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February 28, 2025

Mr. Robert Wight, P.E. Region One Director Utah Department of Transportation 166 West Southwell Street Ogden UT 84404

SUBJECT: UDOT Project Number S-R199 (381)

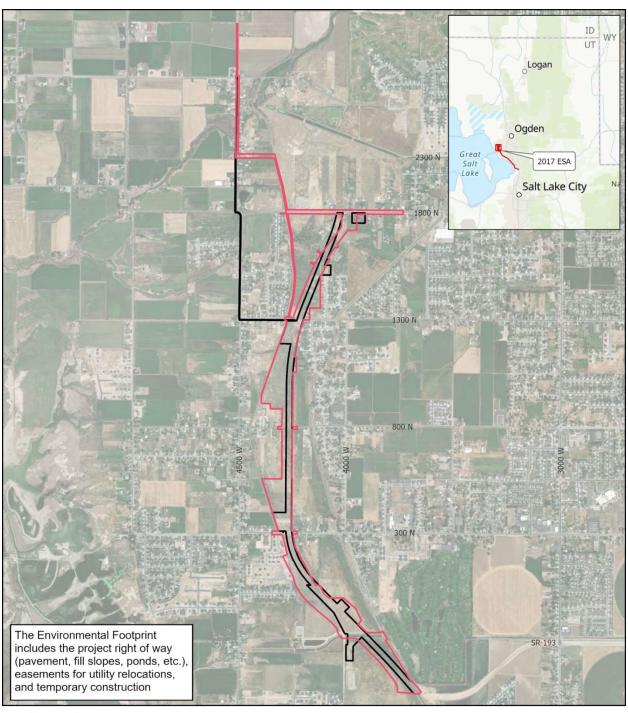
SR-177; SR-193 to 1800 N. (PIN 20927)

Environmental Impact Statement Re-evaluation 15

Dear Mr. Wight:

A Final Environmental Impact Statement (EIS) and Section 4(f) Evaluation for the West Davis Corridor (WDC) was completed in June 2017 and approved through the issuance of a Record of Decision (ROD) on September 29, 2017, from the Federal Highway Administration (FHWA) (FHWA 2017). This re-evaluation is evaluating the design refinements proposed to address the change of conditions in the project area between State Route 193 (SR-193) and 1800 North in Davis County, Utah since approval of the EIS Selected Alternative (ESA) in the 2017 ROD. The design refinements are identified as the Refined Selected Alternative (RSA) (see **Figure 1**, Site Map). Specific design changes are identified in the Background of and Need for the Reevaluation section of this memorandum.

Based on this memorandum the Utah Department of Transportation (UDOT) has concluded that a supplemental EIS is not required for the proposed changes in project design. The regulations in 23 Code of Federal Regulations (CFR) Section 771.130(a) provide that a supplemental EIS is required when "(1) changes to the proposed action would result in significant environmental impacts that were not evaluated in the EIS; or (2) new information or circumstances relevant to environmental concerns and bearing on the proposed action or its impacts would result in significant environmental impacts not evaluated in the EIS."

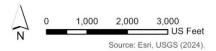


Environmental Footprint

Refined Selected Alternative (RSA)

EIS Selected Alternative (ESA)

SR-177; SR-193 to 1800 N Re-evaluation 15



This memorandum summarizes the proposed refinements to the ESA, discusses changes in the affected environment, and considers whether any of the changes warrant the need for a supplemental EIS. The appendices to this memorandum include the technical documentation and clearance memoranda.

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being or have been carried out by UDOT pursuant to 23 United States Code (USC) Section 327 and a Memorandum of Understanding (MOU) dated May 26, 2022, and executed by FHWA and UDOT. The WDC Project was excluded from the assignment MOU, and FHWA maintained National Environmental Policy Act (NEPA) responsibility of the environmental review process until its issuance of a ROD. Under the assignment MOU, UDOT is responsible for conducting any additional environmental reviews (including re-evaluations) that are required for the WDC Project following issuance of the ROD in 2017.

Therefore, this re-evaluation is being processed in accordance with the assignment MOU, and UDOT is the agency responsible for approving the re-evaluation.

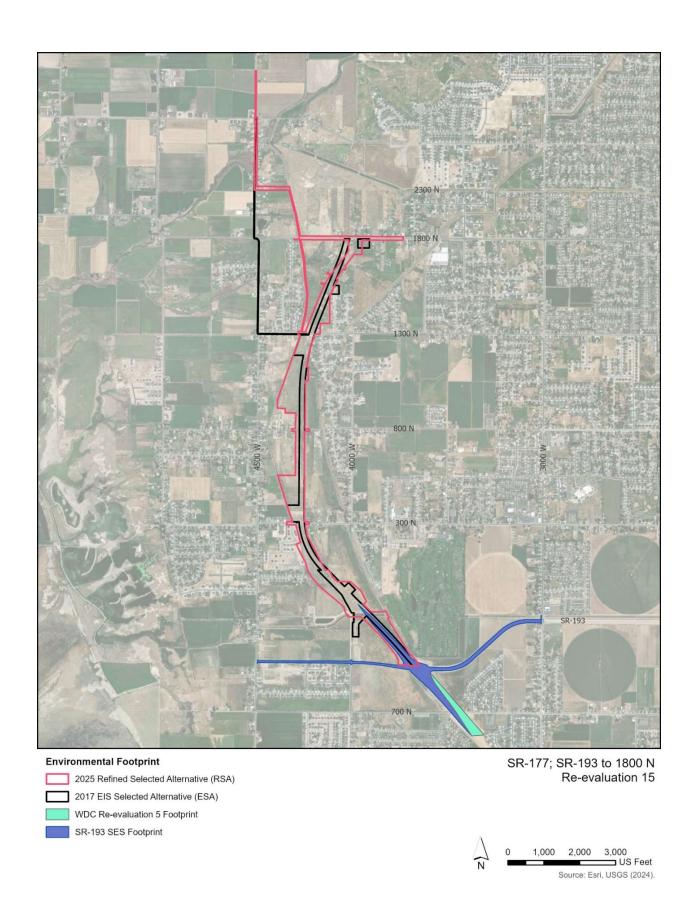
BACKGROUND OF AND NEED FOR THE RE-EVALUATION

The EIS/Section 4(f) Evaluation and ROD evaluated the environmental impacts of improving regional mobility in western Davis and Weber Counties. Since completion of the WDC ROD, UDOT has conducted further environmental studies and more-detailed survey and engineering work to update the ESA. These updates are described below.

Additional Lanes

During the EIS process, UDOT's traffic modeling determined the need for a four-lane freeway between Interstate 15 (I-15) and Antelope Drive and the need for a two-lane freeway between Antelope Drive and 1800 North. At that time, the WDC traffic modeling design year was 2040, consistent with Wasatch Front Regional Council's (WFRC) 2015 to 2040 Regional Transportation Plan (RTP). The socioeconomic data and planned projects in the 2015 RTP were used for that modeling as they were the best information available at the time. The ESA included a two-lane, limited-access freeway between Antelope Drive and 1800 North (FHWA 2017).

In 2020, UDOT completed a State Environmental Study (SES) (UDOT 2020a) for the extension of SR-193 from 3000 West in Syracuse to 4500 West in West Point, crossing the WDC alignment as shown in **Figure 2**. The SES proposed a diamond interchange connection of SR-193 with WDC. Also in 2020, UDOT completed Environmental Re-evaluation 5 of the WDC EIS which, based on WFRC's 2019 to 2050 RTP, identified a need for a four-lane freeway between Antelope Drive and SR-193 (UDOT 2020b).



In 2023, WFRC adopted the 2023 to 2050 RTP (WFRC 2023) with the most current planned projects and socioeconomic data. Traffic modeling using WFRC's latest RTP concluded that the WDC would need to be a four-lane freeway from SR-193 to 1800 North to meet projected transportation demand at a level of service D or better through 2050. The RSA design reflects this change.

Figure 2 identifies the environmental footprints for the 2017 EIS, Re-evaluation 5, SR-193 SES, and the 2024 RSA. The environmental footprint includes the project right-of-way (including travel lanes, fill slopes, ponds, etc), easements for utility relocations, and temporary construction easements.

Other Design Refinements

In addition to the change from a two-lane freeway to a four-lane freeway between SR-193 and 1800 North, other design refinements have been made to the ESA based on more detailed and current information.

- The alignment curvature between SR-193 and 300 North has been updated to meet UDOT's sight distance standards.
- Detention ponds identified in the ESA have been shifted and resized based on the latest survey and drainage information.
- UDOT has coordinated closely with utility companies to identify in greater detail the locations of major utility relocations.
- UDOT has also worked with West Point City to shift the orientation of the 1800 North Park-n-Ride Lot to be more consistent with future development.
- The Emigrant Trail alignment north of 1300 N has been revised to follow along the east side of the Hooper Canal up to about 2100 N, then runs west to 4500 West, and then continues north along either the west or east side of 4500 West within the street Right of Way (ROW).

The updated design as described above for the segment of WDC from SR-193 to 1800 North is defined as the RSA and is the subject of this re-evaluation. This re-evaluation presents the results of the impacts analyses undertaken for the RSA.

REFINED SELECTED ALTERNATIVE (RSA) AND COMPARISON WITH THE 2017 SELECTED ALTERNATIVE (ESA)

As introduced at the beginning of this re-evaluation, the RSA represents design modifications to the ESA to meet the needs for the action through the year 2050.

Table 1 summarizes the changes between the ESA and the RSA.

TABLE 1

Summary of Design Changes between the 2017 EIS (ESA) and 2024 Revised Selected Alternative (RSA)

| EIS Selected Alternative (ESA) |
|---------------------------------------|
| (Alternative B1 with |
| Wetland Avoidance Option) |

- Traffic modeling for 2040 in the EIS identified the need for the WDC to be a two-lane freeway with a 146-foot-wide typical section between SR 193 and 1800 North.
- Bridges to accommodate two lanes over 300 North, 800 North, and 1300 North
- 2,500-foot radius curve south of 300 N provided 601 feet of stopping sight distance
- Preliminary detention pond locations were located based on limited survey and drainage information.
- A preliminary footprint was defined for relocation of utilities between SR-193 and 300 North based on limited information.
- Park-n-Ride Lot located at 1800 North oriented in east-west direction
- Emigrant Trail runs west on 1300 North to 4500 West and continues north along the west side of 4500 West to the Weber County line.

Refined Selected Alternative (RSA) (2024 Re-evaluation)

- Updated 2050 traffic modeling showed the need for a four-lane freeway with a 250-footwide typical section between SR- 193 and 1800 North. The 104-foot additional width has been added to the west side of the 146-footwide two-lane section.
- Additional parallel bridges over 300 North, 800 North, and 1300 North are needed to accommodate the two additional lanes on WDC.
- 3,710-foot radius curve south of 300 North to provide 732 feet of stopping sight distance, meeting UDOT's current standard (730 feet).
- Final detention pond locations are located based on detailed survey and drainage information.
- Final locations of utility relocations have been determined and an appropriate footprint established.
- Park-n-Ride Lot located at 1800 North oriented in north-south direction
- Emigrant Trail follows along the east side of the Hooper Canal up to about 2050 N, then runs west to 4500 West, and then continues north along either the west or east side of 4500 West to the Weber County line.

RE-EVALUATION ANALYSIS

Following is a summary of the main components of the EIS and any changes associated with each component as a result of the changes included in the RSA and the re-evaluation of previously known and newly identified environmental resources in the project area.

Purpose and Need

As stated in the EIS, the purpose of the WDC Project is to improve regional mobility and enhance peak-period mobility in western Davis and Weber Counties. The proposed revisions included with the RSA are consistent with the purpose and need as stated in the 2017 Final EIS.

Independent Utility

No additional transportation improvements are necessary for the proposed project to function as intended. The project would not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

Alternatives

Changes with the RSA (see **Table 1**) would apply to any of the WDC alternatives evaluated in the Final EIS and would not change the basis for choosing Alternative B1 with the Wetland Avoidance Option as the ESA in the 2017 ROD.

ENVIRONMENTAL CONSEQUENCES ANALYSIS

UDOT has evaluated the expected impacts on the natural and built environment from the RSA. It was determined that the impacts of these changes are not individually or cumulatively significant or significantly different from those described in the 2017 Final EIS and ROD for the ESA.

As part of the re-evaluation process, UDOT reviewed and updated the ecosystem resources (wildlife, wetlands, and waters of the U.S.), and cultural resource clearances for the project.

The project team reviewed past findings and compared those to potential impacts from the design revisions as presented by the RSA. As part of that process certain analyses were determined not necessary for certain elements as there was no modification.

Table 6, located at the end of this section, summarizes the changes to the environmental impacts from the RSA, including those determined to not warrant further analyses. Clearance memoranda are provided in Appendices. A discussion of resource impacts is provided below.

Land Use

Land use types along SR-177 between 1800 North and SR-193 include agricultural, and residential. **Figure 3** shows the land use impacts of the RSA and **Table 2** compares those impacts to the land use impacts of the ESA.

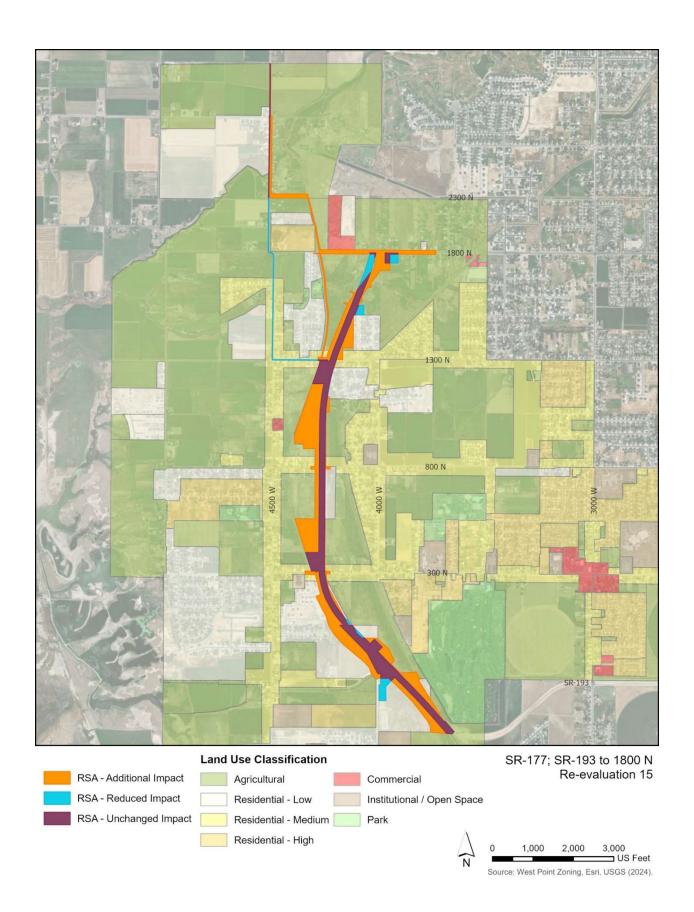
The RSA would convert a total of 79 more acres to transportation use than the original 878 acres of the ESA, for a total of 957 acres which is a 9% increase. This is due to the increased right of way width for the added lanes, ponds, and utility relocations. Even though the RSA has greater land use impacts, it is still consistent with local land use plans.

TABLE 2Refined Selected Alternative (RSA) Changes to Land Use Compared to EIS Selected Alternative (ESA)

| | | A | creag | e by L | and Use | e Categ | ory (A | cre) | |
|------------------|-------------|------------|------------|---------------|------------|----------------------|------------|-------------|-------|
| Alternative | Agriculture | Commercial | Industrial | Institutional | Open Space | Conservation Area | Recreation | Residential | Total |
| ESA Total | 485 | 1 | 2 | 1 | 124 | 141 | 18 | 106 | 878 |
| RSA Net Increase | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 79 |
| RSA Total | 523 | 1 | 2 | 1 | 124 | 141 | 18 | 147 | 957 |

Farmland

Figure 4 shows the farmland impacts of the RSA and ESA. The impacts are also summarized in **Table 3.** The RSA would convert 2 more acres of Farmland of Statewide Importance and 10 more acres of prime farmland compared to the ESA, for a total of 771 acres of farmland impacts which is a 1.6% increase in farmland conversion to transportation corridor when compared with the ESA. The additional farmland impacts are due to the larger footprint of the RSA.



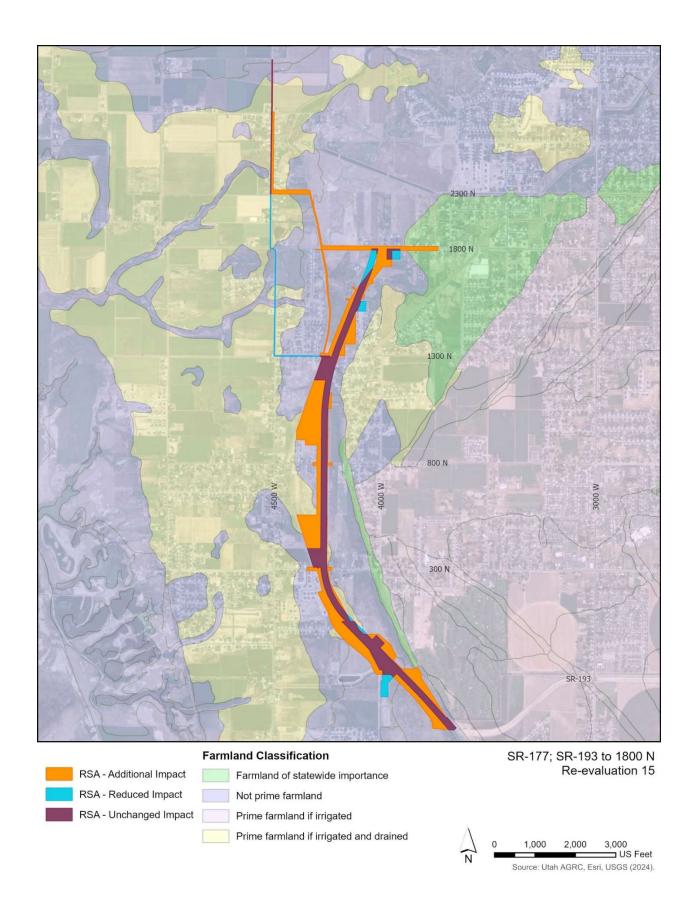


TABLE 3Refined Selected Alternative (RSA) Changes to Farmland Compared to EIS Selected Alternative (ESA)

| | | | Acreag | e by Farmlar | nd Type | (Acre) | | |
|------------------|-----------------------|---------------------------|---|--|--------------------------------|---------------|----------------------|-------|
| Alternative | Irrigated Cropland | Non-irrigated Cropland | Prime Farmland if irrigated and drained | Farmland of Statewide or Local Importance | Agriculture Protection Area | Century Farms | Farmland Remnants | Total |
| ESA Total | 525 | 78 | 94 | 16 | 3 | 16 | 27 | 759 |
| RSA Net Increase | 0 | 0 | 10 | 2 | 0 | 0 | 0 | 12 |
| RSA Total | 525 | 78 | 104 | 18 | 3 | 16 | 27 | 771 |

Community

The community impacted by the RSA is the same as the community impacted by the ESA. However, the increase in size of the project footprint would increase impacts to property owners affected by the ESA. Acquisitions based on the RSA are identified in **Table 4**.

As would be the case of the ESA, the RSA would not divide any subdivisions but would create a physical barrier within the community with crossing points located at city streets. Construction of the RSA would require 1 residential relocation more than the ESA. Property owners will be compensated based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and the Utah Relocation Assistance Act, Utah Code, Section 57-12.

Impacts on quality of life, recreation resources, community facilities, public health and safety, and public services and utilities associated with the RSA would be similar to those analyzed in the Final EIS.

TABLE 4Refined Selected Alternative (RSA) Acquisitions and Relocations (Excludes properties owned by UDOT)

| Davis | | Area o | of Impact | (acres) | |
|--------------------------|-------------------------------------|--------|-----------|---------|------------------------|
| County Parcel ID # | Property Address | ESA | RSA | Change | New Reloca- tion |
| 120370092 | SW1/4 NW1/4 Sec 5, T4N, R2W, SLB&M | 1.32 | 2.32 | 0.99 | |
| 120390028 | NW1/4 SW1/4 Sec 5, T4N, R2W, SLB&M | 0.16 | 0.24 | 0.08 | |
| 120390031 | NW1/4 SW1/4 Sec 5, T4N, R2W, SLB&M | 0.17 | 0.26 | 0.09 | |
| 120390032 | NW1/4 SW1/4 Sec 5, T4N, R2W, SLB&M | 0.00 | 0.25 | 0.25 | |
| 120390036 | NW1/4 SW1/4 Sec 5, T4N, R2W, SLB&M | 0.21 | 0.00 | -0.21 | |
| 120390057 | NW1/4 SW1/4 Sec 5, T4N, R2W, SLB&M | 2.17 | 0.50 | -1.67 | |
| 120430004 | 4233 W 300 N, West Point, UT 84015 | 0.07 | 0.25 | 0.18 | |
| 120430013 | 4157 W 300 N, West Point, UT 84015 | 0.03 | 0.00 | -0.03 | |
| 120430096 | SE1/4 NE1/4 Sec 6, T4N, R2W, SLB&M | 0.00 | 0.14 | 0.14 | |
| 120430116 | SE1/4 NE1/4 Sec 6, T4N, R2W, SLB&M | 0.00 | 2.55 | 2.55 | |
| 120430118 | SE1/4 NE1/4 Sec 6, T4N, R2W, SLB&M | 0.00 | 0.71 | 0.71 | |
| 120430120 | SE1/4 NE1/4 Sec 6, T4N, R2W, SLB&M | 0.00 | 0.95 | 0.95 | |
| 120430121 | SE1/4 NE1/4 Sec 6, T4N, R2W, SLB&M | 0.00 | 0.29 | 0.29 | |
| 130450021 | 4545 W 2025 N, Hooper, UT 84315 | 0.01 | 0.00 | -0.01 | |
| 130450024 | SW1/4 Sec 19, T5N, R2W, SLB&M | 0.10 | 0.23 | 0.14 | |
| 140290021 | 4040 W 1800 N, West Point, UT 84015 | 0.00 | 0.07 | 0.07 | |
| 140290028 | 4040 W 1800 N, West Point, UT 84015 | 0.00 | 0.91 | 0.91 | |
| 140290029 | 4040 W 1800 N, West Point, UT 84015 | 0.00 | 0.26 | 0.26 | |
| 140310096 | W1/2 SW1/4 Sec 29, T5N, R2W, SLB&M | 0.24 | 1.41 | 1.17 | |
| 140310097 | W1/2 SW1/4 Sec 29, T5N, R2W, SLB&M | 1.40 | 0.66 | -0.74 | |
| 140370007 | 2061 N 4500 W, Hooper, UT 84315 | 0.07 | 0.21 | 0.13 | |
| 140370009 | NW1/4 Sec 30, T5N, R2W, SLB&M | 0.01 | 0.00 | -0.01 | |
| 140370018 | SE1/4 Sec 30, T5N, R2W, SLB&M | 0.05 | 0.00 | -0.05 | |
| 140370026 | NW1/4 Sec 30, T5N, R2W, SLB&M | 0.04 | 0.00 | -0.04 | |
| 140370027 | NW1/4 Sec 30, T5N, R2W, SLB&M | 0.03 | 0.00 | -0.03 | |
| 140370033 | 2135 N 4500 W, Hooper, UT 84315 | 0.04 | 0.00 | -0.04 | |
| 140370040 | NE1/4 NW1/4 Sec 30, T5N, R2W, SLB&M | 0.12 | 0.36 | 0.24 | |
| 140370043 | NW1/4 Sec 30, T5N, R2W, SLB&M | 0.04 | 0.12 | 0.08 | |
| 140370044 | NW1/4 Sec 30, T5N, R2W, SLB&M | 0.01 | 0.03 | 0.02 | |
| 140370048 | 4560 W 1800N, West Point, UT 84015 | 0.07 | 0.00 | -0.07 | |
| 140370052 | NW1/4 Sec 30, T5N, R2W, SLB&M | 0.07 | 0.00 | -0.07 | |
| 140370053 | 2025 N 4500 W, Hooper, UT 84315 | 0.02 | 0.00 | -0.02 | |
| 140370054 | 2005 N 4500 W, Hooper, UT 84315 | 0.02 | 0.00 | -0.02 | |
| 140380029 | 4040 W 1800 N, West Point, UT 84015 | 0.00 | 0.22 | 0.22 | |
| 140380050 | 4040 W 1800 N, West Point, UT 84015 | 0.00 | 2.96 | 2.96 | |

| | | Aroa | of Impact | (acros) | |
|---------------------|--|------|-----------|---------|---------|
| Davis | | Alta | mipact | (acres) | New |
| County Parcel ID | Property Address | | | | Reloca- |
| # | | ESA | RSA | Change | tion |
| | | | | | |
| 140380051 | 4040 W 1800 N, West Point, UT 84015 | 0.00 | 0.84 | 0.84 | |
| 140380061 | NE1/4 Sec 30, T5N, R2W, SLB&M | 0.00 | 0.67 | 0.67 | |
| 140380062 | NE1/4 Sec 30, T5N, R2W, SLB&M | 0.00 | 0.21 | 0.21 | |
| 140380067 | NE1/4 Sec 30, T5N, R2W, SLB&M | 0.00 | 0.12 | 0.12 | |
| 140390009 | 1513 N 4500 W, West Point, UT 84015 | 0.08 | 0.00 | -0.08 | |
| 140390026 | 1609 N 4500 W, West Point, UT 84015 | 0.01 | 0.00 | -0.01 | |
| 140390043 | 1309 N 4500 W, West Point, UT 84015 | 0.04 | 0.00 | -0.04 | |
| 140390057 | SW1/4 Sec 30, T5N, R2W, SLB&M | 0.27 | 0.00 | -0.27 | |
| 140390068 | SW1/4 Sec 30, T5N, R2W, SLB&M | 0.34 | 0.00 | -0.34 | |
| 140400072 | 4167 W 1800 N, West Point, UT 84015 | 2.29 | 3.10 | 0.81 | |
| 140400073 | 4167 W 1800 N, West Point, UT 84015 | 0.00 | 0.47 | 0.47 | |
| 140400101 | 4182 W 1300 N, West Point, UT 84015 | 1.07 | 1.87 | 0.80 | Х |
| 140400107 | SE1/4 Sec 30, T5N, R2W, SLB&M | 0.00 | 0.93 | 0.93 | |
| 140400108 | SE1/4 Sec 30, T5N, R2W, SLB&M | 0.00 | 1.61 | 1.61 | |
| 140420005 | 4481 W 1300 N, West Point, UT 84015 | 0.03 | 0.00 | -0.03 | |
| 140420037 | NW1/4 NE1/4 Sec 31, T4N, R42W, SLB&M | 0.07 | 0.18 | 0.11 | |
| 140420038 | NW1/4 NE1/4 Sec 31, T4N, R42W, SLB&M | 0.14 | 0.23 | 0.09 | |
| 140420066 | NW1/4 NE1/4 Sec 31, T4N, R42W, SLB&M | 0.02 | 0.00 | -0.02 | |
| 140420120 | NE1/4 Sec 31, T4N, R42W, SLB&M | 0.06 | 0.07 | 0.00 | |
| 140440032 | 358 N 4500 W, West Point, UT 84015 | 1.46 | 1.48 | 0.02 | |
| 140440055 | SW1/4 NE1/4 Sec 31, T5N, R2W, SLB&M | 0.56 | 2.36 | 1.80 | |
| 140440073 | 410 N 4500 W, West Point, UT 84015 | 0.58 | 2.02 | 1.44 | |
| 140440074 | 436 N 4500 W, West Point, UT 84015 | 0.54 | 2.09 | 1.55 | |
| 140440082 | SW1/4 SE1/4 Sec 31, T5N, R2W, SLB&M | 0.08 | 0.10 | 0.01 | |
| 140440084 | SE1/4 Sec 31, T5N, R2W, SLB&M | 0.00 | 0.15 | 0.15 | |
| 140440091 | 358 N 4500 W, West Point, UT 84015 | 0.89 | 0.89 | 0.01 | |
| 140440092 | 410 N 4500 W, West Point, UT 84015 | 0.83 | 0.84 | 0.02 | |
| 140440098 | 526 N 4500 W, West Point, UT 84015 | 1.00 | 4.98 | 3.98 | |
| 140440099 | 4353 W 800 N, West Point, UT 84015 | 0.11 | 0.33 | 0.21 | |
| 141750005 | NW1/4 NE1/4 Sec 30, T5N, R2W, SLB&M | 0.00 | 1.98 | 1.98 | |
| 142120006 | 4449 W 1300 N, West Point, UT 84015 | 0.04 | 0.00 | -0.04 | |
| 142120007 | 4427 W 1300 N, West Point, UT 84015 | 0.03 | 0.00 | -0.03 | |
| 142120007 | 4405 W 1300 N, West Point, UT 84015 | 0.03 | 0.00 | -0.03 | |
| 142120009 | 4339 W 1300 N, West Point, UT 84015 | 0.03 | 0.00 | -0.03 | |
| 142120009 | 4303 W 1300 N, West Point, UT 84015 | 0.03 | 0.00 | -0.03 | |
| 144300001 | 1273 N 4150 W, West Point, UT 84015 | 0.53 | 0.56 | 0.03 | |
| 144300001 | 1251 N 4150 W, West Point, UT 84015 | 0.43 | 0.44 | 0.03 | |
| 144300002 | 1235 N 4150 W, West Point, UT 84015 | 0.43 | 0.44 | -0.01 | |
| 144300003 | 1200 N 4100 VV, VVESI FUIIII, UT 04010 | 0.30 | 0.33 | -0.01 | |

| Davis | | Area of Impact (acres) | | | | |
|--------------------------|-------------------------------------|------------------------|-------|--------|------------------------|--|
| County Parcel ID # | Property Address | ESA | RSA | Change | New Reloca- tion | |
| 144300004 | 1223 N 4150 W, West Point, UT 84015 | 0.31 | 0.29 | -0.01 | | |
| 144300005 | 1205 N 4150 W, West Point, UT 84015 | 0.25 | 0.24 | -0.01 | | |
| 144300009 | 1081 N 4150 W, West Point, UT 84015 | 0.09 | 0.37 | 0.28 | | |
| 144300010 | 1069 N 4150 W, West Point, UT 84015 | 0.01 | 0.25 | 0.24 | | |
| 144450014 | 1189 N 4150 W, West Point, UT 84015 | 0.20 | 0.19 | -0.02 | | |
| 144450015 | 1175 N 4150 W, West Point, UT 84015 | 0.16 | 0.14 | -0.02 | | |
| 144450016 | 1161 N 4150 W, West Point, UT 84015 | 0.12 | 0.11 | -0.01 | | |
| 144450017 | 1127 N 4150 W, West Point, UT 84015 | 0.09 | 0.13 | 0.05 | | |
| | TOTAL | 19.66 | 46.50 | 26.84 | 1 | |

Transportation

The RSA would double the traffic capacity of SR-177 from SR 193 to 1800 North. The design refinements would require additional bridge crossings for the two added lanes as well as ancillary improvements noted in Table 1. Travel demand modeling was performed to the design year of 2050 and incorporated the refined design into the transportation network to achieve acceptable levels of performance as measured in Levels-of-Service. The transportation impacts of the RSA would be similar to those of the ESA. See Appendix A for the Traffic Modeling Analysis Memorandum.

Air Quality

The 2017 Final EIS concluded that the WDC project was not a project of air quality concern (POAQC). "The WDC is designed to reduce congestion on local roads and accommodate traffic in western Davis County. Because the WDC is designed to serve mostly local traffic, it would be used mostly by gasoline-fueled vehicles. The daily volume of traffic (less than or equal to 30,000 vehicles per day) on the WDC would be small compared to the volume of traffic that could warrant a hot-spot evaluation for PM2.5 or PM10 (that is, 125,000 vehicles per day). In addition, the volume of diesel truck traffic expected on the WDC is a small proportion of the overall traffic (about 3%, or 3750 vehicles per pay). Finally, all interchanges on the WDC have been designed to operate at LOS D or better." (West Davis FEIS, 2017)

The RSA will add one more lane in each direction to the ESA between SR-193 and 1800 North. With the added lanes, the expected 2050 traffic for the RSA is 39,400 vehicles per day, with a diesel traffic percentage of 1.3% (or 512 vehicles per day). This is considerably less than the number of diesel vehicles estimated for the ESA and is well below the 125,000 vehicle per day with 8% diesel traffic example of a project requiring a hot-spot analysis provided in the EPA guidance document.

Noise

The ESA noise analysis resulted in 890 impacted receptors. The RSA noise analysis resulted in 1,049 impacted receptors, including 76 homes that were constructed after completion of the EIS. The RSA noise analysis provides the following information about the receptors:

- 43 receptors would have a noise level greater than or equal to their NAC threshold.
- 282 receptors would receive an increase of 10 dBA or more over their existing noise levels.
- 42 receptors would experience both types of impacts.

Thirteen barriers were analyzed. Three barriers were determined feasible and reasonable and are recommended for balloting. The locations of the feasible and reasonable barriers are included in **Figure 5**. See Appendix B for the Traffic Noise Report,

Ecosystems

Wildlife and Wildlife Habitat

One species listed as threatened under the Endangered Species Act, Ute Ladies' tresses (*Spiranthes diluvialis*) and one proposed threatened species, monarch butterfly (*Danaus plexippus*) were identified by the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPAC) system as having potential to occur within the RSA action area.

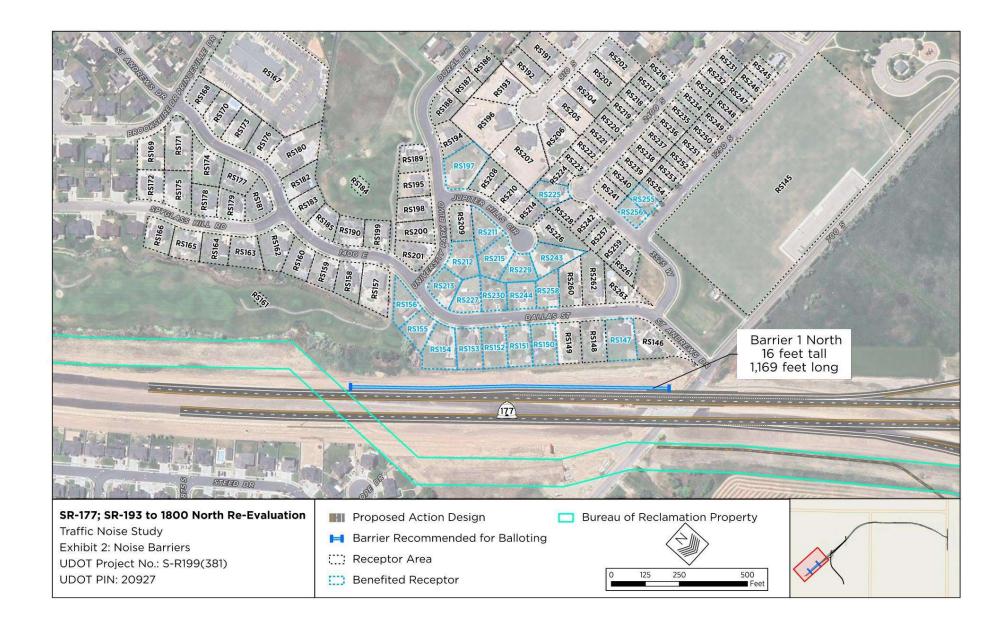
Based on a lack of suitable habitat identified during field surveys, the proposed action is expected to have no effect on the monarch butterfly or Ute Ladies' tresses.

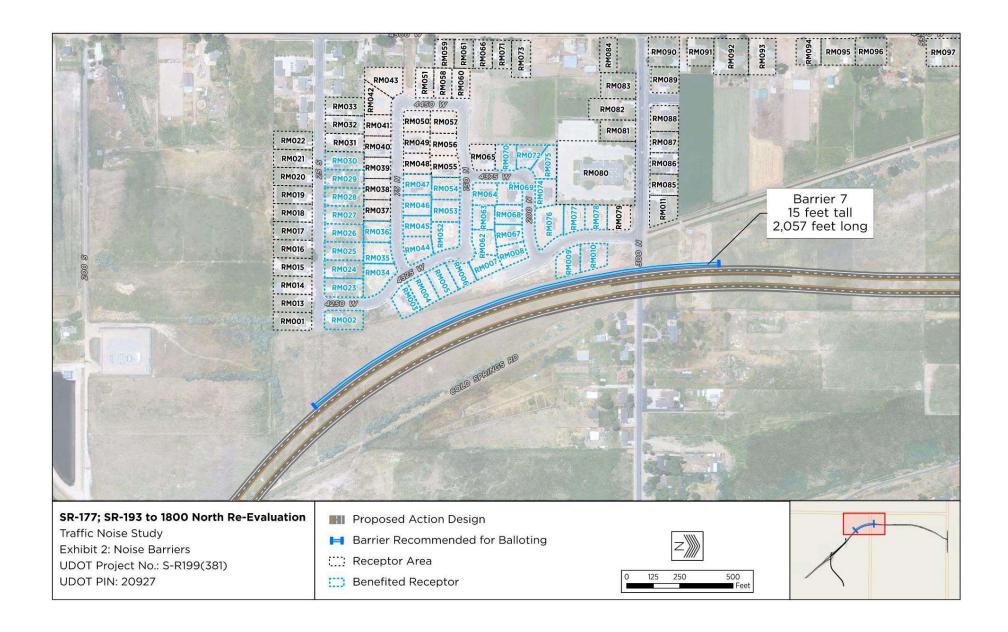
The species are discussed in further detail in the Threatened and Endangered Species Memo in Appendix C.

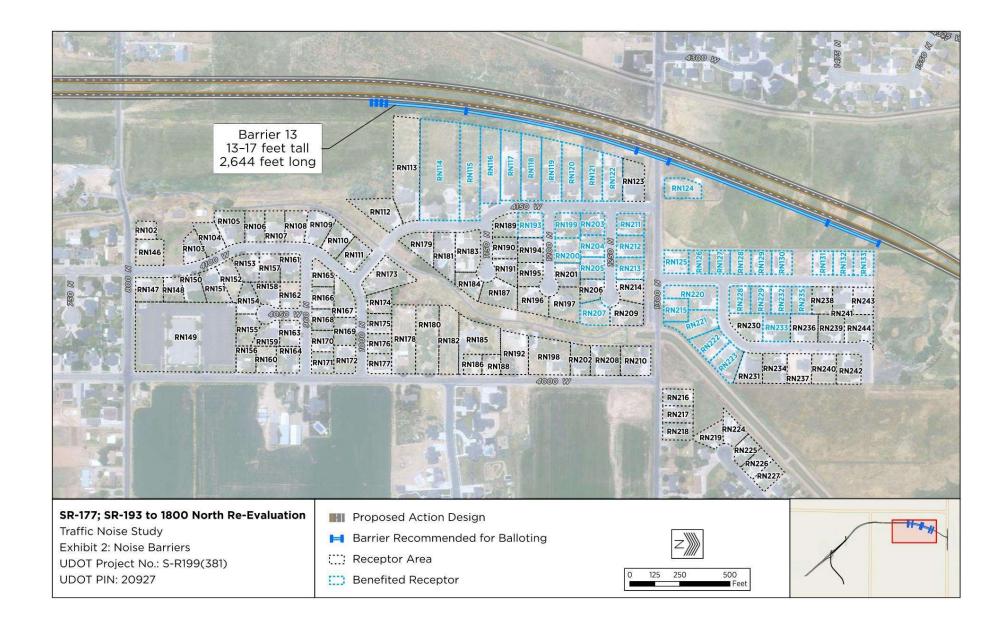
Wetlands

The aquatic resource delineation for the project area between SR-193 and 1800 N was conducted according to the U.S. Army Corps of Engineers Wetlands Delineation Manual (USACE 1987) and the Arid West Regional Supplement (USACE 2008).

A total of 195 acres were surveyed as part of this delineation. A total of 38 aquatic resources were identified during this delineation of aquatic resources, which include 31.70 acres of wetlands, 5.01 acres of ponds, 7,322 linear feet of drainages/canals, and 34 linear feet of streams.







The RSA would result in 13.3 more acres of wetland impacts compared to the wetland impacts of the ESA, for a total of 55.2 acres. These additional wetland impacts are needed to accommodate the RSA's wider footprint for the two additional lanes and associated drainage ponds and utility relocations. These additional wetland impacts are being accounted for in the WDC Clean Water Act Section 404 permit application and mitigation plan. The aquatic resources identified in the project area are provided in the Aquatic Resources Report in Appendix D. **Table 5** compares the RSA wetland impacts to the wetland impacts of the ESA.

TABLE 5Refined Selected Alternative (RSA) Changes to Permanent Impacted Wetlands Compared to EIS Selected Alternative (ESA)

| Altownstive | Acreage by Wetland Type (Acre) | | | |
|------------------|--------------------------------|------------|--|--|
| Alternative | Wetlands | Open Water | | |
| ESA Total | 41.9 | 4.2 | | |
| RSA Net Increase | 13.3 | 1.5 | | |
| RSA Total | 55.2 | 5.7 | | |

Historic, Archaeological, and Paleontological Resources

As part of the re-evaluation process, a supplemental cultural resource inventory and historic structures inventory was conducted in June, August, October, and November 2024.

Five historical buildings were identified in the survey area for the RSA. These structures include three isolated agricultural outbuildings and two historical dwellings. None of the historical buildings are eligible structures for the National Register of Historic Places (NRHP). See Appendix E for the Historic Structures Inventory.

An intensive-level cultural resource inventory for the project area was also conducted. The inventory identified three archaeological sites—42DV138 (an unnamed land drain), 42DV158/42DV223 (the Hooper Canal System), and 42DV182 (the Layton Canal System). Sites 42DV138 and 42DV182 are recommended as ineligible for the National Register under all criteria. Site 42DV158/42DV223 is recommended eligible under Criterion A. Site numbers, descriptions, and recommended eligibility are included in the Archaeological Resource Assessment report in Appendix E.

The project would require piping 40 feet of the open Hooper Canal System to extend sidewalks on the north and south sides of 1300 North to the Emigrant Trail. The project would also pipe another 24 feet of the canal at about 2050 North to connect sidewalks to the Emigrant Trail at 4500 West.

Per UDOT requirements for projects with notable ground disturbance, the Utah Geological Survey (UGS) were consulted regarding known and potential paleontological resources that could be affected by the proposed undertaking. UGS indicated that no fossil localities are known to be present in the survey area and that the Quaternary and Recent alluvial and lacustrine deposits exposed in the area have low potential for yielding significant fossil localities

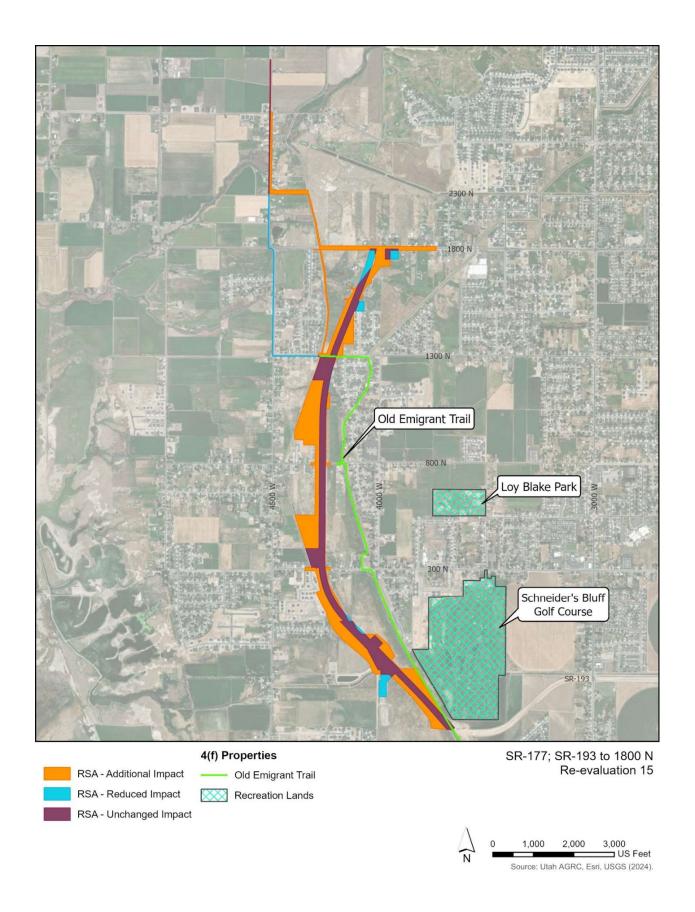
The Utah SHPO has determined that the RSA will result in a finding of No Adverse Effect and has concurred with the Determination of Eligibility and Finding of Effect. A copy of the Determination of Eligibility and Finding of Effect (DOEFOE) is provided in Appendix E.

Section 4(f)

Section 4(f) of the Department of Transportation Act of 1966 is codified at 49 United States Code (USC) 303, Policy on Lands, Wildlife and Waterfowl Refuges, and Historic Sites, and at 23 USC 138, Preservation of Parklands. It applies to significant publicly owned parks, recreation areas, and wildlife and waterfowl refuges and to significant publicly or privately owned historic properties. The requirements of Section 4(f) apply only to agencies within the U.S. Department of Transportation; for example, the Federal Highway Administration (FHWA), the Federal Transit Administration, and the Federal Aviation Administration.

The Final EIS identifies several resources afforded protection under Section 4(f). The RSA would not lead to direct use of any of the resources identified in the Final EIS or any new resources determined to be afforded protection in accordance with Section 4(f) (as no new resources were identified). The resources afforded protection under Section 4(f) within proximity of the RSA would be the Old Emigrant Trail, Loy Blake Park, and the Schneiter's Bluff Golf Course, which are identified on **Figure 6**. Further direct use by the RSA would not occur for any of the three resources, and any proximity impacts to the use of the resources would not be substantial enough to qualify as a constructive use. Therefore, further use of Section 4(f) resources by the RSA would not occur.

Figure 6. 4(f) Resource Locations



Summary

TABLE 6
Summary of Re-evaluation Analysis

| | Chan | no dO | |
|-----------------------------|-------|-------|--|
| Environmental Resource | Chang | gea ? | Comments |
| | Yes | No | |
| Land Use | Х | | The RSA would convert 79 more acres to transportation use than the ESA, for a total of 957 acres, which is a 9% increase. Even though the RSA has greater land use impacts, it is still consistent with local land use plans. |
| Farmland | Х | | The RSA would convert 2 more acres of farmland of statewide importance and 10 more acres of prime farmland if irrigated and drained compared to the ESA. This brings the total farmland impacts of the RSA to 771 acres, which is 1.6% more than the ESA. |
| Community | Х | | The RSA would require UDOT to acquire an additional 26.84 acres of land and one additional relocation than were identified as being impacted by the ESA. |
| Environmental Justice | | Х | The RSA would not change impact conclusions reached in the Final EIS and therefore, no further analysis is warranted (for example, no displacements of low-income or minority populations would occur). |
| Transportation | | Х | The transportation impacts of the RSA would be similar to those of the ESA. The Traffic Modeling Analysis Memorandum is provided in Appendix A. |
| Economics | | Х | Economic impacts associated with the RSA would be similar to those of the ESA, and the result of the analysis would not change. |
| Joint Development | | Х | Various trail projects and improvements are located in communities along the RSA alignment. Implementation of trail network improvements in the vicinity of the RSA would depend on funding, construction, long-term maintenance, and support from the local governments. The impact of these improvements would be similar to those evaluated in the Final EIS, and the result of the analysis would not change. |
| Pedestrian and Bicyclist | | Х | The impact on trails and trail maintenance is similar to that identified in the Final EIS, and the result of the analysis would not change. The RSA will include an additional trail connection to the Emigrant Trail near 200 S per West Point City's Trails Master Plan. The location of the extension of the Emigrant Trail to the Weber County line would follow a different route than identified in the EIS. |
| Air Quality | Х | | The RSA will not have a significant volume of total traffic or percent of diesel truck traffic. Therefore, it is not a POAQC, and no project-level "hotspot" analysis is required for the RSA. |

| Environmental | Chang | ged? | Comments |
|-------------------------------------|-------|------|--|
| Resource | Yes | No | |
| Noise | Х | | The RSA would impact 159 more receptors than the ESA. 76 of the RSA-impacted receptors are newer homes that did not exist at the time of the ESA evaluation. Thirteen barriers were analyzed as part of the analysis. Three barriers were determined feasible and reasonable and are recommended for balloting. |
| | | | The Traffic Noise Report is provided in Appendix B. |
| Water Quality | | Х | Based on the additional two lanes, the RSA would include more paved surface than the ESA. The RSA adds 16.5 acres of impervious area to the 259 acres identified for the ESA. This is a 6.4% increase of impervious area between I-15 and 1800 North. UDOT's construction requirements related to water quality as outlined in the Final EIS apply equally to the RSA. |
| | | | The RSA does not include any additional stream crossings or additional groundwater or public drinking water wells; therefore, the RSA would not change impacts evaluated with the ESA. |
| Ecosystem | Х | | The RSA would result in 13.3 more acres of wetland impacts to the 41.9 acres of wetland impacts from the ESA. The additional wetland impacts are needed to accommodate the RSA's wider footprint for the two additional lanes and associated drainage ponds and utility relocations. These additional wetland impacts are being accounted for in the WDC Clean Water Act Section 404 permit application and mitigation plan. Updated Biological Assessment clearance memo is provided in Appendix C and the Aquatic Resource memo is provided in Appendix D. |
| Floodplains | | Х | Between SR 193 and 1800 North, neither the ESA nor the RSA are located in a floodplain. Therefore, no floodplain impacts would occur with the RSA. |
| Historic, Archaeological, and | Х | | Five historical buildings in the survey area for the RSA were identified. None of the structures were identified as NRHP eligible structures. |
| Paleontological | | | The inventory identified three archaeological sites—42DV138 (an unnamed land drain), 42DV158/42DV223 (the Hooper Canal System), and 42DV182 (the Layton Canal System). Sites 42DV138 and 42DV182 are considered ineligible for the National Register under all criteria. Site 42DV158/42DV223 is recommended eligible under Criterion A. The Project would require piping a portion of the open Hooper Canal System to allow sidewalks on the north and south sides of 1300 North to connect to the Emigrant Trail. |
| | | | The architectural and archaeological clearance memoranda are provided in Appendix E. A copy of the Determination of Eligibility and Finding of Effect is also provided in Appendix E. |
| | | | According to UGS, the potential for impacts to significant paleontological resources from the RSA is very low. For this reason, |

| Environmental Resource | Changed? | | Comments |
|---------------------------------------|----------|----|---|
| 11000000 | Yes | No | |
| | | | paleontological resources are not discussed further in this memorandum. |
| Hazardous Waste | | Х | The Utah Department of Environmental Quality Environmental Interactive Map does not identify any new environmental incidents, voluntary cleanups, or other regulatory actions within 0.5 mile of the RSA. No effects on hazardous waste sites are expected from the RSA. |
| Visual | | Х | Based on the additional pavement width and bridges, visual impacts associated with the RSA would be greater than those evaluated in the Final EIS. However, because the ESA resulted in high visual impacts, the result of the analysis would not change. |
| Energy | | Х | Energy impacts associated with the RSA would be similar to those evaluated in the Final EIS, and the result of the analysis would not change. |
| Construction Impacts | | X | Chapter 20 of the Final EIS describes the types of construction-related activities that would occur and what types of impacts would occur from such activities. The chapter also makes direct reference to the needs for easements and construction phasing. The RSA would not present additional types of construction impacts beyond what has been presented in the Final EIS. Mitigations as described therein would also apply to the RSA. Therefore, no further analysis is warranted. |
| Indirect Effects | | Х | Chapter 23 of the Final EIS describes indirect effects from the ESA. In that EIS chapter, potential general indirect effects on applicable resources (i.e., social resources, demographics, growth, economics, ecosystems, farmlands, floodplains, noise, etc.) were examined and accounted for. The RSA would not present any unaccounted for impact types or mitigation strategies as already adopted in accordance with the Final EIS. Therefore, no further analysis is warranted. |
| Cumulative Impacts | | Х | The Final EIS presents both geospatial and temporal parameters when assessing trends (past, present, and future) that capture not only reasonably foreseeable actions, but also the potential cumulative contributions of the ESA. Tables 24-1 and 2, <i>Present and Reasonably Foreseeable Transit and Roadway Actions</i> and <i>Present and Reasonably Foreseeable Development Actions</i> adequately capture actions together with the RSA would contribute to resource-identified impacts. No new types of cumulative impacts would be presented by the RSA and therefore, no further analysis is warranted. |
| Permits, Reviews, and Approvals | | Х | The RSA does not require permits, review, or approvals not already described in the Final EIS. Therefore, no further analysis is warranted. |

| Environmental Resource | Chan | ged? | Comments | |
|---------------------------|------|------|---|--|
| Resource | Yes | No | | |
| Section 4(f) Resources | | X | The Final EIS identifies several resources afforded protection under Section 4(f). The RSA would not lead to further direct use of any of the resources identified in the Final EIS or any new resources determined to be afforded protection in accordance with Section 4(f) (as no new resources were identified). The resources afforded protection under Section 4(f) within proximity of the RSA would be the Old Emigrant Trail, Loy Blake Park, and the Schneiter's Bluff Golf Course. Further direct use would not occur for any of the three resources, and any proximity impacts to the use of the resources would not be substantial enough to qualify as a constructive use. Therefore, further use of Section 4(f) resources by the RSA would not occur. | |
| Sequencing | | Х | The RSA does not affect sequencing described in the Final EIS. Therefore, the result of the analysis would not change. | |

PUBLIC INVOLVEMENT EFFORTS

The project team has shared information about the RSA through its project website, social media page, and project hotline. An online interactive map showing the proposed improvements is available on the website and the project team has answered questions as they arose. UDOT staff have also met with the affected property owners to explain the need for UDOT to purchase the properties and to answer questions about the property acquisition process.

The project team has met with and is continuing to meet with local government staff and officials and other stakeholders during the design process. An informational meeting was held on October 23, 2024 to provide local residents and other stakeholders with project information and answer questions.

Formal public comment was not required for this re-evaluation. However, comments were received during the informational meeting. Comments were related to noise walls, property transfer, drainage, future SR-177 alignments and Antelope Drive widening (which are not the subject of this re-evaluation), insects and wildlife, safe routes to schools, maintenance of traffic, berm height, lighting, signs, signals, low noise asphalt, and fencing. With the exception of concerns related to noise, none of the comments necessitated revised resource evaluation. Subsequent to the meeting, UDOT refined the roadway design near 1300 North and reanalyzed noise barrier 13. The analysis determined that noise barrier 13 is feasible and reasonable under UDOT's Noise Abatement Policy, and this barrier is recommended for balloting. This analysis is included in the Noise Technical Report in Appendix B.

CONCLUSION

The 2017 Final EIS and Section 4(f) Evaluation for the West Davis Corridor has been reevaluated as required by the UDOT MOU and FHWA regulations found in 23 CFR Parts 771 and 774, FHWA Technical Advisory T6640.8A, and the National Environmental Policy Act.

UDOT evaluated the expected impacts to the natural and built environment from the RSA and evaluated any changes and new information against the ESA, which was analyzed in the Final EIS (FHWA 2017). No substantial changes would occur to the natural or built environment as a result of the RSA that would significantly affect the quality of the human and natural environment. The impacts of these changes are not individually or cumulatively significant or significantly different from those described in the 2017 Final EIS and ROD. Per 23 CFR Section 771.130(a), an EIS shall be supplemented whenever (1) changes to the proposed action would result in significant environmental impacts that were not evaluated in the EIS or (2) new information or circumstances relevant to environmental concerns and bearing on the proposed action or its impacts would result in significant environmental impacts not evaluated in the EIS. UDOT has determined that preparing a supplemental EIS is not necessary since the changes to the proposed action, new information, or new circumstances described in this re-evaluation do not result in significant environmental impacts that were not evaluated in the EIS. UDOT Environmental Services requests concurrence that this re-evaluation has demonstrated that the ROD remains valid and that the proposed resources, impacts, and methodology documented in this environmental re-evaluation are valid in accordance with 23 CFR Section 771.129.

| Sincerely, | |
|-----------------------|-----------------------|
| Nami | lisen |
| Naomi Kisen | |
| UDOT Environme | ental Program Manager |

Enclosures

EIS Re-evaluation Approval UDOT Project Number S-R199 (391), West Davis Corridor, Four Lanes from SR-193 to 1800 N in Davis County UT (PIN 20927)

Robert J. Wight, PE Region One Director

Utah Department of Transportation

03/07/2025

Date

REFERENCES

Meess, Sara and Ellis, Sheri Murray 2012. *Historic Buildings Assessment for the Proposed West Davis Corridor Project, Davis and Weber Counties, Utah.* SWCA Environmental Consultants, Salt Lake City. Antiquities Project Number U-10-ST-0812ps. May.

FHWA 2017. West Davis Corridor Final Environmental Impact Statement and Section 4(f) Evaluation. June.

Hayden, Martha. 2011. Letter from Martha Hayden of the Utah Geological Survey to Sheri Murray Ellis of SWCA Environmental Consultants regarding known and potential localities in the West Davis Corridor impact analysis area. May 2.

Utah Department of Transportation (UDOT) 2020a . *UDOT Project Number S-99(245)2, S.R.* 193, 4500 W to 3000 W in Davis County, Utah (PIN 16518) State Environmental Study. February.

UDOT 2020b. UDOT Project Number S-0067(14)0, S.R. 67, West Davis Corridor; Four Lanes to S.R. 193 in Davis County, Utah (PIN 7176) Environmental Impact Statement Re-evaluation #5. January.

WFRC 2015. Regional Transportation Plan: 2015-2040. May.

WFRC 2023. Wasatch Front Regional Transportation Plan: 2023-2050. May

ACRONYMS AND ABBREVIATIONS

CFR Code of Federal Regulations

EIS Environmental Impact Statement

ESA EIS Selected Alternative

ft foot/feet

ft² square foot/feetLOS Level of Service

MOU Memorandum of UnderstandingNEPA National Environmental Policy Act

ROD Record of Decision

RSA Refined Selected AlternativeRTP Regional Transportation PlanSES State Environmental Study

UDOT Utah Department of Transportation

U.S.C United States CodeWDC West Davis Corridor

WFRC Wasatch Front Regional Council

Appendix A – TRANSPORTATION

MEMORANDUM

To: West Davis Corridor Extension Team

From: Avenue Consultants

Date: August 12, 2024

Subject: West Davis Corridor Extension Re-evaluation Travel Modeling Analyis Memo

1 INTRODUCTION AND PROJECT DESCRIPTION

The Utah Department of Transportation (UDOT) is performing a re-evaluation of West Davis Corridor (SR-177) to extend the northern corridor terminus from SR-193 to 1800 North (SR-37) and to increase the roadway cross-section from one to two travel lanes in each direction. The purpose of this memorandum is to document the benefits of extending a four-lane West Davis Corridor (WDC) farther to the north. This memo presents travel modeling results for the base year (2024), and future (2050) No Build and Build conditions.

2 METHODOLOGY

The Wasatch Front Regional Council (WFRC) is the designated Metropolitan Planning Organization (MPO) for Box Elder, Weber, Davis, and Salt Lake County in Utah. WFRC works in partnership with UDOT, local governments, and other stakeholders to develop long-range transportation plans for the communities within their jurisdictions. As part of its transportation planning work, WFRC, maintains a regional Travel Demand Model (TDM) for its jurisdictional area. References to "the model" in this report refer to the scripts and data maintained by WFRC, not to the Cube software on which the model runs.

The TDM is a state-of-the-practice tool that allows transportation analysts to input various land use and growth scenarios for different road and transit networks to forecast the expected traffic for each scenario. At its core, the TDM uses the common four-step modeling process, which consists of trip generation, trip distribution, mode split, and trip assignment.

Specific inputs to the TDM include socioeconomic forecasts and transportation system data. The socioeconomic data includes population, households, employment, and average household income. Household data is further classified by household size (1 to 6+ persons), number of workers (0 to 3+ persons), and income quartiles. Employment data is classified into 12 categories that include subcategories for retail, industrial, and office. Public school enrollment is classified into elementary, middle, and high school. Special trip generation tables are included for other large generators. Transportation system data includes both roadway and transit networks. The roadway network includes freeways, arterial routes, and collector routes. The transit network includes FrontRunner commuter rail, TRAX light rail, and bus routes.

The geographical area of the TDM is split into individual Traffic Analysis Zones (TAZs), which in turn hold the socioeconomic source data. The model uses the information in each TAZ for trip generation, trip distribution, and mode split. Trips generated by each TAZ are loaded onto the roadway network using special links called centroid connectors. The model then uses the roadway network in an iterative process to assign routes for each trip destination.

The WFRC Regional Transportation Plan (RTP) lists planned transportation improvement projects using 2032, 2042, and 2050 for the timeline of Phase 1, Phase 2, and Phase 3 projects, respectively. The TDM has roadway and transit networks associated with each of these phases. This study uses these networks as the assumed base conditions depending on the year being analyzed.

Version 9.0 of the WFRC TDM was utilized to develop traffic forecasts for 2050. The existing TDM model contains Brigham City and Weber, Davis, Salt Lake, and Utah Counties. The TDM has already been calibrated by WFRC on a network-wide scale. While the model has been calibrated regionally, some localized modifications were made to improve the model's accuracy within the study area, namely some minor adjustments to the locations of some centroid connectors, which are what connects the TAZs to the transportation network.

3 TRAVEL DEMAND MODEL RESULTS

The following sections present traffic results from the TDM for Existing, No-Build, and Build model runs.

3.1 Model Validation

Daily traffic volumes were collected at various locations within the study area to assist in calibrating the existing TDM. The daily traffic volumes at the count locations are presented in **Table 1** along with the corresponding TDM volumes. It shows that the two WDC TDM volumes are within 10 percent of the count volumes with the northernmost one that's closest to the study area within four percent. The table also shows commonly used target error ranges used by WFRC when calibrating the model. Those target error ranges get smaller as the observed volumes increase. A road with a volume less than 1,000 vehicles per day has a target error range of 200 percent, while a road with 10,000 to 25,000 vehicles per day, like WDC, has a target error range of 20 percent. It can be seen that the WDC model volumes are well within the target error range.

The count locations on 300 North, 800 North, 1300 North, and 1800 North are at the planned future crossings of West Davis Corridor and the volume differences range from two to 31 percent. Three of the four locations are well within the target error range, while the 300 North location exceeds the target by one percent. With these results, the model was considered sufficiently calibrated.

| Roadway | Location | Traffic Counts | Existing TDM | Difference | Target Diff. |
|---------------------|-------------------------------|----------------|--------------|------------|--------------|
| West Davis Corridor | Btwn I-15 & 950 North | 22,900 | 20,600 | -10% | ±20% |
| West Davis Corridor | Between 2000 West & SR-127 | 16,000 | 15,400 | -4% | ±20% |
| 300 North (SR-107) | Btwn Cold Springs Dr & 4000 W | 5,400 | 4,000 | -26% | ±25% |
| 800 North | Btwn 4500 West & 4100 West | 810 | 800 | -2% | ±200% |
| 1300 North | Btwn 4300 West & 4150 West | 870 | 600 | -31% | ±200% |
| 1800 North (SR-37) | Btwn 4325 West & 3675 West | 3,800 | 4,000 | +4% | ±50% |

Table 1. Daily Traffic Volumes Comparison

3.2 Socioeconomic Data

WFRC includes socioeconomic data in their regional travel demand model which are based on county-wide projections provided by the Governor's Office of Management and Budget. The socioeconomic data within the WDC EIS study area were summarized for 2024 and 2050 and are presented in **Table 2**. As shown, the population and employment in the study area is projected to grow by 43 percent from 2024 to 2050 while households are

projected to increase by 74 percent. The study area matches the study area from the West Davis Corridor Environmental Impact Statement (EIS) and is shown in **Figure 1**, which was taken from WDC EIS. The specific boundaries of the study area are:

- Northern boundary: 3000 South in Hooper and West Haven
- Southern boundary: about Parrish Lane in Centerville
- Western boundary: just east of the Great Salt Lake
- Eastern boundary: I-15

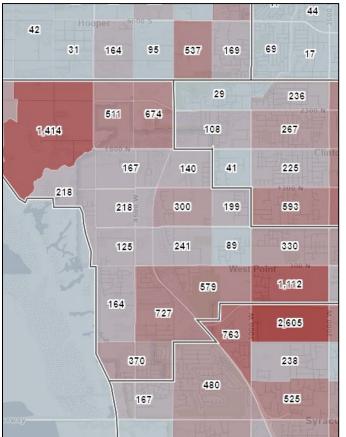
Table 2. WDC EIS Study Area Households and Employment

| Category | 2024 | 2050 | Growth | Annual % Growth |
|------------|---------|---------|--------|--------------------|
| Households | 68,000 | 118,000 | 74% | 2.8% |
| Population | 222,000 | 317,000 | 43% | 1.6% |
| Employment | 83,000 | 119,000 | 43% | 1.7% |



Figure 1. West Davis Corridor EIS Study Area

Screenshots of household and employment growth projections from 2024 to 2050 by TAZ in the vicinity of the WDC extension can be seen below in **Figures 2 and 3**. The darker the color in the figures, the larger the forecast growth. The numbers on the TAZs represent the number of new households or jobs projected for each zone.



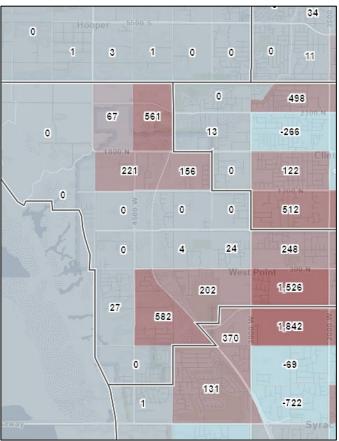


Figure 2: Household Growth (2024-2050)

Figure 3: Employment Growth (2024-2050)

3.3 West Davis Corridor Performance

The TDM was used to project future volumes on the proposed build section of West Davis Corridor from SR-193 to 1800 North (SR-37). The TDM uses volume-to-capacity (V/C) ratio to measure roadway congestion. V/C ratios are often correlated to Level of Service (LOS). The correlation used for this analysis as shown in **Table 3**.

Table 3. Level of Service based on Volume-to-Capacity Ratio

| LOS | Traffic State and Condition | V/C Ratio |
|-----|---|-----------|
| Α | Free flow | 0-0.60 |
| В | Stable flow with unaffected speed | 0.61-0.70 |
| С | Stable flow but speed is affected | 0.71-0.80 |
| D | High-density but stable flow | 0.81-0.90 |
| Е | Traffic volume near or at capacity level with low speed | 0.91-1.00 |
| F | Breakdown flow | >1.00 |

The travel model was run for 2050 conditions for four scenarios. The first two scenarios assumed an interim WDC condition that would only be extended to 1800 North. The second two scenarios assumed full buildout of WDC per the WFRC 2023-2050 RTP, which has WDC extending north to 12th Street in Ogden. These scenarios assumed that WDC would transition from a freeway to an expressway between 4000 South and 2550 South. Each group of two scenarios had one scenario with one WDC travel lane in each direction and another with two travel lanes in each direction.

The resulting 2050 volumes and northbound peak period V/C ratios for the three-hour PM peak period are presented in **Table 4** for the Interim Build and Full Build scenarios. The one-lane scenario in the Interim Build is expected to operate at LOS F with 25,000 vehicles per day, while the two-lane Interim Build is expected to function at LOS A with 1,300 more vehicles per day. The benefit of having two lanes for the Interim Build is clearly illustrated.

In the Full Build scenario, the daily volumes are expected to be 16,000 to 22,000 vehicles per day higher on the same segment. The Full Build one-lane scenario has a PM peak period V/C ratio of 1.25, substantially over capacity, whereas the two-lane scenario has a peak period V/C of 0.99 while carrying approximately 3,000 more vehicles in the peak period and 7,400 more vehicles per day.

| Table 4. Volumes and V/C on West Davis Corridor from SR-193 to 1800 North | h |
|--|---|
|--|---|

| Description | 2050 One-Lane Interim Build | 2050 Two-Lane Interim Build | 2050 One-Lane Full Build | 2050 Two-Lane Full Build |
|--------------------------------------|--------------------------------|--------------------------------|-----------------------------|-----------------------------|
| Daily Volumes | 25,000 | 26,300 | 41,300 | 48,700 |
| Peak Period Northbound V/C and (LOS) | 1.03 (F) | 0.59 (A) | 1.25 (F) | 0.99 (E) |

3.4 Network Delay

Two network delay analyses were performed wherein the total vehicle delay on the roadway segments within a study area were extracted the TDM for each scenario. The first analysis used the WDC EIS study area and the second analysis used a study area that was focused on the north end of the WDC, which generally had the following limits: Antelope Drive on the south, 1400 North on the north, 3000 West on the east and Great Salt Lake on the west.

Table 5 presents the total daily network delay for the WDC study area and the northern WDC study area for each of the 2050 scenarios. The 2050 build scenarios are compared to the No Build scenario, which assumes that WDC remains as is and is not extended farther north.

As shown, delay is expected to increase substantially in the 2050 No Build compared to 2024, as expected. Likewise, all of the build scenarios show substantial improvement compared to the No Build, particularly northern WDC study area, which is more localized to where the WDC The Full Build scenarios illustrate the benefit of the two-lane scenario over the one-lane scenario where the full extension of West Davis Corridor provides a delay reduction of over 50% in the northern study area.

Table 5. WDC EIS Study Area Daily Network Delay

| Scenario | WDC EIS Study Area | Percent Change vs. 2050 No Build | Northern WDC Study Area | Percent Change vs. 2050 No Build |
|-----------------------------|-----------------------|-------------------------------------|----------------------------|-------------------------------------|
| 2024 Existing | 5,700 hours | | 410 hours | |
| 2050 No Build | 17,600 hours | | 4,410 hours | |
| 2050 Interim Build One-Lane | 16,600 hours | -6% | 4,090 hours | -7% |
| 2050 Interim Build Two-Lane | 16,100 hours | -9% | 3,750 hours | -15% |
| 2050 Full Build One-Lane | 16,200 hours | -8% | 3,350 hours | -24% |
| 2050 Full Build Two-Lane | 14,700 hours | -16% | 2,090 hours | -53% |

3.5 Near-Term Analysis

A near-term analysis was conducted to determine what the impacts of the interim build would have on the roadway network near the northern terminus of 1800 North and how those impacts would be mitigated by continuing to extend WDC farther to the north. This was done by performing a 2027 model run with WDC extended to 1800 North and a 2030 model run with WDC extended to 4000 South. **Table 6** compares the daily volumes on 1800 North and WDC for 2024, 2027, and 2030.

Table 6. Near-Term Daily Traffic Volumes

| Roadway Segment | 2024 (WDC to SR-193) | 2027 Build (WDC to 1800 North) | 2030 Build (WDC to 4000 South) |
|--------------------------|-------------------------|-----------------------------------|-----------------------------------|
| 1800 North (west of WDC) | 3,800 | 13,700 | 11,400 |
| 1800 North (east of WDC) | 4,600 | 7,800 | 7,600 |
| WDC (north of 1800 N) | n/a | n/a | 20,900 |
| WDC (north of SR-193) | n/a | 12,900 | 23,300 |

The table shows that in 2027 with the extension of WDC to 1800 North traffic volumes on the west side of WDC are projected to increase substantially compared to existing volumes. The nearly 14,000 vehicles per day on that segment is approaching the capacity of a two-lane road. It's likely that some intersection improvements may be needed at 4500 West to ensure that the system functions well. A more detailed peak hour intersection analysis is recommended to confirm the need and magnitude of the intersection improvements. Extending WDC farther to the north will reduce 1800 North volumes west of WDC, further improving traffic operations.

4 CONCLUSION

A travel modeling analysis was conducted for the extension of West Davis Corridor for both 2050 and near-term conditions. The 2050 analysis shows that for the Interim Build scenario to operate effectively in the future, two travel lanes in each direction will be required. The need to have two lanes in each direction will only increase as the corridor is extended farther to the north.

The near-term conditions analysis shows that when the northern WDC terminus is 1800 North intersection improvements may be needed at 4500 West. A peak hour intersection analysis is recommended to confirm the need and magnitude of the intersection improvements.

Appendix B - NOISE RESOURCE



Traffic Noise Report

SR-177; SR-193 to 1800 North

Project No. S-R199(381) PIN 20927

Prepared for:



Prepared by:





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Exhibit 1: Noise Receptors Exhibit 2: Noise Barriers

Appendices

Appendix A: Traffic Volumes and Vehicle Mix

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1 INTRODUCTION

This report evaluates the potential traffic-generated noise impacts from the Proposed Action, which would construct a new four-lane highway, State Route (SR) 177, in West Point, Davis County, Utah.

This report documents the traffic noise impacts analysis and the noise abatement ana lysis for the Proposed Action. The analyses in this report are consistent with the Utah Department of Transportation (UDOT) *Noise Abatement Policy 08A2-01* and 23 Code of Federal Regulations (CFR) 772.

The noise study area, hereafter referred to as the study area, encompasses all noise-sensitive land uses that could be affected by the Proposed Action (see Figure 1). Noise-sensitive land uses in the study area include single-family homes, four churches, two golf courses, a cemetery, an outdoor sports field, and a park.

2 APPLICABILITY

A traffic noise study is required because 1) the Proposed Action meets the definition of a Type I Project, and 2) noise-sensitive land use activities exist in proximity to the Proposed Action. Type I projects are those that include any of the following (UDOT 2020):

- The construction of a highway on new location; or a substantial horizontal alteration or substantial vertical alteration of an existing highway; or
- The addition of a through-traffic lane, the addition of a through-traffic lane that functions as a High Occupancy Vehicle (HOV) lane, High Occupancy/Toll (HOT) lane, bus lane, or climbing lane; or
- The addition of an auxiliary lane, except for when the auxiliary lane is a turn lane; or
- The addition or relocation of interchange lanes or ramps added to a quadrant to complete a partial interchange; or
- Restriping existing pavement for the purpose of adding a through-traffic lane or an auxiliary lane; or
- The addition of a new or substantial alteration of a weigh station, rest stop, ride share lot, or toll plaza.

The Federal Highway Administration (FHWA) has established Noise Abatement Criteria (NAC) for several land use activities. The FHWA's noise criteria are based on sound levels that impact nearby properties, also known as receptors, with primary consideration given to outdoor areas where frequent human use occurs. NAC are described in terms of the hourly equivalent A-weighted decibel, or dBA (see Section 3.2, Decibels and Equivalent Sound Level, for more information about dBA).

UDOT has developed a noise abatement policy that is consistent with FHWA noise abatement requirements in 23 CFR 772 and establishes UDOT-specific NAC for each land use category (see Table 1). Noise impact and abatement analyses are required for Land Use Activity Categories A, B, C, D, and E only when development exists or has been permitted. Land Use Activity Categories F and G include lands that are not sensitive to traffic noise; therefore, impact criteria do not exist for these categories and a noise impact analysis is not required. A traffic noise impact occurs when 1) the future worst-case noise level is equal to or greater than the UDOT NAC for specified land use categories, or 2) the future worst-case noise level is greater than or equal to an increase of 10 dBA over the existing noise level (UDOT 2020). For this analysis, the future condition is 2050.



Figure 1. Study Area and Noise-Sensitive Land Uses

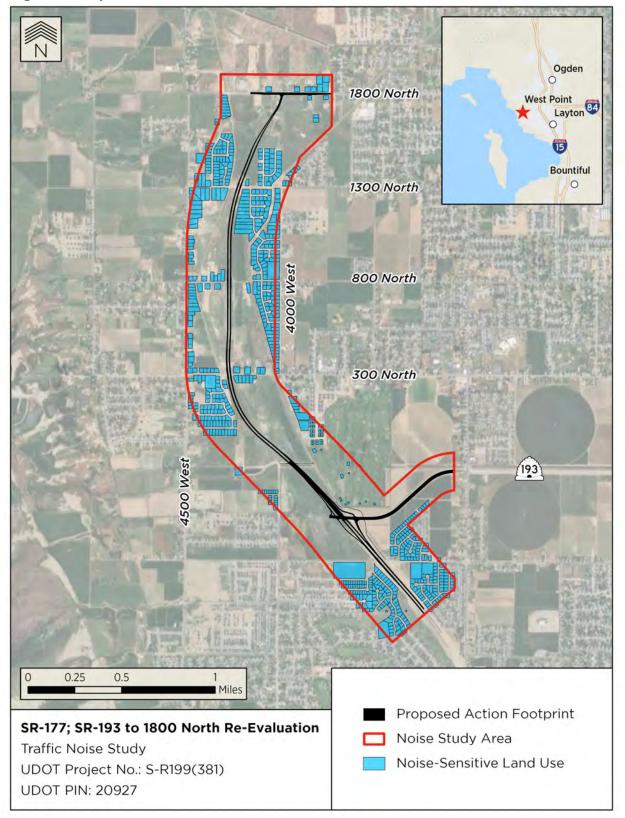




Table 1. Noise Abatement Criteria¹

| Activity Category | FHWA Criteria Leq²(h) | UDOT Criteria Leq(h)³ | Description of Activity |
|----------------------|--------------------------------|-----------------------------|---|
| А | 57 (Exterior) | 56 (Exterior) | Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose. |
| В | 67 (Exterior) | 66 (Exterior) | Residential. |
| С | 67 (Exterior) | 66 (Exterior) | Active sports areas, amphitheaters, auditoriums, campgrounds, cemeteries, daycare centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings. |
| D | 52 (Interior) | 51 (Interior) | Auditoriums, daycare centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios. |
| E | 72 71 (Exterior) (Exterior) | | Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F. |
| F | | | Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing. |
| G | | | Undeveloped lands that are not permitted. |

Source: UDOT 2020

3 FUNDAMENTALS OF TRAFFIC NOISE

This section provides a brief overview of sound, how it is measured, and how it spreads between the noise source (e.g., vehicles) and the receiver (e.g., the human ear).

3.1 Sound, Noise, and Acoustics

Sound is produced by the vibration of sound pressure waves in the air. Noise is simply unwanted, loud, or annoying sound. Acoustics, or how sound is transmitted, consist of a path between the sound source and a receiver. The following factors determine the sound level and characteristics of the noise perceived by the receiver:

- The loudness (i.e., pressure) of the source.
- Ground absorption.

¹ Hourly A-Weighted Sound Level Decibels (dBA).

² Leq = The average sound energy over a specified period.

³ Hourly A-weighted sound level in decibels reflecting a 1 dBA "approach" value below 23 CFR 772 values.



- Obstructions between the sound source and receiver which are natural (e.g., hills or densely wooded areas) or human-made (e.g., noise barriers, rows of houses, or large buildings).
- Atmospheric factors (e.g., temperature, humidity, wind, etc.) which affect the path between the sound/noise source and a receiver.

3.2 Decibels and Equivalent Sound Level

A decibel (dB) is a logarithmic unit used to measure sound-pressure levels. Because decibels are logarithmic, the sound pressure cannot be added or subtracted through ordinary arithmetic (e.g., 1+1=2). Under the decibel scale, a doubling of sound energy corresponds to a three-decibel increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be three decibels higher than one source under the same conditions. For example, if one vehicle produces 70 decibels when it passes an observer, two vehicles passing simultaneously would produce 73 decibels, not 140 decibels.

The decibel scale alone does not adequately characterize how humans perceive noise. This is because sound is composed of various frequencies, but the human ear does not respond to all frequencies. When measuring highway noise levels, frequencies not detectable by the human ear must be filtered. Studies have shown that the A-scale best approximates the frequency response of the human ear. Therefore, highway sound levels are reported in an A-weighted decibel, or dBA. Figure 2 illustrates the typical dBA for common noise levels.

Although a three-decibel increase corresponds to a doubling of sound energy, the human ear barely perceives this change.

In general, a five-decibel change is distinctly noticeable, and the human ear perceives a 10-decibel change as doubling the sound. Therefore, a doubling of sound energy (i.e., three-decibel increase), such as by doubling the amount of traffic on a highway, would generally be perceived as barely detectable.



Source: FHWA 2018a

Daily sound levels fluctuate over

time. UDOT uses an equivalent sound level, also known as Leq, to account for these variations. Leq is the average sound energy over a specified period. In other words, Leq is a steady-state sound level with the same acoustical energy as the time-varying sound that occurs during the same period. UDOT and the FHWA use an NAC that is a one-hour, A-weighted equivalent sound level, which is the average dBA occurring for one hour.

3.3 Sound Propagation

Sound propagation is the path by which sound from a source travel to a receiver. This is often referred to as the source-path-receiver concept. Geometric spreading, ground absorption, atmospheric effects, and shielding influence how a receiver perceives sound from a source. Each of these factors is described below.



GEOMETRIC SPREADING

Sound waves from a local point source spread in a uniform spherical pattern. As the sound wave extends from the point source, the sound level decreases by six dB each time the distance is doubled. However, an observer along a highway is usually within the hearing range of several vehicles (i.e., several point sources), not just one. Because of this, highways have several localized point sources along a defined path and, therefore, are treated as a line source to approximate the effect of several point sources. Unlike a single point source, sound from a line source spreads outward in a semi-cylindrical pattern, which produces a three-decibel decrease—compared to a six-decibel decrease—for each doubling of distance (FHWA 1980).

GROUND ABSORPTION

The sound path from a highway to a receiver is usually close to the ground (typically within nine to 10 feet). In addition to geometric spreading, the ground type—soft versus hard—can influence sound level reduction. Soft ground, such as plowed farmland, grass, or crops, absorbs sound waves and increases the drop-off rate by 1.5 dB for each doubling of distance. When added to the semi-spherical rate, the excess ground absorption results in a total drop-off rate of 4.5 dB each time the distance is doubled. Hard ground, such as a paved parking lot, reflects sound waves. Similarly, a body of water also reflects sound waves. Because of this reflection, excess ground absorption is not added to the drop-off rate. In general, the 4.5 dB drop-off rate is used in traffic noise analyses (FHWA 2011).

ATMOSPHERIC EFFECTS

Atmospheric factors, including air temperature, humidity, and wind, influence sound wave behavior and how the human ear perceives sound levels. For example, receivers downwind from a source can be exposed to increased noise levels relative to calm conditions, while locations upwind can have lowered noise levels. Sound levels can also increase over long distances from a highway because of atmospheric temperature inversions; that is, when temperatures are warmer at higher elevations compared to ground temperatures. In general, traffic noise analyses assume neutral atmospheric conditions because abnormal atmospheric conditions, such as high winds, heavy rain, and high humidity, are generally temporary (FHWA 2018b).

SHIELDING

Shielding refers to large objects or barriers between a noise source and a receiver. Natural terrain features (e.g., hills), and human-made features (e.g., buildings, walls, and berms), can substantially reduce noise levels at the receptor. The amount of reduction provided by shielding depends on the size of the object and the frequency content of the noise source. Walls are the most common object constructed between a highway and a receptor to reduce noise.

4 NOISE ABATEMENT

If a noise impact is identified, specific conditions must be met before traffic noise abatement will be implemented. Noise mitigation must be considered *feasible* and *reasonable*.

4.1 Feasibility

UDOT's policy requires consideration of the following factors to determine if mitigation is feasible (UDOT 2020):

Engineering considerations: Engineering considerations such as safety, presence of cross streets, sight distance, access to adjacent properties, barrier height, topography, drainage, utilities, maintenance access, and maintenance of the abatement measure must be considered as part of establishing feasibility. Noise abatement measures are not intended to serve as privacy fences or safety



barriers. Abatement measures installed on structures (i.e., bridges) will not exceed 10 feet in height measured from the top of the deck or roadway to the top of the noise wall. Noise walls will not be installed on structures that require retrofitting to accommodate the noise abatement measure. Noise abatement measures will be considered if the project meets the criteria established in this policy if structure replacement is included as part of the project. Abatement measures shall be consistent with the general American Association of State Highway and Transportation Officials (AASHTO) design principles.

- Safety on Urban Non-Access Controlled Roadways: To avoid a damaged barrier from becoming a
 safety hazard in the event of a failure, barrier height shall be no greater than the distance from the back
 of curb to the face of proposed barrier.
- Acoustic Feasibility: Noise abatement must be considered acoustically feasible. This is defined as
 achieving at least a five-dBA highway traffic noise reduction for at least 50 percent of front-row
 receptors.

Failure to meet one of the above factors will result in the noise abatement measure being deemed not *feasible* and, therefore, not included in the project.

4.2 Reasonableness

The factors to determine if mitigation is reasonable include (UDOT 2020):

- **Noise Reduction Design Goal:** UDOT defines the noise reduction design goal as a minimum noise reduction from proposed abatement measures to be seven-dBA or greater for at least 35 percent of front-row receptors. Per 23 CFR 772, no abatement measure shall be deemed reasonable if the noise reduction design goal cannot be achieved.
- Cost Effectiveness: The cost of noise abatement measures must be deemed reasonable to be included
 in the project. Allowable noise abatement costs are based on a fixed unit cost of \$20 per square foot,
 multiplied by the height and length of the barrier, plus the cost of additional right-of-way, utility
 relocations, and any other items associated with the abatement measure that are critical to safety or
 otherwise only necessary to accommodate the barrier.
 - The cost effectiveness of abatement is determined by analyzing the cost of a barrier that would provide a noise reduction of five or more dBA for a receptor. A *reasonable* cost is considered to be a maximum of \$30,000 per benefited receptor (Activity Category B Residential) or \$360 per linear foot for Activity Categories A, C, D, or E. When a proposed barrier benefits multiple Activity Categories, the reasonable cost per benefited receptor will be combined. If the anticipated cost of the noise abatement measure is less than the allowable cost, then the abatement is deemed reasonable.
- Viewpoints of Property Owners and Tenants: As part of the final design phase, UDOT needs to establish whether property owners and tenants are in favor of noise abatement measures that meet the feasible and reasonable criteria. Public balloting would occur so the property owners and tenants can indicate their preference for or against the proposed noise-abatement measures.

Failure to achieve any of the above factors will result in the noise abatement measure being deemed not *reasonable* and, therefore, not included in the project.



5 TRAFFIC NOISE MODEL 2.5

Traffic Noise Model 2.5 (TNM 2.5) is a modeling software developed by the FHWA and is used in this study to predict existing (2024) traffic-generated noise and worst-case future (2050) noise conditions. TNM 2.5 uses receivers, which are representative locations of noise-sensitive areas (receptors) to predict noise levels. Receivers may represent one or more receptors based on their proximity to the proposed improvements. TNM 2.5 accounts for vehicle type, vehicle speed, traffic volume, roadway geometry, geometric spreading, ground absorption, atmospheric effects, and shielding (see Section 3.3, *Sound Propagation*). Vehicle types used in TNM 2.5 include:

- Automobiles (Autos): Vehicles with two axles and four tires designed primarily to carry passengers.
- Medium-duty trucks (Medium Trucks): Cargo vehicles with two axles and six tires, including small vans and light trucks.
- Heavy-duty trucks (Heavy Trucks): Cargo vehicles with three or more axles.

TNM 2.5 predicts noise levels for the time of day when vehicle volume, travel speed, and percentage of heavy trucks combine to create the worst (i.e., loudest) traffic noise hour. For the existing condition, vehicle volume is based on peak traffic; for the future condition, vehicle volume is based on Level of Service (LOS) C (see Table 2 and Appendix A, *Traffic Volumes and Vehicle Mix*).

Table 2. TNM 2.5 Existing (2024) Peak and Future (2050) Level of Service C Traffic Volumes and Vehicle Mix

| | | Existing Peak (Per Lane) | | Future LOS C (Per Lane) | | Vehicle Mix (Percent) | | | |
|----------------|-----------|-----------------------------|----------------|----------------------------|----------------|--------------------------|------------------|-----------------|--|
| Road | Direction | Vehicle Volume | Speed (MPH) | Vehicle Volume | Speed (MPH) | Autos | Medium Trucks | Heavy Trucks | |
| SR-177 | NB | n/a | n/a | 1,300 | 75 | 84 | 15 | 1 | |
| Mainline | SB | n/a | n/a | 1,300 | 75 | 84 | 15 | 1 | |
| SR-177 | NB | n/a | n/a | 900 | Variable | 84 | 15 | 1 | |
| On-Ramps | SB | n/a | n/a | 900 | Variable | 84 | 15 | 1 | |
| SR-177 | NB | n/a | n/a | 670 | Variable | 84 | 15 | 1 | |
| Off-Ramps | SB | n/a | n/a | 670 | Variable | 84 | 15 | 1 | |
| SR-193 | EB | 249 | 50 | n/a | n/a | 84 | 14 | 2 | |
| East of SR-177 | WB | 175 | 50 | n/a | n/a | 84 | 14 | 2 | |
| SR-193 | EB | 400 | 40 | n/a | n/a | 84 | 14 | 2 | |
| West of SR-177 | WB | 300 | 40 | n/a | n/a | 84 | 14 | 2 | |
| 4500 West | NB | 517 | 40 | n/a | n/a | 84 | 14 | 2 | |
| 4500 West | SB | 324 | 40 | n/a | n/a | 84 | 14 | 2 | |
| 4000 West | NB | 118 | 35 | n/a | n/a | 85 | 13 | 2 | |
| 4000 West | SB | 88 | 35 | n/a | n/a | 85 | 13 | 2 | |
| 3000 West | NB | 182 | 35 | n/a | n/a | 89 | 10 | 1 | |
| SOOO West | SB | 143 | 35 | n/a | n/a | 89 | 10 | 1 | |



Table 2. TNM 2.5 Existing (2024) Peak and Future (2050) Level of Service C Traffic Volumes and Vehicle Mix

| | | Existing Peak (Per Lane) | | Future LOS C (Per Lane) | | Vehicle Mix (Percent) | | |
|------------|-----------|-----------------------------|----------------|----------------------------|----------------|--------------------------|------------------|-----------------|
| Road | Direction | Vehicle Volume | Speed (MPH) | Vehicle Volume | Speed (MPH) | Autos | Medium Trucks | Heavy Trucks |
| 1800 North | EB | 171 | 45 | n/a | n/a | 80 | 18 | 2 |
| 1800 NOITH | WB | 207 | 45 | n/a | n/a | 80 | 18 | 2 |
| 1300 North | EB | 49 | 35 | n/a | n/a | 89 | 10 | 2 |
| 1300 NOITH | WB | 50 | 35 | n/a | n/a | 89 | 10 | 2 |
| 800 North | EB | 61 | 35 | n/a | n/a | 74 | 24 | 2 |
| 800 NOITH | WB | 53 | 35 | n/a | n/a | 74 | 24 | 2 |
| 200 North | EB | 295 | 40 | n/a | n/a | 79 | 19 | 2 |
| 300 North | WB | 218 | 40 | n/a | n/a | 79 | 19 | 2 |
| 700 South | EB | 110 | 35 | n/a | n/a | 84 | 14 | 2 |
| /00 30uiii | WB | 202 | 35 | n/a | n/a | 84 | 14 | 2 |

LOS = Level of Service

NB = Northbound

SB = Southbound

EB = Eastbound

WB = Westbound

Note: Vehicle volumes marked "n/a" in the Future LOS C condition indicate that the roadway is included in the traffic noise model to produce baseline background noise levels. Future LOS C vehicle volumes were not applied to these roadways because they would not be modified by the Proposed Action.

6 EXISTING NOISE ENVIRONMENT

6.1 Noise-Sensitive Land Uses

Noise-sensitive land uses in the study area were identified using current aerial imagery, online tools (e.g., Google Street View), and field verification. City of West Point planning staff provided information for developments that have received (or are expected to receive) a formal building permit prior to the approval of the Environmental Impact Statement (EIS) Re-evaluation; the Craythorn Homestead development at the corner of SR-193 and Cold Springs Road was identified. NAC land use activities in the study area include:

- Single-family homes (Category B).
- Golf courses (Category C).
- Cemetery (Category C).
- Outdoor sports field (Category C).
- Rock Creek Park (Category C).
- Churches (Category D).

For this analysis, noise abatement is considered for outdoor areas (Category B and Category C) and indoor areas (Category D) that would benefit from a lowered noise level.

6.2 Field Measurements

Field measurements are taken to validate the use of TNM 2.5 to predict existing and future noise levels, and to provide background measurements that were applied to receptors where the TNM 2.5-predicted dBA was



under the FHWA daytime noise levels of suburban-areas' range of 40 to 50 dBA (FHWA 2018a). Each background measurement site was selected to represent suburban residential areas throughout the study area. A model is valid if predicted noise levels are within three dBA of the field measurements. UDOT selected three short-term validation measurement sites and four short-term background measurement sites to represent the NAC land use activities identified in the study area (see Figure 1, Section 6.1, *Noise Sensitive Land Uses*, and Figure 3). A 20-minute field measurement was taken at each site using a Larson Davis SoundTrack LxT sound level meter (see Appendix B, *Meter Certifications*, for meter calibration certificates, and Appendix C, *Noise Field Measurements*, for measurement dates, times, and field measurement results). At each site, vehicles were counted on a weekday during free-flow conditions and classified as automobiles, medium-duty trucks, and heavy-duty trucks; buses and motorcycles were also counted for validation measurements. The observed travel speeds ranged between 30 and 35 MPH on SR-177, 35 and 40 MPH on 300 North, and 30 MPH on 1300 North. Temperature and wind speed were recorded manually; temperatures ranged from 83°F to 89°F, and sustained wind speeds were not observed.

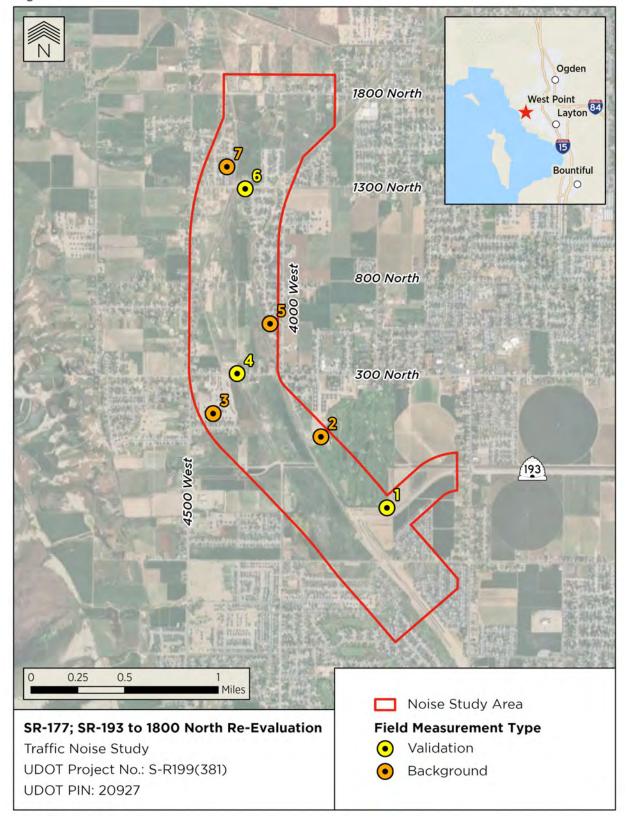
Field measurement noise levels were compared to the TNM 2.5 predicted noise levels (see Table 3). TNM 2.5 predicted noise levels are within three dBA of the field measurement values; therefore, the model is considered valid.

Table 3. Field Measurement and TNM 2.5 Predicted Noise Levels

| Field Measurement Site ID | Field Measurement Noise Level (dBA) | TNM 2.5 Predicted Noise Level (dBA) | Noise Level Difference (dBA) | | |
|------------------------------|---|---|---------------------------------|--|--|
| 1 | 48.0 | 48.8 | -0.8 | | |
| 4 | 63.8 | 63.9 | -0.1 | | |
| 6 | 56.4 | 56.0 | 0.4 | | |



Figure 3. Field Measurement Sites





7 TRAFFIC NOISE IMPACTS ANALYSIS

The purpose of the traffic noise analysis is to determine which (if any) noise receptors are impacted by traffic noise. A noise impact is defined as a receptor having a noise level greater than or equal to its NAC threshold or receiving an increase of 10 dBA or more over its existing noise level. For the traffic noise analysis, noise impact assessments were performed for 764 receivers representing 764 receptors in the study area (see Exhibit 1, Noise Receptors).

To determine if TNM 2.5 is accurately predicting suburban daytime noise levels in the existing condition, several field background measurements were taken; the average dBA for these measurements was 46 dBA. According to FHWA, suburban daytime noise levels might be in the 40-to-50 dBA range (FHWA 2018a). Since the field background measurement average falls within this range, if existing TNM 2.5 noise levels were below 46 dBA, then they were adjusted to 46 dBA instead of the lower TNM 2.5 noise level.

For the existing condition, outdoor noise levels range from 46 dBA to 65 dBA. Indoor noise levels range from 21 dBA to 37 dBA. Of the 764 receptors in this analysis, none are impacted in the existing condition (see Table 3).

For the future condition (2050), outdoor noise levels range from 46 dBA to 74 dBA. Indoor noise levels range from 25 dBA to 40 dBA. Of the 764 receptors in this analysis, 283 receptors are impacted in the future condition (see Table 3 and Exhibit 1, Noise Receptors):

- 43 receptors would have a noise level greater than or equal to their NAC threshold.
- 282 receptors would receive an increase of 10 dBA or more over their existing noise levels.
- 42 receptors would experience both types of impacts.

Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | | | | | | | lmpact | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RN001 | 1 | В | 66 | 46 | 66 | 20 | Yes | Yes |
| RN002 | 1 | В | 66 | 46 | 65 | 19 | No | Yes |
| RN003 | 1 | В | 66 | 51 | 65 | 14 | No | Yes |
| RN004 | 1 | В | 66 | 46 | 65 | 19 | No | Yes |
| RN005 | 1 | В | 66 | 46 | 64 | 18 | No | Yes |
| RN006 | 1 | В | 66 | 46 | 63 | 17f | No | Yes |
| RN007 | 1 | В | 66 | 46 | 63 | 17 | No | Yes |
| RN008 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RN009 | 1 | В | 66 | 46 | 61 | 15 | No | Yes |
| RN010 | 1 | В | 66 | 46 | 61 | 15 | No | Yes |
| RN011 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RN012 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | 71 2.5 Existing (2 | | | 0, 0011011010 | | | | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| | | | | | | | lmı | pact |
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RN013 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RN014 | 1 | В | 66 | 46 | 59 | 13 | No | Yes |
| RN015 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RN019 | 1 | В | 66 | 60 | 65 | 5 | No | No |
| RN020 | 1 | В | 66 | 46 | 63 | 17 | No | Yes |
| RN021 | 1 | В | 66 | 46 | 62 | 16 | No | Yes |
| RN022 | 1 | В | 66 | 46 | 59 | 13 | No | Yes |
| RN023 | 1 | В | 66 | 46 | 58 | 12 | No | Yes |
| RN024 | 1 | В | 66 | 47 | 56 | 9 | No | No |
| RN025 | 1 | В | 66 | 60 | 60 | 0 | No | No |
| RN026 | 1 | В | 66 | 51 | 57 | 6 | No | No |
| RN027 | 1 | В | 66 | 51 | 56 | 5 | No | No |
| RN028 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RN029 | 1 | В | 66 | 49 | 56 | 7 | No | No |
| RN030 | 1 | В | 66 | 47 | 56 | 9 | No | No |
| RN031 | 1 | В | 66 | 53 | 57 | 4 | No | No |
| RN032 | 1 | В | 66 | 54 | 57 | 3 | No | No |
| RN033 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RN034 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RN035 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RN036 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RN037 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RN038 | 1 | В | 66 | 48 | 56 | 8 | No | No |
| RN039 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RN040 | 1 | В | 66 | 47 | 56 | 9 | No | No |
| RN041 | 1 | В | 66 | 52 | 55 | 3 | No | No |
| RN042 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RN043 | 1 | В | 66 | 46 | 58 | 12 | No | Yes |
| RN044 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | VI 2.5 EXISTING (2 | | () | -, | | | | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| | | | | | | | lm | pact |
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RN045 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RN046 | 1 | В | 66 | 48 | 55 | 7 | No | No |
| RN047 | 1 | В | 66 | 57 | 58 | 1 | No | No |
| RN048 | 1 | В | 66 | 54 | 62 | 8 | No | No |
| RN049 | 1 | В | 66 | 52 | 59 | 7 | No | No |
| RN050 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RN051 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RN052 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RN053 | 1 | В | 66 | 49 | 52 | 3 | No | No |
| RN054 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RN055 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RN056 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RN057 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RN058 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RN059 | 1 | В | 66 | 46 | 58 | 12 | No | Yes |
| RN060 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RN061 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RN062 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RN063 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RN064 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RN065 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RN066 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RN067 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RN068 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RN069 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RN070 | 1 | В | 66 | 46 | 58 | 12 | No | Yes |
| RN071 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RN072 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RN073 | 1 | В | 66 | 46 | 55 | 9 | No | No |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | 71 2.5 Existing (2 | | | -, | | | | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| | | | | | | | lmı | pact |
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RN074 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RN075 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RN076 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RN077 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RN078 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RN079 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RN080 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RN081 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RN082 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RN083 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RN084 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RN085 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RN086 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RN087 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RN088 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RN089 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RN090 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RN091 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RN092 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RN093 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RN094 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RN095 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RN096 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RN097 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RN098 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RN099 | 1 | В | 66 | 49 | 53 | 4 | No | No |
| RN100 | 1 | В | 66 | 53 | 55 | 2 | No | No |
| RN101 | 1 | В | 66 | 61 | 61 | 0 | No | No |
| RN102 | 1 | В | 66 | 46 | 63 | 17 | No | Yes |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | VI 2.5 EXISTING (2 | | () | -, | | | | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| | | | | | | | lmı | pact |
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RN103 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RN104 | 1 | В | 66 | 46 | 59 | 13 | No | Yes |
| RN105 | 1 | В | 66 | 46 | 61 | 15 | No | Yes |
| RN106 | 1 | В | 66 | 46 | 61 | 15 | No | Yes |
| RN107 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RN108 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RN109 | 1 | В | 66 | 46 | 58 | 12 | No | Yes |
| RN110 | 1 | В | 66 | 46 | 58 | 12 | No | Yes |
| RN111 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RN112 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RN113 | 1 | В | 66 | 46 | 63 | 17 | No | Yes |
| RN114 | 1 | В | 66 | 46 | 62 | 16 | No | Yes |
| RN115 | 1 | В | 66 | 46 | 62 | 16 | No | Yes |
| RN116 | 1 | В | 66 | 46 | 64 | 18 | No | Yes |
| RN117 | 1 | В | 66 | 46 | 67 | 21 | Yes | Yes |
| RN118 | 1 | В | 66 | 46 | 67 | 21 | Yes | Yes |
| RN119 | 1 | В | 66 | 46 | 68 | 22 | Yes | Yes |
| RN120 | 1 | В | 66 | 46 | 67 | 21 | Yes | Yes |
| RN121 | 1 | В | 66 | 46 | 66 | 20 | Yes | Yes |
| RN122 | 1 | В | 66 | 46 | 68 | 22 | Yes | Yes |
| RN123 | 1 | В | 66 | 48 | 70 | 22 | Yes | Yes |
| RN124 | 1 | В | 66 | 46 | 68 | 22 | Yes | Yes |
| RN125 | 1 | В | 66 | 46 | 62 | 16 | No | Yes |
| RN126 | 1 | В | 66 | 46 | 63 | 17 | No | Yes |
| RN127 | 1 | В | 66 | 46 | 64 | 18 | No | Yes |
| RN128 | 1 | В | 66 | 46 | 65 | 19 | No | Yes |
| RN129 | 1 | В | 66 | 46 | 66 | 20 | Yes | Yes |
| RN130 | 1 | В | 66 | 46 | 66 | 20 | Yes | Yes |
| RN131 | 1 | В | 66 | 46 | 69 | 23 | Yes | Yes |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | = = | | | 0, 001101101011 | | | and impacts | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| | | | | | | | lmı | pact |
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RN132 | 1 | В | 66 | 46 | 69 | 23 | Yes | Yes |
| RN133 | 1 | В | 66 | 46 | 70 | 24 | Yes | Yes |
| RN137 | 1 | В | 66 | 59 | 64 | 5 | No | No |
| RN138 | 1 | В | 66 | 62 | 64 | 2 | No | No |
| RN139 | 1 | В | 66 | 62 | 63 | 1 | No | No |
| RN140 | 1 | В | 66 | 61 | 62 | 1 | No | No |
| RN141 | 1 | В | 66 | 59 | 60 | 1 | No | No |
| RN142 | 1 | В | 66 | 48 | 55 | 7 | No | No |
| RN143 | 1 | В | 66 | 60 | 61 | 1 | No | No |
| RN144 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RN145 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RN146 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RN147 | 1 | В | 66 | 48 | 55 | 7 | No | No |
| RN148 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RN149 | 1 | D | 51 | 21 | 25 | 4 | No | No |
| RN150 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RN151 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RN152 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RN153 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RN154 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RN155 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RN156 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RN157 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RN158 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RN159 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RN160 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RN161 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RN162 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RN163 | 1 | В | 66 | 46 | 46 | 0 | No | No |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | 7 2.5 Existing (2 | | () | -, | | | | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| | | | | | | | lm | pact |
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RN164 | 1 | В | 66 | 48 | 49 | 1 | No | No |
| RN165 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RN166 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RN167 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RN168 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RN169 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RN170 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RN171 | 1 | В | 66 | 49 | 50 | 1 | No | No |
| RN172 | 1 | В | 66 | 52 | 53 | 1 | No | No |
| RN173 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RN174 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RN175 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RN176 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RN177 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RN178 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RN179 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RN180 | 1 | В | 66 | 47 | 50 | 3 | No | No |
| RN181 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RN182 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RN183 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RN184 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RN185 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RN186 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RN187 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RN188 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RN189 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RN190 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RN191 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RN192 | 1 | В | 66 | 46 | 50 | 4 | No | No |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | 71 2.5 Existing (2 | | | 0, 0011011010 | | | | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| | | | | | | | lm | pact |
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RN193 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RN194 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RN195 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RN196 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RN197 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RN198 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RN199 | 1 | В | 66 | 46 | 58 | 12 | No | Yes |
| RN200 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RN201 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RN202 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RN203 | 1 | В | 66 | 46 | 58 | 12 | No | Yes |
| RN204 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RN205 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RN206 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RN207 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RN208 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RN209 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RN210 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RN211 | 1 | В | 66 | 51 | 64 | 13 | No | Yes |
| RN212 | 1 | В | 66 | 51 | 63 | 12 | No | Yes |
| RN213 | 1 | В | 66 | 51 | 61 | 10 | No | Yes |
| RN214 | 1 | В | 66 | 51 | 59 | 8 | No | No |
| RN215 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RN216 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RN217 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RN218 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RN219 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RN220 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RN221 | 1 | В | 66 | 46 | 54 | 8 | No | No |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | VI 2.5 EXISTING (2 | | | 0, 001101101011 | | | | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| | | | | | | | lm | pact |
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RN222 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RN223 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RN224 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RN225 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RN226 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RN227 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RN228 | 1 | В | 66 | 46 | 59 | 13 | No | Yes |
| RN229 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RN230 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RN231 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RN232 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RN233 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RN234 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RN235 | 1 | В | 66 | 46 | 61 | 15 | No | Yes |
| RN236 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RN237 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RN238 | 1 | В | 66 | 46 | 62 | 16 | No | Yes |
| RN239 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RN240 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RN241 | 1 | В | 66 | 46 | 62 | 16 | No | Yes |
| RN242 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RN243 | 1 | В | 66 | 46 | 64 | 18 | No | Yes |
| RN244 | 1 | В | 66 | 46 | 61 | 15 | No | Yes |
| RN245 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RN246 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RM001 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RM002 | 1 | В | 66 | 46 | 66 | 20 | Yes | Yes |
| RM003 | 1 | В | 66 | 46 | 68 | 22 | Yes | Yes |
| RM004 | 1 | В | 66 | 46 | 67 | 21 | Yes | Yes |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | | | | | | | lmpact | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RM005 | 1 | В | 66 | 46 | 68 | 22 | Yes | Yes |
| RM006 | 1 | В | 66 | 46 | 68 | 22 | Yes | Yes |
| RM007 | 1 | В | 66 | 46 | 68 | 22 | Yes | Yes |
| RM008 | 1 | В | 66 | 46 | 65 | 19 | No | Yes |
| RM009 | 1 | В | 66 | 47 | 67 | 20 | Yes | Yes |
| RM010 | 1 | В | 66 | 50 | 67 | 17 | Yes | Yes |
| RM011 | 1 | В | 66 | 46 | 61 | 15 | No | Yes |
| RM012 | 1 | В | 66 | 46 | 65 | 19 | No | Yes |
| RM013 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RM014 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RM015 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RM016 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RM017 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RM018 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RM019 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RM020 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RM021 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RM022 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RM023 | 1 | В | 66 | 46 | 64 | 18 | No | Yes |
| RM024 | 1 | В | 66 | 46 | 61 | 15 | No | Yes |
| RM025 | 1 | В | 66 | 46 | 59 | 13 | No | Yes |
| RM026 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RM027 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RM028 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RM029 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RM030 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RM031 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RM032 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RM033 | 1 | В | 66 | 46 | 52 | 6 | No | No |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | 7 2.5 Existing (2 | | () | -, | | | | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| | | | | | | | Impa | |
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RM034 | 1 | В | 66 | 46 | 66 | 20 | Yes | Yes |
| RM035 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RM036 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RM037 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RM038 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RM039 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RM040 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RM041 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RM042 | 1 | В | 66 | 47 | 50 | 3 | No | No |
| RM043 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RM044 | 1 | В | 66 | 46 | 61 | 15 | No | Yes |
| RM045 | 1 | В | 66 | 46 | 59 | 13 | No | Yes |
| RM046 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RM047 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RM048 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RM049 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RM050 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RM051 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RM052 | 1 | В | 66 | 46 | 58 | 12 | No | Yes |
| RM053 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RM054 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RM055 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RM056 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RM057 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RM058 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RM059 | 1 | В | 66 | 50 | 53 | 3 | No | No |
| RM060 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RM061 | 1 | В | 66 | 49 | 53 | 4 | No | No |
| RM062 | 1 | В | 66 | 46 | 62 | 16 | No | Yes |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | | | | | | | • | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| | | | | | | | Impact | |
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RM063 | 1 | В | 66 | 46 | 58 | 12 | No | Yes |
| RM064 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RM065 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RM066 | 1 | В | 66 | 49 | 53 | 4 | No | No |
| RM067 | 1 | В | 66 | 46 | 61 | 15 | No | Yes |
| RM068 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RM069 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RM070 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RM071 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RM072 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RM073 | 1 | В | 66 | 50 | 54 | 4 | No | No |
| RM074 | 1 | В | 66 | 46 | 59 | 13 | No | Yes |
| RM075 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RM076 | 1 | В | 66 | 46 | 63 | 17 | No | Yes |
| RM077 | 1 | В | 66 | 47 | 66 | 19 | Yes | Yes |
| RM078 | 1 | В | 66 | 51 | 66 | 15 | Yes | Yes |
| RM079 | 1 | В | 66 | 58 | 67 | 9 | Yes | No |
| RM080 | 1 | D | 51 | 37 | 40 | 3 | No | No |
| RM081 | 1 | В | 66 | 53 | 56 | 3 | No | No |
| RM082 | 1 | В | 66 | 47 | 52 | 5 | No | No |
| RM083 | 1 | В | 66 | 52 | 54 | 2 | No | No |
| RM084 | 1 | В | 66 | 54 | 56 | 2 | No | No |
| RM085 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RM086 | 1 | В | 66 | 46 | 58 | 12 | No | Yes |
| RM087 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RM088 | 1 | В | 66 | 57 | 58 | 1 | No | No |
| RM089 | 1 | В | 66 | 58 | 59 | 1 | No | No |
| RM090 | 1 | В | 66 | 59 | 59 | 0 | No | No |
| RM091 | 1 | В | 66 | 50 | 55 | 5 | No | No |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | | | | | | | lm | pact |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RM092 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RM093 | 1 | В | 66 | 48 | 56 | 8 | No | No |
| RM094 | 1 | В | 66 | 48 | 55 | 7 | No | No |
| RM095 | 1 | В | 66 | 49 | 55 | 6 | No | No |
| RM096 | 1 | В | 66 | 51 | 57 | 6 | No | No |
| RM097 | 1 | В | 66 | 49 | 56 | 7 | No | No |
| RM098 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RM099 | 1 | В | 66 | 50 | 55 | 5 | No | No |
| RM100 | 1 | В | 66 | 50 | 55 | 5 | No | No |
| RM101 | 1 | В | 66 | 47 | 54 | 7 | No | No |
| RM102 | 1 | В | 66 | 48 | 54 | 6 | No | No |
| RM103 | 1 | В | 66 | 54 | 56 | 2 | No | No |
| RM104 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RM105 | 1 | В | 66 | 48 | 55 | 7 | No | No |
| RM106 | 1 | В | 66 | 46 | 59 | 13 | No | Yes |
| RM107 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RM108 | 1 | В | 66 | 48 | 53 | 5 | No | No |
| RM109 | 1 | В | 66 | 60 | 60 | 0 | No | No |
| RM110 | 1 | С | 66 | 55 | 63 | 8 | No | No |
| RM111 | 1 | С | 66 | 53 | 63 | 10 | No | Yes |
| RM112 | 1 | С | 66 | 53 | 65 | 12 | No | Yes |
| RM113 | 1 | С | 66 | 51 | 68 | 17 | Yes | Yes |
| RM114 | 1 | С | 66 | 49 | 69 | 20 | Yes | Yes |
| RM115 | 1 | С | 66 | 46 | 61 | 15 | No | Yes |
| RM116 | 1 | С | 66 | 46 | 58 | 12 | No | Yes |
| RM117 | 1 | С | 66 | 46 | 55 | 9 | No | No |
| RM118 | 1 | С | 66 | 46 | 56 | 10 | No | Yes |
| RM119 | 1 | С | 66 | 46 | 61 | 15 | No | Yes |
| RM120 | 1 | С | 66 | 46 | 63 | 17 | No | Yes |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | 71 2.5 Existing (2 | | | 0, 0011011010 | | | | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| | | | | | | | lm | pact |
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RM121 | 1 | В | 66 | 46 | 62 | 16 | No | Yes |
| RM122 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RM123 | 1 | С | 66 | 46 | 57 | 11 | No | Yes |
| RM124 | 1 | С | 66 | 46 | 56 | 10 | No | Yes |
| RM125 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RM126 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RM127 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RM128 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RM129 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RM130 | 1 | В | 66 | 51 | 66 | 15 | Yes | Yes |
| RM131 | 1 | В | 66 | 46 | 67 | 21 | Yes | Yes |
| RM132 | 1 | В | 66 | 48 | 59 | 11 | No | Yes |
| RM133 | 1 | В | 66 | 48 | 59 | 11 | No | Yes |
| RM134 | 1 | В | 66 | 48 | 59 | 11 | No | Yes |
| RM135 | 1 | В | 66 | 46 | 58 | 12 | No | Yes |
| RM136 | 1 | В | 66 | 46 | 58 | 12 | No | Yes |
| RM137 | 1 | В | 66 | 46 | 58 | 12 | No | Yes |
| RM138 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RM139 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RM140 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RM141 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RM142 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RM143 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RM144 | 1 | В | 66 | 46 | 61 | 15 | No | Yes |
| RM145 | 1 | В | 66 | 46 | 61 | 15 | No | Yes |
| RM146 | 1 | В | 66 | 46 | 62 | 16 | No | Yes |
| RM147 | 1 | В | 66 | 46 | 62 | 16 | No | Yes |
| RM148 | 1 | В | 66 | 46 | 62 | 16 | No | Yes |
| RM149 | 1 | В | 66 | 46 | 63 | 17 | No | Yes |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | VI 2.5 EXISTING (2 | | | -, | | | | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| | | | | | | | Impa | |
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RM150 | 1 | В | 66 | 46 | 63 | 17 | No | Yes |
| RM151 | 1 | В | 66 | 46 | 63 | 17 | No | Yes |
| RM152 | 1 | В | 66 | 46 | 63 | 17 | No | Yes |
| RM153 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RM154 | 1 | В | 66 | 47 | 64 | 17 | No | Yes |
| RM155 | 1 | В | 66 | 46 | 62 | 16 | No | Yes |
| RM156 | 1 | В | 66 | 46 | 61 | 15 | No | Yes |
| RM157 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RM158 | 1 | В | 66 | 46 | 59 | 13 | No | Yes |
| RM159 | 1 | В | 66 | 46 | 59 | 13 | No | Yes |
| RM160 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RM161 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RM162 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RM163 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RM164 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RM165 | 1 | В | 66 | 46 | 59 | 13 | No | Yes |
| RM166 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RM167 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RM168 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RM169 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RM170 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RM171 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RM172 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RM173 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RM174 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RM175 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RM176 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RM177 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RM178 | 1 | В | 66 | 46 | 52 | 6 | No | No |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | 71 2.5 Existing (2 | | | 0, 0011011010 | | | | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| | | | | | | | lm | pact |
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RM179 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RM180 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RM181 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RM182 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RM183 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RM184 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RM185 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RM186 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RM187 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RM188 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RM189 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RM190 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RM191 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RM192 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RM193 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RM194 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RM195 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RM196 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RM197 | 1 | В | 66 | 47 | 64 | 17 | No | Yes |
| RM198 | 1 | В | 66 | 46 | 62 | 16 | No | Yes |
| RM199 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RM200 | 1 | В | 66 | 46 | 59 | 13 | No | Yes |
| RM201 | 1 | В | 66 | 50 | 58 | 8 | No | No |
| RM202 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RM203 | 1 | В | 66 | 47 | 58 | 11 | No | Yes |
| RM204 | 1 | В | 66 | 47 | 56 | 9 | No | No |
| RM205 | 1 | В | 66 | 64 | 65 | 1 | No | No |
| RM206 | 1 | В | 66 | 57 | 61 | 4 | No | No |
| RM207 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | 7 2.5 Existing (2 | | () | -, | | | | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| | | | | | | | lm | pact |
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RM208 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RM209 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RM210 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RM211 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RM212 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RM213 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RM214 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RM215 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RM216 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RM217 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RM218 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RM219 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RM220 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RM221 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RM222 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RM223 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RM224 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RM225 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RM226 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RM227 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RM228 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RM229 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RM230 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RM231 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RM232 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RM233 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RM234 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RM235 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RM236 | 1 | В | 66 | 46 | 46 | 0 | No | No |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | 71 2.5 Existing (2 | | | 0, 0011011010 | | | | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| | | | | | | | lm | pact |
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RM237 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RM238 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RM239 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RM240 | 1 | В | 66 | 52 | 56 | 4 | No | No |
| RM241 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RM242 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RM243 | 1 | В | 66 | 52 | 52 | 0 | No | No |
| RS036 | 1 | В | 66 | 65 | 65 | 0 | No | No |
| RS037 | 1 | В | 66 | 58 | 61 | 3 | No | No |
| RS038 | 1 | В | 66 | 55 | 59 | 4 | No | No |
| RS039 | 1 | В | 66 | 53 | 59 | 6 | No | No |
| RS040 | 1 | В | 66 | 51 | 59 | 8 | No | No |
| RS041 | 1 | В | 66 | 49 | 58 | 9 | No | No |
| RS117 | 1 | В | 66 | 52 | 57 | 5 | No | No |
| RS118 | 1 | В | 66 | 50 | 57 | 7 | No | No |
| RS119 | 1 | В | 66 | 47 | 56 | 9 | No | No |
| RS120 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RS135 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RS136 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RS137 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RS138 | 1 | В | 66 | 46 | 58 | 12 | No | Yes |
| RS139 | 1 | В | 66 | 46 | 58 | 12 | No | Yes |
| RS140 | 1 | В | 66 | 46 | 58 | 12 | No | Yes |
| RS141 | 1 | В | 66 | 46 | 59 | 13 | No | Yes |
| RS142 | 1 | В | 66 | 46 | 59 | 13 | No | Yes |
| RS143 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RS144 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RS145 | 1 | С | 66 | 49 | 61 | 12 | No | Yes |
| RS146 | 1 | В | 66 | 55 | 66 | 11 | Yes | Yes |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | VI 2.5 EXISTING (2 | | | -, | | | | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| | | | | | | | Impact | |
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RS147 | 1 | В | 66 | 53 | 66 | 13 | Yes | Yes |
| RS148 | 1 | В | 66 | 54 | 65 | 11 | No | Yes |
| RS149 | 1 | В | 66 | 54 | 64 | 10 | No | Yes |
| RS150 | 1 | В | 66 | 55 | 65 | 10 | No | Yes |
| RS151 | 1 | В | 66 | 55 | 66 | 11 | Yes | Yes |
| RS152 | 1 | В | 66 | 55 | 67 | 12 | Yes | Yes |
| RS153 | 1 | В | 66 | 55 | 68 | 13 | Yes | Yes |
| RS154 | 1 | В | 66 | 55 | 68 | 13 | Yes | Yes |
| RS155 | 1 | В | 66 | 53 | 66 | 13 | Yes | Yes |
| RS156 | 1 | В | 66 | 51 | 64 | 13 | No | Yes |
| RS157 | 1 | В | 66 | 49 | 62 | 13 | No | Yes |
| RS158 | 1 | В | 66 | 50 | 63 | 13 | No | Yes |
| RS159 | 1 | В | 66 | 49 | 63 | 14 | No | Yes |
| RS160 | 1 | В | 66 | 49 | 62 | 13 | No | Yes |
| RS161 | 1 | С | 66 | 52 | 64 | 12 | No | Yes |
| RS162 | 1 | В | 66 | 48 | 61 | 13 | No | Yes |
| RS163 | 1 | В | 66 | 48 | 61 | 13 | No | Yes |
| RS164 | 1 | В | 66 | 48 | 60 | 12 | No | Yes |
| RS165 | 1 | В | 66 | 48 | 60 | 12 | No | Yes |
| RS166 | 1 | В | 66 | 47 | 59 | 12 | No | Yes |
| RS167 | 1 | D | 51 | 21 | 26 | 5 | No | No |
| RS168 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RS169 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RS170 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RS171 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RS172 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RS173 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RS174 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RS175 | 1 | В | 66 | 47 | 60 | 13 | No | Yes |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | n 2.5 Existing (2 | | (| 0, 001101101011 | | | | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| | | | | | | | Impact | |
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RS176 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RS177 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RS178 | 1 | В | 66 | 49 | 61 | 12 | No | Yes |
| RS179 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RS180 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RS181 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RS182 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RS183 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RS184 | 1 | С | 66 | 46 | 53 | 7 | No | No |
| RS185 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RS186 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RS187 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RS188 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RS189 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RS190 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RS191 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS192 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS193 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS194 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RS195 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RS196 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RS197 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RS198 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RS199 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RS200 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RS201 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RS202 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RS203 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RS204 | 1 | В | 66 | 46 | 49 | 3 | No | No |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | 7 2.5 Existing (2 | | () | -, | | | | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| | | | | | | | Impact | |
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RS205 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RS206 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RS207 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RS208 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RS209 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RS210 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RS211 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RS212 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RS213 | 1 | В | 66 | 47 | 61 | 14 | No | Yes |
| RS214 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RS215 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RS216 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS217 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS218 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS219 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RS220 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS221 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS222 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS223 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS224 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RS225 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RS226 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RS227 | 1 | В | 66 | 48 | 62 | 14 | No | Yes |
| RS228 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RS229 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RS230 | 1 | В | 66 | 47 | 61 | 14 | No | Yes |
| RS231 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RS232 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RS233 | 1 | В | 66 | 46 | 49 | 3 | No | No |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | J. | - | | | | | | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| | | | | | | | Impact | |
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RS234 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RS235 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RS236 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RS237 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RS238 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RS239 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RS240 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RS241 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RS242 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RS243 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RS244 | 1 | В | 66 | 47 | 60 | 13 | No | Yes |
| RS245 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS246 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS247 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS248 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS249 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS250 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RS251 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RS252 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS253 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RS254 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RS255 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RS256 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RS257 | 1 | В | 66 | 46 | 58 | 12 | No | Yes |
| RS258 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RS259 | 1 | В | 66 | 46 | 59 | 13 | No | Yes |
| RS260 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RS261 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RS262 | 1 | В | 66 | 47 | 61 | 14 | No | Yes |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | 71 2.5 Existing (2 | | | -, | | | | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| | | | | | | | lmı | pact |
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RS263 | 1 | В | 66 | 48 | 61 | 13 | No | Yes |
| RS264 | 1 | В | 66 | 51 | 63 | 12 | No | Yes |
| RS265 | 1 | В | 66 | 51 | 62 | 11 | No | Yes |
| RS266 | 1 | В | 66 | 51 | 63 | 12 | No | Yes |
| RS267 | 1 | В | 66 | 51 | 63 | 12 | No | Yes |
| RS268 | 1 | В | 66 | 51 | 63 | 12 | No | Yes |
| RS269 | 1 | В | 66 | 52 | 64 | 12 | No | Yes |
| RS270 | 1 | В | 66 | 52 | 65 | 13 | No | Yes |
| RS271 | 1 | В | 66 | 53 | 66 | 13 | Yes | Yes |
| RS272 | 1 | В | 66 | 56 | 69 | 13 | Yes | Yes |
| RS273 | 1 | В | 66 | 61 | 74 | 13 | Yes | Yes |
| RS274 | 1 | В | 66 | 56 | 70 | 14 | Yes | Yes |
| RS275 | 1 | D | 51 | 34 | 39 | 5 | No | No |
| RS276 | 1 | В | 66 | 52 | 66 | 14 | Yes | Yes |
| RS277 | 1 | В | 66 | 52 | 66 | 14 | Yes | Yes |
| RS278 | 1 | В | 66 | 46 | 59 | 13 | No | Yes |
| RS279 | 1 | В | 66 | 50 | 63 | 13 | No | Yes |
| RS280 | 1 | В | 66 | 52 | 61 | 9 | No | No |
| RS281 | 1 | В | 66 | 53 | 61 | 8 | No | No |
| RS282 | 1 | В | 66 | 53 | 60 | 7 | No | No |
| RS283 | 1 | В | 66 | 53 | 60 | 7 | No | No |
| RS284 | 1 | В | 66 | 54 | 60 | 6 | No | No |
| RS285 | 1 | В | 66 | 54 | 61 | 7 | No | No |
| RS286 | 1 | В | 66 | 54 | 60 | 6 | No | No |
| RS287 | 1 | В | 66 | 54 | 60 | 6 | No | No |
| RS288 | 1 | В | 66 | 55 | 62 | 7 | No | No |
| RS289 | 1 | В | 66 | 55 | 62 | 7 | No | No |
| RS290 | 1 | В | 66 | 55 | 61 | 6 | No | No |
| RS291 | 1 | В | 66 | 55 | 61 | 6 | No | No |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | 71 2.5 Existing (2 | | | -, | | | | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| | | | | | | | lm | pact |
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RS292 | 1 | В | 66 | 55 | 61 | 6 | No | No |
| RS293 | 1 | В | 66 | 54 | 61 | 7 | No | No |
| RS294 | 1 | В | 66 | 54 | 59 | 5 | No | No |
| RS295 | 1 | В | 66 | 54 | 60 | 6 | No | No |
| RS296 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RS297 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RS298 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS299 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS300 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS301 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS302 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS303 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RS304 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RS305 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RS306 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RS307 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RS308 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RS309 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RS310 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RS311 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RS312 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RS313 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RS314 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RS315 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RS316 | 1 | В | 66 | 48 | 61 | 13 | No | Yes |
| RS317 | 1 | В | 66 | 46 | 56 | 10 | No | Yes |
| RS318 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RS319 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RS320 | 1 | В | 66 | 46 | 46 | 0 | No | No |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | | | | | | | lm | pact |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RS321 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS322 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RS323 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS324 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RS325 | 1 | В | 66 | 49 | 63 | 14 | No | Yes |
| RS326 | 1 | В | 66 | 46 | 58 | 12 | No | Yes |
| RS327 | 1 | В | 66 | 46 | 58 | 12 | No | Yes |
| RS328 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RS329 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RS330 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RS331 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RS332 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS333 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RS334 | 1 | В | 66 | 46 | 59 | 13 | No | Yes |
| RS335 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RS336 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS337 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RS338 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS339 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RS340 | 1 | В | 66 | 46 | 60 | 14 | No | Yes |
| RS341 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RS342 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RS343 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS344 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS345 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RS346 | 1 | В | 66 | 47 | 55 | 8 | No | No |
| RS347 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RS348 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS349 | 1 | В | 66 | 52 | 55 | 3 | No | No |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | 71 2.5 Existing (2 | | | -, | | | | |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| | | | | | | | lm | pact |
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RS350 | 1 | C | 66 | 58 | 59 | 1 | No | No |
| RS351 | 1 | В | 66 | 56 | 58 | 2 | No | No |
| RS352 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RS353 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RS354 | 1 | В | 66 | 47 | 57 | 10 | No | Yes |
| RS355 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RS356 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RS357 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RS358 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RS359 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RS360 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RS361 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS362 | 1 | В | 66 | 48 | 50 | 2 | No | No |
| RS363 | 1 | В | 66 | 48 | 51 | 3 | No | No |
| RS364 | 1 | В | 66 | 52 | 64 | 12 | No | Yes |
| RS365 | 1 | В | 66 | 46 | 58 | 12 | No | Yes |
| RS366 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RS367 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RS368 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RS369 | 1 | В | 66 | 48 | 62 | 14 | No | Yes |
| RS370 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RS371 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RS372 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RS373 | 1 | В | 66 | 46 | 47 | 1 | No | No |
| RS374 | 1 | В | 66 | 50 | 64 | 14 | No | Yes |
| RS375 | 1 | В | 66 | 46 | 61 | 15 | No | Yes |
| RS376 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RS377 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RS378 | 1 | В | 66 | 46 | 49 | 3 | No | No |



Table 4. TNM 2.5 Existing (2024) and Future (2050) Condition Noise Level Results and Impacts

| | | | | | | | lm | pact |
|----------|--------------------------|----------------------------------|----------------------|--|--|---------------------------------------|---------------|--|
| Receiver | Receptors Represented | Land Use Activity Category | UDOT NAC (dBA) | Existing Noise Level ¹ (dBA) | Future Noise Level ¹ (dBA) | Noise Level Difference (dBA) | ≥ UDOT NAC | ≥ 10 dBA Increase Over Existing |
| RS379 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS380 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RS381 | 1 | В | 66 | 46 | 57 | 11 | No | Yes |
| RS382 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RS383 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RS384 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RS385 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS386 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RS387 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RS388 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RS389 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RS390 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS391 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RS392 | 1 | В | 66 | 46 | 46 | 0 | No | No |
| RS393 | 1 | В | 66 | 46 | 59 | 13 | No | Yes |
| RS394 | 1 | В | 66 | 46 | 55 | 9 | No | No |
| RS395 | 1 | В | 66 | 46 | 54 | 8 | No | No |
| RS396 | 1 | В | 66 | 46 | 52 | 6 | No | No |
| RS397 | 1 | В | 66 | 46 | 53 | 7 | No | No |
| RS398 | 1 | В | 66 | 46 | 49 | 3 | No | No |
| RS399 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RS400 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RS401 | 1 | В | 66 | 46 | 50 | 4 | No | No |
| RS402 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RS403 | 1 | В | 66 | 46 | 51 | 5 | No | No |
| RS404 | 1 | В | 66 | 46 | 48 | 2 | No | No |
| RS405 | 1 | В | 66 | 46 | 53 | 7 | No | No |

¹ dBA rounded to the nearest integer.



8 NOISE ABATEMENT ANALYSIS

All impacted receptors are considered for noise abatement analysis. Sections 8.1 through 8.13 discuss the detailed barrier analyses that considered noise abatement for impacted receptors. Each barrier analysis was conducted to determine a recommended barrier height and length at impacted receptors. A recommended barrier would provide sufficient noise reduction (i.e., is acoustically *feasible* and *reasonable*) at an allowable cost, as defined in Section 4, *Noise Abatement*. The following steps were applied for the noise barrier analysis to recommend or not recommend a noise barrier for balloting:

- 1. Determine the location of the barrier between the traffic noise source and impacted receptors based on engineering considerations.
- 2. Determine the estimated length of the barrier based on the distance of the end impacted receptors from the outside travel lane of the traffic noise source.
- 3. Evaluate a range of uniform barrier heights (i.e., a barrier that has the same height across its entire length) and adjust barrier lengths according to the height to meet *feasible* and *reasonable* criteria, including cost effectiveness. The maximum barrier height considered in each barrier analysis is 17 feet, as recommended in UDOT's 2024 Standard Drawings for Road and Bridge Construction (UDOT 2024). The minimum barrier height is limited either to the minimum barrier height of six feet tall as recommended in UDOT's 2024 Standard Drawings for Road and Bridge Construction, a barrier that is either not acoustically feasible, or a barrier that does not meet the noise reduction design goal. Barriers between and including the minimum and maximum heights are evaluated to determine if increasing the barrier height would qualify a barrier to be considered both *feasible* and *reasonable*. In general, taller barrier heights will provide a greater noise reduction and will shorten the overall barrier length.

The following sections describe 13 detailed barrier analyses that considered noise abatement (i.e., noise barriers) for impacted receptors.

8.1 Noise Barrier 1 – Proposed

This analysis evaluates noise abatement as a noise barrier for 48 impacted receptors represented by receivers RS145–RS166, RS175, RS178, RS179, RS185, RS190, RS199, RS201, RS211–RS213, RS215, RS227–RS230, RS241–RS244, and RS257–RS263 (see Exhibit 1, *Noise Receptors*). Three noise barrier scenarios are included in this analysis:

- A barrier system (Noise Barrier 1 System Analysis) including two barriers with a gap in the middle. A Bureau of Reclamation buried canal is in this gap, and structures cannot be built on this property.
- A single barrier (Noise Barrier 1 North Analysis) for receptors north of the Bureau of Reclamation property.
- A single barrier (Noise Barrier 1 South Analysis) for receptors south of the Bureau of Reclamation property.

8.1.1 Noise Barrier 1 System Analysis

The barriers evaluated range in heights from 15 feet to 17 feet, and lengths of 1,819 feet to 1,969 (see Table 5 and Exhibit 2, *Noise Barriers*).

All barriers achieve at least a five-dBA noise reduction for at least 50 percent of front-row receptors and are therefore acoustically feasible.



All barriers, except for the 15-foot-tall barrier, achieve at least a seven-dBA noise reduction for at least 35 percent of front-row receptors and therefore meet the noise reduction design goal. Therefore, the 15-foot-tall barrier is not evaluated further in this analysis.

All remaining barriers cost less than the \$30,000 allowance per benefited receptor for Activity Category B receptors; however, the remaining barriers do not cost less than \$360 per linear foot for the Activity Category C receptor. Therefore, the 16-foot-tall and 17-foot-tall barriers are not evaluated further in this analysis.

8.1.2 Noise Barrier 1 North Analysis

The barriers evaluated range in heights from 15 feet to 17 feet, and lengths of 1,169 feet to 1,194 feet (see Table 5 and Exhibit 2. *Noise Barriers*).

All barriers achieve at least a five-dBA noise reduction for at least 50 percent of front-row receptors and are therefore acoustically feasible.

All barriers, except for the 15-foot-tall barrier, achieve at least a seven-dBA noise reduction for at least 35 percent of front-row receptors and therefore meet the noise reduction design goal. Therefore, the 15-foot-tall barrier is not evaluated further in this analysis.

All remaining barriers cost less than the \$30,000 allowance per benefited receptor for Activity Category B receptors.

8.1.3 Noise Barrier 1 South Analysis

The barrier evaluated is 17 feet tall and 1,600 feet long (see Table 5 and Exhibit 2, Noise Barriers).

The barrier does not achieve at least a five-dBA noise reduction for at least 50 percent of front-row receptors and is therefore not acoustically feasible. Therefore, the 17-foot-tall barrier is not evaluated further in this analysis.

8.1.4 Noise Barrier 1 Scenarios Conclusions

Noise Barrier 1 System Analysis Conclusion: The barriers are not considered *feasible* and *reasonable*. Therefore, the barriers are not recommended for balloting (see Table 5).

Noise Barrier 1 North Analysis Conclusion: Barriers ranging in height from 16 feet to 17 feet are considered *feasible* and *reasonable*. The 16-foot-tall barrier benefits the same number of receptors as the 17-foot-tall barrier and costs less per benefited receptor. Therefore, a 16-foot-tall barrier is recommended for balloting (see Table 5).

Noise Barrier 1 South Analysis Conclusion: The barrier is not considered *feasible* and *reasonable*. Therefore, the barrier is not recommended for balloting (see Table 5).



Table 5. Noise Barrier 1 Analysis Summary

| Barrier Height (Feet) | Barrier Length for Activity Category B Receptors (Feet) | Barrier Length for Activity Category C Receptors (Feet) | Front- Row Receptors with ≥5 dBA Reduction (Percent) | Front- Row Receptors with ≥7 dBA Reduction (Percent) | Number of Benefited Receptors | Cost Per Benefited Receptor for NAC Activity Category B (\$30,000) | Cost for NAC Activity Category C Receptor (\$360 Per Linear Foot) | Barrier Recommended for Balloting |
|-----------------------------|--|--|--|--|--|---|---|---|
| | | | I | Noise Barrier | 1 System | | | |
| 15 | 1,194 | 775 | 60 | 30 | n/a | n/a | n/a | No |
| 16 | 1,194 | 675 | 60 | 40 | 33 | \$16,101 | \$465 | No |
| 17 | 1,194 | 625 | 60 | 40 | 33 | \$16,825 | \$445 | No |
| | | | | Noise Barrier | 1 North | | | |
| 15 | 1,194 | n/a | 67 | 33 | n/a | n/a | n/a | No |
| 16 | 1,169 | n/a | 67 | 44 | 22 | \$23,646 | n/a | Yes |
| 17 | 1,169 | n/a | 67 | 44 | 22 | \$24,708 | n/a | No |
| | | | | Noise Barrier | 1 South | | | |
| 15 | 1,194 | n/a | 67 | 33 | n/a | n/a | n/a | No |

8.2 Noise Barrier 2 – Existing Barrier

This analysis evaluates noise abatement at the existing 16-foot-tall noise barrier on the east side of SR-177 for 17 impacted receptors represented by receivers RS264–RS272, RS296, RS297, RS303–RS305, RS308, RS316, and RS317 (see Exhibit 1, *Noise Receptors*). In accordance with FHWA guidance, the existing barrier was evaluated to determine noise levels for the impacted receptors in a "no barrier" scenario. This "no barrier" scenario was then compared to the "with barrier" scenario to determine if the existing barrier satisfied the requirements of the UDOT *Noise Abatement Policy 08A2-01* for acoustic feasibility and met the noise reduction design goal. The barrier evaluated is 16 feet tall and 1,598 feet long (see Table 6 and Exhibit 2, *Noise Barriers*).

The barrier achieves at least a five-dBA noise reduction for at least 50 percent of front-row receptors and is therefore acoustically feasible.

The barrier achieves at least a seven-dBA noise reduction for at least 35 percent of front-row receptors and therefore meets the noise reduction design goal.

Noise Barrier 2 Analysis Conclusion: The existing 16-foot-tall barrier is acoustically feasible and meets the noise reduction design goal. Therefore, the existing barrier is recommended to remain in place (see Table 6).



Table 6. Noise Barrier 2 Analysis Summary

| Barrier Height (Feet) | Barrier Length (Feet) | Front-Row Receptors with ≥5 dBA Reduction (Percent) | Front-Row Receptors with ≥7 dBA Reduction (Percent) |
|--------------------------|--------------------------|---|---|
| 16 | 1,598 | 100 | 78 |

8.3 Noise Barrier 3 – Proposed

This analysis evaluates noise abatement as a noise barrier for eight impacted receptors represented by receivers RS273, RS274, RS325–RS327, RS334, RS340, and RS341 (see Exhibit 1, *Noise Receptors*). The barrier evaluated is 17 feet tall and 910 feet long (see Table 7 and Exhibit 2, *Noise Barriers*).

The barrier does not achieve at least a five-dBA noise reduction for at least 50 percent of front-row receptors and is therefore not acoustically feasible. Therefore, the 17-foot-tall barrier is not evaluated further in this analysis.

Noise Barrier 3 Analysis Conclusion: The barrier is not considered *feasible* and *reasonable*. Therefore, a barrier is not recommended for balloting (see Table 7).

Table 7. Noise Barrier 3 Analysis Summary

| Barrier Height (Feet) | Barrier Length (Feet) | Front-Row Receptors with ≥5 dBA Reduction (Percent) | Front-Row Receptors with ≥7 dBA Reduction (Percent) | Number of Benefited Receptors | Cost Per Benefited Receptor for NAC Activity Category B (\$30,000) | Barrier Recommended for Balloting |
|--------------------------|--------------------------|---|---|-------------------------------------|---|---|
| 17 | 910 | 33 | n/a | n/a | n/a | No |

8.4 Noise Barrier 4 – Proposed

This analysis evaluates noise abatement as a noise barrier for six impacted receptors represented by receivers RS276–RS279, RS374, and RS393 (see Exhibit 1, *Noise Receptors*). The barrier evaluated is 17 feet tall and 1,205 feet long (see Table 8 and Exhibit 2, *Noise Barriers*).

The barrier does not achieve at least a five-dBA noise reduction for at least 50 percent of front-row receptors and is therefore not acoustically feasible. Therefore, the 17-foot-tall barrier is not evaluated further in this analysis.

Noise Barrier 4 Analysis Conclusion: The barrier is not considered *feasible* and *reasonable*. Therefore, a barrier is not recommended for balloting (see Table 8).

Table 8. Noise Barrier 4 Analysis Summary

| Barrier Height (Feet) | Barrier Length (Feet) | Front-Row Receptors with ≥5 dBA Reduction (Percent) | Front-Row Receptors with ≥7 dBA Reduction (Percent) | Number of Benefited Receptors | Cost Per Benefited Receptor for NAC Activity Category B (\$30,000) | Barrier Recommended for Balloting |
|--------------------------|--------------------------|---|---|-------------------------------------|---|---|
| 17 | 1,205 | 0 | n/a | n/a | n/a | No |



8.5 Noise Barrier 5 - Proposed

This analysis evaluates noise abatement as a noise barrier for 10 impacted receptors represented by receivers RS120 and RS135–RS143 (see Exhibit 1, *Noise Receptors*). The barrier evaluated is 17 feet tall and 1,739 feet long (see Table 9 and Exhibit 2, *Noise Barriers*).

The barrier does not achieve at least a five-dBA noise reduction for at least 50 percent of front-row receptors and is therefore not acoustically feasible. Therefore, the 17-foot-tall barrier is not evaluated further in this analysis.

Noise Barrier 5 Analysis Conclusion: The barrier is not considered *feasible* and *reasonable*. Therefore, a barrier is not recommended for balloting (see Table 9).

Table 9. Noise Barrier 5 Analysis Summary

| Barrier Height (Feet) | Barrier Length (Feet) | Front-Row Receptors with ≥5 dBA Reduction (Percent) | Front-Row Receptors with ≥7 dBA Reduction (Percent) | Number of Benefited Receptors | Cost Per Benefited Receptor for NAC Activity Category B (\$30,000) | Barrier Recommended for Balloting |
|--------------------------|--------------------------|---|---|-------------------------------------|---|---|
| 17 | 1,739 | 0 | n/a | n/a | n/a | No |

8.6 Noise Barrier 6 – Proposed

This analysis evaluates noise abatement as a noise barrier for seven impacted receptors represented by receivers RM111–RM116 and RM118 (see Exhibit 1, *Noise Receptors*). The barrier evaluated is 17 feet tall and 1,756 feet long (see Table 10 and Exhibit 2, *Noise Barriers*).

The barrier does not achieve at least a five-dBA noise reduction for at least 50 percent of front-row receptors and is therefore not acoustically feasible. Therefore, the 17-foot-tall barrier is not evaluated further in this analysis.

Noise Barrier 6 Analysis Conclusion: The barrier is not considered *feasible* and *reasonable*. Therefore, a barrier is not recommended for balloting (see Table 10).

Table 10. Noise Barrier 6 Analysis Summary

| Barrier Height (Feet) | Barrier Length (Feet) | Front-Row Receptors with ≥5 dBA Reduction (Percent) | Front-Row Receptors with ≥7 dBA Reduction (Percent) | Number of Benefited Receptors | Cost Per Benefited Receptor for NAC Activity Category B (\$30,000) | Barrier Recommended for Balloting |
|--------------------------|--------------------------|---|---|-------------------------------------|---|---|
| 17 | 1,756 | 11 | n/a | n/a | n/a | No |

8.7 Noise Barrier 7 – Proposed

This analysis evaluates noise abatement as a noise barrier for 42 impacted receptors represented by receivers RM001–RM014, RM023–RM027, RM034, RM035, RM044, RM045, RM052, RM062–RM065, RM067, RM068, RM070, RM072, RM074–RM079, RM085–RM087, and RM106 (see Exhibit 1, *Noise Receptors*). The barriers evaluated range in heights from nine feet to 17 feet, and lengths of 2,032 feet to 2,557 feet (see Table 11 and Exhibit 2, *Noise Barriers*). All barriers include a 10-foot-tall and 157-foot-long barrier segment on the bridge crossing over 300 North; ten feet is the maximum height UDOT's noise policy allows for a noise barrier installed on a structure.



All barriers achieve at least a five-dBA noise reduction for at least 50 percent of front-row receptors and are therefore acoustically feasible.

All barriers, except for the nine-foot-tall barrier, achieve at least a seven-dBA noise reduction for at least 35 percent of front-row receptors and therefore meet the noise reduction design goal. Therefore, the nine-foot-tall barrier is not evaluated further in this analysis.

All barriers, except for the 10-foot-tall barrier, cost less than the \$30,000 allowance per benefited receptor and are therefore cost-effective. Therefore, the 10-foot-tall barrier is not evaluated further in this analysis.

Noise Barrier 7 Analysis Conclusion: Barriers ranging in height from 11 feet to 17 feet are considered *feasible* and *reasonable*. The 15-foot-tall barrier benefits the same number of receptors as the 16-foot and 17-foot-tall barriers, and costs less per benefited receptor than all other barriers. Therefore, a 15-foot-tall barrier is recommended for balloting (see Table 11).

Table 11. Noise Barrier 7 Analysis Summary

| Barrier Height (Feet) | Barrier Length (Feet) | Front-Row Receptors with ≥5 dBA Reduction (Percent) | Front-Row Receptors with ≥7 dBA Reduction (Percent) | Number of Benefited Receptors | Cost Per Benefited Receptor for NAC Activity Category B (\$30,000) | Barrier Recommended for Balloting |
|--------------------------|--------------------------|---|---|-------------------------------------|---|---|
| 9 | 2,557 | 82 | 18 | n/a | n/a | No |
| 10 | 2,557 | 82 | 55 | 26 | \$31,208 | No |
| 11 | 2,557 | 82 | 64 | 29 | \$29,634 | No |
| 12 | 2,282 | 82 | 64 | 34 | \$23,736 | No |
| 13 | 2,257 | 82 | 64 | 36 | \$23,331 | No |
| 14 | 2,257 | 82 | 64 | 39 | \$22,613 | No |
| 15 | 2,057 | 82 | 73 | 40 | \$20,973 | Yes |
| 16 | 2,032 | 82 | 73 | 40 | \$21,644 | No |
| 17 | 2,032 | 82 | 73 | 40 | \$22,582 | No |

8.8 Noise Barrier 8 – Proposed

This analysis evaluates noise abatement as a noise barrier for 20 impacted receptors represented by receivers RM119–RM124, RM130, RM155–RM160, RM165, RM166, RM169, and RM197–RM200 (see Exhibit 1, *Noise Receptors*). The barrier evaluated is 17 feet tall and 772 feet long (see Table 12 and Exhibit 2, *Noise Barriers*).

The barrier achieves at least a five-dBA noise reduction for at least 50 percent of front-row receptors and is therefore acoustically feasible.

The barrier does not achieve at least a seven-dBA noise reduction for at least 35 percent of front-row receptors and therefore does not meet the noise reduction design goal. Therefore, the 17-foot-tall barrier is not evaluated further in this analysis.

Noise Barrier 8 Analysis Conclusion: The barrier is not considered *feasible* and *reasonable*. Therefore, a barrier is not recommended for balloting (see Table 12).



Table 12. Noise Barrier 8 Analysis Summary

| Barrier Height (Feet) | Barrier Length (Feet) | Front-Row Receptors with ≥5 dBA Reduction (Percent) | Front-Row Receptors with ≥7 dBA Reduction (Percent) | Number of Benefited Receptors | Cost Per Benefited Receptor for NAC Activity Category B (\$30,000) | Barrier Recommended for Balloting |
|--------------------------|--------------------------|---|---|-------------------------------------|---|---|
| 17 | 772 | 100 | 0 | n/a | n/a | No |

8.9 Noise Barrier 9 - Proposed

This analysis evaluates noise abatement as a noise barrier for two impacted receptors represented by receivers RM012 and RM106 (see Exhibit 1, *Noise Receptors*). The barrier evaluated is 17 feet tall and 1,136 feet long (see Table 13 and Exhibit 2, *Noise Barriers*).

The barrier achieves at least a five-dBA noise reduction for at least 50 percent of front-row receptors and is therefore acoustically feasible.

The barrier does not achieve at least a seven-dBA noise reduction for at least 35 percent of front-row receptors and therefore does not meet the noise reduction design goal. Therefore, the 17-foot-tall barrier is not evaluated further in this analysis.

Noise Barrier 9 Analysis Conclusion: The barrier is not considered *feasible* and *reasonable*. Therefore, a barrier is not recommended for balloting (see Table 13).

Table 13. Noise Barrier 9 Analysis Summary

| Barrier Height (Feet) | Barrier Length (Feet) | Front-Row Receptors with ≥5 dBA Reduction (Percent) | Front-Row Receptors with ≥7 dBA Reduction (Percent) | Number of Benefited Receptors | Cost Per Benefited Receptor for NAC Activity Category B (\$30,000) | Barrier Recommended for Balloting |
|--------------------------|--------------------------|---|---|-------------------------------------|---|---|
| 17 | 1,136 | 100 | 0 | n/a | n/a | No |

8.10 Noise Barrier 10 - Proposed

This analysis evaluates noise abatement as a noise barrier for 30 impacted receptors represented by receivers RM131–RM154, RM202, RM203, RM207, RM209, RM233, and RM238 (see Exhibit 1, *Noise Receptors*). The barrier evaluated is 17 feet tall and 2,455 feet long (see Table 14 and Exhibit 2, *Noise Barriers*).

The barrier does not achieve at least a five-dBA noise reduction for at least 50 percent of front-row receptors and is therefore not acoustically feasible. Therefore, the 17-foot-tall barrier is not evaluated further in this analysis.

Noise Barrier 10 Analysis Conclusion: The barrier is not considered *feasible* and *reasonable*. Therefore, a barrier is not recommended for balloting (see Table 14).



Table 14. Noise Barrier 10 Analysis Summary

| Barrier Height (Feet) | Barrier Length (Feet) | Front-Row Receptors with ≥5 dBA Reduction (Percent) | Front-Row Receptors with ≥7 dBA Reduction (Percent) | Number of Benefited Receptors | Cost Per Benefited Receptor for NAC Activity Category B (\$30,000) | Barrier Recommended for Balloting |
|--------------------------|--------------------------|---|---|-------------------------------------|---|---|
| 17 | 2,455 | 17 | n/a | n/a | n/a | No |

8.11 Noise Barrier 11 - Proposed

This analysis evaluates noise abatement as a noise barrier for five impacted receptors represented by receivers RN001 and RN020–RN023 (see Exhibit 1, *Noise Receptors*). The barriers evaluated range in heights from seven feet to 17 feet, and lengths of 150 feet to 541 feet (see Table 15 and Exhibit 2, *Noise Barriers*).

All barriers achieve at least a five-dBA noise reduction for at least 50 percent of front-row receptors and are therefore acoustically feasible.

All barriers, except for the seven-foot-tall barrier, achieve at least a seven-dBA noise reduction for at least 35 percent of front-row receptors and therefore meet the noise reduction design goal. Therefore, the seven-foot-tall barrier is not evaluated further in this analysis.

The remaining barriers cost more than the \$30,000 allowance per benefited receptor and are therefore not cost-effective.

Noise Barrier 11 Analysis Conclusion: The analysis evaluated barriers ranging from 14 to 17 feet in height, which benefited the maximum number of receptors but exceeded the \$30,000 allowance per benefited receptor, making them not cost-effective. The analysis then evaluated barriers ranging from seven to 13 feet in height, which benefited fewer receptors, but their shorter lengths increased the likelihood of the barrier being cost-effective. However, barriers at these shorter heights and lengths still exceed the \$30,000 allowance per benefited receptor, making them not cost-effective. Therefore, no barriers are considered *feasible* and *reasonable* and a barrier at this location is not recommended for balloting (see Table 15).



Table 15. Noise Barrier 11 Analysis Summary

| Barrier Height (Feet) | Barrier Length (Feet) | Front-Row Receptors with ≥5 dBA Reduction (Percent) | Front-Row Receptors with ≥7 dBA Reduction (Percent) | Number of Benefited Receptors | Cost Per Benefited Receptor for NAC Activity Category B (\$30,000) | Barrier Recommended for Balloting |
|--------------------------|--------------------------|---|---|-------------------------------------|---|---|
| 7 | 541 | 100 | 0 | n/a | n/a | No |
| 8 | 250 | 100 | 100 | 1 | \$71,250 | No |
| 9 | 190 | 100 | 100 | 1 | \$57,950 | No |
| 10 | 170 | 100 | 100 | 1 | \$55,250 | No |
| 11 | 160 | 100 | 100 | 1 | \$55,200 | No |
| 12 | 150 | 100 | 100 | 1 | \$54,750 | No |
| 13 | 210 | 100 | 100 | 1 | \$80,850 | No |
| 14 | 541 | 100 | 100 | 3 | \$73,035 | No |
| 15 | 541 | 100 | 100 | 3 | \$76,642 | No |
| 16 | 510 | 100 | 100 | 3 | \$75,650 | No |
| 17 | 489 | 100 | 100 | 3 | \$75,795 | No |

8.12 Noise Barrier 12 - Proposed

This analysis evaluates noise abatement as a noise barrier for 34 impacted receptors represented by receivers RN002–RN014, RN033–RN037, RN039, RN042–RN045, RN050, RN054, RN057, RN059, RN063, RN067, RN070–RN072, RN079, and RN087 (see Exhibit 1, *Noise Receptors*). The barrier evaluated is 17 feet tall and 3,914 feet long, with a 10-foot-tall and 164-foot-long barrier segment on the bridge crossing over 1300 North (see Table 16 and Exhibit 2, *Noise Barriers*). Ten feet is the maximum height UDOT's noise policy allows for a noise barrier installed on a structure.

The barrier achieves at least a five-dBA noise reduction for at least 50 percent of front-row receptors and is therefore acoustically feasible.

The barrier does not achieve at least a seven-dBA noise reduction for at least 35 percent of front-row receptors and therefore does not meet the noise reduction design goal. Therefore, the 17-foot-tall barrier is not evaluated further in this analysis.

Noise Barrier 12 Analysis Conclusion: The barrier is not considered *feasible* and *reasonable*. Therefore, a barrier is not recommended for balloting (see Table 16).



Table 16. Noise Barrier 12 Analysis Summary

| Barrier Height (Feet) | Barrier Length (Feet) | Front-Row Receptors with ≥5 dBA Reduction (Percent) | Front-Row Receptors with ≥7 dBA Reduction (Percent) | Number of Benefited Receptors | Cost Per Benefited Receptor for NAC Activity Category B (\$30,000) | Barrier Recommended for Balloting |
|--------------------------|--------------------------|---|---|-------------------------------------|---|---|
| 17 | 3,914 | 71 | 29 | n/a | n/a | No |

8.13 Noise Barrier 13 - Proposed

This analysis evaluates noise abatement as a noise barrier for 54 impacted receptors represented by receivers RN102–RN133, RN179, RN189, RN193, RN199, RN203, RN211–RN213, RN215, RN220, RN222, RN223, RN228, RN229, RN232, RN235, RN236, RN238, RN239, and RN241–RN244 (see Exhibit 1, *Noise Receptors*). The barriers evaluated range in heights from 11 feet to 17 feet, and lengths of 2,644 feet to 2,994 feet (see Table 17 and Exhibit 2, *Noise Barriers*). All barriers include a 10-foot-tall and 169-foot-long barrier segment on the bridge crossing over 1300 North. Ten feet is the maximum height UDOT's noise policy allows for a noise barrier installed on a structure.

All barriers achieve at least a five-dBA noise reduction for at least 50 percent of front-row receptors and are therefore acoustically feasible.

All barriers, except for the 11-foot-tall barrier, achieve at least a seven-dBA noise reduction for at least 35 percent of front-row receptors and therefore meet the noise reduction design goal. The 11-foot-tall barrier is not evaluated further in this analysis.

The remaining barriers each cost more than the \$30,000 allowance per benefited receptor and are therefore not cost-effective.

8.13.1 Noise Barrier 13 Optimized

Because the 17-foot-tall barrier is near the \$30,000 allowance per benefited receptor, an optimized barrier was analyzed to determine if reducing end barrier segments at one-foot increments could reduce the cost per benefited receptor while remaining acoustically feasible and meeting the noise reduction design goal.

The evaluated optimized barrier ranges in height from 13 feet to 17 feet; is 2,644 feet long; and includes a 10-foot-tall and 169-foot-long barrier segment on the bridge crossing over 1300 North.

The optimized barrier achieves at least a five-dBA noise reduction for at least 50 percent of front-row receptors and is therefore acoustically feasible.

The optimized barrier achieves at least a seven-dBA noise reduction for at least 35 percent of front-row receptors and therefore meets the noise reduction design goal.

The optimized barrier costs less than the \$30,000 allowance per benefited receptor and is therefore cost-effective.

Noise Barrier 13 Analysis Conclusion: Barriers ranging in uniform heights from 11 feet to 17 feet are not considered *feasible* and *reasonable*. However, an optimized barrier that ranges in height from 13 feet to 17 feet is considered *feasible* and *reasonable*. Therefore, the optimized barrier is recommended for balloting (see Table 17).



Table 17. Noise Barrier 13 Analysis Summary

| Barrier Height (Feet) | Barrier Length (Feet) | Front-Row Receptors with ≥5 dBA Reduction (Percent) | Front-Row Receptors with ≥7 dBA Reduction (Percent) | Number of Benefited Receptors | Cost Per Benefited Receptor for NAC Activity Category B (\$30,000) | Barrier Recommended for Balloting | |
|--------------------------|--------------------------|---|---|-------------------------------------|---|---|--|
| 11 | 2,994 | 74 | 32 | n/a | n/a | No | |
| 12 | 2,994 | 79 | 42 | 42 27 | | No | |
| 13 | 2,969 | 79 | 58 | 28 | \$39,707 | No | |
| 14 | 2,969 | 95 | 58 | 35 | \$33,366 | No | |
| 15 | 2,794 | 95 | 58 | 37 | \$31,066 | No | |
| 16 | 2,744 | 95 | 63 | 38 | \$31,044 | No | |
| Optimized 13-17 | 2,644 | 89 | 63 | 39 | \$29,915 | Yes | |
| 17 | 2,719 | 95 | 63 | 40 | \$30,489 | No | |

9 CONSTRUCTION NOISE

Land uses that are sensitive to traffic noise are also sensitive to construction noise during UDOT project delivery. UDOT typically controls construction noise by limiting the hours that construction equipment can be operated and requiring permissible sound levels when construction is occurring. UDOT has developed a supplemental specification—2024 UDOT Special Provision 00555—that establishes noise control during construction (UDOT 2024). All UDOT contractors are required to conform to this specification to reduce the impact of construction noise on the surrounding community. This specification would be applicable for the Proposed Action.

10 COORDINATION WITH LOCAL OFFICIALS

Land use compatibility noise data was developed to inform local authorities of future noise levels on undeveloped land next to the Proposed Action, specifically land adjacent to SR-177 which is a major traffic noise generator. For this analysis, one undeveloped property was selected on the west side of SR-177at approximately 500 North. The 66 dBA contour would be approximately 250 feet from the edge of the outside lane. The 71 dBA contour would be approximately 50 feet from the edge of the outside lane.

Although the noise contour information is based on the results of the noise modeling, it should not be interpreted to be site specific for any areas along SR-177. Variations in terrain, the roadway profile, the proximity to intersections, and existing development could change the distances of these noise contours. This information is intended only to provide a general guide for future planning and should not be used in the final design or layout of future development.

11 CONCLUSIONS

The following sections provide conclusions for the traffic noise impacts analysis and the noise abatement analysis for the Proposed Action.



11.1 Traffic Noise Impact Analysis Conclusions

For the existing condition, outdoor noise levels range from 46 dBA to 65 dBA. Indoor noise levels range from 21 dBA to 37 dBA. Of the 764 receptors in this analysis, none are impacted in the existing condition.

For the future condition (2050), outdoor noise levels range from 46 dBA to 74 dBA. Indoor noise levels range from 25 dBA to 40 dBA. Of the 764 receptors in this analysis, 283 receptors are impacted in the future condition:

- 43 receptors would have a noise level greater than or equal to their NAC threshold.
- 282 receptors would receive an increase of 10 dBA or more over their existing noise levels.
- 42 receptors would experience both types of impacts.

11.2 Noise Abatement Analysis Conclusions

Thirteen barrier analyses considered noise abatement for impacted receptors (see Table 18).

Table 18. Noise Barrier Analysis Summary and Barriers Recommended for Balloting

| Barrier Analysis | Barrier Recommended for Balloting | Barrier Height (Feet) | Barrier Length (Feet) | | | |
|---------------------|--------------------------------------|--------------------------|--------------------------|--|--|--|
| 1 | Yes | 16 | 1,169 | | | |
| 2 | Existing Barrier Remain in Place | 16 | 1,598 | | | |
| 3 | No | n/a | n/a | | | |
| 4 | No | n/a | n/a | | | |
| 5 | No | n/a n/a | | | | |
| 6 | No | n/a | n/a | | | |
| 7 | Yes | 15 | 2,057 | | | |
| 8 | No | n/a | n/a | | | |
| 9 | No | n/a | n/a | | | |
| 10 | No | n/a | n/a | | | |
| 11 | No | n/a | n/a | | | |
| 12 | No | n/a | n/a | | | |
| 13 | Yes | Optimized 13-17 | 2,644 | | | |

12 REFERENCES

[FHWA] Federal Highway Administration. 1980. Highway Noise Fundamentals. September.

- ---. 2011. *Highway Traffic Noise: Analysis and Abatement Guidance*. Available at: https://www.fhwa.dot.gov/environMent/noise/regulations_and_guidance/. December.
- ---. 2018a. *Techniques for Reviewing Noise Analyses and Associated Noise Reports*. Available at: https://www.fhwa.dot.gov/Environment/noise/resources/reviewing_noise_analysis/. June1.
- ---. 2018b. *Noise Measurement Handbook*. Available at: https://www.fhwa.dot.gov/environment/noise/measurement/handbook.cfm. June 1.

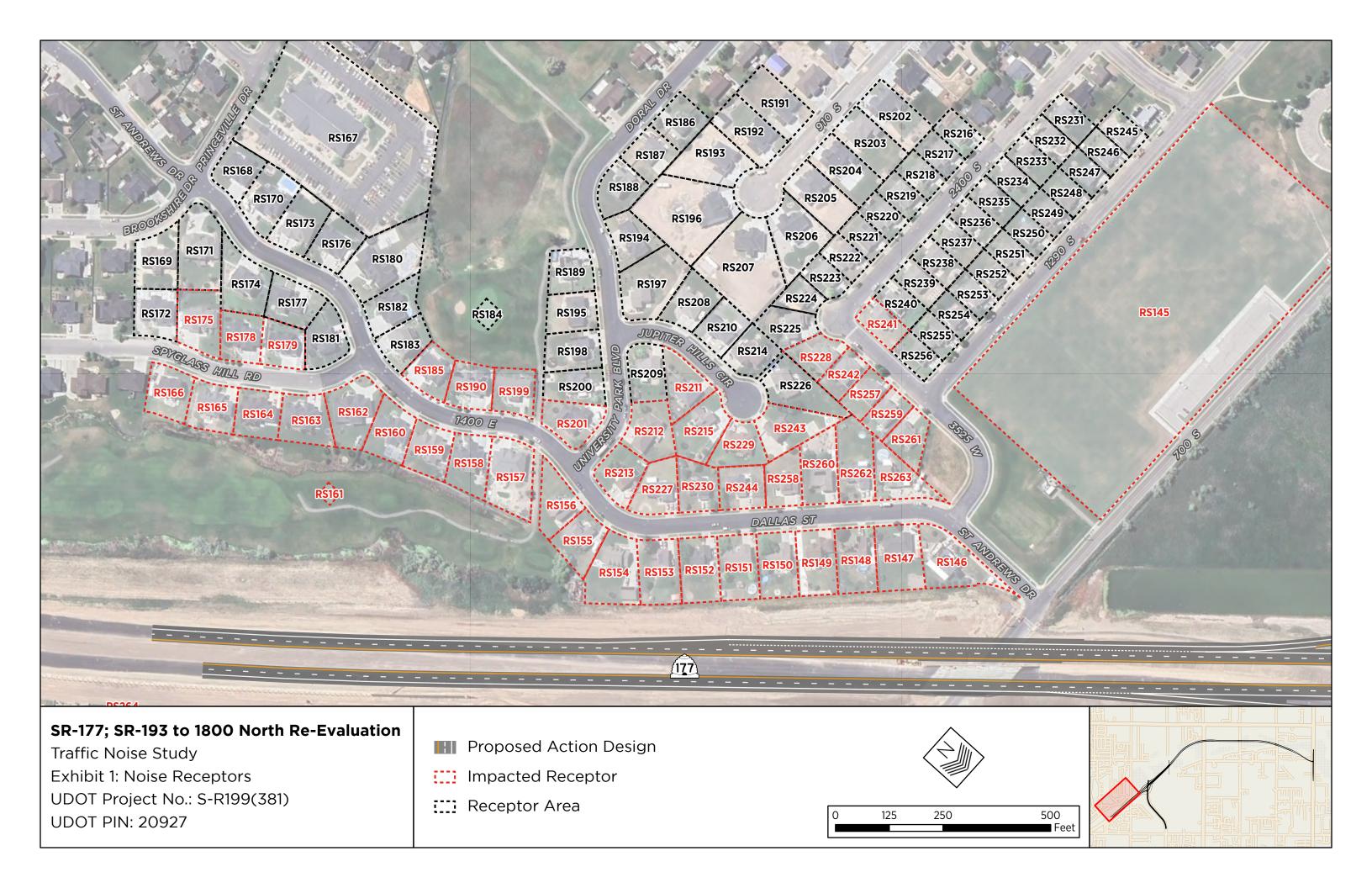


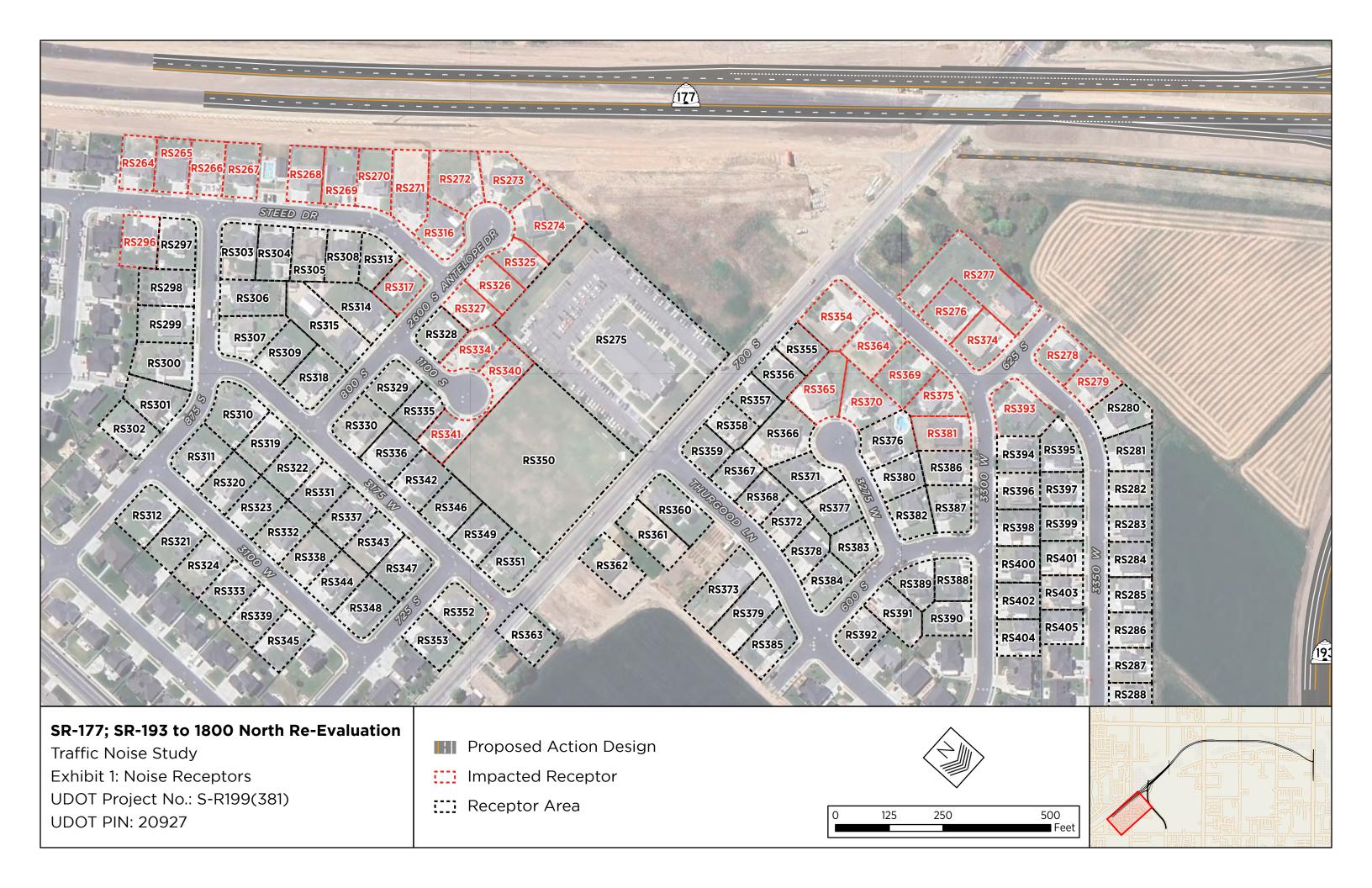
[UDOT] Utah Department of Transportation. 2020. Noise Abatement UDOT 08A2-01. May 28.

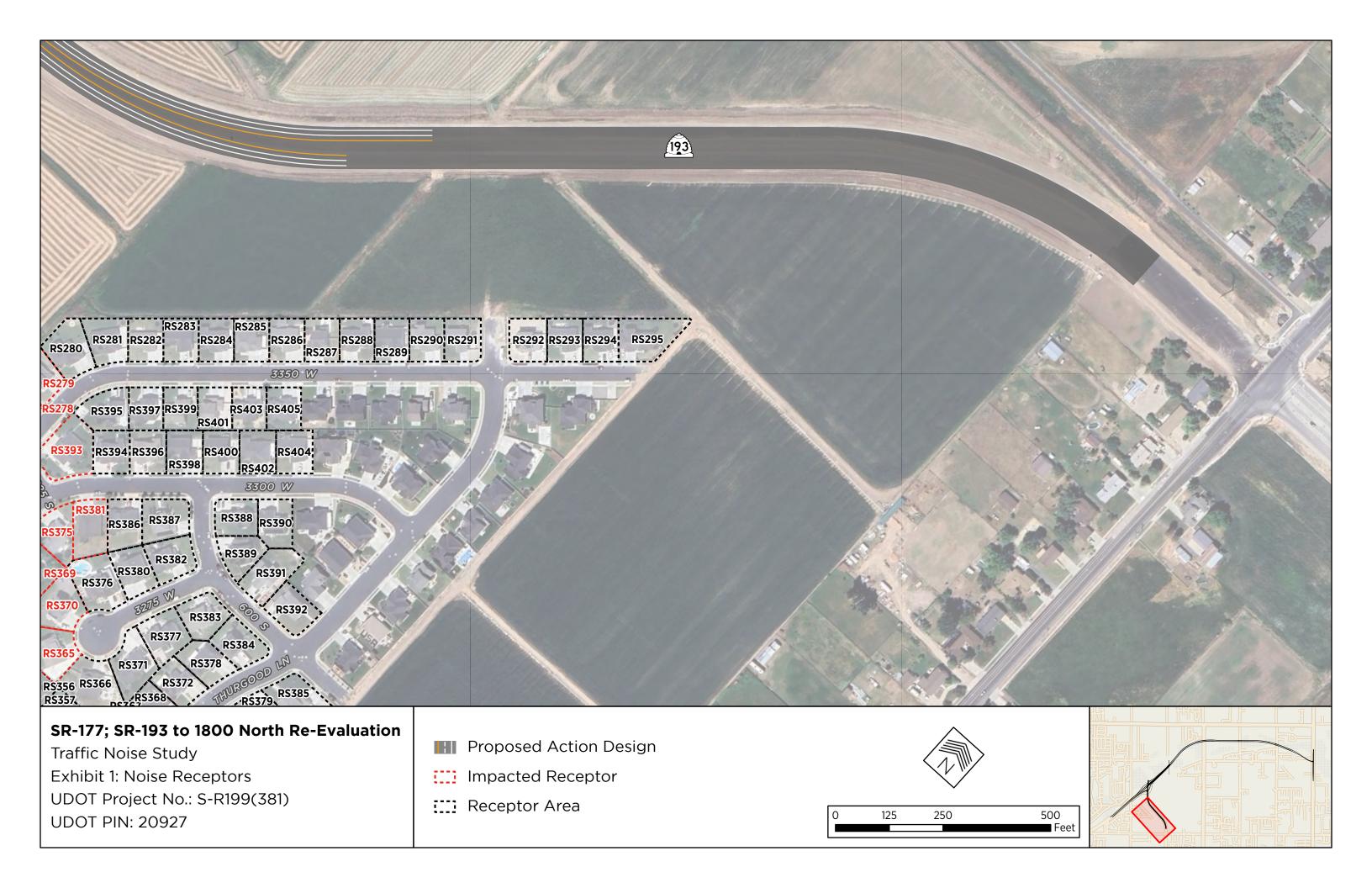
---. 2024. *Utah Department of Transportation 2024 Standard Drawings for Road and Bridge Construction*. Available at: https://www.udot.utah.gov/connect/business/standards/. January.

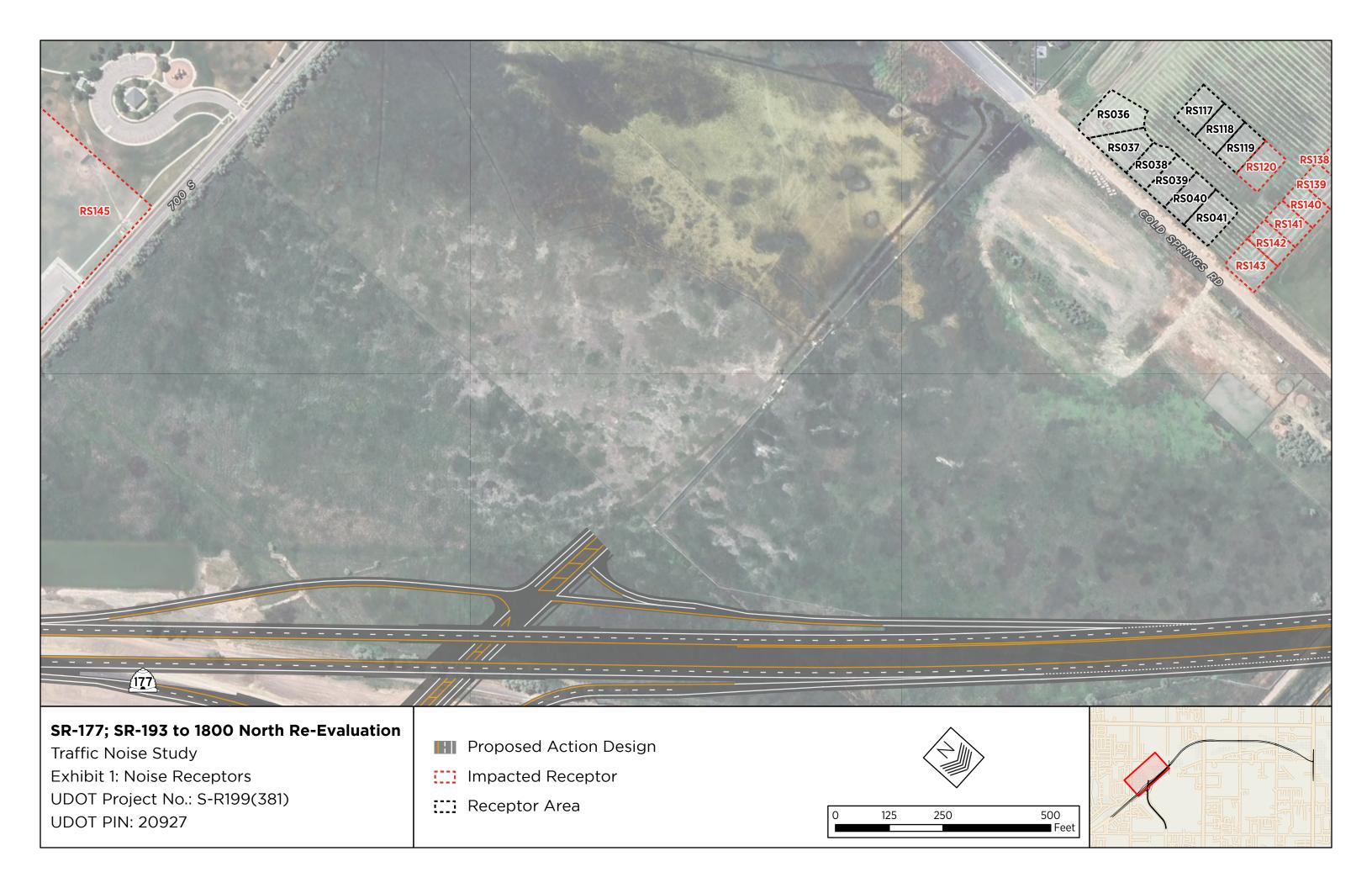


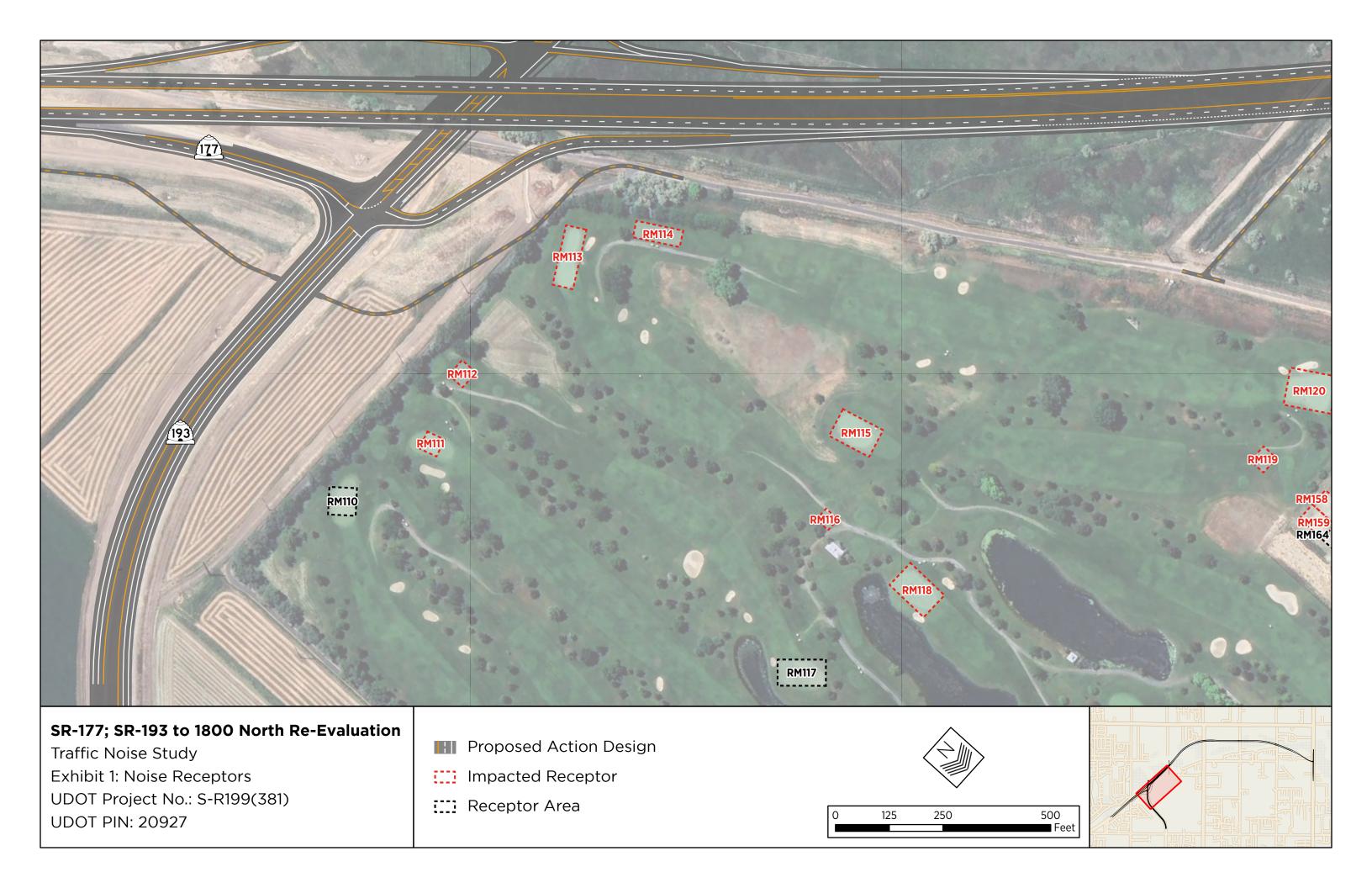
EXHIBIT 1: NOISE RECEPTORS

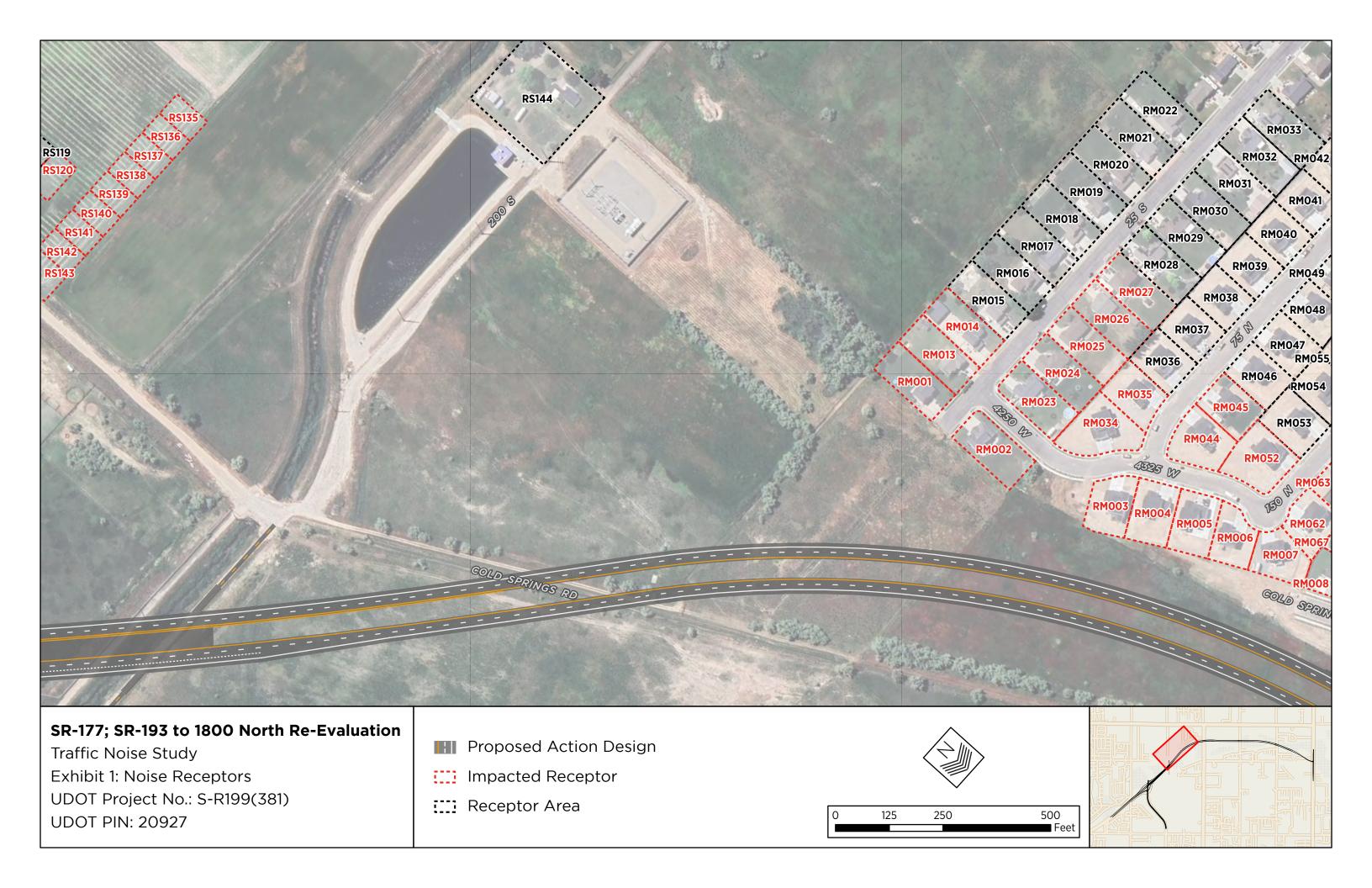


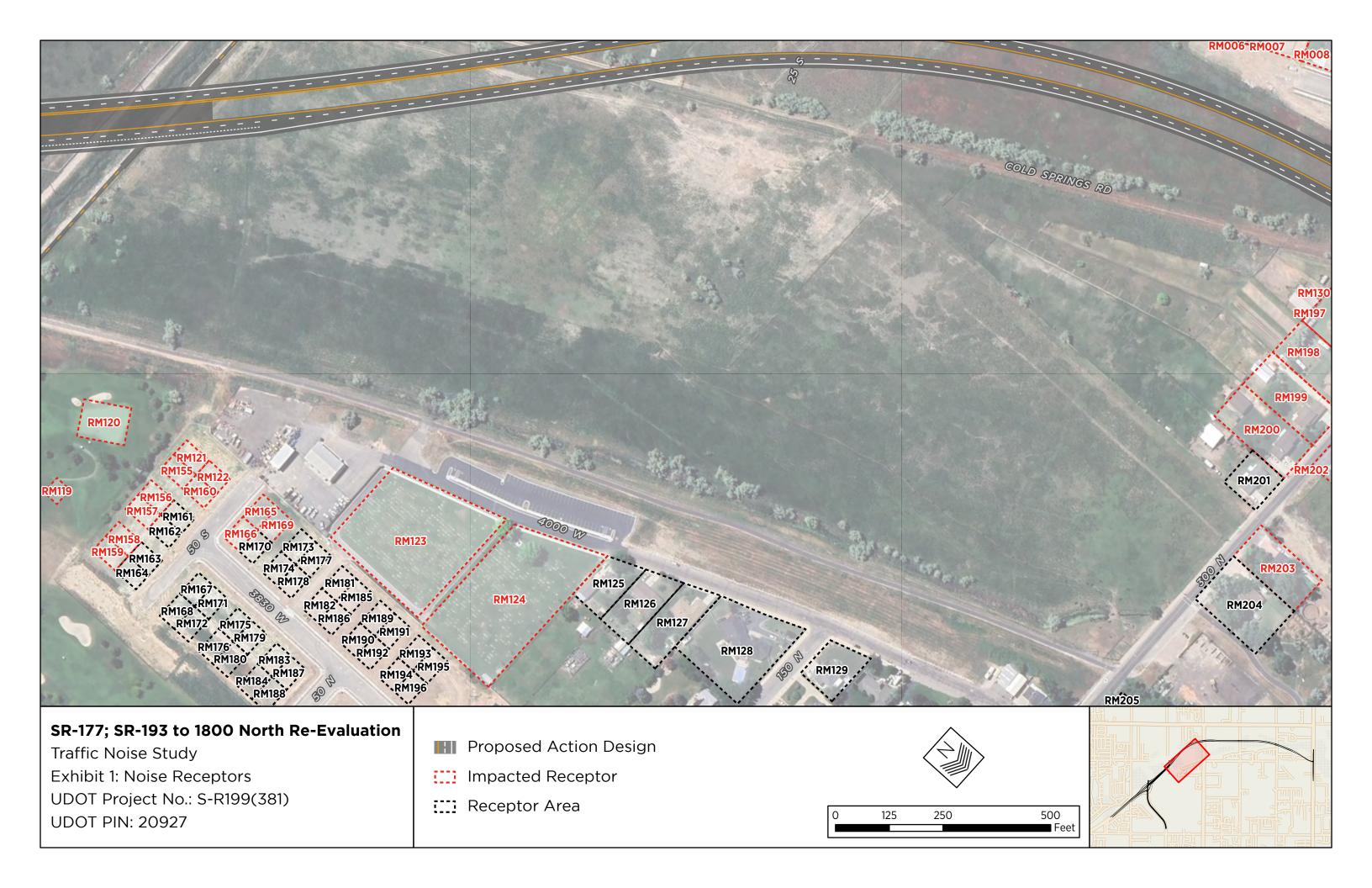


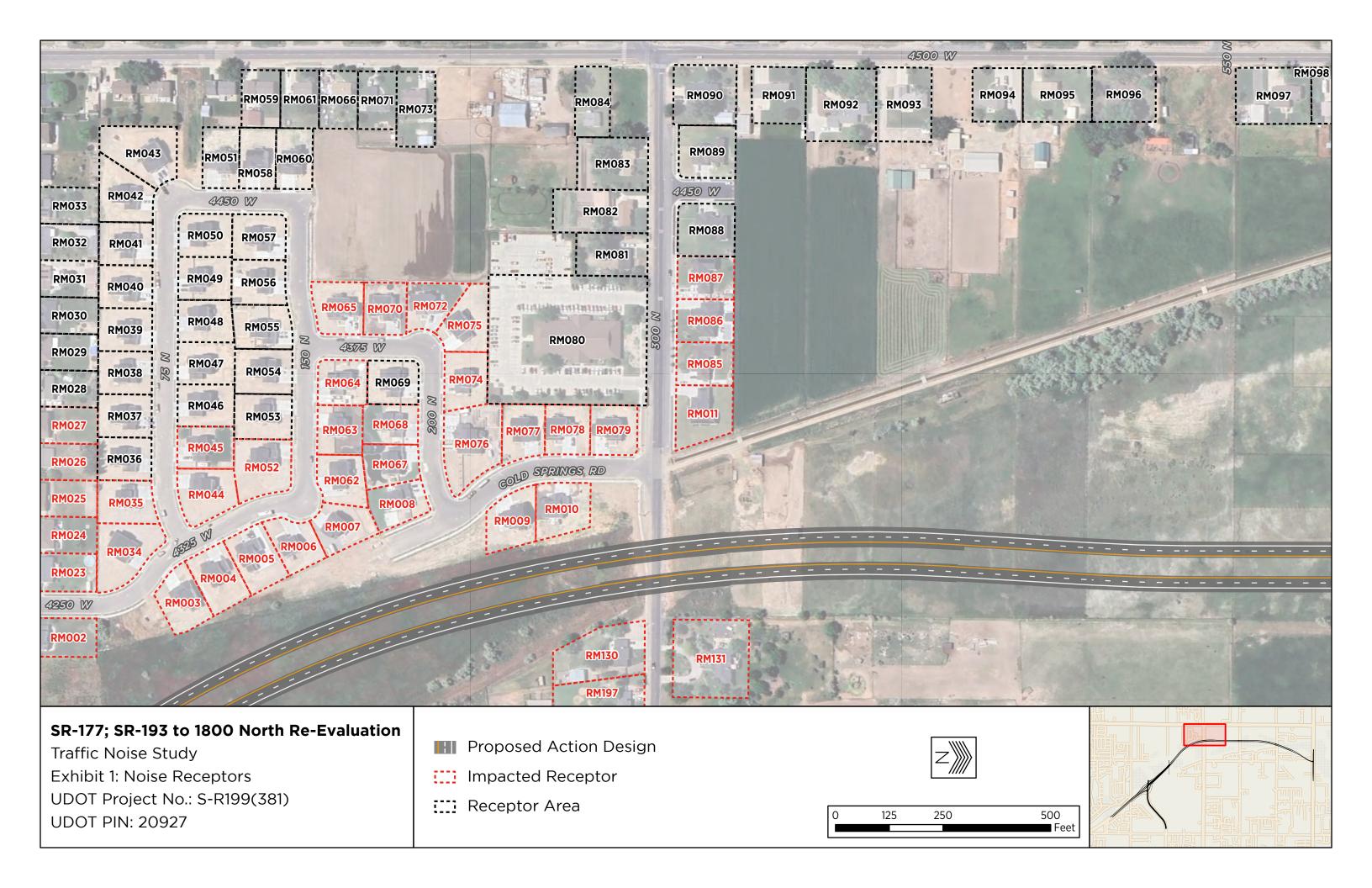


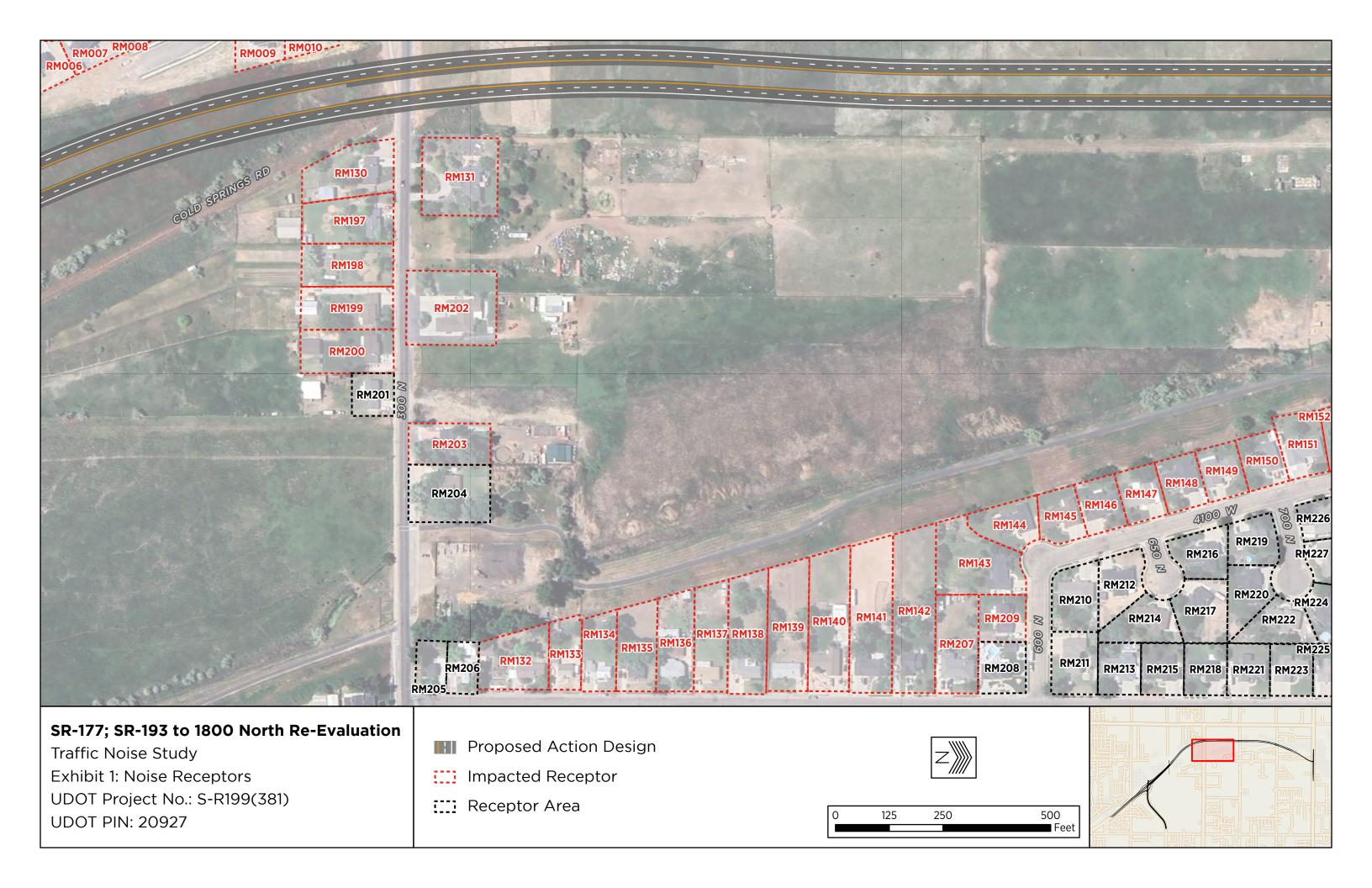


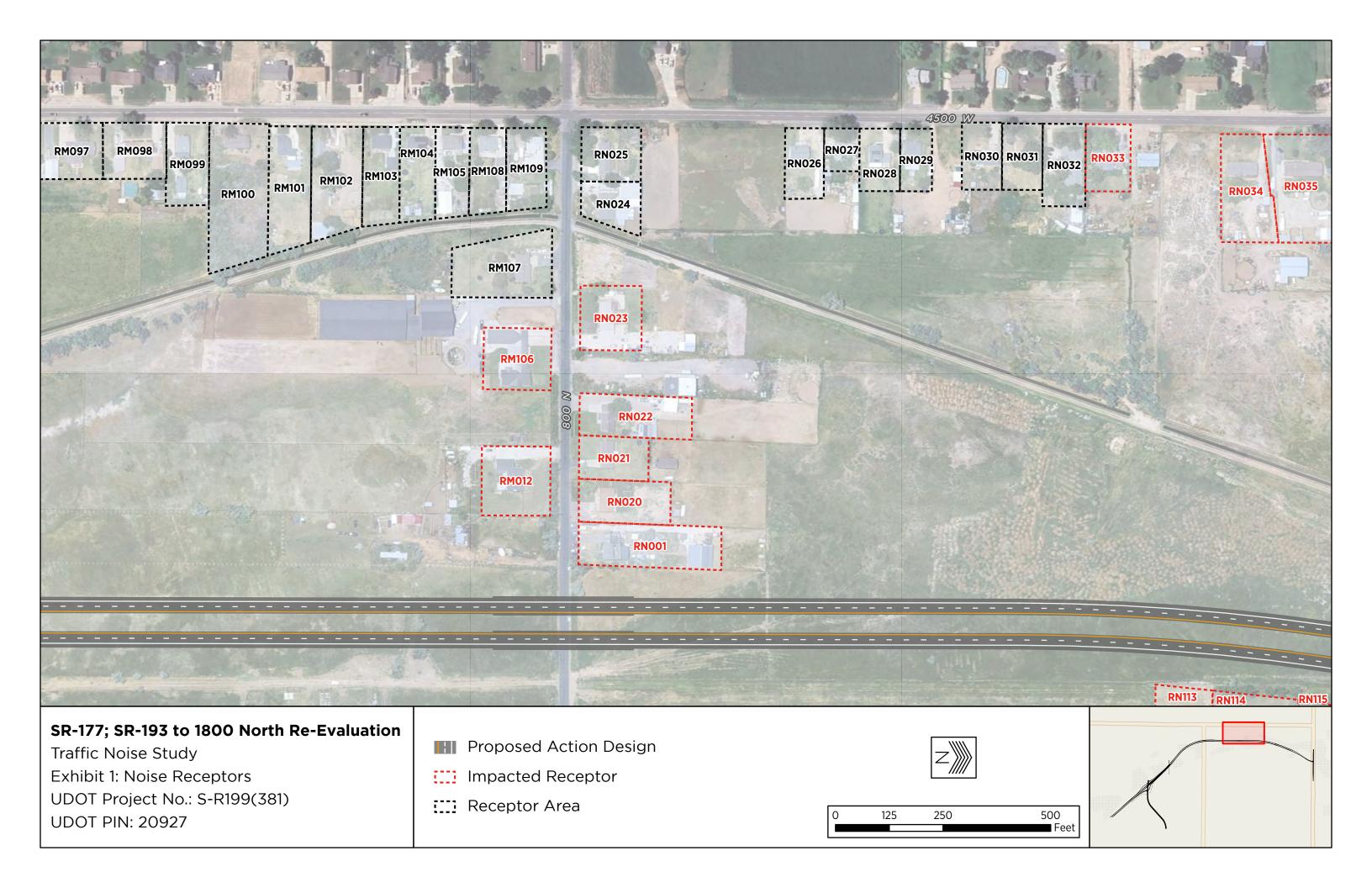


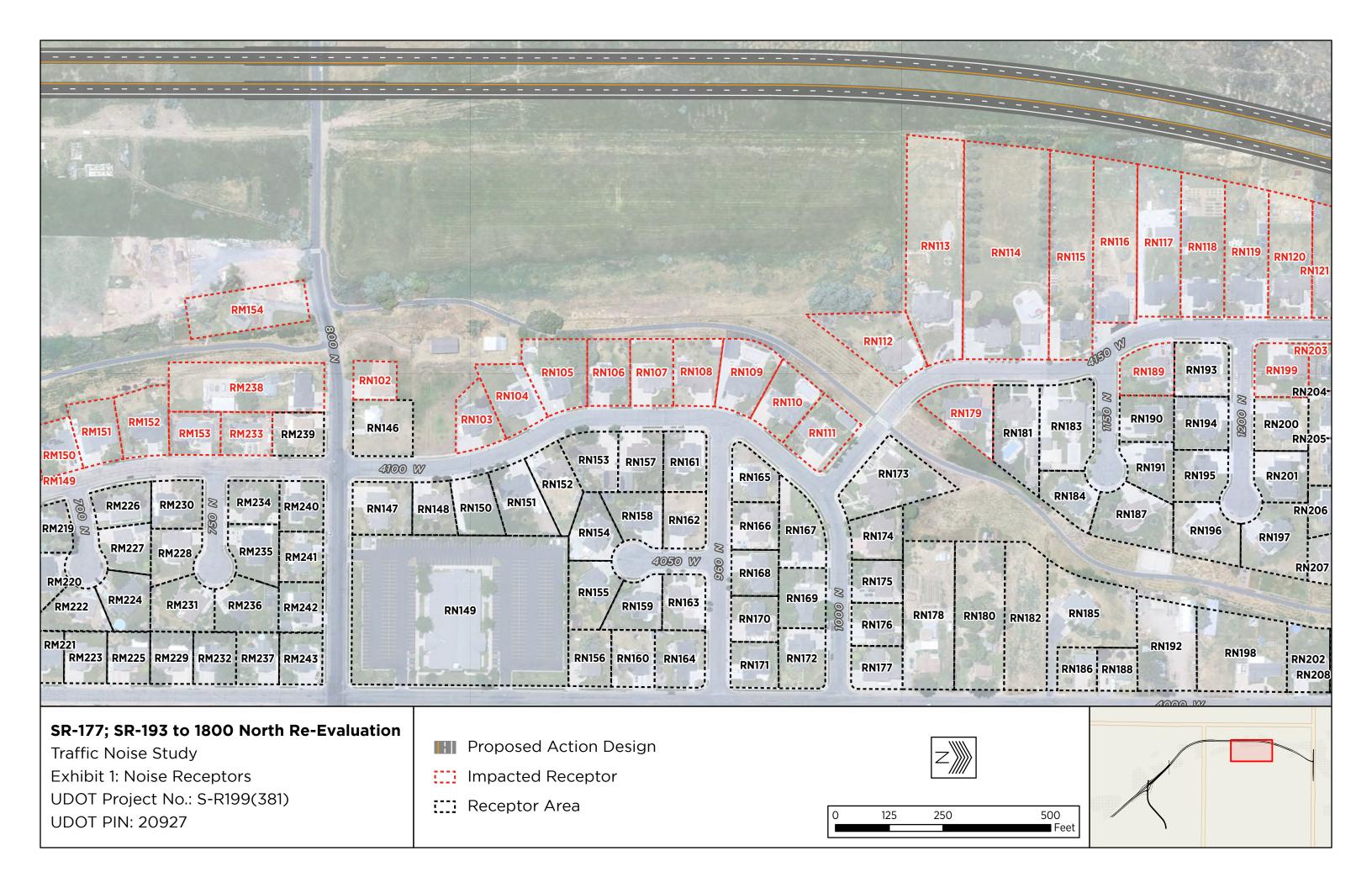


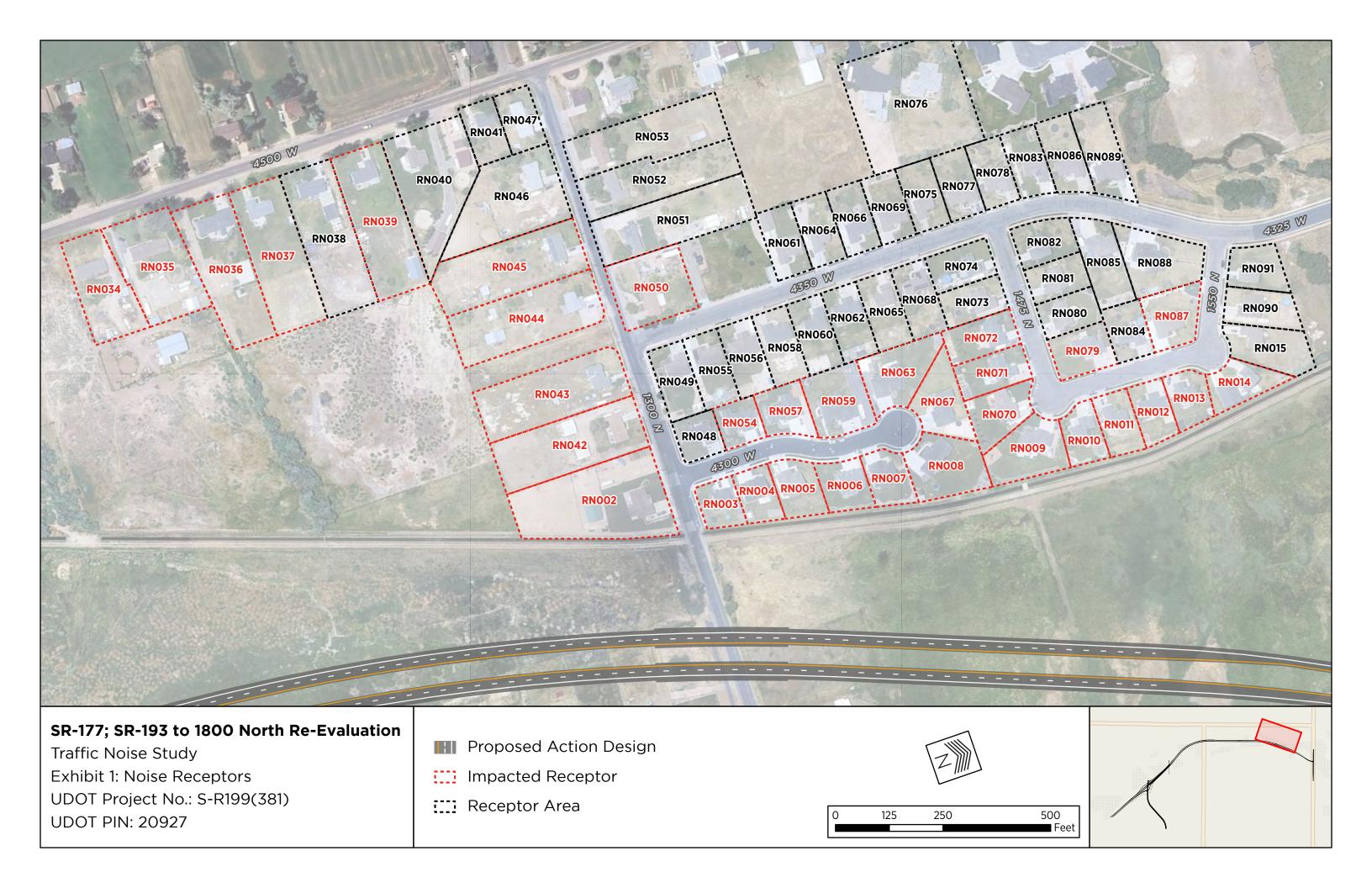


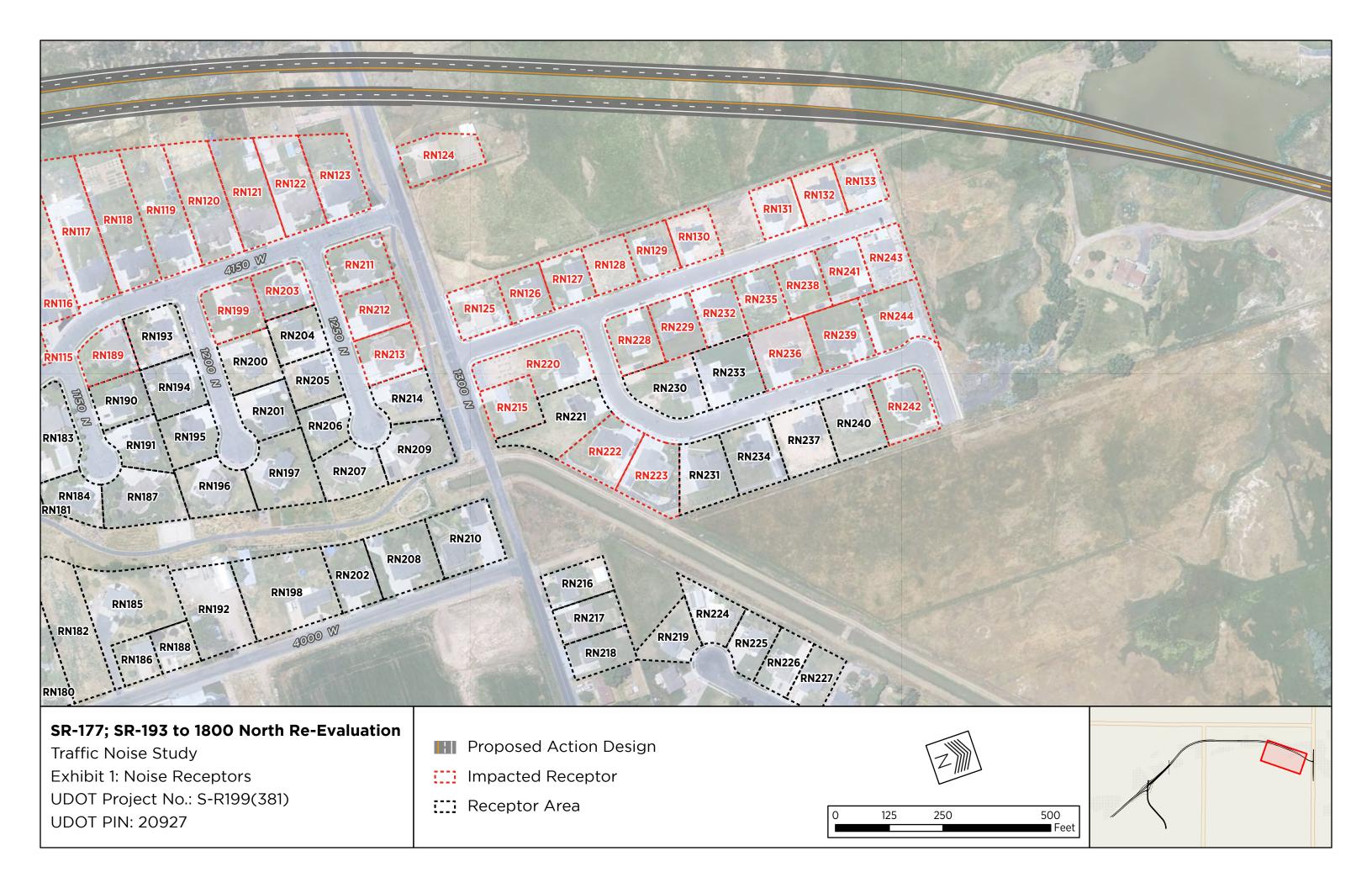












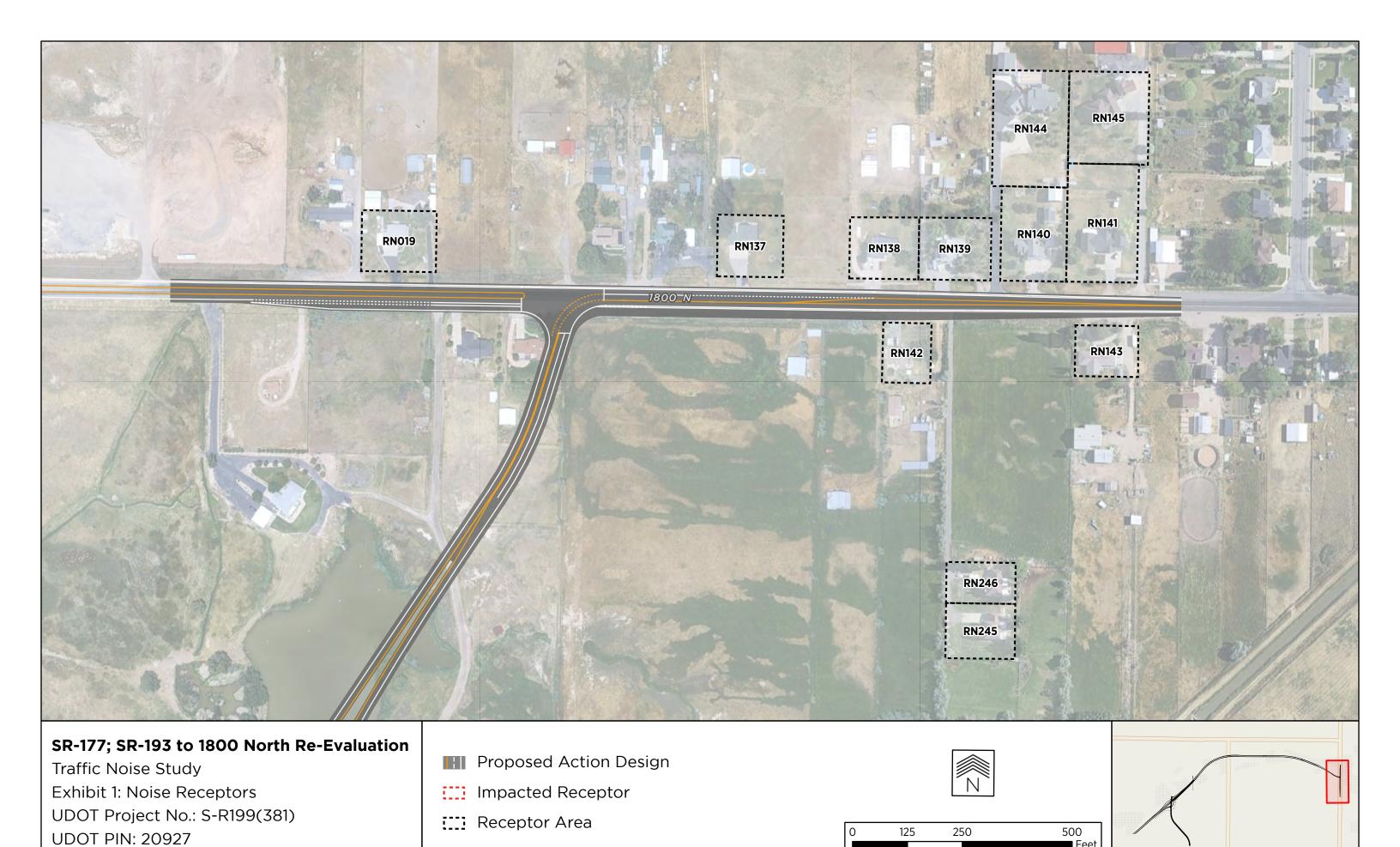
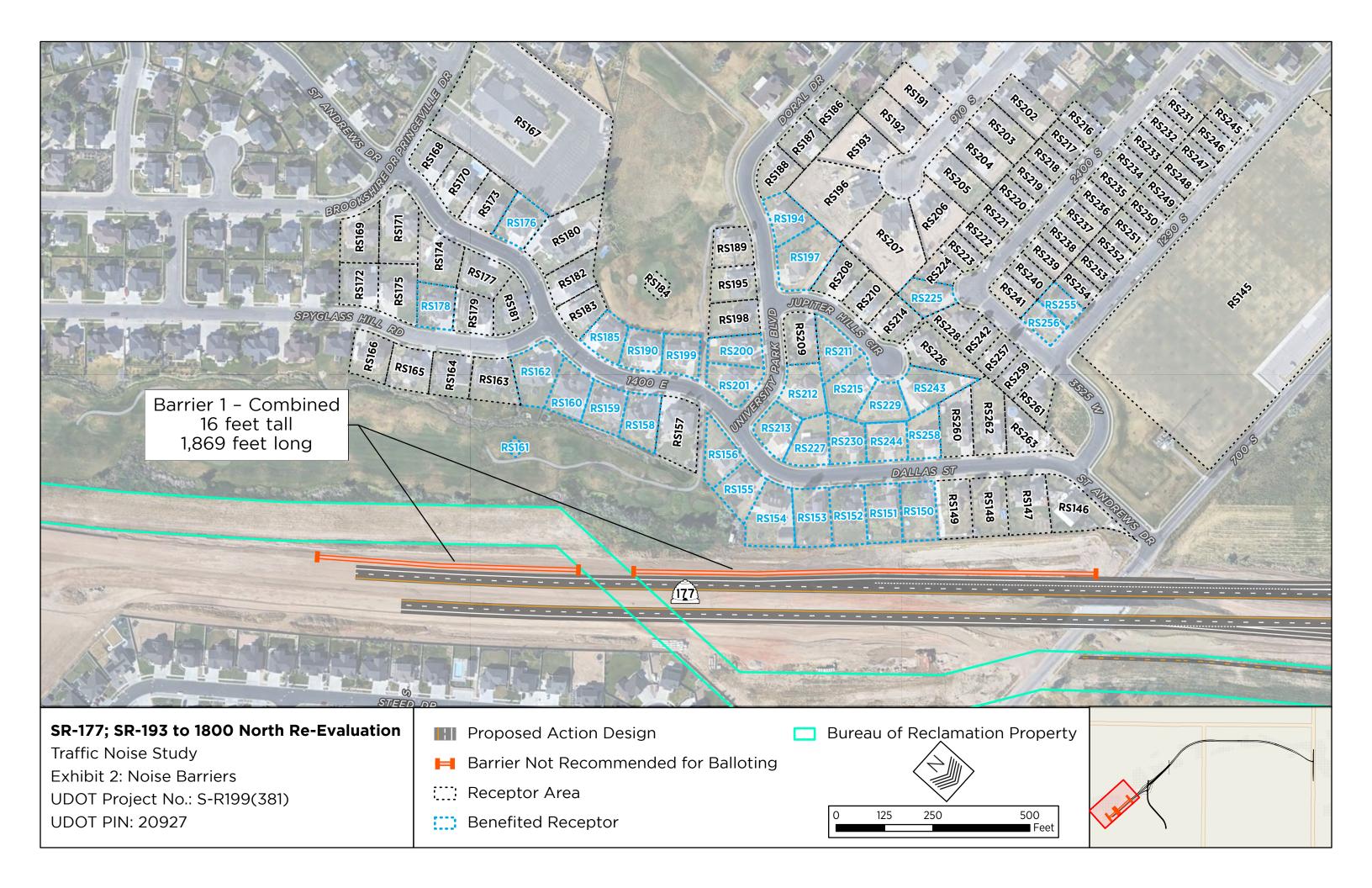




EXHIBIT 2: NOISE BARRIERS



SR-177; SR-193 to 1800 N Noise Abatement Analysis Noise Barrier 1 System

| | | | NAC | | | | | 17-Foot Barrier 16-Foot Barrier | | | rier | 15-Foot Barrier | | | |
|----------|-------|-------------|----------|----------|--------|----------|-----------|---------------------------------|-----------|-----------|-----------|-----------------|-----------|-----------|-----------|
| | Front | Receptors | Land Use | Existing | Future | Increase | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited |
| Receiver | Row | Represented | Category | dBA | dBA | dBA | dBA | dBA | Receptors | dBA | dBA | Receptors | dBA | dBA | Receptors |
| RS145 | No | 1 | C | 49 | 61 | 12 | 60 | 1 | 0 | 60 | 1 | 0 | 60 | 1 | 0 |
| RS146 | Yes | 1 | В | 55 | 66 | 11 | 64 | 2 | 0 | 64 | 2 | 0 | 64 | 2 | 0 |
| RS147 | Yes | 1 | В | 53 | 66 | 13 | 62 | 4 | 0 | 62 | 4 | 0 | 62 | 4 | 0 |
| RS148 | Yes | 1 | В | 54 | 65 | 11 | 61 | 4 | 0 | 61 | 4 | 0 | 61 | 4 | 0 |
| RS149 | Yes | 1 | В | 54 | 64 | 10 | 60 | 4 | 0 | 60 | 4 | 0 | 60 | 4 | 0 |
| RS150 | Yes | 1 | В | 55 | 65 | 10 | 59 | 6 | 1 | 60 | 5 | 1 | 60 | 5 | 1 |
| RS151 | Yes | 1 | В | 55 | 66 | 11 | 59 | 7 | 1 | 59 | 7 | 1 | 60 | 6 | 1 |
| RS152 | Yes | 1 | В | 55 | 67 | 12 | 59 | 8 | 1 | 59 | 8 | 1 | 60 | 7 | 1 |
| RS153 | Yes | 1 | В | 55 | 68 | 13 | 59 | 9 | 1 | 60 | 8 | 1 | 60 | 8 | 1 |
| RS154 | Yes | 1 | В | 55 | 68 | 13 | 60 | 8 | 1 | 60 | 8 | 1 | 60 | 8 | 1 |
| RS155 | No | 1 | В | 53 | 66 | 13 | 59 | 7 | 1 | 59 | 7 | 1 | 59 | 7 | 1 |
| RS156 | No | 1 | В | 51 | 64 | 13 | 58 | 6 | 1 | 58 | 6 | 1 | 58 | 6 | 1 |
| RS157 | No | 1 | В | 49 | 62 | 13 | 57 | 5 | 1 | 58 | 4 | 0 | 58 | 4 | 0 |
| RS158 | No | 1 | В | 50 | 63 | 13 | 58 | 5 | 1 | 58 | 5 | 1 | 58 | 5 | 1 |
| RS159 | No | 1 | В | 49 | 63 | 14 | 58 | 5 | 1 | 58 | 5 | 1 | 58 | 5 | 1 |
| RS160 | No | 1 | В | 49 | 62 | 13 | 57 | 5 | 1 | 57 | 5 | 1 | 57 | 5 | 1 |
| RS161 | Yes | 1 | C | 52 | 64 | 12 | 59 | 5 | 1 | 59 | 5 | 1 | 59 | 5 | 1 |
| RS162 | No | 1 | В | 48 | 61 | 13 | 56 | 5 | 1 | 56 | 5 | 1 | 56 | 5 | 1 |
| RS163 | No | 1 | В | 48 | 61 | 13 | 57 | 4 | 0 | 57 | 4 | 0 | 57 | 4 | 0 |
| RS164 | No | 1 | В | 48 | 60 | 12 | 57 | 3 | 0 | 57 | 3 | 0 | 56 | 4 | 0 |
| RS165 | No | 1 | В | 48 | 60 | 12 | 57 | 3 | 0 | 57 | 3 | 0 | 56 | 4 | 0 |
| RS166 | No | 1 | В | 47 | 59 | 12 | 56 | 3 | 0 | 56 | 3 | 0 | 56 | 3 | 0 |
| RS167 | No | 1 | D | 21 | 26 | 5 | 23 | 3 | 0 | 23 | 3 | 0 | 23 | 3 | 0 |
| RS168 | No | 1 | В | 46 | 49 | 3 | 45 | 4 | 0 | 45 | 4 | 0 | 45 | 4 | 0 |
| RS169 | No | 1 | В | 46 | 49 | 3 | 46 | 3 | 0 | 46 | 3 | 0 | 46 | 3 | 0 |
| RS170 | No | 1 | В | 46 | 50 | 4 | 46 | 4 | 0 | 46 | 4 | 0 | 46 | 4 | 0 |
| RS171 | No | 1 | В | 46 | 48 | 2 | 46 | 2 | 0 | 46 | 2 | 0 | 46 | 2 | 0 |
| RS172 | No | 1 | В | 46 | 55 | 9 | 51 | 4 | 0 | 51 | 4 | 0 | 51 | 4 | 0 |
| RS173 | No | 1 | В | 46 | 51 | 5 | 47 | 4 | 0 | 47 | 4 | 0 | 47 | 4 | 0 |
| RS174 | No | 1 | В | 46 | 50 | 4 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 |
| RS175 | No | 1 | В | 47 | 60 | 13 | 57 | 3 | 0 | 57 | 3 | 0 | 57 | 3 | 0 |
| RS176 | No | 1 | В | 46 | 51 | 5 | 46 | 5 | 1 | 46 | 5 | 1 | 46 | 5 | 1 |
| RS177 | No | 1 | В | 46 | 52 | 6 | 49 | 3 | 0 | 49 | 3 | 0 | 48 | 4 | 0 |
| RS178 | No | 1 | В | 49 | 61 | 12 | 57 | 4 | 0 | 56 | 5 | 1 | 56 | 5 | 1 |
| RS179 | No | 1 | В | 46 | 56 | 10 | 53 | 3 | 0 | 53 | 3 | 0 | 53 | 3 | 0 |
| RS180 | No | 1 | В | 46 | 51 | 5 | 47 | 4 | 0 | 47 | 4 | 0 | 47 | 4 | 0 |
| RS181 | No | 1 | В | 46 | 55 | 9 | 51 | 4 | 0 | 51 | 4 | 0 | 51 | 4 | 0 |
| RS182 | No | 1 | В | 46 | 53 | 7 | 49 | 4 | 0 | 49 | 4 | 0 | 48 | 5 | 1 |
| RS183 | No | 1 | В | 46 | 54 | 8 | 50 | 4 | 0 | 50 | 4 | 0 | 50 | 4 | 0 |
| RS184 | No | 1 | С | 46 | 53 | 7 | 49 | 4 | 0 | 50 | 3 | 0 | 50 | 3 | 0 |
| RS185 | No | 1 | В | 46 | 56 | 10 | 51 | 5 | 1 | 51 | 5 | 1 | 51 | 5 | 1 |
| RS186 | No | 1 | В | 46 | 49 | 3 | 45 | 4 | 0 | 45 | 4 | 0 | 46 | 3 | 0 |
| RS187 | No | 1 | В | 46 | 51 | 5 | 47 | 4 | 0 | 47 | 4 | 0 | 48 | 3 | 0 |
| RS188 | No | 1 | В | 46 | 52 | 6 | 50 | 2 | 0 | 50 | 2 | 0 | 50 | 2 | 0 |
| RS189 | No | 1 | В | 46 | 51 | 5 | 47 | 4 | 0 | 47 | 4 | 0 | 47 | 4 | 0 |
| RS190 | No | 1 | В | 46 | 56 | 10 | 51 | 5 | 1 | 51 | 5 | 1 | 52 | 4 | 0 |
| RS191 | No | 1 | В | 46 | 46 | 0 | 43 | 3 | 0 | 43 | 3 | 0 | 43 | 3 | 0 |
| RS192 | No | 1 | В | 46 | 46 | 0 | 43 | 3 | 0 | 43 | 3 | 0 | 43 | 3 | 0 |
| RS193 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 | 44 | 2 | 0 | 44 | 2 | 0 |

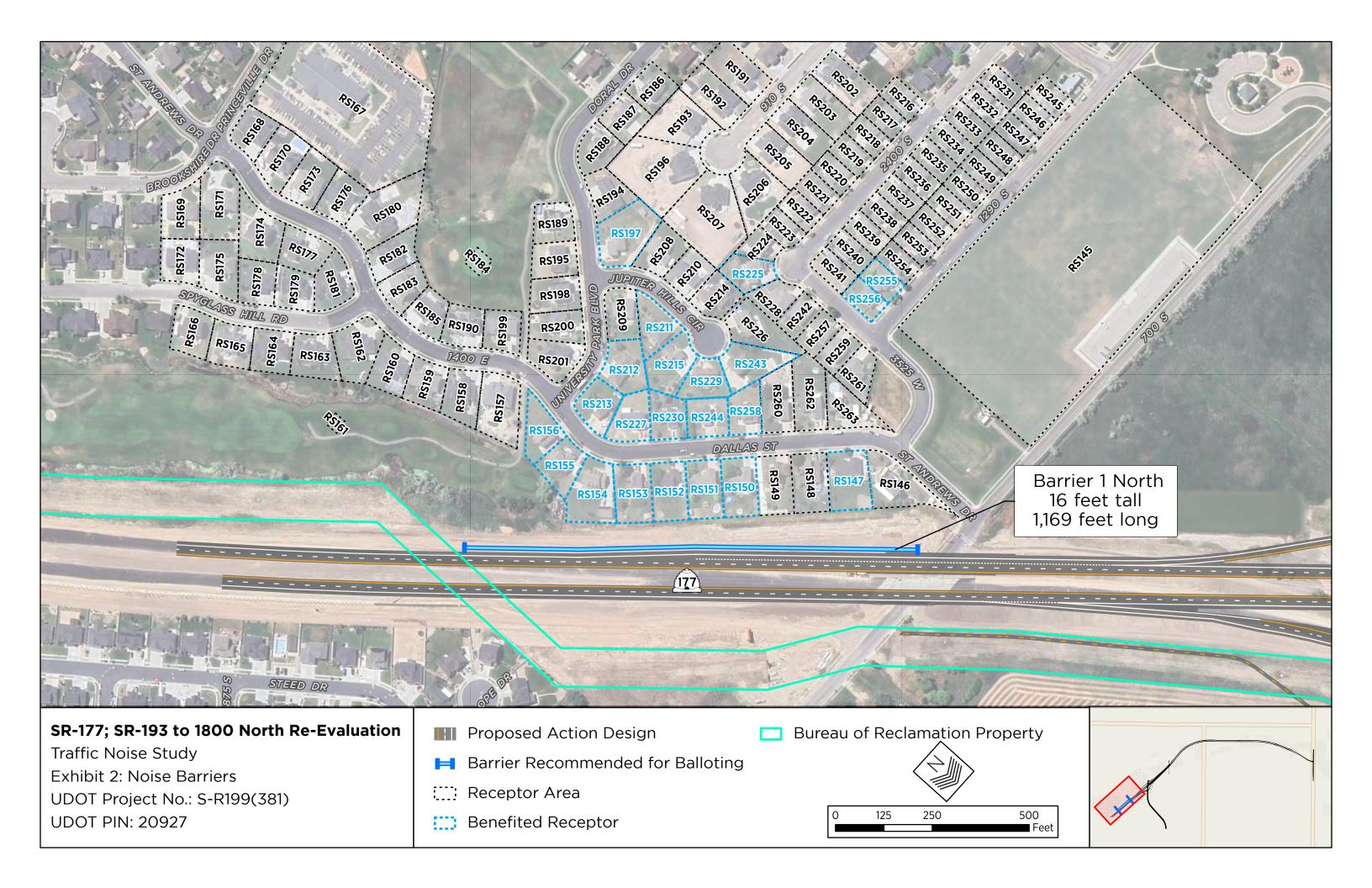
| | | | | | | | 17-Foot Barr | ier | | 16-Foot Barı | rier | | 15-Foot Barr | ier | |
|----------|-----|-------------|----------|-----|-----|----------|--------------|-----------|-----------|--------------|-----------|-----------|--------------|-----------|-----------|
| | | - | | _ | | Increase | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited |
| Receiver | Row | Represented | Category | dBA | dBA | dBA | dBA | dBA | Receptors | dBA | dBA | Receptors | dBA | dBA | Receptors |
| RS194 | No | 1 | В | 46 | 51 | 5 | 46 | 5 | 1 | 46 | 5 | 1 | 46 | 5 | 1 |
| RS195 | No | 1 | В | 46 | 51 | 5 | 47 | 4 | 0 | 47 | 4 | 0 | 48 | 3 | 0 |
| RS196 | No | 1 | В | 46 | 52 | 6 | 49 | 3 | 0 | 49 | 3 | 0 | 49 | 3 | 0 |
| RS197 | No | 1 | В | 46 | 51 | 5 | 45 | 6 | 1 | 45 | 6 | 1 | 45 | 6 | 1 |
| RS198 | No | 1 | В | 46 | 52 | 6 | 49 | 3 | 0 | 49 | 3 | 0 | 50 | 2 | 0 |
| RS199 | No | 1 | В | 46 | 57 | 11 | 52 | 5 | 1 | 52 | 5 | 1 | 52 | 5 | 1 |
| RS200 | No | 1 | В | 46 | 54 | 8 | 49 | 5 | 1 | 49 | 5 | 1 | 49 | 5 | 1 |
| RS201 | No | 1 | В | 46 | 56 | 10 | 50 | 6 | 1 | 50 | 6 | 1 | 51 | 5 | 1 |
| RS202 | No | 1 | В | 46 | 48 | 2 | 46 | 2 | 0 | 46 | 2 | 0 | 46 | 2 | 0 |
| RS203 | No | 1 | В | 46 | 49 | 3 | 46 | 3 | 0 | 46 | 3 | 0 | 46 | 3 | 0 |
| RS204 | No | 1 | В | 46 | 49 | 3 | 46 | 3 | 0 | 46 | 3 | 0 | 46 | 3 | 0 |
| RS205 | No | 1 | В | 46 | 48 | 2 | 45 | 3 | 0 | 46 | 2 | 0 | 46 | 2 | 0 |
| RS206 | No | 1 | В | 46 | 49 | 3 | 46 | 3 | 0 | 46 | 3 | 0 | 46 | 3 | 0 |
| RS207 | No | 1 | В | 46 | 52 | 6 | 48 | 4 | 0 | 48 | 4 | 0 | 48 | 4 | 0 |
| RS208 | No | 1 | В | 46 | 53 | 7 | 49 | 4 | 0 | 49 | 4 | 0 | 50 | 3 | 0 |
| RS209 | No | 1 | В | 46 | 55 | 9 | 51 | 4 | 0 | 51 | 4 | 0 | 51 | 4 | 0 |
| RS210 | No | 1 | В | 46 | 54 | 8 | 51 | 3 | 0 | 51 | 3 | 0 | 51 | 3 | 0 |
| RS211 | No | 1 | В | 46 | 57 | 11 | 49 | 8 | 1 | 49 | 8 | 1 | 50 | 7 | 1 |
| RS212 | No | 1 | В | 46 | 56 | 10 | 51 | 5 | 1 | 51 | 5 | 1 | 51 | 5 | 1 |
| RS213 | No | 1 | В | 47 | 61 | 14 | 54 | 7 | 1 | 54 | 7 | 1 | 54 | 7 | 1 |
| RS214 | No | 1 | В | 46 | 54 | 8 | 51 | 3 | 0 | 51 | 3 | 0 | 51 | 3 | 0 |
| RS215 | No | 1 | В | 46 | 57 | 11 | 50 | 7 | 1 | 50 | 7 | 1 | 51 | 6 | 1 |
| RS216 | No | 1 | В | 46 | 46 | 0 | 42 | 4 | 0 | 42 | 4 | 0 | 43 | 3 | 0 |
| RS217 | No | 1 | В | 46 | 46 | 0 | 43 | 3 | 0 | 43 | 3 | 0 | 43 | 3 | 0 |
| RS218 | No | 1 | В | 46 | 46 | 0 | 43 | 3 | 0 | 44 | 2 | 0 | 44 | 2 | 0 |
| RS219 | No | 1 | В | 46 | 47 | 1 | 44 | 3 | 0 | 44 | 3 | 0 | 44 | 3 | 0 |
| RS220 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 | 44 | 2 | 0 | 44 | 2 | 0 |
| RS221 | No | 1 | В | 46 | 46 | 0 | 42 | 4 | 0 | 43 | 3 | 0 | 43 | 3 | 0 |
| RS222 | No | 1 | В | 46 | 46 | 0 | 43 | 3 | 0 | 43 | 3 | 0 | 44 | 2 | 0 |
| RS223 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 | 44 | 2 | 0 | 44 | 2 | 0 |
| RS224 | No | 1 | В | 46 | 47 | 1 | 44 | 3 | 0 | 44 | 3 | 0 | 44 | 3 | 0 |
| RS225 | No | 1 | В | 46 | 52 | 6 | 46 | 6 | 1 | 47 | 5 | 1 | 47 | 5 | 1 |
| RS226 | No | 1 | В | 46 | 54 | 8 | 50 | 4 | 0 | 50 | 4 | 0 | 50 | 4 | 0 |
| RS227 | No | 1 | В | 48 | 62 | 14 | 54 | 8 | 1 | 54 | 8 | 1 | 54 | 8 | 1 |
| RS228 | No | 1 | В | 46 | 57 | 11 | 53 | 4 | 0 | 53 | 4 | 0 | 53 | 4 | 0 |
| RS229 | No | 1 | В | 46 | 56 | 10 | 50 | 6 | 1 | 51 | 5 | 1 | 51 | 5 | 1 |
| RS230 | No | 1 | В | 47 | 61 | 14 | 53 | 8 | 1 | 53 | 8 | 1 | 53 | 8 | 1 |
| RS231 | No | 1 | В | 46 | 49 | 3 | 47 | 2 | 0 | 47 | 2 | 0 | 47 | 2 | 0 |
| RS232 | No | 1 | В | 46 | 50 | 4 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 |
| RS233 | No | 1 | В | 46 | 49 | 3 | 47 | 2 | 0 | 47 | 2 | 0 | 47 | 2 | 0 |
| RS234 | No | 1 | В | 46 | 49 | 3 | 46 | 3 | 0 | 46 | 3 | 0 | 46 | 3 | 0 |
| RS235 | No | 1 | В | 46 | 50 | 4 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 |
| RS236 | No | 1 | В | 46 | 50 | 4 | 47 | 3 | 0 | 47 | 3 | 0 | 47 | 3 | 0 |
| RS237 | No | 1 | В | 46 | 52 | 6 | 50 | 2 | 0 | 50 | 2 | 0 | 50 | 2 | 0 |
| RS238 | No | 1 | В | 46 | 50 | 4 | 47 | 3 | 0 | 47 | 3 | 0 | 47 | 3 | 0 |
| RS239 | No | 1 | В | 46 | 51 | 5 | 48 | 3 | 0 | 48 | 3 | 0 | 48 | 3 | 0 |
| RS240 | No | 1 | В | 46 | 52 | 6 | 48 | 4 | 0 | 48 | 4 | 0 | 48 | 4 | 0 |
| RS241 | No | 1 | В | 46 | 57 | 11 | 55 | 2 | 0 | 55 | 2 | 0 | 55 | 2 | 0 |
| RS242 | No | 1 | В | 46 | 57 | 11 | 54 | 3 | 0 | 54 | 3 | 0 | 54 | 3 | 0 |

SR-177; SR-193 to 1800 N Noise Abatement Analysis Noise Barrier 1 System

| | | | NAC | | | | | 17-Foot Barr | ier | | 16-Foot Barr | ier | | 15-Foot Barr | ier |
|----------|--------------|--------------------------|----------------------|-----------------|---------------|-----------------|------------------|------------------|------------------------|------------------|------------------|------------------------|------------------|------------------|------------------------|
| Receiver | Front Row | Receptors Represented | Land Use Category | Existing dBA | Future dBA | Increase dBA | W/Barrier dBA | Reduction dBA | Benefited Receptors | W/Barrier dBA | Reduction dBA | Benefited Receptors | W/Barrier dBA | Reduction dBA | Benefited Receptors |
| RS243 | No | 1 | В | 46 | 57 | 11 | 51 | 6 | 1 | 51 | 6 | 1 | 52 | 5 | 1 |
| RS244 | No | 1 | В | 47 | 60 | 13 | 53 | 7 | 1 | 53 | 7 | 1 | 53 | 7 | 1 |
| RS245 | No | 1 | В | 46 | 46 | 0 | 43 | 3 | 0 | 43 | 3 | 0 | 43 | 3 | 0 |
| RS246 | No | 1 | В | 46 | 46 | 0 | 43 | 3 | 0 | 43 | 3 | 0 | 43 | 3 | 0 |
| RS247 | No | 1 | В | 46 | 46 | 0 | 43 | 3 | 0 | 43 | 3 | 0 | 43 | 3 | 0 |
| RS248 | No | 1 | В | 46 | 46 | 0 | 43 | 3 | 0 | 44 | 2 | 0 | 44 | 2 | 0 |
| RS249 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 | 44 | 2 | 0 | 44 | 2 | 0 |
| RS250 | No | 1 | В | 46 | 47 | 1 | 44 | 3 | 0 | 44 | 3 | 0 | 45 | 2 | 0 |
| RS251 | No | 1 | В | 46 | 47 | 1 | 44 | 3 | 0 | 44 | 3 | 0 | 44 | 3 | 0 |
| RS252 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 | 44 | 2 | 0 | 44 | 2 | 0 |
| RS253 | No | 1 | В | 46 | 48 | 2 | 44 | 4 | 0 | 44 | 4 | 0 | 44 | 4 | 0 |
| RS254 | No | 1 | В | 46 | 48 | 2 | 46 | 2 | 0 | 46 | 2 | 0 | 47 | 1 | 0 |
| RS255 | No | 1 | В | 46 | 55 | 9 | 47 | 8 | 1 | 47 | 8 | 1 | 47 | 8 | 1 |
| RS256 | No | 1 | В | 46 | 52 | 6 | 45 | 7 | 1 | 46 | 6 | 1 | 46 | 6 | 1 |
| RS257 | No | 1 | В | 46 | 58 | 12 | 55 | 3 | 0 | 55 | 3 | 0 | 55 | 3 | 0 |
| RS258 | No | 1 | В | 46 | 60 | 14 | 54 | 6 | 1 | 54 | 6 | 1 | 54 | 6 | 1 |
| RS259 | No | 1 | В | 46 | 59 | 13 | 57 | 2 | 0 | 57 | 2 | 0 | 57 | 2 | 0 |
| RS260 | No | 1 | В | 46 | 60 | 14 | 56 | 4 | 0 | 56 | 4 | 0 | 56 | 4 | 0 |
| RS261 | No | 1 | В | 46 | 60 | 14 | 59 | 1 | 0 | 59 | 1 | 0 | 59 | 1 | 0 |
| RS262 | No | 1 | В | 47 | 61 | 14 | 57 | 4 | 0 | 57 | 4 | 0 | 57 | 4 | 0 |
| RS263 | No | 1 | В | 48 | 61 | 13 | 59 | 2 | 0 | 59 | 2 | 0 | 59 | 2 | 0 |

= Impacted receptor = 5 dBA reduction or better = 7 dBA reduction or better

| NA | С | 17-Foot Barrie | er | 16-Foot Barrier | 15-Foot Barrier |
|----------------|--------------------------------------|------------------------|-----------|-----------------|-----------------|
| | | Inputs – Overall | | | |
| | D. | arrier Length (ft.) = | 1,819 | 1,86 | 9 1 |
| | | arrier Height (ft.) = | 1,819 | 1,00 | _ |
| | | rrier Area (sq. ft.) = | 30,923 | 29,90 | |
| | | egory A, C, D, or E | 30,723 | 25,50 | 1 |
| | | arrier Height (ft.) = | 17 | 1 | 6 |
| | | arrier Length (ft.) = | 625 | 67 | |
| | | Barrier Area (ft.) = | 10,625 | 10,80 | _ |
| | Right-of-Way Acquisi | | 0 | -7 | 0 |
| | | Barrier (linear ft.) = | 625 | 67 | 5 |
| | | puts – Category B | | | |
| | | arrier Height (ft.) = | 17 | 1 | 6 |
| | | arrier Length (ft.) = | 1,194 | 1,19 | 1 |
| | | rrier Area (sq. ft.) = | 20,298 | 19,10 | |
| | Right-of-Way Acquisi | tion Area (sq. ft.) = | 0 | | 0 |
| | Safety | Barrier (linear ft.) = | 1,194 | 1,19 | 4 |
| | Ac | oustic Feasibility | | | |
| sibility | Fron | t Row Receptors = | 10 | 1 | 0 |
| <u>iā</u> — | Front-Row Receptors with a | 5 dBA Reduction = | 6 | | 6 |
| Feas | % of Front-Row Receptors Reduce | d At Least 5 dBA = | 60% | 609 | 6 |
| <u> </u> | Acol | ustically Feasible = | Yes | Ye | s |
| | | ction Design Goal | | | |
| | | t Row Receptors = | 10 | 1 | o |
| | Front Row Receptors with | | 4 | | 4 |
| | % of Front Row Reduce | d At Least 7 dBA = | 40% | 409 | 6 |
| | Meets Noise Reduc | tion Design Goal = | Yes | Ye | s |
| | Cost Effectiveness – Cato | egory A, C, D, or E | | | 1 |
| | Barrier Cost (I | Barrier area x 20) = | \$212,500 | \$216,00 | 0 |
| | Right-of-Way Acquis | ition (sq. ft. x 20) = | \$0 | \$ | 0 |
| SS | Safety Barrie | r (linear ft. x 125) = | \$78,125 | \$84,37 | 5 |
| ene | | Total Barrier Cost = | \$290,625 | \$300,37 | 5 |
| ğ | Allowable Co | ost (length x 360) = | \$225,000 | \$243,00 | 0 |
| Dug | Cos | t per Linear Foot = | \$465 | \$44 | 5 |
| Reasonableness | | Cost Reasonable = | No | N | 0 |
| | | ness – Category B | | | |
| | | Barrier area x 20) = | \$405,960 | \$382,08 | |
| | Right-of-Way Acquis | | \$0 | \$ | |
| | | r (linear ft. x 125) = | \$149,250 | \$149,25 | |
| | | Total Barrier Cost = | \$555,210 | \$531,33 | |
| | | (benefited x 30k) = | \$990,000 | \$990,00 | _ |
| | Benefited (Category B w/ 5 | · | 33 | 3 | |
| | Cost per Benefited Receptor (Barrier | | \$16,825 | \$16,10 | |
| | | Cost Reasonable = | Yes | Ye | s |



| | | | NAC | | | | | 17-Foot Barr | ier | | 16-Foot Barı | rier | | 15-Foot Barr | ier |
|----------|-------|-------------|----------|----------|--------|----------|-----------|--------------|-----------|-----------|--------------|-----------|-----------|--------------|-----------|
| | Front | Receptors | Land Use | Existing | Future | Increase | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited |
| Receiver | Row | Represented | Category | dBA | dBA | dBA | dBA | dBA | Receptors | dBA | dBA | Receptors | dBA | dBA | Receptors |
| RS145 | No | 1 | С | 49 | 61 | 12 | 60 | 1 | 0 | 60 | 1 | 0 | 60 | 1 | 0 |
| RS146 | Yes | 1 | В | 55 | 66 | 11 | 62 | 4 | 0 | 63 | 3 | 0 | 63 | 3 | 0 |
| RS147 | Yes | 1 | В | 53 | 66 | 13 | 61 | 5 | 1 | 61 | 5 | 1 | 61 | 5 | 1 |
| RS148 | Yes | 1 | В | 54 | 65 | 11 | 61 | 4 | 0 | 61 | 4 | 0 | 61 | 4 | 0 |
| RS149 | Yes | 1 | В | 54 | 64 | 10 | 60 | 4 | 0 | 60 | 4 | 0 | 60 | 4 | 0 |
| RS150 | Yes | 1 | В | 55 | 65 | 10 | 59 | 6 | 1 | 60 | 5 | 1 | 60 | 5 | 1 |
| RS151 | Yes | 1 | В | 55 | 66 | 11 | 59 | 7 | 1 | 59 | 7 | 1 | 60 | 6 | 1 |
| RS152 | Yes | 1 | В | 55 | 67 | 12 | 59 | 8 | 1 | 60 | 7 | 1 | 60 | 7 | 1 |
| RS153 | Yes | 1 | В | 55 | 68 | 13 | 60 | 8 | 1 | 60 | 8 | 1 | 60 | 8 | 1 |
| RS154 | Yes | 1 | В | 55 | 68 | 13 | 60 | 8 | 1 | 60 | 8 | 1 | 60 | 8 | 1 |
| RS155 | No | 1 | В | 53 | 66 | 13 | 59 | 7 | 1 | 60 | 6 | 1 | 60 | 6 | 1 |
| RS156 | No | 1 | В | 51 | 64 | 13 | 59 | 5 | 1 | 59 | 5 | 1 | 59 | 5 | 1 |
| RS157 | No | 1 | В | 49 | 62 | 13 | 59 | 3 | 0 | 59 | 3 | 0 | 59 | 3 | 0 |
| RS158 | No | 1 | В | 50 | 63 | 13 | 60 | 3 | 0 | 60 | 3 | 0 | 60 | 3 | 0 |
| RS159 | No | 1 | В | 49 | 63 | 14 | 60 | 3 | 0 | 60 | 3 | 0 | 60 | 3 | 0 |
| RS160 | No | 1 | В | 49 | 62 | 13 | 60 | 2 | 0 | 60 | 2 | 0 | 59 | 3 | 0 |
| RS161 | No | 1 | С | 52 | 64 | 12 | 63 | 1 | 0 | 63 | 1 | 0 | 63 | 1 | 0 |
| RS162 | No | 1 | В | 48 | 61 | 13 | 59 | 2 | 0 | 59 | 2 | 0 | 59 | 2 | 0 |
| RS163 | No | 1 | В | 48 | 61 | 13 | 59 | 2 | 0 | 59 | 2 | 0 | 59 | 2 | 0 |
| RS164 | No | 1 | В | 48 | 60 | 12 | 59 | 1 | 0 | 59 | 1 | 0 | 59 | 1 | 0 |
| RS165 | No | 1 | В | 48 | 60 | 12 | 59 | 1 | 0 | 59 | 1 | 0 | 59 | 1 | 0 |
| RS166 | No | 1 | В | 47 | 59 | 12 | 58 | 1 | 0 | 58 | 1 | 0 | 58 | 1 | 0 |
| RS167 | No | 1 | D | 21 | 26 | 5 | 24 | 2 | 0 | 24 | 2 | 0 | 24 | 2 | 0 |
| RS168 | No | 1 | В | 46 | 49 | 3 | 46 | 3 | 0 | 46 | 3 | 0 | 46 | 3 | 0 |
| RS169 | No | 1 | В | 46 | 49 | 3 | 47 | 2 | 0 | 47 | 2 | 0 | 47 | 2 | 0 |
| RS170 | No | 1 | В | 46 | 50 | 4 | 47 | 3 | 0 | 48 | 2 | 0 | 48 | 2 | 0 |
| RS171 | No | 1 | В | 46 | 48 | 2 | 47 | 1 | 0 | 47 | 1 | 0 | 47 | 1 | 0 |
| RS172 | No | 1 | В | 46 | 55 | 9 | 52 | 3 | 0 | 52 | 3 | 0 | 52 | 3 | 0 |
| RS173 | No | 1 | В | 46 | 51 | 5 | 48 | 3 | 0 | 48 | 3 | 0 | 48 | 3 | 0 |
| RS174 | No | 1 | В | 46 | 50 | 4 | 49 | 1 | 0 | 49 | 1 | 0 | 49 | 1 | 0 |
| RS175 | No | 1 | В | 47 | 60 | 13 | 59 | 1 | 0 | 59 | 1 | 0 | 59 | 1 | 0 |
| RS176 | No | 1 | В | 46 | 51 | 5 | 48 | 3 | 0 | 48 | 3 | 0 | 48 | 3 | 0 |
| RS177 | No | 1 | В | 46 | 52 | 6 | 51 | 1 | 0 | 51 | 1 | 0 | 51 | 1 | 0 |
| RS178 | No | 1 | В | 49 | 61 | 12 | 61 | 0 | 0 | 61 | 0 | 0 | 61 | 0 | 0 |
| RS179 | No | 1 | В | 46 | 56 | 10 | 54 | 2 | 0 | 54 | 2 | 0 | 54 | 2 | 0 |
| RS180 | No | 1 | В | 46 | 51 | 5 | 50 | 1 | 0 | 50 | 1 | 0 | 50 | 1 | 0 |
| RS181 | No | 1 | В | 46 | 55 | 9 | 53 | 2 | 0 | 53 | 2 | 0 | 53 | 2 | 0 |
| RS182 | No | 1 | В | 46 | 53 | 7 | 52 | 1 | 0 | 52 | 1 | 0 | 52 | 1 | 0 |
| RS183 | No | 1 | В | 46 | 54 | 8 | 52 | 2 | 0 | 52 | 2 | 0 | 52 | 2 | 0 |
| RS184 | No | 1 | C | 46 | 53 | 7 | 51 | 2 | 0 | 51 | 2 | 0 | 51 | 2 | 0 |
| RS185 | No | 1 | В | 46 | 56 | 10 | 53 | 3 | 0 | 53 | 3 | 0 | 53 | 3 | 0 |
| RS186 | No | 1 | В | 46 | 49 | 3 | 46 | 3 | 0 | 46 | 3 | 0 | 46 | 3 | 0 |
| RS187 | No | 1 | В | 46 | 51 | 5 | 48 | 3 | 0 | 48 | 3 | 0 | 48 | 3 | 0 |
| RS188 | No | 1 | В | 46 | 52 | 6 | 50 | 2 | 0 | 50 | 2 | 0 | 50 | 2 | 0 |
| RS189 | No | 1 | В | 46 | 51 | 5 | 48 | 3 | 0 | 48 | 3 | 0 | 48 | 3 | 0 |
| RS190 | No | 1 | В | 46 | 56 | 10 | 53 | 3 | 0 | 54 | 2 | 0 | 54 | 2 | 0 |
| RS191 | No | 1 | В | 46 | 46 | 0 | 43 | 3 | 0 | 43 | 3 | 0 | 43 | 3 | 0 |
| RS192 | No | 1 | В | 46 | 46 | 0 | 43 | 3 | 0 | 43 | 3 | 0 | 43 | 3 | 0 |
| RS193 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 | 44 | 2 | 0 | 44 | 2 | 0 |

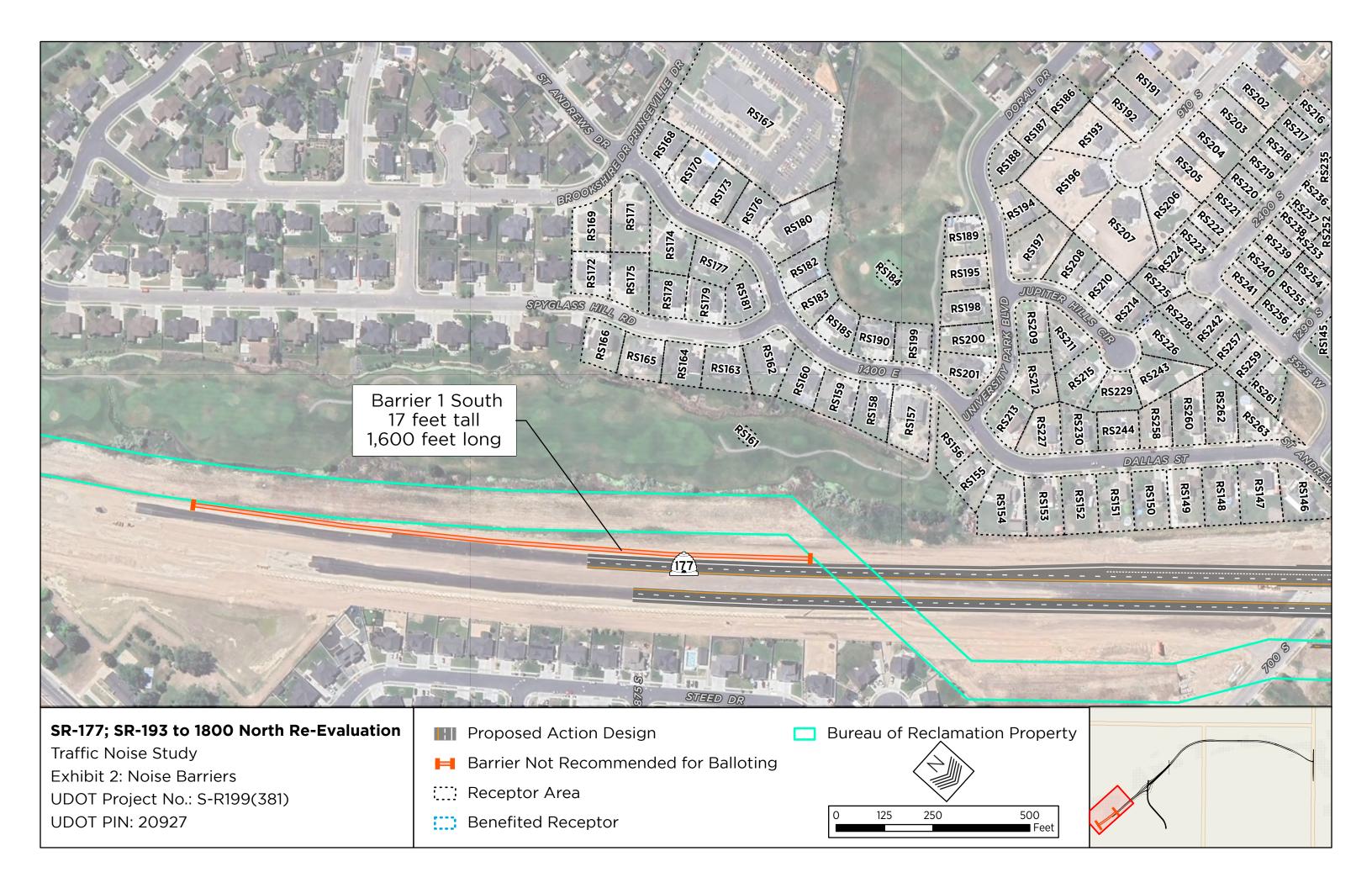
| | | | NAC | | | | | 17-Foot Barı | ier | | 16-Foot Barı | ier | 15-Foot Barrier | | |
|----------|-------|-------------|----------|----------|--------|----------|-----------|--------------|-----------|-----------|--------------|-----------|-----------------|-----------|-----------|
| | Front | Receptors | Land Use | Existing | Future | Increase | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited |
| Receiver | Row | Represented | Category | dBA | dBA | dBA | dBA | dBA | Receptors | dBA | dBA | Receptors | dBA | dBA | Receptors |
| RS194 | No | 1 | В | 46 | 51 | 5 | 47 | 4 | 0 | 47 | 4 | 0 | 47 | 4 | 0 |
| RS195 | No | 1 | В | 46 | 51 | 5 | 48 | 3 | 0 | 48 | 3 | 0 | 48 | 3 | 0 |
| RS196 | No | 1 | В | 46 | 52 | 6 | 49 | 3 | 0 | 49 | 3 | 0 | 49 | 3 | 0 |
| RS197 | No | 1 | В | 46 | 51 | 5 | 45 | 6 | 1 | 45 | 6 | 1 | 45 | 6 | 1 |
| RS198 | No | 1 | В | 46 | 52 | 6 | 50 | 2 | 0 | 50 | 2 | 0 | 50 | 2 | 0 |
| RS199 | No | 1 | В | 46 | 57 | 11 | 53 | 4 | 0 | 53 | 4 | 0 | 53 | 4 | 0 |
| RS200 | No | 1 | В | 46 | 54 | 8 | 52 | 2 | 0 | 52 | 2 | 0 | 51 | 3 | 0 |
| RS201 | No | 1 | В | 46 | 56 | 10 | 53 | 3 | 0 | 53 | 3 | 0 | 52 | 4 | 0 |
| RS202 | No | 1 | В | 46 | 48 | 2 | 46 | 2 | 0 | 46 | 2 | 0 | 46 | 2 | 0 |
| RS203 | No | 1 | В | 46 | 49 | 3 | 46 | 3 | 0 | 46 | 3 | 0 | 47 | 2 | 0 |
| RS204 | No | 1 | В | 46 | 49 | 3 | 46 | 3 | 0 | 46 | 3 | 0 | 46 | 3 | 0 |
| RS205 | No | 1 | В | 46 | 48 | 2 | 45 | 3 | 0 | 46 | 2 | 0 | 46 | 2 | 0 |
| RS206 | No | 1 | В | 46 | 49 | 3 | 46 | 3 | 0 | 46 | 3 | 0 | 46 | 3 | 0 |
| RS207 | No | 1 | В | 46 | 52 | 6 | 48 | 4 | 0 | 48 | 4 | 0 | 48 | 4 | 0 |
| RS208 | No | 1 | В | 46 | 53 | 7 | 50 | 3 | 0 | 50 | 3 | 0 | 50 | 3 | 0 |
| RS209 | No | 1 | В | 46 | 55 | 9 | 52 | 3 | 0 | 52 | 3 | 0 | 52 | 3 | 0 |
| RS210 | No | 1 | В | 46 | 54 | 8 | 52 | 2 | 0 | 52 | 2 | 0 | 52 | 2 | 0 |
| RS211 | No | 1 | В | 46 | 57 | 11 | 50 | 7 | 1 | 50 | 7 | 1 | 50 | 7 | 1 |
| RS212 | No | 1 | В | 46 | 56 | 10 | 51 | 5 | 1 | 51 | 5 | 1 | 51 | 5 | 1 |
| RS213 | No | 1 | В | 47 | 61 | 14 | 55 | 6 | 1 | 55 | 6 | 1 | 55 | 6 | 1 |
| RS214 | No | 1 | В | 46 | 54 | 8 | 51 | 3 | 0 | 51 | 3 | 0 | 51 | 3 | 0 |
| RS215 | No | 1 | В | 46 | 57 | 11 | 51 | 6 | 1 | 51 | 6 | 1 | 51 | 6 | 1 |
| RS216 | No | 1 | В | 46 | 46 | 0 | 43 | 3 | 0 | 43 | 3 | 0 | 44 | 2 | 0 |
| RS217 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 | 44 | 2 | 0 | 44 | 2 | 0 |
| RS218 | No | 1 | В | 46 | 46 | 0 | 45 | 1 | 0 | 45 | 1 | 0 | 45 | 1 | 0 |
| RS219 | No | 1 | В | 46 | 47 | 1 | 45 | 2 | 0 | 45 | 2 | 0 | 45 | 2 | 0 |
| RS220 | No | 1 | В | 46 | 46 | 0 | 45 | 1 | 0 | 45 | 1 | 0 | 45 | 1 | 0 |
| RS221 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 | 44 | 2 | 0 | 44 | 2 | 0 |
| RS222 | No | 1 | В | 46 | 46 | 0 | 45 | 1 | 0 | 45 | 1 | 0 | 45 | 1 | 0 |
| RS223 | No | 1 | В | 46 | 46 | 0 | 45 | 1 | 0 | 45 | 1 | 0 | 45 | 1 | 0 |
| RS224 | No | 1 | В | 46 | 47 | 1 | 44 | 3 | 0 | 44 | 3 | 0 | 44 | 3 | 0 |
| RS225 | No | 1 | В | 46 | 52 | 6 | 47 | 5 | 1 | 47 | 5 | 1 | 47 | 5 | 1 |
| RS226 | No | 1 | В | 46 | 54 | 8 | 51 | 3 | 0 | 51 | 3 | 0 | 51 | 3 | 0 |
| RS227 | No | 1 | В | 48 | 62 | 14 | 54 | 8 | 1 | 54 | 8 | 1 | 54 | 8 | 1 |
| RS228 | No | 1 | В | 46 | 57 | 11 | 54 | 3 | 0 | 54 | 3 | 0 | 54 | 3 | 0 |
| RS229 | No | 1 | В | 46 | 56 | 10 | 51 | 5 | 1 | 51 | 5 | 1 | 51 | 5 | 1 |
| RS230 | No | 1 | В | 47 | 61 | 14 | 54 | 7 | 1 | 54 | 7 | 1 | 54 | 7 | 1 |
| RS231 | No | 1 | В | 46 | 49 | 3 | 48 | 1 | 0 | 48 | 1 | 0 | 48 | 1 | 0 |
| RS232 | No | 1 | В | 46 | 50 | 4 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 |
| RS233 | No | 1 | В | 46 | 49 | 3 | 47 | 2 | 0 | 47 | 2 | 0 | 47 | 2 | 0 |
| RS234 | No | 1 | В | 46 | 49 | 3 | 46 | 3 | 0 | 46 | 3 | 0 | 47 | 2 | 0 |
| RS235 | No | 1 | В | 46 | 50 | 4 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 |
| RS236 | No | 1 | В | 46 | 50 | 4 | 47 | 3 | 0 | 47 | 3 | 0 | 47 | 3 | 0 |
| RS237 | No | 1 | В | 46 | 52 | 6 | 50 | 2 | 0 | 50 | 2 | 0 | 50 | 2 | 0 |
| RS238 | No | 1 | В | 46 | 50 | 4 | 47 | 3 | 0 | 47 | 3 | 0 | 47 | 3 | 0 |
| RS239 | No | 1 | В | 46 | 51 | 5 | 48 | 3 | 0 | 48 | 3 | 0 | 48 | 3 | 0 |
| RS240 | No | 1 | В | 46 | 52 | 6 | 48 | 4 | 0 | 48 | 4 | 0 | 48 | 4 | 0 |
| RS241 | No | 1 | В | 46 | 57 | 11 | 55 | 2 | 0 | 55 | 2 | 0 | 55 | 2 | 0 |
| RS242 | No | 1 | В | 46 | 57 | 11 | 54 | 3 | 0 | 54 | 3 | 0 | 55 | 2 | 0 |

SR-177; SR-193 to 1800 N Noise Abatement Analysis **Noise Barrier 1 North**

| | | | NAC | | | | | 17-Foot Barr | ier | | 16-Foot Barr | ier | 15-Foot Barrier | | |
|----------|--------------|--------------------------|----------------------|-----------------|---------------|-----------------|------------------|------------------|------------------------|------------------|------------------|------------------------|------------------|------------------|------------------------|
| Receiver | Front Row | Receptors Represented | Land Use Category | Existing dBA | Future dBA | Increase dBA | W/Barrier dBA | Reduction dBA | Benefited Receptors | W/Barrier dBA | Reduction dBA | Benefited Receptors | W/Barrier dBA | Reduction dBA | Benefited Receptors |
| RS243 | No | 1 | В | 46 | 57 | 11 | 51 | 6 | 1 | 52 | 5 | 1 | 52 | 5 | 1 |
| RS244 | No | 1 | В | 47 | 60 | 13 | 53 | 7 | 1 | 54 | 6 | 1 | 54 | 6 | 1 |
| RS245 | No | 1 | В | 46 | 46 | 0 | 43 | 3 | 0 | 43 | 3 | 0 | 43 | 3 | 0 |
| RS246 | No | 1 | В | 46 | 46 | 0 | 43 | 3 | 0 | 43 | 3 | 0 | 43 | 3 | 0 |
| RS247 | No | 1 | В | 46 | 46 | 0 | 43 | 3 | 0 | 43 | 3 | 0 | 44 | 2 | 0 |
| RS248 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 | 44 | 2 | 0 | 44 | 2 | 0 |
| RS249 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 | 44 | 2 | 0 | 44 | 2 | 0 |
| RS250 | No | 1 | В | 46 | 47 | 1 | 45 | 2 | 0 | 45 | 2 | 0 | 45 | 2 | 0 |
| RS251 | No | 1 | В | 46 | 47 | 1 | 44 | 3 | 0 | 44 | 3 | 0 | 45 | 2 | 0 |
| RS252 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 | 44 | 2 | 0 | 44 | 2 | 0 |
| RS253 | No | 1 | В | 46 | 48 | 2 | 44 | 4 | 0 | 45 | 3 | 0 | 45 | 3 | 0 |
| RS254 | No | 1 | В | 46 | 48 | 2 | 45 | 3 | 0 | 45 | 3 | 0 | 45 | 3 | 0 |
| RS255 | No | 1 | В | 46 | 55 | 9 | 47 | 8 | 1 | 47 | 8 | 1 | 47 | 8 | 1 |
| RS256 | No | 1 | В | 46 | 52 | 6 | 46 | 6 | 1 | 46 | 6 | 1 | 46 | 6 | 1 |
| RS257 | No | 1 | В | 46 | 58 | 12 | 55 | 3 | 0 | 55 | 3 | 0 | 55 | 3 | 0 |
| RS258 | No | 1 | В | 46 | 60 | 14 | 54 | 6 | 1 | 54 | 6 | 1 | 54 | 6 | 1 |
| RS259 | No | 1 | В | 46 | 59 | 13 | 57 | 2 | 0 | 57 | 2 | 0 | 57 | 2 | 0 |
| RS260 | No | 1 | В | 46 | 60 | 14 | 56 | 4 | 0 | 56 | 4 | 0 | 56 | 4 | 0 |
| RS261 | No | 1 | В | 46 | 60 | 14 | 59 | 1 | 0 | 59 | 1 | 0 | 59 | 1 | 0 |
| RS262 | No | 1 | В | 47 | 61 | 14 | 57 | 4 | 0 | 57 | 4 | 0 | 57 | 4 | 0 |
| RS263 | No | 1 | В | 48 | 61 | 13 | 59 | 2 | 0 | 59 | 2 | 0 | 59 | 2 | 0 |

= Impacted receptor = 5 dBA reduction or better = 7 dBA reduction or better

| NA | AC | 17-Foot Barrier | | 16-Foot Barrier | 15-Foot Barrier |
|--|---|--------------------|-----------|-----------------|-----------------|
| | | and Organia | | | |
| | | puts – Overall | 1.160 | 1.160 | |
| | | er Length (ft.) = | 1,169 | 1,169 | 1, |
| <u> </u> | | er Height (ft.) = | 17 | 16 | 17.6 |
| | | Area (sq. ft.) = | 19,873 | 18,704 | 17,5 |
| <u> </u> | Inputs – Categor | | | | |
| | | er Height (ft.) = | n/a | n/a | |
| | | er Length (ft.) = | n/a | n/a | |
| | | rier Area (ft.) = | n/a | n/a | |
| | Right-of-Way Acquisition | | n/a | n/a | |
| | | ier (linear ft.) = | n/a | n/a | |
| | | s – Category B | | | |
| | | er Height (ft.) = | 17 | 16 | |
| | | er Length (ft.) = | 1,169 | 1,169 | 1, |
| | | · Area (sq. ft.) = | 19,873 | 18,704 | 17,9 |
| | Right-of-Way Acquisition | | 0 | 0 | |
| | | ier (linear ft.) = | 1,169 | 1,169 | 1, |
| | Acous | stic Feasibility | | | |
| Feasibility | Front Ro | w Receptors = | 9 | 9 | |
| <u>ië</u> | Front-Row Receptors with a 5 dB | BA Reduction = | 6 | 6 | |
| e a s | % of Front-Row Receptors Reduced At | t Least 5 dBA = | 67% | 67% | 6 |
| ŭ | • | cally Feasible = | Yes | Yes | , |
| | Noise Reduction | n Design Goal | | | |
| | Front Ro | w Receptors = | 9 | 9 | |
| | Front Row Receptors with 7 dB | BA Reduction = | 4 | 4 | |
| | % of Front Row Reduced At | t Least 7 dBA = | 44% | 44% | 3 |
| | Meets Noise Reduction | Design Goal = | Yes | Yes | |
| | Cost Effectiveness – Catego | ry A, C, D, or E | | | |
| | Barrier Cost (Barri | ier area x 20) = | n/a | n/a | |
| | Right-of-Way Acquisition | | n/a | n/a | |
| es: | Safety Barrier (lin | | n/a | n/a | |
| <u> </u> | | Barrier Cost = | n/a | n/a | |
| ab | Allowable Cost (I | ength x 360) = | n/a | n/a | |
| <u> </u> | | t Reasonable = | n/a | n/a | |
| Reasonableness | Cost Effectiveness | | | 137,5 | |
| ~ <u> </u> | Barrier Cost (Barri | | \$397,460 | \$374,080 | |
| | Right-of-Way Acquisition | | \$0 | \$0 | |
| | Safety Barrier (lin | | \$146,125 | \$146,125 | |
| | | Barrier Cost = | \$543,585 | \$520,205 | |
| | Allowable Cost (ben | | \$660,000 | \$660,000 | |
| | Benefited (Category B w/ 5 dB/ | | 22 | 22 | |
| | Cost per Benefited Receptor (Barrier cost | | \$24,708 | \$23,646 | |
| | | t Reasonable = | Yes | Yes | |
| | | | | | L |
| | | | | | |



| | | | NAC | | | | | 17-Foot Barı | rier |
|----------------|-------|-------------|----------|----------|--------------|----------|-----------|--------------|-----------|
| | Front | Receptors | Land Use | Existing | Future | Increase | W/Barrier | Reduction | Benefited |
| Receiver | Row | Represented | Category | dBA | dBA | dBA | dBA | dBA | Receptors |
| RS145 | No | 1 | C | 49 | 61 | 12 | 61 | 0 | 0 |
| RS146 | No | 1 | В | 55 | 66 | 11 | 66 | 0 | 0 |
| RS147 | No | 1 | В | 53 | 66 | 13 | 66 | 0 | 0 |
| RS148 | No | 1 | В | 54 | 65 | 11 | 65 | 0 | 0 |
| RS149 | No | 1 | В | 54 | 64 | 10 | 64 | 0 | 0 |
| RS150 | No | 1 | В | 55 | 65 | 10 | 65 | 0 | 0 |
| RS151 | No | 1 | В | 55 | 66 | 11 | 66 | 0 | 0 |
| RS152 | No | 1 | В | 55 | 67 | 12 | 67 | 0 | 0 |
| RS153 | No | 1 | В | 55 | 68 | 13 | 68 | 0 | 0 |
| RS154 | No | 1 | В | 55 | 68 | 13 | 68 | 0 | 0 |
| RS155 | No | 1 | В | 53 | 66 | 13 | 66 | 0 | 0 |
| RS156 | No | 1 | В | 51 | 64 | 13 | 64 | 0 | 0 |
| RS157 | No | 1 | В | 49 | 62 | 13 | 62 | 0 | 0 |
| RS158 | No | 1 | В | 50 | 63 | 13 | 63 | 0 | 0 |
| RS159 | No | 1 | В | 49 | 63 | 14 | 62 | 1 | 0 |
| RS160 | No | 1 | В | 49 | 62 | 13 | 61 | 1 | 0 |
| RS161 | Yes | 1 | C | 52 | 64 | 12 | 61 | 3 | 0 |
| RS162 | No | 1 | В | 48 | 61 | 13 | 59 | 2 | 0 |
| RS163 | No | 1 | В | 48 | 61 | 13 | 59 | 2 | 0 |
| RS164 | No | 1 | В | 48 | 60 | 12 | 58 | 2 | 0 |
| RS165 | No | 1 | В | 48 | 60 | 12 | 57 | 3 | 0 |
| RS166 | No | 1 | В | 47 | 59 | 12 | 56 | 3 | 0 |
| RS167 | No | 1 | D | 21 | 26 | 5 | 26 | 0 | 0 |
| RS168 | No | 1 | В | 46 | 49 | 3 | 48 | 1 | 0 |
| RS169 | No | 1 | В | 46 | 49 | 3 | 47 | 2 | 0 |
| RS170 | No | 1 | В | 46 | 50 | 4 | 49 | 1 | 0 |
| RS170 RS171 | No | 1 | В | 46 | 48 | 2 | 49 | 1 | 0 |
| | No | 1 | В | 46 | 55 | 9 | 53 | 2 | 0 |
| RS172 | | | | 46 | | 5 | 50 | 1 | |
| RS173 | No | 1 | B B | 46 | 51 50 | _ | 48 | 2 | 0 |
| RS174 | No | - | | 47 | 60 | 13 | 58 | 2 | 0 |
| RS175 | No | 1 | В | | | | | 1 | 1 |
| RS176 | No | 1 | B B | 46 46 | 51 52 | 5 | 50 | 1 4 | 0 |
| RS177 | No | | В | 49 | | | 48 | | |
| RS178 | No | 1 | | | 61 | 12 | 57 55 | 4 | 0 |
| RS179 | No | 1 | B B | 46 | 56 51 | 10 | 55 49 | 3 | 0 |
| RS180 | No | 1 | В | 46 | 51 | 5 9 | 48 | 3 | 0 |
| RS181 | No | 1 | | 46 | 55 | 7 | 52 50 | | _ |
| RS182 | No | 1 | В | 46 | 53 | + | 50 | 3 | 0 |
| RS183 | No | 1 | B C | 46 | 54 | 8 | 52 52 | 2 | 0 |
| RS184 | No | 1 | | 46 | 53 | 7 | 52 54 | 1 | 0 |
| RS185 | No | 1 | В | 46 | 56 | 10 | 54 | 2 | 0 |
| RS186 | No | 1 | В | 46 | 49 | 3 | 49 | 0 | 0 |
| RS187 | No | 1 | В | 46 | 51 | 5 | 51 | 0 | 0 |
| RS188 | No | 1 | В | 46 | 52 | 6 | 51 | 1 | 0 |
| RS189 | No | 1 | В | 46 | 51 | 5 | 51 55 | 0 | 0 |
| RS190 | No | 1 | В | 46 | 56 | 10 | 55 45 | 1 | 0 |
| RS191 | No | 1 | В | 46 | 46 | 0 | 45 | 1 | 0 |
| RS192 | No | 1 | В | 46 | 46 | 0 | 45 | 1 | 0 |
| RS193 | No | 1 | В | 46 | 46 | 0 | 46 | 0 | 0 |

| | | | NAC | | | | | 17-Foot Barr | ier |
|----------|-------|-------------|----------|----------|--------|----------|-----------|--------------|-----------|
| | Front | Receptors | Land Use | Existing | Future | Increase | W/Barrier | Reduction | Benefited |
| Receiver | Row | Represented | Category | dBA | dBA | dBA | dBA | dBA | Receptors |
| RS194 | No | 1 | В | 46 | 51 | 5 | 50 | 1 | 0 |
| RS195 | No | 1 | В | 46 | 51 | 5 | 51 | 0 | 0 |
| RS196 | No | 1 | В | 46 | 52 | 6 | 51 | 1 | 0 |
| RS197 | No | 1 | В | 46 | 51 | 5 | 51 | 0 | 0 |
| RS198 | No | 1 | В | 46 | 52 | 6 | 52 | 0 | 0 |
| RS199 | No | 1 | В | 46 | 57 | 11 | 56 | 1 | 0 |
| RS200 | No | 1 | В | 46 | 54 | 8 | 53 | 1 | 0 |
| RS201 | No | 1 | В | 46 | 56 | 10 | 56 | 0 | 0 |
| RS202 | No | 1 | В | 46 | 48 | 2 | 48 | 0 | 0 |
| RS203 | No | 1 | В | 46 | 49 | 3 | 49 | 0 | 0 |
| RS204 | No | 1 | В | 46 | 49 | 3 | 48 | 1 | 0 |
| RS205 | No | 1 | В | 46 | 48 | 2 | 48 | 0 | 0 |
| RS206 | No | 1 | В | 46 | 49 | 3 | 49 | 0 | 0 |
| RS207 | No | 1 | В | 46 | 52 | 6 | 52 | 0 | 0 |
| RS208 | No | 1 | В | 46 | 53 | 7 | 53 | 0 | 0 |
| RS209 | No | 1 | В | 46 | 55 | 9 | 55 | 0 | 0 |
| RS210 | No | 1 | В | 46 | 54 | 8 | 54 | 0 | 0 |
| RS211 | No | 1 | В | 46 | 57 | 11 | 57 | 0 | 0 |
| RS212 | No | 1 | В | 46 | 56 | 10 | 56 | 0 | 0 |
| RS213 | No | 1 | В | 47 | 61 | 14 | 60 | 1 | 0 |
| RS214 | No | 1 | В | 46 | 54 | 8 | 54 | 0 | 0 |
| RS215 | No | 1 | В | 46 | 57 | 11 | 57 | 0 | 0 |
| RS216 | No | 1 | В | 46 | 46 | 0 | 43 | 3 | 0 |
| RS217 | No | 1 | В | 46 | 46 | 0 | 45 | 1 | 0 |
| RS218 | No | 1 | В | 46 | 46 | 0 | 45 | 1 | 0 |
| RS219 | No | 1 | В | 46 | 47 | 1 | 46 | 1 | 0 |
| RS220 | No | 1 | В | 46 | 46 | 0 | 45 | 1 | 0 |
| RS221 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 |
| RS222 | No | 1 | В | 46 | 46 | 0 | 45 | 1 | 0 |
| RS223 | No | 1 | В | 46 | 46 | 0 | 45 | 1 | 0 |
| RS224 | No | 1 | В | 46 | 47 | 1 | 47 | 0 | 0 |
| RS225 | No | 1 | В | 46 | 52 | 6 | 52 | 0 | 0 |
| RS226 | No | 1 | В | 46 | 54 | 8 | 54 | 0 | 0 |
| RS227 | No | 1 | В | 48 | 62 | 14 | 62 | 0 | 0 |
| RS228 | No | 1 | В | 46 | 57 | 11 | 57 | 0 | 0 |
| RS229 | No | 1 | В | 46 | 56 | 10 | 56 | 0 | 0 |
| RS230 | No | 1 | В | 47 | 61 | 14 | 60 | 1 | 0 |
| RS231 | No | 1 | В | 46 | 49 | 3 | 49 | 0 | 0 |
| RS232 | No | 1 | В | 46 | 50 | 4 | 50 | 0 | 0 |
| RS233 | No | 1 | В | 46 | 49 | 3 | 49 | 0 | 0 |
| RS234 | No | 1 | В | 46 | 49 | 3 | 48 | 1 | 0 |
| RS235 | No | 1 | В | 46 | 50 | 4 | 50 | 0 | 0 |
| RS236 | No | 1 | В | 46 | 50 | 4 | 49 | 1 | 0 |
| RS237 | No | 1 | В | 46 | 52 | 6 | 51 | 1 | 0 |
| RS238 | No | 1 | В | 46 | 50 | 4 | 50 | 0 | 0 |
| RS239 | No | 1 | В | 46 | 51 | 5 | 51 | 0 | 0 |
| RS240 | No | 1 | В | 46 | 52 | 6 | 52 | 0 | 0 |
| RS241 | No | 1 | В | 46 | 57 | 11 | 57 | 0 | 0 |
| RS242 | No | 1 | В | 46 | 57 | 11 | 57 | 0 | 0 |

| | | | NAC | | | | | 17-Foot Barr | ier |
|----------|--------------|--------------------------|----------------------|-----------------|---------------|-----------------|------------------|------------------|------------------------|
| Receiver | Front Row | Receptors Represented | Land Use Category | Existing dBA | Future dBA | Increase dBA | W/Barrier dBA | Reduction dBA | Benefited Receptors |
| RS243 | No | 1 | В | 46 | 57 | 11 | 57 | 0 | 0 |
| RS244 | No | 1 | В | 47 | 60 | 13 | 60 | 0 | 0 |
| RS245 | No | 1 | В | 46 | 46 | 0 | 45 | 1 | 0 |
| RS246 | No | 1 | В | 46 | 46 | 0 | 45 | 1 | 0 |
| RS247 | No | 1 | В | 46 | 46 | 0 | 45 | 1 | 0 |
| RS248 | No | 1 | В | 46 | 46 | 0 | 46 | 0 | 0 |
| RS249 | No | 1 | В | 46 | 46 | 0 | 46 | 0 | 0 |
| RS250 | No | 1 | В | 46 | 47 | 1 | 47 | 0 | 0 |
| RS251 | No | 1 | В | 46 | 47 | 1 | 47 | 0 | 0 |
| RS252 | No | 1 | В | 46 | 46 | 0 | 45 | 1 | 0 |
| RS253 | No | 1 | В | 46 | 48 | 2 | 47 | 1 | 0 |
| RS254 | No | 1 | В | 46 | 48 | 2 | 48 | 0 | 0 |
| RS255 | No | 1 | В | 46 | 55 | 9 | 55 | 0 | 0 |
| RS256 | No | 1 | В | 46 | 52 | 6 | 52 | 0 | 0 |
| RS257 | No | 1 | В | 46 | 58 | 12 | 58 | 0 | 0 |
| RS258 | No | 1 | В | 46 | 60 | 14 | 60 | 0 | 0 |
| RS259 | No | 1 | В | 46 | 59 | 13 | 59 | 0 | 0 |
| RS260 | No | 1 | В | 46 | 60 | 14 | 60 | 0 | 0 |
| RS261 | No | 1 | В | 46 | 60 | 14 | 59 | 1 | 0 |
| RS262 | No | 1 | В | 47 | 61 | 14 | 61 | 0 | 0 |
| RS263 | No | 1 | В | 48 | 61 | 13 | 61 | 0 | 0 |



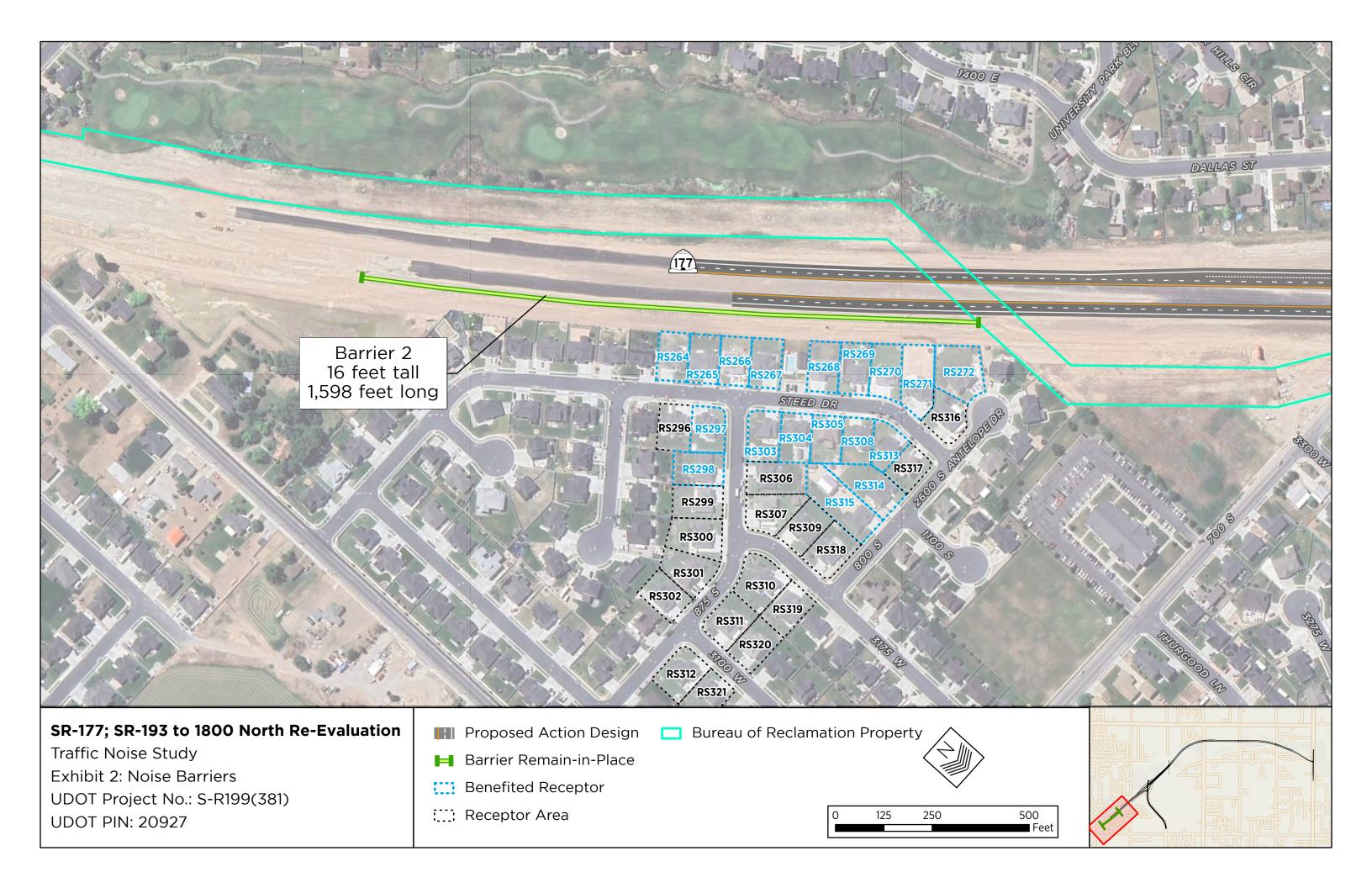
⁼ Impacted receptor = 5 dBA reduction or better = 7 dBA reduction or better

| NAC | 17-Foot Barrier |
|-----|-----------------|
|-----|-----------------|

| | Inputs – Overall | |
|----------------|--|--------|
| | Barrier Length (ft.) = | 1,600 |
| | Barrier Height (ft.) = | 17 |
| | Barrier Area (sq. ft.) = | 27,200 |
| | Inputs – Category A, C, D, or E | 27,200 |
| | Barrier Height (ft.) = | 17 |
| | Barrier Length (ft.) = | 350 |
| | Barrier Area (ft.) = | 5,950 |
| | Right-of-Way Acquisition Area (sq. ft.) = | 0 |
| | Safety Barrier (linear ft.) = | 350 |
| | Inputs – Category B | |
| | Barrier Height (ft.) = | 17 |
| | Barrier Length (ft.) = | 1,250 |
| | Barrier Area (sq. ft.) = | 21,250 |
| | Right-of-Way Acquisition Area (sq. ft.) = | 0 |
| | Safety Barrier (linear ft.) = | 1,250 |
| | Acoustic Feasibility | .,255 |
| <u>₹</u> | Front Row Receptors = | 1 |
| 豆 | Front-Row Receptors with a 5 dBA Reduction = | 0 |
| Feasibility | % of Front-Row Receptors Reduced At Least 5 dBA = | 0% |
| Ψ. | Acoustically Feasible = | No |
| | Noise Reduction Design Goal | 110 |
| | Front Row Receptors = | 1 |
| | Front Row Receptors with 7 dBA Reduction = | 0 |
| | % of Front Row Reduced At Least 7 dBA = | 0% |
| | Meets Noise Reduction Design Goal = | No |
| | Cost Effectiveness – Category A, C, D, or E | |
| | Barrier Cost (Barrier area x 20) = | n/a |
| | Right-of-Way Acquisition (sq. ft. x 20) = | n/a |
| ess | Safety Barrier (linear ft. x 125) = | n/a |
| e | Total Barrier Cost = | n/a |
| apl | Allowable Cost (length x 360) = | n/a |
| ē | Cost Reasonable = | n/a |
| Reasonableness | Cost Effectiveness – Category B | .,,,, |
| č | Barrier Cost (Barrier area x 20) = | n/a |
| | Right-of-Way Acquisition (sq. ft. x 20) = | n/a |
| | Safety Barrier (linear ft. x 125) = | n/a |
| | Total Barrier Cost = | n/a |
| | Allowable Cost (benefited x 30k) = | n/a |
| | Benefited (Category B w/ 5 dBA Reduction) = | n/a |
| | Cost per Benefited Receptor (Barrier cost / benefited) = | n/a |
| | Cost Reasonable = | n/a |
| | 1 | , |

Is Noise Barrier 1 South Feasible and Reasonable?

No



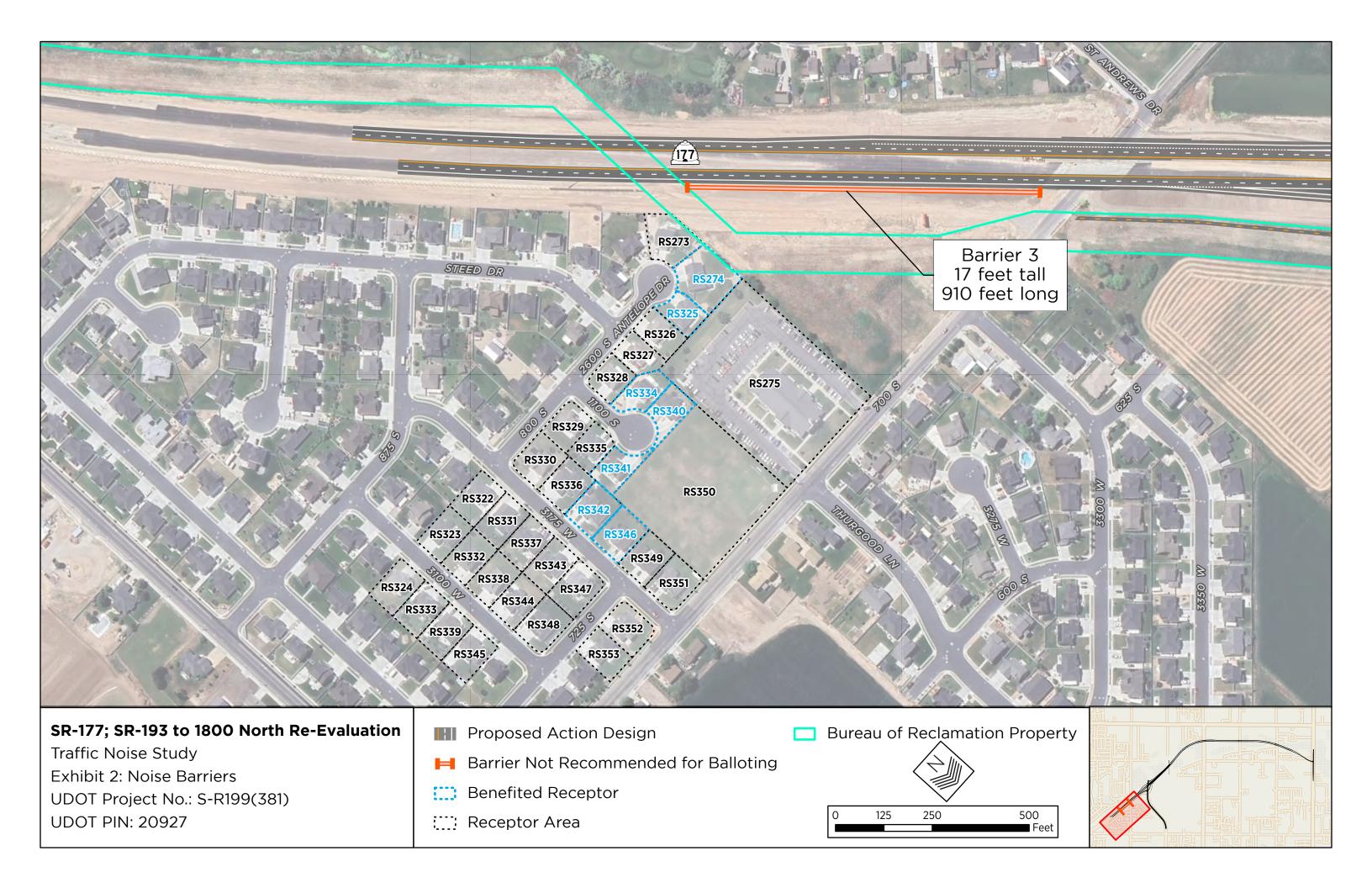
| | NAC | | | | | | Exi | sting 16-Foot | Barrier |
|----------|--------------|-----------------------|----------------------|-----------------|---------------------------------|-----------------|-----|------------------|------------------------|
| Receiver | Front Row | Receptors Represented | Land Use Category | Existing dBA | Future W/O Barrier dBA | Increase dBA | dBA | Reduction dBA | Benefited Receptors |
| RS264 | Yes | 1 | В | 51 | 76 | 25 | 63 | 13 | 1 |
| RS265 | Yes | 1 | В | 51 | 76 | 25 | 62 | 14 | 1 |
| RS266 | Yes | 1 | В | 51 | 75 | 24 | 63 | 12 | 1 |
| RS267 | Yes | 1 | В | 51 | 75 | 24 | 63 | 12 | 1 |
| RS268 | Yes | 1 | В | 51 | 75 | 24 | 63 | 12 | 1 |
| RS269 | Yes | 1 | В | 52 | 75 | 23 | 64 | 11 | 1 |
| RS270 | Yes | 1 | В | 52 | 74 | 22 | 65 | 9 | 1 |
| RS271 | Yes | 1 | В | 53 | 73 | 20 | 67 | 6 | 1 |
| RS272 | Yes | 1 | В | 56 | 74 | 18 | 69 | 5 | 1 |
| RS296 | No | 1 | В | 46 | 60 | 14 | 56 | 4 | 0 |
| RS297 | No | 1 | В | 46 | 59 | 13 | 52 | 7 | 1 |
| RS298 | No | 1 | В | 46 | 50 | 4 | 45 | 5 | 1 |
| RS299 | No | 1 | В | 46 | 49 | 3 | 45 | 4 | 0 |
| RS300 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 |
| RS301 | No | 1 | В | 46 | 46 | 0 | 45 | 1 | 0 |
| RS302 | No | 1 | В | 46 | 47 | 1 | 45 | 2 | 0 |
| RS303 | No | 1 | В | 46 | 62 | 16 | 54 | 8 | 1 |
| RS304 | No | 1 | В | 46 | 64 | 18 | 54 | 10 | 1 |
| RS305 | No | 1 | В | 46 | 60 | 14 | 53 | 7 | 1 |
| RS306 | No | 1 | В | 46 | 50 | 4 | 48 | 2 | 0 |
| RS307 | No | 1 | В | 46 | 51 | 5 | 48 | 3 | 0 |
| RS308 | No | 1 | В | 46 | 62 | 16 | 53 | 9 | 1 |
| RS309 | No | 1 | В | 46 | 50 | 4 | 48 | 2 | 0 |
| RS310 | No | 1 | В | 46 | 51 | 5 | 51 | 0 | 0 |
| RS311 | No | 1 | В | 46 | 49 | 3 | 47 | 2 | 0 |
| RS312 | No | 1 | В | 46 | 49 | 3 | 48 | 1 | 0 |
| RS313 | No | 1 | В | 46 | 60 | 14 | 55 | 5 | 1 |
| RS314 | No | 1 | В | 46 | 53 | 7 | 48 | 5 | 1 |
| RS315 | No | 1 | В | 46 | 52 | 6 | 47 | 5 | 1 |
| RS316 | No | 1 | В | 48 | 65 | 17 | 61 | 4 | 0 |
| RS317 | No | 1 | В | 46 | 60 | 14 | 56 | 4 | 0 |
| RS318 | No | 1 | В | 46 | 47 | 1 | 47 | 0 | 0 |
| RS319 | No | 1 | В | 46 | 52 | 6 | 52 | 0 | 0 |
| RS320 | No | 1 | В | 46 | 46 | 0 | 45 | 1 | 0 |
| RS321 | No | 1 | В | 46 | 46 | 0 | 43 | 3 | 0 |

⁼ Impacted receptor = 5 dBA reduction or better = 7 dBA reduction or better

| NAC | Existing 16-Foot Barrier |
|-----|--------------------------|

| Barrier Length (fft.) = 1,598 | | | • |
|---|------------|---|--------|
| Barrier Height (ft.) = 16 | | · | |
| Barrier Area (sq. ft.) = 25,568 | | | |
| Inputs - Category A, C, D, or E | | | |
| Barrier Height (ft.) = | | | 25,568 |
| Barrier Length (ft.) = | | | |
| Barrier Area (ft.) = n/a Right-of-Way Acquisition Area (sq. ft.) = n/a Safety Barrier (linear ft.) = n/a | | | |
| Right-of-Way Acquisition Area (sq. ft.) = n/a | | | n/a |
| Safety Barrier (linear ft.) = n/a | | | n/a |
| Inputs - Category B Barrier Height (ft.) = 16 | | | n/a |
| Barrier Height (ft.) = 1,598 | | | n/a |
| Barrier Length (ft.) = 1,598 | | | |
| Barrier Area (sq. ft.) = 25,568 | | | |
| Right-of-Way Acquisition Area (sq. ft.) = 0 | | | 1,598 |
| Safety Barrier (linear ft.) = 0 | | Barrier Area (sq. ft.) = | 25,568 |
| Second | | | |
| Front Row Receptors = 9 Front-Row Receptors = 9 Front-Row Receptors with a 5 dBA Reduction = 9 Wo of Front-Row Receptors Reduced At Least 5 dBA = 100% Acoustically Feasible = Yes | | | 0 |
| Noise Reduction Design Goal | | Acoustic Feasibility | |
| Noise Reduction Design Goal | ≝ | Front Row Receptors = | |
| Noise Reduction Design Goal | <u>i</u> ë | Front-Row Receptors with a 5 dBA Reduction = | 9 |
| Noise Reduction Design Goal | eas: | % of Front-Row Receptors Reduced At Least 5 dBA = | 100% |
| Front Row Receptors = 9 | ш. | Acoustically Feasible = | Yes |
| Front Row Receptors = 9 | | Noise Reduction Design Goal | |
| Front Row Receptors with 7 dBA Reduction = 7 | | | 9 |
| Wo f Front Row Reduced At Least 7 dBA = 78% | | | 7 |
| Cost Effectiveness - Category A, C, D, or E | | | 78% |
| Cost Effectiveness - Category A, C, D, or E | | Meets Noise Reduction Design Goal = | |
| Barrier Cost (Barrier area x 20) = n/a Right-of-Way Acquisition (sq. ft. x 20) = n/a Safety Barrier (linear ft. x 125) = n/a Total Barrier Cost = n/a Allowable Cost (length x 360) = n/a Cost Reasonable = n/a Cost Effectiveness - Category B Barrier Cost (Barrier area x 20) = n/a Right-of-Way Acquisition (sq. ft. x 20) = n/a Safety Barrier (linear ft. x 125) = n/a Total Barrier Cost = n/a Allowable Cost (benefited x 30k) = n/a Benefited (Category B w/ 5 dBA Reduction) = n/a Cost per Benefited Receptor (Barrier cost / benefited) = n/a | | | |
| Safety Barrier (linear ft. x 125) = n/a Total Barrier Cost = n/a Allowable Cost (length x 360) = n/a Cost Reasonable = n/a Cost Effectiveness - Category B Barrier Cost (Barrier area x 20) = n/a Right-of-Way Acquisition (sq. ft. x 20) = n/a Safety Barrier (linear ft. x 125) = n/a Total Barrier Cost = n/a Allowable Cost (benefited x 30k) = n/a Benefited (Category B w/ 5 dBA Reduction) = n/a Cost per Benefited Receptor (Barrier cost / benefited) = n/a | | Barrier Cost (Barrier area x 20) = | n/a |
| Barrier Cost (Barrier area x 20) = n/a Right-of-Way Acquisition (sq. ft. x 20) = n/a Safety Barrier (linear ft. x 125) = n/a Total Barrier Cost = n/a Allowable Cost (benefited x 30k) = n/a Benefited (Category B w/ 5 dBA Reduction) = n/a Cost per Benefited Receptor (Barrier cost / benefited) = n/a | | Right-of-Way Acquisition (sq. ft. x 20) = | n/a |
| Barrier Cost (Barrier area x 20) = n/a Right-of-Way Acquisition (sq. ft. x 20) = n/a Safety Barrier (linear ft. x 125) = n/a Total Barrier Cost = n/a Allowable Cost (benefited x 30k) = n/a Benefited (Category B w/ 5 dBA Reduction) = n/a Cost per Benefited Receptor (Barrier cost / benefited) = n/a | les: | Safety Barrier (linear ft. x 125) = | n/a |
| Barrier Cost (Barrier area x 20) = n/a Right-of-Way Acquisition (sq. ft. x 20) = n/a Safety Barrier (linear ft. x 125) = n/a Total Barrier Cost = n/a Allowable Cost (benefited x 30k) = n/a Benefited (Category B w/ 5 dBA Reduction) = n/a Cost per Benefited Receptor (Barrier cost / benefited) = n/a | <u>e</u> | Total Barrier Cost = | n/a |
| Barrier Cost (Barrier area x 20) = n/a Right-of-Way Acquisition (sq. ft. x 20) = n/a Safety Barrier (linear ft. x 125) = n/a Total Barrier Cost = n/a Allowable Cost (benefited x 30k) = n/a Benefited (Category B w/ 5 dBA Reduction) = n/a Cost per Benefited Receptor (Barrier cost / benefited) = n/a | ab | Allowable Cost (length x 360) = | n/a |
| Barrier Cost (Barrier area x 20) = n/a Right-of-Way Acquisition (sq. ft. x 20) = n/a Safety Barrier (linear ft. x 125) = n/a Total Barrier Cost = n/a Allowable Cost (benefited x 30k) = n/a Benefited (Category B w/ 5 dBA Reduction) = n/a Cost per Benefited Receptor (Barrier cost / benefited) = n/a | 6 | Cost Reasonable = | n/a |
| Barrier Cost (Barrier area x 20) = n/a Right-of-Way Acquisition (sq. ft. x 20) = n/a Safety Barrier (linear ft. x 125) = n/a Total Barrier Cost = n/a Allowable Cost (benefited x 30k) = n/a Benefited (Category B w/ 5 dBA Reduction) = n/a Cost per Benefited Receptor (Barrier cost / benefited) = n/a | ea: | Cost Effectiveness – Category B | |
| Safety Barrier (linear ft. x 125) = n/a $Total Barrier Cost = n/a$ $Allowable Cost (benefited x 30k) = n/a$ $Benefited (Category B w/ 5 dBA Reduction) = n/a$ $Cost per Benefited Receptor (Barrier cost / benefited) = n/a$ | <u>~</u> | | n/a |
| Safety Barrier (linear ft. x 125) = n/a $Total Barrier Cost = n/a$ $Allowable Cost (benefited x 30k) = n/a$ $Benefited (Category B w/ 5 dBA Reduction) = n/a$ $Cost per Benefited Receptor (Barrier cost / benefited) = n/a$ | | Right-of-Way Acquisition (sq. ft. x 20) = | n/a |
| | | | n/a |
| Allowable Cost (benefited x 30k) = n/a $ Benefited (Category B w/ 5 dBA Reduction) = n/a $ $ Cost per Benefited Receptor (Barrier cost / benefited) = n/a$ | | | n/a |
| Benefited (Category B w/ 5 dBA Reduction) = n/a Cost per Benefited Receptor (Barrier cost / benefited) = n/a | | Allowable Cost (benefited x 30k) = | |
| Cost per Benefited Receptor (Barrier cost / benefited) = n/a | | | n/a |
| | | | |
| Cost neasonable – 11/a | | Cost Reasonable = | n/a |

Is Noise Barrier 2 Feasible? Yes



| • | NAC | | | | | | | 17-Foot Barr | ier |
|----------|--------------|--------------------------|----------------------|-----------------|---------------|-----------------|------------------|------------------|------------------------|
| Receiver | Front Row | Receptors Represented | Land Use Category | Existing dBA | Future dBA | Increase dBA | W/Barrier dBA | Reduction dBA | Benefited Receptors |
| RS273 | Yes | 1 | В | 61 | 74 | 13 | 72 | 2 | 0 |
| RS274 | Yes | 1 | В | 56 | 70 | 14 | 65 | 5 | 1 |
| RS275 | Yes | 1 | D | 34 | 39 | 5 | 36 | 3 | 0 |
| RS322 | No | 1 | В | 46 | 52 | 6 | 49 | 3 | 0 |
| RS323 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 |
| RS324 | No | 1 | В | 46 | 48 | 2 | 46 | 2 | 0 |
| RS325 | No | 1 | В | 49 | 63 | 14 | 56 | 7 | 1 |
| RS326 | No | 1 | В | 46 | 58 | 12 | 54 | 4 | 0 |
| RS327 | No | 1 | В | 46 | 58 | 12 | 54 | 4 | 0 |
| RS328 | No | 1 | В | 46 | 54 | 8 | 54 | 0 | 0 |
| RS329 | No | 1 | В | 46 | 55 | 9 | 52 | 3 | 0 |
| RS330 | No | 1 | В | 46 | 47 | 1 | 46 | 1 | 0 |
| RS331 | No | 1 | В | 46 | 50 | 4 | 48 | 2 | 0 |
| RS332 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 |
| RS333 | No | 1 | В | 46 | 50 | 4 | 49 | 1 | 0 |
| RS334 | No | 1 | В | 46 | 59 | 13 | 54 | 5 | 1 |
| RS335 | No | 1 | В | 46 | 52 | 6 | 52 | 0 | 0 |
| RS336 | No | 1 | В | 46 | 46 | 0 | 45 | 1 | 0 |
| RS337 | No | 1 | В | 46 | 48 | 2 | 47 | 1 | 0 |
| RS338 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 |
| RS339 | No | 1 | В | 46 | 48 | 2 | 46 | 2 | 0 |
| RS340 | No | 1 | В | 46 | 60 | 14 | 54 | 6 | 1 |
| RS341 | No | 1 | В | 46 | 57 | 11 | 51 | 6 | 1 |
| RS342 | No | 1 | В | 46 | 53 | 7 | 48 | 5 | 1 |
| RS343 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 |
| RS344 | No | 1 | В | 46 | 46 | 0 | 45 | 1 | 0 |
| RS345 | No | 1 | В | 46 | 47 | 1 | 46 | 1 | 0 |
| RS346 | No | 1 | В | 47 | 55 | 8 | 50 | 5 | 1 |
| RS347 | No | 1 | В | 46 | 47 | 1 | 47 | 0 | 0 |
| RS348 | No | 1 | В | 46 | 46 | 0 | 46 | 0 | 0 |
| RS349 | No | 1 | В | 52 | 55 | 3 | 53 | 2 | 0 |
| RS350 | No | 1 | С | 58 | 59 | 1 | 59 | 0 | 0 |
| RS351 | No | 1 | В | 56 | 58 | 2 | 57 | 1 | 0 |
| RS352 | No | 1 | В | 46 | 47 | 1 | 47 | 0 | 0 |
| RS353 | No | 1 | В | 46 | 47 | 1 | 45 | 2 | 0 |



⁼ Impacted receptor = 5 dBA reduction or better

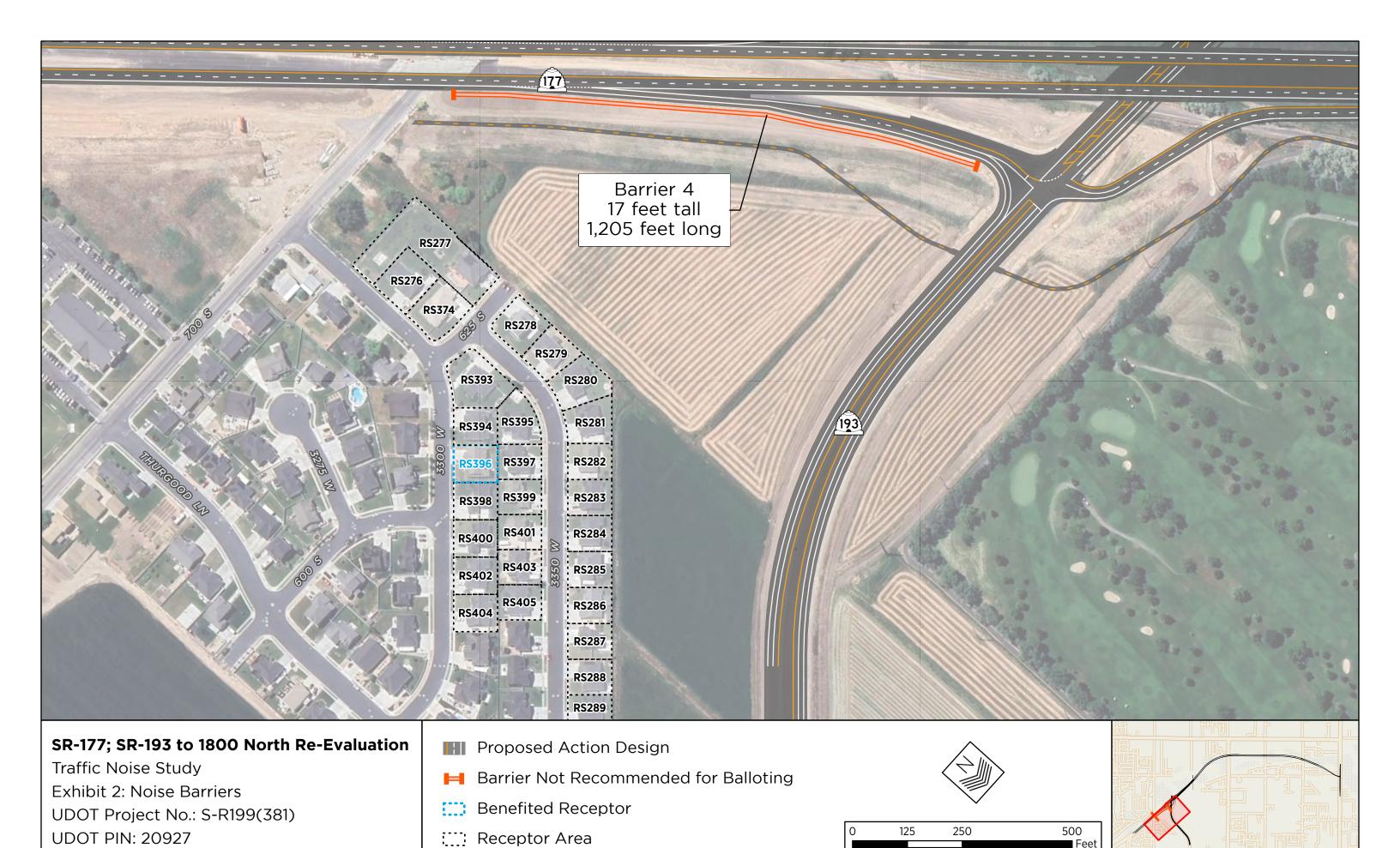
^{= 7} dBA reduction or better

| NAC | 17-Foot Barrier |
|-----|-----------------|
|-----|-----------------|

| | Innuts Overall | ſ |
|----------------|--|------------|
| | Inputs – Overall Barrier Length (ft.) = | 910 |
| | Barrier Length (it.) = Barrier Height (ft.) = | 17 |
| | Barrier Area (sq. ft.) = | 15,470 |
| | | 15,470 |
| | Inputs – Category A, C, D, or E Barrier Height (ft.) = | 2/2 |
| | Barrier Height (it.) = Barrier Length (ft.) = | n/a |
| | Barrier Area (ft.) = | n/a |
| | Right-of-Way Acquisition Area (sq. ft.) = | n/a n/a |
| | Safety Barrier (linear ft.) = | |
| | Inputs – Category B | n/a |
| | Barrier Height (ft.) = | 17 |
| | Barrier Length (ft.) = | 910 |
| | Barrier Area (sq. ft.) = | 15,470 |
| | Right-of-Way Acquisition Area (sq. ft.) = | 0 |
| | Safety Barrier (linear ft.) = | 910 |
| | Acoustic Feasibility | |
| <u> </u> | Front Row Receptors = | 3 |
| <u> </u> | Front-Row Receptors with a 5 dBA Reduction = | 1 |
| Feasibility | % of Front-Row Receptors Reduced At Least 5 dBA = | 33% |
| _ <u> </u> | Acoustically Feasible = | No |
| | Noise Reduction Design Goal | |
| | Front Row Receptors = | 3 |
| | Front Row Receptors with 7 dBA Reduction = | 0 |
| | % of Front Row Reduced At Least 7 dBA = | 0% |
| | Meets Noise Reduction Design Goal = | No |
| | Cost Effectiveness – Category A, C, D, or E | |
| | Barrier Cost (Barrier area x 20) = | n/a |
| ., | Right-of-Way Acquisition (sq. ft. x 20) = | n/a |
| Reasonableness | Safety Barrier (linear ft. x 125) = | n/a |
| <u> </u> | Total Barrier Cost = | n/a |
| lab | Allowable Cost (length x 360) = | n/a |
| [6 | Cost Reasonable = | n/a |
| ea | Cost Effectiveness – Category B | |
| _ ~ | Barrier Cost (Barrier area x 20) = | n/a |
| | Right-of-Way Acquisition (sq. ft. x 20) = | n/a |
| | Safety Barrier (linear ft. x 125) = | n/a |
| | Total Barrier Cost = | n/a |
| | Allowable Cost (benefited x 30k) = | n/a |
| | Benefited (Category B w/ 5 dBA Reduction) = | n/a |
| | Cost per Benefited Receptor (Barrier cost / benefited) = | n/a |
| ĺ | Cost Reasonable = | n/a |

Is Noise Barrier 3 Feasible and Reasonable?

No



| | NAC | | | | | | | 17-Foot Barr | ier |
|----------|-------|-------------|----------|----------|--------|----------|-----------|--------------|-----------|
| | Front | Receptors | Land Use | Existing | Future | Increase | W/Barrier | Reduction | Benefited |
| Receiver | Row | Represented | Category | dBA | dBA | dBA | dBA | dBA | Receptors |
| RS276 | Yes | 1 | В | 52 | 66 | 14 | 64 | 2 | 0 |
| RS277 | Yes | 1 | В | 52 | 66 | 14 | 64 | 2 | 0 |
| RS278 | Yes | 1 | В | 46 | 59 | 13 | 56 | 3 | 0 |
| RS279 | Yes | 1 | В | 50 | 63 | 13 | 60 | 3 | 0 |
| RS280 | No | 1 | В | 52 | 61 | 9 | 60 | 1 | 0 |
| RS281 | No | 1 | В | 53 | 61 | 8 | 60 | 1 | 0 |
| RS282 | No | 1 | В | 53 | 60 | 7 | 60 | 0 | 0 |
| RS283 | No | 1 | В | 53 | 60 | 7 | 60 | 0 | 0 |
| RS284 | No | 1 | В | 54 | 60 | 6 | 60 | 0 | 0 |
| RS285 | No | 1 | В | 54 | 61 | 7 | 60 | 1 | 0 |
| RS286 | No | 1 | В | 54 | 60 | 6 | 60 | 0 | 0 |
| RS287 | No | 1 | В | 54 | 60 | 6 | 60 | 0 | 0 |
| RS288 | No | 1 | В | 55 | 62 | 7 | 61 | 1 | 0 |
| RS289 | No | 1 | В | 55 | 62 | 7 | 61 | 1 | 0 |
| RS290 | No | 1 | В | 55 | 61 | 6 | 61 | 0 | 0 |
| RS291 | No | 1 | В | 55 | 61 | 6 | 61 | 0 | 0 |
| RS374 | No | 1 | В | 49 | 64 | 15 | 63 | 1 | 0 |
| RS393 | No | 1 | В | 46 | 59 | 13 | 57 | 2 | 0 |
| RS394 | No | 1 | В | 46 | 55 | 9 | 52 | 3 | 0 |
| RS395 | No | 1 | В | 46 | 54 | 8 | 53 | 1 | 0 |
| RS396 | No | 1 | В | 46 | 52 | 6 | 46 | 6 | 1 |
| RS397 | No | 1 | В | 46 | 53 | 7 | 52 | 1 | 0 |
| RS398 | No | 1 | В | 46 | 49 | 3 | 46 | 3 | 0 |
| RS399 | No | 1 | В | 46 | 51 | 5 | 51 | 0 | 0 |
| RS400 | No | 1 | В | 46 | 48 | 2 | 46 | 2 | 0 |
| RS401 | No | 1 | В | 46 | 50 | 4 | 49 | 1 | 0 |
| RS402 | No | 1 | В | 46 | 48 | 2 | 47 | 1 | 0 |
| RS403 | No | 1 | В | 46 | 51 | 5 | 49 | 2 | 0 |
| RS404 | No | 1 | В | 46 | 48 | 2 | 47 | 1 | 0 |
| RS405 | No | 1 | В | 46 | 53 | 7 | 53 | 0 | 0 |



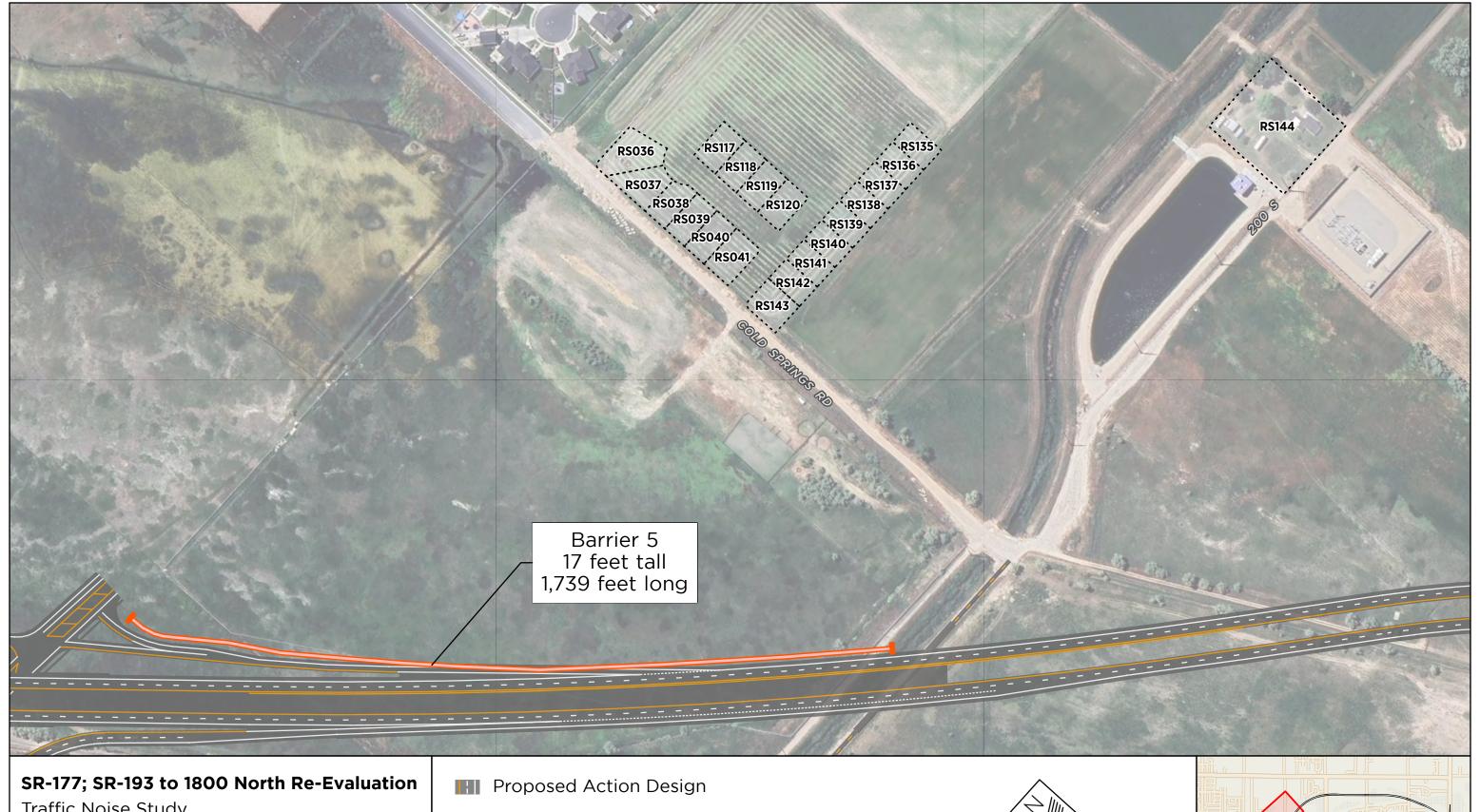
⁼ Impacted receptor = 5 dBA reduction or better = 7 dBA reduction or better

| NAC | 17-Foot Barrier |
|-----|-----------------|
|-----|-----------------|

| | Inputs – Overall | 1 |
|----------------|---|------------|
| | Barrier Length (ft.) = | 1,205 |
| | Barrier Height (ft.) = | 1,203 |
| | Barrier Area (sg. ft.) = | 20,485 |
| | Inputs – Category A, C, D, or E | 20,403 |
| | Barrier Height (ft.) = | n/a |
| | Barrier Length (ft.) = | n/a |
| | Barrier Area (ft.) = | n/a |
| | Right-of-Way Acquisition Area (sq. ft.) = | n/a |
| | Safety Barrier (linear ft.) = | n/a |
| | Inputs – Category B | |
| | Barrier Height (ft.) = | 17 |
| | Barrier Length (ft.) = | 1,205 |
| | Barrier Area (sq. ft.) = | 20,485 |
| | Right-of-Way Acquisition Area (sq. ft.) = | 0 |
| | Safety Barrier (linear ft.) = | 1,205 |
| | Acoustic Feasibility | |
| it | Front Row Receptors = | 4 |
| idis | Front-Row Receptors with a 5 dBA Reduction = | 0 |
| Feasibility | % of Front-Row Receptors Reduced At Least 5 dBA = | 0% |
| ш. | Acoustically Feasible = | No |
| | Noise Reduction Design Goal | |
| | Front Row Receptors = | 4 |
| | Front Row Receptors with 7 dBA Reduction = | 0 |
| | % of Front Row Reduced At Least 7 dBA = | 0% |
| | Meets Noise Reduction Design Goal = | No |
| | Cost Effectiveness – Category A, C, D, or E | |
| | Barrier Cost (Barrier area x 20) = | n/a |
| SS | Right-of-Way Acquisition (sq. ft. x 20) = | n/a |
| ne | Safety Barrier (linear ft. x 125) = | n/a |
| Reasonableness | Total Barrier Cost = | n/a |
| na | Allowable Cost (length x 360) = Cost Reasonable = | n/a |
| asc | | n/a |
| Re | Cost Effectiveness – Category B Barrier Cost (Barrier area x 20) = | 2/2 |
| | Right-of-Way Acquisition (sq. ft. x 20) = | n/a |
| | Safety Barrier (linear ft. x 125) = | n/a n/a |
| | Total Barrier Cost = | n/a |
| | Allowable Cost (benefited x 30k) = | n/a |
| | Benefited (Category B w/ 5 dBA Reduction) = | n/a |
| | Cost per Benefited (Category B W/ 3 dBA Neddction) = | n/a |
| | Cost per benefited neceptor (barrier cost / benefited) = | n/a |
| 1 | Cost reasonable – | ,, a |

Is Noise Barrier 4 Feasible and Reasonable?

No



Traffic Noise Study

Exhibit 2: Noise Barriers

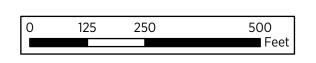
UDOT Project No.: S-R199(381)

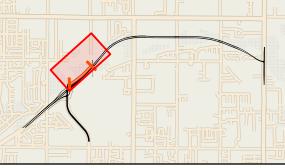
UDOT PIN: 20927

■ Barrier Not Recommended for Balloting

:::: Receptor Area







| NAC | | | | | | | | 17-Foot Barrier | | |
|----------|--------------|--------------------------|----------------------|-----------------|---------------|-----------------|------------------|------------------|------------------------|--|
| Receiver | Front Row | Receptors Represented | Land Use Category | Existing dBA | Future dBA | Increase dBA | W/Barrier dBA | Reduction dBA | Benefited Receptors | |
| RS036 | Yes | 1 | В | 65 | 65 | 0 | 65 | 0 | 0 | |
| RS037 | Yes | 1 | В | 58 | 61 | 3 | 60 | 1 | 0 | |
| RS038 | Yes | 1 | В | 55 | 59 | 4 | 58 | 1 | 0 | |
| RS039 | Yes | 1 | В | 53 | 59 | 6 | 57 | 2 | 0 | |
| RS040 | Yes | 1 | В | 51 | 59 | 8 | 57 | 2 | 0 | |
| RS041 | Yes | 1 | В | 49 | 58 | 9 | 56 | 2 | 0 | |
| RS117 | No | 1 | В | 52 | 57 | 5 | 55 | 2 | 0 | |
| RS118 | No | 1 | В | 50 | 57 | 7 | 55 | 2 | 0 | |
| RS119 | No | 1 | В | 47 | 56 | 9 | 54 | 2 | 0 | |
| RS120 | No | 1 | В | 46 | 56 | 10 | 53 | 3 | 0 | |
| RS135 | No | 1 | В | 46 | 57 | 11 | 55 | 2 | 0 | |
| RS136 | No | 1 | В | 46 | 57 | 11 | 55 | 2 | 0 | |
| RS137 | No | 1 | В | 46 | 57 | 11 | 55 | 2 | 0 | |
| RS138 | No | 1 | В | 46 | 58 | 12 | 56 | 2 | 0 | |
| RS139 | No | 1 | В | 46 | 58 | 12 | 56 | 2 | 0 | |
| RS140 | No | 1 | В | 46 | 58 | 12 | 56 | 2 | 0 | |
| RS141 | No | 1 | В | 46 | 59 | 13 | 57 | 2 | 0 | |
| RS142 | No | 1 | В | 46 | 59 | 13 | 57 | 2 | 0 | |
| RS143 | Yes | 1 | В | 46 | 60 | 14 | 58 | 2 | 0 | |
| RS144 | No | 1 | В | 46 | 55 | 9 | 55 | 0 | 0 | |



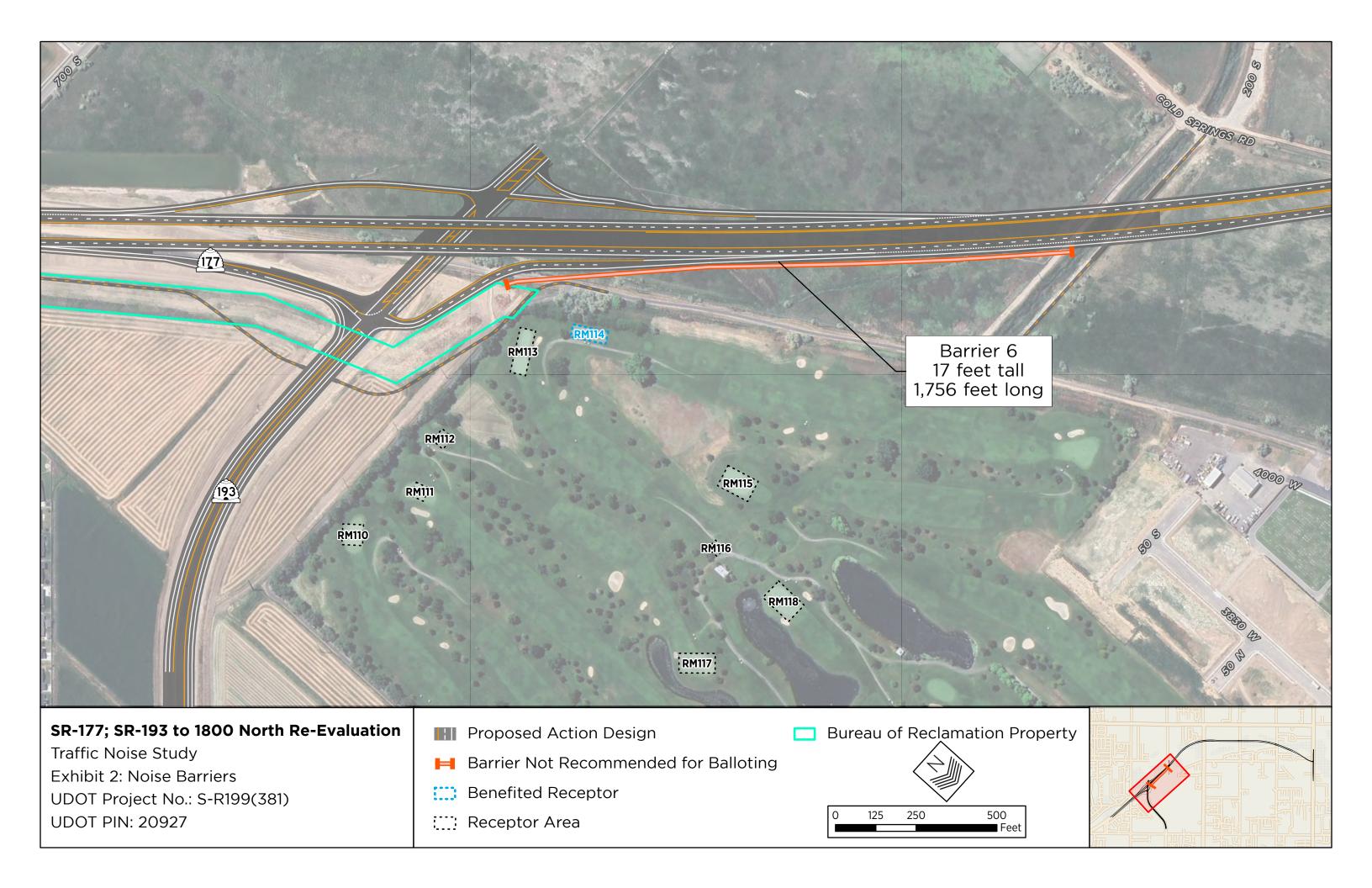
⁼ Impacted receptor = 5 dBA reduction or better = 7 dBA reduction or better

| NAC | 17-Foot Barrier |
|-----|-----------------|
|-----|-----------------|

| | Inputs – Overall | 1 |
|----------------|--|--------|
| | Barrier Length (ft.) = | 1,739 |
| | Barrier Height (ft.) = | 17 |
| | Barrier Area (sq. ft.) = | 29,563 |
| | Inputs – Category A, C, D, or E | . , |
| | Barrier Height (ft.) = | n/a |
| | Barrier Length (ft.) = | n/a |
| | Barrier Area (ft.) = | n/a |
| | Right-of-Way Acquisition Area (sq. ft.) = | n/a |
| | Safety Barrier (linear ft.) = | n/a |
| | Inputs – Category B | |
| | Barrier Height (ft.) = | 17 |
| | Barrier Length (ft.) = | 1,739 |
| | Barrier Area (sq. ft.) = | 29,563 |
| | Right-of-Way Acquisition Area (sq. ft.) = | 0 |
| | Safety Barrier (linear ft.) = | 1,739 |
| | Acoustic Feasibility | |
| ≝ | Front Row Receptors = | 7 |
| ji ji | Front-Row Receptors with a 5 dBA Reduction = | 0 |
| Feasibility | % of Front-Row Receptors Reduced At Least 5 dBA = | 0% |
| " | Acoustically Feasible = | No |
| | Noise Reduction Design Goal | |
| | Front Row Receptors = | 7 |
| | Front Row Receptors with 7 dBA Reduction = | 0 |
| | % of Front Row Reduced At Least 7 dBA = | 0% |
| | Meets Noise Reduction Design Goal = | No |
| | Cost Effectiveness – Category A, C, D, or E | |
| | Barrier Cost (Barrier area x 20) = | n/a |
| ا _م | Right-of-Way Acquisition (sq. ft. x 20) = | n/a |
| les | Safety Barrier (linear ft. x 125) = | n/a |
| <u> </u> | Total Barrier Cost = | n/a |
| lab | Allowable Cost (length x 360) = | n/a |
| Sor | Cost Reasonable = | n/a |
| Reasonableness | Cost Effectiveness – Category B | |
| " | Barrier Cost (Barrier area x 20) = | n/a |
| | Right-of-Way Acquisition (sq. ft. x 20) = | n/a |
| | Safety Barrier (linear ft. x 125) = | n/a |
| | Total Barrier Cost = | n/a |
| | Allowable Cost (benefited x 30k) = | n/a |
| | Benefited (Category B w/ 5 dBA Reduction) = | n/a |
| | Cost per Benefited Receptor (Barrier cost / benefited) = | n/a |
| | Cost Reasonable = | n/a |

Is Noise Barrier 5 Feasible and Reasonable?

No



| NAC | | | | | | | 17-Foot Barrier | | |
|----------|--------------|--------------------------|----------------------|-----------------|---------------|-----------------|------------------|------------------|------------------------|
| Receiver | Front Row | Receptors Represented | Land Use Category | Existing dBA | Future dBA | Increase dBA | W/Barrier dBA | Reduction dBA | Benefited Receptors |
| RM110 | Yes | 1 | C | 55 | 63 | 8 | 63 | 0 | 0 |
| RM111 | Yes | 1 | C | 53 | 63 | 10 | 63 | 0 | 0 |
| RM112 | Yes | 1 | С | 53 | 65 | 12 | 65 | 0 | 0 |
| RM113 | Yes | 1 | С | 51 | 68 | 17 | 66 | 2 | 0 |
| RM114 | Yes | 1 | С | 49 | 69 | 20 | 64 | 5 | 1 |
| RM115 | Yes | 1 | С | 46 | 61 | 15 | 57 | 4 | 0 |
| RM116 | Yes | 1 | C | 46 | 58 | 12 | 56 | 2 | 0 |
| RM117 | Yes | 1 | C | 46 | 55 | 9 | 53 | 2 | 0 |
| RM118 | Yes | 1 | С | 46 | 56 | 10 | 54 | 2 | 0 |



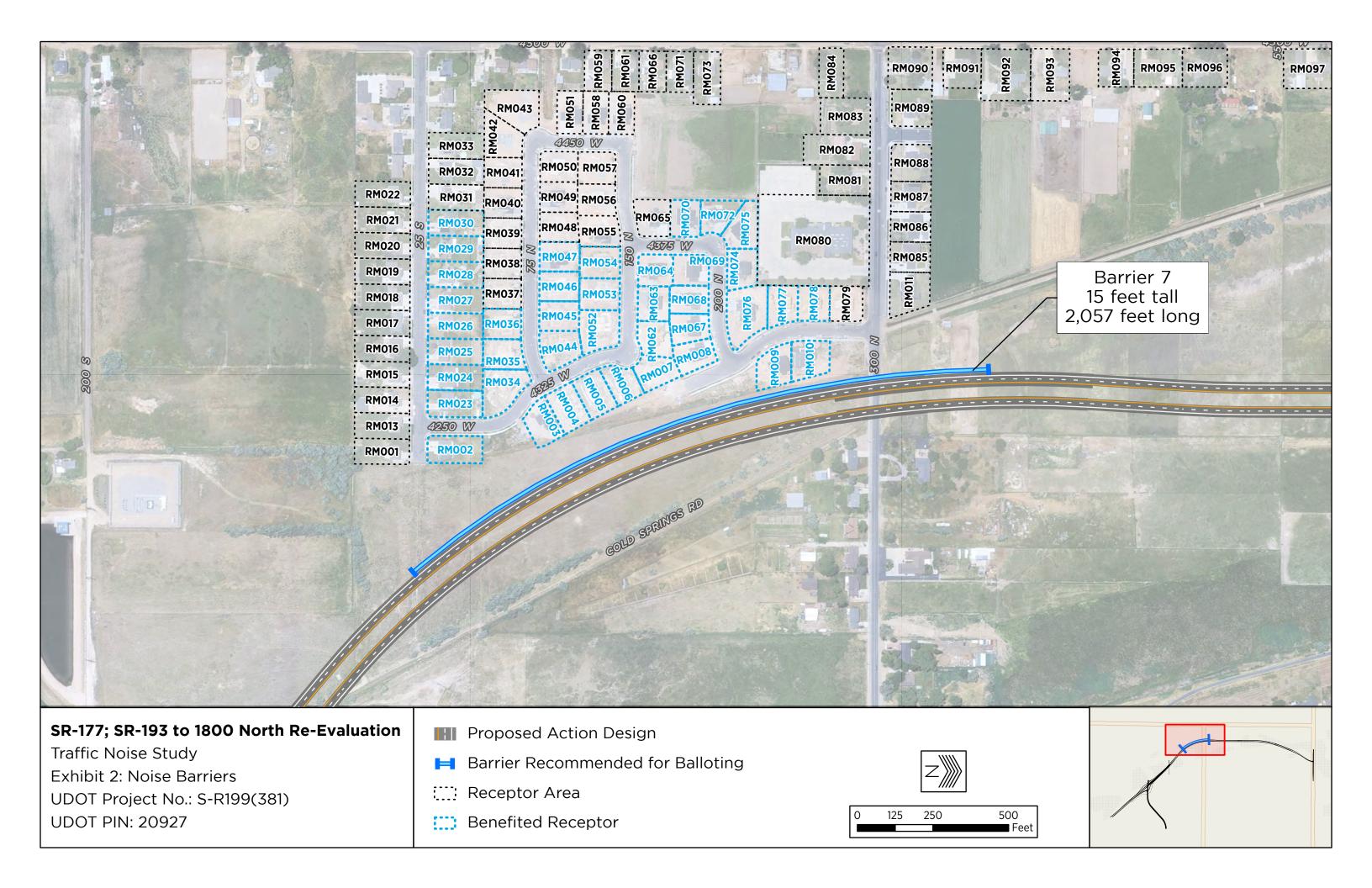
⁼ Impacted receptor = 5 dBA reduction or better = 7 dBA reduction or better

| NAC 17-Foot Barrier |
|---------------------|
|---------------------|

| | Inputs – Overall | |
|----------------|--|--------|
| | Barrier Length (ft.) = | 1,756 |
| | Barrier Height (ft.) = | 17 |
| | Barrier Area (sq. ft.) = | 29,852 |
| | Inputs – Category A, C, D, or E | |
| | Barrier Height (ft.) = | 17 |
| | Barrier Length (ft.) = | 1,756 |
| | Barrier Area (ft.) = | 29,852 |
| | Right-of-Way Acquisition Area (sq. ft.) = | 0 |
| | Safety Barrier (linear ft.) = | 1,756 |
| | Inputs – Category B | |
| | Barrier Height (ft.) = | 0 |
| | Barrier Length (ft.) = | 0 |
| | Barrier Area (sq. ft.) = | 0 |
| | Right-of-Way Acquisition Area (sq. ft.) = | 0 |
| | Safety Barrier (linear ft.) = | 0 |
| > | Acoustic Feasibility | |
| Feasibility | Front Row Receptors = | 9 |
| dis | Front-Row Receptors with a 5 dBA Reduction = | 1 |
| ea | % of Front-Row Receptors Reduced At Least 5 dBA = | 11% |
| ш. | Acoustically Feasible = | No |
| | Noise Reduction Design Goal | |
| | Front Row Receptors = | 9 |
| | Front Row Receptors with 7 dBA Reduction = | 0 |
| | % of Front Row Reduced At Least 7 dBA = | 0% |
| | Meets Noise Reduction Design Goal = | No |
| | Cost Effectiveness – Category A, C, D, or E | |
| | Barrier Cost (Barrier area x 20) = | n/a |
| 9 | Right-of-Way Acquisition (sq. ft. x 20) = | n/a |
| nes | Safety Barrier (linear ft. x 125) = | n/a |
| ole. | Total Barrier Cost = | n/a |
| nał | Allowable Cost (length x 360) = | n/a |
| Reasonableness | Cost Reasonable = | n/a |
| 3ea | Cost Effectiveness – Category B | |
| _ | Barrier Cost (Barrier area x 20) = | n/a |
| | Right-of-Way Acquisition (sq. ft. x 20) = | n/a |
| | Safety Barrier (linear ft. x 125) = | n/a |
| | Total Barrier Cost = | n/a |
| | Allowable Cost (benefited x 30k) = | n/a |
| | Benefited (Category B w/ 5 dBA Reduction) = | n/a |
| | Cost per Benefited Receptor (Barrier cost / benefited) = | n/a |
| | Cost Reasonable = | n/a |

Is Noise Barrier 6 Feasible and Reasonable?

No



| | NAC Front Receptors Land Use Existing Future II | | | | | | | 17-Foot Barr | ier | | 16-Foot Barr | ier | | 15-Foot Barı | rier | | 14-Foot Barr | rier | | 13-Foot Barr | ier |
|----------------|---|-------------|----------|----------|----------|-----|-----------|--------------|-----------|-----------|--------------|-----------|-----------|--------------|-----------|-----------|--------------|-----------|-----------|--------------|-----------|
| | | - | | | | 1 | W/Barrier | Reduction | Benefited |
| Receiver | Row | Represented | Category | dBA | dBA | dBA | dBA | dBA | Receptors |
| RM001 | Yes | 1 | В | 46 | 60 | 14 | 57 52 | 3 | 0 | 57 | 3 | 0 | 57 | 3 | 0 | 56 | 4 | 0 | 56 | 4 | 0 |
| RM002 | Yes | 1 | В | 46 | 66 | 20 | 58 | 8 | 1 | 58 | 8 | 1 | 58 | 8 | 1 | 58 | 8 | 1 | 58 | 8 | 1 |
| RM003 | Yes | 1 | В | 46 | 68 | 22 | 59 50 | 9 | 1 | 59 | 9 | 1 | 59 | 9 | 1 | 59 | 9 | 1 | 60 | 8 | I |
| RM004 | Yes | 1 1 | В | 46 | 67 | 21 | 58 50 | 9 | <u> </u> | 58 | 9 | 1 | 58 | 9 | 1 | 59 | 8 | 1 | 59 | 8 | <u> </u> |
| RM005 | Yes | 1 | B B | 46 | 68 | 22 | 58 | 10 | 1 | 59 50 | 9 | <u> </u> | 59 | 9 | 1 | 59 50 | 9 | 1 | 60 | 8 | <u> </u> |
| RM006 | Yes Yes | 1 | В | 46 46 | 68 | 22 | 58 59 | 10 9 | 1 | 59 59 | 9 | 1 | 59 59 | 9 | 1 | 59 59 | 9 | 1 | 60 60 | 8 | 1 1 |
| RM007 RM008 | Yes | 1 | В | 46 46 | 68 65 | 19 | 55 | 10 | 1 | 55 | 10 | 1 | 56 | 9 | 1 | 56 | 9 | 1 | 56 | 9 | 1 1 |
| RM009 | Yes | 1 | В | 47 | 67 | 20 | 60 | 7 | 1 | 60 | 7 | 1 | 60 | 7 | 1 | 61 | 6 | 1 | 61 | 6 | 1 |
| RM010 | Yes | 1 | В | 50 | 67 | 17 | 61 | 6 | 1 | 61 | 6 | 1 | 62 | 5 | 1 | 62 | 5 | 1 | 62 | 5 | 1 |
| RM011 | Yes | 1 | В | 46 | 61 | 15 | 58 | 3 | 0 | 59 | 2 | 0 | 59 | 2 | 0 | 58 | 3 | 0 | 59 | 2 | 0 |
| RM012 | No | 1 | В | 46 | 65 | 19 | 64 | 1 | 0 | 64 | 1 | 0 | 64 | 1 | 0 | 64 | 1 | 0 | 64 | 1 | 0 |
| RM013 | No | 1 | В | 46 | 57 | 11 | 55 | 2 | 0 | 55 | 2 | 0 | 55 | 2 | 0 | 54 | 3 | 0 | 54 | 3 | 0 |
| RM014 | No | 1 | В | 46 | 56 | 10 | 54 | 2 | 0 | 54 | 2 | 0 | 54 | 2 | 0 | 53 | 3 | 0 | 53 | 3 | 0 |
| RM015 | No | 1 | В | 46 | 54 | 8 | 52 | 2 | 0 | 52 | 2 | 0 | 52 | 2 | 0 | 52 | 2 | 0 | 52 | 2 | 0 |
| RM016 | No | 1 | В | 46 | 54 | 8 | 51 | 3 | 0 | 51 | 3 | 0 | 52 | 2 | 0 | 51 | 3 | 0 | 51 | 3 | 0 |
| RM017 | No | 1 | В | 46 | 53 | 7 | 51 | 2 | 0 | 51 | 2 | 0 | 51 | 2 | 0 | 50 | 3 | 0 | 51 | 2 | 0 |
| RM018 | No | 1 | В | 46 | 52 | 6 | 50 | 2 | 0 | 50 | 2 | 0 | 50 | 2 | 0 | 50 | 2 | 0 | 50 | 2 | 0 |
| RM019 | No | 1 | В | 46 | 52 | 6 | 49 | 3 | 0 | 49 | 3 | 0 | 49 | 3 | 0 | 49 | 3 | 0 | 49 | 3 | 0 |
| RM020 | No | 1 | В | 46 | 51 | 5 | 48 | 3 | 0 | 48 | 3 | 0 | 49 | 2 | 0 | 49 | 2 | 0 | 49 | 2 | 0 |
| RM021 | No | 1 | В | 46 | 50 | 4 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 |
| RM022 | No | 1 | В | 46 | 50 | 4 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 |
| RM023 | No | 1 | В | 46 | 64 | 18 | 54 | 10 | 1 | 54 | 10 | 1 | 54 | 10 | 1 | 54 | 10 | 1 | 55 | 9 | 1 |
| RM024 | No | 1 | В | 46 | 61 | 15 | 53 | 8 | 1 | 53 | 8 | 1 | 53 | 8 | 1 | 53 | 8 | 1 | 54 | 7 | 1 |
| RM025 | No | 1 | В | 46 | 59 | 13 | 51 | 8 | 1 | 51 | 8 | 1 | 52 | 7 | 1 | 52 | 7 | 1 | 52 | 7 | 1 |
| RM026 | No | 1 | В | 46 | 57 | 11 | 50 | 7 | 1 | 50 | 7 | 1 | 51 | 6 | 1 | 51 | 6 | 1 | 51 | 6 | 1 |
| RM027 | No | 1 | В | 46 | 56 | 10 | 49 | 7 | 1 | 50 | 6 | 1 | 50 | 6 | 1 | 50 | 6 | 1 | 51 | 5 | 1 |
| RM028 | No | 1 | В | 46 | 54 | 8 | 48 | 6 | 1 | 49 | 5 | 1 | 49 | 5 | 1 | 49 | 5 | 1 | 50 | 4 | 0 |
| RM029 | No | 1 | В | 46 | 53 | 7 | 48 | 5 | 1 | 48 | 5 | 1 | 48 | 5 | 1 | 48 | 5 | 1 | 49 | 4 | 0 |
| RM030 | No | 1 | В | 46 | 52 | 6 | 47 | 5 | 1 | 47 | 5 | 1 | 47 | 5 | 1 | 48 | 4 | 0 | 48 | 4 | 0 |
| RM031 | No | 1 | В | 46 | 51 | 5 | 47 | 4 | 0 | 47 | 4 | 0 | 47 | 4 | 0 | 47 | 4 | 0 | 48 | 3 | 0 |
| RM032 | No | 1 | В | 46 | 50 | 4 | 47 | 3 | 0 | 47 | 3 | 0 | 47 | 3 | 0 | 48 | 2 | 0 | 48 | 2 | 0 |
| RM033 | No | 1 | В | 46 | 52 | 6 | 48 | 4 | 0 | 48 | 4 | 0 | 48 | 4 | 0 | 48 | 4 | 0 | 49 | 3 | 0 |
| RM034 | No | 1 | В | 46 | 66 | 20 | 58 | 8 | 1 | 58 | 8 | 1 | 58 | 8 | 1 | 57 | 9 | 1 | 57 | 9 | 1 |
| RM035 | No | 1 | В | 46 | 57 | 11 | 52 | 5 | 1 | 52 | 5 | 1 | 52 | 5 | 1 | 52 | 5 | 1 | 52 | 5 | 1 |
| RM036 | No | 1 | В | 46 | 54 | 8 | 49 | 5 | 1 | 49 | 5 | 1 | 49 | 5 | 1 | 49 | 5 | 1 | 50 | 4 | 0 |
| RM037 | No | 1 | В | 46 | 52 | 6 | 48 | 4 | 0 | 49 | 3 | 0 | 49 | 3 | 0 | 49 | 3 | 0 | 49 | 3 | 0 |
| RM038 | No | 1 | В | 46 | 51 | 5 | 47 | 4 | 0 | 48 | 3 | 0 | 48 | 3 | 0 | 48 | 3 | 0 | 48 | 3 | 0 |
| RM039 | No | 1 | В | 46 | 50 | 4 | 47 | 3 | 0 | 47 | 3 | 0 | 47 | 3 | 0 | 47 | 3 | 0 | 47 | 3 | 0 |
| RM040 | No | 1 | В | 46 | 49 | 3 | 46 | 3 | 0 | 47 | 2 | 0 | 47 | 2 | 0 | 47 | 2 | 0 | 47 | 2 | 0 |
| RM041 | No | 1 | В | 46 | 49 | 3 | 46 | 3 | 0 | 46 | 3 | 0 | 47 | 2 | 0 | 47 | 2 | 0 | 47 | 2 | 0 |
| RM042 | No | 1 | В | 47 | 50 | 3 | 49 | 1 | 0 | 49 | 1 | 0 | 49 | 1 | 0 | 49 | 1 | 0 | 49 | 1 | 0 |
| RM043 | No | 1 | В | 46 | 52 | 6 | 48 | 4 | 0 | 49 | 3 | 0 | 49 | 3 | 0 | 49 | 3 | 0 | 49 | 3 | 0 |
| RM044 | No | 1 | В | 46 | 61 | 15 | 51 50 | 10 | 1 | 51 | 10 | 1 | 52 | 9 | 1 | 52 | 9 | 1 | 52 | 9 | 1 |
| RM045 | No | 1 | В | 46 | 59 | 13 | 50 | 9 | 1 | 50 | 9 | 1 | 51 | 8 | 1 | 51 | 8 | 1 | 51 | 8 | 1 |
| RM046 | No | 1 | В | 46 | 54 | 8 | 48 | 6 | 1 | 48 | 6 | 1 | 48 | 6 | 1 | 48 | 6 | 1 | 49 | 5 | 1 |
| RM047 | No | 1 | В | 46 | 53 | 7 | 48 | 5 | 1 | 48 | 5 | 1 | 48 | 5 | 1 | 48 | 5 | 1 | 48 | 5 | 1 |
| RM048 | No | 1 | В | 46 | 51 | 5 | 47 | 4 | 0 | 47 | 4 | 0 | 47 | 4 | 0 | 47 | 4 | 0 | 47 | 4 | 0 |
| RM049 | No | 1 | В | 46 | 51 | 5 | 47 | 4 | 0 | 47 | 4 | 0 | 47 | 4 | 0 | 47 | 4 | 0 | 48 | 3 | 0 |

| | | | | | | | 17-Foot Barr | ier | | 16-Foot Barr | rier | | 15-Foot Barr | rier | | 14-Foot Barr | rier | 13-Foot Barrier | | | |
|----------------|----------|-------------|----------|----------|----------|----------|--------------|-----------|-----------|--------------|---------------|-----------|--------------|-----------|-----------|--------------|-----------|-----------------|-----------|-----------|-----------|
| | Front | Receptors | Land Use | Existing | Future | Increase | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited |
| Receiver | Row | Represented | Category | dBA | dBA | dBA | dBA | dBA | Receptors | dBA | dBA | Receptors | dBA | dBA | Receptors | dBA | dBA | Receptors | dBA | dBA | Receptors |
| RM050 | No | 1 | В | 46 | 50 | 4 | 47 | 3 | 0 | 47 | 3 | 0 | 47 | 3 | 0 | 47 | 3 | 0 | 48 | 2 | 0 |
| RM051 | No | 1 | В | 46 | 50 | 4 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 49 | 1 | 0 |
| RM052 | No | 1 | В | 46 | 58 | 12 | 49 | 9 | 1 | 49 | 9 | 1 | 50 | 8 | 1 | 50 | 8 | 1 | 51 | 7 | 1 |
| RM053 | No | 1 | В | 46 | 53 | 7 | 47 | 6 | 1 | 47 | 6 | 1 | 48 | 5 | 1 | 47 | 6 | 1 | 48 | 5 | 1 |
| RM054 | No | 1 | В | 46 | 52 | 6 | 47 | 5 | 0 | 47 | 5 | 0 | 47 | 5 4 | 1 | 46 | 6 | 1 | 47 | 5 | 1 |
| RM055 RM056 | No No | 1 | B B | 46 46 | 50 49 | 3 | 46 46 | 3 | 0 | 46 46 | <u>4</u> 3 | 0 | 46 46 | 3 | 0 | 46 46 | 3 | 0 | 47 47 | 3 | 0 |
| RM057 | No | 1 | В | 46 | 49 | 3 | 46 | 3 | 0 | 46 | 3 | 0 | 46 | 3 | 0 | 46 | 3 | 0 | 47 | 2 | 0 |
| RM058 | No | 1 | В | 46 | 50 | 4 | 47 | 3 | 0 | 47 | 3 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 |
| RM059 | No | 1 | В | 50 | 53 | 3 | 52 | 1 | 0 | 52 | 1 | 0 | 52 | 1 | 0 | 52 | 1 | 0 | 52 | 1 | 0 |
| RM060 | No | 1 | В | 46 | 52 | 6 | 49 | 3 | 0 | 49 | 3 | 0 | 49 | 3 | 0 | 49 | 3 | 0 | 49 | 3 | 0 |
| RM061 | No | 1 | В | 49 | 53 | 4 | 51 | 2 | 0 | 51 | 2 | 0 | 51 | 2 | 0 | 51 | 2 | 0 | 52 | 1 | 0 |
| RM062 | No | 1 | В | 46 | 62 | 16 | 52 | 10 | 1 | 52 | 10 | 1 | 53 | 9 | 1 | 53 | 9 | 1 | 53 | 9 | 1 |
| RM063 | No | 1 | В | 46 | 58 | 12 | 50 | 8 | 1 | 50 | 8 | 1 | 50 | 8 | 1 | 51 | 7 | 1 | 51 | 7 | 1 |
| RM064 | No | 1 | В | 46 | 56 | 10 | 48 | 8 | 1 | 48 | 8 | 1 | 48 | 8 | 1 | 49 | 7 | 1 | 49 | 7 | 1 |
| RM065 | No | 1 | В | 46 | 57 | 11 | 54 | 3 | 0 | 54 | 3 | 0 | 55 | 2 | 0 | 55 | 2 | 0 | 55 | 2 | 0 |
| RM066 | No | 1 | В | 49 | 53 | 4 | 51 | 2 | 0 | 51 | 2 | 0 | 51 | 2 | 0 | 51 | 2 | 0 | 51 | 2 | 0 |
| RM067 | No | 1 | В | 46 | 61 | 15 | 51 | 10 | 1 | 51 | 10 | 1 | 51 | 10 | 1 | 52 | 9 | 1 | 52 | 9 | 1 |
| RM068 | No | 1 | В | 46 | 57 | 11 | 49 | 8 | 1 | 49 | 8 | 1 | 49 | 8 | 1 | 50 | 7 | 1 | 50 | 7 | 1 |
| RM069 | No | 1 | В | 46 46 | 53 | 7 | 47 51 | 6 5 | 1 | 47 | <u>6</u> 5 | 1 | 47 51 | 6 5 | 1 | 47 | 6 5 | 1 | 48 | 5 | 1 |
| RM070 RM071 | No No | 1 | B B | 46 | 56 53 | 10 7 | 51 50 | 3 | 0 | 51 50 | 3 | 0 | 51 | 2 | 0 | 51 51 | 2 | 0 | 51 51 | 2 | 0 |
| RM071 | No | 1 | В | 46 | 56 | 10 | 50 | 6 | 1 | 50 | 6 | 1 | 50 | 6 | 1 | 50 | 6 | 1 | 50 | 6 | 1 |
| RM073 | No | 1 | В | 50 | 54 | 4 | 52 | 2 | 0 | 52 | 2 | 0 | 52 | 2 | 0 | 52 | 2 | 0 | 52 | 2 | 0 |
| RM074 | No | 1 | В | 46 | 59 | 13 | 51 | 8 | 1 | 51 | 8 | 1 | 52 | 7 | 1 | 52 | 7 | 1 | 52 | 7 | 1 |
| RM075 | No | 1 | В | 46 | 57 | 11 | 50 | 7 | 1 | 50 | 7 | 1 | 51 | 6 | 1 | 51 | 6 | 1 | 51 | 6 | 1 |
| RM076 | No | 1 | В | 46 | 63 | 17 | 58 | 5 | 1 | 58 | 5 | 1 | 58 | 5 | 1 | 58 | 5 | 1 | 58 | 5 | 1 |
| RM077 | No | 1 | В | 47 | 66 | 19 | 61 | 5 | 1 | 61 | 5 | 1 | 61 | 5 | 1 | 61 | 5 | 1 | 61 | 5 | 1 |
| RM078 | No | 1 | В | 51 | 66 | 15 | 61 | 5 | 1 | 61 | 5 | 1 | 61 | 5 | 1 | 61 | 5 | 1 | 61 | 5 | 1 |
| RM079 | No | 1 | В | 58 | 67 | 9 | 63 | 4 | 0 | 63 | 4 | 0 | 63 | 4 | 0 | 63 | 4 | 0 | 63 | 4 | 0 |
| RM080 | No | 1 | D | 37 | 40 | 3 | 38 | 2 | 0 | 38 | 2 | 0 | 38 | 2 | 0 | 39 | 1 | 0 | 39 | 1 | 0 |
| RM081 | No | 1 | В | 53 | 56 | 3 | 54 | 2 | 0 | 54 | 2 | 0 | 54 | 2 | 0 | 55 | 1 | 0 | 55 | 1 | 0 |
| RM082 | No | 1 | В | 47 53 | 52 | 5 | 50 | 2 | 0 | 50 | 2 | 0 | 50 | 2 | 0 | 50 | 2 | 0 | 50 | 2 | 0 |
| RM083 | No No | 1 | B B | 52 54 | 54 56 | 2 | 53 55 | 1 | 0 | 53 55 | 1 | 0 | 53 55 | 1 | 0 | 53 55 | 1 | 0 | 53 55 | 1 1 | 0 |
| RM084 RM085 | No | 1 | В | 46 | 60 | 14 | 55 57 | 3 | 0 | 55 | 3 | 0 | 55 | 3 | 0 | 55 | 3 | 0 | 55 | 3 | 0 |
| RM086 | No | 1 | В | 46 | 58 | 12 | 56 | 2 | 0 | 56 | 2 | 0 | 56 | 2 | 0 | 56 | 2 | 0 | 56 | 2 | 0 |
| RM087 | No | 1 | В | 46 | 57 | 11 | 55 | 2 | 0 | 55 | 2 | 0 | 55 | 2 | 0 | 55 | 2 | 0 | 55 | 2 | 0 |
| RM088 | No | 1 | В | 57 | 58 | 1 | 58 | 0 | 0 | 58 | 0 | 0 | 58 | 0 | 0 | 58 | 0 | 0 | 58 | 0 | 0 |
| RM089 | No | 1 | В | 58 | 59 | 1 | 59 | 0 | 0 | 59 | 0 | 0 | 59 | 0 | 0 | 59 | 0 | 0 | 59 | 0 | 0 |
| RM090 | No | 1 | В | 59 | 59 | 0 | 59 | 0 | 0 | 59 | 0 | 0 | 59 | 0 | 0 | 59 | 0 | 0 | 59 | 0 | 0 |
| RM091 | No | 1 | В | 50 | 55 | 5 | 54 | 1 | 0 | 54 | 1 | 0 | 54 | 1 | 0 | 54 | 1 | 0 | 54 | 1 | 0 |
| RM092 | No | 1 | В | 46 | 55 | 9 | 54 | 1 | 0 | 54 | 1 | 0 | 54 | 1 | 0 | 54 | 1 | 0 | 54 | 1 | 0 |
| RM093 | No | 1 | В | 48 | 56 | 8 | 55 | 1 | 0 | 55 | 1 | 0 | 55 | 1 | 0 | 55 | 1 | 0 | 55 | 1 | 0 |
| RM094 | No | 1 | В | 48 | 55 | 7 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 |
| RM095 | No | 1 | В | 49 | 55 | 6 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 |
| RM096 | No | 1 | В | 51 | 57 | 6 | 56 | 1 | 0 | 56 | 1 | 0 | 56 | 1 | 0 | 56 | 1 | 0 | 56 | 1 | 0 |
| RM097 | No | 1 | В | 49 | 56 | 7 | 55 | 1 | 0 | 55 | 1 | 0 | 55 | 1 | 0 | 55 | 1 | 0 | 55 | 1 | 0 |
| RM098 | No | 1 | В | 46 | 54 | 8 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 |

SR-177; SR-193 to 1800 N Noise Abatement Analysis Noise Barrier 7

| | NAC | | | | | | 17-Foot Barrier | | | | 16-Foot Barı | ier | | 15-Foot Barr | ier | | 14-Foot Barr | ier | 13-Foot Barrier | | |
|----------|-------|-------------|----------|----------|--------|-----|-----------------|------------------|-----------|-----------|------------------|-----------|-----------|--------------|-----------|-----|------------------|-----------|------------------|------------------|-----------|
| Bassinsa | Front | Receptors | Land Use | Existing | Future | | W/Barrier | Reduction dBA | | W/Barrier | Reduction dBA | Benefited | W/Barrier | Reduction | Benefited | | Reduction dBA | Benefited | W/Barrier dBA | Reduction dBA | Benefited |
| Receiver | Row | Represented | Category | dBA | dBA | dBA | dBA | aba | Receptors | dBA | aba | Receptors | dBA | dBA | Receptors | dBA | abA | Receptors | GBA | ава | Receptors |
| RM099 | No | 1 | В | 50 | 55 | 5 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 |
| RM100 | No | 1 | В | 50 | 55 | 5 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 |
| RM101 | No | 1 | В | 47 | 54 | 7 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 |
| RM102 | No | 1 | В | 48 | 54 | 6 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 |
| RM103 | No | 1 | В | 54 | 56 | 2 | 56 | 0 | 0 | 56 | 0 | 0 | 56 | 0 | 0 | 56 | 0 | 0 | 56 | 0 | 0 |
| RM104 | No | 1 | В | 46 | 53 | 7 | 53 | 0 | 0 | 53 | 0 | 0 | 53 | 0 | 0 | 53 | 0 | 0 | 53 | 0 | 0 |
| RM105 | No | 1 | В | 48 | 55 | 7 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 |
| RM106 | No | 1 | В | 46 | 59 | 13 | 58 | 1 | 0 | 58 | 1 | 0 | 58 | 1 | 0 | 58 | 1 | 0 | 58 | 1 | 0 |
| RM107 | No | 1 | В | 46 | 55 | 9 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 |
| RM108 | No | 1 | В | 48 | 53 | 5 | 53 | 0 | 0 | 53 | 0 | 0 | 53 | 0 | 0 | 53 | 0 | 0 | 53 | 0 | 0 |
| RM109 | No | 1 | В | 60 | 60 | 0 | 60 | 0 | 0 | 60 | 0 | 0 | 60 | 0 | 0 | 60 | 0 | 0 | 60 | 0 | 0 |

= Impacted receptor = 5 dBA reduction or better = 7 dBA reduction or better

| | NAC | 17-Foot Barrier | 16-Foot Barrier | 15-Foot Barrier | 14-Foot Barrier | 13-Foot Barrier |
|---------|------------------------------------|---|-----------------|------------------|------------------|------------------|
| | | | | | | |
| | | Inputs – Overall | 201 | | | · |
| | | Barrier Length (ft.) = 2,0 | 2,032 | 2,057 | 2,257 | 2,257 |
| | | *Barrier Height (ft.) = 17 & | | 15 & 10 | 14 & 10 | 13 & 10 |
| | | Barrier Area (sq. ft.) = 33,4 | 45 31,570 | 30,070 | 30,970 | 28,870 |
| | Inputs – | Category A, C, D, or E | | | | |
| | | | n/a n/a | n/a | n/a | n/a |
| | | | n/a n/a | n/a | n/a | n/a |
| | Diabt of Wor. And | | n/a n/a | n/a | n/a | n/a |
| | | | n/a n/a | n/a | n/a | n/a |
| | Sai | | n/a n/a | n/a | n/a | n/a |
| | | Inputs – Category B | 16 9 10 | 15 9 10 | 14 9 10 | 13 9 10 |
| | | Barrier Height (ft.) = 17 & Barrier Length (ft.) = 2,0 | | 15 & 10 2,057 | 14 & 10 2,257 | 13 & 10 2,257 |
| | | Barrier Length (ft.) = $2,0$ Barrier Area (sq. ft.) = $33,4$ | | 30,070 | 30,970 | 2,257 |
| | Pight of Way Acc | quisition Area (sq. ft.) = 33,4 | 31,570 | 30,070 | 30,970 | 20,070 |
| | | ety Barrier (linear ft.) = 1,8 | 75 1,875 | 1,900 | 2,100 | 2,100 |
| | Sai | Acoustic Feasibility | 1,873 | 1,900 | 2,100 | 2,100 |
| ţ | | | 11 11 | 11 | 11 | 11 |
| ibility | Front-Row Receptors wit | • | 11 | 11 | 11 | 11 |
| asi | % of Front-Row Receptors Rec | | 2% 82% | 82% | 82% | 82% |
| Fe | <u> </u> | | /es | Yes | Yes | Yes |
| | | eduction Design Goal | 165 | Tes | Tes | 165 |
| | | • | 11 11 | 11 | 11 | 11 |
| | Front Row Receptors w | | 8 8 | 8 | 7 | 7 |
| | | | 73% | 73% | 64% | 64% |
| | | | Yes Yes | Yes | Yes | Yes |
| | | Category A, C, D, or E | | 1.55 | 165 | 1.55 |
| | | | n/a n/a | n/a | n/a | n/a |
| | | | n/a n/a | n/a | n/a | n/a |
| ess | | | n/a n/a | n/a | n/a | n/a |
| | , | | n/a n/a | n/a | n/a | n/a |
| ab | Allowabl | | n/a n/a | n/a | n/a | n/a |
| ion | | | n/a n/a | n/a | n/a | n/a |
| eas | Cost Effect | tiveness – Category B | | | | |
| ~ | Barrier Co | ost (Barrier area x 20) = \$668,9 | 00 \$631,400 | \$601,400 | \$619,400 | \$577,400 |
| | Right-of-Way Ac | quisition (sq. ft. x 20) = | \$0 \$0 | \$0 | \$0 | \$0 |
| | Safety Ba | errier (linear ft. x 125) = \$234,3 | | \$237,500 | \$262,500 | \$262,500 |
| | | Total Barrier Cost = \$903,2 | | \$838,900 | \$881,900 | \$839,900 |
| | | ost (benefited x 30k) = $$1,200,0$ | | \$1,200,000 | \$1,170,000 | \$1,080,000 |
| | | | 40 40 | 40 | 39 | 36 |
| | Cost per Benefited Receptor (Bar | | | \$20,973 | \$22,613 | \$23,331 |
| | | Cost Reasonable = | Yes Yes | Yes | Yes | Yes |
| | Is Noise Barrier 7 Feasible and R | oaconablo? | 'es Yes | Yes | Yes | Yes |
| | is ivoise dattiet / reasible and K | easonable: | tes Tes | res | res | res |

^{*}Overall barrier heights include a uniform barrier at the height indicated and a 10-foot-tall and 157-foot-long segment on the bridge over 300 North.

^{**}Safety barrier length excludes the proposed 157-foot-long barrier length on the bridge over 300 North.

| 1 1 1 1 1 1 1 1 1 1 | | | | | | | | 12-Foot Barr | ier | | 11-Foot Barr | ier | | 10-Foot Barr | ier | 9-Foot Barrier | | | |
|---------------------|--------------|--------------------------|----------------------|-----------------|---------------|-----------------|------------------|------------------|------------------------|------------------|------------------|------------------------|------------------|------------------|------------------------|------------------|------------------|------------------------|--|
| Receiver | Front Row | Receptors Represented | Land Use Category | Existing dBA | Future dBA | Increase dBA | W/Barrier dBA | Reduction dBA | Benefited Receptors | |
| RM001 | Yes | 1 | В | 46 | 60 | 14 | 57 | 3 | 0 | 57 | 3 | 0 | 57 | 3 | 0 | 57 | 3 | 0 | |
| RM002 | Yes | 1 | В | 46 | 66 | 20 | 58 | 8 | 1 | 59 | 7 | 1 | 60 | 6 | 1 | 60 | 6 | 1 | |
| RM003 | Yes | 1 | В | 46 | 68 | 22 | 60 | 8 | 1 | 61 | 7 | 1 | 61 | 7 | 1 | 61 | 7 | 1 | |
| RM004 | Yes | 1 | В | 46 | 67 | 21 | 60 | 7 | 1 | 60 | 7 | 1 | 60 | 7 | 1 | 61 | 6 | 1 | |
| RM005 | Yes | 1 | В | 46 | 68 | 22 | 60 | 8 | 1 | 60 | 8 | 1 | 61 | 7 | 1 | 61 | 7 | 1 | |
| RM006 | Yes | 1 | В | 46 | 68 | 22 | 60 | 8 | 1 | 60 | 8 | 1 | 61 | 7 | 1 | 62 | 6 | 1 | |
| RM007 | Yes | 1 | В | 46 | 68 | 22 | 60 | 8 | 1 | 61 | 7 | 1 | 61 | 7 | 1 | 62 | 6 | 1 | |
| RM008 | Yes | 1 | В | 46 | 65 | 19 | 57 | 8 | 1 | 57 | 8 | 1 | 58 | 7 | 1 | 59 | 6 | 1 | |
| RM009 | Yes | 1 | В | 47 | 67 | 20 | 61 | 6 | 1 | 61 | 6 | 1 | 62 | 5 | 1 | 62 | 5 | 1 | |
| RM010 | Yes | 1 | В | 50 | 67 | 17 | 62 | 5 | 1 | 62 | 5 | 1 | 62 | 5 | 1 | 62 | 5 | 1 | |
| RM010 | Yes | 1 | В | 46 | 61 | 15 | 59 | 2 | 0 | 58 | 3 | 0 | 58 | 3 | 0 | 59 | 2 | 0 | |
| RM011 | No | 1 | В | 46 | 65 | 19 | 64 | 1 | 0 | 64 | 1 | 0 | 64 | 1 | 0 | 64 | 1 | 0 | |
| RM013 | No | 1 | В | 46 | 57 | 11 | 54 | 3 | 0 | 54 | 3 | 0 | 54 | 3 | 0 | 54 | 3 | 0 | |
| RM014 | No | 1 | В | 46 | 56 | 10 | 53 | 3 | 0 | 53 | 3 | 0 | 54 | 2 | 0 | 54 | 2 | 0 | |
| RM014 | No | 1 | В | 46 | 54 | 8 | 52 | 2 | 0 | 52 | 2 | 0 | 52 | 2 | 0 | 52 | 2 | 0 | |
| RM016 | No | 1 | В | 46 | 54 | 8 | 51 | 3 | 0 | 51 | 3 | 0 | 52 | 2 | 0 | 52 | 2 | 0 | |
| RM017 | No | 1 | В В | 46 | 53 | 7 | 51 | 2 | 0 | 51 | 2 | 0 | 51 | 2 | 0 | 52 51 | 2 | 0 | |
| RM017 | No | 1 | В В | 46 | 52 | 6 | 50 | 2 | 0 | 50 | 2 | 0 | 50 | 2 | 0 | 50 | 2 | 0 | |
| | No | 1 | В В | | | | 49 | 3 | 0 | 50 | | 0 | | 2 | 0 | 50 | | 0 | |
| RM019 RM020 | No | 1 | В | 46 46 | 52 51 | 6 5 | 49 | 2 | | | 2 | 0 | 50 49 | 2 | 0 | 49 | 2 | 0 | |
| | No | 1 | В | | 51 | 4 | | | 0 | 49 | 1 | 0 | - | 1 | 0 | | 1 | 0 | |
| RM021 | No | 1 | | 46 | 50 | | 48 | 2 | 0 | 49 | 1 | | 49 | 2 | | 49 | 1 | 0 | |
| RM022 | | 1 | В | 46 | 50 | 4 | 48 | 2 8 | 0 | 48 | 2 | 0 | 48 | 7 | 0 | 49 | 7 | 1 | |
| RM023 | No No | 1 | B B | 46 46 | 64 61 | 18 | 56 55 | 6 | 1 | 56 55 | 8 | 1 | 57 56 | 5 | 1 | 57 56 | 5 | 1 | |
| RM024 | No | 1 | В | | 59 | 15 | 53 | 6 | 1 | 54 | 6 5 | 1 | 56 | 5 | 1 | | | 0 | |
| RM025 | No | 1 | В | 46 46 | 57 | 13 | 52 | | 1 | 52 | 5 | 1 | 53 | 4 | 0 | 55 53 | 4 | 0 | |
| RM026 | | 1 | В | 46 | | 11 10 | 51 | 5 5 | 1 | 52 | | 0 | 52 | · | 0 | 53 | 4 | 0 | |
| RM027 | No | 1 | | | 56 | | | | 1 | 1 | 4 | | - | 4 | 0 | | 3 | | |
| RM028 | No | 1 | В | 46 | 54 | 8 7 | 50 | 4 | 0 | 51 | 3 | 0 | 51 | 3 | | 52 | 2 | 0 | |
| RM029 | No | 1 | В | 46 | 53 | · · | 49 | 4 | 0 | 50 | 3 | 0 | 50 | 3 | 0 | 51 | 2 | 0 | |
| RM030 | No | 1 | В | 46 | 52 | 6 5 | 49 | 3 | 0 | 49 48 | 3 | 0 | 49 49 | 3 | 0 | 50 49 | 2 | 0 | |
| RM031 | No | 1 | В | 46 | 51 | | 48 | - | | | | 0 | | 2 | | — · | | | |
| RM032 | No No | 1 | <u>В</u> В | 46 46 | 50 52 | 6 | 48 49 | 3 | 0 | 48 50 | 2 | 0 | 49 50 | 2 | 0 | 49 50 | 2 | 0 | |
| RM033 | No | 1 | В | 46 | 66 | 20 | | 8 | 1 | | 8 | 1 | 58 | 8 | 1 | 59 | 7 | 1 | |
| RM034 | No | 1 | В | 46 | 57 | 11 | 58 53 | 4 | 0 | 58 53 | 4 | 0 | 53 | 4 | 0 | 54 | 3 | 0 | |
| RM035 | | 1 | | | | | | | | | | | - | | | 1 | | | |
| RM036 | No | 1 | В | 46 46 | 54 | 8 | 50 | 2 | 0 | 50 | 4 | 0 | 51 | 3 | 0 | 51 50 | 3 | 0 | |
| RM037 | No | 1 | В | | 52 51 | 6 | 49 | 3 | 0 | 50 | 2 | 0 | 50 | 2 | | 50 50 | 1 | 0 | |
| RM038 | No | 1 | В | 46 | 51 | 5 | 49 | 2 | 0 | 49 | 2 | 0 | 50 | ' | 0 | 50 | <u> </u> | 0 | |
| RM039 | No | 1 | В | 46 | 50 | 4 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | |
| RM040 | No | 1 | В | 46 | 49 | 3 | 47 | 2 | 0 | 47 | 2 | 0 | 48 | 1 | 0 | 48 | 1 | 0 | |
| RM041 | No | 1 | В | 46 | 49 | 3 | 47 | 2 | 0 | 47 | 2 | 0 | 47 | 2 | 0 | 48 | 1 | 0 | |
| RM042 | No | 1 | В | 47 | 50 | 3 | 49 | 1 | 0 | 49 | 1 | 0 | 49 | 1 | 0 | 50 | 0 | 0 | |
| RM043 | No | 1 | В | 46 | 52 | 6 | 49 | 3 | 0 | 49 | 3 | 0 | 49 | 3 | 0 | 49 | 3 | 0 | |
| RM044 | No | 1 | В | 46 | 61 | 15 | 53 | 8 | 1 | 54 | 7 | 1 | 54 | 7 | 1 | 55 | 6 | 1 | |
| RM045 | No | 1 | В | 46 | 59 | 13 | 52 | 7 | | 53 | 6 | 1 | 53 | 6 | 1 | 54 | 5 | I | |
| RM046 | No | 1 | В | 46 | 54 | 8 | 49 | 5 | 1 | 50 | 4 | 0 | 50 | 4 | 0 | 51 | 3 | 0 | |
| RM047 | No | 1 | В | 46 | 53 | 7 | 49 | 4 | 0 | 49 | 4 | 0 | 50 | 3 | 0 | 50 | 3 | 0 | |
| RM048 | No | 1 | В | 46 | 51 | 5 | 48 | 3 | 0 | 48 | 3 | 0 | 48 | 3 | 0 | 49 | 2 | 0 | |
| RM049 | No | 1 | В | 46 | 51 | 5 | 48 | 3 | 0 | 48 | 3 | 0 | 48 | 3 | 0 | 49 | 2 | 0 | |

| 1 1 1 1 1 7 1 1 | | | | | | | | 12-Foot Barr | rier | | 11-Foot Barı | rier | | 10-Foot Barr | rier | | 9-Foot Barri | er |
|-----------------|-------|-------------|----------|----------|----------|----------|-----------|--------------|-----------|-----------|--------------|-----------|-----------|--------------|-----------|-----------|--------------|-----------|
| | Front | - | | _ | | | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | | W/Barrier | Reduction | Benefited |
| Receiver | Row | Represented | Category | dBA | dBA | dBA | dBA | dBA | Receptors |
| RM050 | No | 1 | В | 46 | 50 | 4 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 49 | 1 | 0 |
| RM051 | No | 1 | В | 46 | 50 | 4 | 49 | 1 | 0 | 49 | 1 | 0 | 49 | 1 | 0 | 49 | 1 | 0 |
| RM052 | No | 1 | В | 46 | 58 | 12 | 51 | 7 | 1 | 52 | 6 | 1 | 52 | 6 | 1 | 53 | 5 | 1 |
| RM053 | No | 1 | В | 46 | 53 | 7 | 48 | 5 | 1 | 49 | 4 | 0 | 49 | 4 | 0 | 50 | 3 | 0 |
| RM054 | No | 1 | В | 46 | 52 | 6 | 47 | 5 | 1 | 48 | 4 | 0 | 48 | 4 | 0 | 49 | 3 | 0 |
| RM055 | No | 1 | В | 46 | 50 | 4 | 47 | 3 | 0 | 47 | 3 | 0 | 48 | 2 | 0 | 48 | 2 | 0 |
| RM056 | No | 1 | В | 46 | 49 | 3 | 47 | 2 | 0 | 48 | 1 | 0 | 48 | 1 | 0 | 48 | 1 | 0 |
| RM057 | No | 1 | В | 46 | 49 | 3 | 47 | 2 | 0 | 47 | 2 | 0 | 47 | 2 | 0 | 47 | 2 | 0 |
| RM058 | No | 1 | В | 46 | 50 | 4 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 49 | 1 | 0 |
| RM059 | No | 1 | В | 50 | 53 | 3 | 52 | 1 | 0 | 52 | 1 | 0 | 52 | 1 | 0 | 52 | 1 | 0 |
| RM060 | No | 1 | В | 46 | 52 | 6 | 49 | 3 | 0 | 49 | 3 | 0 | 49 | 3 | 0 | 50 | 2 | 0 |
| RM061 | No | 1 | В | 49 | 53 | 4 | 52 | 1 | 0 | 52 | 1 | 0 | 52 | 1 | 0 | 52 | 1 | 0 |
| RM062 | No | 1 | В | 46 | 62 | 16 | 54 | 8 | 1 | 55 | 7 | 1 | 55 | 7 | 1 | 56 | 6 | 1 |
| RM063 | No | 1 | В | 46 | 58 | 12 | 52 | 6 | 1 | 52 | 6 | 1 | 53 | 5 | 1 | 53 | 5 | 1 |
| RM064 | No | 1 | В | 46 | 56 | 10 | 50 | 6 | 1 | 50 | 6 | 1 | 51 | 5 | 1 | 51 | 5 | 1 |
| RM065 | No | 1 | В | 46 | 57 | 11 | 55 | 2 | 0 | 55 | 2 | 0 | 55 | 2 | 0 | 55 | 2 | 0 |
| RM066 | No | 1 | В | 49 | 53 | 4 | 52 | 1 | 0 | 52 | 1 | 0 | 52 | 1 | 0 | 52 | 1 | 0 |
| RM067 | No | 1 | В | 46 | 61 | 15 | 53 | 8 | 1 | 53 | 8 | 1 | 54 | 7 | 1 | 54 | 7 | 1 |
| RM068 | No | 1 | В | 46 | 57 | 11 | 51 | 6 | 1 | 51 | 6 | 1 | 52 | 5 | 1 | 52 | 5 | 1 |
| RM069 | No | 1 | В | 46 | 53 | 7 | 48 | 5 | 1 | 49 | 4 | 0 | 49 | 4 | 0 | 50 | 3 | 0 |
| RM070 | No | 1 | В | 46 | 56 | 10 | 51 | 5 | 1 | 51 | 5 | 1 | 52 | 4 | 0 | 52 | 4 | 0 |
| RM071 | No | 1 | В | 46 | 53 | 7 | 51 | 2 | 0 | 51 | 2 | 0 | 51 | 2 | 0 | 51 | 2 | 0 |
| RM071 | No | 1 | В | 46 | 56 | 10 | 51 | 5 | 1 | 51 | 5 | 1 | 51 | 5 | 1 | 52 | 4 | 0 |
| RM073 | No | 1 | В | 50 | 54 | 4 | 52 | 2 | 0 | 52 | 2 | 0 | 52 | 2 | 0 | 52 | 2 | 0 |
| RM074 | No | 1 | В | 46 | 59 | 13 | 52 | 7 | 1 | 53 | 6 | 1 | 53 | 6 | 1 | 54 | 5 | 1 |
| RM074 | No | 1 | В | 46 | 57 | | 52 | 5 | 1 | 52 | 5 | 1 | 52 | 5 | 1 | 53 | 4 | 0 |
| RM076 | No | 1 | В | 46 | 63 | 11 17 | 58 | 5 | 1 | 58 | 5 | 1 | 59 | 4 | 0 | 59 | 4 | 0 |
| RM077 | No | 1 | В | 47 | 66 | 17 | 61 | 5 | 1 | 60 | 6 | 1 | 61 | 5 | 1 | 61 | 5 | 1 |
| RM077 | No | 1 | В | 51 | 66 | 15 | 61 | 5 | 1 | 61 | 5 | 1 | 61 | 5 | 1 | 61 | 5 | 1 |
| RM079 | No | 1 | В | 58 | 67 | 9 | 63 | 4 | 0 | 63 | 4 | 0 | 63 | 4 | 0 | 63 | 4 | 0 |
| RM080 | No | 1 | D | 37 | 40 | 3 | 39 | 1 | 0 | 39 | 1 | 0 | 39 | 1 | 0 | 39 | 1 | 0 |
| RM081 | No | 1 | В | 53 | 56 | 3 | 55 | 1 | 0 | 55 | 1 | 0 | 55 | 1 | 0 | 55 | 1 | 0 |
| RM082 | No | 1 | В | 47 | 52 | 5 | 50 | 2 | 0 | 50 | 2 | 0 | 51 | 1 | 0 | 51 | 1 | 0 |
| | No | 1 | В | 1 | 54 | 2 | | 1 | 0 | 53 | 1 | 0 | 53 | 1 | 0 | 54 | 0 | 0 |
| RM083 | No | 1 | В | 52 54 | 56 | 2 | 53 55 | 1 | 0 | 55 | 1 | 0 | 55 | 1 | 0 | 55 | 1 | 0 |
| RM084 | | 1 | | . | | | | ' | | | ' | | • | ' | | | · · | |
| RM085 | No | 1 | В | 46 | 60 58 | 14 | 57 56 | 3 | 0 |
| RM086 | No | 1 | В | 46 | | 12 | 56 55 | 2 | 0 | 56 | 2 | 0 | 56 | 2 | 0 | 56 55 | 2 | 0 |
| RM087 | No | 1 | В | 46 | 57 | 11 | 55 50 | 2 | 0 |
| RM088 | No | 1 1 | В | 57 | 58 50 | 1 1 | 58 50 | 0 | 0 |
| RM089 | No | 1 | В | 58 | 59 50 | 0 | 59 50 | 0 | 0 | 59 50 | 0 | 0 | 59 50 | 0 | 0 | 59 50 | 0 | 0 |
| RM090 | No | 1 | В | 59 | 59 55 | | 59 54 | 0 | 0 | 59 54 | 0 | 0 | 59 54 | 1 | | 59 54 | 0 | |
| RM091 | No | 1 | В | 50 | 55 55 | 5 | 54 | 1 | 0 | 54 | 1 | 0 | 54 | 1 | 0 | 54 | 1 | 0 |
| RM092 | No | 1 | В | 46 | 55 56 | 9 | 54 55 | 1 | 0 | 54 | 1 1 | 0 | 54 | 1 | 0 | 54 | • | 0 |
| RM093 | No | 1 1 | В | 48 | 56 | 8 | 55 55 | 1 | 0 | 54 | 2 | 0 | 55 54 | 1 | 0 | 55 54 | 1 | 0 |
| RM094 | No | ' | В | 48 | 55 | 7 | 55 55 | 0 | 0 | 54 | | 0 | 54 | 1 | 0 | 54 | | 0 |
| RM095 | No | 1 | В | 49 | 55 57 | 6 | 55 56 | 0 | 0 | 55 | 0 | 0 | 55 56 | 0 | 0 | 55 56 | 0 | 0 |
| RM096 | No | 1 | В | 51 | 57 | 6 | 56 55 | 1 | 0 | 56 | 1 1 | 0 | 56 | 1 | 0 | 56 55 | 1 | 0 |
| RM097 | No | 1 | В | 49 | 56 | 7 | 55 54 | ' | 0 | 55 | | 0 | 55 | 1 | 0 | 55 | 1 | 0 |
| RM098 | No | Ī | В | 46 | 54 | 8 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 |

SR-177; SR-193 to 1800 N Noise Abatement Analysis Noise Barrier 7

| | | | NAC | | | | | 12-Foot Barr | ier | | 11-Foot Barr | ier | | 10-Foot Barr | ier | 9-Foot Barrier | | |
|----------|--------------|--------------------------|----------------------|-----------------|---------------|-----------------|------------------|------------------|------------------------|------------------|------------------|------------------------|------------------|------------------|------------------------|------------------|------------------|------------------------|
| Receiver | Front Row | Receptors Represented | Land Use Category | Existing dBA | Future dBA | Increase dBA | W/Barrier dBA | Reduction dBA | Benefited Receptors |
| RM099 | No | 1 | В | 50 | 55 | 5 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 |
| RM100 | No | 1 | В | 50 | 55 | 5 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 |
| RM101 | No | 1 | В | 47 | 54 | 7 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 |
| RM102 | No | 1 | В | 48 | 54 | 6 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 |
| RM103 | No | 1 | В | 54 | 56 | 2 | 56 | 0 | 0 | 56 | 0 | 0 | 56 | 0 | 0 | 56 | 0 | 0 |
| RM104 | No | 1 | В | 46 | 53 | 7 | 53 | 0 | 0 | 53 | 0 | 0 | 53 | 0 | 0 | 53 | 0 | 0 |
| RM105 | No | 1 | В | 48 | 55 | 7 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 |
| RM106 | No | 1 | В | 46 | 59 | 13 | 58 | 1 | 0 | 58 | 1 | 0 | 58 | 1 | 0 | 58 | 1 | 0 |
| RM107 | No | 1 | В | 46 | 55 | 9 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 |
| RM108 | No | 1 | В | 48 | 53 | 5 | 53 | 0 | 0 | 53 | 0 | 0 | 53 | 0 | 0 | 53 | 0 | 0 |
| RM109 | No | 1 | В | 60 | 60 | 0 | 60 | 0 | 0 | 60 | 0 | 0 | 60 | 0 | 0 | 60 | 0 | 0 |

= Impacted receptor = 5 dBA reduction or better = 7 dBA reduction or better

| | NAC | 12-Foot Barr | Barrier 11-Foot Barrier | | 10-Foot Barrier | 9-Foot Barrier | |
|----------------|---------------------------------|--|-------------------------|-------------------|-------------------|------------------|--|
| | | | | | | | |
| | | Inputs – Overall Barrier Length (ft.) = | 2 202 | | 0.555 | | |
| | | 2,282 | 2,557 | 2,557 | 2,55 | | |
| | | *Barrier Height (ft.) = | 12 & 10 27,070 | 11 & 10 27,970 | 10 & 10 25,570 | 9 & 10 23,170 | |
| | Innuts - | Barrier Area (sq. ft.) = Category A, C, D, or E | 27,070 | 27,970 | 25,570 | 25,17 | |
| | inputs - | Barrier Height (ft.) = | n/a | n/a | n/a | n/ | |
| | | Barrier Length (ft.) = | n/a | n/a | n/a | n/ | |
| | | Barrier Area (ft.) = | n/a | n/a | n/a | | |
| | Right-of-Way Ac | quisition Area (sq. ft.) = | n/a | n/a | n/a | n/ | |
| | | fety Barrier (linear ft.) = | n/a | n/a | n/a | | |
| | | Inputs – Category B | | | | | |
| | | Barrier Height (ft.) = | 12 & 10 | 11 & 10 | 10 & 10 | 9 & 1 | |
| | | Barrier Length (ft.) = | 2,282 | 2,557 | 2,557 | 2,55 | |
| | | Barrier Area (sq. ft.) = | 27,070 | 27,970 | 25,570 | 23,17 | |
| | | quisition Area (sq. ft.) = | 0 | 0 | 0 | | |
| | **Sa | fety Barrier (linear ft.) = | 2,125 | 2,400 | 2,400 | 2,40 | |
| | | Acoustic Feasibility | | | | | |
| sibility | | Front Row Receptors = | 11 | 11 | 11 | 1 | |
| l sis | Front-Row Receptors wi | | 9 | 9 | 9 | 9 | |
| Fea | % of Front-Row Receptors Re | | 82% | 82% | 82% | 82% | |
| | | Acoustically Feasible = | Yes | Yes | Yes | Ye | |
| | | Reduction Design Goal | | | | | |
| | | Front Row Receptors = | 11 | 11 | 11 | 1 | |
| | | with 7 dBA Reduction = | 7 | 7 | 6 | 100 | |
| | | duced At Least 7 dBA = | 64% | 64% | 55% | 189 | |
| | | eduction Design Goal = • Category A, C, D, or E | Yes | Yes | Yes | Ne | |
| | | ost (Barrier area x 20) = | n/2 | | n/a | n/o | |
| | | equisition (sq. ft. x 20) = | n/a n/a | n/a n/a | n/a n/a | n/- | |
| ess | | arrier (linear ft. x 125) = | n/a | n/a | n/a | n/3 | |
| Reasonableness | Suicty | Total Barrier Cost = | n/a | n/a | n/a | n/ | |
| apl | Allowab | le Cost (length x 360) = | n/a | n/a | n/a | n/ | |
| l e | | Cost Reasonable = | n/a | n/a | n/a | n/s | |
| eas | Cost Effec | tiveness – Category B | | | | | |
| ھّ ا | | ost (Barrier area x 20) = | \$541,400 | \$559,400 | \$511,400 | n/ | |
| | Right-of-Way A | equisition (sq. ft. x 20) = | \$0 | \$0 | \$0 | n/ | |
| | Safety B | arrier (linear ft. x 125) = | \$265,625 | \$300,000 | \$300,000 | n/ | |
| | | Total Barrier Cost = | \$807,025 | \$859,400 | \$811,400 | n/ | |
| | | Cost (benefited x 30k) = | \$1,020,000 | \$870,000 | \$780,000 | n/ | |
| | | s w/ 5 dBA Reduction) = | 34 | 29 | 26 | n/ | |
| | Cost per Benefited Receptor (Ba | | \$23,736 | \$29,634 | \$31,208 | n/s | |
| | | Cost Reasonable = | Yes | Yes | No | n/a | |
| | Is Noise Barrier 7 Feasible and | Possonablo? | Yes | Yes | No | No | |

^{*}Overall barrier heights include a uniform barrier at the height indicated and a 10-foot-tall and 157-foot-long segment on the bridge over 300 North.

^{**}Safety barrier length excludes the proposed 157-foot-long barrier length on the bridge over 300 North.

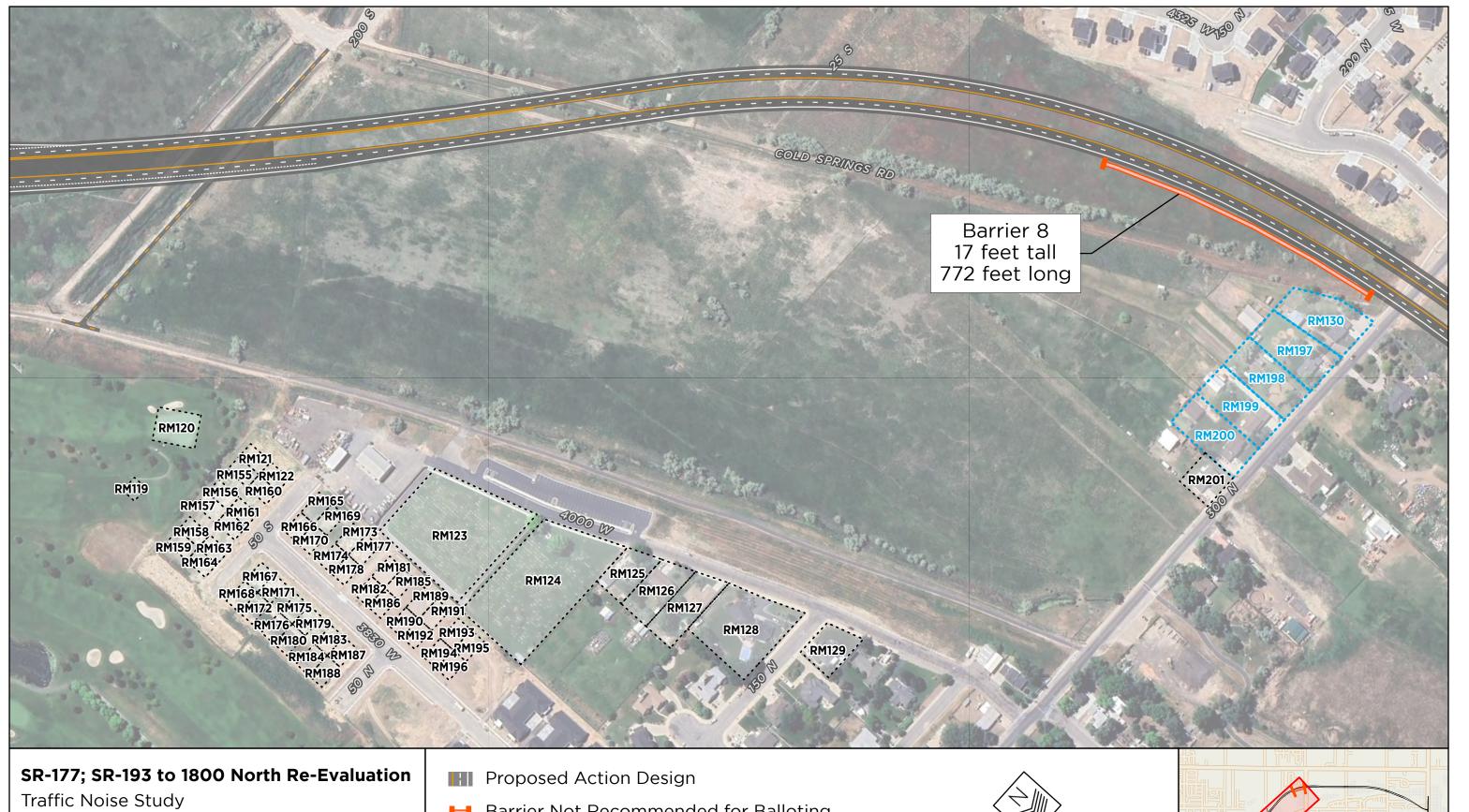


Exhibit 2: Noise Barriers

UDOT Project No.: S-R199(381)

UDOT PIN: 20927

- Barrier Not Recommended for Balloting
- Benefited Receptor
- Receptor Area



500

250

125



SR-177; SR-193 to 1800 N Noise Abatement Analysis Noise Barrier 8

| | NAC | | | | | | | 17-Foot Barr | ier |
|----------|-------|-------------|----------|----------|--------|----------|-----------|--------------|-----------|
| | Front | Receptors | Land Use | Existing | Future | Increase | W/Barrier | Reduction | Benefited |
| Receiver | Row | Represented | Category | dBA | dBA | dBA | dBA | dBA | Receptors |
| RM119 | No | 1 | С | 46 | 61 | 15 | 61 | 0 | 0 |
| RM120 | No | 1 | С | 46 | 63 | 17 | 63 | 0 | 0 |
| RM121 | No | 1 | В | 46 | 62 | 16 | 62 | 0 | 0 |
| RM122 | No | 1 | В | 46 | 60 | 14 | 60 | 0 | 0 |
| RM123 | No | 1 | С | 46 | 57 | 11 | 57 | 0 | 0 |
| RM124 | No | 1 | С | 46 | 56 | 10 | 56 | 0 | 0 |
| RM125 | No | 1 | В | 46 | 55 | 9 | 55 | 0 | 0 |
| RM126 | No | 1 | В | 46 | 55 | 9 | 55 | 0 | 0 |
| RM127 | No | 1 | В | 46 | 55 | 9 | 54 | 1 | 0 |
| RM128 | No | 1 | В | 46 | 54 | 8 | 54 | 0 | 0 |
| RM129 | No | 1 | В | 46 | 54 | 8 | 54 | 0 | 0 |
| RM130 | Yes | 1 | В | 51 | 66 | 15 | 60 | 6 | 1 |
| RM155 | No | 1 | В | 46 | 62 | 16 | 61 | 1 | 0 |
| RM156 | No | 1 | В | 46 | 61 | 15 | 61 | 0 | 0 |
| RM157 | No | 1 | В | 46 | 60 | 14 | 60 | 0 | 0 |
| RM158 | No | 1 | В | 46 | 59 | 13 | 59 | 0 | 0 |
| RM159 | No | 1 | В | 46 | 59 | 13 | 59 | 0 | 0 |
| RM160 | No | 1 | В | 46 | 57 | 11 | 56 | 1 | 0 |
| RM161 | No | 1 | В | 46 | 55 | 9 | 55 | 0 | 0 |
| RM162 | No | 1 | В | 46 | 54 | 8 | 54 | 0 | 0 |
| RM163 | No | 1 | В | 46 | 54 | 8 | 54 | 0 | 0 |
| RM164 | No | 1 | В | 46 | 53 | 7 | 53 | 0 | 0 |
| RM165 | No | 1 | В | 46 | 59 | 13 | 59 | 0 | 0 |
| RM166 | No | 1 | В | 46 | 56 | 10 | 56 | 0 | 0 |
| RM167 | No | 1 | В | 46 | 55 | 9 | 55 | 0 | 0 |
| RM168 | No | 1 | В | 46 | 53 | 7 | 53 | 0 | 0 |
| RM169 | No | 1 | В | 46 | 57 | 11 | 56 | 1 | 0 |
| RM170 | No | 1 | В | 46 | 54 | 8 | 53 | 1 | 0 |
| RM171 | No | 1 | В | 46 | 55 | 9 | 55 | 0 | 0 |
| RM172 | No | 1 | В | 46 | 52 | 6 | 52 | 0 | 0 |
| RM173 | No | 1 | В | 46 | 55 | 9 | 55 | 0 | 0 |
| RM174 | No | 1 | В | 46 | 53 | 7 | 53 | 0 | 0 |
| RM175 | No | 1 | В | 46 | 54 | 8 | 54 | 0 | 0 |
| RM176 | No | 1 | В | 46 | 51 | 5 | 51 | 0 | 0 |
| RM177 | No | 1 | В | 46 | 55 | 9 | 55 | 0 | 0 |
| RM178 | No | 1 | В | 46 | 52 | 6 | 52 | 0 | 0 |
| RM179 | No | 1 | В | 46 | 53 | 7 | 53 | 0 | 0 |
| RM180 | No | 1 | В | 46 | 51 | 5 | 51 | 0 | 0 |
| RM181 | No | 1 | В | 46 | 54 | 8 | 54 | 0 | 0 |
| RM182 | No | 1 | В | 46 | 52 | 6 | 52 | 0 | 0 |
| RM183 | No | 1 | В | 46 | 52 | 6 | 52 | 0 | 0 |
| RM184 | No | 1 | В | 46 | 50 | 4 | 50 | 0 | 0 |
| RM185 | No | 1 | В | 46 | 54 | 8 | 54 | 0 | 0 |
| RM186 | No | 1 | В | 46 | 52 | 6 | 52 | 0 | 0 |
| RM187 | No | 1 | В | 46 | 52 | 6 | 52 | 0 | 0 |
| RM188 | No | 1 | В | 46 | 50 | 4 | 50 | 0 | 0 |
| RM189 | No | 1 | В | 46 | 54 | 8 | 54 | 0 | 0 |
| RM190 | No | 1 | В | 46 | 51 | 5 | 51 | 0 | 0 |
| INVITAU | No | 1 | В | 46 | 54 | 8 | 53 | 1 | 0 |

| | NAC | | | | | | | 17-Foot Barrier | | |
|----------|--------------|--------------------------|----------------------|-----------------|---------------|-----------------|------------------|------------------|------------------------|--|
| Receiver | Front Row | Receptors Represented | Land Use Category | Existing dBA | Future dBA | Increase dBA | W/Barrier dBA | Reduction dBA | Benefited Receptors | |
| RM192 | No | 1 | В | 46 | 50 | 4 | 50 | 0 | 0 | |
| RM193 | No | 1 | В | 46 | 53 | 7 | 53 | 0 | 0 | |
| RM194 | No | 1 | В | 46 | 50 | 4 | 50 | 0 | 0 | |
| RM195 | No | 1 | В | 46 | 53 | 7 | 53 | 0 | 0 | |
| RM196 | No | 1 | В | 46 | 50 | 4 | 50 | 0 | 0 | |
| RM197 | No | 1 | В | 47 | 64 | 17 | 58 | 6 | 1 | |
| RM198 | No | 1 | В | 46 | 62 | 16 | 56 | 6 | 1 | |
| RM199 | No | 1 | В | 46 | 60 | 14 | 55 | 5 | 1 | |
| RM200 | No | 1 | В | 46 | 59 | 13 | 54 | 5 | 1 | |
| RM201 | No | 1 | В | 50 | 58 | 8 | 54 | 4 | 0 | |



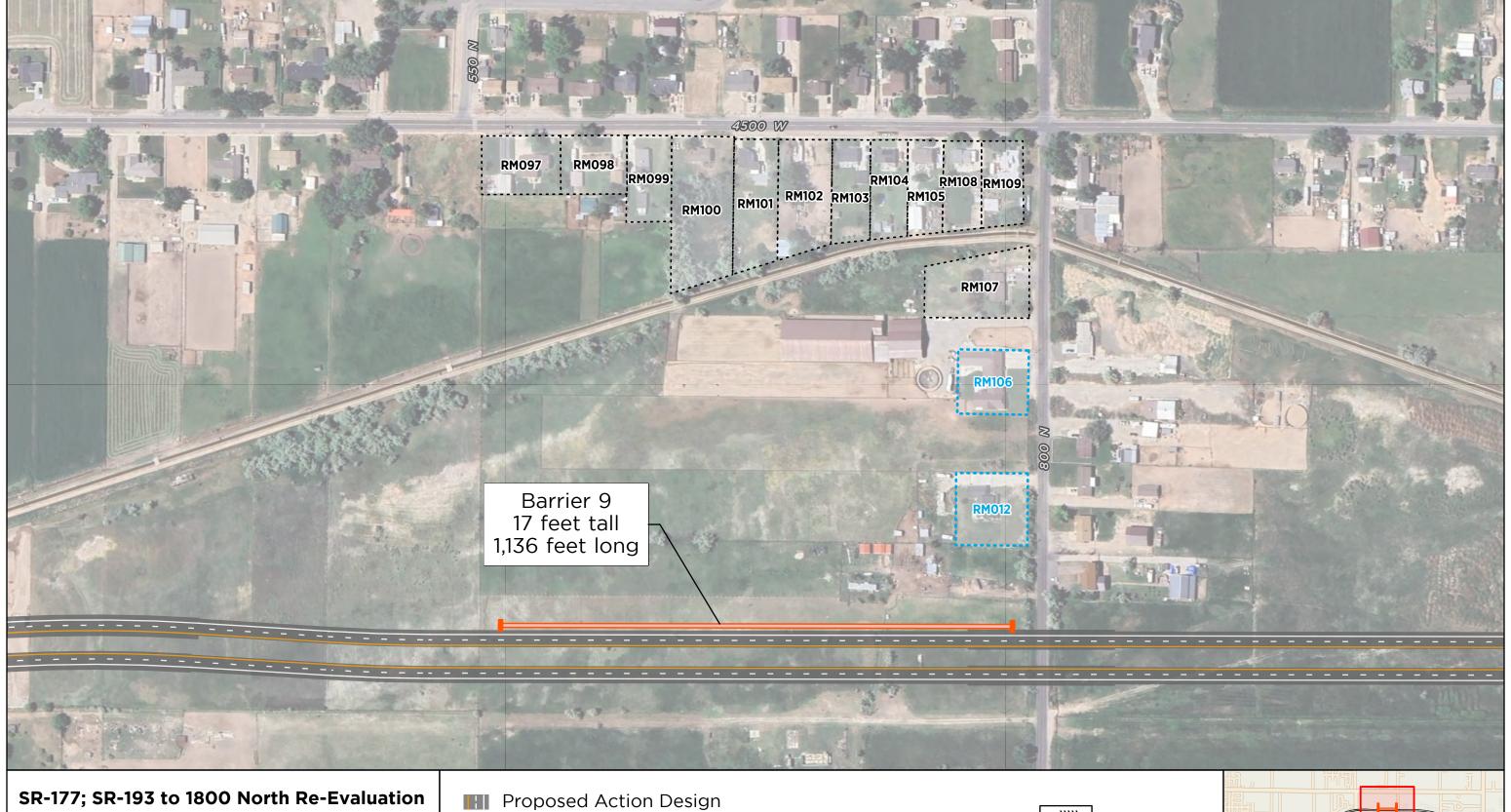
⁼ Impacted receptor = 5 dBA reduction or better = 7 dBA reduction or better

| NAC | 17-Foot Barrier |
|-----|-----------------|
|-----|-----------------|

| İ | Inputs – Overall | i |
|----------------|--|--------|
| | Barrier Length (ft.) = | 772 |
| | Barrier Height (ft.) = | 17 |
| | Barrier Area (sq. ft.) = | 13,124 |
| | Inputs – Category A, C, D, or E | 13,124 |
| | Barrier Height (ft.) = | n/a |
| | Barrier Length (ft.) = | n/a |
| | Barrier Area (ft.) = | n/a |
| | Right-of-Way Acquisition Area (sq. ft.) = | 0 |
| | Safety Barrier (linear ft.) = | n/a |
| | Inputs – Category B | 11/4 |
| | Barrier Height (ft.) = | 17 |
| | Barrier Length (ft.) = | 772 |
| | Barrier Area (sq. ft.) = | 13,124 |
| | Right-of-Way Acquisition Area (sq. ft.) = | 0 |
| | Safety Barrier (linear ft.) = | 772 |
| | Acoustic Feasibility | |
| <u>.</u> | Front Row Receptors = | 1 |
| idi | Front-Row Receptors with a 5 dBA Reduction = | 1 |
| Feasibility | % of Front-Row Receptors Reduced At Least 5 dBA = | 100% |
| Ľ. | Acoustically Feasible = | Yes |
| | Noise Reduction Design Goal | |
| | Front Row Receptors = | 1 |
| | Front Row Receptors with 7 dBA Reduction = | 0 |
| | % of Front Row Reduced At Least 7 dBA = | 0% |
| | Meets Noise Reduction Design Goal = | No |
| | Cost Effectiveness – Category A, C, D, or E | |
| | Barrier Cost (Barrier area x 20) = | n/a |
| | Right-of-Way Acquisition (sq. ft. x 20) = | n/a |
| es | Safety Barrier (linear ft. x 125) = | n/a |
| len | Total Barrier Cost = | n/a |
| lab | Allowable Cost (length x 360) = | n/a |
| Sor | Cost Reasonable = | n/a |
| Reasonableness | Cost Effectiveness – Category B | |
| | Barrier Cost (Barrier area x 20) = | n/a |
| | Right-of-Way Acquisition (sq. ft. x 20) = | n/a |
| | Safety Barrier (linear ft. x 125) = | n/a |
| | Total Barrier Cost = | n/a |
| | Allowable Cost (benefited x 30k) = | n/a |
| | Benefited (Category B w/ 5 dBA Reduction) = | n/a |
| | Cost per Benefited Receptor (Barrier cost / benefited) = | n/a |
| | Cost Reasonable = | n/a |

Is Noise Barrier 8 Feasible and Reasonable?

No



Traffic Noise Study

Exhibit 2: Noise Barriers

UDOT Project No.: S-R199(381)

UDOT PIN: 20927

■ Barrier Not Recommended for Balloting

Benefited Receptor

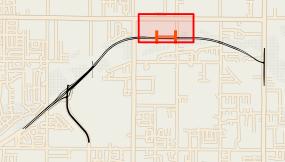
Receptor Area



250

125





| | NAC | | | | | | | 17-Foot Barrier | | |
|----------|--------------|--------------------------|----------------------|-----------------|---------------|-----------------|------------------|------------------|------------------------|--|
| Receiver | Front Row | Receptors Represented | Land Use Category | Existing dBA | Future dBA | Increase dBA | W/Barrier dBA | Reduction dBA | Benefited Receptors | |
| RM012 | Yes | 1 | В | 46 | 65 | 19 | 60 | 5 | 1 | |
| RM097 | No | 1 | В | 49 | 56 | 7 | 55 | 1 | 0 | |
| RM098 | No | 1 | В | 46 | 54 | 8 | 52 | 2 | 0 | |
| RM099 | No | 1 | В | 50 | 55 | 5 | 54 | 1 | 0 | |
| RM100 | No | 1 | В | 50 | 55 | 5 | 54 | 1 | 0 | |
| RM101 | No | 1 | В | 47 | 54 | 7 | 53 | 1 | 0 | |
| RM102 | No | 1 | В | 48 | 54 | 6 | 53 | 1 | 0 | |
| RM103 | No | 1 | В | 54 | 56 | 2 | 55 | 1 | 0 | |
| RM104 | No | 1 | В | 46 | 53 | 7 | 51 | 2 | 0 | |
| RM105 | No | 1 | В | 48 | 55 | 7 | 54 | 1 | 0 | |
| RM106 | No | 1 | В | 46 | 59 | 13 | 54 | 5 | 1 | |
| RM107 | No | 1 | В | 46 | 55 | 9 | 52 | 3 | 0 | |
| RM108 | No | 1 | В | 48 | 53 | 5 | 52 | 1 | 0 | |
| RM109 | No | 1 | В | 60 | 60 | 0 | 60 | 0 | 0 | |



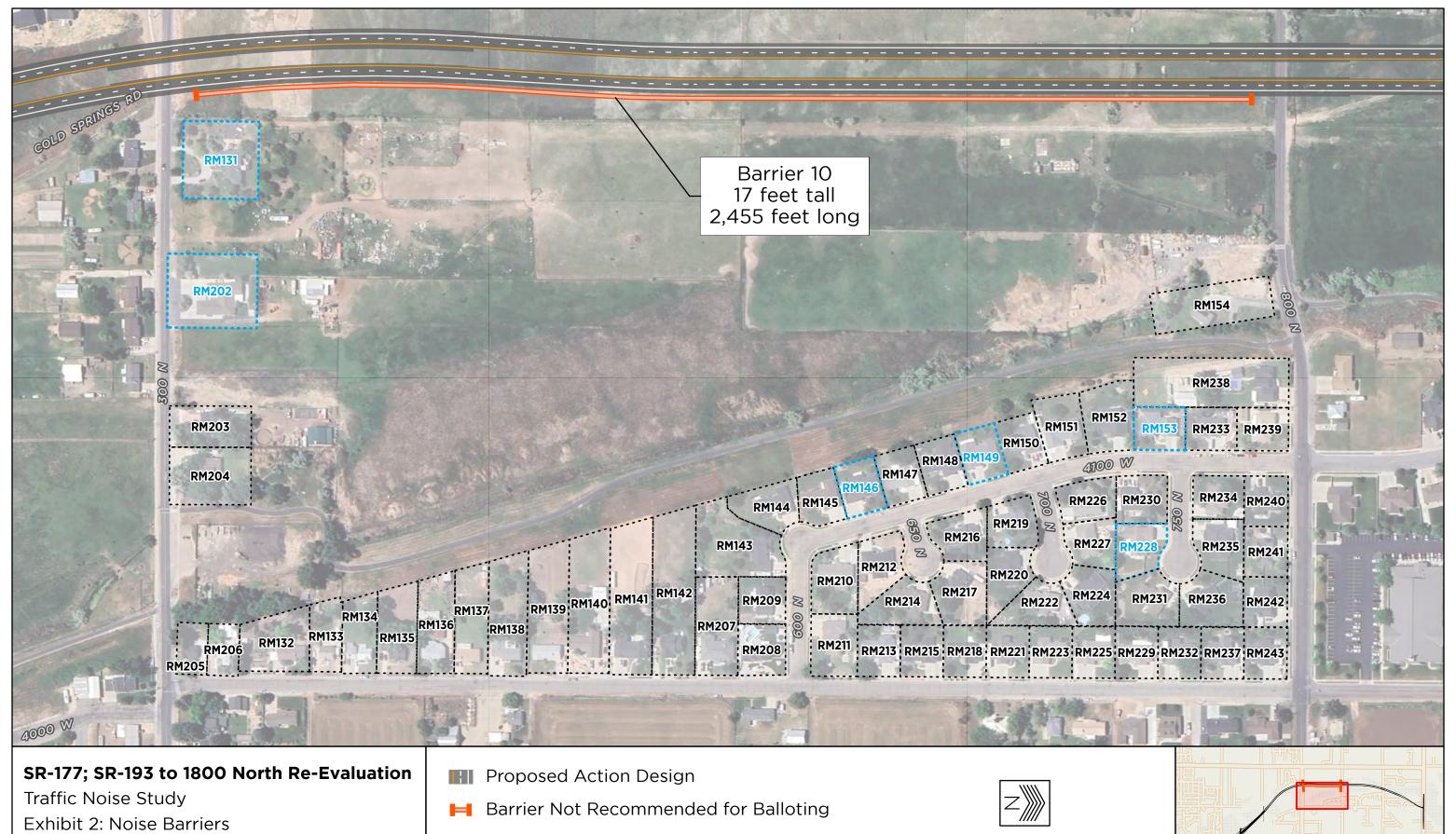
⁼ Impacted receptor = 5 dBA reduction or better = 7 dBA reduction or better

| NAC 17-Foot Barrier |
|---------------------|
|---------------------|

| | Inputs – Overall | |
|----------------|---|--------|
| | Barrier Length (ft.) = | 1,136 |
| | Barrier Height (ft.) = | 17 |
| | Barrier Area (sq. ft.) = | 19,312 |
| | Inputs – Category A, C, D, or E | |
| | Barrier Height (ft.) = | n/a |
| | Barrier Length (ft.) = | n/a |
| | Barrier Area (ft.) = | n/a |
| | Right-of-Way Acquisition Area (sq. ft.) = | n/a |
| | Safety Barrier (linear ft.) = | n/a |
| | Inputs – Category B | |
| | Barrier Height (ft.) = | 17 |
| | Barrier Length (ft.) = | 1,136 |
| | Barrier Area (sq. ft.) = | 19,312 |
| | Right-of-Way Acquisition Area (sq. ft.) = | 0 |
| | Safety Barrier (linear ft.) = | 1,136 |
| | Acoustic Feasibility | |
| | Front Row Receptors = | 1 |
| <u> </u> | Front-Row Receptors with a 5 dBA Reduction = | 1 |
| Feasibility | % of Front-Row Receptors Reduced At Least 5 dBA = | 100% |
| _ <u>_</u> | Acoustically Feasible = | Yes |
| | Noise Reduction Design Goal | |
| | Front Row Receptors = | 1 |
| | Front Row Receptors with 7 dBA Reduction = | 0 |
| | % of Front Row Reduced At Least 7 dBA = | 0% |
| | Meets Noise Reduction Design Goal = | No |
| | Cost Effectiveness – Category A, C, D, or E | |
| | Barrier Cost (Barrier area x 20) = | n/a |
| ۷ . | Right-of-Way Acquisition (sq. ft. x 20) = | n/a |
| les les | Safety Barrier (linear ft. x 125) = | n/a |
| l ler | Total Barrier Cost = | n/a |
| lab | Allowable Cost (length x 360) = | n/a |
| Sor | Cost Reasonable = | n/a |
| Reasonableness | Cost Effectiveness – Category B | |
| " | Barrier Cost (Barrier area x 20) = | n/a |
| | Right-of-Way Acquisition (sq. ft. x 20) = | n/a |
| | Safety Barrier (linear ft. x 125) = | n/a |
| | Total Barrier Cost = | n/a |
| | Allowable Cost (benefited x 30k) = | n/a |
| | Benefited (Category B w/ 5 dBA Reduction) = | n/a |
| | Cost per Benefited Receptor (Barrier cost / benefited) = Cost Reasonable = | n/a |
| | | n/a |

Is Noise Barrier 9 Feasible and Reasonable?

No



125

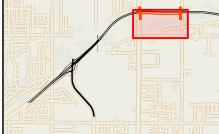
250

500

UDOT Project No.: S-R199(381)

UDOT PIN: 20927

- Benefited Receptor
- Receptor Area



| | NAC | | | | | | | 17-Foot Barr | ier |
|----------|----------|---------------|----------|----------|----------|-----|---------------|--------------|-----------|
| Donairea | Front | Receptors | Land Use | Existing | Future | | W/Barrier | Reduction | Benefited |
| Receiver | Row | Represented | Category | dBA | dBA | dBA | dBA 57 | dBA | Receptors |
| RM131 | Yes | 1 | В | 46 | 67 | 21 | | 10 | 1 |
| RM132 | No | 1 | В | 48 | 59 | 11 | 58 | 1 | 0 |
| RM133 | Yes | 1 | В | 48 | 59 | 11 | 58 | 1 | 0 |
| RM134 | Yes | 1 | В | 48 | 59 | 11 | 58 | 1 | 0 |
| RM135 | Yes | 1 | В | 46 | 58 | 12 | 57 | 1 | 0 |
| RM136 | Yes | 1 | В | 46 | 58 | 12 | 56 | 2 | 0 |
| RM137 | Yes | 1 | В | 46 | 58 | 12 | 56 | 2 | 0 |
| RM138 | Yes | 1 | В | 46 | 57 | 11 | 55 | 2 | 0 |
| RM139 | Yes | 1 | В | 46 | 57 | 11 | 55 | 2 | 0 |
| RM140 | Yes | 1 | В | 46 | 56 | 10 | 54 | 2 | 0 |
| RM141 | Yes | 1 | В | 46 | 56 | 10 | 52 | 4 | 0 |
| RM142 | Yes | 1 | В | 46 | 56 | 10 | 53 | 3 | 0 |
| RM143 | Yes | 1 | В | 46 | 57 | 11 | 54 | 3 | 0 |
| RM144 | Yes | 1 | В | 46 | 61 | 15 | 57 | 4 | 0 |
| RM145 | Yes | 1 | В | 46 | 61 | 15 | 57 | 4 | 0 |
| RM146 | Yes | 1 | В | 46 | 62 | 16 | 57 | 5 | 1 |
| RM147 | Yes | 1 | В | 46 | 62 | 16 | 58 | 4 | 0 |
| RM148 | Yes | 1 | В | 46 | 62 | 16 | 58 | 4 | 0 |
| RM149 | Yes | 1 | В | 46 | 63 | 17 | 58 | 5 | 1 |
| RM150 | Yes | 1 | В | 46 | 63 | 17 | 59 | 4 | 0 |
| RM151 | Yes | 1 | В | 46 | 63 | 17 | 59 | 4 | 0 |
| RM152 | Yes | 1 | В | 46 | 63 | 17 | 60 | 3 | 0 |
| RM153 | Yes | 1 | В | 46 | 60 | 14 | 54 | 6 | 1 |
| RM154 | Yes | 1 | В | 47 | 64 | 17 | 61 | 3 | 0 |
| RM202 | No | 1 | В | 46 | 60 | 14 | 53 | 7 | 1 |
| RM203 | No | 1 | В | 47 | 58 | 11 | 54 | 4 | 0 |
| RM204 | No | 1 | В | 47 | 56 | 9 | 52 | 4 | 0 |
| RM205 | No | 1 | В | 64 | 65 | 1 | 64 | 1 | 0 |
| RM206 | No | 1 | В | 57 | 61 | 4 | 60 | 1 | 0 |
| RM207 | No | 1 | В | 46 | 56 | 10 | 53 | 3 | 0 |
| RM208 | No | 1 | В | 46 | 55 | 9 | 52 | 3 | 0 |
| | | 1 | В | 46 | | 10 | 53 | | 0 |
| RM209 | No No | <u>'</u> 1 | В | 46 | 56 50 | 4 | 49 | 3 1 | 0 |
| RM210 | | 1 | В | 46 | | 2 | 47 | | 0 |
| RM211 | No | | | | 48 | | • | 1 | |
| RM212 | No | 1 | В | 46 | 50 | 4 | 46 | 4 | 0 |
| RM213 | No | 1 | В | 46 | 47 | 1 | 45 | 2 | 0 |
| RM214 | No | 1 | В | 46 | 48 | 2 | 44 | 4 | 0 |
| RM215 | No | 1 | В | 46 | 46 | 0 | 45 | 1 | 0 |
| RM216 | No | 1 | В | 46 | 49 | 3 | 46 | 3 | 0 |
| RM217 | No | 1 | В | 46 | 48 | 2 | 44 | 4 | 0 |
| RM218 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 |
| RM219 | No | 1 | В | 46 | 50 | 4 | 47 | 3 | 0 |
| RM220 | No | 1 | В | 46 | 46 | 0 | 43 | 3 | 0 |
| RM221 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 |
| RM222 | No | 1 | В | 46 | 46 | 0 | 42 | 4 | 0 |
| RM223 | No | 1 | В | 46 | 46 | 0 | 43 | 3 | 0 |
| RM224 | No | 1 | В | 46 | 48 | 2 | 44 | 4 | 0 |
| RM225 | No | 1 | В | 46 | 46 | 0 | 43 | 3 | 0 |
| RM226 | No | 1 | В | 46 | 53 | 7 | 49 | 4 | 0 |

| | | | NAC | | | | | 17-Foot Barr | ier |
|----------|--------------|--------------------------|----------------------|-----------------|---------------|-----------------|------------------|------------------|------------------------|
| Receiver | Front Row | Receptors Represented | Land Use Category | Existing dBA | Future dBA | Increase dBA | W/Barrier dBA | Reduction dBA | Benefited Receptors |
| RM227 | No | 1 | В | 46 | 46 | 0 | 43 | 3 | 0 |
| RM228 | No | 1 | В | 46 | 48 | 2 | 43 | 5 | 1 |
| RM229 | No | 1 | В | 46 | 46 | 0 | 43 | 3 | 0 |
| RM230 | No | 1 | В | 46 | 52 | 6 | 48 | 4 | 0 |
| RM231 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 |
| RM232 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 |
| RM233 | No | 1 | В | 46 | 60 | 14 | 57 | 3 | 0 |
| RM234 | No | 1 | В | 46 | 52 | 6 | 50 | 2 | 0 |
| RM235 | No | 1 | В | 46 | 47 | 1 | 46 | 1 | 0 |
| RM236 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 |
| RM237 | No | 1 | В | 46 | 46 | 0 | 46 | 0 | 0 |
| RM238 | No | 1 | В | 46 | 60 | 14 | 58 | 2 | 0 |
| RM239 | No | 1 | В | 46 | 54 | 8 | 53 | 1 | 0 |
| RM240 | No | 1 | В | 52 | 56 | 4 | 55 | 1 | 0 |
| RM241 | No | 1 | В | 46 | 47 | 1 | 44 | 3 | 0 |
| RM242 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 |
| RM243 | No | 1 | В | 52 | 52 | 0 | 52 | 0 | 0 |



⁼ Impacted receptor = 5 dBA reduction or better = 7 dBA reduction or better

| NAC | 17-Foot Barrier |
|-----|-----------------|
|-----|-----------------|

| | Inputs – Overall | I |
|----------------|--|--------|
| | Barrier Length (ft.) = | 2,455 |
| | Barrier Height (ft.) = | 17 |
| | Barrier Area (sq. ft.) = | 41,735 |
| | Inputs – Category A, C, D, or E | , |
| | Barrier Height (ft.) = | n/a |
| | Barrier Length (ft.) = | n/a |
| | Barrier Area (ft.) = | n/a |
| | Right-of-Way Acquisition Area (sq. ft.) = | n/a |
| | Safety Barrier (linear ft.) = | n/a |
| | Inputs – Category B | |
| | Barrier Height (ft.) = | 17 |
| | Barrier Length (ft.) = | 2,455 |
| | Barrier Area (sq. ft.) = | 41,735 |
| | Right-of-Way Acquisition Area (sq. ft.) = | 0 |
| | Safety Barrier (linear ft.) = | 2,455 |
| | Acoustic Feasibility | |
| Feasibility | Front Row Receptors = | 23 |
| idi | Front-Row Receptors with a 5 dBA Reduction = | 4 |
| eas | % of Front-Row Receptors Reduced At Least 5 dBA = | 17% |
| Щ | Acoustically Feasible = | No |
| | Noise Reduction Design Goal | |
| | Front Row Receptors = | 23 |
| | Front Row Receptors with 7 dBA Reduction = | 1 |
| | % of Front Row Reduced At Least 7 dBA = | 4% |
| | Meets Noise Reduction Design Goal = | No |
| | Cost Effectiveness – Category A, C, D, or E | |
| | Barrier Cost (Barrier area x 20) = | n/a |
| ا ۵ | Right-of-Way Acquisition (sq. ft. x 20) = | n/a |
| les | Safety Barrier (linear ft. x 125) = | n/a |
| l ler | Total Barrier Cost = | n/a |
| lab | Allowable Cost (length x 360) = | n/a |
| Sor | Cost Reasonable = | n/a |
| Reasonableness | Cost Effectiveness – Category B | |
| - | Barrier Cost (Barrier area x 20) = | n/a |
| | Right-of-Way Acquisition (sq. ft. x 20) = | n/a |
| | Safety Barrier (linear ft. x 125) = | n/a |
| | Total Barrier Cost = | n/a |
| | Allowable Cost (benefited x 30k) = | n/a |
| | Benefited (Category B w/ 5 dBA Reduction) = | n/a |
| | Cost per Benefited Receptor (Barrier cost / benefited) = | n/a |
| | Cost Reasonable = | n/a |

Is Noise Barrier 10 Feasible and Reasonable?

No

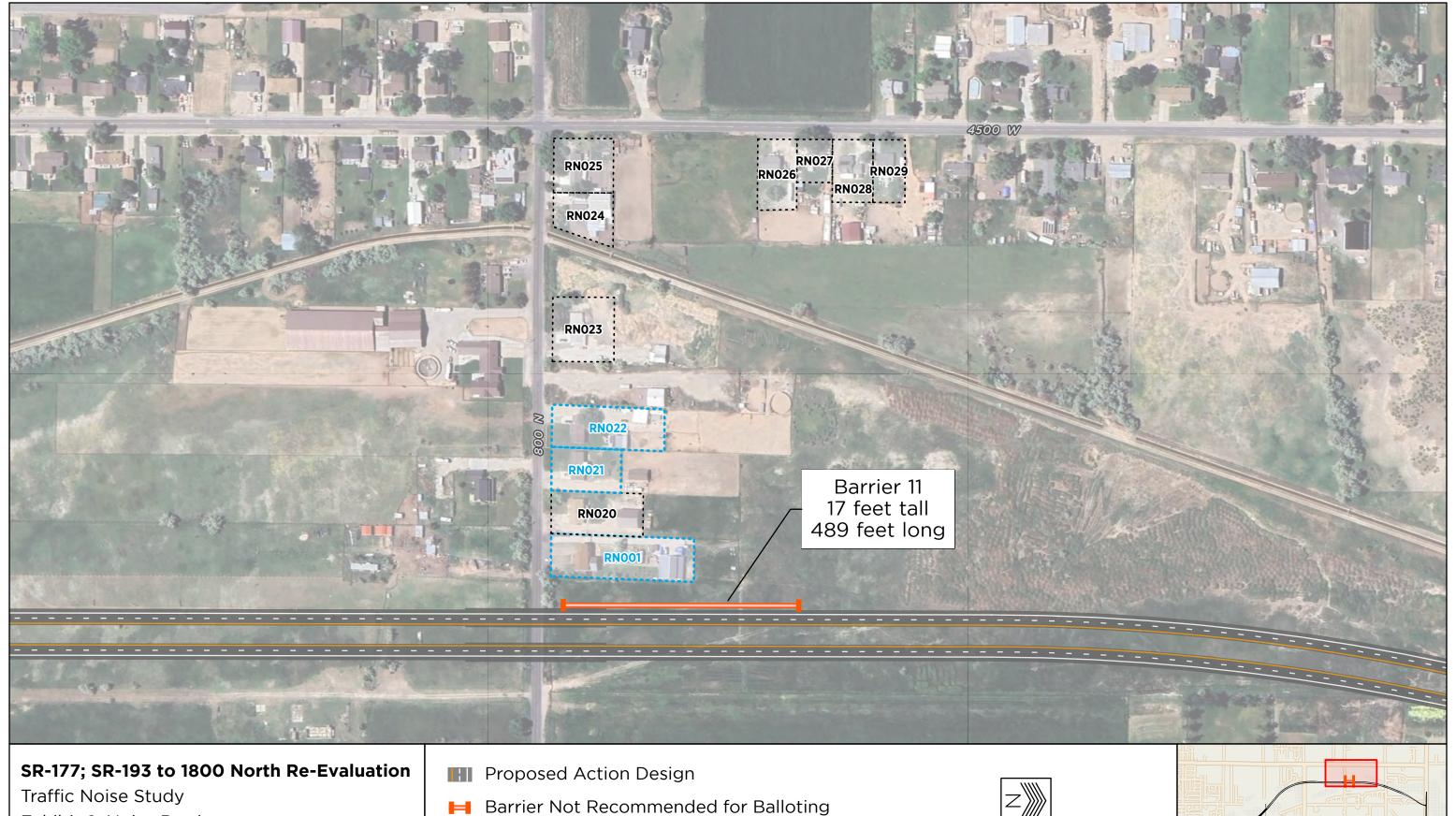


Exhibit 2: Noise Barriers

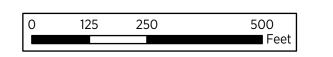
UDOT Project No.: S-R199(381)

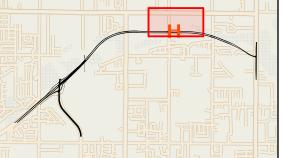
UDOT PIN: 20927

Benefited Receptor

Receptor Area







SR-177; SR-193 to 1800 N Noise Abatement Analysis Noise Barrier 11

| | | | NAC | | | | 17-Foot Barrier | | | 16-Foot Barrier | | | 15-Foot Barrier | | 14-Foot Barrier | | | 13-Foot Barrier | | | |
|----------|-------|-------------|----------|----------|--------|----------|-----------------|-----------|-----------|-----------------|-----------|-----------|-----------------|-----------|-----------------|-----------|-----------|-----------------|-----------|-----------|-----------|
| | Front | Receptors | Land Use | Existing | Future | Increase | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited | V/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited |
| Receiver | Row | Represented | Category | dBA | dBA | dBA | dBA | dBA | Receptors | dBA | dBA | Receptors | dBA | dBA | Receptors | dBA | dBA | Receptors | dBA | dBA | Receptors |
| RN001 | Yes | 1 | В | 46 | 67 | 21 | 58 | 9 | 1 | 58 | 9 | 1 | 58 | 9 | 1 | 58 | 9 | 1 | 59 | 8 | 1 |
| RN020 | No | 1 | В | 46 | 63 | 17 | 59 | 4 | 0 | 59 | 4 | 0 | 59 | 4 | 0 | 59 | 4 | 0 | 62 | 1 | 0 |
| RN021 | No | 1 | В | 46 | 62 | 16 | 57 | 5 | 1 | 57 | 5 | 1 | 57 | 5 | 1 | 57 | 5 | 1 | 61 | 1 | 0 |
| RN022 | No | 1 | В | 46 | 59 | 13 | 54 | 5 | 1 | 54 | 5 | 1 | 54 | 5 | 1 | 54 | 5 | 1 | 58 | 1 | 0 |
| RN023 | No | 1 | В | 46 | 58 | 12 | 56 | 2 | 0 | 56 | 2 | 0 | 56 | 2 | 0 | 56 | 2 | 0 | 58 | 0 | 0 |
| RN024 | No | 1 | В | 47 | 56 | 9 | 54 | 2 | 0 | 54 | 2 | 0 | 54 | 2 | 0 | 54 | 2 | 0 | 55 | 1 | 0 |
| RN025 | No | 1 | В | 60 | 60 | 0 | 60 | 0 | 0 | 60 | 0 | 0 | 60 | 0 | 0 | 60 | 0 | 0 | 60 | 0 | 0 |
| RN026 | No | 1 | В | 51 | 56 | 5 | 56 | 0 | 0 | 56 | 0 | 0 | 56 | 0 | 0 | 56 | 0 | 0 | 56 | 0 | 0 |
| RN027 | No | 1 | В | 51 | 56 | 5 | 55 | 1 | 0 | 55 | 1 | 0 | 55 | 1 | 0 | 55 | 1 | 0 | 56 | 0 | 0 |
| RN028 | No | 1 | В | 46 | 55 | 9 | 54 | 1 | 0 | 54 | 1 | 0 | 54 | 1 | 0 | 54 | 1 | 0 | 55 | 0 | 0 |
| RN029 | No | 1 | В | 49 | 56 | 7 | 55 | 1 | 0 | 55 | 1 | 0 | 55 | 1 | 0 | 55 | 1 | 0 | 55 | 1 | 0 |

= Impacted receptor = 5 dBA reduction or better = 7 dBA reduction or better

| | NAC | 17-Foot Barrie | er | 16-Foot Barrier | 15-Foot Barrier | 14-Foot Barrier | 13-Foot Barrier |
|---|---------------------------------|---|------------------|---|------------------|------------------|-----------------|
| | | | - | | | | |
| | | Inputs – Overall | 100 | | | | |
| | | Barrier Length (ft.) = | 489 | 510 | 541 | 541 | 21 |
| | | Barrier Height (ft.) = | 17 8,313 | 8,160 | 8,115 | 7,574 | 2,73 |
| | Inputs | Barrier Area (sq. ft.) = - Category A, C, D, or E | 0,313 | 8,100 | 0,113 | 7,374 | 2,/3 |
| | mputs - | Barrier Height (ft.) = | n/a | n/a | n/a | n/a | n, |
| | | Barrier Length (ft.) = | n/a | n/a | n/a | n/a | n |
| | | Barrier Area (ft.) = | n/a | n/a | n/a | n/a | n |
| | Right-of-Way A | cquisition Area (sq. ft.) = | n/a | n/a | n/a | n/a | n |
| | | afety Barrier (linear ft.) = | n/a | n/a | n/a | n/a | r |
| | | Inputs – Category B | | | | | |
| | | Barrier Height (ft.) = | 17 | 16 | 15 | 14 | |
| | | Barrier Length (ft.) = | 489 | 510 | 541 | 541 | 2 |
| | | Barrier Area (sq. ft.) = | 8,313 | 8,160 | 8,115 | 7,574 | 2,7 |
| | | cquisition Area (sq. ft.) = | 0 | 0 | 0 | 0 | |
| | S | afety Barrier (linear ft.) = | 489 | 510 | 541 | 541 | 2 |
| > | | Acoustic Feasibility | | | | | |
| | 5 12 2 | Front Row Receptors = | 1 | 1 | 1 | 1 | |
| asik | | vith a 5 dBA Reduction = | 1 | 1 | 1 1 2 2 2 2 | 1 2004 | 100 |
| , in the second | % of Front-Row Receptors Re | | 100% | 100% | 100% | 100% | 100 |
| | <u> </u> | Acoustically Feasible = | Yes | Yes | Yes | Yes | Y |
| | Noise | Reduction Design Goal | | 1 | 1 | 1 | |
| | Eront Pow Pocontars | Front Row Receptors = with 7 dBA Reduction = | <u> </u> | | 1 | 1 | |
| | | educed At Least 7 dBA = | 100% | 100% | 100% | 100% | 100 |
| | | Reduction Design Goal = | Yes | Yes | Yes | Yes | Y |
| | | - Category A, C, D, or E | | | 1.55 | | |
| | | Cost (Barrier area x 20) = | n/a | n/a | n/a | n/a | r |
| δ. | Right-of-Way A | acquisition (sq. ft. x 20) = | n/a | n/a | n/a | n/a | r |
| Sec | Safety | Barrier (linear ft. x 125) = | n/a | n/a | n/a | n/a | r |
| l lei | | Total Barrier Cost = | n/a | n/a | n/a | n/a | r |
| nak | Allowa | ble Cost (length x 360) = | n/a | n/a | n/a | n/a | r |
| So | 6 . 5% | Cost Reasonable = | n/a | n/a | n/a | n/a | n |
| Res | | ctiveness – Category B | \$166.260 | \$162,200 | ¢162.200 | ¢151.400 | <u> </u> |
| | | Cost (Barrier area x 20) = | \$166,260 \$0 | \$163,200 | \$162,300 \$0 | \$151,480 \$0 | \$54,6 |
| | | Acquisition (sq. ft. x 20) = Barrier (linear ft. x 125) = | \$61,125 | \$0 \$63,750 | \$67,625 | \$67,625 | \$26,2 |
| | Salety | Total Barrier Cost = | \$227,385 | \$226,950 | \$229,925 | \$219,105 | \$80,8 |
| | Allowable | Cost (benefited x 30k) = | \$90,000 | \$90,000 | \$90,000 | \$90,000 | \$30,0 |
| | | B w/ 5 dBA Reduction) = | 3 | 3 | 3 | 3 | 436/6 |
| | Cost per Benefited Receptor (B. | | \$75,795 | \$75,650 | \$76,642 | \$73,035 | \$80,8 |
| | | Cost Reasonable = | No | No | No | No | N |
| | | | | | | | |
| | Is Noise Barrier 11 Feas | sible and Reasonable? | No | No | No | No | N |

SR-177; SR-193 to 1800 N Noise Abatement Analysis Noise Barrier 11

| | | | NAC | | | | | 12-Foot Barrier | | | 11-Foot Barrier | | | 10-Foot Barrier | | 9-Foot Barrier | | | 8-Foot Barrier | | |
|----------|-------|-------------|----------|----------|--------|----------|-----------|-----------------|-----------|-----------|-----------------|-----------|-----------|-----------------|-----------|----------------|-----------|-----------|----------------|-----------|-----------|
| | Front | Receptors | Land Use | Existing | Future | Increase | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited | V/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited |
| Receiver | Row | Represented | Category | dBA | dBA | dBA | dBA | dBA | Receptors | dBA | dBA | Receptors | dBA | dBA | Receptors | dBA | dBA | Receptors | dBA | dBA | Receptors |
| RN001 | Yes | 1 | В | 46 | 67 | 21 | 60 | 7 | 1 | 60 | 7 | 1 | 60 | 7 | 1 | 60 | 7 | 1 | 60 | 7 | 1 |
| RN020 | No | 1 | В | 46 | 63 | 17 | 63 | 0 | 0 | 63 | 0 | 0 | 63 | 0 | 0 | 63 | 0 | 0 | 62 | 1 | 0 |
| RN021 | No | 1 | В | 46 | 62 | 16 | 62 | 0 | 0 | 62 | 0 | 0 | 61 | 1 | 0 | 61 | 1 | 0 | 61 | 1 | 0 |
| RN022 | No | 1 | В | 46 | 59 | 13 | 58 | 1 | 0 | 58 | 1 | 0 | 58 | 1 | 0 | 58 | 1 | 0 | 58 | 1 | 0 |
| RN023 | No | 1 | В | 46 | 58 | 12 | 58 | 0 | 0 | 58 | 0 | 0 | 58 | 0 | 0 | 58 | 0 | 0 | 58 | 0 | 0 |
| RN024 | No | 1 | В | 47 | 56 | 9 | 55 | 1 | 0 | 55 | 1 | 0 | 55 | 1 | 0 | 55 | 1 | 0 | 55 | 1 | 0 |
| RN025 | No | 1 | В | 60 | 60 | 0 | 60 | 0 | 0 | 60 | 0 | 0 | 60 | 0 | 0 | 60 | 0 | 0 | 60 | 0 | 0 |
| RN026 | No | 1 | В | 51 | 56 | 5 | 56 | 0 | 0 | 56 | 0 | 0 | 56 | 0 | 0 | 56 | 0 | 0 | 56 | 0 | 0 |
| RN027 | No | 1 | В | 51 | 56 | 5 | 56 | 0 | 0 | 56 | 0 | 0 | 56 | 0 | 0 | 56 | 0 | 0 | 56 | 0 | 0 |
| RN028 | No | 1 | В | 46 | 55 | 9 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 | 55 | 0 | 0 |
| RN029 | No | 1 | В | 49 | 56 | 7 | 55 | 1 | 0 | 55 | 1 | 0 | 55 | 1 | 0 | 55 | 1 | 0 | 55 | 1 | 0 |

⁼ Impacted receptor = 5 dBA reduction or better = 7 dBA reduction or better

| N | NAC | 12-Foot Barrier | | 11-Foot Barrier | 10-Foot Barrier | 9-Foot Barrier | 8-Foot Barrier |
|-----------|--|---|-----------|-----------------|-----------------|----------------|----------------|
| _ | | | | | | | |
| | | Inputs – Overall | 150 | 160 | 170 | 100 | 75 |
| | | rrier Length (ft.) = arrier Height (ft.) = | 150 12 | 160 11 | 170 | 190 | 25 |
| <u> </u> | | rier Area (sq. ft.) = | 1,800 | 1,760 | 1,700 | 1,710 | 2,00 |
| | Innuts – Cate | gory A, C, D, or E | 1,800 | 1,700 | 1,700 | 1,710 | 2,00 |
| | Ra Ba | arrier Height (ft.) = | n/a | n/a | n/a | n/a | n/ |
| | | rrier Length (ft.) = | n/a | n/a | n/a | n/a | n/ |
| | | Barrier Area (ft.) = | n/a | n/a | n/a | n/a | n, |
| | Right-of-Way Acquisit | | n/a | n/a | n/a | n/a | n, |
| | Safety E | Barrier (linear ft.) = | n/a | n/a | n/a | n/a | n |
| | | outs – Category B | | | | | |
| | | arrier Height (ft.) = | 12 | 11 | 10 | 9 | |
| | | rrier Length (ft.) = | 150 | 160 | 170 | 190 | 25 |
| <u> </u> | | rier Area (sq. ft.) = | 1,800 | 1,760 | 1,700 | 1,710 | 2,00 |
| | Right-of-Way Acquisit | | 0 | 0 | 0 | 0 | |
| | • | Barrier (linear ft.) = | 150 | 160 | 170 | 190 | 25 |
| | | oustic Feasibility | | | | | |
| | Front-Row Receptors with a 5 | t Row Receptors = | 1 | 1 | 1 | | |
| asi | % of Front-Row Receptors Reduced | | 100% | 100% | 100% | 100% | 100 |
| | | istically Feasible = | Yes | Yes | Yes | Yes | Ye |
| <u> </u> | | tion Design Goal | 165 | res | Tes | Tes | 16 |
| | | t Row Receptors = | 1 | 1 | 1 | 1 | |
| | Front Row Receptors with 7 | | 1 | 1 | 1 | 1 | |
| | % of Front Row Reduced | | 100% | 100% | 100% | 100% | 100 |
| | Meets Noise Reduct | | Yes | Yes | Yes | Yes | Y |
| | Cost Effectiveness – Cate | gory A, C, D, or E | | | | | |
| | | Barrier area x 20) = | n/a | n/a | n/a | n/a | n |
| <u>بر</u> | Right-of-Way Acquisi | | n/a | n/a | n/a | n/a | n |
| es | | (linear ft. x 125) = | n/a | n/a | n/a | n/a | n |
| <u> </u> | | otal Barrier Cost = | n/a | n/a | n/a | n/a | n |
| ana — | | st (length x 360) = | n/a | n/a | n/a | n/a | n |
| aso | | Cost Reasonable = less – Category B | n/a | n/a | n/a | n/a | n |
| 8 — | | Barrier area x 20) = | \$36,000 | \$35,200 | \$34,000 | \$34,200 | \$40,00 |
| | Right-of-Way Acquisi | | \$30,000 | \$0 | \$34,000 | \$0 | 340,0 |
| | | (linear ft. x 125) = | \$18,750 | \$20,000 | \$21,250 | \$23,750 | \$31,25 |
| | | otal Barrier Cost = | \$54,750 | \$55,200 | \$55,250 | \$57,950 | \$71,2 |
| | | benefited x 30k) = | \$30,000 | \$30,000 | \$30,000 | \$30,000 | \$30,00 |
| | Benefited (Category B w/ 5 | | 1 | 1 | 1 | 1 | |
| | Cost per Benefited Receptor (Barrier o | cost / benefited) = | \$54,750 | \$55,200 | \$55,250 | \$57,950 | \$71,2 |
| | (| Cost Reasonable = | No | No | No | No | N |
| | le Noise Davieu 14 Familie - | ad Dagganahla? | NI- | No. | N- | N- | |
| | Is Noise Barrier 11 Feasible a | nu keasonable! | No | No | No | No | N |

| | | | NAC | | | | 7-Foot Barrier | | | | | |
|----------|--------------|--------------------------|----------------------|-----------------|---------------|-----------------|------------------|------------------|------------------------|--|--|--|
| Receiver | Front Row | Receptors Represented | Land Use Category | Existing dBA | Future dBA | Increase dBA | W/Barrier dBA | Reduction dBA | Benefited Receptors | | | |
| RN001 | Yes | 1 | В | 46 | 67 | 21 | 61 | 6 | 1 | | | |
| RN020 | No | 1 | В | 46 | 63 | 17 | 61 | 2 | 0 | | | |
| RN021 | No | 1 | В | 46 | 62 | 16 | 59 | 3 | 0 | | | |
| RN022 | No | 1 | В | 46 | 59 | 13 | 56 | 3 | 0 | | | |
| RN023 | No | 1 | В | 46 | 58 | 12 | 57 | 1 | 0 | | | |
| RN024 | No | 1 | В | 47 | 56 | 9 | 55 | 1 | 0 | | | |
| RN025 | No | 1 | В | 60 | 60 | 0 | 60 | 0 | 0 | | | |
| RN026 | No | 1 | В | 51 | 56 | 5 | 56 | 0 | 0 | | | |
| RN027 | No | 1 | В | 51 | 56 | 5 | 56 | 0 | 0 | | | |
| RN028 | No | 1 | В | 46 | 55 | 9 | 55 | 0 | 0 | | | |
| RN029 | No | 1 | В | 49 | 56 | 7 | 55 | 1 | 0 | | | |



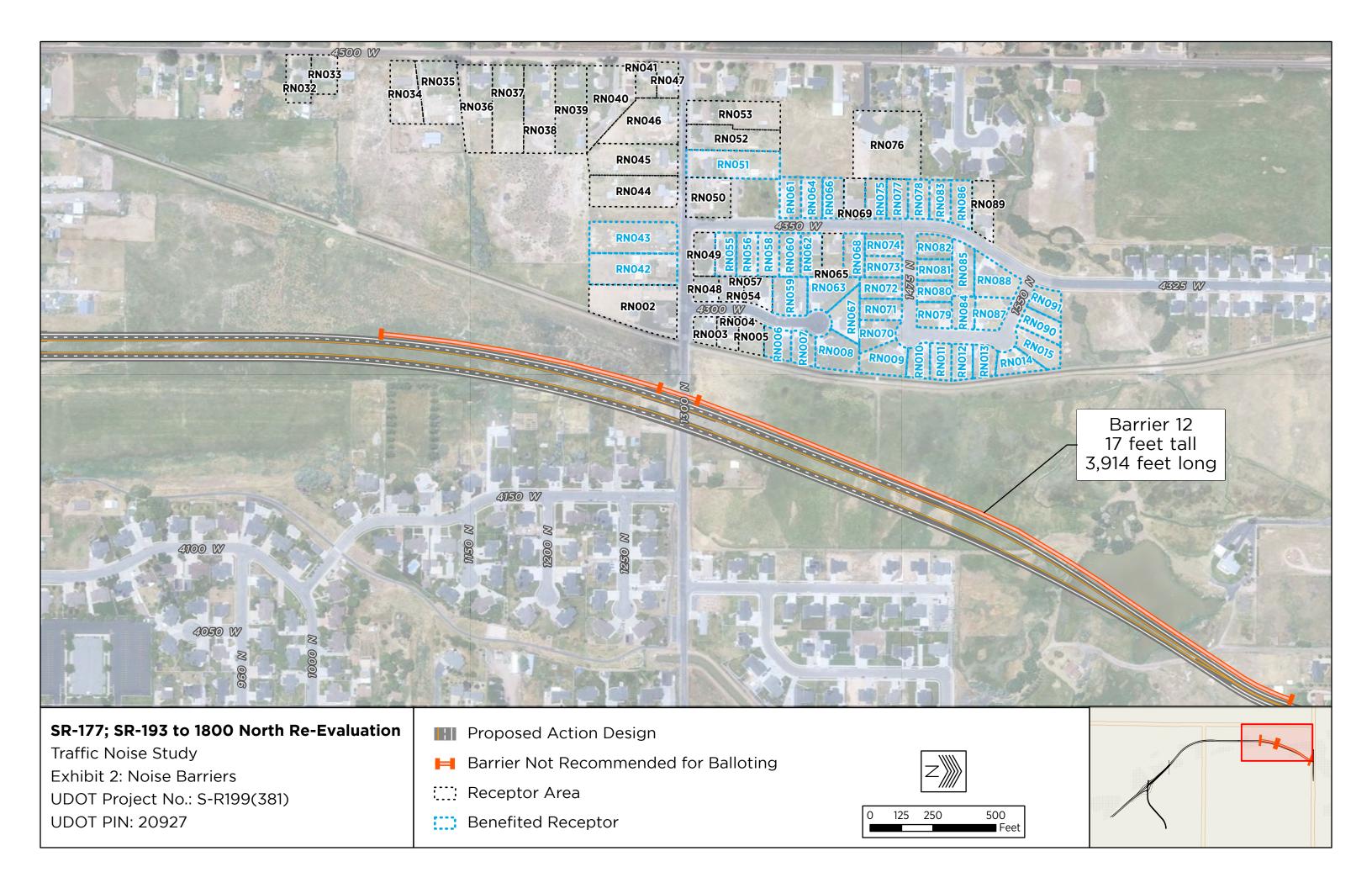
⁼ Impacted receptor = 5 dBA reduction or better = 7 dBA reduction or better

| NAC | 7-Foot Barrier |
|-----|----------------|
|-----|----------------|

| | Inputs – Overall | i |
|-------------------|--|--------|
| | Barrier Length (ft.) = | 541 |
| | Barrier Height (ft.) = | 7 |
| | Barrier Area (sq. ft.) = | 3,787 |
| | Inputs – Category A, C, D, or E | 57. 6. |
| | Barrier Height (ft.) = | n/a |
| | Barrier Length (ft.) = | n/a |
| | Barrier Area (ft.) = | n/a |
| | Right-of-Way Acquisition Area (sq. ft.) = | n/a |
| | Safety Barrier (linear ft.) = | n/a |
| | Inputs – Category B | .,,, |
| | Barrier Height (ft.) = | 7 |
| | Barrier Length (ft.) = | 541 |
| | Barrier Area (sq. ft.) = | 3,787 |
| | Right-of-Way Acquisition Area (sq. ft.) = | . 0 |
| | Safety Barrier (linear ft.) = | 541 |
| | Acoustic Feasibility | |
| <u> <u>:</u></u> | Front Row Receptors = | 1 |
| <u> </u> | Front-Row Receptors with a 5 dBA Reduction = | 1 |
| Feasibility | % of Front-Row Receptors Reduced At Least 5 dBA = | 100% |
| <u>"</u> | Acoustically Feasible = | Yes |
| | Noise Reduction Design Goal | |
| | Front Row Receptors = | 1 |
| | Front Row Receptors with 7 dBA Reduction = | 0 |
| | % of Front Row Reduced At Least 7 dBA = | 0% |
| ľ | Meets Noise Reduction Design Goal = | No |
| | Cost Effectiveness – Category A, C, D, or E | |
| | Barrier Cost (Barrier area x 20) = | n/a |
| ا م | Right-of-Way Acquisition (sq. ft. x 20) = | n/a |
| less | Safety Barrier (linear ft. x 125) = | n/a |
| len | Total Barrier Cost = | n/a |
| lab | Allowable Cost (length x 360) = | n/a |
| l ig | Cost Reasonable = | n/a |
| Reasonableness | Cost Effectiveness – Category B | |
| ~ [| Barrier Cost (Barrier area x 20) = | n/a |
| | Right-of-Way Acquisition (sq. ft. x 20) = | n/a |
| | Safety Barrier (linear ft. x 125) = | n/a |
| | Total Barrier Cost = | n/a |
| | Allowable Cost (benefited x 30k) = | n/a |
| | Benefited (Category B w/ 5 dBA Reduction) = | n/a |
| | Cost per Benefited Receptor (Barrier cost / benefited) = | n/a |
| | Cost Reasonable = | n/a |

Is Noise Barrier 11 Feasible and Reasonable?

No



| | | | NAC | | | | | 17-Foot Barr | ier |
|----------|-------|---------------|----------|----------|--------|----------|-----------|--------------|-----------|
| | Front | Receptors | Land Use | Existing | Future | Increase | W/Barrier | Reduction | Benefited |
| Receiver | Row | Represented | Category | dBA | dBA | dBA | dBA | dBA | Receptors |
| RN002 | Yes | 1 | В | 46 | 65 | 19 | 61 | 4 | 0 |
| RN003 | Yes | 1 | В | 51 | 65 | 14 | 62 | 3 | 0 |
| RN004 | Yes | 1 | В | 46 | 65 | 19 | 61 | 4 | 0 |
| RN005 | Yes | 1 | В | 46 | 64 | 18 | 60 | 4 | 0 |
| RN006 | Yes | 1 | В | 46 | 63 | 17 | 58 | 5 | 1 |
| RN007 | Yes | 1 | В | 46 | 63 | 17 | 57 | 6 | 1 |
| RN008 | Yes | 1 | В | 46 | 60 | 14 | 53 | 7 | 1 |
| RN009 | Yes | 1 | В | 46 | 61 | 15 | 55 | 6 | 1 |
| RN010 | Yes | 1 | В | 46 | 61 | 15 | 54 | 7 | 1 |
| RN011 | Yes | 1 | В | 46 | 60 | 14 | 54 | 6 | 1 |
| RN012 | Yes | 1 | В | 46 | 60 | 14 | 54 | 6 | 1 |
| RN013 | Yes | 1 | В | 46 | 60 | 14 | 53 | 7 | 1 |
| RN014 | Yes | 1 | В | 46 | 59 | 13 | 51 | 8 | 1 |
| RN015 | Yes | 1 | В | 46 | 55 | 9 | 49 | 6 | 1 |
| RN032 | No | <u>'</u> 1 | В | 54 | 57 | 3 | 57 | 0 | 0 |
| RN033 | No | 1 | В | 46 | 56 | 10 | 54 | 2 | 0 |
| RN034 | No | 1 | В | 46 | 56 | 10 | 54 | 2 | 0 |
| RN034 | No | 1 | В | 46 | 56 | 10 | 54 | 2 | 0 |
| | No | 1 | В | 46 | 56 | 10 | 54 | 2 | 0 |
| RN036 | | 1 | В | 46 | 56 | | 54 | 2 | 0 |
| RN037 | No | | В | 48 | 56 | 10 | 54 54 | | 0 |
| RN038 | No | 1 | | | | 8 | | 2 | |
| RN039 | No | 1 | В | 46 | 56 | 10 | 53 | 3 | 0 |
| RN040 | No | 1 | В | 47 | 56 | 9 | 53 | 3 | 0 |
| RN041 | No | 1 | В | 52 | 55 | 3 | 54 | 1 | 0 |
| RN042 | No | 1 | В | 46 | 60 | 14 | 54 | 6 | 1 |
| RN043 | No | 1 | В | 46 | 58 | 12 | 53 | 5 | 1 |
| RN044 | No | 1 | В | 46 | 57 | 11 | 53 | 4 | 0 |
| RN045 | No | 1 | В | 46 | 56 | 10 | 52 | 4 | 0 |
| RN046 | No | 1 | В | 48 | 55 | 7 | 52 | 3 | 0 |
| RN047 | No | 1 | В | 57 | 58 | 1 | 58 | 0 | 0 |
| RN048 | No | 1 | В | 54 | 62 | 8 | 59 | 3 | 0 |
| RN049 | No | 1 | В | 52 | 59 | 7 | 55 | 4 | 0 |
| RN050 | No | 1 | В | 46 | 57 | 11 | 53 | 4 | 0 |
| RN051 | No | 1 | В | 46 | 52 | 6 | 47 | 5 | 1 |
| RN052 | No | 1 | В | 46 | 52 | 6 | 48 | 4 | 0 |
| RN053 | No | 1 | В | 49 | 52 | 3 | 50 | 2 | 0 |
| RN054 | No | 1 | В | 46 | 57 | 11 | 53 | 4 | 0 |
| RN055 | No | 1 | В | 46 | 55 | 9 | 50 | 5 | 1 |
| RN056 | No | 1 | В | 46 | 55 | 9 | 49 | 6 | 1 |
| RN057 | No | 1 | В | 46 | 60 | 14 | 57 | 3 | 0 |
| RN058 | No | 1 | В | 46 | 54 | 8 | 49 | 5 | 1 |
| RN059 | No | 1 | В | 46 | 58 | 12 | 52 | 6 | 1 |
| RN060 | No | 1 | В | 46 | 55 | 9 | 50 | 5 | 1 |
| RN061 | No | 1 | В | 46 | 55 | 9 | 49 | 6 | 1 |
| RN062 | No | 1 | В | 46 | 55 | 9 | 50 | 5 | 1 |
| RN063 | No | 1 | В | 46 | 57 | 11 | 52 | 5 | 1 |
| RN064 | No | 1 | В | 46 | 55 | 9 | 50 | 5 | 1 |
| RN065 | No | 1 | В | 46 | 54 | 8 | 50 | 4 | 0 |
| RN066 | No | 1 | В | 46 | 52 | 6 | 47 | 5 | 1 |

| | | | NAC | | | | 17-Foot Barrier | | | | | |
|----------|--------------|--------------------------|----------------------|-----------------|---------------|-----------------|------------------|------------------|------------------------|--|--|--|
| Receiver | Front Row | Receptors Represented | Land Use Category | Existing dBA | Future dBA | Increase dBA | W/Barrier dBA | Reduction dBA | Benefited Receptors | | | |
| RN067 | No | 1 | В | 46 | 56 | 10 | 50 | 6 | 1 | | | |
| RN068 | No | 1 | В | 46 | 55 | 9 | 50 | 5 | 1 | | | |
| RN069 | No | 1 | В | 46 | 51 | 5 | 47 | 4 | 0 | | | |
| RN070 | No | 1 | В | 46 | 58 | 12 | 52 | 6 | 1 | | | |
| RN071 | No | 1 | В | 46 | 56 | 10 | 50 | 6 | 1 | | | |
| RN072 | No | 1 | В | 46 | 56 | 10 | 50 | 6 | 1 | | | |
| RN073 | No | 1 | В | 46 | 55 | 9 | 49 | 6 | 1 | | | |
| RN074 | No | 1 | В | 46 | 54 | 8 | 48 | 6 | 1 | | | |
| RN075 | No | 1 | В | 46 | 52 | 6 | 47 | 5 | 1 | | | |
| RN076 | No | 1 | В | 46 | 51 | 5 | 47 | 4 | 0 | | | |
| RN077 | No | 1 | В | 46 | 53 | 7 | 47 | 6 | 1 | | | |
| RN078 | No | 1 | В | 46 | 52 | 6 | 47 | 5 | 1 | | | |
| RN079 | No | 1 | В | 46 | 56 | 10 | 49 | 7 | 1 | | | |
| RN080 | No | 1 | В | 46 | 48 | 2 | 42 | 6 | 1 | | | |
| RN081 | No | 1 | В | 46 | 48 | 2 | 42 | 6 | 1 | | | |
| RN082 | No | 1 | В | 46 | 47 | 1 | 42 | 5 | 1 | | | |
| RN083 | No | 1 | В | 46 | 51 | 5 | 46 | 5 | 1 | | | |
| RN084 | No | 1 | В | 46 | 55 | 9 | 50 | 5 | 1 | | | |
| RN085 | No | 1 | В | 46 | 51 | 5 | 45 | 6 | 1 | | | |
| RN086 | No | 1 | В | 46 | 50 | 4 | 45 | 5 | 1 | | | |
| RN087 | No | 1 | В | 46 | 56 | 10 | 51 | 5 | 1 | | | |
| RN088 | No | 1 | В | 46 | 51 | 5 | 45 | 6 | 1 | | | |
| RN089 | No | 1 | В | 46 | 49 | 3 | 46 | 3 | 0 | | | |
| RN090 | No | 1 | В | 46 | 54 | 8 | 48 | 6 | 1 | | | |
| RN091 | No | 1 | В | 46 | 52 | 6 | 47 | 5 | 1 | | | |



⁼ Impacted receptor = 5 dBA reduction or better = 7 dBA reduction or better

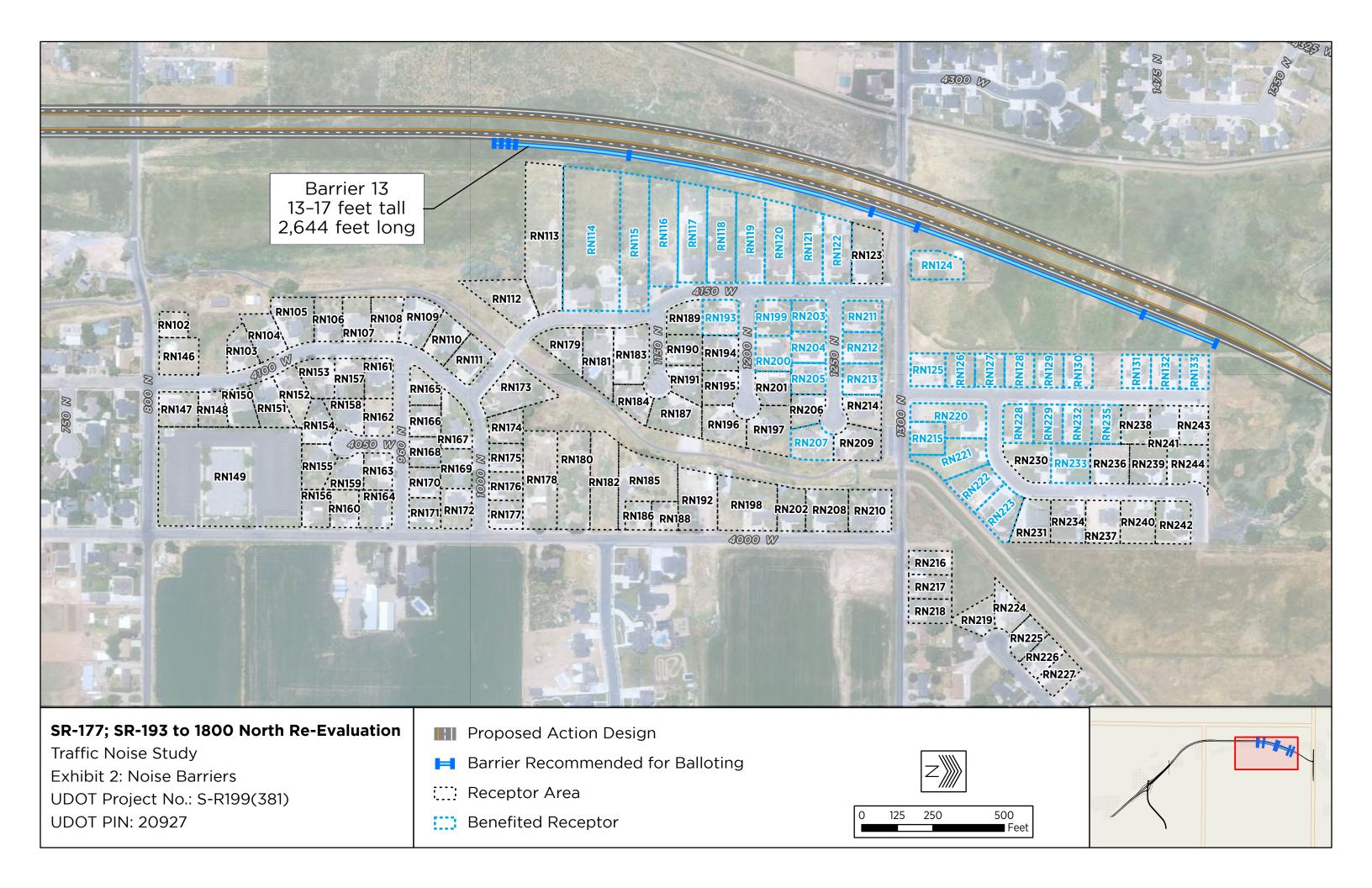
| NAC 17-Foot Barrier |
|---------------------|
|---------------------|

| | Inputs – Overall | i |
|----------------|--|---------|
| | Barrier Length (ft.) = | 3,914 |
| | *Barrier Height (ft.) = | 10 & 17 |
| | Barrier Area (sq. ft.) = | 65,390 |
| | Inputs – Category A, C, D, or E | 03/070 |
| | Barrier Height (ft.) = | n/a |
| | Barrier Length (ft.) = | n/a |
| | Barrier Area (ft.) = | n/a |
| | Right-of-Way Acquisition Area (sq. ft.) = | n/a |
| | Safety Barrier (linear ft.) = | n/a |
| | Inputs – Category B | |
| | Barrier Height (ft.) = | 10 & 17 |
| | Barrier Length (ft.) = | 3,914 |
| | Barrier Area (sq. ft.) = | 65,390 |
| | Right-of-Way Acquisition Area (sq. ft.) = | 0 |
| | Safety Barrier (linear ft.) = | 0 |
| | Acoustic Feasibility | |
| Feasibility | Front Row Receptors = | 14 |
| igi | Front-Row Receptors with a 5 dBA Reduction = | 10 |
| eas | % of Front-Row Receptors Reduced At Least 5 dBA = | 71% |
| ш. | Acoustically Feasible = | Yes |
| | Noise Reduction Design Goal | |
| | Front Row Receptors = | 14 |
| | Front Row Receptors with 7 dBA Reduction = | 4 |
| | % of Front Row Reduced At Least 7 dBA = | 29% |
| | Meets Noise Reduction Design Goal = | No |
| | Cost Effectiveness – Category A, C, D, or E | |
| | Barrier Cost (Barrier area x 20) = | n/a |
| s | Right-of-Way Acquisition (sq. ft. x 20) = | n/a |
| səu | Safety Barrier (linear ft. x 125) = | n/a |
| oler | Total Barrier Cost = | n/a |
| nab | Allowable Cost (length x 360) = | n/a |
| sor | Cost Reasonable = | n/a |
| Reasonableness | Cost Effectiveness – Category B | |
| | Barrier Cost (Barrier area x 20) = | n/a |
| | Right-of-Way Acquisition (sq. ft. x 20) = | n/a |
| | Safety Barrier (linear ft. x 125) = | n/a |
| | Total Barrier Cost = | n/a |
| | Allowable Cost (benefited x 30k) = | n/a |
| | Benefited (Category B w/ 5 dBA Reduction) = | n/a |
| | Cost per Benefited Receptor (Barrier cost / benefited) = | n/a |
| | Cost Reasonable = | n/a |

Is Noise Barrier 12 Feasible and Reasonable?

No

*Overall barrier heights include a uniform barrier at the height indicated and a 10-foot-tall and 164-foot-long segment on the bridge over 1300 North.



| | | | NAC | | | | | 17-Foot Barr | rier | 17-F | oot Optimized | d Barrier | | 16-Foot Barı | rier | | 15-Foot Bar | rier | | 14-Foot Barı | rier | | 13-Foot Bar | rier | | 12-Foot Bar | rier |
|----------------|------------|-------------|----------|----------|----------|----------|-----------|--------------|-----------|-----------|---------------|-----------|-----------|--------------|-----------|-----------|-------------|-----------|-----------|--------------|-----------|-----------|-------------|-----------|-----------|-------------|-----------|
| | Front | Receptors | Land Use | Existing | Future | Increase | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited |
| Receiver | Row | Represented | Category | dBA | dBA | dBA | dBA | dBA | Receptors | dBA | dBA | Receptors | dBA | dBA | Receptors | dBA | dBA | Receptors | dBA | dBA | Receptors | dBA | dBA | Receptors | dBA | dBA | Receptors |
| RN102 | No | 1 | B B | 46 46 | 63 60 | 17 | 62 60 | 0 | 0 | 62 60 | 0 | 0 | 62 60 | 0 | 0 | 62 60 | 0 | 0 | 62 60 | 0 | 0 | 62 60 | 0 | 0 | 62 60 | 0 | 0 |
| RN103 RN104 | No No | 1 | В | 46 | 59 | 13 | 59 | 0 | 0 | 59 | 0 | 0 | 59 | 0 | 0 | 59 | 0 | 0 | 59 | 0 | 0 | 59 | 0 | 0 | 59 | 0 | 0 |
| RN105 | No | 1 | В | 46 | 61 | 15 | 60 | 1 | 0 | 60 | 1 | 0 | 60 | 1 | 0 | 60 | 1 | 0 | 60 | 1 | 0 | 60 | 1 | 0 | 60 | 1 | 0 |
| RN106 | No | 1 | В | 46 | 61 | 15 | 60 | 1 | 0 | 60 | 1 | 0 | 60 | 1 | 0 | 60 | 1 | 0 | 60 | 1 | 0 | 60 | 1 | 0 | 60 | 1 | 0 |
| RN107 | No No | 1 | B B | 46 46 | 60 60 | 14 | 59 59 | 1 | 0 | 59 59 | 1 | 0 | 59 59 | 1 | 0 | 59 59 | 1 | 0 | 59 58 | 2 | 0 | 59 59 | 1 1 | 0 | 59 59 | 1 | 0 |
| RN108 RN109 | No | 1 | В | 46 | 58 | 12 | 57 | 1 | 0 | 57 | 1 | 0 | 57 | 1 | 0 | 56 | 2 | 0 | 56 | 2 | 0 | 56 | 2 | 0 | 56 | 2 | 0 |
| RN110 | No | 1 | В | 46 | 58 | 12 | 56 | 2 | 0 | 57 | 1 | 0 | 56 | 2 | 0 | 56 | 2 | 0 | 55 | 3 | 0 | 55 | 3 | 0 | 55 | 3 | 0 |
| RN111 | No | 1 | В | 46 | 57 | 11 | 55 | 2 | 0 | 56 | 1 | 0 | 55 | 2 | 0 | 55 | 2 | 0 | 54 | 3 | 0 | 54 | 3 | 0 | 54 | 3 | 0 |
| RN112 | No | 1 | В | 46 46 | 60 63 | 14 | 57 58 | 3 5 | 0 | 58 59 | 2 4 | 0 | 57 58 | 3 5 | 0 | 57 58 | 3 5 | 0 | 57 58 | 3 5 | 0 | 57 59 | 3 4 | 0 | 57 59 | 3 4 | 0 |
| RN113 RN114 | Yes Yes | 1 | В | 46 | 62 | 16 | 57 | 5 | 1 | 57 | 5 | 1 | 57 | 5 | 1 | 57 | 5 | 1 | 57 | 5 | 1 | 58 | 4 | 0 | 58 | 4 | 0 |
| RN115 | Yes | 1 | В | 46 | 62 | 16 | 56 | 6 | 1 | 57 | 5 | 1 | 57 | 5 | 1 | 57 | 5 | 1 | 57 | 5 | 1 | 58 | 4 | 0 | 58 | 4 | 0 |
| RN116 | Yes | 1 | В | 46 | 64 | 18 | 57 | 7 | 1 | 57 | 7 | 1 | 57 | 7 | 1 | 58 | 6 | 1 | 58 | 6 | 1 | 59 | 5 | 1 | 59 | 5 | 1 |
| RN117 | Yes | 1 | В | 46 | 67 | 21 | 59 50 | 8 | 1 | 59 50 | 8 | 1 | 59 | 8 | 1 | 59 | 8 | 1 | 59 | 8 | 1 | 60 | 7 | 1 | 61 | 6 | 1 |
| RN118 RN119 | Yes Yes | 1 | B B | 46 46 | 68 | 21 | 59 60 | 8 | 1 | 59 60 | 8 | 1 1 | 59 60 | 8 | 1 | 60 60 | 7 8 | 1 | 60 60 | 7 8 | 1 | 60 61 | 7 | 1 | 61 61 | 6 7 | |
| RN120 | Yes | 1 | В | 46 | 67 | 21 | 61 | 6 | 1 | 61 | 6 | 1 | 61 | 6 | 1 | 61 | 6 | 1 | 61 | 6 | 1 | 61 | 6 | 1 | 62 | 5 | 1 |
| RN121 | Yes | 1 | В | 46 | 66 | 20 | 59 | 7 | 1 | 59 | 7 | 1 | 59 | 7 | 1 | 59 | 7 | 1 | 59 | 7 | 1 | 59 | 7 | 1 | 60 | 6 | 1 |
| RN122 | Yes | 1 | В | 46 | 68 | 22 | 63 | 5 | 1 | 63 | 5 | 1 | 63 | 5 | 1 | 63 | 5 | 1 | 63 | 5 | 1 | 63 | 5 | 1 | 63 | 5 | 1 |
| RN123 RN124 | Yes Yes | 1 | B B | 48 46 | 70 68 | 22 | 66 58 | 10 | 0 1 | 66 58 | 10 | <u> </u> | 66 58 | 10 | 1 | 66 58 | 10 | 1 | 66 59 | 9 | 0 | 66 59 | 9 | 1 | 66 59 | 9 | 0 |
| RN124 RN125 | No | 1 | В | 46 | 62 | 16 | 55 | 7 | 1 | 55 | 7 | 1 | 55 | 7 | 1 | 55 | 7 | 1 | 56 | 6 | 1 | 56 | 6 | 1 | 56 | 6 | 1 |
| RN126 | No | 1 | В | 46 | 63 | 17 | 56 | 7 | 1 | 56 | 7 | 1 | 56 | 7 | 1 | 56 | 7 | 1 | 56 | 7 | 1 | 56 | 7 | 1 | 57 | 6 | 1 |
| RN127 | Yes | 1 | В | 46 | 64 | 18 | 55 | 9 | 1 | 55 | 9 | 1 | 56 | 8 | 1 | 56 | 8 | 1 | 56 | 8 | 1 | 56 | 8 | 1 | 57 | 7 | 1 |
| RN128 | Yes | 1 | В | 46 | 65 | 19 | 56 | 9 | 1 | 57 57 | 8 | 1 | 57 | 8 | 1 | 57 | 8 | 1 | 57 | 8 | 1 | 57 | 8 | 1 | 58 | 7 | 1 |
| RN129 RN130 | Yes Yes | 1 | B B | 46 46 | 66 66 | 20 | 57 58 | 9 8 | 1 | 57 58 | 9 8 | 1 | 57 58 | 9 8 | 1 | 58 58 | 8 | 1 | 58 58 | 8 | 1 | 58 59 | 7 | 1 | 59 59 | 7 | 1 |
| RN131 | Yes | 1 | В | 46 | 69 | 23 | 60 | 9 | 1 | 60 | 9 | 1 | 60 | 9 | 1 | 60 | 9 | 1 | 61 | 8 | 1 | 61 | 8 | 1 | 61 | 8 | 1 |
| RN132 | Yes | 1 | В | 46 | 69 | 23 | 61 | 8 | 1 | 61 | 8 | 1 | 61 | 8 | 1 | 61 | 8 | 1 | 62 | 7 | 1 | 62 | 7 | 1 | 62 | 7 | 1 |
| RN133 | Yes | 1 | В | 46 | 70 | 24 | 65 | 5 | 1 | 65 | 5 | 1 | 65 | 5 | 1 | 65 | 5 | 1 | 65 | 5 | 1 | 65 | 5 | 1 | 65 | 5 | 1 |
| RN146 RN147 | No No | 1 | B B | 46 48 | 55 55 | 9 7 | 55 55 | 0 | 0 | 55 55 | 0 | 0 | 55 55 | 0 | 0 | 55 55 | 0 | 0 | 55 55 | 0 | 0 | 55 55 | 0 | 0 | 55 55 | 0 | 0 |
| RN147 RN148 | No | 1 | В | 46 | 54 | 8 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 |
| RN149 | No | 1 | D | 21 | 25 | 4 | 25 | 0 | 0 | 25 | 0 | 0 | 25 | 0 | 0 | 25 | 0 | 0 | 25 | 0 | 0 | 25 | 0 | 0 | 25 | 0 | 0 |
| RN150 | No | 1 | В | 46 | 54 | 8 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 | 54 | 0 | 0 |
| RN151 | No | 1 | В | 46 | 51 | 5 | 51 | 0 | 0 | 51 52 | 0 | 0 | 51 | 0 | 0 | 51 | 0 | 0 | 51 | 0 | 0 | 51 | 0 | 0 | 51 | 0 | 0 |
| RN152 RN153 | No No | 1 | B B | 46 46 | 53 52 | 7 6 | 53 52 | 0 | 0 | 53 52 | 0 | 0 | 53 52 | 0 | 0 | 53 52 | 0 | 0 | 53 51 | 1 | 0 | 53 52 | 0 | 0 | 53 52 | 0 | 0 |
| RN154 | No | 1 | В | 46 | 47 | 1 | 47 | 0 | 0 | 47 | 0 | 0 | 47 | 0 | 0 | 47 | 0 | 0 | 47 | 0 | 0 | 47 | 0 | 0 | 47 | 0 | 0 |
| RN155 | No | 1 | В | 46 | 46 | 0 | 46 | 0 | 0 | 46 | 0 | 0 | 46 | 0 | 0 | 46 | 0 | 0 | 46 | 0 | 0 | 46 | 0 | 0 | 46 | 0 | 0 |
| RN156 | No | 1 | В | 46 | 46 | 0 | 46 | 0 | 0 | 46 | 0 | 0 | 46 | 0 | 0 | 46 | 0 | 0 | 46 | 0 | 0 | 46 | 0 | 0 | 46 | 0 | 0 |
| RN157 RN158 | No | 1 | B B | 46 46 | 51 47 | 5 1 | 51 47 | 0 | 0 | 51 47 | 0 | 0 | 51 47 | 0 | 0 | 51 47 | 0 | 0 | 51 47 | 0 | 0 | 51 47 | 0 | 0 | 51 47 | 0 | 0 |
| RN158 | No No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 | 47 | 1 | 0 | 47 | 1 | 0 | 47 | 1 | 0 | 47 | 1 | 0 | 47 | 1 | 0 | 47 | 1 | 0 |
| RN160 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 | 44 | 2 | 0 | 44 | 2 | 0 | 44 | 2 | 0 | 44 | 2 | 0 | 44 | 2 | 0 | 44 | 2 | 0 |
| RN161 | No | 1 | В | 46 | 51 | 5 | 50 | 1 | 0 | 51 | 0 | 0 | 50 | 1 | 0 | 50 | 1 | 0 | 50 | 1 | 0 | 50 | 1 | 0 | 50 | 1 | 0 |
| RN162 | No | 1 | В | 46 | 49 | 3 | 47 | 1 | 0 | 47 | 2 | 0 | 47 | 2 | 0 | 47 | 2 | 0 | 47 | 2 | 0 | 48 | 1 | 0 | 48 | 1 | 0 |
| RN163 RN164 | No No | 1 | B B | 46 48 | 46 49 | 0 1 | 45 49 | 0 | 0 | 45 49 | 0 | 0 | 45 49 | 0 | 0 | 45 49 | 0 | 0 | 45 49 | 0 | 0 | 45 49 | 0 | 0 | 45 49 | 0 | 0 |
| RN165 | No | 1 | В | 46 | 47 | 1 | 45 | 2 | 0 | 45 | 2 | 0 | 45 | 2 | 0 | 45 | 2 | 0 | 45 | 2 | 0 | 45 | 2 | 0 | 46 | 1 | 0 |
| RN166 | No | 1 | В | 46 | 48 | 2 | 44 | 4 | 0 | 45 | 3 | 0 | 44 | 4 | 0 | 44 | 4 | 0 | 45 | 3 | 0 | 45 | 3 | 0 | 46 | 2 | 0 |
| RN167 | No | 1 | В | 46 | 47 | 1 | 45 | 2 | 0 | 45 | 2 | 0 | 45 | 2 | 0 | 45 | 2 | 0 | 44 | 3 | 0 | 44 | 3 | 0 | 45 | 2 | 0 |
| RN168 RN169 | No No | 1 | B B | 46 46 | 46 46 | 0 | 43 44 | 3 2 | 0 | 43 44 | 3 2 | 0 | 43 44 | 2 | 0 | 43 44 | 3 | 0 | 44 | 2 | 0 | 44 44 | 2 2 | 0 | 44 44 | 2 | 0 |
| RN170 | No | 1 | В | 46 | 46 | 0 | 45 | 1 | 0 | 45 | 1 | 0 | 45 | 1 | 0 | 45 | 1 | 0 | 45 | 1 | 0 | 44 | 1 | 0 | 45 | 1 | 0 |
| RN171 | No | 1 | В | 49 | 50 | 1 | 50 | 0 | 0 | 50 | 0 | 0 | 50 | 0 | 0 | 50 | 0 | 0 | 50 | 0 | 0 | 50 | 0 | 0 | 50 | 0 | 0 |
| RN172 | No | 1 | В | 52 | 53 | 1 | 53 | 0 | 0 | 53 | 0 | 0 | 53 | 0 | 0 | 53 | 0 | 0 | 53 | 0 | 0 | 53 | 0 | 0 | 53 | 0 | 0 |
| RN173 | No | 1 | В | 46 | 51 | 5 | 48 | 3 | 0 | 48 | 3 | 0 | 48 | 3 | 0 | 48 | 3 | 0 | 48 | 3 | 0 | 49 | 2 | 0 | 49 | 2 | 0 |
| RN174 RN175 | No No | 1 | B B | 46 46 | 49 47 | 3 1 | 47 45 | 2 | 0 | 47 45 | 2 | 0 | 47 45 | 2 | 0 | 47 45 | 2 | 0 | 47 45 | 2 | 0 | 47 46 | 1 | 0 | 48 46 | 1 | 0 |
| RN176 | No | 1 | В | 46 | 47 | 1 | 45 | 2 | 0 | 45 | 2 | 0 | 45 | 2 | 0 | 45 | 2 | 0 | 46 | 1 | 0 | 46 | 1 | 0 | 46 | 1 | 0 |
| RN177 | No | 1 | В | 46 | 47 | 1 | 46 | 1 | 0 | 46 | 1 | 0 | 47 | 0 | 0 | 47 | 0 | 0 | 46 | 1 | 0 | 47 | 0 | 0 | 47 | 0 | 0 |
| RN178 | No | 1 | В | 46 | 47 | 1 | 45 | 2 | 0 | 45 | 2 | 0 | 45 | 2 | 0 | 46 | 1 | 0 | 46 | 1 | 0 | 46 | 1 | 0 | 46 | 1 | 0 |
| RN179 | No | 1 | В | 46 | 56 | 10 | 53 | 3 | 0 | 53 | 3 | 0 | 53 | 3 | 0 | 53 | 3 | 0 | 53 | 3 | 0 | 53 | 3 | 0 | 53 | 3 | 0 |

| | | | NAC | | | | | 17-Foot Bar | rier | 17-Fo | ot Optimize | d Barrier | | 16-Foot Ba | rrier | | 15-Foot Bar | rier | | 14-Foot Barı | rier | | 13-Foot Bar | rier | | 12-Foot Barr | rier |
|------------------|----------|--------------|----------|----------|---|----------|-----------|-------------|-----------|-----------|---------------|-----------|-----------|------------|---|-----------|-------------|-----------|-----------|--------------|-----------|-----------|-------------|-----------|-----------|--------------|-----------|
| | Front | Receptors | Land Use | Existing | Future | Increase | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited | W/Barrier | Reduction | Benefited |
| Receiver | Row | Represented | Category | dBA | dBA | dBA | dBA | dBA | Receptors | dBA | dBA | Receptors | dBA | dBA | Receptors | dBA | dBA | Receptors | dBA | dBA | Receptors | dBA | dBA | Receptors | dBA | dBA | Receptors |
| RN180 | No | 1 | В | 47 | 50 | 3 | 49 | 1 | 0 | 49 | 1 | 0 | 49 | 1 | 0 | 49 | 1 | 0 | 49 | 1 | 0 | 49 | 1 | 0 | 49 | 1 | 0 |
| RN181 RN182 | No No | 1 | B B | 46 46 | 55 50 | 9 | 51 49 | 1 | 0 | 52 49 | <u>3</u> | 0 | 51 49 | 1 | 0 | 52 49 | 1 | 0 | 52 49 | 1 | 0 | 52 49 | 1 | 0 | 53 49 | 1 | 0 |
| RN183 | No | 1 | В | 46 | 54 | 8 | 50 | 4 | 0 | 50 | 4 | 0 | 50 | 4 | 0 | 51 | 3 | 0 | 51 | 3 | 0 | 51 | 3 | 0 | 51 | 3 | 0 |
| RN184 | No | 1 | В | 46 | 50 | 4 | 47 | 3 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 49 | 1 | 0 | 49 | 1 | 0 |
| RN185 | No | 1 | В | 46 | 49 | 3 | 47 | 2 | 0 | 47 | 2 | 0 | 47 | 2 | 0 | 47 | 2 | 0 | 47 | 2 | 0 | 48 | 1 | 0 | 48 | 1 | 0 |
| RN186 | No | 1 | B B | 46 46 | 48 50 | 2 | 47 47 | 3 | 0 | 47 47 | <u>1</u> 3 | 0 | 47 47 | 3 | 0 | 47 47 | 3 | 0 | 47 48 | 1 | 0 | 47 48 | 1 | 0 | 47 48 | 1 | 0 |
| RN187 RN188 | No No | 1 | В | 46 | 47 | 1 | 46 | 1 | 0 | 46 | 1 | 0 | 46 | 1 | 0 | 46 | 1 | 0 | 46 | 1 | 0 | 46 | 1 | 0 | 47 | 0 | 0 |
| RN189 | No | 1 | В | 46 | 56 | 10 | 52 | 4 | 0 | 52 | 4 | 0 | 53 | 3 | 0 | 53 | 3 | 0 | 53 | 3 | 0 | 54 | 2 | 0 | 54 | 2 | 0 |
| RN190 | No | 1 | В | 46 | 49 | 3 | 46 | 3 | 0 | 46 | 3 | 0 | 46 | 3 | 0 | 47 | 2 | 0 | 47 | 2 | 0 | 48 | 1 | 0 | 48 | 1 | 0 |
| RN191 | No | 1 | В | 46 | 48 | 2 | 45 | 3 | 0 | 45 | 3 | 0 | 45 | 3 | 0 | 45 | 3 | 0 | 46 | 2 | 0 | 46 | 2 | 0 | 46 | 2 | 0 |
| RN192 RN193 | No No | 1 | B B | 46 46 | 50 54 | 8 | 49 47 | 7 | 1 | 49 48 | 1 6 | 1 | 49 47 | 7 | 0 | 49 48 | 6 | 1 | 49 48 | 6 | 1 | 49 49 | 5 | 1 | 49 49 | 1 5 | 0 |
| RN194 | No | 1 | В | 46 | 47 | 1 | 45 | 2 | 0 | 46 | 1 | 0 | 45 | 2 | 0 | 46 | 1 | 0 | 46 | 1 | 0 | 46 | 1 | 0 | 47 | 0 | 0 |
| RN195 | No | 1 | В | 46 | 47 | 1 | 43 | 4 | 0 | 44 | 3 | 0 | 44 | 3 | 0 | 44 | 3 | 0 | 45 | 2 | 0 | 45 | 2 | 0 | 45 | 2 | 0 |
| RN196 | No | 1 | В | 46 | 51 | 5 | 49 | 2 | 0 | 49 | 2 | 0 | 49 | 2 | 0 | 49 | 2 | 0 | 49 | 2 | 0 | 50 | 1 | 0 | 49 | 2 | 0 |
| RN197 RN198 | No No | 1 1 | B B | 46 46 | 50 49 | 3 | 46 47 | 2 | 0 | 46 47 | 2 | 0 | 46 47 | 2 | 0 | 47 47 | 3 2 | 0 | 47 47 | 2 | 0 | 47 48 | 3 | 0 | 48 48 | 1 | 0 |
| RN 198 RN 199 | No | 1 | В | 46 | 58 | 12 | 52 | 6 | 1 | 52 | 6 | 1 | 52 | 6 | 1 | 52 | 6 | 1 | 53 | 5 | 1 | 53 | 5 | 1 | 53 | 5 | 1 |
| RN200 | No | 1 | В | 46 | 52 | 6 | 47 | 5 | 1 | 47 | 5 | 1 | 47 | 5 | 1 | 47 | 5 | 1 | 48 | 4 | 0 | 48 | 4 | 0 | 48 | 4 | 0 |
| RN201 | No | 1 | В | 46 | 49 | 3 | 45 | 4 | 0 | 45 | 4 | 0 | 45 | 4 | 0 | 46 | 3 | 0 | 46 | 3 | 0 | 46 | 3 | 0 | 47 | 2 | 0 |
| RN202 RN203 | No No | 1 | B B | 46 46 | 49 58 | 3 | 46 52 | 3 6 | 1 | 46 52 | 3 6 | 0 1 | 47 52 | 6 | 0 | 47 52 | 6 | 0 | 47 53 | 5 | 0 | 47 53 | 5 | 1 | 48 53 | 1 5 | 0 |
| RN203 | No | 1 | В | 46 | 52 | 6 | 46 | 6 | 1 | 46 | 6 | 1 | 46 | 6 | 1 | 47 | 5 | 1 | 47 | 5 | 1 | 48 | 4 | 0 | 48 | 4 | 0 |
| RN205 | No | 1 | В | 46 | 50 | 4 | 45 | 5 | 1 | 45 | 5 | 1 | 46 | 4 | 0 | 46 | 4 | 0 | 46 | 4 | 0 | 47 | 3 | 0 | 47 | 3 | 0 |
| RN206 | No | 1 | В | 46 | 48 | 2 | 45 | 3 | 0 | 45 | 3 | 0 | 45 | 3 | 0 | 45 | 3 | 0 | 45 | 3 | 0 | 46 | 2 | 0 | 46 | 2 | 0 |
| RN207 | No | 1 | В | 46 | 52 | 6 | 48 | 5 | 1 | 48 | 5 | 1 | 47 | 5 | 1 | 48 | 4 | 0 | 48 | 4 | 0 | 48 | 4 | 0 | 48 | 4 | 0 |
| RN208 RN209 | No No | 1 | B B | 46 46 | 51 51 | 5 | 47 47 | 4 | 0 | 47 47 | 4 | 0 | 47 47 | 4 | 0 | 47 47 | 4 | 0 | 47 47 | 4 | 0 | 47 48 | 3 | 0 | 48 48 | 3 | 0 |
| RN210 | No | 1 | В | 46 | 52 | 6 | 48 | 4 | 0 | 48 | 4 | 0 | 48 | 4 | 0 | 49 | 3 | 0 | 49 | 3 | 0 | 49 | 3 | 0 | 49 | 3 | 0 |
| RN211 | No | 1 | В | 51 | 64 | 13 | 59 | 5 | 1 | 59 | 5 | 1 | 59 | 5 | 1 | 59 | 5 | 1 | 59 | 5 | 1 | 59 | 5 | 1 | 59 | 5 | 1 |
| RN212 RN213 | No No | 1 | B B | 51 51 | 63 61 | 12 | 58 56 | 5 | 1 | 58 56 | 5 | 1 | 58 56 | 5 | 1 | 58 56 | 5 | 1 | 58 56 | 5 | 1 | 58 57 | 5 | 0 | 58 57 | 5 4 | 0 |
| RN213 | No | 1 | В | 51 | 59 | 8 | 55 | 4 | 0 | 55 | 4 | 0 | 55 | 4 | 0 | 55 | 4 | 0 | 56 | 3 | 0 | 56 | 3 | 0 | 56 | 3 | 0 |
| RN215 | No | 1 | В | 46 | 56 | 10 | 50 | 6 | 1 | 50 | 6 | 1 | 51 | 5 | 1 | 51 | 5 | 1 | 51 | 5 | 1 | 51 | 5 | 1 | 51 | 5 | 1 |
| RN216 | No | 1 | В | 46 | 50 | 4 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 |
| RN217 RN218 | No No | 1 | B B | 46 46 | 48 46 | 0 | 46 44 | 2 | 0 | 46 44 | 2 | 0 | 46 44 | 2 | 0 | 46 44 | 2 | 0 | 47 44 | 2 | 0 | 47 44 | 2 | 0 | 47 45 | 1 | 0 |
| RN219 | No | 1 | В | 46 | 50 | 4 | 46 | 4 | 0 | 46 | 4 | 0 | 46 | 4 | 0 | 46 | 4 | 0 | 47 | 3 | 0 | 47 | 3 | 0 | 47 | 3 | 0 |
| RN220 | No | 1 | В | 46 | 57 | 11 | 51 | 6 | 1 | 51 | 6 | 1 | 51 | 6 | 1 | 51 | 6 | 1 | 51 | 6 | 1 | 52 | 5 | 1 | 52 | 5 | 1 |
| RN221 | No | 1 | В | 46 | 54 | 8 | 49 | 5 | 1 | 49 | 5 | 1 | 49 | 5 | 1 | 49 | 5 | 1 | 49 | 5 | 1 | 50 | 4 | 0 | 50 | 4 | 0 |
| RN222 RN223 | No No | 1 | В | 46 46 | 56 57 | 10 | 51 50 | 7 | 1 | 51 50 | 7 | 1 | 51 51 | 6 | 1 1 | 51 51 | 6 | 1 | 51 51 | 6 | 1 | 52 51 | 6 | 1 | 52 51 | 6 | 1 |
| RN224 | No | 1 | В | 46 | 49 | 3 | 47 | 2 | 0 | 47 | 2 | 0 | 47 | 2 | 0 | 47 | 2 | 0 | 48 | 1 | 0 | 48 | 1 | 0 | 48 | 1 | 0 |
| RN225 | No | 1 | В | 46 | 50 | 4 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 |
| RN226 | No | 1 | В | 46 | 50 | 4 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 | 48 | 2 | 0 |
| RN227 RN228 | No No | 1 1 | B B | 46 46 | 49 59 | 3 13 | 48 53 | 6 | 1 | 48 53 | 1 6 | 0 1 | 48 53 | 1 6 | 1 | 48 53 | 6 | 1 | 48 53 | 6 | 0 1 | 48 53 | 6 | 1 | 48 54 | 1 5 | 1 |
| RN228 RN229 | No | 1 | В | 46 | 60 | 14 | 53 | 7 | 1 | 53 | 7 | 1 | 54 | 6 | 1 | 54 | 6 | 1 | 54 | 6 | 1 | 54 | 6 | 1 | 55 | 5 | 1 |
| RN230 | No | 1 | В | 46 | 53 | 7 | 49 | 4 | 0 | 49 | 4 | 0 | 49 | 4 | 0 | 49 | 4 | 0 | 50 | 3 | 0 | 50 | 3 | 0 | 50 | 3 | 0 |
| RN231 | No | 1 | В | 46 | 54 | 8 | 51 | 3 | 0 | 51 | 3 | 0 | 52 | 2 | 0 | 52 | 2 | 0 | 52 | 2 | 0 | 52 | 2 | 0 | 53 | 1 | 0 |
| RN232 RN233 | No No | 1 1 | B B | 46 46 | 60 55 | 14 9 | 54 50 | 6 5 | 1 | 54 50 | <u>6</u> 5 | 1 | 55 50 | 5 | 1 1 | 55 50 | 5 | 1 | 55 51 | 5 4 | 0 | 55 51 | 5 4 | 0 | 56 51 | 4 | 0 |
| RN233 RN234 | No No | 1 | В | 46 | 54 | 8 | 51 | 3 | 0 | 51 | 3 | 0 | 51 | 3 | 0 | 51 | 3 | 0 | 51 | 3 | 0 | 51 | 3 | 0 | 52 | 2 | 0 |
| RN235 | No | 1 | В | 46 | 61 | 15 | 56 | 5 | 1 | 56 | 5 | 1 | 57 | 4 | 0 | 57 | 4 | 0 | 57 | 4 | 0 | 57 | 4 | 0 | 57 | 4 | 0 |
| RN236 | No | 1 | В | 46 | 56 | 10 | 52 | 4 | 0 | 52 | 4 | 0 | 52 | 4 | 0 | 52 | 4 | 0 | 52 | 4 | 0 | 53 | 3 | 0 | 53 | 3 | 0 |
| RN237 RN238 | No No | 1 1 | B B | 46 46 | 54 62 | 8 16 | 51 58 | 3 4 | 0 | 51 58 | 3 4 | 0 | 51 58 | 3 4 | 0 | 52 58 | 4 | 0 | 52 58 | 4 | 0 | 52 58 | 2 4 | 0 | 52 58 | 2 4 | 0 |
| RN238 RN239 | No | 1 | В | 46 | 56 | 10 | 58 | 3 | 0 | 53 | 3 | 0 | 58 | 2 | 0 | 58 | 2 | 0 | 58 | 2 | 0 | 58 | 2 | 0 | 58 | 2 | 0 |
| RN240 | No | 1 | В | 46 | 55 | 9 | 54 | 1 | 0 | 54 | 1 | 0 | 54 | 1 | 0 | 54 | 1 | 0 | 54 | 1 | 0 | 54 | 1 | 0 | 54 | 1 | 0 |
| RN241 | No | 1 | В | 46 | 62 | 16 | 59 | 3 | 0 | 59 | 3 | 0 | 59 | 3 | 0 | 59 | 3 | 0 | 59 | 3 | 0 | 59 | 3 | 0 | 59 | 3 | 0 |
| RN242 | No | 1 | B B | 46 | 57 64 | 11 | 57 63 | 0 | 0 | 57 63 | 0 1 | 0 | 57 63 | 0 | 0 | 57 63 | 0 | 0 | 57 63 | 0 | 0 | 57 63 | 0 | 0 | 57 62 | 0 | 0 |
| RN243 RN244 | No No | 1 | В | 46 46 | 64 61 | 18 15 | 63 60 | 1 1 | 0 | 63 60 | 1 | 0 | 63 60 | 1 | 0 | 63 60 | 1 | 0 | 63 60 | 1 | 0 | 63 60 | 1 | 0 | 62 60 | 2 1 | 0 |
| | | ted receptor | | | <u>, , , , , , , , , , , , , , , , , , , </u> | | | | | | • | | | | <u>, </u> | | · · | | | · · · | | | · · | <u> </u> | | · · · · · · | <u> </u> |

= Impacted receptor = 5 dBA reduction or better

= 7 dBA reduction or better

| | NAC | 17-Foot Barrie | er | 17-Foot Optimized Barrier | 16-Foot Barrier | 15-Foot Barrier | 14-Foot Barrier | 13-Foot Barrier | 12-Foot Barrier |
|------|------------------------------------|---|-------------------|---------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | , | | • | • | | | | · | |
| | | Inputs – Overall | | | | 0.704 | | | |
| | | Barrier Length (ft.) = | 2,719 | 2,644 | 2,744 | 2,794 | 2,969 | 2,969 | 2,994 |
| | | *Barrier Height (ft.) = Barrier Area (sq. ft.) = | 10 & 17 45,040 | 10, 13–17 42,865 | 10 & 16 42,890 | 10 & 15 41,065 | 10 & 14 40,890 | 10 & 13 38,090 | 10 & 12 35,590 |
| | | Category A, C, D, or E | 45,040 | 42,805 | 42,890 | 41,065 | 40,890 | 38,090 | 35,590 |
| | inputs - C | Barrier Height (ft.) = | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| | | Barrier Length (ft.) = | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| | | Barrier Area (ft.) = | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| | Right-of-Way Acqu | uisition Area (sq. ft.) = | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| | | ety Barrier (linear ft.) = | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| | | Inputs – Category B | | 117,4 | | 13.5 | | | 13,4 |
| | | Barrier Height (ft.) = | 10 & 17 | 10, 13–17 | 10 & 16 | 10 & 15 | 10 & 14 | 10 & 13 | 10 & 12 |
| | | Barrier Length (ft.) = | 2,719 | 2,644 | 2,744 | 2,794 | 2,969 | 2,969 | 2,994 |
| | | Barrier Area (sq. ft.) = | 45,040 | 42,865 | 42,890 | 41,065 | 40,890 | 38,090 | 35,590 |
| | | uisition Area (sq. ft.) = | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | **Safe | ety Barrier (linear ft.) = | 2,550 | 2,475 | 2,575 | 2,625 | 2,800 | 2,800 | 2,825 |
| | | Acoustic Feasibility | | | | | | | |
| ≝ | Fi | ront Row Receptors = | 19 | 19 | 19 | 19 | 19 | 19 | 19 |
| 🤶 | Front-Row Receptors with | n a 5 dBA Reduction = | 18 | 17 | 18 | 18 | 18 | 15 | 15 |
| ea | % of Front-Row Receptors Redu | uced At Least 5 dBA = | 95% | 89% | 95% | 95% | 95% | 79% | 79% |
| L L | A | Acoustically Feasible = | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | Noise Rec | duction Design Goal | | | | | | | |
| | | ront Row Receptors = | 19 | 19 | 19 | 19 | 19 | 19 | 19 |
| | Front Row Receptors wi | ith 7 dBA Reduction = | 12 | 12 | 12 | 11 | 11 | 11 | 8 |
| | | uced At Least 7 dBA = | 63% | 63% | 63% | 58% | 58% | 58% | 42% |
| | | duction Design Goal = | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | Cost Effectiveness – C | | | | | | | | |
| | | st (Barrier area x 20) = | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SS | | quisition (sq. ft. x 20) = | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| jë l | Safety Bar | rrier (linear ft. x 125) = | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Pe | All 11 | Total Barrier Cost = | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| l a | Allowable | Cost (length x 360) = | n/a | n/a | n/a | n/a | n/a | n/a | n/a n/a |
| aso | Cost Efforti | Cost Reasonable = iveness - Category B | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| , Se | | est (Barrier area x 20) = | \$900,800 | \$857,300 | \$857,800 | \$821,300 | \$817,800 | \$761,800 | \$711,800 |
| | | quisition (sq. ft. x 20) = | \$900,800 | \$637,300 | \$837,800 | \$821,300 | \$817,800 | \$761,800 | \$711,800 |
| | | rrier (linear ft. x 125) = | \$318,750 | \$309,375 | \$321,875 | \$328,125 | \$350,000 | \$350,000 | \$353,125 |
| | Salety Bai | Total Barrier Cost = | \$1,219,550 | \$1,166,675 | \$1,179,675 | \$1,149,425 | \$1,167,800 | \$1,111,800 | \$1,064,925 |
| | Allowable Co | ost (benefited x 30k) = | \$1,200,000 | \$1,170,000 | \$1,140,000 | \$1,110,000 | \$1,050,000 | \$840,000 | \$810,000 |
| | Benefited (Category B w | | 40 | 39 | 38 | 37 | 35 | 28 | 27 |
| | Cost per Benefited Receptor (Barri | | \$30,489 | \$29,915 | \$31,044 | \$31,066 | \$33,366 | \$39,707 | \$39,442 |
| | cost per seriented neceptor (burn | Cost Reasonable = | No | Yes | No | No | No | No | No |
| | | | | | | | | | |
| | Is Noise Barrier 13 Feasik | ble and Reasonable? | No | Yes | No | No | No | No | No |

*Overall barrier heights, unless otherwise indicated, include a uniform barrier at the height indicated and a 10-foot-tall and 169-foot-long segment on the bridge over 1300 North.

^{**}Safety barrier length excludes the proposed 169-foot-long barrier length on the bridge over 1300 North.

| | | | NAC | | | | | 11-Foot Barr | rier |
|----------------|--------------|--------------------------|----------------------|-----------------|-----------------|-----------------|------------------|------------------|------------------------|
| Receiver | Front Row | Receptors Represented | Land Use Category | Existing dBA | Future dBA | Increase dBA | W/Barrier dBA | Reduction dBA | Benefited Receptors |
| RN102 | No | 1 | В | 46 | 63 | 17 | 62 | 1 | 0 |
| RN103 | No | 1 | В | 46 | 60 | 14 | 60 | 0 | 0 |
| RN104 | No | 1 | В | 46 | 59 | 13 | 59 | 0 | 0 |
| RN105 | No | 1 | В | 46 | 61 | 15 | 60 | 1 | 0 |
| RN106 | No | 1 | В | 46 | 61 | 15 | 60 | 1 | 0 |
| RN107 | No | 1 | В | 46 | 60 | 14 | 59 | 1 | 0 |
| RN108 | No | 1 | В | 46 | 60 | 14 | 59 | 1 | 0 |
| RN109 | No | 1 | В | 46 | 58 | 12 | 56 | 2 | 0 |
| RN110 | No | 1 | В | 46 | 58 | 12 | 56 | 2 | 0 |
| RN111 | No | 1 | В | 46 | 57 | 11 | 55 | 2 | 0 |
| RN112 | No | 1 | В | 46 | 60 | 14 | 57 | 3 | 0 |
| RN113 | Yes | 1 | В | 46 | 63 | 17 | 60 | 3 | 0 |
| RN114 | Yes | 1 | В | 46 | 62 | 16 | 59 | 3 | 0 |
| RN115 | Yes | 1 | В | 46 | 62 | 16 | 59 | 3 | 0 |
| RN116 | Yes | 1 | В | 46 | 64 | 18 | 60 | 4 | 0 |
| RN117 | Yes | 1 | В | 46 | 67 | 21 | 61 | 6 | 1 |
| RN118 | Yes | 1 | В | 46 | 67 | 21 | 61 | 6 | 1 |
| RN119 | Yes | 1 | В | 46 | 68 | 22 | 62 | 6 | 1 |
| RN120 | Yes | 1 | В | 46 | 67 | 21 | 62 | 5 | 1 |
| RN121 | Yes | 1 | В | 46 | 66 | 20 | 60 | 6 | 1 |
| RN122 | Yes | 1 | В | 46 | 68 | 22 | 63 | 5 | 1 |
| RN123 | Yes | 1 | В | 48 | 70 | 22 | 66 | 4 | 0 |
| RN124 | Yes | 1 | В | 46 | 68 | 22 | 59 | 9 | 1 |
| RN125 | No | 1 | В | 46 | 62 | 16 | 56 | 6 | 1 |
| RN126 | No | 1 | В | 46 | 63 | 17 | 57 | 6 7 | 1 |
| RN127 | Yes | 1 | В | 46 | 64 | 18 | 57 | | 1 |
| RN128 | Yes | 1 | В | 46 | 65 | 19 | 58 | 7 | 1 |
| RN129 | Yes Yes | 1 | B B | 46 46 | 66 | 20 | 59 60 | 6 | 1 |
| RN130 | | 1 | | | 66 | 20 | | 7 | 1 |
| RN131 | Yes | 1 | В В | 46 46 | 69 | 23 | 62 62 | 7 | 1 |
| RN132 | Yes | | | | 69 | 23 | | | |
| RN133 | Yes | 1 | В | 46 | 70 | 24 | 65 | 5 | 1 |
| RN146 | No No | 1 | B B | 46 48 | 55 55 | 9 7 | 55 55 | 0 | 0 |
| RN147 | No | 1 | В | 46 | 54 | 8 | 54 | 0 | 0 |
| RN148 | No | 1 | D | 21 | 25 | 4 | 25 | 0 | 0 |
| RN149 | No | 1 | В | 46 | 54 | 8 | 54 | 0 | |
| RN150 RN151 | No | 1 | В | 46 | 51 | 5 | 51 | 0 | 0 |
| | No | 1 | В | 46 | 53 | 7 | 53 | 0 | 0 |
| RN152 RN153 | No | 1 | В | 46 | 52 | 6 | 52 | 0 | 0 |
| | No | 1 | В | 46 | 47 | 1 | 47 | 0 | 0 |
| RN154 | No | 1 | В | 46 | 46 | 0 | 46 | 0 | 0 |
| RN155 | No | 1 | В | | | - | | 0 | 0 |
| RN156 RN157 | No | 1 | В | 46 46 | <u>46</u> 51 | 5 | 46 51 | 0 | 0 |
| RN158 | No | 1 | В | 46 | 47 | 1 | 47 | 0 | 0 |
| RN159 | No | 1 | В | 46 | 46 | 0 | 46 | 0 | 0 |
| RN160 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 |
| RN161 | No | 1 | В | 46 | 51 | 5 | 51 | 0 | 0 |
| RN162 | No | 1 | В | 46 | 49 | 3 | 49 | 0 | 0 |
| RN163 | No | 1 | В | 46 | 46 | 0 | 46 | 0 | 0 |
| RN164 | No | 1 | В | 48 | 49 | 1 | 49 | 0 | 0 |
| RN165 | No | 1 | В | 46 | 47 | 1 | 46 | 1 | 0 |
| RN166 | No | 1 | В | 46 | 48 | 2 | 47 | 1 | 0 |
| RN167 | No | 1 | В | 46 | 47 | 1 | 45 | 2 | 0 |
| RN168 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 |
| RN169 | No | 1 | В | 46 | 46 | 0 | 44 | 2 | 0 |
| RN170 | No | 1 | В | 46 | 46 | 0 | 45 | 1 | 0 |
| RN171 | No | 1 | В | 49 | 50 | 1 | 50 | 0 | 0 |
| RN172 | No | 1 | В | 52 | 53 | 1 | 53 | 0 | 0 |
| RN173 | No | 1 | В | 46 | 51 | 5 | 50 | 1 | 0 |
| RN174 | No | 1 | В | 46 | 49 | 3 | 48 | 1 | 0 |
| RN174 | No | 1 | В | 46 | 47 | 1 | 47 | 0 | 0 |
| RN176 | No | 1 | В | 46 | 47 | 1 | 46 | 1 | 0 |
| RN177 | No | 1 | В | 46 | 47 | 1 | 47 | 0 | 0 |
| RN177 | No | 1 | В | 46 | 47 | 1 | 46 | 1 | 0 |
| | 1110 | ' ' | | I 70 | ч, | <u>'</u> | 70 | 1 | |

| | | | NAC | | | | | 11-Foot Barı | ier |
|----------------|--------------|--------------------------|----------------------|-----------------|---------------|-----------------|------------------|------------------|------------------------|
| Receiver | Front Row | Receptors Represented | Land Use Category | Existing dBA | Future dBA | Increase dBA | W/Barrier dBA | Reduction dBA | Benefited Receptors |
| RN180 | No | 1 | В | 47 | 50 | 3 | 50 | 0 | 0 |
| RN181 | No | 1 | В | 46 | 55 | 9 | 53 | 2 | 0 |
| RN182 | No | 1 | В | 46 | 50 | 4 | 49 | 1 | 0 |
| RN183 | No | 1 | В | 46 | 54 | 8 | 52 | 2 | 0 |
| RN184 | No | 1 | В | 46 | 50 | 4 | 49 | 1 | 0 |
| RN185 | No | 1 | В | 46 | 49 | 3 | 48 | 1 | 0 |
| RN186 | No | 1 | В | 46 | 48 | 2 | 47 | 1 | 0 |
| RN187 RN188 | No No | 1 | В | 46 46 | 50 47 | 1 | 49 47 | 0 | 0 |
| RN189 | No | 1 | В | 46 | 56 | 10 | 54 | 2 | 0 |
| RN190 | No | 1 | В | 46 | 49 | 3 | 48 | 1 | 0 |
| RN191 | No | 1 | В | 46 | 48 | 2 | 47 | 1 | 0 |
| RN192 | No | 1 | В | 46 | 50 | 4 | 50 | 0 | 0 |
| RN193 | No | 1 | В | 46 | 54 | 8 | 50 | 4 | 0 |
| RN194 | No | 1 | В | 46 | 47 | 1 | 47 | 0 | 0 |
| RN195 | No | 1 | В | 46 | 47 | 1 | 46 | 1 | 0 |
| RN196 | No | 1 | В | 46 | 51 | 5 | 49 | 2 | 0 |
| RN197 | No | 1 | В | 46 | 50 | 4 | 48 | 2 | 0 |
| RN198 | No No | 1 | B B | 46 46 | 49 58 | 3 12 | 48 54 | 1 4 | 0 |
| RN199 RN200 | No | 1 | В | 46 | 58 | 6 | 49 | 3 | 0 |
| RN201 | No | 1 | В | 46 | 49 | 3 | 47 | 2 | 0 |
| RN202 | No | 1 | В | 46 | 49 | 3 | 48 | 1 | 0 |
| RN203 | No | 1 | В | 46 | 58 | 12 | 53 | 5 | 1 |
| RN204 | No | 1 | В | 46 | 52 | 6 | 49 | 3 | 0 |
| RN205 | No | 1 | В | 46 | 50 | 4 | 47 | 3 | 0 |
| RN206 | No | 1 | В | 46 | 48 | 2 | 46 | 2 | 0 |
| RN207 | No | 1 | В | 46 | 52 | 6 | 49 | 3 | 0 |
| RN208 | No | 1 | В | 46 | 51 | 5 | 48 | 3 | 0 |
| RN209 RN210 | No No | 1 | B B | 46 46 | 51 52 | 6 | 49 50 | 2 | 0 |
| RN210 | No | 1 | В | 51 | 64 | 13 | 60 | 4 | 0 |
| RN212 | No | 1 | В | 51 | 63 | 12 | 59 | 4 | 0 |
| RN213 | No | 1 | В | 51 | 61 | 10 | 57 | 4 | 0 |
| RN214 | No | 1 | В | 51 | 59 | 8 | 56 | 3 | 0 |
| RN215 | No | 1 | В | 46 | 56 | 10 | 52 | 4 | 0 |
| RN216 | No | 1 | В | 46 | 50 | 4 | 49 | 1 | 0 |
| RN217 | No | 1 | В | 46 | 48 | 2 | 47 | 1 | 0 |
| RN218 | No | 1 | В | 46 | 46 | 0 | 45 | 1 | 0 |
| RN219 | No | 1 | В | 46 | 50 | 4 | 47 | 3 | 0 |
| RN220 | No No | 1 | B B | 46 46 | 57 54 | 11 8 | 52 51 | 5 3 | 0 |
| RN221 RN222 | No | 1 | В | 46 | 56 | 10 | 52 | 4 | 0 |
| RN223 | No | 1 | В | 46 | 57 | 11 | 52 | 5 | 1 |
| RN224 | No | 1 | В | 46 | 49 | 3 | 49 | 0 | 0 |
| RN225 | No | 1 | В | 46 | 50 | 4 | 49 | 1 | 0 |
| RN226 | No | 1 | В | 46 | 50 | 4 | 49 | 1 | 0 |
| RN227 | No | 1 | В | 46 | 49 | 3 | 49 | 0 | 0 |
| RN228 | No | 1 | В | 46 | 59 | 13 | 54 | 5 | 1 |
| RN229 | No | 1 | В | 46 | 60 | 14 | 55 | 5 | 1 |
| RN230 | No | 1 | В | 46 | 53 | 7 | 50 | 3 | 0 |
| RN231 | No No | 1 | B B | 46 46 | 54 60 | 8 14 | 53 56 | 1 4 | 0 |
| RN232 RN233 | No | 1 | В | 46 | 55 | 9 | 52 | 3 | 0 |
| RN234 | No | 1 | В | 46 | 54 | 8 | 52 | 2 | 0 |
| RN235 | No | 1 | В | 46 | 61 | 15 | 58 | 3 | 0 |
| RN236 | No | 1 | В | 46 | 56 | 10 | 53 | 3 | 0 |
| RN237 | No | 1 | В | 46 | 54 | 8 | 52 | 2 | 0 |
| RN238 | No | 1 | В | 46 | 62 | 16 | 59 | 3 | 0 |
| RN239 | No | 1 | В | 46 | 56 | 10 | 54 | 2 | 0 |
| RN240 | No | 1 | В | 46 | 55 | 9 | 55 | 0 | 0 |
| RN241 | No | 1 | В | 46 | 62 | 16 | 59 | 3 | 0 |
| RN242 | No | 1 | В | 46 | 57 | 11 | 57 | 0 | 0 |
| RN243 | No | 1 | В | 46 | 64 | 18 | 62 | 2 | 0 |
| RN244 | No | 1 ted recentor | В | 46 | 61 | 15 | 60 | 1 | 0 |

= Impacted receptor = 5 dBA reduction or better

= 7 dBA reduction or better



| NAC 11-Foot Barrier |
|---------------------|
|---------------------|

| 2.004 | Inputs – Overall | | | | | |
|---------|--|----------------|--|--|--|--|
| 2,994 | Barrier Length (ft.) = | | | | | |
| 10 & 11 | *Barrier Height (ft.) = | | | | | |
| 32,765 | Barrier Area (sq. ft.) = | | | | | |
| | Inputs – Category A, C, D, or E | | | | | |
| n/a | Barrier Height (ft.) = | | | | | |
| n/a | Barrier Length (ft.) = | | | | | |
| n/a | Barrier Area (ft.) = | | | | | |
| n/a | Right-of-Way Acquisition Area (sq. ft.) = | | | | | |
| n/a | Safety Barrier (linear ft.) = | | | | | |
| | Inputs – Category B | | | | | |
| 10 & 11 | Barrier Height (ft.) = | | | | | |
| 2,994 | Barrier Length (ft.) = | | | | | |
| 32,765 | Barrier Area (sq. ft.) = | | | | | |
| 0 | Right-of-Way Acquisition Area (sq. ft.) = | | | | | |
| 2,825 | **Safety Barrier (linear ft.) = | | | | | |
| | Acoustic Feasibility | > | | | | |
| 19 | Front Row Receptors = | ≝ | | | | |
| 14 | Front-Row Receptors with a 5 dBA Reduction = | Sib | | | | |
| 74% | % of Front-Row Receptors Reduced At Least 5 dBA = | Feasibility | | | | |
| Yes | Acoustically Feasible = | ш | | | | |
| | Noise Reduction Design Goal | | | | | |
| 19 | Front Row Receptors = | | | | | |
| 6 | Front Row Receptors with 7 dBA Reduction = | | | | | |
| 32% | % of Front Row Reduced At Least 7 dBA = | | | | | |
| No | Meets Noise Reduction Design Goal = | | | | | |
| | Cost Effectiveness – Category A, C, D, or E | | | | | |
| n/a | Barrier Cost (Barrier area x 20) = | | | | | |
| n/a | Right-of-Way Acquisition (sq. ft. x 20) = | 10 | | | | |
| n/a | Safety Barrier (linear ft. x 125) = | es | | | | |
| n/a | Total Barrier Cost = | <u>=</u> | | | | |
| n/a | Allowable Cost (length x 360) = | ap | | | | |
| n/a | Cost Reasonable = | 5 | | | | |
| | Cost Effectiveness – Category B | Reasonableness | | | | |
| n/a | Barrier Cost (Barrier area x 20) = | č | | | | |
| n/a | Right-of-Way Acquisition (sq. ft. x 20) = | | | | | |
| n/a | Safety Barrier (linear ft. x 125) = | | | | | |
| n/a | Total Barrier Cost = | | | | | |
| n/a | Allowable Cost (benefited x 30k) = | | | | | |
| n/a | Benefited (Category B w/ 5 dBA Reduction) = | | | | | |
| n/a | Cost per Benefited Receptor (Barrier cost / benefited) = | | | | | |
| n/a | Cost Per Benefice Receptor (Burner cost / Beneficed) = | | | | | |

Is Noise Barrier 13 Feasible and Reasonable?

*Overall barrier heights, unless otherwise indicated, include a uniform barrier at the height indicated and a 10-foot-tall and 169-foot-long segment on the bridge over 1300 North.

**Safety barrier length excludes the proposed 169-foot-long barrier length on the bridge over 1300 North.



APPENDIX A: TRAFFIC VOLUMES AND VEHICLE MIX



MEMORANDUM

To: UDOT Region Two and Environmental

From: Avenue Consultants

Date: September 5, 2024

SR-177; SR-193 to 1800 North Preconstruction Re-evaluation

Subject: Traffic Volumes and Vehicle Mix Data for the Traffic Noise Study

Project No.: S-R199(381) PIN: 20927

The purpose of this memorandum is to document the development of traffic volume data used for the traffic noise study.

1 EXISTING TRAFFIC VOLUMES

The Utah Department of Transportation (UDOT) *Noise Abatement Policy 08A2-01* directs calculating existing (2024) traffic-generated noise levels using existing traffic volumes, meaning the worst hourly traffic volumes.

Traffic analysis and field observations indicate that the afternoon/evening (PM) peak hour represents the worst traffic performance of the day in the existing condition. Therefore, we recommend using the PM peak hour traffic volumes for the existing condition in the traffic noise study.

Table 1 shows the existing, worst hourly traffic volumes.

2 FUTURE TRAFFIC VOLUMES

The UDOT *Noise Abatement Policy 08A2-01* directs calculating future (2050) worst-case traffic-generated noise levels using future traffic volumes, meaning using Level of Service (LOS) C traffic volumes and the Proposed Action's design speed.

We estimated generalized hourly LOS C traffic volumes by determining a percentage of the hourly roadway capacity. The *Wasatch Front Travel Demand Model* (WF-TDM) provided the roadway capacity data used in developing future traffic volumes. We extracted hourly capacities specific to the roadway segments intended for the traffic noise study, and these capacities are determined based on the roadway's functional type and the number of lanes.

To convert the roadway capacity to LOS C volume, we reviewed the *Highway Capacity Manual* (HCM) and conducted tests using the *Highway Capacity Software* (HCS) to establish a factor for the conversion. The HCM review indicated a LOS C range of 71 to 80 percent of the roadway capacity for arterial roadways. Additionally, the HCS analysis, focusing on a sample freeway segment, demonstrated a LOS C range from 57 to 75 percent of the roadway capacity. Combining insights from these methodologies, we used a LOS C value of 75 percent of capacity for traffic volumes.

Table 1 shows the future, LOS C traffic volumes.



Table 1: Existing (2024) and Future (2050) Condition Traffic Volumes

| Roadway | Direction | Existing Volume (Per Lane) | Future Volume (Per Lane) |
|-----------------------|-----------|-------------------------------|-----------------------------|
| SR-177 Mainline | NB | n/a | 1,300 |
| SN-177 Marrilline | SB | n/a | 1,300 |
| CD 177 On Domains | NB | n/a | 900 |
| SR-177 On-Ramps | SB | n/a | 900 |
| SD 177 Off Dames | NB | n/a | 670 |
| SR-177 Off-Ramps | SB | n/a | 670 |
| CD 103 Foot of CD 177 | EB | 249 | n/a |
| SR-193 East of SR-177 | WB | 175 | n/a |
| CD 103 W+ -f CD 177 | EB | 400 | n/a |
| SR-193 West of SR-177 | WB | 300 | n/a |
| 4500 W+ | NB | 517 | n/a |
| 4500 West | SB | 324 | n/a |
| 4000 W+ | NB | 118 | n/a |
| 4000 West | SB | 88 | n/a |
| 2000 W | NB | 182 | n/a |
| 3000 West | SB | 143 | n/a |
| 1000 No. 44 | EB | 171 | n/a |
| 1800 North | WB | 207 | n/a |
| 1200 No. 44 | EB | 49 | n/a |
| 1300 North | WB | 50 | n/a |
| 220 No. 4 | EB | 61 | n/a |
| 800 North | WB | 53 | n/a |
| 200 No. 4h | EB | 295 | n/a |
| 300 North | WB | 218 | n/a |
| 700 6 11 | EB | 110 | n/a |
| 700 South | WB | 202 | n/a |

3 VEHICLE MIX

The vehicle mix was estimated, representing the percentage distribution of automobiles, medium trucks, and heavy trucks, by relying on data obtained from collected traffic counts, UDOT's published traffic data, and the WF-TDM for future projections.

Table 2 shows the vehicle mix used for both the existing and future traffic volumes.



Table 2: Vehicle Mix

| | Direction | Vehicle Type | | | |
|-----------------------|-----------|-------------------------|---------------------------|--------------------------|--|
| Roadway | | Automobile (Percent) | Medium Truck (Percent) | Heavy Truck (Percent) | |
| CD 177 Mainline | NB | 84% | 15% | 1% | |
| SR-177 Mainline | SB | 84% | 15% | 1% | |
| CD 177 On Parana | NB | 84% | 15% | 1% | |
| SR-177 On-Ramps | SB | 84% | 15% | 1% | |
| CD 177 Off Page 25 | NB | 84% | 15% | 1% | |
| SR-177 Off-Ramps | SB | 84% | 15% | 1% | |
| CD 103 Fact of CD 177 | EB | 84% | 14% | 2% | |
| SR-193 East of SR-177 | WB | 84% | 14% | 2% | |
| CD 102 Wast of CD 177 | EB | 84% | 14% | 2% | |
| SR-193 West of SR-177 | WB | 84% | 14% | 2% | |
| 4500 W+ | NB | 84% | 14% | 2% | |
| 4500 West | SB | 84% | 14% | 2% | |
| 4000 W+ | NB | 85% | 13% | 2% | |
| 4000 West | SB | 85% | 13% | 2% | |
| 2000 W+ | NB | 89% | 10% | 1% | |
| 3000 West | SB | 89% | 10% | 1% | |
| 1000 No. 44 | EB | 80% | 18% | 2% | |
| 1800 North | WB | 80% | 18% | 2% | |
| 1200 No. 44 | EB | 89% | 10% | 2% | |
| 1300 North | WB | 89% | 10% | 2% | |
| OOO Nowth | EB | 74% | 24% | 2% | |
| 800 North | WB | 74% | 24% | 2% | |
| 200 North | EB | 79% | 19% | 2% | |
| 300 North | WB | 79% | 19% | 2% | |
| 700 Coth | EB | 84% | 14% | 2% | |
| 700 South | WB | 84% | 14% | 2% | |



APPENDIX B: METER CERTIFICATIONS

Calibration Certificate

Certificate Number 2024005505

Customer:

Avenue Consultants

Model Number LxT1 Procedure Number D0001.8378 Serial Number 0006299 Technician Jacob Cannon Test Results Calibration Date 11 Apr 2024 **Pass** Calibration Due 11 Apr 2025 AS RECEIVED same as shipped Initial Condition

Temperature 23.3 °C ± 0.25 °C

Description SoundTrack LxT Class 1 Humidity 53.8 %RH ± 2.0 %RH

Class 1 Sound Level Meter Static Pressure 86.5 kPa ± 0.13 kPa

Firmware Revision: 2,404

Evaluation Method Tested electrically using Larson Davis PRMLxT1 S/N 071360 and a 12.0 pF capacitor to simulate

microphone capacitance. Data reported in dB re 20 μPa assuming a microphone sensitivity of 50.0

mV/Pa.

Compliance Standards Compliant to Manufacturer Specifications and the following standards when combined with

Calibration Certificate from procedure D0001.8384:

IEC 60651:2001 Type 1 ANSI S1.4-2014 Class 1
IEC 60804:2000 Type 1 ANSI S1.4 (R2006) Type 1
IEC 61252:2002 ANSI S1.25 (R2007)
IEC 61672:2013 Class 1 ANSI S1.43 (R2007) Type 1

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the International System of Units (SI) through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2017. **Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.**

The quality system is registered to ISO 9001:2015.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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Correction data from Larson Davis LxT Manual for SoundTrack LxT & SoundExpert Lxt, I770.01 Rev O Supporting Firmware Version 4.0.5, 2019-09-10

Calibration Check Frequency: 1000 Hz; Reference Sound Pressure Level: 114 dB re 20 µPa

Periodic tests were performed in accordance with procedures from IEC 61672-3:2013 / ANSI/ASA S1.4-2014/Part3.

LARSON DAVIS – A PCB DIVISION 1681 West 820 North Provo, UT 84601, United States 716-684-0001





Certificate Number 2024005505

Pattern approval for IEC 61672-1:2013 / ANSI/ASA S1.4-2014/Part 1 successfully completed by Physikalisch-Technische Bundesanstalt (PTB) on 2007-10-09 reference number PTB-1.72-4034218.

The sound level meter submitted for testing successfully completed the periodic tests of IEC 61672-3:2013 / ANSI/ASA S1.4-2014/Part 3, for the environmental conditions under which the tests were performed. As evidence was publicly available, from an independent testing organization responsible for approving the results of pattern-evaluation tests performed in accordance with IEC 61672-2:2013 / ANSI/ASA S1.4-2014/Part 2, to demonstrate that the model of sound level meter fully conformed to the class 1 specifications in IEC 61672-1:2013 / ANSI/ASA S1.4-2014/Part 1; the sound level meter submitted for testing conforms to the class 1 specifications in IEC 61672-1:2013 / ANSI/ASA S1.4-2014/Part 1.

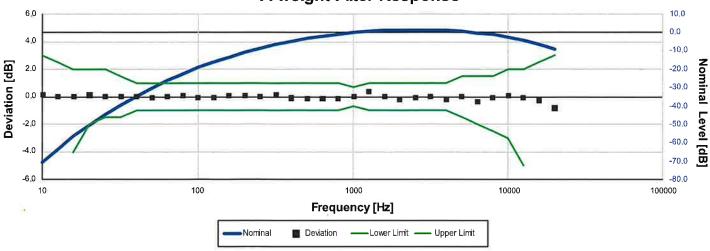
| | Standards Used | | | |
|--|----------------|------------|--------------|--|
| Description | Cal Date | Cal Due | Cal Standard | |
| Hart Scientific 2626-S Humidity/Temperature Sensor | 2023-02-20 | 2024-08-20 | 006946 | |
| SRS DS360 Ultra Low Distortion Generator | 2024-03-26 | 2025-03-26 | 007635 | |





2024-4-11T13:27:29

A-weight Filter Response



Electrical signal test of frequency weighting performed according to IEC 61672-3:2013 13 and ANSI S1.4-2014 Part 3: 13 for compliance to IEC 61672-1:2013 5.5; IEC 60651:2001 6.1 and 9.2.2; IEC 60804:2000 5; ANSI S1.4:1983 (R2006) 5.1 and 8.2.1; ANSI S1.4-2014 Part 1: 5.5

| Frequency [Hz] | Test Result [dB] | Deviation [dB] | Lower limit [dB] | Upper limit [dB] | Expanded Uncertainty [dB] | Result |
|----------------|------------------|----------------|------------------|------------------|---------------------------|--------|
| 10.00 | -70.28 | 0.12 | -inf | 3.00 | 0.25 | Pass |
| 12.59 | -63.39 | 0.01 | -inf | 2.50 | 0.25 | Pass |
| 15.85 | -56.68 | 0.02 | -4.00 | 2.00 | 0.25 | Pass |
| 19.95 | -50,39 | 0.11 | -2.00 | 2.00 | 0.25 | Pass |
| 25.12 | -44.67 | 0.03 | -1.50 | 2.00 | 0.25 | Pass |
| 31.62 | -39.38 | 0.02 | -1.50 | 1.50 | 0.25 | Pass |
| 39.81 | -34.60 | 0.00 | -1.00 | 1.00 | 0.25 | Pass |
| 50.12 | -30.24 | -0.04 | -1.00 | 1.00 | 0.25 | Pass |
| 63.10 | -26.18 | 0.02 | -1.00 | 1.00 | 0.25 | Pass |
| 79.43 | -22.45 | 0.05 | -1.00 | 1.00 | 0.25 | Pass |
| 100.00 | -19.14 | -0.04 | -1.00 | 1.00 | 0.25 | Pass |
| 125.89 | -16.14 | -0.04 | -1.00 | 1.00 | 0.25 | Pass |
| 158.49 | -13.31 | 0.09 | -1.00 | 1.00 | 0.25 | Pass |
| 199.53 | -10.85 | 0.05 | -1.00 | 1.00 | 0.25 | Pass |
| 251.19 | -8.60 | 0.01 | -1.00 | 1.00 | 0.25 | Pass |
| 316.23 | -6.47 | 0.13 | -1.00 | 1.00 | 0.25 | Pass |
| 398.11 | -4.91 | -0.10 | -1.00 | 1.00 | 0.25 | Pass |
| 501.19 | -3.34 | -0.14 | -1.00 | 1.00 | 0.25 | Pass |
| 630.96 | -2.05 | -0.15 | -1.00 | 1.00 | 0.25 | Pass |
| 794.33 | -0.94 | -0.14 | -1.00 | 1.00 | 0.25 | Pass |
| 1,000.00 | 0.00 | 0.00 | -0.70 | 0.70 | 0.25 | Pass |
| 1,258.93 | 0.95 | 0.35 | -1.00 | 1.00 | 0.25 | Pass |
| 1,584.89 | 1.02 | 0.02 | -1.00 | 1.00 | 0.25 | Pass |
| 1,995.26 | 0.97 | -0.23 | -1.00 | 1.00 | 0.25 | Pass |
| 2,511.89 | 1.23 | -0.07 | -1.00 | 1.00 | 0.25 | Pass |
| 3,162.28 | 1.19 | -0.01 | -1.00 | 1.00 | 0.25 | Pass |
| 3,981.07 | 0.81 | -0.19 | -1.00 | 1.00 | 0.25 | Pass |
| 5,011.87 | 0.52 | 0.02 | -1.50 | 1.50 | 0.25 | Pass |
| 6,309.57 | -0.48 | -0.38 | -2.00 | 1.50 | 0.25 | Pass |
| 7,943.28 | -1.20 | -0.10 | -2.50 | 1.50 | 0.25 | Pass |
| 10,000.00 | -2.40 | 0.10 | -3.00 | 2.00 | 0.25 | Pass |
| 12,589.25 | -4.36 | -0.06 | -5.00 | 2.00 | 0.25 | Pass |
| 15,848.93 | -6.85 | -0.25 | -16.00 | 2.50 | 0.25 | Pass |
| 19,952.62 | -10.13 | -0.83 | -inf | 3.00 | 0.25 | Pass |

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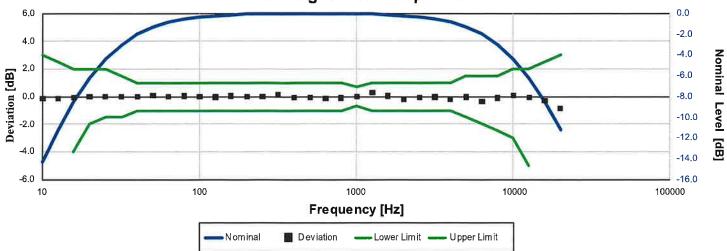
2024-4-11T13:27:29







C-weight Filter Response



Electrical signal test of frequency weighting performed according to IEC 61672-3:2013 13 and ANSI S1.4-2014 Part 3: 13 for compliance to IEC 61672-1:2013 5.5; IEC 60651:2001 6.1 and 9.2.2; IEC 60804:2000 5; ANSI S1.4:1983 (R2006) 5.1 and 8.2.1; ANSI S1.4-2014 Part 1: 5.5

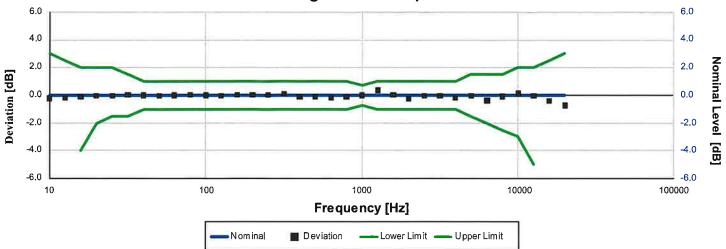
| Frequency [Hz] | Test Result [dB] | Deviation [dB] | Lower limit [dB] | Upper limit [dB] | Expanded Uncertainty [dB] | Result |
|----------------|------------------|----------------|------------------|------------------|---------------------------|--------|
| 10.00 | -14.43 | -0.13 | -inf | 3.00 | 0.25 | Pass |
| 12.59 | -11.33 | -0.13 | -inf | 2.50 | 0.25 | Pass |
| 15.85 | -8.54 | -0.04 | -4.00 | 2.00 | 0.25 | Pass |
| 19.95 | -6.18 | 0.02 | -2.00 | 2.00 | 0.25 | Pass |
| 25.12 | -4.37 | 0.03 | -1.50 | 2.00 | 0.25 | Pass |
| 31.62 | -2.96 | 0.04 | -1.50 | 1.50 | 0.25 | Pass |
| 39.81 | -1.97 | 0.03 | -1.00 | 1.00 | 0.25 | Pass |
| 50.12 | -1.22 | 0.09 | -1.00 | 1.00 | 0.25 | Pass |
| 63.10 | -0.80 | 0.00 | -1.00 | 1.00 | 0.25 | Pass |
| 79.43 | -0.45 | 0.05 | -1.00 | 1.00 | 0.25 | Pass |
| 100.00 | -0.28 | 0.02 | -1.00 | 1.00 | 0.25 | Pass |
| 125.89 | -0.22 | -0.02 | -1.00 | 1.00 | 0.25 | Pass |
| 158.49 | -0.05 | 0.05 | -1.00 | 1.00 | 0.25 | Pass |
| 199.53 | -0.01 | -0.01 | -1.00 | 1.00 | 0.25 | Pass |
| 251.19 | 0.03 | 0.03 | -1.00 | 1.00 | 0.25 | Pass |
| 316.23 | 0.15 | 0.15 | -1.00 | 1.00 | 0.25 | Pass |
| 398.11 | -0.07 | -0.07 | -1.00 | 1.00 | 0.25 | Pass |
| 501.19 | -0.08 | -0.08 | -1.00 | 1.00 | 0.25 | Pass |
| 630.96 | -0.13 | -0.12 | -1.00 | 1.00 | 0.25 | Pass |
| 794.33 | -0.10 | -0.10 | -1.00 | 1.00 | 0.25 | Pass |
| 1,000.00 | 0.00 | 0.00 | -0.70 | 0.70 | 0.25 | Pass |
| 1,258.93 | 0.32 | 0.32 | -1.00 | 1.00 | 0.25 | Pass |
| 1,584.89 | -0.05 | 0.05 | -1.00 | 1.00 | 0.25 | Pass |
| 1,995.26 | -0.41 | -0.20 | -1.00 | 1.00 | 0.25 | Pass |
| 2,511.89 | -0.34 | -0.04 | -1.00 | 1.00 | 0.25 | Pass |
| 3,162.28 | -0.51 | -0.01 | -1.00 | 1.00 | 0.25 | Pass |
| 3,981.07 | -0.99 | -0.19 | -1.00 | 1.00 | 0.25 | Pass |
| 5,011.87 | -1.33 | -0.03 | -1.50 | 1.50 | 0.25 | Pass |
| 6,309.57 | -2.36 | -0.36 | -2.00 | 1.50 | 0.25 | Pass |
| 7,943.28 | -3.10 | -0.10 | -2.50 | 1.50 | 0.25 | Pass |
| 10,000.00 | -4.32 | 0.08 | -3.00 | 2.00 | 0.25 | Pass |
| 12,589.25 | -6.28 | -0.08 | -5.00 | 2.00 | 0.25 | Pass |
| 15,848.93 | -8.78 | -0.28 | -16.00 | 2.50 | 0.25 | Pass |
| 19,952.62 | -12.06 | -0.86 | -inf | 3.00 | 0.25 | Pass |







Z-weight Filter Response



Electrical signal test of frequency weighting performed according to IEC 61672-3:2013 13 and ANSI S1.4-2014 Part 3: 13 for compliance to IEC 61672-1:2013 5.5; IEC 60651:2001 6.1 and 9.2.2; IEC 60804:2000 5; ANSI S1.4:1983 (R2006) 5.1 and 8.2.1; ANSI S1.4-2014 Part 1: 5.5

| Frequency [Hz] | Test Result [dB] | Deviation [dB] | Lower limit [dB] | Upper limit [dB] | Expanded Uncertainty [dB] | Result |
|----------------|------------------|----------------|------------------|------------------|---------------------------|--------|
| 10.00 | -0.23 | -0.23 | -inf | 3.00 | 0.25 | Pass |
| 12.59 | -0.19 | -0.19 | -inf | 2.50 | 0.25 | Pass |
| 15.85 | -0.11 | -0.11 | -4.00 | 2.00 | 0.25 | Pass |
| 19.95 | -0.03 | -0.03 | -2.00 | 2.00 | 0.25 | Pass |
| 25.12 | -0.03 | -0.03 | -1.50 | 2.00 | 0.25 | Pass |
| 31.62 | 0.01 | 0.01 | -1.50 | 1.50 | 0.25 | Pass |
| 39.81 | -0.01 | -0.01 | -1.00 | 1.00 | 0.25 | Pass |
| 50.12 | -0.06 | -0.06 | -1.00 | 1.00 | 0.25 | Pass |
| 63.10 | 0.00 | 0.00 | -1.00 | 1.00 | 0.25 | Pass |
| 79.43 | 0.04 | 0.03 | -1.00 | 1.00 | 0.25 | Pass |
| 100.00 | -0.01 | -0.01 | -1.00 | 1.00 | 0.25 | Pass |
| 125.89 | -0.06 | -0.06 | -1.00 | 1.00 | 0.25 | Pass |
| 158.49 | 0.02 | 0.02 | -1.00 | 1.00 | 0.25 | Pass |
| 199.53 | 0.01 | 0.01 | -1.00 | 1.00 | 0.25 | Pass |
| 251.19 | 0.01 | 0.01 | -1.00 | 1.00 | 0.25 | Pass |
| 316.23 | 0.13 | 0.13 | -1.00 | 1.00 | 0.25 | Pass |
| 398.11 | -0.11 | -0.11 | -1.00 | 1.00 | 0.25 | Pass |
| 501.19 | -0.12 | -0.12 | -1.00 | 1.00 | 0.25 | Pass |
| 630.96 | -0.16 | -0.16 | -1.00 | 1.00 | 0.25 | Pass |
| 794.33 | -0.13 | -0.13 | -1.00 | 1.00 | 0.25 | Pass |
| 1,000.00 | 0.00 | 0.00 | -0.70 | 0.70 | 0.25 | Pass |
| 1,258.93 | 0.35 | 0.35 | -1.00 | 1.00 | 0.25 | Pass |
| 1,584.89 | 0.03 | 0.03 | -1.00 | 1.00 | 0.25 | Pass |
| 1,995.26 | -0.25 | -0.25 | -1.00 | 1.00 | 0.25 | Pass |
| 2,511.89 | -0.06 | -0.06 | -1.00 | 1.00 | 0.25 | Pass |
| 3,162.28 | -0.03 | -0.03 | -1.00 | 1.00 | 0.25 | Pass |
| 3,981.07 | -0.19 | -0.19 | -1.00 | 1.00 | 0.25 | Pass |
| 5,011.87 | -0.06 | -0.06 | -1.50 | 1.50 | 0.25 | Pass |
| 6,309.57 | -0.37 | -0.37 | -2.00 | 1.50 | 0.25 | Pass |
| 7,943.28 | -0.07 | -0.07 | -2.50 | 1.50 | 0.25 | Pass |
| 10,000.00 | 0.14 | 0.14 | -3.00 | 2.00 | 0.25 | Pass |
| 12,589.25 | -0.05 | -0.04 | -5.00 | 2.00 | 0.25 | Pass |
| 15,848.93 | -0.39 | -0.39 | -16.00 | 2.50 | 0.25 | Pass |
| 19,952.62 | -0.73 | -0.73 | -inf | 3.00 | 0.25 | Pass |







Certificate Number 2024005505

High Level Stability

Electrical signal test of high level stability performed according to IEC 61672-3:2013 21 and ANSI S1.4-2014 Part 3: 21 for compliance to IEC 61672-1:2013 5 15 and ANSI S1.4-2014 Part 1: 5.15

| Measurement | Test Result [dB] | Lower limit [dB] | Upper limit [dB] | Expanded Uncertainty [dB] | Result |
|----------------------|------------------|------------------|------------------|------------------------------|--------|
| High Level Stability | 0.01 | -0.10 | 0.10 | 0.00 ‡ | Pass |

Long-Term Stability

Electrical signal test of long term stability performed according to IEC 61672-3:2013 15 and ANSI S1.4-2014 Part 3: 15 for compliance to ISC 61672-1:2013 5.14 and ANSI S1.4-2014 Part 1: 5.14

| Test Duration [min] | Test Result [dB] | Lower limit [dB] | Upper limit [dB] | Expanded Uncertainty [dB] | Result |
|---------------------|------------------|------------------|------------------|------------------------------|--------|
| 33 | 0.07 | -0.10 | 0.10 | 0.01 ± | Pass |

1 kHz Reference Levels

Frequency weightings and time weightings at 1 kHz (reference is A weighted Fast) performed according to IEC 61672-3:2013 14 and ANSI S1.4-2014 Part 3: 14 for compliance to IEC 61672-1:2013 5.5.9 and 5.8.3 and ANSI S1.4-2014 Part 1: 5.5.9 and 5.8.3

| Test Result [dB] | Lower limit [dB] | Upper limit [dB] | Expanded Uncertainty [dB] | Result |
|------------------|----------------------------|---|--|---|
| 115.20 | 115.00 | 115,40 | 0.15 | Pass |
| 115.20 | 115.00 | 115.40 | 0.15 | Pass |
| 115.20 | 115.10 | 115.30 | 0.15 | Pass |
| 115.20 | 115.10 | 115.30 | 0.15 | Pass |
| | 115.20 115.20 115.20 | 115.20 115.00 115.20 115.00 115.20 115.10 | 115.20 115.00 115.40 115.20 115.00 115.40 115.20 115.10 115.30 | Test Result [dB] Lower limit [dB] Upper limit [dB] Uncertainty [dB] 115.20 115.00 115.40 0.15 115.20 115.00 115.40 0.15 115.20 115.10 115.30 0.15 |

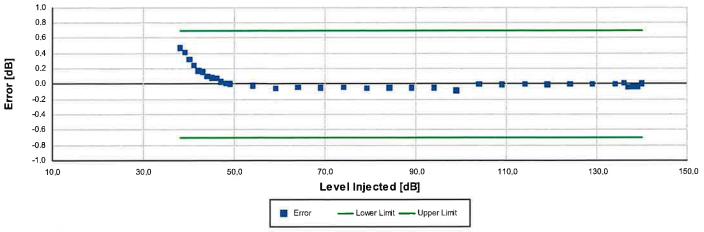
- End of measurement results--





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A-weighted Broadband Log Linearity: 8,000.00 Hz



Broadband level linearity performed according to IEC 61672-3:2013 16 and ANSI S1.4-2014 Part 3: 16 for compliance to IEC 61672-1:2013 5.6, IEC 60804:2000 6.2, IEC 61252:2002 8, ANSI S1.4 (R2006) 6.9, ANSI S1.4-2014 Part 1: 5.6, ANSI S1.43 (R2007) 6.2

| Level [dB] | Error [dB] | Lower limit [dB] | Upper limit [dB] | Expanded Uncertainty [dB] | Result |
|------------|------------|------------------|------------------|---------------------------|--------|
| 38.00 | 0.48 | -0.70 | 0.70 | 0.16 | Pass |
| 39.00 | 0.41 | -0.70 | 0.70 | 0.16 | Pass |
| 40.00 | 0.32 | -0.70 | 0.70 | 0.16 | Pass |
| 41.00 | 0.25 | -0.70 | 0.70 | 0.16 | Pass |
| 42.00 | 0.18 | -0.70 | 0.70 | 0.16 | Pass |
| 43.00 | 0.16 | -0.70 | 0.70 | 0.16 | Pass |
| 44.00 | 0.11 | -0.70 | 0.70 | 0.17 | Pass |
| 45.00 | 0.09 | -0.70 | 0.70 | 0.16 | Pass |
| 46.00 | 0.08 | -0.70 | 0.70 | 0.16 | Pass |
| 47.00 | 0.03 | -0.70 | 0.70 | 0.16 | Pass |
| 48.00 | 0.01 | -0.70 | 0.70 | 0.16 | Pass |
| 49.00 | 0.00 | -0.70 | 0.70 | 0.16 | Pass |
| 54.00 | -0.02 | -0.70 | 0.70 | 0.16 | Pass |
| 59.00 | -0.06 | -0.70 | 0.70 | 0.16 | Pass |
| 64.00 | -0.04 | -0.70 | 0.70 | 0.16 | Pass |
| 69.00 | -0.05 | -0.70 | 0.70 | 0.16 | Pass |
| 74.00 | -0.04 | -0.70 | 0.70 | 0.16 | Pass |
| 79.00 | -0.05 | -0.70 | 0.70 | 0.16 | Pass |
| 84.00 | -0.05 | -0.70 | 0.70 | 0.16 | Pass |
| 89.00 | -0.05 | -0.70 | 0.70 | 0.16 | Pass |
| 94.00 | -0.05 | -0.70 | 0.70 | 0.16 | Pass |
| 99.00 | -0.08 | -0.70 | 0.70 | 0.15 | Pass |
| 104.00 | 0.00 | -0.70 | 0.70 | 0.15 | Pass |
| 109.00 | -0.01 | -0.70 | 0.70 | 0.15 | Pass |
| 114.00 | 0.00 | -0.70 | 0.70 | 0.15 | Pass |
| 119.00 | -0.01 | -0.70 | 0.70 | 0.15 | Pass |
| 124.00 | 0.00 | -0.70 | 0.70 | 0.15 | Pass |
| 129.00 | 0.00 | -0.70 | 0.70 | 0.15 | Pass |
| 134.00 | 0.00 | -0.70 | 0.70 | 0.15 | Pass |
| 136.00 | 0.01 | -0.70 | 0.70 | 0.15 | Pass |
| 137.00 | -0.04 | -0.70 | 0.70 | 0.15 | Pass |
| 138.00 | -0.04 | -0.70 | 0.70 | 0.15 | Pass |
| 139.00 | -0.04 | -0.70 | 0.70 | 0.15 | Pass |
| 140.00 | 0.01 | -0.70 | 0.70 | 0.15 | Pass |







Certificate Number 2024005505

Slow Detector

Toneburst response performed according to IEC 61672-3:2013 18 and ANSI S1.4-2014 Part 3: 18 for compliance to IEC 61672-1:2013 5.9, IEC 60651:2001 9.4.2, ANSI S1.4:1983 (R2006) 8.4.2 and ANSI S1.4-2014 Part 1: 5.9

| Amplitude [dB] | Duration [ms] | Test Result [dB] | Lower limit [dB] | Upper limit [dB] | Expanded Uncertainty [dB] | Result |
|----------------|---------------|------------------|------------------|------------------|---------------------------|--------|
| 137.00 | 200 | -7.55 | -7.92 | -6.92 | 0.15 | Pass |
| | 2 | -27.14 | -29.99 | -25.99 | 0.15 | Pass |

Fast Detector

Toneburst response performed according to IEC 61672-3:2013 18 and ANSI S1.4-2014 Part 3: 18 for compliance to IEC 61672-1:2013 5.9, IEC 60651:2001 9.4.2, ANSI S1.4:1983 (R2006) 8.4.2 and ANSI S1.4-2014 Part 1: 5.9

| Amplitude [dB] | Duration [ms] | Test Result [dB] | Lower limit [dB] | Upper limit [dB] | Expanded Uncertainty [dB] | Result |
|----------------|---------------|------------------|------------------|------------------|---------------------------|--------|
| 137.00 | 200.00 | -1.06 | -1.48 | -0.48 | 0.26 | Pass |
| | 2.00 | -18.19 | -19.49 | -16.99 | 0.15 | Pass |
| | 0.25 | -27.30 | -29.99 | -25.99 | 0.15 | Pass |

Sound Exposure Level

Toneburst response performed according to IEC 61672-3:2013 18 and ANSI S1.4-2014 Part 3: 18 for compliance to IEC 61672-1:2013 5.9, IEC 60651:2001 9.4.2, ANSI S1.4:1983 (R2006) 8.4.2 and ANSI S1.4-2014 Part 1: 5.9

| Amplitude [dB] | Duration [ms] | Test Result [dB] | Lower limit [dB] | Upper limit [dB] | Expanded Uncertainty [dB] | Result |
|----------------|---------------|------------------|------------------|------------------|---------------------------|--------|
| 137.00 | 200.00 | -7.01 | -7.49 | -6.49 | 0.15 | Pass |
| | 2.00 | -27.03 | -28.49 | -25.99 | 0.15 | Pass |
| | 0.25 | -36.14 | -39.02 | -35.02 | 0.15 | Pass |

Peak C-weight

C-weighted peak sound level performed according to IEC 61672-3:2013 19 and ANSI S1.4-2014 Part 3: 19 for compliance to IEC 61672-1:2013 5.13 and ANSI S1.4-2014 Part 1: 5.13

| Level [dB] | Frequency [Hz] | Test Result [dB] | Lower limit [dB] | Upper limit [dB] | Expanded Uncertainty [dB] | Result |
|------------------|----------------|------------------|------------------|------------------|---------------------------|--------|
| 135.00 | 31.50 | 138.21 | 135.50 | 139.50 | 0.15 | Pass |
| 135.00 | 500.00 | 138.58 | 137.50 | 139.50 | 0.15 | Pass |
| 135.00 | 8,000.00 | 137.77 | 136.40 | 140.40 | 0.15 | Pass |
| 135.00, Negative | 500.00 | 137.18 | 136.40 | 138.40 | 0.15 | Pass |
| 135.00, Positive | 500.00 | 137.15 | 136.40 | 138.40 | 0.15 | Pass |



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Certificate Number 2024005505

Peak Z-weight

Z-weighted peak sound level performed according to IEC 60651:2001 9.4.4 and ANSI S1.4:1983 (R2006) 8.4.4

| Amplitude [dB] | Duration[µs] | Test I | Result [dB] | Lower limit [dB] | Upper limit [dB] | Expanded Uncertainty [dB] | Result |
|----------------|--------------|----------------|-------------|--------------------|------------------|------------------------------|--------|
| 134.85 | 100 | Negative Pulse | 135.43 | 133.08 | 137.08 | 0.15 | Pass |
| | 100 | Positive Pulse | 135.41 | 133.07 | 137.07 | 0.15 | Pass |
| 124.85 | 100 | Negative Pulse | 126.32 | 123.98 | 127.98 | 0.15 | Pass |
| | 100 | Positive Pulse | 126.31 | 123.98 | 127.98 | 0.15 | Pass |
| 114.85 | 100 | Negative Pulse | 116.34 | 114.01 | 118.01 | 0.15 | Pass |
| | 100 | Positive Pulse | 116.34 | 114.00 | 118.00 | 0.15 | Pass |
| 104.85 | 100 | Negative Pulse | 106.31 | 103.97 | 107.97 | 0,15 | Pass |
| | 100 | Positive Pulse | 106.31 | 103.98 | 107.98 | 0.15 | Pass |
| | | | - End of me | asurement results— | | | |

Overload Detector

Overload indication performed according to IEC 61672-3:2013 20 and ANSI S1.4-2014 Part 3: 20 for compliance to IEC 61672-1:2013 5.11, IEC 60804:2000 9.3.5, IEC 61252:2002 11, ANSI S1.4 (R2006) 5.8, and ANSI S1.4-2014 Part 1: 5.11, ANSI S1.25 (R2007) 7.6, ANSI S1.43 (R2007) 7

| Measurement | Test Result [dB] | Lower limit [dB] | Upper limit [dB] | Expanded Uncertainty [dB] | Result |
|-------------|------------------|--------------------|------------------|------------------------------|--------|
| Positive | 141.70 | 140.00 | 143.00 | 0.15 | Pass |
| Negative | 141.60 | 140.00 | 143.00 | 0.15 | Pass |
| Difference | 0.10 | -1.50 | 1.50 | 0.15 | Pass |
| | End of m | easurement results | | 3,,,, | |

Peak Rise Time

Peak rise time performed according to IEC 60651:2001 9.4.4 and ANSI S1.4:1983 (R2006) 8.4.4

| amplitude [dB] | Duration [µs] | | Test Result [dB] | Lower limit [dB] | Upper limit [dB] | Expanded Uncertainty [dB] | Result |
|----------------|---------------|----------------|------------------|------------------|------------------|------------------------------|--------|
| 137.85 | 40 | Negative Pulse | 134.52 | 133.09 | 135.09 | 0.15 | Pass |
| | | Positive Pulse | 134.51 | 133.07 | 135.07 | 0.15 | Pass |
| | 30 | Negative Pulse | 133.41 | 133.09 | 135.09 | 0.15 | Pass |
| | | Positive Pulse | 133,45 | 133.07 | 135.07 | 0.15 | Pass |



Positive Pulse Crest Factor

200 µs pulse tests at 2.0, 12.0, 22.0, 32.0 dB below Overload Limit

Crest Factor measured according to IEC 60651:2001 9.4.2 and ANSI S1.4:1983 (R2006) 8.4.2

| mplitude [dB] | Crest Factor | Test Result [dB] | Limits [dB] | Expanded Uncertainty [dB] | Result |
|---------------|--------------|------------------|-------------|---------------------------|--------|
| 136.85 | 3 | OVLD | ± 0.50 | 0.15 ‡ | Pass |
| | 5 | OVLD | ± 1.00 | 0.15 ‡ | Pass |
| | 10 | OVLD | ± 1.50 | 0.15 ‡ | Pass |
| 126.85 | 3 | -0.15 | ± 0.50 | 0.15 ‡ | Pass |
| | 5 | -0.15 | ± 1.00 | 0.16 ‡ | Pass |
| | 10 | OVLD | ± 1.50 | 0.15 ‡ | Pass |
| 116.85 | 3 | -0.16 | ± 0.50 | 0.15 ‡ | Pass |
| | 5 | -0.15 | ± 1.00 | 0.15 ‡ | Pass |
| | 10 | -0.11 | ± 1.50 | 0.15 ‡ | Pass |
| 106,85 | 3 | -0.16 | ± 0.50 | 0.15 ‡ | Pass |
| | 5 | -0.14 | ± 1.00 | 0.15 ‡ | Pass |
| | 10 | -0.18 | ± 1.50 | 0.15 ± | Pass |

Negative Pulse Crest Factor

200 µs pulse tests at 2.0, 12.0, 22.0, 32.0 dB below Overload Limit

Crest Factor measured according to IEC 60651:2001 9.4.2 and ANSI S1.4:1983 (R2006) 8.4.2

| Amplitude [dB] | Crest Factor | Test Result [dB] | Limits [dB] | Expanded Uncertainty [dB] | Result |
|----------------|--------------|------------------|-------------|---------------------------|--------|
| 136.85 | 3 | OVLD | ± 0.50 | 0.15 ‡ | Pass |
| | 5 | OVLD | ± 1.00 | 0.15 ‡ | Pass |
| | 10 | OVLD | ± 1.50 | 0.15 ‡ | Pass |
| 126.85 | 3 | -0.13 | ± 0.50 | 0.15 ‡ | Pass |
| | 5 | -0.12 | ± 1.00 | 0.15 ‡ | Pass |
| | 10 | OVLD | ± 1.50 | 0.15 ‡ | Pass |
| 116.85 | 3 | -0.15 | ± 0.50 | 0.15 ‡ | Pass |
| | 5 | -0.13 | ± 1.00 | 0.15 ‡ | Pass |
| | 10 | -0.10 | ± 1.50 | 0.15 ‡ | Pass |
| 106.85 | 3 | -0.16 | ± 0.50 | 0.15 ‡ | Pass |
| | 5 | -0.13 | ± 1.00 | 0.15 ‡ | Pass |
| | 10 | -0.17 | ± 1.50 | 0.15 ± | Pass |

Tone Burst

2kHz tone burst tests at 2.0, 12.0, 22.0, 32.0 dB below Overload Limit

Tone burst response measured according to IEC 60651:2001 9.4.2 and ANSI S1.4:1983 (R2006) 8.4.2

| Amplitude [dB] | Crest Factor | Test Result [dB] | Limits [dB] | Expanded Uncertainty [dB] | Result |
|----------------|--------------|------------------|---------------------|---------------------------|--------|
| 136.85 | 3 | OVLD | ± 0.50 | 0.15 | Pass |
| | 5 | OVLD | ± 1.00 | 0.15 | Pass |
| 126.85 | 3 | -0.08 | ± 0.50 | 0.15 | Pass |
| | 5 | 0.00 | ± 1.00 | 0.15 | Pass |
| 116.85 | 3 | -0.10 | ± 0.50 | 0.15 | Pass |
| | 5 | -0.03 | ± 1.00 | 0.15 | Pass |
| 106.85 | 3 | -0.13 | ± 0.50 | 0.15 | Pass |
| | 5 | -0.08 | ± 1.00 | 0.15 | Pass |
| | | End of m | easurement results- | | |





Certificate Number 2024005505

Impulse Detector - Repeat

Impulse Detector measured according to IEC 60651:2001 9.4.3 and ANSI S1.4:1983 (R2006) 8.4.3

| Amplitude [dB] | Repitition Rate [Hz] | Test Result [dB] | Lower limit [dB] | Upper limit [dB] | Expanded Uncertainty [dB] | Result |
|----------------|----------------------|------------------|-----------------------|------------------|---------------------------|--------|
| 140 | 100.00 | -2.87 | -3.71 | -1.71 | 0.15 | Pass |
| | 20.00 | -7.53 | -9.57 | -5.57 | 0.20 | Pass |
| | 2.00 | -8.73 | -10.76 | -6.76 | 0.15 | Pass |
| Step | 2.00 | 5.10 | 4.00 | 6.00 | 0.15 | Pass |
| | | Enc | l of measurement resu | lts | | |

Impulse Detector - Single

Impulse Detector measured according to IEC 60651:2001 9.4.3 and ANSI S1.4:1983 (R2006) 8.4.3

| Amplitude [dB] | Duration [ms] | Test Result [dB] | Lower limit [dB] | Upper limit [dB] | Expanded Uncertainty [dB] | Result |
|----------------|---------------|------------------|------------------|------------------|---------------------------|--------|
| 140 | 20.00 | -3.66 | -5.11 | -2.11 | 0.15 | Pass |
| | 5.00 | -8.76 | -10.76 | -6.76 | 0.16 | Pass |
| | 2.00 | -12.70 | -14.55 | -10.55 | 0.16 | Pass |
| Step | 2.00 | 10.09 | 9.00 | 11.00 | 0.16 | Pass |

Gain

Gain measured according to IEC 61672-3:2013 17.3 and 17.4 and ANSI S1.4-2014 Part 3: 17.3 and 17.4

| Measurement | Test Result [dB] | Lower limit [dB] | Upper limit [dB] | Expanded Uncertainty [dB] | Result |
|----------------------|------------------|-----------------------|------------------|---------------------------|--------|
| 0 dB Gain | 93.98 | 93.93 | 94.13 | 0.15 | Pass |
| 0 dB Gain, Linearity | 41.19 | 40.33 | 41.73 | 0.16 | Pass |
| OBA Low Range | 94.03 | 93,93 | 94.13 | 0.15 | Pass |
| OBA Normal Range | 94.03 | 93.20 | 94.80 | 0.15 | Pass |
| | End | d of measurement resi | ults | | |

Broadband Noise Floor

Self-generated noise measured according to IEC 61672-3:2013 11.2 and ANSI S1.4-2014 Part 3: 11.2

| Measurement | Test Result [dB] | Upper limit [dB] | Result |
|----------------------|------------------|------------------|--------|
| A-weight Noise Floor | 27.29 | 36.00 | Pass |
| C-weight Noise Floor | 27.17 | 35.00 | Pass |
| Z-weight Noise Floor | 33.49 | 39.00 | Pass |

⁻⁻ End of measurement results--

Total Harmonic Distortion

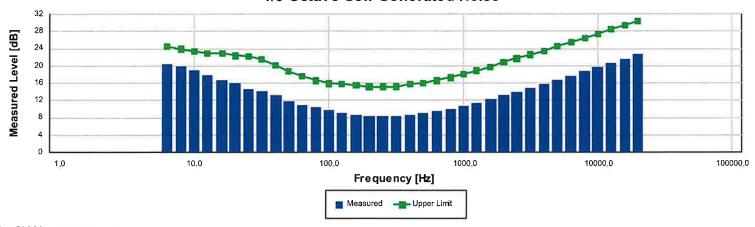
Measured using 1/3-Octave filters

| Measurement | Test Result [dB] | Lower Limit [dB] | Upper Limit [dB] | Expanded Uncertainty [dB] | Result |
|--------------|------------------|------------------|------------------|---------------------------|--------|
| 10 Hz Signal | 135.13 | 135.05 | 136.65 | 0.15 | Pass |
| THD | -62.67 | | -58.00 | 0.00 ‡ | Pass |
| THD+N | -59.85 | | -58.00 | 0.00 ± | Pass |





1/3-Octave Self-Generated Noise



The SLM is set to low range.

| Frequency [Hz] | Test Result [dB] | Upper limit [dB] | Resu |
|----------------|------------------|------------------|------|
| 6.30 | 20.43 | 24.60 | Pas |
| 8.00 | 20.00 | 24.00 | Pas |
| 10.00 | 18.91 | 23.50 | Pas |
| 12.50 | 17.83 | 23.00 | Pas |
| 16.00 | 16.72 | 22.90 | Pas |
| 20.00 | 15.99 | 22.40 | Pas |
| 25.00 | 14.70 | 22.30 | Pas |
| 31.50 | 14.06 | 21.50 | Pas |
| 40.00 | 13.13 | 20.20 | Pas |
| 50.00 | 11.88 | 18.80 | Pas |
| 63.00 | 10.97 | 17.60 | Pas |
| 80.00 | 10.52 | 16.60 | Pas |
| 100.00 | 9.76 | 15.90 | Pas |
| 125.00 | 9.07 | 15.70 | Pas |
| 160.00 | 8.51 | 15.50 | Pas |
| 200.00 | 8.47 | 15.20 | Pas |
| 250.00 | 8.25 | 15.20 | Pas |
| 315.00 | 8.41 | 15.20 | Pas |
| 400.00 | 8.61 | 15.70 | Pas |
| 500.00 | 8.98 | 16.00 | Pas |
| 630.00 | 9.47 | 16.60 | Pas |
| 800.00 | 10.02 | 17.30 | Pas |
| 1,000.00 | 10.72 | 18.10 | Pas |
| 1,250.00 | 11.49 | 18.90 | Pas |
| 1,600.00 | 12.30 | 19.80 | Pas |
| 2,000.00 | 13.12 | 20.80 | Pas |
| 2,500.00 | 13.94 | 21.70 | Pas |
| 3,150.00 | 14.85 | 22.60 | Pas |
| 4,000.00 | 15.87 | 23.50 | Pas |
| 5,000.00 | 16.79 | 24.50 | Pas |
| 6,300.00 | 17.69 | 25.50 | Pas |
| 8,000.00 | 18.70 | 26.50 | Pas |
| 10,000.00 | 19.68 | 27.40 | Pas |
| 12,500.00 | 20.66 | 28.50 | Pas |
| 16,000.00 | 21.64 | 29.50 | Pas |
| 20,000.00 | 22.64 | 30.40 | Pas |







- End of Report-







APPENDIX C: FIELD MEASUREMENTS



PROJECT NAME: SR-177; SR-193 to 1800 North Re-evaluation

SITE / ADDRESS: 1 / 200 South Trail
OBSERVER NAME: Matt Montgomery

DATE: July 16, 2024

General Meteorological Conditions

TEMPERATURE / CLOUD COVER:: 83°F/Overcast

WIND SPEED / DIRECTION: 7 MPH/SE

Calibration Information

PRE-MEASUREMENT LEVEL: 94.03
POST-MEASUREMENT LEVEL: 94.05

Validation Measurement Results

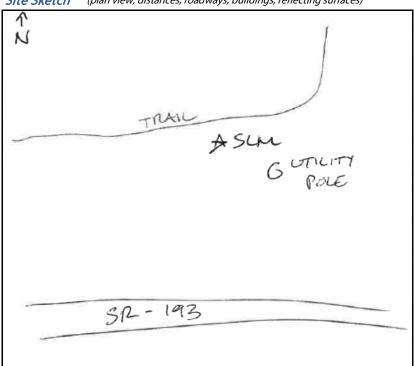
| START TIME: | 10:01 AM |
|----------------------|----------|
| END TIME: | 10:21 AM |
| LA _{eq} : | 48.0 |
| LAS _{max} : | 48.4 |
| | |

Sound Level Meter Information

MODEL / SERIAL NUMBER: Larson Davis SoundTrack LxT1 / 0006299

EVENT NUMBER: .002

Site Sketch (plan view, distances, roadways, buildings, reflecting surfaces)



Background Noise / Unusual Events Log

| START TIME | END TIME | DESCRIPTION | START TIME | END TIME | DESCRIPTION |
|------------|----------|-------------|------------|----------|-------------|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |



PROJECT NAME: SR-177; SR-193 to 1800 North Re-evaluation

SITE / ADDRESS: 1 / 200 South Trail

North



East



South



West





PROJECT NAME: SR-177; SR-193 to 1800 North Re-evaluation

SITE / ADDRESS: 1 / 200 South Trail

Traffic Speed & Volumes (per lane per 20 minutes)

| ROAD | DIRECTION | SPEED | CONGESTION | AUTO | MED. TRUCK | HEAVY TRUCK | BUS | MOTORCYCLE |
|--------|-----------|-------|------------|------|------------|-------------|-----|------------|
| SR-193 | EB | 50 | No | 39 | 8 | 1 | 0 | 1 |
| SR-193 | WB | 50 | No | 61 | 9 | 3 | 0 | 0 |

Traffic Speed & Volumes (per lane per hour)

| ROAD | DIRECTION | SPEED | CONGESTION | AUTO | MED. TRUCK | HEAVY TRUCK | BUS | MOTORCYCLE |
|--------|-----------|-------|------------|------|------------|-------------|-----|------------|
| SR-193 | EB | 50 | No | 117 | 24 | 3 | 0 | 3 |
| SR-193 | WB | 50 | No | 183 | 27 | 9 | 0 | 0 |



PROJECT NAME: SR-177; SR-193 to 1800 North Re-evaluation

SITE / ADDRESS: 4 / 4228 West 300 North

OBSERVER NAME: Matt Montgomery

DATE: July 16, 2024

General Meteorological Conditions

TEMPERATURE / CLOUD COVER:: 87°F/Overcast

WIND SPEED / DIRECTION: 0 MPH/N

Calibration Information

PRE-MEASUREMENT LEVEL: 94.05
POST-MEASUREMENT LEVEL: 94.04

Validation Measurement Results

| START TIME: | 10:53 AM |
|----------------------|----------|
| END TIME: | 11:14 AM |
| LA _{eq} : | 63.8 |
| LAS _{max} : | 83.9 |

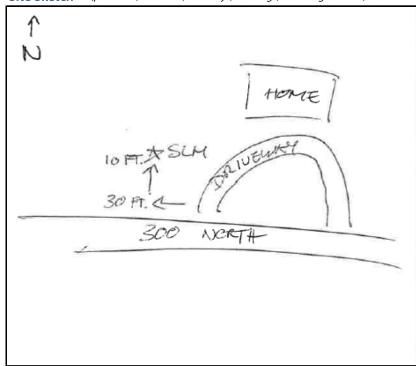
A 21-minute measurement was recorded. Two unusual events occurred during the measurement (see below). These events occurred over a 1-minute period; this period was removed from the measurement data which provides a 20-minute measurement consistent with other sites. The LA $_{\rm eq}$ was adjusted to reflect the 20-minute period.

Sound Level Meter Information

MODEL / SERIAL NUMBER: Larson Davis SoundTrack LxT1 / 0006299

EVENT NUMBER: .003

Site Sketch (plan view, distances, roadways, buildings, reflecting surfaces)



Background Noise / Unusual Events Log

| START TIME | END TIME | DESCRIPTION | START TIME | END TIME | DESCRIPTION |
|------------|----------|-----------------|------------|----------|-------------|
| 11:02:21 | 11:02:51 | Propeller plane | | | _ |
| 11:04:11 | 11:04:41 | Propeller plane | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |



PROJECT NAME: SR-177; SR-193 to 1800 North Re-evaluation

SITE / ADDRESS: 4 / 4228 West 300 North

North



East



South



West





PROJECT NAME: SR-177; SR-193 to 1800 North Re-evaluation

SITE / ADDRESS: 4 / 4228 West 300 North

Traffic Speed & Volumes (per lane per 20 minutes)

| ROAD | DIRECTION | SPEED | CONGESTION | AUTO | MED. TRUCK | HEAVY TRUCK | BUS | MOTORCYCLE |
|-----------|-----------|-------|------------|------|------------|-------------|-----|------------|
| 300 North | EB | 35-40 | No | 34 | 5 | 0 | 0 | 0 |
| 300 North | WB | 35-40 | No | 21 | 7 | 1 | 1 | 0 |

Traffic Speed & Volumes (per lane per hour)

| ROAD | DIRECTION | SPEED | CONGESTION | AUTO | MED. TRUCK | HEAVY TRUCK | BUS | MOTORCYCLE |
|-----------|-----------|-------|------------|------|------------|-------------|-----|------------|
| 300 North | EB | 35-40 | No | 102 | 15 | 0 | 0 | 0 |
| 300 North | WB | 35-40 | No | 63 | 21 | 3 | 3 | 0 |



PROJECT NAME: SR-177; SR-193 to 1800 North Re-evaluation

SITE / ADDRESS: 6 / Emigrant Trail

OBSERVER NAME: Matt Montgomery

DATE: July 16, 2024

General Meteorological Conditions

TEMPERATURE / CLOUD COVER:: 89°F/Overcast

WIND SPEED / DIRECTION: 3 MPH/N

Calibration Information

PRE-MEASUREMENT LEVEL: 94.04
POST-MEASUREMENT LEVEL: 94.10

Validation Measurement Results

 START TIME:
 12:03 PM

 END TIME:
 12:26 PM

 LA_{eq}:
 56.4

 LAS_{max}:
 71.4

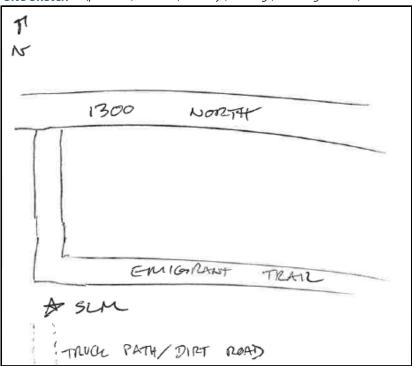
A 23-minute measurement was recorded. Six unusual events occurred during the measurement (see below). These events occurred over a 3-minute period; this period was removed from the measurement data which provides a 20-minute measurement consistent with other sites. The LA _{eq} was adjusted to reflect the 20-minute period.

Sound Level Meter Information

MODEL / SERIAL NUMBER: Larson Davis SoundTrack LxT1 / 0006299

EVENT NUMBER: .005

Site Sketch (plan view, distances, roadways, buildings, reflecting surfaces)



Background Noise / Unusual Events Log

| START TIME | END TIME | DESCRIPTION | START TIME | END TIME | DESCRIPTION |
|------------|----------|-----------------|------------|----------|-------------|
| 12:04:14 | 12:04:44 | Propeller plane | | | |
| 12:07:44 | 12:08:14 | Helicopter | | | |
| 12:10:04 | 12:10:34 | Commercial jet | | | |
| 12:20:34 | 12:21:04 | Commercial jet | | | |
| 12:22:44 | 12:23:14 | Commercial jet | | | |
| 12:23:54 | 12:24:24 | Propeller plane | | | |
| | | | | | |



PROJECT NAME: SR-177; SR-193 to 1800 North Re-evaluation

6 / Emigrant Trail SITE / ADDRESS:

North





South



West





PROJECT NAME: SR-177; SR-193 to 1800 North Re-evaluation

SITE / ADDRESS: 6 / Emigrant Trail

Traffic Speed & Volumes (per lane per 20 minutes)

| ROAD | DIRECTION | SPEED | CONGESTION | AUTO | MED. TRUCK | HEAVY TRUCK | BUS | MOTORCYCLE |
|------------|-----------|-------|------------|------|------------|-------------|-----|------------|
| 1300 North | EB | 30 | No | 6 | 3 | 0 | 0 | 0 |
| 1300 North | WB | 30 | No | 10 | 3 | 1 | 0 | 0 |

Traffic Speed & Volumes (per lane per hour)

| ROAD | DIRECTION | SPEED | CONGESTION | AUTO | MED. TRUCK | HEAVY TRUCK | BUS | MOTORCYCLE |
|------------|-----------|-------|------------|------|------------|-------------|-----|------------|
| 1300 North | EB | 30 | No | 18 | 9 | 0 | 0 | 0 |
| 1300 North | WB | 30 | No | 30 | 9 | 3 | 0 | 0 |

Appendix C – WILDLIFE AND HABITAT



Memorandum

Environmental Services

DATE: January 29, 2025

TO: Staci Hill, Sr. PM, HNTB

FROM: Matt Howard, Natural Resources Manager

SUBJECT: West Davis Corridor SR-177; SR-193 to 1800 N PIN 20927

Staci,

I have reviewed the assessment for the West Davis Corridor SR-177; SR-193 to 1800 reevaluation and its potential impacts to species protected by the Endangered Species Act (ESA) and concur with its findings. I agree with the summary's findings that the project would have no effect on species protected by the ESA. The project will not result in take of species protected by the MBTA or BGEPA. I have also reviewed the project to assess impacts to greater sage-grouse and have found that the project would have no impact on sage-grouse.

Sincerely,

Matt Howard

Natural Resource Manager



TECHNICAL MEMORANDUM

TO: Naomi Kisen, Utah Department of Transportation

Matt Howard, Utah Department of Transportation

COPIES: Randy Jefferies, HNTB

Jamie Tsandes, Bowen Collins & Associates

File

FROM: Elena Capson, Biologist

Bowen Collins & Associates

DATE: December 3, 2024

SUBJECT: PIN 20927 | WDC SR-177; SR-193 to 1800 N

Threatened and Endangered Species Memo

INTRODUCTION

Utah Department of Transportation (UDOT) is planning to expand the West Davis Corridor approximately three linear miles through West Point City, Utah. Bowen Collins & Associates (BC&A) has been contracted to complete the necessary evaluations for aquatic resources in preparation for environmental permitting with the U.S. Army Corps of Engineers (USACE). Part of the requirements for a USACE permit include biological evaluations and/or surveys for Threatened and Endangered Species (TES) with findings included in a Biological Assessment or TES Memo depending on the presence of TES or TES habitat. The assessment of impacts to TES is the purpose of this memo.

EXISTING CONDITIONS

The project area is a three-mile, 195 acre, linear corridor that is generally oriented in a north-south direction located in West Point, Utah (see Site Location Figures, Appendix A). The project area is predominantly used for rural agricultural practices; however, the surrounding area is rapidly urbanizing, and the WDC is needed to provide adequate infrastructure for the increasing population. Agricultural pastures and open fields make up the majority of the project area. Individual pastures are usually separated by barbwire. Most of them are planted with intermediate wheatgrass for grazing cattle, and due to flood irrigation, the fields also support rushes.

POTENTIAL SPECIES OF CONCERN

A list of potential TES was generated using the Information for Planning and Consultation (IPaC) online tool provided by the U.S. Fish & Wildlife Service (USFWS) and can be found in Appendix B. Based on the project location, this list includes two potential TES including monarch butterfly and Ute ladies'-tresses as listed with habitat requirements in the table on the next page.

Potential TES Species & Habitat in the Project Area

| Species | Status | Habitat Requirements | Habitat in Action Area | Critical Habitat in Action Area |
|--|---|---|------------------------------|--|
| | | Insects | | |
| Monarch Butterfly Danaus plexippus | Open fields and meadows with Candidate abundant milkweed plants for breeding. | | No | Not Designated |
| | | Plants | | |
| Ute Ladies'-tresses Spiranthes diluvialis | Threatened | Found in moist to very wet meadows, along streams and ditches, in abandoned stream meanders, and near springs, seeps, and lake shores. In Utah, elevation range: 4,200-7,000 feet | No | Not Designated |

HABITAT DETERMINATION

There is no habitat for either of these species at this site. The remainder of this memo will further discuss the lack of habitat for each species. Photos of the site are included in Appendix C.

Monarch Butterfly (*Danaus plexippus*): Monarch butterflies rely on abundant milkweed for breeding and other flowering plants for foraging. While some milkweed plants were found within the project area, they were sparse and not in significant enough numbers to be suitable for monarch breeding habitat. Therefore, there is no suitable habitat for this species within the project area.

Ute Ladies'-tresses (*Spiranthes diluvialis*): Most of the wetlands within the project area have tall or dense vegetation which is unsuitable for Ute ladies'-tresses (ULT) as they are not shade tolerant and do not do well with competition. Only one wetland at the site had a suitable vegetation community; however, this wetland is significantly disturbed as it has regularly been mowed and hayed. According to the ULT survey protocol, highly disturbed or modified sites—such as this site that has been harvested—are not considered suitable (USFWS, 2017). Therefore, there is no suitable habitat for ULT within the project area.

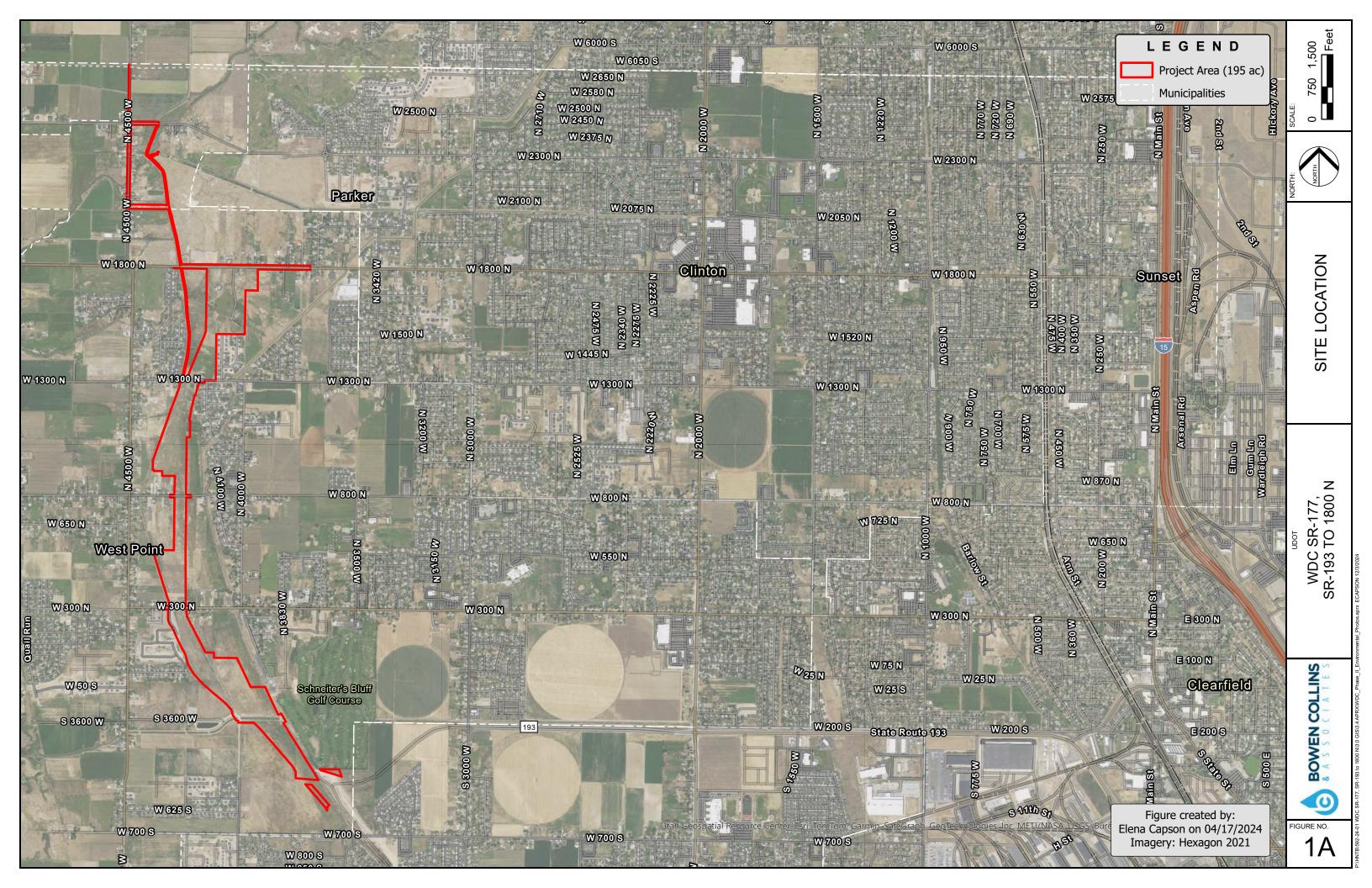
CONCLUSION

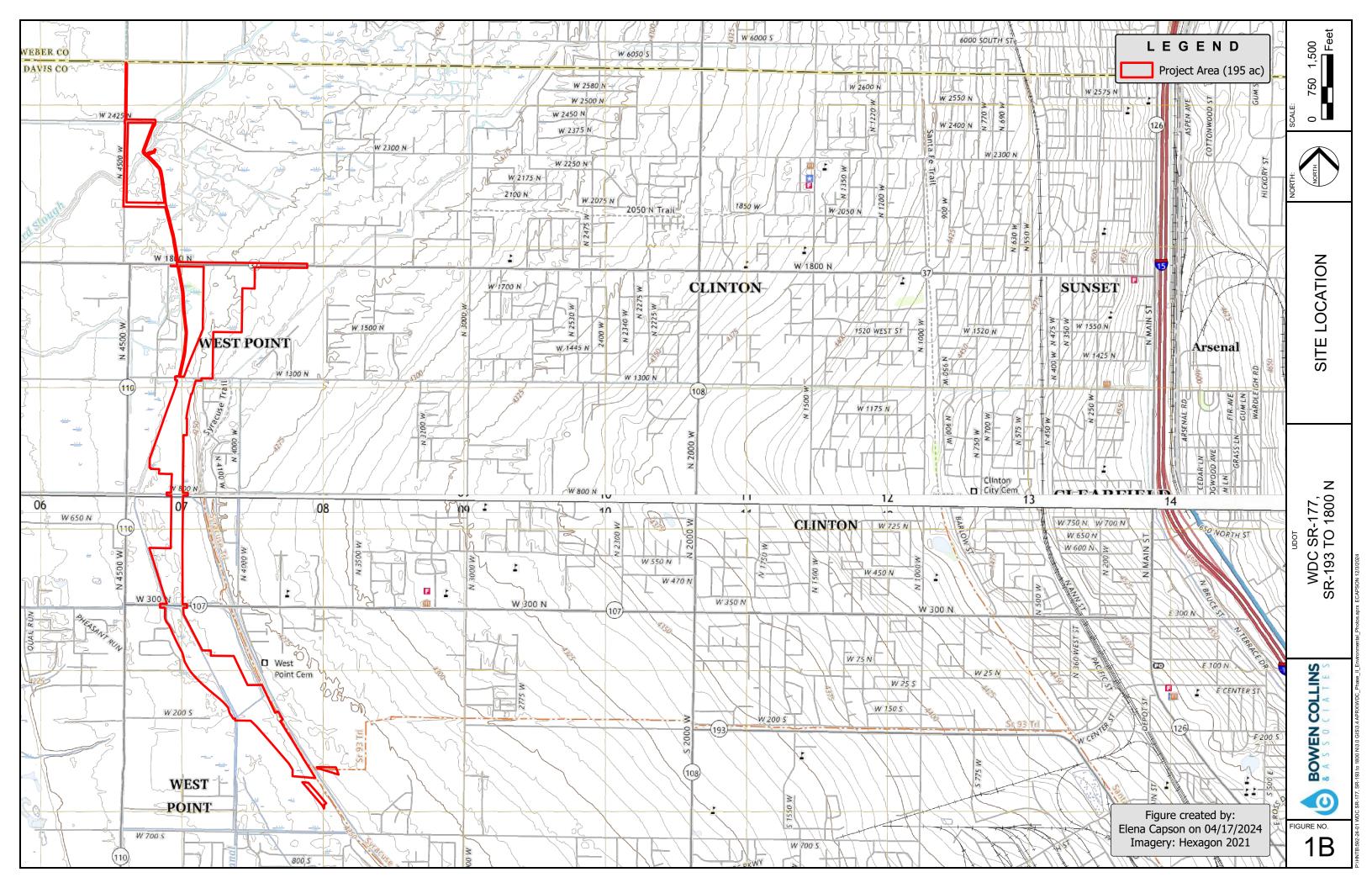
There is no suitable habitat for monarch butterfly or Ute ladies'-tresses as described above. As such, there will be *no effect* to TES by the proposed project.

REFERENCE

USFWS. 2017. Interim Survey Requirements for Ute Ladies'-tresses Orchid (*Spiranthes diluvialis*). https://www.fws.gov/sites/default/files/documents/SPDI_interimSurveyRequirements_1992 _revised%202017.pdf

Appendix A Site Location Figures





Appendix B

Information for Planning and Consultation (IPaC) and Utah Natural Heritage Program (UNHP) Reports



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Utah Ecological Services Field Office 2369 West Orton Circle, Suite 50 West Valley City, UT 84119-7603 Phone: (801) 975-3330 Fax: (801) 975-3331

In Reply Refer To: 08/07/2024 20:26:20 UTC

Project Code: 2024-0127448

Project Name: WDC: SR-177; SR-193 to 1800 N

Subject: List of threatened and endangered species that may occur in your proposed project

location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

Project code: 2024-0127448

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Project code: 2024-0127448 08/07/2024 20:26:20 UTC

Attachment(s):

Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Utah Ecological Services Field Office 2369 West Orton Circle, Suite 50 West Valley City, UT 84119-7603 (801) 975-3330

PROJECT SUMMARY

Project Code: 2024-0127448

Project Name: WDC: SR-177; SR-193 to 1800 N Project Type: Road/Hwy - New Construction

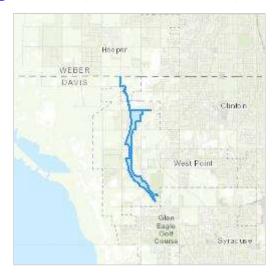
Project Description: Phase II of the West Davis Corridor project will extend the current

highway by about 3 linear miles and include about 1.5 miles recreational

trail in West Point, Utah.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@41.1299294,-112.10856685346258,14z



Counties: Davis County, Utah

ENDANGERED SPECIES ACT SPECIES

Project code: 2024-0127448

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Project code: 2024-0127448 08/07/2024 20:26:20 UTC

INSECTS

NAME

Monarch Butterfly *Danaus plexippus*

Candidate

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743

FLOWERING PLANTS

NAME

Ute Ladies'-tresses Spiranthes diluvialis

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2159

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

Project code: 2024-0127448 08/07/2024 20:26:20 UTC

IPAC USER CONTACT INFORMATION

Agency: Utah Department of Transportation

Name: Elena Capson

Address: 154 East 14075 South

City: Draper State: UT Zip: 84020

Email ecapson@bowencollins.com

Phone: 8014952224



Report Number: 15835 August 7, 2024

Utah Natural Heritage Program Online Species Search Report

Project Information

Project Name

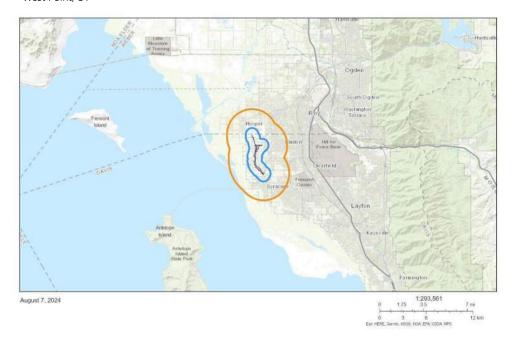
WDC: SR-177; SR-193 to 1800 N

Project Description

Phase II of the West Davis Corridor project will extend the current highway by about 3 linear miles and include about 1.5 miles recreational trail

Location Description

West Point, UT



Animals within a 1/2 mile radius

| Common Name | Scientific Name | State Status | U.S. ESA Status | Last Observation Year |
|-----------------------|--------------------|--------------|-----------------|-----------------------|
| Northern Leopard Frog | Lithobates pipiens | SGCN | | 2006 |
| Snowy Plover | Charadrius nivosus | SGCN | | 1997 |

Plants within a 1/2 mile radius

| Common Name | Scientific Name | State Status | U.S. ESA Status | Last Observation Year |
|-------------|-----------------|--------------|-----------------|-----------------------|
| | | | | |

No Species Found

Animals within a 2 mile radius

| Common Name | Scientific Name | State Status | U.S. ESA Status | Last Observation Year |
|-----------------------|--------------------------|--------------|-----------------|-----------------------|
| American Bittern | Botaurus lentiginosus | SGCN | | 1902 |
| Bald Eagle | Haliaeetus leucocephalus | SGCN | | 1986 |
| Burrowing Owl | Athene cunicularia | SGCN | | 1984 |
| Northern Leopard Frog | Lithobates pipiens | SGCN | | 2010 |
| Peregrine Falcon | Falco peregrinus | SGCN | | 1992 |
| Snowy Plover | Charadrius nivosus | SGCN | | 2013 |
| Winged Floater | Anodonta nuttalliana | SGCN | | 2022 |

Plants within a 2 mile radius

| Common Name | Scientific Name | State Status | U.S. ESA Status | Last Observation Year | |
|-------------|-----------------|--------------|-----------------|-----------------------|--|
|-------------|-----------------|--------------|-----------------|-----------------------|--|

No Species Found

Definitions

State Status

| SGCN |
|------|
|------|

U.S. Endangered Species Act

| LE | A taxon that is listed by the U.S. Fish and Wildlife Service as "endangered" with the probability of worldwide extinction |
|-------|---|
| LT | A taxon that is listed by the U.S. Fish and Wildlife Service as "threatened" with becoming endangered |
| LE;XN | An "endangered" taxon that is considered by the U.S. Fish and Wildlife Service to be "experimental and nonessential" in its designated use areas in Utah |
| С | A taxon for which the U.S. Fish and Wildlife Service has on file sufficient information on biological vulnerability and threats to justify it being a "candidate" for listing as endangered or threatened |
| PT/PE | A taxon "proposed" to be listed as "endangered" or "threatened" by the U.S. Fish and Wildlife Service |

Disclaimer

The information provided in this report is based on data existing in the Utah Division of Wildlife Resources' central database at the time of the request. It should not be regarded as a final statement on the occurrence of any species on or near the designated site, nor should it be considered a substitute for on-the-ground biological surveys. Moreover, because the Utah Division of Wildlife Resources' central database is continually updated, any given response is only appropriate for its respective request.

The UDWR provides no warranty, nor accepts any liability, occurring from any incorrect, incomplete, or misleading data, or from any incorrect, incomplete, or misleading use of these data.

The results are a query of species tracked by the Utah Natural Heritage Program, which includes all species listed under the U.S. Endangered Species Act and species on the Utah Wildlife Action Plan. Other significant wildlife values might also be present on the designated site. Please <u>contact_UDWR</u>'s regional habitat manager if you have any questions.

For additional information about species listed under the Endangered Species Act and their Critical Habitats that may be affected by activities in this area or for information about Section 7 consultation under the Endangered Species Act, please visit https://ecos.fws.gov/ipac/ or contact the Uservices Field Office at (801) 975-3330 or utahfieldoffice_esa@fws.gov.

Please contact our office at (801) 538-4759 or habitat@utah.gov if you require further assistance.

Your project is located in the following UDWR region(s): Northern region

Report generated for: Elena Capson Bowen Collins & Associates 154 East 14075 South Draper, UT 84020 (801) 495-2224 ecapson@bowencollins.com



Appendix C

Habitat Map and Photographs

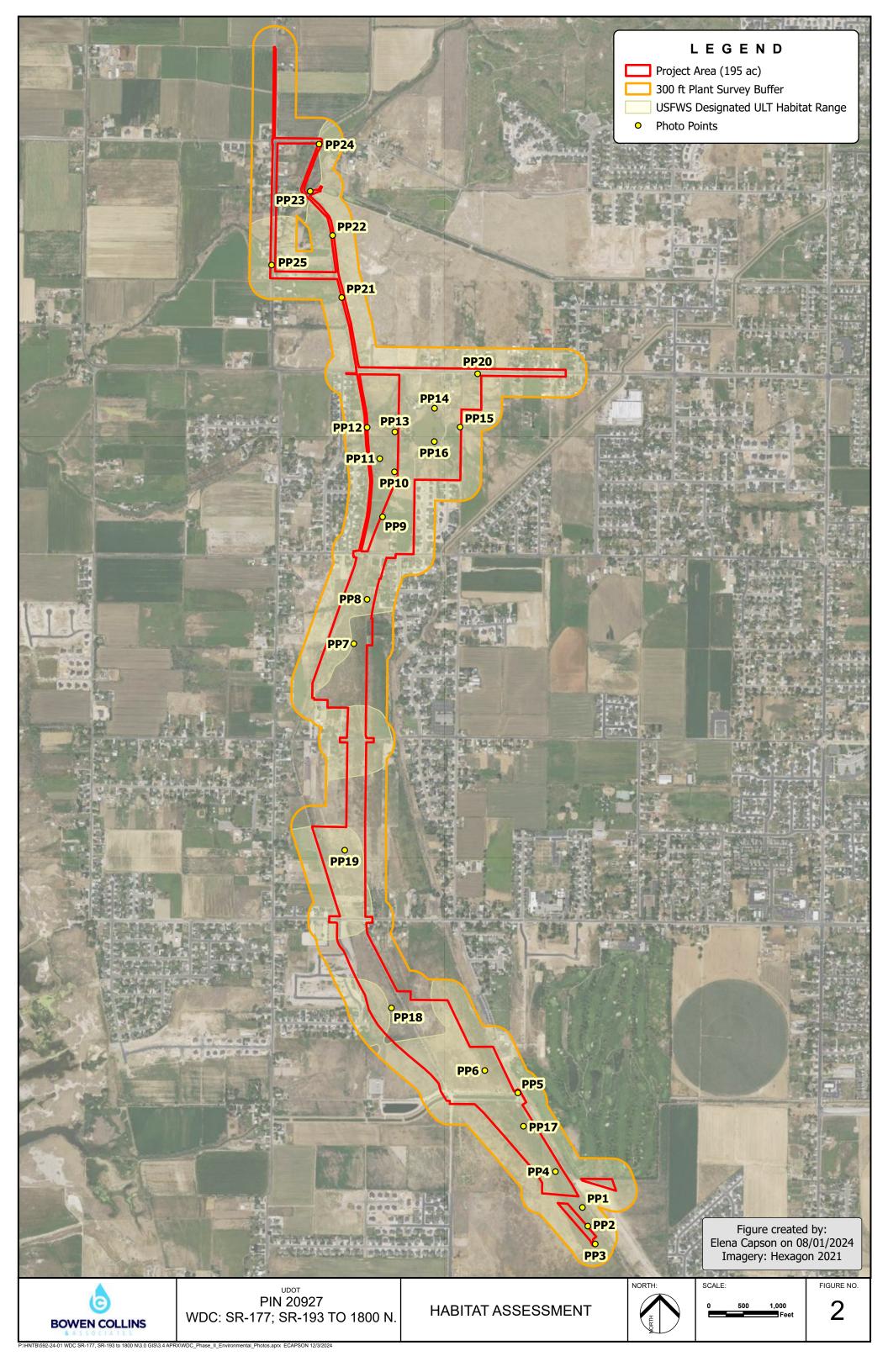




Photo Point 1



Photo Point 2



Photo Point 3



Photo Point 3



Photo Point 4



Photo Point 5



Photo Point 6



Photo Point 7



Photo Point 8



Photo Point 8



Photo Point 9



Photo Point 9



Photo Point 10

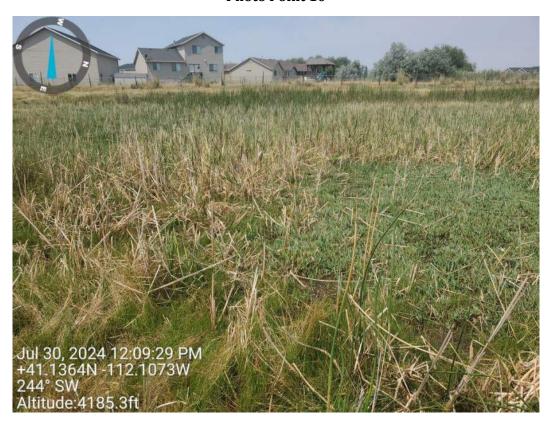


Photo Point 11



Photo Point 12



Photo Point 12



Photo Point 13



Photo Point 13



Photo Point 13



Photo Point 14



Photo Point 14



Photo Point 15



Photo Point 15



Photo Point 16



Photo Point 17 - May 14th, 2024 (4° - N)



Photo Point 17 - May 14th, 2024 (142 $^{\circ}$ - SE)



Photo Point 18 - May 14th, 2024 (264° - W)

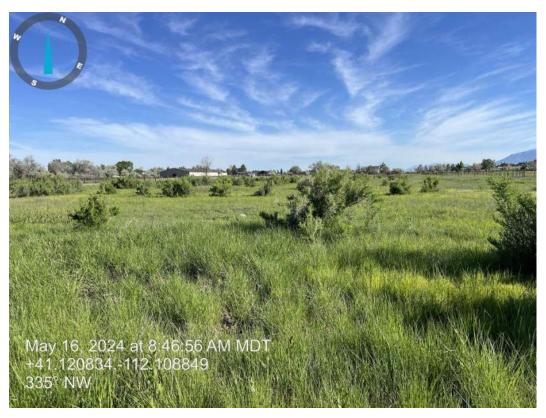


Photo Point 19



Photo Point 19



Photo Point 20



Photo Point 21



Photo Point 22



Photo Point 23



Photo Point 23



Photo Point 24



Photo Point 25



Photo Point 25

Appendix D – AQUATIC RESOURCES





<u>MEMORANDUM</u>

Date: Monday, September 30, 2024

To: Brandon Weston

UDOT Environmental Services Director

From: Rod Hess

UDOT Senior Landscape Architect 2024.09.30

RE: ENVIRONMENTAL REVIEW FOR AQUATIC RESOURCES

EIS Re-evaluation

PROJECT PURPOSE, DESCRIPTION AND SCOPE OF WORK

The Utah Department of Transportation (UDOT) is completing a re-evaluation of the West Davis Corridor EIS and preparing a project advertisement to construct a second phase of West Davis Corridor (SR-177) between SR-193 and 1800 North in Davis County.

A Final Environmental Impact Statement (EIS) and Section 4(f) Evaluation for the West Davis Corridor (WDC) was completed in June 2017 and approved through the issuance of a Record of Decision (ROD) on September 29, 2017, from the Federal Highway Administration (FHWA). This re-evaluation is evaluating the design refinements proposed to address the change of conditions in the project area between State Route 193 (SR-193) and 1800 North in Davis County, Utah since approval of the EIS Selected Alternative (ESA) in the 2017 ROD. The design refinements identified as the Refined Selected Alternative (RSA) (see attached) include the need for a four-lane freeway (increased from a two-lane freeway in the ESA), improved alignment curvature, trail alignment, updated detention ponds and utility relocations.

Bowen Collins and Associates (BC&A), in cooperation with HNTB, has completed an Aquatic Resources Delineation Report (2024) within the RSA environmental study area footprint (see attached) to complete aquatic resource impact analysis as part of the WDC EIS re-evaluation. UDOT has reviewed the delineation report and provides the following summary and mitigation recommendations.

Aquatic Resources and Wetlands:

Within the RSA of the EIS re-evaluation, BC&A did identify and map any potential aquatic resources including streams, ponds, ditches and wetland habitat that may be considered either waters of the U.S. (WOTUS), including wetlands, subject to Clean Water Act (CWA) jurisdiction by the U.S. Army Corps of Engineers (Army Corps), and natural streams regulated by the State of Utah as part of the State Alteration Permit Program.

Results of the Aquatic Resource Delineation Report shows a total of 38.37 acres of aquatic resources occurring within the RSA which include 31.63 acres of wetland habitat, 5.02 acres of ponds/streams, and 1.72 acres of ditches occurring within the RSA. Many of these aquatic resources are likely jurisdictional WOTUS and regulated by the Army Corps. The project must obtain an appropriate Department of Army



Permit based on the total acreage of impacts to jurisdictional aquatic resources. As part of the Army Corps permit application, UDOT will prepare and submit an Approved Jurisdictional Determination (AJD) to the Army Corps. By completing an AJD, the Army Corps will definitively determine which of all the mapped aquatic resources are considered jurisdictional WOTUS and the finalized Army Corps permit type will be determined based on total permanent impacts to those aquatic resources identified in the AJD as jurisdictional.

In addition to obtaining an appropriate Department of Army Permit, the project must also apply for and obtain a Stream Alteration Permit from the State of Utah for any impacts to Howard Slough, a perennial stream, which is considered a natural stream by the State of Utah and regulated as part of the Stream Alteration Program.

Mitigation Commitments:

- 1. Apply for and obtain an appropriate Department of Army Permit. (UDOT)
- 2. Comply with all conditions included in the Department of Army Permit. (Awarded Contractor)
- 3. Apply for and obtain a Stream Alteration Permit from the Utah Division of Water Rights. (UDOT)
- 4. Comply with all conditions and findings included in the Stream Alteration Permit. (Awarded Contractor)

Utah Pollutant Discharge Elimination System (UPDES):

This project will disturb more than one (1) acre of earth and is required to comply with the Utah Pollutant Discharge Elimination System (UPDES) Utah Construction General Permit (CGP).

Mitigation Commitments:

- 1. Comply with CGP, by preparing the Stormwater Pollution Prevention Plan (SWPPP) during project design; provide SWPPP to the project awarded contractor before Notice to Proceed. (UDOT)
- 2. Comply with CGP, by finalizing the SWPPP before beginning any earth disturbing activities and submit Notice of Intent (NOI); implement and maintain the project SWPPP according to CGP requirements throughout project construction. (Awarded Contractor)

Federal Emergency Management Agency (FEMA) Floodplains:

FEMA floodplains are not mapped within the project limits.

Mitigation Commitments:

None

Invasive and Noxious Weeds:

To reduce the introduction and spread of noxious weed species and to comply with Utah Noxious Weed Act (Utah Administrative Code, Rule R68-9), the project is required to: (1) properly clean earthmoving construction equipment before mobilizing onto site as required in UDOT General Provision Section 01355 (ENVIRONMENTAL COMPLIANCE) and (2) treat any noxious weeds found on the project as as required in UDOT Standard Section 02924 (NOXIOUS WEED CONTROL).

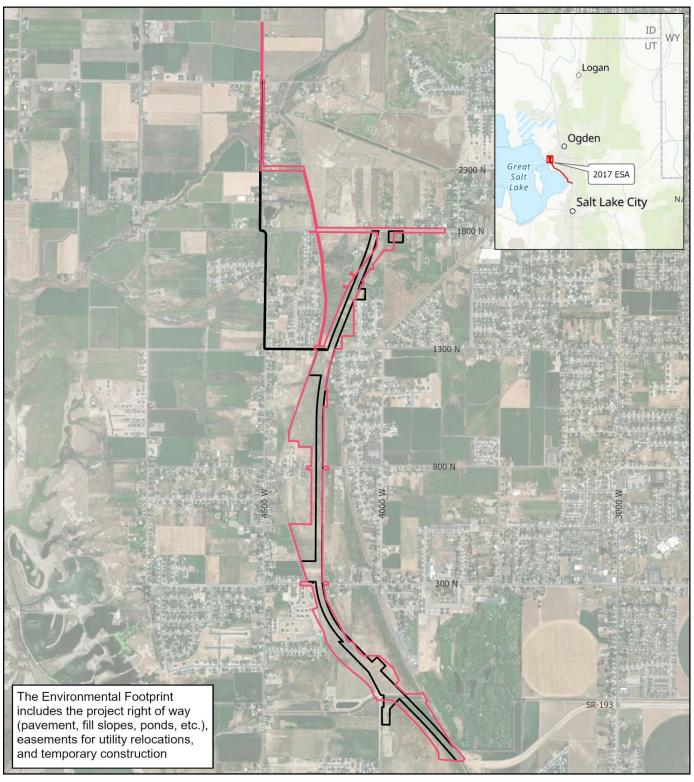




Mitigation Commitments:

- 1. Include UDOT Standard Section 02924 (NOXIOUS WEED CONTROL) in the contract documents to require identify and treat all noxious weeds found on the project site. (UDOT)
- 2. Comply with UDOT General Provision Section 01355 (ENVIRONMENTAL COMPLIANCE) and Standard Section 02924 (NOXIOUS WEED CONTROL). (Awarded Contractor)

Figure 1 Site Map



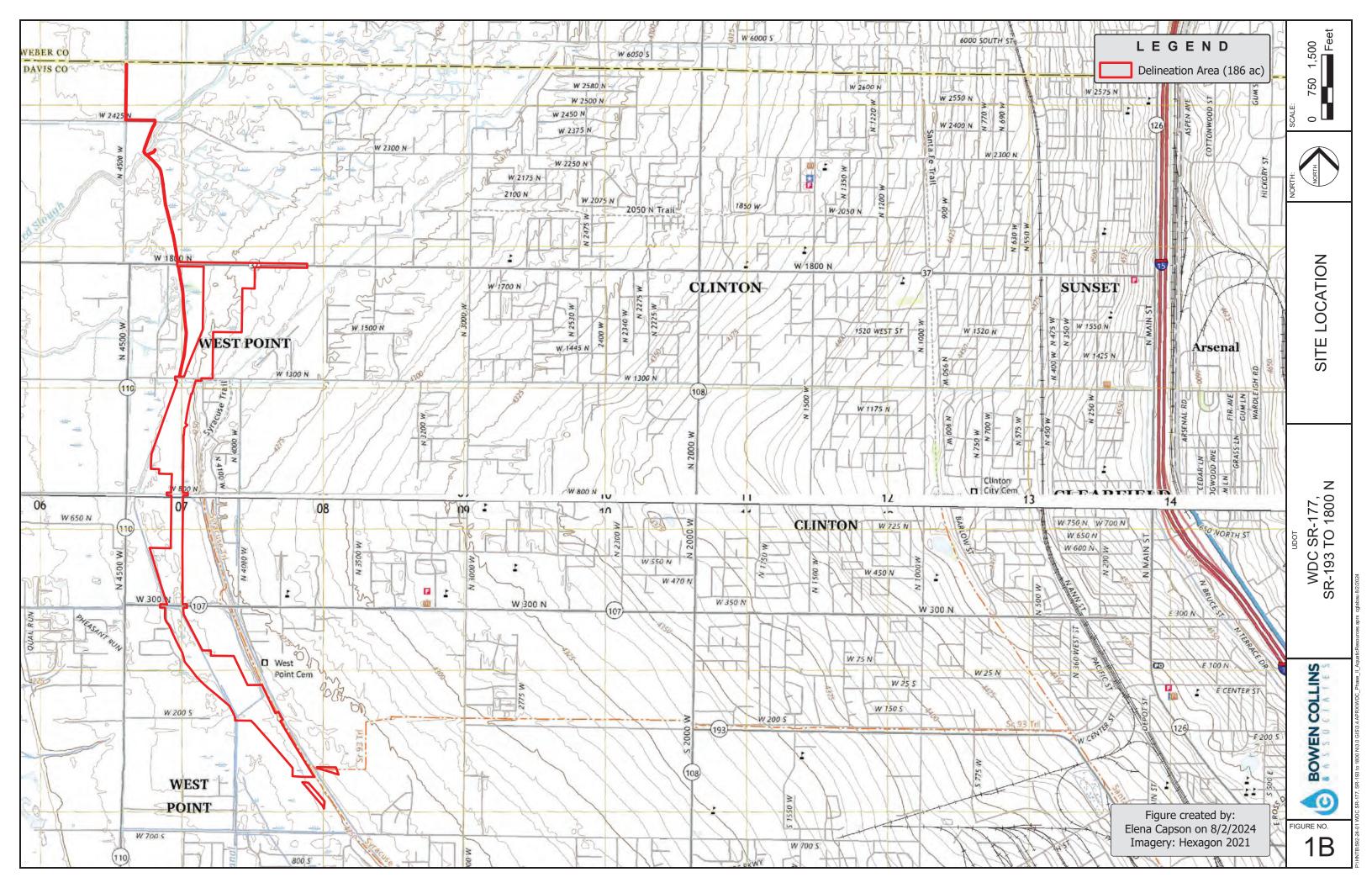
Environmental Footprint

Refined Selected Alternative (RSA)

EIS Selected Alternative (ESA)

SR-177; SR-193 to 1800 N Re-evaluation 15





WDC SR-177 Phase II (PIN 20927): SR-193 to 1800 North Aquatic Resources Report SPK-2007-01985

Prepared for:



Attn: Rod Hess 4501 South 2700 West Taylorsville, UT 84129 (801) 830-9589

Prepared by:



154 East 14075 South Draper, UT 84020 801-495-2224

December 2024

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EXECUTIVE SUMMARY

The West Davis Corridor Phase II: SR-177, SR-193 to 1800 North aquatic resource delineation was conducted according to the U.S. Army Corps of Engineers Wetlands Delineation Manual (USACE 1987) and the Arid West Supplement (USACE 2008).

A total of 195 acres were surveyed as part of this delineation. During this delineation, 38 aquatic resources were identified, for a total of 31.70 acres of wetlands, 5.01 acres of ponds, 7,322 linear feet of drainages/canals, and 34 linear feet of streams. The aquatic resources identified in the project area are classified as PEM (Palustrine, Emergent), PUB3C (Palustrine, Unconsolidated Bottom, Mud, Seasonally Flooded), PUB3Cx (Palustrine, Unconsolidated Bottom, Mud, Permanently Flooded), R2UB3Cx (Riverine, Lower Perennial, Unconsolidated Bottom, Mud, Seasonally Flooded, Excavated), R2UB3C (Riverine, Lower Perennial, Unconsolidated Bottom, Mud, Seasonally Flooded), R2UB3H (Riverine, Lower Perennial, Unconsolidated Bottom, Mud, Permanently Flooded), R4SB5C (Riverine, Intermittent, Streambed, Mud, Seasonally Flooded), R4SB5Cx (Riverine, Intermittent, Streambed, Artificially Flooded, Excavated), and R4SB5Kx (Riverine, Intermittent, Streambed, Mud, Artificially Flooded, Excavated) according to the NWI classification system. The condition of these resources was typical at the time of the delineation.

INTRODUCTION

This document presents results of a delineation of aquatic resources conducted for the Utah Department of Transportation (UDOT) by Bowen Collins & Associates (BC&A) at the West Davis Corridor Phase II: SR-177, SR-193 to 1800 North Site in Davis County, Utah. UDOT is planning to expand the West Davis Corridor within the project area. The purpose of this delineation is to identify all aquatic resources present within the project boundary.

SITE LOCATION AND METHODOLOGY

The delineation area is located in Davis County, Utah, Sections 5 and 6 of Township 4 North, Range 2 West, and Sections 19, 29, 30, 31, and 32 of Township 5 North Range 2 West. Directions to the site are as follows: from Bountiful, head north on I-15 for about 3.5 miles. Next, take a slight right onto SR-177/West Davis Corridor. Continue for about 16 miles. The south end of the project area begins where SR-177 turns to become SR-193 (See Site Location Figures, Appendix A).

The area delineated is approximately 195 acres of land primarily used as rural pasture. Surrounding this open agricultural space are developed residential areas, which occasionally cross into the delineation area due to the steady urbanization throughout Davis County. This area begins at the northernmost end of the existing portion of the West Davis Corridor, where it merges with SR-193. The delineation area then continues north, ending just past the intersection of 2425 North and 4500 West. A portion of the Old Emigrant and Jensen Nature Park Trail follow an extent of this area, which connects to both the Syracuse Trail and the Bluff Trail. All of these are paved multi-use trails. Besides those trails and bisecting roadways, the delineation area covers private property not accessed by the public. There is no interstate or foreign commerce taking place on or within the delineated wetlands.

Field work for this delineation was conducted on May 13, 14, 16, and 22 and July 25 of 2024, by Merissa Davis, Cara Glabau, and Elena Capson of BC&A. The total area delineated was approximately 195 acres and this entire area was observed during the site visits. Field conditions during the survey were clear and the area had not received much precipitation for several days prior. In general, annual precipitation was higher than normal for this time of year, potentially influencing hydrological conditions throughout the delineation area (see Antecedent Precipitation Figure, Appendix I). Although wetter than typical conditions were present at the time of the delineation, all wetlands and aquatic resources were still clearly identified.

The custom soil report for Davis-Weber Area, Utah (NRCS 2024a) was used to determine soil types for the area. National Wetlands Inventory (NWI) data was also examined to obtain the location of possible aquatic resources on the site (see NWI figure, Appendix E). The aquatic resource delineation was conducted according to the Corps of Engineers Wetlands Delineation Manual (USACE 1987), Arid West Supplement (USACE 2008), with a minimum of one sampling point per wetland area. Upland points were also sampled to further confirm wetland boundaries. Sample point data was recorded electronically in the field with Ecobot software. A total of 83 points were sampled to delineate the wetlands on the site, and these were sufficient to determine the location of the wetland boundaries. Points and boundaries were recorded using ArcGIS Field Maps connected with a Bad Elf or a Trimble R1 GPS receiver for sub-meter accuracy.

Based on the Wetlands Delineation Manual, wetlands are identified using three delineation criteria. These criteria include (1) hydrophytic vegetation, which is vegetation that prefers wet growing conditions, (2) wetland hydrology, which is typically classified as being saturated within 12 inches of the surface for 14 consecutive days in the growing season, and (3) hydric soils which form unique characteristics when regularly saturated, flooded, or ponded. All three indicators must be present to

meet wetland delineation criteria to qualify as a wetland, except in cases where a two-factor approach may be applied. According to the Arid West Supplement, in some situations with problematic vegetation, soils, or hydrology, two of the three criteria may suffice to qualify as a wetland. A detailed explanation of these wetland criteria follows.

Hydrophytic Vegetation

Hydrophytic plants are plants that are adapted to wet conditions. The National Wetland Plant List for the Arid West Region (USACE 2012) was used to determine the wetland indicator status of dominant plant species encountered on sample plots. Sight-identification was used to determine most plant species. Problematic hydrophytic vegetation that may qualify for the two-factor approach includes temporary shifts in vegetation, sparse vegetation, riparian areas, grazing areas, managed areas, and flood areas.

Wetland Hydrology

Wetland hydrology is present when an area is inundated either permanently or periodically, or the soil is saturated to the surface for 14 or more consecutive days at some time during the growing season of the prevalent vegetation. Primary hydrologic indicators also include high water tables, oxidized root channels, and sediment or drift deposits. Common secondary hydrologic indicators include watermarks, drainage patterns, and the FAC-neutral test. Wetlands that periodically lack indicators for wetland hydrology may apply the two-factor approach during problematic conditions such as periods with below-normal rainfall, drought years, and years with unusually low winter snowpack.

Hydric Soils

In Field Indicators of Hydric Soils in the U.S. (NRCS 2010) the Natural Resources Conservation Service (NRCS) defines hydric soils as soils that are formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the top 12 to 20 inches of soil, depending on soil texture. Hydric properties of soils were assessed using a spade to excavate the soil pit, and a CAPSURE color matching instrument was used to determine the Munsell soil color of the soils at each sample point. Problematic hydric soils that may qualify for the two-factor approach includes alkaline soils, volcanic ash, gravel bars, and recently developed wetlands.

RESULTS

Vegetation

The delineation area is approximately a mile east of the marshes that surround the Great Salt Lake. Proximity to the lake increases the height of ground water which makes it more accessible to hydrophytic vegetation. Hydrophytic vegetation was consistent throughout both upland and wetland areas, but dominance and variety of these plant communities increased in delineated wetlands. Upland areas are dominated by upland grasses such as wall barley, intermediate wheatgrass, and Kentucky bluegrass as well as Baltic rush, which is found throughout the site. Wetlands typically have a mix of reed canary grass, cattails, salt grass, rushes, and sedges. Dominant plants that occur at the sampling locations are listed in Table 1 on the next page.

Vegetation was identified primarily based on flowering parts and structural characteristics. Vegetation data collected and photos of the general vegetation for each sample point can be found in the Wetland Determination Data Forms (see Appendix C).

Table 1
Dominant Plants Observed within the Delineation Area

| Latin Binomial | Common Name | Region 8 Indicator Status |
|---------------------------|-------------------------|---------------------------|
| Carex nebrascensis | Nebraska Sedge | OBL |
| Carex rostrata | Swollen Beaked Sedge | OBL |
| Eleocharis obtuse | Blunt Spike-Rush | OBL |
| Eleocharis palustris | Common Spike-Rush | OBL |
| Schoenoplectus acutus | Hardstem Bullrush | OBL |
| Schoenoplectus americanus | Chairmakers Bullrush | OBL |
| Typha latifolia | Broadleaf Cattail | OBL |
| Calamagrostis canadensis | Bluejoint | FACW |
| Carex praegracilis | Clustered Field Sedge | FACW |
| Conium maculatum | Poison Hemlock | FACW |
| Phalaris angusta | Timothy Canary Grass | FACW |
| Juncus balticus | Baltic Rush | FACW |
| Phalaris arundinacea | Reed Canary Grass | FACW |
| Phragmites australis | Common Reed | FACW |
| Salix alba | White Willow | FACW |
| Distichlis spicata | Saltgrass | FAC |
| Elaeagnus angustifolia | Russian Olive | FAC |
| Festuca rubra | Red Fescue | FAC |
| Hordem jubatum | Foxtail Barley | FAC |
| Leymus triticoides | Beardless Lyme Grass | FAC |
| Poa pratensis | Kentucky Bluegrass | FAC |
| Rumex crispus | Curly Dock | FAC |
| Trifolium fragiferum | Strawbery-Head Clover | FAC |
| Bromus inermis | Smooth Brome | FACU |
| Cirsium vulgare | Bull Thistle | FACU |
| Helianthus annuus | Common Sunflower | FACU |
| Hordeum murinum | Wall Barley | FACU |
| Lactuca serriola | Prickly Lettuce | FACU |
| Melilotus officinalis | Yellow Sweet Clover | FACU |
| Sarcobatus vermiculatus | Greasewood | FACU |
| Taraxacum officinale | Common Dandelion | FACU |
| Bromus tectorum | Cheatgrass | UPL |
| Convolvulus arvensis | Field Bindweed | UPL |
| Lepidium campestre | Field Pepperweed | UPL |
| Lolium arundinaceum | Tall Fescue | UPL |
| Rhynchospora nivea | Showy Whitetop | UPL |
| Thinopyrum intermedium | Intermediate Wheatgrass | UPL |

^{*}Indicator Status:

OBL = occurs in aquatic resources > 99% of time FACW = occurs in aquatic resources 67-99% of time FAC = occurs in aquatic resources 34-66% of time FACU = occurs in aquatic resources 1-33% of time UPL = occurs in uplands > 99% of time (Note: Hydrophytic plant species are shaded gray)

Hydrology

The hydrology of the site is the result of high ground water, stormwater drainage, and irrigation practices. Multiple ditches and waterways are present throughout the delineation area to support both the local stormwater drainage system and irrigation requirements (see Appendix B and Additional Photos, Appendix G).

Irrigation practices within the delineation area contribute to a large number of waterways, such as ditches or canals, that are artificially controlled and intermittent. These are often used for water to be turned out for flood irrigation practices, and any excess water drains into the local storm drain system. Many pastures with active irrigation have more hydrophytic vegetation than other uplands areas due to the artificial source of intermittent hydrology. Areas with artificially controlled irrigation flood practices would likely quickly dry out and match nearby upland areas if irrigation ceased.

In general, the area delineated exhibits high groundwater. Many areas with topographical depressions seasonally pond from this high groundwater, with no additional sources of consistent hydrology. This high groundwater is also the primary hydrology in many wetlands throughout the delineation area.

Both the Hooper Canal and Howard Slough cross through the delineation area, but no discharges from these waterways were observed during the field work to contribute to hydrology within the delineated wetlands. Water from some wetlands drain from these wetlands into the Howard Slough and other unnamed waterways which continue onto the Great Salt Lake.

Ditches, which are man-made and convey both irrigation water and storm water runoff, throughout the delineation area are identified in the delineation results figures (Appendix B) but not classified as aquatic resources because these are extensions of the piped storm drain system and are of the type of ditches not commonly regulated themselves as waters of the United States. This network of piped drainages occasionally opens to collect stormwater and irrigation runoff, typically alongside roads. These ditches have no signs of regular hydrology. Several stormwater and irrigation ditches which are generally considered as non-jurisdictional per the Pre-2015 Regulatory Regime are identified on the figures shown in Appendix B but are not numbered or quantified by linear feet or acreage. Unlike these ditches, larger drainages have been included as aquatic resources due to their open water connections to waterways that connect to the Great Salt Lake.

Primary hydrologic indicators at the site included hydrogen sulfide odor, water-stained leaves, surface soil cracks, surface water, high water table, and soil saturation. Secondary indicators often included the FAC-Neutral test. Hydrologic data collected at the sample points can be found in the Wetland Determination Data Forms (see Appendix C). Overall, the ordinary high water marks of all the channels or ponds were clearly identified by changes in vegetation/soil and erosion patterns (see Appendix H for ordinary high water mark data forms).

Soils

The soils at the site are primarily lacustrine deposits and/or alluvium. The Davis-Weber Area, Utah Soil Survey (NRCS 2024a) was referenced to determine soil types for the area. The following soil types occur within the delineated area:

- Parleys loam, 0-4% slopes, well drained
- Ford loam, shallow water table, 0-1% slopes, poorly drained

- Harrisville silt loam, 0-1% slopes, somewhat poorly drained
- Harrisville-Leland complex, 0-1% slopes, somewhat poorly drained
- Kidman fine sandy loam, 0-1% slopes, well drained
- Kidman fine sandy loam, 10-20% slopes, eroded, well drained
- Parleys loam, 6-10% slopes, well drained
- Syracuse loamy fine sand, 0-2% slopes, somewhat poorly drained
- Syracuse loamy fine sand, moderately saline, sodic, 0-2% slopes, somewhat poorly drained
- Warm Springs fine sandy loam, 0-1% slopes, somewhat poorly drained
- Warm Springs fine sandy loam, saline, sodic, 0-1% slopes, somewhat poorly drained
- Warm Springs fine sandy loam, shallow water table, 0-1% slopes, somewhat poorly drained
- Warm Springs fine sandy loam, 1-3% slopes, somewhat poorly drained

Ford loam and Warm Springs fine sandy loam, 0-1% slopes, as well as Warm Springs fine sandy loam, 1-3%, are classified as hydric on the national and Utah hydric soils lists (NRCS 2015). Soil properties such as texture and Munsell soil color generally matched the soil descriptions found in the Soil Survey for Davis-Weber Area, Utah (NRCS 2024a). Soil data collected, including color and texture, at the sample points along with photos of the soil pits dug at each sample point can be found in the Wetland Determination Data Forms (see Appendix C). Additionally, a custom soil resource report from the NRCS for the site is located in Appendix F.

Sample Points

Of the 83 sample points taken at the site, 29 points were located in wetlands. The Delineation Results Figure in Appendix B displays the sample point locations and Table 2 below summarizes the sample point data.

Table 2
Wetland Delineation Sample Point Summary and Determination Matrix

| Sample Point | Hydrophytes Dominant? | Hydric Soils Present? | Hydrologic Indicator(s) Present? | Is the Sample Point in a Wetland? |
|--------------|--------------------------|--------------------------|--|---|
| 1 | ✓ | ✓ | ✓ | ✓ |
| 2 | - | - | ✓ | - |
| 3 | ✓ | ✓ | ✓ | ✓ |
| 4 | - | - | ✓ | - |
| 5 | ✓ | ✓ | ✓ | ✓ |
| 6 | ✓ | - | ✓ | - |
| 7 | - | - | - | - |
| 8 | ✓ | - | ✓ | - |
| 9 | - | - | - | - |

| Sample Point | Hydrophytes Dominant? | Hydric Soils Present? | Hydrologic Indicator(s) Present? | Is the Sample Point in a Wetland? |
|--------------|--------------------------|--------------------------|--|---|
| 10 | - | - | - | - |
| 11 | ✓ | - | - | - |
| 12 | ✓ | - | ✓ | - |
| 13 | - | - | - | - |
| 14 | - | - | - | - |
| 15 | - | - | - | - |
| 16 | ✓ | ✓ | ✓ | ✓ |
| 17 | - | - | - | - |
| 18 | ✓ | ✓ | ✓ | ✓ |
| 19 | - | - | - | - |
| 20 | ✓ | - | ✓ | - |
| 21 | ✓ | ✓ | ✓ | ✓ |
| 22 | ✓ | - | ✓ | - |
| 23 | ✓ | ✓ | ✓ | ✓ |
| 24 | - | - | - | - |
| 25 | - | - | - | - |
| 26 | ✓ | ✓ | ✓ | ✓ |
| 27 | - | - | - | - |
| 28 | ✓ | ✓ | ✓ | ✓ |
| 29 | ✓ | ✓ | ✓ | ✓ |
| 30 | ✓ | - | ✓ | - |
| 31 | - | - | - | - |
| 32 | ✓ | - | - | - |
| 33 | ✓ | ✓ | ✓ | ✓ |
| 34 | ✓ | ✓ | ✓ | ✓ |
| 35 | - | - | - | - |
| 36 | - | - | - | - |
| 37 | ✓ | - | ✓ | - |
| 38 | - | - | - | - |
| 39 | ✓ | ✓ | ✓ | ✓ |
| 40 | - | - | - | - |
| 41 | ✓ | ✓ | ✓ | ✓ |
| 42 | ✓ | ✓ | ✓ | ✓ |
| 43 | - | - | - | - |
| 44 | ✓ | ✓ | ✓ | ✓ |
| 45 | ✓ | ✓ | ✓ | ✓ |
| 46 | - | - | - | - |
| 47 | ✓ | - | - | - |
| 48 | ✓ | ✓ | ✓ | ✓ |

| Sample Point | Hydrophytes Dominant? | Hydric Soils Present? | Hydrologic Indicator(s) Present? | Is the Sample Point in a Wetland? |
|--------------|--------------------------|--------------------------|--|---|
| 49 | - | - | - | - |
| 50 | ✓ | - | - | - |
| 51 | - | - | - | - |
| 52 | ✓ | - | - | - |
| 53 | ✓ | ✓ | ✓ | ✓ |
| 54 | - | - | - | - |
| 55 | ✓ | - | - | - |
| 56 | ✓ | ✓ | ✓ | ✓ |
| 57 | - | - | - | - |
| 58 | ✓ | ✓ | ✓ | ✓ |
| 59 | - | - | - | - |
| 60 | - | - | - | - |
| 61 | ✓ | ✓ | ✓ | ✓ |
| 62 | - | - | - | - |
| 63 | ✓ | ✓ | ✓ | ✓ |
| 64 | - | - | - | - |
| 65 | ✓ | - | ✓ | - |
| 66 | ✓ | ✓ | ✓ | ✓ |
| 67 | - | - | - | - |
| 68 | - | - | - | - |
| 69 | ✓ | - | ✓ | - |
| 70 | ✓ | ✓ | ✓ | ✓ |
| 71 | - | - | - | - |
| 72 | ✓ | ✓ | ✓ | ✓ |
| 73 | - | - | - | - |
| 74 | - | - | - | - |
| 75 | - | - | ✓ | - |
| 76 | ✓ | - | - | - |
| 77 | - | - | - | - |
| 78 | ✓ | ✓ | ✓ | ✓ |
| 79 | - | - | - | - |
| 80 | - | - | - | - |
| 81 | ✓ | ✓ | ✓ | ✓ |
| 82 | - | - | - | - |
| 83 | ✓ | ✓ | ✓ | ✓ |

Wetland Boundaries

Throughout the delineation area a variety of aquatic resources are present, all with varying vegetation, soils, sources of hydrology, and connections to outside waterways. Overall, the boundaries of these aquatic resources were distinct due to changes in vegetation, hydrology, and topography throughout the site and can be seen in the delineation results figures in Appendix B.

Additionally, the delineation results figures in Appendix B include potential wetlands and waterways extending outside of the delineation area. This is shown to demonstrate potential connections to Waters of the United States. These boundaries were determined by analyzing previous delineation findings, NWI data, aerial imagery, and field observations. All of these boundaries of aquatic resources outside the delineation area have not been verified in the field and represent potential findings.

The spreadsheet on the following pages details the 38 aquatic resources present within the delineation area. These aquatic resources can also be found in the Aquatic Resource Spreadsheet in Appendix D of this report.

| | | | | | WETLANDS | | |
|------------------|---------------------------|---------|------------------|--------------------------------|--|-------------------------------------|-----------------------------|
| Aquatic Resource | General Description | Amount | Cowardin Code | Waters Type | Description | Jurisdiction Recommendation | Associated Sample Points |
| W1 | Emergent Marsh Wetland | 0.04 ac | PEM | NON-WOTUS.WETL. NEGATIVE-A7 | Wetland W1 is an emergent marsh sourced from groundwater. This wetland extends to the north and south of the delineation area, connecting to an open ditch system to the south, which joins the local stormwater drainage system via culvert. There are no connections to other waters or wetlands to the north of the delineation area. The local stormwater drainage system is a fully piped network and appears to end at the North Davis Sewer District facility (water treatment plant). After leaving the plant it eventually discharges into the Great Salt Lake. Although this wetland may at times connect via a piped system and through the treatment plant to downstream Waters of the U.S. it does not have a continuous surface water connection (multiple miles of underground piping), nor does it have a relatively permanent flow (storm events and/or irrigation overflow). | May <u>not</u> be jurisdictional | SP29 |
| W2 | Emergent Marsh Wetland | 7.55 ac | PEM | A7-AJD.WETL-404 | Wetland W2 is an emergent marsh sourced from groundwater and stormwater runoff from an abutting ditch and adjacent drainage systems via culverts. The area was saturated to the surface with some areas of standing water. The vegetation community becomes more complex in areas with more water to the east and is dominant with rushes to the west where elevations slightly rise with less consistent standing water. This wetland drains into a stormwater drainage channel (D1) which continues through the delineation area before discharging into a larger open drainage channel (D2) which eventually connects to waters associated with the Great Salt Lake. Based on these connections, wetland W2 has a continuous surface water connection to Waters of the U.S. | May be jurisdictional | SP28 |
| W3 | Wet Meadow Wetland | 2.24 ac | PEM | NON-WOTUS.WETL. NEGATIVE-A7 | Wetland W3 is a wet meadow sourced from high groundwater. Vegetation is primarily rushes and grasses planted for previous agricultural grazing. Any potential surface flows between wetland W3 and nearby waters to the north and east is restricted by a berm, isolating this aquatic resource. No discrete features such as pipes, swales, or culverts were identified to connect this wetland to any other nearby waters or wetlands. Previously, this wetland was connected to wetland W2, but has in recent years been fully separated by a road and berm (not related to this project). Based on this, wetland W3 has no continuous surface water connections to any Waters of the U.S. | May <u>not</u> be jurisdictional | SP23; SP26 |
| W4 | Wet Meadow Wetland | 0.63 ac | PEM | A7-AJD.WETL-404 | Wetland W4 is a wet meadow, almost entirely dominant with rushes and located in a depression which briefly connects to a stormwater drainage channel (D1). This wetland is located at the toe of a slope, where hydrology collects from snowmelt and stormwater runoff. The surface water connection between wetland W4 and the adjacent drainage channel (D1) is continuous and based on its downstream connection to a larger open drainage channel (D2), eventually connects to waters associated with the Great Salt Lake. Based on these connections, wetland W4 has a continuous surface water connection to Waters of the U.S. | May be jurisdictional | SP18 |
| W5 | Phragmites Emergent Marsh | 0.43 ac | PEM | A7-AJD.WETL-404 | Wetland W5 abuts wetland W4 but is dominant with <i>Phragmites australis</i> , separating the two wetlands based on these distinct changes in vegetation communities. This wetland is located on a slope and receives hydrology from snowmelt and stormwater runoff as it drains into the wetland below. This wetland has a continuous surface water connection to wetland W4, which has a continuous surface water connection to drainages (D1 and D2) which eventually connect to waters associated with the Great Salt Lake. Based on these connections, wetland W5 has a continuous surface water connection to Waters of the U.S. | May be jurisdictional | SP21 |

| | | | | | WETLANDS | | |
|------------------|------------------------|---------|------------------|--------------------------------|---|-------------------------------------|-----------------------------|
| Aquatic Resource | General Description | Amount | Cowardin Code | Waters Type | Description | Jurisdiction Recommendation | Associated Sample Points |
| W6 | Wet Meadow Wetland | 1.57 ac | PEM | NON-WOTUS.WETL. NEGATIVE-A7 | Wetland W6 is a wet meadow dominant with rushes and planted grasses for cattle grazing. This wetland has developed in a slight depression in this field, spanning along a fence line to the west where wetland vegetation is still dispersed throughout the site, but all sample points taken on the west side of the fence did not qualify as wetlands, defining this boundary. The hydrology of this wetland is from high groundwater, stormwater runoff, and irrigation pooling, which drains into the adjacent wetland (W7) which is topographically lower than wetland W6. The boundary between these two wetlands was determined by a difference in vegetation and hydrology patterns. The drained waters from Wetland W6 flows through Wetland W7 which continues outside of the delineation area before entering a culvert directly to the south of 300 North, where it enters the storm drain system. The local stormwater drainage system is a fully piped network and appears to end at the North Davis Sewer District facility (water treatment plant). After leaving the plant it eventually discharges into the Great Salt Lake. Although this wetland may at times connect via a piped system and through the treatment plant to downstream Waters of the U.S. it does not have a continuous surface water connection (multiple miles of underground piping), nor does it have a relatively permanent flow (storm events and/or irrigation overflow). | May <u>not</u> be jurisdictional | SP1; SP16 |
| W7 | Emergent Marsh Wetland | 0.39 ac | PEM | NON-WOTUS.WETL. NEGATIVE-A7 | Wetland W7 is an emergent marsh which is sourced from both irrigation runoff and high ground water. Vegetation within this wetland is diverse and varies based on the levels of inundation. This wetland is a depression that acts as a swale, which begins very shallow in the fields to the west, collecting any irrigation runoff from these surrounding fields, draining to the northeast before turning to the north. At the time of the delineation this wetland had areas of standing and very slow-moving water, continuing to the north outside the delineation area where it drains into a culvert directly to the south of 300 North, where it enters the storm drain system. The local stormwater drainage system is a fully piped network and appears to end at the North Davis Sewer District facility (water treatment plant). After leaving the plant it eventually discharges into the Great Salt Lake. Although this wetland may at times connect via a piped system and through the treatment plant to downstream Waters of the U.S. it does not have a continuous surface water connection (multiple miles of underground piping), nor does it have a relatively permanent flow (storm events and/or irrigation overflow). | May <u>not</u> be jurisdictional | SP3 |
| W8 | Wet Meadow Wetland | 1.09 ac | PEM | NON-WOTUS.WETL. NEGATIVE-A7 | Wetland W8 is a wet meadow similar to W6, but on the opposite side of W7. It is dominant with rushes and planted grasses for cattle grazing. This wetland has developed in a slight depression in this field, spanning along a fence line to the west where wetland vegetation is still dispersed throughout the site, but all sample points taken on the west side of the fence did not qualify as wetlands, defining this boundary. Wetland conditions appear to span to the north outside the delineation area, but these boundaries were not confirmed during the delineation field work. The hydrology of this wetland is from high groundwater and stormwater runoff, draining into the adjacent wetland (W7) which is topographically lower than wetland W8. Any water draining from Wetland W8 flows through Wetland W7 which continues outside of the delineation area before entering a culvert directly to the south of 300 North, where it enters the storm drain system. The local stormwater drainage system is a fully piped network and appears to end at the North Davis Sewer District facility (water treatment plant). After leaving the plant it eventually discharges into the Great Salt Lake. Although this wetland may at times connect via a piped system and through the treatment plant to downstream Waters of the U.S. it does not have a continuous surface water connection (multiple miles of underground piping), nor does it have a relatively permanent flow (storm events and/or irrigation overflow). | May <u>not</u> be jurisdictional | SP5 |

| | WETLANDS | | | | | | | | | |
|------------------|---------------------------|---------|------------------|--------------------------------|--|-------------------------------------|---------------------------------|--|--|--|
| Aquatic Resource | General Description | Amount | Cowardin Code | Waters Type | Description | Jurisdiction Recommendation | Associated Sample Points | | | |
| W9 | Wet Meadow Wetland | 1.31 ac | PEM | NON-WOTUS.WETL. NEGATIVE-A7 | Wetland W9 is a wet meadow developed in a slight depression sourced from high ground water and stormwater runoff. This wetland is dominant with sedges and rushes and boundaries of the wetland can be defined by that distinction in this vegetation. No discrete features such as pipes, swales, or culverts were identified to connect this wetland to any other nearby waters or wetlands. Wetland W9 has no continuous surface water connections to any other aquatic resources or Waters of the U.S. | May <u>not</u> be jurisdictional | SP41 | | | |
| W10 | Emergent Marsh Wetland | 5.78 ac | PEM | NON-WOTUS.WETL. NEGATIVE-A7 | Wetland W10 is an emergent marsh with a varied plant community that appears to span outside the delineation area to the east, but these boundaries were not confirmed during the delineation field work. This wetland is in a depression with dispersed areas of shallow standing water. Mucky soils and strong odors of hydrogen sulfide were present at the time of the delineation field work. This wetland is seasonally flooded from a mix of high ground water and stormwater runoff and based on aerial imagery likely dries out later in the growing season. This wetland drains into two ponds (OW1 and OW2) both of which do not have any continuous surface water connections to any other aquatic resources. No discrete features such as pipes, swales, or culverts were identified to connect this wetland to any other nearby waters or wetlands. Based on this, wetland W10 has no continuous surface water connections to any Waters of the U.S. | May <u>not</u> be jurisdictional | SP33; SP34; SP42; SP44; SP45 | | | |
| W11 | Emergent Marsh Wetland | 1.95 ac | PEM | NON-WOTUS.WETL. NEGATIVE-A7 | Wetland W11 is an emergent marsh that was flooded at the time of the delineation field work. This wetland directly abuts wetland W10, with the boundary defined by the area of significant inundation. Flood conditions appear to be seasonal based on the vegetation growing within this wetland, likely having similar conditions to the adjacent wetland later in the growing season. Water from this wetland expands into the adjacent wetlands (W12) and nearby pond (OW1), both of which do not have any continuous surface water connections to any other aquatic resources. No discrete features such as pipes, swales, or culverts were identified to connect this wetland to any other nearby waters or wetlands. Based on this, wetland W11 has no continuous surface water connections to any Waters of the U.S. | May <u>not</u> be jurisdictional | N/A | | | |
| W12 | Emergent Marsh Wetland | 3.06 ac | PEM | NON-WOTUS.WETL. NEGATIVE-A7 | Wetland W12 is comprised of historically placed fill material which seasonally floods. This material has created large mounds with upland vegetation growing above the waters. Between these mounds is a large network of connected seasonal standing water and wetlands. This wetland abuts a ponded area (OW1) and flooded emergent marsh wetland (W11). The hydrology between these resources is all directly connected, none of which have any continuous surface water connections to any other aquatic resources outside this isolated system. No discrete features such as pipes, swales, or culverts were identified to connect this wetland to any other nearby waters or wetlands. Based on this, Wetland W12 has no continuous surface water connections to any Waters of the U.S. | May <u>not</u> be jurisdictional | N/A | | | |
| W13 | Phragmites Emergent Marsh | 0.10 ac | PEM | NON-WOTUS.WETL. NEGATIVE-A7 | Wetland W13 is an emergent marsh dominant with <i>Phragmites australis</i> . This wetland is a roadside depression that has been excavated to hold stormwater runoff before draining into the storm drain system via culvert. This area is seasonally saturated or flooded from storm events and annual runoff. The consistent hydrology supports the dense growth of <i>Phragmites australis</i> . This wetland has a culverted connection to the local storm drain system but no other continuous surface water connections. The local stormwater drainage system is a fully piped network and appears to end at the North Davis Sewer District facility (water treatment plant). After leaving the plant it eventually discharges into the Great Salt Lake. Although this wetland may at times connect via a piped system and through the treatment plant to downstream Waters of the U.S. it does not have a continuous surface water connection (multiple miles of underground piping), nor does it have a relatively permanent flow (storm events and/or irrigation overflow). | May <u>not</u> be jurisdictional | SP39 | | | |

| | | | | | WETLANDS | | |
|------------------|------------------------|---------|------------------|-----------------|---|--------------------------------|-----------------------------|
| Aquatic Resource | General Description | Amount | Cowardin Code | Waters Type | Description | Jurisdiction Recommendation | Associated Sample Points |
| W14 | Emergent Marsh Wetland | 0.13 ac | PEM | A7-AJD.WETL-404 | Wetland W14 is an emergent marsh that follows the alignment of the service road for the Hooper Canal and spans outside the delineation area into agricultural lands. This wetland has developed in a depression, collecting high groundwater, irrigation runoff, and stormwater runoff from the surrounding fields. The greater extent of this wetland had inundated areas at the time of the delineation field work which slowly flows through a culvert to a nearby wetland (W15). This adjacent wetland drains into an open drainage channel (D4), which eventually connects to waters associated with the Great Salt Lake. Based on these connections, wetland W14 has a continuous surface water connection to Waters of the U.S. | May be jurisdictional | SP72 |
| W15 | Emergent Marsh Wetland | 2.10 ac | PEM | A7-AJD.WETL-404 | Wetland W15 is an emergent marsh that spans from the access road for the Hooper Canal to the west and to a residential property on the east. This wetland has developed in a depression, collecting high groundwater, irrigation runoff, and stormwater runoff. Water flows through this wetland through two drainage channels (D9 and D10) which convey overflow from the nearby ponds (OW3 and OW4). These channels appear to seasonally flood portions of this wetland as well as provide continuous hydrology which drains via culvert into an open drainage channel (D4). This drainage channel eventually connects to waters associated with the Great Salt Lake. Based on these connections, wetland W15 has a continuous surface water connection to Waters of the U.S. | May be jurisdictional | SP70 |
| W16 | Emergent Marsh Wetland | 0.63 ac | PEM | A7-AJD.WETL-404 | Wetland W16 is an emergent marsh that spans from a drainage channel (D9) in a depression. This wetland collects water that overflows from pond OW4 through an undefined ditch which loops through the wetland before discharging into the adjacent drainage channel (D9). This drainage channel continues through nearby wetlands before draining into an open drainage channel (D4), which eventually connects to waters associated with the Great Salt Lake. Based on these connections, wetland W16 has a continuous surface water connection to Waters of the U.S. | May be jurisdictional | SP66 |
| W17 | Emergent Marsh Wetland | 0.16 ac | PEM | A7-AJD.WETL-404 | Wetland W17 is an emergent marsh which has developed in a depression. This wetland is sourced from high ground water and intermittent irrigation runoff. Areas of inundation within the wetland were present at the time of the delineation field work. This wetland drains into the adjacent drainage channel (D5), which discharges into the nearby pond (OW4) via culvert. This pond has a continuous surface water connection to drainages (D4) that connect to water associated with the Great Salt Lake. Based on these connections, wetland W17 has a continuous surface water connection to Waters of the U.S. | May be jurisdictional | SP61 |
| W18 | Emergent Marsh Wetland | 0.52 ac | PEM | A7-AJD.WETL-404 | Wetland W18 is an emergent marsh which has developed in a depression alongside two drainages. This wetland is sourced from high ground water and spillover from the two adjacent drainages (D5 and D7). This wetland shares a continuous surface water connection to both of these drainages, which both discharge into the nearby pond (OW4) via culvert. This pond has a continuous surface water connection to drainages (D4) that connect to water associated with the Great Salt Lake. Based on these connections, wetland W18 has a continuous surface water connection to Waters of the U.S. | May be jurisdictional | SP58 |
| W19 | Emergent Marsh Wetland | 0.13 ac | PEM | A7-AJD.WETL-404 | Wetland W19 is an emergent marsh located along the bank of pond OW4. This wetland is at the base of a slope from a roadway to the east, collecting any stormwater runoff draining towards the adjacent pond. Hydrology collected within the wetland also drains into the pond. This pond has a continuous surface water connection to drainages (D4) that connect to water associated with the Great Salt Lake. Based on these connections, wetland W19 has a continuous surface water connection to Waters of the U.S. | May be jurisdictional | SP56 |

| | | | | | WETLANDS | | |
|------------------|------------------------|---------|------------------|--------------------------------|--|-------------------------------------|-----------------------------|
| Aquatic Resource | General Description | Amount | Cowardin Code | Waters Type | Description | Jurisdiction Recommendation | Associated Sample Points |
| W20 | Emergent Marsh Wetland | 0.47 ac | PEM | A7-AJD.WETL-404 | Wetland W20 is an emergent marsh located along the bank of pond OW4. This wetland is at the base of a slope from a roadway and agricultural properties to the east, collecting any stormwater runoff draining towards the adjacent pond. A culvert also crosses under the roadway, draining fields to the east into this wetland. Hydrology collected within the wetland also drains into the pond. This pond has a continuous surface water connection to drainages (D4) that connect to water associated with the Great Salt Lake. Based on these connections, wetland W20 has a continuous surface water connection to Waters of the U.S. | May be jurisdictional | SP48 |
| W21 | Emergent Marsh Wetland | 0.11 ac | PEM | A7-AJD.WETL-404 | Wetland W21 is an emergent marsh located along the bank of pond OW4. This wetland is at the base of a slope along the bank of the adjacent pond. Based on the low elevation of this wetland, it appears to seasonally flood from the pond. This wetland has a direct connection to the adjacent pond, which has a continuous surface water connection to drainages (D4) that connect to water associated with the Great Salt Lake. Based on these connections, wetland W21 has a continuous surface water connection to Waters of the U.S. | May be jurisdictional | SP63 |
| W22 | Emergent Marsh Wetland | 0.52 ac | PEM | A7-AJD.WETL-404 | Wetland W22 is a depression with a pooling of high ground water, with inundation at the lowest point. This inundation level appears to be consistent based on the obligate vegetation growing at this lower point of the depression. Vegetation varied throughout the wetland but is also significantly disturbed from goat activity. Part of this wetland is located within a goat pen, and most areas that were not flooded have been eaten down dramatically, but vegetation was still identifiable at the sample point locations. A culvert continually drains the water from this wetland into the nearby pond (OW4) and this pond has a continuous surface water connection to drainages (D4) that connect to water associated with the Great Salt Lake. Based on these connections, wetland W22 has a continuous surface water connection to Waters of the U.S. | May be jurisdictional | SP53 |
| W23 | Emergent Marsh Wetland | 0.48 ac | PEM | NON-WOTUS.WETL. NEGATIVE-A7 | Wetland W23 is comprised of historically placed fill material which seasonally floods. This material has created large mounds with upland vegetation growing above the waters. Between these mounds is a large network of connected seasonal standing water and wetlands. This wetland abuts a ponded area (OW1) and flooded emergent marsh wetland (W11). The hydrology between these resources is all directly connected, none of which have any continuous surface water connections to any other aquatic resources outside this isolated system. No discrete features such as pipes, swales, or culverts were identified to connect this wetland to any other nearby waters or wetlands. Based on this, Wetland W23 has no continuous surface water connections to any Waters of the U.S. | May <u>not</u> be jurisdictional | N/A |

| | | | | DRAINA | GE CHANNELS / DITCHES / CANALS | | |
|------------------|--------------------------------|---------|------------------|-------------------------------------|--|-------------------------------------|-----------------------------|
| Aquatic Resource | General Description | Amount | Cowardin Code | Waters Type | Description | Jurisdiction Recommendation | Associated Sample Points |
| D1 | Stormwater Drainage Channel | 1340 FT | R4SB5Cx | A5.TRIB-404 | The stormwater drainage channel D1 is an intermittent drainage with seasonal flows. This drainage canal was excavated and constructed as part of the local storm drain system. At the time of the delineation there was flowing water due to the drainage from a culvert under the adjacent trail, discharging stormwater, as well hydrology draining from abutting wetlands (W2 and W4). Although intermittent and dictated by seasonal and storm runoff, this drainage receives enough hydrology to have a clear ordinary high water mark, which was observed by a distinct transition between thick grasses to an absence of vegetation at the ordinary high water mark. This drainage discharges into a larger open stormwater drainage canal (D2) via culvert which has a continuous surface water connection to waters associated with the Great Salt Lake. Based on these connections, stormwater drainage channel D1 has a continuous surface water connection to Waters of the U.S. | May be jurisdictional | N/A |
| D2 | Stormwater Drainage Canal | 967 FT | R2UB3Cx | A5.TRIB-404 | The stormwater drainage canal D2 is a lower perennial channel with varied flows from stormwater and seasonal runoff. This drainage canal was excavated and constructed as part of the local storm drain system and has hydrology year-round with higher flows in the spring and summer. The ordinary high water mark was clear based on bent vegetation in the path of flows as well as a change in vegetation type at this point along the bank. Exposed rocks along a scour line also distinguished continuous flow levels. This canal receives hydrology from two culverts that come from the east, connected to underground stormwater systems. Water continues to the west outside of the delineation area via culvert into another open section of the canal. The canal continues to the west, culverted under roadways but primarily open, until draining into waters associated with the Great Salt Lake. Based on these connections, stormwater drainage canal D2 has a continuous surface water connection to Waters of the U.S. | May be jurisdictional | N/A |
| D3 | Irrigation Drainage Channel | 1167 FT | R4SB5Kx | NON-JD- RAPANOS.GUIDE - DITCH | The irrigation drainage channel D3 is an intermittent, artificially controlled drainage used for adjacent irrigation purposes. This channel appears to get diverted in areas to flood fields and is culverted in sections to pass under driveways. Flows are infrequent enough that there is no ordinary high water mark present along this channel, but hydrology was active at the time of the delineation. Any water remaining after the water from this channel is used drains into the stormwater drainage system along 300 North. Although this irrigation drainage channel connects to the local stormwater drainage system, this network is piped and flows from this channel are not continuous over a two-week period, and therefore there is no continuous surface water connection to Waters of the U.S. | May <u>not</u> be jurisdictional | N/A |
| D4 | Drainage Channel | 57 FT | R4SB5C | A5.TRIB-404 | Drainage channel D4 is an intermittent drainage with seasonal flows from nearby drainages. Drainages that span from a nearby pond (W26) flow and pool through nearby wetlands (W15 and W16) before draining into D4 via culverts. This drainage channel pools before being culverted under the concrete-lined Hooper Canal and continuing outside the delineation area to the west. A distinct ordinary high water mark is clear based on changes in vegetation, indicating regular flows throughout the growing season. Based on this, drainage channel D4 has a continuous surface water connection into waters associated with the Great Salt Lake. | May be jurisdictional | N/A |

| | | | | DRAINA | GE CHANNELS / DITCHES / CANALS | | |
|------------------|-----------------------------|---------|------------------|--------------------------------------|---|-------------------------------------|-----------------------------|
| Aquatic Resource | General Description | Amount | Cowardin Code | Waters Type | Description | Jurisdiction Recommendation | Associated Sample Points |
| D5 | Irrigation Drainage Channel | 1885 FT | R4SB5Kx | A5.TRIB-404 | The irrigation drainage channel D5 is an intermittent, artificially controlled drainage, which has been excavated and continually used for adjacent irrigation purposes. This channel appears to collect and drain runoff irrigation water from fields to the west. Flows are occasional enough that there is no ordinary high water mark present along this channel, but hydrology was active at the time of the delineation. Water discharges into both an open field and an adjacent pond (OW4) via culvert. This pond has a continuous surface water connection to a drainage channel (D4) that connects to water associated with the Great Salt Lake. Based on these connections, irrigation drainage channel D5 has a continuous surface water connection to Waters of the U.S. | May be jurisdictional | N/A |
| D6 | Hooper Canal | 159 FT | R4SBKx | NON-WOTUS- STREAM.NEGATIVE -A5 | Hooper Canal (D6) is a concrete lined irrigation canal which conveys irrigation water for various users to utilize for agricultural purposes. This canal has artificially controlled flows from the Weber River and is intermittent in nature, lacking flows outside the growing season. The Hooper Canal is primarily open and fully concrete-lined, being culverted under roads and crosses the delineation area in two locations. It flows south until being permanently piped at 300 North. This piped portion of the Hooper Canal continues for approximately two miles to Antelope Drive where it connects into the local storm drain system. The local stormwater drainage system is a fully piped network and appears to end at the North Davis Sewer District facility (water treatment plant). After leaving the plant it eventually discharges into the Great Salt Lake. Although this wetland may at times connect via a piped system and through the treatment plant to downstream Waters of the U.S. it does not have a continuous surface water connection (multiple miles of underground piping), nor does it have a relatively permanent flow (storm events and/or irrigation overflow). | May <u>not</u> be jurisdictional | N/A |
| D7 | Drainage Channel | 105 FT | R4SB5C | A5.TRIB-404 | Drainage channel D7 is an intermittent channel with seasonal flows from stormwater runoff and irrigation drainage. Flows are occasional enough that there is no ordinary high water mark present along this channel, but hydrology was active at the time of the delineation. Water discharges into an adjacent pond (OW4) via culvert. This pond has a continuous surface water connection to drainages (D4) that connect to water associated with the Great Salt Lake. | May be jurisdictional | N/A |
| D8 | Drainage Channel | 178 FT | R2UB3C | A5.TRIB-404 | Drainage channel D8 is a perennial drainage sourced from springs located outside the delineation area to the east as well as adjacent irrigation and stormwater runoff that collect in the lower topography. Flows are consistent and an ordinary high water mark was distinct due to changes in soil composition and vegetation types. This drainage enters the delineation area through a culvert which spans to the east, collecting drainage outside the delineation area. It flows to the west before being culverted again into the nearby pond (OW4). This pond continuously overflows into two drainage channels (D9 and D10) which then drain into another channel (D4) via culvert. This drainage eventually discharges into the Great Salt Lake. Based on this, drainage channel D8 has a continuous surface water connection into waters associated with the Great Salt Lake. | May be jurisdictional | N/A |
| D9 | Drainage Channel | 921 FT | R2UB3C | A5.TRIB-404 | Drainage channel D9 is a perennial drainage sourced from the adjacent pond system (OW3 and OW4), by conveying overflow waters to the west through a wetland (W15) before being discharging into a separate open drainage channel (D4) via culvert. These flows continue to the Great Salt Lake. A distinct ordinary high water mark is clear based on changes in vegetation and soil composition, indicating regular flows throughout the growing season. Based on this, drainage channel D9 has a continuous surface water connection into waters associated with the Great Salt Lake. | May be jurisdictional | N/A |

| | DRAINAGE CHANNELS / DITCHES / CANALS | | | | | | | | | | | |
|------------------|--------------------------------------|--------|------------------|-------------|---|--------------------------------|-----------------------------|--|--|--|--|--|
| Aquatic Resource | General Description | Amount | Cowardin Code | Waters Type | Description | Jurisdiction Recommendation | Associated Sample Points | | | | | |
| D10 | Drainage Channel | 268 FT | R2UB3C | A5.TRIB-404 | Drainage channel D10 is a perennial drainage sourced from the adjacent pond system (OW3 and OW4), by conveying overflow waters to the west through a wetland (W15) before being discharging into a separate open drainage channel (D4) via culvert. These flows continue to the Great Salt Lake. A distinct ordinary high water mark is clear based on changes in vegetation and soil composition, indicating regular flows throughout the growing season. Based on this, drainage channel D10 has a continuous surface water connection into waters associated with the Great Salt Lake. | May be jurisdictional | N/A | | | | | |

| OPEN WATER | | | | | | | |
|------------------|---------------------|---------|------------------|---|--|-------------------------------------|-----------------------------|
| Aquatic Resource | General Description | Amount | Cowardin Code | Waters Type | Description | Jurisdiction Recommendation | Associated Sample Points |
| OW1 | Seasonal Pond | 1.13 ac | PUB3C | NON-WOTUS- LAKE.POND. NEGATIVE-A5 | Pond OW1 is a seasonally flooded pond that is sourced from high ground water and stormwater runoff. No indicators for an ordinary high water mark were present at the time of the delineation field work. Flood conditions are likely variable and potentially dependent on annual precipitation patterns. Various debris and old concrete are present in this ponded area. This pond abuts the wetlands (W12) to the east as well as the adjacent flooded emergent marsh wetland (W11), emergent marsh wetland (W10), and seasonal pond (OW2). The hydrology between these resources is all directly connected, none of which have any continuous surface water connections to any other aquatic resources outside this isolated system. No discrete features such as pipes, swales, or culverts were identified to connect this pond to any other nearby waters or wetlands. Based on this, pond OW1 has no continuous surface water connections to any Waters of the U.S. | May <u>not</u> be jurisdictional | N/A |
| OW2 | Seasonal Pond | 0.23 ac | PUB3Cx | NON-WOTUS- LAKE.POND. NEGATIVE-A5 | Pond OW2 is an excavated seasonally flooded pond, likely used for irrigation purposes. There is no inlet or outlet of this pond, but a continuous surface water connection between the pond and wetland W10 is present. The hydrology between these two resources is directly connected, neither of which has any continuous surface water connections to any other aquatic resources outside this isolated system. No discrete features such as pipes, swales, or culverts were identified to connect this pond to any other nearby waters or wetlands. Based on this, pond OW2 has no continuous surface water connections to any Waters of the U.S. | May <u>not</u> be jurisdictional | N/A |
| OW3 | Pond | 0.08 ac | PUB3Hx | A4.IMPDT-404 | Pond OW3 is a holding pond to drain waters from the adjacent larger pond (OW4) via culverts when the water elevation is high. This pond was excavated for this purpose and is permanently flooded from this overflow as well as high groundwater consistent with the area. The ordinary high water mark was clear due to changes in vegetation and water staining. Flows drain from this pond into two drainages via culvert, which both continue through wetlands (W15 and W16) before discharging into drainages (D4) that connect to waters associated with the Great Salt Lake. Based on these connections, pond OW3 has a continuous surface water connection to Waters of the U.S. | May be jurisdictional | N/A |
| OW4 | Pond | 3.29 ac | PUB3Hx | A4.IMPDT-404 | Pond OW4 is a permanently flooded pond sourced from high ground water, stormwater runoff, and irrigation drainage. This pond is stocked with trout by the current landowner and bird nesting platforms have been installed throughout. This has created a dynamic ecosystem with an abundance of animal activity. The pond was excavated and created to collect drainage waters and then overflow for flood irrigation in the adjacent fields. The ordinary high water mark was clear due to changes in vegetation and water staining. This pond drains into an adjacent pond (OW3) via culvert when pool levels are high enough, which eventually drains drainages (D4) that discharge into waters associated with the Great Salt Lake. Based on these connections, pond OW4 has a continuous surface water connection to Waters of the U.S. | May be jurisdictional | N/A |

| STREAMS | | | | | | | |
|------------------|---------------------|--------|------------------|-------------|---|--------------------------------|-----------------------------|
| Aquatic Resource | General Description | Amount | Cowardin Code | Waters Type | Description | Jurisdiction Recommendation | Associated Sample Points |
| S1 | Howard Slough | 34 FT | R2UB3H | A5.TRIB-404 | Howard Slough (S1) crosses through the delineation area before being culverted under the Hooper Canal. Hydrology within the slough is from irrigation and stormwater runoff, and these connections support permanently flooded conditions within the slough. An ordinary high water mark was clearly defined by changes in vegetation. Due to this consistent hydrology, Howard Slough has a continuous surface water connection to waters associated with the Great Salt Lake. | May be jurisdictional | N/A |

A total of 38 aquatic resources were identified during this delineation of aquatic resources, for a total of 31.70 acres of wetlands, 5.01 acres of ponds, 7,224 linear feet of drainages/canals, and 34 linear feet of streams. All of the wetlands, ponds, channels, and drainages described above are shown on the Delineation Results Figure found in Appendix B and are listed in the Aquatic Resources spreadsheet in Appendix D and in Table 3 below. Indicators for vegetation, hydrology, and hydric soils were clear and easily identified.

Table 3
Aquatic Resources Within the Survey Area

| Aquatic Resource | Aquatic R | Aquatic Resource | Aquatic Resource Size | | |
|---------------------|-----------|------------------------|-----------------------------|--------|--|
| Name | Cowardin* | Location (UTM) | Size (acres) | (feet) | |
| W1 | PEM | 41.105961, -112.095873 | 0.04 | | |
| W2 | PEM | 41.108619, -112.098269 | 7.55 | | |
| W3 | PEM | 41.109775, -112.100275 | 2.24 | | |
| W4 | PEM | 41.110132, -112.099354 | 0.63 | | |
| W5 | PEM | 41.110286, -112.09912 | 0.43 | | |
| W6 | PEM | 41.111745, -112.100706 | 1.57 | | |
| W7 | PEM | 41.112496, -112.101516 | 0.39 | | |
| W8 | PEM | 41.112694, -112.101587 | 1.09 | | |
| W9 | PEM | 41.126432, -112.108597 | 1.31 | | |
| W10 | PEM | 41.128535, -112.108054 | 6.03 | | |
| W11 | PEM | 41.129396, -112.108084 | 1.95 | | |
| W12 | PEM | 41.129053, -112.108889 | 3.06 | | |
| W13 | PEM | 41.132474, -112.108086 | 0.10 | | |
| W14 | PEM | 41.134204, -112.107827 | 0.13 | | |
| W15 | PEM | 41.138173, -112.106331 | 2.10 | | |
| W16 | PEM | 41.13811, -112.105658 | 0.63 | | |
| W17 | PEM | 41.136783, -112.105367 | 0.16 | | |
| W18 | PEM | 41.136495, -112.104939 | 0.58 | | |
| W19 | PEM | 41.137483, -112.104426 | 0.13 | | |
| W20 | PEM | 41.138105, -112.104219 | 0.47 | | |
| W21 | PEM | 41.138044, -112.105061 | 0.11 | | |
| W22 | PEM | 41.138848, -112.104602 | 0.52 | | |
| W23 | PEM | 41.130619, -112.108796 | 0.46 | | |
| D1 | R4SB5Cx | 41.110441, -112.100607 | (0.32) | 1340 | |
| D2 | R4UB3Cx | 41.111089, -112.101418 | (0.61) | 967 | |
| D3 | R4SB5Kx | 41.119865, -112.110119 | (0.16) | 1167 | |
| D4 | R4SB5C | 41.137677, -112.107994 | (0.02) | 57 | |
| D5 | R4SB5Kx | 41.13524, -112.10558 | (0.18) | 1885 | |
| D6 | R4SBKx | 41.140173, -112.110693 | (0.05) | 159 | |
| D7 | R4SB5C | 41.136617, -112.104732 | (0.18) | 380 | |
| D8 | R2UB3C | 41.137747, -112.103391 | (0.09) | 178 | |

| Aquatic Resource | Aquatic Re | Aquatic Resource | Aquatic Resource | |
|---------------------|------------|------------------------|---------------------|----------------|
| Name | Cowardin* | Location (UTM) | Size (acres) | Size (feet) |
| D9 | R2UB3C | 41.138009, -112.105852 | (0.13) | 921 |
| D10 | R2UB3C | 41.136714, -112.106109 | (0.04) | 268 |
| OW1 | PUB3C | 41.129074, -112.109433 | 1.13 | |
| OW2 | PUB3Cx | 41.130983, -112.107666 | 0.23 | |
| OW3 | PUB3Hx | 41.137306, -112.105634 | 0.36 | |
| OW4 | PUB3Hx | 41.137557, -112.104833 | 3.29 | |
| S1 | R2UB3H | 41.146842, -112.111292 | (0.01) | 34 |

^{**} Acreages for the canals and drainages are only provided for reference and are not included in the total aquatic resources area acreage.

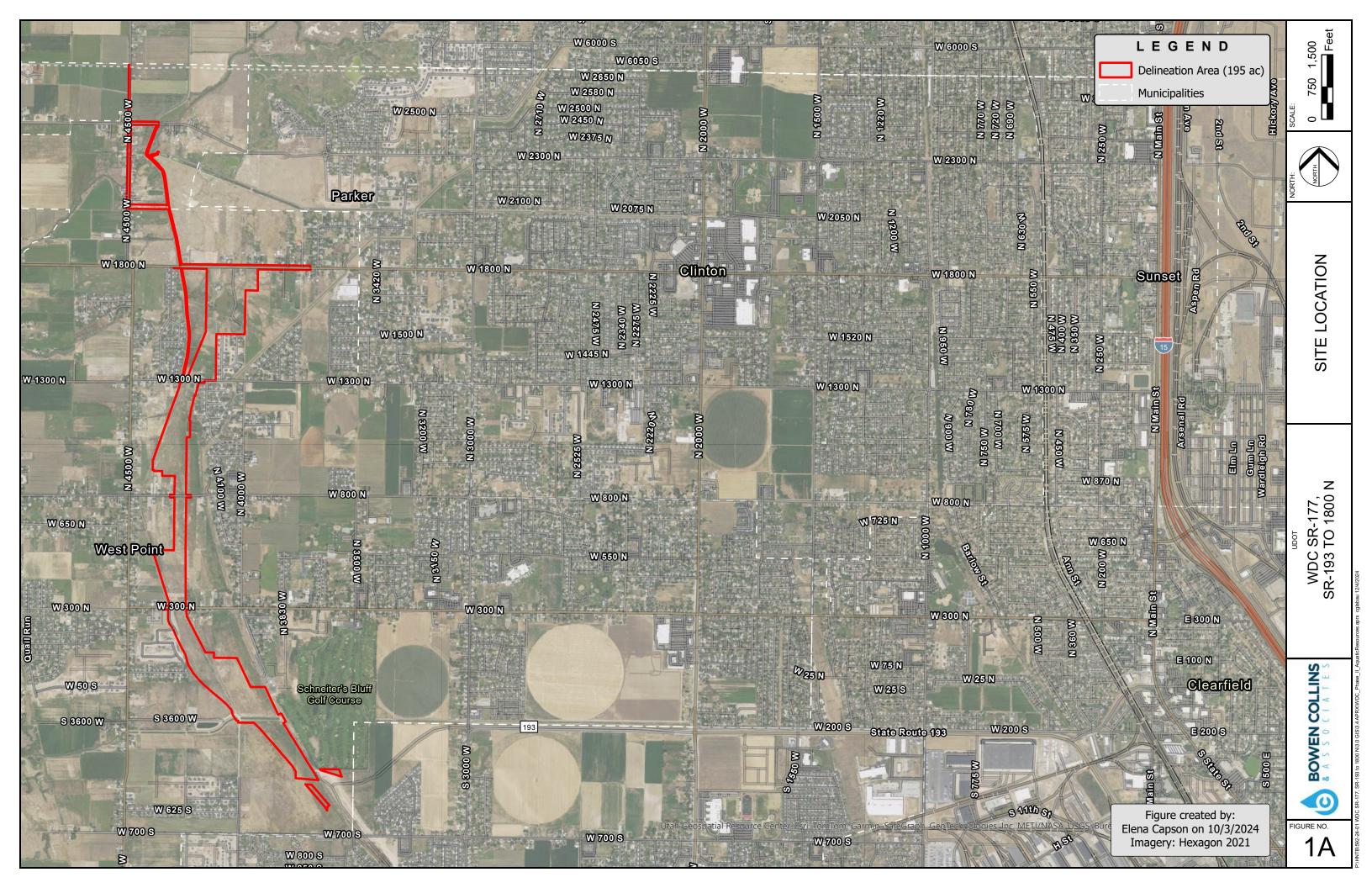
The land within the delineation area is owned by both public and private entities. If USACE site visits are desired, contact and access information for landowners can be coordinated through UDOT.

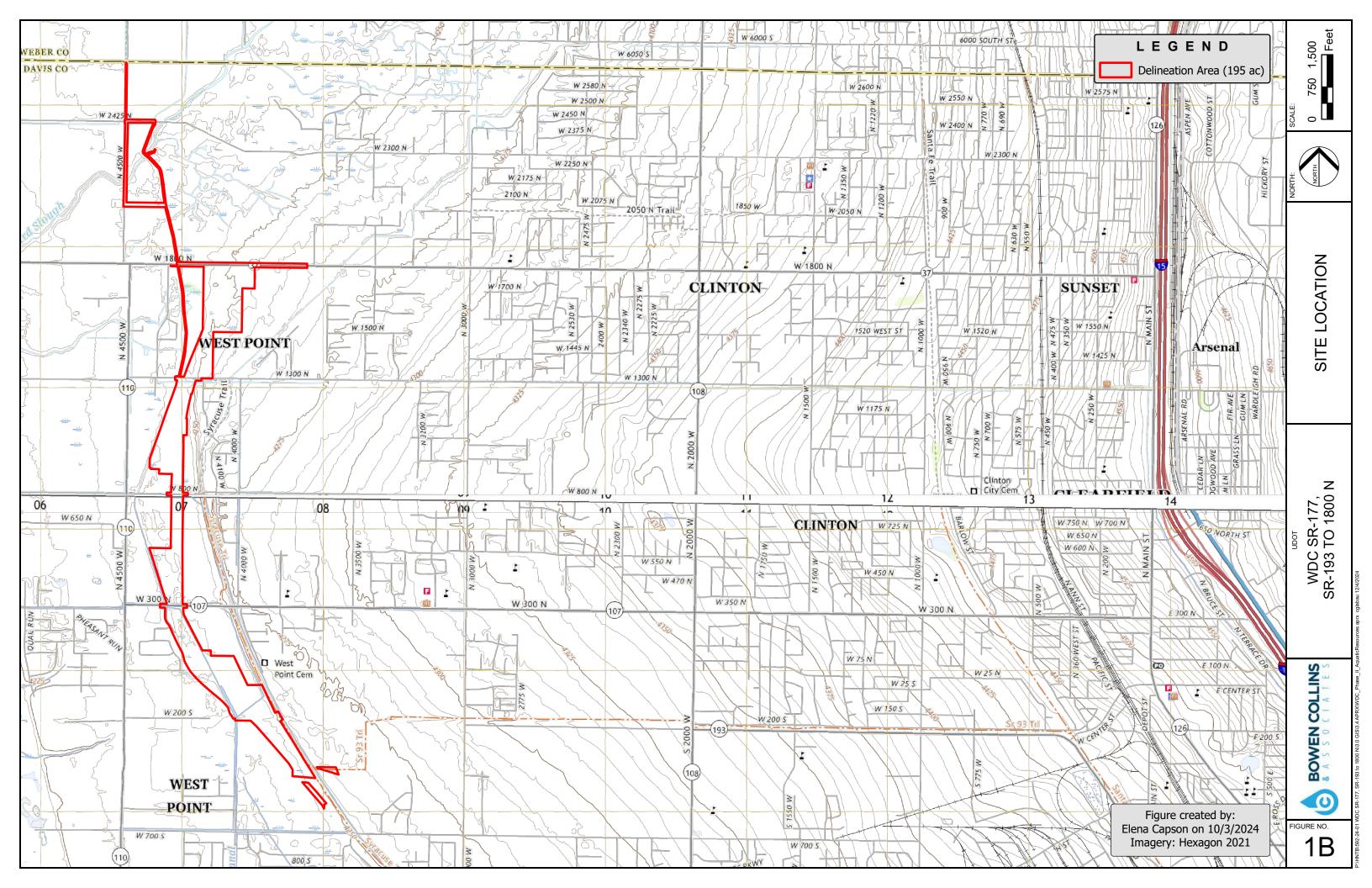
REFERENCES

- U.S. Army Corps of Engineers (USACE). 2012. *The National Wetland Plant List for the Arid West.* U.S. Army Corps of Engineers, Cold Regions Research and Engineering Laboratory (CRREL). Hanover, New Hampshire
- USACE. 2008. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL Tr-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- USACE. 1987. *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1. U.S. Army Corps of Engineers Waterways Experiment Station, Vicksburg, Mississippi.
- United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). 2010. *Field Indicators of Hydric Soils in the United States, Version 7.0*. L.M. Vasilas, G.W. Hurt, and C.V. Noble, editors. USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.
- USDA NRCS. 2015a. *National Hydric Soils List*. Access online http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/
- USDA NRCS. 2024a. *Soil Survey for Davis-Weber Area, Utah*. National Resources Conservation Services and Forest Service, in Cooperation with the Utah Agricultural Experiment Station.
- USDA NRCS. 2024b. *The PLANTS Database* http://plants.usda.gov/ Natural Plant Data Center, Baton Rouge LA 70874-4490 USA. [Accessed May 5, 2024].
- Utah State University Extension. 2011. *Grasses and Grasslike Plants of Utah, A Field Guide*. Donna Falkenborg, editor.
- Welsh, S.L., N.D. Atwood, L.C. Higgins, and S.Goodrich. 2003. *A Utah Flora*, Third Edition. Brigham Young University, Provo, Utah.
- Whitson, Tom D., Larry C. Burrill, Steven A. Dewey, David W. Cudney, B.E. Nelson, Richard D. Lee, and Robert Parker. Whitson, Tom D. (ed.) 2010. *Weeds of the West. 10th ed.* Laramie: University of Wyoming.

APPENDIX A

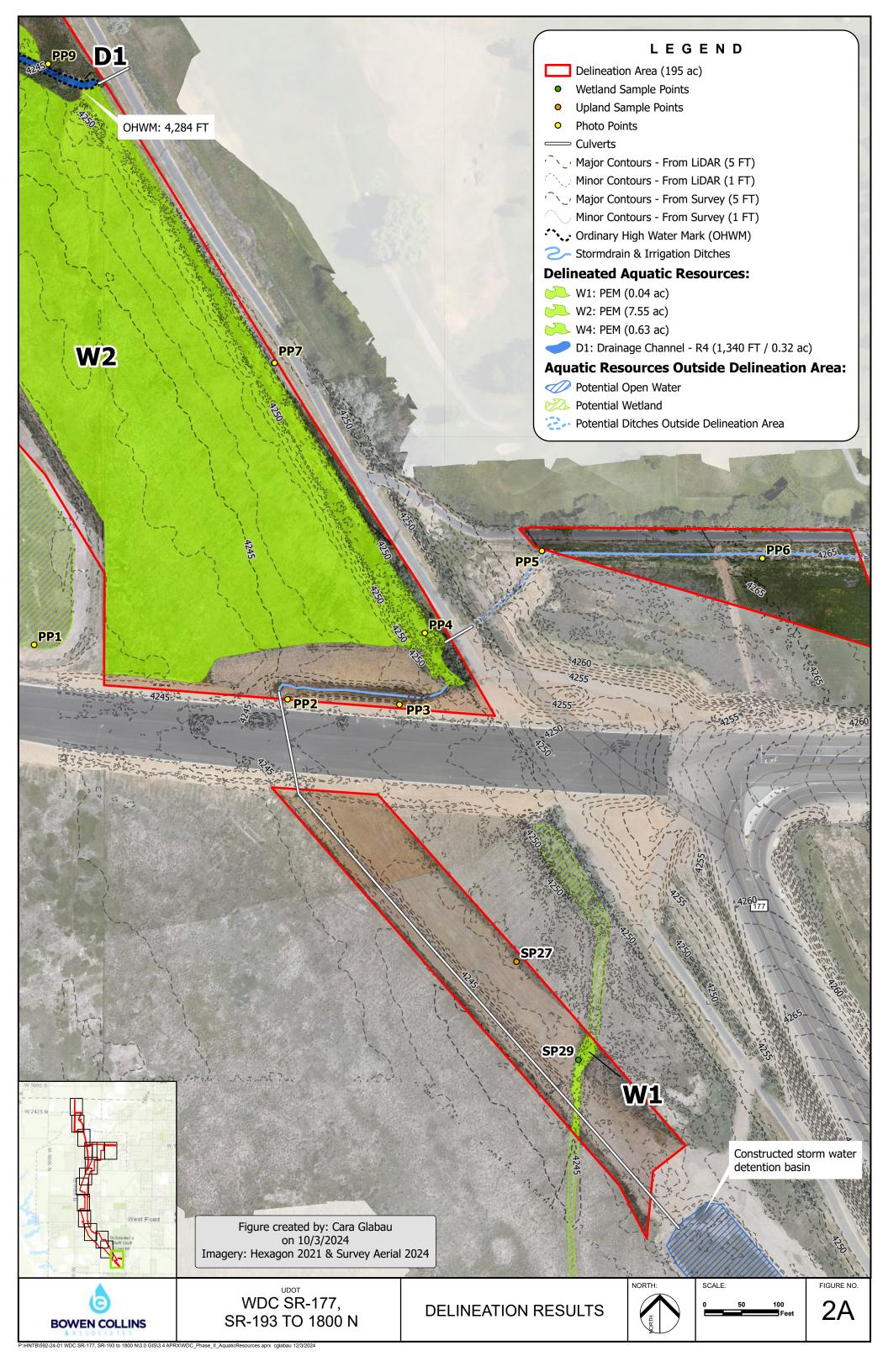
Site Location Figures

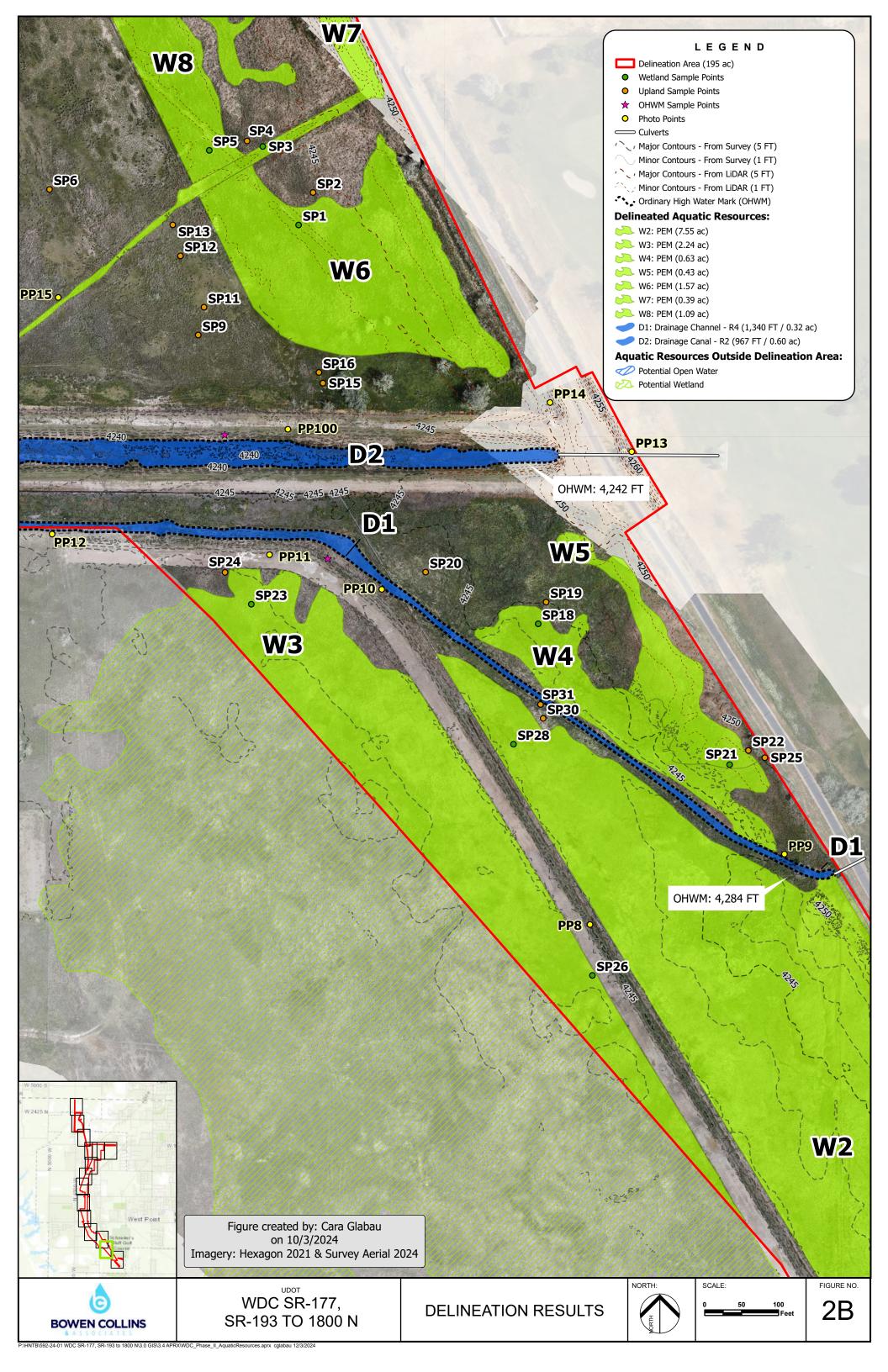


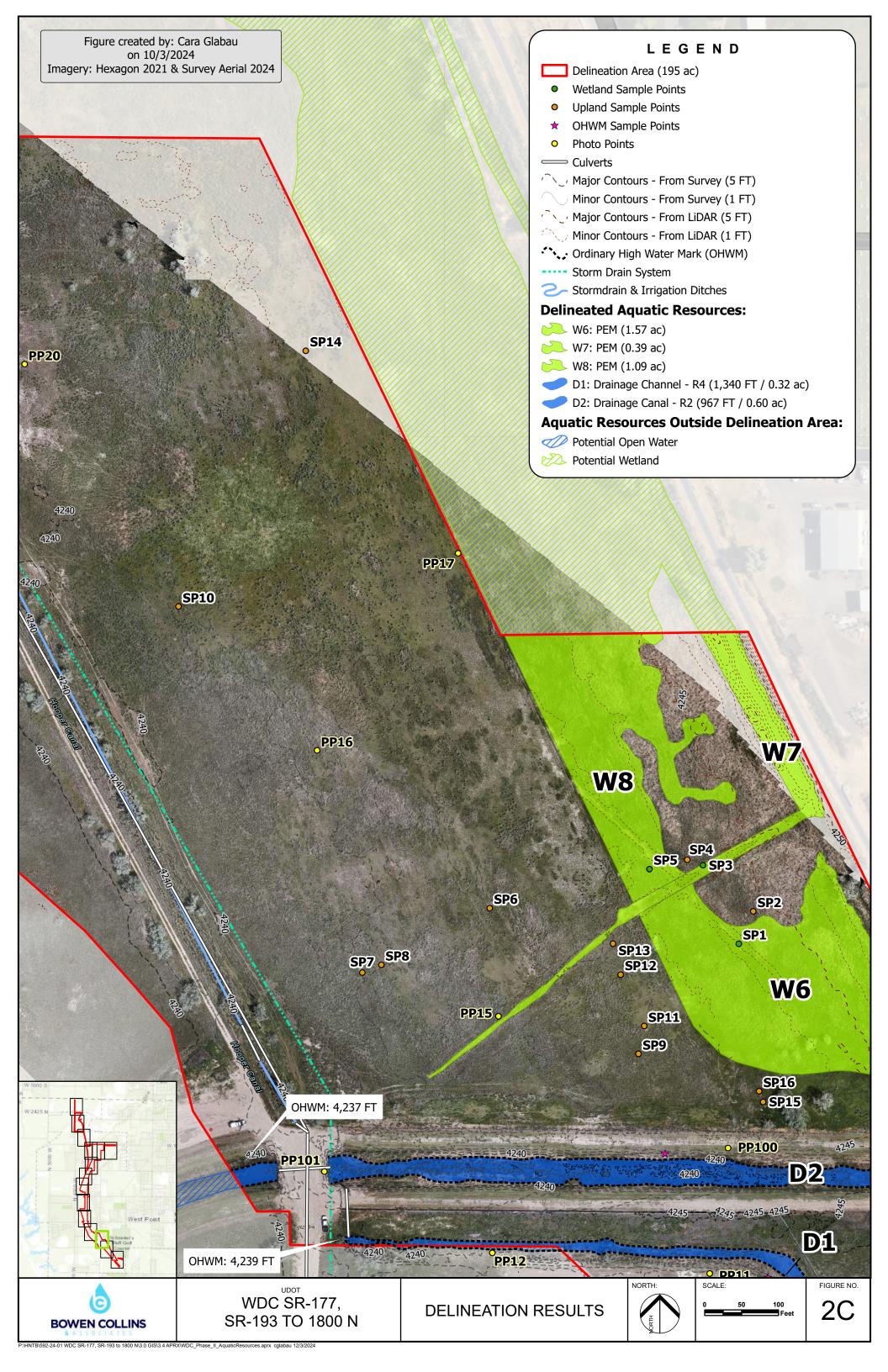


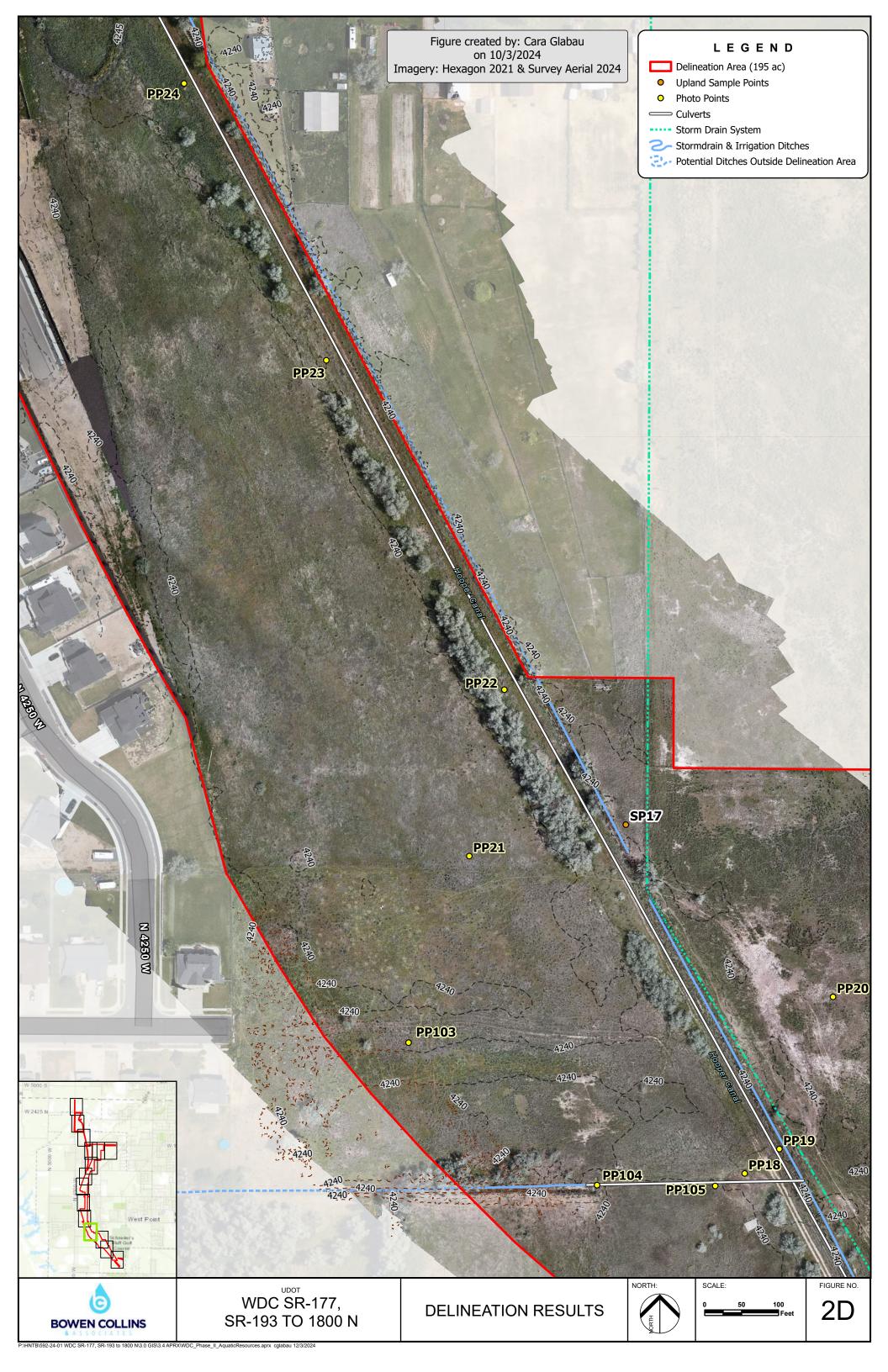
APPENDIX B

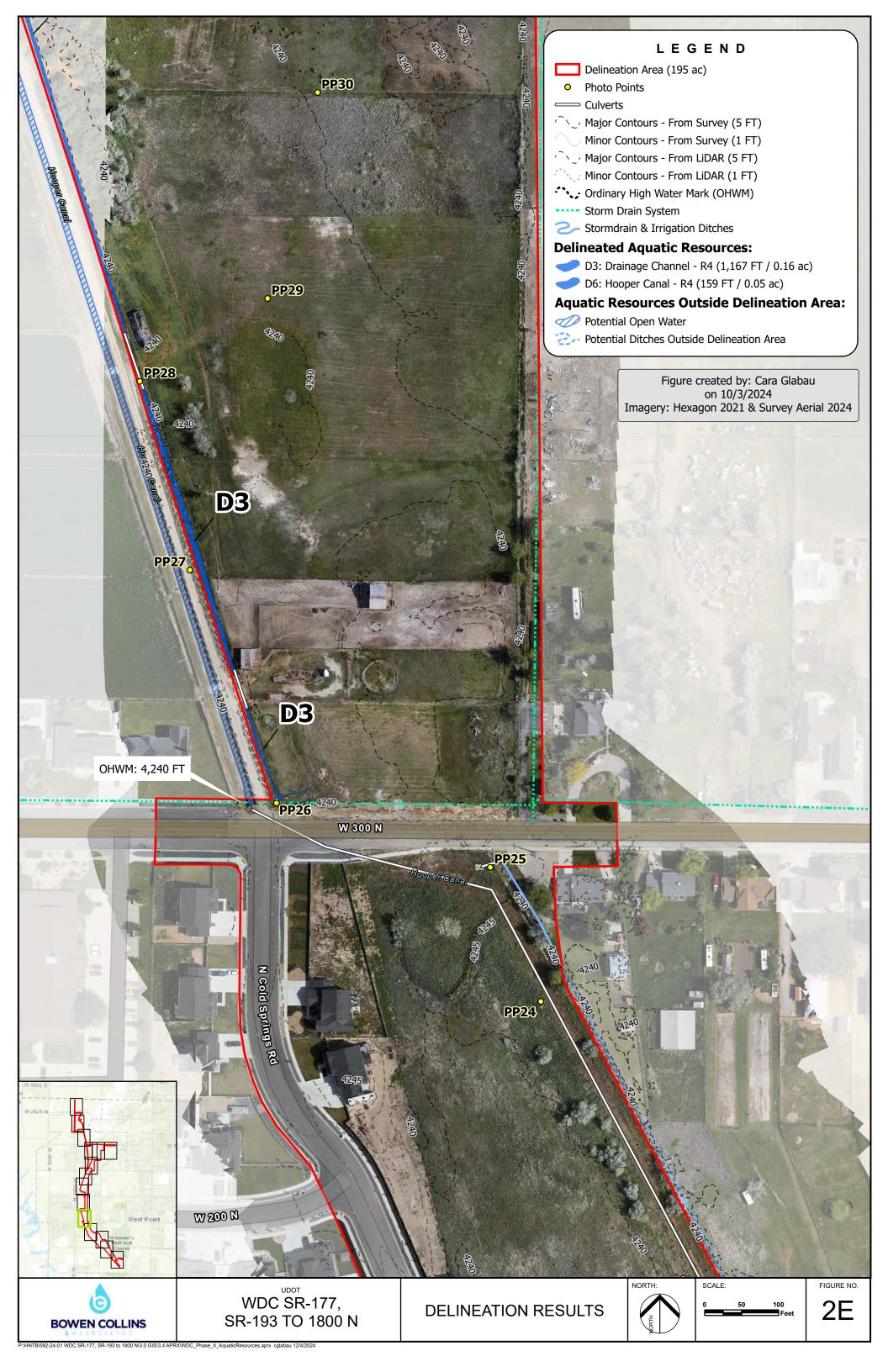
Delineation Results Figures

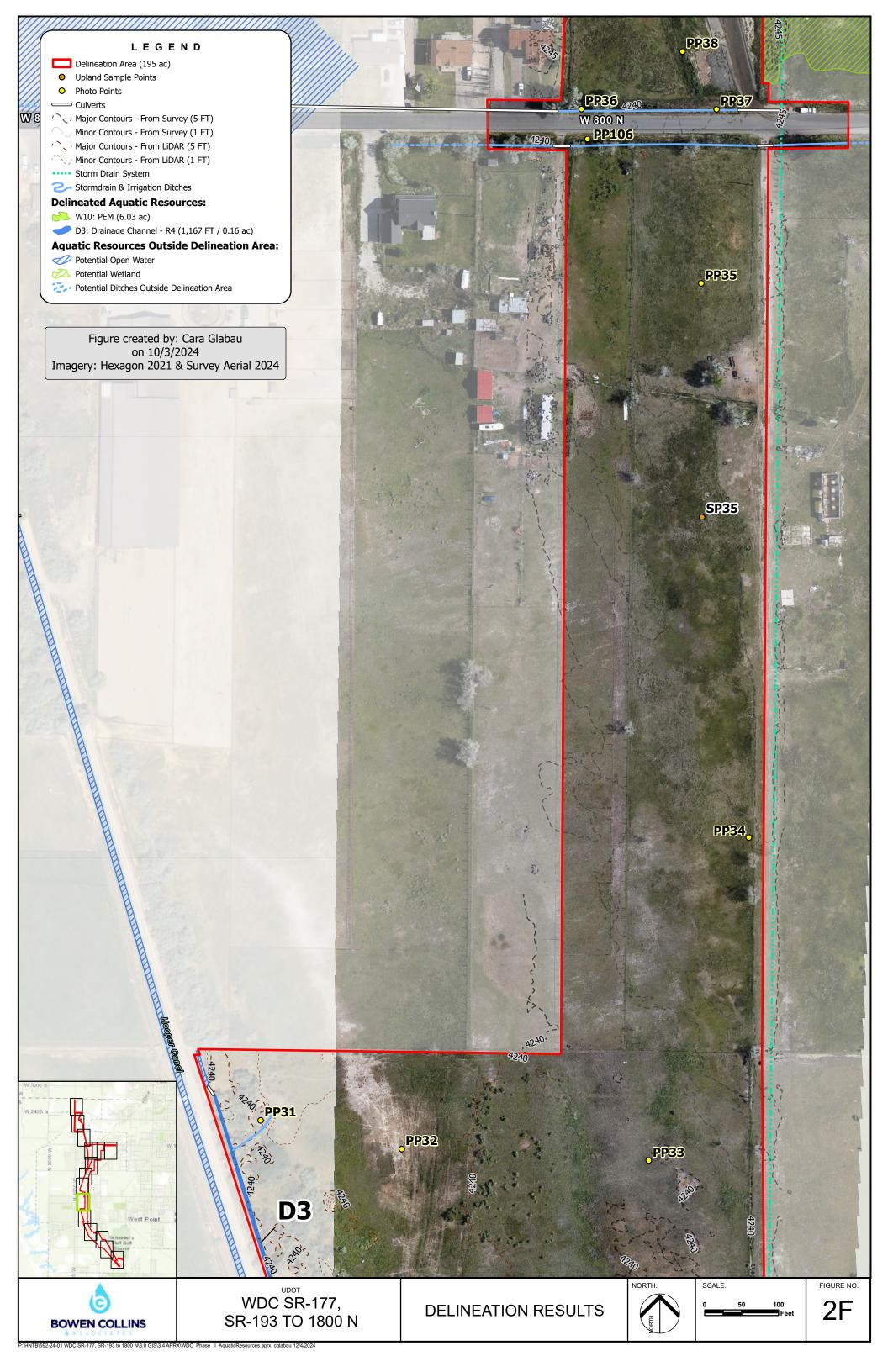


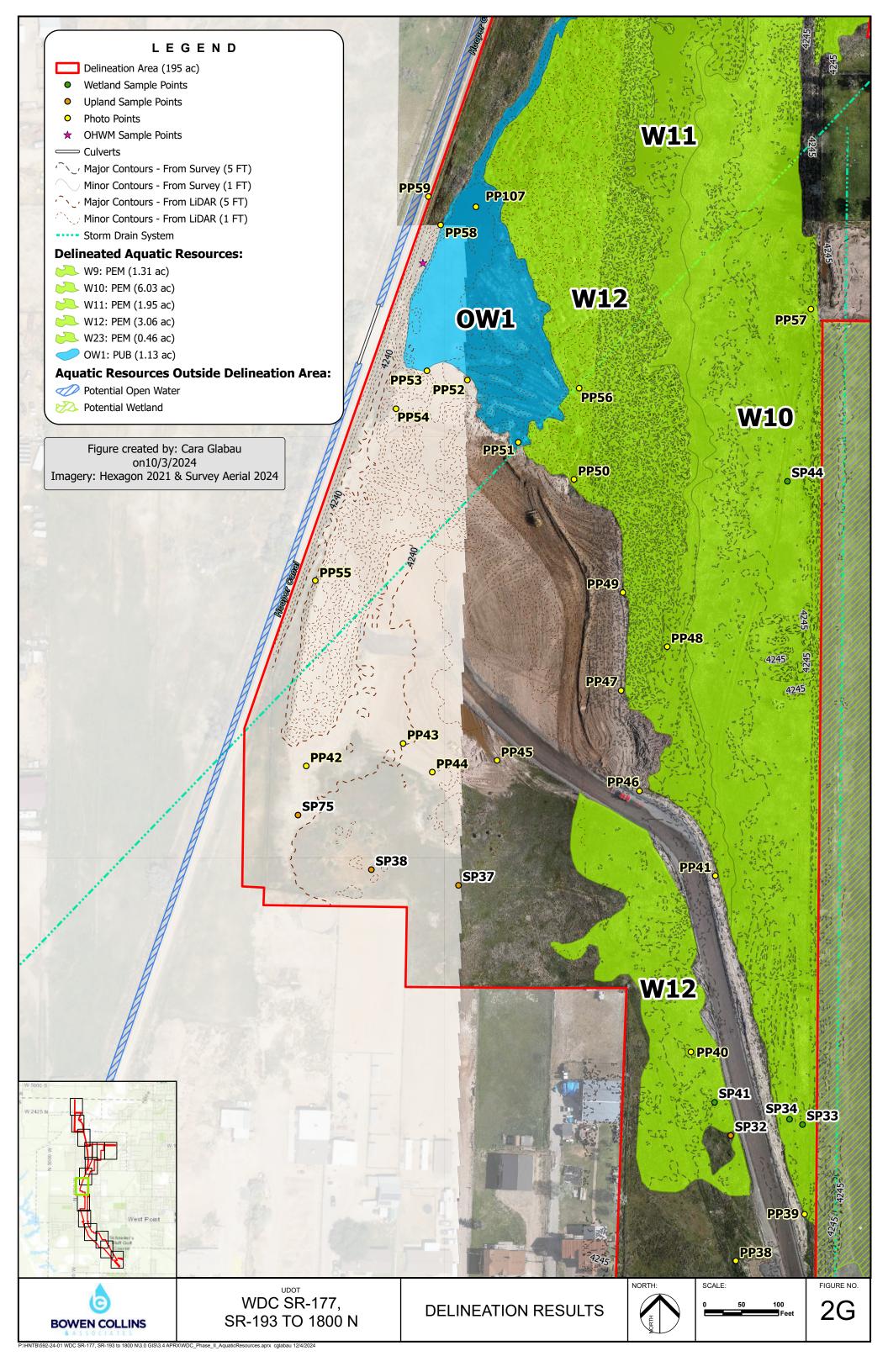


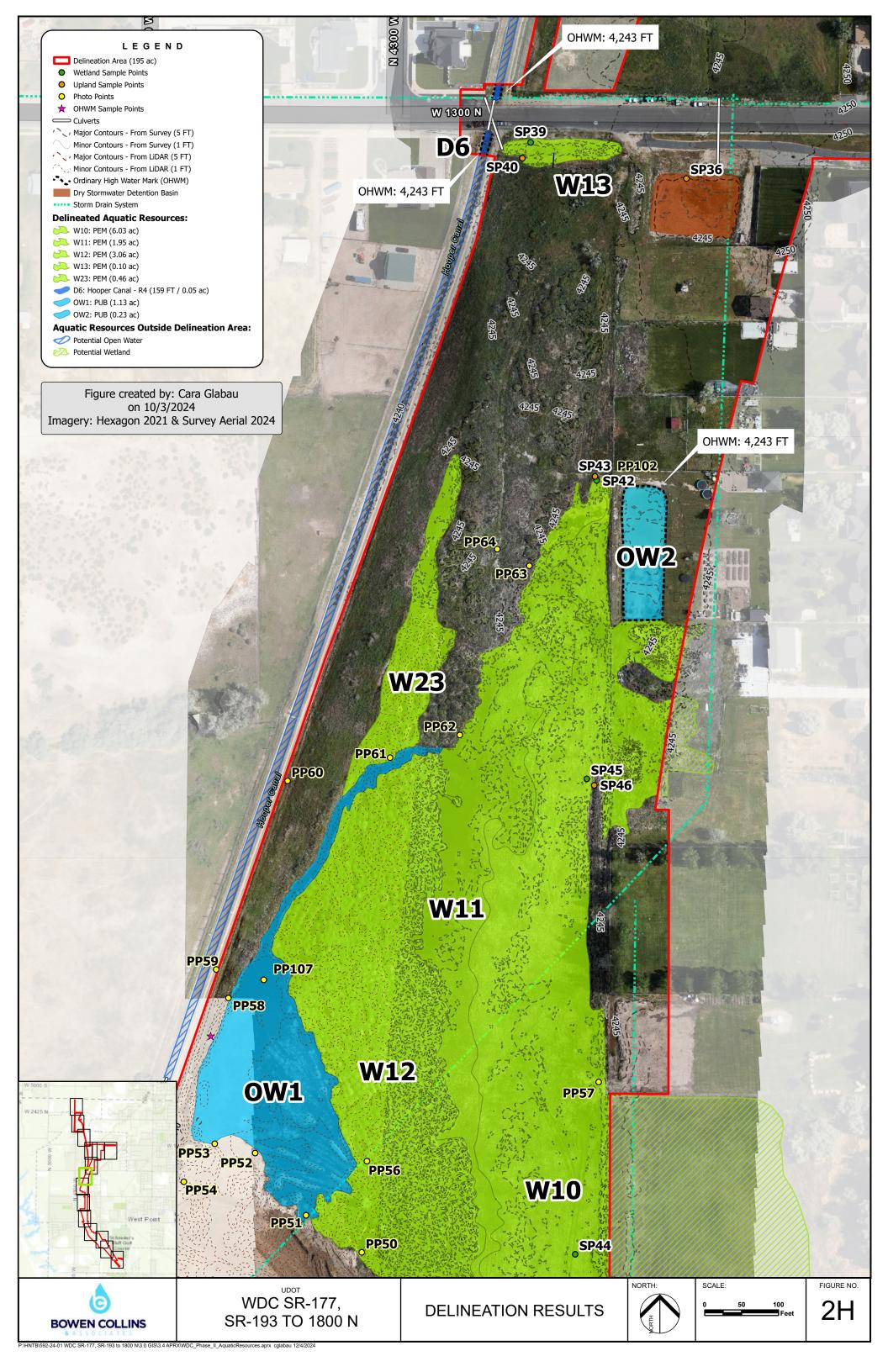




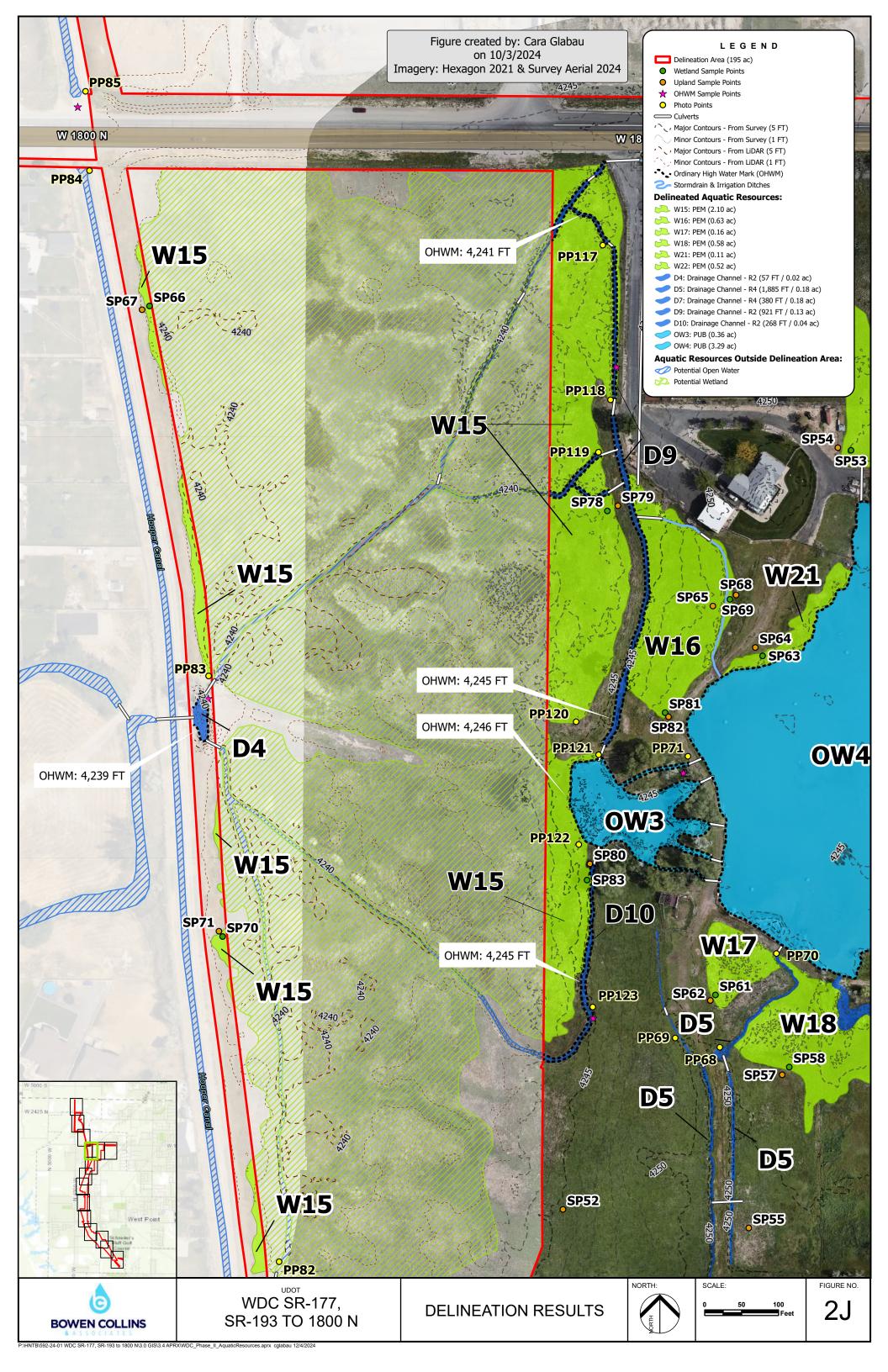


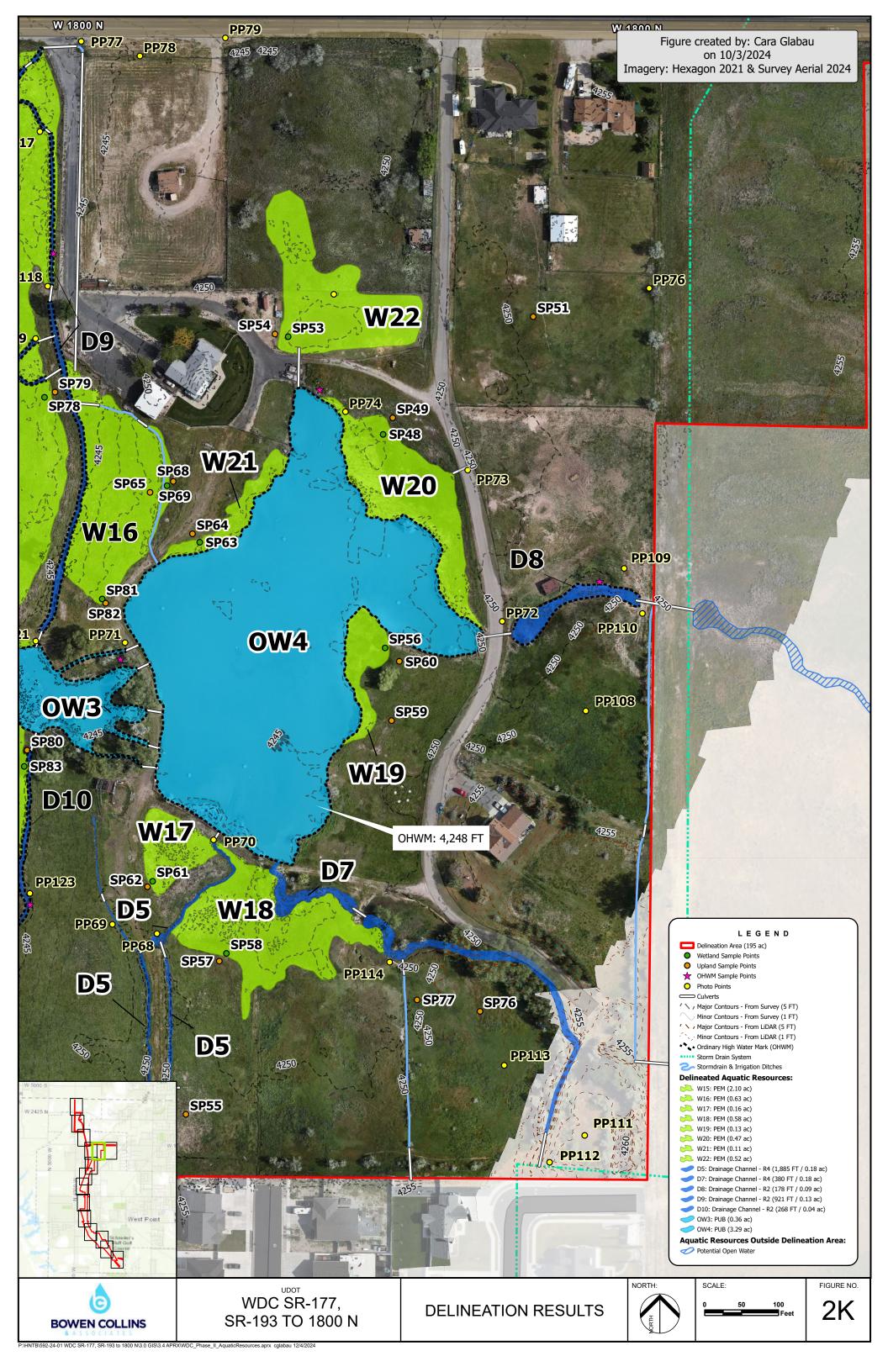


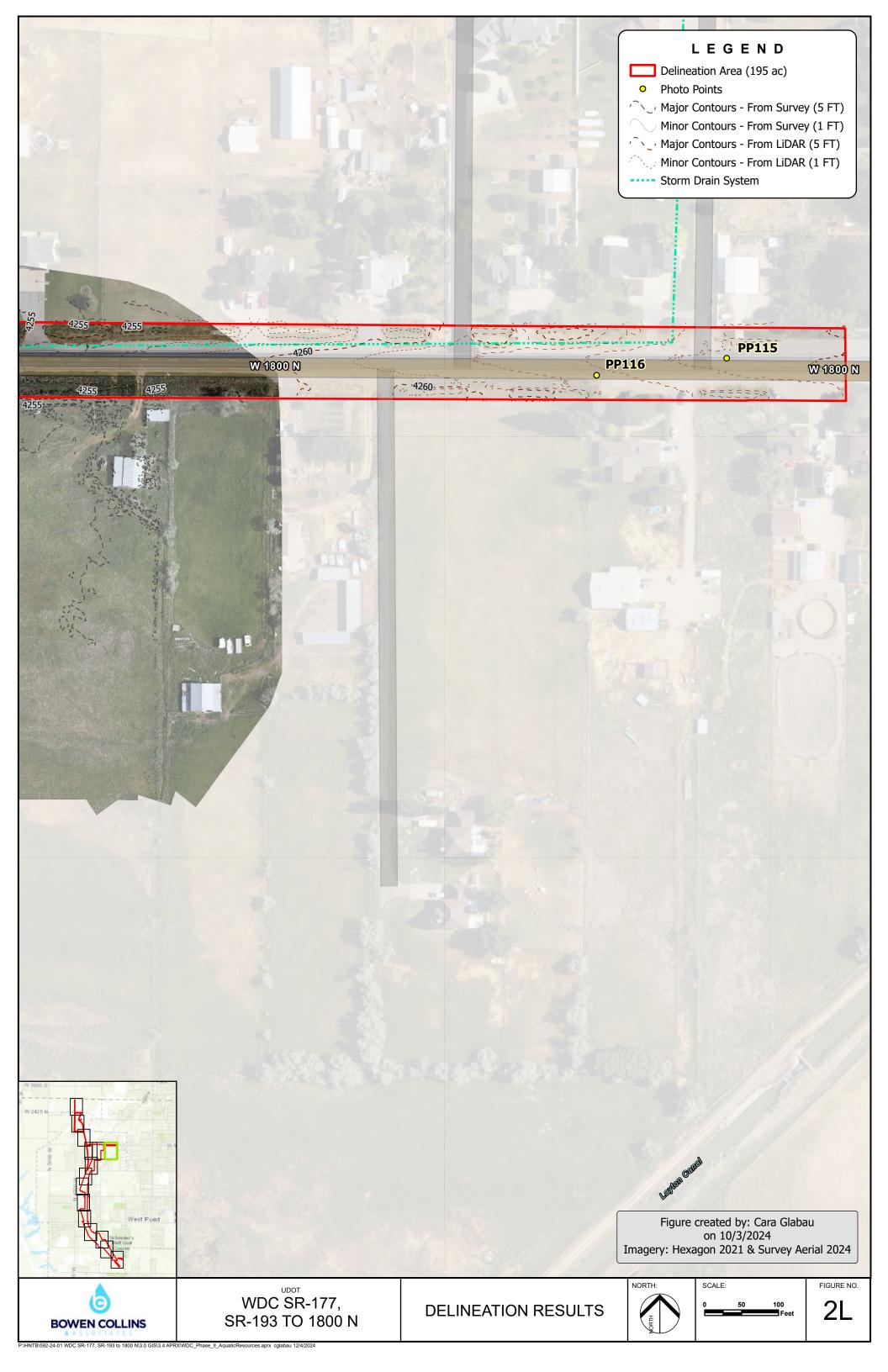


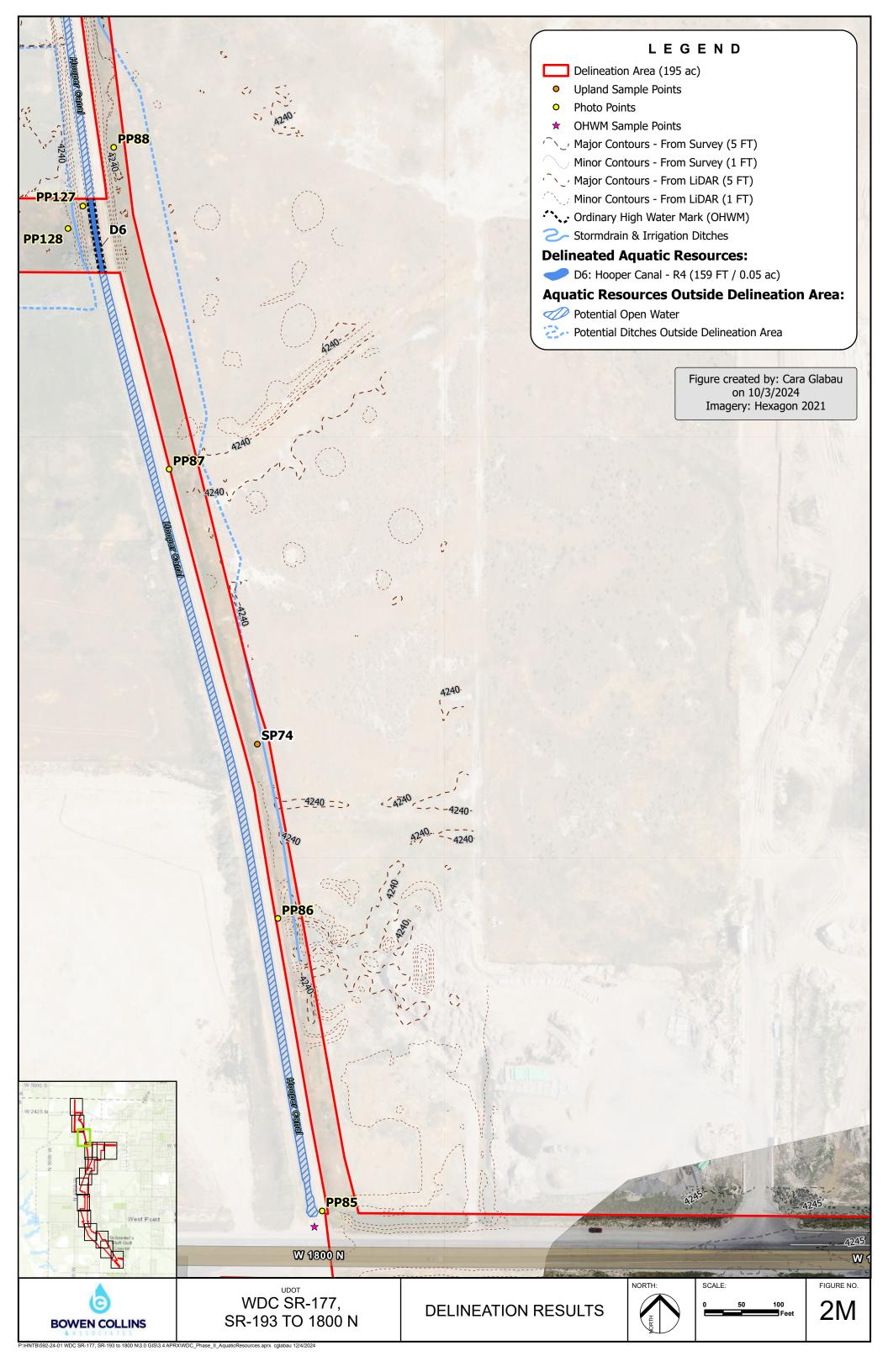


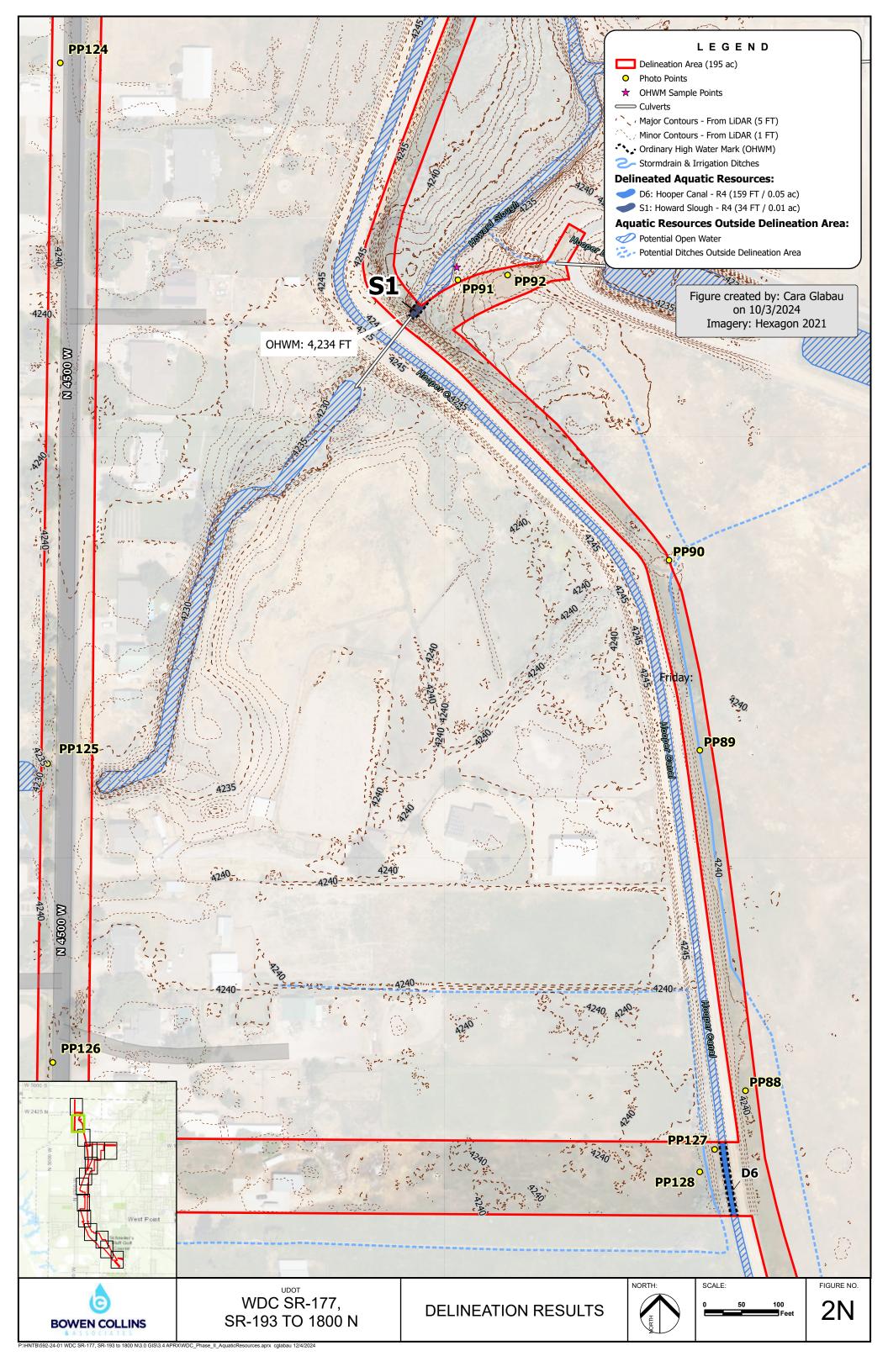


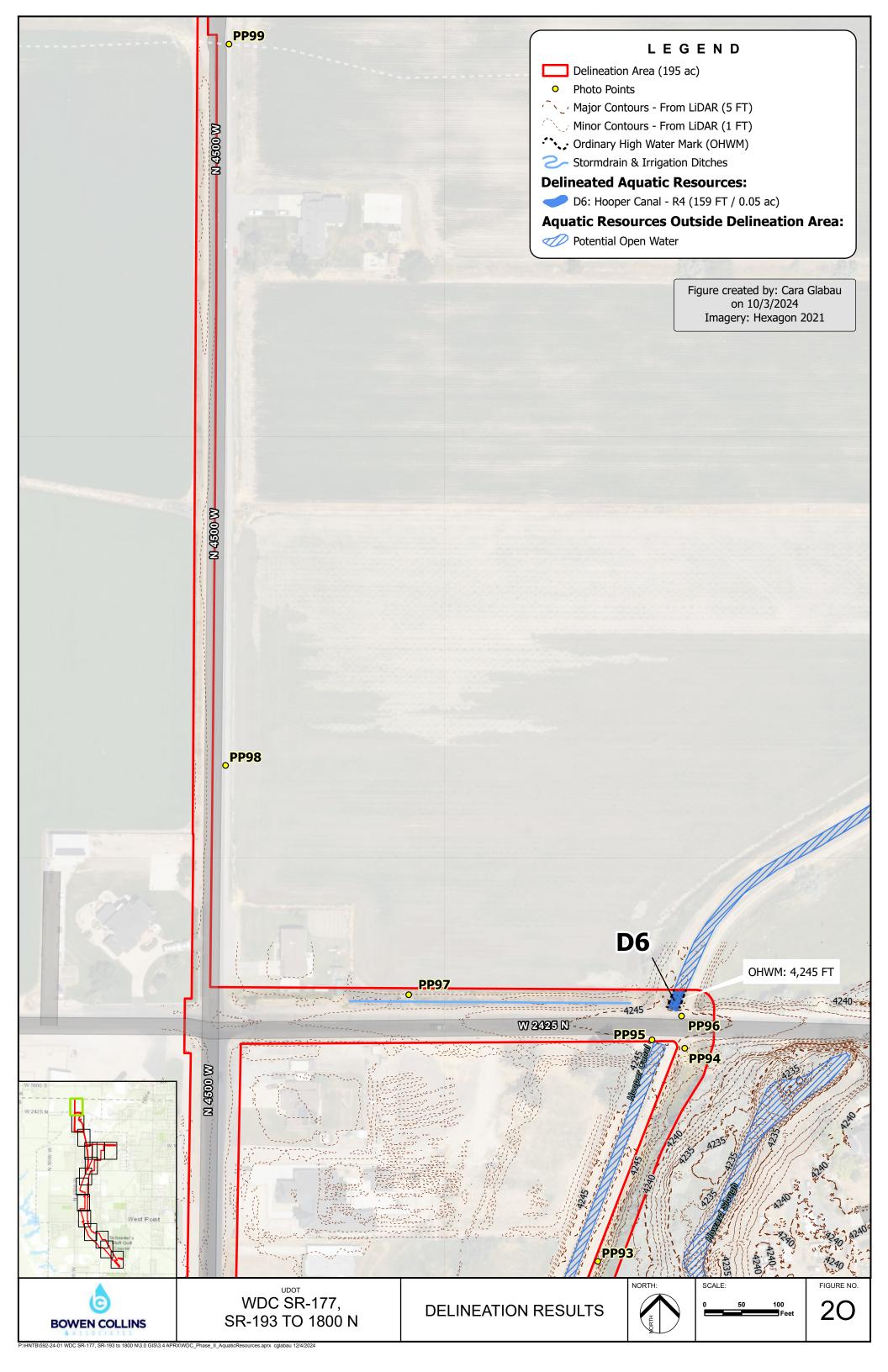


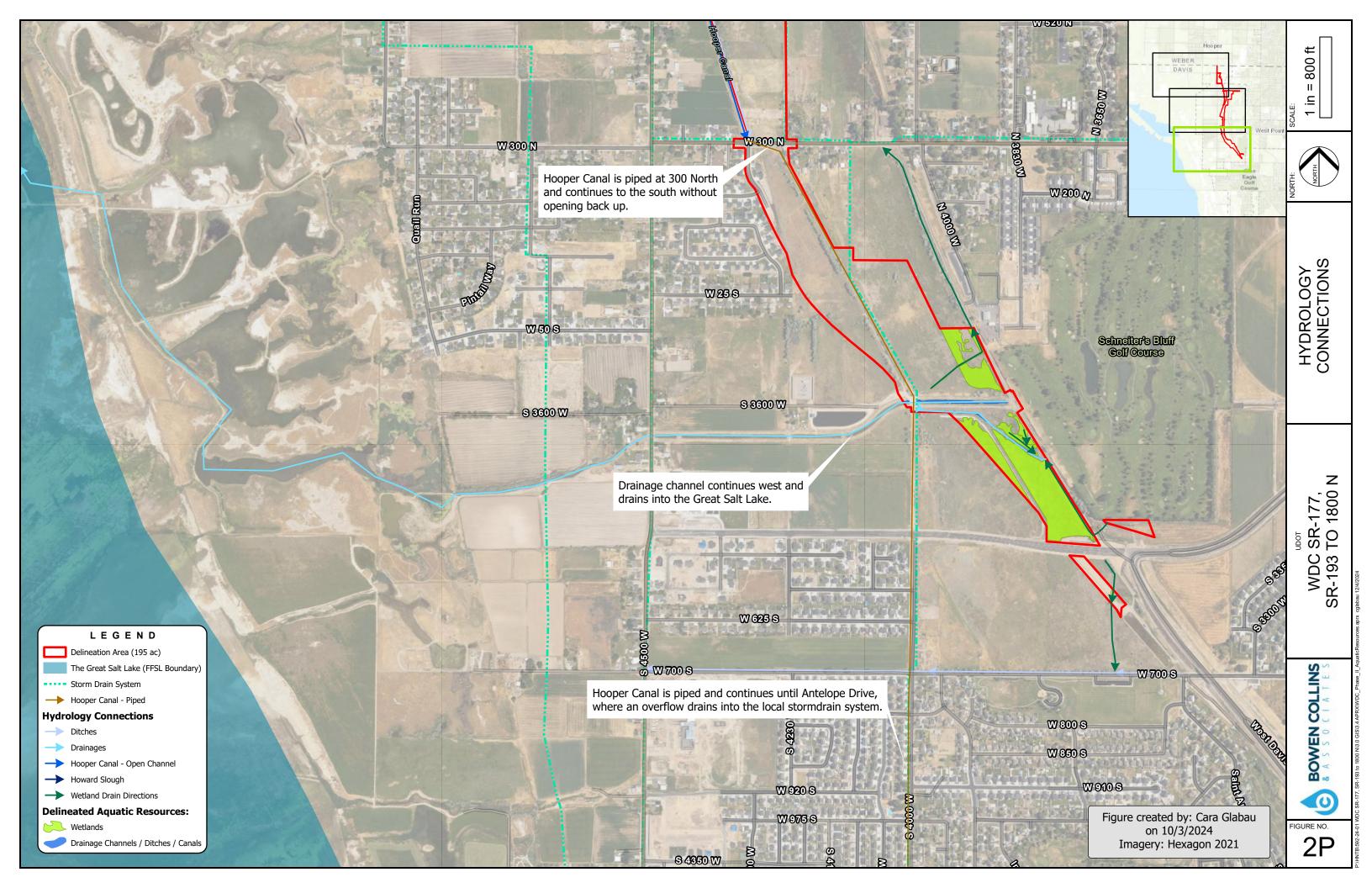


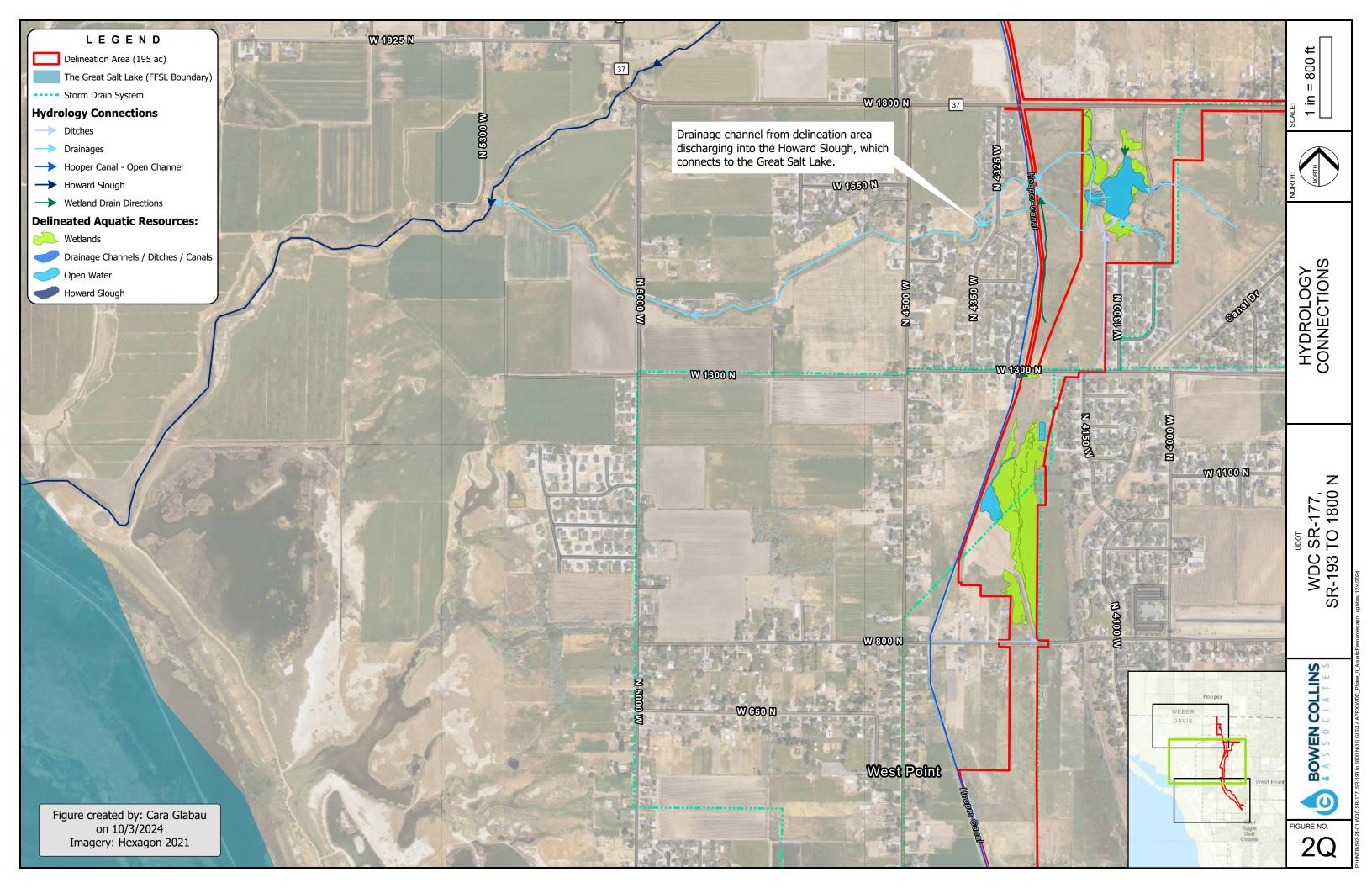


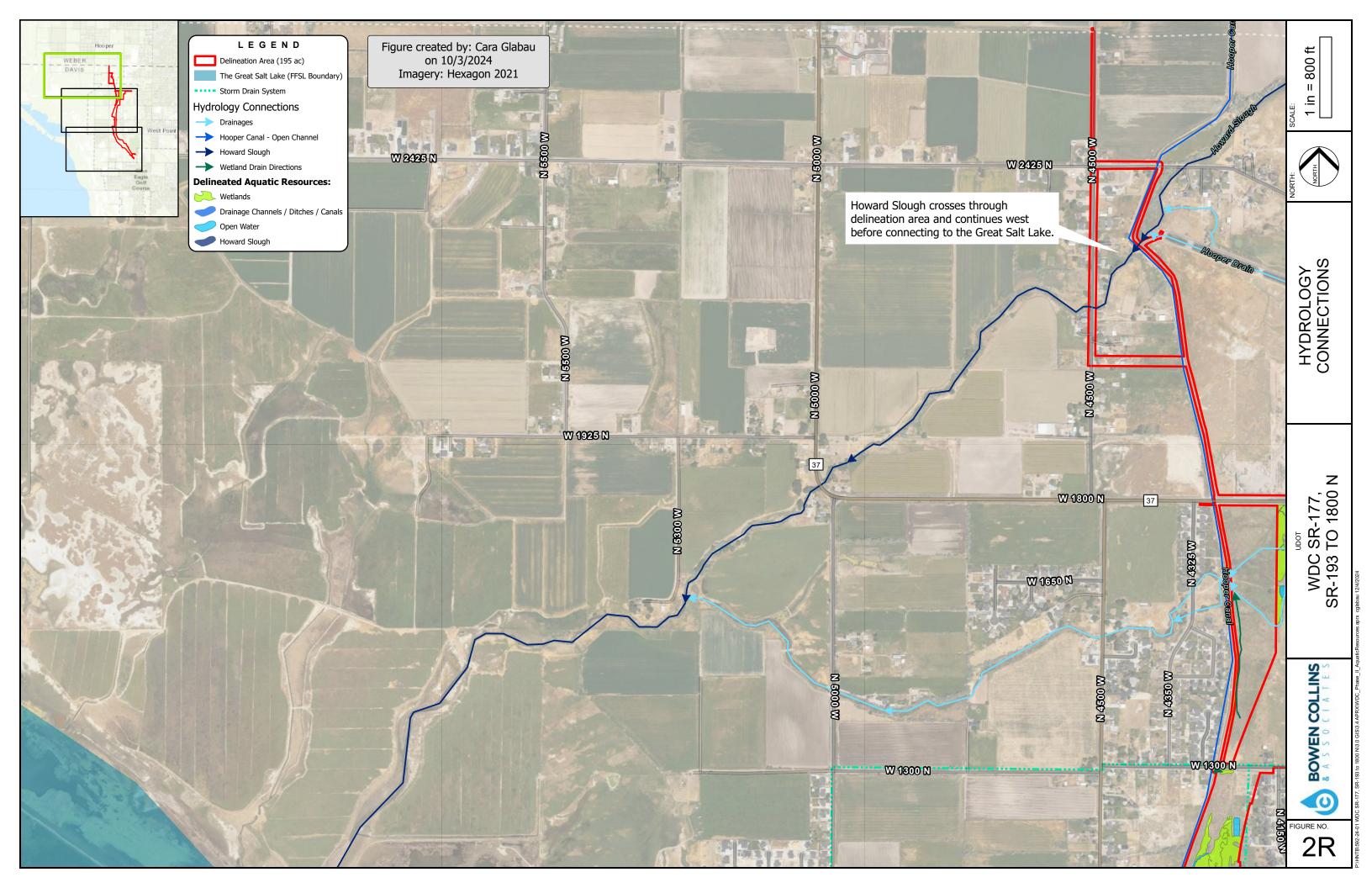












APPENDIX C

Wetland Determination Data Forms & Photographs

| Project/Site: WDC Phase II | (| City/County | Davis Co | ounty | _ Sampling Date: 2024-05-13 |
|---|---------------|--------------|-------------|---------------------------|---|
| Applicant/Owner: UDOT | | | | State: Utah | _ Sampling Point: SP1 |
| Investigator(s): Cara Glabau, Elena Capson | (| Section, To | wnship, Ra | nge: S05 T4N R2W | |
| Landform (hillslope, terrace, etc.): Flat | | Local relief | (concave, | convex, none): None | Slope (%): 0 |
| Subregion (LRR): D 28A | Lat: 41.1 | 1119405 | | Long: -112.100955 | Datum: NAD83_2011 |
| Soil Map Unit Name: Fb - Ford loam, shallow water to | | | | | · · · · · · · · · · · · · · · · · · · |
| Are climatic / hydrologic conditions on the site typical for this | | | | | |
| Are Vegetation, Soil, or Hydrologysi | | | | | present? Yes No |
| Are Vegetation, Soil, or Hydrologyn | aturally prol | blematic? | | eded, explain any answ | |
| SUMMARY OF FINDINGS - Attach site map | showing | samplin | g point le | ocations, transect | s, important features, etc. |
| Hydrophytic Vegetation Present? Yes No | o | le th | e Sampled | Aroa | |
| Hydric Soil Present? Yes No | o | | in a Wetlar | | ✓ No |
| Wetland Hydrology Present? Yes No | · | | | | |
| Remarks: | | | e | | |
| This pasture has likely been planted with interme normal according to the antecedent precipitation | | _ | _ | _ | |
| | | | | | , |
| VEGETATION – Use scientific names of plant | | Dominant | Indicator | Dominance Test wor | rkohooti |
| Tree Stratum (Plot size:) | % Cover | | | Number of Dominant | |
| 1 | | | | That Are OBL, FACW | |
| 2 | | | | Total Number of Domi | inant |
| 3 | | | | Species Across All Str | |
| 4 | | | | Percent of Dominant S | |
| Sapling/Shrub Stratum (Plot size:) | | = Total Co | ver | That Are OBL, FACW | , or FAC: <u>66.66</u> (A/B) |
| 1 | | | | Prevalence Index wo | orksheet: |
| 2 | | | | Total % Cover of: | |
| 3 | | | | | x 1 = 0 |
| 4 | | | | · | x = 142 |
| 5 | | | | | x 3 = 0 $x 4 = 32$ |
| Herb Stratum (Plot size:) | | = Total Co | ver | | x 5 = 105 |
| 1. Carex praegracilis | 41 | | FACW | Column Totals: 100 | |
| 2. Juncus balticus | 30 | | FACW | | |
| 3. Thinopyrum intermedium | 21 | | UPL | | ex = B/A = 2.79 |
| 4. Melilotus officinalis | 8 | | FACU | Hydrophytic Vegetat | |
| 5 | | | | <u>✓</u> Dominance Test i | |
| 6 | | | | ✓ Prevalence Index | |
| 7 | | | | | aptations ¹ (Provide supporting ks or on a separate sheet) |
| 8 | 400 | = Total Co | | Problematic Hydr | ophytic Vegetation ¹ (Explain) |
| Woody Vine Stratum (Plot size:) | | = Total Co | vei | | |
| 1 | | | | | oil and wetland hydrology must |
| 2 | | | | be present, unless dis | sturbed or problematic. |
| | | = Total Co | ver | Hydrophytic Vegetation | |
| % Bare Ground in Herb Stratum % Cover | of Biotic Cr | ust | | Present? Y | es <u>/</u> No |
| Remarks: | | | | L | |
| This pasture has likely been planted | with in | termed | iate wh | eatgrass for th | ne grazing cattle |
| This partial that meet, woon planted | | | | | g. s.=/g cattle. |
| | | | | | |

| | Motrix | | Doday Footures | nfirm the absence of indicators.) |
|---|--|--|---|--|
| Depth (inches) Co | Matrix Ior (moist) | % Co | Redox Features olor (moist) % Type ¹ Lo | c ² Texture Remarks |
| | 2.5/1 | 100 | | Muck |
| 1 - 14 10YF | R 4/2 | 100 | | Clay |
| | R 6/2 | 100 | | Clay |
| 14 24 1011 | 10/2 | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| - | | | | |
| Type: C=Concentr | ation, D=Depl | etion, RM=Redu | iced Matrix, CS=Covered or Coated Sa | nd Grains. ² Location: PL=Pore Lining, M=Matrix. |
| | | | , unless otherwise noted.) | Indicators for Problematic Hydric Soils ³ : |
| Histosol (A1) | | _ | _ Sandy Redox (S5) | 1 cm Muck (A9) (LRR C) |
| Histic Epipedon | ı (A2) | _ | _ Stripped Matrix (S6) | 2 cm Muck (A10) (LRR B) |
| Black Histic (A3 | , | _ | _ Loamy Mucky Mineral (F1) | Reduced Vertic (F18) |
| Hydrogen Sulfic | . , | _ | _ Loamy Gleyed Matrix (F2) | Red Parent Material (TF2) |
| Stratified Layers | | | Depleted Matrix (F3) | Other (Explain in Remarks) |
| 1 cm Muck (A9) | , , | | Redox Dark Surface (F6) | |
| Depleted BelowThick Dark Surf | | (ATT) _ | Depleted Dark Surface (F7) Redox Depressions (F8) | ³ Indicators of hydrophytic vegetation and |
| Sandy Mucky M | | _ | Vernal Pools (F9) | wetland hydrology must be present, |
| Sandy Gleyed N | | _ | | unless disturbed or problematic. |
| Restrictive Layer (i | | | | |
| Type: | | | | |
| Depth (inches): | | | | Hydric Soil Present? Yes No |
| Remarks: | | | | |
| YDROLOGY | | | | |
| Wetland Hydrology | y Indicators: | | | |
| Primary Indicators (| | ne required: che | ck all that apply) | Secondary Indicators (2 or more required) |
| Surface Water (| | | Salt Crust (B11) | Water Marks (B1) (Riverine) |
| High Water Tab | ` ' | | Biotic Crust (B12) | Sediment Deposits (B2) (Riverine) |
| ✓ Saturation (A3) | | | Aquatic Invertebrates (B13) | Drift Deposits (B3) (Riverine) |
| Water Marks (B | | ne) | Hydrogen Sulfide Odor (C1) | Drainage Patterns (B10) |
| | sits (B2) (Nor | | Oxidized Rhizospheres along Living | |
| | , , , | , | | |
| | 33) (Nonriver | ine) | Presence of Reduced Iron (C4) | , , , |
| Drift Deposits (F | | ine) | Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil | Crayfish Burrows (C8) |
| Drift Deposits (E | acks (B6) | | Recent Iron Reduction in Tilled Soil | Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) |
| Drift Deposits (| acks (B6) ole on Aerial Ir | | | Crayfish Burrows (C8) |
| Drift Deposits (I Surface Soil Cra Inundation Vis t Water-Stained I | acks (B6) ble on Aerial In Leaves (B9) | | Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) | Crayfish Burrows (C8) Is (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| Drift Deposits (I Surface Soil Cra Inundation Vis b Water-Stained I | acks (B6) ble on Aerial In Leaves (B9) | magery (B7) | Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Other (Explain in Remarks) | Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| Drift Deposits (I Surface Soil Cra Inundation Vis I Water-Stained I Field Observations Surface Water Pres | acks (B6) ble on Aerial In Leaves (B9) s: ent? Ye | magery (B7) | Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): | Crayfish Burrows (C8) Is (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| Drift Deposits (I Surface Soil Cra Inundation Vis b Water-Stained I Field Observations Surface Water Present Water Table Present? | acks (B6) ble on Aerial In Leaves (B9) s: ent? Ye Ye | magery (B7) es No es No | Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): Depth (inches): 18 | Crayfish Burrows (C8) Is (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| Drift Deposits (I Surface Soil Cra Inundation Vis the Water-Stained I Field Observations Surface Water Present Water Table Present? Saturation Present? (includes capillary fre | acks (B6) ble on Aerial In Leaves (B9) s: ent? Ye ye ringe) | magery (B7) es No es No | Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): Depth (inches): 18 | Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No |
| Drift Deposits (I Surface Soil Cra Inundation Vis the Water-Stained I Field Observations Surface Water Present Water Table Present? Saturation Present? (includes capillary fre | acks (B6) ble on Aerial In Leaves (B9) s: ent? Ye ye ringe) | magery (B7) es No es No | Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): Depth (inches): 18 Depth (inches): 0 | Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No |
| Drift Deposits (I Surface Soil Cra Inundation Vis the Water-Stained I Field Observations Surface Water Present Water Table Present? Saturation Present? (includes capillary fre | acks (B6) ble on Aerial In Leaves (B9) s: ent? Ye ye ringe) | magery (B7) es No es No | Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): Depth (inches): 18 Depth (inches): 0 | Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No |
| Drift Deposits (I Surface Soil Cra Inundation Vis b Water-Stained I Field Observations Surface Water Prese Water Table Present Saturation Present? (includes capillary fr Describe Recorded Remarks: | acks (B6) ble on Aerial In Leaves (B9) s: ent? Ye that? Ye ringe) Data (stream | es No es No _ es No _ gauge, monitorio | Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): Depth (inches): 18 Depth (inches): 0 ng well, aerial photos, previous inspection | Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No |
| Drift Deposits (I Surface Soil Cra Inundation Vis It Water-Stained I Field Observations Surface Water Present Water Table Present? Saturation Present? (includes capillary fro Describe Recorded | acks (B6) ble on Aerial In Leaves (B9) s: ent? Ye ringe) Data (stream | magery (B7) es No es No gauge, monitorion Id have likely | Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): O ng well, aerial photos, previous inspection y developed with more time. | Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No ons), if available: |



Sample Point 1



Sample Point 1

| Project/Site: WDC Phase II | (| City/Coun | ty: Davis Co | ounty | Sampling Dat | e: 2024-05-13 |
|---|---|-------------|--------------------------|---|-------------------------|-----------------|
| Applicant/Owner: UDOT | | - | - | State: Utah | | |
| Investigator(s): Cara Glabau, Elena Capson | ; | Section, 1 | Γownship, Ra | nge: S05 T4N R2W | | |
| | | | | convex, none): None | | Slope (%): 0 |
| Subregion (LRR): D 28A | Lat: 41. | 1120613 | 3 | Long: -112.100923 | 367 _D | atum: NAD83_201 |
| Soil Map Unit Name: Fb - Ford loam, shallow wa | | | | | | |
| Are climatic / hydrologic conditions on the site typical for | | | | | | |
| Are Vegetation, Soil, or Hydrology | | | | Normal Circumstances | | No_ 🗸 |
| Are Vegetation, Soil, or Hydrology | | | | eded, explain any ansv | | |
| SUMMARY OF FINDINGS – Attach site m | | | | | | |
| Hydrophytic Vegetation Present? Yes | No 🗸 | | | | | |
| Hydric Soil Present? Yes | No 🔽 | | the Sampled | | N | , |
| Wetland Hydrology Present? Yes | | Wi | thin a Wetlar | nd? Yes | No | |
| Remarks: | | · · | | | | |
| This pasture has likely been planted with intermediate wheatgrass not been rain for several days prior to the site visit. Although this s area likely receives irrigation for cattle grazing, but not consistent of the site visit. | ample point has hydr enough hydrology to | ology, vege | etation and soils | do not meet any wetland crit | teria and is therefore, | • |
| VEGETATION – Use scientific names of p | | | | | | |
| Tree Stratum (Plot size:) | | | nt Indicator ? Status | Dominance Test wo | | |
| 1 | | | | Number of Dominant That Are OBL, FACV | | (A) |
| 2 | | | | Total Number of Dom | ^ | |
| 3 | | | | Species Across All S | trata: <u>Z</u> | (B) |
| 4. | | = Total C | Cover | Percent of Dominant That Are OBL, FACW | | 00 (A/B) |
| Sapling/Shrub Stratum (Plot size:) | | | | Prevalence Index w | orkshoot: | |
| 1 | | | | Total % Cover of | | tiply by: |
| 2 3 | | | | | x 1 = C | |
| 4 | | | | FACW species 55 | | |
| 5 | | | | | x 3 = 0 | |
| | | = Total C | Cover | FACU species 0 | x 4 = 0 |) |
| Herb Stratum (Plot size:) | | • | | | x 5 = 2 | |
| 1. Juncus balticus | 40 | | FACW | Column Totals: 95 | (A) <u>3</u> | B10 (B) |
| 2. Thinopyrum intermedium | 40 | | UPL | Dravalance lad | ex = B/A = 3.26 | 3 |
| 3. Carex praegracilis | 15 | | FACW | Hydrophytic Vegeta | | |
| 4 | | | | Dominance Test | | |
| 5 | | | | Prevalence Inde | | |
| 6 | | | | Morphological A | | ide supporting |
| 7 8 | | - | | data in Rema | rks or on a separ | ate sheet) |
| 0 | 0.5 | = Total C | | Problematic Hyd | rophytic Vegetati | on¹ (Explain) |
| Woody Vine Stratum (Plot size:) | | - Total C | Jovei | | | |
| 1 | | | | ¹ Indicators of hydric s | | |
| 2 | | | | be present, unless di | sturbed or proble | matic. |
| | | = Total C | Cover | Hydrophytic | | |
| % Bare Ground in Herb Stratum % 0 | Cover of Biotic Cr | rust | | Vegetation Present? | Yes No | |
| Remarks: | | | - | l | | |
| This pasture has been planted with i | ntermediat | e whe | atgrass w | hich is dominar | nt in this loc | ation, likely |
| due to a change in topographic cond | | | • | | | |

| | | - | oth needed to docum | | or commi | n the absence of it | idicators.) | |
|---|--|-------------|---|--|------------------|--|--|----------------------|
| Depth (inches) | Matrix Color (moist) | % | Redox Color (moist) | Features W Type ¹ | Loc ² | Texture | Pom | arks |
| 0 - 2 | 2.5YR 2.5/2 | 100 | Color (moist) | | LUC | Peat | Keli | idiks |
| 2 - 24 | 2.5Y 5/2 | 100 | | | | Clay | | |
| - | | | | | | | | |
| - | | | | | | | | |
| - | | | | | | | | |
| - | | | | | | | | |
| - | | | | | | | | |
| - | | | | | | | | |
| • | | | =Reduced Matrix, CS= LRRs, unless otherv | | d Sand G | rains. ² Location | | ning, M=Matrix. |
| Black H Hydroge Stratifie 1 cm Mi Deplete Thick D Sandy N Sandy O | pipipedon (A2) listic (A3) en Sulfide (A4) ed Layers (A5) (LRR D) ed Below Dark Surfa eark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Layer (if present): | ace (A11) | Loamy Gleye Depleted Ma Redox Dark Depleted Dar Redox Depreted Dar Redox Depreted Dar | rix (S6) y Mineral (F1) ed Matrix (F2) trix (F3) Surface (F6) rk Surface (F7) essions (F8) | | Other (Expl 3Indicators of hy wetland hydre | (A10) (LRR B) ertic (F18) t Material (TF2) dain in Remarks | etation and present, |
| Type: | nches): | | | | | Hydric Soil Pres | sant? Vas | No_ |
| Remarks: | | | | | | Tiyano con Tres | | |
| YDROLO |) OGY | | he depleted la | yer to qual | fy for | "depleted be | elow dark | surface". |
| - | drology Indicator | | | | | | | |
| | • | one require | ed; check all that apply | | | | | or more required) |
| | Water (A1) | | Salt Crust (I | , | | | Marks (B1) (R | , |

| Wetland Hydrology Indicators: | | | |
|--|---|---|--|
| Primary Indicators (minimum of one required; cl | neck all that apply) | Secondary Indicators (2 or more required) | |
| Surface Water (A1) | Salt Crust (B11) | Water Marks (B1) (Riverine) | |
| High Water Table (A2) | Biotic Crust (B12) | Sediment Deposits (B2) (Riverine) | |
| Saturation (A3) | Aquatic Invertebrates (B13) | Drift Deposits (B3) (Riverine) | |
| Water Marks (B1) (Nonriverine) | Hydrogen Sulfide Odor (C1) | Drainage Patterns (B10) | |
| Sediment Deposits (B2) (Nonriverine) | ng Roots (C3) Dry-Season Water Table (C2) | | |
| Drift Deposits (B3) (Nonriverine) | Presence of Reduced Iron (C4) | Crayfish Burrows (C8) | |
| Surface Soil Cracks (B6) | oils (C6) Saturation Visible on Aerial Imagery (C9) | | |
| Inundation Vis ble on Aerial Imagery (B7) | Thin Muck Surface (C7) | Shallow Aquitard (D3) | |
| Water-Stained Leaves (B9) | Other (Explain in Remarks) | FAC-Neutral Test (D5) | |
| Field Observations: | | | |
| Surface Water Present? Yes No | Depth (inches): | | |
| Water Table Present? Yes No _ | Depth (inches): 20 | | |
| Saturation Present? Yes No _ (includes capillary fringe) | Wetland Hydrology Present? Yes No | | |
| Describe Recorded Data (stream gauge, monitor | oring well, aerial photos, previous inspec | tions), if available: | |
| | | | |
| Remarks: | | | |

Water table present at bottom four inches of sample point pit and soil was moist but not fully saturated to the extent that was present at other points throughout the delineation area except the soils that were close to and under the water table.



Sample Point 2



Sample Point 2

| Project/Site: WDC Phase II | | (| City/Count | _{ty:} Davis Co | ounty | _ Sampling Date: _2 | 2024-05-13 |
|---|------------------|------------------|------------|-------------------------|--|---------------------------------|---------------|
| Applicant/Owner: UDOT | | _ | - | - | State: Utah | · - | |
| Investigator(s): Cara Glabau, Elena Cap | son | | | | nge: S05 T4N R2W | _ , | |
| Landform (hillslope, terrace, etc.): Drainage | | | | | | ve _{Slor} | oe (%): 0 |
| | | | | | Long: -112.1011318 | | |
| Soil Map Unit Name: Fb - Ford loam, sha | | | | | | | |
| Are climatic / hydrologic conditions on the site | | | | | | | |
| Are Vegetation, Soil, or Hydro | | | | | | | , No |
| | | | | | | | NO |
| Are Vegetation, Soil, or Hydro SUMMARY OF FINDINGS – Attacl | | | | | eeded, explain any answ | | atures etc |
| | | | Jampin | ng ponit it | oddiono, transcot | <u> </u> | |
| | es / N | | ls t | the Sampled | | | |
| | es <u> </u> | | wit | hin a Wetlar | nd? Yes | No | • |
| Remarks: | | | | | | | |
| This is a depression that appears to convey drawere wetter than normal according to the antec | cedent precipita | ation tool, bu | | | | - | n. Conditions |
| VEGETATION – Use scientific nan | nes of plan | its. | | | | | |
| Tree Stratum (Plot size:) | | Absolute % Cover | | nt Indicator Status | Dominance Test wor | | |
| 1 | | | | | Number of Dominant S That Are OBL, FACW | | (A) |
| 2. | | | | | | | |
| 3. | | | | | Total Number of Domi Species Across All Str | | (B) |
| 4 | | | | | Percent of Dominant S | Phoeine | , , |
| Sapling/Shrub Stratum (Plot size: |) | | = Total C | Cover | That Are OBL, FACW | | (A/B) |
| 1. | | | | | Prevalence Index wo | rksheet: | |
| 2 | | | | | Total % Cover of: | Multiply | <u>y by:</u> |
| 3 | | | | | | x 1 = <u>85</u> | |
| 4 | | | | | FACW species 0 | | |
| 5 | | | | | | x 3 = 18 | |
| Herb Stratum (Plot size:) | | | = Total C | Cover | FACU species 3 | | |
| 1 Eleocharis palustris | | 38 | ~ | OBL | · · · · · · · · · · · · · · · · · · · | x 5 = 0 | |
| 2. Eleocharis obtusa | | 28 | | OBL | Column Totals: 94 | (A) <u>115</u> | (B) |
| 3. Carex nebrascensis | | 16 | | OBL | Prevalence Inde | x = B/A = <u>1.22</u> | |
| 4. Rumex crispus | | 6 | | FAC | Hydrophytic Vegetat | ion Indicators: | |
| 5. Ranunculus sceleratus | | 3 | | OBL | ✓ Dominance Test i | s >50% | |
| 6. Xanthium spinosum | | 3 | | FACU | ✓ Prevalence Index | is ≤3.0 ¹ | |
| 7 | | | | | | aptations ¹ (Provide | |
| 8 | | | | | Problematic Hydro | ks or on a separate | • |
| Woody Vine Stratum (Diet size) | , | 94 | = Total C | Cover | r roblematic rryun | opinytic vegetation | (Explain) |
| Woody Vine Stratum (Plot size: 1 | | | | | ¹ Indicators of hydric so | | |
| 2 | | | | | be present, unless dis | turbed or problemat | IC. |
| | | | = Total C | Cover | Hydrophytic | | |
| % Bare Ground in Herb Stratum | % Cove | r of Biotic C | rust | | Vegetation Present? Yes | es <u>/</u> No | |
| Remarks: | | | | | • | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Profile Desc | cription: (Describe | to the depth | needed to docur | nent the i | ndicator | or confirm | n the absence of indicators.) |
|------------------------------|---|---------------------------------------|---------------------|-------------|--------------|------------------|---|
| Depth | Matrix | | | x Features | | | |
| (inches) | Color (moist) | | Color (moist) | | Type' | Loc ² | Texture Remarks |
| 0 - 1 | 2.5Y 3/2 | 100 | | | | | Muck |
| 1 - 10 | 2.5Y 3/3 | 100 | | | | | Clay Loam |
| 10 - 24 | 2.5YR 4/2 | 100 | | | | | Sandy Clay |
| - | | | | | | | |
| - | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| <u> </u> | | | | | | | · |
| - | | | | | | | |
| | oncentration, D=Dep | | | | | d Sand Gr | |
| _ | Indicators: (Applic | able to all LR | | | ea.) | | Indicators for Problematic Hydric Soils ³ : |
| Histosol | (A1) pipedon (A2) | | Sandy Red | | | | 1 cm Muck (A9) (LRR C) 2 cm Muck (A10) (LRR B) |
| | istic (A3) | | Suipped Mid | , , | l (F1) | | Reduced Vertic (F18) |
| | en Sulfide (A4) | | Loamy Gley | - | | | Red Parent Material (TF2) |
| | d Layers (A5) (LRR | C) | Depleted M | | (1 2) | | Other (Explain in Remarks) |
| | uck (A9) (LRR D) | 0) | Redox Dark | | F6) | | Other (Explain in Remaine) |
| | d Below Dark Surfac | ce (A11) | Depleted D | | , | | |
| | ark Surface (A12) | , | Redox Dep | | | | ³ Indicators of hydrophytic vegetation and |
| | Mucky Mineral (S1) | | Vernal Pool | | , | | wetland hydrology must be present, |
| | Bleyed Matrix (S4) | | | | | | unless disturbed or problematic. |
| Restrictive I | Layer (if present): | | | | | | |
| Type: | | | | | | | |
| Depth (in | ches): | | _ | | | | Hydric Soil Present? Yes No |
| Remarks: | | | | | | | • |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| HYDROLO | | | | | | | |
| _ | drology Indicators | | | | | | |
| | cators (minimum of o | one required; o | | | | | Secondary Indicators (2 or more required) |
| Surface | ` ' | | Salt Crust | ` ' | | | Water Marks (B1) (Riverine) |
| | ater Table (A2) | | Biotic Crus | | | | Sediment Deposits (B2) (Riverine) |
| Saturation | on (A3) | | Aquatic In | vertebrate | s (B13) | | Drift Deposits (B3) (Riverine) |
| | larks (B1) (Nonrive i | | Hydrogen | | | | Drainage Patterns (B10) |
| Sedimer | nt Deposits (B2) (No | nriverine) | Oxidized F | Rhizosphe | res along | Living Roc | ots (C3) Dry-Season Water Table (C2) |
| Drift Dep | posits (B3) (Nonrive | erine) | Presence | | | | Crayfish Burrows (C8) |
| Surface | Soil Cracks (B6) | | Recent Iro | n Reduction | on in Tilled | d Soils (C6 | 6) Saturation Visible on Aerial Imagery (C9) |
| Inundati | on Vis ble on Aerial | Imagery (B7) | Thin Muck | Surface (| C7) | | Shallow Aquitard (D3) |
| Water-S | tained Leaves (B9) | | Other (Exp | olain in Re | marks) | | FAC-Neutral Test (D5) |
| Field Obser | | | | | | | |
| Surface Wat | | | Depth (in | | | | |
| Water Table | | · · · · · · · · · · · · · · · · · · · | Depth (in | | | | |
| Saturation P | | res No | Depth (in | ches): | | _ Wetla | and Hydrology Present? Yes No |
| (includes cap Describe Re | corded Data (stream | n gauge, monit | toring well, aerial | photos. pre | evious ins | pections). | if available: |
| | 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 | J J., | 5 2, 2021 | ,, pi | | , /, | |
| Remarks: | | | | | | | |
| | urfo o o ····-+-·· | O11640 | ما ۱ به ما اه | - عامره | -i-+: | + las=+ | tion was present Danth |
| | | | ung the sai | npie p | oint pi | i iocat | tion was present. Depth was not |
| greater | then 3-inche | es. | | | | | |
| | | | | | | | |



Sample Point 3



Sample Point 3

| Project/Site: WDC Phase II | | (| City/Coun | _{ity:} Davis Co | ounty | Sampling Date: 202 | 4-05-13 |
|---|---------------------------|--------------------|--------------|--------------------------|---------------------------------------|--------------------------------|--------------|
| Applicant/Owner: UDOT | | | | | State: Utah | Sampling Point: SP4 | |
| Investigator(s): Cara Glabau, Elena C | Capson | ; | Section, 1 | Гownship, Ra | nge: S05 T4N R2W | | |
| Landform (hillslope, terrace, etc.): Flat | | | | | convex, none): None | Slope (% | 6): <u>0</u> |
| Subregion (LRR): D 28A | | Lat: 41. | 1122551 | 7 | Long: -112.1012391 | 7 Datum: N | IAD83_201 |
| Soil Map Unit Name: Fb - Ford loam, | shallow water | r table, 0 to | 1 perce | nt slopes | NWI classific | cation: None | |
| Are climatic / hydrologic conditions on the | e site typical for t | his time of yea | ar? Yes_ | No | (If no, explain in R | lemarks.) | |
| Are Vegetation, Soil, or H | ydrology | _significantly | disturbed' | ? Are " | 'Normal Circumstances" p | present? Yes | No |
| Are Vegetation, Soil, or H | ydrology | _naturally prol | blematic? | (If ne | eded, explain any answe | ers in Remarks.) | |
| SUMMARY OF FINDINGS - Att | tach site ma _l | p showing | sampli | ng point l | ocations, transects | s, important featu | res, etc. |
| Hydrophytic Vegetation Present? | Yes | No 🗸 | | | | | |
| Hydric Soil Present? | Yes | No 🔽 | | the Sampled | | N | |
| Wetland Hydrology Present? | Yes | | Wi | thin a Wetlar | nd? Yes | No | |
| Remarks: | | | | | | | |
| This pasture has likely been planted with intermed not been rain for several days prior to the site visit area likely receives irrigation for cattle grazing, but | t. Although this samp | ple point has hydr | rology, vege | etation and soils | do not meet any wetland criteri | ia and is therefore, not a wet | |
| VEGETATION - Use scientific | names of pla | ants. | | | | | |
| | | Absolute | | nt Indicator | Dominance Test work | sheet: | |
| Tree Stratum (Plot size: | | | | ? Status | Number of Dominant S | pecies | |
| 1. | | | | | That Are OBL, FACW, | or FAC: 1 | (A) |
| 2. | | | | | Total Number of Domin | iant 2 | (5) |
| 3. | | | | | Species Across All Stra | ata: 2 | (B) |
| 4 | | | | | Percent of Dominant S | | (A /D) |
| Sapling/Shrub Stratum (Plot size: |) | | 10101 | 50101 | That Are OBL, FACW, | 01 FAC. <u>50.00</u> | (A/B) |
| 1 | | | | | Prevalence Index wor | | |
| 2 | | | | | Total % Cover of: | | |
| 3 | | | | | | x 1 = 0 | |
| 4 | | | | | FACW species 55 | | |
| 5 | | | | | | x 3 = 0 | |
| Herb Stratum (Plot size: | ` | | = Total C | Cover | FACU species 0 | | |
| Herb Stratum (Plot size: 1 Juncus balticus | / | 40 | ~ | FACW | · · · · · · · · · · · · · · · · · · · | x 5 = 200 | — |
| 2. Thinopyrum intermedium | | 40 | | UPL | Column Totals: 95 | (A) <u>310</u> | (B) |
| 3. Carex praegracilis | | 15 | | FACW | Prevalence Index | = B/A = <u>3.26</u> | |
| 4. | | | | | Hydrophytic Vegetation | on Indicators: | |
| 5. | | | | | Dominance Test is | >50% | |
| 6. | | | | | Prevalence Index i | s ≤3.0 ¹ | |
| 7 | | | | | | ptations¹ (Provide supp | |
| 8 | | | | | | s or on a separate shee | , |
| | | 95 | = Total C | Cover | Problematic Hydro | pnytic vegetation (Exp | olain) |
| Woody Vine Stratum (Plot size: | | | | | ¹ Indicators of hydric soi | il and watland hydrolog | v muot |
| 1. | | | | | be present, unless distr | | y must |
| 2 | | | | 2 | Hydrophytic | | |
| | | | | | Vegetation | , | |
| % Bare Ground in Herb Stratum | % Cov | er of Biotic Cr | rust | | Present? Ye | es No | <u>-</u> |
| Remarks: This pasture has been plan | | | | • | | in this location | , likely |
| due to a change in topogra | phic condit | ions and I | lessen | ing long- | term saturation. | | |

| l | inpulon. (Describe | | needed to docur | | ilaicatoi t | , commi | the absence of in | idicators.) |
|---|--|---|---|---|---|------------------|---|--|
| Depth | Matrix | | Redo | x Features | s | | | |
| (inches) | Color (moist) | | Color (moist) | % | Type ¹ | Loc ² | Texture | Remarks |
| 0 - 2 | 2.5YR 2.5/2 | 100 | | | | | Peat | |
| 2 - 24 | 2.5Y 5/2 | 100 | | | | | Clay | |
| | | | | | | | | |
| | | | | - —— | - | | | |
| | | | | | | | | |
| | | | | | | | | |
| - | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | oncentration, D=Dep | | | | | d Sand Gr | | n: PL=Pore Lining, M=Matrix. |
| | Indicators: (Applic | able to all Li | | | ed.) | | | Problematic Hydric Soils ³ : |
| Histosol | ` ' | | Sandy Redo | | | | | (A9) (LRR C) |
| | oipedon (A2) | | Stripped Ma | | | | | (A10) (LRR B) |
| Black Hi | | | Loamy Muc | - | | | Reduced V | |
| | en Sulfide (A4) | ۵, | Loamy Gley | | (F2) | | | t Material (TF2) |
| | d Layers (A5) (LRR | C) | Depleted M | | (FO) | | Other (Exp | lain in Remarks) |
| | uck (A9) (LRR D) d Below Dark Surfac | oo (A11) | Redox Dark | | . , | | | |
| | ark Surface (A12) | Æ (ATT) | Depleted Da | | | | ³ Indicators of h | ydrophytic vegetation and |
| | Mucky Mineral (S1) | | Vernal Pool | | 0) | | | ology must be present, |
| - | Gleyed Matrix (S4) | | vernari oor | 3 (1 3) | | | - | bed or problematic. |
| | Layer (if present): | | | | | | | esa er presioniale. |
| _ | | | | | | | | |
| , , <u> </u> | ches): | | | | | | Hydric Soil Pre | sent? Yes No |
| | Ciles). | | | | | | Tryunc 3011 File | Sent: 165 NO |
| Remarks: | | | | | | | | |
| Depleted | d layer need | s redox t | o qualify fo | r "dep | leted b | elow o | dark surface | e". |
| • | • | | ' ' | • | | | | |
| | | | | | | | | |
| LIVDDOLO | | | | | | | | |
| HIDROLO | GY | | | | | | | |
| | GY drology Indicators | : | | | | | | |
| Wetland Hy | drology Indicators | | check all that appl | y) | | | Secondary | / Indicators (2 or more required) |
| Wetland Hyd | drology Indicators cators (minimum of | | | • | | | | |
| Wetland Hyd Primary India Surface | drology Indicators cators (minimum of o Water (A1) | | Salt Crust | (B11) | | | Water | Marks (B1) (Riverine) |
| Wetland Hyd Primary India Surface High Wa | drology Indicators cators (minimum of o Water (A1) ater Table (A2) | | Salt Crust | (B11) st (B12) | s (B13) | | Water | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) |
| Wetland Hyd Primary Indic Surface High Wa Saturatio | drology Indicators cators (minimum of e Water (A1) ater Table (A2) on (A3) | one required; | Salt Crust Biotic Crust Aquatic In | (B11) st (B12) vertebrate | | | Water Sedim Drift D | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) |
| Wetland Hyd Primary Indic Surface High Wa Saturatic Water M | drology Indicators cators (minimum of of Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive | one required; | Salt Crust Biotic Crust Aquatic In Hydrogen | (B11) st (B12) vertebrate Sulfide Od | dor (C1) | iving Roo | Water Sedim Drift D | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) |
| Wetland Hyd Primary India Surface High Wa Saturatia Water M Sedimer | drology Indicators cators (minimum of of Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive at Deposits (B2) (No | one required; rine) onriverine) | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F | (B11) st (B12) vertebrate Sulfide Oo Rhizosphe | dor (C1) res along l | - | Water Sedin Drift D Draina ts (C3) Dry-S | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) Deposits (B10) Deposits (B10 |
| Wetland Hyd Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep | drology Indicators eators (minimum of of Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive nt Deposits (B2) (No cosits (B3) (Nonrive | one required; rine) onriverine) | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F | (B11) st (B12) vertebrate Sulfide Oo Rhizosphe of Reduce | dor (C1) res along l d Iron (C4 |) | Water Sedin Drift C Draina ts (C3) Dry-S Crayfi | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) Deposits (B1) (Riverine) Deposits (B10) D |
| Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Surface | drology Indicators cators (minimum of electric (A1) ater Table (A2) on (A3) larks (B1) (Nonriver nt Deposits (B2) (No cosits (B3) (Nonriver Soil Cracks (B6) | one required; rine) onriverine) erine) | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence | (B11) st (B12) vertebrate Sulfide Od Rhizosphe of Reduce n Reducti | dor (C1) res along led Iron (C4 on in Tilled |) | Water Sedin Drift E Draina ts (C3) Dry-S Crayfi) Satura | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) Deposits (B1) (Riverine) Deposits (B10) Deposits (B10) Deposits (B10) Deposits (B10) Deposits (B10) Deposits (B10) Deposits (B2) Deposits (B2) (Riverine) Deposits (Ri |
| Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Surface Inundatic | drology Indicators cators (minimum of of Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive nt Deposits (B2) (No cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial | one required; rine) onriverine) erine) | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck | (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce n Reducti Surface (| dor (C1) res along led Iron (C4 on in Tilled C7) |) | Water Sedin Drift E Draina ts (C3) Dry-S Crayfi) Satura Shallo | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) Deposits (B1) (Riverine) Deposits (B10) Deposits (B10) Deposits (B10) Deposits (B10) Deposits (B10) Deposits (B2) (Riverine) Deposits (B2) (Rive |
| Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Surface Inundatic Water-S | drology Indicators cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive nt Deposits (B2) (No cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) | one required; rine) onriverine) erine) | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence | (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce n Reducti Surface (| dor (C1) res along l d Iron (C4 on in Tilled C7) |) | Water Sedin Drift E Draina ts (C3) Dry-S Crayfi) Satura Shallo | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) Deposits (B1) (Riverine) Deposits (B10) Deposits (B10) Deposits (B10) Deposits (B10) Deposits (B10) Deposits (B10) Deposits (B2) Deposits (B2) (Riverine) Deposits (Ri |
| Wetland Hydelicon Primary India Surface High Water Mage Sedimer Drift Deg Surface Inundation Water-S Field Observation | drology Indicators cators (minimum of of other (A1) ater Table (A2) on (A3) larks (B1) (Nonrive nt Deposits (B2) (No cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: | one required; rine) onriverine) erine) Imagery (B7) | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide Od Rhizosphe of Reduce in Reduction Surface (Diain in Re | dor (C1) res along l d Iron (C4 on in Tilled C7) |) | Water Sedin Drift E Draina ts (C3) Dry-S Crayfi) Satura Shallo | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) Deposits (B1) (Riverine) Deposits (B10) Deposits (B10) Deposits (B10) Deposits (B10) Deposits (B10) Deposits (B2) (Riverine) Deposits (B2) (Rive |
| Wetland Hyderimary Indices Surface High Was Saturation Water MSedimer Drift Dep Surface Inundation Water-S Field Obserts | drology Indicators cators (minimum of of other (A1) ater Table (A2) on (A3) larks (B1) (Nonrivel nt Deposits (B2) (No cosits (B3) (Nonrivel Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? | rine) porriverine) erine) Imagery (B7) | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce in Reduction Surface (colain in Re ches): | dor (C1) res along l d Iron (C4 on in Tilled C7) |) | Water Sedin Drift E Draina ts (C3) Dry-S Crayfi) Satura Shallo | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) Deposits (B1) (Riverine) Deposits (B10) Deposits (B10) Deposits (B10) Deposits (B10) Deposits (B10) Deposits (B2) (Riverine) Deposits (B2) (Rive |
| Wetland Hydelian Primary India Surface High Water Management Sedimer Drift Dep Surface Inundation Water-S Field Obsert Surface Water Table | drology Indicators cators (minimum of or Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver nt Deposits (B2) (No cosits (B3) (Nonriver Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? | rine) priverine) lmagery (B7) Yes No | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce in Reducti Surface (blain in Re ches): | dor (C1) res along l d Iron (C4 on in Tilled C7) marks) |) Soils (C6 | Water Sedim Drift □ Draina ts (C3) Crayfi) Satura Shallo | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) Deposits (B1) (Riverine) Deposits (B10) Deposits |
| Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Surface Inundatic Water-S Field Observa | drology Indicators cators (minimum of or Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver nt Deposits (B2) (No cosits (B3) (Nonriver Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? | rine) priverine) lmagery (B7) Yes No | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce in Reducti Surface (blain in Re ches): | dor (C1) res along l d Iron (C4 on in Tilled C7) marks) |) Soils (C6 | Water Sedim Drift □ Draina ts (C3) Crayfi) Satura Shallo | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) Deposits (B1) (Riverine) Deposits (B10) Deposits (B10) Deposits (B10) Deposits (B10) Deposits (B10) Deposits (B2) (Riverine) Deposits (B2) (Rive |
| Wetland Hyderimary Indices Surface High Water Manager Sedimer Drift Department Surface Inundation Water-S Field Obserting Surface Water Table Saturation Polyincludes cap | drology Indicators cators (minimum of or Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver nt Deposits (B2) (No cosits (B3) (Nonriver Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? | rine) porriverine) lmagery (B7) Yes No Yes No | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce in Reducti Surface (blain in Re ches): | dor (C1) res along l res along l red Iron (C4 on in Tilled C7) marks) |) Soils (C6 | Water Sedin Drift □ Draina ts (C3) Dry-S Crayfi Satura FAC-I | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) Deposits (B1) (Riverine) Deposits (B10) Deposits |

Remarks:

Water table present at bottom four inches of sample point pit and soil was moist but not fully saturated to the extent that was present at other points throughout the delineation area except the soils that were close to and under the water table.



Sample Point 4



Sample Point 4

| Project/Site: WDC Phase II | (| City/County | _{y:} <u>Davis C</u> | ounty Sampling Date: 2024-05-13 |
|--|-----------------|-------------|------------------------------|---|
| Applicant/Owner: UDOT | | | | State: Utah Sampling Point: SP5 |
| Investigator(s): Cara Glabau, Elena Capson | ; | Section, To | ownship, Ra | nge: S05 T4N R2W |
| Landform (hillslope, terrace, etc.): Depression | | Local relie | f (concave, | convex, none): Concave Slope (%): 0 |
| Subregion (LRR): D 28A | Lat: 41. | 1122185 | | Long: -112.10139417 Datum: NAD83_201 |
| Soil Map Unit Name: Fb - Ford loam, shallow water | table, 0 to | 1 percer | nt slopes | NWI classification: None |
| Are climatic / hydrologic conditions on the site typical for th | is time of yea | ar? Yes _ | No _ | (If no, explain in Remarks.) |
| Are Vegetation, Soil, or Hydrology | significantly o | disturbed? | Are ' | "Normal Circumstances" present? Yes No |
| Are Vegetation, Soil, or Hydrology | naturally pro | blematic? | (If ne | eeded, explain any answers in Remarks.) |
| SUMMARY OF FINDINGS - Attach site map | showing | samplir | ng point l | ocations, transects, important features, etc. |
| Wetland Hydrology Present? Yes <u>✓</u> N Remarks: | No | with | he Sampleo | nd? Yes <u>/</u> No |
| This pasture has been planted with interme the antecedent precipitation tool, but there | | _ | | _ |
| VEGETATION – Use scientific names of plan | nts. | | | |
| Tree Stratum (Plot size:) 1 | | Species? | | Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A) |
| 2 | | | | Total Number of Dominant Species Across All Strata: 3 (B) |
| 4. Sapling/Shrub Stratum (Plot size:) | | | over | Percent of Dominant Species That Are OBL, FACW, or FAC: 66.66 (A/B) |
| 1 | | | | Prevalence Index worksheet: |
| 2 | | | | Total % Cover of: Multiply by: |
| 3 | | | | OBL species $9 \times 1 = 9$ |
| 4 | | | | FACW species 64 $x = 128$ FAC species 0 $x = 0$ |
| 5 | | = Total Co | over | FACU species 0 x 4 = 0 |
| Herb Stratum (Plot size:) | | - Total Ot | | UPL species 27 x 5 = 135 |
| 1. Juncus balticus | _ 41 | | FACW | Column Totals: 100 (A) 272 (B) |
| 2. Phalaris arundinacea | 23 22 | <u> </u> | FACW UPL | Prevalence Index = B/A = 2.72 |
| 3. Thinopyrum intermedium 4 Eleocharis obtusa | 9 | | OBL | Hydrophytic Vegetation Indicators: |
| 5. Panicum oligosanthes | _ 5 | - | UPL | ✓ Dominance Test is >50% |
| 6. | | - | | Prevalence Index is ≤3.0¹ |
| 7 | | | | Morphological Adaptations ¹ (Provide supporting |
| 8. | | | | data in Remarks or on a separate sheet) |
| | 100 | = Total Co | over | Problematic Hydrophytic Vegetation ¹ (Explain) |
| Woody Vine Stratum (Plot size:) 1 2 | | | | ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| | | = Total Co | | Hydrophytic Vegetation |
| % Bare Ground in Herb Stratum % Cove | er of Biotic Cr | rust | | Present? Yes No |
| Remarks: | | | | |

| | - | to the depth | needed to document the i | | or confirm | the absence | e of indicators.) |
|---|--|------------------|--|-------------------------|------------------|---------------------------------------|---|
| Depth (inches) | Matrix Color (moist) | <u></u> % | Redox Feature Color (moist) % | s _Type ¹ | Loc ² | Texture | Remarks |
| 0 - 2 | 10YR 3/3 | 100 | Color (moist) 70 | Турс | LOC | Peat | Remarks |
| 2 - 6 | 10YR 3/2 | 100 | - | | | Mucky Loam/Clay | |
| | | | - | | | | |
| 6 - 24 | 10YR 5/2 | 100 | | | | Clay | |
| | | | | | | - | |
| | | | | | | | |
| - | | | | | | | |
| _ | | | | | | | |
| | | | · · | | | - | |
| 1T C-C | | | ducand Mahring CC-Causana | | | 21 - | antions DI - Doug Lining Manhatris |
| | | | educed Matrix, CS=Covered Rs, unless otherwise not | | u Sanu Gi | | cation: PL=Pore Lining, M=Matrix. s for Problematic Hydric Soils ³ : |
| Histosol | | 5a5i6 t6 all 21t | Sandy Redox (S5) | ou., | | | Muck (A9) (LRR C) |
| | pipedon (A2) | | Stripped Matrix (S6) | | | | Muck (A10) (LRR B) |
| | istic (A3) | | Loamy Mucky Minera | l (F1) | | | ced Vertic (F18) |
| <u>✓</u> Hydroge | en Sulfide (A4) | | Loamy Gleyed Matrix | | | Red F | Parent Material (TF2) |
| Stratified | d Layers (A5) (LRR | C) | Depleted Matrix (F3) | | | Other | (Explain in Remarks) |
| | uck (A9) (LRR D) | | Redox Dark Surface | ` ' | | | |
| | d Below Dark Surface | ce (A11) | Depleted Dark Surface | | | 3 | |
| · | ark Surface (A12) | | Redox Depressions (| F8) | | | s of hydrophytic vegetation and |
| - | Mucky Mineral (S1) Gleyed Matrix (S4) | | Vernal Pools (F9) | | | | hydrology must be present, disturbed or problematic. |
| | Layer (if present): | | | | | unicss | disturbed of problematic. |
| | | | | | | | |
| • | ches): | | _ | | | Hydric Soi | I Present? Yes V No No |
| Remarks: | | | _ | | | 1 . , | |
| HYDROLO | GY | | | | | | |
| Wetland Hy | drology Indicators | : | | | | | |
| Primary India | cators (minimum of | one required; c | heck all that apply) | | | Seco | ndary Indicators (2 or more required) |
| | Water (A1) | | Salt Crust (B11) | | | | Water Marks (B1) (Riverine) |
| | ater Table (A2) | | Biotic Crust (B12) | | | | Sediment Deposits (B2) (Riverine) |
| ✓ Saturation | , , | | Aquatic Invertebrate | | | | Orift Deposits (B3) (Riverine) |
| | farks (B1) (Nonrive | * | ✓ Hydrogen Sulfide O | , , | | · · · · · · · · · · · · · · · · · · · | Orainage Patterns (B10) |
| | nt Deposits (B2) (No | • | Oxidized Rhizosphe | • | • | · · · — | Ory-Season Water Table (C2) |
| | posits (B3) (Nonrive | erine) | Presence of Reduce | | | | Crayfish Burrows (C8) |
| | Soil Cracks (B6) | Imagany (P7) | Recent Iron Reducti | | 1 Solis (Co | | Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| | on Vis ble on Aerial Stained Leaves (B9) | illiagery (b7) | Thin Muck Surface (Other (Explain in Re | | | | FAC-Neutral Test (D5) |
| Field Obser | | | Other (Explain in the | inano, | | | Ad-Neutral Test (D3) |
| Surface Wat | | Yes No | Depth (inches): | | | | |
| Water Table | | _ | Depth (inches): 20 |) | _ | | |
| Saturation P | | | Depth (inches): 0 | <u> </u> | - Wetl: | and Hydrolog | gy Present? Yes No |
| (includes cap | pillary fringe) | | | | | | , 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| Describe Re | corded Data (stream | n gauge, monit | oring well, aerial photos, pr | evious insp | pections), | if available: | |
| | | | | | | | |
| Remarks: | | | | | | | |
| A higher v | water table wo | uld have lik | ely developed with r | nore tim | ne. Cond | ditions of s | soils were very saturated, likely |
| from a mi | x of high groun | d water an | d surface drainage f | rom loca | al irrigat | tion practi | ces. This area is slightly |
| depresse | d, allowing this | water to p | ermeate the soils wh | nile slow | ly drain | ing to the | south. |



Sample Point 5



Sample Point 5

| Project/Site: WDC Phase II | | City/Cou | nty: Davis C | ounty | Sampling Date: 2024-05-13 |
|---|-----------------------|----------|--------------------------------|--|---|
| Applicant/Owner: UDOT | | | | State: Utah | Sampling Point: SP6 |
| Investigator(s): Merissa Davis | | Section, | | | |
| Landform (hillslope, terrace, etc.): Flat | | Local re | lief (concave, | convex, none): None | Slope (%): 0 |
| Subregion (LRR): D 28A | Lat: 41. | 112086 | 42 | Long: -112.1022032 | 7 Datum: NAD83_201 |
| Soil Map Unit Name: WgA - Warm Springs fine sa | | | | - | |
| Are climatic / hydrologic conditions on the site typical | for this time of year | ar? Yes | No | (If no, explain in R | emarks.) |
| Are Vegetation, Soil, or Hydrology | | | | | resent? Yes No |
| Are Vegetation, Soil, or Hydrology | | | | eeded, explain any answe | |
| SUMMARY OF FINDINGS – Attach site | | | | ocations, transects | , important features, etc. |
| Hydrophytic Vegetation Present? Yes | No | | | | |
| Hydric Soil Present? Yes | No 🗸 | | the Sampled vithin a Wetlar | | No |
| | No | W | nunn a wenai | ild: Tes | NO |
| Remarks: | | | | | |
| This pasture has likely been planted with intermediate wheatgra- not been rain for several days prior to the site visit. Although this | | | | • | |
| wetland. This area likely receives irrigation for cattle grazing, but | | | - | | · |
| VEGETATION – Use scientific names of | nlants | | | | |
| VEGETATION GGC GOLDHAM MAINES OF | Absolute | Domin: | ant Indicator | Dominance Test work | sheet: |
| Tree Stratum (Plot size:) | | | s? Status | Number of Dominant Sp | |
| 1 | | | | That Are OBL, FACW, o | |
| 2 | | | | Total Number of Domin | |
| 3 | | | | Species Across All Stra | ta: <u>3</u> (B) |
| 4 | | | | Percent of Dominant Sp | |
| Sapling/Shrub Stratum (Plot size: | | = rotar | Cover | That Are OBL, FACW, o | or FAC: <u>66.66</u> (A/B) |
| 1 | | | | Prevalence Index worl | ksheet: |
| 2 | | | | Total % Cover of: | |
| 3 | | | | | x 1 = 0 |
| 4 | | | | · · · · · · · · · · · · · · · · · · · | x 2 = 50 |
| 5 | | | | · · | x 3 = 90 |
| Herb Stratum (Plot size:) | | = Total | Cover | FACU species 5 UPL species 20 | x 4 = 20 x 5 = 100 |
| 1. Distichlis spicata | 30 | | FAC | Column Totals: 80 | |
| 2. Juncus balticus | 25 | / | FACW | Column Totals. | (A) <u> (</u> B) |
| 3. Thinopyrum intermedium | 20 | | UPL | Prevalence Index | = B/A = 3.25 |
| 4. Taraxacum officinale | 5 | | FACU | Hydrophytic Vegetation | |
| 5 | | | | <u>✓</u> Dominance Test is | |
| 6 | | | | Prevalence Index is | |
| 7 | | | | | ptations ¹ (Provide supporting s or on a separate sheet) |
| 8 | 80 | T-4-1 | | Problematic Hydror | ohytic Vegetation ¹ (Explain) |
| Woody Vine Stratum (Plot size:) | | = Total | Cover | | |
| 1 | | | | ¹ Indicators of hydric soil | and wetland hydrology must |
| 2 | | | | be present, unless distu | irbed or problematic. |
| | | | Cover | Hydrophytic | |
| % Bare Ground in Herb Stratum % | Cover of Biotic C | rust | | Vegetation Present? Yes | s <u>/</u> No |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Sampling Point: SP6

| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. The standard of the standard or Coated Sand Grains. The standard or C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. The standard or C=Concentration, D=Depletation: PL=Pore Lire | | | | | |
|--|---|--|--|--|--|
| 3 - 12 10YR 4/1 100 Clay 12 - 24 10R 5/3 100 Clay | arks | | | | |
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depleted in RP=Pore Lire | matter | | | | |
| - Cype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. - Cype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. - Cype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. - Cype: C=Concentration, D=Depleted Lir X, CS=Covered or Coated Sand Grains. - Cype: C=Concentration, D=Depleted Lir X, CS=Covered or Coated Sand Grains. - Cype: C=Concentration, D=Depleted Lir X, CS=Covered or Coated Sand Grains. - Cype: C=Concentration, D=Depleted Lir X, CS=Covered or Coated Sand Grains. - Cype: C=Concentration, D=Depleted Lir X, CS=Covered or Coated Sand Grains. - Cype: C=Concentration, D=Depleted Lir X, CS=Covered or Coated Sand Grains. - Cype: C=Concentration, D=Depleted Lir X, CS=Covered or Coated Sand Grains. - Cype: C=Concentration, D=Depleted Lir X, CS=Covered or Coated Sand Grains. - Cype: C=Concentration, D=Depleted Lir X, CS=Covered or Coated Sand Grains. - Cype: C=Concentration, D=Depleted Lir X, CS=Covered or Coated Sand Grains. - Cype: C=Concentration, D=Depleted Lir X, CS=Covered or Coated Sand Grains. - Cype: C=Concentration, D=Depleted Lir X, CS=Covered or Coated Sand Grains. - Cype: C=Concentration: PL=Pote Lir X, CS=Covered or Coated Sand Grains. - Cype: C=Concentration: PL=Pote Lir X, CS=Covered or Coated Sand Grains. - Cype: C=Concentration: PL=Pote Lir X, CS=Covered or Coated Sand Grains. - Cype: C=Concentration: PL=Pote Lir X, CS=Covered or Coated Sand Grains. - Cype: C=Concentration: PL=Pote Lir X, CS=Covered or Coated Sand Grains. - Cype: C=Concentration: Indicators of Problematic Holds or Problematic Holds or Castella Sandy Grain Sandy Gra | | | | | |
| ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stripped Matrix (F2) Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Tom Muck (A9) (LRR C) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Vernal Pools (F9) Indicators for Problematic H Indicators for Poblematic H Indicators for Problematic H Indicators for Poblema | | | | | |
| Adric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Straiffied Layers (A5) (LRR C) Depleted Matrix (F3) Tom Muck (A9) (LRR C) Depleted Matrix (F3) Tom Muck (A9) (LRR C) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Vernal Pools (F9) Indicators for Problematic H | | | | |
| ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stripped Matrix (F2) Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Tom Muck (A9) (LRR C) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Vernal Pools (F9) Indicators for Problematic H Indicators for Poblematic H Indicators for Problematic H Indicators for Poblema | | | | | |
| Addric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stripped Matrix (F2) Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Tom Muck (A9) (LRR C) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Vernal Pools (F9) Indicators for Problematic H Indicators for Probl | | | | | |
| ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Straiffied Layers (A5) (LRR C) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Vernal Pools (F9) Wetland hydrology must be unless disturbed or problem estrictive Layer (if present): | | | | | |
| ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Thick Dark Surface (A12) Sandy Redox (S5) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Redox Dark Surface (F6) Depleted Dark Surface (F7) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Vernal Pools (F9) Wetland hydrology must be unless disturbed or problem estrictive Layer (if present): | | | | | |
| ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stripped Matrix (F2) Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Vernal Pools (F9) Indicators for Problematic H Indicators | ing, M=Matrix. | | | | |
| Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Straiffied Layers (A5) (LRR C) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Straiffied Layer (if present): | | | | | |
| Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Red Parent Material (TF2) Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Other (Explain in Remarks of Parent Material (TF2) Tom Muck (A9) (LRR D) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) wetland hydrology must be unless disturbed or problem estrictive Layer (if present): | | | | | |
| Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C) Depleted Matrix (F2) Tem Muck (A9) (LRR D) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Extractified Layers (A4) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Vernal Pools (F9) Wetland hydrology must be unless disturbed or problem | 2 cm Muck (A10) (LRR B) | | | | |
| Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Other (Explain in Remarks 1 to m Muck (A9) (LRR D) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) wetland hydrology must be strictive Layer (if present): | | | | | |
| | Red Parent Material (TF2) | | | | |
| Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Redox Depressions (F8) Vernal Pools (F9) Wetland hydrology must be unless disturbed or problem estrictive Layer (if present): | Other (Explain in Remarks) | | | | |
| Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sestrictive Layer (if present): Redox Depressions (F8) Vernal Pools (F9) Wetland hydrology must be unless disturbed or problem | | | | | |
| Sandy Mucky Mineral (S1) Vernal Pools (F9) wetland hydrology must be unless disturbed or problem estrictive Layer (if present): | | | | | |
| _ Sandy Mucky Mineral (S1) Vernal Pools (F9) wetland hydrology must be unless disturbed or problem estrictive Layer (if present): | ³ Indicators of hydrophytic vegetation and | | | | |
| _ Sandy Gleyed Matrix (S4) unless disturbed or problem estrictive Layer (if present): | wetland hydrology must be present, | | | | |
| estrictive Layer (if present): | unless disturbed or problematic. | | | | |
| Type: | | | | | |
| туре | | | | | |
| Depth (inches): Hydric Soil Present? Yes _ | Hydric Soil Present? Yes No | | | | |
| emarks: | | | | | |
| | | | | | |
| ark layer and depleted layer have value or chroma too high to qualify for "depl | eted below | | | | |

HYDROLOGY

| Wetland Hydrology Indicators: | | | | | | | | |
|--|--|---|--|--|--|--|--|--|
| • • • | Primary Indicators (minimum of one required; check all that apply) | | | | | | | |
| | Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) | | | | | | | |
| | Salt Crust (B11) Biotic Crust (B12) | Sediment Deposits (B2) (Riverine) | | | | | | |
| | Aquatic Invertebrates (B13) | Drift Deposits (B3) (Riverine) | | | | | | |
| | Hydrogen Sulfide Odor (C1) | Drainage Patterns (B10) | | | | | | |
| | _ | g Roots (C3) Dry-Season Water Table (C2) | | | | | | |
| Drift Deposits (B3) (Nonriverine) | Crayfish Burrows (C8) | | | | | | | |
| | , , , | | | | | | | |
| | Recent Iron Reduction in Tilled So Thin Muck Surface (C7) | Shallow Aquitard (D3) | | | | | | |
| | Other (Explain in Remarks) | FAC-Neutral Test (D5) | | | | | | |
| Field Observations: | | | | | | | | |
| | Depth (inches): | | | | | | | |
| | Depth (inches): 17 | | | | | | | |
| Saturation Present? Yes Ves No No | Depth (inches): 15 | Wetland Hydrology Present? Yes No | | | | | | |
| Describe Recorded Data (stream gauge, monitoring | g well, aerial photos, previous inspect | ions), if available: | | | | | | |
| | | | | | | | | |
| Remarks: | | | | | | | | |
| Water table present at bottom f | our inches of sample po | pint pit and soil was moist but not fully | | | | | | |

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saturated to the extent that was present at other points throughout the delineation area

except the soils that were close to and under the water table.



Sample Point 6



Sample Point 6

| Project/Site: WDC Phase II | | City/Co | ounty | Davis C | ounty | Sam | pling Date: | 2024-05-13 |
|---|-----------------------|---------|-------|--------------------------|-----------------------------------|-------------------------------|--|--------------|
| Applicant/Owner: UDOT | _ | - | - | | State: Uta | | - | |
| Investigator(s): Merissa Davis | | | | | nge: S05 T4N F | | | |
| | | | | | convex, none): N | | Slo | pe (%): 0 |
| Subregion (LRR): D 28A | Lat: 41. | 11183 | 3363 | } | Long: -112.10 | 282847 | Datu | m: NAD83_20 |
| Soil Map Unit Name: WgA - Warm Springs fine sandy | | | | | | | | |
| Are climatic / hydrologic conditions on the site typical for th | is time of year | ar? Ye | es | No | (If no, expl | ain in Remar | ks.) | |
| Are Vegetation, Soil, or Hydrology | significantly | disturt | oed? | Are ' | 'Normal Circumsta | ances" preser | nt? Yes | No |
| Are Vegetation, Soil, or Hydrology | naturally pro | blema | tic? | (If ne | eded, explain any | answers in F | Remarks.) | |
| SUMMARY OF FINDINGS - Attach site map | showing | sam | plin | g point l | ocations, tran | sects, im | portant fe | atures, etc. |
| Hydrophytic Vegetation Present? Yes Negrow Yes | No | | | e Sampled in a Wetlar | | es | No | - |
| Conditions were wetter than normal ac been rain for several days prior to the s | _ | | | | | tion tool, | but ther | e had not |
| VEGETATION – Use scientific names of plan | | | | | | | | |
| Tara Otraham (Districts | Absolute | | | | Dominance Te | st workshee | t: | |
| Tree Stratum (Plot size:) 1 | % Cover | | | | Number of Dom That Are OBL, F | | | (A) |
| 2. | | | | | | | o. <u>- </u> | (A) |
| 3. | | | | | Total Number of Species Across | | 2 | (B) |
| 4 | | | | | Percent of Dom | | - | |
| Sapling/Shrub Stratum (Plot size:) | | _ = Tot | al Co | ver | That Are OBL, F | | | (A/B) |
| 1 | | | | | Prevalence Ind | ex workshee | et: | |
| 2. | | | | | Total % Co | ver of: | Multipl | y by: |
| 3. | | | | | OBL species | 0 | x 1 = 0 | |
| 4 | | | | | FACW species | | | |
| 5 | | | | | FAC species | 15 | | |
| | | _ = Tot | al Co | ver | FACU species | | | |
| Herb Stratum (Plot size:) 1. Thinopyrum intermedium | 60 | | , | UPL | UPL species | 60 | - | |
| 2. Distichlis spicata | _ 55 15 | | | FAC | Column Totals: | /5 | (A) <u>345</u> | <u>P</u> (B) |
| 3. | | | | | Prevalenc | e Index = B/ | A = 4.60 | |
| 4. | | | | | Hydrophytic Ve | egetation Inc | dicators: | |
| 5. | | | | | Dominance | Test is >50% | 6 | |
| 6. | | | | | Prevalence | Index is ≤3.0 |)1 | |
| 7 | | | | | Morphologi | cal Adaptatio Remarks or o | ns ¹ (Provide | supporting |
| 8 | | | | | Problemation | | | |
| Woody Vine Stratum (Plot size:) | 75 | _ = Tot | al Co | ver | 1 10010111411 | riyaropiiyao | vegetation | (Explain) |
| 1 | | | | | ¹ Indicators of hy | dric soil and | wetland hyd | rology must |
| 2. | | | | | be present, unle | ess disturbed | or problema | tic. |
| | | = Tot | | | Hydrophytic | | | |
| % Bare Ground in Herb Stratum 15 % Cove | er of Biotic C | rust | | | Vegetation Present? | Yes | No | <u>~</u> |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

| | ription: (Describe | to the depth | | | | or confirr | n the absence | of indicators.) |
|---------------------------------------|--|----------------|-----------------------|-----------------|--------------------|------------------|---------------------------------------|--|
| Depth (inches) | Matrix Color (moist) | % | Redo Color (moist) | x Features % | SType ¹ | Loc ² | Texture | Remarks |
| 0 - 2 | 10R 4/2 | 100 | | | | | Loam | Organic matter present |
| 2 - 9 | 10YR 5/2 | 100 | | - | | | | Lots of organic matter. No redox, just roots. |
| 9 - 24 | 10YR 5/3 | 100 | | | | | | |
| | | | | | | | | |
| | | | | | | | | - |
| | - | | | | | | | |
| | | | | | | | | |
| | | | | · —— | | | | |
| | | | | | | | | |
| | oncentration, D=De Indicators: (Appli | | | | | d Sand G | | cation: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ : |
| Histosol | | Cable to all L | Sandy Red | | eu.) | | | Muck (A9) (LRR C) |
| | oipedon (A2) | | Stripped Ma | . , | | | | Muck (A9) (LRR B) |
| Black Hi | | | Loamy Muc | | l (F1) | | | ced Vertic (F18) |
| | n Sulfide (A4) | | Loamy Gley | | | | | arent Material (TF2) |
| | Layers (A5) (LRR | C) | Depleted M | | (- –) | | | (Explain in Remarks) |
| | ick (A9) (LRR D) | -, | Redox Dark | ` ' | F6) | | | (= |
| | Below Dark Surfa | ce (A11) | Depleted D | , | , | | | |
| | ark Surface (A12) | , , | Redox Dep | | | | ³ Indicators | of hydrophytic vegetation and |
| Sandy M | lucky Mineral (S1) | | Vernal Pool | s (F9) | | | wetland | hydrology must be present, |
| Sandy G | leyed Matrix (S4) | | | | | | unless d | listurbed or problematic. |
| Restrictive I | _ayer (if present): | | | | | | | |
| Type: | | | | | | | | |
| Depth (inc | ches): | | <u></u> | | | | Hydric Soil | Present? Yes No |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| HYDROLO | GY | | | | | | | |
| Wetland Hyd | drology Indicators | : | | | | | | |
| Primary Indic | cators (minimum of | one required; | check all that appl | y) | | | Secoi | ndary Indicators (2 or more required) |
| Surface | Water (A1) | | Salt Crust | (B11) | | | V | Vater Marks (B1) (Riverine) |
| High Wa | ter Table (A2) | | Biotic Crus | st (B12) | | | s | Sediment Deposits (B2) (Riverine) |
| Saturation | on (A3) | | Aquatic In | vertebrate | s (B13) | | 0 | Orift Deposits (B3) (Riverine) |
| Water M | arks (B1) (Nonrive | rine) | Hydrogen | Sulfide Od | dor (C1) | | 0 | Orainage Patterns (B10) |
| Sedimer | nt Deposits (B2) (No | onriverine) | Oxidized F | Rhizosphe | res along | Living Ro | ots (C3) D | Ory-Season Water Table (C2) |
| Drift Dep | osits (B3) (Nonrive | erine) | Presence | of Reduce | d Iron (C4 | .) | C | Crayfish Burrows (C8) |
| | Soil Cracks (B6) | , | Recent Iro | n Reduction | on in Tilled | d Soils (C | | Saturation Visible on Aerial Imagery (C9) |
| | on Vis ble on Aerial | Imagery (B7) | | | | , | | Shallow Aquitard (D3) |
| · · · · · · · · · · · · · · · · · · · | tained Leaves (B9) | | Other (Exp | | | | · · · · · · · · · · · · · · · · · · · | AC-Neutral Test (D5) |
| Field Observ | (, | | | | , | | | |
| Surface Water | | Yes N | o Depth (in | ches): | | | | |
| Water Table | | | o Depth (in | | | | | |
| | | | | | | | | 5 10 Y |
| Saturation Proceeds (includes cap | resent? pillary fringe) | Yes N | o V Depth (in | ches): | | _ Wet | land Hydrolog | y Present? Yes No |
| | corded Data (strear | n gauge, mon | itoring well, aerial | photos, pr | evious ins | pections), | if available: | |
| | | | | | | | | |
| Remarks: | | | | | | | | |
| | | | | | | | | |
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| | | | | | | | | |



Sample Point 7



Sample Point 7

| Project/Site: WDC Phase II | (| City/Cou | _{inty:} Davis Co | ounty | Sampling Date: 2024-05-14 | | |
|--|---|------------|---------------------------|----------------------------|---|--|--|
| Applicant/Owner: UDOT | | | Sampling Point: SP8 | | | | |
| Investigator(s): Cara Glabau, Elena Capson | | Section, | | | | | |
| Landform (hillslope, terrace, etc.): Flat | | Local re | Slope (%): 0 | | | | |
| Subregion (LRR): D 28A | Lat: 41.11186233 Long: -112.10272283 Datum: NAD83 | | | | | | |
| | ndy loam, saline, sodic, 0 to 1 percent slopes NWI classification: None | | | | | | |
| Are climatic / hydrologic conditions on the site typical for thi | s time of vea | ar? Yes | s No | (If no. explain in R | emarks.) | | |
| Are Vegetation, Soil, or Hydrologys | - | | | | resent? Yes No | | |
| Are Vegetation, Soil, or Hydrologyı | | | | eeded, explain any answe | | | |
| SUMMARY OF FINDINGS – Attach site map | | | | | | | |
| Hydrophytic Vegetation Present? Yes N | Jo | | | | | | |
| Hydric Soil Present? Yes N | 10 | | s the Sampled | | No | | |
| Wetland Hydrology Present? Yes <u>✓</u> N | | v | vithin a Wetlar | id? fes | NO | | |
| Remarks: | | • | | | | | |
| This pasture has likely been planted with intermediate wheatgrass for the not been rain for several days prior to the site visit. Although this sample | | | | _ | | | |
| wetland. This area likely receives irrigation for cattle grazing, but not col | nsistent enougl | h hydrolog | gy to support hydri | ic soil development. | | | |
| VEGETATION – Use scientific names of plan | nts. | | | | | | |
| | Absolute | Domin | ant Indicator | Dominance Test work | sheet: | | |
| Tree Stratum (Plot size:) | | | es? Status | Number of Dominant Sp | pecies | | |
| 1 | | | | That Are OBL, FACW, | or FAC: 2 (A) | | |
| 2 | | | | Total Number of Domin | ant | | |
| 3 | | | | Species Across All Stra | ta: <u>2</u> (B) | | |
| 4 | | | | Percent of Dominant Sp | | | |
| Sapling/Shrub Stratum (Plot size:) | | = Total | Cover | That Are OBL, FACW, o | or FAC: 100.00 (A/B) | | |
| 1 | | | | Prevalence Index wor | ksheet: | | |
| 2 | | | | Total % Cover of: | | | |
| 3 | | | | | x 1 = 26 | | |
| 4 | | | | l | x = 24 | | |
| 5 | | | | | $x 3 = \frac{126}{x 4 = 0}$ | | |
| Herb Stratum (Plot size:) | | = Total | Cover | · - | x 4 = 0 x 5 = 30 | | |
| 1. Distichlis spicata | 42 | | FAC | Column Totals: 86 | | | |
| 2. Eleocharis palustris | 26 | ~ | OBL | Column Totals. | (A) (B) | | |
| 3. Phalaris arundinacea | 12 | | FACW | Prevalence Index | <u> </u> | | |
| 4. Thinopyrum intermedium | 6 | | UPL | Hydrophytic Vegetation | | | |
| 5 | | | | <u>✓</u> Dominance Test is | | | |
| 6 | | | | Prevalence Index is | | | |
| 7 | | | | | ptations ¹ (Provide supporting s or on a separate sheet) | | |
| 8 | 86 | | | | ohytic Vegetation¹ (Explain) | | |
| Woody Vine Stratum (Plot size:) | | = Total | Cover | | | | |
| 1 | | | | | and wetland hydrology must | | |
| 2 | | | | be present, unless distu | irbed or problematic. | | |
| | | = Total | Cover | Hydrophytic | | | |
| % Bare Ground in Herb Stratum % Cove | r of Biotic C | rust | | Vegetation Present? Yes | s <u>/</u> No | | |
| Remarks: | | | _ | <u> </u> | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Profile Desc | cription: (Describe | to the depth | n needed to docur | nent the | indicator | or confirm | the absence of | indicators.) |
|--------------|---------------------------------------|----------------|--------------------------|-----------------|---------------------|------------------|-----------------|---|
| Depth | Matrix | | | x Feature | | | | , |
| (inches) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | Texture | Remarks |
| 0 - 6 | 7.5YR 3/1 | 100 | | | | | Clay | |
| 6 - 8 | 7.5YR 2.5/1 | 100 | | | | | Loam | |
| 8 - 24 | 10YR 5/3 | 100 | | | | | Clay | |
| | | | | | | | | |
| | | | | | . ——— | | | |
| | | | | | · | | | • |
| | | | | - | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | oncentration, D=De | | | | | d Sand Gr | | ion: PL=Pore Lining, M=Matrix. |
| - | Indicators: (Applie | cable to all L | | | ed.) | | | r Problematic Hydric Soils³: |
| Histosol | | | Sandy Redo | | | | | ck (A9) (LRR C) |
| | pipedon (A2) | | Stripped Ma Loamy Muc | | J (E1) | | | ck (A10) (LRR B) Vertic (F18) |
| | listic (A3) en Sulfide (A4) | | Loamy Gley | - | . , | | | ent Material (TF2) |
| | d Layers (A5) (LRR | C) | Depleted M | | · (· -) | | | kplain in Remarks) |
| | uck (A9) (LRR D) | , | Redox Dark | | (F6) | | | , |
| | d Below Dark Surface | ce (A11) | Depleted Da | | | | 0 | |
| | ark Surface (A12) | | Redox Depi | , | F8) | | | hydrophytic vegetation and |
| | Mucky Mineral (S1) Gleyed Matrix (S4) | | Vernal Pool | s (F9) | | | | drology must be present, urbed or problematic. |
| | Layer (if present): | | | | | | dilicas dist | urbed of problematic. |
| Type: | , , , | | | | | | | |
| Depth (in | iches): | | | | | | Hydric Soil Pr | resent? Yes No 🗸 |
| Remarks: | | | | | | | 1 - 1 | _ |
| Daduas | مريامير سميرما | مرام ام مرم | | ما به : ما | | l:£. , £ | اه مخمل می داد. | halam dankan wasaallan |
| | - | | oma are tod | nign | to qua | iiry for | aepietea | below dark surface" or |
| "thick da | ark surface". | | | | | | | |
| HYDROLO |)GY | | | | | | | |
| | drology Indicators | <u> </u> | | | | | | |
| _ | cators (minimum of | | check all that appl | v) | | | Seconda | ary Indicators (2 or more required) |
| | : Water (A1) | | Salt Crust | | | | <u> </u> | er Marks (B1) (Riverine) |
| | ater Table (A2) | | Biotic Crus | , , | | | | iment Deposits (B2) (Riverine) |
| ✓ Saturati | , , | | Aquatic In | , , | es (B13) | | | Deposits (B3) (Riverine) |
| | Marks (B1) (Nonrive | rine) | Hydrogen | | | | | inage Patterns (B10) |
| Sedime | nt Deposits (B2) (No | onriverine) | Oxidized F | Rhizosphe | res along | Living Roo | ots (C3) Dry- | -Season Water Table (C2) |
| Drift De | posits (B3) (Nonrive | erine) | Presence | of Reduce | ed Iron (C4 | !) | Cray | yfish Burrows (C8) |
| Surface | Soil Cracks (B6) | | Recent Iro | n Reducti | ion in Tille | d Soils (C6 | 5) Satu | uration Visible on Aerial Imagery (C9) |
| | ion Vis ble on Aerial | Imagery (B7) | | | | | | llow Aquitard (D3) |
| | Stained Leaves (B9) | | Other (Exp | olain in Re | emarks) | | <u>•</u> FAC | C-Neutral Test (D5) |
| Field Obser | | | V 5 11 11 | | | | | |
| | | | o Depth (in | | | | | |
| Water Table | | | o Depth (in | | | | | |
| Saturation P | 'resent? pillary fringe) | Yes V | o Depth (in | ches): <u>0</u> | | _ Wetla | and Hydrology F | Present? Yes No |
| Describe Re | ecorded Data (stream | n gauge, mor | nitoring well, aerial p | ohotos, pr | evious ins | pections), | if available: | |
| I | | | | | | | | |
| | | | | | | | | |
| Remarks: | | | | | | | | |
| Remarks: | | | | | | | | |
| Remarks: | | | | | | | | |
| Remarks: | | | | | | | | |



Sample Point 8



Sample Point 8

| Project/Site: WDC Phase II | | (| City/Cou | _{nty:} <u>Davis C</u> | ounty | Sampli | ng Date: 202 | 4-05-14 |
|--|------------------------|----------------------------|--|--------------------------------|--------------------------------|-----------------|------------------------------------|--------------|
| Applicant/Owner: UDOT | | | | | State: Utal | h Samplii | ng Point: SP9 |) |
| Investigator(s): Cara Glabau, Elena | Capson | ; | Section, | Township, Ra | nge: S05 T4N R2 | 2W | | |
| Landform (hillslope, terrace, etc.): Flat | | | Local re | elief (concave, | convex, none): No | ne | Slope (% | %): <u>0</u> |
| Subregion (LRR): D 28A | | Lat: 41. | 41.11149833 Long:112.101474 Datum: NAD83_2 | | | | | |
| Soil Map Unit Name։ WgA - Warm Տր | orings fine sandy | loam, saline | e, sodic | , 0 to 1 perce | ent slopes NWI cl | assification: N | √one | |
| Are climatic / hydrologic conditions on the | ne site typical for th | nis time of yea | ar? Yes | No _ | (If no, expla | in in Remarks. | .) | |
| Are Vegetation, Soil, or | Hydrology | significantly | disturbed | d? Are | "Normal Circumstar | nces" present? | Yes | No |
| Are Vegetation, Soil, or | Hydrology | naturally pro | blematic | :? (If ne | eeded, explain any a | answers in Rei | marks.) | |
| SUMMARY OF FINDINGS - A | ttach site mar | showing | samp | ling point l | ocations, trans | sects, impo | rtant featu | res, etc. |
| | <u>_</u> | 4 | | | * | <u>·</u> | | |
| Hydrophytic Vegetation Present? Hydric Soil Present? | Yes Yes | | Is | the Sampled | | | | |
| Wetland Hydrology Present? | Yes | | w | rithin a Wetlar | nd? Yes | s No | o <u> </u> | |
| Remarks: | | | | | | | | |
| This pasture has likely been plar | nted with interm | nediate whe | eatgras | ss for the gr | azing cattle. Coı | nditions wer | e wetter tha | an |
| normal according to the anteced | | | _ | _ | _ | | | |
| | | | | | | | | |
| VEGETATION – Use scientific | names of pla | | | | | | | |
| Tree Stratum (Plot size: |) | Absolute <u>% Cover</u> | | ant Indicator s? Status | Dominance Test Number of Domin | | | |
| 1 | | | | | That Are OBL, FA | | 0 | (A) |
| 2 | | | | | Total Number of | Dominant | | |
| 3 | | | | | Species Across A | | 2 | (B) |
| 4 | | | | | Percent of Domir | ant Species | | |
| Sapling/Shrub Stratum (Plot size: | , | | = Total | Cover | That Are OBL, FA | | 0.00 | (A/B) |
| 1 | | | | | Prevalence Inde | x worksheet: | | |
| 2. | | | | | Total % Cove | er of: | Multiply by: | |
| 3. | | | | | OBL species | 3 , | x 1 = 3 | |
| 4 | | | | | FACW species | | x 2 = <u>12</u> | |
| 5 | | | | | 1 AO Species | <u>0</u> , | | |
| Harb Stratum (Diet size) | ` | - | = Total | Cover | FACU species | | | |
| Herb Stratum (Plot size: |) | 42 | ~ | UPL | Of E openies _ | | x 5 = 345 | |
| 2. Thinopyrum intermedium | | 27 | | UPL | Column Totals: _ | 96 (/ | A) <u>432</u> | (B) |
| 3. Poa compressa | | 18 | | FACU | Prevalence | Index = B/A = | <u>4.50</u> | |
| 4. Juncus balticus | | 6 | | FACW | Hydrophytic Veg | getation Indic | ators: | |
| _{5.} Eleocharis obtusa | | 3 | | OBL | Dominance | | | |
| 6 | | | | | Prevalence I | | | |
| 7 | | | | | Morphologica | al Adaptations | 1 (Provide supp a separate shee | orting |
| 8 | | | | | Problematic | | • | , |
| Woody Vine Stratum (Plot size: |) | 96 | = Total | Cover | | , | -9 (| , |
| 1 | | | | | ¹ Indicators of hyd | | | y must |
| 2. | | | | | be present, unles | s disturbed or | problematic. | |
| | | | | Cover | Hydrophytic | | | |
| % Bare Ground in Herb Stratum | % Cov | er of Biotic C | rust | | Vegetation Present? | Yes | No_ | |
| Remarks: | | Ci di Bidilo di | | | Trosont. | | | - |
| Tomano. | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

| | | to the depth | needed to documen | | or confirn | n the absence of i | ndicators.) |
|-------------------------------------|---|----------------|--------------------------------|---------------------------------------|------------------|------------------------------|---|
| Depth (inches) | Matrix Color (moist) | % | Redox Fo | eatures <u>%</u> Type ¹ | Loc ² | Texture | Remarks |
| 0 - 4 | 10YR 4/2 | 100 | | | | Clay Loam | . Tomaine |
| 4 - 20 | 10YR 5/2 | 100 | | | | Clay | |
| 20 - 24 | 10YR 5/3 | 100 | | | | Clay | |
| - | 10111 0/0 | | | | | | |
| | - | | | | | | |
| | | | | | | | |
| | | | · | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | Reduced Matrix, CS=C | | d Sand Gi | | on: PL=Pore Lining, M=Matrix. |
| - | | cable to all L | RRs, unless otherwis | | | | Problematic Hydric Soils ³ : |
| Histosol | | | Sandy Redox (| , | | | (A9) (LRR C) |
| | oipedon (A2) | | Stripped Matrix | | | | (A10) (LRR B) |
| Black Hi | ` ' | | Loamy Mucky N | | | | Vertic (F18) |
| | n Sulfide (A4) | C) | Loamy Gleyed | | | | nt Material (TF2) |
| | d Layers (A5) (LRR | C) | Depleted Matrix Redox Dark Su | ` ' | | Other (Exp | plain in Remarks) |
| | ick (A9) (LRR D) d Below Dark Surfa | co (A11) | Redox Dark Su Depleted Dark | ` ' | | | |
| | ark Surface (A12) | ce (ATT) | Redox Depress | | | ³ Indicators of h | hydrophytic vegetation and |
| | lucky Mineral (S1) | | Vernal Pools (F | | | | rology must be present, |
| - | Gleyed Matrix (S4) | | (| • , | | | rbed or problematic. |
| | _ayer (if present): | | | | | | • |
| Type: | | | <u></u> | | | | |
| Depth (inc | ches): | | | | | Hydric Soil Pre | esent? Yes No |
| Remarks: | , | | | | | 1 1 | |
| | | | | | | | |
| HYDROLO | GY | | | | | | |
| Wetland Hy | drology Indicators | : | | | | | |
| Primary India | cators (minimum of | one required; | check all that apply) | | | <u>Secondar</u> | y Indicators (2 or more required) |
| Surface | Water (A1) | | Salt Crust (B1 | 1) | | Wate | r Marks (B1) (Riverine) |
| High Wa | iter Table (A2) | | Biotic Crust (E | 312) | | Sedir | ment Deposits (B2) (Riverine) |
| Saturation | on (A3) | | Aquatic Invert | ebrates (B13) | | Drift | Deposits (B3) (Riverine) |
| Water M | arks (B1) (Nonrive | rine) | Hydrogen Sul | fide Odor (C1) | | Drain | age Patterns (B10) |
| | nt Deposits (B2) (No | | Oxidized Rhiz | ospheres along | Living Roo | ots (C3) Dry-S | Season Water Table (C2) |
| Drift Dep | osits (B3) (Nonrive | erine) | Presence of R | Reduced Iron (C4 | .) | Cray | fish Burrows (C8) |
| Surface | Soil Cracks (B6) | | Recent Iron R | eduction in Tilled | d Soils (C6 | | ration Visible on Aerial Imagery (C9) |
| | on Vis ble on Aerial | Imagery (B7) | | | , | | ow Aquitard (D3) |
| | tained Leaves (B9) | | Other (Explain | | | · | Neutral Test (D5) |
| Field Obser | vations: | | | , | | | . , |
| Surface Water | er Present? | Yes N | o Depth (inche | s): | | | |
| Water Table | | | Depth (inche | | | | |
| | | | o Depth (inche | | | and Hydrology D | resent? Yes No |
| Saturation Procession (includes cap | | res N | b _ • Depth (inche | s): | _ weti | and Hydrology Pi | resent? Yes No |
| Describe Re | corded Data (strear | n gauge, mon | itoring well, aerial pho | tos, previous ins | pections), | if available: | |
| | | | | | | | |
| Remarks: | | | | | | | |
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Sample Point 9



Sample Point 9

| Project/Site: WDC Phase II | (| City/County | n: Davis Co | ounty | Sampl | ing Date: 2024- | 05-14 |
|---|---------------|-------------|---------------|------------------------------------|------------------|---|----------|
| Applicant/Owner: UDOT | | | | State: Uta | ah Sampl | ing Point: SP10 | |
| Investigator(s): Merissa Davis | ; | Section, To | wnship, Rar | nge: S06 T4N F | R2W | | |
| Landform (hillslope, terrace, etc.): Flat | | Local relie | f (concave, o | convex, none): N | one | Slope (%): | 0 |
| Subregion (LRR): D 28A | _ Lat: 41.1 | 11318618 | | Long: -112.10 | 374155 | Datum: ΝΑΓ | 083_201 |
| Soil Map Unit Name: Fb - Ford loam, shallow water to | | | | | | | |
| Are climatic / hydrologic conditions on the site typical for this | time of yea | ar? Yes | No | (If no, expl | ain in Remarks | .) | |
| Are Vegetation, Soil, or Hydrology si | gnificantly o | disturbed? | Are " | Normal Circumsta | ances" present? | ? Yes 🔽 No | o |
| Are Vegetation, Soil, or Hydrology na | aturally prof | blematic? | (If ne | eded, explain any | answers in Re | emarks.) | |
| SUMMARY OF FINDINGS - Attach site map s | showing | samplin | g point lo | ocations, tran | sects, impo | ortant feature | s, etc. |
| Hydrophytic Vegetation Present? Yes No | ~ | | | _ | | | |
| Hydric Soil Present? Yes No | , <u> </u> | | ne Sampled | | es N | 10 V | |
| Wetland Hydrology Present? Yes No | · | Witt | nin a Wetlan | iar re | :S N | .0 | |
| Remarks: | | • | | | | | |
| Conditions were wetter than normal acc | ording t | to the a | ntecede | nt precipitat | tion tool, b | ut there had | l not |
| been rain for several days prior to the sit | te visit. | Cattle a | also acti | ve in area. | | | |
| VEGETATION – Use scientific names of plant | s. | | | | | | |
| | | Dominant | Indicator | Dominance Tes | st worksheet: | | |
| | % Cover | | | Number of Dom | | 0 | |
| 1 | | | | That Are OBL, F | FACW, or FAC: | 0 | (A) |
| 2 | | | | Total Number of | | 2 | (D) |
| 3 | | | | Species Across | All Strata: | 2 | (B) |
| | | | | Percent of Domi That Are OBL, F | | 0.00 | (A/B) |
| Sapling/Shrub Stratum (Plot size:) | | | | | | · | (700) |
| 1 | | | | Prevalence Ind | | | |
| 2 | | | | | | $\frac{\text{Multiply by:}}{\text{x 1 = } 0}$ | |
| 3 | | | | | | x 1 = 0 x 2 = 0 | |
| 4 | | | | FAC species | | x 3 = 0 | |
| 5 | - | = Total Co | | FACU species | | | _ |
| Herb Stratum (Plot size:) | | - Total Oc | 7001 | | 65 | | _ |
| 1. Thinopyrum intermedium | 40 | | UPL | Column Totals: | | (A) 405 | — (B) |
| 2. Hordeum murinum | 20 | | FACU | | | | _ (/ |
| 3. Bromus tectorum | 15 | | UPL | | e Index = B/A | <u> </u> | _ |
| 4. Descurainia pinnata | 5 | | UPL | Hydrophytic Ve | _ | ators: | |
| 5. Convolvulus arvensis | 5 | | UPL | Dominance | | | |
| 6 | | | | Prevalence | | s ¹ (Provide suppor | tina |
| 7 | | | | | | a separate sheet) | |
| 8 | 85 | = Total Co | | Problemation | Hydrophytic V | egetation¹ (Explai | in) |
| Woody Vine Stratum (Plot size:) | | = rotar Co | over | | | | |
| 1 | | | | | | etland hydrology n | nust |
| 2 | | | | be present, unle | ess disturbed of | problematic. | |
| | | = Total Co | over | Hydrophytic Vegetation | | | |
| % Bare Ground in Herb Stratum % Cover | of Biotic Cr | rust | | Present? | Yes | No <u> </u> | |
| Remarks: | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Profile Desc | inpulon. (Describe | • | | | | , |
|--|---|--|---|---|----------------------------|--|
| Depth | Matrix | | Redox Feature | es | | |
| (inches) | Color (moist) | <u>%</u> | Color (moist) % | Type ¹ | | Texture Remarks |
| 0 - 6 | 10YR 4/2 | 100 | | | <u>C</u> | lay |
| 6 - 11 | 2.5Y 2.5/1 | 100 | | | <u>Lo</u> | oam |
| 11 - 24 | 10YR 4/2 | 100 | | | CI | ay Loam |
| - | | | | | | |
| - | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 1T C-C | | -leties DM-C | Nadward Matrix, CC-Cavara | | Cond Cusina | 21 certions DI - Deve Lining M-Metric |
| | | | Reduced Matrix, CS=Covere RRs, unless otherwise no | | | s. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : |
| Histosol | | Jubic to all E | | iou., | | · · · · · · · · · · · · · · · · · · · |
| | ` ' | | Sandy Redox (S5) | | | 1 cm Muck (A9) (LRR C) |
| | pipedon (A2) | | Stripped Matrix (S6) | | | 2 cm Muck (A10) (LRR B) |
| | istic (A3) | | Loamy Mucky Miner | | | Reduced Vertic (F18) |
| | en Sulfide (A4) | | Loamy Gleyed Matri | | | Red Parent Material (TF2) |
| | d Layers (A5) (LRR | C) | Depleted Matrix (F3) |) | | Other (Explain in Remarks) |
| | uck (A9) (LRR D) | | Redox Dark Surface | (F6) | | |
| Depleted | d Below Dark Surfac | ce (A11) | Depleted Dark Surfa | ce (F7) | | |
| Thick Da | ark Surface (A12) | | Redox Depressions | (F8) | | ³ Indicators of hydrophytic vegetation and |
| Sandy M | Mucky Mineral (S1) | | Vernal Pools (F9) | | | wetland hydrology must be present, |
| | Gleyed Matrix (S4) | | | | | unless disturbed or problematic. |
| | Layer (if present): | | | | | , |
| Type: | | | | | | |
| Depth (in | | | _ | | _ | lydric Soil Present? Yes No |
| Remarks: | Ciles). | | | | | iyunc son Fresent: Tes No |
| Deplete | d layer need | | | | | |
| Борюсо | u layer neeu | s redox t | o qualify for "dep | oleted b | elow da | rk surface". |
| • | | s redox t | o qualify for "dep | oleted b | elow da | rk surface". |
| HYDROLO | GY | | o qualify for "dep | oleted b | elow da | rk surface". |
| HYDROLO Wetland Hy | GY drology Indicators | : | | oleted b | elow da | |
| HYDROLO Wetland Hyder Primary India | GY drology Indicators cators (minimum of | : | check all that apply) | oleted b | elow da | Secondary Indicators (2 or more required) |
| HYDROLO Wetland Hy Primary India Surface | drology Indicators cators (minimum of | : | check all that apply) Salt Crust (B11) | oleted b | elow da | Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) |
| HYDROLO Wetland Hyder Primary India Surface High Wa | drology Indicators cators (minimum of a Water (A1) ater Table (A2) | : | check all that apply) | oleted b | elow da | Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) |
| HYDROLO Wetland Hy Primary India Surface | drology Indicators cators (minimum of a Water (A1) ater Table (A2) | : | check all that apply) Salt Crust (B11) | | elow da | Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) |
| HYDROLO Wetland Hyde Primary Indice Surface High Wa Saturation | drology Indicators cators (minimum of a Water (A1) ater Table (A2) | : one required; | check all that apply) Salt Crust (B11) Biotic Crust (B12) | es (B13) | elow da | Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) |
| HYDROLO Wetland Hyde Primary Indice Surface High Water Mater M | drology Indicators cators (minimum of water (A1) ater Table (A2) on (A3) darks (B1) (Nonrive | : one required; rine) | check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C | es (B13) Odor (C1) | | Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) |
| HYDROLO Wetland Hyde Primary India Surface High Wa Saturatio Water M Sedimer | drology Indicators cators (minimum of a Water (A1) ater Table (A2) on (A3) darks (B1) (Nonrive int Deposits (B2) (No | : one required; rine) onriverine) | check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C | es (B13) Odor (C1) eres along Li | | Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) C3) Dry-Season Water Table (C2) |
| HYDROLO Wetland Hyde Primary India Surface High Water Mater Ma | drology Indicators cators (minimum of a Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrive nt Deposits (B2) (Nonrive posits (B3) (Nonrive | : one required; rine) onriverine) | check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C Oxidized Rhizosph Presence of Reduc | es (B13) Odor (C1) eres along Li | ving Roots (| Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) |
| HYDROLO Wetland Hyde Primary India Surface High Wa Saturatia Water M Sedimer Drift Dep Surface | drology Indicators cators (minimum of other cators) Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrive nt Deposits (B2) (Nonrive posits (B3) (Nonrive Soil Cracks (B6) | : one required; rine) onriverine) | check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C Oxidized Rhizosph Presence of Reduc | es (B13) Odor (C1) eres along Li ed Iron (C4) tion in Tilled 3 | ving Roots (| Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) |
| HYDROLO Wetland Hyde Primary Indice Surface High Water M Sedimer Drift Dep Surface Inundation | drology Indicators cators (minimum of a Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial | : one required; rine) onriverine) | check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C Oxidized Rhizosph Presence of Reduc Recent Iron Reduc | es (B13) Odor (C1) eres along Li red Iron (C4) tion in Tilled (C7) | ving Roots (| Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| HYDROLO Wetland Hyde Primary India Surface High Wa Saturatio Water M Sedimer Drifft Dep Surface Inundatio Water-S | drology Indicators cators (minimum of a Water (A1) ater Table (A2) on (A3) farks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial stained Leaves (B9) | : one required; rine) onriverine) | check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C Oxidized Rhizosph Presence of Reduc | es (B13) Odor (C1) eres along Li red Iron (C4) tion in Tilled (C7) | ving Roots (| Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) |
| HYDROLO Wetland Hyde Primary India Surface High Water Mater | drology Indicators cators (minimum of of water (A1) ater Table (A2) on (A3) darks (B1) (Nonrive nt Deposits (B2) (Nonrive Soil Cracks (B6) on Vis ble on Aerial stained Leaves (B9) vations: | : one required; rine) onriverine) erine) | check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C Oxidized Rhizosph Presence of Reduct Recent Iron Reduct Thin Muck Surface Other (Explain in Reduct | es (B13) Odor (C1) eres along Li ed Iron (C4) tion in Tilled (C7) emarks) | ving Roots (Soils (C6) | Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| HYDROLO Wetland Hy Primary India Surface High Wa Saturatia Water M Sedimer Drift Dep Surface Inundatia Water-S Field Obser Surface Wat | drology Indicators cators (minimum of a Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial stained Leaves (B9) vations: er Present? | : one required; rine) onriverine) erine) Imagery (B7) | check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C Oxidized Rhizosph Presence of Reduce Recent Iron Reduce Thin Muck Surface Other (Explain in Reduce) Depth (inches): | es (B13) Odor (C1) eres along Li ed Iron (C4) tion in Tilled (C7) emarks) | ving Roots (Soils (C6) | Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| HYDROLO Wetland Hyde Primary India Surface High Wa Saturatio Water M Sedimer Drifft Dep Surface Inundatio Water-S Field Obser Surface Water Table | drology Indicators cators (minimum of a Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial stained Leaves (B9) vations: er Present? | : one required; rine) onriverine) erine) Imagery (B7) Yes No | check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C Oxidized Rhizosph Presence of Reduc Recent Iron Reduc Thin Muck Surface Other (Explain in R | es (B13) Odor (C1) eres along Li ed Iron (C4) tion in Tilled (C7) emarks) | ving Roots (Soils (C6) | Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| HYDROLO Wetland Hyde Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Obser Surface Water Table Saturation P | drology Indicators cators (minimum of a Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial stained Leaves (B9) vations: er Present? Present? | : one required; rine) onriverine) erine) Imagery (B7) Yes No | check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C Oxidized Rhizosph Presence of Reduce Recent Iron Reduce Thin Muck Surface Other (Explain in Reduce) Depth (inches): | es (B13) Odor (C1) eres along Li ed Iron (C4) tion in Tilled (C7) emarks) | ving Roots (Soils (C6) | Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| HYDROLO Wetland Hy Primary India Surface High Wa Saturatia Water M Sedimer Drift Dep Surface Inundatia Water-S Field Obser Surface Wate Water Table Saturation P (includes cap | drology Indicators cators (minimum of a Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive int Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial stained Leaves (B9) vations: are Present? Present? | : one required; rine) onriverine) erine) Imagery (B7) Yes No | check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C Oxidized Rhizosph Presence of Reduc Recent Iron Reduc Thin Muck Surface Other (Explain in R | es (B13) Odor (C1) eres along Li ed Iron (C4) tion in Tilled S (C7) emarks) | ving Roots (Soils (C6) | Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| HYDROLO Wetland Hy Primary India Surface High Wa Saturatia Water M Sedimer Drift Dep Surface Inundatia Water-S Field Obser Surface Wate Water Table Saturation P (includes cap | drology Indicators cators (minimum of a Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive int Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial stained Leaves (B9) vations: are Present? Present? | : one required; rine) onriverine) erine) Imagery (B7) Yes No | check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C Oxidized Rhizosph Presence of Reduc Recent Iron Reduc Thin Muck Surface Other (Explain in R | es (B13) Odor (C1) eres along Li ed Iron (C4) tion in Tilled S (C7) emarks) | ving Roots (Soils (C6) | Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| HYDROLO Wetland Hy Primary India Surface High Wa Saturatia Water M Sedimer Drift Dep Surface Inundatia Water-S Field Obser Surface Wate Water Table Saturation P (includes cap | drology Indicators cators (minimum of a Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive int Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial stained Leaves (B9) vations: are Present? Present? | : one required; rine) onriverine) erine) Imagery (B7) Yes No | check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C Oxidized Rhizosph Presence of Reduc Recent Iron Reduc Thin Muck Surface Other (Explain in R | es (B13) Odor (C1) eres along Li ed Iron (C4) tion in Tilled S (C7) emarks) | ving Roots (Soils (C6) | Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| HYDROLO Wetland Hydelic Surface High Water Marcon Sedimer Drift Deglic Surface Inundating Water-S Field Obser Surface Water Table Saturation Perincludes cape Describe Res | drology Indicators cators (minimum of a Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive int Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial stained Leaves (B9) vations: are Present? Present? | : one required; rine) onriverine) erine) Imagery (B7) Yes No | check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C Oxidized Rhizosph Presence of Reduc Recent Iron Reduc Thin Muck Surface Other (Explain in R | es (B13) Odor (C1) eres along Li ed Iron (C4) tion in Tilled S (C7) emarks) | ving Roots (Soils (C6) | Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| HYDROLO Wetland Hydelic Surface High Water Marcon Sedimer Drift Deglic Surface Inundating Water-S Field Obser Surface Water Table Saturation Perincludes cape Describe Res | drology Indicators cators (minimum of a Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive int Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial stained Leaves (B9) vations: are Present? Present? | : one required; rine) onriverine) erine) Imagery (B7) Yes No | check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C Oxidized Rhizosph Presence of Reduc Recent Iron Reduc Thin Muck Surface Other (Explain in R | es (B13) Odor (C1) eres along Li ed Iron (C4) tion in Tilled S (C7) emarks) | ving Roots (Soils (C6) | Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| HYDROLO Wetland Hydelic Surface High Water Marcon Sedimer Drift Deglic Surface Inundating Water-S Field Obser Surface Water Table Saturation Perincludes cape Describe Res | drology Indicators cators (minimum of a Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive int Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial stained Leaves (B9) vations: are Present? Present? | : one required; rine) onriverine) erine) Imagery (B7) Yes No | check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C Oxidized Rhizosph Presence of Reduc Recent Iron Reduc Thin Muck Surface Other (Explain in R | es (B13) Odor (C1) eres along Li ed Iron (C4) tion in Tilled S (C7) emarks) | ving Roots (Soils (C6) | Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| HYDROLO Wetland Hydelic Surface High Water Marcon Sedimer Drift Deglic Surface Inundating Water-S Field Obser Surface Water Table Saturation Perincludes cape Describe Res | drology Indicators cators (minimum of a Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive int Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial stained Leaves (B9) vations: are Present? Present? | : one required; rine) onriverine) erine) Imagery (B7) Yes No | check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C Oxidized Rhizosph Presence of Reduc Recent Iron Reduc Thin Muck Surface Other (Explain in R | es (B13) Odor (C1) eres along Li ed Iron (C4) tion in Tilled S (C7) emarks) | ving Roots (Soils (C6) | Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| HYDROLO Wetland Hydelic Surface High Water Marcon Sedimer Drift Deglic Surface Inundating Water-S Field Obser Surface Water Table Saturation Perincludes cape Describe Res | drology Indicators cators (minimum of a Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive int Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial stained Leaves (B9) vations: are Present? Present? | : one required; rine) onriverine) erine) Imagery (B7) Yes No | check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C Oxidized Rhizosph Presence of Reduc Recent Iron Reduc Thin Muck Surface Other (Explain in R | es (B13) Odor (C1) eres along Li ed Iron (C4) tion in Tilled S (C7) emarks) | ving Roots (Soils (C6) | Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) |



Sample Point 10

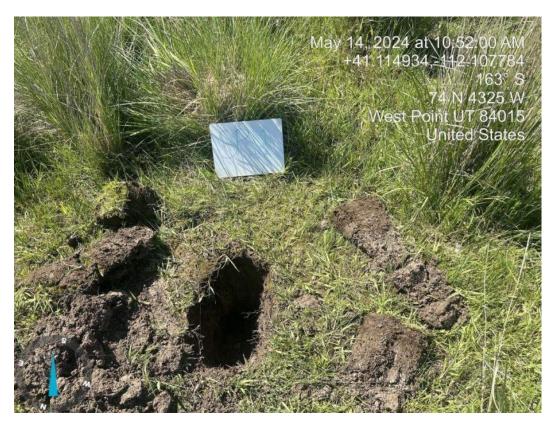


Sample Point 10

| Project/Site: WDC Phase II | (| City/Co | ounty: D | avis Co | ounty | Sampling | Date: 2024 | 1-05-14 |
|---|----------------------------------|----------|------------|-----------|--------------------------------------|--------------|-----------------|-------------|
| Applicant/Owner: UDOT | State: Utah Sampling Point: SP11 | | | | | | | |
| Investigator(s): Cara Glabau, Elena Capson | | Sectio | n, Towns | ship, Rar | nge: S05 T4N R2W | | | |
| | | | | | convex, none): Concav | e | Slope (% |): <u>0</u> |
| Subregion (LRR): D 28A | _ Lat: 41. | 11166 | 8883 | | Long: -112.1014696 | 7 | _ Datum: NA | AD83_201 |
| Soil Map Unit Name: WgA - Warm Springs fine sandy l | oam, salin | e, sod | dic, 0 to | 1 perce | ent slopes NWI classific | ation: No | ne | |
| Are climatic / hydrologic conditions on the site typical for this | s time of yea | ar? Ye | es | No | (If no, explain in R | emarks.) | | |
| Are Vegetation, Soil, or Hydrologys | ignificantly | disturb | bed? | Are " | Normal Circumstances" p | resent? \ | res 1 | No |
| Are Vegetation, Soil, or Hydrology n | naturally pro | blema | atic? | (If ne | eded, explain any answe | rs in Rema | ırks.) | |
| SUMMARY OF FINDINGS – Attach site map | showing | sam | pling p | oint l | ocations, transects | , import | ant feature | es, etc. |
| Hydrophytic Vegetation Present? Yes N | 0 | | | | | | | |
| Hydric Soil Present? Yes N | | | Is the S | | | No_ | / | |
| Wetland Hydrology Present? Yes N | o <u> </u> | | WILIIII | a vvetiai | iu: les | | | |
| Remarks: | | | | | | | | |
| Conditions were wetter than normal according to the anteceded depression in field likely collects stormwater and irrigation was | | | | | | | | - |
| sample point does not qualify as a wetland. | ici to suppoi | renyan | opnytic v | egetatioi | n. Hydric sons and Hydroic | Jy Were not | . present, ther | crore triis |
| VEGETATION – Use scientific names of plan | ts. | | | | | | | |
| | Absolute | Dom | ninant Inc | dicator | Dominance Test work | sheet: | | |
| Tree Stratum (Plot size:) | % Cover | | | | Number of Dominant S | pecies | | |
| 1 | | | | | That Are OBL, FACW, | or FAC: | 2 | _ (A) |
| 2 | | | | | Total Number of Domir | ant | • | |
| 3 | | | | | Species Across All Stra | ıta: _ | 2 | _ (B) |
| 4 | | | | | Percent of Dominant S | | 100.00 | |
| Sapling/Shrub Stratum (Plot size:) | | _ = 1 Ot | iai Cover | | That Are OBL, FACW, | or FAC: | 100.00 | _ (A/B) |
| 1 | | | | | Prevalence Index wor | ksheet: | | |
| 2 | | | | | Total % Cover of: | | Multiply by: | |
| 3 | | | | | | | = 0 | |
| 4 | | | | | FACW species 75 | | | |
| 5 | | | | | | | = 15 | |
| Herb Stratum (Plot size: | | = Tot | tal Cover | | FACU species 2 | | | — |
| 1. Phalaris arundinacea | 43 | v | / F/ | ACW | UPL species 14 Column Totals: 96 | x 5 | | — (D) |
| 2. Juncus balticus | 32 | - | / F/ | ACW | Column rotals | (A) | 240 | (B) |
| 3. Thinopyrum intermedium | 8 | | U | PL | Prevalence Index | = B/A = _ | 2.53 | |
| 4. Bromus tectorum | 6 | | <u>U</u> | PL | Hydrophytic Vegetation | on Indicato | ors: | |
| 5. Poa pratensis | 5 | | F/ | AC | <u>✓</u> Dominance Test is | | | |
| 6. Taraxacum officinale | 2 | | <u>F/</u> | ACU | Prevalence Index i | | | |
| 7 | | | | | Morphological Ada data in Remark | | | |
| 8 | 00 | | | | Problematic Hydro | | • | • |
| Woody Vine Stratum (Plot size:) | 96 | = Tot | tal Cover | | | , , , | ` ' | , |
| 1 | | | | | ¹ Indicators of hydric so | | | / must |
| 2. | | | | | be present, unless distr | arbed or pro | oblematic. | |
| | | | tal Cover | | Hydrophytic | | | |
| % Bare Ground in Herb Stratum % Cover | r of Biotic C | rust | | | Vegetation Present? Ye | s_ 🗸 _ | No | |
| Remarks: | | | | | 1 | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

| Profile Description | on: (Describe | to the depth | needed to docun | | iiaioatoi v | | n the absend | ce of illulcators.) | |
|---|---|--|--|--|---|--------------------------------|--|---|---------|
| Depth | Matrix | | Redox | K Feature: | 3 | | | | |
| | Color (moist) | <u>%</u> | Color (moist) | % | Type ¹ | Loc ² | <u>Texture</u> | Remarks | |
| 0 - 3 10 | YR 2/2 | 100 | | | | | Peat | | |
| 3 - 8 10 | YR 4/2 | 100 | | | | | Clay | _ | |
| 8 - 18 10 | YR 5/2 | 100 | | | | | Clay | | |
| 18 - 24 10 | YR 4/2 | 100 | | | | | Clay | | |
| - | | <u> </u> | | | | | | | |
| | | <u> </u> | | | | | | _ | |
| | | · | | | | | | | |
| | | · —— | | | | | | _ | |
| 1T C-Canaaa | ntration D-Dan | leties DM-D | advised Matrix CC | | | | : 21 | | |
| Hydric Soil Indic | | | educed Matrix, CS | | | d Sand Gi | | _ocation: PL=Pore Lining, M=Matri rs for Problematic Hydric Soils ³ : | |
| Histosol (A1) | | able to all Er | | | <i>.</i> , | | | • | |
| _ ` ' | | | Sandy Redo | | | | | n Muck (A9) (LRR C) | |
| Histic Epiped | | | Stripped Ma | | I (E4) | | | n Muck (A10) (LRR B) | |
| Black Histic (| | | Loamy Mucl | - | | | | uced Vertic (F18) | |
| Hydrogen Su | | 2) | Loamy Gley | | (FZ) | | | Parent Material (TF2) | |
| | vers (A5) (LRR (| (ک | Depleted Ma | | F0) | | Otne | er (Explain in Remarks) | |
| 1 cm Muck (A | , , , , | | Redox Dark | | , | | | | |
| l — · | ow Dark Surfac | e (A11) | Depleted Da | | | | 2 | | |
| Thick Dark Si | urface (A12) | | Redox Depr | essions (I | - 8) | | ³Indicato | rs of hydrophytic vegetation and | |
| Sandy Mucky | y Mineral (S1) | | Vernal Pools | s (F9) | | | | nd hydrology must be present, | |
| Sandy Gleye | d Matrix (S4) | | | | | | unless | s disturbed or problematic. | |
| Restrictive Layer | r (if present): | | | | | | | | |
| Туре: | | | | | | | | | |
| Depth (inches) |): | | | | | | Hydric So | oil Present? Yes No _ | ~ |
| Remarks: | , | | _ | | | | | | |
| | | | | | | | | | |
| Depleted la | iyer needs | s redox to | o qualify fo | r "dep | leted k | pelow | dark sui | rface". | |
| | iyer needs | s redox to | o qualify fo | r "dep | leted k | pelow | dark sui | rface". | |
| HYDROLOGY | | | o qualify fo | r "dep | leted k | oelow | dark su | rface". | |
| HYDROLOGY Wetland Hydrolo | ogy Indicators: | | | | leted b | pelow | | | rod) |
| HYDROLOGY Wetland Hydrolo Primary Indicators | ogy Indicators: s (minimum of o | | check all that apply | · /) | leted k | pelow | Sec | condary Indicators (2 or more requi | red) |
| HYDROLOGY Wetland Hydrolo Primary Indicators Surface Water | ogy Indicators: s (minimum of o | | check all that apply | ·)(B11) | leted k | pelow | <u>Sec</u> | condary Indicators (2 or more requi Water Marks (B1) (Riverine) | |
| HYDROLOGY Wetland Hydrolo Primary Indicators Surface Wate High Water T | ogy Indicators: s (minimum of o er (A1) Table (A2) | | check all that apply | ·)(B11) | leted k | pelow | <u>Sec</u> | condary Indicators (2 or more requi | |
| HYDROLOGY Wetland Hydrolo Primary Indicators Surface Water | ogy Indicators: s (minimum of o er (A1) Table (A2) | | check all that apply | (B11) t (B12) | | pelow | <u>Sec</u> | condary Indicators (2 or more requi Water Marks (B1) (Riverine) | |
| HYDROLOGY Wetland Hydrolo Primary Indicators Surface Wate High Water T | ogy Indicators: s (minimum of o er (A1) Table (A2) | one required; c | check all that apply Salt Crust Biotic Crus | (B11) t (B12) vertebrate | s (B13) | pelow | Sec | condary Indicators (2 or more requir Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) | |
| HYDROLOGY Wetland Hydrolo Primary Indicators Surface Water High Water T Saturation (A Water Marks | ogy Indicators: s (minimum of o er (A1) Table (A2) (3) (B1) (Nonriver | ne required; c | check all that apply Salt Crust Biotic Crus Aquatic Inv | (B11) t (B12) vertebrate Sulfide Od | s (B13) dor (C1) | | <u>Sec</u> | condary Indicators (2 or more requirement Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) | |
| HYDROLOGY Wetland Hydrolo Primary Indicators Surface Wate High Water T Saturation (A Water Marks Sediment De | ogy Indicators: s (minimum of o er (A1) Table (A2) 3) (B1) (Nonriver | ne required; o | check all that apply Salt Crust Biotic Crus Aquatic Inv | (B11) t (B12) rertebrate Sulfide Odhizosphe | s (B13) dor (C1) res along | Living Roo | Sec ———————————————————————————————————— | condary Indicators (2 or more required Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) | |
| Wetland Hydrolo Primary Indicators Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits | ogy Indicators: s (minimum of o er (A1) Table (A2) A3) (B1) (Nonriver eposits (B2) (Noriver s (B3) (Nonriver) | ne required; o | check all that apply Salt Crust Biotic Crus Aquatic Inv Hydrogen S Oxidized R | (B11) t (B12) rertebrate Sulfide Ochizosphe of Reduce | s (B13) dor (C1) res along l d Iron (C4 | Living Roc | Sec ———————————————————————————————————— | wondary Indicators (2 or more requirement of the condary Indicators (2 or more requirement of the condary Indicators (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) |) |
| HYDROLOGY Wetland Hydrolo Primary Indicators Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Surface Soil (| ogy Indicators: s (minimum of o er (A1) Table (A2) A3) (B1) (Nonriver eposits (B2) (Noriver es (B3) (Nonriver Cracks (B6) | ine required; o | check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence o | (B11) t (B12) rertebrate Sulfide Od hizosphe of Reduce | s (B13) dor (C1) res along l d Iron (C4 on in Tilled | Living Roc | Sec ———————————————————————————————————— | Condary Indicators (2 or more requirement of the condary Indicators (2 or more requirement of the condary Indicators (B1) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Image |) |
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| HYDROLOGY Wetland Hydrolo Primary Indicators Surface Water High Water T Saturation (A Water Marks Sediment Der Drift Deposits Surface Soil (Inundation Vi) Water-Staine Field Observatio Surface Water Prowuder Table Preser | ogy Indicators: s (minimum of oger (A1) Table (A2) S) (B1) (Nonriver oposits (B2) (Noriver of oger (B3) (Nonriver of oger (B4)) Sis ble on Aerial I of Leaves (B9) Sons: Sesent? Yesent? Yesent? Yesent? Yesent? Yesent? | ine) nriverine) rine) magery (B7) es No es No es No | check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen: Oxidized R Presence of Recent Iron Thin Muck Other (Exp | (B11) t (B12) rertebrate Sulfide Ochizosphe of Reduce n Reduction Surface (lain in Resches): | s (B13) dor (C1) res along l d Iron (C4 on in Tilled C7) marks) | Living Roc) d Soils (Co | Secondary Second | Condary Indicators (2 or more requirement Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Image Shallow Aquitard (D3) FAC-Neutral Test (D5) | ry (C9) |
| HYDROLOGY Wetland Hydrolo Primary Indicators Surface Water High Water T Saturation (A Water Marks Sediment De Drift Deposits Surface Soil (Inundation Vi Water-Staine Field Observatio Surface Water Pre Water Table Pres Saturation Preser (includes capillary Describe Recorde | ogy Indicators: s (minimum of oger (A1) Table (A2) S) (B1) (Nonriver oposits (B2) (Noriver of oger (B3) (Nonriver of oger (B4)) Sis ble on Aerial I of Leaves (B9) Sons: Sesent? Yesent? Yesent? Yesent? Yesent? Yesent? | ine) nriverine) rine) magery (B7) es No es No es No | check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen: Oxidized R Presence of Recent Iron Thin Muck Other (Exp | (B11) t (B12) rertebrate Sulfide Ochizosphe of Reduce n Reduction Surface (lain in Resches): | s (B13) dor (C1) res along l d Iron (C4 on in Tilled C7) marks) | Living Roc) d Soils (Co | Secondary Second | Condary Indicators (2 or more requirement Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Image Shallow Aquitard (D3) FAC-Neutral Test (D5) | ry (C9) |
| HYDROLOGY Wetland Hydrolo Primary Indicators Surface Water High Water T Saturation (A Water Marks Sediment De Drift Deposits Surface Soil (Inundation Vi Water-Staine Field Observatio Surface Water Pre Water Table Pres Saturation Preser (includes capillary Describe Recorde | ogy Indicators: s (minimum of oger (A1) Table (A2) S) (B1) (Nonriver oposits (B2) (Noriver of oger (B3) (Nonriver of oger (B4)) Sis ble on Aerial I of Leaves (B9) Sons: Sesent? Yesent? Yesent? Yesent? Yesent? Yesent? | ine) nriverine) rine) magery (B7) es No es No es No | check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen: Oxidized R Presence of Recent Iron Thin Muck Other (Exp | (B11) t (B12) rertebrate Sulfide Ochizosphe of Reduce n Reduction Surface (lain in Resches): | s (B13) dor (C1) res along l d Iron (C4 on in Tilled C7) marks) | Living Roc) d Soils (Co | Secondary Second | Condary Indicators (2 or more requirement Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Image Shallow Aquitard (D3) FAC-Neutral Test (D5) | ry (C9) |
| HYDROLOGY Wetland Hydrolo Primary Indicators Surface Water High Water T Saturation (A Water Marks Sediment De Drift Deposits Surface Soil (Inundation Vi Water-Staine Field Observatio Surface Water Pre Water Table Pres Saturation Preser (includes capillary Describe Recorde | ogy Indicators: s (minimum of oger (A1) Table (A2) S) (B1) (Nonriver oposits (B2) (Noriver of oger (B3) (Nonriver of oger (B4)) Sis ble on Aerial I of Leaves (B9) Sons: Sesent? Yesent? Yesent? Yesent? Yesent? Yesent? | ine) nriverine) rine) magery (B7) es No es No es No | check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen: Oxidized R Presence of Recent Iron Thin Muck Other (Exp | (B11) t (B12) rertebrate Sulfide Ochizosphe of Reduce n Reduction Surface (lain in Resches): | s (B13) dor (C1) res along l d Iron (C4 on in Tilled C7) marks) | Living Roc) d Soils (Co | Secondary Second | Condary Indicators (2 or more requirement Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Image Shallow Aquitard (D3) FAC-Neutral Test (D5) | ry (C9) |
| HYDROLOGY Wetland Hydrolo Primary Indicators Surface Water High Water T Saturation (A Water Marks Sediment De Drift Deposits Surface Soil (Inundation Vi Water-Staine Field Observatio Surface Water Pre Water Table Pres Saturation Preser (includes capillary Describe Recorde | ogy Indicators: s (minimum of oger (A1) Table (A2) S) (B1) (Nonriver oposits (B2) (Noriver of oger (B3) (Nonriver of oger (B4)) Sis ble on Aerial I of Leaves (B9) Sons: Sesent? Yesent? Yesent? Yesent? Yesent? Yesent? | ine) nriverine) rine) magery (B7) es No es No es No | check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen: Oxidized R Presence of Recent Iron Thin Muck Other (Exp | (B11) t (B12) tertebrate Sulfide Ochizosphe of Reduce n Reductic Surface (lain in Re | s (B13) dor (C1) res along l d Iron (C4 on in Tilled C7) marks) | Living Roc) d Soils (Co | Secondary Second | Condary Indicators (2 or more requirement Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Image Shallow Aquitard (D3) FAC-Neutral Test (D5) | ry (C9) |

WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 11



Sample Point 11

| Project/Site: WDC Phase II | | City/Cour | nty: Davis C | ounty | Sampling Date: 2024-05-14 | | |
|---|---------------------------------------|---|--------------------|--|--|--|--|
| Applicant/Owner: UDOT | | | | State: Utah | Sampling Point: SP12 | | |
| Investigator(s): Cara Glabau, Elena Capson | | Section, | Township, Ra | nge: S05 T4N R2W | | | |
| Landform (hillslope, terrace, etc.): Slope | | Local rel | ief (concave, | convex, none): Linear | Slope (%): 3 | | |
| Subregion (LRR): D 28A | Lat: 41. | 111833 | Datum: NAD83_201 | | | | |
| | ndy loam, salin | ndy loam, saline, sodic, 0 to 1 percent slopes NWI classification: None | | | | | |
| Are climatic / hydrologic conditions on the site typical | for this time of yea | ar? Yes | No | (If no, explain in R | Remarks.) | | |
| Are Vegetation, Soil, or Hydrology | | | | | oresent? Yes <u> </u> | | |
| Are Vegetation, Soil, or Hydrology | | | | eeded, explain any answe | | | |
| SUMMARY OF FINDINGS – Attach site r | | | | • | · · | | |
| Hydrophytic Vegetation Present? Yes | No | le | the Sampleo | I Area | | | |
| | No | | ithin a Wetla | | No | | |
| Wetland Hydrology Present? Yes Remarks: | No | | | | <u> </u> | | |
| Conditions were wetter than normal according to the an slightly sloped, likely draining stormwater and irrigation not hold water for long periods, therefore this sample po | water to support h | ydrophyti | ic vegetation. | | | | |
| VEGETATION – Use scientific names of | plants. | | | | | | |
| True Otestano (Districtor | Absolute | | nt Indicator | Dominance Test work | sheet: | | |
| Tree Stratum (Plot size:) | · · · · · · · · · · · · · · · · · · · | | s? Status | Number of Dominant S That Are OBL, FACW, | | | |
| 1 2 | | | | That Are OBL, FACW, | 01 FAC (A) | | |
| 3. | | | <u> </u> | Total Number of Domin Species Across All Stra | ^ | | |
| 4. | | | | | | | |
| | | | | Percent of Dominant Sport That Are OBL, FACW, | | | |
| Sapling/Shrub Stratum (Plot size:) | | | | Prevalence Index wor | | | |
| 1 | | | | Total % Cover of: | | | |
| 2 3 | | | | | x 1 = 0 | | |
| 4 | | | | FACW species 70 | | | |
| 5. | | | | · · | x 3 = 0 | | |
| | | = Total | Cover | FACU species 6 | x 4 = <u>24</u> | | |
| Herb Stratum (Plot size:) | 24 | | E A O\A/ | UPL species 22 | x 5 = 110 | | |
| 1. Phalaris arundinacea | 31 | | FACW | Column Totals: 98 | (A) <u>274</u> (B) | | |
| Juncus balticus Thinopyrum intermedium | <u>27</u> 22 | | <u>FACW</u> UPL | Prevalence Index | $r = R/\Lambda = 2.79$ | | |
| Carex praegracilis | 12 | | FACW | Hydrophytic Vegetation | | | |
| 5. Taraxacum officinale | 6 | | FACU | ✓ Dominance Test is | | | |
| | | | | Prevalence Index i | | | |
| 6 7 | | | | | ptations ¹ (Provide supporting | | |
| 8. | | | | | s or on a separate sheet) | | |
| | 98 | = Total | Cover | Problematic Hydro | phytic Vegetation ¹ (Explain) | | |
| Woody Vine Stratum (Plot size:) | | - | | 1 | | | |
| 1 | | | | be present, unless distu | il and wetland hydrology must urbed or problematic. | | |
| 2 | | | | Hydrophytic | · | | |
| | | = | | Vegetation | . 1 | | |
| % Bare Ground in Herb Stratum % | Cover of Biotic C | rust | | Present? Ye | s No | | |
| Remarks: | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Profile Desc | cription: (Describe | to the depth | needed to docun | nent the i | ndicator o | or confirm | n the absence of indicators.) |
|---------------|------------------------------|-----------------|----------------------|------------|-------------------|------------------|---|
| Depth | Matrix | | Redox | c Features | | | |
| (inches) | Color (moist) | <u> </u> | Color (moist) | % | Type ¹ | Loc ² | Texture Remarks |
| 0 - 2 | 5YR 2.5/2 | 100 | | | | | Peat |
| 2 - 12 | 2.5Y 4/2 | 100 | | | | | Clay |
| 12 - 24 | 10YR 4/2 | 100 | | | | | Clay |
| | | | | | | | |
| | | | | | | | |
| - | | | | | | | |
| - | | | | | | | |
| - | | | | | | | |
| ¹Type: C=Ce | oncentration, D=De | oletion, RM=Re | educed Matrix, CS | =Covered | or Coate | d Sand Gr | rains. ² Location: PL=Pore Lining, M=Matrix. |
| Hydric Soil | Indicators: (Appli | cable to all LR | Rs, unless other | wise note | ed.) | | Indicators for Problematic Hydric Soils ³ : |
| Histosol | (A1) | | Sandy Redo | x (S5) | | | 1 cm Muck (A9) (LRR C) |
| | pipedon (A2) | | Stripped Ma | . , | | | 2 cm Muck (A10) (LRR B) |
| - | istic (A3) | | Loamy Mucl | | (F1) | | Reduced Vertic (F18) |
| | en Sulfide (A4) | | Loamy Gley | - | | | Red Parent Material (TF2) |
| | d Layers (A5) (LRR | C) | Depleted Ma | | ` , | | Other (Explain in Remarks) |
| | uck (A9) (LRR D) | -, | Redox Dark | | F6) | | |
| | d Below Dark Surfac | ce (A11) | Depleted Da | , | , | | |
| | ark Surface (A12) | (* (* ()) | Redox Depr | | , , | | ³ Indicators of hydrophytic vegetation and |
| | Mucky Mineral (S1) | | Vernal Pools | | •, | | wetland hydrology must be present, |
| - | Gleyed Matrix (S4) | | voman con | , (i o) | | | unless disturbed or problematic. |
| | Layer (if present): | | | | | | |
| | | | | | | | |
| Depth (in | | | _ | | | | Hydric Soil Present? Yes No |
| Remarks: | , | | _ | | | | |
| rtemanto. | | | | | | | |
| Deplete | d laver need | s redox to | o qualify fo | r "depl | leted b | pelow | dark surface". |
| | | | 9 9 9 9 9 9 9 9 | . G. G G | | | |
| | | | | | | | |
| HYDROLO | GY | | | | | | |
| | drology Indicators | : | | | | | |
| 1 | cators (minimum of | | heck all that apply | () | | | Secondary Indicators (2 or more required) |
| | • | one required, e | | | | | |
| Surface | | | Salt Crust | | | | Water Marks (B1) (Riverine) |
| _ | ater Table (A2) | | Biotic Crus | | | | Sediment Deposits (B2) (Riverine) |
| Saturation | | | Aquatic Inv | | , , | | Drift Deposits (B3) (Riverine) |
| Water M | larks (B1) (Nonrive | rine) | Hydrogen | Sulfide Od | lor (C1) | | Drainage Patterns (B10) |
| Sedimer | nt Deposits (B2) (No | onriverine) | Oxidized R | hizospher | es along l | Living Roc | ots (C3) Dry-Season Water Table (C2) |
| Drift Dep | posits (B3) (Nonrive | erine) | Presence of | of Reduce | d Iron (C4 | .) | Crayfish Burrows (C8) |
| Surface | Soil Cracks (B6) | | Recent Iro | n Reductio | on in Tilled | Soils (C6 | 6) Saturation Visible on Aerial Imagery (C9) |
| Inundati | on Vis ble on Aerial | Imagery (B7) | Thin Muck | Surface (| C7) | | Shallow Aquitard (D3) |
| | tained Leaves (B9) | 0 , (, | Other (Exp | | | | FAC-Neutral Test (D5) |
| Field Obser | | | | | | | |
| Surface Wat | er Present? | res No | Depth (inc | hes). | | | |
| Water Table | | | Depth (inc | | | | |
| Saturation P | | | Depth (inc | | | | land Hydrology Present? Yes No |
| (includes car | pillary fringe) | | | | | | |
| Describe Re | corded Data (stream | n gauge, monit | oring well, aerial p | hotos, pre | evious insp | pections), | it available: |
| | | | | | | | |
| Remarks: | | | | | | | |
| Conditio | ons of soil we | ere moist | but not sat | urated | d in co | mparis | son to truly saturated soils within |
| the delir | neation area | | | | | | |
| | | | | | | | |
| Ĩ | | | | | | | |

WDC SR-177, SR-193 to 1800 NorthUDOT



Sample Point 12



Sample Point 12

| Project/Site: WDC Phase II | | City/Cou | _{nty:} <u>Davis C</u> | ounty | _ Sampling Date: 2024-0 |)5-14 | |
|--|----------------------------------|-----------|--------------------------------|--|---|--------|--|
| Applicant/Owner: UDOT | State: Utah Sampling Point: SP13 | | | | | | |
| Investigator(s): Cara Glabau, Elena Capson | | Section, | Township, Ra | nge: S05 T4N R2W | | | |
| | | | | | Slope (%): <u>(</u> | 0 | |
| Subregion (LRR): D 28A | Lat: 41. | 111932 | 83 | _ Long: -112.1015963 | 33 Datum: NAD8 | 33_201 | |
| Soil Map Unit Name: WgA - Warm Springs fine sand | dy loam, salin | e, sodic | , 0 to 1 perce | ent slopes NWI classifi | cation: None | | |
| Are climatic / hydrologic conditions on the site typical for | this time of year | ar? Yes | No _ | (If no, explain in I | Remarks.) | | |
| Are Vegetation, Soil, or Hydrology | significantly | disturbed | d? Are ' | "Normal Circumstances" | present? Yes No | | |
| Are Vegetation, Soil, or Hydrology | naturally pro | blematic | :? (If ne | eeded, explain any answ | ers in Remarks.) | | |
| SUMMARY OF FINDINGS - Attach site ma | ap showing | samp | ling point l | ocations, transect | s, important features | , etc. | |
| Hydrophytic Vegetation Present? Yes | No 🔽 | | | | | | |
| | No 🗸 | | the Sampled | | No. V | | |
| Wetland Hydrology Present? Yes | | l w | rithin a Wetlaı | nd? Yes | No | | |
| Remarks: | | | | | | | |
| Conditions were wetter than normal a | according t | to the | antecede | ent precipitation | tool, but there had | not | |
| been rain for several days prior to the | • | | | | , | | |
| VEGETATION – Use scientific names of pl | | | | | | | |
| VEGETATION — Use scientific flames of pr | Absolute | Domin: | ant Indicator | Dominance Test wor | ksheet: | | |
| Tree Stratum (Plot size:) | | | s? Status | Number of Dominant S | | | |
| 1 | | | | That Are OBL, FACW, | | (A) | |
| 2 | | | | Total Number of Domi | nant | | |
| 3 | | | | Species Across All Str | rata: 2 | (B) | |
| 4 | | | | Percent of Dominant S | | | |
| Sapling/Shrub Stratum (Plot size:) | | = rotar | Cover | That Are OBL, FACW, | , or FAC: <u>50.00</u> | (A/B) | |
| 1 | | | | Prevalence Index wo | rksheet: | | |
| 2 | | | | Total % Cover of: | | | |
| 3 | | | | | x 1 = 0 | - | |
| 4 | | | | · · · · · · · · · · · · · · · · · · · | x 2 = 58 | - | |
| 5 | | | | · · | x 3 = 0 x 4 = 12 | - | |
| Herb Stratum (Plot size:) | | = rotar | Cover | | | - | |
| 1. Thinopyrum intermedium | 51 | | UPL | | (A) 385 | (B) | |
| 2. Juncus balticus | 21 | | FACW | | | . () | |
| 3. Bromus tectorum | 12 | | UPL TABLE | | x = B/A = 4.05 | - | |
| 4. Carex praegracilis 5. Taraxacum officinale | <u>8</u> | | FACU | Hydrophytic Vegetati | | | |
| | | | FACU_ | Dominance Test is Prevalence Index | | | |
| 6 | | | | | aptations ¹ (Provide supportin | na | |
| 7 8 | | | | | ks or on a separate sheet) | 9 | |
| 0 | ~= | = Total | Cover | Problematic Hydro | ophytic Vegetation ¹ (Explain | ı) | |
| Woody Vine Stratum (Plot size:) | | | | 4 | | | |
| 1 | | | | Indicators of hydric so be present, unless dis | oil and wetland hydrology mu turbed or problematic | ust | |
| 2 | | | | | | | |
| | | = Total | Cover | Hydrophytic Vegetation | | | |
| % Bare Ground in Herb Stratum % Co | over of Biotic Co | rust | | | es No <u>'</u> | | |
| Remarks: | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Profile Desc | cription: (Describe | to the depth | needed to docur | nent the | indicator of | or confirm | n the absence of | indicators.) | |
|-------------------------------|--|---------------|---------------------------------------|-------------|-------------------|------------------|---------------------------|---------------------------|-------------------|
| Depth | Matrix | | | x Feature | | | | | |
| (inches) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | Texture | Remark | S |
| 0 - 2 | 10YR 3/3 | 100 | | | | | Peat | | |
| 2 - 5 | 10YR 2/1 | 100 | | | | | Clay Loam | | |
| 5 - 7 | 10YR 8/1 | 100 | | | | | Clay | | |
| 7 - 12 | 5Y 4/2 | 100 | | | | | Clay | | |
| 12 - 20 | 2.5Y 3/1 | 100 | | | | | Clay | | |
| 20 - 24 | 2.5Y 4/2 | 100 | | | | | Clay | | |
| - | | | | | | | | | |
| | | <u> </u> | | | | | | | |
| ¹Type: C=C | oncentration, D=Dep | letion RM=F | Reduced Matrix CS | S=Covere | d or Coate | d Sand G | rains ² Locati | ion: PL=Pore Lining | M=Matrix |
| • | Indicators: (Applic | | | | | a cana c | | r Problematic Hydr | |
| Histosol | (A1) | | Sandy Redo | ox (S5) | | | 1 cm Mud | ck (A9) (LRR C) | |
| Histic Ep | pipedon (A2) | | Stripped Ma | atrix (S6) | | | | ck (A10) (LRR B) | |
| | istic (A3) | | Loamy Muc | - | | | | Vertic (F18) | |
| | en Sulfide (A4) | • | Loamy Gley | | (F2) | | | ent Material (TF2) | |
| | d Layers (A5) (LRR | C) | Depleted M | ` , | (FC) | | Other (Ex | xplain in Remarks) | |
| | uck (A9) (LRR D) d Below Dark Surfac | o (Δ11) | Redox Dark Depleted Da | | . , | | | | |
| | ark Surface (A12) | C (ATT) | Redox Depi | | | | 3Indicators of | hydrophytic vegetation | on and |
| · —— | Aucky Mineral (S1) | | Vernal Pool | | . •, | | | drology must be pres | |
| | Gleyed Matrix (S4) | | | ` , | | | - | urbed or problematic | |
| Restrictive | Layer (if present): | | | | | | | | |
| Type: | | | <u> </u> | | | | | | |
| Depth (in | ches): | | | | | | Hydric Soil Pr | resent? Yes | No |
| Reduced | d layer is not | thick er | nough to qua | alify fo | or "dep | leted | below dark | surface". | |
| HYDROLO | GY | | | | | | | | |
| Wetland Hy | drology Indicators: | : | | | | | | | |
| Primary India | cators (minimum of c | one required; | check all that appl | y) | | | <u>Seconda</u> | ary Indicators (2 or m | ore required) |
| Surface | Water (A1) | | Salt Crust | (B11) | | | Wat | er Marks (B1) (River | ine) |
| High Wa | ater Table (A2) | | Biotic Crus | st (B12) | | | Sed | iment Deposits (B2) | (Riverine) |
| Saturation | on (A3) | | Aquatic In | vertebrate | es (B13) | | Drift | t Deposits (B3) (Rive | rine) |
| | larks (B1) (Nonriver | , | Hydrogen | | | | | inage Patterns (B10) | |
| | nt Deposits (B2) (No | | · · · · · · · · · · · · · · · · · · · | | - | - | — • | -Season Water Table | (C2) |
| | posits (B3) (Nonrive | erine) | Presence | | | | | yfish Burrows (C8) | |
| · | Soil Cracks (B6) | | Recent Iro | | | Soils (C | | uration Visible on Aer | rial Imagery (C9) |
| · | on Vis ble on Aerial | Imagery (B7) | · · · · · · · · · · · · · · · · · · · | | | | | Illow Aquitard (D3) | |
| | tained Leaves (B9) | | Other (Exp | olain in Re | emarks) | | FAC | C-Neutral Test (D5) | |
| Field Obser | | /oo N | o Depth (in | obos): | | | | | |
| Surface Wat | | | | | | | | | |
| Water Table | | | o Depth (in | | | | land I budaalaan. F | 2 | No. V |
| Saturation P (includes car | | res N | o V Depth (in | cnes): | | _ wet | ana nyarology P | Present? Yes | NO |
| | corded Data (stream | n gauge, mon | itoring well, aerial ¡ | ohotos, pr | evious ins | pections), | if available: | | |
| | | | | | | | | | |
| Remarks: | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 13



Sample Point 13

| Project/Site: WDC Phase II | | City/Co | ounty | Davis C | ounty | Sampling E | oate: 2024 | -05-14 |
|--|----------------|---------|--------|--------------------------|---|--|---------------|----------|
| Applicant/Owner: UDOT | | - | - | | State: Utah | | | |
| • • | | | | | nge: S05 T4N R2W | | | |
| Landform (hillslope, terrace, etc.): Flat | | Local | relief | (concave, | convex, none): None | | Slope (%) |): 0 |
| Subregion (LRR): D 28A | | | | | | | | |
| Soil Map Unit Name: Fb - Ford loam, shallow water | | | | | | | | |
| Are climatic / hydrologic conditions on the site typical for th | is time of yea | ar? Ye | es | No | (If no, explain in | n Remarks.) | | |
| Are Vegetation, Soil, or Hydrology | | | | | "Normal Circumstances | | es <u> </u> | No |
| Are Vegetation, Soil, or Hydrology | naturally pro | blema | tic? | (If ne | eeded, explain any ans | wers in Remark | ks.) | |
| SUMMARY OF FINDINGS - Attach site map | | | | | ocations, transec | cts, importa | nt feature | es, etc. |
| Hydrophytic Vegetation Present? Yes N Hydric Soil Present? Yes N Wetland Hydrology Present? Yes N Remarks: | 10 <u>~</u> | | | e Sampled in a Wetlar | | No | <u> </u> | |
| Conditions were wetter than normal acbeen rain for several days prior to the s | • | | | | • • | tool, but t | there ha | d not |
| VEGETATION – Use scientific names of plan | | Out | iic d | 130 4011 | ve in area. | | | |
| | Absolute | Dom | inant | Indicator | Dominance Test we | orksheet: | | |
| Tree Stratum (Plot size:) | % Cover | | | | Number of Dominan | | | |
| 1 | | | | | That Are OBL, FAC | N, or FAC: <u> </u> | | _ (A) |
| 2 | | | | | Total Number of Dor Species Across All S | | <u>.</u> | (B) |
| 4 | | | | | | | | _ (D) |
| | | = Tot | al Co | ver | Percent of Dominant That Are OBL, FACV | l Species <i>N</i> , or FAC: <u>5</u> | 0.00 | (A/B) |
| Sapling/Shrub Stratum (Plot size:) | | | | | Prevalence Index w | | | |
| 1. 2. | | | | | Total % Cover of | | Multiply by: | |
| 3. | | | | | | x 1 = | | |
| 4. | | | | | FACW species 15 | x 2 = | 30 | |
| 5 | | | | | FAC species 40 | x 3 = | : 120 | |
| | | = Tot | al Co | ver | FACU species 5 | | | |
| Herb Stratum (Plot size:) | 40 | | , | FA0 | | x 5 = | | |
| 1. Lepidium latifolium | 40 | | | FAC | Column Totals: 95 | (A) | 345 | (B) |
| Thinopyrum intermedium Juncus balticus | <u>35</u> | | _ | UPL FACW | Drovolonoo Inc | dex = B/A = 3 | 63 | |
| Taraxacum officinale | 5 | | | FACU | Hydrophytic Vegeta | | | |
| ··· · | | - | | | Dominance Tes | | 3. | |
| 5 6 | | | | | Prevalence Inde | | | |
| 7. | | | | | Morphological A | daptations¹ (Pr | ovide suppo | orting |
| 8. | | | | | | arks or on a sep | | |
| | 95 | = Tot | al Co | ver | Problematic Hyd | drophytic Veget | ation' (Expla | ain) |
| Woody Vine Stratum (Plot size:) | | | | | 1 maliantana at hualuin | : | م ا مدام ا | |
| 1 | | | | | ¹ Indicators of hydric be present, unless d | | | must |
| 2 | | | | | Hydrophytic | | | |
| E | | _ | | | Vegetation | | | |
| % Bare Ground in Herb Stratum 5 % Cove | er of Biotic C | rust | | | Present? | Yes | No | |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

| | ription: (Describe | to the depth | needed to document | the indicator o | r contirm | tne absenc | e or mulcators.) |
|---|--|---|--|--|------------------|----------------------------------|---|
| Depth | Matrix | | Redox Fe | | | | |
| (inches) | Color (moist) | <u>%</u> | Color (moist) | % Type ¹ | Loc ² | <u>Texture</u> | Remarks |
| 0 - 3 | 2.5Y 3/2 | 100 | | | | Clay | |
| 3 - 6 | 2.5Y 3/2 | 100 | | | | Clay | lots of organic matter |
| 6 - 24 | 10YR 4/2 | 100 | - | | | Clay | |
| | · | | | | | | |
| | | | | | | | |
| <u> </u> | | | | | | | _ |
| | | | | | | | |
| - | | | | | | | |
| - | | | - | | | | |
| ¹Type: C=C | oncentration D=Der | oletion PM=F | Reduced Matrix, CS=Co | overed or Coated | Sand Gra | aine ² I (| ocation: PL=Pore Lining, M=Matrix. |
| | | | RRs, unless otherwis | | i Sand Ora | | s for Problematic Hydric Soils ³ : |
| Histosol | | | Sandy Redox (S | | | | Muck (A9) (LRR C) |
| l — | pipedon (A2) | | Stripped Matrix | | | | Muck (A10) (LRR B) |
| | istic (A3) | | Loamy Mucky M | | | | iced Vertic (F18) |
| | en Sulfide (A4) | | Loamy Gleyed I | | | | Parent Material (TF2) |
| | d Layers (A5) (LRR | C) | Depleted Matrix | | | | r (Explain in Remarks) |
| | uck (A9) (LRR D) | -, | Redox Dark Sur | | | _ | |
| | d Below Dark Surfac | e (A11) | Depleted Dark S | | | | |
| Thick Da | ark Surface (A12) | | Redox Depress | ions (F8) | | ³ Indicator | s of hydrophytic vegetation and |
| Sandy N | Mucky Mineral (S1) | | Vernal Pools (F | 9) | | wetland | d hydrology must be present, |
| Sandy G | Sleyed Matrix (S4) | | | | | unless | disturbed or problematic. |
| Restrictive | Layer (if present): | | | | | | |
| Type: | | | | | | | |
| Depth (in | ches): | | <u></u> | | | Hydric So | il Present? Yes No |
| Remarks: | | | | | | <u> </u> | |
| Reduced | d matrix need | ds redox | to qualify for | "depleted | below | dark su | ırface". |
| HYDROLO | | | | | | | |
| | GY | | | | | | |
| Wetland Hy | | | | | | | |
| _ | drology Indicators: | | chools all that apply) | | | Coo | andon Indicators (2 or more required) |
| Primary India | drology Indicators: cators (minimum of c | | check all that apply) | | | | ondary Indicators (2 or more required) |
| Primary India Surface | drology Indicators: cators (minimum of o Water (A1) | | Salt Crust (B1 | , | | _ | Water Marks (B1) (Riverine) |
| Primary India Surface High Wa | drology Indicators: cators (minimum of o Water (A1) ater Table (A2) | | Salt Crust (B1 | 12) | | | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) |
| Primary India Surface High Wa Saturatio | drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) | one required; | Salt Crust (B1 Biotic Crust (B Aquatic Inverte | 12) ebrates (B13) | | | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) |
| Primary India Surface High Wa Saturatia | drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver | one required; | Salt Crust (B1 Biotic Crust (B Aquatic Inverte Hydrogen Sulf | 12) ebrates (B13) ide Odor (C1) | | | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) |
| Primary India Surface High Wa Saturatia Water M Sedimen | drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver nt Deposits (B2) (No | one required; rine) onriverine) | Salt Crust (B1 Biotic Crust (B Aquatic Inverte Hydrogen Sulf Oxidized Rhize | 12) ebrates (B13) ide Odor (C1) ospheres along L | • | ts (C3) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) |
| Primary India Surface High Wa Saturatia Water M Sedimer Drift De | drology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) darks (B1) (Nonriver of Deposits (B2) (No posits (B3) (Nonriver) | one required; rine) onriverine) | Salt Crust (B1 Biotic Crust (B Aquatic Inverte Hydrogen Sulf Oxidized Rhizo | pebrates (B13) de Odor (C1) ospheres along L educed Iron (C4) | | ts (C3) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) |
| Primary India Surface High Wa Saturatia Water M Sedimer Drift De | drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver nt Deposits (B2) (No | one required; rine) onriverine) | Salt Crust (B1 Biotic Crust (B Aquatic Inverte Hydrogen Sulf Oxidized Rhize | pebrates (B13) de Odor (C1) ospheres along L educed Iron (C4) | | ts (C3) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) |
| Primary India Surface High Wa Saturatia Water M Sedimer Drift Der Surface Inundati | drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial | one required; rine) onriverine) orine) | Salt Crust (B1 Biotic Crust (B Aquatic Inverte Hydrogen Sulf Oxidized Rhizo Presence of R Recent Iron Re | per test (B13) and (B13) a | | ts (C3) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| Primary India Surface High Wa Saturatia Water M Sedimen Drift Dep Surface Inundati Water-S | drology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) darks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) on Vis ble on Aerial stained Leaves (B9) | one required; rine) onriverine) orine) | Salt Crust (B1 Biotic Crust (B Aquatic Inverte Hydrogen Sulf Oxidized Rhizo Presence of R Recent Iron Re | pbrates (B13) de Odor (C1) ospheres along L educed Iron (C4) eduction in Tilled face (C7) | | ts (C3) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) |
| Primary India Surface High Wa Saturatia Water M Sedimer Drift Der Surface Inundati | drology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) darks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) on Vis ble on Aerial stained Leaves (B9) vations: | rine) enriverine) erine) Imagery (B7) | Salt Crust (B1 Biotic Crust (B Aquatic Inverte Hydrogen Sulf Oxidized Rhize Presence of R Recent Iron Re Thin Muck Sur Other (Explain | 12) ebrates (B13) ide Odor (C1) ospheres along L educed Iron (C4) eduction in Tilled face (C7) in Remarks) | Soils (C6) | ts (C3) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| Primary India Surface High Wa Saturatia Water M Sedimen Drift Dep Surface Inundati Water-S | drology Indicators: cators (minimum of of of other (A1) ater Table (A2) on (A3) darks (B1) (Nonriver of Deposits (B2) (Nonriver Soil Cracks (B6) on Vis ble on Aerial of tained Leaves (B9) vations: er Present? | rine) Imagery (B7) | Salt Crust (B1 Biotic Crust (B Aquatic Inverte Hydrogen Sulf Oxidized Rhizo Presence of R Recent Iron Re Thin Muck Sur Other (Explain | abrates (B13) de Odor (C1) depheres along L deduced Iron (C4) deduction in Tilled face (C7) in Remarks) | Soils (C6) | ts (C3) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| Primary India Surface High Wa Saturatia Water M Sedimer Drift Der Surface Inundati Water-S Field Obser | drology Indicators: cators (minimum of of of other (A1) ater Table (A2) on (A3) darks (B1) (Nonriver of Deposits (B2) (Nonriver Soil Cracks (B6) on Vis ble on Aerial of tained Leaves (B9) vations: er Present? | rine) Imagery (B7) | Salt Crust (B1 Biotic Crust (B Aquatic Inverte Hydrogen Sulf Oxidized Rhize Presence of R Recent Iron Re Thin Muck Sur Other (Explain | abrates (B13) de Odor (C1) depheres along L deduced Iron (C4) deduction in Tilled face (C7) in Remarks) | Soils (C6) | ts (C3) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P | drology Indicators: cators (minimum of of of other (A1) ater Table (A2) on (A3) darks (B1) (Nonriver of the Deposits (B2) (Nonriver Soil Cracks (B6) on Vis ble on Aerial stained Leaves (B9) vations: er Present? Present? | rine) Imagery (B7) /es No | Salt Crust (B1 Biotic Crust (B Aquatic Inverte Hydrogen Sulf Oxidized Rhizo Presence of R Recent Iron Re Thin Muck Sur Other (Explain | abrates (B13) de Odor (C1) despheres along L deduced Iron (C4) deduction in Tilled face (C7) in Remarks) | Soils (C6) | ts (C3) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| Primary India Surface High Wa Saturatio Water M Sedimer Drift Der Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes car | drology Indicators: cators (minimum of of other (A1) ater Table (A2) on (A3) flarks (B1) (Nonriver of Deposits (B2) (Noriver (B3) (Noriver (B4)) on Vis ble on Aerial of tained Leaves (B9) vations: er Present? Present? Yresent? Yresent? | rine) Imagery (B7) /es No /es No /es No | Salt Crust (B1) Biotic Crust (B1) Aquatic Inverte Hydrogen Sulf Oxidized Rhize Presence of Re Recent Iron Re Thin Muck Sur Other (Explain Depth (inches | abrates (B13) de Odor (C1) dephares along L deduced Iron (C4) deduction in Tilled face (C7) in Remarks) despie | Soils (C6) | ts (C3)) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| Primary India Surface High Wa Saturatio Water M Sedimer Drift Der Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes car | drology Indicators: cators (minimum of of other (A1) ater Table (A2) on (A3) flarks (B1) (Nonriver of Deposits (B2) (Noriver (B3) (Noriver (B4)) on Vis ble on Aerial of tained Leaves (B9) vations: er Present? Present? Yresent? Yresent? | rine) Imagery (B7) /es No /es No /es No | Salt Crust (B1) Biotic Crust (B1) Aquatic Inverte Hydrogen Sulf Oxidized Rhize Presence of Re Recent Iron Re Thin Muck Sur Other (Explain | abrates (B13) de Odor (C1) dephares along L deduced Iron (C4) deduction in Tilled face (C7) in Remarks) despie | Soils (C6) | ts (C3)) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| Primary India Surface High Wa Saturatia Water M Sedimer Drift Der Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes car Describe Re | drology Indicators: cators (minimum of of other (A1) ater Table (A2) on (A3) flarks (B1) (Nonriver of Deposits (B2) (Noriver (B3) (Noriver (B4)) on Vis ble on Aerial of tained Leaves (B9) vations: er Present? Present? Yresent? Yresent? | rine) Imagery (B7) /es No /es No /es No | Salt Crust (B1) Biotic Crust (B1) Aquatic Inverte Hydrogen Sulf Oxidized Rhize Presence of Re Recent Iron Re Thin Muck Sur Other (Explain Depth (inches | abrates (B13) de Odor (C1) dephares along L deduced Iron (C4) deduction in Tilled face (C7) in Remarks) despie | Soils (C6) | ts (C3)) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| Primary India Surface High Wa Saturatio Water M Sedimer Drift Der Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes car | drology Indicators: cators (minimum of of other (A1) ater Table (A2) on (A3) flarks (B1) (Nonriver of Deposits (B2) (Noriver (B3) (Noriver (B4)) on Vis ble on Aerial of tained Leaves (B9) vations: er Present? Present? Yresent? Yresent? | rine) Imagery (B7) /es No /es No /es No | Salt Crust (B1) Biotic Crust (B1) Aquatic Inverte Hydrogen Sulf Oxidized Rhize Presence of Re Recent Iron Re Thin Muck Sur Other (Explain Depth (inches | abrates (B13) de Odor (C1) dephares along L deduced Iron (C4) deduction in Tilled face (C7) in Remarks) despie | Soils (C6) | ts (C3)) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| Primary India Surface High Wa Saturatia Water M Sedimer Drift Der Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes car Describe Re | drology Indicators: cators (minimum of of other (A1) ater Table (A2) on (A3) flarks (B1) (Nonriver of Deposits (B2) (Noriver (B3) (Noriver (B4)) on Vis ble on Aerial of tained Leaves (B9) vations: er Present? Present? Yresent? Yresent? | rine) Imagery (B7) /es No /es No /es No | Salt Crust (B1) Biotic Crust (B1) Aquatic Inverte Hydrogen Sulf Oxidized Rhize Presence of Re Recent Iron Re Thin Muck Sur Other (Explain Depth (inches | abrates (B13) de Odor (C1) dephares along L deduced Iron (C4) deduction in Tilled face (C7) in Remarks) despie | Soils (C6) | ts (C3)) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) |
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| Primary India Surface High Wa Saturatia Water M Sedimer Drift Der Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes car Describe Re | drology Indicators: cators (minimum of of other (A1) ater Table (A2) on (A3) flarks (B1) (Nonriver of Deposits (B2) (Noriver (B3) (Noriver (B4)) on Vis ble on Aerial of tained Leaves (B9) vations: er Present? Present? Yresent? Yresent? | rine) Imagery (B7) /es No /es No /es No | Salt Crust (B1) Biotic Crust (B1) Aquatic Inverte Hydrogen Sulf Oxidized Rhize Presence of Re Recent Iron Re Thin Muck Sur Other (Explain Depth (inches | abrates (B13) de Odor (C1) dephares along L deduced Iron (C4) deduction in Tilled face (C7) in Remarks) despie | Soils (C6) | ts (C3)) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) |

WDC SR-177, SR-193 to 1800 NorthUDOT



Sample Point 14

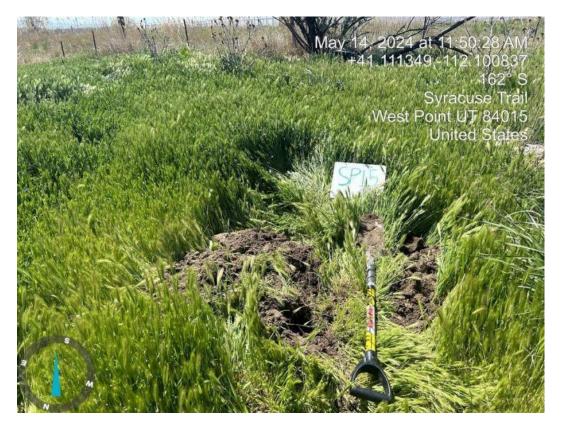


Sample Point 14

| Project/Site: WDC Phase II | | City/Co | ounty | Davis C | ounty | Saı | mpling Date: 2024 | -05-14 |
|--|-----------------|----------|-------|--------------------------|--|------------------------|--|--------------|
| Applicant/Owner: UDOT | | | - | | State: Utah | | · - | |
| Investigator(s): Cara Glabau, Elena Capson | | Sectio | n, To | wnship, Ra | nge: S05 T4N R2 | W | | |
| Landform (hillslope, terrace, etc.): Slope | | | | | | | Slope (%) |): <u>5</u> |
| Subregion (LRR): D 28A | Lat: 41. | 11135 | 033 | | Long: -112.1008 | 865 | Datum: NA | D83_201 |
| Soil Map Unit Name: WgA - Warm Springs fine sandy | | | | | | | | |
| Are climatic / hydrologic conditions on the site typical for the | nis time of yea | ar? Ye | es | No | (If no, explain | n in Rema | arks.) | |
| Are Vegetation, Soil, or Hydrology | | | | | | | | No |
| Are Vegetation, Soil, or Hydrology | | | | | eeded, explain any a | | | |
| SUMMARY OF FINDINGS – Attach site map | showing | sam | plin | g point l | ocations, trans | ects, in | nportant feature | es, etc. |
| Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes Wetland Hydrology Present? Yes Remarks: | No | | | e Sampled in a Wetlar | | | No | |
| Conditions were wetter than normal ac been rain for several days prior to the | _ | to th | e aı | ntecede | ent precipitation | n tool | , but there ha | d not |
| VEGETATION – Use scientific names of pla | | | | | | | | |
| | Absolute | Dom | inant | Indicator | Dominance Test | workshe | et: | |
| Tree Stratum (Plot size:) | % Cover | | | | Number of Domina | | | |
| Elaeagnus angustifolia | 12 | | | FAC | That Are OBL, FA | CW, or F | AC: 1 | _ (A) |
| 2 3 | | | | | Total Number of D Species Across Al | | 2 | (B) |
| 4 | | | | | | | | _ (D) |
| | 12 | = Tota | al Co | ver | Percent of Domina That Are OBL, FA | | | (A/B) |
| Sapling/Shrub Stratum (Plot size:) | | | | | Prevalence Index | | • | _ |
| 1 2 | | | | | Total % Cove | | | |
| | | | | | OBL species 0 | | x 1 = 0 | |
| 3 | | | | | - | | x 2 = 0 | |
| 5 | | | | | | | x 3 = 36 | |
| 0 | | = Tot | al Co | ver | FACU species 8 | | | |
| Herb Stratum (Plot size:) | | | u. 00 | ••• | | 8 | x 5 = 90 | _ |
| 1. Hordeum pusillum | | | | FACU | Column Totals: 1 | 12 | (A) 454 | (B) |
| 2. Bromus tectorum | 5 | | | UPL | | | _ , , | 、 / |
| 3. Cirsium arvense | 5 | | | FACU | Prevalence I | | | |
| 4. Thinopyrum intermedium | <u>5</u> | | | UPL | Hydrophytic Veg | | | |
| 5. Descurainia pinnata | _ 3 | | | UPL | Dominance T | | | |
| 6. Erodium cicutarium | _ 3 | | | UPL | Prevalence In | | | |
| 7. Lepidium campestre | _ 2 | | | <u>UPL</u> | Morphologica data in Re | l Adaptati marks or | ons ¹ (Provide suppo on a separate sheet | orting () |
| 8 | 100 | | | | | | ic Vegetation ¹ (Expl | • |
| Woody Vine Stratum (Plot size:) | 100 | _ = Tota | al Co | ver | | | • | , |
| 1 | | | | | ¹ Indicators of hydr | ic soil and | d wetland hydrology | must |
| 2. | | | | | be present, unless | disturbe | d or problematic. | |
| | | _ = Tota | al Co | ver | Hydrophytic | | | |
| % Bare Ground in Herb Stratum % Cov | er of Biotic C | rust | | | Vegetation Present? | Yes | No <u> </u> | |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

| Profile Desc | ription: (Describe | to the depth | needed to document the indicator or c | onfirm the absence of indicators.) | |
|-------------------|-------------------------------|------------------|--|--|--------------------------|
| Depth | Matrix | | Redox Features | | . |
| (inches) 0 - 8 | Color (moist) 2.5Y 4/4 | 100 | Color (moist) % Type ¹ L | Clay Loam | Remarks |
| | - | | | | |
| 8 - 18 | 2.5Y 5/2 | 100 | | Clay Loam | |
| 18 - 24 | 2.5Y 3/2 | _ <u>100</u> _ | | <u>Clay</u> | |
| | | | | | |
| | | | | | |
| | | | | | |
| - | | | | | |
| - | - | | | | |
| ¹Type: C=Co | oncentration D=De | nletion RM=R | Reduced Matrix, CS=Covered or Coated S | and Grains. ² Location: PL=Pore | e Lining M=Matrix |
| | | | RRs, unless otherwise noted.) | Indicators for Problemat | |
| Histosol | (A1) | | Sandy Redox (S5) | 1 cm Muck (A9) (LRR | (C) |
| Histic Ep | pipedon (A2) | | Stripped Matrix (S6) | 2 cm Muck (A10) (LR | RB) |
| Black Hi | stic (A3) | | Loamy Mucky Mineral (F1) | Reduced Vertic (F18) | |
| Hydroge | n Sulfide (A4) | | Loamy Gleyed Matrix (F2) | Red Parent Material (| TF2) |
| Stratified | d Layers (A5) (LRR | C) | Depleted Matrix (F3) | Other (Explain in Rem | narks) |
| 1 cm Mu | ıck (A9) (LRR D) | | Redox Dark Surface (F6) | | |
| | d Below Dark Surfa | ce (A11) | Depleted Dark Surface (F7) | • | |
| | ark Surface (A12) | | Redox Depressions (F8) | ³ Indicators of hydrophytic | _ |
| - | flucky Mineral (S1) | | Vernal Pools (F9) | wetland hydrology must | • |
| | Bleyed Matrix (S4) | | | unless disturbed or prob | olematic. |
| | Layer (if present): | | | | |
| Type: | | | <u> </u> | | |
| Depth (inc | ches): | | <u></u> | Hydric Soil Present? You | es No |
| Remarks: | | | | 1 | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| HYDROLO | GY | | | | |
| Wetland Hyd | drology Indicators | : | | | |
| Primary Indic | cators (minimum of | one required; | check all that apply) | Secondary Indicators | (2 or more required) |
| Surface | Water (A1) | | Salt Crust (B11) | Water Marks (B1 |) (Riverine) |
| — High Wa | iter Table (A2) | | Biotic Crust (B12) | | its (B2) (Riverine) |
| Saturation | | | Aquatic Invertebrates (B13) | Drift Deposits (B | |
| | larks (B1) (Nonrive | rine) | Hydrogen Sulfide Odor (C1) | Drainage Patterr | |
| | nt Deposits (B2) (N o | | | ig Roots (C3) Dry-Season Wat | |
| | posits (B3) (Nonrive | | Presence of Reduced Iron (C4) | Crayfish Burrows | , , |
| | Soil Cracks (B6) | erine) | Recent Iron Reduction in Tilled So | | e on Aerial Imagery (C9) |
| | | Imagani (D7) | | | 3 , , , |
| | on Vis ble on Aerial | | | Shallow Aquitard | ` ' |
| | tained Leaves (B9) | | Other (Explain in Remarks) | FAC-Neutral Tes | St (D5) |
| Field Obser | | | . | | |
| Surface Water | | | Depth (inches): | | |
| Water Table | | | Depth (inches): | | |
| Saturation P | resent? | Yes No | Depth (inches): | Wetland Hydrology Present? Y | es No |
| (includes cap | | n dalide mon | itoring well, aerial photos, previous inspec | ions) if available: | |
| Describe ive | corded Data (Streat | ii gauge, iiioii | noring wen, aeriai priotos, previous inspec | ions), ii avaliable. | |
| | | | | | |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |
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| | | | | | |
| | | | | | |

WDC SR-177, SR-193 to 1800 NorthUDOT



Sample Point 15



Sample Point 15

| Project/Site: WDC Phase II | | City/Count | y: Davis C | ounty | Sampling Date: 2024-05-14 | |
|--|----------------|---------------|----------------------------|--|---|--|
| Applicant/Owner: UDOT | | | | State: Utah | Sampling Point: SP16 | |
| Investigator(s): Cara Glabau, Elena Capson | | Section, T | ownship, Ra | nge: S05 T4N R2W | | |
| | | | | | e Slope (%): 0 | |
| Subregion (LRR): D 28A | _ Lat: 41. | 1113893 | 3 | Long: -112.1008455 | Datum: NAD83_2011 | |
| Soil Map Unit Name: WgA - Warm Springs fine sandy | | | | ent slopes NWI classific | | |
| Are climatic / hydrologic conditions on the site typical for thi | s time of yea | ar? Yes_ | No | (If no, explain in Re | emarks.) | |
| Are Vegetation, Soil, or Hydrologys | significantly | disturbed? | Are ' | 'Normal Circumstances" p | oresent? Yes No | |
| Are Vegetation, Soil, or Hydrology | naturally pro | blematic? | | eded, explain any answer | | |
| SUMMARY OF FINDINGS – Attach site map | showing | samplii | ng point l | ocations, transects | , important features, etc. | |
| Hydrophytic Vegetation Present? Yes N | lo | 1- 4 | h a Camanda d | | | |
| Hydric Soil Present? Yes N | lo | | he Sampled hin a Wetlar | | No | |
| Wetland Hydrology Present? Yes N | lo | WIL | iiii a wellai | iu: 165 | | |
| Remarks: Conditions were wetter than normal according to the anteced | ant procinita | tion tool h | ut there had r | not been rain for coveral day | ve prior to the cite visit. Sails and | |
| vegetation are likely caused by nearby irrigation practices, ca growth. No hydrology was present at the time of the delineation | using inconsi | stent surfa | ace water to s | upport hydric soil developn | | |
| | | iore triis is | not a wetiani | u. | | |
| VEGETATION – Use scientific names of plan | Absolute | Dominan | nt Indicator | Dominance Test work | shooti | |
| Tree Stratum (Plot size:) | | | Status | Number of Dominant Sp | | |
| 1 | | | | That Are OBL, FACW, of | • | |
| 2 | | | | Total Number of Domina | ant | |
| 3 | | | | Species Across All Stra | ^ | |
| 4 | | | | Percent of Dominant Sp | | |
| Sapling/Shrub Stratum (Plot size:) | | = Total C | over | That Are OBL, FACW, o | or FAC: 100.00 (A/B) | |
| 1 | | | | Prevalence Index worl | ksheet: | |
| 2 | | | | Total % Cover of: | | |
| 3 | | | | | x 1 = 0 | |
| 4 | | | | FACW species 70 | | |
| 5 | | | | · · | x 3 = 36 | |
| Herb Stratum (Plot size:) | | = Total C | over | FACU species 4 | | |
| Herb Stratum (Plot size:) 1. Carex praegracilis | 40 | ~ | FACW | | x = 5 = 35 (A) 227 (B) | |
| 2. Phalaris arundinacea | 22 | | FACW | Column Totals: 93 | (A) <u>227</u> (B) | |
| 3. Poa pratensis | 12 | | FAC | Prevalence Index | = B/A = 2.44 | |
| 4. Juncus balticus | 8 | | FACW | Hydrophytic Vegetation | on Indicators: | |
| 5. Thinopyrum intermedium | 5 | | UPL | ✓ Dominance Test is | >50% | |
| 6. Bromus tectorum | 2 | | UPL | Prevalence Index is | s ≤3.0 ¹ | |
| 7. Melilotus officinalis | 2 | | FACU | Morphological Adap | ptations ¹ (Provide supporting | |
| 8. Taraxacum officinale | 2 | | FACU | | s or on a separate sheet) | |
| | 93 | = Total C | over | Problematic Hydrop | phytic Vegetation ¹ (Explain) | |
| Woody Vine Stratum (Plot size:) | | | | ¹ Indicators of hydric soil | I and wetland hydrology must | |
| 1 | | | | be present, unless distu | | |
| 2. | | = Total C | over | Hydrophytic | | |
| 0/ Dave Crewal in Harb Chretwee | - of Diotic O | • | | Vegetation | s 🗸 No | |
| % Bare Ground in Herb Stratum % Cove | r of Blotic Ci | rust | | Present? Yes | s No | |
| Remarks: | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

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

| /:\ | Matrix | | | Features | | |
|---|--|---|---|--|--------------------------|---|
| (inches) | Color (moist) | | Color (moist) | <u>%</u> Type ¹ | | <u>Exture</u> Remarks |
| 0 - 4 | 5YR 2.5/2 | 100 | | | Muck | ky Loam/Clay |
| 4 - 16 | 7.5YR 5/2 | 100 | | | Cla | ay |
| 16 - 24 | 2.5Y 6/2 | 100 | | | Cla | ay |
| | | | | | | |
| - | | | | | | |
| - | | | | | | |
| _ | | | | | | |
| | | | | | | |
| 1Type: C=C | oncentration D=D | nletion PM= | | =Covered or Coate | ad Sand Grains | 2Location: PL=Pore Lining, M=Matrix. |
| | | | LRRs, unless otherv | | | ndicators for Problematic Hydric Soils ³ : |
| Histosol | | | Sandy Redox | | _ | 1 cm Muck (A9) (LRR C) |
| | oipedon (A2) | | Stripped Mat | , , | _ | 2 cm Muck (A10) (LRR B) |
| | stic (A3) | | Loamy Muck | | _ | Reduced Vertic (F18) |
| | en Sulfide (A4) | | | ed Matrix (F2) | _ | Red Parent Material (TF2) |
| | d Layers (A5) (LRF | R C) | Depleted Ma Redox Dark | | _ | Other (Explain in Remarks) |
| | ıck (A9) (LRR D) d Below Dark Surfa | ace (A11) | | rk Surface (F7) | | |
| | ark Surface (A12) | , | Redox Depre | | 3 | Indicators of hydrophytic vegetation and |
| Sandy M | Mucky Mineral (S1) | | Vernal Pools | (F9) | | wetland hydrology must be present, |
| | Bleyed Matrix (S4) | | | | | unless disturbed or problematic. |
| | Layer (if present): | | | | | |
| Type: | -l\· | | <u></u> | | | uduis Cail Bussant2 - Vas - V - Na |
| Depth (ind | cnes): | | | | п | ydric Soil Present? Yes No |
| | | | | | | |
| HYDROLO | GY | | | | | |
| | GY drology Indicator | s: | | | | |
| Wetland Hyd | drology Indicator | | t; check all that apply |) | | Secondary Indicators (2 or more required) |
| Wetland Hyd | drology Indicator | | l; check all that apply | - | | Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) |
| Wetland Hyd Primary Indic Surface High Wa | drology Indicator cators (minimum o Water (A1) ater Table (A2) | | Salt Crust (I | B11) (B12) | | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) |
| Primary Indice Surface High Wa Saturatio | drology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) | f one required | Salt Crust (I Biotic Crust Aquatic Inve | B11) (B12) ertebrates (B13) | | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) |
| Wetland Hyd Primary Indic Surface High Wa Saturatic Water M | drology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriv | f one required | Salt Crust (I Biotic Crust Aquatic Inve | B11) (B12) ertebrates (B13) Sulfide Odor (C1) | Living Poets (C | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) |
| Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimer | drology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivent Deposits (B2) (N | f one required erine) lonriverine) | Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh | B11) (B12) ertebrates (B13) Gulfide Odor (C1) nizospheres along | • | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) |
| Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep | drology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriv nt Deposits (B2) (Nonriv | f one required erine) lonriverine) | Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh | B11) (B12) ertebrates (B13) Sulfide Odor (C1) nizospheres along f Reduced Iron (C | 4) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) |
| Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Surface | drology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivent Deposits (B2) (Nonrivent Deposits (B3) (Nonrivent Cosits (B6)) | f one required erine) lonriverine) verine) | Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Ri Presence of Recent Iron | B11) (B12) ertebrates (B13) Sulfide Odor (C1) nizospheres along f Reduced Iron (Ci | 4) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) |
| Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Surface Inundation | drology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriv nt Deposits (B2) (Nonriv | erine) lonriverine) verine) | Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S | B11) (B12) ertebrates (B13) Sulfide Odor (C1) nizospheres along f Reduced Iron (C | 4) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) |
| Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Surface Inundation | drology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivent Deposits (B2) (Nonrivent Deposits (B2) (Nonrivent Caracks (B6) on Vis ble on Aeria | erine) lonriverine) verine) | Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S | B11) (B12) ertebrates (B13) Sulfide Odor (C1) nizospheres along f Reduced Iron (C- Reduction in Tille Surface (C7) | 4) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S | drology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivent Deposits (B2) (Norrivent Cacks (B6) on Vis ble on Aeria tained Leaves (B9) vations: | erine) lonriverine) verine) il Imagery (B7 | Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized RI Presence of Recent Iron Thin Muck S Other (Expl. | B11) c (B12) ertebrates (B13) Sulfide Odor (C1) nizospheres along f Reduced Iron (C- Reduction in Tille Surface (C7) ain in Remarks) hes): | 4) d Soils (C6) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Observ | drology Indicator cators (minimum or water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivent Deposits (B2) (Nonrivent Cacks (B6) on Vis ble on Aeriatained Leaves (B9) vations: | erine) lonriverine) verine) l Imagery (B7) Yes 1 | Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl. | B11) c (B12) ertebrates (B13) Gulfide Odor (C1) nizospheres along f Reduced Iron (Ci Reduction in Tille Surface (C7) ain in Remarks) hes): | 4) d Soils (C6) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Observ Surface Water Table Saturation Primary Indice | drology Indicator cators (minimum or water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivent Deposits (B2) (Nonsits (B3) (Nonrivent Cracks (B6) on Vis ble on Aeriatained Leaves (B9) vations: er Present? Present? | erine) lonriverine) verine) l Imagery (B7) Yes 1 | Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized RI Presence of Recent Iron Thin Muck S Other (Expl. | B11) c (B12) ertebrates (B13) Gulfide Odor (C1) nizospheres along f Reduced Iron (Ci Reduction in Tille Surface (C7) ain in Remarks) hes): | 4) d Soils (C6) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Surface Inundatic Water-S Field Observ Surface Water Table Saturation Pr (includes cap | drology Indicator cators (minimum or cators (minimum or water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivent Deposits (B2) (Norrivent Cators (B3) (Nonrivent Cators (B6) on Vis ble on Aeriatained Leaves (B9) vations: er Present? Present? resent? pillary fringe) | erine) lonriverine) verine) I Imagery (B7) Yes 1 Yes 1 | Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl. | B11) c (B12) ertebrates (B13) Gulfide Odor (C1) nizospheres along f Reduced Iron (Ci Reduction in Tille Surface (C7) ain in Remarks) hes): hes): | 4) d Soils (C6) Wetland | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Surface Inundatic Water-S Field Observ Surface Water Table Saturation Pr (includes cap | drology Indicator cators (minimum or cators (minimum or water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivent Deposits (B2) (Norrivent Cators (B3) (Nonrivent Cators (B6) on Vis ble on Aeriatained Leaves (B9) vations: er Present? Present? resent? pillary fringe) | erine) lonriverine) verine) I Imagery (B7) Yes 1 Yes 1 | Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl. No Depth (incl. No Depth (incl. | B11) c (B12) ertebrates (B13) Gulfide Odor (C1) nizospheres along f Reduced Iron (Ci Reduction in Tille Surface (C7) ain in Remarks) hes): hes): | 4) d Soils (C6) Wetland | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Observ Surface Water Water Table Saturation Pr (includes cap Describe Rec | drology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriv nt Deposits (B2) (Nonriv cosits (B3) (Nonriv Soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9 vations: er Present? Present? resent? corded Data (strea | erine) lonriverine) verine) l Imagery (B7) Yes 1 Yes 1 yes 1 | Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl. No Depth (incl. No Depth (incl. No Depth (incl. | B11) (B12) ertebrates (B13) Gulfide Odor (C1) nizospheres along f Reduced Iron (C- n Reduction in Tille Surface (C7) ain in Remarks) hes): hes): hes): | 4) d Soils (C6) Wetland | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Hydrology Present? Yes No ✓ |
| Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Observ Surface Water Surface Water Table Saturation Pr (includes cap Describe Rec | drology Indicator cators (minimum or cators (minimum or water (A1) ater Table (A2) on (A3) ater Section (A3) (Nonriversity Section (A3) (N | erine) Honriverine) Verine) Yes N Yes N Yes N The gauge, mo | Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl. No Depth (incl. No Depth (incl. No Depth (incl. Initoring well, aerial pl | B11) (B12) ertebrates (B13) Gulfide Odor (C1) nizospheres along f Reduced Iron (C- n Reduction in Tille Surface (C7) ain in Remarks) hes): hes): hes): | 4) d Soils (C6) Wetland | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Observ Surface Water Water Table Saturation Profincludes cap Describe Records Remarks: Soil was | drology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriv nt Deposits (B2) (Nonriv cosits (B3) (Nonriv Soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9 vations: er Present? Present? resent? corded Data (strea | erine) Honriverine) Verine) Yes N Yes N Yes N The gauge, mo | Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl. No Depth (incl. No Depth (incl. No Depth (incl. Initoring well, aerial pl | B11) (B12) ertebrates (B13) Gulfide Odor (C1) nizospheres along f Reduced Iron (C- n Reduction in Tille Surface (C7) ain in Remarks) hes): hes): hes): | 4) d Soils (C6) Wetland | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Hydrology Present? Yes No✓ |

WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 16



Sample Point 16

| Project/Site: WDC Phase II | (| City/Co | ounty: | Davis C | ounty | Sampling [| oate: 2024 | -05-14 |
|--|------------------|---------|----------|------------------|---|---------------------------------------|--------------|----------|
| Applicant/Owner: UDOT | | - | • | | State: Utah | | · | |
| • • | | | | | nge: S06 T4N R2W | | | |
| Landform (hillslope, terrace, etc.): Flat | | Local | relief (| concave, | convex, none): None | | Slope (%) |): O |
| Subregion (LRR): D 28A | | | | | | | | |
| Soil Map Unit Name: WaA - Warm Springs fine sar | | | | | | | | |
| Are climatic / hydrologic conditions on the site typical for | this time of yea | ar? Ye | es | No _ | (If no, explain ir | n Remarks.) | | |
| Are Vegetation, Soil, or Hydrology | | | | | "Normal Circumstances | | es <u> </u> | No |
| Are Vegetation, Soil, or Hydrology | _ naturally pro | blema | itic? | (If ne | eeded, explain any ans | wers in Remark | ks.) | |
| SUMMARY OF FINDINGS - Attach site ma | | | | | ocations, transec | ts, importa | nt feature | es, etc. |
| Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes Wetland Hydrology Present? Yes Remarks: | No 🔽 | | | Sampled | | No | <u> </u> | |
| Conditions were wetter than normal abeen rain for several days prior to the | • | | | | • • | tool, but t | there ha | d not |
| VEGETATION – Use scientific names of pla | | - | | | | | | |
| | Absolute | | | | Dominance Test wo | orksheet: | | |
| Tree Stratum (Plot size:) | <u>% Cover</u> | | | | Number of Dominant | Species | \ | (4) |
| 1 2 | | | | | That Are OBL, FACV | V, or FAC: <u>0</u> | | _ (A) |
| 3. | | | | | Total Number of Dor Species Across All S | | | (B) |
| 4. | | | | | | _ | | _ (=) |
| | | = Tota | tal Cov | er | Percent of Dominant That Are OBL, FACV | | .00 | _ (A/B) |
| Sapling/Shrub Stratum (Plot size:) | | | | | Prevalence Index w | orksheet | | |
| 1. 2. | | | | | Total % Cover o | | Multiply by: | |
| 3. | | | | | | x 1 = | | |
| 4. | | | | | FACW species 10 | x 2 = | : 20 | |
| 5 | | | | | FAC species 0 | x 3 = | : <u>0</u> | |
| | | = Tota | tal Cov | er | FACU species 0 | | | |
| Herb Stratum (Plot size:) | 65 | | , | UPL | | x 5 = | | |
| Thinopyrum intermedium Juncus balticus | 10 | | | FACW | Column Totals: 75 | (A) | 345 | (B) |
| | | - | | | Prevalence Ind | ex = B/A = 4 | .60 | |
| 3 4 | | | | | Hydrophytic Vegeta | · · · · · · · · · · · · · · · · · · · | | |
| 5 | | | | | Dominance Test | | | |
| 6. | | | | | Prevalence Inde | | | |
| 7 | | | | | Morphological A | daptations ¹ (Pr | ovide suppo | orting |
| 8 | | | | | data in Rema | arks or on a sep | | |
| W I M O I M O I | 75 | = Tota | tal Cov | er | Problematic Hyd | rophytic veget | ation (Expi | ain) |
| Woody Vine Stratum (Plot size:) | | | | | ¹ Indicators of hydric | soil and wetlan | d hydrology | must |
| 1 2 | | | | | be present, unless d | | | muot |
| | | | | | Hydrophytic | | | |
| % Bare Ground in Herb Stratum % Co | ver of Biotic C | rust | | | Vegetation Present? | Yes I | No 🗸 | |
| Remarks: | | _ | | _ _ _ | | <u>-</u> | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

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

| Depth | Matrix Color (moist) | % | Redox Features Color (moist) % Type ¹ L | Texture Remarks |
|---------------------|--|---------------|---|--|
| (inches) 0 - 2 | 2.5Y 2.5/1 | 100 | Color (moist) % Type' L | Loam lot of organic matter |
| 2 - 14 | 10YR 4/2 | 100 - | | Clay Loam |
| | | | | |
| 14 - 24 | 7.5YR 4/3 | 100 | | Silt |
| | | | | |
| | | | | |
| | | | | |
| - | | | | |
| - | | | | |
| ¹Type: C=Co | oncentration. D=De | pletion. RM=F | Reduced Matrix, CS=Covered or Coated S | and Grains. ² Location: PL=Pore Lining, M=Matrix. |
| | | | RRs, unless otherwise noted.) | Indicators for Problematic Hydric Soils ³ : |
| Histosol | (A1) | | Sandy Redox (S5) | 1 cm Muck (A9) (LRR C) |
| | pipedon (A2) | | Stripped Matrix (S6) | 2 cm Muck (A10) (LRR B) |
| Black His | | | Loamy Mucky Mineral (F1) | Reduced Vertic (F18) |
| | n Sulfide (A4) | C \ | Loamy Gleyed Matrix (F2) | Red Parent Material (TF2) |
| | l Layers (A5) (LRR ck (A9) (LRR D) | C) | Depleted Matrix (F3) Redox Dark Surface (F6) | Other (Explain in Remarks) |
| | Below Dark Surfa | ce (A11) | Depleted Dark Surface (F7) | |
| | rk Surface (A12) | , | Redox Depressions (F8) | ³ Indicators of hydrophytic vegetation and |
| Sandy M | lucky Mineral (S1) | | Vernal Pools (F9) | wetland hydrology must be present, |
| | leyed Matrix (S4) | | | unless disturbed or problematic. |
| | ayer (if present): | | | |
| Type: | | | <u>—</u> | |
| Depth (inc | ches): | | | Hydric Soil Present? Yes No |
| HYDROLO | GY | | | |
| | drology Indicators | ·• | | |
| _ | | | check all that apply) | Secondary Indicators (2 or more required) |
| | Water (A1) | <u> </u> | Salt Crust (B11) | Water Marks (B1) (Riverine) |
| · | ter Table (A2) | | Biotic Crust (B12) | Sediment Deposits (B2) (Riverine) |
| Saturatio | | | Aquatic Invertebrates (B13) | Drift Deposits (B3) (Riverine) |
| Water M | arks (B1) (Nonrive | rine) | Hydrogen Sulfide Odor (C1) | Drainage Patterns (B10) |
| Sedimer | nt Deposits (B2) (No | onriverine) | Oxidized Rhizospheres along Livi | ng Roots (C3) Dry-Season Water Table (C2) |
| Drift Dep | osits (B3) (Nonriv | erine) | Presence of Reduced Iron (C4) | Crayfish Burrows (C8) |
| | Soil Cracks (B6) | | Recent Iron Reduction in Tilled So | |
| · <u> </u> | on Vis ble on Aerial | | | Shallow Aquitard (D3) |
| | tained Leaves (B9) | | Other (Explain in Remarks) | FAC-Neutral Test (D5) |
| Field Observ | | Voo N | o Depth (inches): | |
| Surface Water Table | | | o Depth (inches): 22 | |
| Saturation Pr | | | o Depth (inches): <u>18</u> | Wetland Hydrology Present? Yes No |
| (includes cap | | res N | o Deptil (inches)10 | Wettand Hydrology Present? Tes NO |
| Describe Red | corded Data (strear | n gauge, mon | itoring well, aerial photos, previous inspec | ctions), if available: |
| Remarks: | | | | |
| Saturation | on and wate | r table d | o not occur within 12" of t | he surface and therefore do not |
| qualify for | or wetland h | nydrolog | y. | |

WDC SR-177, SR-193 to 1800 NorthUDOT



Sample Point 17



Sample Point 17

| Project/Site: WDC Phase II | | | City/Cou | _{ınty:} <u>Davis C</u> | ounty | | Sampling D | _{ete:} 2024 | -05-14 |
|--|--------------------|-------------------|-----------|---------------------------------|---------------------|-----------------------------------|--|----------------------|-------------|
| Applicant/Owner: UDOT | | | | | Sta | _{te:} Utah | Sampling F | oint: SP18 | , |
| Investigator(s): Cara Glabau, Elena G | Capson | | Section, | Township, Ra | inge: <u>S05</u> | T4N R2W | | | |
| Landform (hillslope, terrace, etc.): Depr | ession | | Local re | elief (concave, | convex, no | ne): Concav | <u>e </u> | _ Slope (%) |): <u>0</u> |
| Subregion (LRR): D 28A | | Lat: 41. | 110482 | 217 | _ Long: <u>-</u> ^ | 112.0997755 | <u>;</u> | Datum: NA | AD83_20 |
| Soil Map Unit Name: Fb - Ford Ioam, | shallow wate | er table, 0 to | 1 perc | ent slopes | | _ NWI classific | ation: None | е | |
| Are climatic / hydrologic conditions on the | e site typical for | this time of year | ar? Yes | No _ | (If r | no, explain in R | emarks.) | | |
| Are Vegetation, Soil, or H | lydrology | _ significantly | disturbe | d? Are | "Normal Ci | rcumstances" p | resent? Ye | es <u> </u> | ۷o |
| Are Vegetation, Soil, or H | lydrology | _ naturally pro | blematic | ? (If ne | eeded, exp | lain any answe | rs in Remarl | ks.) | |
| SUMMARY OF FINDINGS – At | tach site ma | p showing | samp | ling point l | ocations | s, transects | , importa | nt feature | es, etc |
| Livelyne who the Memorate time Dune and O | V V | Na | | | | | | | |
| Hydrophytic Vegetation Present? Hydric Soil Present? | Yes | No | | s the Sampled | | | | | |
| Wetland Hydrology Present? | Yes 🗸 | | W | vithin a Wetla | nd? | Yes | No | | |
| Remarks: | | | | | | | | | |
| Conditions were wetter that | n normal a | ccordina 1 | to the | antecede | ent pred | initation to | ool but | there ha | d not |
| been rain for several days | | • | | | , in p. 55 | | | | |
| VEGETATION – Use scientific | | | | | | | | | |
| VEGETATION - Use scientific | names or pr | Absolute | Domin | ant Indicator | Domina | nce Test work | shoot: | | |
| Tree Stratum (Plot size: |) | | | es? Status | | of Dominant S | | | |
| 1 | | | | | | OBL, FACW, | or FAC: 1 | | (A) |
| 2 | | | - | | Total Nu | mber of Domin | ant | | |
| 3 | | | | | | Across All Stra | | | _ (B) |
| 4 | | | | | Percent | of Dominant Sp | oecies | | |
| Sapling/Shrub Stratum (Plot size: |) | | _ = Total | Cover | That Are | OBL, FACW, | or FAC: 10 | 00.00 | _ (A/B) |
| 1 | | | | | Prevale | nce Index wor | ksheet: | | |
| 2. | | | | | Tota | al % Cover of: | | Multiply by: | |
| 3. | | | | | OBL spe | ecies 0 | x 1 = | : 0 | |
| 4 | | | | | FACW s | pecies 82 | | | |
| 5 | | | - | | FAC spe | · | | <u> 18</u> | |
| Herb Stratum (Plot size: | , | | = Total | Cover | | pecies 0 | | | _ |
| 1. Juncus balticus |) | 82 | ~ | FACW | UPL spe | | x 5 = | | |
| 2. Lepidium campestre | | 10 | | UPL | Column | Totals: 98 | (A) | 232 | (B) |
| 3. Dipsacus fullonum | | 6 | | FAC | Pre | evalence Index | = B/A = <u>2</u> | .36 | |
| 4. | | | | | Hydroph | nytic Vegetation | n Indicator | s: | |
| 5 | | | | | | ninance Test is | | | |
| 6 | | | | | I — | /alence Index is | | | |
| 7 | | | | | | phological Ada lata in Remarks | | | |
| 8 | | | | | | olematic Hydro | | | , |
| Woody Vine Stratum (Plot size: |) | 98 | = Total | Cover | | | , | (| / |
| 1 | | | | | | rs of hydric soi | | | must |
| 2. | | | | | be prese | ent, unless distu | irbed or prob | olematic. | |
| | | | | | Hydropl | | | | |
| % Bare Ground in Herb Stratum | % Co | ver of Biotic C | rust | | Vegetati Present | ion ? Ye | s_ ' I | No | |
| Remarks: | | . 5. 5. 5.0.0 | | | . 1036111 | . 16 | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

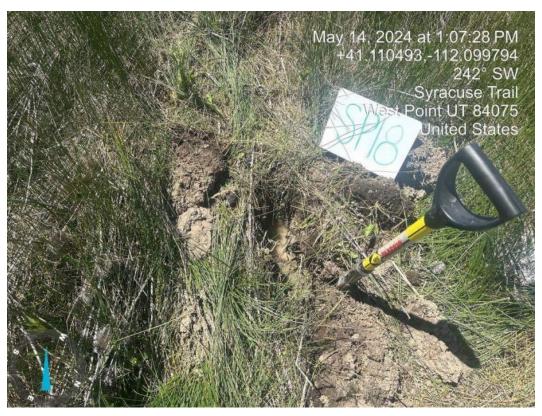
Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

| Depth | Matrix | | | K Features | _ 1 | | _ | | | |
|---|--|---|--|---|--|------------------|--|--|--|--|
| (inches) | Color (moist) | <u>%</u> | Color (moist) | <u></u> % | Type ¹ | Loc ² | <u>Texture</u> | Remarks | | |
| 0 - 2 | 2.5YR 2.5/1 | 100 | | | | | Peat | | | |
| 2 - 5 | 10YR 3/3 | 100 | | | | | Clay Loam | | | |
| 6 - 20 | 10YR 5/1 | 100 | | | | | Clay | | | |
| 20 - 24 | 10YR 5/2 | 100 | | | | | Clay | | | |
| - | | | | | | | | | | |
| - | | | | | _ | | | | | |
| - | | | | | | | | | | |
| _ | | | | | | | | | | |
| 1Typo: C=C | ncontration D-Do | nlotion DM= | Reduced Matrix, CS | -Covered e | or Coato | d Sand G | rains ² l o | cation: PL=Pore Lining, M=Matrix. | | |
| | | | RRs, unless other | | | u Sanu Gi | | s for Problematic Hydric Soils ³ : | | |
| Histosol | | | Sandy Redo | | , | | | Muck (A9) (LRR C) | | |
| | oipedon (A2) | | Stripped Ma | | | | 2 cm Muck (A10) (LRR B) | | | |
| Black Histic (A3) Lo | | | - | Loamy Mucky Mineral (F1) | | | | ced Vertic (F18) | | |
| Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) (LRR C) Depleted Matrix (F3) | | | | | | | Parent Material (TF2) | | | |
| | ick (A9) (LRR D) | C) | <u>▶</u> Depleted Ma | | 6) | | Otner | (Explain in Remarks) | | |
| | d Below Dark Surfac | ce (A11) | Depleted Da | • | , | | | | | |
| Thick Dark Surface (A12) Redox Depressions (F8) | | | | | | | ³ Indicators | of hydrophytic vegetation and | | |
| - | Sandy Mucky Mineral (S1) Vernal Pools (F9) | | | | | | | hydrology must be present, | | |
| _ | Gleyed Matrix (S4) | | | | | | unless o | disturbed or problematic. | | |
| | Layer (if present): | | | | | | | | | |
| Type: Depth (inc | | | | | | | Hydric Soil | I Present? Yes ✓ No | | |
| Remarks: | | | | | | | Tiyunic oon | 11163cm: 163 140 | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| HYDPOLO | GV. | | | | | | | | | |
| HYDROLO | | | | | | | | | | |
| Wetland Hyd | drology Indicators | | check all that apply | Λ. | | | Second | ndany Indicators (2 or more required) | | |
| Wetland Hyd | drology Indicators cators (minimum of | | ; check all that apply | | | | | ndary Indicators (2 or more required) Vater Marks (R1) (Riverine) | | |
| Wetland Hyder Primary Indicates Surface | drology Indicators cators (minimum of a Water (A1) | | Salt Crust | (B11) | | | v | Vater Marks (B1) (Riverine) | | |
| Wetland Hyder Primary Indicates Surface | drology Indicators eators (minimum of Water (A1) ater Table (A2) | | Salt Crust (| (B11) t (B12) | (B13) | | v | Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) | | |
| Primary Indice Surface High Wa | drology Indicators eators (minimum of Water (A1) ater Table (A2) | one required | Salt Crust | (B11) t (B12) vertebrates | | | v s c | Vater Marks (B1) (Riverine) | | |
| Wetland Hyd Primary Indic Surface High Wa ✓ Saturatic Water M | drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) | one required | Salt Crust (Biotic Crus Aquatic Inv | (B11) t (B12) vertebrates Sulfide Odo | or (C1) | Living Roc | v s c | Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) | | |
| Wetland Hyd Primary India Surface High Wa ✓ Saturatia Water M Sedimer Drift Dep | drology Indicators eators (minimum of of Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive ot Deposits (B2) (No posits (B3) (Nonrive | one required rine) onriverine) | Salt Crust (Solt Crust (Aquatic Inv Hydrogen (Oxidized R Presence (| (B11) t (B12) vertebrates Sulfide Odo chizosphere of Reduced | or (C1) es along l Iron (C4 |) | V S C C ots (C3) C | Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) | | |
| Wetland Hyd Primary Indic Surface High Wa V Saturatio Water M Sedimer Drift Dep Surface | drology Indicators eators (minimum of eators (Minimum of eators (Minimum of eators (Ma) eater Table (A2) on (A3) earks (B1) (Nonrive eat Deposits (B2) (No cosits (B3) (Nonrive Soil Cracks (B6) | one required rine) onriverine) erine) | Salt Crust (Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence co | (B11) t (B12) rertebrates Sulfide Odo thizosphere of Reduced n Reduction | or (C1) es along l Iron (C4 n in Tilled |) | V C C ots (C3) C C | Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Orayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) | | |
| Wetland Hyd Primary Indic Surface High Wa ✓ Saturatic Water M Sedimer Drift Dep Surface Inundatic | drology Indicators eators (minimum of other (A1) where (A2) on (A3) larks (B1) (Nonrive th Deposits (B2) (No cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial | one required rine) onriverine) erine) | Salt Crust (Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence C Recent Iron Thin Muck | (B11) t (B12) vertebrates Sulfide Odo chizosphere of Reduced n Reduction Surface (C | or (C1) es along l Iron (C4 n in Tilled 7) |) | V S C C C C C S S) S | Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) | | |
| Wetland Hyd Primary Indic Surface High Wa ✓ Saturatic Water M Sedimer Drift Dep Surface Inundatic Water-S | drology Indicators eators (minimum of other (A1) ater Table (A2) on (A3) darks (B1) (Nonrive nt Deposits (B2) (No cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) | one required rine) onriverine) erine) | Salt Crust (Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence co | (B11) t (B12) vertebrates Sulfide Odo chizosphere of Reduced n Reduction Surface (C | or (C1) es along l Iron (C4 n in Tilled 7) |) | V S C C C C C S S) S | Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Orayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) | | |
| Wetland Hyden Primary India Surface High Wa ✓ Saturation Water M Sedimer Drift Dep Surface Inundation Water-S Field Observi | drology Indicators eators (minimum of other (A1) ater Table (A2) on (A3) larks (B1) (Nonrive nt Deposits (B2) (No cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: | one required rine) onriverine) erine) Imagery (B7 | Salt Crust (Biotic Crust (Aquatic Inv Hydrogen S Oxidized R Presence (Recent Iron Thin Muck Other (Exp | (B11) t (B12) vertebrates Sulfide Odo thizosphere of Reduced n Reduction Surface (Collain in Rem | or (C1) es along l Iron (C4 n in Tilled 7) |) | V S C C C C C S S) S | Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) | | |
| Wetland Hyden Primary Indice Surface High Wa Saturation Water Moreon More | drology Indicators eators (minimum of a Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive at Deposits (B2) (No cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? | one required rine) onriverine) erine) Imagery (B7 | Salt Crust (Biotic Crust (Aquatic Inv (Hydrogen S) Oxidized R Presence (Recent Iror (Thin Muck (Other (Exp | (B11) t (B12) vertebrates Sulfide Odo hizosphere of Reduced n Reduction Surface (C' | or (C1) es along l Iron (C4 n in Tilled 7) |) | V C C ots (C3) C C S) S | Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) | | |
| Wetland Hyd Primary India Surface High Wa ✓ Saturatia Water M Sedimer Drift Dep Surface Inundatia Water-S Field Obsers Surface Water Table | drology Indicators eators (minimum of or | rine) prine) priverine) erine) Imagery (B7 | Salt Crust (Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence C Recent Iron Thin Muck Other (Exp | (B11) t (B12) vertebrates Sulfide Odo chizosphere of Reduced in Reduction Surface (Cilain in Rem ches): | or (C1) es along l Iron (C4 n in Tilled 7) |) I Soils (C6 | | Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) | | |
| Wetland Hyden Primary Indices Surface High Water Mater Mater Mater Sedimer Drift Dep Surface Inundation Water-Selection Surface Water Table Saturation Projection (includes capetal Surface capetal Nater Table Saturation Projection (includes capetal Surface water Table Saturation Projection Projec | drology Indicators eators (minimum of other (A1) where (A1) where (A2) on (A3) larks (B1) (Nonrive the Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? | rine) porriverine) erine) Imagery (B7 Yes N Yes N | Salt Crust (Biotic Crust (Aquatic Inv (Hydrogen S) (Oxidized R) (Presence of (Recent Iron (Thin Muck (Other (Exp (Depth (income (No (Depth (income (Depth | (B11) t (B12) vertebrates Sulfide Odo chizosphere of Reduced in Reduction Surface (Cilain in Rem ches): | or (C1) es along l Iron (C4 n in Tilleo 7) narks) |) d Soils (C6 | V S S S S S S S S S | Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) | | |
| Wetland Hyden Primary Indices Surface High Water Mater Mater Mater Sedimer Drift Dep Surface Inundation Water-Selection Surface Water Table Saturation Projection (includes capetal Surface capetal Nater Table Saturation Projection (includes capetal Surface water Table Saturation Projection Projec | drology Indicators eators (minimum of other (A1) where (A1) where (A2) on (A3) larks (B1) (Nonrive the Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? | rine) porriverine) erine) Imagery (B7 Yes N Yes N | Salt Crust (Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence C Recent Iron Thin Muck Other (Exp | (B11) t (B12) vertebrates Sulfide Odo chizosphere of Reduced in Reduction Surface (Cilain in Rem ches): | or (C1) es along l Iron (C4 n in Tilleo 7) narks) |) d Soils (C6 | V S S S S S S S S S | Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) | | |
| Wetland Hyden Primary India Surface High Wa ✓ Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Obsert Surface Water Vater Table Saturation Projection Projection Received The Projection Pro | drology Indicators eators (minimum of other (A1) where (A1) where (A2) on (A3) larks (B1) (Nonrive the Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? | rine) porriverine) erine) Imagery (B7 Yes N Yes N | Salt Crust (Biotic Crust (Aquatic Inv (Hydrogen S) (Oxidized R) (Presence of (Recent Iron (Thin Muck (Other (Exp (Depth (income (No (Depth (income (Depth | (B11) t (B12) vertebrates Sulfide Odo chizosphere of Reduced in Reduction Surface (Cilain in Rem ches): | or (C1) es along l Iron (C4 n in Tilleo 7) narks) |) d Soils (C6 | V S S S S S S S S S | Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) | | |
| Wetland Hyden Primary Indices Surface High Water Mater Mater Mater Sedimer Drift Dep Surface Inundation Water-Selection Surface Water Table Saturation Projection (includes capetal Surface capetal Nater Table Saturation Projection (includes capetal Surface water Table Saturation Projection Projec | drology Indicators eators (minimum of other (A1) where (A1) where (A2) on (A3) larks (B1) (Nonrive the Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? | rine) porriverine) erine) Imagery (B7 Yes N Yes N | Salt Crust (Biotic Crust (Aquatic Inv (Hydrogen S) (Oxidized R) (Presence of (Recent Iron (Thin Muck (Other (Exp (Depth (income (No (Depth (income (Depth | (B11) t (B12) vertebrates Sulfide Odo chizosphere of Reduced in Reduction Surface (Cilain in Rem ches): | or (C1) es along l Iron (C4 n in Tilleo 7) narks) |) d Soils (C6 | V S S S S S S S S S | Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) | | |
| Wetland Hyden Primary India Surface High Wa ✓ Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Obsert Surface Water Vater Table Saturation Projection Projection Received The Projection Pro | drology Indicators eators (minimum of other (A1) where (A1) where (A2) on (A3) larks (B1) (Nonrive the Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? | rine) porriverine) erine) Imagery (B7 Yes N Yes N | Salt Crust (Biotic Crust (Aquatic Inv (Hydrogen S) (Oxidized R) (Presence of (Recent Iron (Thin Muck (Other (Exp (Depth (income (No (Depth (income (Depth | (B11) t (B12) vertebrates Sulfide Odo chizosphere of Reduced in Reduction Surface (Cilain in Rem ches): | or (C1) es along l Iron (C4 n in Tilleo 7) narks) |) d Soils (C6 | V S S S S S S S S S | Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) | | |
| Wetland Hyden Primary India Surface High Wa ✓ Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Obsert Surface Water Vater Table Saturation Projection Projection Received The Projection Pro | drology Indicators eators (minimum of other (A1) where (A1) where (A2) on (A3) larks (B1) (Nonrive the Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? | rine) porriverine) erine) Imagery (B7 Yes N Yes N | Salt Crust (Biotic Crust (Aquatic Inv (Hydrogen S) (Oxidized R) (Presence of (Recent Iron (Thin Muck (Other (Exp (Depth (income (No (Depth (income (Depth | (B11) t (B12) vertebrates Sulfide Odo chizosphere of Reduced in Reduction Surface (Cilain in Rem ches): | or (C1) es along l Iron (C4 n in Tilleo 7) narks) |) d Soils (C6 | V S S S S S S S S S | Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) | | |
| Wetland Hyde Primary India Surface High Wa ✓ Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Obsert Surface Water Vater Table Saturation Projection Received The Second T | drology Indicators eators (minimum of other (A1) where (A1) where (A2) on (A3) larks (B1) (Nonrive the Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? | rine) porriverine) erine) Imagery (B7 Yes N Yes N | Salt Crust (Biotic Crust (Aquatic Inv (Hydrogen S) (Oxidized R) (Presence of (Recent Iron (Thin Muck (Other (Exp (Depth (income (No (Depth (income (Depth | (B11) t (B12) vertebrates Sulfide Odo chizosphere of Reduced in Reduction Surface (Cilain in Rem ches): | or (C1) es along l Iron (C4 n in Tilleo 7) narks) |) d Soils (C6 | V S S S S S S S S S | Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) | | |

WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 18



Sample Point 18

| Project/Site: WDC Phase II | (| City/County: Davis | County | Sampling Date: 2024-05-14 |
|--|-------------------------------|------------------------------------|---|--|
| Applicant/Owner: UDOT | | | State: Utah | Sampling Point: SP19 |
| Investigator(s): Cara Glabau, Elena Caps | on g | Section, Township, F | Range: S05 T4N R2W | |
| Landform (hillslope, terrace, etc.): | | Local relief (concave | e, convex, none): | Slope (%): |
| Subregion (LRR): D 28A | Lat: 41. 1 | 11054417 | Long: -112.0997335 | 5 Datum: NAD83_201 |
| Soil Map Unit Name: Fb - Ford Ioam, shal | low water table, 0 to | 1 percent slopes | NWI classific | cation: None |
| Are climatic / hydrologic conditions on the site | typical for this time of year | ar? Yes No | (If no, explain in F | Remarks.) |
| Are Vegetation, Soil, or Hydrol | | | | present? Yes No |
| Are Vegetation, Soil, or Hydrol | | | needed, explain any answe | |
| SUMMARY OF FINDINGS – Attach | | | | |
| | <u> </u> | | | , |
| | s No s No | Is the Sample | | , |
| | s No | within a Wetl | and? Yes | No |
| Remarks: | <u> </u> | | | |
| Conditions were wetter than no | ormal according t | o the anteced | lent precipitation t | ool but there had not |
| been rain for several days prior | • | o the anteced | icht precipitation t | ooi, but there had not |
| | | | | |
| VEGETATION – Use scientific nam | <u> </u> | | | |
| Tree Stratum (Plot size:) | Absolute % Cover | Dominant Indicator Species? Status | | |
| 1 | <u> </u> | | Number of Dominant S That Are OBL, FACW, | |
| 2. | | | Total Number of Domir | |
| 3 | | | Species Across All Stra | ^ |
| 4 | | | Percent of Dominant S | necies |
| Sapling/Shrub Stratum (Plot size: | | = Total Cover | That Are OBL, FACW, | |
| | | | Prevalence Index wor | rksheet: |
| 1 2 | | | Total % Cover of: | |
| 3. | | | - | x 1 = 0 |
| 4. | | | <u> </u> | x 2 = 108 |
| 5 | | | | x 3 = 0 |
| | | = Total Cover | FACU species 3 | |
| Herb Stratum (Plot size:) 1. Phalaris arundinacea | 54 | ✓ FACW | G. 2 openios | x 5 = 200 |
| 2. Rhynchospora nivea | 34 | ✓ UPL | - Column Totals: 97 | (A) <u>320</u> (B) |
| 3. Lepidium campestre | 6 | UPL | Prevalence Index | c = B/A = 3.29 |
| 4. Cirsium arvense | 3 | FACU | Hydrophytic Vegetation | on Indicators: |
| 5. | | | Dominance Test is | s >50% |
| 6 | | | Prevalence Index i | |
| 7 | | | | aptations ¹ (Provide supporting s or on a separate sheet) |
| 8 | ^- | | | ophytic Vegetation ¹ (Explain) |
| Woody Vine Stratum (Plot size: | | = Total Cover | r robiemado riyaro | priyuo vogotation (Explain) |
| 1 | | | ¹ Indicators of hydric so | il and wetland hydrology must |
| 2. | | | be present, unless dist | urbed or problematic. |
| | | = Total Cover | Hydrophytic | |
| % Bare Ground in Herb Stratum | % Cover of Biotic Cr | rust | Vegetation Present? Ye | es No <u>/</u> _ |
| Remarks: | | | 11000 | |
| . Comarko. | | | | |
| | | | | |
| | | | | |
| | | | | |

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

| 0 - 5 5 - 16 | Color (moist) | % | Color (moist) % Type ¹ Loc | c ² Texture Remarks | | |
|---|--|--|--|--|--|--|
| 5 - 16 | 10YR 4/2 | 100 | | Clay Loam | | |
| | 10YR 4/2 | 100 | | Clay | | |
| _ | 10YR 5/2 | 100 | | Clay | | |
| | 101110/2 | | | | | |
| | | | | | | |
| | | | | | | |
| | | · ——— — | | | | |
| - | | <u> </u> | | | | |
| - | | | | | | |
| ¹ Type: C=Co | oncentration, D=Dep | letion, RM=Re | educed Matrix, CS=Covered or Coated Sar | nd Grains. ² Location: PL=Pore Lining, M=Matrix. | | |
| Hydric Soil | Indicators: (Application | able to all LR | RRs, unless otherwise noted.) | Indicators for Problematic Hydric Soils ³ : | | |
| Histosol | , , | | Sandy Redox (S5) | 1 cm Muck (A9) (LRR C) | | |
| | pipedon (A2) | | Stripped Matrix (S6) | 2 cm Muck (A10) (LRR B) | | |
| | stic (A3) | | Loamy Mucky Mineral (F1) | Reduced Vertic (F18) | | |
| | en Sulfide (A4) d Layers (A5) (LRR (| •) | Loamy Gleyed Matrix (F2)Depleted Matrix (F3) | Red Parent Material (TF2) Other (Explain in Remarks) | | |
| | uck (A9) (LRR D) | •) | Redox Dark Surface (F6) | Other (Explain in Remarks) | | |
| | d Below Dark Surface | e (A11) | Depleted Dark Surface (F7) | | | |
| | ark Surface (A12) | · (/ · · · / | Redox Depressions (F8) | ³ Indicators of hydrophytic vegetation and | | |
| | Mucky Mineral (S1) | | wetland hydrology must be present, | | | |
| Sandy G | Bleyed Matrix (S4) | | Vernal Pools (F9) | unless disturbed or problematic. | | |
| Restrictive I | Layer (if present): | | | | | |
| Type: | | | _ | | | |
| Depth (inc | ches): | | _ | Hydric Soil Present? Yes No | | |
| IYDROLO | GY | | | | | |
| | drology Indicators: | | | | | |
| Primary Indic | cators (minimum of o | ne required; α | check all that apply) | Secondary Indicators (2 or more required) | | |
| | Water (A1) | | Salt Crust (B11) | Water Marks (B1) (Riverine) | | |
| Surface | | | | | | |
| | ater Table (A2) | | Biotic Crust (B12) | Sediment Deposits (B2) (Riverine) | | |
| | | | Biotic Crust (B12) Aquatic Invertebrates (B13) | | | |
| High Wa Saturatio | | ne) | | Sediment Deposits (B2) (Riverine) | | |
| High Wa Saturatio Water M | on (A3) | • | Aquatic Invertebrates (B13) | Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) | | |
| High Wa Saturation Water M Sedimer | on (A3) larks (B1) (Nonriver i | nriverine) | Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) | Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) | | |
| High Wa Saturatio Water M Sedimer Drift Dep | on (A3) larks (B1) (Nonriver i nt Deposits (B2) (No i | nriverine) | Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living | Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) | | |
| High Wa Saturatic Water M Sedimer Drift Dep Surface | on (A3) larks (B1) (Nonriver i nt Deposits (B2) (No posits (B3) (Nonrive i | nriverine) rine) | Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) | Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) | | |
| High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio | on (A3) larks (B1) (Nonriver nt Deposits (B2) (Non posits (B3) (Nonrive Soil Cracks (B6) | nriverine) rine) | Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils | Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) G Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) | | |
| High Wa Saturation Water M Sedimer Drift Dep Surface Inundation Water-S | on (A3) larks (B1) (Nonriverint Deposits (B2) (Nonriverint Deposits (B3) (Nonrivering Soil Cracks (B6) on Visible on Aerial I tained Leaves (B9) vations: | nriverine) rine) magery (B7) | Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Other (Explain in Remarks) | Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) | | |
| High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatic Water-S | on (A3) larks (B1) (Nonriverint Deposits (B2) (Nonrivering Soil Cracks (B6) on Visible on Aerial Intained Leaves (B9) vations: er Present? | nriverine) rine) magery (B7) es No | Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Other (Explain in Remarks) | Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) | | |
| High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Observ Surface Water | on (A3) larks (B1) (Nonrivering to Deposits (B2) (Nonriversits (B3) (Nonriversits (B6)) on Vis ble on Aerial Intained Leaves (B9) vations: er Present? Y Present? Y | mriverine) rine) magery (B7) es No es No | Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Other (Explain in Remarks) | Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) | | |
| High Wa Saturation Water M Sedimer Drift Dep Surface Inundation Water-S Field Observ Surface Water Water Table Saturation Pro(includes cap | on (A3) larks (B1) (Nonriverint Deposits (B2) (Nonriverint Deposits (B3) (Nonriverint Soil Cracks (B6) on Visible on Aerial Intained Leaves (B9) vations: er Present? Present? Y resent? Y resent? Y | mriverine) rine) magery (B7) es No es No es No | Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Other (Explain in Remarks) | Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No | | |
| High Wa Saturation Water M Sedimer Drift Dep Surface Inundation Water-S Field Observ Surface Water Water Table Saturation Pro(includes cap | on (A3) larks (B1) (Nonriverint Deposits (B2) (Nonriverint Deposits (B3) (Nonriverint Soil Cracks (B6) on Visible on Aerial Intained Leaves (B9) vations: er Present? Present? Y resent? Y resent? Y | mriverine) rine) magery (B7) es No es No es No | Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Other (Explain in Remarks) | Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No | | |
| High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Observ Surface Water Vater Table Saturation Pr (includes cap | on (A3) larks (B1) (Nonriverint Deposits (B2) (Nonriverint Deposits (B3) (Nonriverint Soil Cracks (B6) on Visible on Aerial Intained Leaves (B9) vations: er Present? Present? Y resent? Y resent? Y | mriverine) rine) magery (B7) es No es No es No | Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Other (Explain in Remarks) | Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No | | |
| High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Obsert Surface Water Water Table Saturation Pr (includes cap Describe Rec | on (A3) larks (B1) (Nonriverint Deposits (B2) (Nonriverint Deposits (B3) (Nonriverint Deposits (B3) (Nonriverint Deposits (B6) (N | magery (B7) magery (B7) es No es No gauge, monit | Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): Depth (inches): 14 | Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) g Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) gs (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No ons), if available: | | |
| High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Obsert Surface Water Water Table Saturation Pr (includes cap Describe Rec | on (A3) larks (B1) (Nonriverint Deposits (B2) (Nonriverint Deposits (B3) (Nonriverint Deposits (B3) (Nonriverint Deposits (B6) (N | magery (B7) magery (B7) es No es No gauge, monit | Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Other (Explain in Remarks) | Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) g Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) gs (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No ons), if available: | | |
| High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Observ Surface Water Water Table Saturation Pr (includes cap Describe Rec | on (A3) larks (B1) (Nonriverint Deposits (B2) (Nonriverint Deposits (B3) (Nonriverint Deposits (B3) (Nonriverint Deposits (B6) (N | magery (B7) magery (B7) es No es No gauge, monit | Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): Depth (inches): 14 | Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No Dons), if available: | | |

WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 19



Sample Point 19

| Project/Site: WDC Phase II | (| City/Cour | Sampling Date: 2024-05-14 | | |
|---|---------------------|-------------|-------------------------------|---|---|
| Applicant/Owner: UDOT | | | | State: Utah | Sampling Point: SP20 |
| Investigator(s): Cara Glabau, Elena Capson | ; | Section, | Township, Ra | nge: S05 T4N R2W | |
| | | | | | e Slope (%): 0 |
| Subregion (LRR): D 28A | Lat: 41. | 11066 | | Long: -112.1003285 | Datum: NAD83_201 |
| Soil Map Unit Name: Fb - Ford loam, shallow water | r table, 0 to | 1 perce | ent slopes | NWI classific | cation: None |
| Are climatic / hydrologic conditions on the site typical for t | his time of yea | ar? Yes | No | (If no, explain in R | Remarks.) |
| Are Vegetation, Soil, or Hydrology | | | | | oresent? Yes <u> </u> |
| Are Vegetation, Soil, or Hydrology | | | | eeded, explain any answe | |
| SUMMARY OF FINDINGS – Attach site map | | | | | |
| Hydrophytic Vegetation Present? Yes | No | la | the Commission | I Avon | |
| Hydric Soil Present? Yes | No | | the Sampled ithin a Wetlar | | No |
| Wetland Hydrology Present? Yes | No | | Timir a Wellar | 103 | |
| Conditions were wetter than normal according to the antece depression likely holds stormwater runoff for short periods of | | | | | |
| enough to develop hydric soils. Due to the lack of hydric soil | <u> </u> | s area is r | not a wetland. | | |
| VEGETATION – Use scientific names of pla | | | | | |
| Tree Stratum (Plot size:) | Absolute % Cover | | int Indicator Status | Dominance Test work | |
| 1 | | | | Number of Dominant S That Are OBL, FACW, | |
| 2 | | | | Total Number of Domin | nant |
| 3 | | | | Species Across All Stra | ^ |
| 4 | | | | Percent of Dominant S | pecies |
| Sapling/Shrub Stratum (Plot size:) | | = Total (| Cover | That Are OBL, FACW, | or FAC: 100.00 (A/B) |
| 1 | | | | Prevalence Index wor | ksheet: |
| 2. | | | | Total % Cover of: | Multiply by: |
| 3 | | | | | x 1 = 0 |
| 4 | | | | FACW species 90 | |
| 5 | | | | | x 3 = 0 |
| Herb Stratum (Plot size:) | | = Total (| Cover | · · | x 4 = 0 |
| 1. Phalaris arundinacea | 58 | v | FACW | UPL species 8 Column Totals: 98 | $x = \frac{40}{(A)}$ (B) |
| 2. Juncus balticus | 32 | ~ | FACW | Column Totals. Column | (A) <u>220</u> (B) |
| 3. Thinopyrum intermedium | 8 | | UPL | Prevalence Index | = B/A = <u>2.24</u> |
| 4 | | | | Hydrophytic Vegetation | on Indicators: |
| 5 | | | | ✓ Dominance Test is | |
| 6 | | | | Prevalence Index i | |
| 7 | | | | | ptations ¹ (Provide supporting s or on a separate sheet) |
| 8 | 98 | | | | phytic Vegetation ¹ (Explain) |
| Woody Vine Stratum (Plot size:) | 90 | = Total (| Cover | | |
| 1 | | | | | il and wetland hydrology must |
| 2 | | | | be present, unless distr | urbed or problematic. |
| | | = Total (| Cover | Hydrophytic Vegetation | |
| % Bare Ground in Herb Stratum % Cov | er of Biotic C | rust | | Present? Ye | s No |
| Remarks: | | | | 1 | |
| | | | | | |
| | | | | | |
| | | | | | |

| | . ` | to the depti | n needed to document the indicator or c | onnim the abs | ence of indicators.) | | | |
|-------------------------|---|---------------|--|---------------------|---|--|--|--|
| Depth (inches) | Matrix Color (moist) | % | Redox Features Color (moist) % Type ¹ L | oc² Textu | re Remarks | | | |
| 0 - 2 | 10YR 3/1 | 100 | | Clay Lo | | | | |
| 2 - 16 | 10YR 4/2 | 100 | | Clay | | | | |
| 16 - 24 | 10YR 5/3 | 100 | | Clay | | | | |
| 10 24 | 10111 0/0 | | | <u> </u> | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | _ | | | | | | | |
| | | | | | <u> </u> | | | |
| ¹ Type: C=Co | oncentration, D=Dep | oletion, RM=F | Reduced Matrix, CS=Covered or Coated Sa | and Grains. | ² Location: PL=Pore Lining, M=Matrix. | | | |
| Hydric Soil I | ndicators: (Applic | able to all L | .RRs, unless otherwise noted.) | Indica | ators for Problematic Hydric Soils ³ : | | | |
| Histosol | | | Sandy Redox (S5) | | cm Muck (A9) (LRR C) | | | |
| | ipedon (A2) | | Stripped Matrix (S6) | | cm Muck (A10) (LRR B) | | | |
| Black His | ` ' | | Loamy Mucky Mineral (F1) | | Reduced Vertic (F18) | | | |
| | n Sulfide (A4) | 0 \ | Loamy Gleyed Matrix (F2) | | Red Parent Material (TF2) | | | |
| | Layers (A5) (LRR | () | Depleted Matrix (F3) | | Other (Explain in Remarks) | | | |
| | ck (A9) (LRR D) I Below Dark Surfac | ο (Λ11) | Redox Dark Surface (F6)Depleted Dark Surface (F7) | | | | | |
| - | irk Surface (A12) | C (ATT) | Redox Depressions (F8) | ³ Indic | ators of hydrophytic vegetation and | | | |
| | lucky Mineral (S1) | | Vernal Pools (F9) | | tland hydrology must be present, | | | |
| - | leyed Matrix (S4) | | | | ess disturbed or problematic. | | | |
| | ayer (if present): | | | | р | | | |
| Type: | | | | | | | | |
| Depth (inc | ches): | | | Hydric | Soil Present? Yes No | | | |
| Remarks: | | | | , , , | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| HYDROLO | | | | | | | | |
| Wetland Hyd | drology Indicators: | | | | | | | |
| Primary Indic | ators (minimum of o | one required; | check all that apply) | | Secondary Indicators (2 or more required) | | | |
| Surface | Water (A1) | | Salt Crust (B11) | <u>-</u> | Water Marks (B1) (Riverine) | | | |
| High Wa | ter Table (A2) | | Biotic Crust (B12) | _ | Sediment Deposits (B2) (Riverine) | | | |
| ✓ Saturation | on (A3) | | Aquatic Invertebrates (B13) | _ | Drift Deposits (B3) (Riverine) | | | |
| Water Ma | arks (B1) (Nonriver | ine) | Hydrogen Sulfide Odor (C1) | | Drainage Patterns (B10) | | | |
| | t Deposits (B2) (No | | Oxidized Rhizospheres along Livir | | | | | |
| | osits (B3) (Nonrive | | Presence of Reduced Iron (C4) | | Crayfish Burrows (C8) | | | |
| - | Soil Cracks (B6) | - / | Recent Iron Reduction in Tilled Sc | | Saturation Visible on Aerial Imagery (C9) | | | |
| | on Vis ble on Aerial | Imagery (B7) | | . , | Shallow Aquitard (D3) | | | |
| | tained Leaves (B9) | | Other (Explain in Remarks) | - | FAC-Neutral Test (D5) | | | |
| Field Observ | | | | | | | | |
| Surface Water | | ′es N | o Depth (inches): | | | | | |
| Water Table | | | o Pepth (inches): | | | | | |
| Saturation Pr | | | o Depth (inches): 3 | Wetland Hydr | rology Present? Yes No | | | |
| (includes cap | | CS IN | U Deptil (iliches). U | wetiana riyar | ology r resent: res No | | | |
| | | gauge, mor | nitoring well, aerial photos, previous inspec | tions), if availabl | le: | | | |
| | | | | | | | | |
| Remarks: | | | | | | | | |
| | | | | | | | | |
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WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 20



Sample Point 20

| Project/Site: WDC Phase II | C | ity/County: Davis | County | Sampling Date: 2024-05-14 | | |
|--|-------------------------------|----------------------------------|--------------------------------------|---|--|--|
| Applicant/Owner: UDOT | | State: Utah Sampling Point: SP21 | | | | |
| Investigator(s): Merissa Davis | S | ection, Township, F | Range: S05 T4N R2W | | | |
| Landform (hillslope, terrace, etc.): Depression | | | | e Slope (%): 1 | | |
| Subregion (LRR): D 28A | Lat: _ 41.1 | 0992525 | Long: -112.0988596 | Datum: NAD83_201 | | |
| Soil Map Unit Name: Fb - Ford Ioam, shal | low water table, 0 to 1 | percent slopes | NWI classific | cation: None | | |
| Are climatic / hydrologic conditions on the site | typical for this time of year | ? Yes No | (If no, explain in R | demarks.) | | |
| Are Vegetation, Soil, or Hydrol | ogy significantly d | sturbed? Are | e "Normal Circumstances" p | oresent? Yes No | | |
| Are Vegetation, Soil, or Hydrol | ogy naturally prob | lematic? (If | needed, explain any answe | ers in Remarks.) | | |
| SUMMARY OF FINDINGS - Attach | site map showing s | sampling point | locations, transects | s, important features, etc. | | |
| | 4 | | <u> </u> | · · · | | |
| | s | Is the Sample | | | | |
| | s <u>/</u> No | within a Wetl | and? Yes | No | | |
| Remarks: | <u> </u> | | | | | |
| Conditions were wetter than no | ormal according to | the anteced | lent precipitation t | ool but there had not | | |
| been rain for several days prior | • | | one proofpitation to | ooi, but there much not | | |
| VEGETATION – Use scientific nam | | | | | | |
| VEGETATION – OSE SCIENTING Ham | | Dominant Indicator | Dominance Test work | sheet: | | |
| Tree Stratum (Plot size:) | | Species? Status | | | | |
| 1 | | | _ That Are OBL, FACW, | | | |
| 2. | | | Total Number of Domin | | | |
| 3 | | | _ Species Across All Stra | ata: <u>4</u> (B) | | |
| 4 | | = Total Cover | Percent of Dominant Sp | | | |
| Sapling/Shrub Stratum (Plot size: | | - Total Gover | That Are OBL, FACW, | or FAC: 100.00 (A/B) | | |
| 1 | | | Prevalence Index wor | | | |
| 2 | | | Total % Cover of: | | | |
| 3 | | | OBL species 0 FACW species 88 | x 1 = 0 x 2 = 176 | | |
| 4 | | | <u> </u> | x 3 = 30 | | |
| | | = Total Cover | _ | x 4 = 0 | | |
| Herb Stratum (Plot size:) | 25 | - FACW | UPL species 0 | x 5 = <u>0</u> | | |
| Phalaris arundinacea Phragmites australis | <u>25</u> 15 | FACW FACW | - Column Totals: 98 | (A) <u>206</u> (B) | | |
| 3. Carex praegracilis | | FACW FACW | Prevalence Index | = B/A = 2.10 | | |
| 4. Conium maculatum | <u></u> | ✓ FACW | Hydrophytic Vegetation | | | |
| 5. Dipsacus fullonum | 10 | FAC | <u>✓</u> Dominance Test is | >50% | | |
| 6. Juncus balticus | 10 | FACW | Prevalence Index is | | | |
| 7. Mentha arvensis | 8 | FACW | | ptations ¹ (Provide supporting s or on a separate sheet) | | |
| 8 | | | | phytic Vegetation ¹ (Explain) | | |
| Woody Vine Stratum (Plot size: | | = Total Cover | - | | | |
| 1 | | | | il and wetland hydrology must | | |
| 2. | | | be present, unless distu | urbed or problematic. | | |
| | : | = Total Cover | Hydrophytic Vegetation | | | |
| % Bare Ground in Herb Stratum | % Cover of Biotic Cru | ıst | Present? Yes | s No | | |
| Remarks: | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| | cription. (Describe | to the depth in | eeaea to aocun | nent the i | ndicator | or confirn | n the absence | of indicators.) |
|---|---|--|---|--|--|------------------|--|---|
| Depth | Matrix | | | x Feature | 3 | | | |
| (inches) | Color (moist) | | Color (moist) | | Type ¹ | Loc ² | Texture | Remarks |
| 0 - 8 | 10YR 3/2 | 100 | | | | | Silt Loam | |
| 8 - 20 | 7.5YR 3/1 | 100 | | | | | Clay | |
| - | | | | | | | | |
| - | | | | | | | | |
| _ | | | | | | | | |
| | | | | · | | - | | |
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| | | | | | | | | |
| | | | | | | | | |
| • | concentration, D=De | | | | | d Sand G | | cation: PL=Pore Lining, M=Matrix. |
| - | Indicators: (Applie | cable to all LRF | | | ea.) | | | for Problematic Hydric Soils ³ : |
| Histosol | ı (A1) pipedon (A2) | | Sandy Redomerated Stripped Ma | | | | | /luck (A9) (LRR C) /luck (A10) (LRR B) |
| | istic (A3) | | Suipped Mac | | I (F1) | | | ed Vertic (F18) |
| Hydrogen Sulfide (A4) | | | Loamy Gley | - | | | | arent Material (TF2) |
| | d Layers (A5) (LRR | Depleted M | | ` , | | | (Explain in Remarks) | |
| | uck (A9) (LRR D) | | Redox Dark | | | | | |
| | d Below Dark Surfac | ce (A11) | Depleted Da | | | | 31 11 1 | |
| | ark Surface (A12) | Redox Depressions (F8) | | | | | of hydrophytic vegetation and hydrology must be present, | |
| Sandy Mucky Mineral (S1) Vernal Pools (F9) Sandy Gleyed Matrix (S4) | | | | | | | | isturbed or problematic. |
| | Layer (if present): | | | | | | | |
| Type: | | | _ | | | | | |
| Depth (in | iches): | | = | | | | Hydric Soil | Present? Yes No |
| Remarks: Soil pit r | not deep end | ough to co | nfirm depl | eted n | natrix. | Thick | dark surf | ace assumed. |
| | | | | | | | | |
| | | | | | | | | |
| HYDROLO | GY | | | | | | | |
| | OGY drology Indicators | : | | | | | | |
| Wetland Hy | | | eck all that apply | y) | | | Secor | ndary Indicators (2 or more required) |
| Wetland Hy | rdrology Indicators cators (minimum of | | eck all that appl | | | | | ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) |
| Wetland Hy Primary Indi V Surface | rdrology Indicators cators (minimum of | | | (B11) | | | v | |
| Wetland Hy Primary Indi V Surface | rdrology Indicators cators (minimum of Water (A1) ater Table (A2) | | Salt Crust | (B11) st (B12) | s (B13) | | v s | Vater Marks (B1) (Riverine) |
| Wetland Hy Primary Indi ✓ Surface ✓ High Wa ✓ Saturati — Water M | cators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonrive | one required; ch | Salt Crust Biotic Crust Aquatic Inv | (B11) st (B12) vertebrate Sulfide Od | dor (C1) | | v s d | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rrainage Patterns (B10) |
| Wetland Hy Primary Indi ✓ Surface ✓ High Wa ✓ Saturati | rdrology Indicators cators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonrive nt Deposits (B2) (No | one required; ch rine) onriverine) | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F | (B11) st (B12) vertebrate Sulfide Oc | dor (C1) res along | _ | V S D D ots (C3) D | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) virift Deposits (B3) (Riverine) virainage Patterns (B10) viry-Season Water Table (C2) |
| Wetland Hy Primary Indi ✓ Surface ✓ High Wa ✓ Saturati Water M Sedime Drift De | rdrology Indicators cators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonrive nt Deposits (B2) (No | one required; ch rine) onriverine) | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Presence | (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce | dor (C1) res along d Iron (C4 | ·) | V S C C ots (C3) C | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rrainage Patterns (B10) rry-Season Water Table (C2) rrayfish Burrows (C8) |
| Primary Indi Surface High Wa Saturati Water N Sedime Drift De Surface | rdrology Indicators cators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) | one required; ch rine) onriverine) erine) | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro | (B11) st (B12) vertebrate Sulfide Oo Rhizosphe of Reduce n Reducti | dor (C1) res along d Iron (C4 on in Tilled | ·) | V S C C ots (C3) C C | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) rry-Season Water Table (C2) trayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) |
| Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Surface Inundati | rdrology Indicators cators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Vis ble on Aerial | one required; cherine) porriverine) erine) Imagery (B7) | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Thin Muck | (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce n Reducti Surface (| dor (C1) res along d Iron (C4 on in Tilled C7) | ·) | V S C C C C C C S S | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) virift Deposits (B3) (Riverine) virinage Patterns (B10) viry-Season Water Table (C2) virayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) |
| Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Surface Inundati Water-S | rdrology Indicators cators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Vis ble on Aerial Stained Leaves (B9) | one required; cherine) porriverine) erine) Imagery (B7) | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro | (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce n Reducti Surface (| dor (C1) res along d Iron (C4 on in Tilled C7) | ·) | V S C C C C C C S S | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) rry-Season Water Table (C2) trayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) |
| Wetland Hy Primary Indi ✓ Surface ✓ High Wa ✓ Saturati — Water M — Sedime — Drift De — Surface — Inundati — Water-S Field Obser | rdrology Indicators cators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Vis ble on Aerial Stained Leaves (B9) rvations: | one required; ch | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Presence G Recent Iro Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce in Reducti Surface (blain in Re | dor (C1) res along d Iron (C4 on in Tilled C7) | ·) | V S C C C C C C S S | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) rry-Season Water Table (C2) rrayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) |
| Wetland Hy Primary Indi ✓ Surface ✓ High Wa ✓ Saturati — Water M — Sedime — Drift De — Surface — Inundati — Water-S Field Obser Surface Wat | rdrology Indicators cators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Vis ble on Aerial Stained Leaves (B9) rvations: ter Present? | rine) conriverine) erine) Imagery (B7) | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Presence C Recent Iro Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide Oo Rhizosphe of Reduce in Reducti Surface (blain in Re ches): 0 | dor (C1) res along d Iron (C4 on in Tilled C7) | ·) | V S C C C C C C S S | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) rry-Season Water Table (C2) rrayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) |
| Wetland Hy Primary Indi ✓ Surface ✓ High Wa ✓ Saturati — Water Management — Drift De — Surface — Inundati — Water-S Field Obser Surface Water Table | rdrology Indicators cators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Vis ble on Aerial Stained Leaves (B9) rvations: ter Present? | rine) prine) priverine) erine) Imagery (B7) Yes No _ Yes No _ | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce in Reducti Surface (blain in Re ches): 0 ches): 4 | dor (C1) res along d Iron (C4 on in Tilled C7) | d Soils (Co | V C C C C C S S S | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) virift Deposits (B3) (Riverine) virinage Patterns (B10) viry-Season Water Table (C2) virayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5) |
| Wetland Hy Primary Indi ✓ Surface ✓ High Wa ✓ Saturati — Water Magnetic — Drift De — Surface — Inundati — Water-S Field Obser Surface Water Table Saturation P | rdrology Indicators cators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Vis ble on Aerial Stained Leaves (B9) rvations: ter Present? | rine) prine) priverine) erine) Imagery (B7) Yes No _ Yes No _ | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Presence C Recent Iro Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce in Reducti Surface (blain in Re ches): 0 ches): 4 | dor (C1) res along d Iron (C4 on in Tilled C7) | d Soils (Co | V C C C C C S S S | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) rry-Season Water Table (C2) rrayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) |
| Wetland Hy Primary Indi ✓ Surface ✓ High Wa ✓ Saturati — Water Magnetic — Drift De — Surface — Inundati — Water-S Field Obser Surface Water Table Saturation P (includes ca | rdrology Indicators cators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Vis ble on Aerial Stained Leaves (B9) rvations: ter Present? Present? | rine) ponriverine) erine) Imagery (B7) Yes No Yes No Yes No | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Thin Muck Other (Exp Depth (inc | (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce in Reducti Surface (blain in Re ches): 0 ches): 0 | dor (C1) res along d Iron (C4 on in Tilled C7) marks) | d Soils (Co | V S D ots (C3) D C3 S S | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) virift Deposits (B3) (Riverine) virinage Patterns (B10) viry-Season Water Table (C2) virayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5) |
| Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes ca | rdrology Indicators cators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonrive int Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Vis ble on Aerial Stained Leaves (B9) rvations: ter Present? Present? | rine) ponriverine) erine) Imagery (B7) Yes No Yes No Yes No | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Thin Muck Other (Exp Depth (inc | (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce in Reducti Surface (blain in Re ches): 0 ches): 0 | dor (C1) res along d Iron (C4 on in Tilled C7) marks) | d Soils (Co | V S D ots (C3) D C3 S S | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) virift Deposits (B3) (Riverine) virinage Patterns (B10) viry-Season Water Table (C2) virayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5) |
| Wetland Hy Primary Indi Surface High Wa Saturati Water N Sedime Drift De Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes ca Describe Re | rdrology Indicators cators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Vis ble on Aerial Stained Leaves (B9) rvations: ter Present? Present? Present? pillary fringe) ecorded Data (stream | rine) prine) priverine) lmagery (B7) Yes No Yes No Yes No n gauge, monito | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Thin Muck Other (Exp Depth (inc Depth (inc | (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce in Reducti Surface (blain in Re ches): 0 ches): 0 photos, pr | dor (C1) res along d Iron (C4 on in Tilled C7) marks) | d Soils (Co | V S D ots (C3) D C3 S S | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) virift Deposits (B3) (Riverine) virinage Patterns (B10) viry-Season Water Table (C2) virayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5) |
| Wetland Hy Primary Indi Surface High Wa Saturati Water N Sedime Drift De Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes ca Describe Re | rdrology Indicators cators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonrive int Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Vis ble on Aerial Stained Leaves (B9) rvations: ter Present? Present? | rine) prine) priverine) lmagery (B7) Yes No Yes No Yes No n gauge, monito | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Thin Muck Other (Exp Depth (inc Depth (inc | (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce in Reducti Surface (blain in Re ches): 0 ches): 0 photos, pr | dor (C1) res along d Iron (C4 on in Tilled C7) marks) | d Soils (Co | V S D ots (C3) D C3 S S | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) virift Deposits (B3) (Riverine) virinage Patterns (B10) viry-Season Water Table (C2) virayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5) |
| Wetland Hy Primary Indi Surface High Wa Saturati Water N Sedime Drift De Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes ca Describe Re | rdrology Indicators cators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Vis ble on Aerial Stained Leaves (B9) rvations: ter Present? Present? Present? pillary fringe) ecorded Data (stream | rine) prine) priverine) lmagery (B7) Yes No Yes No Yes No n gauge, monito | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Thin Muck Other (Exp Depth (inc Depth (inc | (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce in Reducti Surface (blain in Re ches): 0 ches): 0 photos, pr | dor (C1) res along d Iron (C4 on in Tilled C7) marks) | d Soils (Co | V S D ots (C3) D C3 S S | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) virift Deposits (B3) (Riverine) virinage Patterns (B10) viry-Season Water Table (C2) virayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5) |

WDC SR-177, SR-193 to 1800 NorthUDOT



Sample Point 21



Sample Point 21

| Project/Site: WDC Phase II | | | City/Co | _{unty:} <u>Davis C</u> | ounty | | Sampling | Date: 202 | 4-05-14 |
|--|--------------------|---------------------|----------|---------------------------------|-------------------------------|--------------|---------------------|-------------------------------|--------------|
| Applicant/Owner: UDOT | | | | | State: <u>L</u> | Jtah | Sampling | Point: SP2 | 2 |
| Investigator(s): Merissa Davis | | | Section | ı, Township, Ra | nge: S05 T4N | I R2W | | | |
| Landform (hillslope, terrace, etc.): Slope | | | | | convex, none): | | | Slope (% | 6): <u>5</u> |
| Subregion (LRR): D 28A | | Lat: 41. | 11001 | 003 | _ Long: -112.0 | 987428 | 3 | _ Datum: N | IAD83_20 |
| Soil Map Unit Name: PaD - Parleys Ic | am, 6 to 10 ¡ | percent slop | es | | NW | /I classific | cation: Nor | ne | |
| Are climatic / hydrologic conditions on the | e site typical for | r this time of yea | ar? Ye: | s No _ | (If no, ex | plain in R | Remarks.) | | |
| Are Vegetation, Soil, or F | | | | | "Normal Circum | | | es 🗸 | No |
| Are Vegetation, Soil, or F | | | | | eeded, explain a | | | | |
| SUMMARY OF FINDINGS – At | | | | | • | • | | ŕ | res, etc |
| | | | | 31 | | | ., | | |
| Hydrophytic Vegetation Present? Hydric Soil Present? | Yes | No | | Is the Sampled | | | | | |
| Wetland Hydrology Present? | | No | 1 | within a Wetla | nd? | Yes | No _ | | |
| Remarks: | | | | | | | | | |
| Conditions were wetter tha | n normal a | according | to the | antecede | nt precipit | ation t | ool but | there h | ad not |
| been rain for several days p | | • | | anteced | one precipit | ation | ooi, but | there in | ad Hot |
| | | | | | | | | | |
| VEGETATION – Use scientific | names of p | | | | | | | | |
| Tree Stratum (Plot size: |) | Absolute % Cover | | nant Indicator es? Status | Dominance 1 | | | | |
| 1 | | | | | Number of Do That Are OBL | | or FAC: | 1 | (A) |
| 2. | | | | | Total Number | of Domin | | | _ ` ` / |
| 3 | | | | | Total Number Species Acros | | | 1 | (B) |
| 4 | | | | | Percent of Do | minant S | necies | | |
| Capling/Chruh Ctratum /Diet size: | , | | _ = Tota | l Cover | That Are OBL | | | 100.00 | (A/B) |
| Sapling/Shrub Stratum (Plot size: | | | | | Prevalence I | ndex wor | ksheet: | | |
| 1 2 | | | | | Total % C | | | Multiply by: | |
| 3. | | | | | OBL species | | x 1 | | |
| 4 | | | | | FACW specie | | | | <u> </u> |
| 5. | | | | | FAC species | | | = 45 | |
| | | | _ = Tota | l Cover | FACU species | s <u>0</u> | | = 0 | |
| Herb Stratum (Plot size: |) | 65 | , | FACW | UPL species | 0 | | = 0 | |
| 2. Dipsacus fullonum | | <u>05</u> 15 | | FAC | Column Total | s: <u>90</u> | (A) | 195 | (B) |
| 3. Conium maculatum | | 10 | | FACW | Prevale | nce Index | x = B/A = _2 | 2.16 | |
| 4 | | | | <u> </u> | Hydrophytic | | | | |
| 5. | | | | | <u>✓</u> Dominan | ce Test is | s >50% | | |
| 6. | | | | | Prevalen | ce Index i | s ≤3.0 ¹ | | |
| 7 | | | | | | | | Provide supp | |
| 8 | | | | | | | | eparate shee etation¹ (Exp | |
| Manaka Vina Obrahama (Diakaina | , | 90 | _ = Tota | I Cover | FIODIEIIIA | alic Hydro | priylic vege | ıalıon (⊏x | лапт) |
| Woody Vine Stratum (Plot size: | | | | | ¹ Indicators of | hydric so | il and wetla | nd hydrolog | v must |
| 1 2 | | | | | be present, u | | | | y maor |
| 2. | | | | | Hydrophytic | | | | |
| 0/ Dana Cray and in Haub Charley | 0/ 0- | | _ | | Vegetation | Va | - / | N | |
| % Bare Ground in Herb Stratum | % Co | over of Blotic C | rust | | Present? | Ye | es | No | |
| Remarks: | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| Profile Desc | cription: (Describ | e to the depth | needed to docu | ment the i | ndicator | or confirm | the absence of i | indicators.) |
|---------------|---|--------------------|-------------------------|-------------|-------------------|------------------|------------------------------|---|
| Depth | Matrix | | | x Feature | | | | |
| (inches) | Color (moist) | | Color (moist) | % | Type ¹ | Loc ² | Texture | Remarks |
| 0 - 18 | 5Y 4/2 | 100 | | | | | Silty Clay | |
| - | | | | | | | | |
| - | | | | | | | | |
| - | | | | | | | | |
| | | | | | | | | _ |
| | - | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | oncentration, D=De | | | | | ed Sand Gr | | on: PL=Pore Lining, M=Matrix. |
| Hydric Soil | Indicators: (Appl | cable to all LF | RRs, unless othe | rwise not | ed.) | | Indicators for | Problematic Hydric Soils ³ : |
| Histosol | • • | | Sandy Red | | | | | k (A9) (LRR C) |
| - | pipedon (A2) | | Stripped M | | | | | k (A10) (LRR B) |
| | Black Histic (A3) Hydrogen Sulfide (A4) | | | cky Minera | | | | Vertic (F18) |
| | , , | (C) | Loamy Gle | - | (F2) | | | nt Material (TF2) |
| | d Layers (A5) (LRR uck (A9) (LRR D) | (C) | Depleted M Redox Dar | | E6) | | Other (Exp | olain in Remarks) |
| | d Below Dark Surfa | ice (A11) | Depleted D | | , | | | |
| - | ark Surface (A12) | (, , , , , | Redox Dep | | | | ³ Indicators of h | nydrophytic vegetation and |
| | Mucky Mineral (S1) | | Vernal Poo | | , | | | rology must be present, |
| Sandy G | Sandy Gleyed Matrix (S4) | | | | | | unless distu | rbed or problematic. |
| Restrictive | Layer (if present): | | | | | | | |
| Type: | | | | | | | | |
| Depth (in | ches): | | | | | | Hydric Soil Pre | esent? Yes No |
| Remarks: | | | | | | | | |
| Value to | o high to qu | alify for " | thick dark | curfac | ۳۵ | | | |
| Value to | o nign to qu | iailiy ioi | tilick dark | Surrac | С. | | | |
| | | | | | | | | |
| HYDROLO | GY | | | | | | | |
| Wetland Hy | drology Indicators | S: | | | | | | |
| Primary India | cators (minimum of | one required; | check all that app | ly) | | | Secondar | ry Indicators (2 or more required) |
| ✓ Surface | Water (A1) | | Salt Crust | (B11) | | | Wate | er Marks (B1) (Riverine) |
| High Wa | ater Table (A2) | | Biotic Cru | st (B12) | | | · | ment Deposits (B2) (Riverine) |
| ✓ Saturation | | | Aquatic In | | s (B13) | | | Deposits (B3) (Riverine) |
| Water M | Marks (B1) (Nonrive | erine) | Hydrogen | Sulfide O | dor (C1) | | Drain | nage Patterns (B10) |
| Sedimer | nt Deposits (B2) (N | onriverine) | Oxidized I | Rhizosphe | res along | Living Roc | ots (C3) Dry-S | Season Water Table (C2) |
| Drift Dep | posits (B3) (Nonriv | erine) | Presence | of Reduce | d Iron (C4 | 1) | Cray | fish Burrows (C8) |
| Surface | Soil Cracks (B6) | | Recent Iro | n Reducti | on in Tille | d Soils (C6 | S) Satur | ration Visible on Aerial Imagery (C9) |
| Inundati | on Vis ble on Aeria | I Imagery (B7) | Thin Mucl | Surface (| C7) | | Shall | ow Aquitard (D3) |
| Water-S | stained Leaves (B9) |) | Other (Ex | plain in Re | marks) | | FAC- | Neutral Test (D5) |
| Field Obser | | | | | | | | |
| Surface Wat | er Present? | Yes No | Depth (in | ches): 0 | | | | |
| Water Table | | | Depth (in | | | | | |
| Saturation P | resent? | Yes No | Depth (in | ches): 0 | | Wetla | and Hydrology Pı | resent? Yes No |
| | pillary fringe) corded Data (strea | m daudo moni | toring well porial | nhotos er | evieus inc | nections) | if available: | |
| Describe Re | corded Data (Strea | iii gauge, iiioiii | toring well, aerial | priotos, pr | evious ilis | pections), | ii avaliable. | |
| Demonstra | | | | | | | | |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

WDC SR-177, SR-193 to 1800 NorthUDOT



Sample Point 22



Sample Point 22

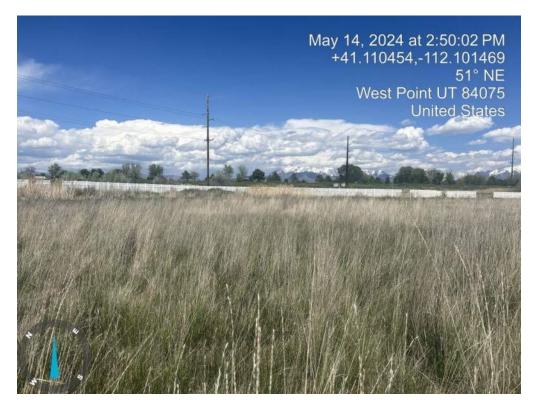
| Project/Site: WDC Phase II | (| City/County | y: Davis C | ounty | _ Sampling Date: 2024- | 05-14 |
|--|---------------------|-------------|--------------|--|---|------------|
| Applicant/Owner: UDOT | | | | State: Utah | Sampling Point: SP23 | |
| Investigator(s): Cara Glabau, Elena Capson | ; | Section, To | ownship, Ra | ange: S05 T4N R2W | | |
| Landform (hillslope, terrace, etc.): Depression | | Local relie | ef (concave, | convex, none): Concav | ve Slope (%): | 0 |
| Subregion (LRR): D 28A | Lat: 41. | 1105413 | 3 | _ Long: -112.1011866 | Datum: NAD | D83_201′ |
| Soil Map Unit Name: WgA - Warm Springs fine sar | ndy loam, saline | e, sodic, (| 0 to 1 perce | ent slopes NWI classifi | cation: None | |
| Are climatic / hydrologic conditions on the site typical for | or this time of yea | ar? Yes _ | No _ | (If no, explain in F | Remarks.) | |
| Are Vegetation, Soil, or Hydrology | significantly | disturbed? | Are | "Normal Circumstances" | present? Yes No | o <u> </u> |
| Are Vegetation, Soil, or Hydrology | naturally pro | blematic? | (If ne | eeded, explain any answe | ers in Remarks.) | |
| SUMMARY OF FINDINGS - Attach site m | nap showing | samplir | ng point l | ocations, transects | s, important feature | s, etc. |
| Hydrophytic Vegetation Present? Yes | No | | | | | |
| Hydric Soil Present? Yes | No | | he Sampled | | , | |
| | No | with | hin a Wetla | nd? Yes | No | |
| Remarks: | | | | | | |
| Conditions were wetter than normal | according t | o the a | intecede | ent precipitation t | tool, but there had | d not |
| been rain for several days prior to th | • | | | р. с с.р. са | | |
| VEGETATION – Use scientific names of p | | | | | | |
| VEGETATION - 03e scientific flames of p | Absolute | Dominan | t Indicator | Dominance Test worl | ksheet: | |
| Tree Stratum (Plot size:) | % Cover | | | Number of Dominant S | | |
| 1 | | | | That Are OBL, FACW, | | (A) |
| 2 | | - | | Total Number of Domin | | |
| 3 | | | | Species Across All Stra | ata: <u>3</u> | (B) |
| 4 | | | | Percent of Dominant S | | |
| Sapling/Shrub Stratum (Plot size:) | | = Total Co | ovei | That Are OBL, FACW, | or FAC: <u>66.66</u> | (A/B) |
| 1 | | | | Prevalence Index wo | rksheet: | |
| 2 | | - | | Total % Cover of: | | _ |
| 3 | | | | | x 1 = 0 | _ |
| 4 | | | | FACW species 25 FAC species 42 | x 2 = 30 x 3 = 126 | _ |
| 5 | | = Total Co | over | | x 4 = 0 | _ |
| Herb Stratum (Plot size:) | - | - Total Ct | ovei | UPL species 33 | x 5 = 165 | _ |
| 1. Distichlis spicata | 42 | | FAC | Column Totals: 100 | | (B) |
| 2. Thinopyrum intermedium | 33 | | UPL | | | _ , , |
| 3. Juncus balticus | 25 | | FACW | Prevalence Index | ' | |
| 4 | | | | Hydrophytic Vegetati Dominance Test is | | |
| 5 | | | | Prevalence Index | | |
| 6 | | | | | aptations ¹ (Provide suppor | rting |
| 8 | | | | data in Remark | ks or on a separate sheet) | |
| 0. | 400 | = Total Co | | Problematic Hydro | ophytic Vegetation ¹ (Explai | in) |
| Woody Vine Stratum (Plot size:) | | | | 1 | | |
| 1 | | | | lindicators of hydric so be present, unless dist | oil and wetland hydrology r turbed or problematic. | nust |
| 2 | | | | | | |
| | | | | Hydrophytic Vegetation | | |
| % Bare Ground in Herb Stratum % C | Cover of Biotic Cr | ust | | Present? Ye | es No | |
| Remarks: | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

SOIL

Sampling Point: SP23

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

| Depth | Matrix | | | ox Feature | | . 1 | _ | <u>_</u> . |
|--|--|--|---|--|---|------------------|--|--|
| (inches) | Color (moist) | | Color (moist) | % | Type ¹ | Loc ² | <u>Texture</u> | Remarks |
| 0 - 1 | 2.5YR 2.5/1 | 100 | | | | | Mucky Peat | |
| 1 - 5 | 10YR 3/2 | 100 | | | | | <u>Clay</u> | |
| 5 - 24 | 2.5Y 4/2 | 97 | 7.5YR 5/6 | 3 | С | М | Clay | |
| | | | | | | | | |
| - | | | | | | | | |
| - | | | | | | | | |
| | | | | | _ | | | |
| | | | | | | | | |
| 1T C-C | | | 4-Dadwaad Matrix C | C-C | | | 21 | DI - Dana Linina M-Matrix |
| | | | I=Reduced Matrix, C I LRRs, unless other | | | ea Sana G | | PL=Pore Lining, M=Matrix. bblematic Hydric Soils ³ : |
| Histosol | | ouble to ul | Sandy Red | | iou., | | 1 cm Muck (A | • |
| | pipedon (A2) | | Stripped M | , , | | | 2 cm Muck (A | , , |
| | stic (A3) | | Loamy Mu | | al (F1) | | Reduced Veri | |
| Hydroge | n Sulfide (A4) | | Loamy Gle | - | | | Red Parent M | laterial (TF2) |
| | Layers (A5) (LRR | C) | <u>✓</u> Depleted M | , , | | | Other (Explain | n in Remarks) |
| | ick (A9) (LRR D) d Below Dark Surfa | 00 (411) | Redox Dar Depleted D | | . , | | | |
| | ark Surface (A12) | Ce (ATT) | Depleted L | | | | ³ Indicators of hydr | ophytic vegetation and |
| | fucky Mineral (S1) | | Vernal Poo | | (10) | | • | ngy must be present, |
| - | Bleyed Matrix (S4) | | <u>—</u> | ` , | | | - | d or problematic. |
| Restrictive I | _ayer (if present): | | | | | | | |
| Type: | | | | | | | | |
| Depth (inc | ches): | | | | | | Hydric Soil Prese | nt? Yes <u>'</u> No |
| | | | | | | | | |
| HYDROLO | | | | | | | | |
| | drology Indicators | | | | | | | |
| | cators (minimum of | | | | | | | |
| | | one require | ed; check all that app | | | | | ndicators (2 or more required) |
| | Water (A1) | one require | Salt Crus | t (B11) | | | Water M | arks (B1) (Riverine) |
| High Wa | iter Table (A2) | one require | Salt Crusi | t (B11) st (B12) | (D42) | | Water M | arks (B1) (Riverine) tt Deposits (B2) (Riverine) |
| High Wa | nter Table (A2) on (A3) | | Salt Crus Biotic Cru Aquatic Ir | t (B11) st (B12) overtebrat | | | Water M Sedimer Drift Dep | arks (B1) (Riverine) at Deposits (B2) (Riverine) posits (B3) (Riverine) |
| High Wa Saturation Water M | nter Table (A2) on (A3) larks (B1) (Nonrive | rine) | Salt Crus Biotic Cru Aquatic Ir Hydrogen | t (B11) est (B12) evertebrat Sulfide C | dor (C1) | ı Living Ro | Water M Sedimer Drift Dep | arks (B1) (Riverine) at Deposits (B2) (Riverine) posits (B3) (Riverine) e Patterns (B10) |
| High Wa Saturation Water M Sedimer | nter Table (A2) on (A3) larks (B1) (Nonrive nt Deposits (B2) (N o | rine) onriverine) | Salt Crus Biotic Cru Aquatic Ir Hydrogen Oxidized | t (B11) ist (B12) ivertebrat Sulfide C Rhizosph | odor (C1) eres along | J Living Roo | Water M Sedimer Drift Dep Drainage | arks (B1) (Riverine) at Deposits (B2) (Riverine) assits (B3) (Riverine) at Patterns (B10) at Patterns (B10) at Patterns (B10) |
| High Wa Saturatio Water M Sedimer Drift Dep | on (A3) larks (B1) (Nonrive at Deposits (B2) (Noncive posits (B3) (Nonrive | rine) onriverine) | Salt Crusi Biotic Cru Aquatic Ir Hydrogen Oxidized Presence | t (B11) st (B12) overtebrat Sulfide C Rhizospho of Reduc | odor (C1) eres along ed Iron (C | 4) | Water M Sedimer Drift Dep Drainage ots (C3) Crayfish | arks (B1) (Riverine) at Deposits (B2) (Riverine) at Deposits (B3) (Riverine) at Deposits (B1) (Riverine) at Patterns (B10) |
| High Wa✓ SaturatioWater MSedimerDrift DepSurface | nter Table (A2) on (A3) larks (B1) (Nonrive nt Deposits (B2) (N o | rine) onriverine erine) | Salt Crusi Biotic Cru Aquatic Ir Hydrogen Oxidized Presence Recent Ir | t (B11) st (B12) nvertebrat Sulfide C Rhizospho of Reducton Reducton | Odor (C1) eres along ed Iron (C tion in Tille | - | Water M Sedimer Drift Dep Drainage ots (C3) Crayfish Saturatio | arks (B1) (Riverine) at Deposits (B2) (Riverine) assits (B3) (Riverine) at Patterns (B10) at Patterns (B10) at Patterns (B10) |
| High Wa ✓ Saturatio Water M Sedimer Drift Dep Surface Inundatio | on (A3) larks (B1) (Nonrive on Deposits (B2) (Nonrive on Deposits (B3) (Nonrive Osits (B3) (Nonrive Osits (B6)) | rine) onriverine) erine) Imagery (E | Salt Crus Biotic Cru Aquatic Ir Hydrogen Oxidized Presence Recent Ire | t (B11) ust (B12) uvertebrat u Sulfide C Rhizospho of Reduct the Surface | odor (C1) eres along ed Iron (C tion in Tille (C7) | 4) | Water M Sedimer Drift Dep Drainage ots (C3) Crayfish Saturatio Shallow | arks (B1) (Riverine) at Deposits (B2) (Riverine) at Deposits (B3) (Riverine) at Patterns (B10) at Patterns (B10) at Patterns (B10) at Patterns (B10) at Patterns (C2) but Visible on Aerial Imagery (C9) |
| High Wa ✓ Saturatio Water M Sedimer Drift Dep Surface Inundatio | on (A3) Identify (A2) Identify (A3) Identify | erine) onriverine erine) Imagery (E | Salt Crusi Biotic Cru Aquatic Ir Hydrogen Oxidized Presence Recent Ir Thin Muci | t (B11) ast (B12) avertebrat Sulfide C Rhizospho of Reduct on Reduct k Surface splain in R | odor (C1) eres along ed Iron (C tion in Tille (C7) emarks) | ed Soils (C | Water M Sedimer Drift Dep Drainage ots (C3) Crayfish Saturatio Shallow | arks (B1) (Riverine) at Deposits (B2) (Riverine) posits (B3) (Riverine) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) Aquitard (D3) |
| High Wa Saturation Water M Sedimer Drift Dep Surface Inundation Water-S | on (A3) Inter Table (A2) In (A3) In (A3) In (B1) (Nonrive Int Deposits (B2) (No Int Deposits (B3) (Nonrive Int Cracks (B6) In Vis ble on Aerial Itained Leaves (B9) Invations: In (B2) | erine) ponriverine; erine) Imagery (E | Salt Crusi Biotic Cru Aquatic Ir Hydrogen Oxidized Presence Recent Ir Thin Muci Other (Ex | t (B11) ast (B12) avertebrat Sulfide C Rhizosph of Reduc on Reduc k Surface plain in R | odor (C1) eres along ed Iron (C tion in Tille (C7) emarks) | 4) ed Soils (Co | Water M Sedimer Drift Dep Drainage ots (C3) Crayfish Saturatio Shallow | arks (B1) (Riverine) at Deposits (B2) (Riverine) posits (B3) (Riverine) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) Aquitard (D3) |
| High Wa Saturation Water M Sedimer Drift Dep Surface Inundation Water-S Field Observ | on (A3) arks (B1) (Nonrive at Deposits (B2) (No cosits (B3) (Nonrive cosits (B3) (Nonrive cosits (B6) con Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? | erine) ponriverine) erine) Imagery (E | Salt Crusi Biotic Cru Aquatic Ir Hydrogen Oxidized Presence Recent Ir Thin Muc Other (Ex | t (B11) ust (B12) nvertebrat Sulfide C Rhizosphi of Reduct on Reduct k Surface plain in R | odor (C1) eres along ed Iron (C tion in Tilla (C7) emarks) | ed Soils (Co | Water M Sedimer Drift Dep Drainage ots (C3) Crayfish Saturatio Shallow | arks (B1) (Riverine) at Deposits (B2) (Riverine) posits (B3) (Riverine) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) Aquitard (D3) |
| High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Observ Surface Water | on (A3) arks (B1) (Nonrivent Deposits (B2) (Nonsits (B3) (Nonrivent Cracks (B6)) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? | erine) ponriverine) erine) Imagery (E | Salt Crusi Biotic Cru Aquatic Ir Hydrogen Oxidized Presence Recent Ir Thin Muci Other (Ex | t (B11) ust (B12) nvertebrat Sulfide C Rhizosphi of Reduct on Reduct k Surface plain in R | odor (C1) eres along ed Iron (C tion in Tilla (C7) emarks) | ed Soils (Co | Water M Sedimer Drift Dep Drainage ots (C3) Crayfish Saturatic Shallow FAC-Nei | arks (B1) (Riverine) at Deposits (B2) (Riverine) posits (B3) (Riverine) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) Aquitard (D3) |
| High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Observ Surface Water Water Table Saturation Pr (includes cap | on (A3) arks (B1) (Nonrive at Deposits (B2) (No cosits (B3) (Nonrive cosits (B3) (Nonrive cosits (B6) con Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? resent? | erine) ponriverine) erine) Imagery (E Yes Yes Yes | Salt Crusi Biotic Cru Aquatic Ir Hydrogen Oxidized Presence Recent Ir Thin Muc Other (Ex | t (B11) ust (B12) nvertebrat Sulfide C Rhizosphi of Reduct on Reduct k Surface uplain in R nches): nches): nches): | odor (C1) eres along ed Iron (C tion in Tilla (C7) emarks) | (4) ed Soils (Co | Water M Sedimer Drift Dep Drainage ots (C3) Dry-Sea Crayfish Saturatic Shallow FAC-Net | arks (B1) (Riverine) at Deposits (B2) (Riverine) posits (B3) (Riverine) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) Aquitard (D3) utral Test (D5) |
| High Water M Saturation Water M Sedimer Drift Dep Surface Inundation Water-S Field Observ Surface Water Water Table Saturation Pr (includes cap Describe Rec | on (A3) arks (B1) (Nonrive at Deposits (B2) (No cosits (B3) (Nonrive cosits (B3) (Nonrive cosits (B6) con Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? resent? | erine) ponriverine) erine) Imagery (E Yes Yes Yes | Salt Crusi Biotic Cru Aquatic Ir Hydrogen Oxidized Presence Recent Ir Thin Muc Other (Ex No Depth (ir No Depth (ir | t (B11) ust (B12) nvertebrat Sulfide C Rhizosphi of Reduct on Reduct k Surface uplain in R nches): nches): nches): | odor (C1) eres along ed Iron (C tion in Tilla (C7) emarks) | (4) ed Soils (Co | Water M Sedimer Drift Dep Drainage ots (C3) Dry-Sea Crayfish Saturatic Shallow FAC-Net | arks (B1) (Riverine) at Deposits (B2) (Riverine) posits (B3) (Riverine) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) Aquitard (D3) utral Test (D5) |
| High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Observ Surface Water Water Table Saturation Pr (includes cap | on (A3) arks (B1) (Nonrive at Deposits (B2) (No cosits (B3) (Nonrive cosits (B3) (Nonrive cosits (B6) con Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? resent? | erine) ponriverine) erine) Imagery (E Yes Yes Yes | Salt Crusi Biotic Cru Aquatic Ir Hydrogen Oxidized Presence Recent Ir Thin Muc Other (Ex No Depth (ir No Depth (ir | t (B11) ust (B12) nvertebrat Sulfide C Rhizosphi of Reduct on Reduct k Surface uplain in R nches): nches): nches): | odor (C1) eres along ed Iron (C tion in Tilla (C7) emarks) | (4) ed Soils (Co | Water M Sedimer Drift Dep Drainage ots (C3) Dry-Sea Crayfish Saturatic Shallow FAC-Net | arks (B1) (Riverine) at Deposits (B2) (Riverine) posits (B3) (Riverine) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) Aquitard (D3) utral Test (D5) |
| High Water M Saturation Water M Sedimer Drift Dep Surface Inundation Water-S Field Observ Surface Water Water Table Saturation Pr (includes cap Describe Rec | on (A3) arks (B1) (Nonrive at Deposits (B2) (No cosits (B3) (Nonrive cosits (B3) (Nonrive cosits (B6) con Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? resent? | erine) ponriverine) erine) Imagery (E Yes Yes Yes | Salt Crusi Biotic Cru Aquatic Ir Hydrogen Oxidized Presence Recent Ir Thin Muc Other (Ex No Depth (ir No Depth (ir | t (B11) ust (B12) nvertebrat Sulfide C Rhizosphi of Reduct on Reduct k Surface uplain in R nches): nches): nches): | odor (C1) eres along ed Iron (C tion in Tilla (C7) emarks) | (4) ed Soils (Co | Water M Sedimer Drift Dep Drainage ots (C3) Dry-Sea Crayfish Saturatic Shallow FAC-Net | arks (B1) (Riverine) at Deposits (B2) (Riverine) posits (B3) (Riverine) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) Aquitard (D3) utral Test (D5) |
| High Water M Saturation Water M Sedimer Drift Dep Surface Inundation Water-S Field Observ Surface Water Water Table Saturation Pr (includes cap Describe Rec | on (A3) arks (B1) (Nonrive at Deposits (B2) (No cosits (B3) (Nonrive cosits (B3) (Nonrive cosits (B6) con Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? resent? | erine) ponriverine) erine) Imagery (E Yes Yes Yes | Salt Crusi Biotic Cru Aquatic Ir Hydrogen Oxidized Presence Recent Ir Thin Muc Other (Ex No Depth (ir No Depth (ir | t (B11) ust (B12) nvertebrat Sulfide C Rhizosphi of Reduct on Reduct k Surface uplain in R nches): nches): nches): | odor (C1) eres along ed Iron (C tion in Tilla (C7) emarks) | (4) ed Soils (Co | Water M Sedimer Drift Dep Drainage ots (C3) Dry-Sea Crayfish Saturatic Shallow FAC-Net | arks (B1) (Riverine) at Deposits (B2) (Riverine) posits (B3) (Riverine) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) Aquitard (D3) utral Test (D5) |
| High Water M Saturation Water M Sedimer Drift Dep Surface Inundation Water-S Field Observ Surface Water Water Table Saturation Pr (includes cap Describe Rec | on (A3) arks (B1) (Nonrive at Deposits (B2) (No cosits (B3) (Nonrive cosits (B3) (Nonrive cosits (B6) con Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? resent? | erine) ponriverine) erine) Imagery (E Yes Yes Yes | Salt Crusi Biotic Cru Aquatic Ir Hydrogen Oxidized Presence Recent Ir Thin Muc Other (Ex No Depth (ir No Depth (ir | t (B11) ust (B12) nvertebrat Sulfide C Rhizosphi of Reduct on Reduct k Surface uplain in R nches): nches): nches): | odor (C1) eres along ed Iron (C tion in Tilla (C7) emarks) | (4) ed Soils (Co | Water M Sedimer Drift Dep Drainage ots (C3) Dry-Sea Crayfish Saturatic Shallow FAC-Net | arks (B1) (Riverine) at Deposits (B2) (Riverine) posits (B3) (Riverine) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) Aquitard (D3) utral Test (D5) |



Sample Point 23 - Wetland area photos taken at sample point location, neglected to take photos of sample



Sample Point 23 - Wetland area photos taken at sample point location, neglected to take photos of sample

| Project/Site: WDC Phase II | | City/County | _{/:} Davis C | ounty | Sampling Date: 2024- | -05-14 |
|--|---------------------|-------------|----------------------------|--|--|--------------|
| Applicant/Owner: UDOT | | | | State: Utah | Sampling Point: SP24 | ı |
| Investigator(s): Cara Glabau, Elena Capson | | Section, To | ownship, Ra | nge: S05 T4N R2W | | |
| | | | | | Slope (%): | <u>:</u> 0 |
| | | | | | Datum: NA | |
| Soil Map Unit Name: WgA - Warm Springs fine sal | | | | | | |
| Are climatic / hydrologic conditions on the site typical f | or this time of yea | ar? Yes | No | (If no, explain in F | Remarks.) | |
| Are Vegetation, Soil, or Hydrology | - | | | | present? Yes N | lo |
| Are Vegetation, Soil, or Hydrology | | | | eeded, explain any answe | | <u> </u> |
| SUMMARY OF FINDINGS – Attach site n | | | | | • | es, etc. |
| Hydrophytic Vegetation Present? Yes | No | 15.41 | | | | |
| Hydric Soil Present? Yes | No | | ne Sampled nin a Wetlar | | No | |
| | No | **** | IIII u Wellul | 100 | | |
| Remarks: | | _ | _ | | | _ |
| Conditions were wetter than normal | _ | to the a | ntecede | ent precipitation t | ool, but there had | d not |
| been rain for several days prior to th | | | | | | |
| VEGETATION – Use scientific names of p | plants. | | | | | |
| Tree Stratum (Plot size:) | Absolute % Cover | | t Indicator | Dominance Test worl | | |
| 1 | | | | Number of Dominant S That Are OBL, FACW, | | (A) |
| 2. | | | | | | . (-) |
| 3. | | | | Total Number of Domin Species Across All Stra | | (B) |
| 4 | | | | Percent of Dominant S | | |
| Capling/Charle Charles / Dlatains | | = Total Co | over | That Are OBL, FACW, | | (A/B) |
| Sapling/Shrub Stratum (Plot size:) | | | | Prevalence Index wo | rksheet: | |
| 1 2 | | | | Total % Cover of: | | |
| 3. | | | | | x 1 = 0 | |
| 4 | | | | _ | x 2 = 4 | |
| 5. | | | | FAC species 2 | x 3 = 6 | _ |
| | | = Total Co | over | - | x 4 = <u>0</u> | _ |
| Herb Stratum (Plot size:) Thinopyrum intermedium | 96 | ~ | UPL | | x 5 = 480 | _ |
| Distichlis spicata | 2 | | FAC | Column Totals: 100 | (A) <u>490</u> | (B) |
| 3. Juncus balticus | $\frac{2}{2}$ | | FACW | Prevalence Index | x = B/A = 4.90 | |
| 4. | | | · —— | Hydrophytic Vegetati | · | |
| 5. | | | | Dominance Test is | s >50% | |
| 6. | | | | Prevalence Index | is ≤3.0 ¹ | |
| 7 | | | | | aptations¹ (Provide suppor | |
| 8 | | | | | ks or on a separate sheet) ophytic Vegetation¹ (Expla | |
| Manda Vina Chatana (Diataina) | 100 | = Total Co | over | Floblematic Hydro | priytic vegetation (Expla | uii <i>)</i> |
| Woody Vine Stratum (Plot size:) 1 | | | | ¹ Indicators of hydric sc | oil and wetland hydrology i | must |
| 2. | | | | be present, unless dist | | |
| | | | over | Hydrophytic | | |
| % Bare Ground in Herb Stratum % 0 | | | | Vegetation Present? Ye | es No | |
| Remarks: | COVER OF DIOLOGO | | <u> </u> | 1.000 | | |
| Troniano. | | | | | | |
| | | | | | | |
| | | | | | | |
| I . | | | | | | |

SOIL Sampling Point: SP24

| Profile Desc | cription: (Describ | e to the depth | needed to docu | ment the i | ndicator | or confirm | the absence of indicators.) | |
|-------------------|---|------------------|-------------------------|-------------|--------------|------------------|--|-----------------------|
| Depth | Matrix | | | ox Feature: | | . 2 | T . | |
| (inches) 0 - 3 | Color (moist) | <u>%</u> | Color (moist) | % | Type' | Loc ² | | marks |
| | 7.5YR 3/1 | | | | | | Clay Loam | |
| 3 - 24 | 10YR 4/2 | 100 | | | | | Clay | |
| | | | | | | | | |
| - | | | | | | | | |
| | | | | | | | | |
| | | <u> </u> | | | | | | |
| | | _ | | | | | | |
| | | | | | | | | |
| | | <u> </u> | | | | | | |
| | oncentration, D=De | • | | | | d Sand Gr | | |
| Hydric Soil | Indicators: (Appl | icable to all LR | Rs, unless othe | rwise note | ed.) | | Indicators for Problematic | Hydric Soils³: |
| Histosol | ` ' | | Sandy Red | | | | 1 cm Muck (A9) (LRR C) | |
| - | oipedon (A2) | | Stripped M | | | | 2 cm Muck (A10) (LRR E | 3) |
| | istic (A3) | | Loamy Mud | - | | | Reduced Vertic (F18) | ٠, |
| | en Sulfide (A4) | | Loamy Gle | - | (F2) | | Red Parent Material (TF: | |
| | d Layers (A5) (LRF uck (A9) (LRR D) | () | Depleted M Redox Dar | ` , | F6) | | Other (Explain in Remark | (5) |
| | d Below Dark Surfa | ace (A11) | Depleted D | | , | | | |
| · — · | ark Surface (A12) | (| Redox Dep | | | | ³ Indicators of hydrophytic veg | getation and |
| Sandy M | Mucky Mineral (S1) | | Vernal Poo | ls (F9) | | | wetland hydrology must be | present, |
| - | Bleyed Matrix (S4) | | | | | | unless disturbed or probler | matic. |
| Restrictive I | Layer (if present): | : | | | | | | |
| Type: | | | _ | | | | | _ |
| Depth (in | ches): | | | | | | Hydric Soil Present? Yes | No |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| HYDROLO | GY | | | | | | | |
| Wetland Hy | drology Indicator | s: | | | | | | |
| _ | cators (minimum of | | heck all that app | ly) | | | Secondary Indicators (2 | or more required) |
| Surface | | | Salt Crust | | | | Water Marks (B1) (I | Riverine) |
| | ater Table (A2) | | Biotic Cru | | | | Sediment Deposits | |
| Saturation | | | Aquatic In | | s (B13) | | Drift Deposits (B3) | |
| | larks (B1) (Nonriv | erine) | Hydrogen | | | | Drainage Patterns (| |
| | nt Deposits (B2) (N | | | | | Living Roo | ts (C3) Dry-Season Water | |
| | oosits (B3) (Nonriv | | Presence | of Reduce | d Iron (C4 | ·) | Crayfish Burrows (C | 28) |
| Surface | Soil Cracks (B6) | | Recent Iro | on Reducti | on in Tilled | d Soils (C6 | i) Saturation Visible o | n Aerial Imagery (C9) |
| Inundati | on Vis ble on Aeria | I Imagery (B7) | Thin Mucl | k Surface (| C7) | | Shallow Aquitard (D | 03) |
| Water-S | tained Leaves (B9 |) | Other (Ex | plain in Re | marks) | | FAC-Neutral Test (I | D5) |
| Field Obser | | | | | | | | |
| Surface Wat | er Present? | Yes No | Depth (in | iches): | | _ | | |
| Water Table | Present? | Yes No | Depth (in | iches): | | _ | | |
| Saturation P | | Yes No | Depth (in | iches): | | Wetla | and Hydrology Present? Yes | No |
| (includes cap | | m dalido monit | oring wall social | nhotos sa | ovious inc | nections) | if available: | |
| Describe Re | corded Data (strea | ın yauye, monit | oning well, aerial | priotos, pr | evious INS | pections), | ıı avdıldül e . | |
| Domorko | | | | | | | | |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| l | | | | | | | | |



Sample Point 24



Sample Point 24

| Project/Site: WDC Phase II | | City/Co | ounty | Davis C | ounty | Samp | ling Date: | 2024- | 05-14 |
|--|----------------|---------|-------|--------------------------|--|-------------|--------------|-----------|--------------|
| Applicant/Owner: UDOT | | | _ | | State: Utah | Samp | ling Point: | SP25 | |
| Investigator(s): Merissa Davis | | Sectio | n, To | wnship, Ra | nge: S05 T4N R2V | ٧ | | | |
| Landform (hillslope, terrace, etc.): Slope | | | | | | | Slo | pe (%): | 5 |
| Subregion (LRR): D 28A | Lat: 41. | 1099 | 7077 | 7 | Long: -112.0986 | 666 | Dati | ım: NAI | 083_201 |
| Soil Map Unit Name: PaD - Parleys loam, 6 to 10 per | | | | | NWI clas | | | | |
| Are climatic / hydrologic conditions on the site typical for thi | is time of yea | | | | | | | | |
| Are Vegetation, Soil, or Hydrology | | | | | 'Normal Circumstance | | | V N | 0 |
| Are Vegetation, Soil, or Hydrologyı | naturally pro | blema | tic? | | eeded, explain any an | | | | |
| SUMMARY OF FINDINGS – Attach site map | showing | sam | plin | g point l | ocations, transe | cts, imp | ortant fo | eature | s, etc. |
| Hydrophytic Vegetation Present? Yes N Hydric Soil Present? Yes N Wetland Hydrology Present? Yes N Remarks: | 10 | | | e Sampled in a Wetlar | | | No <u> </u> | _ | |
| Conditions were wetter than normal accepted rain for several days prior to the s | • | to th | e aı | ntecede | ent precipitatio | n tool, k | out the | re hac | d not |
| VEGETATION – Use scientific names of plar | | | | | | | | | |
| | Absolute | Dom | inant | Indicator | Dominance Test w | orksheet: | | | |
| Tree Stratum (Plot size:) | % Cover | | | | Number of Domina | | 1 | | , . . |
| Elaeagnus angustifolia | _ 5 | | | FAC | That Are OBL, FAC | W, or FAC | : <u>'</u> | | (A) |
| 2. 3. | | | | | Total Number of Do Species Across All | | 2 | | (B) |
| 4 | | | | | | | <u>-</u> | | (D) |
| | 5 | = Tot | al Co | ver | Percent of Dominar That Are OBL, FAC | | 50.00 |) | (A/B) |
| Sapling/Shrub Stratum (Plot size:) | | | | | Prevalence Index | | | | |
| 1 2 | | | | | Total % Cover | | | ly by: | |
| | | | | | OBL species 0 | | | ıy by. | _ |
| 3 | | | | - | FACW species 13 | | | | _ |
| 5 | | | | | | 3 | | | |
| J | _ | = Tot | al Co | ver | FACU species 0 | | | | |
| Herb Stratum (Plot size:) | | 100 | ai CO | VCI | | | x 5 = 20 | | _ |
| 1. Thinopyrum intermedium | 40 | | | UPL | Column Totals: 81 | | (A) 31 | | (B) |
| 2. Lepidium latifolium | 15 | | | FAC | Column Totals. | | (A) <u>-</u> | | _ (D) |
| 3. Conioselinum scopulorum | 10 | | | FACW | Prevalence In | dex = B/A | = 3.82 | | _ |
| 4. Dipsacus fullonum | 8 | | | FAC | Hydrophytic Vege | tation Indi | cators: | | |
| 5. Mentha arvensis | 3 | | | FACW | Dominance Te | | | | |
| 6 | | | | | Prevalence Ind | | | | |
| 7 | | | | | Morphological data in Rem | | | | |
| 8 | | | | | Problematic Hy | | • | , | |
| Manda Vine Otestano (Diet siesa | 76 | _ = Tot | al Co | ver | 1 Toblematic Hy | diopriyac v | v egetation | (Lxpia | 111 <i>)</i> |
| Woody Vine Stratum (Plot size:) | | | | | ¹ Indicators of hydric | v bne lioe | etland hve | drology r | nuet |
| 1 | | | | | be present, unless | | | | iiust |
| 2 | | = Tot | al Co | ver | Hydrophytic | | | | |
| % Bare Ground in Herb Stratum % Cove | er of Biotic C | =' | | | Vegetation Present? | Yes | No _ | ✓ | |
| Remarks: | | | | | | | | | |
| | | | | | | | | | |

SOIL Sampling Point: SP25

| Profile Desc | cription: (Describ | e to the depth | needed to docu | ment the i | ndicator | or confirm | the absence of indic | ators.) | |
|-------------------|----------------------------|-------------------|----------------------|--------------|--------------|------------------|----------------------------------|---------------------|--------------|
| Depth | Matrix | | | x Features | | 1 2 | Tarakana | Damada | |
| (inches) 0 - 7 | Color (moist) | <u>%</u> | Color (moist) | % | Type' | Loc ² | Texture | Remarks | |
| l —— | 10YR 4/2 | | | | | | Loam | | |
| 7 - 18 | 10YR 4/3 | 100 | | | | | Clay Loam | | |
| | - | | | | | | · | | |
| - | | | | | | | | | |
| - | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| - | - | | | | | | | | |
| | oncentration, D=D | • | | | | d Sand Gr | | L=Pore Lining, M | |
| _ | Indicators: (App | licable to all LR | | | ea.) | | Indicators for Prob | - | ooiis : |
| Histosol | (A1) pipedon (A2) | | Sandy Red Stripped M | | | | 1 cm Muck (A9 2 cm Muck (A1 | | |
| | istic (A3) | | Suipped M | , , | l (F1) | | Reduced Vertice | , , , | |
| | en Sulfide (A4) | | Loamy Gle | - | | | Red Parent Ma | | |
| | d Layers (A5) (LR | R C) | Depleted M | | () | | Other (Explain | | |
| | uck (A9) (LRR D) | - / | Redox Dar | ` , | F6) | | | , | |
| Depleted | d Below Dark Surf | ace (A11) | Depleted D | ark Surfac | e (F7) | | | | |
| | ark Surface (A12) | | Redox Dep | | F8) | | ³ Indicators of hydro | | |
| - | Mucky Mineral (S1) | | Vernal Poo | ls (F9) | | | - | y must be presen | t, |
| | Gleyed Matrix (S4) | | | | | | unless disturbed | or problematic. | |
| _ | Layer (if present) | | | | | | | | |
| Type: | ahaa); | | <u> </u> | | | | Undria Cail Brasant | 12 Van | No 🗸 |
| | ches): | | | | | | Hydric Soil Present | t? Yes | NO |
| Remarks: | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| HYDROLO | GY | | | | | | | | |
| Wetland Hy | drology Indicator | s: | | | | | | | |
| Primary India | cators (minimum o | f one required; o | check all that app | ly) | | | Secondary Ind | licators (2 or more | required) |
| Surface | Water (A1) | | Salt Crust | (B11) | | | Water Ma | rks (B1) (Riverine | ·) |
| High Wa | ater Table (A2) | | Biotic Cru | st (B12) | | | Sediment | Deposits (B2) (Ri | verine) |
| Saturation | on (A3) | | Aquatic In | | s (B13) | | | sits (B3) (Riverin | |
| Water M | Marks (B1) (Nonriv | erine) | Hydrogen | Sulfide Od | dor (C1) | | Drainage | Patterns (B10) | |
| Sedimer | nt Deposits (B2) (| lonriverine) | Oxidized I | Rhizosphe | res along | Living Roo | ots (C3) Dry-Seaso | on Water Table (C | 2) |
| Drift Dep | posits (B3) (Nonri | verine) | Presence | of Reduce | d Iron (C4 | !) | Crayfish B | Burrows (C8) | |
| Surface | Soil Cracks (B6) | | Recent Iro | n Reduction | on in Tilled | d Soils (C6 | S) Saturation | Visible on Aerial | Imagery (C9) |
| Inundati | on Vis ble on Aeria | al Imagery (B7) | Thin Mucl | Surface (| C7) | | Shallow A | quitard (D3) | |
| Water-S | Stained Leaves (B9 |) | Other (Ex | plain in Re | marks) | | FAC-Neut | ral Test (D5) | |
| Field Obser | vations: | | | | | | | | |
| Surface Wat | er Present? | Yes No | Depth (in | iches): | | _ | | | |
| Water Table | Present? | Yes No | Depth (in | ches): | | _ | | | |
| Saturation P | resent? | Yes No | Depth (in | ches): | | Wetla | and Hydrology Preser | nt? Yes | No 🔽 |
| (includes cap | | m gallas marit | oring well cori- | nhotos == | ovious in- | noctions) | if available: | | |
| Describe Re | corded Data (strea | ını gauge, monit | oning well, aerial | priotos, pri | evious ins | pections), | ii avallable. | | |
| Damesidia | | | | | | | | | |
| Remarks: | | | | | | | | | |
| | | | | | | | | | |
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| Ì | | | | | | | | | |



Sample Point 25



Sample Point 25

| Project/Site: WDC Phase II | C | City/County: | Davis C | ounty | Sampling Date: 2024-05-14 |
|---|--|-------------------|-------------|-----------------------------------|---|
| Applicant/Owner: UDOT | | | | State: Utah | Sampling Point: SP26 |
| Investigator(s): Cara Glabau, Elena Capson | | Section, Tov | wnship, Ra | nge: S05 T4N R2W | |
| Landform (hillslope, terrace, etc.): Flat | I | Local relief | (concave, | convex, none): None | Slope (%): 0 |
| Subregion (LRR): D 28A | Lat: 41.1 | 0915567 | | _ Long: -112.0995148 | B3 Datum: NAD83_201 |
| Soil Map Unit Name: Fb - Ford loam, shallow w | ater table, 0 to | 1 percent | slopes | NWI classific | cation: None |
| Are climatic / hydrologic conditions on the site typical | for this time of yea | r? Yes | No _ | (If no, explain in F | Remarks.) |
| Are Vegetation, Soil, or Hydrology | significantly d | listurbed? | Are ' | 'Normal Circumstances" | present? Yes No |
| Are Vegetation, Soil, or Hydrology | naturally prob | olematic? | (If ne | eeded, explain any answe | ers in Remarks.) |
| SUMMARY OF FINDINGS - Attach site | map showing | sampling | g point l | ocations, transects | s, important features, etc. |
| Hadaaahati Vaastalia Baasat | N- | | | | |
| Hydrophytic Vegetation Present? Yes Vegetation Present? Yes Vegetation Present? | No | | e Sampled | | , |
| | No | withi | in a Wetlaı | nd? Yes | No |
| Remarks: | | | | | |
| Conditions were wetter than norma | l according t | o the ar | ntecede | ent precipitation t | cool, but there had not |
| been rain for several days prior to the | • | | | | |
| | | | | | _ |
| VEGETATION – Use scientific names of | <u>- </u> | Dominant | Indicator | Dominance Test work | kahaati |
| Tree Stratum (Plot size:) | % Cover | Dominant Species? | | Number of Dominant S | |
| 1 | | | | That Are OBL, FACW, | |
| 2 | | | | Total Number of Domir | nant |
| 3 | | | | Species Across All Stra | ^ |
| 4 | | | | Percent of Dominant S | |
| Sapling/Shrub Stratum (Plot size: | , —— | = Total Co | ver | That Are OBL, FACW, | or FAC: <u>66.66</u> (A/B) |
| 1 | | | | Prevalence Index wor | rksheet: |
| 2. | | | | Total % Cover of: | Multiply by: |
| 3 | | | | OBL species 21 | x 1 = 21 |
| 4 | | | | - | x 2 = 62 |
| 5 | | | | · · | x 3 = <u>39</u> |
| Herb Stratum (Plot size:) | | = Total Co | ver | FACU species 12 | |
| 1. Eleocharis palustris | 21 | ~ | OBL | UPL species 23 Column Totals: 100 | x = 115 (A) 285 (B) |
| 2. Phalaris arundinacea | 19 | ~ | FACW | Column Totals. 100 | (A) <u>285</u> (B) |
| 3. Lepidium campestre | 15 | V | UPL | Prevalence Index | c = B/A = 2.85 |
| 4. Distichlis spicata | 13 | | FAC | Hydrophytic Vegetati | on Indicators: |
| 5. Juncus balticus | 12 | | FACW | <u>✓</u> Dominance Test is | |
| 6. Taraxacum officinale | 12 | | FACU | ✓ Prevalence Index i | |
| 7. Thinopyrum intermedium | 8 | | UPL | | aptations ¹ (Provide supporting as or on a separate sheet) |
| 8 | 100 | | | Problematic Hydro | ophytic Vegetation¹ (Explain) |
| Woody Vine Stratum (Plot size:) | 100 | = Total Co | ver | | |
| 1 | | | | | il and wetland hydrology must |
| 2 | | | | be present, unless dist | urbed or problematic. |
| | | = Total Co | ver | Hydrophytic Vegetation | |
| % Bare Ground in Herb Stratum % | Cover of Biotic Cr | ust | | Present? Ye | es No |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

SOIL

Sampling Point: SP26

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

| Depth | Matrix | | | ox Feature | | | | |
|---------------------------------------|---|-------------|---|------------|-------------------|------------------|--|----|
| (inches) | Color (moist) | | Color (moist) | % | Type ¹ | Loc ² | Texture Remarks | — |
| 0 - 2 | 7.5YR 2.5/1 | 100 | | | | | Mucky Peat | _ |
| 2 - 8 | 2.5Y 4/2 | 100 | - | | | | Clay | _ |
| 8 - 24 | 2.5Y 5/2 | 100 | 10YR 6/8 | 12 | <u> </u> | <u> M</u> | Clay | _ |
| | | | | _ | _ | | | |
| - | | | | | | | | |
| - | | | | | | | | _ |
| | | | | | _ | | | _ |
| | | | | | _ | | · | |
| 1T C-C | | mletiem DN | | C-C | | | Project 21 continue DI - Done Linium Mandrin | _ |
| | | | I=Reduced Matrix, C I LRRs, unless othe | | | ted Sand G | Grains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : | |
| Histosol | | ouble to ul | Sandy Red | | icu., | | 1 cm Muck (A9) (LRR C) | |
| | oipedon (A2) | | Stripped M | . , | | | 2 cm Muck (A10) (LRR B) | |
| | stic (A3) | | Loamy Mu | | | | Reduced Vertic (F18) | |
| Hydroge | en Sulfide (A4) | | Loamy Gle | - | | | Red Parent Material (TF2) | |
| | d Layers (A5) (LRR | C) | <u>✓</u> Depleted N | | | | Other (Explain in Remarks) | |
| | ıck (A9) (LRR D) d Below Dark Surfa | 00 (411) | Redox Dar Depleted D | | . , | | | |
| | ark Surface (A12) | ce (ATT) | Depleted L | | | | ³ Indicators of hydrophytic vegetation and | |
| | fucky Mineral (S1) | | Vernal Poo | | (10) | | wetland hydrology must be present, | |
| - | Gleyed Matrix (S4) | | | ` , | | | unless disturbed or problematic. | |
| Restrictive I | Layer (if present): | | | | | | | |
| Type: | | | | | | | | |
| Depth (inc | ches): | | | | | | Hydric Soil Present? Yes No | _ |
| | | | | | | | | |
| | | | | | | | | |
| HYDROLO | | | | | | | | |
| | drology Indicators | | adi ahaak all that ann | | | | Cocondan Indicators (2 or more required) | |
| | • | one require | ed; check all that app | - | | | Secondary Indicators (2 or more required) | _ |
| | Water (A1) iter Table (A2) | | Salt Crus Biotic Cru | ` , | | | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) | |
| ✓ Saturation | | | Aquatic Ir | | es (B13) | | Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) | |
| | larks (B1) (Nonrive | rine) | Hydroger | | | | Drainage Patterns (B10) | |
| · · · · · · · · · · · · · · · · · · · | nt Deposits (B2) (No | • | | | , , | g Living Roo | | |
| | oosits (B3) (Nonrive | | Presence | | - | - | Crayfish Burrows (C8) | |
| Surface | Soil Cracks (B6) | ŕ | | | | ed Soils (Co | | 9) |
| Inundation | on Vis ble on Aerial | Imagery (E | 37) Thin Muc | k Surface | (C7) | | Shallow Aquitard (D3) | |
| Water-S | tained Leaves (B9) | | Other (Ex | plain in R | emarks) | | FAC-Neutral Test (D5) | |
| Field Obser | vations: | | | | | | | |
| Surface Water | | | No Depth (ir | | | | | |
| Water Table | | | No Depth (ir | | | | | |
| Saturation Projection (includes cap | oillary fringe) | · <u> </u> | No Depth (in | , | | | land Hydrology Present? Yes No | _ |
| Describe Re | corded Data (strear | n gauge, m | nonitoring well, aerial | photos, p | revious in | spections), | , if available: | |
| Remarks: | | | | | | | | |
| KEMBIKS. | | | | | | | | |
| | | | | | | | | |
| . tomaine | | | | | | | | |
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| | | | | | | | | |



Sample Point 26



Sample Point 26

| Project/Site: WDC Phase II | | | City/Co | _{unty:} <u>Davis C</u> | County | Sa | ampling | Date: 2024 | 1-05-14 |
|---|------------------|-------------------|--------------|---------------------------------|---------------------|-------------------------|-----------|---------------|--------------------|
| Applicant/Owner: UDOT | | | | | State: U | tah Sa | ampling l | Point: SP2 | 7 |
| Investigator(s): Merissa Davis | | | Section | n, Township, R | ange: S05 T4N | R2W | | | |
| Landform (hillslope, terrace, etc.): Flat | | | Local r | relief (concave, | , convex, none): _ | None | | Slope (% | o): <u>0</u> |
| Subregion (LRR): D 28A | | Lat: 41. | 10630 | 343 | Long: <u>-112.0</u> | 9624045 | | _ Datum: N | AD83_20 |
| Section, Township, Range: S05 T4N R2W | | | | | | | | | |
| Are climatic / hydrologic conditions on the | site typical for | this time of year | ar? Ye | s No _ | (If no, ex | plain in Rem | ıarks.) | | |
| Are Vegetation, Soil, or Hy | drology | significantly | disturbe | ed? Are | "Normal Circums | stances" pres | sent? Y | es | No |
| Are Vegetation, Soil, or Hy | drology | naturally pro | blemati | ic? (If n | needed, explain a | ny answers i | n Remar | rks.) | |
| SUMMARY OF FINDINGS - Atta | ach site ma | ap showing | samp | oling point | locations, tra | ınsects, iı | mporta | ant featur | es, etc |
| Liveline in the Versateties Discount? | Vac | No. V | | | | | | | |
| | Yes | No V | | | | | | ., | |
| | | | , | within a Wetla | and? | ſes | _ No _ | | |
| | | | | | | | | | |
| Conditions were wetter than | າ normal a | ccording | to the | e anteced | ent precipit | ation too | ol, but | there ha | ad not |
| | | _ | | | | | • | | |
| | | | | | | | | | |
| | | | Domii | nant Indicator | Dominance T | est worksh | eet: | | |
| | | | | | Number of Do | minant Spec | cies | | |
| | | | | | That Are OBL | , FACW, or F | FAC: _ | <u> </u> | _ (A) |
| | | | | | | | t, | 2 | (5) |
| | | | | | Species Acros | ss All Strata: | | | _ (B) |
| 7- | | | | al Cover | | | | 50.00 | (A/B) |
| Sapling/Shrub Stratum (Plot size: |) | | | 0010. | | | | 50.00 | _ (A/D) |
| | | | | | - | | | | |
| | | | | | - - | | | | |
| | | | | | | | | | |
| | | | | | · | | | | |
| 3 | | | | | - | | | | |
| | _) | | | | | | | | |
| ··· | | | | | Column Totals | s: 100 | | 005 | (B) |
| | | | | | . Drawala | | D/A = 3 | 2 05 | |
| | | | | | | | | | |
| | | | | | - | | | 15. | |
| | | | | | - | | | | |
| | | | | | . | | | rovide supp | orting |
| | | | | | data ir | n Remarks or | r on a se | parate shee | et) |
| | | 400 | = Tota | al Cover | Problema | tic Hydrophy | tic Vege | etation1 (Exp | lain) |
| Woody Vine Stratum (Plot size: |) | | | | 11 | la contrata de la Stata | 1 41 | | |
| | | | | | be present, ur | | | | / must |
| 2 | | | | | Hydrophytic | | | | |
| | | · | - | | Vegetation | | | / | |
| % Bare Ground in Herb Stratum | % Co | over of Biotic C | rust | | Present? | Yes _ | | No | |
| Remarks: | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Sampling Point: SP27

| SUIL | | | | | | | | Sampling Point: Of 27 |
|---|--|---|---|---------------------------------|-------------------|------------------|------------------------|--|
| Profile Desc | ription: (Describe | to the depth | needed to docum | ent the i | ndicator | or confirn | n the absence | of indicators.) |
| Depth | Matrix | | | Features | | . 2 | | |
| (inches) | Color (moist) | | Color (moist) | % | Type ¹ | Loc ² | <u>Texture</u> | Remarks |
| 0 - 4 | 5Y 2.5/2 | 100 | | | | | Loam | High organic content |
| 4 - 10 | 10YR 3/2 | 100 | | | | | Clay Loam | |
| 10 - 20 | 10YR 4/2 | 100 | | | | | Silty Clay | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| - | | | | | | | | |
| ¹Type: C=Co | oncentration, D=Dep | oletion RM=R | Reduced Matrix CS | =Covered | d or Coate | d Sand G | rains ² l o | cation: PL=Pore Lining, M=Matrix. |
| | Indicators: (Applic | | | | | a cana c | | for Problematic Hydric Soils ³ : |
| Histosol | | | Sandy Redo | | , | | | Muck (A9) (LRR C) |
| | oipedon (A2) | | Stripped Ma | | | | | Muck (A10) (LRR B) |
| Black Hi | | | Loamy Muck | | l (F1) | | | ced Vertic (F18) |
| Hydroge | en Sulfide (A4) | | Loamy Gley | ed Matrix | (F2) | | Red P | arent Material (TF2) |
| | d Layers (A5) (LRR | C) | Depleted Ma | atrix (F3) | | | Other | (Explain in Remarks) |
| | ıck (A9) (LRR D) | | Redox Dark | , | , | | | |
| | d Below Dark Surfac | ce (A11) | Depleted Da | | | | 3, ,, | |
| | ark Surface (A12) | | Redox Depr Vernal Pools | | -8) | | | of hydrophytic vegetation and hydrology must be present, |
| - | Mucky Mineral (S1) Bleyed Matrix (S4) | | vernai Pools | s (F9) | | | | listurbed or problematic. |
| | Layer (if present): | | | | | | 1 111000 0 | notarbed of problematio. |
| Type: | | | | | | | | |
| · · · | ches): | | | | | | Hydric Soil | Present? Yes No |
| Remarks: | onoo). | | | | | | 11,411.10 0011 | 100 <u>100 100 100 100 100 100 100 100 100</u> |
| remano. | | | | | | | | |
| Does no | t qualify for | hydric so | oil. Reduced | matri | x need | ds red | ox to qua | lify for "depleted below |
| dark sur | face" or "thic | ck dark s | surface" | | | | | |
| | | | | | | | | |
| HYDROLO | GY | | | | | | | |
| Wetland Hyd | drology Indicators: | | | | | | | |
| Primary Indic | cators (minimum of | one required; | check all that apply | ') | | | Secor | ndary Indicators (2 or more required) |
| Surface | Water (A1) | | Salt Crust (| B11) | | | V | Vater Marks (B1) (Riverine) |
| | ater Table (A2) | | Biotic Crus | | | | | Sediment Deposits (B2) (Riverine) |
| Saturation | | | Aquatic Inv | ertebrate | s (B13) | | | Orift Deposits (B3) (Riverine) |
| Water M | larks (B1) (Nonrive | rine) | Hydrogen S | Sulfide Od | dor (C1) | | 0 | Prainage Patterns (B10) |
| Sedimer | nt Deposits (B2) (No | nriverine) | Oxidized R | hizosphe | res along | Living Roo | ots (C3) D | Ory-Season Water Table (C2) |
| Drift Dep | oosits (B3) (Nonrive | erine) | Presence of | f Reduce | d Iron (C4 | ·) | c | Crayfish Burrows (C8) |
| Surface | Soil Cracks (B6) | | Recent Iron | Reduction | on in Tilled | d Soils (Ce | 6) <u> </u> | Saturation Visible on Aerial Imagery (C9) |
| Inundation | on Vis ble on Aerial | Imagery (B7) | Thin Muck | Surface (| C7) | | s | Shallow Aquitard (D3) |
| Water-S | tained Leaves (B9) | | Other (Exp | lain in Re | marks) | | F | AC-Neutral Test (D5) |
| | ` , | | | | | | | |
| Field Observ | | | | | | | | |
| Field Observ | vations: | /es No | Depth (inc | hes): | | _ | | |
| | vations: er Present? | | Depth (inc | | | | | |
| Surface Wate | vations: er Present? | /es No | Depth (inc | hes): | | _ | and Hydrolog | y Present? Yes No _ 🗸 _ |
| Surface Water Water Table Saturation Pro (includes cap | vations: er Present? Present? resent? y indicates the second of the s | ∕es No ∕es No | Depth (inc | hes): hes): <u>18</u> | | Wetl | - | y Present? Yes No |
| Surface Water Water Table Saturation Pro (includes cap | vations: er Present? Present? Yresent? | ∕es No ∕es No | Depth (inc | hes): hes): <u>18</u> | | Wetl | - | y Present? Yes No |
| Surface Water Water Table Saturation Pro (includes cap Describe Reco | vations: er Present? Present? resent? y indicates the second of the s | ∕es No ∕es No | Depth (inc | hes): hes): <u>18</u> | | Wetl | - | y Present? Yes No |
| Surface Water Water Table Saturation Pro (includes cap | vations: er Present? Present? resent? y indicates the second of the s | ∕es No ∕es No | Depth (inc | hes): hes): <u>18</u> | | Wetl | - | y Present? Yes No |
| Surface Water Water Table Saturation Projection (includes caped Describe Recommendation) Remarks: | vations: er Present? Present? resent? villary fringe) corded Data (stream | ∕es No ∕es _ v No n gauge, mon | Depth (incomposition) Depth (incomposition) Depth (incomposition) | hes): hes): 18 hotos, pro | evious ins | Wetl | if available: | |
| Surface Water Water Table Saturation Projection (includes caped Describe Recompany) Remarks: | vations: er Present? Present? resent? y indicates the second of the s | ∕es No ∕es _ v No n gauge, mon | Depth (incomposition) Depth (incomposition) Depth (incomposition) | hes): hes): 18 hotos, pro | evious ins | Wetl | if available: | |
| Surface Water Water Table Saturation Projection (includes caped Describe Recompany) Remarks: | vations: er Present? Present? resent? villary fringe) corded Data (stream | ∕es No ∕es _ v No n gauge, mon | Depth (incomposition) Depth (incomposition) Depth (incomposition) | hes): hes): 18 hotos, pro | evious ins | Wetl | if available: | |



Sample Point 27



Sample Point 27

| Project/Site: WDC Phase II | | | City/Cour | _{nty:} <u>Davis C</u> | ounty | | Sampling D | _{ate:} 2024 | -05-14 |
|--|------------------|---------------------|-----------|--------------------------------|------------------------|----------------------------------|-------------------|----------------------|------------|
| Applicant/Owner: UDOT | | | | | State | _{e:} Utah | Sampling Po | oint: SP28 | 1 |
| Investigator(s): Cara Glabau, Elena Ca | apson | | Section, | Township, Ra | inge: S05 | T4N R2W | | | |
| Landform (hillslope, terrace, etc.): Depres | ssion | | Local rel | ief (concave, | convex, nor | ne): Concave |) | Slope (%) | : <u>0</u> |
| Subregion (LRR): D 28A | | Lat: 41. | 110026 | 67 | _ Long: <u>-1</u> | 12.099889 | | Datum: NA | D83_20 |
| Soil Map Unit Name: Fb - Ford Ioam, s | hallow wate | er table, 0 to | 1 perce | ent slopes | | NWI classifica | ation: None |) | |
| Are climatic / hydrologic conditions on the | site typical for | this time of year | ar? Yes | No | (If no | o, explain in Re | emarks.) | | |
| Are Vegetation, Soil, or Hy | | - | | | | cumstances" pi | | s V N | lo |
| Are Vegetation, Soil, or Hy | | - | | | | in any answer | | | |
| SUMMARY OF FINDINGS – Atta | | | | | • | • | | , | es. etc |
| | | | | | | , , | • | | |
| Hydria Sail Broant? | Yes | No | Is | the Sampled | d Area | | | | |
| | | No No | wi | ithin a Wetlaı | nd? | Yes | No | | |
| Remarks: | 103 | | | | | | | | |
| Conditions were wetter than | normal a | ccordina | to the | antacada | nt nreci | initation to | ol but t | hore had | d not |
| been rain for several days pr | | • | | antecede | ont preci | pitation to | oi, but t | nere na | J HOC |
| | | | | | | | | | |
| VEGETATION – Use scientific na | ames of pl | | | | | | | | |
| Tree Stratum (Plot size: |) | Absolute % Cover | | int Indicator ? Status | | ce Test works | | | |
| 1 | | | | | | of Dominant Sp OBL, FACW, o | r FAC: 2 | | (A) |
| 2 | | | | | Total Nun | nber of Domina | nt | | |
| 3 | | | | | | Across All Strat | | | (B) |
| 4 | | | | | Percent of | of Dominant Sp | ecies | | |
| Sapling/Shrub Stratum (Plot size: | ١ | | = Total (| Cover | | OBL, FACW, o | | 00.00 | (A/B) |
| 1 | | | | | Prevalen | ce Index work | sheet: | | |
| 2 | | | | | | % Cover of: | | lultiply by: | |
| 3 | | | | | OBL spec | cies <u>26</u> | x 1 = | 26 | |
| 4. | | | | | FACW sp | ecies 56 | x 2 = | 112 | |
| 5 | | | | | FAC spec | | | 54 | |
| | | | = Total (| Cover | FACU sp | _ | | 0 | _ |
| Herb Stratum (Plot size: 1. Juncus balticus | _) | 48 | ~ | FACW | UPL spec | | x 5 = | | _ |
| 2. Eleocharis obtusa | | 46 | | OBL | Column T | otals: 100 | (A) | 192 | (B) |
| 3. Dipsacus fullonum | | 18 | | FAC | Pre | valence Index | = B/A = 1.9 | 92 | |
| 4. Phalaris arundinacea | | 8 | | FACW | | ytic Vegetatio | | | |
| 5 | | | | | <u>✓</u> Domi | inance Test is | >50% | | |
| 6 | | | | | <u>✓</u> Preva | alence Index is | ≤3.0 ¹ | | |
| 7 | | | | | | hological Adap | | | |
| 8 | | | | | | ata in Remarks Iematic Hydrop | | | |
| Moody Vino Stratum (Plataina) | ` | 100 | = Total (| Cover | 1 1001 | iematic riyurop | nylic vegete | ttion (Expla | <i>)</i> |
| Woody Vine Stratum (Plot size: 1 | | | | | ¹ Indicator | s of hydric soil | and wetland | hvdrology | must |
| 2. | | | | | | nt, unless distu | | | |
| | | | | | Hydroph | | | | |
| 9/ Para Cround in Horb Stratum | 0/ Co | | _ | | Vegetation Present? | on Voc | . <u> </u> | lo. | |
| % Bare Ground in Herb Stratum Remarks: | % C0 | DVEI UI DIUIIC C | านจเ | | riesent? | res | <u> </u> | lo | |
| ivernains. | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

SOIL

Sampling Point: SP28

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

| Depth | Matrix | | | x Feature | | | | |
|---------------------------------------|---|-------------|--------------------------|------------------|-------------------|------------------|------------------------------|---|
| (inches) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | Texture | Remarks |
| 0 - 1 | 10YR 2/2 | 100 | | | | | Muck | |
| 1 - 4 | 10YR 3/2 | 100 | | _ | | | Clay Loam | |
| 4 - 24 | 2.5Y 5/2 | 92 | 7.5YR 5/8 | 8 | <u>C</u> | PL | Clay | |
| | | | | | | | | |
| | | | | | | | | |
| - | | | | | | | | |
| _ | | | | | | | | |
| | - | | - | | _ | | | |
| 1Type: C=C | ncentration D=De | nletion PM | 1=Reduced Matrix, C | S=Cover | ed or Coat | ed Sand G | raine ² l ocatio | n: PL=Pore Lining, M=Matrix. |
| | | | I LRRs, unless othe | | | leu Sanu G | | Problematic Hydric Soils ³ : |
| Histosol | | | Sandy Red | | , | | | (A9) (LRR C) |
| | oipedon (A2) | | Stripped M | . , | | | · | (A10) (LRR B) |
| Black Hi | stic (A3) | | Loamy Mu | - | | | Reduced V | /ertic (F18) |
| | en Sulfide (A4) | | Loamy Gle | - | | | | t Material (TF2) |
| | d Layers (A5) (LRR | C) | <u>✓</u> Depleted M | . , | | | Other (Exp | lain in Remarks) |
| | ıck (A9) (LRR D) d Below Dark Surfa | ce (A11) | Redox Dar Depleted D | | . , | | | |
| | ark Surface (A12) | 00 (7111) | Redox Dep | | | | ³ Indicators of h | ydrophytic vegetation and |
| | Mucky Mineral (S1) | | Vernal Poo | | ` , | | | ology must be present, |
| - | Gleyed Matrix (S4) | | | | | | unless distur | bed or problematic. |
| Restrictive I | Layer (if present): | | | | | | | |
| Type: | | | | | | | | 4 |
| Depth (inc | ches): | | | | | | Hydric Soil Pre | sent? Yes No |
| | | | | | | | | |
| HYDROLO | | | | | | | | |
| | drology Indicators | | | L A | | | 0 | a la dia ataun (O an manana manaina di) |
| | - | one require | ed; check all that app | • | | | | / Indicators (2 or more required) |
| | Water (A1) iter Table (A2) | | Salt Crust | ` ' | | | ·—— | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) |
| ✓ Saturation | | | Biotic Cru Aquatic Ir | | es (R13) | | | Deposits (B3) (Riverine) |
| | larks (B1) (Nonrive | rine) | Hydrogen | | | | | age Patterns (B10) |
| · · · · · · · · · · · · · · · · · · · | nt Deposits (B2) (N | • | | | , , | Living Ro | | eason Water Table (C2) |
| | oosits (B3) (Nonriv | | Presence | | - | - | | sh Burrows (C8) |
| Surface | Soil Cracks (B6) | | | | | ed Soils (C | | ation Visible on Aerial Imagery (C9) |
| Inundation | on Vis ble on Aeria | Imagery (E | 37) Thin Mucl | k Surface | (C7) | | Shallo | ow Aquitard (D3) |
| Water-S | tained Leaves (B9) | | Other (Ex | plain in R | temarks) | | <u>✓</u> FAC-I | Neutral Test (D5) |
| Field Obser | | | | | | | | |
| Surface Water | | | No Depth (ir | | | | | |
| Water Table | | | No Depth (ir | | | | | |
| Saturation Projection (includes cap | | Yes | No Depth (ir | iches): <u>0</u> | | Wet | land Hydrology Pr | esent? Yes V No No |
| | | n gauge, m | nonitoring well, aerial | photos, p | revious in | spections), | , if available: | |
| | | | | | | | | |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |



Sample Point 28



Sample Point 28

| Project/Site: WDC Phase II | | (| City/County | _{/:} Davis C | ounty | _ Sampling Date: 2024-0 |)5-14 |
|---|---------------------|-----------------|-------------|-----------------------|----------------------------|---|--------|
| Applicant/Owner: UDOT | | | | | State: Utah | _ Sampling Point: SP29 | |
| Investigator(s): Merissa Davis | | : | Section, To | ownship, Ra | nge: S05 T4N R2W | | |
| Landform (hillslope, terrace, etc.): Depre | ssion | | Local relie | f (concave, | convex, none): Conca | <u>/e</u> Slope (%): <u>(</u> | 0 |
| Subregion (LRR): D 28A | | Lat: 41. | 1059338 | | _ Long: <u>-112.095927</u> | Datum: NAD8 | 33_201 |
| Soil Map Unit Name: Fb - Ford Ioam, s | hallow water | table, 0 to | 1 percen | t slopes | NWI classifi | cation: None | |
| Are climatic / hydrologic conditions on the | site typical for th | nis time of yea | ar? Yes | No _ | (If no, explain in I | Remarks.) | |
| Are Vegetation, Soil, or Hy | drology | significantly | disturbed? | Are ' | 'Normal Circumstances" | present? Yes No | |
| Are Vegetation, Soil, or Hy | drology | naturally pro | blematic? | (If ne | eeded, explain any answ | ers in Remarks.) | |
| SUMMARY OF FINDINGS - Atta | ach site map | showing | samplin | g point l | ocations, transect | s, important features | , etc. |
| | 4 | | 1 | | <u> </u> | <u>. ·</u> | |
| Hydrophytic Vegetation Present? Hydric Soil Present? | Yes / | No No | | ne Sampled | | , | |
| Wetland Hydrology Present? | Yes 🗸 | | with | nin a Wetlaı | nd? Yes | No | |
| Remarks: | | | | | | | |
| Conditions were wetter than | າ normal ac | cordina t | to the a | ntecede | ent precipitation | tool, but there had | not |
| been rain for several days p | | • | | | р. со.р. са | | |
| VEGETATION – Use scientific n | | | | | | | |
| VEGETATION OSC SCICILITIES II | — Plan | Absolute | Dominant | Indicator | Dominance Test wor | ksheet: | |
| Tree Stratum (Plot size: | _) | % Cover | | | Number of Dominant S | Species | |
| 1 | | | | | That Are OBL, FACW, | or FAC: <u>3</u> | (A) |
| 2 | | | | | Total Number of Domi | ^ | |
| 3 | | | | · | Species Across All Str | rata: <u>3</u> | (B) |
| 4 | | | = Total Co | over | Percent of Dominant S | | (A (D) |
| Sapling/Shrub Stratum (Plot size: |) | | . Total oc | 7401 | That Are OBL, FACW, | | (A/B) |
| 1 | | | | | Prevalence Index wo | | |
| 2 | | | | | Total % Cover of: | | - |
| 3 | | | | | · | x 1 = 0 x 2 = 160 | - |
| 4 5 | | | | | | x 3 = 0 | _ |
| | | | = Total Co | over | | x 4 = 0 | |
| Herb Stratum (Plot size: | _) | 25 | | EAC)A/ | UPL species 0 | x 5 = 0 | - |
| 1. Phragmites australis 2. Juncus balticus | | <u>35</u> | <u> </u> | FACW FACW | Column Totals: 80 | (A) <u>160</u> | (B) |
| 3. Phalaris arundinacea | | 20 | | FACW | Prevalence Inde | x = B/A = 2.00 | |
| 4 | | | | | Hydrophytic Vegetat | · | |
| 5. | | | | | ✓ Dominance Test is | s >50% | |
| 6 | | | | | ✓ Prevalence Index | | |
| 7 | | | | | | aptations ¹ (Provide supportiiks or on a separate sheet) | ng |
| 8 | | 80 | | · | | ophytic Vegetation ¹ (Explain | 1) |
| Woody Vine Stratum (Plot size: |) | 80 | = Total Co | over | | | |
| 1. | | | | | | oil and wetland hydrology mu | ust |
| 2 | | | | | be present, unless dis | turbed or problematic. | |
| | | | = Total Co | over | Hydrophytic Vegetation | | |
| % Bare Ground in Herb Stratum | % Cov | er of Biotic Cı | rust | | Present? You | es <u> </u> | |
| Remarks: | | | | | l | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

SOIL Sampling Point: SP29

| Profile Desc | ription: (Describe | to the depth | needed to docu | ment the i | ndicator | or confirn | n the absence o | of indicators.) |
|----------------------------|--|-----------------|------------------------|---------------|------------|------------------|--------------------------|---|
| Depth | Matrix | | | ox Feature | 4 | | | |
| (inches) | Color (moist) | <u> %</u> | Color (moist) | % | Type' | Loc ² | <u>Texture</u> | Remarks |
| 0 - 5 | 7.5YR 3/1 | 100 | | | | | Loam | |
| 5 - 20 | 5YR 4/1 | 100 | | | | | Clay | |
| - | | | | | | | | |
| | | | | | | | | |
| - | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| - | | | | | | | | |
| - | | | | | | | | |
| ¹Type: C=Ce | oncentration, D=Dep | oletion, RM=Re | educed Matrix, C | S=Covered | d or Coate | d Sand G | rains. ² Loca | ation: PL=Pore Lining, M=Matrix. |
| | Indicators: (Applic | | | | | | | or Problematic Hydric Soils ³ : |
| Histosol | (A1) | | Sandy Red | ox (S5) | | | 1 cm M | uck (A9) (LRR C) |
| Histic Ep | oipedon (A2) | | Stripped M | | | | | uck (A10) (LRR B) |
| Black Hi | stic (A3) | | Loamy Mu | - | | | Reduce | d Vertic (F18) |
| | n Sulfide (A4) | | Loamy Gle | - | (F2) | | | rent Material (TF2) |
| | d Layers (A5) (LRR | C) | Depleted M | | | | Other (E | Explain in Remarks) |
| | ick (A9) (LRR D) | (0.4.4) | Redox Dar | | . , | | | |
| - | d Below Dark Surfac ark Surface (A12) | ce (A11) | Depleted D Redox Dep | | | | 3Indicators o | f hydrophytic vegetation and |
| | fucky Mineral (S1) | | Vernal Poo | | го) | | | ydrology must be present, |
| - | Gleyed Matrix (S4) | | veman oc | 13 (1 3) | | | | sturbed or problematic. |
| | Layer (if present): | | | | | | 1 | |
| Type: | , , , | | | | | | | |
| | ches): | | _ | | | | Hydric Soil F | Present? Yes No |
| Remarks: | , | | <u> </u> | | | | 1 | |
| | | | | | | | | |
| Soil pit v | vas not deep | enough | to confirm | deple | ted ma | atrix. I | nick dark | surface assumed. |
| | | | | | | | | |
| HYDROLO | GV. | | | | | | | |
| | drology Indicators | | | | | | | |
| _ | cators (minimum of | | book all that ann | ls.A | | | Sacara | dary Indicators (2 or more required) |
| | • | one required, c | • • | | | | | |
| | Water (A1) | | Salt Crust | , | | | | ater Marks (B1) (Riverine) |
| | ater Table (A2) | | Biotic Cru | | - (D40) | | | diment Deposits (B2) (Riverine) |
| Saturation | | -: \ | | vertebrate | | | · | ift Deposits (B3) (Riverine) |
| | larks (B1) (Nonrive i | | Hydrogen | | | Livina Dod | | ainage Patterns (B10) |
| | nt Deposits (B2) (No | | | | _ | _ | | y-Season Water Table (C2) |
| | oosits (B3) (Nonrive | erine) | | of Reduce | | | | ayfish Burrows (C8) |
| · —— | Soil Cracks (B6) | Imagani (DZ) | | on Reducti | | J Solis (Co | | turation Visible on Aerial Imagery (C9) |
| | on Vis ble on Aerial | imagery (b7) | Thin Mucl Other (Ex | | | | | allow Aquitard (D3) .C-Neutral Test (D5) |
| Field Obser | tained Leaves (B9) | | Other (Ex | piaiii iii Ke | illaiks) | | <u>•</u> FA | C-Neutral Test (D5) |
| | | /aa Na | V Donth (in | ahaa). | | | | |
| Surface Wat | | | Depth (ir | | | | | |
| Water Table | | | Depth (ir | | | | | |
| Saturation P (includes car | | es No | Depth (ir | nches): | | _ Wetl | and Hydrology | Present? Yes V No No |
| | corded Data (stream | n gauge, monit | oring well, aerial | photos, pr | evious ins | pections), | if available: | |
| | | | | | | | | |
| Remarks: | | | | | | | | |
| Low are | a where wat | er appea | rs to have | at leas | t prev | iously | traveled o | r sat. No hydrology |
| | y, but secon | | | | • | • | | , |
| Jancond | , , Dat 300011 | aary man | | | | | | |
| | | | | | | | | |



Sample Point 29



Sample Point 29

| Project/Site: WDC Phase II | (| Citv/Cou | _{ıntv:} Davis C | ounty | Sampling Date: 2024-05-14 |
|--|-----------------|----------|--------------------------|--------------------------------------|---|
| Applicant/Owner: UDOT | | - | - | | Sampling Point: SP30 |
| • • | | | | ange: S05 T4N R2W | |
| Landform (hillslope, terrace, etc.): Slope | | | | | |
| | | | | | 38 Datum: NAD83_20 |
| Soil Map Unit Name: Fb - Ford loam, shallow water | | | | | |
| Are climatic / hydrologic conditions on the site typical for the | | | | | |
| Are Vegetation, Soil, or Hydrology | | | | | " present? Yes No |
| Are Vegetation, Soil, or Hydrology | | | | eeded, explain any answ | |
| SUMMARY OF FINDINGS – Attach site map | | | | | |
| Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Yes Yes Ves | No | | s the Sampled | | No |
| Conditions were wetter than normal ac been rain for several days prior to the s | _ | | antecede | ent precipitation | tool, but there had not |
| | | | | | |
| VEGETATION – Use scientific names of pla | Absolute | Domin | ant Indicator | Deminance Test we | ulsahaat. |
| Tree Stratum (Plot size:) | | | es? Status | Dominance Test wo Number of Dominant | |
| 1. Elaeagnus angustifolia | _ 5 | | FAC | That Are OBL, FACW | |
| 2 | | | | Total Number of Dom | ninant |
| 3 | | | | Species Across All St | trata: <u>3</u> (B) |
| 4 | 5 | | | Percent of Dominant | |
| Sapling/Shrub Stratum (Plot size:) | <u> </u> | = rotai | Cover | That Are OBL, FACW | V, or FAC: 66.66 (A/B) |
| 1 | | | | Prevalence Index wo | orksheet: |
| 2 | | | | Total % Cover of | |
| 3 | | | | | x 1 = 0 |
| 4 | | | | | x 2 = <u>74</u> |
| 5 | | | | | x 3 = 15 |
| Hade Otesture (Plateine | | = Total | Cover | FACU species 22 | |
| Herb Stratum (Plot size:) 1. Phalaris arundinacea | 37 | ~ | FACW | | x 5 = 155 |
| 2. Thinopyrum intermedium | | | UPL | Column Totals: 95 | (A) <u>332</u> (B) |
| 3. Taraxacum officinale | | | FACU | Prevalence Inde | ex = B/A = 3.49 |
| 4. Cirsium arvense | 8 | | FACU | Hydrophytic Vegeta | <u></u> |
| 5. Lepidium campestre | 3 | | UPL | <u>✓</u> Dominance Test | |
| 6. Chenopodium album | 2 | | FACU | Prevalence Index | x is ≤3.0 ¹ |
| 7 | | | | Morphological Ac | daptations ¹ (Provide supporting |
| 8 | | | | | rks or on a separate sheet) |
| | 90 | = Total | Cover | Problematic Hydr | rophytic Vegetation ¹ (Explain) |
| Woody Vine Stratum (Plot size:) | | | | ¹ Indicators of hydric s | soil and wetland hydrology must |
| 1 2 | | | | | sturbed or problematic. |
| 2. | | = Total | l Cover | Hydrophytic | - |
| N.D. 0. 11 11 101 1 | | _ | | Vegetation | |
| % Bare Ground in Herb Stratum % Cov | er of Biotic C | rust | | Present? Y | res No |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Soll Sampling Point: SP30

| Depth (inches) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | Texture | Remarks |
|--|--|--|--|--|--|-------------------------------|---|--|
| 0 - 1 | 7.5YR 2.5/2 | 100 | <u> </u> | | .,,,,, | | Peat | - Tomaine |
| 1 - 12 | 7.5YR 4/2 | 100 | - | - | | | Clay | |
| 12 - 24 | 7.5YR 5/2 | 91 | 7.5YR 5/6 | 9 | С | PL | Clay | |
| 12 24 | 7.511 3/2 | 31 | 7.511 3/0 | | | | Clay | |
| | - | - | | - | | | - | |
| | - | | | | | | | |
| | | | | | | ī | | |
| - | | | | | | | | |
| - | | | | | | | | |
| 7! | | | M=Reduced Matrix, CS | | | ed Sand C | | ation: PL=Pore Lining, M=Matrix |
| - | | able to a | II LRRs, unless othe | | ed.) | | | for Problematic Hydric Soils ³ : |
| Histosol | | | Sandy Red | | | | | fluck (A9) (LRR C) |
| | pipedon (A2) | | Stripped Ma Loamy Mud | | J /E1) | | | luck (A10) (LRR B) ed Vertic (F18) |
| | istic (A3) en Sulfide (A4) | | Loamy Gle | - | , , | | | arent Material (TF2) |
| | d Layers (A5) (LRR | C) | Depleted M | | (1 2) | | | Explain in Remarks) |
| | uck (A9) (LRR D) | - / | Redox Dark | . , | (F6) | | | , , |
| Deplete | d Below Dark Surfac | e (A11) | Depleted D | ark Surfac | ce (F7) | | | |
| | ark Surface (A12) | | Redox Dep | | (F8) | | | of hydrophytic vegetation and |
| Sandy N | Mucky Mineral (S1) | | Vernal Poo | ls (F9) | | | | hydrology must be present, |
| _ | Clayed Matrix (C4) | | | | | | | |
| Sandy 0 | Gleyed Matrix (S4) | | | | | | uniess ui | sturbed or problematic. |
| Sandy (| Layer (if present): | | | | | | uniess di | sturbed of problematic. |
| Sandy (Restrictive Type: | Layer (if present): | | | | | | | |
| Sandy (Restrictive Type: Depth (in Remarks: | ches): h redox and | a redu | | preser | nt, this | does | Hydric Soil | Present? Yes No _ |
| Sandy (Restrictive Type: Depth (in Remarks: Althoug ydric s | ches): h redox and oil indicators | a redu | | preser | nt, this | does | Hydric Soil | Present? Yes No _ |
| Sandy (Restrictive Type: Depth (in Remarks: Althoug Tydric s | ches): h redox and oil indicators | a redu | | preser | nt, this | does | Hydric Soil | Present? Yes No _ |
| Sandy (Restrictive Type: Depth (in Remarks: Althoug Tydric s YDROLO Vetland Hy | ches): h redox and oil indicators GY drology Indicators cators (minimum of cators) | a redu | ced matrix if | | nt, this | does | Hydric Soil not fit the | Present? Yes No e requirements of any |
| Sandy CRestrictive Type: Depth (in Remarks: Althoug Tydric S YDROLO Vetland Hy Primary Indi Surface | ches): h redox and oil indicators GY drology Indicators cators (minimum of other (A1) | a redu | ed; check all that appl | (B11) | nt, this | does | Hydric Soil not fit the | Present? Yes No e requirements of any dary Indicators (2 or more require fater Marks (B1) (Riverine) |
| Sandy (Restrictive Type: Depth (in Remarks: Althoug YDROLO Vetland Hy Primary Indi Surface High Wa | ches): h redox and oil indicators GY drology Indicators cators (minimum of a water (A1) ater Table (A2) | a redu | ed; check all that appl Salt Crust | (B11) st (B12) | | does | Hydric Soil not fit the Secon W Secon | Present? Yes No e requirements of any dary Indicators (2 or more require fater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) |
| Sandy Control Sestrictive Type: Depth (in Remarks: Although your Control Sestending Primary Indian Surface High Way Saturati | ches): h redox and oil indicators GY drology Indicators cators (minimum of other (A1) ater Table (A2) on (A3) | a redu | ed; check all that appl Salt Crust Biotic Crust Aquatic In | y) (B11) st (B12) vertebrate | es (B13) | does | Hydric Soil not fit the Secon W Soil | Present? Yes No e requirements of any dary Indicators (2 or more require fater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) |
| Sandy C Restrictive Type: Depth (in Remarks: Althoug Tydric s YDROLO Wetland Hy Primary Indi Surface High Wa Saturati Water N | ches): ches): h redox and oil indicators GY drology Indicators cators (minimum of of the cators) Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver) | a redu | ed; check all that appl Salt Crust Biotic Crust Aquatic In Hydrogen | (B11) st (B12) vertebrate Sulfide O | es (B13) dor (C1) | | Hydric Soil not fit the Secon W So D | Present? Yes No e requirements of any dary Indicators (2 or more require fater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) |
| Sandy C Restrictive Type: Depth (in Remarks: Althoug Tydric s YDROLO Vetland Hy Primary Indi Surface High Wa Saturati Water M Sedime | ches): ches): h redox and oil indicators drology Indicators cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver int Deposits (B2) (No | a redu | ed; check all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F | y) (B11) st (B12) vertebrate Sulfide O Rhizosphe | es (B13) dor (C1) eres along | Living Ro | Hydric Soil not fit the Secon W Soil Doots (C3) Doots (C3) | Present? Yes No e requirements of any dary Indicators (2 or more require fater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) |
| Sandy C Restrictive Type: Depth (in Remarks: Althoug Tydric s YDROLO Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De | ches): ches): h redox and oil indicators GY drology Indicators cators (minimum of other (A1) ater Table (A2) on (A3) Marks (B1) (Nonrivent Deposits (B2) (Nonrivent Deposits (B3) (Nonrivent Deposits (B4) (B4) (B4) (B4) (B4) (B4) (B4) (B4) | a redu | ed; check all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F | (B11) st (B12) vertebrate Sulfide O Rhizosphe of Reduce | es (B13) dor (C1) eres along ed Iron (C | Living Ro | Hydric Soil not fit the Secon W Solution D Doots (C3) C | Present? Yes No e requirements of any dary Indicators (2 or more require fater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) |
| Sandy C Restrictive Type: Depth (in Remarks: Althoug Tydric S YDROLO Wetland Hy Primary Indi Surface High Wa Sedime Drift De Surface Surface Surface Surface Surface Surface Surface Surface Surface | ches): ches): ches): ches): ches): ches): ches): ches: ch | a redu | ed; check all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro | (B11) st (B12) vertebrate Sulfide O Rhizosphe of Reduce | es (B13) dor (C1) eres along ed Iron (Ci | Living Ro | Hydric Soil | Present? Yes No e requirements of any dary Indicators (2 or more require fater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imager |
| Sandy Control Sestrictive Type: Depth (in Remarks: Although your Control Sestimate | ches): ches): h redox and oil indicators GY drology Indicators cators (minimum of other (A1) ater Table (A2) on (A3) Marks (B1) (Nonrivent Deposits (B2) (Nonrivent Deposits (B3) (Nonrivent Deposits (B4) (B4) (B4) (B4) (B4) (B4) (B4) (B4) | a redu | ed; check all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro | (B11) st (B12) vertebrate Sulfide O Rhizosphe of Reduce on Reduct | es (B13) dor (C1) eres along ed Iron (C- ion in Tille (C7) | Living Ro | Hydric Soil | Present? Yes No e requirements of any dary Indicators (2 or more require fater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) |
| Sandy C Restrictive Type: Depth (in Remarks: Althoug Tydric s YDROLO Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Surface Inundati Water-S | ches): ches): ches): ches): ches): ches): ches in ches i | a redu | ed; check all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro | (B11) st (B12) vertebrate Sulfide O Rhizosphe of Reduce on Reduct | es (B13) dor (C1) eres along ed Iron (C- ion in Tille (C7) | Living Ro | Hydric Soil | e requirements of any dary Indicators (2 or more require fater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imager hallow Aquitard (D3) |
| Sandy C Restrictive Type: Depth (in Remarks: Althoug Tydric s YDROLO Vetland Hy Primary Indi Saturati Water M Sedime Drift De Surface Inundati Water-S Field Obser | ches): ches): ches): ches): ches): ches): ches): ches's a redu | ed; check all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro | (B11) st (B12) vertebrate Sulfide O Rhizosphe of Reduct on Reduct x Surface | es (B13) dor (C1) eres along ed Iron (Ci ion in Tille (C7) emarks) | Living Ro 4) d Soils (C | Hydric Soil | e requirements of any dary Indicators (2 or more require fater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imager hallow Aquitard (D3) |
| Sandy Control Sestrictive Type: Depth (in Remarks: Althoug by dric serio | ches): ches): ches): ches): ches): ches): ches): ches: ch | a redu | ed; check all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro B7) Thin Muck | (B11) st (B12) vertebrate Sulfide O Rhizosphe of Reduct on Reduct c Surface plain in Re | es (B13) dor (C1) eres along ed Iron (C- ion in Tille (C7) emarks) | Living Ro 4) d Soils (C | Hydric Soil | e requirements of any dary Indicators (2 or more require fater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imager hallow Aquitard (D3) |
| Sandy (Restrictive Type: Depth (in Remarks: Althoug YDROLO Wetland Hy Primary Indi Surface High Wa Sedime Drift De Surface Inundati Water -S Field Obser Surface Water Table Saturation P | ches): ches): ches): ches): ches): ches): ches): ches): ches in redox and oil indicators cators (minimum of a cators (minimum | a redu | ed; check all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro B7) Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide O Rhizosphe of Reduct on Reduct c Surface plain in Re ches): ches): | es (B13) dor (C1) eres along ed Iron (C- ion in Tille (C7) emarks) | Living Ro 4) d Soils (C | Hydric Soil | e requirements of any dary Indicators (2 or more require fater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imager hallow Aquitard (D3) |
| Sandy C Restrictive Type: Depth (in Remarks: Althoug Tydric s YDROLO Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Surface Inundati Water-S Field Obser Surface Wat Vater Table Saturation P includes ca | ches): ches): ches): ches): ches): ches): ches): ches: ch | a reductions. Signal of the content | ed; check all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc B7) Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide O Rhizosphe of Reduct on Reduct c Surface plain in Re ches): ches): ches): | es (B13) dor (C1) eres along ed Iron (C- ion in Tille (C7) emarks) | Living Ro 4) d Soils (C | Hydric Soil not fit the Secon W So Doots (C3) D C6) Si Si Fr | e requirements of any dary Indicators (2 or more require dater Marks (B1) (Riverine) rift Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imager hallow Aquitard (D3) AC-Neutral Test (D5) |
| Sandy Of Restrictive Type: Depth (in Remarks: Althoug by dric s Primary Indi Surface High Water Maker Maker Maker Surface Inundati Water Surface Water Table Saturation Princludes callescribe Restriction Resource Restriction Resource Resourc | ches): ches): ches): ches): ches): ches): ches): ches: ch | a reductions. Signal of the content | ed; check all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc B7) Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide O Rhizosphe of Reduct on Reduct c Surface plain in Re ches): ches): ches): | es (B13) dor (C1) eres along ed Iron (C- ion in Tille (C7) emarks) | Living Ro 4) d Soils (C | Hydric Soil not fit the Secon W So Doots (C3) D C6) Si Si Fr | e requirements of any dary Indicators (2 or more require dater Marks (B1) (Riverine) rift Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imager hallow Aquitard (D3) AC-Neutral Test (D5) |
| Sandy C Restrictive Type: Depth (in Remarks: Althoug Tydric s YDROLO Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Surface Inundati Water-S Field Obser Surface Wat Vater Table Saturation P includes ca | ches): ches): ches): ches): ches): ches): ches): ches: ch | a reductions. Signal of the content | ed; check all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc B7) Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide O Rhizosphe of Reduct on Reduct c Surface plain in Re ches): ches): ches): | es (B13) dor (C1) eres along ed Iron (C- ion in Tille (C7) emarks) | Living Ro 4) d Soils (C | Hydric Soil not fit the Secon W So Doots (C3) D C6) Si Si Fr | e requirements of any dary Indicators (2 or more require dater Marks (B1) (Riverine) rift Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imager hallow Aquitard (D3) AC-Neutral Test (D5) |



Sample Point 30



Sample Point 30

| Project/Site: WDC Phase II | City | _{//County:} Davis C | County | Sampling Date: 2024-05-14 |
|---|------------------------------|----------------------------------|----------------------------------|--|
| Applicant/Owner: UDOT | | | State: Utah | Sampling Point: SP31 |
| Investigator(s): Cara Glabau, Elena Capson | Se | ction, Township, Ra | ange: S05 T4N R2W | |
| Landform (hillslope, terrace, etc.): Berm | Lo | cal relief (concave, | , convex, none): Convex | Slope (%): 0 |
| Subregion (LRR): D 28A | Lat: 41.110 |)17633 | Long: <u>-112.0997626</u> | 67 Datum: NAD83_20 |
| Soil Map Unit Name: Fb - Ford Ioam, shallov | w water table, 0 to 1 | percent slopes | NWI classific | cation: None |
| Are climatic / hydrologic conditions on the site type | oical for this time of year? | Yes No _ | (If no, explain in F | Remarks.) |
| Are Vegetation, Soil, or Hydrolog | y significantly dis | urbed? Are | "Normal Circumstances" | present? Yes No |
| Are Vegetation, Soil, or Hydrolog | y naturally proble | matic? (If n | needed, explain any answe | ers in Remarks.) |
| SUMMARY OF FINDINGS - Attach s | ite map showing sa | ampling point | locations, transects | s, important features, etc. |
| Hydrophytic Vogotation Procent? | No. V | | | |
| | No | Is the Sample | | |
| | No | within a Wetla | ınd? Yes | No |
| Remarks: | | | | |
| Conditions were wetter than nor | mal according to | the anteced | ent precipitation t | ool, but there had not |
| been rain for several days prior t | _ | | p p | |
| | | | | |
| VEGETATION – Use scientific names | <u> </u> | ominant Indicator | Dominance Test work | kahaati |
| Tree Stratum (Plot size:) | | ominant Indicator pecies? Status | Number of Dominant S | |
| 1 | | | That Are OBL, FACW, | ' 4 |
| 2 | | | Total Number of Domir | nant |
| 3 | | | Species Across All Stra | |
| 4 | | | Percent of Dominant S | |
| Sapling/Shrub Stratum (Plot size: | = | Total Cover | That Are OBL, FACW, | or FAC: <u>50.00</u> (A/B) |
| 1 | | | Prevalence Index wor | rksheet: |
| 2. | | | Total % Cover of: | Multiply by: |
| 3 | | | OBL species 0 | x 1 = 0 |
| 4 | | | - | x 2 = 118 |
| 5 | | | · | x 3 = 6 |
| Herb Stratum (Plot size:) | = | Total Cover | | x 4 = 0 |
| 1 Phalaris arundinacea | 59 | ✓ FACW | UPL species 38 Column Totals: 99 | x = 5 = 190 (A) 314 (B) |
| 2. Thinopyrum intermedium | 38 | ✓ UPL | Column Totals: 55 | (A) <u>014</u> (B) |
| 3. Dipsacus fullonum | 2 | FAC | Prevalence Index | c = B/A = 3.17 |
| 4 | | | Hydrophytic Vegetati | on Indicators: |
| 5 | | | Dominance Test is | |
| 6 | | | Prevalence Index i | |
| 7 | | | | aptations ¹ (Provide supporting s or on a separate sheet) |
| 8 | | | | ophytic Vegetation ¹ (Explain) |
| Woody Vine Stratum (Plot size: | | Total Cover | | |
| 1 | | | | il and wetland hydrology must |
| 2 | | | be present, unless dist | urbed or problematic. |
| | = | Total Cover | Hydrophytic | |
| % Bare Ground in Herb Stratum | % Cover of Biotic Crus | t | Vegetation Present? Ye | es No |
| Remarks: | | <u> </u> | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

SOIL Sampling Point: SP31

| | . ` | to the dept | n needed to document the indicator or | confirm t | ne absence o | or indicators.) |
|-------------------------------|------------------------------|-----------------------|---|------------------|----------------------------|---|
| Depth (inches) | Matrix Color (moist) | % | Redox Features Color (moist) % Type ¹ | Loc ² | Texture | Remarks |
| 0 - 3 | 7.5YR 3/3 | | | | Loam | |
| 3 - 20 | 7.5YR 4/3 | 100 | | | Clay Loam | |
| 20 - 24 | 7.5YR 4/3 | 100 | | | Clay | |
| - | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | Reduced Matrix, CS=Covered or Coated | Sand Grai | | ation: PL=Pore Lining, M=Matrix. |
| - | | able to all L | _RRs, unless otherwise noted.) | | | for Problematic Hydric Soils ³ : |
| Histosol | | | Sandy Redox (S5) | | | uck (A9) (LRR C) |
| | ipedon (A2) | | Stripped Matrix (S6) | | | uck (A10) (LRR B) |
| Black His | n Sulfide (A4) | | Loamy Mucky Mineral (F1)Loamy Gleyed Matrix (F2) | | | d Vertic (F18) rent Material (TF2) |
| | l Layers (A5) (LRR (| C) | Depleted Matrix (F3) | | | Explain in Remarks) |
| | ck (A9) (LRR D) | 0) | Redox Dark Surface (F6) | | Other (E | zxpiaiii iii Remarks) |
| | Below Dark Surfac | e (A11) | Depleted Dark Surface (F7) | | | |
| | rk Surface (A12) | () | Redox Depressions (F8) | | ³ Indicators of | of hydrophytic vegetation and |
| | lucky Mineral (S1) | | Vernal Pools (F9) | | | ydrology must be present, |
| - | leyed Matrix (S4) | | | | unless dis | sturbed or problematic. |
| Restrictive L | ayer (if present): | | | | | |
| Type: | | | | | | |
| Depth (inc | ches): | | | | Hydric Soil F | Present? Yes No |
| Remarks: | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | ov. | | | | | |
| HYDROLO | | | | | | |
| - | drology Indicators: | | | | _ | |
| | • | one required | ; check all that apply) | | | dary Indicators (2 or more required) |
| Surface \ | Water (A1) | | Salt Crust (B11) | | | ater Marks (B1) (Riverine) |
| <u> </u> | ter Table (A2) | | Biotic Crust (B12) | | | ediment Deposits (B2) (Riverine) |
| Saturatio | , , | | Aquatic Invertebrates (B13) | | Dri | ift Deposits (B3) (Riverine) |
| | arks (B1) (Nonriver | | Hydrogen Sulfide Odor (C1) | | | ainage Patterns (B10) |
| Sedimen | t Deposits (B2) (No | nriverine) | Oxidized Rhizospheres along Li | ving Roots | s (C3) Dr | y-Season Water Table (C2) |
| Drift Dep | osits (B3) (Nonrive | rine) | Presence of Reduced Iron (C4) | | Cra | ayfish Burrows (C8) |
| Surface | Soil Cracks (B6) | | Recent Iron Reduction in Tilled : | Soils (C6) | Sa | turation Visible on Aerial Imagery (C9) |
| | on Vis ble on Aerial | Imagery (B7 | Thin Muck Surface (C7) | | Sh | allow Aquitard (D3) |
| Water-St | ained Leaves (B9) | | Other (Explain in Remarks) | | FA | C-Neutral Test (D5) |
| Field Observ | | | .1 | | | |
| Surface Water | | _ | No Depth (inches): | - | | |
| Water Table | Present? Y | es N | No Depth (inches): 23 | - | | |
| Saturation Pr | | ′es <u> ′ </u> | No Depth (inches): 23 | Wetlan | nd Hydrology | Present? Yes No |
| (includes cap Describe Rec | | n dalide moi | nitoring well, aerial photos, previous inspe | ections) if | available: | |
| 200011001100 | Data (ottodii | . 34430, 11101 | | - Janon 10 j, 11 | a. anabio. | |
| Remarks: | | | | | | |
| | | | | _ | | |
| Saturation | on and water | r table t | oo deep to qualify for indi | icators | . | |
| | | | | | | |
| | | | | | | |
| | | | | | | |



Sample Point 31



Sample Point 31

| Project/Site: WDC Phase II | (| City/Co | _{ounty:} <u>Davis C</u> | ounty | Sampling Date: 2024-05-16 | | |
|--|---------------------|---------|----------------------------------|---|---|--|--|
| Applicant/Owner: UDOT | | | | State: Utah | Sampling Point: SP32 | | |
| Investigator(s): Cara Glabau, Elena Capson | | Section | n, Township, Ra | ange: S31 T5N R2W | | | |
| | | | | | Slope (%): 0 | | |
| Subregion (LRR): D 28A | Lat: 41. | 12594 | 435 | _ Long: -112.1082355 | Datum: NAD83_201 | | |
| Soil Map Unit Name: Fb - Ford loam, shallow water | table, 0 to | 1 per | cent slopes | NWI classific | ation: None | | |
| Are climatic / hydrologic conditions on the site typical for the | nis time of yea | ar? Ye | es No | (If no, explain in R | emarks.) | | |
| Are Vegetation, Soil, or Hydrology | | | | | oresent? Yes No | | |
| Are Vegetation, Soil, or Hydrology | | | | eeded, explain any answe | | | |
| SUMMARY OF FINDINGS – Attach site map | | | | | | | |
| Hydrophytic Vegetation Present? Yes | No | | Is the Sample | J A.c. | | | |
| Hydric Soil Present? Yes | No <u>′</u> | | within a Wetla | | No | | |
| Wetland Hydrology Present? Yes Remarks: | No | | William a Wella | | | | |
| Conditions were wetter than normal according to the antece Hydrophytic vegetation present, likely due to adjacent wetlal soils or hydrology were present. Although hydrophytic veget | nd conditions | and int | ermittent hydrol | ogy that may be present fro | m adjacent wetlands. No hydric | | |
| VEGETATION – Use scientific names of pla | nts. | | | | | | |
| Tree Stratum (Plot size:) | Absolute % Cover | | inant Indicator ies? Status | Dominance Test work | | | |
| 1 | | | | Number of Dominant Sp That Are OBL, FACW, of | | | |
| 2 | | | | | | | |
| 3. | | | | Total Number of Domin Species Across All Stra | ^ | | |
| 4 | | | | Percent of Dominant Sp | oocios | | |
| Ocalias (Obsult Otsatura (Distrains | | = Tota | al Cover | That Are OBL, FACW, of | | | |
| Sapling/Shrub Stratum (Plot size:) | | | | Prevalence Index wor | ksheet: | | |
| 1 2 | | | | Total % Cover of: | | | |
| 3. | | | | | x 1 = 0 | | |
| 4 | | | | FACW species 60 | | | |
| 5. | | | | - | x 3 = 0 | | |
| | | = Tota | al Cover | FACU species 29 | | | |
| Herb Stratum (Plot size:) | | | | UPL species 11 | x 5 = <u>55</u> | | |
| 1. Carex praegracilis | 33 | | | Column Totals: 100 | (A) <u>291</u> (B) | | |
| 2. Bromus inermis | _ 25 | | | | n., 2.01 | | |
| 3. Juncus balticus | 25 | | | Prevalence Index | · | | |
| 4. Bromus tectorum | _ 6 | | UPL UPL | Hydrophytic Vegetation | | | |
| 5. Eragrostis curvula | <u>5</u> | | UPL FACIL | ✓ Dominance Test is_ Prevalence Index is | | | |
| 6. Hordeum murinum 7. Deschampsia caespitosa | _ 2 | | FACU | | ptations ¹ (Provide supporting | | |
| | | | <u>FACW</u> | | s or on a separate sheet) | | |
| 8 | 100 | | al Cavar | Problematic Hydro | phytic Vegetation ¹ (Explain) | | |
| Woody Vine Stratum (Plot size:) | 100 | = 1018 | al Cover | | | | |
| 1 | | | | ¹ Indicators of hydric soi be present, unless distu | l and wetland hydrology must urbed or problematic. | | |
| 2 | | | | | | | |
| | | = Tota | al Cover | Hydrophytic Vegetation | | | |
| % Bare Ground in Herb Stratum % Cov | er of Biotic C | rust | | Present? Yes | s No | | |
| Remarks: | | | | • | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

SOIL Sampling Point: SP32

| Depth (inches) | Color (moist) | % | Color (moist) | <u>k Features</u> % | Type ¹ | Loc ² | Texture | Remarks | |
|---|--|--|--|--|---|---------------------------------|--|---|------------------|
| 0 - 3 | 7.5YR 3/2 | 100 | COIOI (IIIOISI) | | Турс | | Clay Loam | remano | |
| 3 - 18 | 10YR 3/2 | 100 | _ | | | | Clay | | |
| | | | | | | | | | |
| 18 - 24 | 10YR 4/3 | 100 | | | | | Clay | | |
| - | | | | | | | | | |
| - | | | | | | | | | |
| - | | | | | | | | | |
| - | | | | | | | | | |
| - | | | | | | | | | |
| Гуре: С=С | concentration, D=Dep | oletion, RM=F | Reduced Matrix, CS | =Covered | d or Coate | d Sand G | rains. ² Loca | ation: PL=Pore Lining, M=Matri: | х. |
| ydric Soil | Indicators: (Applic | cable to all L | RRs, unless other | wise note | ed.) | | Indicators f | or Problematic Hydric Soils ³ : | |
| _ Histoso | | | Sandy Redo | | | | | uck (A9) (LRR C) | |
| | pipedon (A2) | | Stripped Ma | , , | | | | uck (A10) (LRR B) | |
| | istic (A3) | | Loamy Mucl | - | | | | d Vertic (F18) | |
| | en Sulfide (A4) d Layers (A5) (LRR | C) | Loamy Gley Depleted Ma | | (F2) | | | rent Material (TF2) Explain in Remarks) | |
| | uck (A9) (LRR D) | C) | Redox Dark | | (F6) | | Other (L | -xpiaiii iii Neiliaiks) | |
| | d Below Dark Surface | ce (A11) | Depleted Da | | | | | | |
| | ark Surface (A12) | , | Redox Depr | | | | ³ Indicators o | f hydrophytic vegetation and | |
| Sandy l | Mucky Mineral (S1) | | Vernal Pools | s (F9) | | | wetland h | ydrology must be present, | |
| Sandy (| Gleyed Matrix (S4) | | | | | | unless dis | sturbed or problematic. | |
| - | | | | | | | | | |
| - | Layer (if present): | | | | | | | | |
| Restrictive Type: | Layer (if present): | | | | | | | | . 4 |
| Type: | ches): d layer has c | | <u> </u> | ualify | for "de | eplete | | Present? Yes No_ | |
| Restrictive Type: Depth (in Remarks: Deplete Ark sui | d layer has c | hroma t | <u> </u> | ualify | for "de | eplete | | | |
| Restrictive Type: Depth (in Remarks: Deplete lark sur YDROLO | d layer has carface". | hroma t | oo high to q | | for "de | eplete | d below da | ark surface" or "thic | k |
| Restrictive Type: Depth (in Remarks: Deplete lark sul YDROLO Vetland Hy | d layer has cators (minimum of cators (minimum of cators): | hroma t | oo high to q | <i>'</i>) | for "de | eplete | d below da | ark surface" or "thic | k |
| Type: | d layer has conface". OGY Indicators (minimum of experiment): | hroma t | oo high to question of the check all that apply a salt Crust | (B11) | for "de | eplete | d below da | ark surface" or "thic | k red) |
| Type: | d layer has conface". OGY redrology Indicators cators (minimum of a water (A1) ater Table (A2) | hroma t | check all that apply Salt Crust Biotic Crust | (B11) t (B12) | | eplete | d below da | dary Indicators (2 or more require ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine | k red) |
| Type: | d layer has carface". OGY Indicators (minimum of other cators (minimu | hroma t | check all that apply Salt Crust Biotic Crust Aquatic Inv | /) (B11) t (B12) vertebrate | es (B13) | eplete | Second Was Se Dri | dary Indicators (2 or more requirater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) | k red) |
| Type: | d layer has conface". OGY rdrology Indicators cators (minimum of other (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriver | chroma t : : : : : : : : : : : : : : : : : : : | check all that apply Salt Crust Biotic Crus Aquatic Inv | (B11) t (B12) vertebrate Sulfide Od | es (B13) dor (C1) | | Second Second Second Dri Dri | dary Indicators (2 or more requirater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) | k red) |
| Restrictive Type: Depth (in Remarks: Deplete lark sul YDROLO Vetland Hy Primary Indi Surface High W: Saturati Water M Sedime | d layer has conface". OGY Indicators (minimum of one water (A1) atter Table (A2) on (A3) Marks (B1) (Nonrive and Deposits (B2) (No | chroma t | check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R | (B11) t (B12) vertebrate Sulfide Oc | es (B13) dor (C1) res along | Living Roo | Second Second Wa Se Dri Dra ots (C3) | dary Indicators (2 or more requirement Deposits (B2) (Riverine) diment Deposits (B3) (Riverine) dimage Patterns (B10) y-Season Water Table (C2) | k red) |
| Restrictive Type: Depth (in Remarks: Deplete lark sur YDROLC Vetland Hy Primary Indi Surface High W Saturati Water M Sedime Drift De | d layer has conface". OGY Indicators (minimum of one water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonrive (Nonrive) (Non | chroma t | check all that apply Salt Crust Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence C | (B11) t (B12) vertebrate Sulfide Ochizosphe of Reduce | es (B13) dor (C1) eres along ed Iron (C4 | Living Roo | Second We Se Dri Dra Dra ots (C3) Dra | dary Indicators (2 or more requirement Deposits (B2) (Riverine) diment Deposits (B3) (Riverine) dimage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) | k red) |
| Restrictive Type: Depth (in Remarks: Deplete lark sur YDROLC Vetland Hy Primary Indi Surface High W Saturati Water N Sedime Drift De Surface | d layer has conface". OGY Indicators (minimum of other trable (A2) (Nonrive) (A3) Marks (B1) (Nonrive) (A3) | chroma t cone required; crine) crine) crine) | check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence co | (B11) t (B12) vertebrate Sulfide Od thizosphel of Reduce | es (B13) dor (C1) res along ed Iron (C4 on in Tille | Living Roo | Second Wa | dary Indicators (2 or more requirater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Image | k red) |
| Restrictive Type: Depth (in Remarks: Deplete Lark sur YDROLO Vetland Hy Primary Indi Surface High W Saturati Water N Sedime Drift De Surface Inundat | d layer has conface". OGY Indicators (minimum of a water Table (A2) ion (A3) Marks (B1) (Nonrive int Deposits (B2) (Nonrive int Deposits (B3) (Nonrive int Deposits (B6) ion Visible on Aerial | chroma t cone required; crine) crine) crine) | check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron | (B11) t (B12) vertebrate Sulfide Od thizosphe of Reduce n Reduction | es (B13) dor (C1) eres along ed Iron (C4 on in Tille (C7) | Living Roo | Second Wa | dary Indicators (2 or more requirater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) dinage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Image allow Aquitard (D3) | k red) |
| Restrictive Type: Depth (in Remarks: Deplete lark sul YDROLO Vetland Hy Primary Indi Surface High W Saturati Water M Sedime Drift De Surface Inundat Water-S | d layer has conface". OGY Indicators Cators (minimum of of the conface) Water (A1) Indicators (A2) Indicators (B1) (Nonrive) Indicators (B2) (Nonrive) Indicators (B3) (Nonrive) Indicators (B4) (Non | chroma t cone required; crine) crine) crine) | check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence co | (B11) t (B12) vertebrate Sulfide Od thizosphe of Reduce n Reduction | es (B13) dor (C1) eres along ed Iron (C4 on in Tille (C7) | Living Roo | Second Wa | dary Indicators (2 or more requirater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Image | k red) |
| Restrictive Type: Depth (in Remarks: Peplete Park Sul YDROLO Vetland Hy Primary Indi Surface High W Saturati _ Water N _ Sedime _ Drift De _ Surface _ Inundat _ Water-S Field Obser | d layer has conface". OGY Indicators (Minimum of Marks (B1) (Nonrive in Deposits (B2) (Nonrive in Confacts (B3) (Nonrive in Confacts (B3) (Nonrive in Confacts (B4) (Nonrive in Confacts (B6) (Nonrive in Confacts (B9) (Nonrive | chroma t cone required; rine) priverine) erine) | check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence co Recent Irod Thin Muck Other (Exp | (B11) t (B12) vertebrate Sulfide Oc thizosphe of Reduce n Reducti Surface (| es (B13) dor (C1) res along ed Iron (C4 on in Tille (C7) emarks) | Living Roo l) d Soils (Co | Second Wa | dary Indicators (2 or more requirater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) dinage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Image allow Aquitard (D3) | k red) |
| Restrictive Type: Depth (in Remarks: Deplete Primary Indi Surface High W. Saturati Water N. Sedime Drift De Surface Inundat Water-Strield Observant | d layer has conface". OGY Indicators (minimum of one of the confact (Minimum of one of one of the confact (Minimum of one | chroma t cone required; crine) crine) crine) lmagery (B7) | check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence C Recent Iroi Thin Muck Other (Exp | (B11) t (B12) vertebrate Sulfide Ochizosphe of Reduce n Reduction Surface (Idain in Re | es (B13) dor (C1) eres along ed Iron (C4 on in Tille (C7) emarks) | Living Roo | Second Wa | dary Indicators (2 or more requirater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) dinage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Image allow Aquitard (D3) | k red) |
| Restrictive Type: Depth (in Remarks: Deplete Lark sur YDROLO Vetland Hy Primary Indi Surface High W Saturati Water N _ Sedime _ Drift De _ Surface _ Inundat _ Water-S Field Obset Surface Water Table | Layer (if present): Iches): ches): Ich | chroma t chroma | check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence co Recent Irod Thin Muck Other (Exp | (B11) t (B12) vertebrate Sulfide Od thizospher of Reduce n Reductic Surface (lain in Re | es (B13) dor (C1) res along ed Iron (C4 on in Tille (C7) emarks) | Living Roo l) d Soils (Co | Second Wa | dary Indicators (2 or more requirater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) dinage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Image allow Aquitard (D3) | k red) |
| Restrictive Type: Depth (in Remarks: Deplete lark sur YDROLC Wetland Hy Primary Indi Surface High W Saturati Water N Sedime Drift De Surface Inundat Water-S Field Obsel Surface Wa Vater Table Saturation F includes ca | d layer has conface". OGY Indicators (minimum of other contact) Indicators (minimum of other | chroma t chroma | check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Thin Muck Other (Exp | (B11) t (B12) vertebrate Sulfide Od thizospher of Reduce n Reductic Surface (lain in Re ches): ches): | es (B13) dor (C1) res along ed Iron (C4 on in Tille (C7) emarks) | Living Rool i) d Soils (Co | Second Water Second Dri Dra Ots (C3) Sa Sh FA | dary Indicators (2 or more requirater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) diment Deposits (B3) (Riverine) dianage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Image allow Aquitard (D3) C-Neutral Test (D5) | k red) |
| Restrictive Type: Depth (in Remarks: Deplete lark sur YDROLC Wetland Hy Primary Indi Surface High W Saturati Water N Sedime Drift De Surface Inundat Water-S Field Obsel Surface Wa Vater Table Saturation F includes ca | d layer has conface". OGY Indicators Cators (minimum of a contact (Management) All Marks (B1) (Nonrive (Management) Posits (B3) (Nonrive (Management) Posits (B4) (Nonrive (Management) Posits (B5) (Nonrive (Management) Posits (B6) (Management) Posits (B7) (Nonrive (Management) Posits (B8) (Nonrive (Management) Posits (B | chroma t chroma | check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Thin Muck Other (Exp | (B11) t (B12) vertebrate Sulfide Od thizospher of Reduce n Reductic Surface (lain in Re ches): ches): | es (B13) dor (C1) res along ed Iron (C4 on in Tille (C7) emarks) | Living Rool i) d Soils (Co | Second Water Second Dri Dra Ots (C3) Sa Sh FA | dary Indicators (2 or more requirater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) diment Deposits (B3) (Riverine) dianage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Image allow Aquitard (D3) C-Neutral Test (D5) | k red) rry (C9 |
| Restrictive Type: Depth (in Remarks: Deplete lark sur YDROLC Vetland Hy Primary Indi Surface High W Saturati Water N Sedime Drift De Surface Inundat Water-S Field Obser Surface Water Table Saturation Fincludes cal Describe Re | d layer has conface". OGY Indicators (minimum of other contact) Indicators (minimum of other | chroma t chroma | check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Thin Muck Other (Exp | (B11) t (B12) vertebrate Sulfide Od thizospher of Reduce n Reductic Surface (lain in Re ches): ches): | es (B13) dor (C1) res along ed Iron (C4 on in Tille (C7) emarks) | Living Rool i) d Soils (Co | Second Water Second Dri Dra Ots (C3) Sa Sh FA | dary Indicators (2 or more requirater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) diment Deposits (B3) (Riverine) dianage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Image allow Aquitard (D3) C-Neutral Test (D5) | k red) rry (C9 |
| Restrictive Type: Depth (in Remarks: Deplete lark sur YDROLC Vetland Hy Primary Indi Surface High W Saturati Water N Sedime Drift De Surface Inundat Water-S Field Obsel Surface Wa Vater Table Saturation Fincludes ca | d layer has conface". OGY Indicators (minimum of other contact) Indicators (minimum of other | chroma t chroma | check all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Thin Muck Other (Exp | (B11) t (B12) vertebrate Sulfide Od thizospher of Reduce n Reductic Surface (lain in Re ches): ches): | es (B13) dor (C1) res along ed Iron (C4 on in Tille (C7) emarks) | Living Rool i) d Soils (Co | Second Water Second Dri Dra Ots (C3) Sa Sh FA | dary Indicators (2 or more requirater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) diment Deposits (B3) (Riverine) dianage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Image allow Aquitard (D3) C-Neutral Test (D5) | k red) rry (C9 |



Sample Point 32



Sample Point 32

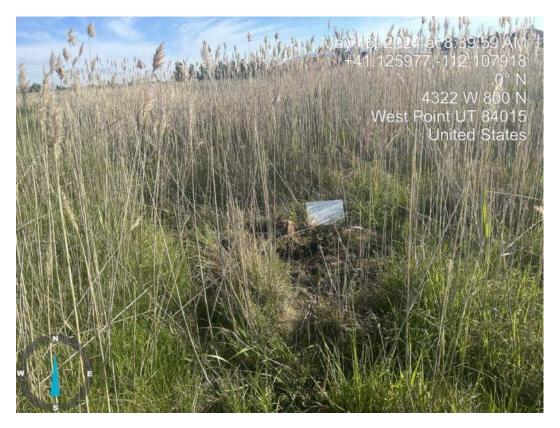
| Project/Site: WDC Phase II | (| City/County | _{/:} Davis C | ounty | Sampling Date: 2024-05-16 |
|---|-----------------|-------------|-----------------------|---|---|
| Applicant/Owner: UDOT | | | | State: Utah | Sampling Point: SP33 |
| Investigator(s): Cara Glabau, Elena Capson | ; | Section, To | ownship, Ra | nge: S31 T5N R2W | |
| Landform (hillslope, terrace, etc.): Flat | | Local relie | f (concave, | convex, none): None | Slope (%): 0 |
| Subregion (LRR): D 28A | Lat: 41. | 1259933 | 3 | Long: -112.1078961 | 7 Datum: NAD83_201 |
| Soil Map Unit Name: Fb - Ford loam, shallow water | r table, 0 to | 1 percen | t slopes | NWI classific | cation: None |
| Are climatic / hydrologic conditions on the site typical for t | his time of yea | ar? Yes_ | No | (If no, explain in R | emarks.) |
| Are Vegetation, Soil, or Hydrology | _significantly | disturbed? | Are ' | 'Normal Circumstances" p | oresent? Yes No |
| Are Vegetation, Soil, or Hydrology | _naturally pro | blematic? | (If ne | eeded, explain any answe | rs in Remarks.) |
| SUMMARY OF FINDINGS – Attach site ma | p showing | samplir | g point l | ocations, transects | , important features, etc. |
| | | 1 | | <u> </u> | <u> </u> |
| Hydrophytic Vegetation Present? Hydric Soil Present? Yes Ves | No | ls ti | ne Sampled | | , |
| Wetland Hydrology Present? Yes | | with | nin a Wetlar | nd? Yes | No |
| Remarks: | | | | | |
| Conditions were wetter than normal ac | ccording t | o the a | ntecede | ent precipitation t | ool, but there had not |
| been rain for several days prior to the | • | | | | , |
| VEGETATION – Use scientific names of pla | | | | | |
| | Absolute | Dominan | Indicator | Dominance Test work | sheet: |
| Tree Stratum (Plot size:) | % Cover | | | Number of Dominant S | pecies |
| 1 | | | | That Are OBL, FACW, | or FAC: <u>3</u> (A) |
| 2 | | | | Total Number of Domin | |
| 3 4 | | | · ——— | Species Across All Stra | ata: <u>3</u> (B) |
| | | = Total Co | over | Percent of Dominant Sp That Are OBL, FACW, | |
| Sapling/Shrub Stratum (Plot size:) | | | | | (**2) |
| 1 | | | | Prevalence Index wor | |
| 2 | | | | Total % Cover of: OBL species 0 | $\frac{\text{Multiply by:}}{\text{x 1 = } 0}$ |
| 3 | | | | FACW species 100 | |
| 5 | | | | | x 3 = 0 |
| | | = Total Co | | | x 4 = 0 |
| Herb Stratum (Plot size:) 1 Phragmites australis | 44 | ~ | FACW | UPL species 0 | x 5 = 0 |
| 2. Carex praegracilis | 20 | | FACW | Column Totals: 100 | (A) <u>200</u> (B) |
| 3. Juncus balticus | 20 | ~ | FACW | Prevalence Index | = B/A = 2.00 |
| 4. Phalaris arundinacea | 16 | | FACW | Hydrophytic Vegetation | on Indicators: |
| 5 | | | | <u>✓</u> Dominance Test is | |
| 6 | | | | ✓ Prevalence Index is | |
| 7 | | - | | | ptations ¹ (Provide supporting s or on a separate sheet) |
| 8 | 100 | | | | phytic Vegetation ¹ (Explain) |
| Woody Vine Stratum (Plot size:) | 100 | = Total Co | over | | |
| 1 | | - | | ¹ Indicators of hydric soi be present, unless distu | il and wetland hydrology must |
| 2 | | - | | | Troed of problematic. |
| | | = Total Co | over | Hydrophytic Vegetation | |
| % Bare Ground in Herb Stratum % Cov | er of Biotic Cı | rust | | Present? Ye | s No |
| Remarks: | | | | • | |
| | | | | | |
| | | | | | |
| | | | | | |

SOIL

Sampling Point: SP33

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

| (inches) | Matrix | | | x Feature | | | _ | _ |
|--|--|---|--|--|---|-------------------|---|--|
| | Color (moist) | | Color (moist) | % | Type ¹ | Loc ² | <u>Texture</u> | Remarks |
| 0 - 2 | 10YR 4/2 | 100 | 7.575.576 | | | | Mucky Loam/Clay | |
| 2 - 8 | 7.5YR 4/2 | 92 | 7.5YR 5/8 | 8 | <u>C</u> | <u>M</u> | Silty Clay | |
| 8 - 10 | 10YR 3/3 | 100 | | | _ | - | Loam | |
| 10 - 24 | 10YR 4/1 | 100 | | | | | Clay | |
| | | | | | | | | |
| | | | | | _ | | | |
| - | | | | | | | | |
| - | | | | | | | | |
| ¹Type: C=Co | oncentration, D=De | epletion, RM | 1=Reduced Matrix, CS | S=Covere | ed or Coate | ed Sand G | rains. ² Location | n: PL=Pore Lining, M=Matrix. |
| | | | I LRRs, unless other | | | | | Problematic Hydric Soils ³ : |
| Histosol | | | Sandy Redo | . , | | | | (A9) (LRR C) |
| | oipedon (A2) | | Stripped Ma | | -1 (54) | | | (A10) (LRR B) |
| Black His | n Sulfide (A4) | | Loamy Muc Loamy Gley | | | | Reduced V | ertic (F18) t Material (TF2) |
| | l Layers (A5) (LRR | 2 C) | <u>✓</u> Depleted Ma | | , , | | | lain in Remarks) |
| | ck (A9) (LRR D) | , | Redox Dark | . , | | | _ ` ' | , |
| | Below Dark Surfa | ace (A11) | Depleted Da | | | | 3 | |
| | ark Surface (A12) lucky Mineral (S1) | | Redox Depr Vernal Pool | | (F8) | | | drophytic vegetation and ology must be present, |
| - | Bleyed Matrix (S4) | | Vernai Fooi | 5 (1 9) | | | - | bed or problematic. |
| | _ayer (if present): | | | | | | | • |
| Type: | | | | | | | | |
| Depth (inc | ches): | | | | | | Hydric Soil Pres | sent? Yes No |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| HYDROLO | GY | | | | | | | |
| | GY drology Indicators | s: | | | | | | |
| Wetland Hyd | drology Indicators cators (minimum of | | ed; check all that apply | y) | | | | v Indicators (2 or more required) |
| Wetland Hyd Primary Indic Surface | drology Indicators ators (minimum of Water (A1) | | Salt Crust | (B11) | | | Water | Marks (B1) (Riverine) |
| Wetland Hyd Primary Indic Surface High Wa | drology Indicators eators (minimum of Water (A1) ter Table (A2) | | Salt Crust Biotic Crus | (B11) st (B12) | oo (D42) | | Water Sedim | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) |
| Wetland Hyd Primary Indic Surface High Wa ✓ Saturatio | drology Indicators eators (minimum of Water (A1) tter Table (A2) on (A3) | one require | Salt Crust Biotic Crus Aquatic Inv | (B11) st (B12) vertebrate | | | Water Sedim Drift D | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) deposits (B3) (Riverine) |
| Wetland Hyd Primary Indic Surface High Wa ✓ Saturatic Water M | drology Indicators eators (minimum of Water (A1) Iter Table (A2) on (A3) arks (B1) (Nonrive | one require | Salt Crust Biotic Crus Aquatic Inv | (B11) st (B12) vertebrate Sulfide C | dor (C1) | Livina Ro | Water Sedim Drift D | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) peposits (B3) (Riverine) age Patterns (B10) |
| Wetland Hyd Primary Indic Surface High Wa V Saturatio Water M Sedimen | drology Indicators eators (minimum of Water (A1) tter Table (A2) on (A3) | one require | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R | (B11) st (B12) vertebrate Sulfide C | odor (C1) eres along | - | Water Sedim Drift D Draina ots (C3) Dry-S | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) deposits (B3) (Riverine) |
| Primary Indice Surface High Wa Saturatio Water M Sedimen Drift Dep | drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive at Deposits (B2) (N | one require | Salt Crust Biotic Crus Aquatic Inv | (B11) st (B12) vertebrate Sulfide C Rhizosphe of Reduc | odor (C1) eres along ed Iron (C | 4) | Water Sedim Drift D Draina ots (C3) Dry-S Crayfi | Marks (B1) (Riverine) tent Deposits (B2) (Riverine) teposits (B3) (Riverine) tege Patterns (B10) teason Water Table (C2) |
| Wetland Hyd Primary Indic Surface High Wa V Saturatio Water M Sedimer Drift Dep Surface | cators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1) (Nonrive tt Deposits (B2) (Nonsits (B3) (Nonrive | erine) onriverine | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence o | (B11) st (B12) vertebrate Sulfide C Rhizosphe of Reduct | odor (C1) eres along ed Iron (Cotion in Tille | 4) | Water Sedim Drift E Draina ots (C3) Dry-S Crayfi 6) Satura | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) neposits (B3) (Riverine) nage Patterns (B10) neason Water Table (C2) nesh Burrows (C8) |
| Wetland Hyd Primary Indic Surface High Wa ✓ Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-Si | drology Indicators eators (minimum of Water (A1) Iter Table (A2) Iter Table (A3) Iter Table (A | erine) onriverine; erine) | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence o | (B11) st (B12) vertebrate Sulfide C Rhizosphe of Reduct n Reduct Surface | odor (C1) eres along ed Iron (Cotion in Tille (C7) | 4) | Water Sedim Drift E Draina ots (C3) Dry-S Crayfi 6) Satura Shallo | Marks (B1) (Riverine) ment Deposits (B2) (Riverine) meposits (B3) (Riverine) mage Patterns (B10) meason Water Table (C2) meason Water Table (C2) meason Wisible on Aerial Imagery (C9) |
| Wetland Hyd Primary Indic Surface High Wa V Saturatio Water M Sedimen Drift Dep Surface Inundatio Water-St Field Observ | drology Indicators eators (minimum of Water (A1) Inter Table (A2) In (A3) In (A3) In (B1) (Nonrive Int Deposits (B2) (Nonrive Int Deposits (B3) (Nonrive Int Deposits (B6) In Vis ble on Aeria Italined Leaves (B9) Invations: | erine) conriverine; rerine) I Imagery (E | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iro Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide C Rhizosphe of Reduct n Reduct Surface olain in Re | odor (C1) eres along ed Iron (C4 cion in Tille (C7) emarks) | 4) | Water Sedim Drift E Draina ots (C3) Dry-S Crayfi 6) Satura Shallo | Marks (B1) (Riverine) ment Deposits (B2) (Riverine) meposits (B3) (Riverine) mage Patterns (B10) meason Water Table (C2) meason Wisible on Aerial Imagery (C9) meason Waterd (D3) |
| Wetland Hyd Primary Indic Surface High Wa ✓ Saturatic Water M Sedimer Drift Dep Surface Inundatic Water-Si Field Observ Surface Water | drology Indicators eators (minimum of Water (A1) her Table (A2) on (A3) earks (B1) (Nonrive her Deposits (B2) (N cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9) vations: er Present? | erine) onriverine; rerine) I Imagery (E | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iro Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide C Rhizosphe of Reduc n Reduct Surface olain in Re | odor (C1) eres along ed Iron (Co- cion in Tille (C7) emarks) | 4) | Water Sedim Drift E Draina ots (C3) Dry-S Crayfi 6) Satura Shallo | Marks (B1) (Riverine) ment Deposits (B2) (Riverine) meposits (B3) (Riverine) mage Patterns (B10) meason Water Table (C2) meason Wisible on Aerial Imagery (C9) meason Waterd (D3) |
| Primary Indice Surface High Wa ✓ Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-Si Field Observ Surface Water Water Table | drology Indicators eators (minimum of Water (A1) Iter Table (A2) In (A3) In (A3) In (A5) In (A | erine) onriverine) rerine) I Imagery (E) Yes | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iro Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide C Rhizosphe of Reduc n Reduct Surface blain in Re ches): ches): ches): | odor (C1) eres along ed Iron (C- tion in Tille (C7) emarks) | 4) d Soils (Co | Water Sedim Drift D Draina ots (C3) Dry-S Crayfi 6) Satura Shallo | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) peposits (B3) (Riverine) nege Patterns (B10) neason Water Table (C2) nsh Burrows (C8) nation Visible on Aerial Imagery (C9) nw Aquitard (D3) Neutral Test (D5) |
| Primary Indice Surface High Wa ✓ Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-Si Field Observ Surface Water Saturation Pr | drology Indicators eators (minimum of Water (A1) Iter Table (A2) In (A3) In (A3) In (B1) (Nonrive Int Deposits (B2) (Nonrive Int Deposits (B3) (Nonrive Soil Cracks (B6) In Vis ble on Aeria Itained Leaves (B9) Ivations: Iter Present? Iter Present? Iter Present? | erine) onriverine) rerine) I Imagery (E) Yes | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iro Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide C Rhizosphe of Reduc n Reduct Surface blain in Re ches): ches): ches): | odor (C1) eres along ed Iron (C- tion in Tille (C7) emarks) | 4) d Soils (Co | Water Sedim Drift D Draina ots (C3) Dry-S Crayfi 6) Satura Shallo | Marks (B1) (Riverine) ment Deposits (B2) (Riverine) meposits (B3) (Riverine) mage Patterns (B10) meason Water Table (C2) meason Wisible on Aerial Imagery (C9) meason Waterd (D3) |
| Wetland Hyd Primary Indic Surface High Wa ✓ Saturatic Water M Sedimer Drift Dep Surface Inundatic Water-Si Field Observ Surface Water Saturation Pr (includes cap | drology Indicators eators (minimum of Water (A1) Iter Table (A2) In (A3) In (A | erine) onriverine) rerine) I Imagery (E) Yes Yes Yes | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iro Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide C Rhizosphe of Reduct n Reduct Surface olain in Re ches): ches): ches): ches): | odor (C1) eres along ed Iron (Cion in Tille (C7) emarks) | 4) d Soils (Co | Water Sedim Drift □ Draina ots (C3) Dry-S Crayfi Satura FAC-N | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) peposits (B3) (Riverine) nege Patterns (B10) neason Water Table (C2) nsh Burrows (C8) nation Visible on Aerial Imagery (C9) nw Aquitard (D3) Neutral Test (D5) |
| Wetland Hyd Primary Indic Surface High Wa ✓ Saturatic Water M Sedimer Drift Dep Surface Inundatic Water-Si Field Observ Surface Water Saturation Pr (includes cap | drology Indicators eators (minimum of Water (A1) Iter Table (A2) In (A3) In (A | erine) onriverine) rerine) I Imagery (E) Yes Yes Yes | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence o Recent Iro Thin Muck Other (Exp No Depth (inc | (B11) st (B12) vertebrate Sulfide C Rhizosphe of Reduct n Reduct Surface olain in Re ches): ches): ches): ches): | odor (C1) eres along ed Iron (Cion in Tille (C7) emarks) | 4) d Soils (Co | Water Sedim Drift □ Draina ots (C3) Dry-S Crayfi Satura FAC-N | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) peposits (B3) (Riverine) nege Patterns (B10) neason Water Table (C2) nsh Burrows (C8) nation Visible on Aerial Imagery (C9) nw Aquitard (D3) Neutral Test (D5) |
| Wetland Hyd Primary Indic Surface High Wa ✓ Saturatic Water M Sedimer Drift Dep Surface Inundatic Water-Si Field Observ Surface Water Saturation Pr (includes cap | drology Indicators eators (minimum of Water (A1) Iter Table (A2) In (A3) In (A | erine) onriverine) rerine) I Imagery (E) Yes Yes Yes | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence o Recent Iro Thin Muck Other (Exp No Depth (inc | (B11) st (B12) vertebrate Sulfide C Rhizosphe of Reduct n Reduct Surface olain in Re ches): ches): ches): ches): | odor (C1) eres along ed Iron (Cion in Tille (C7) emarks) | 4) d Soils (Co | Water Sedim Drift □ Draina ots (C3) Dry-S Crayfi Satura FAC-N | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) peposits (B3) (Riverine) nege Patterns (B10) neason Water Table (C2) nsh Burrows (C8) nation Visible on Aerial Imagery (C9) nw Aquitard (D3) Neutral Test (D5) |
| Wetland Hyd Primary Indic Surface High Wa V Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-St Field Observ Surface Water Vater Table Saturation Pr (includes cap Describe Rec | drology Indicators eators (minimum of Water (A1) Iter Table (A2) In (A3) In (A | erine) onriverine) rerine) I Imagery (E) Yes Yes Yes | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence o Recent Iro Thin Muck Other (Exp No Depth (inc | (B11) st (B12) vertebrate Sulfide C Rhizosphe of Reduct n Reduct Surface olain in Re ches): ches): ches): ches): | odor (C1) eres along ed Iron (Cion in Tille (C7) emarks) | 4) d Soils (Co | Water Sedim Drift □ Draina ots (C3) Dry-S Crayfi Satura FAC-N | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) peposits (B3) (Riverine) nege Patterns (B10) neason Water Table (C2) nsh Burrows (C8) nation Visible on Aerial Imagery (C9) nw Aquitard (D3) Neutral Test (D5) |
| Wetland Hyd Primary Indic Surface High Wa V Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-St Field Observ Surface Water Vater Table Saturation Pr (includes cap Describe Rec | drology Indicators eators (minimum of Water (A1) Iter Table (A2) In (A3) In (A3) In (A5) In (A | erine) onriverine) rerine) I Imagery (E) Yes Yes Yes | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence o Recent Iro Thin Muck Other (Exp No Depth (inc | (B11) st (B12) vertebrate Sulfide C Rhizosphe of Reduct n Reduct Surface olain in Re ches): ches): ches): ches): | odor (C1) eres along ed Iron (Cion in Tille (C7) emarks) | 4) d Soils (Co | Water Sedim Drift □ Draina ots (C3) Dry-S Crayfi Satura FAC-N | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) peposits (B3) (Riverine) nege Patterns (B10) neason Water Table (C2) nsh Burrows (C8) nation Visible on Aerial Imagery (C9) nw Aquitard (D3) Neutral Test (D5) |
| Wetland Hyd Primary Indic Surface High Wa V Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-St Field Observ Surface Water Vater Table Saturation Pr (includes cap Describe Rec | drology Indicators eators (minimum of Water (A1) Iter Table (A2) In (A3) In (A3) In (A5) In (A | erine) onriverine) rerine) I Imagery (E) Yes Yes Yes | Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence o Recent Iro Thin Muck Other (Exp No Depth (inc | (B11) st (B12) vertebrate Sulfide C Rhizosphe of Reduct n Reduct Surface olain in Re ches): ches): ches): ches): | odor (C1) eres along ed Iron (Cion in Tille (C7) emarks) | 4) d Soils (Co | Water Sedim Drift □ Draina ots (C3) Dry-S Crayfi Satura FAC-N | Marks (B1) (Riverine) nent Deposits (B2) (Riverine) peposits (B3) (Riverine) nege Patterns (B10) neason Water Table (C2) nsh Burrows (C8) nation Visible on Aerial Imagery (C9) nw Aquitard (D3) Neutral Test (D5) |



Sample Point 33



Sample Point 33

| Project/Site: WDC Phase II | C | ity/County: Davis (| County | Sampling Date: 2024-05-16 |
|---|------------------------|----------------------|----------------------------|---|
| Applicant/Owner: UDOT | | | State: Utah | Sampling Point: SP34 |
| Investigator(s): Cara Glabau, Elena Capson | | Section, Township, R | tange: S31 T5N R2W | |
| Landform (hillslope, terrace, etc.): Flat | I | ocal relief (concave | , convex, none): None | Slope (%): 0 |
| Subregion (LRR): D 28A | _{Lat:} 41.1 | 260085 | Long: -112.1079565 | Datum: NAD83_201 |
| Soil Map Unit Name: Fb - Ford Ioam, shallow v | vater table, 0 to | 1 percent slopes | NWI classific | cation: None |
| Are climatic / hydrologic conditions on the site typica | I for this time of yea | r? Yes No | (If no, explain in R | Remarks.) |
| Are Vegetation, Soil, or Hydrology _ | significantly d | isturbed? Are | e "Normal Circumstances" p | present? Yes No |
| Are Vegetation, Soil, or Hydrology _ | naturally prob | lematic? (If r | needed, explain any answe | ers in Remarks.) |
| SUMMARY OF FINDINGS - Attach site | map showing | sampling point | locations, transects | s, important features, etc. |
| | _ | | <u> </u> | <u>· · · · · · · · · · · · · · · · · · · </u> |
| | No No | Is the Sample | | |
| | No | within a Wetla | and? Yes | No |
| Remarks: | | | | |
| Conditions were wetter than norma | al according t | o the anteced | ent precipitation t | ool but there had not |
| been rain for several days prior to | _ | | one proofpitation t | ooi, but there had not |
| VEGETATION – Use scientific names o | | | | |
| VEGETATION – Use scientific flames o | | Dominant Indicator | Dominance Test work | rsheet: |
| Tree Stratum (Plot size:) | | Species? Status | | Species |
| 1 | | | _ That Are OBL, FACW, | or FAC: 2 (A) |
| 2 | | | Total Number of Domir | nant |
| 3 | | | _ Species Across All Stra | ata: <u>2</u> (B) |
| 4 | | = Total Cover | Percent of Dominant S | |
| Sapling/Shrub Stratum (Plot size: | | Total Gover | That Are OBL, FACW, | (122) |
| 1 | | | Prevalence Index wor | |
| 2 | | | Total % Cover of: | |
| 3 | | | - 1 | x 1 = 0 x 2 = 110 |
| 4 5 | | | | x 3 = 75 |
| <u> </u> | | = Total Cover | FACU species 0 | |
| Herb Stratum (Plot size:) | 20 | EACW | UPL species 20 | x 5 = 100 |
| Phalaris arundinacea Juncus balticus | <u>30</u> 25 | ✓ FACW FACW | - Column Totals: 100 | (A) <u>285</u> (B) |
| 3. Poa pratensis | 17 | FAC | - Prevalence Index | c = B/A = 2.85 |
| 4. Lolium perenne ssp. perenne | 16 | UPL | Hydrophytic Vegetation | |
| 5. Distichlis spicata | 8 | FAC | <u>✓</u> Dominance Test is | ; >50% |
| 6. Thinopyrum intermedium | 4 | UPL | ✓ Prevalence Index i | |
| 7 | | | | aptations ¹ (Provide supporting as or on a separate sheet) |
| 8 | 100 | | | ophytic Vegetation ¹ (Explain) |
| Woody Vine Stratum (Plot size:) | | = Total Cover | | |
| 1 | | | | il and wetland hydrology must |
| 2 | | | be present, unless distr | urbed or problematic. |
| | | = Total Cover | Hydrophytic Vegetation | |
| % Bare Ground in Herb Stratum | % Cover of Biotic Cr | ust | Present? Ye | es <u>/</u> No |
| Remarks: | | | | |
| | | | | |
| | | | | |
| | | | | |

SOIL Sampling Point: SP34

| Profile Desc | ription: (Describe | to the dep | oth needed to docu | ment the | indicator | or confir | m the absence of indicators.) |
|---------------|------------------------------|-------------|------------------------|-----------------|-------------------|-------------------|--|
| Depth | Matrix | | Redo | x Feature | | | <u></u> |
| (inches) | Color (moist) | % | Color (moist) | % | Type ¹ | _Loc ² | Texture Remarks |
| 0 - 1 | 10YR 4/3 | 100 | | | | | Silt |
| 1 - 18 | 10YR 4/2 | 90 | 7.5YR 5/8 | 10 | <u>C</u> | М | Silty Clay |
| 18 - 20 | 7.5YR 4/2 | 92 | 7.5YR 5/6 | 8 | С | М | Clay |
| 20 - 24 | 10YR 4/2 | 100 | | | | | Clay |
| - | | | | | | | |
| - | | | | | | - | |
| - | | | | _ | _ | | |
| - | | | | _ | | | |
| ¹Type: C=Co | oncentration D=Der | letion. RM | =Reduced Matrix, C | S=Covere | ed or Coate | ed Sand 0 | Grains. ² Location: PL=Pore Lining, M=Matrix. |
| | | | LRRs, unless othe | | | ou ouna c | Indicators for Problematic Hydric Soils ³ : |
| Histosol | (A1) | | Sandy Red | ox (S5) | | | 1 cm Muck (A9) (LRR C) |
| Histic Ep | pipedon (A2) | | Stripped M | | | | 2 cm Muck (A10) (LRR B) |
| Black Hi | | | Loamy Mud | | al (F1) | | Reduced Vertic (F18) |
| Hydroge | n Sulfide (A4) | | Loamy Gle | yed Matrix | x (F2) | | Red Parent Material (TF2) |
| Stratified | d Layers (A5) (LRR | C) | ✓ Depleted M | latrix (F3) | | | Other (Explain in Remarks) |
| 1 cm Mu | ıck (A9) (LRR D) | | Redox Dari | k Surface | (F6) | | |
| Depleted | d Below Dark Surfac | e (A11) | Depleted D | ark Surfa | ce (F7) | | |
| Thick Da | ark Surface (A12) | | Redox Dep | ressions | (F8) | | ³ Indicators of hydrophytic vegetation and |
| Sandy M | lucky Mineral (S1) | | Vernal Poo | ls (F9) | | | wetland hydrology must be present, |
| Sandy G | Gleyed Matrix (S4) | | | | | | unless disturbed or problematic. |
| Restrictive I | _ayer (if present): | | | | | | |
| Type: | | | | | | | |
| Depth (inc | ches): | | | | | | Hydric Soil Present? Yes No |
| Remarks: | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| HYDROLO | GY | | | | | | |
| Wetland Hy | drology Indicators | | | | | | |
| Primary India | cators (minimum of | one require | d; check all that app | y) | | | Secondary Indicators (2 or more required) |
| Surface | Water (A1) | | Salt Crust | (B11) | | | Water Marks (B1) (Riverine) |
| _ | iter Table (A2) | | Biotic Cru | ` , | | | Sediment Deposits (B2) (Riverine) |
| ✓ Saturation | | | Aquatic In | | es (R13) | | Drift Deposits (B3) (Riverine) |
| l — | arks (B1) (Nonrive i | ino) | | | | | |
| | , , , | • | Hydrogen | | | Linda a Da | Drainage Patterns (B10) |
| | nt Deposits (B2) (No | | | • | - | - | oots (C3) Dry-Season Water Table (C2) |
| l — | oosits (B3) (Nonrive | rine) | Presence | | • | • | Crayfish Burrows (C8) |
| | Soil Cracks (B6) | | Recent Iro | | | ed Soils (C | |
| Inundation | on Vis ble on Aerial | Imagery (B | 37) Thin Muck | Surface | (C7) | | Shallow Aquitard (D3) |
| | tained Leaves (B9) | | Other (Ex | plain in R | emarks) | | FAC-Neutral Test (D5) |
| Field Obser | | | ., | | | | |
| Surface Water | | | No Depth (in | | | | |
| Water Table | | | No Depth (in | | | | , |
| Saturation Pi | | es_ | No Depth (in | ches): <u>0</u> | | We | tland Hydrology Present? Yes No |
| | | n gauge, m | onitoring well, aerial | photos, p | revious ins | spections' |), if available: |
| | (| 33-, | 3 - , | , , | | | ,, |
| Remarks: | | | | | | | |
| ivemaiks. | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |



Sample Point 34



Sample Point 34

| Project/Site: WDC Phase II | | | City/Co | ounty: Dav | is Co | ounty | San | npling | Date: 202 | <u>4-05-16</u> |
|--|------------------|-------------------|----------|-------------------|--------|--------------------------------|---------------|-----------------|-------------------|----------------|
| Applicant/Owner: UDOT | | | | | | State: Uta | h San | npling | Point: SP3 | 55 |
| Investigator(s): Merissa Davis | | | Section | n, Townshi | p, Rar | nge: S31 T5N R | 2W | | | |
| Landform (hillslope, terrace, etc.): Depres | | | | | | convex, none): Co | | | Slope (% | 6): <u>0</u> |
| Subregion (LRR): D 28A | | Lat: 41. | 12375 | 623 | | Long: -112.108 | 310692 | | _ Datum: N | IAD83_20 |
| Soil Map Unit Name: Fb - Ford Ioam, s | hallow wate | er table, 0 to | 1 per | cent slop | es | NWI c | lassification | ո։ <u>Nor</u> | ne | |
| Are climatic / hydrologic conditions on the | site typical for | this time of year | ar? Ye | es | No _ | (If no, expla | ain in Rema | rks.) | | |
| Are Vegetation, Soil, or Hy | drology | _ significantly | disturb | ed? | Are " | 'Normal Circumsta | nces" prese | ent? Y | 'es | No |
| Are Vegetation, Soil, or Hy | drology | _ naturally pro | blemat | tic? | (If ne | eded, explain any | answers in | Rema | rks.) | |
| SUMMARY OF FINDINGS - Atta | ch site ma | p showing | samı | pling po | int lo | ocations, tran | sects, im | porta | ant featu | res, etc |
| Lludranhutia Variation Propent? | Vac | No. V | | | | | | | | |
| Hydrophytic Vegetation Present? Hydric Soil Present? | Yes | No V | | Is the Sar | - | | | | ., | |
| Wetland Hydrology Present? | Yes | | | within a V | Vetlan | id? Ye | s | No _ | | |
| Remarks: | | | | | | | | | | |
| Conditions were wetter than | normal a | ccording t | to the | e antec | ede | nt precipitat | ion tool | , but | there h | ad not |
| been rain for several days p | | _ | | | | | , | • | | |
| VEGETATION – Use scientific n | | | | | | | | | | |
| | | Absolute | Domi | nant Indic | ator | Dominance Tes | t workshee | et: | | |
| Tree Stratum (Plot size: | | % Cover | | | us | Number of Domi | | es | | |
| 1 | | | | | | That Are OBL, F | ACW, or FA | 4C: _ | 1 | (A) |
| 2 | | | | | | Total Number of | | | 2 | (D) |
| 3 4 | | | | | | Species Across | Ali Strata: | | 2 | (B) |
| | | | | al Cover | | Percent of Domi | | | 50.00 | (A/B) |
| Sapling/Shrub Stratum (Plot size: |) | <u></u> | _ | | | | • | | | _ (٨٥) |
| 1 | | | | | | Prevalence Inde | | | N 4 - 145 - 1 - 1 | |
| 2 | | | | | | Total % Cov | ver of: 0 | | Multiply by: | |
| 3 | | | | | | OBL species FACW species | | | | |
| 4 5 | | | | | | | 40 | | | |
| <u> </u> | | | | | | FACU species | | | | |
| Herb Stratum (Plot size: | _) | | | | | | 35 | | = 175 | |
| 1. Festuca rubra | | 40 | | | | Column Totals: | 90 | _ (A) | 325 | (B) |
| 2. Thinopyrum intermedium 3. Juncus balticus | | <u>35</u> 15 | | <u>UPL</u> FAC | | Prevalence | e Index = B | /Δ = 3 | 3.61 | |
| | | | | | | Hydrophytic Ve | | | | |
| 4 5 | | | | | | Dominance | | | | |
| 6 | | | | | | Prevalence | Index is ≤3. | .0 ¹ | | |
| 7. | | | | | | Morphologic | al Adaptation | ons¹ (P | rovide supp | orting |
| 8 | | | | | | Problematic | Remarks or o | | | |
| Manda Vina Chataga (District | , | 90 | _ = Tota | al Cover | | Problematic | пушорпуш | c vege | itation (Exp | лапт) |
| Woody Vine Stratum (Plot size: | | | | | | ¹ Indicators of hyd | dric soil and | l wetla | nd hvdrolog | v must |
| 1 2 | | | | | | be present, unle | | | | , |
| | | | | | | Hydrophytic | | | | |
| % Bare Ground in Herb Stratum | % Co | ver of Biotic C | rust | | | Vegetation Present? | Yes | | No 🔽 | |
| Remarks: | | | | | _ | 1.000 | | | | |
| remarks. | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

| Profile Desc Depth | ription: (Describe Matrix | e to the depti | n needed to document the indicator or c Redox Features | onfirm the ab | osence of indicators.) | | | |
|--------------------------------|------------------------------|-----------------|---|-----------------------------|--|--|--|--|
| (inches) | Color (moist) | % | Color (moist) % Type ¹ L | .oc ² Text | ture Remarks | | | |
| 0 - 2 | 5Y 2.5/1 | 100 | | Loam | Sod/high organic matter | | | |
| 2 - 9 | 10YR 3/2 | 100 | | Clay L | Loam | | | |
| 9 - 20 | 10YR 4/2 | 100 | | Clay L | Loam | | | |
| | · | | | | | | | |
| | | | | , _ | | | | |
| | | | | | | | | |
| | - | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | Reduced Matrix, CS=Covered or Coated S | | ² Location: PL=Pore Lining, M=Matrix. | | | |
| - | | icable to all L | RRs, unless otherwise noted.) | | cators for Problematic Hydric Soils ³ : | | | |
| Histosol | (A1) hipedon (A2) | | Sandy Redox (S5) Stripped Matrix (S6) | | 1 cm Muck (A9) (LRR C) 2 cm Muck (A10) (LRR B) | | | |
| Black His | | | Loamy Mucky Mineral (F1) | | Reduced Vertic (F18) | | | |
| | n Sulfide (A4) | | Loamy Gleyed Matrix (F2) | | Red Parent Material (TF2) | | | |
| | l Layers (A5) (LRR | (C) | Depleted Matrix (F3) | | Other (Explain in Remarks) | | | |
| | ck (A9) (LRR D) | / | Redox Dark Surface (F6) | _ | (=:,-::::::::::::::::::::::::::::::::::: | | | |
| | Below Dark Surfa | ace (A11) | Depleted Dark Surface (F7) | | | | | |
| | rk Surface (A12) | , | Redox Depressions (F8) | ³ Indi | icators of hydrophytic vegetation and | | | |
| Sandy M | lucky Mineral (S1) | | Vernal Pools (F9) | W | etland hydrology must be present, | | | |
| | leyed Matrix (S4) | | | ur | nless disturbed or problematic. | | | |
| Restrictive L | ayer (if present): | | | | | | | |
| ,. <u>—</u> | | | <u></u> | | | | | |
| Depth (inc | ches): | | <u></u> | Hydri | ric Soil Present? Yes No | | | |
| Remarks: | | | | | | | | |
| Reduced | l matrix nee | ds redox | to qualify for "depleted be | elow dark | k surface". | | | |
| | | | | | | | | |
| HYDROLO(| GY | | | | | | | |
| | drology Indicators | s: | | | | | | |
| _ | | | check all that apply) | | Secondary Indicators (2 or more required) | | | |
| - | Water (A1) | one required, | Salt Crust (B11) | | Water Marks (B1) (Riverine) | | | |
| | ` , | | | | | | | |
| | ter Table (A2) | | Biotic Crust (B12) | | Sediment Deposits (B2) (Riverine) | | | |
| Saturatio | , , | arima) | Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) | | Drift Deposits (B3) (Riverine) | | | |
| · | arks (B1) (Nonrive | • | , , , | D (C2) | Drainage Patterns (B10) | | | |
| | nt Deposits (B2) (N | | | ng Roots (C3) | Dry-Season Water Table (C2) | | | |
| | oosits (B3) (Nonriv | erine) | Presence of Reduced Iron (C4) | -:!- (00) | Crayfish Burrows (C8) | | | |
| | Soil Cracks (B6) | l los /D7 | Recent Iron Reduction in Tilled So | olis (C6) | Saturation Visible on Aerial Imagery (C9) | | | |
| | on Vis ble on Aeria | | | | Shallow Aquitard (D3) | | | |
| Field Observ | tained Leaves (B9) |) | Other (Explain in Remarks) | <u> </u> | FAC-Neutral Test (D5) | | | |
| Surface Wate | | Voc N | o Depth (inches): | | | | | |
| Water Table | | | o Depth (inches): | | | | | |
| | | | | Wetlend Use | dralamy Dragant2 Van Na V | | | |
| Saturation Pr (includes cap | | Yes N | o Depth (inches): | wetiand Hyd | drology Present? Yes No | | | |
| | | m gauge, mor | nitoring well, aerial photos, previous inspec | tions), if availa | able: | | | |
| | | | | | | | | |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |



Sample Point 35



Sample Point 35

| Project/Site: WDC Phase II | | City/Cou | nty: Davis Co | ounty | Sampling Date: 2024-05-16 |
|--|----------------|-----------|----------------|--|---|
| Applicant/Owner: UDOT | | | | State: Utah | Sampling Point: SP36 |
| Investigator(s): Merissa Davis | | Section, | Township, Ra | nge: S31 T5N R2W | |
| Landform (hillslope, terrace, etc.): Depression | | Local rel | lief (concave, | convex, none): Concav | /e Slope (%): 0 |
| | | | | | 97 Datum: NAD83_201 |
| Soil Map Unit Name: HLA - Harrisville-Leland comp | | | | | |
| Are climatic / hydrologic conditions on the site typical for th | | | | | |
| Are Vegetation, Soil, or Hydrology | | | | | present? Yes No |
| Are Vegetation, Soil, or Hydrology | | | | eeded, explain any answe | |
| SUMMARY OF FINDINGS – Attach site map | | | | | |
| Hydrophytic Vegetation Present? Yes N | lo 🗸 | | | | |
| Hydric Soil Present? Yes N | 10 | | the Sampled | | 🗸 |
| Wetland Hydrology Present? Yes N | 10 🗸 | W | ithin a Wetlar | nd? Yes | No |
| Remarks: | | | | - | |
| Conditions were wetter than normal according to the anteced Depression does not qualify as a wetland but appears to hold may be inundated during storm events. | | | | | |
| VEGETATION – Use scientific names of plan | nts. | | | | |
| Taga Chachian (Diat sing) | | | ant Indicator | Dominance Test world | ksheet: |
| Tree Stratum (Plot size:) | | | s? Status | Number of Dominant S | |
| 1 2 | | | | That Are OBL, FACW, | 01 FAC (A) |
| 3. | | | | Total Number of Domin Species Across All Stra | 4 |
| 4. | | | | · | |
| | | | | Percent of Dominant S That Are OBL, FACW, | |
| Sapling/Shrub Stratum (Plot size:) | | | | | |
| 1 | | | | Prevalence Index wo | |
| 2 | | | | Total % Cover of: OBL species 0 | $\frac{\text{Multiply by:}}{\text{x 1 = } 0}$ |
| 3 | | | | | $x = \frac{1}{20}$ |
| 4 | | | | | x 3 = 0 |
| J | | = Total | Cover | FACU species 50 | |
| Herb Stratum (Plot size:) | | _ Total | OOVCI | | x 5 = 125 |
| 1. Taraxacum officinale | 50 | | FACU | Column Totals: 85 | |
| 2. Erodium cicutarium | 10 | | UPL | | |
| 3. Medicago sativa ssp. sativa | 10 | | UPL | Prevalence Index | <u> </u> |
| 4. Phragmites australis | _ <u>10</u> | | FACW | Hydrophytic Vegetati | |
| 5. Descurainia pinnata | 5 | | UPL | Dominance Test is | |
| 6 | | | | Prevalence Index | |
| 7 | | | | | aptations ¹ (Provide supporting ss or on a separate sheet) |
| 8 | 85 | T-4-1 | | Problematic Hydro | ophytic Vegetation ¹ (Explain) |
| Woody Vine Stratum (Plot size:) | | = Total | Cover | | |
| 1 | | | | | pil and wetland hydrology must |
| 2 | | | | be present, unless dist | curbed or problematic. |
| | | = Total | Cover | Hydrophytic | |
| % Bare Ground in Herb Stratum % Cove | er of Biotic C | rust | | Vegetation Present? Yes | es No |
| Remarks: | | | | 1 | |
| | | | | | |
| | | | | | |
| | | | | | |
| 1 | | | | | |

| Profile Desc | ription: (Describe | e to the depth | needed to docur | nent the i | ndicator o | or confirm | the absence | e of indicators.) |
|-----------------------------------|--|----------------|----------------------|---------------|------------|------------------|---------------------------------------|---|
| Depth | Matrix | | | x Features | 1 | . 2 | | |
| (inches) 0 - 2 | Color (moist) | | Color (moist) | % | Type' | Loc ² | Texture | Remarks |
| | 7.5YR 3/1 | 100 | | · —— | | | Loam | high organic content |
| 2 - 7 | 5YR 3/2 | 100 | | · —— | | | Sandy Loam | |
| 7 - 22 | 10YR 4/2 | 100 | | | | | Silt Loam | |
| | | | | <u> </u> | | | | |
| - | | | | | | | | |
| - | | | | | | | | |
| | | | | | | | | |
| | | | | · | | | | |
| 1T C-C | | | Dadward Makris Co | | | | 21 - | sections DI - Done Lining M-Matrix |
| | oncentration, D=De Indicators: (Appli | | | | | a Sana Gr | | ocation: PL=Pore Lining, M=Matrix. s for Problematic Hydric Soils ³ : |
| Histosol | | ouble to all L | Sandy Red | | ou., | | | Muck (A9) (LRR C) |
| _ | pipedon (A2) | | Stripped Ma | | | | | Muck (A10) (LRR B) |
| Black Hi | | | Loamy Muc | | l (F1) | | | ced Vertic (F18) |
| | n Sulfide (A4) | | Loamy Gley | - | . , | | | Parent Material (TF2) |
| | Layers (A5) (LRR | (C) | Depleted M | | () | | | (Explain in Remarks) |
| | ick (A9) (LRR D) | , | Redox Dark | ` ' | F6) | | <u>—</u> | , |
| | d Below Dark Surfa | ice (A11) | Depleted D | ark Surfac | e (F7) | | | |
| Thick Da | ark Surface (A12) | | Redox Dep | ressions (I | F8) | | ³ Indicators | s of hydrophytic vegetation and |
| Sandy M | lucky Mineral (S1) | | Vernal Pool | s (F9) | | | wetland | I hydrology must be present, |
| | Bleyed Matrix (S4) | | | | | | unless | disturbed or problematic. |
| Restrictive I | _ayer (if present): | | | | | | | |
| Type: | | | | | | | | |
| Depth (inc | ches): | | | | | | Hydric Soi | I Present? Yes No |
| Remarks: | | | | | | | | |
| Doduoos | d matrix nee | de rodov | to qualify f | or "do | nlatad | holow | dork ou | rfaca" |
| Reduced | | us reduz | to quality i | oi ue | pieteu | Delow | uaik su | ilace. |
| | | | | | | | | |
| HYDROLO | GY | | | | | | | |
| Wetland Hyd | drology Indicators | S: | | | | | | |
| _ | cators (minimum of | | check all that appl | v) | | | Seco | andary Indicators (2 or more required) |
| - | Water (A1) | | Salt Crust | | | | | Water Marks (B1) (Riverine) |
| | iter Table (A2) | | Biotic Crus | | | | | Sediment Deposits (B2) (Riverine) |
| Saturation | , , | | Aquatic In | | s (B13) | | | Drift Deposits (B3) (Riverine) |
| | arks (B1) (Nonriv e | arine) | Hydrogen | | | | | Drainage Patterns (B10) |
| | nt Deposits (B2) (N | | | | | Livina Boo | · · · · · · · · · · · · · · · · · · · | Dry-Season Water Table (C2) |
| | oosits (B3) (Nonriv | | Presence | | - | - | | Crayfish Burrows (C8) |
| | Soil Cracks (B6) | erine) | Recent Iro | | | | | Saturation Visible on Aerial Imagery (C9) |
| | on Vis ble on Aeria | l Imagani (D7) | | | | a Solis (Co | · — | • • • • |
| | tained Leaves (B9) | | | | | | | Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| Field Observ | · , , | 1 | Other (Exp | naiii iii Ne | iliaiks) | | ' | AC-Neutral Test (D3) |
| Surface Water | | Voc. N | o <u> </u> | oboo): | | | | |
| | | | o Depth (in | | | | | |
| Water Table | | | | , | | | | 5 10 11 11 11 |
| Saturation Proceed (includes cape | | Yes N | o Depth (in | ches): | | _ Wetla | and Hydrolog | gy Present? Yes No |
| | corded Data (strea | m gauge, mor | itoring well, aerial | ohotos, pr | evious ins | pections), | if available: | |
| | | | | | | | | |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |



Sample Point 36



Sample Point 36

| Project/Site: WDC Phase II | | City/County | _{y:} Davis C | ounty | Sampling Date: 2024-05-16 |
|---|----------------|-------------|-----------------------|--|--|
| Applicant/Owner: UDOT | | | | State: Utah | Sampling Point: SP37 |
| Investigator(s): Cara Glabau, Elena Capson | | Section, To | ownship, Ra | inge: S31 T5N R2W | |
| | | | | | Slope (%): _0 |
| , , , | | | • | , | 33 Datum: NAD83_201 |
| Soil Map Unit Name: Fb - Ford loam, shallow water | | | | | |
| Are climatic / hydrologic conditions on the site typical for thi | | | | | |
| Are Vegetation, Soil, or Hydrologys | | | | | present? Yes No |
| Are Vegetation, Soil, or Hydrology I | | | | eeded, explain any answ | |
| SUMMARY OF FINDINGS – Attach site map | | | | | |
| | | | | <u> </u> | <u> </u> |
| Hydrophytic Vegetation Present? Yes N Hydric Soil Present? Yes N | lo | | he Sampled | | |
| Wetland Hydrology Present? | | with | nin a Wetlaı | nd? Yes | No |
| Remarks: | | | | | |
| Conditions were wetter than normal according to the anteced meadow appears to collect nearby stormwater runoff, which sa wetland. | | | | | |
| VEGETATION – Use scientific names of plan | nts. | | | | |
| T 01 1 (D11) | | | t Indicator | Dominance Test wor | ksheet: |
| Tree Stratum (Plot size:) | % Cover | | | Number of Dominant S | |
| 1 2 | | | | That Are OBL, FACW, | , or FAC: 2 (A) |
| 3. | | | | Total Number of Domi Species Across All Str | ^ |
| 4. | | | | | |
| Sapling/Shrub Stratum (Plot size:) | | = Total Co | over | Percent of Dominant S That Are OBL, FACW, | |
| 1. Sarcobatus vermiculatus | 10 | | FACU | Prevalence Index wo | rksheet: |
| 2 | | | | Total % Cover of: | |
| 3 | | | | | x 1 = <u>17</u> |
| 4 | | | | FACW species 40 | |
| 5 | | | | | x 3 = 129 |
| Herb Stratum (Plot size: | 10 | = Total Co | over | | x 4 = 40 |
| Herb Stratum (Plot size:) 1. Distichlis spicata | 43 | ~ | FAC | | x = 5 = 0 (A) 266 (B) |
| 2 Calamagrostis canadensis | 40 | | FACW | Column Totals: 110 | (A) <u>266</u> (B) |
| 3. Spergularia marina | 12 | · | OBL | Prevalence Inde | x = B/A = 2.41 |
| 4. Triglochin maritima | 5 | | OBL | Hydrophytic Vegetat | ion Indicators: |
| 5. | | | | <u>✓</u> Dominance Test is | s >50% |
| 6. | | | | Prevalence Index | is $\leq 3.0^{1}$ |
| 7 | | | | | aptations ¹ (Provide supporting |
| 8 | | | | | ks or on a separate sheet) ophytic Vegetation¹ (Explain) |
| | 100 | = Total Co | over | Problematic Hydro | opriytic vegetation (Explain) |
| Woody Vine Stratum (Plot size:) | | | | ¹ Indicators of hydric so | oil and wetland hydrology must |
| 1 | | | . —— | be present, unless dis | |
| 2. | | = Total Co | over | Hydrophytic | |
| 0/ Days Coough in Harb Obstance | | - | | Vegetation | V N- |
| % Bare Ground in Herb Stratum % Cove | er of Biotic C | rust | | Present? Yo | es No |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| Profile Desc | ription: (Describe | to the depth i | needed to docu | ment the i | indicator | or confirm | the absence of indicators.) | |
|---------------------|--|-----------------|----------------------|-------------|---------------|------------------|---|--------------------|
| Depth | Matrix | | | x Feature | | . 2 | | |
| (inches) | Color (moist) | | Color (moist) | % | Type' | Loc ² | Texture Remark | KS |
| 0 - 1 | 10YR 5/3 | 100 | | | . | | Mucky Peat | |
| 1 - 8 | 10YR 4/2 | _ <u>100</u> | | | | | Silt | |
| 8 - 20 | 10YR 5/3 | 100 | | _ | | | Silty Clay | |
| 20 - 24 | 10YR 5/2 | 100 | | | | | Silty Clay | |
| - | | | | | | | | |
| _ | | | | | · | | | |
| | | | | - | | | | |
| | - | <u> </u> | | | | | | |
| | | | | | · | | | |
| | oncentration, D=De Indicators: (Appli | | | | | d Sand Gr | | |
| - | | cable to all LR | | | ea.) | | Indicators for Problematic Hydr | ric Solis : |
| Histosol | oipedon (A2) | | Sandy Red Stripped M | | | | 1 cm Muck (A9) (LRR C) 2 cm Muck (A10) (LRR B) | |
| Black Hi | | | Loamy Mud | | l (F1) | | Reduced Vertic (F18) | |
| _ | en Sulfide (A4) | | Loamy Gle | - | | | Red Parent Material (TF2) | |
| | d Layers (A5) (LRR | C) | Depleted M | | (1 =) | | Other (Explain in Remarks) | |
| | ick (A9) (LRR D) | •, | Redox Dar | | (F6) | | | |
| | d Below Dark Surfa | ce (A11) | Depleted D | | ` ' | | | |
| | ark Surface (A12) | , , | Redox Dep | ressions (| F8) | | ³ Indicators of hydrophytic vegetat | ion and |
| Sandy M | Mucky Mineral (S1) | | Vernal Poo | ls (F9) | | | wetland hydrology must be pre | sent, |
| . — | Gleyed Matrix (S4) | | | | | | unless disturbed or problemation | C. |
| Restrictive I | Layer (if present): | | | | | | | |
| Type: | | | <u> </u> | | | | | |
| Depth (inc | ches): | | <u> </u> | | | | Hydric Soil Present? Yes | No <u> </u> |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| HYDROLO | GV. | | | | | | | |
| | drology Indicators | | | | | | | |
| | cators (minimum of | | hook all that ann | lv) | | | Secondary Indicators (2 or n | noro roquirod) |
| - | • | one requirea; c | | • | | | Secondary Indicators (2 or n | |
| Surface | ` , | | Salt Crust | ` , | | | Water Marks (B1) (Rive | |
| | iter Table (A2) | | Biotic Cru | | (5.46) | | Sediment Deposits (B2) | |
| <u>✓</u> Saturation | , , | | Aquatic In | | | | Drift Deposits (B3) (Rive | |
| | larks (B1) (Nonrive | | Hydrogen | | | | Drainage Patterns (B10) | |
| | nt Deposits (B2) (No | | | | _ | _ | ots (C3) Dry-Season Water Table | e (C2) |
| - | oosits (B3) (Nonrive | erine) | Presence | | • | • | Crayfish Burrows (C8) | |
| | Soil Cracks (B6) | | Recent Iro | | | d Soils (C6 | · — | erial Imagery (C9) |
| | on Vis ble on Aerial | | Thin Mucl | Surface (| (C7) | | Shallow Aquitard (D3) | |
| | tained Leaves (B9) | | Other (Ex | plain in Re | emarks) | | FAC-Neutral Test (D5) | |
| Field Obser | | | | | | | | |
| Surface Water | | | Depth (in | | | | | |
| Water Table | | | Depth (in | | | | | |
| Saturation P | | Yes <u> </u> | Depth (in | ches): 10 | | Wetl | and Hydrology Present? Yes• | No |
| (includes cap | oillary fringe) corded Data (strear | n gauge monite | oring well aerial | nhotos nr | evioue ine | nections) | if available: | |
| Describe Net | corded Data (Streat | ir gauge, monit | oning well, aerial | priotos, pr | evious iris | pections), | ii avaliable. | |
| Demonto | | | | | | | | |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |



Sample Point 37



Sample Point 37

| Project/Site: WDC Phase II | (| City/C | ounty | Davis Co | ounty | Samp | oling Date: | 2024- | 05-16 |
|---|---------------------|--------|--|-------------|--------------------------------|---------------------------|-------------------------|-------------|---------|
| Applicant/Owner: UDOT | | - | - | | State: Utal | | _ | | |
| | | | | | nge: S31 T5N R2 | | 9 | | |
| | | | | | convex, none): Co | | Sic | pe (%): | 0 |
| Subregion (LRR): D 28A | | | | | | | | | |
| Soil Map Unit Name: Fb - Ford loam, shallow water t | | | | | | | | | |
| Are climatic / hydrologic conditions on the site typical for this | | | | | | | | | |
| Are Vegetation, Soil, or Hydrologys | | | | | 'Normal Circumstar | | | / No | _ |
| | | | | | | | | INC | , |
| Are Vegetation, Soil, or Hydrology r SUMMARY OF FINDINGS – Attach site map | | | | | eeded, explain any a | | | eatures | s, etc. |
| | | | <u>- </u> | | <u> </u> | | | | |
| Hydrophytic Vegetation Present? Yes N Hydric Soil Present? Yes N | lo | | | e Sampled | | | | | |
| Wetland Hydrology Present? Yes N | lo 🗸 | | with | in a Wetlar | nd? Yes | s N | 40 <u> </u> | _ | |
| Remarks: | | İ | | | | | | | |
| Conditions were wetter than normal accord | ing to the | e ant | ece | dent pre | cipitation tool, | , but there | had no | t been | rain |
| for several days prior to the site visit. Slight | • | | | • | • | | | | |
| | | | | | | | | | |
| VEGETATION – Use scientific names of plan | | | | 1 12 1 | | | | | |
| Tree Stratum (Plot size:) | Absolute % Cover | | | | Dominance Test | | | | |
| 1 | | | | | Number of Domin | | ; <u>0</u> | | (A) |
| 2 | | | | | Total Number of | Dominant | | | |
| 3 | | | | | Species Across A | | 4 | | (B) |
| 4 | | | | | Percent of Domir | nant Species | | | |
| Conling/Shrub Stratum (Diot size: | | = Tot | tal Co | ver | That Are OBL, F | | 0.00 | | (A/B) |
| Sapling/Shrub Stratum (Plot size:) 1. Sarcobatus vermiculatus | 38 | | / | FACU | Prevalence Inde | x worksheet | | | |
| 2. | | | | | | er of: | | ly by: | |
| 3. | | | | | | 10 | | | |
| 4. | | | | | FACW species | 0 | x 2 = 0 | | _ |
| 5 | | | | | FAC species | 0 | x 3 = 0 | | _ |
| | 38 | = Tot | tal Co | ver | FACU species | | | | _ |
| Herb Stratum (Plot size:) 1. Bromus tectorum | 35 | | , | UPL | · - | 65 | · | | _ |
| 2. Hordeum murinum | 25 | | | FACU | Column Totals: | 138 | (A) <u>58</u> | / | _ (B) |
| 3. Rhynchospora nivea | 20 | | _ | UPL | Prevalence | Index = B/A | = 4.25 | | |
| 4. Eleocharis palustris | 10 | | | OBL | Hydrophytic Ve | | | | |
| 5. Descurainia pinnata ssp. pinnata | 5 | | | UPL | Dominance | _ | | | |
| 6. Lepidium campestre | 5 | | | UPL | Prevalence I | ndex is ≤3.0 ¹ | | | |
| 7 | | | | | Morphologic | al Adaptation | s ¹ (Provide | support | ting |
| 8 | | | | | | emarks or on | | | \ |
| | 100 | = Tot | tal Co | ver | Problematic | Hydrophytic | /egetation | (Explai | n) |
| Woody Vine Stratum (Plot size:) | | | | | ¹ Indicators of hyd | dric soil and w | vetland hvd | Irology m | nuet |
| 1 | | | | | be present, unles | | | | iust |
| 2 | | = Tot | | | Hydrophytic | | | | |
| | | _ | | | Vegetation | ., | | , | |
| % Bare Ground in Herb Stratum % Cover | r of Biotic C | rust _ | | | Present? | Yes | No _ | | |
| Remarks: | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| Profile Desc | ription: (Describe | to the depth | needed to document the indicator or c | onfirm the absence | of indicators.) | | | |
|-------------------------------------|--|----------------|--|---------------------------------------|---|--|--|--|
| Depth | Matrix Color (moist) | % | Redox Features Color (moist) % Type ¹ L | oc² Texture | Domonteo | | | |
| (inches) 0 - 3 | 10YR 2/2 | 100 | Color (moist) % Type ¹ L | .oc² <u>Texture</u> Loam | Remarks | | | |
| 3 - 20 | 10YR 3/2 | 100 | | Silty Clay | | | | |
| | - | 100 | | | <u> </u> | | | |
| 20 - 24 | 10YR 4/2 | _ 100 _ | | Silty Clay | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| ¹ Type: C=Co | oncentration, D=Dep | oletion, RM=R | educed Matrix, CS=Covered or Coated S | | ation: PL=Pore Lining, M=Matrix. | | | |
| Hydric Soil | Indicators: (Applic | able to all LF | RRs, unless otherwise noted.) | Indicators f | for Problematic Hydric Soils ³ : | | | |
| Histosol | ` ' | | Sandy Redox (S5) | | uck (A9) (LRR C) | | | |
| | oipedon (A2) | | Stripped Matrix (S6) | | uck (A10) (LRR B) | | | |
| | stic (A3) | | Loamy Mucky Mineral (F1) | | ed Vertic (F18) | | | |
| | en Sulfide (A4) | 0) | Loamy Gleyed Matrix (F2) | · | rent Material (TF2) | | | |
| | d Layers (A5) (LRR | C) | Depleted Matrix (F3) | Other (i | Explain in Remarks) | | | |
| | ick (A9) (LRR D) | oo (A11) | Redox Dark Surface (F6)Depleted Dark Surface (F7) | | | | | |
| - | d Below Dark Surfac ark Surface (A12) | ce (ATT) | Redox Depressions (F8) | ³ Indicators (| of hydrophytic vegetation and | | | |
| | fucky Mineral (S1) | | Vernal Pools (F9) | | nydrology must be present, | | | |
| | Gleyed Matrix (S4) | | vernar ools (10) | | sturbed or problematic. | | | |
| | Layer (if present): | | | | , , , , , , , , , , , , , , , , , , , | | | |
| Type: | , , , | | | | | | | |
| | ches): | | _ | Hydric Soil I | Present? Yes No | | | |
| Remarks: | | | | 11,44110 00111 | 100 m | | | |
| Remarks. | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| HYDROLO | GY | | | | | | | |
| Wetland Hy | drology Indicators | : | | | | | | |
| Primary India | cators (minimum of | one required; | check all that apply) | Secon | dary Indicators (2 or more required) | | | |
| Surface | Water (A1) | | Salt Crust (B11) | W | ater Marks (B1) (Riverine) | | | |
| | ater Table (A2) | | Biotic Crust (B12) | | Sediment Deposits (B2) (Riverine) | | | |
| Saturation | | | Aquatic Invertebrates (B13) | | ift Deposits (B3) (Riverine) | | | |
| · | larks (B1) (Nonrive i | rine) | Hydrogen Sulfide Odor (C1) | | rainage Patterns (B10) | | | |
| · | nt Deposits (B2) (No | • | Oxidized Rhizospheres along Livi | | - | | | |
| | posits (B3) (Nonrive | | Presence of Reduced Iron (C4) | | rayfish Burrows (C8) | | | |
| - | Soil Cracks (B6) | inie) | Recent Iron Reduction in Tilled So | · · · · · · · · · · · · · · · · · · · | aturation Visible on Aerial Imagery (C9) | | | |
| | on Vis ble on Aerial | Imagary (P7) | | | | | | |
| | tained Leaves (B9) | iiiagery (b7) | Thin Muck Surface (C7) | · · · · · · · · · · · · · · · · · · · | nallow Aquitard (D3) | | | |
| | | | Other (Explain in Remarks) | <u> </u> | AC-Neutral Test (D5) | | | |
| Field Observ | | / N- | Depth (inches): | | | | | |
| Surface Water | | | | | | | | |
| Water Table | | | Depth (inches): | | | | | |
| Saturation Projection (includes cap | | res V No | Depth (inches): 20 | Wetland Hydrology | Present? Yes No | | | |
| | | n gauge, moni | toring well, aerial photos, previous inspec | tions), if available: | | | | |
| | | | | | | | | |
| Remarks: | | | | | | | | |
| . tomanto. | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |



Sample Point 38



Sample Point 38

| Project/Site: WDC Phase II | | City/County: Davis C | County | _ Sampling Date: 2024-05-16 |
|---|---------------------|---|--|--|
| Applicant/Owner: UDOT | | - , - · · · · · · · · · · · · · · · · · | | Sampling Point: SP39 |
| Investigator(s): Merissa Davis | | Section, Township, Ra | ange: S31 T5N R2W | |
| Landform (hillslope, terrace, etc.): Depression | | Local relief (concave, | convex, none): Conca | ve Slope (%): 0 |
| | | | | 662 Datum: NAD83_2011 |
| Soil Map Unit Name: HLA - Harrisville-Lela | | | | |
| Are climatic / hydrologic conditions on the site ty | | | | |
| Are Vegetation, Soil, or Hydrolog | • | | | present? Yes No |
| Are Vegetation, Soil, or Hydrolog | | | eeded, explain any answ | |
| SUMMARY OF FINDINGS – Attach s | | • | | |
| | | Is the Sample within a Wetla | nd? Yes | |
| been rain for several days prior | • | | | |
| VEGETATION – Use scientific name | s of plants. | | | |
| Tree Stratum (Plot size:) 1 | - | Dominant Indicator Species? Status | Number of Dominant That Are OBL, FACW | Species |
| 2 | | | Total Number of Dom Species Across All St | 4 |
| 4 | | = Total Cover | Percent of Dominant S That Are OBL, FACW | 100.00 |
| Sapling/Shrub Stratum (Plot size:1. | | | Prevalence Index wo | orksheet: |
| 2 | | | | Multiply by: |
| 3. | | | | x 1 = 0 |
| 4. | | | FACW species 80 | x 2 = <u>160</u> |
| 5 | | <u> </u> | FAC species 0 | x 3 = 0 |
| | | _ = Total Cover | · | x 4 = 0 |
| Herb Stratum (Plot size:) 1 Phragmites australis | 80 | ✓ FACW | C. 2 op co.cc | x 5 = 0 |
| 2. | | - <u></u> | Column Totals: 80 | (A) <u>160</u> (B) |
| 3. | | | Prevalence Inde | ex = B/A = 2.00 |
| 4. | | | Hydrophytic Vegetat | ion Indicators: |
| 5 | | | ✓ Dominance Test | is >50% |
| 6 | | | ✓ Prevalence Index | |
| 7 | | , | | laptations ¹ (Provide supporting ks or on a separate sheet) |
| 8 | 80 | <u> </u> | | rophytic Vegetation ¹ (Explain) |
| Woody Vine Stratum (Plot size: | | _ = Total Cover | _ , | |
| 1 | · | | | oil and wetland hydrology must sturbed or problematic. |
| 2 | | _ = Total Cover | Hydrophytic | |
| % Bare Ground in Herb Stratum | % Cover of Biotic C | Crust | Vegetation Present? Y | res No |
| Remarks: | | | | |
| | | | | |
| | | | | |

| SUIL | | | | | | | | Sampling Point: Of 33 |
|-------------------------------|--|----------------|---------------------------|----------------|-------------------|------------------|---------------------------------------|---|
| Profile Desc | ription: (Describe | to the depth | n needed to docum | ent the ir | ndicator | or confirm | n the absence | e of indicators.) |
| Depth | Matrix | | Redox | Features | | | | |
| (inches) | Color (moist) | | Color (moist) | % | Type ¹ | Loc ² | Texture | Remarks |
| 0 - 2 | 5Y 4/1 | 100 | | | | | Silty Clay | |
| 2 - 10 | 10YR 4/2 | 100 | | | | | Sand | |
| 10 - 22 | 10YR 4/2 | 100 | | | | | Clay | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| _ | | | | | | | | |
| ¹ Type: C=Co | oncentration, D=Dep | oletion, RM=F | Reduced Matrix, CS= | -Covered | or Coate | ed Sand Gr | rains. ² Lo | cation: PL=Pore Lining, M=Matrix. |
| Hydric Soil I | Indicators: (Applic | able to all L | RRs, unless otherv | vise note | d.) | | Indicators | s for Problematic Hydric Soils ³ : |
| Histosol | | | Sandy Redox | | | | 1 cm | Muck (A9) (LRR C) |
| | pipedon (A2) | | Stripped Mat | . , | | | | Muck (A10) (LRR B) |
| Black Hi | ` ' | | Loamy Muck | • | . , | | · | ced Vertic (F18) |
| | n Sulfide (A4) | ۵, | Loamy Gleye | | (F2) | | | Parent Material (TF2) |
| | d Layers (A5) (LRR (| () | Depleted Ma Redox Dark | | -6) | | <u>v</u> Otner | (Explain in Remarks) |
| | ick (A9) (LRR D) d Below Dark Surfac | - (Δ11) | Redox Dark | , | , | | | |
| | ark Surface (A12) | C (ATT) | Redox Depre | | | | 3Indicators | s of hydrophytic vegetation and |
| | fucky Mineral (S1) | | Vernal Pools | | -, | | | hydrology must be present, |
| | Bleyed Matrix (S4) | | <u> </u> | ` , | | | | disturbed or problematic. |
| Restrictive L | _ayer (if present): | | | | | | | |
| Type: | | | | | | | | |
| Depth (inc | ches): | | | | | | Hydric Soi | l Present? Yes No |
| Remarks: | | | | | | | | |
| This wetla | nd is likely inu | ndated di | ırina storm eve | nte and | l anne | ars to m | aintain end | ough hydrology beyond those |
| | - | | • | | | | | |
| tilles to s | иррог пуагорг | lytic vege | etation. Sons an | енкету | reguia | riy Cilai | igilig due t | o stormwater deposits. |
| HYDROLO | GV | | | | | | | |
| | | | | | | | | |
| _ | drology Indicators: | | | | | | | |
| | - | ne required; | check all that apply | | | | | ndary Indicators (2 or more required) |
| | Water (A1) | | Salt Crust (I | | | | | Water Marks (B1) (Riverine) |
| | iter Table (A2) | | Biotic Crust | | | | · · · · · · · · · · · · · · · · · · · | Sediment Deposits (B2) (Riverine) |
| ✓ Saturation | | | Aquatic Inve | | | | | Orift Deposits (B3) (Riverine) |
| | arks (B1) (Nonriver | , | Hydrogen S | | . , | | | Orainage Patterns (B10) |
| | nt Deposits (B2) (No | | | | | | | Ory-Season Water Table (C2) |
| | oosits (B3) (Nonrive | rine) | Presence of | | | | | Crayfish Burrows (C8) |
| | Soil Cracks (B6) | | Recent Iron | | | d Soils (C6 | | Saturation Visible on Aerial Imagery (C9) |
| | on Vis ble on Aerial | Imagery (B7) | | | | | | Shallow Aquitard (D3) |
| | tained Leaves (B9) | | Other (Expl | ain in Rei | marks) | | <u></u> | FAC-Neutral Test (D5) |
| Field Observ | | | | | | | | |
| Surface Water | | _ | o Depth (incl | | | | | |
| Water Table | | | o Depth (incl | | | | | , |
| Saturation Pr | | ′es <u> </u> | o Depth (incl | nes): <u>2</u> | | Wetla | and Hydrolog | gy Present? Yes No |
| (includes cap Describe Red | | gauge mor | nitoring well, aerial pl | notos nre | vious ins | pections) | if available: | |
| 200011001100 | 23.304 2414 (01104111 | . gaago, 11101 | | .5.00, pr | | , Journal, | available. | |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| 1 | ت - الجريم المائلة الما | | | | | | | |
| Inundate | ed in other pa | arts of t | his wetland. | Pit wa | is take | en on l | ess wet e | edge. |
| Inundate | ed in other pa | arts of t | his wetland. | Pit wa | is take | en on l | ess wet e | edge. |



Sample Point 39



Sample Point 39

| Project/Site: WDC Phase II | | City/Cou | _{nty:} <u>Davis C</u> | ounty | _ Sampling Date: 2024-05-16 | | |
|---|----------------------------------|-------------|--------------------------------|-----------------------------------|--|--|--|
| Applicant/Owner: UDOT | State: Utah Sampling Point: SP40 | | | | | | |
| Investigator(s): Merissa Davis | | Section, | Township, Ra | nge: S31 T5N R2W | | | |
| Landform (hillslope, terrace, etc.): Flat | | Local re | lief (concave, | convex, none): None | Slope (%): 0 | | |
| Subregion (LRR): D 28A | Lat: 41. | 132449 | 965 | _ Long: <u>-112.108289</u> | 65 Datum: NAD83_20 | | |
| Soil Map Unit Name: HLA - Harrisville-Leland cor | mplex, 0 to 1 | percen | t slopes | NWI classif | ication: None | | |
| Are climatic / hydrologic conditions on the site typical fo | r this time of yea | ar? Yes | No _ | (If no, explain in | Remarks.) | | |
| Are Vegetation, Soil, or Hydrology | significantly | disturbed | d? Are ' | "Normal Circumstances" | present? Yes No | | |
| Are Vegetation, Soil, or Hydrology | naturally pro | blematic | ? (If ne | eeded, explain any answ | ers in Remarks.) | | |
| SUMMARY OF FINDINGS - Attach site m | ap showing | sampl | ing point l | ocations, transect | s, important features, etc | | |
| Hydrophytic Vegetation Present? Yes | No | | | | | | |
| | No 🗸 | | the Sampled | | No | | |
| Wetland Hydrology Present? Yes | | w | ithin a Wetlaı | nd? fes | NO | | |
| Remarks: | | | | | | | |
| Conditions were wetter than normal | according t | to the | antecede | ent precipitation | tool, but there had not | | |
| been rain for several days prior to the | e site visit. | | | | | | |
| VEGETATION – Use scientific names of p | | | | | | | |
| VEGETATION GGC GOICHGING Harries of p | Absolute | Domina | ant Indicator | Dominance Test wor | | | |
| Tree Stratum (Plot size:) | | | s? Status | Number of Dominant | | | |
| 1 | | | | That Are OBL, FACW | , or FAC: 1 (A) | | |
| 2 | | | | Total Number of Domi | inant _ | | |
| 3 | | | | Species Across All Str | rata: <u>5</u> (B) | | |
| 4 | | | | Percent of Dominant S | | | |
| Sapling/Shrub Stratum (Plot size:) | | _ = 10tai | Covei | That Are OBL, FACW | , or FAC: 20.00 (A/B) | | |
| 1 | | | | Prevalence Index wo | rksheet: | | |
| 2 | | | | Total % Cover of: | | | |
| 3 | | | | | x 1 = 0 | | |
| 4 | | | | | x 2 = 10 | | |
| 5 | | | | FAC species 10 FACU species 30 | x 3 = 30 x 4 = 120 | | |
| Herb Stratum (Plot size:) | | = Total | Cover | | x 5 = 150 | | |
| 1. Convolvulus arvensis | 30 | | UPL | | (A) 310 (B) | | |
| 2. Bromus inermis | 10 | | FACU | | | | |
| 3. Helianthus annuus | 10 | | FACU | | x = B/A = 4.13 | | |
| 4. Rumex crispus | | | FAC | Hydrophytic Vegetat | | | |
| 5. Cirsium vulgare 6. Phragmites australis | <u>10</u> 5 | | FACU FACW | Dominance Test i Prevalence Index | | | |
| | | | FACW | | aptations ¹ (Provide supporting | | |
| 7 8 | | | | data in Remar | ks or on a separate sheet) | | |
| o | 7- | = Total | Cover | Problematic Hydr | ophytic Vegetation ¹ (Explain) | | |
| Woody Vine Stratum (Plot size:) | | · · · · · · | 0010. | | | | |
| 1 | | | | | oil and wetland hydrology must sturbed or problematic. | | |
| 2 | | | | | tarboa or problematic. | | |
| | | = Total | Cover | Hydrophytic Vegetation | | | |
| % Bare Ground in Herb Stratum % C | over of Biotic C | rust | | | es No | | |
| Remarks: | | | | • | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Color (moist) | | Matrix | | Redo | x Features | 3 | | | |
|--|---|--|---|---|---|---|-------------------|---|---|
| Sand Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Thydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histos (A1) Histos (A1) Histos (A1) Histos (A2) Histos (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Reduced Vertic (F18 | | | % | | | | Loc ² | Texture | Remarks |
| "Type: C=Concentration.D=Depletion, RM=Reduced Matrix. CS=Covered or Costed Sand Grains. "Location: PL=Pore Lining, M=Mat Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosoil (A1) | 0 - 9 | 10YR 3/2 | 100 | | | | | Loam | |
| Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histic Epipedon (A2) | 9 - 20 | 10YR 4/2 | 100 | | - | | | Sand | |
| Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoc Epipedon (A2) Histoc Epipedon (A2) Sardy Redox (S5) Histoc Epipedon (A2) Stripped Matrix (S6) Black Histoc (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Cother (Explain in Remarks) Hothic Dark Surface (A11) Depleted Dark Surface (F6) Depleted Blow Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Dark Surface (F7) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Restrictive Layer (if present): Type: Depth (inches): Depth (inches): Depth (inches): Surface Water (A1) Salt Crust (B11) Water Marks (B1) (Nonriverine) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Surface Soil Cracks (B8) Resention Reduction in Tilled Soils (C8) Surface Soil Cracks (B8) Recent Inn Remarks Primary Indicators (B8) Recention Reduction in Tilled Soils (C8) Surface Soil Cracks (B8) Recent Inn Remarks Primary Indicators (B8) Recent Inn Remarks Primary Indicators (B1) Water Marks (B1) (Nonriverine) Surface Water (B1) Surface Water (B1) Water Table (C2) Surface Soil Cracks (B8) Recent Inn Remarks Primary Indicators (B1) Water Table (C2) Surface Soil Cracks (B8) Recent Inn Remarks Primary Indicators (B1) Water Table (C2) Surface Water (B8) Recent Inn Remarks Primary Indicators (B1) Water Table (C2) Saturation (C3) Pry-Season Water Table (C2) Saturation (C3) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Water Table Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: | | | | | | | | | |
| Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoc Epipedon (A2) Histoc Epipedon (A2) Sardy Redox (S5) Histoc Epipedon (A2) Stripped Matrix (S6) Black Histoc (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Cother (Explain in Remarks) Hothic Dark Surface (A11) Depleted Dark Surface (F6) Depleted Blow Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Dark Surface (F7) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Restrictive Layer (if present): Type: Depth (inches): Depth (inches): Depth (inches): Surface Water (A1) Salt Crust (B11) Water Marks (B1) (Nonriverine) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Surface Soil Cracks (B8) Resention Reduction in Tilled Soils (C8) Surface Soil Cracks (B8) Recent Inn Remarks Primary Indicators (B8) Recention Reduction in Tilled Soils (C8) Surface Soil Cracks (B8) Recent Inn Remarks Primary Indicators (B8) Recent Inn Remarks Primary Indicators (B1) Water Marks (B1) (Nonriverine) Surface Water (B1) Surface Water (B1) Water Table (C2) Surface Soil Cracks (B8) Recent Inn Remarks Primary Indicators (B1) Water Table (C2) Surface Soil Cracks (B8) Recent Inn Remarks Primary Indicators (B1) Water Table (C2) Surface Water (B8) Recent Inn Remarks Primary Indicators (B1) Water Table (C2) Saturation (C3) Pry-Season Water Table (C2) Saturation (C3) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Water Table Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: | | | | | | | | | |
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| Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoc Epipedon (A2) Histoc Epipedon (A2) Sardy Redox (S5) Histoc Epipedon (A2) Stripped Matrix (S6) Black Histoc (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) (LRR C) Loamy Gleyed Matrix (F2) Stratified Layers (A5) (LRR D) Redox Dark Surface (F6) Depleted Bolen Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Restrictive Layer (if present): Type: Depth (inches): Depth (inches): Surface Water (A1) Sulface | - | | | | | | | | |
| Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A2) Sardy Redox (S5) Stripped Matrix (S6) Black Histoc (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) (LRR C) 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) Depleted Bolow Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Wetland Hydrology Indicators of hydrophylic vegetation and wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No | - | | | | | | | | |
| Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoc Epipedon (A2) Histoc Epipedon (A2) Sardy Redox (S5) Histoc Epipedon (A2) Stripped Matrix (S6) Black Histoc (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) (LRR C) Loamy Gleyed Matrix (F2) Stratified Layers (A5) (LRR D) Redox Dark Surface (F6) Depleted Bolen Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Restrictive Layer (if present): Type: Depth (inches): Depth (inches): Surface Water (A1) Sulface | ¹Tvpe: C=C | oncentration, D=Der | oletion. RM=R | educed Matrix. CS | S=Covered | or Coate | d Sand G | rains. ² Locat | tion: PL=Pore Lining, M=Matrix. |
| Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR B) Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Red Parent Material (TF2) Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Other (Explain in Remarks) 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) Wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type: Depth (inches): Depth (inches): Depth (inches): Surface Water (A1) Salt Crust (B11) Water Marks (B1) (Riverine) Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required; Salt Crust (B11) Water Marks (B1) (Riverine) High Water Table (A2) Biotic Crust (B12) Sediment Deposits (B2) (Nonriverine) Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Drift Deposits (B3) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquilard (D3) Field Observations: Surface Water Present? Yes No Poeth (inches): Sultration Present? Yes No Poeth (inches): Sultration Present? Yes No Poeth (inches): Sultration Present? Yes No Poeth (inches): Water Table Present? Yes No Poeth (inches): Sultration Present? Yes No Poeth (inches): Sultration Present? Yes No Poeth (inches): Sultration Present? Yes No Poeth (inches): Sultration Present? Yes No Poeth (inches): Sultration Present? Yes No Poeth (inches): Sultration Present? Yes No Poeth (inches): Sultration Present? Yes No Poeth (inches): Sultration Present? Yes No Poeth (inches): Sultration Present? Yes No Poeth (inches): Sultration Present? Yes No Poeth (| | | | | | | | | |
| Black Histic (A3) | Histosol | (A1) | | Sandy Red | ox (S5) | | | 1 cm Mu | ck (A9) (LRR C) |
| Hydrogen Sulfide (A4) | Histic E | pipedon (A2) | | - | | | | | |
| Statified Layers (A5) (LRR C) Depleted Matrix (F3) Other (Explain in Remarks) Community (F3) Community (F3) | <u> </u> | | | | | | | Reduced | Vertic (F18) |
| 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) | | | | | | (F2) | | | |
| Depleted Below Dark Surface (A11) | | | C) | | ` , | | | Other (E | xplain in Remarks) |
| Thick Dark Surface (A12) Redox Depressions (F8) | | ` , ` , | | | | | | | |
| Sandy Mucky Mineral (S1) | | | ce (A11) | | | ` ' | | 31 | The relation of the second of the second |
| | | | | | | -8) | | | |
| Restrictive Layer (if present): Type: | - | | | vernai Poo | IS (F9) | | | | |
| Type: | - | | | | | | | unices dist | dibed of problematic. |
| Popth (inches): | | | | | | | | | |
| Applicators Secondary Indicators Secondary Indicators Secondary Indicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check applicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check applicators (2 or more required; Check all that apply) Secondary Indicators (2 or more required; Check applicators (2 or more required; Check a | , <u> </u> | | | | | | | Hydric Soil P | resent? Yes No |
| Metland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required; Surface Water (A1) Salt Crust (B11) Water Marks (B1) (Riverine) | | onco). | | | | | | Tiyano con I | 103 10 |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required; check all that apply) Surface Water (A1) Salt Crust (B11) Water Marks (B1) (Riverine) High Water Table (A2) Biotic Crust (B12) Sediment Deposits (B2) (Riverine) Saturation (A3) Aquatic Invertebrates (B13) Drift Deposits (B3) (Riverine) Water Marks (B1) (Nonriverine) | | | | | | | | | |
| Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Aquatic Invertebrates (B13) Water Marks (B1) (Nonriverine) Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) (Nonriverine) Drainage Patterns (B10) Sediment Deposits (B2) (Nonriverine) Drainage Patterns (B10) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Water-Stained Leaves (B9) Thin Muck Surface (C7) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Remarks: Remarks: | HYDROLO | ogy | | | | | | | |
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| | Wetland Hy Primary Indi | drology Indicators | | | | | | | • |
| | Wetland Hy Primary Indi Surface | drology Indicators cators (minimum of o Water (A1) | | Salt Crust | (B11) | | | Wat | ter Marks (B1) (Riverine) |
| Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) Water Table Present? | Wetland Hy Primary Indi Surface High Wa | drology Indicators cators (minimum of o Water (A1) ater Table (A2) | | Salt Crust | (B11) st (B12) | s (B13) | | Wat | ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) |
| Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Image (B7) Thin Muck Surface (C7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Wetland Hy Primary Indi Surface High Wa Saturati | drology Indicators cators (minimum of of Water (A1) ater Table (A2) on (A3) | one required; | Salt Crust Biotic Crust Aquatic In | (B11) st (B12) vertebrate | | | War Sed Drif | ter Marks (B1) (Riverine) liment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) |
| Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Image Inundation Vis ble on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Wetland Hy Primary Indi Surface High Wa Saturati Water M | drology Indicators cators (minimum of of Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonriver | one required; | Salt Crust Biotic Crust Aquatic In Hydrogen | (B11) st (B12) vertebrate Sulfide Od | lor (C1) | Living Ro | Wai Sed Drif Dra | ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) |
| Inundation Vis ble on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) Factorial Test (D5) | Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime | drology Indicators cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrivel nt Deposits (B2) (No | one required; rine) onriverine) | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F | (B11) st (B12) vertebrate Sulfide Oc | lor (C1) es along | - | Wat Sec Drift Dra ots (C3) Dry | ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) |
| Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: | Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De | drology Indicators cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrive int Deposits (B2) (No posits (B3) (Nonrive | one required; rine) onriverine) | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F | (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce | lor (C1) es along d Iron (C4 | 1) | Wat Sec Drif Dra ots (C3) Dry Cra | ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) |
| Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: | Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Surface | drology Indicators cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) | one required; rine) onriverine) erine) | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro | (B11) st (B12) vertebrate Sulfide Oc Rhizosphei of Reduce on Reduction | lor (C1) res along d Iron (C ² on in Tille | 1) | Wat Sec Drif Dra ots (C3) Dry Cra 6) Sati | ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C8 |
| Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No No Depth (inches): Wetland Hydrology Present? Yes No | Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Surface | drology Indicators cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Vis ble on Aerial | one required; rine) onriverine) erine) | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc | (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce on Reduction s Surface (| lor (C1) res along d Iron (C4 on in Tille C7) | 1) | Wat Sec Drif Dra ots (C3) Dry Cra 6) Satt Sha | ter Marks (B1) (Riverine) liment Deposits (B2) (Riverine) It Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 illow Aquitard (D3) |
| Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No No Depth (inches): Wetland Hydrology Present? Yes No | Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Surface Inundati Water-S | drology Indicators cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Vis ble on Aerial stained Leaves (B9) | one required; rine) onriverine) erine) | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc | (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce on Reduction s Surface (| lor (C1) res along d Iron (C4 on in Tille C7) | 1) | Wat Sec Drif Dra ots (C3) Dry Cra 6) Satt Sha | ter Marks (B1) (Riverine) liment Deposits (B2) (Riverine) It Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 illow Aquitard (D3) |
| Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No No Depth (inches): No | Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Surface Inundati Water-S | drology Indicators cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Vis ble on Aerial stained Leaves (B9) rvations: | one required; rine) onriverine) erine) Imagery (B7) | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide Oc Rhizospher of Reduce on Reduction Surface (blain in Re | lor (C1) res along d Iron (C4 on in Tille C7) marks) | t) d Soils (Co | Wat Sec Drif Dra ots (C3) Dry Cra 6) Satt Sha | ter Marks (B1) (Riverine) liment Deposits (B2) (Riverine) It Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 illow Aquitard (D3) |
| (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: | Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Surface Inundati Water-S Field Obser | drology Indicators cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Vis ble on Aerial Stained Leaves (B9) Evations: | one required; rine) onriverine) erine) Imagery (B7) | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide Oc Rhizospher of Reduce on Reduction Surface (colain in Re ches): | lor (C1) res along d Iron (C4 on in Tille C7) marks) | t) d Soils (Co | Wat Sec Drif Dra ots (C3) Dry Cra 6) Satt Sha | ter Marks (B1) (Riverine) liment Deposits (B2) (Riverine) It Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 illow Aquitard (D3) |
| Remarks: | Wetland Hy Primary Indi Surface High Wa Saturati Water N Sedime Drift De Surface Inundati Water-S Field Obser Surface Water Table | drology Indicators cators (minimum of of of other (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Vis ble on Aerial Stained Leaves (B9) vations: ter Present? | rine) porriverine) erine) Imagery (B7) Yes No | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce on Reductic Surface (blain in Re ches): ches): | lor (C1) res along d Iron (C4 on in Tille C7) marks) | t) d Soils (Co | Wat Sec Drif Dra ots (C3) Dry Cra 6) Satt Sha FAC | ter Marks (B1) (Riverine) liment Deposits (B2) (Riverine) It Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 allow Aquitard (D3) C-Neutral Test (D5) |
| | Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes ca | drology Indicators cators (minimum of of of other (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) on Vis ble on Aerial Stained Leaves (B9) rvations: ter Present? Present? | rine) porriverine) erine) Imagery (B7) Yes No | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide Oc Rhizosphei of Reduce on Reductic s Surface (colain in Re ches): ches): ches): | lor (C1) res along d Iron (C4 on in Tille C7) marks) | t) d Soils (Co | Wat Sec Drif Dra ots (C3) Dry Cra 6) Sat Sha FAC | ter Marks (B1) (Riverine) liment Deposits (B2) (Riverine) It Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 allow Aquitard (D3) C-Neutral Test (D5) |
| | Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes ca | drology Indicators cators (minimum of of of other (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) on Vis ble on Aerial Stained Leaves (B9) rvations: ter Present? Present? | rine) porriverine) erine) Imagery (B7) Yes No | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide Oc Rhizosphei of Reduce on Reductic s Surface (colain in Re ches): ches): ches): | lor (C1) res along d Iron (C4 on in Tille C7) marks) | t) d Soils (Co | Wat Sec Drif Dra ots (C3) Dry Cra 6) Sat Sha FAC | ter Marks (B1) (Riverine) liment Deposits (B2) (Riverine) It Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 allow Aquitard (D3) C-Neutral Test (D5) |
| none | Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes ca Describe Re | drology Indicators cators (minimum of of of other (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) on Vis ble on Aerial Stained Leaves (B9) rvations: ter Present? Present? | rine) porriverine) erine) Imagery (B7) Yes No | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide Oc Rhizosphei of Reduce on Reductic s Surface (colain in Re ches): ches): ches): | lor (C1) res along d Iron (C4 on in Tille C7) marks) | t) d Soils (Co | Wat Sec Drif Dra ots (C3) Dry Cra 6) Sat Sha FAC | ter Marks (B1) (Riverine) liment Deposits (B2) (Riverine) It Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 allow Aquitard (D3) C-Neutral Test (D5) |
| | Wetland Hy Primary Indi Surface High Wa Saturati Water N Sedime Drift De Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes ca Describe Re | drology Indicators cators (minimum of of of other (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) on Vis ble on Aerial Stained Leaves (B9) rvations: ter Present? Present? | rine) porriverine) erine) Imagery (B7) Yes No | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide Oc Rhizosphei of Reduce on Reductic s Surface (colain in Re ches): ches): ches): | lor (C1) res along d Iron (C4 on in Tille C7) marks) | t) d Soils (Co | Wat Sec Drif Dra ots (C3) Dry Cra 6) Sat Sha FAC | ter Marks (B1) (Riverine) liment Deposits (B2) (Riverine) It Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 allow Aquitard (D3) C-Neutral Test (D5) |
| | Wetland Hy Primary Indi Surface High Wa Saturati Water N Sedime Drift De Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes ca Describe Re | drology Indicators cators (minimum of of of other (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) on Vis ble on Aerial Stained Leaves (B9) rvations: ter Present? Present? | rine) porriverine) erine) Imagery (B7) Yes No | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide Oc Rhizosphei of Reduce on Reductic s Surface (colain in Re ches): ches): ches): | lor (C1) res along d Iron (C4 on in Tille C7) marks) | t) d Soils (Co | Wat Sec Drif Dra ots (C3) Dry Cra 6) Sat Sha FAC | ter Marks (B1) (Riverine) liment Deposits (B2) (Riverine) It Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 allow Aquitard (D3) C-Neutral Test (D5) |
| | Wetland Hy Primary Indi Surface High Wa Saturati Water N Sedime Drift De Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes ca Describe Re | drology Indicators cators (minimum of of of other (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) on Vis ble on Aerial Stained Leaves (B9) rvations: ter Present? Present? | rine) porriverine) erine) Imagery (B7) Yes No | Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Thin Muck Other (Exp | (B11) st (B12) vertebrate Sulfide Oc Rhizosphei of Reduce on Reductic s Surface (colain in Re ches): ches): ches): | lor (C1) res along d Iron (C4 on in Tille C7) marks) | t) d Soils (Co | Wat Sec Drif Dra ots (C3) Dry Cra 6) Sat Sha FAC | ter Marks (B1) (Riverine) liment Deposits (B2) (Riverine) It Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 allow Aquitard (D3) C-Neutral Test (D5) |



Sample Point 40



Sample Point 40

| Project/Site: WDC Phase II | C | city/County: Davis (| County | Sampling Date: 2024-05-16 | | | | |
|--|-------------------------|------------------------------------|---|--|--|--|--|--|
| Applicant/Owner: UDOT | | State: Utah Sampling Point: SP41 | | | | | | |
| Investigator(s): Cara Glabau, Elena Capson | | Section, Township, R | tange: S31 T5N R2W | | | | | |
| Landform (hillslope, terrace, etc.): Flat | I | ocal relief (concave | , convex, none): None | Slope (%): 0 | | | | |
| Subregion (LRR): D 28A | _{Lat:} 41.1 | 26077 | Long: -112.10831917 | 7 Datum: NAD83_20 | | | | |
| Soil Map Unit Name: Fb - Ford loam, shallow | water table, 0 to | 1 percent slopes | NWI classific | ation: None | | | | |
| Are climatic / hydrologic conditions on the site typic | al for this time of yea | r? Yes No | (If no, explain in R | emarks.) | | | | |
| Are Vegetation, Soil, or Hydrology _ | significantly d | isturbed? Are | "Normal Circumstances" p | oresent? Yes <u> </u> | | | | |
| Are Vegetation, Soil, or Hydrology _ | naturally prob | elematic? (If r | needed, explain any answe | rs in Remarks.) | | | | |
| SUMMARY OF FINDINGS - Attach site | e map showing | sampling point | locations, transects | , important features, etc. | | | | |
| | | | <u> </u> | · · · | | | | |
| Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes | No | Is the Sample | | | | | | |
| | No | within a Wetla | and? Yes | No | | | | |
| Remarks: | | | | | | | | |
| Conditions were wetter than normal accor | rding to the anted | edent precipitat | ion tool, but there had | not been rain for several | | | | |
| days prior to the site visit. Meadow, likely | _ | | | | | | | |
| | | | | | | | | |
| VEGETATION – Use scientific names of | | | | | | | | |
| Tree Stratum (Plot size:) | | Dominant Indicator Species? Status | | | | | | |
| 1 | | | Number of Dominant Sp That Are OBL, FACW, or | | | | | |
| 2. | | | | | | | | |
| 3 | | | Total Number of DominSpecies Across All Stra | | | | | |
| 4 | | | Percent of Dominant Sp | | | | | |
| Openition (Objects Objects are a CDI of the inner | , | = Total Cover | That Are OBL, FACW, of | | | | | |
| Sapling/Shrub Stratum (Plot size: | | | Prevalence Index worl | kshoot: | | | | |
| 1 | | | Total % Cover of: | | | | | |
| 2 | | | - - | x 1 = 0 | | | | |
| 4. | | | FACW species 90 | | | | | |
| 5 | | | _ | x 3 = 30 | | | | |
| | | = Total Cover | FACU species 0 | x 4 = 0 | | | | |
| Herb Stratum (Plot size:) | 22 | | UPL species 0 | x 5 = 0 | | | | |
| 1. Carex praegracilis | 60 | FACW | - Column Totals: 100 | (A) <u>210</u> (B) | | | | |
| 2. Juncus balticus 3. Distichlis spicata | 30 10 | FACW FAC | Prevalence Index | $= R/\Delta = 2.10$ | | | | |
| | | | Hydrophytic Vegetation | | | | | |
| 4 | | | Dominance Test is | | | | | |
| 6 | | | ✓ Prevalence Index is | | | | | |
| 7. | | | | ptations ¹ (Provide supporting | | | | |
| 8 | | | | s or on a separate sheet) | | | | |
| | 100 | = Total Cover | Problematic Hydrop | phytic Vegetation ¹ (Explain) | | | | |
| Woody Vine Stratum (Plot size: |) | | 1 | | | | | |
| 1 | | | be present, unless distu | I and wetland hydrology must urbed or problematic. | | | | |
| 2 | | | - | · | | | | |
| | | = Total Cover | Hydrophytic Vegetation | , | | | | |
| % Bare Ground in Herb Stratum | % Cover of Biotic Cr | ust | Present? Yes | s No | | | | |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

SOIL

Sampling Point: SP41

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

| Depth | Matrix | | | ox Feature | | | | _ |
|---|---|-------------|---|-----------------------------|-------------------|------------------|------------------------------------|---|
| (inches) | Color (moist) | | Color (moist) | % | Type ¹ | Loc ² | <u>Texture</u> | Remarks |
| 0 - 4 | 10YR 2/2 | 100 | . — | | | | Muck | |
| 4 - 5 | 10YR 3/2 | 100 | | | | | <u>Clay</u> | |
| 5 - 24 | 10YR 4/2 | 92 | 7.5YR 5/6 | 8 | <u>C</u> | M | Clay | |
| | | | | | | | | |
| - | | | | | | | | |
| _ | | | | | | | | |
| | | | • | | _ | | | |
| | | | | _ | _ | | | |
| 1T C-C | | | 4-Dadward Matrix C | C-C | | | 21 aastian, DI | -Dave Lining M-Matrix |
| | | | I=Reduced Matrix, C I LRRs, unless othe | | | ea Sana G | | =Pore Lining, M=Matrix. ematic Hydric Soils ³ : |
| Histosol | | ouble to u | Sandy Red | | icu., | | 1 cm Muck (A9) | • |
| | oipedon (A2) | | Stripped M | . , | | | 2 cm Muck (A10) | , |
| | stic (A3) | | Loamy Mu | | | | Reduced Vertic (| |
| Hydroge | en Sulfide (A4) | | Loamy Gle | - | , , | | Red Parent Mate | erial (TF2) |
| | Layers (A5) (LRR | C) | <u>✓</u> Depleted M | | | | Other (Explain in | Remarks) |
| | ıck (A9) (LRR D) d Below Dark Surfa | 00 (411) | Redox Dar Depleted D | | . , | | | |
| | ark Surface (A12) | ce (ATT) | Depleted D | | | | ³ Indicators of hydroph | nytic vegetation and |
| | fucky Mineral (S1) | | Vernal Poo | | (10) | | wetland hydrology | |
| - | Bleyed Matrix (S4) | | <u>—</u> | ` , | | | unless disturbed of | |
| Restrictive I | Layer (if present): | | | | | | | |
| Type: | | | | | | | | , |
| Depth (inc | ches): | | | | | | Hydric Soil Present? | Yes No |
| | | | | | | | | |
| HYDROLO | | | | | | | | |
| | drology Indicators | | | | | | | |
| | • | one require | ed; check all that app | | | | <u> </u> | ators (2 or more required) |
| | Water (A1) | | Salt Crust | ` , | | | | s (B1) (Riverine) |
| High Wa <u>✓</u> Saturation | ater Table (A2) | | Biotic Cru Aquatic Ir | | oo (P12) | | | eposits (B2) (Riverine) ts (B3) (Riverine) |
| | larks (B1) (Nonrive | rine) | Aquatic II | | | | | atterns (B10) |
| · · · · · · · · · · · · · · · · · · · | nt Deposits (B2) (N o | • | | | , , | Living Ro | _ | Water Table (C2) |
| | posits (B3) (Nonrive | | Presence | | - | _ | Crayfish Bu | |
| | Soil Cracks (B6) | , | | | | ed Soils (Co | | /isible on Aerial Imagery (C9) |
| Inundation | on Vis ble on Aerial | Imagery (E | 37) Thin Mucl | k Surface | (C7) | | Shallow Aqu | uitard (D3) |
| Water-S | tained Leaves (B9) | | Other (Ex | plain in R | temarks) | | ✓ FAC-Neutra | al Test (D5) |
| Field Observ | 11 | | | | | | | |
| Surface Water | | | | | | | | |
| | er Present? | | No Depth (in | | | | | |
| Water Table | er Present? Present? | Yes | No Depth (in | nches): | | | | |
| Water Table Saturation Pi (includes cap | er Present? Present? resent? | Yes | | nches): | | | land Hydrology Present | ? Yes <u> </u> No |
| Saturation Projection (includes cap | er Present? Present? resent? pillary fringe) | Yes Yes | No Depth (in | nches): nches): <u>1</u> | 1 | Wetl | | ? Yes <u> </u> |
| Saturation Projection (includes cape Describe Rec | er Present? Present? resent? pillary fringe) | Yes Yes | No Depth (in No Depth (in | nches): nches): <u>1</u> | 1 | Wetl | | ? Yes <u> </u> |
| Saturation Projection (includes cap | er Present? Present? resent? pillary fringe) | Yes Yes | No Depth (in No Depth (in | nches): nches): <u>1</u> | 1 | Wetl | | ? Yes <u> </u> |
| Saturation Projection (includes cape Describe Rec | er Present? Present? resent? pillary fringe) | Yes Yes | No Depth (in No Depth (in | nches): nches): <u>1</u> | 1 | Wetl | | ? Yes <u>/</u> No |
| Saturation Projection (includes cape Describe Rec | er Present? Present? resent? pillary fringe) | Yes Yes | No Depth (in No Depth (in | nches): nches): <u>1</u> | 1 | Wetl | | ? Yes <u> </u> |
| Saturation Projection (includes cape Describe Rec | er Present? Present? resent? pillary fringe) | Yes Yes | No Depth (in No Depth (in | nches): nches): <u>1</u> | 1 | Wetl | | ? Yes <u>/</u> No |



Sample Point 41



Sample Point 41

| Project/Site: WDC Phase II | (| City/Cour | nty: Davis Co | ounty | Sampling Date: | 2024-05-16 |
|--|-------------------------|-----------|----------------|---------------------------------------|--|---------------------------|
| Applicant/Owner: UDOT | | | | State: Utah | _ Sampling Point | SP42 |
| Investigator(s): Merissa Davis | ; | Section, | Township, Ra | nge: S31 T5N R2W | | |
| | | | | convex, none): Conca | | ope (%): 0 |
| Subregion (LRR): D 28A | Lat: 41. | 131259 | 37 | Long: -112.107910 | 38 Dat | tum: NAD83_201 |
| Soil Map Unit Name: HLA - Harrisville-Leland | complex, 0 to 1 | percent | slopes | NWI classit | fication: None | |
| Are climatic / hydrologic conditions on the site typical | al for this time of yea | ar? Yes | No | (If no, explain in | Remarks.) | |
| Are Vegetation, Soil, or Hydrology _ | significantly | disturbed | ? Are " | "Normal Circumstances" | present? Yes _ | ✓ No |
| Are Vegetation, Soil, or Hydrology _ | naturally pro | blematic1 | ? (If ne | eeded, explain any answ | vers in Remarks.) | |
| SUMMARY OF FINDINGS - Attach site | map showing | sampl | ing point l | ocations, transect | s, important f | eatures, etc. |
| Hydrophytic Vegetation Present? Yes | , No | | | | | |
| Hydric Soil Present? Yes | | | the Sampled | | No | |
| | No | W W | ithin a Wetlar | na? Yes | <u>-</u> No | _ |
| Remarks: | | | | | | |
| Conditions were wetter than norma | al according t | to the | antecede | ent precipitation | tool, but the | re had not |
| been rain for several days prior to | the site visit. | | | | | |
| VEGETATION – Use scientific names o | f plants. | | | | | |
| Trace Chaptures (Diet einer | | | int Indicator | Dominance Test wo | rksheet: | |
| Tree Stratum (Plot size:) 1 | | | Status | Number of Dominant That Are OBL, FACW | Species /, or FAC: 2 | (A) |
| 2 | | | | Total Number of Dom | inant | |
| 3 | | | | Species Across All St | | (B) |
| 4 | | | | Percent of Dominant | | |
| Sapling/Shrub Stratum (Plot size: | | = Total (| Cover | That Are OBL, FACW | /, or FAC: 100.0 | 00 (A/B) |
| 1 | | | | Prevalence Index wo | orksheet: | |
| 2 | | | | Total % Cover of: | | oly by: |
| 3 | | | | • | x 1 = 20 | |
| 4 | | | | FACW species 25 | | |
| 5 | | | | | x 3 = 0 | |
| Herb Stratum (Plot size:) | | = Total (| Cover | FACU species 0 | x 4 = 0 x 5 = 0 | |
| 1. Juncus balticus | 25 | ~ | FACW | UPL species 0 Column Totals: 45 | | |
| 2. Schoenoplectus acutus | 20 | V | OBL | Column Totals. 10 | (A) <u>/ 3</u> |) (B) |
| 3 | | | | Prevalence Inde | ex = B/A = 1.55 | |
| 4 | | | | Hydrophytic Vegeta | | |
| 5 | | | | <u>✓</u> Dominance Test | | |
| 6 | | | | ✓ Prevalence Index | | |
| 7 | | | | Morphological Ac | iaptations" (Provid rks or on a separat | e supporting te sheet) |
| 8 | 4.5 | T-4-14 | | Problematic Hydr | | |
| Woody Vine Stratum (Plot size:) | | = Total (| Cover | | | |
| 1 | | | | ¹ Indicators of hydric s | | |
| 2 | | | | be present, unless dis | sturbed or problem | iatic. |
| | | = Total (| Cover | Hydrophytic Vegetation | | |
| % Bare Ground in Herb Stratum | % Cover of Biotic Cr | rust | | Present? Y | ′es <u> </u> | |
| Remarks: | | | | | | |
| Juncus on edges and bull rush i | n water. Are | eas su | rroundin | ng the sample p | oint locatio | n have |
| open, deep water with no veget | | | | | | |

| Profile Desc | ription: (Describe | to the dept | h needed to docu | ment the | indicator | or confirn | n the absence of | of indicators.) |
|-------------------------------------|--|------------------|-----------------------|-----------------|-------------------|------------------|----------------------------|---|
| Depth | Matrix | | Redo | x Feature | | | | |
| (inches) | Color (moist) | <u> </u> | Color (moist) | % | Type ¹ | Loc ² | Texture | Remarks |
| 0 - 3 | 10YR 3/1 | 90 | 7.5YR 5/8 | 10 | | М | Silty Clay | |
| 3 - 12 | 10YR 5/2 | 100 | | _ | _ | | Clay | |
| 12 - 20 | 10YR 4/2 | 100 | | | | | Clay | |
| - | | | | | | | | |
| - | | | | | - | | | |
| | - | | | | | | - | |
| | | | | | | | - | |
| | | | | | | | · | |
| 1- 0.0 | | | | | | | . 2. | |
| | oncentration, D=Dep Indicators: (Applic | | | | | ed Sand G | | ation: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ : |
| - | | able to all i | | | ieu.) | | | • |
| Histosol | oipedon (A2) | | Sandy Red Stripped Ma | . , | | | | uck (A9) (LRR C) uck (A10) (LRR B) |
| Black Hi | | | Loamy Muc | | al (F1) | | | ed Vertic (F18) |
| | en Sulfide (A4) | | Loamy Gle | - | . , | | | rent Material (TF2) |
| | d Layers (A5) (LRR | C) | Depleted M | | | | | Explain in Remarks) |
| | ick (A9) (LRR D) | -, | Redox Darl | ` ' | | | | |
| | d Below Dark Surfac | ce (A11) | Depleted D | | ` ' | | | |
| | ark Surface (A12) | ` , | ✓ Redox Dep | | | | ³ Indicators of | of hydrophytic vegetation and |
| Sandy M | lucky Mineral (S1) | | Vernal Poo | ls (F9) | | | wetland h | ydrology must be present, |
| Sandy G | Gleyed Matrix (S4) | | | | | | unless dis | sturbed or problematic. |
| Restrictive I | Layer (if present): | | | | | | | |
| Type: | | | | | | | | |
| Depth (inc | ches): | | | | | | Hydric Soil F | Present? Yes No |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| HYDROLO | GY | | | | | | | |
| | drology Indicators: | • | | | | | | |
| | cators (minimum of | | r check all that appl | v) | | | Second | dary Indicators (2 or more required) |
| ✓ Surface | • | <u> </u> | Salt Crust | | | | | ater Marks (B1) (Riverine) |
| - | iter Table (A2) | | Biotic Cru | ` ' | | | | ediment Deposits (B2) (Riverine) |
| ✓ Saturation | | | Aquatic In | | e (B13) | | | ift Deposits (B3) (Riverine) |
| | larks (B1) (Nonrive i | rino) | Hydrogen | | | | | ainage Patterns (B10) |
| · | , , , | • | | | | Livina Boo | | |
| | nt Deposits (B2) (No | | | | | | | y-Season Water Table (C2) |
| · | oosits (B3) (Nonrive | erine) | Presence | | | | | ayfish Burrows (C8) |
| | Soil Cracks (B6) | lana a ma ma (DZ | Recent Iro | | | u Solis (Co | | ituration Visible on Aerial Imagery (C9) |
| · | on Vis ble on Aerial | imagery (B7 | . — | | | | | allow Aquitard (D3) |
| | tained Leaves (B9) | | Other (Ex | biain in Re | emarks) | 1 | <u>•</u> FA | C-Neutral Test (D5) |
| Field Observ | | , , , | | 1 | | | | |
| Surface Water | | | No Depth (in | | | _ | | |
| Water Table | | | No Depth (in | | | _ | | _ |
| Saturation Projection (includes cap | resent? \ | res 1 | No Depth (in | ches): <u>0</u> | | Wetl | land Hydrology | Present? Yes No |
| | corded Data (stream | n gauge, mo | nitoring well, aerial | photos, pr | revious ins | pections), | if available: | |
| | • | · · | - | · | | ,- | | |
| Remarks: | | | | | | | | |
| Sample | noint taken s | at adaa | of inundator | d aroa | | | | |
| Sample | point taken a | at euge | or inunuated | a ai ea | • | | | |
| | | | | | | | | |
| | | | | | | | | |



Sample Point 42



Sample Point 42

| Project/Site: WDC Phase II | City | _{//County:} Davis C | ounty | Sampling Date: 2024-05-16 |
|--|--------------------------------|------------------------------|---|---|
| Applicant/Owner: UDOT | | | State: Utah | Sampling Point: SP43 |
| Investigator(s): Merissa Davis | Sec | ction, Township, Ra | inge: S31 T5N R2W | |
| Landform (hillslope, terrace, etc.): Flat | Lo | cal relief (concave, | convex, none): None | Slope (%): 0 |
| | | | | Datum: NAD83_201 |
| Soil Map Unit Name: HLA - Harrisville-Lel | and complex, 0 to 1 pe | rcent slopes | NWI classifica | ation: None |
| Are climatic / hydrologic conditions on the site t | typical for this time of year? | Yes No _ | (If no, explain in Re | emarks.) |
| Are Vegetation, Soil, or Hydrold | ogy significantly dist | turbed? Are | "Normal Circumstances" p | resent? Yes No |
| Are Vegetation, Soil, or Hydrold | ogy naturally proble | matic? (If ne | eeded, explain any answer | rs in Remarks.) |
| SUMMARY OF FINDINGS - Attach | site map showing sa | ampling point I | ocations, transects | , important features, etc. |
| Hydrophytic Vegetation Present? Yes | No | | | |
| | No | Is the Sampled | | No. V |
| | No 🗸 | within a Wetla | nd? Yes | No |
| Remarks: | | • | | |
| Conditions were wetter than no | ormal according to | the antecede | ent precipitation to | ool, but there had not |
| been rain for several days prior | to the site visit. | | | |
| VEGETATION – Use scientific name | es of plants. | | | |
| | | ominant Indicator | Dominance Test works | sheet: |
| Tree Stratum (Plot size:) | | pecies? Status | Number of Dominant Sp | |
| 1 | | | That Are OBL, FACW, o | or FAC: 0 (A) |
| 2 | | | Total Number of Domina Species Across All Strat | |
| 4 | | | | |
| | = | | Percent of Dominant Sp That Are OBL, FACW, of | |
| Sapling/Shrub Stratum (Plot size: | | | Prevalence Index work | rshoot: |
| 1 2 | | | Total % Cover of: | |
| 3 | | | | x 1 = 0 |
| 4. | | | | x 2 = 0 |
| 5 | | | · · | x 3 = <u>30</u> |
| Harb Stratum (Diet eine | = | Total Cover | | x 4 = 0 |
| Herb Stratum (Plot size:) 1. Thinopyrum intermedium | 75 | ✓ UPL | | $x = \frac{375}{405}$ |
| 2. Distichlis spicata | 10 | FAC | Column Totals: 03 | (A) <u>405</u> (B) |
| 3. | | | Prevalence Index | = B/A = <u>4.76</u> |
| 4 | | | Hydrophytic Vegetatio | |
| 5 | | | Dominance Test is | |
| 6 | | | Prevalence Index is | s ≤3.0° otations¹ (Provide supporting |
| 7 8 | | | | s or on a separate sheet) |
| 0 | 0.5 | Total Cover | Problematic Hydrop | phytic Vegetation ¹ (Explain) |
| Woody Vine Stratum (Plot size: | | | 1 | |
| 1 | | | 'Indicators of hydric soil be present, unless distu | and wetland hydrology must rbed or problematic. |
| 2 | | | Hydrophytic | |
| | = | | Vegetation | ., |
| % Bare Ground in Herb Stratum | _ % Cover of Biotic Crus | t | Present? Yes | S No |
| Remarks: | | | | |
| | | | | |
| | | | | |
| | | | | |

| Depth Matrix | | confirm the absence of indicators.) | |
|--|---|---|----------------|
| | Redox Features | | |
| (inches) Color (moist) % 0 - 10 10YR 3/2 100 | Color (moist) % Type ¹ | Loc ² Texture Remarks | |
| | | Clay | |
| 10 - 20 10YR 3/2 100 | | Silt Loam | <u></u> |
| | | | |
| - | | | |
| - | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| ¹ Type: C=Concentration, D=Depletion, RM= | | | |
| Hydric Soil Indicators: (Applicable to all L | | Indicators for Problematic Hydric Soils ³ : | |
| Histosol (A1) Histic Epipedon (A2) | Sandy Redox (S5) Stripped Matrix (S6) | 1 cm Muck (A9) (LRR C) 2 cm Muck (A10) (LRR B) | |
| Black Histic (A3) | Loamy Mucky Mineral (F1) | Reduced Vertic (F18) | |
| Hydrogen Sulfide (A4) | Loamy Gleyed Matrix (F2) | Red Parent Material (TF2) | |
| Stratified Layers (A5) (LRR C) | Depleted Matrix (F3) | Other (Explain in Remarks) | |
| 1 cm Muck (A9) (LRR D) | Redox Dark Surface (F6) | | |
| Depleted Below Dark Surface (A11) | Depleted Dark Surface (F7) | | |
| Thick Dark Surface (A12) | Redox Depressions (F8) | ³ Indicators of hydrophytic vegetation and | |
| Sandy Mucky Mineral (S1) | Vernal Pools (F9) | wetland hydrology must be present, | |
| Sandy Gleyed Matrix (S4) Restrictive Layer (if present): | | unless disturbed or problematic. | |
| _ | | | |
| Type: | | Hydric Soil Present? Yes No | ~ |
| Depth (inches): | | nyunc 3011 Fresent: Tes No_ | |
| remarks. | | | |
| | | | |
| | | | |
| | | | |
| HYDDOLOGY | | | |
| HYDROLOGY | | | |
| Wetland Hydrology Indicators: | | | |
| | check all that apply) | Secondary Indicators (2 or more requi | red) |
| Wetland Hydrology Indicators: | check all that apply) Salt Crust (B11) | Secondary Indicators (2 or more requi | red) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required) | **** | | <u> </u> |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) | Salt Crust (B11) | Water Marks (B1) (Riverine) | <u> </u> |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) | Salt Crust (B11) Biotic Crust (B12) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine | <u> </u> |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) | <u> </u> |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) | <u> </u> |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Ving Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) | *) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Ving Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) | *) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7 Water-Stained Leaves (B9) | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Image | *) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7 Water-Stained Leaves (B9) Field Observations: | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) Other (Explain in Remarks) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Pring Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Image Shallow Aquitard (D3) FAC-Neutral Test (D5) | *) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes N | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) Other (Explain in Remarks) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Pring Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Image Shallow Aquitard (D3) FAC-Neutral Test (D5) | *) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes N | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) Other (Explain in Remarks) to Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Pring Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Image Shallow Aquitard (D3) FAC-Neutral Test (D5) | *) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7 Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Naturation Present? Yes Naturation Present? | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) Other (Explain in Remarks) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Pring Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Image Shallow Aquitard (D3) FAC-Neutral Test (D5) | e) ery (C9) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7 Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Naturation Present? | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) Other (Explain in Remarks) o Depth (inches): Depth (inches): Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Image Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No | e) ery (C9) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7 Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Naturation Present? Yes Naturation Present? | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) Other (Explain in Remarks) o Depth (inches): Depth (inches): Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Image Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No | e) ery (C9) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Naturation Pr | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) Other (Explain in Remarks) o Depth (inches): Depth (inches): Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Image Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No | e) ery (C9) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7 Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Naturation Present? | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) Other (Explain in Remarks) o Depth (inches): Depth (inches): Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Image Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No | e) ery (C9) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Naturation Pr | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) Other (Explain in Remarks) o Depth (inches): Depth (inches): Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Image Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No | e) ery (C9) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Naturation Pr | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) Other (Explain in Remarks) o Depth (inches): Depth (inches): Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Image Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No | e) ery (C9) |



Sample Point 43



Sample Point 43

| Project/Site: WDC Phase II | | City/County: Davis C | County | _ Sampling Date: 2024-05-16 |
|--|-----------------------------|-----------------------|----------------------------------|---|
| Applicant/Owner: UDOT | | | | Sampling Point: SP44 |
| Investigator(s): Merissa Davis | | Section, Township, Ra | ange: S31 T5N R2W | |
| Landform (hillslope, terrace, etc.): Depressi | | | | ve Slope (%): 0 |
| Subregion (LRR): D 28A | Lat: 41 | .12839188 | Long:112.108002 | 77 Datum: NAD83_20 |
| Soil Map Unit Name: WaA - Warm Spring | js fine sandy loam, 0 | to 1 percent slope | S NWI classifi | ication: None |
| Are climatic / hydrologic conditions on the site | typical for this time of ye | ar? Yes No | (If no, explain in I | Remarks.) |
| Are Vegetation, Soil, or Hydro | logy significantly | disturbed? Are | "Normal Circumstances" | present? Yes No |
| Are Vegetation, Soil, or Hydro | logynaturally pro | oblematic? (If n | needed, explain any answ | ers in Remarks.) |
| SUMMARY OF FINDINGS - Attack | າ site map showing | sampling point | locations, transect | s, important features, etc. |
| Hydrophytic Vegetation Present? Ye | es No | | | |
| Hydric Soil Present? | es | Is the Sample | | |
| | es No No | within a Wetla | ınd? Yes | No |
| Remarks: | | | | |
| Conditions were wetter than n | ormal according | to the anteced | ent precipitation | tool, but there had not |
| been rain for several days prio | ~ | | | , |
| VEGETATION – Use scientific nan | | | | |
| VEGETATION – USE SCIENTING HAIT | Absolute | Dominant Indicator | Dominance Test wor | kohooti |
| Tree Stratum (Plot size:) | | Species? Status | Number of Dominant S | |
| 1 | | | That Are OBL, FACW, | |
| 2 | | · | Total Number of Domi | nant |
| 3 | | | Species Across All Str | 4 |
| 4 | | | Percent of Dominant S | |
| Sapling/Shrub Stratum (Plot size: |) | _ = Total Cover | That Are OBL, FACW, | , or FAC: 100.00 (A/B) |
| 1 | | | Prevalence Index wo | rksheet: |
| 2. | | | Total % Cover of: | Multiply by: |
| 3 | | | OBL species 0 | x 1 = 0 |
| 4 | , | | · | x 2 = 170 |
| 5 | | | · | x 3 = 0 |
| Herb Stratum (Plot size:) | | _ = Total Cover | | x 4 = 0 |
| 4 Juneus haltique | 85 | ✓ FACW | UPL species 0 Column Totals: 85 | x = 0 (A) 170 (B) |
| 2 | | | Column Totals: 00 | (A) <u>170</u> (B) |
| 3. | | | Prevalence Inde | x = B/A = 2.00 |
| 4 | | | Hydrophytic Vegetat | ion Indicators: |
| 5 | , | | <u>✓</u> Dominance Test is | |
| 6 | | · | Prevalence Index | |
| 7 | , | | | aptations ¹ (Provide supporting ks or on a separate sheet) |
| 8 | | · | | ophytic Vegetation ¹ (Explain) |
| Woody Vine Stratum (Plot size: | 85 | _ = Total Cover | | |
| 1 | | | | oil and wetland hydrology must |
| 2. | | | be present, unless dis | turbed or problematic. |
| | | _ = Total Cover | Hydrophytic | |
| % Bare Ground in Herb Stratum 15 | % Cover of Biotic C | rust | Vegetation Present? Yes | es No |
| Remarks: | | | | _ |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

SOIL

Sampling Point: SP44

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

| Depth | Matrix | | | (Features | | | | |
|------------------------------|---------------------------------------|----------------|---------------------------------------|-------------|-------------------|------------------|-------------------|---|
| (inches) | Color (moist) | | Color (moist) | <u>%</u> | Type ¹ | Loc ² | <u>Texture</u> | Remarks |
| 0 - 4 | 7.5YR 2.5/1 | 100 | | | | | Mucky Loam/Clay | |
| 4 - 24 | 10YR 4/2 | 100 | | | | | Silty Clay | |
| | | | | | | | | |
| - | | | | | | | | |
| - | | | _ | | | | | _ |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | _ |
| | | | | | | | | |
| | oncentration, D=De | | | | | d Sand Gr | | n: PL=Pore Lining, M=Matrix. |
| _ | Indicators: (Applic | cable to all L | | | ed.) | | | Problematic Hydric Soils ³ : |
| Histosol | | | Sandy Redo Stripped Ma | . , | | | | (A9) (LRR C) |
| | oipedon (A2) stic (A3) | | Loamy Muck | | I (F1) | | Reduced V | (A10) (LRR B) ertic (F18) |
| | en Sulfide (A4) | | Loamy Gley | | | | | Material (TF2) |
| | d Layers (A5) (LRR | C) | Depleted Ma | | ` ' | | | ain in Remarks) |
| | ıck (A9) (LRR D) | | Redox Dark | , | , | | | |
| | d Below Dark Surfac | ce (A11) | Depleted Da | | | | 3 | |
| | ark Surface (A12) | | Redox Depr | | - 8) | | · | drophytic vegetation and |
| - | Mucky Mineral (S1) Bleyed Matrix (S4) | | Vernal Pools | s (F9) | | | - | ology must be present, ped or problematic. |
| | Layer (if present): | | | | | | unicas distant | bed of problematic. |
| Type: | , , | | | | | | | |
| Depth (in | ches): | | | | | | Hydric Soil Pres | sent? Yes No |
| Remarks: | , | | | | | | 1 - | |
| | | | | | | | | |
| HYDROLO | GY drology Indicators | | | | | | | |
| _ | cators (minimum of | | check all that annly | () | | | Secondary | Indicators (2 or more required) |
| | Water (A1) | one required, | Salt Crust | | | | | Marks (B1) (Riverine) |
| | ater Table (A2) | | Biotic Crus | | | | | ent Deposits (B2) (Riverine) |
| ✓ Saturation | , , | | Aquatic Inv | | s (B13) | | | eposits (B3) (Riverine) |
| | larks (B1) (Nonrive | rine) | Hydrogen \$ | | | | | age Patterns (B10) |
| | nt Deposits (B2) (No | • | | | | Living Roc | | eason Water Table (C2) |
| Drift Dep | posits (B3) (Nonrive | erine) | Presence of | | _ | - | | sh Burrows (C8) |
| Surface | Soil Cracks (B6) | | Recent Iron | n Reduction | on in Tilled | d Soils (C6 | S) Satura | ation Visible on Aerial Imagery (C9) |
| Inundati | on Vis ble on Aerial | Imagery (B7) | Thin Muck | Surface (| C7) | | Shallo | w Aquitard (D3) |
| Water-S | tained Leaves (B9) | | Other (Exp | lain in Re | marks) | | <u>✓</u> FAC-N | leutral Test (D5) |
| Field Obser | | | | | | | | |
| Surface Wat | | | Depth (inc | | | _ | | |
| Water Table | | | Depth (inc | | | _ | | |
| Saturation P | | res N | Depth (inc | :hes): 0 | | Wetl | and Hydrology Pre | esent? Yes V No No |
| (includes car Describe Re | corded Data (strean | n gauge, mon | itoring well. aerial p | hotos, pr | evious ins | pections). | if available: | |
| | (| 3 3-, | , , , , , , , , , , , , , , , , , , , | - 7 (22) | | /, | - | |
| Remarks: | | | | | | | | |
| | | | | | | | | |
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| | | | | | | | | |



Sample Point 44



Sample Point 44

| Project/Site: WDC Phase II | | | City/Cou | _{ınty:} <u>Davis C</u> | ounty | S | Sampling Date: 2024- | 05-16 |
|--|--------------------|-----------------|----------|---------------------------------|-------------------------------|-----------------|--------------------------------------|-----------------|
| Applicant/Owner: UDOT | | | | | State: <u>L</u> | Jtah S | Sampling Point: SP45 | |
| Investigator(s): Cara Glabau, Elena Cap | son | | Section, | , Township, Ra | ange: S31 T5N | R2W | | |
| Landform (hillslope, terrace, etc.): Flat | | | Local re | elief (concave, | convex, none): | None | Slope (%): | 0 |
| Subregion (LRR): D 28A | | _ Lat: 41. | 12607 | 633 | _ Long: <u>-112.1</u> | 0831983 | Datum: NAD |)83_201 |
| Soil Map Unit Name: Fb - Ford Ioam, sha | allow water t | table, 0 to | 1 perc | ent slopes | NW | /I classificati | ion: None | |
| Are climatic / hydrologic conditions on the sit | e typical for this | s time of year | ar? Yes | s No _ | (If no, ex | plain in Ren | narks.) | |
| Are Vegetation, Soil, or Hydro | ologys | significantly | disturbe | d? Are | "Normal Circums | stances" pre | esent? Yes <u> </u> | o |
| Are Vegetation, Soil, or Hydro | ologyr | naturally pro | blematio | c? (If ne | eeded, explain a | ny answers | in Remarks.) | |
| SUMMARY OF FINDINGS - Attac | h site map | showing | samp | ling point l | ocations, tra | ansects, i | mportant features | s, etc. |
| Liveline Proceeding Proceeding Washing | | 1- | | | | | | |
| Hydrophytic Vegetation Present? Y Hydric Soil Present? Y | res / N | lo | | s the Sampled | | ., | | |
| | es V | | V | vithin a Wetla | nd? | Yes | No | |
| Remarks: | | | | | | | | |
| Conditions were wetter than r | normal acc | cording | to the | antecede | ent precipit | ation to | ol, but there had | d not |
| been rain for several days prid | | _ | | | | | • | |
| VEGETATION – Use scientific nar | | | | | | | | |
| | | Absolute | Domin | ant Indicator | Dominance 1 | Test worksh | neet: | |
| Tree Stratum (Plot size:) | | % Cover | Specie | es? Status | Number of Do | | cies | |
| 1 | | | | | That Are OBL | , FACW, or | FAC: 2 | (A) |
| 2 | | | | | Total Number | | ıt a | |
| 3 | | | | | Species Acros | ss All Strata: | 3 | (B) |
| 7. | | | | Cover | Percent of Do That Are OBL | | | (A/B) |
| Sapling/Shrub Stratum (Plot size: |) | | | | | | | (٨١٥) |
| 1 | | | | | Prevalence II | | | |
| 2 | | | | | | Cover of: 0 | | |
| 3 | | | | | OBL species | | $x = \frac{1}{80}$ | _ |
| 4. 5. | | | | | FAC species | | x 3 = 105 | _ |
| <u> </u> | | | | | | | x 4 = 0 | _ |
| Herb Stratum (Plot size:) | | | | | UPL species | 25 | x 5 = 125 | _ |
| 1. Juncus balticus | | 40 | | FACW | Column Totals | s: 100 | (A) <u>310</u> | _ (B) |
| 2. Distichlis spicata 3 Thinopyrum intermedium | | <u>35</u> 25 | | FAC UPL | Prevale | nce Index = | B/A = 3.10 | |
| 4 | | | <u> </u> | | Hydrophytic | | <u> </u> | |
| 5 | | | | | <u>✓</u> Dominan | | | |
| 6. | | | | | Prevalence | ce Index is ≤ | ≤3.0 ¹ | |
| 7. | | | | | | | ations ¹ (Provide support | |
| 8 | | | | | | | or on a separate sheet) | |
| | , | 100 | = Total | Cover | Problema | itic Hyaropn | ytic Vegetation ¹ (Explai | _' n) |
| Woody Vine Stratum (Plot size: | | | | | ¹ Indicators of | hydric soil a | ınd wetland hydrology n | nust |
| 1 2 | | | | | | | ped or problematic. | nast |
| | | | | Cover | Hydrophytic | | | |
| % Bare Ground in Herb Stratum | % Cove | | = | | Vegetation Present? | Vos | ✓ No | |
| Remarks: | | 1 of Blotte o | | | 1 resent: | 103_ | | |
| Tomano. | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

SOIL

Sampling Point: SP45

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

| Depth | Matrix | | | K Feature | S | | | |
|-------------------------------------|---|----------------|-----------------------|-----------------|-------------------|------------------|--------------------------------|--|
| (inches) | Color (moist) | | Color (moist) | % | Type ¹ | Loc ² | Texture | Remarks |
| 0 - 1 | 10YR 3/1 | 100 | | | | | Muck | |
| 1 - 12 | 10YR 3/2 | 100 | | | | | Clay | |
| 12 - 18 | 10YR 5/3 | 100 | | | | | Clay | |
| 18 - 24 | 7.5YR 7/1 | 100 | | | | | Clay | |
| - | | | | | | | | |
| - | | | | ' | | | | |
| _ | | | | | | | | |
| | | | | | | | | _ |
| 1Type: C=C | oncentration, D=Dep | letion PM=P | educed Matrix CS | =Covered | d or Coate | d Sand Gr | rains ² Location: | PL=Pore Lining, M=Matrix. |
| | Indicators: (Applic | | | | | u Sanu Gi | | roblematic Hydric Soils ³ : |
| Histosol | | | Sandy Redo | | , | | 1 cm Muck (| • |
| | pipedon (A2) | | Stripped Ma | . , | | | | A10) (LRR B) |
| Black Hi | | | Loamy Mucl | - | | | Reduced Ve | |
| | n Sulfide (A4) | C \ | Loamy Gley | | (F2) | | | Material (TF2) |
| | l Layers (A5) (LRR lck (A9) (LRR D) | () | Depleted Ma | | (E6) | | Otner (Expla | in in Remarks) |
| | Below Dark Surfac | e (A11) | Depleted Da | | ` ' | | | |
| | ark Surface (A12) | , | Redox Depr | | , , | | ³ Indicators of hyd | rophytic vegetation and |
| - | lucky Mineral (S1) | | Vernal Pools | s (F9) | | | | ogy must be present, |
| | Sleyed Matrix (S4) | | | | | | unless disturbe | ed or problematic. |
| Type: | _ayer (if present): | | | | | | | |
| Depth (inc | shee): | | | | | | Hydric Soil Prese | ent? Yes 🗸 No |
| Remarks: | | | <u> </u> | | | | Tryunc 3011 Tese | HO |
| | | | | | | | | |
| HYDROLO Wetland Hyd | GY drology Indicators: | <u> </u> | | | | | | |
| _ | cators (minimum of | | check all that apply | /) | | | Secondary I | ndicators (2 or more required) |
| | Water (A1) | | Salt Crust | | | | | Marks (B1) (Riverine) |
| | iter Table (A2) | | Biotic Crus | | | | | ent Deposits (B2) (Riverine) |
| ✓ Saturation | | | Aquatic Inv | | s (B13) | | · <u></u> - | eposits (B3) (Riverine) |
| Water M | arks (B1) (Nonrive i | rine) | ✓ Hydrogen : | Sulfide O | dor (C1) | | Drainag | ge Patterns (B10) |
| Sedimer | nt Deposits (B2) (No | nriverine) | | | _ | - | | ason Water Table (C2) |
| | oosits (B3) (Nonrive | rine) | Presence of | | | | | n Burrows (C8) |
| | Soil Cracks (B6) | (57) | Recent Iro | | | d Soils (C6 | · — | ion Visible on Aerial Imagery (C9) |
| | on Vis ble on Aerial | Imagery (B7) | Thin Muck | | | | | / Aquitard (D3) |
| Field Obser | tained Leaves (B9) | | Other (Exp | iain in Re | emarks) | | FAC-NE | eutral Test (D5) |
| Surface Water | | 'es No | Depth (inc | hes). | | | | |
| Water Table | | | Depth (inc | | | _ | | |
| Saturation Projection (includes cap | resent? \ oillary fringe) | ′es No | Depth (inc | ches): <u>0</u> | | | | sent? Yes No |
| Describe Re | corded Data (stream | n gauge, monit | toring well, aerial p | hotos, pr | evious ins | pections), | if available: | |
| Remarks: | | | | | | | | |
| | | | | | | | | |
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Sample Point 45



Sample Point 45

| Project/Site: WDC Phase II | | (| City/C | ounty: | Davis C | ounty | | Sampling | Date: 202 | 4-05-16 |
|---|---------------|-------------------|---------|--------|-------------|-------------------------|------------------------------|--------------|--------------|--------------|
| Applicant/Owner: UDOT | | | | | | State: | <u>Utah</u> | Sampling | Point: SP4 | 16 |
| Investigator(s): Cara Glabau, Elena | Capson | ; | Sectio | n, To | wnship, Ra | nge: S31 T | 5N R2W | | | |
| Landform (hillslope, terrace, etc.): Berr | | | | | | | | | Slope (% | %): <u>0</u> |
| | | | | | | | | | | |
| Soil Map Unit Name: WaA - Warm S | | | | | | _ | | | | |
| Are climatic / hydrologic conditions on the | | | | | | _ | | | | |
| Are Vegetation, Soil, or | | _ | | | | "Normal Circu | | | es V | No |
| Are Vegetation, Soil, or | | - | | | | eeded, explair | | | | |
| | | | | | | • | • | | · | roo oto |
| SUMMARY OF FINDINGS – A | ttach site ma | ip snowing | Sam | piin | g point i | ocations, | transects | , import | ant reatu | res, etc. |
| Hydrophytic Vegetation Present? | Yes | | | ls th | e Sampled | l Δrea | | | | |
| Hydric Soil Present? | Yes | | | | in a Wetlaı | | Yes | No | ~ | |
| Wetland Hydrology Present? | Yes | No | | ••••• | | | | | | |
| Remarks: | | | | | | | | | | |
| Conditions were wetter the | an normal a | ccording t | to th | ne ar | ntecede | ent precip | oitation to | ool, but | there h | ad not |
| been rain for several days | prior to the | site visit. | | | | | | | | |
| VEGETATION - Use scientific | names of pl | ants. | | | | | | | | |
| | | Absolute | Dom | inant | Indicator | Dominanc | e Test work | sheet: | | |
| Tree Stratum (Plot size: |) | % Cover | Spec | cies? | Status | Number of | Dominant S | pecies | _ | |
| 1 | | | | | | That Are O | BL, FACW, | or FAC: | 0 | (A) |
| 2. | | | | | | | ber of Domin | | | |
| 3. | | | | | | Species Ac | cross All Stra | ta: _ | 1 | (B) |
| 4 | | | | | | | Dominant Sp | pecies | 0.00 | |
| Sapling/Shrub Stratum (Plot size: |) | | _ = 100 | iai Co | vei | That Are O | BL, FACW, | or FAC: _ | 0.00 | (A/B) |
| 1 | | | | | | Prevalence | e Index wor | ksheet: | | |
| 2 | | | | | | Total % | % Cover of: | | Multiply by: | |
| 3 | | | | | | OBL specie | | | = 0 | |
| 4 | | | | | | - | cies 0 | | | |
| 5 | | | | | | FAC specie | | | = 0 | |
| Herb Stratum (Plot size: |) | | = Tot | tal Co | ver | FACU spec | | x 4 | | |
| 1. Thinopyrum intermedium | / | 95 | | / | UPL | UPL specie | otals: 100 | x 5 | | (D) |
| 2. Melilotus officinalis | | 5 | | | FACU | Column 10 | itals: 100 | (A) | 400 | (B) |
| 3. | | | | | | Preva | alence Index | = B/A = _4 | 4.95 | |
| 4 | | | | | | Hydrophyt | tic Vegetation | on Indicato | ors: | |
| 5 | | | | | | | ance Test is | | | |
| 6 | | | | | | | ence Index is | | | |
| 7 | | | | | | | ological Ada a in Remarks | | | |
| 8 | | 400 | | | | | ematic Hydro | | • | • |
| Woody Vine Stratum (Plot size: |) | 100 | = Tot | tal Co | ver | | | yyo 1 0g. | - (= / t | J.G, |
| 1 | | | | | | ¹ Indicators | of hydric soi | l and wetla | nd hydrolog | y must |
| 2. | | | | | | be present | , unless distu | irbed or pro | oblematic. | |
| | | | | | | Hydrophyt | | | | |
| % Bare Ground in Herb Stratum | % Co | over of Biotic Cu | ruet | | | Vegetation Present? | n Ve | • | No 🔽 | |
| Remarks: | | VCI OI DIOLIC OI | | | | Tresenti | | | | |
| Romans. | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

| Profile Desc | cription: (Describe | to the de | pth needed to docu | ment the | indicator | or confi | rm the absence of | indicators.) | |
|---------------|--|-------------|-------------------------|------------|-------------------|------------------|------------------------------|---------------------------------------|-------------------|
| Depth | <u>Matrix</u> | 0/ | | ox Feature | | . 2 | | 5 . | |
| (inches) | Color (moist) | | Color (moist) | % | Type ¹ | Loc ² | | Remark | S |
| 0 - 24 | 7.5YR 5/4 | 90 | 7.5YR 4/6 | 10 | RM | M | Silty Clay | | |
| | | _ | · - | | | <u> </u> | | | |
| - | | | | | | | | | |
| | | _ | | | _ | | | | |
| | | | · - | _ | | | | | |
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| | | | | | | | | | |
| - | | | | | | | | | |
| - | | - | | | | | | | |
| ¹Type: C=C | oncentration, D=De | oletion, RM | 1=Reduced Matrix, C | S=Covere | ed or Coate | ed Sand | Grains. ² Locatio | on: PL=Pore Lining | , M=Matrix. |
| | | | I LRRs, unless othe | | | | | r Problematic Hydr | |
| Histosol | (A1) | | Sandy Red | lox (S5) | | | 1 cm Muc | k (A9) (LRR C) | |
| Histic E | pipedon (A2) | | Stripped M | atrix (S6) | | | 2 cm Muc | k (A10) (LRR B) | |
| | istic (A3) | | Loamy Mu | - | , , | | | Vertic (F18) | |
| | en Sulfide (A4) | | Loamy Gle | • | | | | nt Material (TF2) | |
| | d Layers (A5) (LRR | C) | Depleted N | | | | Other (Ex | plain in Remarks) | |
| | uck (A9) (LRR D) | oo (A11) | Redox Dar | | . , | | | | |
| | d Below Dark Surfac ark Surface (A12) | æ (ATT) | Depleted D Redox Dep | | | | ³ Indicators of I | hydrophytic vegetati | ion and |
| | Aucky Mineral (S1) | | Vernal Poo | | (10) | | | drology must be pres | |
| | Gleyed Matrix (S4) | | | (. 0) | | | - | irbed or problemation | |
| | Layer (if present): | | | | | | | · · · · · · · · · · · · · · · · · · · | |
| Type: | | | | | | | | | |
| Depth (in | ches): | | | | | | Hydric Soil Pro | esent? Yes | No 🗸 |
| HYDROLO | GY | | | | | | | | |
| Wetland Hy | drology Indicators | : | | | | | | | |
| Primary India | cators (minimum of | one require | ed; check all that app | ly) | | | Seconda | ry Indicators (2 or m | nore required) |
| Surface | Water (A1) | | Salt Crus | t (B11) | | | Wate | er Marks (B1) (Rive | rine) |
| High Wa | ater Table (A2) | | Biotic Cru | ıst (B12) | | | Sedi | ment Deposits (B2) | (Riverine) |
| Saturation | on (A3) | | Aquatic Ir | vertebrate | es (B13) | | Drift | Deposits (B3) (Rive | erine) |
| Water M | larks (B1) (Nonrive | rine) | Hydrogen | Sulfide C | dor (C1) | | Drain | nage Patterns (B10) |) |
| Sedimer | nt Deposits (B2) (No | nriverine) | Oxidized | Rhizosphe | eres along | Living R | oots (C3) Dry- | Season Water Table | e (C2) |
| Drift Dep | posits (B3) (Nonrive | erine) | Presence | of Reduc | ed Iron (C | 4) | Cray | fish Burrows (C8) | |
| Surface | Soil Cracks (B6) | | Recent Ire | on Reduct | tion in Tille | ed Soils (0 | C6) Satu | ration Visible on Ae | rial Imagery (C9) |
| Inundati | on Vis ble on Aerial | Imagery (E | 37) Thin Muc | k Surface | (C7) | | Shal | low Aquitard (D3) | |
| Water-S | stained Leaves (B9) | | Other (Ex | plain in R | emarks) | | FAC | -Neutral Test (D5) | |
| Field Obser | | | , | | | | | | |
| Surface Wat | er Present? | /es | No Depth (ir | nches): | | | | | |
| Water Table | Present? | res | No Depth (ir | nches): | | | | | |
| Saturation P | resent? | /es | No Depth (ir | nches): | | We | etland Hydrology P | resent? Yes | No <u> </u> |
| (includes cap | | 2 001102 | onitoring well corie | nhotos = | rovious is | anostica - |) if available: | | |
| Describe Re | corded Data (Strean | ı gauge, m | nonitoring well, aerial | priotos, p | revious in | spections | o), ii avallable: | | |
| | | | | | | | | | |
| Remarks: | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |



Sample Point 46



Sample Point 46

| Landform (hillslope, terrace, etc.): Flat | Project/Site: WDC Phase II | | | City/Co | _{ounty:} <u>Da</u> | vis Co | ounty | Sampling | Date: 20 |)24-05-16 |
|--|--|-----------------|-------------------|----------|-----------------------------|---------------|----------------------------|--|--------------------------|---------------|
| Landfarm (fillslope, terrace, etc.): Flat | Applicant/Owner: UDOT | | | | | | State: Utah | _ Sampling | Point: SI | P47 |
| Landfarm (fillslope, terrace, etc.): Flat | Investigator(s): Merissa Davis | | | Section | n, Townsh | ip, Rar | nge: S30 T5N R2W | | | |
| Soil Map Unit Name: HLA - Harrisville-Leland complex, 0 to 1 percent slopes Are climatic / hydrologic conditions on the site typical for this time of year? Yes No ((If no, explain in Remarks.) Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, et Hydrophytic Vegetation Present? Yes No is the Sampled Area within a Wetland? Yes No Ves No Ves No Within a Wetland? Yes No Ves No Ves No Ves | Landform (hillslope, terrace, etc.): Flat | | | | | | | | Slope | (%): <u>0</u> |
| Are Climatic / hydrologic conditions on the site typical for this time of year? Yes | Subregion (LRR): D 28A | | Lat: 41. | 13456 | 6623 | | _ Long: <u>-112.106767</u> | 93 | _ Datum: | NAD83_20 |
| Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, et Hydrophytic Vegetation Present? Yes No Within a Wetland? Yes No Yes No Within a Wetland? Yes No Yes Yes No Yes Yes No Yes Yes No Yes Yes No Yes Yes No Yes Yes No Yes Yes No Yes Yes No Yes Yes Yes No Yes Yes Yes No Yes Yes No Yes Yes No Yes Yes No Yes Yes No Yes Yes No Yes Yes No Yes Yes No Yes Yes Yes No Yes Yes No Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes | Soil Map Unit Name: HLA - Harrisville-L | _eland com | nplex, 0 to 1 | perce | nt slope | s | NWI classi | fication: No | ne | |
| Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, et Hydrophytic Vegetation Present? Yes No Within a Wetland? Yes No Yes No Within a Wetland? Yes No Yes Yes No Yes Yes No Yes Yes No Yes Yes No Yes Yes No Yes Yes No Yes Yes No Yes Yes No Yes Yes Yes No Yes Yes Yes No Yes Yes No Yes Yes No Yes Yes No Yes Yes No Yes Yes No Yes Yes No Yes Yes No Yes Yes Yes No Yes Yes No Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes | Are climatic / hydrologic conditions on the si | ite typical for | this time of year | ar? Ye | es | No | (If no, explain in | Remarks.) | | |
| SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, et Hydrophytic Vegetation Present? Yes No Wetand Pydrology Present? Yes No Wetand? Yes No Within a Wetland? Yes No Wetland Pydrology Present? Yes No Within a Wetland? Yes No No Within a Wetland? Yes No No Within a Wetland? Yes No No Within a Wetland? Yes No No Within a Wetland? Yes No No Within a Wetland? Yes No No Within a Wetland? Yes No No Within a Wetland? Yes No No Within a Wetland? Yes No No Within a Wetland? Yes No No No No No No No No No No No No No | Are Vegetation, Soil, or Hyd | rology | significantly | disturb | ed? | Are "l | 'Normal Circumstances' | present? | Yes | _ No _ 🗸 |
| Hydrophytic Vegetation Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Wetland? Wetland? Wetland? Yes No Within a Wetland? Yes No No Within a Wetland? Yes No No Within a Wetland? Yes No No Within a Wetland? Yes No No Within a Wetland? Yes No No Within a Wetland? Yes No No Within a Wetland? Yes No No Within a Wetland? Yes No No Within a Wetland? Yes No No Within a Wetland? Yes No No Within a Wetland? Yes No No Within a Wetland? Yes No No No No No No No No No No No No No | Are Vegetation, Soil, or Hyd | rology | naturally pro | blemat | tic? | (If ne | eded, explain any answ | vers in Rema | arks.) | |
| Hydric Soil Present? Yes No Vestand Hydrology Present? Yes No Vestand Hydrology Present? Yes No Vestand Hydrology Present? Yes No Vestand Hydrology Present? Yes No Vestand Hydrology Present? Yes No Vestand Hydrology Present? Yes No Vestand Hydrology Present? Yes No Vestand Hydrology Present? Yes No Vestand Hydrology Present? Yes No Vestand Hydrology Present? Yes No Vestand Hydrology Present? Yes No Vestand Hydrology Present? Yes No Vestand Hydrology Present? No Methand? Yes No Vestand Hydrology Present? No Methand? Yes No Vestand Hydrology Present? No Methand? Yes No Vestand Hydrology Present? No Vestand Hydrology Present? No Methand? Yes No Vestand Hydrology Present? No Vestand Hydrolog | SUMMARY OF FINDINGS - Attac | ch site ma | ap showing | sam | pling po | oint lo | ocations, transect | s, import | ant feat | ures, etc |
| Hydric Soil Present? Yes No V within a Wetland? Yes Ves No Within a Wetland? Yes Ves Yes No Within a Wetland? Yes Ves Yes No Within a Wetland? Yes Ves Yes No Within a Wetland hydrology must be present; where the conditions wetland hydrology must be present; wheel Yes | Lhudaanhudia Varatatian Daasada | | No. | | | | <u> </u> | <u> </u> | | <u> </u> |
| Wetland Hydrology Present? Yes No V William Remarks: No V No William Remarks: No V No William Remarks: No V No V No William Remarks: No V | Hydric Soil Present? | res Yes | No V | | | - | | | | |
| Remarks: Conditions were wetter than normal according to the antecedent precipitation tool, but there had not been rain for several days prior to the site visit. | | | | | within a \ | Vetlan | ıd? Yes | No _ | | |
| Deen rain for several days prior to the site visit. VEGETATION - Use scientific names of plants. Absolute Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A) | | | | | | | | | | |
| Deen rain for several days prior to the site visit. VEGETATION - Use scientific names of plants. Absolute Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A) | Conditions were wetter than | normal a | ccordina | to the | e antec | cede | ent precipitation | tool but | t there | had not |
| VEGETATION – Use scientific names of plants. Tree Stratum (Plot size:) Absolute % Cover Species? Status Status Species That Are OBL, FACW, or FAC: 3 (A) Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A) A (A) 2 | | | _ | | o arres | <i>3</i> | p. co.p.tation | 1001, 1001 | | |
| Absolute % Cover Species? Status | | | | | | | | | | |
| Number of Dominant Species Status Number of Dominant Species That Are OBL, FACW, or FAC: 3 | VEGETATION – USE SCIENTIFIC NA | imes of pi | | Domi | inant India | actor | Deminence Test we | ulcolo o oti | | |
| That Are OBL, FACW, or FAC: 3 (A) | Tree Stratum (Plot size: |) | | | | | | | | |
| Species Across All Strata: 4 (B) | 1 | | | | | | | | 3 | (A) |
| Species Across All Strata: 4 (B) | 2 | | | | | | Total Number of Dom | inant | | |
| Sapling/Shrub Stratum (Plot size: Prevalence Index worksheet: | 3 | | | | | | | rata: | 4 | (B) |
| That Are OBL, FACW, or FAC: 75.00 (A/E) | 4 | | | | | | Percent of Dominant | Species | | |
| 1. Prevalence Index worksheet: 2. Total % Cover of: Multiply by: 3. A. September 100 mode of the present; OBL species 0 mode of the prevalence index worksheet: 5. FACW species 0 mode of the provided supporting of the present; X 1 = 0 mode of the prevalence index worksheet: 5. FACW species 0 mode of the provided supporting of the prevalence index species on the prev | Sanling/Shrub Stratum (Plot size: |) | - | _ = Tota | al Cover | | | | 75.00 | (A/B) |
| 2 | | | | | | | Prevalence Index wo | orksheet: | | |
| 3 | | | | | | | Total % Cover of | <u>: </u> | Multiply b | oy: |
| 4 | | | | | | | OBL species 0 | x 1 | = 0 | |
| Herb Stratum (Plot size:) 1. Poa pratensis 30 | | | | | | | | | | |
| Herb Stratum (Plot size:) Poa pratensis | 5 | | | | | | | | | |
| 1. Poa pratensis 2. Thinopyrum intermedium 3. Distichlis spicata 2. Trifolium fragiferum 2. Trifolium fragiferum 2. Trifolium fragiferum 2. Dominance Test is >50% 6 | Harb Stratum (Diet size) | ` | | _ = Tota | al Cover | | | | | |
| 2 Thinopyrum intermedium 2 Distichlis spicata 2 Distichlis spicata 2 Distichlis spicata 2 Distichlis spicata 2 Distichlis spicata 2 Developeration Indicators: 5 Dominance Test is >50% Prevalence Index is ≤3.0¹ Dominance Test is >50% Prevalence Index is ≤3.0¹ Dominance Test is >50% Prevalence Index is ≤3.0¹ Dominance Test is >50% Prevalence Index is ≤3.0¹ Dominance Test is >50% Prevalence Index is ≤3.0¹ Dominance Test is >50% Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation¹ (Explain) Thindicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Thinopyrum intermedium 2 Dominance Test is >50% Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation¹ (Explain) Thindicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Thinopyrum intermedium Prevalence Index is 3.52 Hydrophytic Vegetation Indicators: Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Thinopyrum intermedium Prevalence Index is 3.52 Hydrophytic Vegetation Indicators: Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Thinopyrum intermedium Prevalence Index is 3.52 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Problematic Hydrophytic Vegetation Present? Yes V No No No No No No No No No No No No No | The state of the s | .) | 30 | / | r FAG | 2 | UPL species 25 | | | |
| 20 FAC Prevalence Index = B/A = 3.52 4 Trifolium fragiferum 20 FAC Hydrophytic Vegetation Indicators: 5 | | | 25 | | | | Column Totals: 93 | (A) | 333 | (B) |
| 5 | | | 20 | ~ | | | Prevalence Inde | ex = B/A = | 3.52 | |
| 6 | 4. Trifolium fragiferum | | 20 | ~ | r FAC | | Hydrophytic Vegeta | tion Indicate | ors: | |
| 6 Prevalence Index is ≤3.0¹ 7 | 5 | | | | | | ' | | | |
| 8 | | | | | | | | | | |
| 8 Problematic Hydrophytic Vegetation¹ (Explain) 1 = Total Cover % Bare Ground in Herb Stratum % Cover of Biotic Crust Problematic Hydrophytic Vegetation¹ (Explain) 1 | 7 | | | | | | Morphological Ad | laptations¹ (l | Provide su enarate st | ipporting |
| Woody Vine Stratum (Plot size:) 1 = Total Cover 2 = Total Cover — = Total Cover Hydrophytic Vegetation Present? Yes No | 8 | | | - | | | | | | • |
| 1 | Woody Vine Stratum (Plot size: |) | 95 | _ = Tota | al Cover | | | | (= | , |
| 2 = Total Cover Wegetation Present? Yes No | | | | | | | | | | |
| ### Total Cover Hydrophytic Vegetation Present? Yes No No No No No No No N | | | | | | | be present, unless dis | sturbed or pr | oblematic | - |
| % Bare Ground in Herb Stratum % Cover of Biotic Crust Present? Yes No | | | | | | | | | | |
| | % Bare Ground in Herb Stratum | % Cc | over of Biotic C | rust | | | Vegetation Present? Y | es V | No | |
| Lemarks. | Remarks: | /0 OC | 51 510110 0 | | | _ | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

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

| Depth (inches) | Matrix Color (moist) | % | Redox Features Color (moist) % Type ¹ Loc | Domorto |
|--|---|--|---|---|
| (inches) 0 - 3 | Color (moist) 5YR 2.5/2 | <u>%</u> 100 | Color (moist) % Type ¹ Loc | <u>C Texture</u> Remarks Loam sod |
| 3 - 6 | 7.5YR 3/2 | 100 | | Loam |
| | - | | | Sandy Loam |
| 11 - 20 | 10YR 3/1 10YR 4/2 | 100 | | |
| 6 - 11 | 10 1 R 4/2 | 100 | | Sand |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | Reduced Matrix, CS=Covered or Coated Sar | |
| - | | icable to all I | LRRs, unless otherwise noted.) | Indicators for Problematic Hydric Soils ³ : |
| Histosol | • • | | Sandy Redox (S5) | 1 cm Muck (A9) (LRR C) |
| Black Hi | oipedon (A2) | | Stripped Matrix (S6) Loamy Mucky Mineral (F1) | 2 cm Muck (A10) (LRR B) Reduced Vertic (F18) |
| | en Sulfide (A4) | | Loamy Gleyed Matrix (F2) | Red Parent Material (TF2) |
| | d Layers (A5) (LRR | R C) | Depleted Matrix (F3) | Other (Explain in Remarks) |
| · | ick (A9) (LRR D) | -, | Redox Dark Surface (F6) | |
| | d Below Dark Surfa | ace (A11) | Depleted Dark Surface (F7) | |
| Thick Da | ark Surface (A12) | | Redox Depressions (F8) | ³ Indicators of hydrophytic vegetation and |
| Sandy M | lucky Mineral (S1) | | Vernal Pools (F9) | wetland hydrology must be present, |
| | Sleyed Matrix (S4) | | | unless disturbed or problematic. |
| | Layer (if present): | | | |
| Type: | | | <u> </u> | |
| Depth (inc | ches): | | | Hydric Soil Present? Yes No |
| Depleted | d layer need | ds redox | to qualify for "depleted belo | ow dark surface". |
| | | | | |
| HYDROLO | | | | |
| Wetland Hyd | drology Indicators | | | |
| Wetland Hyd | drology Indicators cators (minimum of | | ; check all that apply) | Secondary Indicators (2 or more required) |
| Wetland Hyd Primary Indic Surface | drology Indicators cators (minimum of Water (A1) | | Salt Crust (B11) | Water Marks (B1) (Riverine) |
| Wetland Hyd Primary Indic Surface High Wa | drology Indicators cators (minimum of Water (A1) ater Table (A2) | | Salt Crust (B11) Biotic Crust (B12) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) |
| Wetland Hyd Primary Indic Surface High Wa Saturatio | drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) | fone required | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) |
| Wetland Hyd Primary Indic Surface High Wa Saturatic Water M | drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive | fone required | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) |
| Primary India Surface High Wa Saturatio Water M Sedimer | drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive at Deposits (B2) (N | one required erine) conriverine) | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Roots (C3) Dry-Season Water Table (C2) |
| Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep | cators (minimum of Water (A1) Ater Table (A2) on (A3) Harks (B1) (Nonrive ot Deposits (B2) (Nonrive | one required erine) conriverine) | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) |
| Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Surface | cators (minimum of Water (A1) Meter Table (A2) On (A3) Harks (B1) (Nonrive of Deposits (B2) (Nonrive Cosits (B3) (Nonrive Soil Cracks (B6) | erine) fone required fone required fone required fone required | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) |
| Wetland Hyd Primary India Surface High Wa Saturatia Water M Sedimer Drift Dep Surface Inundation | cators (minimum of Water (A1) Mater Table (A2) On (A3) Marks (B1) (Nonrive of Deposits (B2) (Nonsits (B3) (Nonrive Soil Cracks (B6) On Vis ble on Aeria | erine) onriverine) verine) | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Pry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S | drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive nt Deposits (B2) (Norive cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9) | erine) onriverine) verine) | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) |
| Wetland Hyd Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Observ | cators (minimum of Water (A1) Inter Table (A2) In (A3) Iarks (B1) (Nonrivent Deposits (B2) (Norivent Deposits (B3) (Nonrivent Cracks (B6) Ion Vis ble on Aeria tained Leaves (B9) Ivations: | erine) lonriverine) verine) l Imagery (B7 | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Other (Explain in Remarks) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Pry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| Wetland Hyde Primary Indice Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Observ Surface Water | drology Indicators eators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive at Deposits (B2) (Nonrive cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9) vations: er Present? | erine) lonriverine) verine) Il Imagery (B7 | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Other (Explain in Remarks) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Pry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Observ Surface Water | drology Indicators eators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive nt Deposits (B2) (Nonsits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9) vations: er Present? | erine) conriverine) rerine) Il Imagery (B7) Yes N | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Pry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) |
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| Wetland Hyderimary Indices Surface High Water Mater Mater Sedimer Drift Dep Surface Inundatices Water-S Field Obsert Surface Water Water Table Saturation Profice (includes capetal) | drology Indicators eators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive at Deposits (B2) (Nonrive cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9) vations: er Present? Present? resent? | erine) lonriverine) rerine) Il Imagery (B7) Yes N Yes N | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Crayfish Burrows (C8) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No |
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| Wetland Hyderimary India Surface High Water Mage Sedimer Drift Dep Surface Inundation Water-S Field Obsert Surface Water Table Saturation Projection Projection Received Technology Describe Received Technology Describe Received Technology Describe Received Technology Describe Received Technology Project Technology Pr | drology Indicators eators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive at Deposits (B2) (Nonrive cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9) vations: er Present? Present? resent? | erine) lonriverine) rerine) Il Imagery (B7) Yes N Yes N | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Crayfish Burrows (C8) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No |
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| Wetland Hyderimary India Surface High Water Mage Sedimer Drift Dep Surface Inundation Water-S Field Obsert Surface Water Table Saturation Projection Projection Received Technology Describe Received Technology Describe Received Technology Describe Received Technology Describe Received Technology Project Technology Pr | drology Indicators eators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive at Deposits (B2) (Nonrive cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9) vations: er Present? Present? resent? | erine) lonriverine) rerine) Il Imagery (B7) Yes N Yes N | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Crayfish Burrows (C8) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No |
| Wetland Hyderimary Indices — Surface — High Water Management — Drift Dependent — Drift Dependent — Water-S Field Observ Surface Water Water Table Saturation Profincludes cap Describe Reces | drology Indicators eators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive at Deposits (B2) (Nonrive cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9) vations: er Present? Present? resent? | erine) lonriverine) rerine) Il Imagery (B7) Yes N Yes N | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Crayfish Burrows (C8) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No |

WDC SR-177, SR-193 to 1800 NorthUDOT



Sample Point 47



Sample Point 47

| Project/Site: WDC Phase II | (| City/Cour | nty: Davis Co | ounty | Sampling Date: 2024-05-16 |
|---|---------------|-----------|----------------|--|--|
| Applicant/Owner: UDOT | | - | - | | Sampling Point: SP48 |
| •• | ; | | | nge: S30 T5N R2W | |
| Landform (hillslope, terrace, etc.): Slope | | | | | |
| | | | | | 67 Datum: NAD83_201 |
| Soil Map Unit Name: HLA - Harrisville-Leland comple | | | | | |
| Are climatic / hydrologic conditions on the site typical for this | time of yea | ar? Yes | No | (If no, explain in | Remarks.) |
| Are Vegetation, Soil, or Hydrology si | gnificantly | disturbed | ? Are " | 'Normal Circumstances" | present? Yes No |
| Are Vegetation, Soil, or Hydrologyna | aturally prof | blematic? | ? (If ne | eeded, explain any answ | ers in Remarks.) |
| SUMMARY OF FINDINGS - Attach site map s | showing | sampli | ing point le | ocations, transect | s, important features, etc. |
| Hydrophytic Vegetation Present? Yes No | | | | | |
| Hydric Soil Present? Yes V | ´ | | the Sampled | | / No |
| Wetland Hydrology Present? Yes No | | W | ithin a Wetlar | id? Yes | NO |
| Remarks: | | | | | |
| Conditions were wetter than normal acc | ording t | o the | antecede | nt precipitation | tool, but there had not |
| been rain for several days prior to the si | te visit. | Gradu | ıal slope t | owards adjacen | t pond. |
| VEGETATION – Use scientific names of plant | s. | | | | |
| Trac Stratum (Diet size: | | | nt Indicator | Dominance Test wor | ksheet: |
| | | | s? Status | Number of Dominant S That Are OBL, FACW | ' ^ |
| 1 2 | | | | | |
| 3 | | | | Total Number of Domi Species Across All Str | • • |
| 4 | | | | | |
| | | = Total (| Cover | Percent of Dominant S That Are OBL, FACW | |
| Sapling/Shrub Stratum (Plot size:) | | | | Prevalence Index wo | |
| 1 | | | | Total % Cover of: | |
| 3. | | | | | x 1 = 20 |
| 4 | | | | | x 2 = 150 |
| 5. | | | | | x 3 = 15 |
| | | = Total (| Cover | | x 4 = 0 |
| Herb Stratum (Plot size:) 1 Phalaris arundinacea | 40 | ~ | FACW | | x 5 = 0 |
| 2. Juncus balticus | 35 | | FACW | Column Totals: 100 | (A) <u>185</u> (B) |
| 3. Typha angustifolia | 20 | | OBL | Prevalence Inde | x = B/A = 1.85 |
| 4. Rumex crispus | 5 | | FAC | Hydrophytic Vegetat | · |
| 5 | | | | ✓ Dominance Test i | s >50% |
| 6. | | | | ✓ Prevalence Index | is $\leq 3.0^{1}$ |
| 7 | | | | | aptations ¹ (Provide supporting |
| 8 | | - | | | ks or on a separate sheet) ophytic Vegetation¹ (Explain) |
| Woody Vine Stratum (Plot size:) | 100 | = Total (| Cover | r roblematic riyan | oprivite vegetation (Explain) |
| 1 | | | | ¹ Indicators of hydric so | oil and wetland hydrology must |
| 2 | | | | be present, unless dis | turbed or problematic. |
| | | = Total (| Cover | Hydrophytic | |
| % Bare Ground in Herb Stratum % Cover | of Biotic Cr | rust | | Vegetation Present? Yes | es <u> </u> |
| Remarks: | | | | 1 | _ |
| | | | | | |
| | | | | | |
| | | | | | |
| 1 | | | | | |

| Frome Description. (Describe to the u | epth needed to document the indicator or c | ontirm the absence of indicators.) |
|---|---|---|
| Depth Matrix | Redox Features | |
| (inches) Color (moist) % | Color (moist) % Type ¹ L | oc ² Texture Remarks |
| 0 - 2 10YR 3/1 100 | | Muck |
| <u>2 - 12</u> <u>10YR 3/2</u> <u>100</u> | | Clay |
| 12 - 24 7.5YR 6/4 100 | | Clay |
| - | | |
| | | |
| | | |
| | | |
| | | |
| <u> </u> | | |
| | M=Reduced Matrix, CS=Covered or Coated S | |
| Hydric Soil Indicators: (Applicable to | · · · · · · · · · · · · · · · · · · · | Indicators for Problematic Hydric Soils ³ : |
| Histosol (A1) | Sandy Redox (S5) | 1 cm Muck (A9) (LRR C) |
| Histic Epipedon (A2) | Stripped Matrix (S6) | 2 cm Muck (A10) (LRR B) |
| Black Histic (A3) | Loamy Mucky Mineral (F1) | Reduced Vertic (F18) |
| Hydrogen Sulfide (A4) | Loamy Gleyed Matrix (F2) | Red Parent Material (TF2) |
| Stratified Layers (A5) (LRR C) | Depleted Matrix (F3) | Other (Explain in Remarks) |
| <u>✓</u> 1 cm Muck (A9) (LRR D) | Redox Dark Surface (F6) | |
| Depleted Below Dark Surface (A11) | Depleted Dark Surface (F7) | |
| Thick Dark Surface (A12) | Redox Depressions (F8) | ³ Indicators of hydrophytic vegetation and |
| Sandy Mucky Mineral (S1) | Vernal Pools (F9) | wetland hydrology must be present, |
| Sandy Gleyed Matrix (S4) | | unless disturbed or problematic. |
| Restrictive Layer (if present): | | |
| Type: | | |
| Depth (inches): | | Hydric Soil Present? Yes No |
| , , , _ | | nydric Soil Present? Tes No |
| Remarks: | | |
| | | |
| | | |
| | | |
| | | |
| LIVEROLOGY | | |
| HYDROLOGY | | |
| Wetland Hydrology Indicators: | | |
| | red; check all that apply) | Secondary Indicators (2 or more required) |
| Wetland Hydrology Indicators: | red; check all that apply) Salt Crust (B11) | |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) | Salt Crust (B11) | Water Marks (B1) (Riverine) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one requirements) Surface Water (A1) High Water Table (A2) | Salt Crust (B11) Biotic Crust (B12) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one requirements) Surface Water (A1) High Water Table (A2) Saturation (A3) | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one requirements) Surface Water (A1) High Water Table (A2) Saturation (A3) | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one requirum of | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required in Surface Water (A1) High Water Table (A2) ✓ Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livit Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc (B7) Thin Muck Surface (C7) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one requi — Surface Water (A1) — High Water Table (A2) ✓ Saturation (A3) — Water Marks (B1) (Nonriverine) — Sediment Deposits (B2) (Nonriverine) — Drift Deposits (B3) (Nonriverine) — Surface Soil Cracks (B6) — Inundation Vis ble on Aerial Imagery — Water-Stained Leaves (B9) | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) ✓ Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery Water-Stained Leaves (B9) Field Observations: | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sci (B7) Thin Muck Surface (C7) Other (Explain in Remarks) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) ✓ Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc (B7) Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required of the primary Indicators (minimum of one required of the primary Indicators (minimum of one required of the primary Indicators (Martine of the primary of | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required of the primary Indicators (minimum of one required of the primary Indicators (minimum of one required of the primary Indicators (Minim | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc (B7) Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required of the primary Indicators (minimum of one required of the primary Indicators (minimum of one required of the primary Indicators (Management of the primary | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So (B7) Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): No Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required of the primary Indicators (minimum of one required of the primary Indicators (minimum of one required of the primary Indicators (Management of the primary | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) ✓ Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So (B7) Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): No Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required of the primary Indicators (minimum of one required of the primary Indicators (minimum of one required of the primary Indicators (Management of the primary | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So (B7) Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): No Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) ✓ Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So (B7) Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): No Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) ✓ Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So (B7) Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): No Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) ✓ Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So (B7) Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): No Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) ✓ Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So (B7) Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): No Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No |

WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 48



Sample Point 48

| Project/Site: WDC Phase II | | (| City/Cou | _{nty:} <u>Davis C</u> | ounty | Sar | npling D | ate: 2024 | <u>1-05-16</u> |
|---|--------------|---------------------|----------|--------------------------------|---------------------------------------|--------------|-----------------|------------------------|----------------------|
| Applicant/Owner: UDOT | | | | | State: Utah | I Sar | npling P | oint: SP4 | 9 |
| Investigator(s): Cara Glabau, Elena C | apson | | Section, | Township, Ra | _{nge:} S30 T5N R2 | :W | | | |
| Landform (hillslope, terrace, etc.): Slope | ! | | Local re | lief (concave, | convex, none): Lin | ear | | _ Slope (% | _{s):} 1 |
| Subregion (LRR): D 28A | | Lat: 41. | 138408 | 333 | _ Long:112.104; | 3375 | | Datum: N | AD83_20 ² |
| Soil Map Unit Name: HLA - Harrisville | | | | | | | | | |
| Are climatic / hydrologic conditions on the | | | | | | | | | |
| Are Vegetation, Soil, or H | | - | | | 'Normal Circumstan | | | s 🗸 | No |
| Are Vegetation, Soil, or H | | | | | eeded, explain any a | | | | |
| SUMMARY OF FINDINGS - Att | | | | | , , | | | , | as atc |
| COMMANT OF THE MICHOCO AND | | | Jampi | ing point i | | | iportai | - It icatui | |
| Hydrophytic Vegetation Present? | Yes | | Is | the Sampled | l Area | | | | |
| Hydric Soil Present? Wetland Hydrology Present? | Yes | | w | ithin a Wetlar | nd? Yes | | No | <u> </u> | |
| Remarks: | Yes | NO | | | | | | | |
| | n normal a | ooording t | to the | antagada | nt procinitati | on tool | hu++ | horo be | nd not |
| Conditions were wetter tha | | _ | io trie | anteceue | in precipitati | ונטטון נטטון | , but t | Here Ha | ia not |
| been rain for several days p | | | | | | | | | |
| VEGETATION – Use scientific r | names of pla | | | | | | | | |
| Tree Stratum (Plot size: |) | Absolute % Cover | | ant Indicator s? Status | Dominance Test | | | | |
| 1 | | | | | Number of Domin That Are OBL, FA | | | | (A) |
| 2. | | | | | | | _ | | _ () |
| 3 | | | | | Total Number of I Species Across A | | 2 | | _ (B) |
| 4 | | | | | Percent of Domin | ant Snacie | | | |
| Openica a (Observita Obsertance) (Digitariana | , | | = Total | Cover | That Are OBL, FA | | | 0.00 | _ (A/B) |
| Sapling/Shrub Stratum (Plot size: | | | | | Prevalence Index | x workshe | et. | | |
| 1 2 | | | | | Total % Cove | | | fultiply by: | |
| 3 | | | | | | | | 0 | |
| 4. | | | | | FACW species _C |) | _ x 2 = | 0 | |
| 5 | | | | | | | | 150 | |
| | | | = Total | Cover | FACU species 3 | | | | |
| Herb Stratum (Plot size: |) | 50 | ~ | FAC | Of E openies _ | | _ x 5 = | | |
| 2. Lactuca serriola | | <u> 20</u> | | FACU | Column Totals: 1 | 00 | _ (A) | 365 | (B) |
| 3. Dipsacus laciniatus | | 15 | | FACU | Prevalence | Index = B | B/A = 3. | 65 | |
| 4. Thinopyrum intermedium | | 15 | - | UPL | Hydrophytic Veg | etation In | dicator | s: | |
| 5. | | | | | Dominance T | est is >50 | % | | |
| 6 | | | | | Prevalence Ir | ndex is ≤3. | .0 ¹ | | |
| 7 | | | | | Morphologica | | | ovide supporarate shee | |
| 8 | | | | | Problematic I | | | | • |
| Woody Vine Stratum (Plot size: | 1 | 100 | = Total | Cover | 1 1051611141101 | туаторттуп | o vegen | AUGIT (EXP | iairi) |
| 1 | | | | | ¹ Indicators of hyd | ric soil and | d wetland | d hydrology | / must |
| 2. | | | | | be present, unless | | | | |
| | | | | Cover | Hydrophytic | | | | |
| % Bare Ground in Herb Stratum | % Cov | ver of Biotic C | rust | | Vegetation Present? | Yes | | No | |
| Remarks: | | VCI OI BIOLIO OI | | | T TOSCITE. | | | | |
| Tromano. | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| | . ` | to the depth | needed to document the indicator or c | onlini the abs | sence of indicators.) |
|--------------------------------|--|-----------------|--|------------------------|--|
| Depth (inches) | Matrix Color (moist) | % | Redox Features Color (moist) % Type ¹ L | .oc ² Textu | ire Remarks |
| 0 - 6 | 10YR 4/3 | 100 | | Clay Lo | pam |
| 6 - 13 | 7.5YR 5/4 | 100 | | Clay | |
| 13 - 22 | 10YR 4/1 | 100 | | Clay Lo | pam |
| 22 - 24 | 10YR 4/3 | 100 | | Clay | |
| | 1011111/10 | · - | | | |
| | | · —— – | | | |
| | | · —— – | | | |
| | | | | | |
| | | | | | |
| | | | Reduced Matrix, CS=Covered or Coated S | | ² Location: PL=Pore Lining, M=Matrix. |
| - | | able to all Li | RRs, unless otherwise noted.) | | ators for Problematic Hydric Soils ³ : |
| Histosol | | | Sandy Redox (S5) | | cm Muck (A9) (LRR C) |
| Black His | ipedon (A2) | | Stripped Matrix (S6) Loamy Mucky Mineral (F1) | | 2 cm Muck (A10) (LRR B) Reduced Vertic (F18) |
| | n Sulfide (A4) | | Loamy Gleyed Matrix (F2) | | Red Parent Material (TF2) |
| | l Layers (A5) (LRR (| <u>;)</u> | Depleted Matrix (F3) | | Other (Explain in Remarks) |
| | ck (A9) (LRR D) | 3) | Redox Dark Surface (F6) | <u> </u> | other (Explain in remaine) |
| | Below Dark Surfac | e (A11) | Depleted Dark Surface (F7) | | |
| - | rk Surface (A12) | , | Redox Depressions (F8) | ³ Indic | cators of hydrophytic vegetation and |
| Sandy M | lucky Mineral (S1) | | Vernal Pools (F9) | | tland hydrology must be present, |
| Sandy G | leyed Matrix (S4) | | | un | less disturbed or problematic. |
| Restrictive L | ayer (if present): | | | | |
| Type: | | | <u></u> | | |
| Depth (inc | ches): | | <u></u> | Hydrid | Soil Present? Yes No |
| Remarks: | | | | • | |
| | | | | | |
| | | | | | |
| | | | | | |
| HYDROLO | GY | | | | |
| | drology Indicators: | | | | |
| _ | | | check all that apply) | | Secondary Indicators (2 or more required) |
| - | Water (A1) | nic required, | Salt Crust (B11) | | Water Marks (B1) (Riverine) |
| | ` , | | Biotic Crust (B12) | | |
| <u> </u> | ter Table (A2) | | | | Sediment Deposits (B2) (Riverine) |
| Saturatio | arks (B1) (Nonriver | ina\ | Aquatic Invertebrates (B13) | | Drift Deposits (B3) (Riverine) |
| · | at Deposits (B2) (No | • | Hydrogen Sulfide Odor (C1)Oxidized Rhizospheres along Livir | na Booto (C2) | Drainage Patterns (B10) |
| | . , , , | • | | | |
| | osits (B3) (Nonrive | ine) | Presence of Reduced Iron (C4) | | Crayfish Burrows (C8) |
| | Soil Cracks (B6) | magam, (D7) | Recent Iron Reduction in Tilled Sc | | Saturation Visible on Aerial Imagery (C9) |
| | on Vis ble on Aerial I tained Leaves (B9) | magery (b7) | | | Shallow Aquitard (D3) |
| Field Observ | <u> </u> | | Other (Explain in Remarks) | | FAC-Neutral Test (D5) |
| Surface Water | | es No | Depth (inches): | | |
| Water Table | | | Depth (inches): | | |
| | | | | Motlond Hyd | rology Present? Yes No |
| Saturation Pr (includes cap | | es No | Depth (inches): | wettand nyd | rology Present? Yes No |
| | | gauge, mon | itoring well, aerial photos, previous inspec | tions), if availab | le: |
| | | | | | |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 49



Sample Point 49

| Project/Site: WDC Phase II | | | City/Co | ounty: Da | avis Co | ounty | _ Sampling | Date: 202 | <u> 24-05-16</u> |
|---|--------------------|---------------------|----------|---------------------|-----------|-------------------------------------|---------------|---------------|-----------------------|
| Applicant/Owner: UDOT | | | | | | State: Utah | _ Sampling | Point: SP | 50 |
| Investigator(s): Merissa Davis | | | Section | n, Towns | hip, Ra | nge: S30 T5N R2W | | | |
| Landform (hillslope, terrace, etc.): Flat | | | | | | convex, none): None | | Slope (| (%): <u>0</u> |
| Subregion (LRR): D 28A | | Lat: 41. | 13514 | 1907 | | _ Long: <u>-112.106580</u> | 80 | _ Datum: | NAD83_20 ² |
| Soil Map Unit Name: HLA - Harrisville- | Leland comp | olex, 0 to 1 | perce | nt slope | es | NWI classif | fication: No | ne | |
| Are climatic / hydrologic conditions on the s | ite typical for th | nis time of yea | ar? Ye | es | _ No _ | (If no, explain in | Remarks.) | | |
| Are Vegetation, Soil, or Hyd | Irology | significantly | disturb | ed? | Are " | "Normal Circumstances" | ' present? ` | Yes 🔽 | _ No |
| Are Vegetation, Soil, or Hyd | drology | naturally pro | blemat | tic? | (If ne | eeded, explain any answ | vers in Rema | arks.) | |
| SUMMARY OF FINDINGS - Atta | ch site mar | showing | sam | pling p | oint l | ocations, transect | s, import | ant featu | ıres, etc. |
| Hydrophytic Vegetation Present? | Yes | No | | | | | | | |
| Hydric Soil Present? | Yes | No 🔽 | | Is the Sa | - | | N- | ~ | |
| | Yes | | | within a | wetiar | nd? Yes | No _ | | |
| Remarks: | | | | | | | | | |
| Conditions were wetter than | normal ac | cording | to the | e ante | cede | ent precipitation | tool, but | t there h | nad not |
| been rain for several days pr | | _ | | | | | , | | |
| | | | | | | | | | |
| VEGETATION – Use scientific na | imes or pia | | Dami | | l: t - :: | Daminanaa Taatuus | ulanka ata | | |
| Tree Stratum (Plot size: | _) | Absolute % Cover | | nant Ind ies? St | | Number of Dominant | | | |
| 1 | | | | | | That Are OBL, FACW | , or FAC: | 3 | (A) |
| 2 | | | | | | Total Number of Dom | inant | | |
| 3 | | | | | | Species Across All St | | 4 | (B) |
| 4 | | | | | | Percent of Dominant | Species | | |
| Sapling/Shrub Stratum (Plot size: | 1 | - | = Tota | al Cover | | That Are OBL, FACW | | 75.00 | (A/B) |
| 1 | | | | | | Prevalence Index wo | orksheet: | | |
| 2 | | | | | | Total % Cover of | | Multiply by | <u>/:</u> |
| 3. | | | | | | OBL species 0 | x 1 | = 0 | |
| 4 | | | | | | FACW species 10 | | | |
| 5 | | | | | | | x 3 | | |
| Harb Otastura (District | ` | | _ = Tota | al Cover | | FACU species 5 | x 4 | , = <u>20</u> | |
| Herb Stratum (Plot size: | _) | 20 | ~ | , FA | C | UPL species 15 | | 5 = <u>75</u> | |
| 2. Poa pratensis | | 20 | | | | Column Totals: 85 | (A) | 280 | (B) |
| 3. Trifolium fragiferum | | 15 | | | | Prevalence Inde | ex = B/A = | 3.29 | |
| 4. Thinopyrum intermedium | | 15 | ~ | ' UF | ,r | Hydrophytic Vegeta | tion Indicate | ors: | |
| 5. Juncus balticus | | 10 | | FA | CW | ✓ Dominance Test | is >50% | | |
| 6. Taraxacum officinale | | 5 | | <u>FA</u> | CU | Prevalence Index | | | |
| 7 | | | | | | Morphological Addata in Remar | | | |
| 8 | | | | | | Problematic Hydr | | • | • |
| Woody Vine Stratum (Plot size: | \ | 85 | _ = Tota | al Cover | | Troblematic riyar | opriyac veg | ctation (Ex | тріант) |
| 1 | | | | | | ¹ Indicators of hydric s | oil and wetla | and hydrolo | ay must |
| 2. | | | | | | be present, unless dis | | | 0, |
| | | | | al Cover | | Hydrophytic | | | |
| % Bare Ground in Herb Stratum | % Cov | | =' | | | Vegetation Present? Y | ′es | No | |
| | | ei di bidiic C | iust | | | rieseiit: | | | |
| Remarks: | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| Depth | nption: (Describe Matrix | to the deptr | Redox Features | onfirm the | absence | or indicators.) |
|--------------------------------|---------------------------------------|--------------|---|--------------------|-----------------|--|
| (inches) | Color (moist) | % | Color (moist) % Type ¹ L | .oc ² 1 | <u> Fexture</u> | Remarks |
| 0 - 4 | 10YR 3/2 | 100 | | Lo | am | Sod layer |
| 4 - 22 | 10YR 3/2 | 100 | | Silty | y Clay Loam | |
| - | | | | | - | |
| | | | | | | |
| | | | | | - | |
| | | | | | | |
| | | | | | | |
| - | | | | | | |
| | | | | | | |
| 1Type: C=Co | uncentration D=Der | letion PM=F | Reduced Matrix, CS=Covered or Coated S | and Grains | 21.00 | cation: PL=Pore Lining, M=Matrix. |
| | | | RRs, unless otherwise noted.) | | | for Problematic Hydric Soils ³ : |
| Histosol | | | Sandy Redox (S5) | | | Muck (A9) (LRR C) |
| | ipedon (A2) | | Stripped Matrix (S6) | _ | | Muck (A10) (LRR B) |
| Black His | | | Loamy Mucky Mineral (F1) | _ | | ed Vertic (F18) |
| Hydroge | n Sulfide (A4) | | Loamy Gleyed Matrix (F2) | _ | Red Pa | arent Material (TF2) |
| | Layers (A5) (LRR | C) | Depleted Matrix (F3) | _ | Other | (Explain in Remarks) |
| | ck (A9) (LRR D) | | Redox Dark Surface (F6) | | | |
| - | Below Dark Surfac | e (A11) | Depleted Dark Surface (F7) | 3 | St | of hardware the constation and |
| | rk Surface (A12) ucky Mineral (S1) | | Redox Depressions (F8) Vernal Pools (F9) | | | of hydrophytic vegetation and hydrology must be present, |
| - | leyed Matrix (S4) | | Vernai Foois (F9) | | | listurbed or problematic. |
| | ayer (if present): | | | | u | inclarated of problematic. |
| | , , , | | | | | |
| ,. <u> </u> | :hes): | | | H | vdric Soil | Present? Yes No |
| Remarks: | | | | , | , | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| HYDROLO | | | | | | |
| | Irology Indicators: | | | | _ | |
| - | - | ne required; | check all that apply) | | | ndary Indicators (2 or more required) |
| | Water (A1) | | Salt Crust (B11) | | | Vater Marks (B1) (Riverine) |
| <u> </u> | ter Table (A2) | | Biotic Crust (B12) | | | dediment Deposits (B2) (Riverine) |
| Saturatio | , , | | Aquatic Invertebrates (B13) | | | Orift Deposits (B3) (Riverine) |
| | arks (B1) (Nonriver | | Hydrogen Sulfide Odor (C1) | | | Orainage Patterns (B10) |
| | t Deposits (B2) (No | | Oxidized Rhizospheres along Livin | ng Roots (C | | |
| - | osits (B3) (Nonrive | rine) | Presence of Reduced Iron (C4) | -: - (00) | | crayfish Burrows (C8) |
| | Soil Cracks (B6) | l(D7) | Recent Iron Reduction in Tilled Sc | olis (C6) | | raturation Visible on Aerial Imagery (C9) |
| | on Vis ble on Aerial | imagery (B7) | · · · | | | hallow Aquitard (D3) |
| Field Observ | ained Leaves (B9) | | Other (Explain in Remarks) | I | <u> </u> | AC-Neutral Test (D5) |
| | | ′00 N | lo Depth (inches): | | | |
| Surface Water | | | lo Depth (inches): | | | |
| Water Table | | | | Madend | | B |
| Saturation Pr (includes cap | | es N | lo Depth (inches): | wetiand | Hydrolog | y Present? Yes No |
| | | gauge, mon | nitoring well, aerial photos, previous inspec | tions), if av | ailable: | |
| | | | | | | |
| Remarks: | | | | | | |
| moistura | around 10: | nchas h | ut not saturated | | | |
| moisture | around 18 I | nenes D | ut not saturated | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

WDC SR-177, SR-193 to 1800 NorthUDOT



Sample Point 50



Sample Point 50

| Project/Site: WDC Phase II | | Citv/C | ountv | Davis C | ounty | Samo | oling Date: | 2024-0 | 5-16 |
|---|----------------|---------|--------|-------------|--------------------------------|-------------------------------|--------------|------------|------------|
| | | - | - | | State: Uta | | _ | | |
| • • | | | | | nge: S30 T5N R | | 9 | | |
| Landform (hillslope, terrace, etc.): Flat | | | | | | | Sic | ope (%): (|) |
| Subregion (LRR): D 28A | | | | | | | | | |
| Soil Map Unit Name: HLA - Harrisville-Leland comp | | | | | | | | | |
| Are climatic / hydrologic conditions on the site typical for th | | | | | | · - | | | |
| Are Vegetation, Soil, or Hydrology | | | | | 'Normal Circumsta | | | ✓ No | |
| Are Vegetation, Soil, or Hydrology | | | | | eeded, explain any | | | | |
| SUMMARY OF FINDINGS – Attach site map | | | | | | | , | eatures, | , etc. |
| Hydrophytic Vegetation Present? Yes N | No | | Is th | e Sampled | I Δrea | | | | |
| Hydric Soil Present? Yes N | No | | | in a Wetlar | | s 1 | No V | | |
| Wetland Hydrology Present? Yes N | No | | | | | | | | |
| Remarks: | | | | | | | | | |
| Conditions were wetter than normal ac | cording | to th | ne ai | ntecede | ent precipitat | ion tool, k | out ther | re had | not |
| been rain for several days prior to the s | ite visit. | Pas | ture | consis | tently grazed | I by horse | es. | | |
| VEGETATION – Use scientific names of plan | nts. | | | | | | | | |
| . — — — — — — — — — — — — — — — — — — — | Absolute | Dom | ninant | Indicator | Dominance Tes | t worksheet: | | | |
| Tree Stratum (Plot size:) | % Cover | | | | Number of Domi | | | | |
| 1 | | | | | That Are OBL, F. | | : <u>1</u> | (| (A) |
| 2 | | | | | Total Number of | Dominant | | | |
| 3 | | | | | Species Across | All Strata: | 2 | (| (B) |
| 4 | | | | | Percent of Domii | | | | |
| Sapling/Shrub Stratum (Plot size:) | - | _ = Tot | tal Co | ver | That Are OBL, F. | ACW, or FAC | <u>50.00</u> |) (| (A/B) |
| 1 | | | | | Prevalence Inde | ex worksheet | i: | | |
| 2 | | | | | Total % Cov | er of: | Multip | ly by: | • |
| 3 | | | | | | 0 | | | |
| 4 | | | | | FACW species | | | | |
| 5 | | | | | | 22 | | | |
| Herb Stratum (Plot size:) | | _ = Tot | tal Co | ver | FACU species | | | | |
| 1. Hordeum murinum | 51 | | / | FACU | | 103 | | | (D) |
| 2. Poa pratensis | 22 | • | | FAC | Column Totals: | 103 | (A) 400 | <u> </u> | (B) |
| 3. Bromus tectorum | 18 | | | UPL | Prevalence | e Index = B/A | = 3.96 | | _ |
| 4. Taraxacum officinale | 12 | | | FACU | Hydrophytic Ve | getation Indi | cators: | | |
| 5 | | | | | Dominance | | | | |
| 6 | | | | | Prevalence | | | | |
| 7 | | | | | Morphologic | al Adaptation emarks or on | s1 (Provide | supportir | ng |
| 8 | 400 | | | | Problematic | | | |) |
| Woody Vine Stratum (Plot size:) | 103 | _ = Tot | tal Co | ver | | , a. op , a. o | . ogotatio | (=//p.a) | , |
| 1 | | | | | ¹ Indicators of hyd | dric soil and w | vetland hyd | Irology mu | ust |
| 2. | | | | | be present, unles | ss disturbed o | r problema | atic. | |
| | | | | | Hydrophytic | | | | |
| % Bare Ground in Herb Stratum % Cove | er of Biotic C | rust | | | Vegetation Present? | Yes | No | ~ | |
| Remarks: | | | | | 1.1000 | | | - | |
| Tomano. | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| Profile Desc | ription: (Describ | e to the depth | needed to docu | ment the i | ndicator | or confirm | the absence of indicators.) | |
|--------------------|--|------------------|----------------------|-------------|--------------|------------------|--|--------------------------|
| Depth | Matrix | | | x Features | | . 2 | T. (| |
| (inches) 0 - 20 | Color (moist) | <u>%</u> | Color (moist) | % | Type' | Loc ² | Texture Remar | KS |
| | 10YR 3/2 | | | | | | Clay Loam | |
| 20 - 24 | 7.5YR 5/4 | 100 | | | | | Clay | |
| | | | | | | | | |
| - | | | | | | | | |
| | | | | | | | | |
| | - | | | | | | | |
| l — - | - | _ | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | oncentration, D=De | • | | | | d Sand Gr | | |
| Hydric Soil | Indicators: (Appl | icable to all LR | Rs, unless othe | rwise note | ed.) | | Indicators for Problematic Hyd | ric Soils ³ : |
| Histosol | ` ' | | Sandy Red | | | | 1 cm Muck (A9) (LRR C) | |
| - | oipedon (A2) | | Stripped M | | | | 2 cm Muck (A10) (LRR B) | |
| | stic (A3) | | Loamy Mud | - | | | Reduced Vertic (F18) | |
| | n Sulfide (A4) d Layers (A5) (LRF |) (C) | Loamy Gle Depleted M | | (FZ) | | Red Parent Material (TF2)Other (Explain in Remarks) | |
| | ick (A9) (LRR D) | . •) | Redox Dari | ` , | F6) | | Onlei (Explain in Remarks) | |
| | d Below Dark Surfa | ace (A11) | Depleted D | , | , | | | |
| · — · | ark Surface (A12) | ` , | Redox Dep | | | | ³ Indicators of hydrophytic vegeta | tion and |
| Sandy M | lucky Mineral (S1) | | Vernal Poo | ls (F9) | | | wetland hydrology must be pre | esent, |
| | Bleyed Matrix (S4) | | | | | | unless disturbed or problemati | C. |
| Restrictive I | Layer (if present): | | | | | | | |
| Type: | | | _ | | | | | |
| Depth (inc | ches): | | _ | | | | Hydric Soil Present? Yes | No <u> </u> |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| HYDROLO | GY | | | | | | | |
| Wetland Hy | drology Indicator | s: | | | | | | |
| Primary India | cators (minimum of | one required; c | heck all that app | v) | | | Secondary Indicators (2 or r | more required) |
| Surface | | | Salt Crust | | | | Water Marks (B1) (Rive | erine) |
| | iter Table (A2) | | Biotic Cru | | | | Sediment Deposits (B2 | |
| Saturation | | | Aquatic In | | s (B13) | | Drift Deposits (B3) (Riv | |
| | larks (B1) (Nonriv e | erine) | Hydrogen | | | | Drainage Patterns (B10 | |
| | nt Deposits (B2) (N | | | | | Living Roo | ts (C3) Dry-Season Water Table | |
| | oosits (B3) (Nonriv | | Presence | | _ | _ | Crayfish Burrows (C8) | |
| Surface | Soil Cracks (B6) | | Recent Iro | n Reduction | on in Tilled | d Soils (C6 |) Saturation Visible on A | erial Imagery (C9) |
| Inundation | on Vis ble on Aeria | l Imagery (B7) | Thin Mucl | Surface (| C7) | | Shallow Aquitard (D3) | |
| Water-S | tained Leaves (B9 |) | Other (Ex | plain in Re | marks) | | FAC-Neutral Test (D5) | |
| Field Obser | vations: | | | | | | | |
| Surface Water | er Present? | Yes No | Depth (in | ches): | | | | |
| Water Table | Present? | Yes No | Depth (in | ches): | | | | |
| Saturation P | resent? | Yes No | Depth (in | ches): | | Wetla | and Hydrology Present? Yes | No <u> </u> |
| (includes car | | | | | | | if available: | |
| Describe Re | corded Data (strea | ııı gauge, monit | oring well, aerial | pnotos, pr | evious ins | pections), | ii available: | |
| Damada | | | | | | | | |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
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| | | | | | | | | |

WDC SR-177, SR-193 to 1800 NorthUDOT



Sample Point 51



Sample Point 51

| Project/Site: WDC Phase II | | | City/Co | _{ounty:} <u>Davis C</u> | County | | Sampling | Date: 202 | 4-05-16 |
|---|----------------|---|----------|----------------------------------|----------------------------|--------------|---------------------|------------------------------|--------------|
| Applicant/Owner: UDOT | | | | | State: _ | Jtah | Sampling | Point: SP5 | 52 |
| Investigator(s): Merissa Davis | | | Section | n, Township, Ra | ange: <u>S30 T5</u> | N R2W | | | |
| Landform (hillslope, terrace, etc.): Flat | | | | | convex, none): | | | Slope (º | %): <u>0</u> |
| Subregion (LRR): D 28A | | Lat: 41. | 13586 | 6468 | Long:112. | 1062216 | 7 | _ Datum: N | NAD83_20 |
| Soil Map Unit Name: HLA - Harrisvi | lle-Leland com | plex, 0 to 1 | perce | nt slopes | N\ | VI classific | cation: Nor | ne — | |
| Are climatic / hydrologic conditions on t | | | | | | | | | |
| Are Vegetation, Soil, or | | | | | "Normal Circum | | | es 🗸 | No |
| Are Vegetation, Soil, or | | | | | eeded, explain a | | | | |
| SUMMARY OF FINDINGS – A | | | | | · | • | | , | res etc |
| | | <u>. </u> | | pinig ponik | 1004110110, 11 | 41100010 | ,,po | | |
| Hydrophytic Vegetation Present? | Yes | No | | Is the Sample | d Area | | | | |
| Hydric Soil Present? Wetland Hydrology Present? | Yes | | | within a Wetla | ınd? | Yes | No _ | | |
| Remarks: | Yes | NO | | | | | | | |
| Conditions were wetter th | an normal a | ccordina | to the | a antacad | ent precipi | tation t | ool but | there h | ad not |
| been rain for several days | | _ | | c anteced | ciit piccipii | tation t | ooi, but | there in | aa not |
| | • | | | | | | | | |
| VEGETATION – Use scientific | names of pi | | Domi | nant Indiantor | Dominanaa | Toot work | rahaat. | | |
| Tree Stratum (Plot size: |) | Absolute % Cover | | nant Indicator ies? Status | Dominance Number of D | | | | |
| 1 | | | | | That Are OB | | or FAC: | 1 | (A) |
| 2 | | | | | Total Numbe | r of Domin | ant | | |
| 3 | | | | | Species Acro | | | 1 | (B) |
| 4 | | | | | Percent of Do | ominant Sı | pecies | | |
| Sapling/Shrub Stratum (Plot size: |) | | _ = Tota | al Cover | That Are OB | L, FACW, | or FAC: | 100.00 | (A/B) |
| 1 | | | | | Prevalence | Index wor | ksheet: | | |
| 2. | | | | | Total % | Cover of: | | Multiply by: | <u>:</u> |
| 3. | | | | | OBL species | 0 | x 1 | = 0 | |
| 4 | | | | | FACW specie | | | | |
| 5 | | | | | FAC species | | | = 180 | |
| Harb Otration (Districts | , | | _ = Tota | al Cover | FACU specie | _ | x 4 | = 32 | |
| Herb Stratum (Plot size: |) | 50 | ~ | FAC | UPL species | | | = 0 | |
| 2. Juncus balticus | | | | FACW | Column Tota | ls: /8 | (A) | 232 | (B) |
| 3. Trifolium fragiferum | | 10 | | FAC | Prevale | ence Index | = B/A = <u>2</u> | 2.97 | |
| 4. Taraxacum officinale | | 8 | | FACU | Hydrophytic | Vegetation | on Indicato | ors: | |
| 5 | | | | | <u>✓</u> Dominar | nce Test is | >50% | | |
| 6. | | | | | Prevaler | nce Index i | s ≤3.0 ¹ | | |
| 7 | | | | | | | | Provide supp | |
| 8 | | | | | | | | eparate she etation¹ (Exp | • |
| Manda Vina Chahama (Diahaina) | , | 78 | _ = Tota | al Cover | FIODICIII | alic Hyulo | priytic vege | ;tation (LX) | ,Jiaiii) |
| Woody Vine Stratum (Plot size: | | | | | ¹ Indicators of | f hydric soi | il and wetla | nd hydroloc | ıv must |
| 1 2 | | | | | be present, u | | | | ,, |
| | | | | | Hydrophytic | ; | | | |
| % Bare Ground in Herb Stratum | % Cc | over of Biotic C | rust | | Vegetation Present? | Ye | s_ 🗸 | No | |
| Remarks: | | , voi oi biotic o | | | i iosciit: | 16 | ~ | .10 | |
| Tromano. | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| Profile Desc | ription: (Describe | to the dep | th neede | ed to docun | nent the i | ndicator | or confirm | the absence of indicators.) | |
|-------------------------------|--|--------------|-----------|-------------------------|-------------|-------------------|------------------|---|-----|
| Depth | Matrix | | | Redo | x Features | 3 | | | |
| (inches) | Color (moist) | % | Color | (moist) | <u>%</u> | Type ¹ | Loc ² | Texture Remarks | |
| 0 - 13 | 5YR 3/2 | 100 | | | | | | Loam | |
| 13 - 24 | 7.5YR 4/2 | 100 | | | | | | Sandy Clay Loam | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | . —— | | | | |
| | | | | | | | | | |
| - | | | | | | | | | |
| - | | | | | | | | | |
| | | | | | | | | | — |
| 1 | | | | | | | | 2 | |
| | oncentration, D=De | | | | | | d Sand Gr | | |
| _ | Indicators: (Appli | cable to all | | | | ea.) | | Indicators for Problematic Hydric Soils ³ : | |
| Histosol | ` ' | | | Sandy Redo | , , | | | 1 cm Muck (A9) (LRR C) | |
| Black Hi | oipedon (A2) | | | Stripped Ma | | (E1) | | 2 cm Muck (A10) (LRR B) | |
| | en Sulfide (A4) | | | Loamy Muc Loamy Gley | - | | | Reduced Vertic (F18) Red Parent Material (TF2) | |
| - | d Layers (A5) (LRR | C) | | Depleted Ma | | (1 2) | | Other (Explain in Remarks) | |
| | ick (A9) (LRR D) | C) | | Redox Dark | ` , | F6) | | Other (Explain in Remarks) | |
| | d Below Dark Surfa | ce (A11) | | Depleted Da | • | • | | | |
| | ark Surface (A12) | (, , , | | Redox Depr | | | | ³ Indicators of hydrophytic vegetation and | |
| | lucky Mineral (S1) | | | Vernal Pool | | , | | wetland hydrology must be present, | |
| | Bleyed Matrix (S4) | | | | ` , | | | unless disturbed or problematic. | |
| Restrictive I | _ayer (if present): | | | | | | | | |
| Type: | | | | | | | | | |
| Depth (inc | ches): | | | | | | | Hydric Soil Present? Yes No | • |
| Remarks: | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| HYDROLO | GY | | | | | | | | |
| Wetland Hyd | drology Indicators | : | | | | | | | |
| Primary Indic | cators (minimum of | one require | d; check | all that apply | v) | | | Secondary Indicators (2 or more required) | i |
| Surface | Water (A1) | | • | Salt Crust | (B11) | | | Water Marks (B1) (Riverine) | |
| | iter Table (A2) | | | Biotic Crus | | | | Sediment Deposits (B2) (Riverine) | |
| Saturation | , , | | | Aquatic Inv | | s (B13) | | Drift Deposits (B3) (Riverine) | |
| | arks (B1) (Nonrive | rine) | | Hydrogen | | . , | | Drainage Patterns (B10) | |
| | nt Deposits (B2) (N o | | | | | | Living Roo | ots (C3) Dry-Season Water Table (C2) | |
| | oosits (B3) (Nonrive | | | Presence of | • | _ | - | Crayfish Burrows (C8) | |
| - | Soil Cracks (B6) | orine) | | Recent Iro | | | | , , , | C0) |
| | ` ' | Imagary (P | | | | | a Solis (Co | | C3) |
| | on Vis ble on Aerial tained Leaves (B9) | | | Thin Muck Other (Exp | • | | | <pre> Shallow Aquitard (D3) FAC-Neutral Test (D5)</pre> | |
| Field Observ | , , | | | Other (EXP | nain in Nei | iliaiks) | | 1 AC-Neutral Test (D3) | |
| | | V | N= V | Danth (in | -h\. | | | | |
| Surface Water | | | | _ Depth (inc | | | | | |
| Water Table | | | | _ Depth (ind | | | | | , |
| Saturation Pr | | Yes | No | _ Depth (ind | ches): | | _ Wetla | and Hydrology Present? Yes No | _ |
| (includes cap Describe Red | oillary fringe) corded Data (strear | m daude m | onitoring | well aerial r | ohotos pre | evious ins | nections) | if available: | |
| 200011201100 | oordod Bata (otrodi | n gaago, m | ormormig | won, aonar p | onotoo, pro | 311000 1110 | pootiono), i | ii availabio. | |
| Remarks: | | | | | | | | | |
| iveilidiks. | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
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WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 52



Sample Point 52

| Project/Site: WDC Phase II | | City/County | : Davis C | ounty | Sampling Date: 2024-05-16 |
|---|----------------|-------------|---------------------------|--|--|
| Applicant/Owner: UDOT | | | | State: Utah | Sampling Point: SP53 |
| Investigator(s): Cara Glabau, Elena Capson | | Section, To | wnship, Ra | nge: S30 T5N R2W | |
| | | | | | /e Slope (%): 0 |
| Subregion (LRR): D 28A | Lat: 41. | 138693 | | Long: -112.1048208 | Datum: NAD83_201 |
| Soil Map Unit Name: HLA - Harrisville-Leland comple | | | | | |
| Are climatic / hydrologic conditions on the site typical for this | | | | | |
| Are Vegetation, Soil, or Hydrologys | | | | | present? Yes No |
| Are Vegetation, Soil, or Hydrologyn | | | | eeded, explain any answe | |
| SUMMARY OF FINDINGS – Attach site map | | | g point l | ocations, transects | s, important features, etc. |
| Hydrophytic Vegetation Present? Yes No |) | | | | |
| Hydric Soil Present? Yes V | | | ie Sampled in a Wetlai | | No |
| Wetland Hydrology Present? Yes No | | With | ıın a wetiai | id? fes | NO |
| Remarks: | | | | | |
| Conditions were wetter than normal according to the antecede grazed by goats. Appears to be ponding of high ground water i adjacent pond. | | | | | |
| VEGETATION – Use scientific names of plant | ts. | | | | |
| | | Dominant | | Dominance Test work | ksheet: |
| Tree Stratum (Plot size:) | % Cover | | | Number of Dominant S | |
| 1 2 | | | | That Are OBL, FACW, | or FAC: $\frac{2}{}$ (A) |
| 3. | | | | Total Number of Domir Species Across All Stra | ^ |
| 4. | | | | · | |
| | | = Total Co | | Percent of Dominant S That Are OBL, FACW, | |
| Sapling/Shrub Stratum (Plot size:) | | | | | |
| 1 | | | | Prevalence Index wor | |
| 2 | | | | Total % Cover of: OBL species 0 | Multiply by: x 1 = 0 |
| 3 | | | | | x 2 = 110 |
| 5 | | | | | x 3 = 60 |
| o | | = Total Co | ver | | x 4 = 100 |
| Herb Stratum (Plot size:) | | | | | x 5 = 0 |
| 1. Phragmites australis | 55 | | FACW | Column Totals: 100 | (A) <u>270</u> (B) |
| 2. Poa pratensis | 20 | | FAC | | 2.70 |
| 3. Hordeum murinum | 10 | | FACU | Prevalence Index | · |
| 4. Melilotus officinalis 5. Taraxacum officinale | <u>10</u> 5 | | FACU FACU | Hydrophytic Vegetati ✓ Dominance Test is | |
| | | | | ✓ Prevalence Index is | |
| 6 | | | | _ | aptations ¹ (Provide supporting |
| 7 8 | | | | | ss or on a separate sheet) |
| 0 | 100 | = Total Co | Wer | Problematic Hydro | pphytic Vegetation ¹ (Explain) |
| Woody Vine Stratum (Plot size:) | | _ 10161 00 | , vCi | | |
| 1 | | | | ¹ Indicators of hydric so be present, unless dist | il and wetland hydrology must |
| 2 | | | | • • | |
| | | = Total Co | ver | Hydrophytic Vegetation | |
| % Bare Ground in Herb Stratum % Cover | of Biotic C | rust | | | es <u>/</u> No |
| Remarks: | | | | <u>. I </u> | |
| | | | | | |
| | | | | | |
| | | | | | |

| Profile Desc | ription: (Describe | to the dep | oth needed to docu | ment the | indicator | or confir | m the absence o | f indicators.) |
|----------------|---------------------------------------|-------------|------------------------|------------|-------------------|------------------|---------------------------|---|
| Depth | Matrix | | Redo | ox Feature | es | | | |
| (inches) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | Texture | Remarks |
| 0 - 10 | 10YR 2/2 | 94 | 7.5YR 5/6 | 6 | С | M | Clay | |
| 10 - 24 | 7.5YR 7/3 | 98 | 7.5YR 5/8 | 2 | С | М | Clay | |
| _ | | | | | | | <u> </u> | |
| | | | | | - | | · | |
| l — — | - | | - | | | | | |
| <u> </u> | | | | | | | | |
| | | | | | | | . <u></u> - | |
| - | | | | | | | | |
| - | | | | | | | | <u> </u> |
| ¹Type: C=C | oncentration D=De | letion RM | =Reduced Matrix, C | S=Covere | ed or Coat | ed Sand G | irains ² l oca | tion: PL=Pore Lining, M=Matrix. |
| | | | LRRs, unless othe | | | eu Sanu C | | or Problematic Hydric Soils ³ : |
| Histosol | | | Sandy Red | | , | | | uck (A9) (LRR C) |
| l — | oipedon (A2) | | Stripped M | | | | | uck (A10) (LRR B) |
| Black Hi | | | Loamy Mu | | al (F1) | | | d Vertic (F18) |
| Hydroge | en Sulfide (A4) | | Loamy Gle | - | | | | rent Material (TF2) |
| Stratified | d Layers (A5) (LRR | C) | Depleted N | ` , | | | Other (E | Explain in Remarks) |
| | ıck (A9) (LRR D) | | ✓ Redox Dar | | | | | |
| - | d Below Dark Surfac | ce (A11) | Depleted D | | | | 3 | |
| l — | ark Surface (A12) | | Redox Dep | | (F8) | | | f hydrophytic vegetation and |
| | Mucky Mineral (S1) Bleyed Matrix (S4) | | Vernal Poo | is (F9) | | | | ydrology must be present, sturbed or problematic. |
| . — | Layer (if present): | | | | | | uniess dis | nuibed of problematic. |
| | Layor (ii procenty) | | | | | | | |
| Depth (in | | | | | | | Hydric Soil F | Present? Yes No |
| Remarks: | | | | | | | Tiyane oon t | 163 <u>163</u> |
| Remarks. | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| HYDROLO | GY | | | | | | | |
| Wetland Hy | drology Indicators | : | | | | | | |
| Primary India | cators (minimum of | one require | d; check all that app | lv) | | | Second | lary Indicators (2 or more required) |
| Surface | | | Salt Crus | | | | | ater Marks (B1) (Riverine) |
| | iter Table (A2) | | Biotic Cru | ` , | | | | diment Deposits (B2) (Riverine) |
| ✓ Saturation | | | Aquatic Ir | | es (B13) | | | ft Deposits (B3) (Riverine) |
| | larks (B1) (Nonrive i | rine) | Hydrogen | | | | | ainage Patterns (B10) |
| | nt Deposits (B2) (No | | | | | Living Ro | | /-Season Water Table (C2) |
| | oosits (B3) (Nonrive | | Presence | | | | · · · — | ayfish Burrows (C8) |
| | Soil Cracks (B6) | , | Recent Ire | | | | | turation Visible on Aerial Imagery (C9) |
| Inundati | on Vis ble on Aerial | Imagery (B | (7) Thin Muc | k Surface | (C7) | | Sh | allow Aquitard (D3) |
| Water-S | tained Leaves (B9) | | Other (Ex | plain in R | emarks) | | <u></u> ✓ FA | C-Neutral Test (D5) |
| Field Obser | vations: | | | | | | | |
| Surface Wat | er Present? | /es | No Depth (ir | nches): | | | | |
| Water Table | Present? | /es | No Depth (ir | nches): | | | | |
| Saturation P | | | No Depth (ir | | | | land Hvdrologv | Present? Yes No |
| (includes car | oillary fringe) | | | | | | | |
| Describe Re | corded Data (strean | n gauge, m | onitoring well, aerial | photos, p | revious in | spections) | , if available: | |
| | | | | | | | | |
| Remarks: | | | | | | | | |
| adiacen | t surface wa | ter coi | nnection to p | ond | | | | |
| aajaccii | Courage wa | .51, 551 | ουιιοπ το μ | J.14 | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

WDC SR-177, SR-193 to 1800 NorthUDOT



Sample Point 53



Sample Point 53

| Project/Site: WDC Phase II | (| City/Cour | Sampling Date: 2024-05-16 | | | |
|--|---------------|-----------|---------------------------|--|---|-----|
| Applicant/Owner: UDOT | | | | State: Utah | _ Sampling Point: SP54 | |
| Investigator(s): Cara Glabau, Elena Capson | | Section, | Township, Ra | nge: S30 T5N R2W | | |
| | | | | | Slope (%): 2 | |
| Subregion (LRR): D 28A | Lat: 41. | 138684 | 67 | Long: -112.1048703 | 33 Datum: NAD83_2 | 201 |
| Soil Map Unit Name: HLA - Harrisville-Leland cor | | | | | | |
| Are climatic / hydrologic conditions on the site typical for | | | | | · | |
| Are Vegetation, Soil, or Hydrology | - | | | | present? Yes No | |
| Are Vegetation, Soil, or Hydrology | | | | eeded, explain any answe | | |
| SUMMARY OF FINDINGS – Attach site m | | | | | | tc. |
| Hydrophytic Vegetation Present? Yes | <u> </u> | | | <u> </u> | · · · | |
| Hydric Soil Present? Yes | No V | | the Sampled | | N | |
| Wetland Hydrology Present? Yes | | W | ithin a Wetla | nd? fes | No | |
| Conditions were wetter than normal according to the | no antocodont | procipita | ation tool bu | it there had not been ra | ain for coveral days prior to th | ho |
| site visit. Pasture grazed by goats. Sample point wa | | | | | | IC |
| | | · . | | | | |
| VEGETATION – Use scientific names of p | lants. | | | | | |
| Taga Chahira (Diahaina) | Absolute | | nt Indicator | Dominance Test work | ksheet: | |
| Tree Stratum (Plot size:) | | | s? Status | Number of Dominant S That Are OBL, FACW, | | |
| 1 2 | | | | | | |
| 3. | | | | Total Number of Domin Species Across All Stra | ^ | |
| 4. | | | | | | |
| | | | | Percent of Dominant S That Are OBL, FACW, | | B) |
| Sapling/Shrub Stratum (Plot size:) | | | | Prevalence Index wo | | |
| 1 | | | | Total % Cover of: | | |
| 2 | | | | | x 1 = 0 | |
| 4 | | | | | x 2 = 0 | |
| 5. | | | | | x 3 = 150 | |
| | | = Total (| Cover | | x 4 = <u>180</u> | |
| Herb Stratum (Plot size:) | 50 | ~ | FAC | | x 5 = 0 | |
| 1. Poa pratensis 2. Hordeum murinum | 30 | | FACU | Column Totals: 95 | (A) <u>330</u> (B | 3) |
| 3. Taraxacum officinale | 30 | | FACU | Prevalence Index | x = B/A = 3.47 | |
| 4 | | | | Hydrophytic Vegetati | <u> </u> | |
| 5. | | | | Dominance Test is | s >50% | |
| 6. | | | | Prevalence Index | is ≤3.0 ¹ | |
| 7 | | | | | aptations ¹ (Provide supporting so or on a separate sheet) | |
| 8 | | | | | ophytic Vegetation ¹ (Explain) | |
| Woody Vine Stratum (Plot size:) | 95 | = Total (| Cover | 1 Toblematic Hydre | physic regulation (Explain) | |
| 1 | | | | ¹ Indicators of hydric so | oil and wetland hydrology must | |
| 2. | | | | be present, unless dist | | |
| | | | Cover | Hydrophytic | | |
| % Bare Ground in Herb Stratum % C | | | | Vegetation Present? Yes | es No | |
| Remarks: | | | | . 7000111. | | |
| Tromano. | | | | | | |
| | | | | | | |
| | | | | | | |
| 1 | | | | | | |

| Profile Desc | ription: (Describe | to the dep | th neede | ed to docun | nent the i | ndicator o | or confirm | n the absence of indicators.) |
|---------------|--|---------------|---------------------------------------|---------------------------|-------------|-------------|------------------|--|
| Depth | Matrix | | | | x Features | | | |
| (inches) | Color (moist) | | Color | (moist) | <u></u> % | Type' | Loc ² | Texture Remarks |
| 0 - 8 | 10YR 3/3 | 100 | | | | | | Clay Loam |
| 8 - 15 | 10YR 5/4 | 100 | | | | | | Silt |
| 15 - 24 | 10YR 3/3 | 100 | | | | | | Clay Loam |
| - | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | · · · · · · · · · · · · · · · · · · · |
| | - | | | | · | | | |
| | | | | | | | | |
| | | | | | · | | | |
| | oncentration, D=De | | | | | | d Sand Gr | rains. ² Location: PL=Pore Lining, M=Matrix. |
| Hydric Soil I | Indicators: (Appli | cable to all | LRRs, u | nless other | wise note | ed.) | | Indicators for Problematic Hydric Soils ³ : |
| Histosol | (A1) | | | Sandy Redo | ox (S5) | | | 1 cm Muck (A9) (LRR C) |
| | pipedon (A2) | | | Stripped Ma | | | | 2 cm Muck (A10) (LRR B) |
| Black Hi | ` ' | | | Loamy Muc | • | . , | | Reduced Vertic (F18) |
| | n Sulfide (A4) | • | | Loamy Gley | | (F2) | | Red Parent Material (TF2) |
| | d Layers (A5) (LRR | C) | | Depleted Ma | . , | FC) | | Other (Explain in Remarks) |
| | ick (A9) (LRR D) d Below Dark Surfac | ce (Δ11) | | Redox Dark Depleted Da | • | , | | |
| | ark Surface (A12) | oc (ATT) | | Redox Depr | | | | ³ Indicators of hydrophytic vegetation and |
| | lucky Mineral (S1) | | | Vernal Pool | | -, | | wetland hydrology must be present, |
| - | Bleyed Matrix (S4) | | · · · · · · · · · · · · · · · · · · · | | . , | | | unless disturbed or problematic. |
| Restrictive L | _ayer (if present): | | | | | | | |
| Type: | | | | | | | | |
| Depth (inc | ches): | | | | | | | Hydric Soil Present? Yes No |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| HYDROLO | GY | | | | | | | |
| | drology Indicators | • | | | | | | |
| - | cators (minimum of | | l: obook | all that apply | ٨ | | | Secondary Indicators (2 or more required) |
| - | • | orie required | i, check | • • • | | | | Secondary Indicators (2 or more required) |
| Surface | ` ' | | - | Salt Crust | ` ' | | | Water Marks (B1) (Riverine) |
| | iter Table (A2) | | | Biotic Crus | | o (D12) | | Sediment Deposits (B2) (Riverine) |
| Saturatio | | wim a) | | Aquatic Inv | | , , | | Drift Deposits (B3) (Riverine) |
| | arks (B1) (Nonrive nt Deposits (B2) (No | | | Hydrogen | | | Living Poo | Drainage Patterns (B10) ots (C3) Dry-Season Water Table (C2) |
| | oosits (B3) (Nonriv e | | | Presence | | _ | - | Crayfish Burrows (C8) |
| - | Soil Cracks (B6) | :iiie) | | Recent Iro | | | | |
| | on Vis ble on Aerial | Imagery (B | | Thin Muck | | | 2 00110 (00 | Shallow Aquitard (D3) |
| | tained Leaves (B9) | illiagery (Di | / | Other (Exp | • | • | | FAC-Neutral Test (D5) |
| Field Observ | <u> </u> | | - | Outor (Exp | | | | |
| Surface Water | | Yes I | No 🗸 | Denth (inc | rhes). | | | |
| Water Table | | Yes I | | | | | | |
| Saturation Pr | | Yes I | | | | | | and Hydrology Present? Yes No 🗸 |
| (includes cap | | res | NO _ • | _ Depth (inc | iles) | | _ wella | and hydrology Fresent? Tes No |
| Describe Red | corded Data (stream | n gauge, mo | nitoring | well, aerial p | photos, pre | evious insp | pections), | if available: |
| | | | | | | | | |
| Remarks: | | | | | | | | |
| | | | | | | | | |
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WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 54



Sample Point 54

| Project/Site: WDC Phase II | | City/Cou | Sampling Date: 2024-05-16 | | |
|---|-------------------------|------------|---------------------------------|---|--|
| Applicant/Owner: UDOT | | | | State: Utah | Sampling Point: SP55 |
| Investigator(s): Merissa Davis | | Section, | Township, Ra | inge: S30 T5N R2W | |
| Landform (hillslope, terrace, etc.): Depression | | | | | re Slope (%): 0 |
| Subregion (LRR): D 28A | Lat: 41. | 135802 | 272 | Long: -112.1053072 | 23 Datum: NAD83_201 |
| Soil Map Unit Name: HLA - Harrisville-Leland con | mplex, 0 to 1 | percen | t slopes | NWI classific | cation: None |
| Are climatic / hydrologic conditions on the site typical fo | r this time of yea | ar? Yes | No _ | (If no, explain in R | Remarks.) |
| Are Vegetation, Soil, or Hydrology | | | | | present? Yes No |
| Are Vegetation, Soil, or Hydrology | | | | eeded, explain any answe | |
| SUMMARY OF FINDINGS – Attach site m | | | | ocations, transects | s, important features, etc. |
| Hydrophytic Vegetation Present? Yes | _ No | | | | |
| Hydric Soil Present? Yes | No | | s the Sampled vithin a Wetla | | No <u> </u> |
| Wetland Hydrology Present? Yes | _ No | | Titiliii a Wellai | 103 | |
| Conditions were wetter than normal according to the ante | cedent precipita | tion tool. | but there had i | not been rain for several da | avs prior to the site visit. |
| Hydrophytic vegetation likely grows due to the small deprindicators for wetland soils or hydrology and does not qua | ession where wa | ter drain | | | |
| | - | • | | | |
| VEGETATION – Use scientific names of p | | Damin | | Dominana Taat wall | |
| Tree Stratum (Plot size:) | Absolute <u>% Cover</u> | | ant Indicator s? Status | Dominance Test work Number of Dominant S | |
| 1 | | | | That Are OBL, FACW, | |
| 2 | | | | Total Number of Domin | nant |
| 3 | | | | Species Across All Stra | A |
| 4 | | | | Percent of Dominant Sp | pecies |
| Sapling/Shrub Stratum (Plot size:) | - | = Total | Cover | That Are OBL, FACW, | or FAC: <u>75.00</u> (A/B) |
| 1 | | | | Prevalence Index wor | ksheet: |
| 2. | | | | Total % Cover of: | Multiply by: |
| 3 | | | | OBL species 0 | x 1 = 0 |
| 4 | | | | | x 2 = 60 |
| 5 | | | | | x 3 = 45 |
| Herb Stratum (Plot size:) | | = Total | Cover | | x 4 = 40 |
| Herb Stratum (Plot size:) 1 Thinopyrum intermedium | 20 | ~ | UPL | | x = 100 (A) 245 (B) |
| 2. Juncus balticus | 15 | | FACW | Column Totals: 75 | (A) <u>245</u> (B) |
| 3. Poa pratensis | 15 | ~ | FAC | Prevalence Index | c = B/A = 3.26 |
| 4. Carex praegracilis | 15 | ~ | FACW | Hydrophytic Vegetation | on Indicators: |
| 5. Taraxacum officinale | 10 | | FACU | ✓ Dominance Test is | |
| 6 | | | | Prevalence Index is | |
| 7 | | | | | aptations ¹ (Provide supporting s or on a separate sheet) |
| 8 | | | | | phytic Vegetation ¹ (Explain) |
| Woody Vine Stratum (Plot size:) | 75 | = Total | Cover | | p.,, a.c. : |
| 1 | | | | ¹ Indicators of hydric soi | il and wetland hydrology must |
| 2. | | | | be present, unless distu | urbed or problematic. |
| | | | Cover | Hydrophytic | |
| % Bare Ground in Herb Stratum % C | over of Biotic C | rust | | Vegetation Present? Ye | es No |
| Remarks: | .515. 5. 5.000 0 | | | 1.000.11. | |
| | | | | | |
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| | | | | | |

| Profile Desc | ription: (Describe | to the dept | h neede | ed to docun | nent the i | ndicator o | or confirm | n the absence of indicators.) |
|-------------------------|--|----------------|-------------|---------------------------|-------------|-------------------|-------------------------|---|
| Depth | Matrix | | | Redo | x Features | 3 | | |
| (inches) | Color (moist) | <u>%</u> | Color | (moist) | % | Type ¹ | Loc ² | Texture Remarks |
| 0 - 4 | 7.5YR 4/2 | 100 | | | | | | Clay |
| 4 - 12 | 7.5YR 3/1 | 100 | | | | | | Clay |
| 12 - 24 | 10YR 5/3 | 100 | | | | | | Silty Clay |
| - | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| ¹ Type: C=Co | oncentration, D=De | oletion, RM= | Reduce | d Matrix, CS | S=Covered | or Coate | d Sand Gr | rains. ² Location: PL=Pore Lining, M=Matrix. |
| | ndicators: (Applic | | | | | | | Indicators for Problematic Hydric Soils ³ : |
| Histosol | (A1) | | | Sandy Redo | ox (S5) | | | 1 cm Muck (A9) (LRR C) |
| Histic Ep | pipedon (A2) | | | Stripped Ma | ıtrix (S6) | | | 2 cm Muck (A10) (LRR B) |
| Black His | ` ' | | | Loamy Muc | - | | | Reduced Vertic (F18) |
| | n Sulfide (A4) | | | Loamy Gley | | (F2) | | Red Parent Material (TF2) |
| | Layers (A5) (LRR | C) | | Depleted Ma | . , | | | Other (Explain in Remarks) |
| | ick (A9) (LRR D) d Below Dark Surfac | (011) | | Redox Dark | • | | | |
| | ark Surface (A12) | æ (ATT) | | Depleted Da Redox Depr | | | | ³ Indicators of hydrophytic vegetation and |
| | lucky Mineral (S1) | | | Vernal Pool | | 0) | | wetland hydrology must be present, |
| - | Bleyed Matrix (S4) | | | voman con | 0 (1 0) | | | unless disturbed or problematic. |
| | ayer (if present): | | | | | | | , |
| _ | | | | | | | | |
| Depth (inc | ches): | | <u></u> | | | | | Hydric Soil Present? Yes No |
| Remarks: | , | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| HYDROLO | | | | | | | | |
| Wetland Hyd | drology Indicators | • | | | | | | |
| Primary Indic | cators (minimum of | one required: | check | all that apply | y) | | | Secondary Indicators (2 or more required) |
| Surface | Water (A1) | | | Salt Crust | (B11) | | | Water Marks (B1) (Riverine) |
| High Wa | ter Table (A2) | | | Biotic Crus | t (B12) | | | Sediment Deposits (B2) (Riverine) |
| Saturation | on (A3) | | _ | Aquatic Inv | ertebrates | s (B13) | | Drift Deposits (B3) (Riverine) |
| Water M | arks (B1) (Nonrive | rine) | _ | Hydrogen | Sulfide Od | lor (C1) | | Drainage Patterns (B10) |
| Sedimer | nt Deposits (B2) (No | nriverine) | _ | Oxidized R | Rhizospher | es along l | Living Roo | ots (C3) Dry-Season Water Table (C2) |
| Drift Dep | oosits (B3) (Nonrive | erine) | | Presence of | of Reduce | d Iron (C4 | ·) | Crayfish Burrows (C8) |
| Surface | Soil Cracks (B6) | | | Recent Iro | n Reductio | on in Tilled | d Soils (C6 | Saturation Visible on Aerial Imagery (C9) |
| Inundation | on Vis ble on Aerial | Imagery (B7 |) | Thin Muck | Surface (| C7) | | Shallow Aquitard (D3) |
| Water-St | tained Leaves (B9) | | | Other (Exp | lain in Re | marks) | | FAC-Neutral Test (D5) |
| Field Observ | | | | | | | | |
| Surface Water | er Present? | /es N | lo | _ Depth (ind | ches): | | _ | |
| Water Table | Present? | res N | lo <u> </u> | _ Depth (ind | ches): | | _ | |
| Saturation Pr | | res N | lo <u> </u> | _ Depth (ind | ches): | | _ Wetla | and Hydrology Present? Yes No |
| (includes cap | oillary fringe) corded Data (strean | ח תפוותם איני | nitorina | well aerial r | photos pro | avious inc | nections) | if available: |
| Describe Ke | Joinen Dala (Silean | ı yauye, IIIOI | morning ' | wen, aenai [| niolos, pre | zvious IIIS | p c ului18), | ıı avandule. |
| Donastica | | | | | | | | |
| Remarks: | | | | | | | | |
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WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 55



Sample Point 55

| Project/Site: WDC Phase II | | City/Cou | _{inty:} Davis C | ounty | Sampling Date: 2024-05-16 |
|--|---------------|----------|--------------------------|--|---|
| Applicant/Owner: UDOT | | - | - | | _ Sampling Point: SP56 |
| Investigator(s): Cara Glabau, Elena Capson | | Section, | Township, Ra | ange: S30 T5N R2W | |
| Landform (hillslope, terrace, etc.): Slope | | Local re | elief (concave, | convex, none): Linear | Slope (%): 1 |
| Subregion (LRR): D 28A | Lat: 41. | 137528 | 35 | _ Long: -112.104359 | Datum: NAD83_201 |
| Soil Map Unit Name: HLA - Harrisville-Leland compl | | | | | |
| Are climatic / hydrologic conditions on the site typical for thi | | | | | |
| Are Vegetation, Soil, or Hydrologys | | | | | "present? Yes No |
| Are Vegetation, Soil, or Hydrology r | naturally pro | blematic | | eeded, explain any answ | |
| SUMMARY OF FINDINGS – Attach site map | showing | samp | ling point l | ocations, transect | s, important features, etc. |
| Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Yes N N N | lo | | s the Sampled | | ∨ No |
| Conditions were wetter than normal accepted rain for several days prior to the s | _ | | | • | • |
| VEGETATION – Use scientific names of plan | | Gradi | uai siopiii | g meadow towai | us poriu. |
| VEGETATION – Ose scientific flames of plan | Absolute | Domin | ant Indicator | Dominance Test wo | rkshoot: |
| Tree Stratum (Plot size:) | | | s? Status | Number of Dominant | |
| 1. Salix alba | 10 | | FACW | That Are OBL, FACW | |
| 2. Elaeagnus angustifolia | 5 | | FAC | Total Number of Dom | |
| 3 | | - | | Species Across All St | rata: <u>4</u> (B) |
| Sapling/Shrub Stratum (Plot size:) | 15 | = Total | Cover | Percent of Dominant That Are OBL, FACW | |
| 1 | | | | Prevalence Index wo | orksheet: |
| 2. | | | | Total % Cover of | : Multiply by: |
| 3 | | | | | x 1 = <u>0</u> |
| 4 | | | | FACW species 105 | |
| 5 | | | | | x 3 = 15 |
| Herb Stratum (Plot size:) | | = Total | Cover | _ | x 4 = 0 |
| 1. Carex praegracilis | 55 | ~ | FACW | UPL species 5 | x 5 = 25 |
| 2. Juncus balticus | 40 | | FACW | Column Totals: 115 | (A) <u>250</u> (B) |
| 3. Rhynchospora nivea | 5 | | UPL | Prevalence Inde | ex = B/A = 2.17 |
| 4. | | | | Hydrophytic Vegeta | tion Indicators: |
| 5. | | | | ✓ Dominance Test | is >50% |
| 6 | | | | ✓ Prevalence Index | |
| 7 | | | | | daptations ¹ (Provide supporting rks or on a separate sheet) |
| 8 | | | | | rophytic Vegetation ¹ (Explain) |
| Woody Vine Stratum (Plot size:) | 100 | = Total | Cover | rroblematio rryal | ophytic vegetation (Explain) |
| 1 | | | | ¹ Indicators of hydric s | oil and wetland hydrology must |
| 2. | | | | | sturbed or problematic. |
| | | = Total | Cover | Hydrophytic | |
| % Bare Ground in Herb Stratum % Cove | r of Biotic C | rust | | Vegetation Present? | /es No |
| Remarks: | | | | | |
| | | | | | |

SOIL

Sampling Point: SP56

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

| Depth | Matrix | | | x Feature | | . 2 | | |
|---------------------------------------|--|-------------|--------------------------|-----------------|-------------------|------------------|---|----------------|
| (inches) | Color (moist) | <u>%</u> | Color (moist) | % | Type ¹ | Loc ² | Texture Remarks | _ |
| 0 - 1 | 10YR 2/2 | 100 | 7 EVD 4/4 | | | | Peat | _ |
| 1 - 20 | 10YR 3/1 | 98 | 7.5YR 4/4 | 2 | <u>D</u> | <u>M</u> | Silty Clay | _ |
| 20 - 24 | 10YR 5/3 | 100 | | | | | Silty Clay | _ |
| | | | | | | | | _ |
| | | | <u></u> | _ | _ | | | |
| | | | | | | | | |
| _ | | | | | | | | |
| - | | | | - | | | - | _ |
| 1Type: C=C | ncentration D=De | nletion PM | 1=Reduced Matrix, C | S=Covere | d or Coat | ted Sand G | Grains. ² Location: PL=Pore Lining, M=Matrix. | _ |
| | | | I LRRs, unless othe | | | ieu Sanu G | Indicators for Problematic Hydric Soils ³ : | |
| Histosol | | | Sandy Red | | , | | 1 cm Muck (A9) (LRR C) | |
| | pipedon (A2) | | Stripped M | . , | | | 2 cm Muck (A10) (LRR B) | |
| Black Hi | stic (A3) | | Loamy Mud | - | | | Reduced Vertic (F18) | |
| | n Sulfide (A4) | | Loamy Gle | | | | Red Parent Material (TF2) | |
| | d Layers (A5) (LRR | C) | Depleted M | , , | | | Other (Explain in Remarks) | |
| | ick (A9) (LRR D) d Below Dark Surfa | re (A11) | ✓ Redox Dari Depleted D | | ` ' | | | |
| | ark Surface (A12) | JC (A11) | Redox Dep | | | | ³ Indicators of hydrophytic vegetation and | |
| | lucky Mineral (S1) | | Vernal Poo | | (- / | | wetland hydrology must be present, | |
| | Gleyed Matrix (S4) | | | | | | unless disturbed or problematic. | |
| Restrictive I | _ayer (if present): | | | | | | | |
| Type: | | | | | | | | |
| Depth (inc | ches): | | | | | | Hydric Soil Present? Yes No | _ |
| | | | | | | | | |
| HYDROLO | | | | | | | | |
| | drology Indicators | | | | | | | |
| | • | one require | ed; check all that app | | | | Secondary Indicators (2 or more required) | _ |
| | Water (A1) | | Salt Crust | ` , | | | Water Marks (B1) (Riverine) | |
| _ | iter Table (A2) | | Biotic Cru | | (D40) | | Sediment Deposits (B2) (Riverine) | |
| ✓ Saturation | | rino\ | Aquatic In | | | | Drift Deposits (B3) (Riverine) | |
| · · · · · · · · · · · · · · · · · · · | arks (B1) (Nonrive nt Deposits (B2) (No | • | Hydrogen | | | g Living Ro | Drainage Patterns (B10) oots (C3) Dry-Season Water Table (C2) | |
| | oosits (B3) (Nonriv e | | Presence | | - | - | Crayfish Burrows (C8) | |
| | Soil Cracks (B6) | , inic, | | | | ed Soils (C | |)) |
| · · · · · · · · · · · · · · · · · · · | on Vis ble on Aerial | Imagery (E | | | | (- | Shallow Aquitard (D3) | , |
| | tained Leaves (B9) | | Other (Ex | | | | FAC-Neutral Test (D5) | |
| Field Observ | vations: | | | | | | | |
| Surface Water | | | No Depth (in | | | | | |
| Water Table | Present? | Yes | No Depth (in | ches): | | | | |
| Saturation Projection (includes cap | | Yes | No Depth (in | ches): <u>3</u> | | Wetl | tland Hydrology Present? Yes No | _ |
| Describe Red | corded Data (strean | n gauge, n | nonitoring well, aerial | photos, p | revious in | spections), | , if available: | |
| | | | | | | | | |
| Domarka: | | | | | | | | |
| Remarks: | ` | | | | | | | |
| Remarks: | · | | | | | | | |
| Remarks: | · | | | | | | | |
| Remarks: | | | | | | | | |

WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 56



Sample Point 56

| Project/Site: WDC Phase II | | | City/Cou | _{unty:} <u>Davis C</u> | ounty | Sa | ampling | Date: 202 | <u>4-05-16</u> |
|---|-------------|---------------------|----------|---------------------------------|---------------------------------|------------------|-------------|---------------|--------------------|
| Applicant/Owner: UDOT | | | | | State: U | tah Sa | ampling | Point: SP5 | 7 |
| Investigator(s): Merissa Davis | | | Section | , Township, Ra | nge: S30 T5N | R2W | | | |
| Landform (hillslope, terrace, etc.): Flat | | | | | convex, none): 1 | | | Slope (% | 6): <u>0</u> |
| Subregion (LRR): D 28A | | Lat: 41. | 13637 | 067 | _ Long: -112.10 | 0514258 | | Datum: N | AD83_20 |
| Soil Map Unit Name: HLA - Harrisville | -Leland com | nplex, 0 to 1 | percer | nt slopes | NW | l classification | on: Nor | ne | |
| Are climatic / hydrologic conditions on the | | | | | | | | | |
| Are Vegetation, Soil, or Hy | | | | | "Normal Circums | | | es 🗸 | No |
| Are Vegetation, Soil, or Hy | | | | | eeded, explain ar | | | | |
| SUMMARY OF FINDINGS - Atta | | | | | | | | | res. etc |
| | | · · | <u> </u> | g po | | | | | |
| Hydrophytic Vegetation Present? | | No | ı | s the Sampled | d Area | | | | |
| Hydric Soil Present? Wetland Hydrology Present? | | No | v | within a Wetla | nd? Y | 'es | No_ | | |
| Remarks: | Yes | NO | | | | | | | |
| | normal a | ooording | to the | antanada | nt procipita | stion too | l but | thoro be | ad nat |
| Conditions were wetter than | | _ | | antecede | ent precipita | וטוו נטט | i, but | there ha | וטוו טנ |
| been rain for several days p | | | | | | | | | |
| VEGETATION – Use scientific n | ames of pl | | | | | | | | |
| Tree Stratum (Plot size: |) | Absolute % Cover | | nant Indicator es? Status | Dominance To | | | | |
| 1 | | | | | Number of Do | | ies FAC: | 1 | (A) |
| 2. | | | | | | • | | | _ ('') |
| 3. | | | | | Total Number Species Acros | | | 2 | (B) |
| 4 | | | | | | | | | _ |
| | | - | = Tota | l Cover | Percent of Dor That Are OBL, | | | 50.00 | (A/B) |
| Sapling/Shrub Stratum (Plot size: | | | | | Prevalence In | dov workel | noot: | | |
| 1 | | | | | | over of: | | Multiply by: | |
| 2 | | | | | OBL species | | | = <u>0</u> | |
| 4 | | | | | FACW species | | | | |
| 5 | | | | | FAC species | 35 | | | |
| | | | | | FACU species | 10 | x 4 | | |
| Herb Stratum (Plot size: | _) | 40 | , | LIDI | UPL species | 40 | | = 200 | |
| 1. Bromus tectorum | | <u>40</u> 35 | | <u>UPL</u> | Column Totals | 93 | (A) | 361 | (B) |
| 2. Poa pratensis 3. Hordeum murinum | | <u>35</u> 10 | | FAC FACU | Prevalen | ce Index = | R/Δ = 3 | 3.88 | |
| 4. Juncus balticus | | 8 | - | FACW | Hydrophytic \ | | | | |
| 5 | | | - | | Dominand | | | | |
| 6 | | | | | Prevalenc | | | | |
| 7 | | | | | Morpholog | | | | |
| 8. | | | | | | Remarks or | | • | • |
| | | 93 | = Tota | l Cover | Problemat | tic Hydrophy | tic Vege | etation' (Exp | _i lain) |
| Woody Vine Stratum (Plot size: | | | | | 1 maliantana af h | | | | |
| 1 | | | | | ¹ Indicators of h | | | | y must |
| 2 | | | | | | | | | |
| | | | =' | | Hydrophytic Vegetation | | | | |
| % Bare Ground in Herb Stratum | % Co | over of Biotic C | rust | | Present? | Yes _ | | No | |
| Remarks: | | | | | | | _ | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| Profile Desc | ription: (Describ | e to the depth | needed to docu | ment the i | ndicator | or confirm | the absence of indic | ators.) |
|--------------------|---------------------------------------|-------------------|----------------------|--------------|-------------|------------------|-----------------------------|--------------------------------------|
| Depth | Matrix | | | x Feature: | | . 2 | - . | 5 |
| (inches) 0 - 10 | Color (moist) | <u>%</u> | Color (moist) | % | Type' | Loc ² | Texture | Remarks |
| | 10YR 3/2 | | | | | | Loam | |
| 10 - 20 | 10YR 5/3 | 100 | | | | - | Silty Clay | |
| - | | | | | | | | |
| - | | | | | | | | |
| - | | | | | | | | |
| | | | | | | | | |
| | | | | | | | · | |
| | | | | | | | | |
| - | | | | | | | | |
| | oncentration, D=D | | | | | d Sand Gr | | PL=Pore Lining, M=Matrix. |
| - | Indicators: (Appl | icable to all LR | | | ed.) | | | olematic Hydric Soils ³ : |
| Histosol | (A1) pipedon (A2) | | Sandy Red Stripped M | | | | 1 cm Muck (A9 2 cm Muck (A1 | |
| - | stic (A3) | | Suipped M | , , | l (F1) | | Reduced Vertice | , , , |
| | en Sulfide (A4) | | Loamy Gle | - | | | Red Parent Ma | |
| | d Layers (A5) (LRF | R C) | Depleted M | | () | | Other (Explain | |
| | ıck (A9) (LRR D) | - / | Redox Dar | ` , | (F6) | | | , |
| Depleted | d Below Dark Surfa | ace (A11) | Depleted D | ark Surfac | e (F7) | | | |
| | ark Surface (A12) | | Redox Dep | | F8) | | - | phytic vegetation and |
| - | Mucky Mineral (S1) | | Vernal Poo | ls (F9) | | | | y must be present, |
| - | Gleyed Matrix (S4) | | | | | | unless disturbed | or problematic. |
| | Layer (if present) | | | | | | | |
| Type: | abaa): | | | | | | Undria Cail Dragant | ? Yes No ✔ |
| | ches): | | _ | | | | Hydric Soil Present | 1? Yes No |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| HYDROLO | GY | | | | | | | |
| Wetland Hy | drology Indicator | s: | | | | | | |
| Primary India | cators (minimum o | f one required; c | heck all that app | ly) | | | Secondary Ind | licators (2 or more required) |
| Surface | Water (A1) | | Salt Crust | (B11) | | | Water Ma | rks (B1) (Riverine) |
| High Wa | ater Table (A2) | | Biotic Cru | st (B12) | | | Sediment | Deposits (B2) (Riverine) |
| Saturation | on (A3) | | Aquatic In | | s (B13) | | | osits (B3) (Riverine) |
| Water M | larks (B1) (Nonriv | erine) | Hydrogen | Sulfide Od | dor (C1) | | Drainage | Patterns (B10) |
| Sedimer | nt Deposits (B2) (N | lonriverine) | Oxidized | Rhizosphe | res along | Living Roo | ots (C3) Dry-Seaso | on Water Table (C2) |
| Drift Dep | oosits (B3) (Nonri v | verine) | Presence | of Reduce | ed Iron (C4 | ·) | Crayfish E | Burrows (C8) |
| Surface | Soil Cracks (B6) | | Recent Iro | n Reducti | on in Tille | d Soils (C6 | S) Saturation | Visible on Aerial Imagery (C9) |
| Inundati | on Vis ble on Aeria | al Imagery (B7) | Thin Mucl | Surface (| C7) | | Shallow A | quitard (D3) |
| Water-S | tained Leaves (B9 |) | Other (Ex | plain in Re | marks) | | FAC-Neut | ral Test (D5) |
| Field Obser | vations: | | | | | | | |
| Surface Wat | er Present? | Yes No | Depth (in | iches): | | | | |
| Water Table | Present? | Yes No | Depth (in | iches): | | | | |
| Saturation P | | Yes No | Depth (in | ches): | | Wetla | and Hydrology Preser | nt? Yes No |
| (includes cap | oillary fringe) corded Data (strea | ım galige monit | oring well serial | nhotos pr | evious inc | nections) | if available: | |
| Describe Ne | corded Data (Strea | iiii gauge, monit | oring well, aerial | priotos, pri | evious iris | pections), | ii avallabie. | |
| Remarks: | | | | | | | | |
| Nemains. | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

WDC SR-177, SR-193 to 1800 NorthUDOT



Sample Point 57



Sample Point 57

| Project/Site: WDC Phase II | | | City/Cour | _{nty:} <u>Davis C</u> | ounty | | Sampling Da | _{ate:} 2024 | -05-16 |
|--|---------------------|-------------------|-----------|--------------------------------|---------------------|--------------------------------|--|----------------------|------------|
| Applicant/Owner: UDOT | | | | | State | : Utah | Sampling Po | oint: SP58 | } |
| Investigator(s): Merissa Davis | | | Section, | Township, Ra | nge: <u>S30 1</u> | 75N R2W | | | |
| Landform (hillslope, terrace, etc.): Depr | | | | | | |) | Slope (%) | : <u>0</u> |
| Subregion (LRR): D 28A | | Lat: 41. | 136380 | 78 | _ Long: <u>-1</u> 1 | 2.10512455 | <u>. </u> | Datum: NA | D83_20 |
| Soil Map Unit Name: HLA - Harrisvill | e-Leland com | nplex, 0 to 1 | percent | slopes | | NWI classifica | ation: None | | |
| Are climatic / hydrologic conditions on th | ne site typical for | this time of year | ar? Yes | No _ | (If no | , explain in Re | emarks.) | | |
| Are Vegetation, Soil, or I | Hydrology | significantly | disturbed | l? Are | "Normal Circ | umstances" p | resent? Yes | ;_ _ N | 10 |
| Are Vegetation, Soil, or I | Hydrology | naturally pro | blematic | ? (If ne | eeded, expla | in any answer | s in Remarks | s.) | |
| SUMMARY OF FINDINGS - A | ttach site ma | ap showing | sampl | ing point l | ocations, | transects, | importan | nt feature | es, etc |
| | | | | | | | <u> </u> | | |
| Hydrophytic Vegetation Present? Hydric Soil Present? | Yes | No | | the Sampled | | | | | |
| Wetland Hydrology Present? | Yes | | w | ithin a Wetlai | nd? | Yes | No | | |
| Remarks: | | | | | | | | | |
| Conditions were wetter that | an normal a | ccording | to the | antecede | ent preci | nitation to | ol but tl | here had | d not |
| been rain for several days | | • | | antoooac | one proof | pridition | , o i , b a c ci | ioro na | a not |
| <u>-</u> | - | | | | | | | | |
| VEGETATION – Use scientific | names or pr | Absolute | Domina | ant Indicator | Dominan | ce Test works | shoot: | | |
| Tree Stratum (Plot size: |) | | | Status | | f Dominant Sp | | | |
| 1 | | | | | | OBL, FACW, o | | | _ (A) |
| 2 | | | | | Total Num | nber of Domina | ant | | |
| 3 | | | | | | cross All Strat | | | _ (B) |
| 4 | | | | | Percent of | f Dominant Sp | ecies | | |
| Sapling/Shrub Stratum (Plot size: |) | | = Total | Cover | That Are 0 | OBL, FACW, o | r FAC: <u>10</u> | 0.00 | _ (A/B) |
| 1 | | | | | Prevalence | ce Index work | sheet: | | |
| 2. | | | | | Total | % Cover of: | Mı | ultiply by: | |
| 3. | | | | | OBL spec | ies <u>40</u> | x 1 = | 40 | |
| 4 | | | | | FACW sp | ecies 60 | x 2 = | 120 | _ |
| 5 | | | | | FAC spec | | x 3 = | | |
| Harly Otrack was (Diet sings | | | = Total | Cover | FACU spe | _ | x 4 = | | _ |
| Herb Stratum (Plot size: 1. Schoenoplectus acutus |) | 40 | ~ | OBL | UPL spec | | x 5 = | | _ |
| 2. Carex praegracilis | | 35 | | FACW | Column T | otals: 100 | (A) | 160 | (B) |
| 3. Juncus balticus | | 25 | | FACW | Prev | alence Index | = B/A = <u>1.6</u> | 30 | |
| 4 | | | - | | Hydrophy | tic Vegetatio | n Indicators | ;; | |
| 5. | | | | | <u>✓</u> Domi | nance Test is | >50% | | |
| 6 | | | | | <u>✓</u> Preva | alence Index is | ≤3.0 ¹ | | |
| 7 | | | | | | hological Adap | | | |
| 8 | | | | | | ta in Remarks ematic Hydrop | | | |
| | , | 100 | = Total | Cover | PIODI | еттанс пунтор | nylic vegela | шоп (⊏хріа | (111k |
| Woody Vine Stratum (Plot size: | · | | | | 1Indicators | s of hydric soil | and wetland | hydrology | must |
| 1 2 | | | | | | t, unless distu | | | muot |
| | | | | | Hydrophy | | | | |
| 9/ Para Cround in Horh Stratum | 9/ Cc | | _ | | Vegetatio | n Voc | . <u>~</u> N | lo. | |
| % Bare Ground in Herb Stratum | % C0 | over or blotic C | rust | | Present? | res | · _ N | lo | |
| Remarks: | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| Depth | Matrix | | Redox | Features | | | |
|--|--|--|---|--|---|---|--|
| (inches) | Color (moist) | % | Color (moist) | %Type ¹ | Loc ² | Texture | Remarks |
| 0 - 10 | 7.5YR 4/2 | 100 | | | | Silty Clay | |
| 10 - 18 | 10YR 6/2 | 100 | | | | Clay | |
| | | | | | | | |
| | - | | | | | | |
| | | | | | | | |
| - | | | | | | | |
| _ | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | Reduced Matrix, CS | | ted Sand Gr | | on: PL=Pore Lining, M=Matrix. |
| - | | cable to all L | RRs, unless other | | | | Problematic Hydric Soils ³ : |
| Histosol | ` ' | | Sandy Redo | | | · · · · · · · · · · · · · · · · · · · | (A9) (LRR C) |
| | oipedon (A2) | | Stripped Mat | , , | | | ((A10) (LRR B) |
| | stic (A3) | | - | y Mineral (F1) | | | /ertic (F18) |
| | en Sulfide (A4) | | | ed Matrix (F2) | | · · · · · · · · · · · · · · · · · · · | nt Material (TF2) |
| | d Layers (A5) (LRR | C) | <u>✓</u> Depleted Ma | ` ' | | Other (Exp | olain in Remarks) |
| | ıck (A9) (LRR D) | (8.4.4) | Redox Dark | ` , | | | |
| | d Below Dark Surfa | ce (A11) | | rk Surface (F7) | | 31 | and an about a constation and |
| | ark Surface (A12) | | Redox Depre | | | | ydrophytic vegetation and |
| - | Mucky Mineral (S1) Gleyed Matrix (S4) | | Vernal Pools | (F9) | | - | rology must be present, rbed or problematic. |
| | Layer (if present): | | | | | uniess dista | ibed of problematic. |
| | Layer (ii present). | | | | | | |
| • • | | | | | | Uhadaia Cail Bas | esent? Yes / No |
| Depth (in | ches): | | | | | Hydric Soil Pre | esent? Yes V No No |
| | 0 V | | | | | | |
| YDROLO | | | | | | | |
| - | drology Indicators | | shook all that apply | Λ. | | Casanda | u Indicatora (2 or more required) |
| | • | one required | check all that apply | - | | Secondar | y Indicators (2 or more required) |
| ✓ Surface | ` , | | Salt Crust (| R11) | | | |
| High Wa | ater Table (A2) | | | , | | | r Marks (B1) (Riverine) |
| | | | Biotic Crust | t (B12) | | Sedir | ment Deposits (B2) (Riverine) |
| | ` , | | Biotic Crust | , | | Sedir | , , , , , |
| | on (A3) larks (B1) (Nonrive | erine) | Biotic Crusi | t (B12) | | Sedir Drift Drair | ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) |
| Water M | ` , | • | Biotic Crusi Aquatic Inv Hydrogen S | t (B12) ertebrates (B13) | | Sedir Drift Drair | ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) |
| Water M Sedimer | larks (B1) (Nonrive | onriverine) | Biotic Crusi Aquatic Inv Hydrogen S Oxidized R | t (B12) ertebrates (B13) Sulfide Odor (C1) | g Living Roc | Sedii Drift Drair ots (C3) Dry-5 | ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) |
| Water M Sedimer Drift Dep | larks (B1) (Nonrive nt Deposits (B2) (N | onriverine) | Biotic Crusi Aquatic Inv Hydrogen S Oxidized R Presence o | t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alon | g Living Roc C4) | Sedii Drift Drair ots (C3) Dry-S Cray | ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) |
| Water M Sedimer Drift Der Surface | larks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonriv | onriverine) erine) | Biotic Crusi Aquatic Inv Hydrogen S Oxidized R Presence o | t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alon f Reduced Iron (G | g Living Roc C4) | Sedii Drift Drain ots (C3) Dry-5 Cray 5) Satu | ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) |
| Water M Sedimer Drift Dep Surface Inundati | larks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonriv Soil Cracks (B6) | onriverine) erine) Imagery (B7 | Biotic Crusi Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Thin Muck | t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alon f Reduced Iron (G | g Living Roc C4) | Sedii Drift Drair ots (C3) Cray Cray s) Satui Shall | ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Season Water Table (C2) Fish Burrows (C8) ration Visible on Aerial Imagery (C9) |
| Water M Sedimer Drift Dep Surface Inundati Water-S | larks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) | onriverine) erine) Imagery (B7 | Biotic Crusi Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Thin Muck | t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (C) n Reduction in Till Surface (C7) | g Living Roc C4) | Sedii Drift Drair ots (C3) Cray Cray s) Satui Shall | ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Deason Water Table (C2) Tish Burrows (C8) ration Visible on Aerial Imagery (C9) low Aquitard (D3) |
| Water M Sedimer Drift Dep Surface Inundati Water-S | larks (B1) (Nonrive int Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: | onriverine) erine) I Imagery (B7 | Biotic Crusi Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Thin Muck Other (Expl | t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (G n Reduction in Till Surface (C7) lain in Remarks) | g Living Roc C4) | Sedii Drift Drair ots (C3) Cray Cray s) Satui Shall | ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Deason Water Table (C2) Tish Burrows (C8) ration Visible on Aerial Imagery (C9) low Aquitard (D3) |
| Water M Sedimer Drift Dep Surface Inundati Water-S Field Obser Surface Water | larks (B1) (Nonrive int Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? | onriverine) erine) I Imagery (B7 | Biotic Crusi Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Thin Muck Other (Expl | t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (C) n Reduction in Till Surface (C7) lain in Remarks) hes): 1 | g Living Roo C4) led Soils (C6 | Sedii Drift Drair ots (C3) Cray Cray s) Satui Shall | ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Deason Water Table (C2) Tish Burrows (C8) ration Visible on Aerial Imagery (C9) low Aquitard (D3) |
| Water M Sedimer Drift Dep Surface Inundati Water-S Field Obser Surface Wat Water Table | larks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? | onriverine) erine) I Imagery (B7 Yes N | Biotic Crusi Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Thin Muck Other (Expl | t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (C) n Reduction in Till Surface (C7) ain in Remarks) hes): 1 hes): 0 | g Living Roo C4) led Soils (C6 | Sedii Drift Drair ots (C3) Satui Shall | ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Season Water Table (C2) Sish Burrows (C8) Station Visible on Aerial Imagery (C9) low Aquitard (D3) Neutral Test (D5) |
| Water M Sedimer Drift Dep Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P | larks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? | onriverine) erine) I Imagery (B7 Yes N | Biotic Crusi Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Thin Muck Other (Expl | t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (C) n Reduction in Till Surface (C7) ain in Remarks) hes): 1 hes): 0 | g Living Roo C4) led Soils (C6 | Sedii Drift Drair ots (C3) Satui Shall | ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Deason Water Table (C2) Tish Burrows (C8) ration Visible on Aerial Imagery (C9) low Aquitard (D3) |
| Water M Sedimer Drift Dep Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes cap | larks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? pillary fringe) | onriverine) erine) I Imagery (B7 Yes N Yes N | Biotic Crusi Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Thin Muck Other (Expl | t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (C) n Reduction in Till Surface (C7) lain in Remarks) hes): 1 hes): 0 hes): 0 | g Living Roo C4) led Soils (C6 | Sedii Drift Drair ots (C3) Satui Shall FAC- | ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Season Water Table (C2) Sish Burrows (C8) Station Visible on Aerial Imagery (C9) low Aquitard (D3) Neutral Test (D5) |
| Water M Sedimer Drift Dep Surface Inundati Water-S Field Obser Surface Water Table Saturation P (includes cap | larks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? pillary fringe) | onriverine) erine) I Imagery (B7 Yes N Yes N | Biotic Crusi Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Thin Muck Other (Expl | t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (C) n Reduction in Till Surface (C7) lain in Remarks) hes): 1 hes): 0 hes): 0 | g Living Roo C4) led Soils (C6 | Sedii Drift Drair ots (C3) Satui Shall FAC- | ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Season Water Table (C2) Sish Burrows (C8) Station Visible on Aerial Imagery (C9) low Aquitard (D3) Neutral Test (D5) |
| Sedimer Drift Dep Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes cap | larks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? pillary fringe) | onriverine) erine) I Imagery (B7 Yes N Yes N | Biotic Crusi Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Thin Muck Other (Expl | t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (C) n Reduction in Till Surface (C7) lain in Remarks) hes): 1 hes): 0 hes): 0 | g Living Roo C4) led Soils (C6 | Sedii Drift Drair ots (C3) Satui Shall FAC- | ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Season Water Table (C2) Sish Burrows (C8) Station Visible on Aerial Imagery (C9) low Aquitard (D3) Neutral Test (D5) |
| Water M Sedimen Drift Dep Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes cap Describe Re | larks (B1) (Nonrive int Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? present? pillary fringe) corded Data (stream | onriverine) erine) I Imagery (B7 Yes N Yes N The gauge, model | Biotic Crusi Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Thin Muck Other (Expl | t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (C) n Reduction in Till Surface (C7) lain in Remarks) hes): 1 hes): 0 hotos, previous in | g Living Roo C4) led Soils (C6 Wetlanspections), | Sedin Drift Drain Drain Drain Drain Drain Dry-S Sature Shall | ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) low Aquitard (D3) Neutral Test (D5) resent? Yes No |
| Water M Sedimer Drift Dep Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes cap Describe Re Remarks: | larks (B1) (Nonrive Int Deposits (B2) (No Int Deposits (B3) (Nonrive Soil Cracks (B6) Int Oracks (B6) Int Oracks (B9) Int Oracks (B1) (Nonrive Int Oracks (B1) (Non | onriverine) erine) I Imagery (B7 Yes N Yes N The gauge, model is on edges | Biotic Crusi Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Thin Muck Other (Expl | t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (C) n Reduction in Till Surface (C7) lain in Remarks) hes): 1 hes): 0 hotos, previous in | g Living Roo C4) led Soils (C6 Wetlanspections), | Sedin Drift Drain Drain Drain Drain Drain Drain Dry-S Sature Shall FAC- | ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Season Water Table (C2) Sish Burrows (C8) Station Visible on Aerial Imagery (C9) low Aquitard (D3) Neutral Test (D5) |
| Water M Sedimer Drift Der Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P Fincludes cap Describe Re Remarks: | larks (B1) (Nonrive int Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? present? pillary fringe) corded Data (stream | onriverine) erine) I Imagery (B7 Yes N Yes N The gauge, model is on edges | Biotic Crusi Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Thin Muck Other (Expl | t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (C) n Reduction in Till Surface (C7) lain in Remarks) hes): 1 hes): 0 hotos, previous in | g Living Roo C4) led Soils (C6 Wetlanspections), | Sedin Drift Drain Drain Drain Drain Drain Drain Dry-S Sature Shall FAC- | ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9 low Aquitard (D3) Neutral Test (D5) resent? Yes No |

WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 58



Sample Point 58

| Project/Site: WDC Phase II | C | ity/County: Davi | s County | _ Sampling Date: 2024-05-16 |
|--|-----------------------|--------------------|---|--|
| Applicant/Owner: UDOT | | | State: Utah | Sampling Point: SP59 |
| Investigator(s): Cara Glabau, Elena Capson | <u> </u> | ection, Township | , Range: S30 T5N R2W | |
| Landform (hillslope, terrace, etc.): Flat | L | ocal relief (conca | ave, convex, none): None | Slope (%): 0 |
| Subregion (LRR): D 28A | Lat: 41.1 | 3726833 | Long: -112.1043131 | 17 Datum: NAD83_20 |
| Soil Map Unit Name: HLA - Harrisville-Lelan | id complex, 0 to 1 p | ercent slopes | NWI classifi | cation: None |
| Are climatic / hydrologic conditions on the site typ | | | | |
| Are Vegetation, Soil, or Hydrology | | | | present? Yes No |
| Are Vegetation, Soil, or Hydrology | | | (If needed, explain any answ | |
| SUMMARY OF FINDINGS – Attach si | | | | |
| | | | | |
| | No | Is the Sam | pled Area | |
| | No | within a W | etland? Yes | No |
| Wetland Hydrology Present? Yes _ Remarks: | No | | | |
| | | | | |
| Conditions were wetter than nor | _ | o the antece | edent precipitation | tool, but there had not |
| been rain for several days prior t | o the site visit. | | | |
| VEGETATION – Use scientific names | of plants. | | | |
| Trac Stratum (Diet size: | | Dominant Indica | | ksheet: |
| Tree Stratum (Plot size:) | · | Species? Statu | — Number of Dominant S | ' 4 |
| 1 | | | That Are OBL, FACW, | 01 FAC (A) |
| 2 | | | Total Number of Domi Species Across All Str | • • |
| 4 | | | | |
| | | = Total Cover | Percent of Dominant S That Are OBL, FACW, | |
| Sapling/Shrub Stratum (Plot size: |) | | | |
| 1 | | | Prevalence Index wo | |
| 2 | | | Total % Cover of: | |
| 3 | | | | $x 1 = \frac{0}{0}$ $x 2 = \frac{0}{0}$ |
| 4 | | | | x 3 = 105 |
| 5 | | = Total Cover | FACU species 44 | |
| Herb Stratum (Plot size:) | | rotal cover | | x 5 = 105 |
| 1. Poa pratensis | 35 | ✓ FAC | Column Totals: 100 | |
| 2. Hordeum murinum | 28 | FACL | | 0.00 |
| 3. Lolium arundinaceum | 16 | UPL FACE | | x = B/A = <u>3.86</u> |
| 4. Veronica arvensis | <u>13</u> | FACU | _ ' ' ' ' | |
| 5. Lamium amplexicaule | <u>5</u> 3 | UPL FACI | Dominance Test is J Prevalence Index | |
| 6. Matricaria discoidea | | | | aptations¹ (Provide supporting |
| 7 | | | | ks or on a separate sheet) |
| 8 | | = Total Cover | Problematic Hydro | ophytic Vegetation ¹ (Explain) |
| Woody Vine Stratum (Plot size: | | - Total Cover | | |
| 1 | | | | oil and wetland hydrology must |
| 2 | | | be present, unless dis | turbed or problematic. |
| | : | = Total Cover | Hydrophytic Vegetation | |
| % Bare Ground in Herb Stratum | % Cover of Biotic Cru | ıst | | es No <u> </u> |
| Remarks: | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| (inches) 0 - 8 8 - 19 | Color (moist) | <u></u> % | Redox Features Color (moist) % Type ¹ | Loc ² Texture Remarks |
|---|--|---|---|---|
| 8 - 19 | 10YR 4/3 | | Color (moist) % Type | Clay Loam |
| _ | - | | | |
| | 10YR 4/2 | _ 100 _ | | Silty Clay |
| 19 - 24 | 10YR 4/3 | <u>100</u> | | Silt Loam |
| | | | | |
| - | | | | |
| - | | | | |
| _ | | | | |
| _ | | | | |
| | noontration D=D | nlotion DM-D | aduced Matrix, CS=Covered or Costed 9 | Sand Grains. ² Location: PL=Pore Lining, M=Matrix. |
| | | | educed Matrix, CS=Covered or Coated S Rs, unless otherwise noted.) | Indicators for Problematic Hydric Soils ³ : |
| Histosol (| | | Sandy Redox (S5) | 1 cm Muck (A9) (LRR C) |
| | ipedon (A2) | | Stripped Matrix (S6) | 2 cm Muck (A10) (LRR B) |
| Black His | | | Loamy Mucky Mineral (F1) | Reduced Vertic (F18) |
| | n Sulfide (A4) | | Loamy Gleyed Matrix (F2) | Red Parent Material (TF2) |
| | Layers (A5) (LRF | (C) | Depleted Matrix (F3) | Other (Explain in Remarks) |
| | ck (A9) (LRR D) I Below Dark Surfa | nce (Δ11) | Redox Dark Surface (F6)Depleted Dark Surface (F7) | |
| | rk Surface (A12) | ice (ATT) | Redox Depressions (F8) | ³ Indicators of hydrophytic vegetation and |
| | ucky Mineral (S1) | | Vernal Pools (F9) | wetland hydrology must be present, |
| - | leyed Matrix (S4) | | | unless disturbed or problematic. |
| estrictive L | .ayer (if present): | | | |
| Type: | | | <u> </u> | |
| Depth (inc | :hes): | | <u></u> | Hydric Soil Present? Yes No |
| Remarks: | | | | |
| YDROLOG | | | | |
| Vetland Hyd | Irology Indicator | s: | | |
| | ators (minimum of | one required; o | | |
| rimary Indic | M-4 (A 4) | | heck all that apply) | Secondary Indicators (2 or more required |
| | water (AT) | • | heck all that apply) Salt Crust (B11) | Secondary Indicators (2 or more required Water Marks (B1) (Riverine) |
| Surface \ | ter Table (A2) | | | · · · · · · · · · · · · · · · · · · · |
| Surface \ High Wat Saturatio | ter Table (A2) on (A3) | | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) | Water Marks (B1) (Riverine) |
| Surface \ High Wat Saturatio Water Ma | ter Table (A2) on (A3) arks (B1) (Nonriv e | • | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) |
| Surface \ High Wat Saturatio Water Ma | ter Table (A2) on (A3) arks (B1) (Nonriv t Deposits (B2) (N | onriverine) | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) |
| Surface \ High Wat Saturatio Water Ma Sedimen Drift Dep | ter Table (A2) on (A3) arks (B1) (Nonriv e t Deposits (B2) (N osits (B3) (Nonriv | onriverine) | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) ving Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) |
| Surface \ High Wat Saturatio Water Ma Sedimen Drift Dep Surface S | ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (N oosits (B3) (Nonriv Soil Cracks (B6) | onriverine) rerine) | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Ving Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery |
| Surface \ High Wal Saturatio Water Ma Sedimen Drift Dep Surface S Inundatio | ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (N osits (B3) (Nonriv Soil Cracks (B6) on Vis ble on Aeria | onriverine) verine) I Imagery (B7) | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Ving Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery Shallow Aquitard (D3) |
| Surface N High Wat Saturatio Water Ma Sedimen Drift Dep Surface S Inundatio Water-St | ter Table (A2) on (A3) arks (B1) (Nonriv t Deposits (B2) (N osits (B3) (Nonriv Soil Cracks (B6) on Vis ble on Aeria | onriverine) verine) I Imagery (B7) | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Ving Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery |
| Surface \ High Wat Saturatio Water Ma Sedimen Drift Dep Surface S Inundatio Water-St | ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (Nonrive soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9) vations: | onriverine) verine) I Imagery (B7) | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) Other (Explain in Remarks) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Ving Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| Surface N High Wat Saturatio Water Ma Sedimen Drift Dep Surface S Inundatio Water-St Field Observ Surface Wate | ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (Nonrive Soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9 vations: er Present? | onriverine) verine) I Imagery (B7)) Yes No | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) Other (Explain in Remarks) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Ving Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| Surface \ High Wat Saturatio Water Ma Sedimen Drift Dep Surface S Inundatio Water-St Field Observ Surface Water | ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (Nonsits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria ained Leaves (B9 vations: er Present? Present? | onriverine) Verine) I Imagery (B7)) Yes No Yes No | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Uning Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| Surface \ High Wat Saturatio Water Ma Sedimen Drift Dep Surface S Inundatio Water-St | ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (Nonsits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria ained Leaves (B9 vations: er Present? Present? | onriverine) Verine) I Imagery (B7)) Yes No Yes No | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) Other (Explain in Remarks) | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Ving Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| Surface \ High Wat Saturatio Water Ma Sedimen Drift Dep Surface S Inundatio Water-St Field Observ Surface Water Vater Table I Saturation Proincludes cap | ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (Nonsits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria ained Leaves (B9 vations: er Present? Present? esent? illary fringe) | onriverine) rerine) I Imagery (B7)) Yes No Yes No Yes No | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) wing Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No |
| Surface \ High Wat Saturatio Water Ma Sedimen Drift Dep Surface S Inundatio Water-St Field Observ Surface Water Vater Table I Saturation Proincludes cap | ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (Nonsits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria ained Leaves (B9 vations: er Present? Present? esent? illary fringe) | onriverine) rerine) I Imagery (B7)) Yes No Yes No Yes No | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) wing Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No |
| Surface \ High Wat Saturatio Water Ma Sedimen Drift Dep Surface S Inundatio Water-St Field Observ Surface Water Vater Table I Saturation Proincludes cap | ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (Nonsits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria ained Leaves (B9 vations: er Present? Present? esent? illary fringe) | onriverine) rerine) I Imagery (B7)) Yes No Yes No Yes No | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) wing Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No |
| Surface N High Wat Saturatio Water Ma Sedimen Drift Dep Surface S Inundatio Water-St Field Observ Surface Water Vater Table I Saturation Proincludes cap Describe Rec | ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (Nonsits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria ained Leaves (B9 vations: er Present? Present? esent? illary fringe) | onriverine) rerine) I Imagery (B7)) Yes No Yes No Yes No | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) wing Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No |
| Surface \ High Wat Saturatio Water Ma Sedimen Drift Dep Surface S Inundatio Water-St ield Observ urface Water Vater Table If aturation Proncludes cap | ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (Nonsits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria ained Leaves (B9 vations: er Present? Present? esent? illary fringe) | onriverine) rerine) I Imagery (B7)) Yes No Yes No Yes No | Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): | Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) wing Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No |

WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 59



Sample Point 59

| Project/Site: WDC Phase II | | | City/Cou | _{ınty:} <u>Davis C</u> | ounty | Sa | ampling | Date: 2024 | <u> 4-05-16</u> |
|---|-------------|---------------------|----------|---------------------------------|---|---------------------------|------------------|---------------------------|-----------------|
| Applicant/Owner: UDOT | | | | | State: <u>U</u> | tah Sa | ampling | Point: SP6 | 0 |
| Investigator(s): Cara Glabau, Elena Ca | pson | | Section | , Township, Ra | _{inge:} S30 T5N | R2W | | | |
| Landform (hillslope, terrace, etc.): Slope | | | Local re | elief (concave, | convex, none): | Linear | | Slope (% | ,): <u>1</u> |
| Subregion (LRR): D 28A | | Lat: 41. | 13748 | 9 | _ Long:112.1 | 0426167 | | _ Datum: N | AD83_20 |
| Soil Map Unit Name: HLA - Harrisville- | Leland com | plex, 0 to 1 | percer | nt slopes | NW | 'I classification | on: Nor | пе | |
| Are climatic / hydrologic conditions on the s | | | | | | | | | |
| Are Vegetation, Soil, or Hyd | | | | | "Normal Circums | | | ∕es ✓ | No |
| Are Vegetation, Soil, or Hyc | | | | | eeded, explain a | | | | |
| SUMMARY OF FINDINGS – Atta | | | | | | - | | | es. etc |
| | | · | | g p | | | | | |
| | Yes | | I: | s the Sampled | d Area | | | | |
| | Yes Yes | | v | vithin a Wetlaı | nd? | res | _ No _ | | |
| Remarks: | 165 | 110 | | | | | | | |
| Conditions were wetter than | normal a | ccording | to the | antocodo | ant precipit | ation too | d but | there ha | ad not |
| | | _ | | antecede | ent precipita | טטו ווטווג | i, but | ulere lie | iu not |
| been rain for several days pr | | | | | | | | | |
| VEGETATION – Use scientific na | ames of pla | | | | | | | | |
| Tree Stratum (Plot size: |) | Absolute % Cover | | ant Indicator es? Status | Dominance T | | | | |
| 1 | | | | | Number of Do That Are OBL | | ies FAC | 1 | (A) |
| 2 | | | | | | | | | _ ('') |
| 3. | | | | | Total Number Species Acros | | : | 2 | (B) |
| 4 | | | | | | | | | _ 、 / |
| | | | = Total | Cover | Percent of Do | | | 50.00 | _ (A/B) |
| Sapling/Shrub Stratum (Plot size: | | | | | Prevalence In | dov workel | noot: | | |
| 1 | | | | | | over of: | | Multiply by: | |
| 2 | | | | | OBL species | | | = 0 | |
| 4 | | | | | FACW species | | | = 10 | |
| 5 | | | | | FAC species | 35 | | | |
| | | | | | FACU species | , <u>10</u> | x 4 | = 40 | |
| Herb Stratum (Plot size: | _) | 50 | | LIDI | UPL species | 50 | | = 250 | |
| 1. Lolium arundinaceum | | | | <u>UPL</u> | Column Totals | ;: <u>100</u> | (A) | 405 | (B) |
| 2. Poa pratensis 3. Carex praegracilis | | <u>35</u> 5 | | FAC FACW | Prevaler | nce Index = | $R/\Delta = 4$ | 4.05 | |
| Melilotus officinalis | | 5 | | FACU | Hydrophytic ' | | | | |
| 5. Taraxacum officinale | | | | FACU | Dominand | | | | |
| 6 | | | | | Prevalence | e Index is ≤ | 3.0 ¹ | | |
| 7 | | | | | Morpholo | gical Adapta | tions¹ (F | rovide supp | orting |
| 8. | | | | | | | | eparate shee | |
| | | 100 | = Total | Cover | Problema | tic Hydrophy | tic Vege | etation ¹ (Exp | lain) |
| Woody Vine Stratum (Plot size: |) | | | | 11 | la contrata de la 11 de a | 41 - | | |
| 1 | | | | | ¹ Indicators of I be present, un | | | | / must |
| 2 | | | | | | | <u> </u> | | |
| | | | | | Hydrophytic Vegetation | | | , | |
| % Bare Ground in Herb Stratum | % Co | ver of Biotic C | rust | | Present? | Yes _ | | No | |
| Remarks: | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| Profile Desc Depth | ription: (Describe Matrix | to the dept | h needed to document the indicator or c | onfirm the absence of indicators.) | |
|-------------------------------|---|--------------------|---|--|-------------|
| (inches) | Color (moist) | % | Redox Features Color (moist) % Type ¹ L | oc ² Texture Remarks | |
| 0 - 6 | 10YR 3/2 | 100 | | Loam | |
| 6 - 8 | 7.5YR 5/4 | 100 | | Clay | |
| 8 - 20 | 10YR 3/2 | 100 | | Silty Clay | |
| 20 - 24 | 7.5YR 5/4 | 100 | | Clay | |
| | | - ··· - | | | |
| | - | | | | — |
| | | - | | | |
| | | | | | |
| | | | | | |
| | | | Reduced Matrix, CS=Covered or Coated San Reduced Matrix, CS=Covered or Coated San Reduced.) | and Grains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : | |
| Histosol | | cable to all L | Sandy Redox (S5) | 1 cm Muck (A9) (LRR C) | |
| | oipedon (A2) | | Stripped Matrix (S6) | 2 cm Muck (A10) (LRR B) | |
| Black Hi | . , , | | Loamy Mucky Mineral (F1) | Reduced Vertic (F18) | |
| Hydroge | n Sulfide (A4) | | Loamy Gleyed Matrix (F2) | Red Parent Material (TF2) | |
| Stratified | Layers (A5) (LRR | C) | Depleted Matrix (F3) | Other (Explain in Remarks) | |
| 1 cm Mu | ıck (A9) (LRR D) | | Redox Dark Surface (F6) | | |
| Depleted | d Below Dark Surfa | ce (A11) | Depleted Dark Surface (F7) | | |
| | ark Surface (A12) | | Redox Depressions (F8) | ³ Indicators of hydrophytic vegetation and | |
| | lucky Mineral (S1) | | Vernal Pools (F9) | wetland hydrology must be present, | |
| | Bleyed Matrix (S4) Layer (if present): | | | unless disturbed or problematic. | |
| _ | | | | | |
| ,. <u> </u> | ahaa): | | | Hydric Soil Present? Yes No | |
| | ches): | | | Hydric Soil Present? Yes No | |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| HYDROLO | | | | | |
| _ | drology Indicators | | | | |
| Primary India | cators (minimum of | one required: | check all that apply) | Secondary Indicators (2 or more required) | _ |
| | Water (A1) | | Salt Crust (B11) | Water Marks (B1) (Riverine) | |
| High Wa | iter Table (A2) | | Biotic Crust (B12) | Sediment Deposits (B2) (Riverine) | |
| Saturation | on (A3) | | Aquatic Invertebrates (B13) | Drift Deposits (B3) (Riverine) | |
| Water M | arks (B1) (Nonrive | rine) | Hydrogen Sulfide Odor (C1) | Drainage Patterns (B10) | |
| Sedimer | nt Deposits (B2) (N o | onriverine) | | ng Roots (C3) Dry-Season Water Table (C2) | |
| | oosits (B3) (Nonrive | erine) | Presence of Reduced Iron (C4) | Crayfish Burrows (C8) | |
| Surface | Soil Cracks (B6) | | Recent Iron Reduction in Tilled So | oils (C6) Saturation Visible on Aerial Imagery (| 39) |
| Inundation | on Vis ble on Aerial | Imagery (B7 | Thin Muck Surface (C7) | Shallow Aquitard (D3) | |
| | tained Leaves (B9) | | Other (Explain in Remarks) | FAC-Neutral Test (D5) | |
| Field Observ | | | | | |
| Surface Water | | | Depth (inches): | | |
| Water Table | | | lo Depth (inches): | | , |
| Saturation Pr | | Yes N | lo Depth (inches): | Wetland Hydrology Present? Yes No | _ |
| (includes cap Describe Red | | n gauge, mor | nitoring well, aerial photos, previous inspec | tions), if available: | |
| | ` | | , | , | |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |
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| | | | | | |
| | | | | | |

WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 60



Sample Point 60

| Project/Site: WDC Phase II | Cit | _{y/County:} Davis C | county | Sampling Date: 2024-05-16 |
|--|-------------------------------|------------------------------|--|--|
| Applicant/Owner: UDOT | | | State: Utah | Sampling Point: SP61 |
| Investigator(s): Merissa Davis | Se | ction, Township, Ra | ange: S30 T5N R2W | |
| Landform (hillslope, terrace, etc.): Depression | n Lo | cal relief (concave, | convex, none): Concav | Slope (%): 0 |
| Subregion (LRR): D 28A | _{Lat:} 41.13 | 66475 | _ Long: <u>-112.1054976</u> | Datum: NAD83_20 |
| Soil Map Unit Name: HLA - Harrisville-Lela | and complex, 0 to 1 pe | rcent slopes | NWI classific | cation: PEM1/USA |
| Are climatic / hydrologic conditions on the site t | ypical for this time of year? | Yes No _ | (If no, explain in F | Remarks.) |
| Are Vegetation, Soil, or Hydrold | gy significantly dis | turbed? Are | "Normal Circumstances" p | oresent? Yes No |
| Are Vegetation, Soil, or Hydrold | gy naturally proble | ematic? (If n | eeded, explain any answe | ers in Remarks.) |
| SUMMARY OF FINDINGS - Attach | site map showing sa | ampling point | locations, transects | s, important features, etc. |
| Hydrophytic Vegetation Present? Yes | No | | | |
| Hydric Soil Present? Yes | No | Is the Sample | | |
| | No | within a Wetla | ınd? Yes | No |
| Remarks: | <u> </u> | | | |
| Conditions were wetter than no | rmal according to | the anteced | ent precipitation t | ool, but there had not |
| been rain for several days prior | _ | | | |
| VEGETATION – Use scientific name | | | | |
| | • | Dominant Indicator | Dominance Test work | rshoot: |
| Tree Stratum (Plot size:) | | pecies? Status | Number of Dominant S | |
| 1 | | | That Are OBL, FACW, | |
| 2 | | | Total Number of Domir | |
| 3 | | | Species Across All Stra | ata: <u>2</u> (B) |
| 4 | | | Percent of Dominant S | |
| Sapling/Shrub Stratum (Plot size: | = | Total Cover | That Are OBL, FACW, | or FAC: 100.00 (A/B) |
| 1 | | | Prevalence Index wor | ksheet: |
| 2 | | | Total % Cover of: | |
| 3 | | | | x 1 = 40 |
| 4 | | | • | x 2 = 70 |
| 5 | | | • | x 3 = 0 |
| Herb Stratum (Plot size:) | = | Total Cover | FACU species 0 UPL species 0 | x = 0 $x = 0$ $x = 0$ |
| 1. Typha latifolia | 40 | ✓ OBL | Column Totals: 75 | |
| 2. Carex praegracilis | 35 | ✓ FACW | | (*.) (>) |
| 3 | | | Prevalence Index | |
| 4 | | | Hydrophytic Vegetation | |
| 5 | | | ✓ Dominance Test is ✓ Prevalence Index i | |
| 6 | | | · | s ≤3.0 uptations¹ (Provide supporting |
| 7 8. | | | | s or on a separate sheet) |
| o | | Total Cover | Problematic Hydro | phytic Vegetation ¹ (Explain) |
| Woody Vine Stratum (Plot size: | | Total Gover | | |
| 1 | | | ¹ Indicators of hydric so be present, unless disti | il and wetland hydrology must |
| 2 | | | | urbed of problematic. |
| | = | Total Cover | Hydrophytic Vegetation | |
| % Bare Ground in Herb Stratum | _ % Cover of Biotic Crus | t | Present? Ye | es No |
| Remarks: | | | | |
| | | | | |
| | | | | |
| | | | | |

| Profile Desc | cription: (Describe | to the depth | needed to docur | nent the i | ndicator | or confirn | n the absence of indicators.) | | | | |
|-----------------------|--|----------------|----------------------|---------------|-------------------|------------------|--|-------------|--|--|--|
| Depth | Matrix | | | x Feature | | | | | | | |
| (inches) | Color (moist) | | Color (moist) | % | Type ¹ | Loc ² | Texture Remarks | | | | |
| 0 - 5 | 7.5YR 2.5/1 | 100 | | | | | Mucky Loam/Clay | | | | |
| 5 - 20 | 7.5YR 3/1 | 100 | | | | | Clay | | | | |
| | | | | | | | | | | | |
| | | | | · | | | | | | | |
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| | | | | | - | | · | | | | |
| | - | | | · | | | | | | | |
| | | | | | | | | | | | |
| | oncentration, D=De | | | | | ed Sand Gr | | | | | |
| Hydric Soil | Indicators: (Appli | cable to all L | RRs, unless other | wise not | ed.) | | Indicators for Problematic Hydric Soils ³ : | | | | |
| Histosol | (A1) | | Sandy Red | ox (S5) | | | 1 cm Muck (A9) (LRR C) | | | | |
| Histic E _l | pipedon (A2) | | Stripped Ma | | | | 2 cm Muck (A10) (LRR B) | | | | |
| | Black Histic (A3) Loamy Mucky Mineral (F1) | | | | | | Reduced Vertic (F18) | | | | |
| | en Sulfide (A4) | | Loamy Gley | | (F2) | | Red Parent Material (TF2) | | | | |
| | d Layers (A5) (LRR | C) | Depleted M | ` , | | | Other (Explain in Remarks) | | | | |
| | uck (A9) (LRR D) | (8.4.4) | Redox Dark | | . , | | | | | | |
| | d Below Dark Surfa | ce (A11) | Depleted Da | | | | 31 | | | | |
| | ark Surface (A12) | | Redox Dep | | F8) | | ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, | | | | |
| | Mucky Mineral (S1) Gleyed Matrix (S4) | | Vernai Poor | S (F9) | | | unless disturbed or problematic. | | | | |
| | Layer (if present): | | | | | | unless disturbed of problematic. | | | | |
| Type: | Layer (ii present). | | | | | | | | | | |
| | ahaa): | | | | | | Hydric Soil Present? Yes No_ | | | | |
| Depth (in | cries). | | | | | | Hydric Soil Present? Yes No | | | | |
| Remarks: | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| HYDROLO | GY | | | | | | | | | | |
| | drology Indicators | | | | | | | | | | |
| _ | | | -1111-414 | | | | 0 | 1\ | | | |
| | cators (minimum of | one requirea; | | | | | Secondary Indicators (2 or more requi | <u>rea)</u> | | | |
| | Water (A1) | | Salt Crust | ` ' | | | Water Marks (B1) (Riverine) | | | | |
| | ater Table (A2) | | Biotic Crus | | | | Sediment Deposits (B2) (Riverine) | | | | |
| <u>✓</u> Saturati | | | Aquatic In | | | | Drift Deposits (B3) (Riverine) | | | | |
| | larks (B1) (Nonrive | | Hydrogen | | | | Drainage Patterns (B10) | | | | |
| Sedime | nt Deposits (B2) (No | onriverine) | Oxidized F | Rhizosphe | res along | Living Roo | ots (C3) Dry-Season Water Table (C2) | | | | |
| Drift De | posits (B3) (Nonrive | erine) | Presence | of Reduce | ed Iron (C4 | 4) | Crayfish Burrows (C8) | | | | |
| Surface | Soil Cracks (B6) | | Recent Iro | n Reducti | on in Tille | d Soils (C6 | Saturation Visible on Aerial Image | ery (C9) | | | |
| ·—— | on Vis ble on Aerial | | Thin Muck | Surface (| C7) | | Shallow Aquitard (D3) | | | | |
| Water-S | tained Leaves (B9) | | Other (Exp | olain in Re | marks) | | FAC-Neutral Test (D5) | | | | |
| Field Obser | vations: | | | | | | | | | | |
| Surface Wat | er Present? | Yes N | o 🖊 Depth (in | ches): | | _ | | | | | |
| Water Table | Present? | Yes _ 🖊 N | o Depth (in | ches): 10 | | | | | | | |
| Saturation P | | | o Depth (in | | | | and Hydrology Present? Yes No | | | | |
| (includes cap | oillary fringe) | | | | | | · · · | | | | |
| Describe Re | corded Data (strear | m gauge, mon | itoring well, aerial | ohotos, pr | evious ins | pections), | if available: | | | | |
| | | | | | | | | | | | |
| Remarks: | | | | | | | | | | | |
| Moro | rface weter | at the co | entor of the | wo+lo- | ا+iبد ام | 2 02++2 | il growth | | | | |
| IVIOLE SU | rface water | at the ce | inter or the | weuai | iu Will | ı catta | ııı growui. | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
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WDC SR-177, SR-193 to 1800 NorthUDOT



Sample Point 61



Sample Point 61

| Project/Site: WDC Phase II | C | ity/Cou | _{nty:} <u>Davis C</u> | ounty | San | npling Da | te: 2024 | -05-16 |
|---|-----------------------------|----------|--------------------------------|---|--------------|----------------------------------|-------------|-------------|
| Applicant/Owner: UDOT | | | | State: Utah | | npling Poi | int: SP62 | <u> </u> |
| Investigator(s): Merissa Davis | S | ection, | Township, Ra | nge: S30 T5N R2 | ·W | | | |
| Landform (hillslope, terrace, etc.): Flat | L | ocal re | lief (concave, | convex, none): No | ne | | Slope (%) |): <u>0</u> |
| Subregion (LRR): D 28A | Lat: 41.1 3 | 36639 | 912 | Long: -112.105 | 5007 | C | oatum: NA | D83_20 |
| Soil Map Unit Name: HLA - Harrisville-Lelar | nd complex, 0 to 1 p | ercen | t slopes | NWI cla | assificatior | ո։ <u>PEM1/</u> | /USA | |
| Are climatic / hydrologic conditions on the site type | oical for this time of year | ? Yes | No _ | (If no, explai | n in Rema | rks.) | | |
| Are Vegetation, Soil, or Hydrolog | y significantly di | isturbed | d? Are " | "Normal Circumstan | ces" prese | nt? Yes | <u> </u> | <u></u> |
| Are Vegetation, Soil, or Hydrolog | y naturally prob | lematic | ? (If ne | eeded, explain any a | inswers in | Remarks | .) | |
| SUMMARY OF FINDINGS – Attach s | ite map showing s | sampl | ling point l | ocations, trans | ects, im | portan | t feature | es, etc. |
| Hydrophytic Vegetation Present? | No | | | | | | | |
| | No V | | the Sampled | | | | , | |
| | No 🗸 | W | rithin a Wetlar | nd? Yes | | No | <u></u> | |
| Remarks: | | I | | | | | | |
| Conditions were wetter than nor | mal according to | the | antecede | ent precipitati | on tool | , but th | iere ha | d not |
| been rain for several days prior t | | | | | , | | | |
| VEGETATION – Use scientific names | | | | | | | | |
| | | Domina | ant Indicator | Dominance Test | workshee | et: | | |
| Tree Stratum (Plot size:) | % Cover | Specie: | s? Status | Number of Domin | | | | |
| 1 | | | | That Are OBL, FA | CW, or FA | ۱C: <u>1</u> | | _ (A) |
| 2 | | | | Total Number of I | | 2 | | |
| 3 | | | | Species Across A | II Strata: | 3 | | _ (B) |
| 4 | | | | Percent of Domin | | | 33 | (A (D) |
| Sapling/Shrub Stratum (Plot size: |) | rotai | 00101 | That Are OBL, FA | CVV, OF FA | (C: <u>33.</u> | .55 | _ (A/B) |
| 1 | | | | Prevalence Inde | | | | |
| 2 | | | | Total % Cove | | | Iltiply by: | |
| 3 | | | | OBL species <u>S</u> FACW species <u>S</u> | | _ x1= <u>\</u> _ x2= <u>_</u> | 0 16 | _ |
| 4 | | | | | 35 | | | _ |
| 5 | | | Cover | FACU species 3 | | | | _ |
| Herb Stratum (Plot size:) | | rotai | | · · | | x 5 = | | |
| 1. Poa pratensis | 35 | ~ | FAC | Column Totals: | | | | (B) |
| 2. Bromus tectorum | 20 | <u> </u> | UPL FACIL | Decidos | ladau - D | w - 36 | s Q | |
| 3. Hordeum murinum 4. Poa bulbosa | 20 | | FACU FACU | Prevalence Hydrophytic Veg | | | | |
| 5. Juncus balticus | <u>15</u> | | FACW | Dominance T | | | | |
| 6 | | | | Prevalence Ir | | | | |
| 7 | | | | Morphologica | | | vide suppo | orting |
| 8. | | | | data in Re | | | | • |
| | | = Total | Cover | Problematic I | Hydrophyti | c Vegetat | ion¹ (Expla | ain) |
| Woody Vine Stratum (Plot size: | | | | 1 mail and a marget bound | | | | |
| 1 | | | | ¹ Indicators of hyd be present, unles | | | | must |
| 2 | | | | Hydrophytic | | | | |
| | = | | | Vegetation | | | | |
| % Bare Ground in Herb Stratum | % Cover of Biotic Cru | ıst | | Present? | Yes | No | · <u> </u> | |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

| O - 18 10YR 3/2 100 Loam Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. This county of the concentration of the con | | x Features |
|--|--|---|
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ¹Location: PL=Pore Lining, M=Matrix, Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils¹: Histoso (A1) | | % Type ¹ Loc ² Texture Remarks |
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. *\frac{1}{1}Location: PL=Pore Lining, M=Matrix. Pydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosoi (A1) | 0 - 18 10YR 3/2 100 | <u> Loam</u> |
| Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils | <u> </u> | |
| ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) | <u> </u> | |
| Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils | - | |
| Indicators for Problematic Hydric Soils Indicators for Problematic Hydric Soils Histoc Epipedon (A2) | | |
| Indicators for Problematic Hydric Soils Indicators for Problematic Hydric Soils | | |
| Indicators (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils | - | |
| # Histosol (A1) | _ - | |
| # Histosol (A1) | <u> </u> | |
| Histosol (A1) Sandy Redox (S5) 1 cm Muck (A9) (LRR C) HistoEpipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR B) Black Histic (A3) 2 comy Muck (A10) (LRR B) Black Histic (A3) 3 comy Muck (A10) (LRR B) Hydrogen Sulfide (A4) 1 comy Gleyed Matrix (F2) Red Parent Material (TF2) Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Other (Explain in Remarks) I cm Muck (A9) (LRR D) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) Depleted Below Dark Surface (A11) Perpensions (F8) And Mucky Mineral (S1) Area (P7) Sandy Mucky Mineral (S1) Redox Depressions (F8) And Mucky Mineral (S1) Area (P7) Sandy Mucky Mineral (S1) Area (P7) Sandy Gleyed Matrix (S4) Area (P7) Focks Depth (inches): 18 Hydric Soil Present): Type: Rocks Depth (inches): 18 Hydric Soil Present? Yes No YPROLOGY Wetland Hydrology Indicators: Primary Indicators (Minimum of one required: check all that apply) Secondary Indicators (2 or more required) Surface Water (A1) Salt Crust (B11) Water Table (A2) Sediment Deposits (B2) (Riverine) High Water Table (A2) Biotic Crust (B12) Sediment Deposits (B2) (Riverine) Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Drianage Patterns (B10) Sediment Deposits (B2) (Nonriverine) Oxidized Ritizospheres along Living Roots (C3) Dry-Season Water Table (C2) Drift Deposits (B3) (Nonriverine) Presence of Reduced from (C4) Crayish Burrows (C8) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C8) Inundation Vis ble on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3) FAC-Neutral Test (D5) Field Observations: Wetland Hydrology Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Postifice Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS | |
| Histic Epipedon (A2) Stripped Matrix (S6) | lydric Soil Indicators: (Applicable to all LRRs, unless other | rwise noted.) Indicators for Problematic Hydric Soils ³ : |
| Black Histic (A3) | | 1 cm Muck (A9) (LRR C) |
| Hydrogen Sulfide (A4) Loamy Cleyed Matrix (F2) Red Parent Material (TF2) Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Other (Explain in Remarks) Other (Explain in Remarks) | Histic Epipedon (A2) Stripped Ma | atrix (S6) 2 cm Muck (A10) (LRR B) |
| Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Other (Explain in Remarks) 1 cm Muck (A9) (LRR D) Redox Dark Surface (F1) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) wetland Hydrology must be present, unless disturbed or problematic. Seardy Gleyed Matrix (S4) wetland Hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type: Rocks Depth (inches): 18 Hydric Soil Present? Yes No V Permarks: Primary Indicators (minimum of one required: check all that apply) Secondary Indicators (2 or more required) Surface Water (A1) Salt Crust (B11) Water Marks (B1) (Riverine) High Water Table (A2) Belote Crust (B12) Sediment Deposits (B2) (Riverine) Saturation (A3) Aquatic Invertebrates (B13) Drift Deposits (B3) (Riverine) Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10) Sediment Deposits (B2) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C7) Inhundation Vis ble on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Other (Explain in Remarks) Primary Hydrology Present? Yes No V Depth (inches): Surface Water Present? Yes No V Depth (inches): Surface Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Black Histic (A3) Loamy Muc | |
| | Hydrogen Sulfide (A4) Loamy Gley | ved Matrix (F2) Red Parent Material (TF2) |
| Depleted Below Dark Surface (A11) | Stratified Layers (A5) (LRR C) Depleted Ma | atrix (F3) Other (Explain in Remarks) |
| Thick Dark Surface (A12) | 1 cm Muck (A9) (LRR D) Redox Dark | s Surface (F6) |
| Sandy Mucky Mineral (S1) | Depleted Below Dark Surface (A11) Depleted Da | ark Surface (F7) |
| Sandy Gleyed Matrix (S4) unless disturbed or problematic. Restrictive Layer (if present): | Thick Dark Surface (A12) Redox Depr | ressions (F8) ³ Indicators of hydrophytic vegetation and |
| Restrictive Layer (if present): Type; Rocks Depth (inches): 18 Hydric Soil Present? Yes No | Sandy Mucky Mineral (S1) Vernal Pool | s (F9) wetland hydrology must be present, |
| Type: Rocks Depth (inches): 18 | | |
| Popth (inches): 18 Hydric Soil Present? Yes No variable Remarks: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) | Restrictive Layer (if present): | |
| Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Surface Water (A1) Salt Crust (B11) High Water Table (A2) Sutration (A3) Water Marks (B1) (Ronriverine) Water Marks (B1) (Nonriverine) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C7) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) Field Observations: Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Wetland Hydrolo | Type: Rocks | |
| Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Surface Water (A1) Salt Crust (B11) High Water Table (A2) Sutration (A3) Water Marks (B1) (Nonriverine) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C7) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) Field Observations: Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Wetland H | Depth (inches): 18 | Hydric Soil Present? Yes No _ V |
| YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) High Water Table (A2) Salt Crust (B11) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drift Deposits (B3) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B3) (Nonriverine) Sediment Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Other (Explain in Remarks) Water Table Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Wetland Hydrology Present? Yes No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | | |
| Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) | | |
| Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Riverine) Sediment Deposits (B3) (Riverine) Water Marks (B1) (Nonriverine) Water Marks (B1) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Drainage P | WDDQLQQV | |
| Surface Water (A1) Salt Crust (B11) Water Marks (B1) (Riverine) High Water Table (A2) Biotic Crust (B12) Sediment Deposits (B2) (Riverine) Aquatic Invertebrates (B13) Drift Deposits (B3) (Riverine) Drift Deposits (B3) (Riverine) Print Deposits (B2) (Nonriverine) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10) Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C) Shallow Aquitard (D3) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) | | |
| High Water Table (A2) | Netland Hydrology Indicators: | Secondary Indicators (2 or more required) |
| | Netland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply | |
| Water Marks (B1) (Nonriverine) | Netland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply Surface Water (A1) Salt Crust | (B11) Water Marks (B1) (Riverine) |
| Sediment Deposits (B2) (Nonriverine) | Primary Indicators (minimum of one required; check all that apply Surface Water (A1) High Water Table (A2) Biotic Crust | (B11) Water Marks (B1) (Riverine) st (B12) Sediment Deposits (B2) (Riverine) |
| Drift Deposits (B3) (Nonriverine) | Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply Surface Water (A1) Salt Crust High Water Table (A2) Biotic Crust Saturation (A3) Aquatic Inv | (B11) Water Marks (B1) (Riverine) st (B12) Sediment Deposits (B2) (Riverine) vertebrates (B13) Drift Deposits (B3) (Riverine) |
| Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (Compared to the property of the proper | Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply Surface Water (A1) Salt Crust High Water Table (A2) Biotic Crust Saturation (A3) Aquatic Inv | (B11) Water Marks (B1) (Riverine) st (B12) Sediment Deposits (B2) (Riverine) vertebrates (B13) Drift Deposits (B3) (Riverine) |
| Inundation Vis ble on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) Factorial Status (D5) | Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply Surface Water (A1) Salt Crust High Water Table (A2) Biotic Crust Saturation (A3) Aquatic Inv Water Marks (B1) (Nonriverine) Hydrogen | (B11) Water Marks (B1) (Riverine) st (B12) Sediment Deposits (B2) (Riverine) vertebrates (B13) Drift Deposits (B3) (Riverine) Sulfide Odor (C1) Drainage Patterns (B10) |
| Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Seturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply Surface Water (A1) Salt Crust High Water Table (A2) Biotic Crust Saturation (A3) Aquatic Inv Water Marks (B1) (Nonriverine) Hydrogen Sediment Deposits (B2) (Nonriverine) Oxidized R | (B11) Water Marks (B1) (Riverine) st (B12) Sediment Deposits (B2) (Riverine) vertebrates (B13) Drift Deposits (B3) (Riverine) Sulfide Odor (C1) Drainage Patterns (B10) Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) |
| | Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply Surface Water (A1) Salt Crust High Water Table (A2) Biotic Crust Saturation (A3) Aquatic Inv Water Marks (B1) (Nonriverine) Hydrogen Sediment Deposits (B2) (Nonriverine) Oxidized R Drift Deposits (B3) (Nonriverine) Presence of | (B11) Water Marks (B1) (Riverine) st (B12) Sediment Deposits (B2) (Riverine) vertebrates (B13) Drift Deposits (B3) (Riverine) Sulfide Odor (C1) Drainage Patterns (B10) Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) of Reduced Iron (C4) Crayfish Burrows (C8) |
| Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Sincludes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply Surface Water (A1) Salt Crust High Water Table (A2) Biotic Crust Saturation (A3) Aquatic Inv Water Marks (B1) (Nonriverine) Hydrogen Sediment Deposits (B2) (Nonriverine) Oxidized R Drift Deposits (B3) (Nonriverine) Presence of Surface Soil Cracks (B6) Recent Iro | (B11) Water Marks (B1) (Riverine) st (B12) Sediment Deposits (B2) (Riverine) vertebrates (B13) Drift Deposits (B3) (Riverine) Sulfide Odor (C1) Drainage Patterns (B10) Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) of Reduced Iron (C4) Crayfish Burrows (C8) In Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) |
| Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Grincludes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply Surface Water (A1) Salt Crust High Water Table (A2) Biotic Crust Saturation (A3) Aquatic Inv Water Marks (B1) (Nonriverine) Hydrogen Sediment Deposits (B2) (Nonriverine) Oxidized R Drift Deposits (B3) (Nonriverine) Presence of Surface Soil Cracks (B6) Recent Iro Inundation Vis ble on Aerial Imagery (B7) Thin Muck | (B11) Water Marks (B1) (Riverine) st (B12) Sediment Deposits (B2) (Riverine) vertebrates (B13) Drift Deposits (B3) (Riverine) Sulfide Odor (C1) Drainage Patterns (B10) Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) of Reduced Iron (C4) Crayfish Burrows (C8) in Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Surface (C7) Shallow Aquitard (D3) |
| Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Primary Indicators (minimum of one required; check all that apply Surface Water (A1) Salt Crust High Water Table (A2) Biotic Crust Saturation (A3) Aquatic Inv Water Marks (B1) (Nonriverine) Hydrogen Sediment Deposits (B2) (Nonriverine) Oxidized R Drift Deposits (B3) (Nonriverine) Presence of Surface Soil Cracks (B6) Recent Iro Inundation Vis ble on Aerial Imagery (B7) Thin Muck Water-Stained Leaves (B9) Other (Exp. | (B11) Water Marks (B1) (Riverine) st (B12) Sediment Deposits (B2) (Riverine) vertebrates (B13) Drift Deposits (B3) (Riverine) Sulfide Odor (C1) Drainage Patterns (B10) Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) of Reduced Iron (C4) Crayfish Burrows (C8) in Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Surface (C7) Shallow Aquitard (D3) |
| Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply Surface Water (A1) Salt Crust High Water Table (A2) Biotic Crust Saturation (A3) Aquatic Inv Water Marks (B1) (Nonriverine) Hydrogen Sediment Deposits (B2) (Nonriverine) Oxidized R Drift Deposits (B3) (Nonriverine) Presence of Surface Soil Cracks (B6) Recent Iro Inundation Vis ble on Aerial Imagery (B7) Thin Muck Water-Stained Leaves (B9) Other (Exp | (B11) Water Marks (B1) (Riverine) st (B12) Sediment Deposits (B2) (Riverine) vertebrates (B13) Drift Deposits (B3) (Riverine) Sulfide Odor (C1) Drainage Patterns (B10) Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) of Reduced Iron (C4) Crayfish Burrows (C8) in Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9 Surface (C7) Shallow Aquitard (D3) Dlain in Remarks) FAC-Neutral Test (D5) |
| includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply Surface Water (A1) Salt Crust High Water Table (A2) Biotic Crust Saturation (A3) Aquatic Inv Water Marks (B1) (Nonriverine) Hydrogen Sediment Deposits (B2) (Nonriverine) Oxidized R Drift Deposits (B3) (Nonriverine) Presence of Surface Soil Cracks (B6) Recent Iro Inundation Vis ble on Aerial Imagery (B7) Thin Muck Water-Stained Leaves (B9) Other (Exp. | (B11) Water Marks (B1) (Riverine) st (B12) Sediment Deposits (B2) (Riverine) vertebrates (B13) Drift Deposits (B3) (Riverine) Sulfide Odor (C1) Drainage Patterns (B10) Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) of Reduced Iron (C4) Crayfish Burrows (C8) in Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9 Surface (C7) Shallow Aquitard (D3) Dlain in Remarks) FAC-Neutral Test (D5) |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply Surface Water (A1) Salt Crust High Water Table (A2) Biotic Crust Saturation (A3) Aquatic Inv Water Marks (B1) (Nonriverine) Hydrogen Sediment Deposits (B2) (Nonriverine) Oxidized R Drift Deposits (B3) (Nonriverine) Presence of Surface Soil Cracks (B6) Recent Iro Inundation Vis ble on Aerial Imagery (B7) Thin Muck Water-Stained Leaves (B9) Other (Exp | (B11) |
| Remarks: | Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply Surface Water (A1) Salt Crust High Water Table (A2) Biotic Crust Saturation (A3) Aquatic Inv Water Marks (B1) (Nonriverine) Hydrogen Sediment Deposits (B2) (Nonriverine) Oxidized R Drift Deposits (B3) (Nonriverine) Presence of Surface Soil Cracks (B6) Recent Iro Inundation Vis ble on Aerial Imagery (B7) Thin Muck Water-Stained Leaves (B9) Other (Exp. Field Observations: Surface Water Present? Yes No Depth (incompared to the compared to the c | (B11) |
| Remarks: | Primary Indicators (minimum of one required; check all that apply Surface Water (A1) Salt Crust High Water Table (A2) Biotic Crust Saturation (A3) Aquatic Inv Water Marks (B1) (Nonriverine) Hydrogen Sediment Deposits (B2) (Nonriverine) Oxidized R Drift Deposits (B3) (Nonriverine) Presence of Surface Soil Cracks (B6) Recent Iro Inundation Vis ble on Aerial Imagery (B7) Thin Muck Water-Stained Leaves (B9) Other (Exp Field Observations: Surface Water Present? Yes No Depth (index) Saturation Present? Yes No Depth (index) Saturation Present? Yes No Depth (index) | (B11) Water Marks (B1) (Riverine) st (B12) Sediment Deposits (B2) (Riverine) vertebrates (B13) Drift Deposits (B3) (Riverine) Sulfide Odor (C1) Drainage Patterns (B10) Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) of Reduced Iron (C4) Crayfish Burrows (C8) in Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9 Surface (C7) Shallow Aquitard (D3) Dalain in Remarks) FAC-Neutral Test (D5) ches): ches): Ches): Ches): Wetland Hydrology Present? Yes No V |
| | Primary Indicators (minimum of one required; check all that apply Surface Water (A1) Salt Crust High Water Table (A2) Biotic Crust Saturation (A3) Aquatic Inv Water Marks (B1) (Nonriverine) Hydrogen Sediment Deposits (B2) (Nonriverine) Oxidized R Drift Deposits (B3) (Nonriverine) Presence of Surface Soil Cracks (B6) Recent Iro Inundation Vis ble on Aerial Imagery (B7) Thin Muck Water-Stained Leaves (B9) Other (Exp Field Observations: Surface Water Present? Yes No Depth (index) Saturation Present? Yes No Depth (index) Saturation Present? Yes No Depth (index) | (B11) Water Marks (B1) (Riverine) st (B12) Sediment Deposits (B2) (Riverine) vertebrates (B13) Drift Deposits (B3) (Riverine) Sulfide Odor (C1) Drainage Patterns (B10) Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) of Reduced Iron (C4) Crayfish Burrows (C8) in Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9 Surface (C7) Shallow Aquitard (D3) Dalain in Remarks) FAC-Neutral Test (D5) ches): ches): Ches): Ches): Wetland Hydrology Present? Yes No V |
| | Primary Indicators (minimum of one required; check all that apply Surface Water (A1) Salt Crust High Water Table (A2) Biotic Crust Saturation (A3) Aquatic Inv Water Marks (B1) (Nonriverine) Hydrogen Sediment Deposits (B2) (Nonriverine) Oxidized R Drift Deposits (B3) (Nonriverine) Presence of Surface Soil Cracks (B6) Recent Iro Inundation Vis ble on Aerial Imagery (B7) Thin Muck Water-Stained Leaves (B9) Other (Exp Field Observations: Surface Water Present? Yes No Depth (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial processing processing surface of the control of the contr | (B11) Water Marks (B1) (Riverine) st (B12) Sediment Deposits (B2) (Riverine) vertebrates (B13) Drift Deposits (B3) (Riverine) Sulfide Odor (C1) Drainage Patterns (B10) Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) of Reduced Iron (C4) Crayfish Burrows (C8) in Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9 Surface (C7) Shallow Aquitard (D3) Dalain in Remarks) FAC-Neutral Test (D5) ches): ches): Ches): Ches): Wetland Hydrology Present? Yes No V |
| | Primary Indicators (minimum of one required; check all that apply Surface Water (A1) Salt Crust High Water Table (A2) Biotic Crust Saturation (A3) Aquatic Inv Water Marks (B1) (Nonriverine) Hydrogen Sediment Deposits (B2) (Nonriverine) Oxidized R Drift Deposits (B3) (Nonriverine) Presence of Surface Soil Cracks (B6) Recent Iro Inundation Vis ble on Aerial Imagery (B7) Thin Muck Water-Stained Leaves (B9) Other (Exp Field Observations: Surface Water Present? Yes No Depth (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial processing processing surface of the control of the contr | (B11) Water Marks (B1) (Riverine) st (B12) Sediment Deposits (B2) (Riverine) vertebrates (B13) Drift Deposits (B3) (Riverine) Sulfide Odor (C1) Drainage Patterns (B10) Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) of Reduced Iron (C4) Crayfish Burrows (C8) in Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9 Surface (C7) Shallow Aquitard (D3) Dalain in Remarks) FAC-Neutral Test (D5) ches): ches): Ches): Ches): Wetland Hydrology Present? Yes No V |
| | Primary Indicators (minimum of one required; check all that apply Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Water Table Present? Yes No Depth (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial processing | (B11) Water Marks (B1) (Riverine) st (B12) Sediment Deposits (B2) (Riverine) vertebrates (B13) Drift Deposits (B3) (Riverine) Sulfide Odor (C1) Drainage Patterns (B10) Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) of Reduced Iron (C4) Crayfish Burrows (C8) in Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9 Surface (C7) Shallow Aquitard (D3) Dalain in Remarks) FAC-Neutral Test (D5) ches): ches): Ches): Ches): Wetland Hydrology Present? Yes No V |

WDC SR-177, SR-193 to 1800 NorthUDOT



Sample Point 62



Sample Point 62

| Project/Site: WDC Phase II | (| City/County | Davis C | ounty | Sampling Date: 2024-05-16 |
|--|-----------------|-------------|--------------------------|--|--|
| Applicant/Owner: UDOT | | | | State: Utah | Sampling Point: SP63 |
| Investigator(s): Cara Glabau, Elena Capson | ; | Section, To | wnship, Ra | nge: S30 T5N R2W | |
| | | | | | Slope (%): 2 |
| Subregion (LRR): D 28A | _ Lat: 41. | 13793767 | 7 | _ Long:112.10525317 | 7 Datum: NAD83_201 |
| Soil Map Unit Name: HLA - Harrisville-Leland comple | ex, 0 to 1 | percent s | lopes | NWI classific | ation: None |
| Are climatic / hydrologic conditions on the site typical for this | s time of yea | ar? Yes | No | (If no, explain in Re | emarks.) |
| Are Vegetation, Soil, or Hydrologys | significantly | disturbed? | Are " | Normal Circumstances" p | oresent? Yes No |
| Are Vegetation, Soil, or Hydrology r | naturally pro | blematic? | (If ne | eeded, explain any answer | rs in Remarks.) |
| SUMMARY OF FINDINGS – Attach site map | showing | samplin | g point l | ocations, transects | , important features, etc. |
| Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Yes N N N N N | 0 | | e Sampled in a Wetlar | | No |
| Conditions were wetter than normal accorden rain for several days prior to the si | _ | to the a | ntecede | nt precipitation to | ool, but there had not |
| VEGETATION – Use scientific names of plan | | | | | |
| VEGETATION – Use scientific fiames of plan | Absolute | Dominant | Indicator | Dominance Test works | sheet: |
| Tree Stratum (Plot size:) | % Cover | | | Number of Dominant Sp | pecies |
| 1 | | | | That Are OBL, FACW, o | or FAC: 2 (A) |
| 2 | | | | Total Number of Domina | ant 2 (D) |
| 3 | | | | Species Across All Strat | |
| | | = Total Co | | Percent of Dominant Sp That Are OBL, FACW, of | |
| Sapling/Shrub Stratum (Plot size:) | | | | | ` ` ' |
| 1 | | | | Prevalence Index work | Ksneet: Multiply by: |
| 2 | | | | | x 1 = 40 |
| 4. | | | | FACW species 60 | |
| 5. | | | | · · | x 3 = 0 |
| | | = Total Co | ver | FACU species 0 | x 4 = 0 |
| Herb Stratum (Plot size:) | | | | UPL species 0 | x 5 = 0 |
| 1. Carex nebrascensis | 35 | | OBL | Column Totals: 100 | (A) <u>160</u> (B) |
| 2. Juncus balticus | 30 | | FACW | Decorate a contra de con | D/A 160 |
| 3. Carex praegracilis 4 Phalaris arundinacea | 15 | | FACW FACW | Prevalence Index | |
| Typha angustifolia | <u> 15</u> 5 | - | OBL | Hydrophytic Vegetation ✓ Dominance Test is | |
| | - — | | OBL | ✓ Prevalence Index is | |
| 6 | | | | | ptations ¹ (Provide supporting |
| 8 | | | | | s or on a separate sheet) |
| 0 | 100 | = Total Co | ver | Problematic Hydrop | phytic Vegetation ¹ (Explain) |
| Woody Vine Stratum (Plot size:) | | | | | |
| 1 | | | | ¹ Indicators of hydric soil be present, unless distu | I and wetland hydrology must urbed or problematic. |
| 2 | | = Total Co | | Hydrophytic | <u> </u> |
| | | | | Vegetation | |
| % Bare Ground in Herb Stratum % Cover | r of Biotic Ci | rust | | Present? Yes | s No |
| Remarks: | | | | | |
| check sedge species | | | | | |
| | | | | | |

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

| Depth | Matrix | 0/ | Redox Features | Tautuma | Demonto |
|---------------------------------------|---|----------------|---|------------------------------------|---|
| (inches) | Color (moist) | | Color (moist) % Type ¹ L | oc ² Texture | Remarks |
| 0 - 2 | 10YR 3/2 | 100 | | Mucky Loam/Clay | |
| 2 - 6 | 10YR 4/3 | 100 | | Sandy Clay | |
| 6 - 16 | 10YR 7/2 | _ <u>100</u> _ | | Clay | |
| 16 - 24 | 7.5YR 6/4 | 100 | | Clay | |
| | | | | | |
| | | | | | |
| - | | | | | |
| - | | | | | |
| ¹ Type: C=Co | oncentration, D=De | pletion. RM=R | educed Matrix, CS=Covered or Coated S | and Grains. ² Location: | PL=Pore Lining, M=Matrix. |
| | | | RRs, unless otherwise noted.) | | oblematic Hydric Soils ³ : |
| Histosol | (A1) | | Sandy Redox (S5) | 1 cm Muck (A | (A9) (LRR C) |
| Histic Ep | oipedon (A2) | | Stripped Matrix (S6) | 2 cm Muck (A | |
| Black Hi | stic (A3) | | Loamy Mucky Mineral (F1) | Reduced Ver | tic (F18) |
| Hydroge | en Sulfide (A4) | | Loamy Gleyed Matrix (F2) | Red Parent M | laterial (TF2) |
| Stratified | d Layers (A5) (LRR | C) | ✓ Depleted Matrix (F3) | Other (Explai | n in Remarks) |
| | ıck (A9) (LRR D) | | Redox Dark Surface (F6) | | |
| | d Below Dark Surfac | ce (A11) | Depleted Dark Surface (F7) | 3 | |
| _ | ark Surface (A12) | | Redox Depressions (F8) | - | rophytic vegetation and |
| - | Mucky Mineral (S1) | | Vernal Pools (F9) | • | ogy must be present, d or problematic. |
| | Bleyed Matrix (S4) Layer (if present): | | | uniess disturbe | и от рговієтнаціс. |
| Type: | Layer (ii present). | | | | |
| Depth (inc | choe): | | _ | Hydric Soil Prese | nt? Yes 🗸 No |
| Remarks: | | | _ | nyunc 3011 Frese | iit: fesNo |
| | | | | | |
| HYDROLO | GY | | | | |
| Wetland Hyd | drology Indicators | : | | | |
| Primary India | cators (minimum of | one required; | check all that apply) | Secondary Ir | ndicators (2 or more required) |
| Surface | Water (A1) | | Salt Crust (B11) | Water M | larks (B1) (Riverine) |
| High Wa | iter Table (A2) | | Biotic Crust (B12) | Sedimer | nt Deposits (B2) (Riverine) |
| ✓ Saturation | on (A3) | | Aquatic Invertebrates (B13) | Drift Dep | posits (B3) (Riverine) |
| Water M | larks (B1) (Nonrive | rine) | Hydrogen Sulfide Odor (C1) | <u> </u> | e Patterns (B10) |
| Sedimer | nt Deposits (B2) (No | onriverine) | Oxidized Rhizospheres along Livi | ng Roots (C3) Dry-Sea | son Water Table (C2) |
| Drift Dep | oosits (B3) (Nonrive | erine) | Presence of Reduced Iron (C4) | Crayfish | Burrows (C8) |
| | Soil Cracks (B6) | | Recent Iron Reduction in Tilled So | | on Visible on Aerial Imagery (C9) |
| · · · · · · · · · · · · · · · · · · · | on Vis ble on Aerial | , | Thin Muck Surface (C7) | | Aquitard (D3) |
| | tained Leaves (B9) | | Other (Explain in Remarks) | FAC-Ne | utral Test (D5) |
| Field Obser | | | | | |
| Surface Water | | | Depth (inches): | | |
| Water Table | Present? | Yes No | Depth (inches): | | |
| Saturation Pr | | Yes 🔽 No | Depth (inches): 0 | Wetland Hydrology Pres | ent? Yes 🗸 No |
| (includes cap Describe Re | | n gauge, moni | toring well, aerial photos, previous inspec | tions), if available: | |
| | 2000 (00000) | J 30, 1110111 | g g protects, provious mopes | | |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |
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| | | | | | |

WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 63



Sample Point 63

| Project/Site: WDC Phase II | | City/Cou | _{ınty:} <u>Davis C</u> | ounty | S | Sampling | Date: 202 | 4-05-16 |
|--|-------------------------|----------------|---------------------------------|------------------------------|----------------|------------|--------------|--------------|
| Applicant/Owner: UDOT | | | | State: U | l tah S | Sampling | Point: SP6 | 34 |
| Investigator(s): Cara Glabau, Elena Capson | : | Section, | Township, Ra | nge: S30 T5N | R2W | | | |
| Landform (hillslope, terrace, etc.): Flat | | Local re | elief (concave, | convex, none): _ | None | | Slope (| %): <u>0</u> |
| Subregion (LRR): D 28A | Lat: 41. | 137974 | 45 | _ Long: -112.1 | 0527133 | | _ Datum: 1 | √AD83_20′ |
| Soil Map Unit Name: HLA - Harrisville-Leland | complex, 0 to 1 | percen | t slopes | NW | /I classificat | ion: Nor | пе | |
| Are climatic / hydrologic conditions on the site typic | al for this time of yea | ar? Yes | No | (If no, ex | plain in Rer | narks.) | | |
| Are Vegetation, Soil, or Hydrology _ | | | | "Normal Circums | | | es 🗸 | No |
| Are Vegetation, Soil, or Hydrology _ | | | | eeded, explain a | | | | |
| SUMMARY OF FINDINGS – Attach site | | | | | | | | res, etc. |
| | 4 | | | | | | | |
| | No | | s the Sampled | | | | | |
| | No | W | vithin a Wetlaı | nd? | Yes | _ No _ | | |
| Remarks: | | | | | | | | |
| Conditions were wetter than norm | al according t | to the | antecede | nt precipit | ation to | ol but | there h | ad not |
| been rain for several days prior to | _ | | anteceae | in precipit | ation to | Ji, Dut | there in | ad not |
| | | | | | | | | |
| VEGETATION – Use scientific names of | | | | | | | | |
| Tree Stratum (Plot size:) | Absolute % Cover | | ant Indicator es? Status | Dominance T | | | | |
| 1 | | | | Number of Do That Are OBL | | | 0 | (A) |
| 2. | | | | Total Number | of Dominar | -t | | , , |
| 3 | | | | Species Acros | | | 2 | (B) |
| 4 | | | | Percent of Do | minant Sne | ries | | |
| Sapling/Shrub Stratum (Plot size: | | = Total | Cover | That Are OBL | | | 0.00 | (A/B) |
| 1 | | | | Prevalence Ir | ndex works | heet: | | |
| 2. | | | | | Cover of: | | Multiply by: | : |
| 3. | | | | OBL species | | | = 0 | |
| 4. | | | | FACW specie | s <u>0</u> | x 2 | = 0 | |
| 5 | | | | FAC species | 10 | | | |
| | | _ = Total | Cover | FACU species | | x 4 | = 360 | |
| Herb Stratum (Plot size:) 1. Vulpia myuros | 40 | ~ | FACU | UPL species | 0 | | = 0 | |
| 2. Hordeum murinum | 35 | | FACU | Column Totals | 3: 100 | (A) | 390 | (B) |
| 3. Lepidium perfoliatum | 15 | | FACU | Prevaler | nce Index = | : B/A = _3 | 3.90 | |
| 4. Distichlis spicata | 5 | | FAC | Hydrophytic | | | | |
| 5. Rumex crispus | 5 | | FAC | Dominand | ce Test is >! | 50% | | |
| 6 | | | | Prevalence | | | | |
| 7 | | | | Morpholo | | | | |
| 8 | | | | Problema | n Remarks c | | | • |
| Woody Vine Stratum (Plot size: | | = Total | Cover | 1 100101118 | iic riyaropii | ylic vege | itation (EX | piairi) |
| 1 | , | | | ¹ Indicators of | hydric soil a | and wetla | nd hydroloc | y must |
| 2. | | | | be present, ur | | | | |
| | | | Cover | Hydrophytic | | | | |
| % Bare Ground in Herb Stratum | · | - ' | | Vegetation Present? | Vos | | No 🗸 | |
| Remarks: | 70 COVEL OF BIOLIC CI | iust | | Fresent: | 165 | | | |
| Remarks. | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

| | - | _ | | | | or confirm | the absence of ir | dicators.) | | | |
|-------------------------|--|---------------------------------------|----------------------|-------------|------------|-------------|------------------------------|--|------------------|--|--|
| Depth (in aboa) | Matrix | | | ox Feature: | 1 | Loc² | Damada | | | | |
| (inches) | Color (moist) | | Color (moist) | % | Type' | LOC | Texture | Remarks | S | | |
| 0 - 24 | 7.5YR 3/2 | 100 | | | | | Clay Loam | | | | |
| | | | | | | | | | | | |
| - | | | | | | | | | | | |
| - | - | | | | | | | | | | |
| | - | <u> </u> | | | | | · | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| - | | | | | | | | | | | |
| ¹ Type: C=Ce | oncentration, D=D | epletion. RM=R | educed Matrix. C | S=Covered | d or Coate | d Sand Gr | rains. ² Location | n: PL=Pore Lining, | M=Matrix. | | |
| | Indicators: (Appl | • | | | | | | Problematic Hydri | | | |
| Histosol | (A1) | | Sandy Red | lox (S5) | | | 1 cm Muck | (A9) (LRR C) | | | |
| Histic Ep | oipedon (A2) | | Stripped M | | | | | (A10) (LRR B) | | | |
| Black Hi | stic (A3) | | Loamy Mu | cky Minera | I (F1) | | Reduced V | ertic (F18) | | | |
| | en Sulfide (A4) | | Loamy Gle | yed Matrix | (F2) | | | : Material (TF2) | | | |
| | d Layers (A5) (LRF | R C) | Depleted N | ` , | | | Other (Expl | ain in Remarks) | | | |
| | ick (A9) (LRR D) | | Redox Dar | | , | | | | | | |
| | d Below Dark Surfa | ace (A11) | Depleted D | | | | 3Indiantors of h | dranbutia vagatati | an and | | |
| | ark Surface (A12) ⁄lucky Mineral (S1) | | Redox Dep Vernal Poo | | ro) | | | drophytic vegetation of the very discount of the ve | | | |
| - | Gleyed Matrix (S4) | | vernar Foc | ns (1 9) | | | - | oed or problematic | | | |
| | Layer (if present) | | | | | | | od or problemation | • | | |
| _ | , | | | | | | | | | | |
| , , <u> </u> | ches): | | | | | | Hydric Soil Pres | sent? Yes | No 🗸 | | |
| Remarks: | | | _ | | | | 1., | | | | |
| | soil with san | | | | | | | | | | |
| HYDROLO | | | | | | | | | | | |
| _ | drology Indicator | | | | | | | | | | |
| Primary India | cators (minimum o | f one required; | | | | | | Indicators (2 or m | | | |
| Surface | ` , | | Salt Crus | | | | | Marks (B1) (River | • | | |
| _ | ater Table (A2) | | Biotic Cru | | | | | ent Deposits (B2) | | | |
| Saturation | | | Aquatic Ir | | | | | eposits (B3) (Rive | rine) | | |
| | larks (B1) (Nonriv | | Hydrogen | | | | | age Patterns (B10) | | | |
| | nt Deposits (B2) (N | | | | _ | _ | ots (C3) Dry-Se | | (C2) | | |
| - | posits (B3) (Nonriv | verine) | Presence | | • | • | | sh Burrows (C8) | | | |
| | Soil Cracks (B6) | | Recent Ir | | | d Soils (C6 | | ation Visible on Aer | ial Imagery (C9) | | |
| | on Vis ble on Aeria | | Thin Muc | | , | | | w Aquitard (D3) | | | |
| | tained Leaves (B9 |) | Other (Ex | plain in Re | marks) | - | FAC-N | Neutral Test (D5) | | | |
| Field Obser | | | . | | | | | | | | |
| Surface Wat | | | Depth (ir | | | | | | | | |
| Water Table | Present? | · · · · · · · · · · · · · · · · · · · | Depth (ir | | | | | | | | |
| Saturation P | oillary fringe) | | Depth (ir | | | | and Hydrology Pre | esent? Yes | No | | |
| Describe Re | corded Data (strea | ını gauge, moni | toring well, aerlal | priotos, pr | evious ins | pecuons), | ıı avallable: | | | | |
| Remarks: | | | | | | | | | | | |
| rtomants. | | | | | | | | | | | |
| | | | | | | | | | | | |
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WDC SR-177, SR-193 to 1800 NorthUDOT



Sample Point 64



Sample Point 64

| Project/Site: WDC Phase II | | | City/Co | ounty: | Davis C | ounty | | Sampling | Date: 20 | 24-05-22 |
|---|----------------|-----------------|---------|---------------|------------|---------------------|-------------------------------|-------------|--------------------------|---------------|
| Applicant/Owner: UDOT | | | | | | State: | Utah | Sampling | Point: SP | 65 |
| Investigator(s): Merissa Davis | | | Section | n, Tov | nship, Ra | nge: S30 T | 5N R2W | | | |
| Landform (hillslope, terrace, etc.): Depressi | | | | | | | | re | Slope | (%): <u>0</u> |
| Subregion (LRR): D 28A | | Lat: 41. | 13811 | 595 | | _ Long:11: | 2.1054966 | 35 | _ Datum: | NAD83_201 |
| Soil Map Unit Name: HLA - Harrisville-Le | eland comp | olex, 0 to 1 | perce | nt sl | pes | | NWI classifi | cation: No | ne | |
| Are climatic / hydrologic conditions on the site | typical for th | nis time of yea | ar? Ye | es | No | (If no, | explain in F | Remarks.) | | |
| Are Vegetation, Soil, or Hydro | logy | significantly | disturb | ed? | Are ' | "Normal Circu | umstances" | present? Y | /es | No |
| Are Vegetation, Soil, or Hydro | ology 🔽 | naturally pro | blemat | tic? | (If ne | eeded, explai | n any answe | ers in Rema | rks.) | |
| SUMMARY OF FINDINGS - Attacl | n site map | showing | samı | pling | point l | ocations, | transects | s, import | ant feat | ures, etc. |
| Lludrophytic Vogetation Brocent? | es _ 🗸 | No | | | | | | | | |
| Hydrophytic Vegetation Present? Your Hydric Soil Present? You | es | No 🗸 | | | Sampled | | | | ., | |
| | es 🔽 | | | withi | n a Wetlar | nd? | Yes | No _ | | |
| Remarks: | | | | | | | | | | |
| Inundated from overflow of irr | igation d | itch. Cau | ise of | f hv | drophy | tic veaet | ation an | d hvdro | loav. N | 0 |
| indicators for wetland soils pro | • | | | • | . , | J | | , | 3, | |
| VEGETATION – Use scientific nan | | nts. | | | | | | | | |
| | | Absolute | Domi | inant | Indicator | Dominanc | e Test worl | ksheet: | | |
| Tree Stratum (Plot size:) | | % Cover | | | | Number of | Dominant S | Species | _ | |
| 1 | | | | | | That Are C | BL, FACW, | or FAC: | 2 | (A) |
| 2 | | | | | | | ber of Domir | nant | 0 | |
| 3 | | | | . | | Species Ad | cross All Stra | ata: | 2 | (B) |
| 4 | | | | al Cov | | | Dominant S | | 100.00 | (4 (5) |
| Sapling/Shrub Stratum (Plot size: |) | | 1012 | ai Cov | Ci | That Are C | BL, FACW, | or FAC: | 100.00 | (A/B) |
| 1 | | | | | | Prevalenc | e Index wo | rksheet: | | |
| 2 | | | | | | | % Cover of: | | Multiply by | <u>y:</u> |
| 3 | | | | | | OBL specie | | x 1 | | |
| 4 | | | | | | FACW species | cies <u>35</u> | x 2 x 3 | | |
| 5 | | | | | | FACU specific | | x 3 x 4 | | |
| Herb Stratum (Plot size:) | | | 1012 | ai Cov | eı | UPL specie | | | = 0 | |
| 1. Poa pratensis | | 60 | | <u> </u> | FAC | | tals: 100 | | | (B) |
| 2. Juncus balticus | | 35 | | | FACW | | | | | |
| 3. Taraxacum officinale | | 5 | | | FACU | | alence Index | | | |
| 4 | | | | | | | tic Vegetati ance Test is | | ors: | |
| 5 | | | | | | I — | ence Index | | | |
| 6 7 | | | | | | ' | ological Ada | | Provide sur | pportina |
| 8. | | | | | _ | | a in Remark | | | |
| 0. | | 100 | = Tota | al Cov | er | Proble | matic Hydro | phytic Vege | etation ¹ (Ex | xplain) |
| Woody Vine Stratum (Plot size: |) | | | | | 1 | | | | |
| 1 | | | | | | | of hydric so , unless dist | | | gy must |
| 2 | | | | | | | | | | |
| | | | | | | Hydrophy Vegetation | า | | | |
| % Bare Ground in Herb Stratum | % Cov | er of Biotic C | rust | | | Present? | Ye | es | No | _ |
| Remarks: | | | | | | | | _ | _ | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

| Depth | ription: (Describe Matrix | | | ox Feature: | | | | |
|--|---|---|---|--|---|------------------|--|--|
| (inches) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | Texture | Remarks |
| 0 - 20 | 7.5YR 4/2 | 100 | | | | | Silt Loam | |
| - | | | | | | | | |
| - | | | | | | | | |
| | | | | | | | | - |
| | | | | | | | - | |
| | | _ | | | | | | |
| - | | | | | | | | |
| - | | | | | | | | |
| - | | | | | | | | |
| | naantration D-Day | alotion DM- | Reduced Matrix, C | | d or Coots | d Cand C | raina ² l a | cation: PL=Pore Lining, M=Matrix. |
| • • | | | LRRs, unless othe | | | u Sanu G | | for Problematic Hydric Soils ³ : |
| Histosol | | Jubic to un | Sandy Red | | ou., | | | Muck (A9) (LRR C) |
| | ipedon (A2) | | Stripped M | | | | | Muck (A10) (LRR B) |
| Black His | | | Loamy Mu | | l (F1) | | | ed Vertic (F18) |
| | n Sulfide (A4) | | Loamy Gle | - | | | | arent Material (TF2) |
| | Layers (A5) (LRR | C) | Depleted N | - | • , | | | (Explain in Remarks) |
| | ck (A9) (LRR D) | | Redox Dar | | (F6) | | | - |
| | Below Dark Surfac | ce (A11) | Depleted D | | | | | |
| ' | rk Surface (A12) | | Redox Dep | | F8) | | | of hydrophytic vegetation and |
| | ucky Mineral (S1) | | Vernal Poo | ols (F9) | | | | hydrology must be present, |
| | leyed Matrix (S4) | | | | | | unless d | listurbed or problematic. |
| | .ayer (if present): | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | :hes): | | | | | | Hydric Soil | Present? Yes No |
| | :hes): | | | | | | Hydric Soil | Present? Yes No |
| Remarks: | | | | | | | Hydric Soil | Present? Yes No |
| Remarks: | GY | | | | | | Hydric Soil | Present? Yes No |
| YDROLOG | GY Irology Indicators | : | | olv) | | | | |
| YDROLOG Wetland Hyd Primary Indic | GY Irology Indicators ators (minimum of | : | t; check all that app | • | | | Secon | ndary Indicators (2 or more required) |
| YDROLOGUELLA METALEN SUPPRIMARY INDICES | GY Irology Indicators ators (minimum of water (A1) | : | t; check all that app Salt Crus | t (B11) | | | <u>Secoi</u> V | ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) |
| YDROLOG Wetland Hyd Primary Indic V Surface V High Wa | GY Irology Indicators ators (minimum of a Water (A1) ter Table (A2) | : | t; check all that app Salt Crus Biotic Cru | t (B11) ust (B12) | es (B13) | | Secon | ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) |
| YDROLOG Wetland Hyd Primary Indic V Surface High Wa V Saturatio | GY Irology Indicators ators (minimum of a Water (A1) ter Table (A2) on (A3) | : one required | l; check all that app Salt Crus Biotic Cru Aquatic Ir | t (B11) ist (B12) ivertebrate | | | Secon | ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) |
| YDROLOG Wetland Hyden Primary Indices Wetland Hyden Yufaces High Wases Saturation Water Mi | GY Irology Indicators ators (minimum of water (A1) ter Table (A2) in (A3) arks (B1) (Nonrive | : one required | t; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger | t (B11) ust (B12) nvertebrate n Sulfide Od | dor (C1) | Living Ro | Secol — V — S — C | ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) |
| YDROLOG Wetland Hyden Primary Indic Y Surface W High Wa Y Saturation Water March M | GY Irology Indicators ators (minimum of a Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (No | : one required rine) nriverine) | d; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized | t (B11) ust (B12) nvertebrate n Sulfide Oo Rhizosphe | dor (C1) res along | - | Secol V S C C | Andary Indicators (2 or more required) Vater Marks (B1) (Riverine) Gediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) |
| NET SENT OF THE PROPERTY IN TH | GY Irology Indicators ators (minimum of of other (A1) ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (No | : one required rine) nriverine) | d; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence | t (B11) ust (B12) nvertebrate n Sulfide Oo Rhizosphe | dor (C1) res along ed Iron (C4 | .) | Secon V S C C ots (C3) C | ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Orayfish Burrows (C8) |
| Remarks: IYDROLOG Wetland Hyc Primary Indic V Surface V High Wa V Saturatio Water M Sedimen Drift Dep Surface S | GY Irology Indicators ators (minimum of or or or or or or or or or or or or or | : one required rine) onriverine) | d; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir | t (B11) ust (B12) nvertebrate n Sulfide Oo Rhizosphe of Reduce on Reducti | dor (C1) res along ed Iron (C4 on in Tille | .) | Secon V S C C C C C C C C C S | ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Gediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Gaturation Visible on Aerial Imagery (C9) |
| Surface | GY Irology Indicators ators (minimum of orwater (A1) ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (No osits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial | : one required rine) onriverine) | d; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir | t (B11) ust (B12) nvertebrate n Sulfide Od Rhizosphe of Reduce on Reducti k Surface (| dor (C1) res along ed Iron (C4 on in Tille (C7) | .) | Secon V S C C C C C C C C C C C C C C C S S S S S | ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| Surface Surf | GY Irology Indicators ators (minimum of other (A1) ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (Norive cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial ained Leaves (B9) | : one required rine) onriverine) | d; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir | t (B11) ust (B12) nvertebrate n Sulfide Oo Rhizosphe of Reduce on Reducti | dor (C1) res along ed Iron (C4 on in Tille (C7) | .) | Secon V S C C C C C C C C C C C C C C C S S S S S | ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Gediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Gaturation Visible on Aerial Imagery (C9) |
| Primary Indic V Surface High Wa Saturation Water Mater Mater Surface Unundation Water-St | GY Irology Indicators ators (minimum of a Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (No osits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial ained Leaves (B9) vations: | rine) prine) Imagery (B7 | d; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc | t (B11) ust (B12) nvertebrate n Sulfide Oc Rhizosphe of Reduce on Reducti k Surface (cplain in Re | dor (C1) ares along ad Iron (C4 on in Tille (C7) amarks) | d Soils (Co | Secon V S C C C C C C C C C C C C C C C S S S S S | ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| Primary Indice ✓ Surface V ✓ High Water Mang Sedimen Drift Dep Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Water-Sterield Observators | drology Indicators ators (minimum of an ators (minimum of an ators (minimum of an ators (Manager (A1)) ter Table (A2) on (A3) arks (B1) (Nonrive at Deposits (B2) (Nonrive at Deposits (B2) (Nonrive ators (B6)) on Vis ble on Aerial an ained Leaves (B9) artions: er Present? | rine) priverine) rine) Imagery (B7 | d; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Other (Ex | t (B11) ust (B12) nvertebrate n Sulfide Or Rhizosphe of Reduce on Reducti k Surface (xplain in Re | dor (C1) res along ed Iron (C4 on in Tiller (C7) emarks) | d Soils (Co | Secon V S C C C C C C C C C C C C C C C S S S S S | ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| Primary Indice Value Saturation Water Manuel Sedimen Drift Dep Surface Surface Surface Surface Surface Surface Surface Surface Surface Surface Water Table | GY Irology Indicators ators (minimum of a Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (No osits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial cained Leaves (B9) vations: er Present? | rine) priverine) lmagery (B7 | d; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex | t (B11) ust (B12) nvertebrate n Sulfide Oo Rhizosphe of Reduce on Reducti k Surface (cplain in Re nches): 2 nches): 0 | dor (C1) res along ed Iron (C4 on in Tille (C7) emarks) | d Soils (Co | Secon V S C C C C C S C S S S F | ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) (AC-Neutral Test (D5) |
| IVDROLOGN | GY Irology Indicators ators (minimum of orwater (A1) ter Table (A2) on (A3) arks (B1) (Nonriver t Deposits (B2) (Noriver t Deposits (B3) (Nonriver Soil Cracks (B6) on Vis ble on Aerial ained Leaves (B9) //ations: er Present? Present? | rine) priverine) lmagery (B7 | d; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Other (Ex | t (B11) ust (B12) nvertebrate n Sulfide Oo Rhizosphe of Reduce on Reducti k Surface (cplain in Re nches): 2 nches): 0 | dor (C1) res along ed Iron (C4 on in Tille (C7) emarks) | d Soils (Co | Secon V S C C C C C S C S S S F | ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) |
| Primary Indic ✓ Surface ✓ High Wa ✓ Saturatio Water Mand Mater Mandalic Surface Surface Field Observing Surface Water Table Saturation Princludes cap | drology Indicators ators (minimum of a Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (No cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial ained Leaves (B9) vations: er Present? Present? esent? | cine) crine) crine) lmagery (B7 | d; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex | t (B11) ust (B12) nvertebrate n Sulfide Oo Rhizosphe of Reduce on Reducti k Surface (cplain in Re nches): 2 nches): 0 nches): 0 | dor (C1) res along ed Iron (C4 on in Tille (C7) emarks) | d Soils (Co | Secon V S S Cots (C3) S S V F S S S S S S S S S S S S S S S S | ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) (AC-Neutral Test (D5) |
| Primary Indice Value High Water March Sediment Drift Dep Surface Surface Surface Surface Water Strick Water Table Saturation Principle Surface Saturation Principle Saturation P | drology Indicators ators (minimum of a Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (No cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial ained Leaves (B9) vations: er Present? Present? esent? | cine) crine) crine) lmagery (B7 | d; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Other (Ex | t (B11) ust (B12) nvertebrate n Sulfide Oo Rhizosphe of Reduce on Reducti k Surface (cplain in Re nches): 2 nches): 0 nches): 0 | dor (C1) res along ed Iron (C4 on in Tille (C7) emarks) | d Soils (Co | Secon V S S Cots (C3) S S V F S S S S S S S S S S S S S S S S | ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) (AC-Neutral Test (D5) |
| Primary Indic Wetland Hyc Primary Indic Water Mary Sedimen Drift Dep Surface Surface Surface Surface Water Strick Water Table Saturation Principal Surface Saturation Principal Saturation Pri | drology Indicators ators (minimum of a Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (No cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial ained Leaves (B9) vations: er Present? Present? esent? | cine) crine) crine) lmagery (B7 | d; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Other (Ex | t (B11) ust (B12) nvertebrate n Sulfide Oo Rhizosphe of Reduce on Reducti k Surface (cplain in Re nches): 2 nches): 0 nches): 0 | dor (C1) res along ed Iron (C4 on in Tille (C7) emarks) | d Soils (Co | Secon V S S Cots (C3) S S V F S S S S S S S S S S S S S S S S | ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) (AC-Neutral Test (D5) |
| Primary Indice Vetland Hyc Primary Indice Vetland Hyc Primary Indice Vetland Hyc Vetland Hyc Vetland Hyc Vetland Hyc Vetland Hyc Vetland Wa Saturatio Water Mater Sedimen Drift Dep Surface S Inundatio Water-St Field Observ Surface Water Water Table Saturation Pr (includes cap Describe Reconserves Remarks: | drology Indicators ators (minimum of a water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (Norive t Deposits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial ained Leaves (B9) vations: er Present? Present? esent? illary fringe) | rine) priverine) Imagery (B7 /es | d; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex | t (B11) ust (B12) nvertebrate n Sulfide Oo Rhizosphe of Reduce on Reducti k Surface (cplain in Re nches): 2 nches): 0 photos, pri | dor (C1) res along ed Iron (C4 on in Tiller (C7) emarks) | Wetl | Secondary V Secondary S Secondary V Secondary S Second | Indary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Schallow Aquitard (D3) FAC-Neutral Test (D5) The provided of the provided of |
| Primary Indice Value High Wa Saturation Water Manager Surface Surface Surface Water Table Saturation Processoribe Recommendation Remarks: | drology Indicators ators (minimum of a water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (Norive t Deposits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial ained Leaves (B9) vations: er Present? Present? esent? illary fringe) | rine) priverine) Imagery (B7 /es | d; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex | t (B11) ust (B12) nvertebrate n Sulfide Oo Rhizosphe of Reduce on Reducti k Surface (cplain in Re nches): 2 nches): 0 photos, pri | dor (C1) res along ed Iron (C4 on in Tiller (C7) emarks) | Wetl | Secondary V Secondary S Secondary V Secondary S Second | ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) (AC-Neutral Test (D5) |
| YDROLOG Wetland Hyd Primary Indic V Surface V High Wa Saturatio Water M: Sedimen Drift Dep Surface S Inundatio Water-St Field Observ Surface Water Water Table Saturation Pr (includes cap Describe Rec | drology Indicators ators (minimum of a water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (Norive t Deposits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial ained Leaves (B9) vations: er Present? Present? esent? illary fringe) | rine) priverine) Imagery (B7 /es | d; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex | t (B11) ust (B12) nvertebrate n Sulfide Oo Rhizosphe of Reduce on Reducti k Surface (cplain in Re nches): 2 nches): 0 photos, pri | dor (C1) res along ed Iron (C4 on in Tiller (C7) emarks) | Wetl | Secondary V Secondary S Secondary V Secondary S Second | Indary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Schallow Aquitard (D3) FAC-Neutral Test (D5) The provided of the provided of |

WDC SR-177, SR-193 to 1800 NorthUDOT



Sample Point 65



Sample Point 65

| Project/Site: WDC Phase II | | City/ | County | : Davis Co | ounty | S | Sampling Date: 2024- | -05-22 |
|--|-----------------------|--------------|----------|-------------|--------------------------|-----------------|--|---------|
| Applicant/Owner: UDOT | | | | | State: <u>\</u> | Jtah s | Sampling Point: SP66 | |
| Investigator(s): Cara Glabau, Elena Caps | son | Sect | ion, To | wnship, Ra | nge: S30 T5N | I R2W | | |
| Landform (hillslope, terrace, etc.): Depressi | on | Loca | al relie | (concave, | convex, none): | Concave | Slope (%): | 0 |
| Subregion (LRR): D 28A | Lat | 41.139 | 205 | | _ Long: <u>-112.1</u> | 0827183 | Datum: NAD | D83_20° |
| Soil Map Unit Name: HLA - Harrisville-Le | land complex, 0 | to 1 per | cent s | lopes | NV | /I classificati | ion: PEM1/USA | |
| Are climatic / hydrologic conditions on the site | typical for this time | of year? | Yes | No | (If no, ex | plain in Ren | narks.) | |
| Are Vegetation, Soil, or Hydro | ology <u> </u> | antly distu | rbed? | Are " | 'Normal Circum | stances" pre | esent? Yes No | o |
| Are Vegetation, Soil, or Hydro | logynatural | ly problem | natic? | (If ne | eded, explain a | ny answers | in Remarks.) | |
| SUMMARY OF FINDINGS - Attack | າ site map shov | ving saı | mplin | g point l | ocations, tra | ansects, i | mportant feature | s, etc. |
| Lludranhutia Vanatatian Brasant | | | | | | | | |
| Hydrophytic Vegetation Present? Yet Hydric Soil Present? Yet | es | <u></u> | | e Sampled | | ., | | |
| | es No No | | with | in a Wetlar | nd? | Yes | No | |
| Remarks: | | | 1 | | | | | |
| Conditions were wetter than n | ormal accord | ina to t | he a | ntecede | ent precipit | ation too | ol but there had | ton b |
| been rain for several days prio | | - | | | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | |
| | | | | | | | | |
| VEGETATION – Use scientific nan | - | olute Do | minant | Indicator | Dominance 1 | Foot worksh | 2001 | |
| Tree Stratum (Plot size:) | | | | Status | Number of Do | | | |
| 1 | | | | | That Are OBL | | | (A) |
| 2 | | | | | Total Number | of Dominan | nt | |
| 3 | | | | | Species Acro | ss All Strata | 3 | (B) |
| 4 | | | | | Percent of Do | minant Spe | | |
| Sapling/Shrub Stratum (Plot size: |) | = T | otal Co | ver | That Are OBL | ., FACW, or | FAC: 100.00 | (A/B) |
| 1 | | | | | Prevalence I | ndex works | heet: | |
| 2. | | | | | Total % 0 | Cover of: | Multiply by: | _ |
| 3 | | | | | OBL species | | x 1 = <u>5</u> | _ |
| 4 | | | | | | | x 2 = 180 | |
| 5 | | | | | FAC species | | x 3 = 0 | _ |
| Herb Stratum (Plot size:) | | = T | otal Co | ver | FACU specie | s <u>5</u> 0 | x 4 = 20 | _ |
| 1. Carex praegracilis | 35 | | ~ | FACW | UPL species Column Total | | x = 0 (A) 205 | — (D) |
| 2. Phalaris arundinacea | 30 | | ~ | FACW | Column Total | s. <u>100</u> | (A) <u>200</u> | (B) |
| 3. Juncus balticus | 25 | | ' | FACW | Prevale | nce Index = | : B/A = 2.05 | _ |
| 4. Melilotus officinalis | 5 | | | FACU | Hydrophytic | | | |
| _{5.} Typha angustifolia | 5 | | | OBL | <u>✓</u> Dominan | | | |
| 6 | | | | | <u>✓</u> Prevalen | | | |
| 7 | | | | | | | ations ¹ (Provide suppor or on a separate sheet) | |
| 8 | 100 | | | | Problema | atic Hydroph | ytic Vegetation ¹ (Explai | in) |
| Woody Vine Stratum (Plot size: | | <u>/</u> = 1 | otal Co | over | | | | |
| 1. | | | | | | | ind wetland hydrology n | must |
| 2. | | | | | be present, u | nless disturb | ped or problematic. | |
| | | = T | otal Co | ver | Hydrophytic | | | |
| % Bare Ground in Herb Stratum | % Cover of Bir | otic Crust | | | Vegetation Present? | Yes_ | ✓ No | |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

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

| (inches) | Matrix Color (moist) | % | | lox Feature | Type ¹ | Loc ² | Toytura | Pomorko |
|---|---|--|---|--|--|--------------------------------------|---|--|
| (inches) 0 - 2 | Color (moist) 7.5YR 2.5/1 | 100 | Color (moist) | % | <u>rype</u> | LUC | Texture Muck | Remarks |
| 2 - 12 | 10YR 3/1 | 88 | 5YR 4/6 | 12 | | | Silty Clay | |
| | 10YR 5/2 | 93 | 7.5YR 5/8 | <u></u> 7 | | | | |
| 12 - 24 | 10 TR 5/2 | _ 93 | 7.51K 5/6 | | | IVI | Clay | |
| | | | | | | | | |
| | | | | | _ | | | |
| _ | | | | | | | | |
| - | | | | | | | | |
| | - | _ | | | | | | |
| ¹Type: C=Co | oncentration D=De | nletion RM | ====================================== | CS=Covere | ed or Coa | ted Sand G | rains ² l o | cation: PL=Pore Lining, M=Matrix. |
| | | | I LRRs, unless oth | | | itea caria ci | | for Problematic Hydric Soils ³ : |
| Histosol | | | Sandy Re | | , | | | Muck (A9) (LRR C) |
| | oipedon (A2) | | Stripped N | . , | | | | Muck (A10) (LRR B) |
| Black His | stic (A3) | | Loamy Μι | ıcky Miner | al (F1) | | Reduc | ed Vertic (F18) |
| | en Sulfide (A4) | | Loamy Gl | | | | | arent Material (TF2) |
| | d Layers (A5) (LRR | C) | Depleted | | | | Other | (Explain in Remarks) |
| | ick (A9) (LRR D) d Below Dark Surfa | co (A11) | ✓ Redox Da Depleted I | | ` ' | | | |
| | ark Surface (A12) | CE (ATT) | Redox De | | | | ³ Indicators | of hydrophytic vegetation and |
| | fucky Mineral (S1) | | Vernal Po | | (. 0) | | | hydrology must be present, |
| | Bleyed Matrix (S4) | | | ` , | | | | listurbed or problematic. |
| Restrictive L | Layer (if present): | | | | | | | |
| Type: | | | | | | | | |
| Depth (inc | ches): | | | | | | Hydric Soil | Present? Yes No |
| Remarks: | | | | | | | • | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| HYDROLO | GY | | | | | | | |
| | GY drology Indicators | : | | | | | | |
| _ | drology Indicators | | ed; check all that ap | ply) | | | Secor | ndary Indicators (2 or more required) |
| Wetland Hyd | drology Indicators | | ed; check all that ap | - | | | | ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) |
| Wetland Hyd Primary Indic | drology Indicators cators (minimum of | | Salt Crus | - | | | v | <u> </u> |
| Wetland Hyd Primary Indic | drology Indicators eators (minimum of Water (A1) ater Table (A2) | | Salt Crus | st (B11) | es (B13) | | v | Vater Marks (B1) (Riverine) |
| Wetland Hyd Primary Indic Surface High Wa ✓ Saturatic Water M | drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive | one require | Salt Crus Biotic Cr Aquatic I Hydroge | st (B11) ust (B12) nvertebrat n Sulfide 0 | Odor (C1) | | v s d | Vater Marks (B1) (Riverine) sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) |
| Wetland Hyd Primary Indic Surface High Wa V Saturatio Water M Sedimen | drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive at Deposits (B2) (No | one require rine) onriverine | Salt Crus Biotic Cr Aquatic I Hydroge Oxidized | st (B11) ust (B12) nvertebrat n Sulfide (Rhizosph | Odor (C1) eres alon | g Living Roo | V S D ots (C3) D | Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) |
| Wetland Hyd Primary Indic Surface High Wa ✓ Saturatic Water M Sedimer Drift Dep | cators (minimum of Water (A1) Ater Table (A2) on (A3) Harks (B1) (Nonrive ot Deposits (B2) (Nonrive | one require rine) onriverine | Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence | st (B11) ust (B12) nvertebrat n Sulfide (Rhizosph | Odor (C1) eres alon ed Iron (| ig Living Roc C4) | V S C C ots (C3) C | Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Oranage Patterns (B10) Ory-Season Water Table (C2) Orayfish Burrows (C8) |
| Wetland Hyd Primary Indic Surface High Wa V Saturatio Water M Sedimer Drift Dep Surface | drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive nt Deposits (B2) (No cosits (B3) (Nonrive Soil Cracks (B6) | one require rine) onriverine erine) | Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent I | st (B11) ust (B12) nvertebrat n Sulfide (Rhizosph e of Reduc | Odor (C1) eres alon ed Iron (0 tion in Til | g Living Roo | V S C C C S) S | Vater Marks (B1) (Riverine) Gediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Originage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Gaturation Visible on Aerial Imagery (C9) |
| Wetland Hyd Primary Indic Surface High Wa ✓ Saturatic Water M Sedimer Drift Dep Surface Inundation | drology Indicators cators (minimum of Water (A1) ster Table (A2) on (A3) larks (B1) (Nonrive nt Deposits (B2) (No cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial | one require rine) onriverine erine) | Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent II | st (B11) ust (B12) nvertebrat n Sulfide C Rhizosph e of Reduc ron Reduc ck Surface | Odor (C1) eres alon ed Iron (0 tion in Til (C7) | ig Living Roc C4) | V C C C C C S | Vater Marks (B1) (Riverine) Gediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Gaturation Visible on Aerial Imagery (C9) Ghallow Aquitard (D3) |
| Wetland Hyd Primary Indic Surface High Wa ✓ Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-Si | drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive nt Deposits (B2) (No cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) | one require rine) onriverine erine) | Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent II | st (B11) ust (B12) nvertebrat n Sulfide (Rhizosph e of Reduc | Odor (C1) eres alon ed Iron (0 tion in Til (C7) | ig Living Roc C4) | V C C C C C S | Vater Marks (B1) (Riverine) Gediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Originage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Gaturation Visible on Aerial Imagery (C9) |
| Wetland Hyd Primary Indic Surface High Wa ✓ Saturatio Water M Sedimen Drift Dep Surface Inundatio Water-St | drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive at Deposits (B2) (No cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: | one require rine) onriverine erine) Imagery (I | Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent II Thin Muc | st (B11) ust (B12) nvertebrat n Sulfide (Rhizosph e of Reduc ron Reduc ck Surface xplain in R | Odor (C1) eres alon ed Iron (i tion in Til (C7) emarks) | ig Living Roc C4) | V C C C C C S | Vater Marks (B1) (Riverine) Gediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Gaturation Visible on Aerial Imagery (C9) Ghallow Aquitard (D3) |
| Primary Indice Surface High Wa ✓ Saturatic Water M Sedimer Drift Dep Surface Inundatic Water-Si Field Observ Surface Water | drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive at Deposits (B2) (No cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? | one require rine) onriverine erine) Imagery (E | Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent Ii Thin Muc Other (E | st (B11) ust (B12) nvertebrat n Sulfide C Rhizosph e of Reduc ron Reduc ck Surface xxplain in R | Odor (C1) eres alon ed Iron (C tion in Til (C7) emarks) | ig Living Roc C4) | V C C C C C S | Vater Marks (B1) (Riverine) Gediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Gaturation Visible on Aerial Imagery (C9) Ghallow Aquitard (D3) |
| Primary Indice Surface High Wa ✓ Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-Si Field Observ Surface Water Water Table | drology Indicators eators (minimum of Water (A1) ster Table (A2) on (A3) larks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? | rine) ponriverine erine) Imagery (E | Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent II Thin Muc Other (E | st (B11) ust (B12) nvertebrat n Sulfide C Rhizosph e of Reduct ron Reduct ck Surface xplain in R inches): inche | Odor (C1) eres alon ed Iron (C1) tion in Til (C7) emarks) | g Living Roo C4) led Soils (C6 | V S C C C C S S S | Vater Marks (B1) (Riverine) Gediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Gaturation Visible on Aerial Imagery (C9) Ghallow Aquitard (D3) (AC-Neutral Test (D5) |
| Primary Indice Surface High Wa ✓ Saturatic Water M Sedimer Drift Dep Surface Inundatic Water-Si Field Observ Surface Water | drology Indicators eators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive nt Deposits (B2) (No cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? | rine) ponriverine erine) Imagery (E | Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent Ii Thin Muc Other (E | st (B11) ust (B12) nvertebrat n Sulfide C Rhizosph e of Reduct ron Reduct ck Surface xplain in R inches): inche | Odor (C1) eres alon ed Iron (C1) tion in Til (C7) emarks) | g Living Roo C4) led Soils (C6 | V S C C C C S S S | Vater Marks (B1) (Riverine) Gediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Gaturation Visible on Aerial Imagery (C9) Ghallow Aquitard (D3) |
| Wetland Hyd Primary Indic Surface High Wa ✓ Saturatic Water M Sedimer Drift Dep Surface Inundatic Water-Si Field Observ Surface Water Water Table Saturation Pr (includes cap | drology Indicators eators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrive at Deposits (B2) (No cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? resent? | rine) ponriverine erine) Imagery (E | Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent II Thin Muc Other (E | st (B11) ust (B12) nvertebrat n Sulfide C Rhizosph e of Reduc ron Reduc ck Surface xplain in R inches): nches): inches): inches): inches): inches): inches): | Odor (C1) eres alon eed Iron (i tion in Til (C7) eemarks) | g Living Roo C4) led Soils (C6 | V S D ots (C3) D C S) S S | Vater Marks (B1) (Riverine) Gediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Gaturation Visible on Aerial Imagery (C9) Ghallow Aquitard (D3) (AC-Neutral Test (D5) |
| Wetland Hyd Primary Indic Surface High Wa ✓ Saturatic Water M Sedimer Drift Dep Surface Inundatic Water-Si Field Observ Surface Water Water Table Saturation Pr (includes cap | drology Indicators eators (minimum of Water (A1) ster Table (A2) on (A3) larks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? resent? | rine) ponriverine erine) Imagery (E | Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent II Thin Muc Other (E | st (B11) ust (B12) nvertebrat n Sulfide C Rhizosph e of Reduc ron Reduc ck Surface xplain in R inches): nches): inches): inches): inches): inches): inches): | Odor (C1) eres alon eed Iron (i tion in Til (C7) eemarks) | g Living Roo C4) led Soils (C6 | V S D ots (C3) D C S) S S | Vater Marks (B1) (Riverine) Gediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Gaturation Visible on Aerial Imagery (C9) Ghallow Aquitard (D3) (AC-Neutral Test (D5) |
| Wetland Hyd Primary Indic Surface High Wa ✓ Saturatic Water M Sedimer Drift Dep Surface Inundatic Water-Si Field Observ Surface Water Water Table Saturation Pr (includes cap | drology Indicators eators (minimum of Water (A1) ster Table (A2) on (A3) larks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? resent? | rine) ponriverine erine) Imagery (E | Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent II Thin Muc Other (E | st (B11) ust (B12) nvertebrat n Sulfide C Rhizosph e of Reduc ron Reduc ck Surface xplain in R inches): nches): inches): inches): inches): inches): inches): | Odor (C1) eres alon eed Iron (i tion in Til (C7) eemarks) | g Living Roo C4) led Soils (C6 | V S D ots (C3) D C S) S S | Vater Marks (B1) (Riverine) Gediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Gaturation Visible on Aerial Imagery (C9) Ghallow Aquitard (D3) (AC-Neutral Test (D5) |
| Wetland Hyd Primary Indic Surface High Wa V Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-St Field Observ Surface Water Water Table Saturation Pr (includes cap Describe Rec | drology Indicators eators (minimum of Water (A1) ster Table (A2) on (A3) larks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? resent? | rine) ponriverine erine) Imagery (E | Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent II Thin Muc Other (E | st (B11) ust (B12) nvertebrat n Sulfide C Rhizosph e of Reduc ron Reduc ck Surface xplain in R inches): nches): inches): inches): inches): inches): inches): | Odor (C1) eres alon eed Iron (i tion in Til (C7) eemarks) | g Living Roo C4) led Soils (C6 | V S D ots (C3) D C S) S S | Vater Marks (B1) (Riverine) Gediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Gaturation Visible on Aerial Imagery (C9) Ghallow Aquitard (D3) (AC-Neutral Test (D5) |
| Wetland Hyd Primary Indic Surface High Wa V Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-St Field Observ Surface Water Water Table Saturation Pr (includes cap Describe Rec | drology Indicators eators (minimum of Water (A1) ster Table (A2) on (A3) larks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? resent? | rine) ponriverine erine) Imagery (E | Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent II Thin Muc Other (E | st (B11) ust (B12) nvertebrat n Sulfide C Rhizosph e of Reduc ron Reduc ck Surface xplain in R inches): nches): inches): inches): inches): inches): inches): | Odor (C1) eres alon eed Iron (i tion in Til (C7) eemarks) | g Living Roo C4) led Soils (C6 | V S D ots (C3) D C S) S S | Vater Marks (B1) (Riverine) Gediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Gaturation Visible on Aerial Imagery (C9) Ghallow Aquitard (D3) (AC-Neutral Test (D5) |
| Wetland Hyd Primary Indic Surface High Wa V Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-St Field Observ Surface Water Water Table Saturation Pr (includes cap Describe Rec | drology Indicators eators (minimum of Water (A1) ster Table (A2) on (A3) larks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? resent? | rine) ponriverine erine) Imagery (E | Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent II Thin Muc Other (E | st (B11) ust (B12) nvertebrat n Sulfide C Rhizosph e of Reduc ron Reduc ck Surface xplain in R inches): nches): inches): inches): inches): inches): inches): | Odor (C1) eres alon eed Iron (i tion in Til (C7) eemarks) | g Living Roo C4) led Soils (C6 | V S D ots (C3) D C S) S S | Vater Marks (B1) (Riverine) Gediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Gaturation Visible on Aerial Imagery (C9) Ghallow Aquitard (D3) (AC-Neutral Test (D5) |
| Wetland Hyd Primary Indic Surface High Wa ✓ Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-St Field Observ Surface Water Vater Table Saturation Pr (includes cap Describe Rec | drology Indicators eators (minimum of Water (A1) ster Table (A2) on (A3) larks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? resent? | rine) ponriverine erine) Imagery (E | Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent II Thin Muc Other (E | st (B11) ust (B12) nvertebrat n Sulfide C Rhizosph e of Reduc ron Reduc ck Surface xplain in R inches): nches): inches): inches): inches): inches): inches): | Odor (C1) eres alon eed Iron (i tion in Til (C7) eemarks) | g Living Roo C4) led Soils (C6 | V S D ots (C3) D C S) S S | Vater Marks (B1) (Riverine) Gediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Gaturation Visible on Aerial Imagery (C9) Ghallow Aquitard (D3) (AC-Neutral Test (D5) |

WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 66



Sample Point 66

| Project/Site: WDC Phase II | | | City/Co | _{unty:} <u>Davis C</u> | ounty | Sa | mpling | Date: 202 | 4-05-22 |
|---|------------------|-------------------|----------|---------------------------------|------------------------------|--------------|--------------|---------------|--------------|
| Applicant/Owner: UDOT | | | | | State: Ut | ah Sa | mpling | Point: SP6 | 7 |
| Investigator(s): Cara Glabau, Elena Ca | pson | | Section | , Township, Ra | nge: S30 T5N | R2W | | | |
| Landform (hillslope, terrace, etc.): Flat | | | Local r | elief (concave, | convex, none): N | lone | | Slope (% | 6): <u>0</u> |
| Subregion (LRR): | | Lat: 41. | 13921 | 8 | _ Long: -112.10 | 831717 | | _ Datum: N | AD83_20 |
| Soil Map Unit Name: | | | | | NWI | | | | |
| Are climatic / hydrologic conditions on the s | site typical for | this time of year | ar? Yes | | | | | | |
| Are Vegetation, Soil, or Hyd | | | | | "Normal Circumst | | | es _ 🗸 | No |
| Are Vegetation, Soil, or Hyd | drology | _ naturally pro | blemati | | eeded, explain an | | | | |
| SUMMARY OF FINDINGS – Atta | ch site ma | p showing | samp | oling point l | ocations, trai | nsects, ir | nporta | ant featui | res, etc |
| Hydrophytic Vegetation Present? | Yes | No 🗸 | | | | | | | |
| Hydric Soil Present? | Yes | No 🔽 | | s the Sampled | | es | Na | ~ | |
| | Yes | | ' | within a Wetlaı | nur r | es | NO _ | <u> </u> | |
| Remarks: | | | | | | | | | |
| Conditions were wetter than | | _ | | e antecede | ent precipita | tion too | l, but | there ha | ad not |
| been rain for several days pr | | | | | | | | | |
| VEGETATION – Use scientific na | anies or pi | Absolute | Domir | nant Indicator | Dominance Te | st workshe | et: | | |
| Tree Stratum (Plot size: | _) | | | es? Status | Number of Don | ninant Spec | | _ | |
| 1 | | | | | That Are OBL, | FACW, or F | AC: (| 0 | (A) |
| 2. | | | | | Total Number of | | | • | |
| 3 | | | | | Species Across | All Strata: | _ | 2 | (B) |
| 4 | | | | l Cover | Percent of Dom | | | 0.00 | (4.45) |
| Sapling/Shrub Stratum (Plot size: |) | | _ = 10la | i Covei | That Are OBL, | FACW, or F | AC: <u>(</u> | 0.00 | (A/B) |
| 1 | | | | | Prevalence Inc | dex worksh | eet: | | |
| 2 | | | | | Total % Co | | | Multiply by: | |
| 3 | | | | | OBL species | 0 | | | |
| 4 | | | | | FACW species | | | | — |
| 5 | | | | | FAC species FACU species | | _ x 3 | = 228 | |
| Herb Stratum (Plot size: |) | | _ = 10ta | i Cover | UPL species | 15 | | = <u>75</u> | |
| 1. Hordeum murinum | | 42 | | FACU | Column Totals: | 100 | | 377 | — (B) |
| 2. Lolium arundinaceum | | 15 | | | | | | | (=) |
| 3. Distichlis spicata | | 10 | | FAC | | ce Index = E | | | |
| 4. Phalaris arundinacea | | 10 | | FACW | Hydrophytic V | | | rs: | |
| 5. Poa bulbosa | | <u>10</u> | | FACU | Dominance | | | | |
| 6. Plantago lanceolata | | <u>8</u> | | FAC | Prevalence Morpholog | | | rovido supr | orting |
| 7. Melilotus officinalis | | | | <u>FACU</u> | | | | parate shee | |
| 8 | | 100 | - Tota | I Cover | Problemati | c Hydrophy | tic Vege | etation¹ (Exp | olain) |
| Woody Vine Stratum (Plot size: |) | | _ = 10la | l Cover | | | | | |
| 1 | | | | | ¹ Indicators of h | | | | y must |
| 2 | | | | | be present, unl | ess disturbe | a or pro | blematic. | |
| | | - | _= Tota | l Cover | Hydrophytic Vegetation | | | | |
| % Bare Ground in Herb Stratum | % Co | ver of Biotic C | rust | | Present? | Yes _ | | No 🔽 | _ |
| Remarks: | | | | | | | | | <u> </u> |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| Profile Desc | ription: (Describe | to the depti | n needed to docu | nent the i | ndicator | or confirm | the absence of | indicators.) |
|------------------------------|--|---------------|-----------------------|-------------|------------|------------------|--------------------------|---|
| Depth | Matrix | | | x Features | 1 | . 2 | | |
| (inches) | Color (moist) | | Color (moist) | % | Type' | Loc ² | <u>Texture</u> | Remarks |
| 0 - 8 | 10YR 4/2 | 100 | | | | | Sandy Clay Loam | |
| | | | | | | | | |
| - | | | | | | | | |
| | | | | | | | | |
| | - | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| - | | | | | | | | |
| ¹Type: C=Co | oncentration, D=De | pletion. RM=I | Reduced Matrix. C | S=Covered | or Coate | d Sand Gr | ains. ² Locat | ion: PL=Pore Lining, M=Matrix. |
| | Indicators: (Applie | | | | | | | r Problematic Hydric Soils ³ : |
| Histosol | | | Sandy Red | | , | | | ck (A9) (LRR C) |
| _ | oipedon (A2) | | Stripped Ma | | | | | ck (A10) (LRR B) |
| Black Hi | | | Loamy Mud | ky Minera | l (F1) | | | Vertic (F18) |
| Hydroge | en Sulfide (A4) | | Loamy Gle | ed Matrix | (F2) | | Red Pare | ent Material (TF2) |
| | d Layers (A5) (LRR | C) | Depleted M | ` , | | | Other (E) | xplain in Remarks) |
| | ick (A9) (LRR D) | | Redox Dark | | , | | | |
| | d Below Dark Surfac | ce (A11) | Depleted D | | | | 31 | be also also disconnected in a seed |
| | ark Surface (A12) | | Redox Dep | | -8) | | | hydrophytic vegetation and |
| - | Mucky Mineral (S1) Bleyed Matrix (S4) | | Vernal Poo | S (F9) | | | • | drology must be present, urbed or problematic. |
| | Layer (if present): | | | | | | unicss dist | arbed or problematic. |
| Type: Ro | | | | | | | | |
| Depth (inc | | | | | | | Hydric Soil Pr | resent? Yes No |
| Remarks: | Crics). <u>-</u> | | | | | | Trydric con T | |
| | ery rocky, ro | au pase | present no | 111111150 | OHIC Co | illai 10a | ad Constitu | Ction. |
| HYDROLO | GY | | | | | | | |
| Wetland Hy | drology Indicators | : | | | | | | |
| Primary India | cators (minimum of | one required; | check all that appl | y) | | | <u>Seconda</u> | ary Indicators (2 or more required) |
| Surface | Water (A1) | | Salt Crust | (B11) | | | Wat | er Marks (B1) (Riverine) |
| High Wa | iter Table (A2) | | Biotic Cru | st (B12) | | | Sed | iment Deposits (B2) (Riverine) |
| Saturation | on (A3) | | Aquatic In | vertebrate | s (B13) | | Drift | t Deposits (B3) (Riverine) |
| Water M | larks (B1) (Nonrive | rine) | Hydrogen | Sulfide Od | dor (C1) | | Drai | inage Patterns (B10) |
| Sedimer | nt Deposits (B2) (N o | onriverine) | Oxidized F | Rhizosphe | res along | Living Roo | ts (C3) Dry- | -Season Water Table (C2) |
| | oosits (B3) (Nonrive | erine) | Presence | | | | | yfish Burrows (C8) |
| | Soil Cracks (B6) | | | | | d Soils (C6 | · — | uration Visible on Aerial Imagery (C9) |
| | on Vis ble on Aerial | Imagery (B7) | | | | | | llow Aquitard (D3) |
| <u> </u> | tained Leaves (B9) | | Other (Ex | olain in Re | marks) | | FAC | C-Neutral Test (D5) |
| Field Obser | | | | | | | | |
| Surface Water | | | o Depth (in | | | | | |
| Water Table | | | o Depth (in | , | | _ | | |
| Saturation P | | Yes N | o 🔽 Depth (in | ches): | | Wetla | and Hydrology F | Present? Yes No |
| (includes cap Describe Re | oillary fringe) corded Data (strean | n gauge, mor | nitoring well, aerial | photos, pro | evious ins | pections), | if available: | |
| Remarks: | | | | | | | | |
| rtemants. | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 67



Sample Point 67

| Project/Site: WDC Phase II | | City/County | . Davis C | ounty | Samı | pling Date: 20 | 24-05-22 |
|---|-------------|----------------------|------------|---|-------------|------------------------------------|------------|
| Applicant/Owner: UDOT | | | | | | oling Point: SF | |
| Investigator(s): Merissa Davis | | Section, To | wnship, Ra | | | | |
| Landform (hillslope, terrace, etc.): | | | | | | Slope | (%): |
| Subregion (LRR): D 28A | | | | | | | |
| Soil Map Unit Name: HLA - Harrisville-Leland comple | | | | | | | |
| Are climatic / hydrologic conditions on the site typical for this | | | | | | | |
| Are Vegetation, Soil, or Hydrologys | - | | | "Normal Circumstan | | | Nο |
| Are Vegetation, Soil, or Hydrology n | | | | eeded, explain any a | | | _ 110 |
| SUMMARY OF FINDINGS – Attach site map | • | | | | | | ures, etc. |
| Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Conditions were wetter than permal age | 0 / | with | ne Sampleo | nd? Yes | on tool | | had not |
| Conditions were wetter than normal accorden rain for several days prior to the si | _ | | nteceae | ent precipitati | on tool, | but there | nad not |
| VEGETATION – Use scientific names of plan | | | | | | | |
| | Absolute | Dominant | Indicator | Dominance Test | worksheet | : | |
| Tree Stratum (Plot size:) | % Cover | Species? | Status | Number of Domin | | | |
| 1 | | | | That Are OBL, FA | ACW, or FAC | D: 1 | (A) |
| 2 | | | | Total Number of I | | 3 | (B) |
| 4. | | | | Species Across A | | | (b) |
| | | = Total Co | ver | Percent of Domin That Are OBL, FA | | | (A/B) |
| Sapling/Shrub Stratum (Plot size:) 1 | | | | Prevalence Inde | x workshee | ıt: | |
| 2. | | | | Total % Cove | | | y : |
| 3. | | | | OBL species 0 |) | x 1 = 0 | |
| 4 | | | | FACW species | | | |
| 5 | | | | _ | | x 3 = 105 | |
| Horb Stratum (Blot aire) | | _ = Total Co | ver | FACU species | - | · | |
| Herb Stratum (Plot size:) 1. Poa pratensis | 35 | ~ | FAC | · - | 100 | | |
| 2. Hordeum murinum | 30 | | FACU | Column Totals: | 100 | (A) <u>355</u> | (B) |
| 3. Lolium arundinaceum | 30 | | FACU | Prevalence | Index = B/A | \ = <u>3.55</u> | |
| 4. Juncus balticus | 5 | | FACW | Hydrophytic Veg | etation Ind | icators: | |
| 5 | | · - | | Dominance T | est is >50% |) | |
| 6 | | | | Prevalence Ir | | | |
| 7 | | | | | | ns¹ (Provide su n a separate sh | |
| 8 | | · | | Problematic I | | • | |
| Woody Vine Stratum (Plot size:) | 100 | _ = Total Co | ver | | .,, | 9 - 1 - 1 - 1 | |
| 1 | | | | ¹ Indicators of hyd be present, unles | | | |
| 2 | | | | Hydrophytic | | , | |
| % Bare Ground in Herb Stratum % Cover | of Biotic C | _ = Total Co rust | | Vegetation Present? | Yes | No 🗸 | |
| Remarks: | | | | | | | _ |
| | | | | | | | |

| Depth Matrix | Redox Features | | |
|---|---|---|---|
| (inches) Color (moist) % | Color (moist) % Type ¹ Loc ² | Texture | Remarks |
| 0 - 6 2.5YR 3/1 100 | | Loam | |
| 6 - 24 10YR 4/2 100 | | Silt Loam | - |
| | | | |
| | | · | |
| | | | |
| <u> </u> | | | |
| · | | | |
| | | | |
| - | | | |
| ¹ Type: C=Concentration, D=Depletion, RM= | Reduced Matrix, CS=Covered or Coated Sand G | Grains. ² Location | n: PL=Pore Lining, M=Matrix. |
| Hydric Soil Indicators: (Applicable to all | | | Problematic Hydric Soils ³ : |
| Histosol (A1) | Sandy Redox (S5) | 1 cm Muck | (A9) (LRR C) |
| Histic Epipedon (A2) | Stripped Matrix (S6) | 2 cm Muck | (A10) (LRR B) |
| Black Histic (A3) | Loamy Mucky Mineral (F1) | Reduced V | |
| Hydrogen Sulfide (A4) | Loamy Gleyed Matrix (F2) | | Material (TF2) |
| Stratified Layers (A5) (LRR C) | Depleted Matrix (F3) | Other (Expl | ain in Remarks) |
| 1 cm Muck (A9) (LRR D) | Redox Dark Surface (F6)Depleted Dark Surface (F7) | | |
| Depleted Below Dark Surface (A11)Thick Dark Surface (A12) | Redox Depressions (F8) | ³ Indicators of hy | drophytic vegetation and |
| Sandy Mucky Mineral (S1) | Vernal Pools (F9) | • | plogy must be present, |
| Sandy Gleyed Matrix (S4) | | | ped or problematic. |
| Restrictive Layer (if present): | | | • |
| Type: | <u></u> | | |
| Depth (inches): | <u></u> | Hydric Soil Pres | sent? Yes No |
| Remarks: | | | |
| Depleted layer needs redox | to qualify for "depleted below | dark surface | A ^{II} |
| | | dan canac | • |
| HYDROLOGY | | | |
| HYDROLOGY Wetland Hydrology Indicators: | | | |
| Wetland Hydrology Indicators: | | | |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required | ; check all that apply) | Secondary | Indicators (2 or more required) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) | ; check all that apply) Salt Crust (B11) | Secondary — Water | Indicators (2 or more required) Marks (B1) (Riverine) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) | ; check all that apply) Salt Crust (B11) Biotic Crust (B12) | Secondary Water Sedim | Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) | ; check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) | Secondary Water Sedim Drift D | Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) | : check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) | Secondary Water Sedim Drift D | Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) | ; check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro | Secondary Water Sedim Drift D Draina | Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) | ; check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro | Secondary Water Sedim Drift D Draina oots (C3) Crayfis | Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) sh Burrows (C8) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) | ; check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roman Company (C4) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C4) | Secondary Water Sedim Drift D Draina | Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (C9) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7) | : check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C | Secondary Water Sedim Drift D Draina | Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (C9) w Aquitard (D3) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) | ; check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roman Company (C4) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C4) | Secondary Water Sedim Drift D Draina | Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (C9) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required and surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: | : check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roman Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (Catalog) Thin Muck Surface (C7) Other (Explain in Remarks) | Secondary Water Sedim Drift D Draina | Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (C9) w Aquitard (D3) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required and surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes None Tequired | ; check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roman Sulfide (C4) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C4) Thin Muck Surface (C7) Other (Explain in Remarks) | Secondary Water Sedim Drift D Draina | Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (C9) w Aquitard (D3) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required and surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No | ; check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roman Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (Catalog) Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): Depth (inches): | Secondary Water Sedim Drift D Draina oots (C3) Crayfis Satura Shallo FAC-N | Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (C9) w Aquitard (D3) leutral Test (D5) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Saturation Present? | ; check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roman Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (Company) Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): No Depth (inches): Wet | Secondary Water Sedim Drift D Draina Pots (C3) Dry-Se Crayfis Shallo FAC-N | Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (C9) w Aquitard (D3) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Saturation Present? | ; check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roman Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (Catalog) Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): Depth (inches): | Secondary Water Sedim Drift D Draina Pots (C3) Dry-Se Crayfis Shallo FAC-N | Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (C9) w Aquitard (D3) leutral Test (D5) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Saturation Present? | ; check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roman Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (Company) Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): No Depth (inches): Wet | Secondary Water Sedim Drift D Draina Pots (C3) Dry-Se Crayfis Shallo FAC-N | Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (C9) w Aquitard (D3) leutral Test (D5) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Saturation Present? | ; check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roman Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (Company) Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): No Depth (inches): Wet | Secondary Water Sedim Drift D Draina Pots (C3) Dry-Se Crayfis Shallo FAC-N | Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (C9) w Aquitard (D3) leutral Test (D5) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required and surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No saturation Prese | ; check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roman Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (Company) Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): No Depth (inches): Wet | Secondary Water Sedim Drift D Draina Pots (C3) Dry-Se Crayfis Shallo FAC-N | Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (C9) w Aquitard (D3) leutral Test (D5) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required and surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No saturation Prese | ; check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roman Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (Company) Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): No Depth (inches): Wet | Secondary Water Sedim Drift D Draina Pots (C3) Dry-Se Crayfis Shallo FAC-N | Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (C9) w Aquitard (D3) leutral Test (D5) |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required and surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No saturation Prese | ; check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roman Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (Company) Thin Muck Surface (C7) Other (Explain in Remarks) No Depth (inches): No Depth (inches): Wet | Secondary Water Sedim Drift D Draina Pots (C3) Dry-Se Crayfis Shallo FAC-N | Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (C9) w Aquitard (D3) leutral Test (D5) |

WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 68



Sample Point 68

| Project/Site: WDC Phase II | | City/County | _{/:} Davis C | ounty | Sampling Date: 2024-05-22 |
|---|------------------|----------------------|----------------------------|---|---|
| Applicant/Owner: UDOT | | | | State: Utah | Sampling Point: SP69 |
| Investigator(s): Merissa Davis | | Section, To | ownship, Ra | nnge: S30 T5N R2W | |
| Landform (hillslope, terrace, etc.): Flat | | Local relie | f (concave, | convex, none): None | Slope (%): 0 |
| Subregion (LRR): D 28A | Lat: 41. | 1381386 | 2 | _ Long: <u>-112.1054117</u> | 5 Datum: NAD83_201 |
| Soil Map Unit Name: HLA - Harrisville-Leland compl | | | | | |
| Are climatic / hydrologic conditions on the site typical for thi | is time of yea | ar? Yes | No | (If no, explain in F | Remarks.) |
| Are Vegetation, Soil, or Hydrologys | | | | | present? Yes No |
| Are Vegetation, Soil, or Hydrology | naturally pro | blematic? | (If ne | eeded, explain any answe | ers in Remarks.) |
| SUMMARY OF FINDINGS – Attach site map | showing | samplin | ng point l | ocations, transects | s, important features, etc. |
| Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes N N Remarks: | lo | | ne Sampled nin a Wetlar | | No |
| Hydrology present from two adjacent ir | rigation | ditches | which I | ikely seasonally f | lood this wetland. |
| VEGETATION – Use scientific names of plan | nts. | | | | |
| Tree Stratum (Plot size:) | Absolute % Cover | Dominant Species? | | Dominance Test work | |
| 1 | | | | Number of Dominant S That Are OBL, FACW, | |
| 2 | | | | Total Number of Domir | nant |
| 3 | | | | Species Across All Stra | |
| 4 | | = Total Co | | Percent of Dominant S That Are OBL, FACW, | |
| Sapling/Shrub Stratum (Plot size:) | | | | | (12) |
| 1 | | | | Prevalence Index wor | |
| 2 | | | | Total % Cover of: OBL species 40 | $\frac{\text{Multiply by:}}{\text{x 1 = } 40}$ |
| 3 | | | | · · | $\times 1 = \frac{10}{80}$ |
| 4 | | - | | | $x_3 = 45$ |
| J | | = Total Co | over | | x 4 = 0 |
| Herb Stratum (Plot size:) | | _ = 10ta1 Ct | ovei | | x 5 = 0 |
| 1. Carex nebrascensis | 40 | | OBL | Column Totals: 95 | |
| 2. Juncus balticus | 40 | | FACW | | |
| 3. Poa pratensis | 15 | | FAC | Prevalence Index | |
| 4 | | | | Hydrophytic Vegetati | |
| 5 | | | | <u>✓</u> Dominance Test is | |
| 6 | | | | ✓ Prevalence Index in the last of the | |
| 7 | | | | | aptations ¹ (Provide supporting as or on a separate sheet) |
| 8 | 0.5 | | | | ophytic Vegetation ¹ (Explain) |
| Woody Vine Stratum (Plot size:) | 93 | = Total Co | over | | |
| 1 | | | | ¹ Indicators of hydric so be present, unless dist | il and wetland hydrology must |
| 2 | | | · —— | | |
| | | = Total Co | over | Hydrophytic Vegetation | |
| % Bare Ground in Herb Stratum % Cove | er of Biotic C | rust | | | es No |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| Depth (inches) | Matrix Color (moist) | % | Color (moist) | x Features % | Type ¹ | Loc ² | Texture | Remarks |
|---|---|----------------|---|--|--|------------------|--|--|
| 0 - 22 | 7.5YR 3/1 | 100 | Color (moist) | | <u> Type</u> | LUC | Silt Loam | Remarks |
| 0 - 22 | 7.511 3/1 | | | | | | Silt Loain | |
| | | | | | | | | |
| - | | | | | | | | |
| - | | | | | | | | |
| _ | • | | | | | | - | |
| | | | | | | | | |
| | | | | | | | | |
| - | | | | | | | | |
| - | | | | | | | | |
| ype: C=C | oncentration, D=Dep | oletion, RM=Re | duced Matrix, CS | S=Covered | d or Coate | d Sand G | rains. ² Loca | ition: PL=Pore Lining, M=Matrix. |
| | Indicators: (Applic | | | | | | | or Problematic Hydric Soils ³ : |
| _ Histosol | (A1) | | Sandy Redo | ox (S5) | | | 1 cm Mu | uck (A9) (LRR C) |
| _ Histic E | pipedon (A2) | | Stripped Ma | atrix (S6) | | | 2 cm Mu | uck (A10) (LRR B) |
| | istic (A3) | | Loamy Muc | ky Minera | l (F1) | | | d Vertic (F18) |
| | en Sulfide (A4) | | Loamy Gley | | (F2) | | | rent Material (TF2) |
| | d Layers (A5) (LRR | C) | Depleted Ma | | (E0) | | Other (E | Explain in Remarks) |
| | uck (A9) (LRR D) | oo (A11) | Redox Dark | , | ` ' | | | |
| | d Below Dark Surfac ark Surface (A12) | Æ (∧ 1 1) | Depleted Da Redox Depi | | | | ³ Indicators o | f hydrophytic vegetation and |
| | Mucky Mineral (S1) | | Vernal Pool | | 10) | | | ydrology must be present, |
| - | Gleyed Matrix (S4) | | | o (. o) | | | | sturbed or problematic. |
| - | | | | | | | | · |
| estrictive | Layer (if present): | | | | | | | |
| estrictive Type: | | | | | | | | |
| Type: Depth (in emarks: his dar | ches): | | | e prela | vent p | oresen | Hydric Soil F | Present? Yes V No No Ophytic vegetation an |
| Type: Depth (in emarks: his dar ydrolog | ches): k surface as | | | e prela | vent p | oresen | | |
| Type: Depth (in emarks: his dar ydrolog | ches): k surface as | sumed ba | | e prela | vent p | oresen | | |
| Type: | ches): k surface as gy. egy | sumed ba | sed on the | | vent p | oresen | ce of hydr | |
| Type: | ches): k surface as gy. GY drology Indicators | sumed ba | sed on the | y) | vent p | oresen | ce of hydr | ophytic vegetation an |
| Type: | ches): k surface as gy. GY drology Indicators cators (minimum of common control of common control of control | sumed ba | esed on the | y) (B11) | event p | oresen | ce of hydr | ophytic vegetation an |
| Type: | ches): | sumed ba | nsed on the | y) (B11) st (B12) | | oresen | ce of hydr Second Wa Se | ophytic vegetation an |
| Type: | ches): | sumed ba | nsed on the neck all that apple Salt Crust Biotic Crus | y) (B11) st (B12) vertebrate | s (B13) | oresen | Ce of hydr Second War Sec Sec Dri | ophytic vegetation an lary Indicators (2 or more required) ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) |
| Type: | ches): K surface as GY drology Indicators cators (minimum of or Water (A1) ater Table (A2) on (A3) | sumed ba | neck all that appl Salt Crust Biotic Crus Aquatic Inv | y) (B11) st (B12) vertebrate Sulfide Od | es (B13) dor (C1) | | Second Second Second Dri Dri | ophytic vegetation an lary Indicators (2 or more required) ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) |
| Type: | ches): K surface as GY drology Indicators cators (minimum of or Water (A1) ater Table (A2) on (A3) draks (B1) (Nonrive | sumed ba | neck all that appl Salt Crust Biotic Crus Aquatic Inv | y) (B11) st (B12) vertebrate Sulfide Oc | s (B13) dor (C1) res along | Living Ro | Second Second Wa Se Dri Dra ots (C3) Dry | dary Indicators (2 or more required) ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) |
| Type: Depth (in lemarks: his dar ydrolog / DROLO / Vetland Hy rimary Indi / Surface / High Wa / Saturati | ches): | sumed ba | neck all that appl Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F | y) (B11) st (B12) vertebrate Sulfide Oc Rhizosphe | s (B13) dor (C1) res along ed Iron (C4 | Living Ro | Second Wa Second Dri Dra ots (C3) Cra | ophytic vegetation an lary Indicators (2 or more required) ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) |
| Type: Depth (in lemarks: his dar ydrolog /DROLO /etland Hy rimary Indi / Surface / High Wa / Saturati Water N Sedime Drift De Surface | ches): | sumed ba | neck all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F | y) (B11) st (B12) vertebrate Sulfide Oc Rhizospher of Reduce n Reduction | s (B13) dor (C1) res along ed Iron (C4 on in Tille | Living Ro | Second Water Second Dri Dra Ots (C3) Cra 6) | dary Indicators (2 or more required) ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) |
| Type: Depth (in emarks: his dar ydrolog /DROLO /etland Hy rimary Indi / Surface / High Wa / Saturati Water M Sedime Drift De Surface Inundati | ches): k surface as gy. GY drology Indicators cators (minimum of a) Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive) int Deposits (B2) (No posits (B3) (Nonrive) Soil Cracks (B6) | sumed ba | neck all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Recent Iro | y) (B11) st (B12) vertebrate Sulfide Oc Rhizosphei of Reduce n Reduction | s (B13) dor (C1) res along ed Iron (C4 on in Tiller | Living Ro | Second Wea Second Dri Dra Ots (C3) Sa Sh | dary Indicators (2 or more required) ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C |
| Type: Depth (in emarks: his dar ydrolog /DROLO /etland Hy rimary Indi / Surface / High Wa / Saturati Water M Sedime Drift De Surface Inundati | ches): | sumed ba | neck all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence of Recent Iro | y) (B11) st (B12) vertebrate Sulfide Oc Rhizosphei of Reduce n Reduction | s (B13) dor (C1) res along ed Iron (C4 on in Tiller | Living Ro | Second Wea Second Dri Dra Ots (C3) Sa Sh | dary Indicators (2 or more required) ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (Callow Aquitard (D3) |
| Type: | ches): | sumed ba | neck all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence of Recent Iro | y) (B11) st (B12) wertebrate Sulfide Oc Rhizosphe of Reduce n Reductic Surface (| s (B13) dor (C1) res along ed Iron (C4 on in Tiller (C7) emarks) | Living Ro | Second Wea Second Dri Dra Ots (C3) Sa Sh | dary Indicators (2 or more required) ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (Callow Aquitard (D3) |
| Type: Depth (in emarks: his dar ydrolog | ches): ck surface as gy. drology Indicators cators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) on Vis ble on Aerial stained Leaves (B9) vations: er Present? | sumed bases | neck all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Thin Muck | y) (B11) st (B12) vertebrate Sulfide Oc Rhizospher of Reduce n Reduction Surface (blain in Re | s (B13) dor (C1) res along ed Iron (C4 on in Tiller (C7) emarks) | Living Ro | Second Wea Second Dri Dra Ots (C3) Sa Sh | dary Indicators (2 or more required) ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (Callow Aquitard (D3) |
| Type: | ches): K surface as Gy. GY drology Indicators cators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) on Vis ble on Aerial stained Leaves (B9) vations: er Present? Present? Present? resent? resent? | sumed bases | neck all that apply Salt Crust Sold Sold Sold Sold Sold Sold Sold Sold | y) (B11) st (B12) vertebrate Sulfide Oc Rhizospher of Reduce n Reduction Surface (colain in Re ches): 2 ches): 0 ches): 0 | s (B13) dor (C1) res along ed Iron (C4 on in Tille (C7) emarks) | Living Ro | Second Wa Second Wa Second Ora Ora Ora Ots (C3) Ory Cra 6) Sa' FA | dary Indicators (2 or more required) ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (Callow Aquitard (D3) |
| Type: | ches): ck surface as Gy. GY drology Indicators cators (minimum of or water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aerial stained Leaves (B9) vations: er Present? Present? | sumed bases | neck all that apply Salt Crust Sold Sold Sold Sold Sold Sold Sold Sold | y) (B11) st (B12) vertebrate Sulfide Oc Rhizospher of Reduce n Reduction Surface (colain in Re ches): 2 ches): 0 ches): 0 | s (B13) dor (C1) res along ed Iron (C4 on in Tille (C7) emarks) | Living Ro | Second Wa Second Wa Second Ora Ora Ora Ots (C3) Ory Cra 6) Sa' FA | dary Indicators (2 or more required) ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (Callow Aquitard (D3) C-Neutral Test (D5) |
| Type: | ches): K surface as Gy. GY drology Indicators cators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) on Vis ble on Aerial stained Leaves (B9) vations: er Present? Present? Present? resent? resent? | sumed bases | neck all that apply Salt Crust Sold Sold Sold Sold Sold Sold Sold Sold | y) (B11) st (B12) vertebrate Sulfide Oc Rhizospher of Reduce n Reduction Surface (plain in Re ches): 2 ches): 0 ches): 0 | s (B13) dor (C1) res along ed Iron (C4 on in Tille (C7) emarks) | Living Ro | Second Wa Second Wa Second Ora Ora Ora Ots (C3) Ory Cra 6) Sa' FA | dary Indicators (2 or more required) ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (Callow Aquitard (D3) C-Neutral Test (D5) |
| Type: Depth (in emarks: his dar ydrolog | ches): K surface as Gy. GY drology Indicators cators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) on Vis ble on Aerial stained Leaves (B9) vations: er Present? Present? Present? resent? resent? | sumed bases | neck all that apply Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Thin Muck Other (Exp | y) (B11) st (B12) vertebrate Sulfide Oc Rhizospher of Reduce n Reductic Surface (olain in Re ches): 2 ches): 0 ches): 0 | s (B13) dor (C1) res along ed Iron (C4 on in Tiller (C7) emarks) | Living Ro | Second Wa See Dri Dra Ots (C3) Sa' FA | dary Indicators (2 or more required) ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (Callow Aquitard (D3) C-Neutral Test (D5) |

WDC SR-177, SR-193 to 1800 NorthUDOT



Sample Point 69



Sample Point 69

| Applicant/Owner: UDOT | Project/Site: WDC Phase II | | | City/Coun | _{ty:} <u>Davis C</u> | ounty | | Sampling Date | <u> 2024-05</u> |
|--|--|----------------|-------------------|------------|-------------------------------|-------------------------|----------------|-----------------|---------------------------------------|
| Landform (hillslope, terrace, etc.): Depression | Applicant/Owner: UDOT | | | | | State: | Utah | Sampling Point | : <u>SP70</u> |
| Subregion (LRR): D 28A | Investigator(s): Cara Glabau, Elena Car | oson | | Section, 7 | Township, Ra | inge: | | | |
| Soil Map Unit Name: HLA - Harrisville-Leland complex, 0 to 1 percent slopes New classification: PEMI/USA | Landform (hillslope, terrace, etc.): Depress | sion | | Local reli | ef (concave, | convex, none | e): Concave | <u> </u> | lope (%): <u>0</u> |
| Are VegetationSoil or Hydrologysignificantly disturbed? | Subregion (LRR): D 28A | | Lat: 41. | 136885 | 33 | _ Long:11: | 2.1079333 | 3 Da | tum: NAD83 |
| Are Vegetation Soll or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Wetfand Hydricogy Present? Yes No Wetfand Hydrology Present? Yes No Wetfand Hydrology Present? Yes No Wolfand Hydrology Hydrology Mydrology must be present. In the Action Hydrology must be present. Present? Yes No Wolfand Hydrology must be present. Present? Yes No Wolfand Hydrology must be present. Present? Yes No Wolfand Hydrology must be present. Present? Yes No Wolfand Hydrology must be present. Present? Yes No Wolfand Hydrology must be present. Present? Yes No Wolfand Hydrology must be present. Present? Yes No Wolfand Hydrology must be present. Present? Yes No Wolfand Hydrology must be present. Present No Wolfand Hydrology must be present. Present No Wolfand Hydrology must be present. Present No Wolfand Hydrology must be present. Present No Wolfand Hydrology must be present. Present No Wolfand Hydrology must be present. Present No Wolfand Hydrology must be present. Present No Wolfand Hydrology must be present. Present No Wolfand Hydrology must be present. Present No Wolfand Hydrology must be present. Present No Wolfand Hydrology must be present. Present No Wolfand Hydrology must be present. Present No Wolfand Hydrology must be present. Present No Wolfand Hydrology must be present. Present No Wolfand Hydrology Present No Wolfand H | Soil Map Unit Name: HLA - Harrisville-L | eland com | plex, 0 to 1 | percent | slopes | | NWI classifica | ation: PEM1/L | ISA |
| SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. | Are climatic / hydrologic conditions on the si | te typical for | this time of year | ar? Yes_ | No _ | (If no, | explain in Re | emarks.) | |
| SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes V No Wetsand Hydrology Present? Yes V No Wetsand Hydrology Present? Yes V No Wetsand Hydrology Present? Yes V No Wetsand Hydrology Present? Yes V No Wetsand Hydrology Present? Yes V No Wetsand Hydrology Present? Yes V No Wetsand Hydrology Present? Yes V No No Wetsand Hydrology Present? Yes V No No No Wetsand Hydrology Present? Yes V No No No No No No No No No No No No No | Are Vegetation, Soil, or Hydr | ology | _ significantly | disturbed | ? Are ' | "Normal Circu | umstances" p | resent? Yes _ | ✓ No_ |
| Hydrophytic Vegetation Present? Yes V No within a Wetland? Yes No within a Wetland? Wetland Hydrology Present? Yes V No within a Wetland? Wetland Hydrology Present? Yes V No within a Wetland? Yes No No No No No No No No No No No No No | Are Vegetation, Soil, or Hydr | ology | _ naturally pro | blematic? | (If ne | eeded, explai | n any answer | s in Remarks.) | |
| Flyding Soil Present? Yes V No Within a Wetland? Yes V No Within a Wetland? Yes V No | SUMMARY OF FINDINGS - Attac | h site ma | p showing | sampli | ng point l | ocations, | transects, | important | features, |
| Hydroc Soil Present? Yes V No Within a Wetland? Yes V No Within a Wetland hydrology must be present? Yes V No Within a Wetland hydrology must be present? Yes V No Within a Wetland hydrology must be present? Yes V No Within a Wetland hydrology must be present? Yes V No Within a Wetland hydrology must be present? Yes V No Within a Wetland hydrology must be present? Yes V No Within a Wetland hydrology must be present? Yes V No Within a Wetland hydrology must be present? Yes V No Within a Wetland hydrology must be present? Yes V No Within a Wetland hydrology must be present? Yes V No Within a Wetland hydrology must be present? Yes V No Within a Wetland hydrology must be present? Yes V No Within a Wetland hydrology must be present? Yes V No Within a | Livelyne Protein Venetation Proceeds | /aa V | Na | | | | | | |
| Wetland Hydrology Present? Yes No No No No No No No No No No No No No | Hydric Soil Present? | es / | No | | - | | | | |
| Remarks: Conditions were wetter than normal according to the antecedent precipitation tool, but there had not been rain for several days prior to the site visit. | | | | wi | thin a Wetlaı | nd? | Yes | No | _ |
| Deen rain for several days prior to the site visit. VEGETATION - Use scientific names of plants. Absolut Species Species Status Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A) | | | | | | | | | |
| Deen rain for several days prior to the site visit. VEGETATION - Use scientific names of plants. Absolut Species Species Status Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A) | Conditions were wetter than | normal a | ccording | to the : | antecede | ent precir | nitation to | ool but the | ere had r |
| VEGETATION - Use scientific names of plants. Tree Stratum (Plot size:) | | | • | | anteceae | in proof | | oi, but the | , c naa n |
| Absolute | | | | | | | | | |
| Sapiling/Shrub Stratum (Plot size:) | VEGETATION – Use scientific na | mes of pi | | Danis | -4 l | I B! | - T (| | |
| 1 | Tree Stratum (Plot size:) |) | | | | | | | |
| 2 | 1 | | | | | | | r FAC: 2 | (<i>F</i> |
| Species Across All Strata: 2 (B) Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B Factors) That Are OBL, FACW, or FAC: 100.00 (A/B Factors) Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B Factors) Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 75 x 2 = 150 FAC Species 5 x 3 = 15 FAC Species 5 x 3 = 15 FAC UPL species 5 x 3 = 15 FAC UPL species 5 x 5 = 25 Column Totals: 100 (A) 250 (B) Prevalence Index = B/A = 2.50 Hydrophytic Vegetation Indicators: Prevalence Index = B/A = 2.50 Hydrophytic Vegetation Indicators: Prevalence Index = B/A = 2.50 Hydrophytic Vegetation Indicators: Prevalence Index = B/A = 2.50 Hydrophytic Vegetation Indicators: Prevalence Index = B/A = 2.50 Hydrophytic Vegetation Indicators: Prevalence Index = B/A = 2.50 Hydrophytic Vegetation Indicators: Prevalence Index = B/A = 2.50 Hydrophytic Vegetation Indicators: Prevalence Index = B/A = 2.50 Hydrophytic Vegetation Indicators: Prevalence Index = B/A = 2.50 Hydrophytic Vegetation Indicators: Prevalence Index = B/A = 2.50 Hydrophytic Vegetation Indicators: Prevalence Index = B/A = 2.50 Hydrophytic Vegetation Indicators: Prevalence Index = B/A = 2.50 Hydrophytic Vegetation Indicators: Prevalence Index = B/A = 2.50 Hydrophytic Vegetation Indicators: Prevalence Index = B/A = 2.50 Hydrophytic Vegetation Indicators: Prevalence Index = B/A = 2.50 Hydrophytic Vegetation Indicators: Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes No. | 2 | | | | | Total Numl | her of Domina | ant | |
| Sapling/Shrub Stratum (Plot size:) | 3 | | | | | | | a: <u>2</u> | (E |
| Sapling/Shrub Stratum (Plot size: | 4 | | | | | Percent of | Dominant Sp | ecies | |
| 1. | Sanling/Shruh Stratum (Plot size: | , | | = Total C | Cover | | | | <u>00</u> (A |
| 2 | | | | | | Prevalenc | e Index work | sheet: | |
| 3 | | | | | | | | | ply by: |
| 4 | | | | | | OBL specie | es <u>0</u> | x 1 = 0 | |
| Herb Stratum (Plot size:) 1. Juncus balticus 50 | | | | | | FACW spe | | | |
| Herb Stratum (Plot size:) 1. Juncus balticus 50 | 5 | | | | | | | | |
| 1. Juncus balticus 2. Phalaris arundinacea 3. Lactuca serriola 4. Bromus tectorum 5. Poa pratensis 6. Taraxacum officinale 7 | Harb Stratum (Diet eizer | | | = Total C | Cover | - | | | |
| 2. Phalaris arundinacea 25 | |) | 50 | ~ | FACW | - | es <u>5</u> | | |
| Serior Stratum Ser | - | | | | | Column To | tals: 100 | (A) <u>Z</u> | 30 |
| 5. Poa pratensis 6. Taraxacum officinale 7 | | | | | | Preva | alence Index | = B/A = 2.50 | |
| 6. Taraxacum officinale 7 | 4. Bromus tectorum | | 5 | | UPL | Hydrophy | tic Vegetatio | n Indicators: | |
| 7 | 5. Poa pratensis | | | | FAC | <u>✓</u> Domin | ance Test is | >50% | |
| 8 | 6. Taraxacum officinale | | <u>5</u> | | FACU | | | | |
| Moody Vine Stratum (Plot size:) 1 = Total Cover Moody Vine Stratum (Plot size:) | 7 | | | | | | | | |
| Woody Vine Stratum (Plot size:) 1 = Total Cover 2 = Total Cover ### Hydrophytic Vegetation Present? Yes No No | 8 | | | | | | | | |
| 1 | Woody Vine Stratum (Plot size: | 1 | 100 | = Total C | Cover | | | , ao 1 ogoadao | (=,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| 2 = Total Cover Wegetation Present? Yes No | , , | | | | | ¹ Indicators | of hydric soil | and wetland hy | drology mus |
| ## Total Cover Hydrophytic Vegetation Present? Yes Vegetation No | | | | | | be present | , unless distu | rbed or problen | natic. |
| % Bare Ground in Herb Stratum % Cover of Biotic Crust Present? Yes No | | | | | Cover | | | | |
| | % Bare Ground in Herb Stratum | % Co | over of Biotic C | ruet | | _ | | . ✓ No | |
| | | | TVEI OI DIOLIC C | Tust | | i resent: | 168 | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| Profile Desc | ription: (Describe | to the de | oth needed to docum | ent the | indicator | or confirn | m the absence of indicators.) | |
|-------------------------|--|--------------|---------------------------|------------|-------------------|------------------|--|-----|
| Depth | Matrix | | | C Feature | | | _ | |
| (inches) | Color (moist) | | Color (moist) | % | Type ¹ | Loc ² | Texture Remarks | |
| 0 - 4 | 10YR 2/1 | 100 | | | | | Mucky Loam/Clay | |
| 4 - 6 | 10YR 3/2 | 100 | | | | | Silty Clay | |
| 6 - 24 | 10YR 5/3 | 87 | 10YR 5/6 | 13 | С | M | Silty Clay | |
| - | | | | | <u> </u> | | | |
| | | | | | | | | |
| | | | | | | | · | |
| | | | | - | | | · | |
| | | | | | | | · | |
| | | | | | | | · | |
| ¹ Type: C=Co | oncentration, D=Dep | letion, RM | I=Reduced Matrix, CS | =Covere | d or Coate | ed Sand G | Grains. ² Location: PL=Pore Lining, M=Matrix. | |
| Hydric Soil I | ndicators: (Applic | able to all | I LRRs, unless other | wise no | ted.) | | Indicators for Problematic Hydric Soils ³ : | |
| Histosol | ` ' | | Sandy Redo | | | | 1 cm Muck (A9) (LRR C) | |
| | pipedon (A2) | | Stripped Ma | | | | 2 cm Muck (A10) (LRR B) | |
| Black His | , , | | Loamy Muck | • | . , | | Reduced Vertic (F18) | |
| _ , , | n Sulfide (A4) l Layers (A5) (LRR (| C) | Loamy Gley Depleted Ma | | | | Red Parent Material (TF2) Other (Explain in Remarks) | |
| | ck (A9) (LRR D) | C) | Redox Dark | | | | Other (Explain in Remarks) | |
| | Below Dark Surfac | e (A11) | Depleted Da | | | | | |
| | rk Surface (A12) | - () | Redox Depr | | | | ³ Indicators of hydrophytic vegetation and | |
| Sandy M | lucky Mineral (S1) | | Vernal Pools | s (F9) | | | wetland hydrology must be present, | |
| - | leyed Matrix (S4) | | | | | | unless disturbed or problematic. | |
| Restrictive L | ayer (if present): | | | | | | | |
| Type: | | | | | | | | |
| Depth (inc | ches): | | | | | | Hydric Soil Present? Yes No | _ |
| Remarks: | | | | | | | • | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| HYDROLO | GY | | | | | | | |
| Wetland Hvo | drology Indicators: | | | | | | | |
| _ | | | ed; check all that apply | <i>(</i>) | | | Secondary Indicators (2 or more required) | |
| Surface ' | • | 7110 Toquire | Salt Crust (| | | | Water Marks (B1) (Riverine) | _ |
| | ter Table (A2) | | Biotic Crus | ` ' | | | Sediment Deposits (B2) (Riverine) | |
| ✓ Saturation | | | Aquatic Inv | | es (B13) | | Drift Deposits (B3) (Riverine) | |
| | arks (B1) (Nonriver | ine) | Hydrogen S | | | | Drainage Patterns (B10) | |
| | it Deposits (B2) (No | | | | | Livina Roo | oots (C3) Dry-Season Water Table (C2) | |
| | osits (B3) (Nonrive | | Presence of | | - | _ | Crayfish Burrows (C8) | |
| - | Soil Cracks (B6) | -, | Recent Iron | | | | | 29) |
| | on Vis ble on Aerial | Imagery (E | | | | ` | Shallow Aquitard (D3) | , |
| | tained Leaves (B9) | 0 , (| Other (Exp | | ` ' | | FAC-Neutral Test (D5) | |
| Field Observ | vations: | | | | | | | |
| Surface Water | er Present? Y | 'es | No Depth (inc | ches): | | | | |
| Water Table | | | No Depth (inc | | | | | |
| Saturation Pr | | | No Depth (inc | | | | land Hydrology Present? Yes 🔽 No | |
| (includes cap | illary fringe) | | | • | | | | |
| Describe Red | corded Data (stream | gauge, m | onitoring well, aerial p | hotos, p | revious ins | spections), | , if available: | |
| | | | | | | | | |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
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| | | | | | | | | |

WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 70



Sample Point 70

| Project/Site: WDC Phase II | | Citv/County | : Davis C | ounty | San | npling Date: 202 | 4-05-22 |
|--|------------------|-------------|---------------|---|--------------|---------------------------------------|------------------|
| Applicant/Owner: UDOT | | | | | | npling Point: SP7 | |
| Investigator(s): Cara Glabau, Elena Capson | | Section, To | wnship, Ra | nge: S30 T5N R | | | |
| | | | | convex, none): No | | Slope (% | _{%):} 0 |
| Subregion (LRR): | Lat: 41. | .1369063 | 3 | Long: -112.10 | 791683 | | AD83_2011 |
| Soil Map Unit Name: HLA - Harrisville-Leland cor | nplex, 0 to 1 | percent s | lopes | | | | |
| Are climatic / hydrologic conditions on the site typical for | | | | | | | |
| Are Vegetation, Soil, or Hydrology | - | | | "Normal Circumsta | | | Nο |
| Are Vegetation, Soil, or Hydrology | | | | eeded, explain any | | | |
| SUMMARY OF FINDINGS – Attach site ma | | | | | | | res, etc. |
| Wetland Hydrology Present? YesRemarks: | No V | with | ne Samplec | nd? Ye | | No | |
| Conditions were wetter than normal a been rain for several days prior to the | _ | | ntecede | ent precipitat | tion tool, | but there ha | ad not |
| VEGETATION – Use scientific names of p | | | | | | | |
| | Absolute | | | Dominance Tes | st workshee | et: | |
| Tree Stratum (Plot size:) | <u>% Cover</u> | Species? | <u>Status</u> | Number of Dom | | es o O | (4) |
| 1. 2 | | | | That Are OBL, F | -ACVV, or FA | /C: 0 | (A) |
| 2. 3. | | | | Total Number of Species Across | | 1 | (B) |
| 4. | | | | | | | _ (5) |
| | | = Total Co | ver | Percent of Domi | | | (A/B) |
| Sapling/Shrub Stratum (Plot size:) | | | | | | | _ |
| 1 | | | | Prevalence Ind | | et: Multiply by: | |
| 2 | | | | | | x 1 = 0 | |
| 3 4 | | | | | | x 2 = 0 | |
| 5 | | | | | | x 3 = 45 | |
| | | = Total Co | ver | | | x 4 = 340 | |
| Herb Stratum (Plot size:) | | _ | E 4 O L L | UPL species | 0 | x 5 = 0 | |
| 1. Hordeum murinum | 60 | | FACU | Column Totals: | 100 | (A) <u>385</u> | (B) |
| 2. Lepidium perfoliatum | 10 | · ——— | FACU | Dravalana | e Index = B | /A = 3.85 | |
| 3. Bromus hordeaceus 4. Distichlis spicata | 5 | | FACU FAC | Hydrophytic Ve | | | |
| 5. Lactuca serriola | <u>5</u> 5 | | FACU | Dominance | - | | |
| 6. Plantago lanceolata | <u>5</u> | | FAC | Prevalence | | | |
| 7. Poa pratensis | <u>5</u> | · ——— | FAC | | | ons¹ (Provide supp | oortina |
| 8. Taraxacum officinale | <u>-</u> | | FACU | data in F | Remarks or c | on a separate shee | et) |
| <u> </u> | 100 | = Total Co | | Problemation | Hydrophytic | c Vegetation¹ (Exp | olain) |
| Woody Vine Stratum (Plot size:) 1 | | _ | | ¹ Indicators of hy be present, unle | | wetland hydrolog I or problematic. | y must |
| | | = Total Co | | Hydrophytic | | | |
| % Bare Ground in Herb Stratum % C | over of Biotic C | | | Vegetation Present? | Yes | No | _ |
| Remarks: | | | | 1 | | | |
| | | | | | | | |

| Profile Desc | ription: (Describ | e to the depth r | needed to docu | ment the i | ndicator | or confirm | the absence of indica | itors.) | |
|--------------------|--|------------------|-------------------------|-------------|------------|------------------|---|---|------------|
| Depth | Matrix | | | ox Features | 4 | . 2 | - . | 5 . | |
| (inches) 0 - 16 | Color (moist) | <u>%</u> 100 | Color (moist) | % | Type' | Loc ² | Texture Sandy Clay Loam | Remarks | — |
| | 10YR 4/2 | | | | | - | | | _ |
| 16 - 24 | 10YR 3/3 | 100 | | | | | Sandy Clay | | _ |
| | | | | _ | | | - <u></u> | | |
| - | | | | | | | | | |
| - | | | | | | | | | |
| | | | | | | | | | _ |
| | | <u> </u> | | | | | | | _ |
| | - | <u> </u> | | | | | | | _ |
| | | | | | | - | | | _ |
| | oncentration, D=De Indicators: (Appl | • | | | | d Sand Gr | | L=Pore Lining, M=Matrix. lematic Hydric Soils ³ : | |
| - | | icable to all ER | | | eu.) | | | · · | |
| Histosol | oipedon (A2) | | Sandy Red Stripped M | | | | 1 cm Muck (A9) 2 cm Muck (A10 | | |
| | stic (A3) | | Loamy Mu | , , | l (F1) | | Reduced Vertic | | |
| | en Sulfide (A4) | Loamy Gle | - | | | Red Parent Mate | | | |
| | d Layers (A5) (LRF | R C) | Depleted M | - | , | | Other (Explain in | | |
| | ıck (A9) (LRR D) | | Redox Dar | k Surface (| F6) | | | | |
| - | d Below Dark Surfa | ace (A11) | Depleted D | | | | 2 | | |
| | ark Surface (A12) | | Redox Dep | | F8) | | | phytic vegetation and | |
| - | lucky Mineral (S1) Bleyed Matrix (S4) | | Vernal Poo | is (F9) | | | wetland hydrology unless disturbed o | | |
| | Layer (if present): | | | | | | dilless disturbed t | л рговієтнаціс. | |
| Type: | - Lay 61 (11 p. 666111). | | | | | | | | |
| | ches): | | _ | | | | Hydric Soil Present? | ? Yes No | |
| Remarks: | , | | _ | | | | , | | |
| | | | | | | | | | |
| very roc | ку | | | | | | | | |
| | | | | | | | | | |
| HYDROLO | GV | | | | | | | | |
| | drology Indicator | <u> </u> | | | | | | | |
| _ | cators (minimum of | | hock all that ann | lv) | | | Socondary India | eators (2 or more required) | |
| Surface | | one required, c | | | | | | cators (2 or more required) | _ |
| | ` , | | Salt Crust | | | | | ks (B1) (Riverine) | |
| Saturation | ater Table (A2) | | Biotic Cru Aquatic Ir | | c (D13) | | | Deposits (B2) (Riverine) sits (B3) (Riverine) | |
| | larks (B1) (Nonriv | arina) | Hydrogen | | | | Drainage P | | |
| | nt Deposits (B2) (N | | | | | Living Roo | ots (C3) Dry-Seaso | | |
| | posits (B3) (Nonri v | | Presence | | _ | _ | Crayfish Bu | | |
| - | Soil Cracks (B6) | cilic) | Recent Iro | | • | • | | Visible on Aerial Imagery (C9 | 3) |
| | on Vis ble on Aeria | l Imagery (B7) | Thin Mucl | | | u 000 (00 | Shallow Aq | | ., |
| | tained Leaves (B9 | | · | plain in Re | | | FAC-Neutr | | |
| Field Obser | | • | | · | | | | | |
| Surface Wat | er Present? | Yes No | Depth (ir | iches): | | | | | |
| Water Table | | | Depth (ir | | | | | | |
| Saturation P | resent? | · | Depth (ir | | | | and Hydrology Present | t? Yes No 🗸 | |
| (includes car | oillary fringe) | | | | | | | | _ |
| Describe Re | corded Data (strea | m gauge, monito | oring well, aerial | pnotos, pre | evious ins | pections), | ır avaılable: | | |
| | | | | | | | | | |
| Remarks: | | | | | | | | | |
| | | | | | | | | | |
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| I | | | | | | | | | |

WDC SR-177, SR-193 to 1800 NorthUDOT



Sample Point 71



Sample Point 71

| Project/Site: WDC Phase II | | | City/Cou | _{ınty:} <u>Davis C</u> | ounty | | Sampling I | Date: 2024 | I-05-22 |
|--|-----------------|-------------------|-----------|---------------------------------|---------------------------------------|-----------------------------------|------------------|--------------|-------------|
| Applicant/Owner: UDOT | | | | | Sta | _{ate:} Utah | Sampling F | oint: SP72 | 2 |
| Investigator(s): Cara Glabau, Elena Ca | pson | | Section, | , Township, Ra | _{inge:} <u>S30</u> | T5N R2W | | | |
| Landform (hillslope, terrace, etc.): Depres | sion | | Local re | elief (concave, | convex, no | one): Concav | е | _ Slope (% |): <u>0</u> |
| Subregion (LRR): | | Lat: 41. | 13407 | 117 | _ Long: | 112.1078351 | 7 | Datum: NA | AD83_20 |
| Soil Map Unit Name: HLA - Harrisville-I | _eland con | nplex, 0 to 1 | percen | nt slopes | | _ NWI classific | ation: Non | e | |
| Are climatic / hydrologic conditions on the s | ite typical for | this time of year | ar? Yes | No _ | ✓ (If I | no, explain in R | emarks.) | | |
| Are Vegetation, Soil, or Hyd | rology | significantly | disturbe | d? Are | "Normal Ci | rcumstances" p | resent? Y | es 1 | No 🔽 |
| Are Vegetation, Soil, or Hyd | rology | naturally pro | blematio | c? (If ne | eeded, exp | lain any answe | rs in Remar | ks.) | |
| SUMMARY OF FINDINGS - Attac | ch site ma | ap showing | samp | ling point l | ocations | s, transects | , importa | int featur | es, etc |
| Liveline In the Manager Property | / | NI- | | | | | | | |
| Hydrophytic Vegetation Present? Hydric Soil Present? | Yes 🗸 | No | | s the Sampled | | | | | |
| | | No | V | vithin a Wetla | nd? | Yes | No | | |
| Remarks: | | | | | | | | | |
| Conditions were wetter than | normal a | according t | to the | antecede | ent pred | cipitation to | ool. but | there ha | ad not |
| been rain for several days pr | | • | | | , , , , , , , , , , , , , , , , , , , | | | | |
| | | | | | | | | | |
| VEGETATION – Use scientific na | illies of bi | Absolute | Domin | ant Indicator | Domina | nce Test work | shoot: | | |
| Tree Stratum (Plot size: |) | | | es? Status | | of Dominant S | | | |
| 1 | | | | | | OBL, FACW, | or FAC: 1 | | _ (A) |
| 2 | | | | | Total Nu | ımber of Domin | ant | | |
| 3 | | | | | | Across All Stra | | | _ (B) |
| 4 | | | | | Percent | of Dominant Sp | pecies | | |
| Sapling/Shrub Stratum (Plot size: |) | | _ = Total | Cover | That Are | OBL, FACW, | or FAC: <u>1</u> | 00.00 | _ (A/B) |
| 1 | | | | | Prevale | nce Index wor | ksheet: | | |
| 2. | | | | | Tota | al % Cover of: | | Multiply by: | |
| 3 | | | | | OBL spe | | x 1 = | | |
| 4 | | | | | FACW s | | x 2 = | | _ |
| 5 | | | | | FAC spe | | | = 30 | _ |
| Herb Stratum (Plot size: | \ | | = Total | Cover | | _ | x 4 = | | _ |
| 1. Juncus balticus | _) | 70 | ~ | FACW | UPL spe | ecies <u>0</u> Totals: 100 | x 5 = | 005 | |
| 2. Carex aquatilis | | 15 | | OBL | Column | Totals: 100 | (A) | 200 | (B) |
| 3. Distichlis spicata | | 10 | | FAC | Pro | evalence Index | = B/A = <u>2</u> | 05 | |
| 4. Melilotus officinalis | | 5 | | FACU | Hydrop | hytic Vegetation | on Indicato | rs: | |
| 5 | | | | | | ninance Test is | | | |
| 6 | | | | | | valence Index is | | | |
| 7 | | | | | | phological Ada data in Remarks | | | |
| 8 | | 100 | | | | blematic Hydro | | | |
| Woody Vine Stratum (Plot size: |) | 100 | _ = Total | Cover | | | | | , |
| 1 | | | | | | ors of hydric soi | | | / must |
| 2. | | | | | be prese | ent, unless distu | ırbed or pro | blematic. | |
| | | | = Total | Cover | Hydrop | | | | |
| % Bare Ground in Herb Stratum | % Co | over of Biotic C | rust | | Vegetat Present | ion :? Ye | s 🗸 | No | |
| Remarks: | | | | | 1 | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

SOIL

Sampling Point: SP72

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

| Depth | Matrix | | | ox Feature | | . 2 | | |
|---|---|---|---|--|---|-------------------|---|---|
| (inches) | Color (moist) | | Color (moist) | % | Type ¹ | Loc ² | Texture | Remarks |
| 0 - 1 | 10YR 3/2 | 100 | | | | | Muck | |
| 1 - 4 | 10YR 3/2 | 100 | | | | · | Clay | |
| 4 - 16 | 10YR 5/2 | 85 | 7.5YR 5/6 | 15 | С | М | Silty Clay | |
| 16 - 24 | 10YR 4/2 | 90 | 10YR 5/6 | 10 | С | М | Clay | |
| | | | | | | | | |
| - | | | | | | | | |
| - | | | | | | | | |
| | | | - | | | . ——— | | |
| 1 _{Type:} C=C | ancontration D=D | onlotion DN | I=Reduced Matrix, C | S=Cover | d or Coat | od Sand C | raina ² l coation: Di | L-Doro Lining M-Motriy |
| | | | I LRRs, unless other | | | eu Sanu G | | L=Pore Lining, M=Matrix. lematic Hydric Soils ³ : |
| Histosol | | | Sandy Red | | , | | 1 cm Muck (A9) | • |
| | pipedon (A2) | | Stripped M | . , | | | 2 cm Muck (A10 | • |
| | stic (A3) | | Loamy Mu | cky Miner | al (F1) | | Reduced Vertic | (F18) |
| | en Sulfide (A4) | | Loamy Gle | - | | | Red Parent Mat | ` , |
| | d Layers (A5) (LRF | R C) | <u>✓</u> Depleted N | ` ' | | | Other (Explain i | n Remarks) |
| | ıck (A9) (LRR D) d Below Dark Surfa | aca (A11) | Redox Dar Depleted D | | . , | | | |
| | ark Surface (A12) | ace (ATT) | Redox Dep | | | | ³ Indicators of hydror | phytic vegetation and |
| | lucky Mineral (S1) | | Vernal Poo | | () | | | must be present, |
| Sandy G | Gleyed Matrix (S4) | | | | | | unless disturbed of | or problematic. |
| Restrictive I | Layer (if present) | | | | | | | |
| Type: | | | | | | | | |
| Depth (inc | ches): | | | | | | Hydric Soil Present | ? Yes No |
| | | | | | | | | |
| HYDROLO | | | | | | | | |
| | drology Indicator | s. | | | | | | |
| | | | | | | | | |
| | - | | ed; check all that app | | | | | cators (2 or more required) |
| Surface | Water (A1) | | Salt Crus | t (B11) | | | Water Mar | ks (B1) (Riverine) |
| Surface High Wa | Water (A1) ater Table (A2) | | Salt Crus Biotic Cru | t (B11) ust (B12) | es (B13) | | Water Mar Sediment I | ks (B1) (Riverine) Deposits (B2) (Riverine) |
| Surface High Wa Saturatio | Water (A1) ater Table (A2) on (A3) | f one require | Salt Crus Biotic Cru Aquatic Ir | t (B11) ust (B12) nvertebrat | | | Water Mar Sediment I Drift Depos | ks (B1) (Riverine) Deposits (B2) (Riverine) sits (B3) (Riverine) |
| Surface High Wa Saturatio Water M | Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriv | f one require | Salt Crus Biotic Cru Aquatic Ir Hydroger | t (B11) ust (B12) nvertebrat n Sulfide C | odor (C1) | Living Ro | Water Mar Sediment I Drift Depos | ks (B1) (Riverine) Deposits (B2) (Riverine) sits (B3) (Riverine) Patterns (B10) |
| Surface High Wa Saturatio Water M Sedimer | Water (A1) ater Table (A2) on (A3) | f one require erine) Ionriverine | Salt Crus Biotic Cru Aquatic Ir Hydroger | t (B11) ust (B12) nvertebrat n Sulfide (Rhizosph | odor (C1) eres alonç | _ | Water Mar Sediment I Drift Depos Drainage F ots (C3) Dry-Seaso | ks (B1) (Riverine) Deposits (B2) (Riverine) sits (B3) (Riverine) Patterns (B10) n Water Table (C2) |
| Surface High Wa Saturatio Water M Sedimer Drift Dep | Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriv at Deposits (B2) (N | f one require erine) Ionriverine | Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence | t (B11) ust (B12) nvertebrat n Sulfide C Rhizosph | odor (C1) eres alonç ed Iron (C | _ | Water Mar Sediment I Drift Depos Drainage F ots (C3) Dry-Seaso Crayfish B | ks (B1) (Riverine) Deposits (B2) (Riverine) sits (B3) (Riverine) Patterns (B10) n Water Table (C2) |
| Surface High Wa Saturatio Water M Sedimer Drift Dep | Water (A1) Inter Table (A2) Inter Table (A2) Inter (A3) Inter (B1) (Nonrive Inter (B2) (Nonrive Inter (B3) (Nonrive) Inter (B3) (Nonrive) | f one require erine) lonriverine) verine) | Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir | t (B11) ust (B12) nvertebrat n Sulfide C Rhizosph of Reduct on Reduct | odor (C1) eres alono ed Iron (C tion in Tille | 4) | Water Mar Sediment I Drift Depos Drainage F ots (C3) Dry-Seaso Crayfish B Saturation | ks (B1) (Riverine) Deposits (B2) (Riverine) sits (B3) (Riverine) Patterns (B10) n Water Table (C2) urrows (C8) |
| Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio | Water (A1) Iter Table (A2) Iter (A3) Iter(B1) (Nonriv Iter(B2) (Nonriv Iter(B3) (Nonriv Soil Cracks (B6) | erine) lonriverine) verine) | Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir | t (B11) ust (B12) nvertebrat n Sulfide C Rhizosph of Reduc on Reduc k Surface | odor (C1) eres along ed Iron (C tion in Tille (C7) | 4) | Water Mar Sediment I Drift Depos Drainage F ots (C3) Dry-Seaso Crayfish B Saturation | ks (B1) (Riverine) Deposits (B2) (Riverine) Sits (B3) (Riverine) Patterns (B10) In Water Table (C2) Furrows (C8) Visible on Aerial Imagery (C9) Squitard (D3) |
| Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio | Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriv nt Deposits (B2) (N cosits (B3) (Nonriv Soil Cracks (B6) on Vis ble on Aeria | erine) Ionriverine; verine) al Imagery (E | Salt Crus Solt Crus Siotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex | t (B11) ust (B12) nvertebrat n Sulfide (Rhizosph of Reduc on Reduc k Surface k plain in R | odor (C1) eres along ed Iron (C tion in Tille (C7) emarks) | 4) ed Soils (C | Water Mar Sediment I Drift Depos Drainage F ots (C3) Dry-Seaso Crayfish B Saturation Shallow Ac | ks (B1) (Riverine) Deposits (B2) (Riverine) Sits (B3) (Riverine) Patterns (B10) In Water Table (C2) Furrows (C8) Visible on Aerial Imagery (C9) Squitard (D3) |
| Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Observ Surface Water | Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriv nt Deposits (B2) (Nonriv cosits (B3) (Nonriv Soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9 vations: er Present? | erine) lonriverine; verine) al Imagery (E | Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex | t (B11) ust (B12) nvertebrat n Sulfide (Rhizosph of Reduc on Reduc k Surface cplain in R | odor (C1) eres along ed Iron (C tion in Tille (C7) emarks) | 4) ed Soils (C | Water Mar Sediment I Drift Depos Drainage F ots (C3) Dry-Seaso Crayfish B Saturation Shallow Ac | ks (B1) (Riverine) Deposits (B2) (Riverine) Sits (B3) (Riverine) Patterns (B10) In Water Table (C2) Furrows (C8) Visible on Aerial Imagery (C9) Squitard (D3) |
| Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Observ | Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriv nt Deposits (B2) (Nonriv cosits (B3) (Nonriv Soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9 vations: er Present? | erine) Honriverine) verine) al Imagery (E) Yes Yes | Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex | t (B11) ust (B12) nvertebrat n Sulfide C Rhizosph e of Reduct on Reduct k Surface k Surface cplain in R nches): nches): | odor (C1) eres along ed Iron (C tion in Tilla (C7) emarks) | 4) ed Soils (C | Water Mar Sediment I Drift Depose Drainage F ots (C3) Crayfish B Saturation Shallow Ac ✓ FAC-Neutr | ks (B1) (Riverine) Deposits (B2) (Riverine) Sits (B3) (Riverine) Patterns (B10) In Water Table (C2) Surrows (C8) Visible on Aerial Imagery (C9) Spatial Test (D5) |
| Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Obser Surface Water Water Table Saturation Pr (includes cap | water (A1) ater Table (A2) on (A3) larks (B1) (Nonriv nt Deposits (B2) (Nonriv cosits (B3) (Nonriv cosits (B6) on Vis ble on Aeria tained Leaves (B9 vations: er Present? Present? pillary fringe) | erine) Honriverine) Al Imagery (E) Yes Yes Yes | Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex | t (B11) ust (B12) nvertebrat n Sulfide C Rhizosph e of Reduct on Reduct k Surface k Surface cplain in R nches): nches): nches): nches): | odor (C1) eres along ed Iron (C tion in Tilla (C7) emarks) | 4) ed Soils (C | Water Mar Sediment I Drift Depos Drainage F ots (C3) Dry-Seaso Crayfish Bacturation Shallow Actured FAC-Neutr | ks (B1) (Riverine) Deposits (B2) (Riverine) Sits (B3) (Riverine) Patterns (B10) In Water Table (C2) Surrows (C8) Visible on Aerial Imagery (C9) Spatial Test (D5) |
| Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Obser Surface Water Water Table Saturation Pr (includes cap | water (A1) ater Table (A2) on (A3) larks (B1) (Nonriv nt Deposits (B2) (Nonriv cosits (B3) (Nonriv cosits (B6) on Vis ble on Aeria tained Leaves (B9) vations: er Present? Present? pillary fringe) | erine) Honriverine) Al Imagery (E) Yes Yes Yes | Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex | t (B11) ust (B12) nvertebrat n Sulfide C Rhizosph e of Reduct on Reduct k Surface k Surface cplain in R nches): nches): nches): nches): | odor (C1) eres along ed Iron (C tion in Tilla (C7) emarks) | 4) ed Soils (C | Water Mar Sediment I Drift Depos Drainage F ots (C3) Dry-Seaso Crayfish Bacturation Shallow Actured FAC-Neutr | ks (B1) (Riverine) Deposits (B2) (Riverine) Sits (B3) (Riverine) Patterns (B10) In Water Table (C2) Surrows (C8) Visible on Aerial Imagery (C9) Spatial Test (D5) |
| Surface High Wa Saturatio Water M Sedimer Drift Dep ✓ Surface Inundatio ✓ Water-S Field Observ Surface Water Water Table Saturation Pr (includes cap Describe Rec | water (A1) ater Table (A2) on (A3) larks (B1) (Nonriv nt Deposits (B2) (Nonriv cosits (B3) (Nonriv cosits (B6) on Vis ble on Aeria tained Leaves (B9) vations: er Present? Present? pillary fringe) | erine) Honriverine) Al Imagery (E) Yes Yes Yes | Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex | t (B11) ust (B12) nvertebrat n Sulfide C Rhizosph e of Reduct on Reduct k Surface k Surface k plain in R nches): nches): nches): nches): | odor (C1) eres along ed Iron (C tion in Tilla (C7) emarks) | 4) ed Soils (C | Water Mar Sediment I Drift Depos Drainage F ots (C3) Dry-Seaso Crayfish Bacturation Shallow Actured FAC-Neutr | ks (B1) (Riverine) Deposits (B2) (Riverine) Sits (B3) (Riverine) Patterns (B10) In Water Table (C2) Surrows (C8) Visible on Aerial Imagery (C9) Spatial Test (D5) |
| Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Obser Surface Water Water Table Saturation Pr (includes cap | water (A1) ater Table (A2) on (A3) larks (B1) (Nonriv nt Deposits (B2) (Nonriv cosits (B3) (Nonriv cosits (B6) on Vis ble on Aeria tained Leaves (B9) vations: er Present? Present? pillary fringe) | erine) Honriverine) Al Imagery (E) Yes Yes Yes | Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex | t (B11) ust (B12) nvertebrat n Sulfide C Rhizosph e of Reduct on Reduct k Surface k Surface k plain in R nches): nches): nches): nches): | odor (C1) eres along ed Iron (C tion in Tilla (C7) emarks) | 4) ed Soils (C | Water Mar Sediment I Drift Depos Drainage F ots (C3) Dry-Seaso Crayfish Bacturation Shallow Actured FAC-Neutr | ks (B1) (Riverine) Deposits (B2) (Riverine) Sits (B3) (Riverine) Patterns (B10) In Water Table (C2) Surrows (C8) Visible on Aerial Imagery (C9) Spatial Test (D5) |
| Surface High Wa Saturatio Water M Sedimer Drift Dep ✓ Surface Inundatio ✓ Water-S Field Observ Surface Water Water Table Saturation Pr (includes cap Describe Rec | water (A1) ater Table (A2) on (A3) larks (B1) (Nonriv nt Deposits (B2) (Nonriv cosits (B3) (Nonriv cosits (B6) on Vis ble on Aeria tained Leaves (B9) vations: er Present? Present? pillary fringe) | erine) Honriverine) Al Imagery (E) Yes Yes Yes | Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex | t (B11) ust (B12) nvertebrat n Sulfide C Rhizosph e of Reduct on Reduct k Surface k Surface k plain in R nches): nches): nches): nches): | odor (C1) eres along ed Iron (C tion in Tilla (C7) emarks) | 4) ed Soils (C | Water Mar Sediment I Drift Depos Drainage F ots (C3) Dry-Seaso Crayfish Bacturation Shallow Actured FAC-Neutr | ks (B1) (Riverine) Deposits (B2) (Riverine) Sits (B3) (Riverine) Patterns (B10) In Water Table (C2) Surrows (C8) Visible on Aerial Imagery (C9) Spatial Test (D5) |
| Surface High Wa Saturatio Water M Sedimer Drift Dep ✓ Surface Inundatio ✓ Water-S Field Observ Surface Water Water Table Saturation Pr (includes cap Describe Rec | water (A1) ater Table (A2) on (A3) larks (B1) (Nonriv nt Deposits (B2) (Nonriv cosits (B3) (Nonriv cosits (B6) on Vis ble on Aeria tained Leaves (B9) vations: er Present? Present? pillary fringe) | erine) Honriverine) Al Imagery (E) Yes Yes Yes | Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex | t (B11) ust (B12) nvertebrat n Sulfide C Rhizosph e of Reduct on Reduct k Surface k Surface k plain in R nches): nches): nches): nches): | odor (C1) eres along ed Iron (C tion in Tilla (C7) emarks) | 4) ed Soils (C | Water Mar Sediment I Drift Depos Drainage F ots (C3) Dry-Seaso Crayfish Bacturation Shallow Actured FAC-Neutr | ks (B1) (Riverine) Deposits (B2) (Riverine) Sits (B3) (Riverine) Patterns (B10) In Water Table (C2) Surrows (C8) Visible on Aerial Imagery (C9) Spatial Test (D5) |
| Surface High Wa Saturatio Water M Sedimer Drift Dep ✓ Surface Inundatio ✓ Water-S Field Observ Surface Water Water Table Saturation Pr (includes cap Describe Rec | water (A1) ater Table (A2) on (A3) larks (B1) (Nonriv nt Deposits (B2) (Nonriv cosits (B3) (Nonriv cosits (B6) on Vis ble on Aeria tained Leaves (B9) vations: er Present? Present? pillary fringe) | erine) Honriverine) Al Imagery (E) Yes Yes Yes | Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex | t (B11) ust (B12) nvertebrat n Sulfide C Rhizosph e of Reduct on Reduct k Surface k Surface k plain in R nches): nches): nches): nches): | odor (C1) eres along ed Iron (C tion in Tilla (C7) emarks) | 4) ed Soils (C | Water Mar Sediment I Drift Depos Drainage F ots (C3) Dry-Seaso Crayfish Bacturation Shallow Actured FAC-Neutr | ks (B1) (Riverine) Deposits (B2) (Riverine) Sits (B3) (Riverine) Patterns (B10) In Water Table (C2) Surrows (C8) Visible on Aerial Imagery (C9) Spatial Test (D5) |

WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 72



Sample Point 72

| Project/Site: WDC Phase II | | City/Count | _{y:} Davis C | ounty | Sar | npling Date: 202 | 24-05-22 |
|--|-------------------------|----------------|-----------------------|-----------------------------------|-------------------|---|---|
| Applicant/Owner: UDOT | | | | State: Uta | | · - | |
| Investigator(s): Cara Glabau, Elena Capson | | Section, To | ownship, Ra | nge: | | | |
| Landform (hillslope, terrace, etc.): | | Local relie | ef (concave, | convex, none): | | Slope (| %): |
| Subregion (LRR): | Lat: <u>41</u> | .1340851 | 7 | _ Long:112.107 | ⁷ 8675 | Datum: <u></u> | NAD83_2011 |
| Soil Map Unit Name: | | | | NWI d | | | |
| Are climatic / hydrologic conditions on the site typi | cal for this time of ye | ear? Yes_ | No _ | (If no, expla | ain in Rema | rks.) | |
| Are Vegetation, Soil, or Hydrology | significantly | disturbed? | Are | "Normal Circumsta | nces" prese | nt? Yes 🗸 | No |
| Are Vegetation, Soil, or Hydrology | naturally pro | oblematic? | (If ne | eeded, explain any | answers in | Remarks.) | |
| SUMMARY OF FINDINGS - Attach sit | e map showing | g samplir | ng point l | ocations, tran | sects, im | portant featu | res, etc. |
| Hydric Soil Present? Yes Wetland Hydrology Present? Yes Remarks: | No | witl | he Sampleo | nd? Ye | | No | |
| Conditions were wetter than norm been rain for several days prior to | _ | | intecede | ent precipitat | ion tool, | , but there h | ad not |
| VEGETATION – Use scientific names | | · | | | | | |
| Trac Stratum (Diet size: | Absolute | | t Indicator | Dominance Tes | t workshee | et: | |
| Tree Stratum (Plot size:) 1 | <u></u> | Species? | Status | Number of Dom That Are OBL, F | | | (A) |
| 2. | | - | | | • | | ('') |
| 3. | | | | Total Number of Species Across | | 3 | (B) |
| 4 | | | | Percent of Domi | nant Snecie | | |
| Sapling/Shrub Stratum (Plot size: | | _ = Total Co | over | | | C: <u>33.33</u> | (A/B) |
| 1 | | | | Prevalence Ind | ex workshe | et: | |
| 2. | | | | | | Multiply by | <u>: </u> |
| 3. | | | | OBL species | 0 | x 1 = 0 | |
| 4. | | | | FACW species | 0 | x 2 = 0 | |
| 5. | | | | FAC species | 25 | x 3 = <u>75</u> | |
| | | _ = Total Co | over | FACU species | | | |
| Herb Stratum (Plot size:) | 35 | | UPL | UPL species | 55 | _ | |
| 1. bunchgrass | | | - —— | Column Totals: | 100 | _ (A) <u>430</u> | (B) |
| 2. Poa pratensis 3. Lolium arundinaceum | 25 20 | - | FAC UPL | Provalono | e Index = B | /Λ = 4.30 | |
| Melilotus officinalis | 10 | | FACU | Hydrophytic Ve | | • | |
| 5. Poa bulbosa | 10 | - | FACU | Dominance | _ | | |
| 6 | | - | | Prevalence | | | |
| 7. | | | | | | ons¹ (Provide sup | |
| 8. | | | | | | on a separate she | , |
| | 100 | _ = Total Co | over | Problemation | Hydrophyti | c Vegetation ¹ (Ex | plain) |
| Woody Vine Stratum (Plot size: | | | | ¹ Indicators of by | dria agil and | l wotland bydrolog | av must |
| 1 | | | | be present, unle | | l wetland hydrolog l or problematic. | gy musi |
| 2 | | = Total Co | over | Hydrophytic | | | |
| % Bare Ground in Herb Stratum | <u></u> | | | Vegetation Present? | Yes | No | _ |
| Remarks: | | | | 1 | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| | . , | to the dept | n needed to document the indicator or o | communication the at | sence | of indicators.) |
|---------------------------------------|--|---------------|---|----------------------|------------------|---|
| Depth (inches) | Matrix Color (moist) | % | Redox Features Color (moist) % Type ¹ L | oc² Tex | ture | Remarks |
| 0 - 6 | 10YR 3/2 | 100 | | Clay | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| - | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | - | | | | | |
| ¹ Type: C=Co | oncentration, D=Dep | oletion, RM= | Reduced Matrix, CS=Covered or Coated S | and Grains. | ² Loc | cation: PL=Pore Lining, M=Matrix. |
| Hydric Soil I | ndicators: (Applic | able to all L | LRRs, unless otherwise noted.) | Indi | cators | for Problematic Hydric Soils ³ : |
| Histosol | (A1) | | Sandy Redox (S5) | | 1 cm N | fluck (A9) (LRR C) |
| Histic Ep | pipedon (A2) | | Stripped Matrix (S6) | | 2 cm N | Muck (A10) (LRR B) |
| Black His | • • | | Loamy Mucky Mineral (F1) | | | ed Vertic (F18) |
| | n Sulfide (A4) | | Loamy Gleyed Matrix (F2) | | | arent Material (TF2) |
| | Layers (A5) (LRR | C) | Depleted Matrix (F3) | - | Other (| (Explain in Remarks) |
| | ck (A9) (LRR D) | o (A11) | Redox Dark Surface (F6) | | | |
| | d Below Dark Surfac ark Surface (A12) | æ (ATT) | Depleted Dark Surface (F7)Redox Depressions (F8) | ³ Ind | icatore | of hydrophytic vegetation and |
| | lucky Mineral (S1) | | Vernal Pools (F9) | | | hydrology must be present, |
| - | Sleyed Matrix (S4) | | vernai i eele (i e) | | | isturbed or problematic. |
| | _ayer (if present): | | | | | , |
| Type: Ro | | | | | | |
| Depth (inc | | | | Hvdi | ic Soil | Present? Yes No |
| Remarks: | | | | , , | | |
| Rocky fr | om road bas | e form | historic construction of ad | jacent ca | nal r | oad. |
| HYDROLO | GY | | | | | |
| Wetland Hyd | drology Indicators | <u> </u> | | | | |
| - | | | ; check all that apply) | | Secon | ndary Indicators (2 or more required) |
| | Water (A1) | | Salt Crust (B11) | | | /ater Marks (B1) (Riverine) |
| | ter Table (A2) | | Biotic Crust (B12) | | | ediment Deposits (B2) (Riverine) |
| Saturatio | ` ' | | Aquatic Invertebrates (B13) | | | rift Deposits (B3) (Riverine) |
| | arks (B1) (Nonrive i | rine) | Hydrogen Sulfide Odor (C1) | | | rainage Patterns (B10) |
| · · · · · · · · · · · · · · · · · · · | nt Deposits (B2) (No | • | Oxidized Rhizospheres along Livi | na Roots (C3) | | - |
| | oosits (B3) (Nonrive | • | Presence of Reduced Iron (C4) | | | rayfish Burrows (C8) |
| | Soil Cracks (B6) | , | Recent Iron Reduction in Tilled So | oils (C6) | | aturation Visible on Aerial Imagery (C9) |
| | on Vis ble on Aerial | Imagery (B7 | | - () | | hallow Aquitard (D3) |
| | tained Leaves (B9) | | Other (Explain in Remarks) | | | AC-Neutral Test (D5) |
| Field Observ | <u> </u> | | | | | , , |
| Surface Water | | es N | No Depth (inches): | | | |
| Water Table | | | No Depth (inches): | | | |
| Saturation Pr | | | No Depth (inches): | Watland Hy | drology | y Present? Yes No |
| (includes cap | | res N | NO Deptit (inches) | welland ny | urology | y Fresent? Tes No |
| | | n gauge, mo | nitoring well, aerial photos, previous inspec | tions), if availa | ble: | |
| | | | | | | |
| Remarks: | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 73



Sample Point 73

| Project/Site: WDC Phase II | | Citv/Countv | Davis C | ounty | Sampling Date: | 2024-05-22 | | | |
|--|---------------------|----------------------------------|------------|--|----------------------|---------------|--|--|--|
| Applicant/Owner: UDOT | | State: Utah Sampling Point: SP74 | | | | | | | |
| Investigator(s): Cara Glabau, Elena Capson | | Section. To | wnship. Ra | | | | | | |
| | | | | convex, none): Concav | /e SI | ope (%): 0 | | | |
| Subregion (LRR): | | | | | | | | | |
| Soil Map Unit Name: HLA - Harrisville-Leland compl | | | | | | | | | |
| Are climatic / hydrologic conditions on the site typical for thi | | | | | <u>-</u> | | | | |
| Are Vegetation, Soil, or Hydrologys | - | | | "Normal Circumstances" | | ✓ No | | | |
| Are Vegetation, Soil, or Hydrology I | | | | eeded, explain any answe | | | | | |
| SUMMARY OF FINDINGS – Attach site map | | | | | | eatures, etc. | | | |
| Hydrophytic Vegetation Present? Yes N | lo 🗸 | | | · · | <u> </u> | | | | |
| Hydric Soil Present? Yes N | | | e Sampled | | No | | | | |
| Wetland Hydrology Present? Yes N | | with | in a Wetla | na? res | NO | _ | | | |
| Remarks: | | | | | | | | | |
| Conditions were wetter than normal acc | cording | to the a | ntecede | ent precipitation t | tool, but the | re had not | | | |
| been rain for several days prior to the s | ite visit. | | | | | | | | |
| VEGETATION – Use scientific names of plan | nts. | | | | | | | | |
| | | Dominant | | Dominance Test wor | ksheet: | | | | |
| Tree Stratum (Plot size:) | | Species? | Status | Number of Dominant S | ' ^ | (4) | | | |
| 1. | | | | That Are OBL, FACW, | or FAC: 0 | (A) | | | |
| 2 3 | | | | Total Number of Domi | nant | (B) | | | |
| 4 | | | | Species Across All Str | ala. <u>–</u> | (B) | | | |
| Sapling/Shrub Stratum (Plot size:) | | = Total Co | ver | Percent of Dominant S That Are OBL, FACW, | | (A/B) | | | |
| 1. (Flot size) | | | | Prevalence Index wo | rksheet: | | | | |
| 2. | | | | Total % Cover of: | | ply by: | | | |
| 3. | | | | OBL species 0 | x 1 = 0 | | | | |
| 4. | | | | FACW species 5 | x 2 = <u>10</u> | <u> </u> | | | |
| 5 | | | | | x 3 = <u>45</u> | | | | |
| | | _ = Total Co | ver | FACU species 75 | x 4 = 30 | | | | |
| Herb Stratum (Plot size:) 1. Hordeum murinum | 35 | ~ | FACU | · | x 5 = 25 | | | | |
| 2. Melilotus officinalis | _ 35 | <u> </u> | FACU | Column Totals: 100 | (A) <u>38</u> | (B) | | | |
| 3. Poa bulbosa | 15 | | FACU | Prevalence Index | x = B/A = 3.80 | | | | |
| 4. Poa pratensis | 15 | | FAC | Hydrophytic Vegetati | · | | | | |
| 5. Juncus balticus | 5 | | FACW | Dominance Test is | | | | | |
| 6. Lepidium campestre | 5 | | UPL | Prevalence Index | is ≤3.0 ¹ | | | | |
| 7 | | | | Morphological Ada | | | | | |
| 8 | | | | Problematic Hydro | ks or on a separat | , | | | |
| Manda Vina Chrahum (Diah sina) | 100 | _ = Total Co | ver | Froblematic Hydro | priytic vegetation | т (Ехріаіп) | | | |
| Woody Vine Stratum (Plot size:) | | | | ¹ Indicators of hydric so | oil and wetland hy | drology must | | | |
| 1 | | | - | be present, unless dist | | | | | |
| | | = Total Co | ver | Hydrophytic | | | | | |
| 9/ Para Cround in Harb Stratum | r of Piotio C | =' | | Vegetation | as Na | ~ | | | |
| % Bare Ground in Herb Stratum % Cove | U DIUIIC C | านอเ | | Present? Ye | es No _ | | | | |
| Remarks: | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| Profile Desc | ription: (Describe | to the depth | needed to docun | ent the in | dicator c | or confirm | n the absence of indicators.) |
|-------------------------------|----------------------------|-----------------|----------------------|-------------|-------------------|------------------|--|
| Depth | Matrix | | Redox | Features | | | |
| (inches) | Color (moist) | | Color (moist) | <u></u> % | Type ¹ | Loc ² | Texture Remarks |
| 0 - 5 | 10YR 3/2 | 100 | | | | | Silty Clay Loam |
| 5 - 18 | 10YR 4/3 | 100 | | | | | Silty Clay |
| 18 - 28 | 10YR 4/3 | 100 | | | | | Clay |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | oncentration, D=De | | | | | d Sand Gr | <u> </u> |
| | Indicators: (Applic | cable to all LR | | | 1.) | | Indicators for Problematic Hydric Soils ³ : |
| Histosol | | | Sandy Redo | . , | | | 1 cm Muck (A9) (LRR C) |
| - | oipedon (A2) | | Stripped Ma | | | | 2 cm Muck (A10) (LRR B) |
| Black Hi | ` ' | | Loamy Mucl | - | | | Reduced Vertic (F18) |
| Hydroge | n Sulfide (A4) | | Loamy Gley | | F2) | | Red Parent Material (TF2) |
| Stratified | d Layers (A5) (LRR | C) | Depleted Ma | atrix (F3) | | | Other (Explain in Remarks) |
| 1 cm Mu | ıck (A9) (LRR D) | | Redox Dark | Surface (F | 6) | | |
| | d Below Dark Surfac | ce (A11) | Depleted Da | rk Surface | (F7) | | |
| - | ark Surface (A12) | , | Redox Depr | | | | ³ Indicators of hydrophytic vegetation and |
| | fucky Mineral (S1) | | Vernal Pools | • | -, | | wetland hydrology must be present, |
| - | Gleyed Matrix (S4) | | vernar r con | , (1 0) | | | unless disturbed or problematic. |
| | Layer (if present): | | | | | | arriese distance of presionatio. |
| | (p). | | | | | | |
| , , <u> </u> | ches): | | _ | | | | Hydric Soil Present? Yes No |
| | | | _ | | | | Trydric Soil Fresent: Tes No |
| Remarks: | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| HYDROLO | | | | | | | |
| Wetland Hyd | drology Indicators | • | | | | | |
| Primary Indic | cators (minimum of | one required; c | heck all that apply | ') | | | Secondary Indicators (2 or more required) |
| Surface | Water (A1) | | Salt Crust | B11) | | | Water Marks (B1) (Riverine) |
| | iter Table (A2) | | Biotic Crus | | | | Sediment Deposits (B2) (Riverine) |
| Saturation | | | Aquatic Inv | | (B13) | | Orift Deposits (B3) (Riverine) |
| | | rima\ | | | , , | | |
| | larks (B1) (Nonrive | | Hydrogen S | | | ivina Doa | Drainage Patterns (B10) |
| | nt Deposits (B2) (No | , | | | _ | - | ots (C3) Dry-Season Water Table (C2) |
| - | posits (B3) (Nonrive | erine) | Presence of | | | | Crayfish Burrows (C8) |
| | Soil Cracks (B6) | | Recent Iro | | | Soils (C6 | |
| Inundation | on Vis ble on Aerial | Imagery (B7) | Thin Muck | Surface (C | 7) | | Shallow Aquitard (D3) |
| Water-S | tained Leaves (B9) | | Other (Exp | lain in Rem | narks) | | FAC-Neutral Test (D5) |
| Field Observ | | | | | | | |
| Surface Water | er Present? | res No | Depth (inc | :hes): | | _ | |
| Water Table | | | Depth (inc | | | | |
| Saturation Pr | | res No | Depth (inc | hes): 20 | | _ Wetla | land Hydrology Present? Yes No |
| (includes cap Describe Red | corded Data (strean | n gauge monit | oring well aerial r | hotos nrev | /ious insr | pections) | if available: |
| B coombo i to | oordod Bala (oli odi) | r gaago, mom | orning won, dornar p | notoo, pro | riodo irioj | , | in available. |
| Remarks: | | | | | | | |
| | on must he s | within 12" | of soil surf | ace to | ha an | indic | ator of hydrology. No hydrology |
| | | VILIIII IZ | or son sull | ace io | De all | indica | ator of flydrology. No flydrology |
| present. | | | | | | | |
| | | | | | | | |

WDC SR-177, SR-193 to 1800 NorthUDOT



Sample Point 74



Sample Point 74

| Project/Site: WDC Phase II | | (| City/Cou | nty: Davis Co | ounty | Sampling Date: 2024- | 06-05 |
|--|---------------------|----------------------------|-----------|-------------------------------|--|---|---------|
| Applicant/Owner: UDOT | | | | | State: Utah | _ Sampling Point: SP75 | |
| Investigator(s): Merissa Davis | | ; | Section, | Township, Rai | nge: S31 T5N R2W | | |
| Landform (hillslope, terrace, etc.): Depres | | | | | | /e Slope (%): | 0 |
| Subregion (LRR): | | Lat: 41. | 127078 | } | Long: -112.110373 | Datum: NAD |)83_201 |
| Soil Map Unit Name: Fb - Ford loam, sh | nallow water | table, 0 to | 1 perce | ent slopes | NWI classifi | cation: PEM1/USA | |
| Are climatic / hydrologic conditions on the s | site typical for th | nis time of yea | ar? Yes | No | (If no, explain in I | Remarks.) | |
| Are Vegetation, Soil, or Hyd | drology | significantly | disturbed | d? Are " | Normal Circumstances" | present? Yes No | o c |
| Are Vegetation, Soil, or Hyd | drology | naturally pro | blematic | ? (If ne | eded, explain any answ | ers in Remarks.) | |
| SUMMARY OF FINDINGS - Atta | ch site map | showing | sampl | ling point le | ocations, transects | s, important feature: | s, etc. |
| Hydrophytic Vegetation Present? | Yes | No 🗸 | | | | | |
| Hydric Soil Present? | Yes | No 🔽 | | the Sampled ithin a Wetlar | | No | |
| | Yes | | ** | itiliii a wetiai | iu: 165 | | |
| Remarks: | | | | | | | |
| Conditions were wetter than normal accordin depression that appears to seasonally pool w | • | | | | | | is is a |
| | | | | | | | |
| VEGETATION – Use scientific na | ames of pla | | | | | | |
| Tree Stratum (Plot size: | _) | Absolute <u>% Cover</u> | | ant Indicator s? Status | Dominance Test wor Number of Dominant S | | |
| 1 | | | | | That Are OBL, FACW, | ' 1 | (A) |
| 2 | | | | | Total Number of Domi | | |
| 3. | | | | | Species Across All Str | rata: 2 | (B) |
| 4 | | | | Cover | Percent of Dominant S That Are OBL, FACW, | | (A/B) |
| Sapling/Shrub Stratum (Plot size: |) | | | | | | (A/D) |
| 1. | | | | | Prevalence Index wo | | |
| 2 | | | | | Total % Cover of: OBL species 0 | | _ |
| 3 | | | | | | x 2 = 0 | _ |
| 5. | | | | | | x 3 = 60 | |
| | , | | = Total | Cover | | x 4 = 0 | _ |
| Herb Stratum (Plot size: 1 Halogeton glomeratus | _) | 35 | , | UPL | | x 5 = 175 | _ |
| o Distichlis spicata | | 20 | | FAC | Column Totals: 55 | (A) <u>235</u> | _ (B) |
| 3. | | | | | Prevalence Inde | x = B/A = <u>4.27</u> | _ |
| 4. | | | | | Hydrophytic Vegetat | ion Indicators: | |
| 5 | | | | | Dominance Test is | | |
| 6 | | | | | Prevalence Index | is ≤3.0¹ aptations¹ (Provide support | 41 |
| 7 | | | | | | ks or on a separate sheet) | |
| 8 | | | = Total | Cover | Problematic Hydro | ophytic Vegetation¹ (Explai | n) |
| Woody Vine Stratum (Plot size: |) | | · Otal | 00101 | 1 | | |
| 1. | | | | | Indicators of hydric so be present, unless dis | oil and wetland hydrology n turbed or problematic. | nust |
| 2 | | | = Total | | Hydrophytic | | |
| 0/ Barr Orang 1: 11 1 2: | ۵/ ۵ | <u> </u> | = | | Vegetation | | |
| % Bare Ground in Herb Stratum 45 | % Cov | er of Biotic Ci | rust | | Present? Yo | es No | |
| Remarks: | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Profile Desc | ription: (Describe | to the depth | needed to docum | nent the i | ndicator | or confirm | n the absence of | f indicators.) | |
|-------------------------|--|---------------|-------------------------|------------|-------------------|------------------|---------------------------|--|--|
| Depth | Matrix | | Redo | x Features | | | | | |
| (inches) | Color (moist) | <u>%</u> | Color (moist) | % | Type ¹ | Loc ² | Texture | Remarks | |
| 0 - 12 | 10YR 3/2 | 100 | | | | | Silt Loam | | |
| 12 - 24 | 10YR 4/2 | 100 | | | | | Silt Loam | | |
| | · · · · · · · · · · · · · · · · · · · | | | | | | | | |
| <u> </u> | - | | | · —— | | | | | |
| | | | | | | | | | |
| - | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| ¹ Type: C=Co | oncentration, D=Dep | oletion, RM=F | Reduced Matrix, CS | S=Covered | d or Coate | d Sand Gr | rains. ² Locat | tion: PL=Pore Lining, M=Matrix. | |
| Hydric Soil I | ndicators: (Applic | able to all L | RRs, unless other | wise note | ed.) | | Indicators fo | or Problematic Hydric Soils ³ : | |
| Histosol | (A1) | | Sandy Redo | ox (S5) | | | 1 cm Mu | ick (A9) (LRR C) | |
| Histic Ep | pipedon (A2) | | Stripped Ma | ıtrix (S6) | | | 2 cm Mu | ick (A10) (LRR B) | |
| Black Hi | stic (A3) | | Loamy Muc | ky Mineral | l (F1) | | Reduced | d Vertic (F18) | |
| Hydroge | n Sulfide (A4) | | Loamy Gley | ed Matrix | (F2) | | Red Pare | ent Material (TF2) | |
| | Layers (A5) (LRR | C) | Depleted Ma | | | | Other (E | xplain in Remarks) | |
| | ck (A9) (LRR D) | | Redox Dark | | , | | | | |
| - | Below Dark Surfac | e (A11) | Depleted Da | | | | 3 | | |
| | ark Surface (A12) | | Redox Depr | | -8) | | | f hydrophytic vegetation and | |
| | lucky Mineral (S1) | | Vernal Pool | s (F9) | | | - | ydrology must be present, | |
| | leyed Matrix (S4) ayer (if present): | | | | | | uniess disi | turbed or problematic. | |
| | | | | | | | | | |
| , , <u> </u> | | | | | | | | | |
| Depth (inc | ches): | | | | | | Hydric Soil P | resent? Yes No | |
| | | | | | | | | | |
| HYDROLO | GY | | | | | | | | |
| | | | | | | | | | |
| | drology Indicators | | | , | | | 0 1 | | |
| | cators (minimum of o | one required; | | | | | <u> </u> | ary Indicators (2 or more required) | |
| Surface | | | Salt Crust | | | | · <u></u> | ter Marks (B1) (Riverine) | |
| | ter Table (A2) | | Biotic Crus | | | | | diment Deposits (B2) (Riverine) | |
| Saturation | | | Aquatic Inv | | | | | ft Deposits (B3) (Riverine) | |
| | arks (B1) (Nonrive i | | Hydrogen | | ` ' | | | inage Patterns (B10) | |
| · | nt Deposits (B2) (No | • | | | _ | _ | | -Season Water Table (C2) | |
| | oosits (B3) (Nonrive | rine) | Presence | | • | • | | yfish Burrows (C8) | |
| | Soil Cracks (B6) | | Recent Iro | | | d Soils (C6 | | uration Visible on Aerial Imagery (C9) | |
| | on Vis ble on Aerial | Imagery (B7) | | | | | | allow Aquitard (D3) | |
| | tained Leaves (B9) | | Other (Exp | lain in Re | marks) | | FAC | C-Neutral Test (D5) | |
| Field Observ | | | | | | | | | |
| Surface Water | | | o Depth (ind | | | | | | |
| Water Table | Present? | /es N | o Depth (ind | ches): | | | | | |
| Saturation Pr | | /es N | o <u> </u> | ches): | | Wetla | and Hydrology l | Present? Yes <u>'</u> No | |
| (includes cap | oillary fringe) corded Data (strean | n dalide mon | itoring well aerial r | photos pro | avious inc | nections) | if available: | | |
| Describe Net | Colueu Data (Stream | i gauge, mon | illoring well, aeriai p | motos, pre | evious iris | pections), | ii avaliable. | | |
| Remarks: | | | | | | | | | |
| Soil dry | Soil dry at the time of the delineation, water stained leaves is likely caused by seasonal | | | | | | | | |
| flooding | of stormwa | ter due t | o the topog | raphy | of the | area o | creating a | slight depression. | |

WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 75



Sample Point 75

| Project/Site: WDC Phase II | | City/Cour | nty: Davis Co | ounty | Sampling | Date: 2024- | -07-25 |
|--|----------------|-------------|------------------------|---|----------------------|--------------------|----------|
| Applicant/Owner: UDOT | | | | State: Utah | Sampling | Point: SP76 | |
| Investigator(s): C.GLABAU, E.CAPSON | | Section, | Township, Rai | nge: S30 T5N R2W | | | |
| | | | | convex, none): Concav | ⁄e | Slope (%): | 0 |
| Subregion (LRR): D 28A | _ Lat: 41. | 136229 | | Long: -112.1041915 | ı | Datum: NA | D83_201 |
| Soil Map Unit Name: HLA - Harrisville-Leland comple | | | | | | | |
| Are climatic / hydrologic conditions on the site typical for this | s time of year | ar? Yes_ | ✓ No_ | (If no, explain in F | Remarks.) | | |
| Are Vegetation, Soil, or Hydrologys | ignificantly | disturbed | ? Are " | Normal Circumstances" | present? \ | Yes <u>✓</u> N | о |
| Are Vegetation, Soil, or Hydrologyn | aturally pro | blematic? | ? (If ne | eded, explain any answe | ers in Rema | arks.) | |
| SUMMARY OF FINDINGS – Attach site map | showing | sampli | ing point l | ocations, transects | s, import | ant feature | s, etc. |
| Hydrophytic Vegetation Present? Yes N | n | | | | | | |
| Hydric Soil Present? Yes No | ° ~ | | the Sampled | | | / | |
| Wetland Hydrology Present? Yes No | o / | W | thin a Wetlan | id? Yes | No _ | | |
| Remarks: | | <u>'</u> | | | | | |
| Horses grazing, vegetation was still identifiable but areas have stormwater and snowmelt as well as seasonal flooding from th develop wetlands. No hydric soils or hydrology present, and th | e adjacent c | ditch and c | drainage. This I | ikely allows hydrophytic v | | - | |
| VEGETATION – Use scientific names of plan | ts. | | | | | | |
| Tree Stratum (Plot size:) | | | nt Indicator Status | Dominance Test wor | ksheet: | | |
| 1 | | | | Number of Dominant S That Are OBL, FACW, | pecies or FAC: | 2 | (A) |
| 2 | | | | Total Number of Domi | nant ata: | 3 | (B) |
| 4 | | | Cover | Percent of Dominant S That Are OBL, FACW, | | 66.66 | (A/B) |
| Sapling/Shrub Stratum (Plot size:) | | | | | - | | (700) |
| 1. Elaeagnus angustifolia | 5 | | FAC | Prevalence Index wo | | NA - Itila barbara | |
| 2 | | | | Total % Cover of: | | Multiply by: | |
| 3 | | | | OBL species 0 FACW species 15 | | = 0 | |
| 4 | | | | T | x 2 x 3 | | _ |
| 5 | 5 | T-4-1.0 | | FACU species 32 | | | _ |
| Herb Stratum (Plot size:) | | _ = Total (| Jover | | | | _ |
| 1. Melilotus officinalis | 32 | ~ | FACU | Column Totals: 95 | | 000 | — (B) |
| 2. Festuca rubra | 31 | ~ | FAC | Column Totals | (A) | | _ (b) |
| 3. Juncus balticus | 15 | | FACW | Prevalence Index | < = B/A = | 3.17 | |
| 4. Hordeum jubatum | 10 | | FAC | Hydrophytic Vegetati | on Indicate | ors: | |
| 5. Rumex crispus | 2 | | FAC | ✓ Dominance Test is | s >50% | | |
| 6 | | | | Prevalence Index | is ≤3.0 ¹ | | |
| 7 | | | | Morphological Ada | aptations1 (F | Provide suppor | rting |
| 8 | | | | data in Remark | | | |
| | 90 | = Total (| Cover | Problematic Hydro | phytic Veg | etation' (Expla | in) |
| Woody Vine Stratum (Plot size:) | | | | 1 | | | |
| 1 | | | | ¹ Indicators of hydric so be present, unless dist | | | must |
| 2 | | = Total (| Cover | Hydrophytic | <u>.</u> | | |
| 0/ Page Cround in Harb Ottach 10 | of Diatio | | | Vegetation | | Na | |
| | of Biotic C | rust | | Present? Ye | es <u>/</u> | No | |
| Remarks: | | | | | | | |
| Horses grazing, vegetation was still identification. This area is slightly concave and likely colle | | | | • • • • | • | - | |

US Army Corps of Engineers Arid West – Version 2.0

adjacent ditch and drainage. This likely allows hydrophytic vegetation to develop but not develop wetlands.

| Profile Desc | ription: (Describe | to the dep | th needed to docur | nent the | indicator | or confirm | n the absence of indica | tors.) |
|--|----------------------------|--------------|-------------------------|-------------|------------|------------------|-----------------------------------|-------------------------------------|
| Depth | Matrix | | | x Feature | | | | |
| (inches) | Color (moist) | % | Color (moist) | % | Type' | Loc ² | Texture | Remarks |
| 0 - 1 | 10YR 2/2 | 100 | | | | | Loam | |
| 5 - 10 | 10YR 2/3 | 100 | | · | | | Clay | |
| 10 - 16 | 10YR 3/4 | 100 | 10YR 5/4 | 1 | | | Silty Clay Loam | |
| - | | | | | | | | |
| _ | - | | | | | | | |
| | | | | · ——— | · —— | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | . —— | | | |
| | | | Reduced Matrix, CS | | | d Sand Gr | | =Pore Lining, M=Matrix. |
| - | | cable to all | LRRs, unless other | | ed.) | | | lematic Hydric Soils ³ : |
| Histosol | ` ' | | Sandy Redo | | | | 1 cm Muck (A9) | |
| - | oipedon (A2) | | Stripped Ma | | J (E1) | | 2 cm Muck (A10 Reduced Vertic | |
| Black Histic (A3) Loamy Mucky Mineral (F1) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) | | | | | | | Red Parent Mate | ` / |
| Stratified Layers (A5) (LRR C) Depleted Matrix (F3) | | | | | | | Other (Explain in | |
| | ick (A9) (LRR D) | O) | Redox Dark | ` , | (F6) | | Other (Explain ii | Tremane) |
| | d Below Dark Surface | ce (A11) | Depleted Da | | ` ' | | | |
| Thick Da | ark Surface (A12) | | Redox Depi | ressions (| F8) | | ³ Indicators of hydrop | hytic vegetation and |
| Sandy M | lucky Mineral (S1) | | Vernal Pool | s (F9) | | | wetland hydrology | |
| Sandy Gleyed Matrix (S4) | | | | | | | unless disturbed o | or problematic. |
| _ | _ayer (if present): | | | | | | | |
| Type: | | | | | | | | |
| | ches): | | | | | | Hydric Soil Present? | Yes No |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| HYDROLO | GY | | | | | | | |
| Wetland Hyd | drology Indicators | : | | | | | | |
| _ | | | d; check all that appl | v) | | | Secondary India | cators (2 or more required) |
| - | Water (A1) | | Salt Crust | | | | | ks (B1) (Riverine) |
| | iter Table (A2) | | Biotic Crus | ` ' | | | | Deposits (B2) (Riverine) |
| Saturation | ` , | | Aquatic In | | es (B13) | | | sits (B3) (Riverine) |
| | arks (B1) (Nonrive | rine) | Hydrogen | | | | Drainage P | |
| | nt Deposits (B2) (No | | | | | Living Roc | ots (C3) Dry-Season | , , |
| | oosits (B3) (Nonrive | | Presence | | _ | _ | Crayfish Bu | |
| | Soil Cracks (B6) | , | Recent Iro | | , | • | • | Visible on Aerial Imagery (C9) |
| Inundation | on Vis ble on Aerial | Imagery (B | 7) Thin Muck | Surface | (C7) | | Shallow Aq | uitard (D3) |
| Water-S | tained Leaves (B9) | | Other (Exp | olain in Re | emarks) | | FAC-Neutra | al Test (D5) |
| Field Observ | vations: | | | | | | | |
| Surface Water | er Present? | /es | No Depth (in | ches): | | _ | | |
| Water Table | Present? | /es | No Depth (in | ches): | | | | |
| Saturation Pr | resent? | res | No V Depth (in | ches): | | Wetl | and Hydrology Present | ? Yes No |
| (includes cap | oillary fringe) | | | | | | if available: | |
| Describe Red | corded Data (strean | ı gauge, mo | nitoring well, aerial ı | onotos, pi | evious ins | pections), | ıı avallable: | |
| Domonico | | | | | | | | |
| Remarks: | | | _ | | | | | |
| dry, moi | st but not sa | iturated | l | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 76



Sample Point 76

| Project/Site: WDC Phase II | (| City/Coun | nty: Davis Co | ounty | Sampling Date: 2024-07-25 | | |
|---|----------------------|------------------------|------------------------------|---|--|--|--|
| | | | | | Sampling Point: SP77 | | |
| Investigator(s): C.GLABAU, E.CAPSON | ; | Section, 1 | Township, Ra | nge: S30 T5N R2W | | | |
| | | | | | Slope (%): 0 | | |
| Subregion (LRR): | | | | | | | |
| Soil Map Unit Name: HLA - Harrisville-Leland compl | | | | NWI classific | cation: PEM1/USA | | |
| Are climatic / hydrologic conditions on the site typical for this | s time of yea | ar? Yes_ | ✓ No_ | (If no, explain in R | demarks.) | | |
| Are Vegetation, Soil, or Hydrologys | significantly of | disturbed ^a | ? Are " | 'Normal Circumstances" p | present? Yes No | | |
| Are Vegetation, Soil, or Hydrology r | naturally prof | blematic? | ? (If ne | eeded, explain any answe | ers in Remarks.) | | |
| SUMMARY OF FINDINGS – Attach site map | showing | sampli | ing point l | ocations, transects | s, important features, etc. | | |
| Hydrophytic Vegetation Present? Yes N | lo 🗸 | | the Commission | | | | |
| Hydric Soil Present? Yes N | lo 🗸 | | the Sampled thin a Wetlar | | No | | |
| Wetland Hydrology Present? Yes N | lo <u> ′ </u> | WI | uiiii a vveuai | iu: res | | | |
| Remarks: | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| VEGETATION – Use scientific names of plan | its. | | | | | | |
| [| | Domina | nt Indicator | Dominance Test work | sheet: | | |
| Tree Stratum (Plot size:) | % Cover | Species | ? Status | Number of Dominant S | pecies | | |
| 1 | | | | That Are OBL, FACW, | or FAC: 0 (A) | | |
| 2 | | | | Total Number of Domin | | | |
| 3 | | | | Species Across All Stra | ata: 1 (B) | | |
| 4 | | | | Percent of Dominant S | | | |
| Sapling/Shrub Stratum (Plot size:) | | - Total C | Jovei | That Are OBL, FACW, | or FAC: 0.00 (A/B) | | |
| 1 | | | | Prevalence Index wor | | | |
| 2 | | | | | Multiply by: | | |
| 3 | | | | | x = 0 | | |
| 4 | | | | | x = 0 x = 30 | | |
| 5 | | | Cover | | $x = \frac{0}{0}$ | | |
| Herb Stratum (Plot size:) | | - Total C | Jovei | UPL species 80 | | | |
| 1. Bromus tectorum | 80 | | UPL | Column Totals: 90 | | | |
| 2. Distichlis spicata | | | FAC | | | | |
| 3. Lepidium latifolium | | | FAC | Prevalence Index | | | |
| 4 | | | | Hydrophytic Vegetation | | | |
| 5 | | | | Dominance Test is Prevalence Index i | | | |
| 6 | | | | | s ≤3.0 sptations¹ (Provide supporting | | |
| 7 | | | | | s or on a separate sheet) | | |
| 8 | 90 | = Total C | Cover | Problematic Hydro | phytic Vegetation ¹ (Explain) | | |
| Woody Vine Stratum (Plot size:) | | - Total C | Jovei | | | | |
| 1 | | | | ¹ Indicators of hydric soil be present, unless distu | il and wetland hydrology must | | |
| 2 | | | | , , | | | |
| | | = Total C | Cover | Hydrophytic Vegetation | | | |
| % Bare Ground in Herb Stratum 10 % Cover | r of Biotic Cr | rust | | | es No | | |
| Remarks: | | | | <u>.</u> | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Profile Desc | ription: (Describ | e to the depth | needed to docu | ment the i | ndicator | or confirm | the absence of ir | ndicators.) | |
|---------------|--|------------------|----------------------|-------------|-------------------|------------------|-----------------------------|--|-------------------|
| Depth | Matrix | | | ox Feature: | | . 2 | | | |
| (inches) | Color (moist) | | Color (moist) | % | Type ¹ | Loc ² | <u>Texture</u> | Remark | <u>s</u> |
| 0 - 12 | 10YR 4/2 | 100 | | | | | Clay Loam | | |
| | | | | | | | | | |
| - | | | | | | | | | |
| _ | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | _ | | | | | |
| - | | | | | | | | | |
| ¹Type: C=Co | oncentration, D=D | epletion RM=R | Reduced Matrix C | S=Covered | or Coate | d Sand Gr | rains ² Location | n: PL=Pore Lining | M=Matrix |
| | Indicators: (App | • | | | | <u> </u> | | Problematic Hydr | |
| Histosol | | | Sandy Red | | , | | | (A9) (LRR C) | |
| | oipedon (A2) | | Stripped M | | | | | (A10) (LRR B) | |
| - | stic (A3) | | Loamy Mu | cky Minera | l (F1) | | Reduced V | ertic (F18) | |
| Hydroge | n Sulfide (A4) | | Loamy Gle | yed Matrix | (F2) | | Red Parent | Material (TF2) | |
| | d Layers (A5) (LR | R C) | Depleted M | ` , | | | Other (Expl | lain in Remarks) | |
| | ick (A9) (LRR D) | | Redox Dar | | , | | | | |
| | d Below Dark Surf | ace (A11) | Depleted D | | , , | | 31 | | |
| | ark Surface (A12) Mucky Mineral (S1 | ` | Redox Dep Vernal Poo | | -8) | | | drophytic vegetati ology must be pres | |
| | Gleyed Matrix (S4) | • | vernar Foo | 15 (1 9) | | | - | bed or problematic | |
| - | Layer (if present) | | | | | | diffeed dictari | ood or problemate | • |
| Type: | , , | | | | | | | | |
| , , — | ches): | | | | | | Hydric Soil Pres | sent? Yes | No 🗸 |
| Remarks: | | | ` | | | | 1 | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| HYDROLO | GY | | | | | | | | |
| Wetland Hy | drology Indicator | rs: | | | | | | | |
| Primary India | cators (minimum c | of one required; | check all that app | ly) | | | <u>Secondary</u> | / Indicators (2 or m | ore required) |
| Surface | Water (A1) | | Salt Crust | (B11) | | | Water | Marks (B1) (River | ine) |
| High Wa | iter Table (A2) | | Biotic Cru | st (B12) | | | Sedim | ent Deposits (B2) | (Riverine) |
| Saturation | on (A3) | | Aquatic Ir | vertebrate | s (B13) | | Drift D | eposits (B3) (Rive | rine) |
| Water M | larks (B1) (Nonri v | verine) | Hydrogen | Sulfide O | dor (C1) | | Draina | age Patterns (B10) | |
| Sedimer | nt Deposits (B2) (| Nonriverine) | Oxidized | Rhizosphe | res along | Living Roo | ots (C3) Dry-Se | eason Water Table | e (C2) |
| Drift Dep | oosits (B3) (Nonri | verine) | Presence | of Reduce | d Iron (C4 | !) | Crayfi | sh Burrows (C8) | |
| | Soil Cracks (B6) | | Recent Ire | on Reducti | on in Tilled | d Soils (C6 | | ation Visible on Ae | rial Imagery (C9) |
| | on Vis ble on Aeri | | | , | | | | w Aquitard (D3) | |
| | tained Leaves (B9 | 9) | Other (Ex | plain in Re | marks) | | FAC-N | Neutral Test (D5) | |
| Field Obser | vations: | | | | | | | | |
| Surface Wat | er Present? | | Depth (ir | | | | | | |
| Water Table | Present? | Yes No | o Depth (ir | iches): | | | | | |
| Saturation P | | Yes No | o <u> </u> | iches): | | Wetla | and Hydrology Pre | esent? Yes | No <u> </u> |
| (includes car | | am dolles mar | itoring well seriel | nhotos == | ovious is: | nooticno' | if available: | | |
| Describe Re | corded Data (strea | am gauge, mon | itoring well, aerial | pnotos, pr | evious ins | pections), | ıı avallable: | | |
| | | | | | | | | | |
| Remarks: | | | | | | | | | |
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WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 77



Sample Point 77

| Project/Site: WDC Phase II | (| City/County | Davis C | ounty | Sampling Date: 2024-07-25 |
|---|----------------|-------------|-------------|--|---|
| | | | | State: Utah | Sampling Point: SP78 |
| Investigator(s): C.GLABAU, E.CAPSON | ; | Section, To | wnship, Ra | nge: S30 T5N R2W | |
| | | | | | e Slope (%): 1 |
| Subregion (LRR): D 28A | _ Lat: 41.1 | 1384538 | 3 | Long: -112.1059938 | Datum: NAD83_201 |
| Soil Map Unit Name: HLA - Harrisville-Leland comple | ex, 0 to 1 p | percent s | lopes | NWI classific | ation: None |
| Are climatic / hydrologic conditions on the site typical for this | s time of yea | ar? Yes | ✓ No _ | (If no, explain in R | emarks.) |
| Are Vegetation, Soil, or Hydrologys | ignificantly o | disturbed? | Are " | 'Normal Circumstances" p | oresent? Yes No |
| Are Vegetation, Soil, or Hydrologyn | aturally prol | blematic? | (If ne | eeded, explain any answe | rs in Remarks.) |
| SUMMARY OF FINDINGS - Attach site map | showing | samplin | g point l | ocations, transects | , important features, etc. |
| Hydrophytic Vegetation Present? Yes No. | 0 | | | | |
| Hydric Soil Present? Yes V | 0 | | e Sampled | | , N |
| Wetland Hydrology Present? Yes <u>✓</u> No | | With | in a Wetlar | id? Yes | No |
| Remarks: | | II. | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| VEGETATION – Use scientific names of plan | ts. | | | | |
| Troe Stratum (Diet size: | | Dominant | | Dominance Test work | sheet: |
| Tree Stratum (Plot size:) 1 | % Cover | | | Number of Dominant Sp That Are OBL, FACW, of | |
| 2 | | | | | |
| 3 | | | | Total Number of Domin Species Across All Stra | |
| 4. | | | | | |
| | | | | Percent of Dominant Sp That Are OBL, FACW, of | |
| Sapling/Shrub Stratum (Plot size:) | | | | | - ' ' |
| 1 | | | | Prevalence Index work | Ksneet: Multiply by: |
| 2 | | | | | x 1 = 60 |
| 34. | | | | | x 2 = 10 |
| 5 | | | | | x 3 = 105 |
| | | = Total Co | ver | | x 4 = 0 |
| Herb Stratum (Plot size:) | 00 | , | OBL | · · | x 5 = <u>0</u> |
| 1. Schoenoplectus americanus | 60 | | OBL | Column Totals: 100 | (A) <u>175</u> (B) |
| 2. Hordeum jubatum 3. Poa pratensis | 10 | | FAC FAC | Prevalence Index | = R/Δ = 1.75 |
| Juncus balticus | 5 | | FACW | Hydrophytic Vegetation | · · · · · · · · · · · · · · · · · · · |
| 5 Trifolium fragiferum | 5 | | FAC | ✓ Dominance Test is | |
| 6. | | | | ✓ Prevalence Index is | |
| 7 | | | | | ptations ¹ (Provide supporting |
| 8. | | | | | s or on a separate sheet) |
| | 100 | = Total Co | ver | Problematic Hydro | phytic Vegetation ¹ (Explain) |
| Woody Vine Stratum (Plot size:) | | | | 1 | |
| 1 | | | | be present, unless distu | il and wetland hydrology must urbed or problematic. |
| 2 | | | | Livelnophysic | |
| | | = Total Co | ver | Hydrophytic Vegetation | |
| % Bare Ground in Herb Stratum % Cover | of Biotic Cr | rust | | Present? Yes | s No |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| Depth | | | | | | | | |
|--|--|--|--|--|---|------------------|---|--|
| (inches) | Matrix Color (moist) | % | Color (moist) | dox Featur % | Type ¹ | Loc ² | Texture | Remarks |
| 0 - 4 | 2.5Y 3/2 | 100 | | | | | Silty Clay | |
| 4 - 10 | 10YR 3/2 | 10 | 10YR 2/1 | 8 | D | PL | Silty Clay | |
| 10 - 16 | 2.5YR 4/2 | 100 | 10YR 2/1 | <u>8</u> | D | PL | Sandy Clay Loam | |
| - | · | _ | · | | _ | | - | |
| | | | | | | | | |
| | | | | | | | | |
| | - | | | | | | | |
| | | | | | | | | |
| | | | · - | | | | | |
| | | | 1=Reduced Matrix, (| | | ted Sand G | | ation: PL=Pore Lining, M=Matrix. |
| - | | icable to al | I LRRs, unless oth | | oted.) | | | for Problematic Hydric Soils ³ : |
| Histosol | (A1) hipedon (A2) | | Sandy Re Stripped N | , , | ١ | | | luck (A9) (LRR C) luck (A10) (LRR B) |
| Black His | | | Stripped I | | | | | ed Vertic (F18) |
| | n Sulfide (A4) | | Loamy Gl | - | . , | | | arent Material (TF2) |
| Stratified | Layers (A5) (LRR | R C) | <u>✓</u> Depleted | Matrix (F3 |) | | Other (| Explain in Remarks) |
| | ck (A9) (LRR D) | | Redox Da | | . , | | | |
| | Below Dark Surfa | ace (A11) | Depleted | | | | 31 | of levelor also the constation and |
| | ark Surface (A12) lucky Mineral (S1) | | Redox De Vernal Po | | (F8) | | | of hydrophytic vegetation and hydrology must be present, |
| - | leyed Matrix (S4) | | vernari o | 1013 (1 3) | | | | sturbed or problematic. |
| | ayer (if present): | | | | | | | |
| Type: | | | | | | | | |
| Depth (inc | ches): | | | | | | Hydric Soil | Present? Yes No |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| HYDROLO | GY | | | | | | | |
| | | s: | | | | | | |
| Wetland Hyd | drology Indicators | | ed; check all that ap | ply) | | | Secon | dary Indicators (2 or more required) |
| Wetland Hyd | drology Indicators ators (minimum of | | ed; check all that ap Salt Crus | | | | | · · · · · · · · · · · · · · · · · · · |
| Wetland Hyder Primary Indice | drology Indicators ators (minimum of Water (A1) | | Salt Crus | st (B11) | | | W | dary Indicators (2 or more required) vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) |
| Wetland Hyder Primary Indice | drology Indicators eators (minimum of Water (A1) ter Table (A2) | | Salt Crus | st (B11) rust (B12) | tes (B13) | | W | ater Marks (B1) (Riverine) |
| Wetland Hyd Primary Indic Surface High Wa V Saturatio | drology Indicators eators (minimum of Water (A1) ter Table (A2) | fone require | Salt Crus | st (B11) rust (B12) Invertebra | | | W So D | rater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) |
| Primary Indice Surface W High Wa Saturatio Water Ma | drology Indicators eators (minimum of Water (A1) ter Table (A2) on (A3) | fone require | Salt Crus Biotic Cr Aquatic Hydroge | st (B11) rust (B12) Invertebra n Sulfide (| Odor (C1) | g Living Ro | W So D | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) |
| Primary Indice Surface V High Wa V Saturatio Water M: Sedimen Drift Dep | drology Indicators eators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive at Deposits (B2) (Norrive | erine) | Salt Crus Biotic Cr Aquatic Hydroge Oxidized Presence | st (B11) rust (B12) Invertebra n Sulfide (I Rhizosph | Odor (C1) neres alon ced Iron (C | C4) | W So D D ots (C3) D | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) |
| Primary Indice Surface V High Wa V Saturatio Water M Sedimen Drift Dep Surface S | drology Indicators eators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive at Deposits (B2) (Nosits (B3) (Nonrive Soil Cracks (B6) | erine) conriverine | Salt Crue Biotic Cr Aquatic Hydroge Oxidized Presence Recent I | st (B11) rust (B12) Invertebra in Sulfide (I Rhizosph e of Reduction Reduction | Odor (C1) neres alon ced Iron (C ction in Till | - | W D D ots (C3) D C 6) S: | rater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) |
| Wetland Hyd Primary Indic Surface V High Wa V Saturatio Water M Sedimen Drift Dep Surface S Inundation | drology Indicators eators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive at Deposits (B2) (Nonrive osits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria | erine) onriverine; verine) | Salt Crue Biotic Cr Aquatic Hydroge Oxidized Presence Recent I Thin Mu | st (B11) rust (B12) Invertebra In Sulfide (I Rhizosphe of Reduction Reduction | Odor (C1) neres alon ced Iron (C ction in Till e (C7) | C4) | W D D ots (C3) D C 6) Si | rater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) |
| Primary Indice Surface V High Wa Saturatio Water M Sedimen Drift Dep Surface S Inundatio Water-St | drology Indicators eators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive at Deposits (B2) (Norive cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9) | erine) onriverine; verine) | Salt Crue Biotic Cr Aquatic Hydroge Oxidized Presence Recent I Thin Mu | st (B11) rust (B12) Invertebra in Sulfide (I Rhizosph e of Reduction Reduction | Odor (C1) neres alon ced Iron (C ction in Till e (C7) | C4) | W D D ots (C3) D C 6) Si | rater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) |
| Wetland Hyd Primary Indic Surface V High Wa Saturatio Water Ma Sediment Drift Dep Surface Surf | drology Indicators eators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive at Deposits (B2) (Norive cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9) vations: | erine) lonriverine; verine) Il Imagery (E | Salt Crue Biotic Cr Aquatic Hydroge Oxidized Presence Recent I Thin Mue Other (E | st (B11) rust (B12) Invertebra in Sulfide (I Rhizosphe of Reduction Reducti | Odor (C1) heres along ced Iron (Cetion in Till e (C7) Remarks) | C4) | W D D ots (C3) D C 6) Si | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) |
| Wetland Hyd Primary Indice Surface V High Wa V Saturatio Water M Sedimen Drift Dep Surface S Inundatio Water-St Field Observ Surface Water | drology Indicators eators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive at Deposits (B2) (Nonrive cosits (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9) vations: er Present? | erine) lonriverine) verine) Il Imagery (E | Salt Crus Biotic Cr Aquatic Hydroge Oxidized Presence Recent I Thin Muc Other (E | st (B11) rust (B12) Invertebra in Sulfide (I Rhizosphe of Reduction Reducti | Odor (C1) heres alon ced Iron (C tion in Till e (C7) Remarks) | C4) | W D D ots (C3) D C 6) Si | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) |
| Primary Indice Surface V High Wa Saturation Water Ma Sedimen Drift Dep Surface S Inundation Water-St Field Observ Surface Water Water Table | drology Indicators eators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive at Deposits (B2) (Norive soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9) vations: er Present? Present? | erine) conriverine) rerine) Il Imagery (E) Yes | Salt Crue Biotic Cr Aquatic Hydroge Oxidized Presence Recent I Thin Mue Other (E | st (B11) rust (B12) Invertebra in Sulfide (I Rhizosph e of Reduc ron Reduc ck Surface xplain in F inches): inches): inches): | Odor (C1) neres alon ced Iron (C ction in Till e (C7) Remarks) | C4) ed Soils (C | W Si D ots (C3) D C 6) Si Fi | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5) |
| Wetland Hyd Primary Indic Surface V High Wa ✓ Saturatio Water Ma Sedimen Drift Dep Surface S Inundatio Water-St Field Observ Surface Water Saturation Pr | drology Indicators eators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive at Deposits (B2) (Norive soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9) vations: er Present? Present? | erine) conriverine) rerine) Il Imagery (E) Yes | Salt Crus Biotic Cr Aquatic Hydroge Oxidized Presence Recent I Thin Muc Other (E | st (B11) rust (B12) Invertebra in Sulfide (I Rhizosph e of Reduc ron Reduc ck Surface xplain in F inches): inches): inches): | Odor (C1) neres alon ced Iron (C ction in Till e (C7) Remarks) | C4) ed Soils (C | W Si D ots (C3) D C 6) Si Fi | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) |
| Wetland Hyd Primary Indic Surface V High Wa ✓ Saturatio Water Ma Sedimen Drift Dep Surface S Inundatio Water-St Field Observ Surface Water Water Table Saturation Pr (includes cap | drology Indicators eators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive at Deposits (B2) (Nonrive store (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9) vations: er Present? Present? resent? | erine) conriverine; rerine) Il Imagery (E) Yes Yes Yes | Salt Crue Biotic Cr Aquatic Hydroge Oxidized Presence Recent I Thin Mue Other (E | st (B11) rust (B12) Invertebra in Sulfide (I Rhizosphe of Reductor Reducto | Odor (C1) heres alongoded Iron (Ction in Till e (C7) Remarks) | C4) ed Soils (C | W Si D Ots (C3) D C Si \(\rl \rl \rl \rl \rl \rl \rl \rl \rl \rl | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5) |
| Wetland Hyd Primary Indic Surface V High Wa ✓ Saturatio Water Ma Sedimen Drift Dep Surface S Inundatio Water-St Field Observ Surface Water Water Table Saturation Pr (includes cap | drology Indicators eators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive at Deposits (B2) (Nonrive store (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9) vations: er Present? Present? resent? | erine) conriverine; rerine) Il Imagery (E) Yes Yes Yes | Salt Crus Biotic Cr Aquatic Hydroge Oxidized Presence Recent I Thin Muc Other (E | st (B11) rust (B12) Invertebra in Sulfide (I Rhizosphe of Reductor Reducto | Odor (C1) heres alongoded Iron (Ction in Till e (C7) Remarks) | C4) ed Soils (C | W Si D Ots (C3) D C Si \(\rl \rl \rl \rl \rl \rl \rl \rl \rl \rl | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5) |
| Wetland Hyd Primary Indic Surface V High Wa ✓ Saturatio Water Ma Sedimen Drift Dep Surface S Inundatio Water-St Field Observ Surface Water Water Table Saturation Pr (includes cap | drology Indicators eators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive at Deposits (B2) (Nonrive store (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9) vations: er Present? Present? resent? | erine) conriverine; rerine) Il Imagery (E) Yes Yes Yes | Salt Crus Biotic Cr Aquatic Hydroge Oxidized Presence Recent I Thin Muc Other (E | st (B11) rust (B12) Invertebra in Sulfide (I Rhizosphe of Reductor Reducto | Odor (C1) heres alongoded Iron (Ction in Till e (C7) Remarks) | C4) ed Soils (C | W Si D Ots (C3) D C Si \(\rl \rl \rl \rl \rl \rl \rl \rl \rl \rl | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5) |
| Primary Indice Surface V High Wa ✓ Saturation Water Management Drift Dep Surface Surface Surface Surface Water-St Field Observ Surface Water Table Saturation Pr (includes cap Describe Rec | drology Indicators eators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive at Deposits (B2) (Nonrive store (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9) vations: er Present? Present? resent? | erine) conriverine; rerine) Il Imagery (E) Yes Yes Yes | Salt Crus Biotic Cr Aquatic Hydroge Oxidized Presence Recent I Thin Muc Other (E | st (B11) rust (B12) Invertebra in Sulfide (I Rhizosphe of Reductor Reducto | Odor (C1) heres alongoded Iron (Ction in Till e (C7) Remarks) | C4) ed Soils (C | W Si D Ots (C3) D C Si \(\rl \rl \rl \rl \rl \rl \rl \rl \rl \rl | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5) |
| Primary Indice Surface V High Wa ✓ Saturation Water Management Drift Dep Surface Surface Surface Surface Water-St Field Observ Surface Water Table Saturation Pr (includes cap Describe Rec | drology Indicators eators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive at Deposits (B2) (Nonrive store (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9) vations: er Present? Present? resent? | erine) conriverine; rerine) Il Imagery (E) Yes Yes Yes | Salt Crus Biotic Cr Aquatic Hydroge Oxidized Presence Recent I Thin Muc Other (E | st (B11) rust (B12) Invertebra in Sulfide (I Rhizosphe of Reductor Reducto | Odor (C1) heres alongoded Iron (Ction in Till e (C7) Remarks) | C4) ed Soils (C | W Si D Ots (C3) D C Si \(\rl \rl \rl \rl \rl \rl \rl \rl \rl \rl | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5) |
| Primary Indice Surface V High Wa ✓ Saturation Water Management Drift Dep Surface Surface Surface Surface Water-St Field Observ Surface Water Table Saturation Pr (includes cap Describe Rec | drology Indicators eators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrive at Deposits (B2) (Nonrive store (B3) (Nonrive Soil Cracks (B6) on Vis ble on Aeria tained Leaves (B9) vations: er Present? Present? resent? | erine) conriverine; rerine) Il Imagery (E) Yes Yes Yes | Salt Crus Biotic Cr Aquatic Hydroge Oxidized Presence Recent I Thin Muc Other (E | st (B11) rust (B12) Invertebra in Sulfide (I Rhizosphe of Reductor Reducto | Odor (C1) heres alongoded Iron (Ction in Till e (C7) Remarks) | C4) ed Soils (C | W Si D Ots (C3) D C Si \(\rl \rl \rl \rl \rl \rl \rl \rl \rl \rl | Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5) |

WDC SR-177, SR-193 to 1800 NorthUDOT



Sample Point 78



Sample Point 78

| Project/Site: WDC Phase II | (| City/Cour | nty: Davis Co | ounty | Sampling Date: 2024-07-25 |
|--|----------------|-----------|----------------|--------------------------|--|
| | | | | | Sampling Point: SP79 |
| Investigator(s): C.GLABAU, E.CAPSON | (| Section, | Township, Rai | nge: S30 T5N R2W | |
| | | | | | Slope (%): 3 |
| Subregion (LRR): D 28A | _ Lat: 41.1 | 138478 | 0 | Long: -112.1059542 | Datum: NAD83_201 |
| Soil Map Unit Name: HLA - Harrisville-Leland comple | ex, 0 to 1 p | percent | slopes | NWI classific | cation: None |
| Are climatic / hydrologic conditions on the site typical for this | s time of yea | ar? Yes | No | (If no, explain in R | temarks.) |
| Are Vegetation, Soil, or Hydrologys | ignificantly o | disturbed | ? Are " | Normal Circumstances" p | oresent? Yes 🖊 No |
| Are Vegetation, Soil, or Hydrology n | aturally prol | blematic' | ? (If ne | eded, explain any answe | rs in Remarks.) |
| SUMMARY OF FINDINGS – Attach site map | showing | sampl | ing point l | ocations, transects | , important features, etc. |
| Hydrophytic Vegetation Present? Yes N | o 🗸 | lo. | the Sampled | Aron | |
| Hydric Soil Present? Yes N | o <u> </u> | | ithin a Wetlan | | No |
| Wetland Hydrology Present? Yes N | o <u> </u> | | a rroua | | |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |
| VEGETATION – Use scientific names of plan | ts. | | | | |
| The state of the s | | Domina | int Indicator | Dominance Test work | sheet: |
| Tree Stratum (Plot size:) | | | Status | Number of Dominant S | |
| 1 | | | | That Are OBL, FACW, | |
| 2 | | | | Total Number of Domin | nant |
| 3 | | | | Species Across All Stra | 2 (B) |
| 4 | | | | Percent of Dominant Sp | |
| Sapling/Shrub Stratum (Plot size:) | | = rotar t | Cover | That Are OBL, FACW, | or FAC: 50.00 (A/B) |
| 1 | | | | Prevalence Index wor | ksheet: |
| 2 | | | | | Multiply by: |
| 3 | | | | | x 1 = 5 |
| 4 | | | | | x 2 = <u>0</u> |
| 5 | | | | | x 3 = 165 x 4 = 160 |
| Herb Stratum (Plot size:) | | = Total (| Cover | | x 4 = 100 x 5 = 0 |
| 1. Hordeum jubatum | 40 | | FAC | Column Totals: 100 | (A) 330 (B) |
| 2. Melilotus officinalis | 40 | | FACU | | (* ',' (2) |
| 3. Poa pratensis | 15 | | FAC | Prevalence Index | <u> </u> |
| 4. Schoenoplectus americanus | 5 | | OBL | Hydrophytic Vegetation | |
| 5 | | | | Dominance Test is | |
| 6 | | | | Prevalence Index is | s ≤3.0 ptations¹ (Provide supporting |
| 7 | | | | | s or on a separate sheet) |
| 8 | 400 | = Total (| | Problematic Hydro | phytic Vegetation ¹ (Explain) |
| Woody Vine Stratum (Plot size:) | 100 | = rotar t | Cover | | |
| 1 | | | | | il and wetland hydrology must |
| 2 | | | | be present, unless distu | urbed or problematic. |
| | | = Total | Cover | Hydrophytic Vegetation | |
| % Bare Ground in Herb Stratum % Cover | of Biotic Cr | ust | | | s No <u> </u> |
| Remarks: | | | | 1 | |
| | | | | | |
| | | | | | |
| | | | | | |

Sampling Point: SP79

| SOIL | | | | | | | | Samp | ling Point: Of | ,, |
|---------------------------------------|---|--------------|---------------------------|-------------|-------------------|------------------|---|-----------------------|----------------|-------------|
| Profile Desc | ription: (Describe | to the de | pth needed to docun | nent the | indicator | or confire | n the absence of | indicators.) | | |
| Depth | Matrix | | | K Feature | | . 2 | | _ | | |
| (inches) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | <u>Texture</u> | F | Remarks | |
| 0 - 4 | 10YR 4/2 | 100 | | | | | Clay Loam | | | |
| 4 - 8 | 2.5Y 4/2 | 100 | | - | | | Sandy Loam | | | |
| 8 - 16 | 10YR 3/2 | 100 | 10YR 2/1 | 2 | D | PL | Sandy Clay Loam | | | |
| | | - · | • | | • | - | | | | |
| · | - | | | - | · | - | - | | | |
| | | | | | . —— | | | | | |
| | | | | | | | | | | |
| - | | | | | | | | | | |
| - | | | | | | | | | | |
| 1Type: C=Co | ncentration D=Der | letion PM | =Reduced Matrix, CS | =Covere | d or Coate | nd Sand G | raine ² l ocat | ion: DI =Dore | Lining, M=Ma | atriv |
| | | | I LRRs, unless other | | | u Sanu G | | | c Hydric Soil | |
| Histosol | | abio to ui | Sandy Redo | | July | | | ck (A9) (LRR | - | · . |
| | oipedon (A2) | | Stripped Ma | | | | | ck (A10) (LRf | | |
| Black His | | | Loamy Mucl | | al (F1) | | | Vertic (F18) | / | |
| | n Sulfide (A4) | | Loamy Gley | - | | | · | ent Material (| ΓF2) | |
| Stratified | Layers (A5) (LRR | C) | Depleted Ma | | | | Other (E: | xplain in Rem | arks) | |
| | ck (A9) (LRR D) | | Redox Dark | Surface | (F6) | | | | | |
| | Below Dark Surfac | e (A11) | Depleted Da | | | | 2 | | | |
| | ark Surface (A12) | | Redox Depr | | F8) | | | | egetation and | |
| - | lucky Mineral (S1) | | Vernal Pools | s (F9) | | | | drology must | | |
| | leyed Matrix (S4) Layer (if present): | | | | | | uniess dist | urbed or prob | nematic. | |
| | ayer (ii present). | | | | | | | | | |
| Type: | - L V. | | | | | | United to Cold D | | | |
| Depth (inc | cnes): | | | | | | Hydric Soil P | resent? re | es N | o_ <u>v</u> |
| Remarks: | | | | | | | | | | |
| Some re | dox depletio | ns pre | sent, likely du | ie to l | nvdrol | ogv an | d seasonal | flooding | from dr | ainage |
| | • | - | | | - | | | - | , | |
| Charmer, | but not sigi | iiiicaiii | t enough to qu | aaiii y | ioi aii | y Hyui | ic son maic | ators. | | |
| HYDROLO | GY | | | | | | | | | |
| | drology Indicators: | 1 | | | | | | | | |
| _ | | | ed; check all that apply | () | | | Socond | ary Indicators | (2 or more red | auirod) |
| | • | ne require | | | | | | - | • | quireu) |
| | Water (A1) | | Salt Crust Biotic Crus | | | | <pre> Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)</pre> | | | |
| Saturatio | ter Table (A2) | | | | oc (D13) | | | | | me) |
| · · · · · · · · · · · · · · · · · · · | | ino\ | Aquatic Inv | | | | | t Deposits (B3 | | |
| | arks (B1) (Nonriver It Deposits (B2) (No | | Hydrogen | | | Living Po | ots (C3) Dra | inage Pattern | | |
| | oosits (B3) (Nonrive | | Presence of | • | - | - | • | yfish Burrows | , , | |
| | Soil Cracks (B6) | ille) | Recent Iro | | | | | • | on Aerial Ima | nary (CQ) |
| | on Vis ble on Aerial | lmagery (F | | | | u oons (o | · — | Illow Aquitard | | igery (Ca) |
| | tained Leaves (B9) | iiiiageiy (L | Other (Exp | | | | | C-Neutral Tes | | |
| Field Observ | | | Other (Exp | Tall III IX | ziriarko) | | | J-NCUlial 103 | (00) | |
| Surface Water | | /oo | No Depth (inc | hoo). | | | | | | |
| | | | | | | | | | | |
| Water Table | | | No Depth (inc | | | | | | | . , |
| Saturation Pr (includes cap | | 'es | No Depth (inc | ches): | | Wet | land Hydrology I | resent? Y | es N | 10 |
| Describe Red | corded Data (stream | n gauge, m | nonitoring well, aerial p | hotos, pi | evious ins | spections), | , if available: | | | |
| | ` | · | - ' | • • | | . , | | | | |
| Remarks: | | | | | | | | | | |
| | | | | | | | | | | |
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| | | | | | | | | | | |

WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 79



Sample Point 79

| Project/Site: WDC Phase II | (| City/Coun | nty: Davis Co | ounty | Sampling Date: 2024-07-25 | |
|--|--|------------|------------------------------|---|---|--|
| | | | | State: Utah | Sampling Point: SP80 | |
| Investigator(s): C.GLABAU, E.CAPSON | ; | Section, 7 | Γownship, Ra | nge: S30 T5N R2W | | |
| | | | | | Slope (%): 0 | |
| Subregion (LRR): | Lat: 41.13716 Long: -112.106068 Datum: NAD | | | | | |
| Soil Map Unit Name: HLA - Harrisville-Leland compl | | | slopes | NWI classific | ation: None | |
| Are climatic / hydrologic conditions on the site typical for thi | is time of yea | ar? Yes_ | ✓ No_ | (If no, explain in R | emarks.) | |
| Are Vegetation, Soil, or Hydrology | significantly (| disturbed | ? Are " | 'Normal Circumstances" p | oresent? Yes No | |
| Are Vegetation, Soil, or Hydrology | naturally prof | blematic? | (If ne | eeded, explain any answe | rs in Remarks.) | |
| SUMMARY OF FINDINGS – Attach site map | showing | sampli | ing point l | ocations, transects | , important features, etc. | |
| Hydrophytic Vegetation Present? Yes N | 10 🗸 | | 41 0 1 - 1 | 1.4 | | |
| Hydric Soil Present? Yes N | 10 🔨 | | the Sampled thin a Wetlar | | No | |
| Wetland Hydrology Present? Yes N | | WI | unin a wenai | iu! Tes | NO | |
| Remarks: | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| VEGETATION – Use scientific names of plan | ıts. | | | | | |
| Tree Stratum (Plot size:) | | | nt Indicator ? Status | Dominance Test work | | |
| 1 | | - | | Number of Dominant Sport That Are OBL, FACW, or | | |
| 2 | | | | | (, , | |
| 3. | | | | Total Number of Domin Species Across All Stra | | |
| 4. | | | | | | |
| | | | | Percent of Dominant Sp That Are OBL, FACW, | | |
| Sapling/Shrub Stratum (Plot size:) | | | | | | |
| 1 | | | | Prevalence Index wor | ksneet: Multiply by: | |
| 2 | | | | | x 1 = 0 | |
| 3 | | | | | $x = \frac{0}{0}$ | |
| 4. 5. | | | | | x 3 = 0 | |
| J | | | Cover | | x 4 = 240 | |
| Herb Stratum (Plot size:) | | | | · · | x 5 = 200 | |
| 1. Hordeum murinum | 50 | | <u>FACU</u> | Column Totals: 100 | (A) <u>440</u> (B) | |
| 2. Lolium arundinaceum | 40 | | UPL | | n., 4.40 | |
| 3. Melilotus officinalis | 10 | - | FACU | Prevalence Index | <u> </u> | |
| 4 | | | | Hydrophytic Vegetation Dominance Test is | | |
| 5 | | | | Prevalence Index is | | |
| 6 | | | | | ptations ¹ (Provide supporting | |
| 7 | | | | | s or on a separate sheet) | |
| 8 | 100 | = Total (| Cover | Problematic Hydro | phytic Vegetation ¹ (Explain) | |
| Woody Vine Stratum (Plot size:) | | Total | 50101 | | | |
| 1 | | | | ¹ Indicators of hydric soi be present, unless distu | l and wetland hydrology must | |
| 2 | | | | be present, unless dist | | |
| | | = Total C | Cover | Hydrophytic Vegetation | | |
| % Bare Ground in Herb Stratum % Cove | r of Biotic Cr | rust | | | s No <u> </u> | |
| Remarks: | | | | 1 | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| | ription: (Descri | be to the depth | | | | or confirm | the absence of in | ndicators.) | |
|---------------|--|------------------|----------------------|-------------|--------------|------------------|------------------------------|---|-------------------|
| Depth | Matrix | | | ox Feature: | | 1 2 | Tauture | D | _ |
| (inches) | Color (moist) | | Color (moist) | % | Type' | Loc ² | <u>Texture</u> | Remark | S |
| 0 - 5 | 10YR 3/2 | 100 | | | | | Clay Loam | | |
| | | | | | | | | | |
| - | | | | | | | | | |
| _ | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| - | | | | | | | | | |
| ¹Tvpe: C=Ce | oncentration. D=D | epletion. RM=F | Reduced Matrix, C | S=Covered | or Coate | d Sand Gr | rains. ² Location | n: PL=Pore Lining | M=Matrix. |
| | | _ | RRs, unless othe | | | | | Problematic Hydr | |
| Histosol | (A1) | | Sandy Red | ox (S5) | | | 1 cm Muck | (A9) (LRR C) | |
| Histic Ep | oipedon (A2) | | Stripped M | | | | | (A10) (LRR B) | |
| Black Hi | stic (A3) | | Loamy Mu | cky Minera | l (F1) | | Reduced V | ertic (F18) | |
| | en Sulfide (A4) | | Loamy Gle | - | (F2) | | | : Material (TF2) | |
| | d Layers (A5) (LR | R C) | Depleted M | ` , | | | Other (Expl | ain in Remarks) | |
| | ick (A9) (LRR D) | | Redox Dar | | , | | | | |
| - | d Below Dark Surf | | Depleted D | | , , | | 3Indicators of by | dranhytia vaaatati | on and |
| | ark Surface (A12) Nucky Mineral (S1 | | Redox Dep Vernal Poo | | -0) | | | drophytic vegetation of the version | |
| | Gleyed Matrix (S4) | • | vernari oc | 13 (1 3) | | | - | oed or problematic | |
| - | Layer (if present) | | | | | | | | |
| Type: | | | | | | | | | |
| , , — | ches): | | | | | | Hydric Soil Pres | sent? Yes | No 🗸 |
| Remarks: | | | <u> </u> | | | | , , , , , , , | | <u> </u> |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| HYDROLO | | | | | | | | | |
| Wetland Hy | drology Indicato | rs: | | | | | | | |
| Primary India | cators (minimum o | of one required; | check all that app | ly) | | | <u>Secondary</u> | Indicators (2 or m | ore required) |
| Surface | Water (A1) | | Salt Crust | (B11) | | | Water | Marks (B1) (River | ine) |
| High Wa | ater Table (A2) | | Biotic Cru | st (B12) | | | Sedim | ent Deposits (B2) | (Riverine) |
| Saturation | on (A3) | | Aquatic Ir | vertebrate | s (B13) | | Drift D | eposits (B3) (Rive | rine) |
| | larks (B1) (Nonri v | | Hydrogen | Sulfide O | dor (C1) | | Draina | age Patterns (B10) | |
| Sedimer | nt Deposits (B2) (I | Nonriverine) | Oxidized | Rhizosphe | res along | Living Roo | ots (C3) Dry-Se | eason Water Table | (C2) |
| Drift Dep | oosits (B3) (Nonri | verine) | Presence | of Reduce | d Iron (C4 | !) | Crayfis | sh Burrows (C8) | |
| | Soil Cracks (B6) | | Recent Ire | on Reducti | on in Tilled | d Soils (C6 | | ation Visible on Aer | rial Imagery (C9) |
| | on Vis ble on Aeri | | | , | | | | w Aquitard (D3) | |
| | tained Leaves (B | 9) | Other (Ex | plain in Re | marks) | | FAC-N | Neutral Test (D5) | |
| Field Obser | vations: | | | | | | | | |
| Surface Wat | er Present? | | Depth (ir | | | | | | |
| Water Table | Present? | Yes No | o Depth (ir | iches): | | | | | |
| Saturation P | | Yes No | o <u> </u> | iches): | | Wetla | and Hydrology Pre | esent? Yes | No <u> </u> |
| (includes car | | am gauga mar | itoring well seriel | nhotos == | ovious in- | noctions) | if available: | | |
| Describe Re | corded Data (stre | am gauge, mon | itoring well, aerial | pnotos, pr | evious ins | pections), | if available: | | |
| | | | | | | | | | |
| Remarks: | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

WDC SR-177, SR-193 to 1800 North UDOT



Sample Point 80



Sample Point 80

| Project/Site: WDC Phase II | (| City/Count | y: Davis C | ounty | Sampling Date: 2024- | 07-25 |
|--|----------------------------------|------------|----------------------|---|---|---------|
| | State: Utah Sampling Point: SP81 | | | | | |
| Investigator(s): M.DAVIS | | Section, T | ownship, Ra | nge: S30 T5N R2W | | |
| | | | | | re Slope (%): | 1 |
| Subregion (LRR): D 28A | Lat: 41. | 1377174 | 4 | Long: -112.1057299 | 9 Datum: NAD |)83_201 |
| Soil Map Unit Name: HLA - Harrisville-Leland com | plex, 0 to 1 | percent | slopes | NWI classific | cation: None | |
| Are climatic / hydrologic conditions on the site typical for | this time of yea | ar? Yes | ✓ No | (If no, explain in R | Remarks.) | |
| Are Vegetation, Soil, or Hydrology | = | | | | present? Yes No | 0 |
| Are Vegetation, Soil, or Hydrology | | | | eeded, explain any answe | | |
| SUMMARY OF FINDINGS – Attach site ma | | | | ocations, transects | s, important feature | s, etc. |
| Hydrophytic Vegetation Present? | No | | | | | |
| Hydric Soil Present? Yes | | | he Sampled | | , No | |
| Wetland Hydrology Present? Yes | | Wit | hin a Wetla | nd? fes | NO | |
| Remarks: | | • | | | | |
| | | | | | | |
| | | | | | | |
| VECETATION Line accontific names of pl | | | | | | |
| VEGETATION – Use scientific names of plants | | <u> </u> | | | | |
| Tree Stratum (Plot size:) | Absolute % Cover | | nt Indicator Status | Dominance Test work | | |
| 1 | | | | Number of Dominant S That Are OBL, FACW, | | (A) |
| 2 | | | | Total Number of Domir | | , , |
| 3 | | | | Species Across All Stra | | (B) |
| 4 | | | | Percent of Dominant S | necies | |
| Capling/Chrub Ctratum /Dlat aiza | | = Total C | over | That Are OBL, FACW, | | (A/B) |
| Sapling/Shrub Stratum (Plot size:) | | | | Prevalence Index wor | ·ksheet· | |
| 1 2 | | | | Total % Cover of: | | |
| 3. | | | | | x 1 = 40 | _ |
| 4. | | | | | x 2 = 70 | _ |
| 5. | | | | | x 3 = 0 | |
| | | | over | FACU species 0 | x 4 = 0 | _ |
| Herb Stratum (Plot size:) | 40 | | OPI | | x 5 = 0 | _ |
| Eleocharis palustris Juncus balticus | <u>40</u> 35 | | OBL FACW | Column Totals: 75 | (A) <u>110</u> | _ (B) |
| | | | | Prevalence Index | c = B/A = 1.46 | |
| 3 | | | | Hydrophytic Vegetation | \ <u>-</u> | |
| 4. 5. | | | | ✓ Dominance Test is | | |
| 6. | | | | ✓ Prevalence Index i | | |
| 7 | | | | | ptations¹ (Provide suppor | |
| 8. | | | | | s or on a separate sheet) | |
| | 75 | = Total C | over | Problematic Hydro | phytic Vegetation ¹ (Explai | in) |
| Woody Vine Stratum (Plot size:) | | | | 1 mais atoms of building an | : | |
| 1 | | | | be present, unless dist | il and wetland hydrology r urbed or problematic. | nust |
| 2 | | | | Hydrophytic | <u> </u> | |
| 0.5 | | = Total C | | Vegetation | | |
| % Bare Ground in Herb Stratum 25 % Co | ver of Biotic C | rust | | Present? Ye | es No | |
| Remarks: | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| Brofile Dose | rintian: (Describe | to the der | oth needed to docum | ont the | indicator | or confirm | the absence | of indicators |
|---|---|------------|-------------------------------|------------|-------------------|------------------|-----------------------|---|
| | | to the dep | | | | or commi | i tile absence | of marcators.) |
| Depth (inches) | Matrix Color (moist) | % | Color (moist) | Feature % | Type ¹ | Loc ² | Texture | Remarks |
| 0 - 5 | 7.5YR 3/1 | 100 | | | | | Loam | . <u></u> |
| 5 - 6 | 7.5YR 3/1 | 50 | | | | | Loam | |
| 5 - 6 | 10YR 4/2 | 48 | 5YR 6/8 | 2 | С | М | Clay Loam | |
| 6 - 14 | 7.5YR 3/1 | 100 | | | · | | Sandy Loam | |
| 14 - 20 | 10YR 4/2 | 100 | | | | | Sand | Partially loamy |
| | · | | - | | · | | | |
| | | | | - | · | | | |
| | - | . ——— | | | | | | |
| ¹Typo: C=Co | ncontration D=Don | lotion DM | =Reduced Matrix, CS | -Covere | d or Coate | nd Sand Gr | raine ² Lo | cation: PL -Poro Lining M-Matrix |
| | | | LRRs, unless other | | | d Sand Gi | | cation: PL=Pore Lining, M=Matrix. s for Problematic Hydric Soils ³ : |
| Histosol | | | Sandy Redo | | , | | | Muck (A9) (LRR C) |
| Histic Epipedon (A2) Stripped Matrix (S6) | | | | | | | | Muck (A10) (LRR B) |
| Black His | | | Loamy Muck | ky Minera | al (F1) | | Reduc | ced Vertic (F18) |
| Hydroge | n Sulfide (A4) | | Loamy Gley | ed Matrix | (F2) | | Red P | Parent Material (TF2) |
| | Layers (A5) (LRR (| C) | Depleted Ma | ` , | | | ✓ Other | (Explain in Remarks) |
| | ck (A9) (LRR D) | | Redox Dark | | . , | | | |
| - | Below Dark Surface | e (A11) | Depleted Da | | | | 31 | f. lavada a ala di a va a a fati a a a a d |
| | rk Surface (A12) | | Redox Depression Vernal Pools | | (F8) | | | of hydrophytic vegetation and hydrology must be present, |
| - | lucky Mineral (S1) leyed Matrix (S4) | | vernai Pools | s (F9) | | | | disturbed or problematic. |
| | ayer (if present): | | | | | | | р |
| Type: | | | | | | | | |
| Depth (inc | ches): | | | | | | Hydric Soi | I Present? Yes <u>✓</u> No |
| Remarks: | | | | | | | • | |
| This wetlan | d is consistently | inundat | ed throughout the | growir | ng seaso | n. Withou | ut the soils a | adequately drying out and |
| | = | | - | _ | _ | | | o these wet conditions is |
| considered | problematic. | | | | | | | |
| HYDROLO | GY | | | | | | | |
| | drology Indicators: | | | | | | | |
| | | ne require | ed; check all that apply | () | | | Seco | ndary Indicators (2 or more required) |
| | Water (A1) | no roquiro | Salt Crust (| | | | | Water Marks (B1) (Riverine) |
| | ter Table (A2) | | Biotic Crus | ' | | | | Sediment Deposits (B2) (Riverine) |
| ✓ Saturation | | | Aquatic Inv | | es (B13) | | · | Orift Deposits (B3) (Riverine) |
| | arks (B1) (Nonriver i | ine) | Hydrogen S | | | | | Orainage Patterns (B10) |
| · | it Deposits (B2) (No | • | | | | Livina Roo | | Ory-Season Water Table (C2) |
| | osits (B3) (Nonrive i | | Presence of | | • | • | — | Crayfish Burrows (C8) |
| - | Soil Cracks (B6) | , | Recent Iron | | | | · | Saturation Visible on Aerial Imagery (C9) |
| | on Vis ble on Aerial I | magery (B | | | | | | Shallow Aquitard (D3) |
| | ained Leaves (B9) | | Other (Exp | | | | | FAC-Neutral Test (D5) |
| Field Observ | /ations: | | | | | | | |
| Surface Water | er Present? Y | es | No Depth (inc | :hes): | | | | |
| Water Table | Present? Y | es | No Depth (inc | :hes): | | _ | | |
| Saturation Pr (includes cap | | es 🔽 | No Depth (inc | hes): 0 | | Wetla | and Hydrolog | y Present? Yes V No No |
| Describe Rec | corded Data (stream | gauge, m | onitoring well, aerial p | hotos, pi | revious ins | spections), | if available: | |
| Some area | as of standing v | vater th | roughout the we | etland, | but not | at this | sample poi | nt location. |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

WDC SR-177, SR-193 to 1800 NorthUDOT



Sample Point 81



Sample Point 81

| Project/Site: WDC Phase II | Cir | y/County: | Davis C | ounty | Sampling Da | ate: 2024-0 | 07-25 |
|---|-----------------------------|-------------|------------|---|----------------|-----------------|---------|
| Applicant/Owner: UDOT | | | | State: Utah | Sampling Po | oint: SP82 | |
| Investigator(s): M.DAVIS | Se | ection, Tov | vnship, Ra | inge: S30 T5N R2W | | | |
| Landform (hillslope, terrace, etc.): Flat | | | | convex, none): None | | Slope (%): | 0 |
| Subregion (LRR): D 28A | Lat: 41.13 | 771428 | | _ Long: -112.10571136 | 3 | Datum: NAD |)83_201 |
| Soil Map Unit Name: HLA - Harrisville-Lela | nd complex, 0 to 1 pe | ercent sl | opes | NWI classific | ation: None | ; | |
| Are climatic / hydrologic conditions on the site ty | pical for this time of year | ? Yes | No | (If no, explain in R | temarks.) | | |
| Are Vegetation, Soil, or Hydrolog | gy significantly dis | sturbed? | Are ' | "Normal Circumstances" p | oresent? Yes | s <u> </u> | o |
| Are Vegetation, Soil, or Hydrolog | gy naturally probl | ematic? | (If ne | eeded, explain any answe | rs in Remark | s.) | |
| SUMMARY OF FINDINGS - Attach s | site map showing s | ampling | point l | ocations, transects | , importar | nt features | s, etc. |
| Hydrophytic Vegetation Present? Yes | No | | | | | | |
| | No V | | Sampled | | No | ~ | |
| | No | withi | n a Wetlar | id? fes | NO | <u>-</u> | |
| Remarks: | | | | | | | |
| No soil pit dug due to road base | materials restric | ting the | e ability | to dig a hole. All | plants pr | resent we | ere |
| upland plants. Photos not provide | ed because no pit v | vas dug |] . | | | | |
| VEGETATION – Use scientific name | s of plants | ` | | | | | - |
| | • | Dominant | Indicator | Dominance Test work | sheet: | | |
| Tree Stratum (Plot size:) | | | | Number of Dominant S | pecies | | |
| 1 | | | | That Are OBL, FACW, | or FAC: 1 | | (A) |
| 2 | | | | Total Number of Domin | ant | | |
| 3 | | | | Species Across All Stra | ıta: <u>3</u> | | (B) |
| 4 | = | | | Percent of Dominant Sp | | 2 22 | (A (D) |
| Sapling/Shrub Stratum (Plot size: | | Total Co | Ci | That Are OBL, FACW, | or FAC: 3 | 3.33 | (A/B) |
| 1 | | | | Prevalence Index wor | | | |
| 2 | | | | Total % Cover of: | | lultiply by: | |
| 3 | | | | | x 1 = | | _ |
| 4 | | | | · · | x 2 = x 3 = | | _ |
| 5 | = | | | FACU species 20 | | | |
| Herb Stratum (Plot size:) | | Total Co | Ci | | x 5 = | | _ |
| 1. Agropyron cristatum | 35 | <u> </u> | UPL | Column Totals: 75 | | | _ (B) |
| 2. Plantago lanceolata | 20 | | FAC | | D/A 1 | 20 | |
| 3. Grindelia squarrosa | | | FACU | Prevalence Index Hydrophytic Vegetation | | | |
| 4 | | | | Dominance Test is | | >. | |
| 5 6 | | | | Prevalence Index i | | | |
| 7 | | | | Morphological Ada | | ovide support | ting |
| 8 | | | | data in Remark | | | |
| | 7- | Total Cov | | Problematic Hydro | phytic Vegeta | ition¹ (Explaii | n) |
| Woody Vine Stratum (Plot size: | | | | 1 maliantana at huduin an | : | | 4 |
| 1 | | | | ¹ Indicators of hydric soi be present, unless distu | | | nust |
| 2 | | | | Hydrophytic | | | |
| 25 | = | | | Vegetation | | | |
| | % Cover of Biotic Cru | st | | Present? Ye | s N | lo <u> </u> | |
| Remarks: | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) | |
|--|---|
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. | Remarks |
| Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: Histosol (A1) | |
| ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) | - |
| Indicators: (Applicable to all LRRs, unless otherwise noted.) | |
| Indicators: (Applicable to all LRRs, unless otherwise noted.) | |
| Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: Histosol (A1) | |
| Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: Histosol (A1) | - |
| Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: Histosol (A1) | |
| Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: Histosol (A1) | |
| Indicators: (Applicable to all LRRs, unless otherwise noted.) | |
| Indicators: (Applicable to all LRRs, unless otherwise noted.) | |
| Indicators: (Applicable to all LRRs, unless otherwise noted.) | |
| Histosol (A1) Sandy Redox (S5) 1 cm Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Black Histic (A3) Loamy Mucky Mineral (F1) Red Stratified Layers (A5) (LRR C) Depleted Matrix (F2) Red Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Othe 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Indicator Sandy Mucky Mineral (S1) Vernal Pools (F9) Wetland Sandy Gleyed Matrix (S4) United Setricities Layer (if present): Type: Depth (inches): Hydric Sc Brand B | ocation: PL=Pore Lining, M=Matrix. rs for Problematic Hydric Soils ³ : |
| Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Black Histic (A3) Loamy Mucky Mineral (F1) Red Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Red Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Othe 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Indicator Sandy Mucky Mineral (S1) Wernal Pools (F9) Wetland Sandy Gleyed Matrix (S4) Unless Sestrictive Layer (if present): Type: Depth (inches): Hydric Science (F7) Depth (inches): Hydric Science (F7) Frince Matrix (F9) Wetland Hydric Science (F9) Wetland Hydrole | • |
| Black Histic (A3) | Muck (A9) (LRR C) Muck (A10) (LRR B) |
| | uced Vertic (F18) |
| Stratified Layers (A5) (LRR C) 1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sestrictive Layer (if present): Type: Depth (inches): Import Mydrology Indicators: rimary Indicators (minimum of one required; check all that apply) Setrictive Mater (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Derift Deposits (B3) (Non | Parent Material (TF2) |
| | r (Explain in Remarks) |
| | (Explain in Remarks) |
| Thick Dark Surface (A12) | |
| | rs of hydrophytic vegetation and |
| | d hydrology must be present, |
| Restrictive Layer (if present): Type: | disturbed or problematic. |
| Depth (inches): | • |
| Depth (inches): | |
| Remarks: Road base type material too solid to dig a pit. Shallow layer of vegorapable. YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (Minimum of one required; check all that apply) Secondary Indicators (Minimu | oil Present? Yes No |
| ### Apable. ### A | |
| Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Water-Stained Leaves (B9) Other (Explain in Remarks) Surface Water Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Poepth (inches): Saturation Present? | |
| Surface Water (A1) Salt Crust (B11) High Water Table (A2) Biotic Crust (B12) Aquatic Invertebrates (B13) Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Hundation Vis ble on Aerial Imagery (B7) Thin Muck Surface (C7) Water-Stained Leaves (B9) Other (Explain in Remarks) Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Wetland Hydroic includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | |
| High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Water Table Present? Vater Table Present? Ves No Depth (inches): Saturation Present? Ves No Depth (inches): Second Inches (Nonriverine) Second Inches (Nonriverin | ondary Indicators (2 or more required) |
| High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Water Table Present? Ves No Saturation Present? Ves No Saturation Present? Ves No Depth (inches): Saturation Present? Ves No Depth (inches): Secribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Water Marks (B1) (Riverine) |
| | Sediment Deposits (B2) (Riverine) |
| Water Marks (B1) (Nonriverine) | Drift Deposits (B3) (Riverine) |
| Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Inundation Vis ble on Aerial Imagery (B7) Thin Muck Surface (C7) Water-Stained Leaves (B9) Other (Explain in Remarks) Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Baturation Present? Yes No Depth (inches): Wetland Hydrold Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Drainage Patterns (B10) |
| Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Thin Muck Surface (C7) Other (Explain in Remarks) Field Observations: Surface Water Present? Ves No Depth (inches): Vater Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Seturation Present? Yes No Depth (inches): No D | - |
| Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Inundation Vis ble on Aerial Imagery (B7) Thin Muck Surface (C7) Water-Stained Leaves (B9) Other (Explain in Remarks) Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Wetland Hydroic includes capillary fringe) | DIV-Season Water Table (CZ) |
| Inundation Vis ble on Aerial Imagery (B7) Thin Muck Surface (C7) Water-Stained Leaves (B9) Other (Explain in Remarks) Stringed Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Baturation Present? Yes No Depth (inches): Wetland Hydrold includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | • |
| Water-Stained Leaves (B9) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Vater Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Sectional Remarks Depth (inches): Sectional Remarks Depth (inches): Wetland Hydrold Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Crayfish Burrows (C8) |
| Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Seturation Present? Yes No Depth (inches): Wetland Hydrold includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C |
| Surface Water Present? Yes No Depth (inches): Vater Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Seturation Present? Yes No Depth (inches): Seturation Present? Yes No Depth (inches): Depth (inches): Wetland Hydroic includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3) |
| Vater Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Depth (inches): Wetland Hydrological includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C |
| Saturation Present? Yes No Depth (inches): Wetland Hydrological Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3) |
| includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3) |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (Castallow Aquitard (D3) FAC-Neutral Test (D5) |
| | Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C8) Shallow Aquitard (D3) |
| Remarks: | Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| Remarks: | Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| | Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| | Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3) FAC-Neutral Test (D5) |
| | Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (Castallow Aquitard (D3) FAC-Neutral Test (D5) |
| | Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3) FAC-Neutral Test (D5) |

| Project/Site: WDC Phase II | (| City/County | Davis Co | ounty | Sampling Date: 2024-07-25 |
|---|----------------|--------------|----------------------------|---|---|
| Applicant/Owner: UDOT | | | | State: Utah | _ Sampling Point: SP83 |
| Investigator(s): M.DAVIS | ; | Section, To | wnship, Rai | nge: S30 T5N R2W | |
| Landform (hillslope, terrace, etc.): Depression | | Local relief | (concave, | convex, none): Conca | slope (%): 2 |
| Subregion (LRR): D 28A | _ Lat: 41.1 | 13709023 | 3 | Long: -112.106099 | Datum: NAD83_201 |
| Soil Map Unit Name: HLA - Harrisville-Leland comple | ex, 0 to 1 p | percent s | lopes | NWI classi | fication: None |
| Are climatic / hydrologic conditions on the site typical for this | s time of yea | ar? Yes | ✓ No _ | (If no, explain in | Remarks.) |
| Are Vegetation, Soil, or Hydrologys | ignificantly (| disturbed? | Are " | 'Normal Circumstances' | " present? Yes No |
| Are Vegetation, Soil, or Hydrologyn | aturally prof | blematic? | (If ne | eeded, explain any answ | vers in Remarks.) |
| SUMMARY OF FINDINGS - Attach site map | showing | samplin | g point le | ocations, transect | ts, important features, etc. |
| Hydrophytic Vegetation Present? Yes N | 0 | | | | |
| Hydric Soil Present? Yes V | 0 | | ie Sampled iin a Wetlan | | ✓ No |
| Wetland Hydrology Present? Yes N | 0 | With | in a vvetian | id? fes | NO |
| Remarks: | | | , | | |
| | | | | | |
| | | | | | |
| VEGETATION – Use scientific names of plan | ts. | | | | |
| Table 1 and | | Dominant | Indicator | Dominance Test wo | rksheet: |
| Tree Stratum (Plot size:) | % Cover | | | Number of Dominant | |
| 1 | | | | That Are OBL, FACW | |
| 2 | | | | Total Number of Dom | inant |
| 3 | | | | Species Across All St | rata: 2 (B) |
| 4 | | = Total Co | | Percent of Dominant That Are OBL, FACW | |
| Sapling/Shrub Stratum (Plot size:) | | | | | (, 12) |
| 1. | | | | Prevalence Index wo | |
| 2 | | | | Total % Cover of: | Multiply by: x 1 = 65 |
| 3 | | | | · · · · · · · · · · · · · · · · · · · | x = 0 x = 0 |
| 4. 5. | | | | | x 3 = 30 |
| J | | = Total Co | ver | | x 4 = 0 |
| Herb Stratum (Plot size:) | | | | · · | x 5 = 0 |
| 1. Carex nebrascensis | 35 | | OBL | Column Totals: 75 | (A) <u>95</u> (B) |
| 2. Persicaria hydropiper | 20 | | OBL | Duranda u a a la da | D/A 126 |
| 3. Schoenoplectus americanus Poa pratensis | 10 | | OBL FAC | Hydrophytic Vegeta | ex = B/A = 1.26 |
| T | 10 | | | ✓ Dominance Test | |
| 5 | | | | ✓ Prevalence Index | |
| 6 | | | | l — | daptations ¹ (Provide supporting |
| 7 8 | | | | data in Remar | rks or on a separate sheet) |
| <u> </u> | 75 | = Total Co | ver | Problematic Hydr | rophytic Vegetation ¹ (Explain) |
| Woody Vine Stratum (Plot size:) | | | | | |
| 1 | | | | | soil and wetland hydrology must sturbed or problematic. |
| 2 | | | | | - Adiabat of problemation |
| | | = Total Co | ver | Hydrophytic Vegetation | |
| % Bare Ground in Herb Stratum 25 % Cover | of Biotic Cr | rust | | Present? Y | res No |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| Profile Desc | ription: (Describe | to the dep | oth needed to docu | ment the | indicator | or confirm | n the absence of indica | ators.) | |
|---|---|----------------------------|----------------------|-----------------------|-------------|--|---|-----------------------------|--|
| Depth Matrix Redox Features | | | | | | | | | |
| (inches) Color (moist) % | | Color (moist) % | | Type ¹ Loc | | <u>Texture</u> | Remarks | | |
| 0 - 8 | 10YR 3/2 | 100 | | | | | Loam | | |
| 8 - 20 | 7.5YR 2.5/1 | 95 | 7.5YR 3/3 | 5 | С | М | Sandy Loam | | |
| _ | • | | · | | | | | | |
| | | | | | · | | | | |
| | | | | | | | | | |
| - | | | | | | | | | |
| _ | | | | | | | | <u> </u> | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| ¹ Type: C=C | oncentration, D=Dep | letion, RM | =Reduced Matrix, C | S=Covere | d or Coate | ed Sand G | rains. ² Location: P | L=Pore Lining, M=Matrix. | |
| Hydric Soil | Indicators: (Applic | able to all | LRRs, unless other | rwise not | ed.) | | Indicators for Prob | lematic Hydric Soils³: | |
| Histosol | (A1) | | Sandy Red | ox (S5) | | | 1 cm Muck (A9) | (LRR C) | |
| Histic Ep | Histic Epipedon (A2) Stripped Matrix (S6) | | | | | | 2 cm Muck (A10) (LRR B) | | |
| Black Hi | stic (A3) | | Loamy Mu | cky Minera | al (F1) | | Reduced Vertic (F18) | | |
| Hydroge | Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) | | | | | | Red Parent Material (TF2) | | |
| | d Layers (A5) (LRR | C) | Depleted N | | | | Other (Explain i | n Remarks) | |
| 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) | | | | | | | | | |
| - | d Below Dark Surfac | e (A11) | Depleted D | | | | 3 | | |
| _ | Thick Dark Surface (A12) Redox Depressions (F8) | | | | | | ³ Indicators of hydrophytic vegetation and | | |
| Sandy Mucky Mineral (S1) Vernal Pools (F9) Sandy Gleyed Matrix (S4) | | | | | | wetland hydrology must be present, unless disturbed or problematic. | | | |
| . — | Layer (if present): | | | | | | uniess disturbed (| or problematic. | |
| | | | | | | | | | |
| Type: | | | | | | | | | |
| Depth (inches): | | | | | | Hydric Soil Present | ? Yes <u>'</u> No | | |
| Remarks: | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | OV | | | | | | | | |
| HYDROLO | | | | | | | | | |
| Wetland Hy | drology Indicators: | | | | | | | | |
| Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) | | | | | | | | cators (2 or more required) | |
| Surface | Water (A1) | | Salt Crus | t (B11) | | | Water Marks (B1) (Riverine) | | |
| High Wa | ater Table (A2) | | Biotic Cru | st (B12) | | | Sediment Deposits (B2) (Riverine) | | |
| ✓ Saturation (A3) — Aquatic Invertebrates (B13) | | | | | | Drift Deposits (B3) (Riverine) | | | |
| Water M | larks (B1) (Nonrive i | rine) | Hydrogen | | | | Drainage F | | |
| | nt Deposits (B2) (No | | | | | Living Ro | ots (C3) Dry-Seaso | | |
| | oosits (B3) (Nonrive | | Presence | | _ | _ | Crayfish B | | |
| Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) | | | | | | | | , , | |
| Inundation Vis ble on Aerial Imagery (B7) Thin Muck Surface (C7) | | | | | | Shallow Ad | | | |
| | tained Leaves (B9) | Other (Explain in Remarks) | | | | FAC-Neutral Test (D5) | | | |
| Field Obser | , , | | | piairi iir i k | Jiliaino) | | 1710 11041 | a. 1001 (20) | |
| Surface Wat | | /oo | No Depth (ir | oboo): | | | | | |
| | | | | | | | | | |
| Water Table Present? Yes No Depth (inches): | | | | | | | | | |
| | | | | | | and Hydrology Present? Yes No | | | |
| (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | | | | | | | | | |
| Booonibo i to | cordod Bata (otrodir | . gaago, | ormorning won, donar | priotoo, pr | 011000 1110 | opooliono) | in available. | | |
| Domortic | | | | | | | | | |
| Remarks: | | | | | | | | | |
| This are | a is likely we | tter or | occasionally | flood | ed ear | lier in | the season. | | |
| | , | | , | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

WDC SR-177, SR-193 to 1800 NorthUDOT



Sample Point 83



Sample Point 83

APPENDIX D

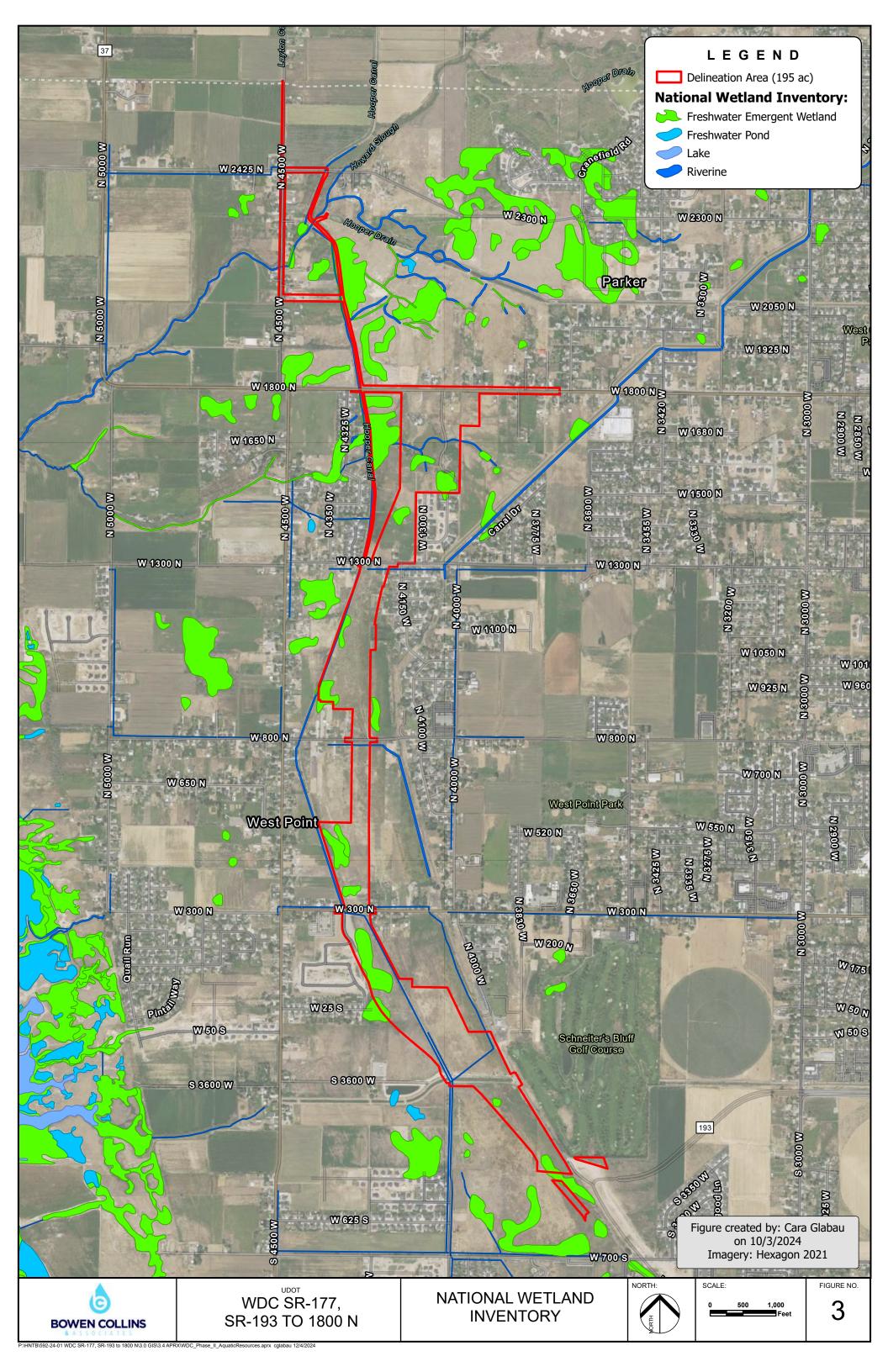
Aquatic Resources Spreadsheet

West Davis Corridor SR-177, SR-193 TO 1800 North (PIN 20927) Delineation Aquatic Resources

| Waters Name | State | Cowadin Code | HGM Code | Measurement Type | Amount | Units | Waters Type | Latitude | Longitude | Local Waterway |
|-------------|-------|-----------------|----------|---------------------|--------|-------|---------------------------------|-----------|-------------|----------------------------------|
| W1 | UT | PEM | DEPRESS | Area | 0.04 | Acres | NON-WOTUS.WETL.NEGATIVE-A7 | 41.105961 | -112.095873 | Stormwater Drainge |
| W2 | UT | PEM | DEPRESS | Area | 7.55 | Acres | A7-AJD.WETL-404 | 41.108619 | -112.098269 | Stormwater Runoff |
| W3 | UT | PEM | DEPRESS | Area | 2.24 | Acres | NON-WOTUS.WETL.NEGATIVE-A7 | 41.109775 | -112.100275 | Stormwater Runoff |
| W4 | UT | PEM | DEPRESS | Area | 0.63 | Acres | A7-AJD.WETL-404 | 41.110132 | -112.099354 | Stormwater Runoff |
| W5 | UT | PEM | SLOPE | Area | 0.43 | Acres | A7-AJD.WETL-404 | 41.110286 | -112.09912 | Stormwater Runoff |
| W6 | UT | PEM | DEPRESS | Area | 1.57 | Acres | NON-WOTUS.WETL.NEGATIVE-A7 | 41.111745 | -112.100706 | Irrigation and Stormwater Runoff |
| W7 | UT | PEM | RIVERINE | Area | 0.39 | Acres | NON-WOTUS.WETL.NEGATIVE-A7 | 41.112496 | -112.101516 | Irrigation and Stormwater Runoff |
| W8 | UT | PEM | DEPRESS | Area | 1.09 | Acres | NON-WOTUS.WETL.NEGATIVE-A7 | 41.112694 | -112.101587 | Irrigation and Stormwater Runoff |
| W9 | UT | PEM | DEPRESS | Area | 1.31 | Acres | NON-WOTUS.WETL.NEGATIVE-A7 | 41.126432 | -112.108597 | Irrigation and Stormwater Runoff |
| W10 | UT | PEM | DEPRESS | Area | 6.03 | Acres | NON-WOTUS.WETL.NEGATIVE-A7 | 41.128535 | -112.108054 | Irrigation and Stormwater Runoff |
| W11 | UT | PEM | DEPRESS | Area | 1.95 | Acres | NON-WOTUS.WETL.NEGATIVE-A7 | 41.129396 | -112.108084 | Irrigation and Stormwater Runoff |
| W12 | UT | PEM | DEPRESS | Area | 3.06 | Acres | NON-WOTUS.WETL.NEGATIVE-A7 | 41.129053 | -112.108889 | Irrigation and Stormwater Runoff |
| W13 | UT | PEM | DEPRESS | Area | 0.10 | Acres | NON-WOTUS.WETL.NEGATIVE-A7 | 41.132474 | -112.108086 | Irrigation and Stormwater Runoff |
| W14 | UT | PEM | DEPRESS | Area | 0.13 | Acres | A7-AJD.WETL-404 | 41.134204 | -112.107827 | Irrigation and Stormwater Runoff |
| W15 | UT | PEM | DEPRESS | Area | 2.10 | Acres | A7-AJD.WETL-404 | 41.138173 | -112.106331 | Irrigation and Stormwater Runoff |
| W16 | UT | PEM | DEPRESS | Area | 0.63 | Acres | A7-AJD.WETL-404 | 41.13811 | -112.105658 | Irrigation and Stormwater Runoff |
| W17 | UT | PEM | RIVERINE | Area | 0.16 | Acres | A7-AJD.WETL-404 | 41.136783 | -112.105367 | Stormwater Runoff |
| W18 | UT | PEM | RIVERINE | Area | 0.58 | Acres | A7-AJD.WETL-404 | 41.136495 | -112.104939 | Stormwater Runoff |
| W19 | UT | PEM | DEPRESS | Area | 0.13 | Acres | A7-AJD.WETL-404 | 41.137483 | -112.104426 | Stormwater Runoff |
| W20 | UT | PEM | DEPRESS | Area | 0.47 | Acres | A7-AJD.WETL-404 | 41.138105 | -112.104219 | Stormwater Runoff |
| W21 | UT | PEM | DEPRESS | Area | 0.11 | Acres | A7-AJD.WETL-404 | 41.138044 | -112.105061 | Stormwater Runoff |
| W22 | UT | PEM | DEPRESS | Area | 0.52 | Acres | A7-AJD.WETL-404 | 41.138848 | -112.104602 | Stormwater Runoff |
| W23 | UT | PEM | DEPRESS | Area | 0.46 | Acres | NON-WOTUS.WETL.NEGATIVE-A7 | 41.130619 | -112.108796 | Irrigation and Stormwater Runoff |
| D1 | UT | R4SB5Cx | RIVERINE | Length | 1340 | Feet | A5.TRIB-404 | 41.110441 | -112.100607 | Stormwater Runoff |
| D2 | UT | R4UB3Cx | RIVERINE | Length | 947 | Feet | A5.TRIB-404 | 41.111089 | -112.101418 | Stormwater Runoff |
| D3 | UT | R4SB5Kx | RIVERINE | Length | 1167 | Feet | NON-JD-RAPANOS-GUIDE-DITCH | 41.119865 | -112.110119 | Irrigation Ditch |
| D4 | UT | R4SB5C | RIVERINE | Length | 57 | Feet | A5.TRIB-404 | 41.137677 | -112.107994 | Irrigation and Stormwater Runoff |
| D5 | UT | R4SB5Kx | RIVERINE | Length | 1885 | Feet | A5.TRIB-404 | 41.13524 | -112.10558 | Irrigation and Stormwater Runoff |
| D6 | UT | R4SBKx | RIVERINE | Length | 81 | Feet | NON-WOTUS-STREAM.NEGATIVE-A5 | 41.140173 | -112.110693 | Stormwater Runoff |
| D7 | UT | R4SB5C | RIVERINE | Length | 380 | Feet | A5.TRIB-404 | 41.136617 | -112.104732 | Irrigation and Stormwater Runoff |
| D8 | UT | R2UB3C | RIVERINE | Length | 178 | Feet | A5.TRIB-404 | 41.137747 | -112.103391 | Stormwater Runoff |
| D9 | UT | R2UB3C | RIVERINE | Length | 921 | Feet | A5.TRIB-404 | 41.138009 | -112.105852 | Stormwater Runoff |
| D10 | UT | R2UB3C | RIVERINE | Length | 268 | Feet | A5.TRIB-404 | 41.136714 | -112.106109 | Stormwater Runoff |
| OW1 | UT | PUB3C | DEPRESS | Area | 1.13 | Acres | NON-WOTUS-LAKE.POND.NEGATIVE-A5 | 41.129074 | -112.109433 | Irrigation and Stormwater Runoff |
| OW2 | UT | PUB3Cx | DEPRESS | Area | 0.23 | Acres | NON-WOTUS-LAKE.POND.NEGATIVE-A5 | 41.130983 | -112.107666 | Irrigation and Stormwater Runoff |
| OW3 | UT | PUB3H | DEPRESS | Area | 0.36 | Acres | A4.IMPDT-404 | 41.137306 | -112.105634 | Irrigation and Stormwater Runoff |
| OW4 | UT | PUB3H | DEPRESS | Area | 3.29 | Acres | A4.IMPDT-404 | 41.137557 | -112.104833 | Irrigation and Stormwater Runoff |
| S1 | UT | R2UB3H | RIVERINE | Length | 34 | Feet | A5.TRIB-404 | 41.146842 | -112.111292 | Irrigation and Stormwater Runoff |

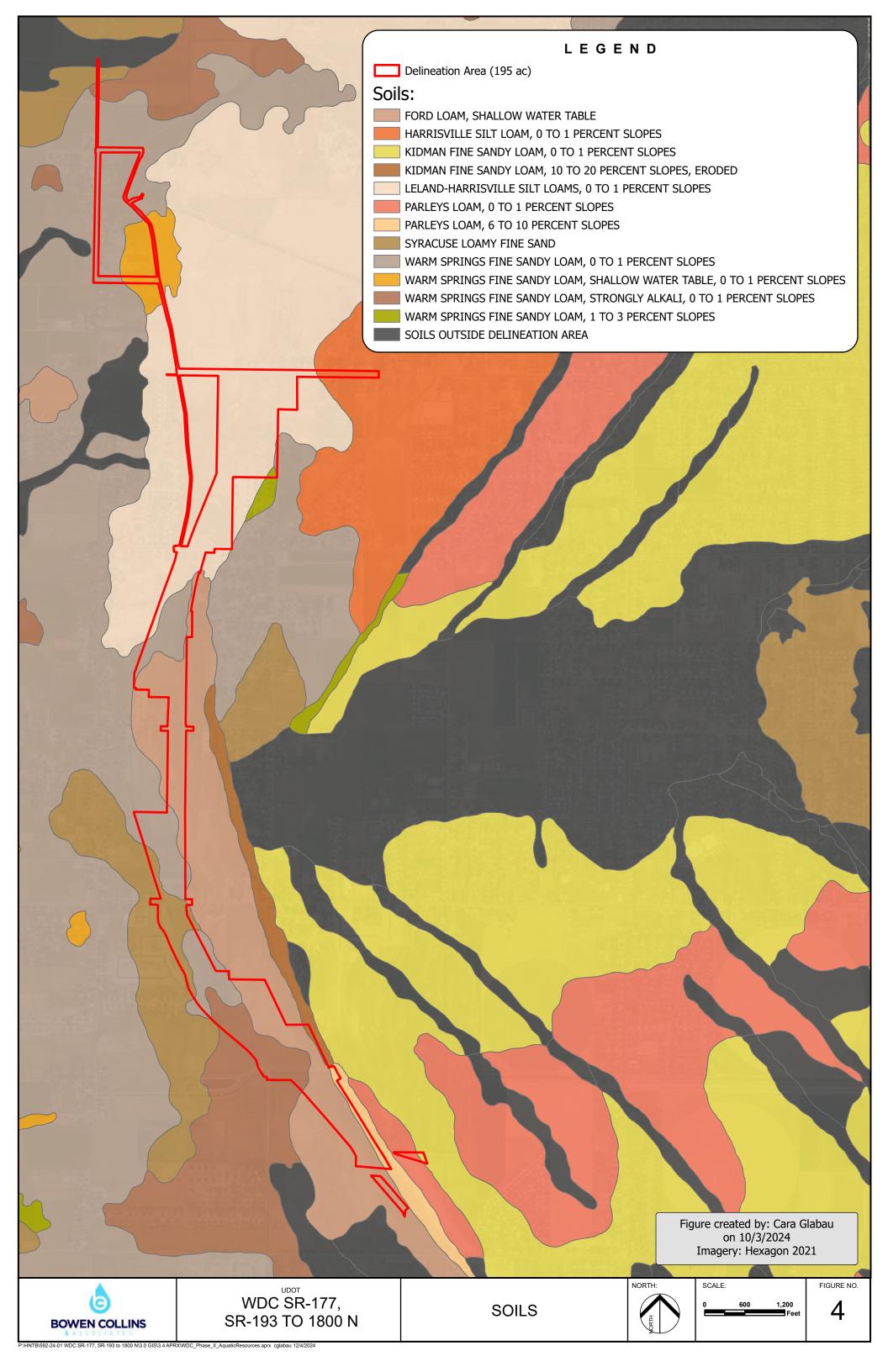
APPENDIX E

NWI Figures



APPENDIX F

Soil Figures and NRCS Custom Soils Resource Report

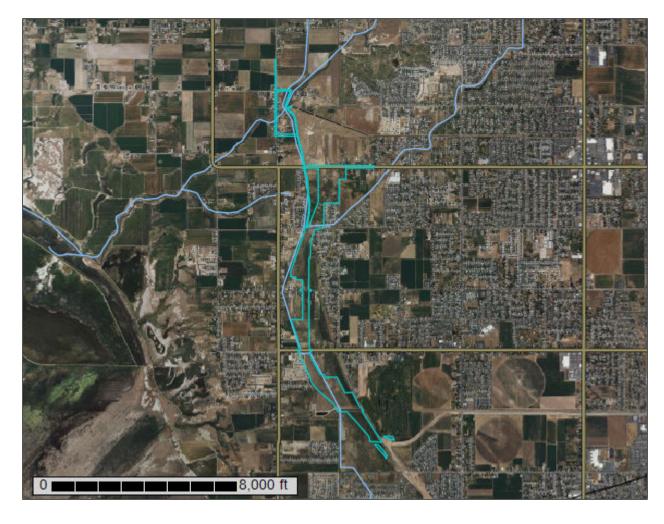




Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Davis-Weber Area, Utah

WDC SR-177 Phase II (Phase 20927): SR-193 to 1800 North



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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| Legend | 10 |
| Map Unit Legend | 11 |
| Map Unit Descriptions | 11 |
| Davis-Weber Area, Utah | 14 |
| 1000—Parleys loam, 0 to 4 percent slopes | |
| Fb—Ford loam, shallow water table, 0 to 1 percent slopes | |
| HaA—Harrisville silt loam, 0 to 1 percent slopes | |
| HLA—Harrisville-Leland complex, 0 to 1 percent slopes | |
| KaA—Kidman fine sandy loam, 0 to 1 percent slopes | |
| KaE2—Kidman fine sandy loam, 10 to 20 percent slopes, eroded | |
| PaD—Parleys loam, 6 to 10 percent slopes | |
| So—Syracuse loamy fine sand, 0 to 2 percent slopes | 22 |
| Sy—Syracuse loamy fine sand, moderately saline, sodic, 0 to 2 | |
| percent slopes | |
| WaA—Warm Springs fine sandy loam, 0 to 1 percent slopes | |
| WaB—Warm Springs fine sandy loam, 1 to 3 percent slopes | 26 |
| WgA—Warm Springs fine sandy loam, saline, sodic, 0 to 1 percent | |
| | 27 |
| WIA—Warm Springs fine sandy loam, shallow water table, 0 to 1 | |
| percent slopes | |
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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

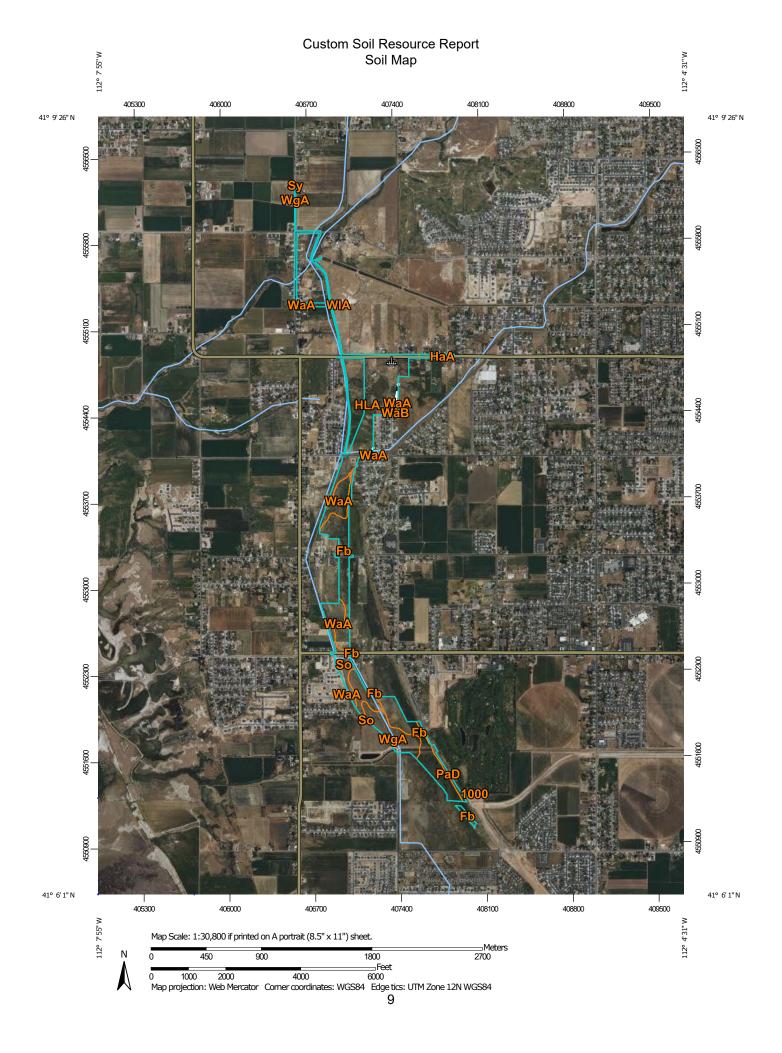
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons

Soil Map Unit Lines

Soil Map Unit Points

Special Point Features

Blowout \odot

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole Slide or Slip

Sodic Spot

å

Spoil Area Stony Spot



Very Stony Spot

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Wet Spot Other

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Special Line Features

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

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Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15.800.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Davis-Weber Area, Utah Survey Area Data: Version 18, Aug 26, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 14, 2022—Jul 20, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI | |
|-----------------------------|---|--------------|----------------|--|
| 1000 | Parleys loam, 0 to 4 percent slopes | 0.7 | 0.3% | |
| Fb | Ford loam, shallow water table, 0 to 1 percent slopes | 53.7 | 27.5% | |
| НаА | Harrisville silt loam, 0 to 1 percent slopes | 2.1 | 1.1% | |
| HLA | Harrisville-Leland complex, 0 to 1 percent slopes | 60.8 | 31.1% | |
| KaA | Kidman fine sandy loam, 0 to 1 percent slopes | 0.3 | 0.2% | |
| KaE2 | Kidman fine sandy loam, 10 to 20 percent slopes, eroded | 0.7 | 0.4% | |
| PaD | Parleys loam, 6 to 10 percent slopes | 2.7 | 1.4% | |
| So | Syracuse loamy fine sand, 0 to 2 percent slopes | 10.7 | 5.5% | |
| Sy | Syracuse loamy fine sand, moderately saline, sodic, 0 to 2 percent slopes | 0.1 | 0.0% | |
| WaA | Warm Springs fine sandy loam, 0 to 1 percent slopes | 42.5 | 21.8% | |
| WaB | Warm Springs fine sandy loam, 1 to 3 percent slopes | 0.4 | 0.2% | |
| WgA | Warm Springs fine sandy loam, saline, sodic, 0 to 1 percent slopes | 18.4 | 9.4% | |
| WIA | Warm Springs fine sandy loam, shallow water table, 0 to 1 percent slopes | 2.3 | 1.2% | |
| Totals for Area of Interest | | 195.4 | 100.0% | |

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class.

Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The

pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Davis-Weber Area, Utah

1000—Parleys loam, 0 to 4 percent slopes

Map Unit Setting

National map unit symbol: 2tjtg Elevation: 4,210 to 5,400 feet

Mean annual precipitation: 12 to 18 inches
Mean annual air temperature: 49 to 51 degrees F

Frost-free period: 130 to 180 days

Farmland classification: Prime farmland if irrigated

Map Unit Composition

Parleys and similar soils: 85 percent Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Parleys

Setting

Landform: Lake terraces, stream terraces Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Lacustrine deposits and/or alluvium derived from igneous and

sedimentary rock

Typical profile

Ap - 0 to 6 inches: loam
A - 6 to 15 inches: loam
Bt - 15 to 26 inches: clay loam
Bk - 26 to 33 inches: silty clay loam
CBk - 33 to 48 inches: silt loam

C - 48 to 60 inches: stratified fine sand to silty clay loam

Properties and qualities

Slope: 0 to 4 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20

to 0.60 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 35 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 5.0

Available water supply, 0 to 60 inches: High (about 10.8 inches)

Interpretive groups

Land capability classification (irrigated): 2e Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: C

Ecological site: R028AY310UT - Upland Loam (Bonneville Big Sagebrush) North

Other vegetative classification: Upland Loam (Mountain Big Sagebrush)

(028AY310UT) Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 15 percent

Hydric soil rating: No

Fb—Ford loam, shallow water table, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: j533 Elevation: 4,200 to 4,300 feet

Mean annual precipitation: 14 to 18 inches Mean annual air temperature: 48 to 52 degrees F

Frost-free period: 160 to 180 days

Farmland classification: Not prime farmland

Map Unit Composition

Ford, shallow water table, and similar soils: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ford, Shallow Water Table

Setting

Landform: Lake terraces

Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Lacustrine deposits

Typical profile

A1 - 0 to 9 inches: loam C1ca - 9 to 16 inches: loam

C2ca - 16 to 34 inches: fine sandy loam C3cam - 34 to 44 inches: indurated C4ca - 44 to 52 inches: fine sandy loam C5cam - 52 to 60 inches: indurated

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: 20 to 40 inches to petrocalcic

Drainage class: Poorly drained Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately

low (0.00 to 0.07 in/hr)

Depth to water table: About 0 to 6 inches Frequency of flooding: Occasional Frequency of ponding: Rare

Calcium carbonate, maximum content: 25 percent

Maximum salinity: Moderately saline to strongly saline (8.0 to 16.0 mmhos/cm)

Sodium adsorption ratio, maximum: 30.0

Available water supply, 0 to 60 inches: Low (about 3.4 inches)

Interpretive groups

Land capability classification (irrigated): 4w Land capability classification (nonirrigated): 7w

Hydrologic Soil Group: D

Ecological site: R028AY024UT - Wet Saline Meadow (Saltgrass)

Hydric soil rating: Yes

HaA—Harrisville silt loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: j53h Elevation: 4.250 to 4.500 feet

Mean annual precipitation: 14 to 18 inches Mean annual air temperature: 48 to 52 degrees F

Frost-free period: 160 to 180 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Harrisville and similar soils: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Harrisville

Setting

Landform: Lake terraces

Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Alluvium and/or lacustrine deposits

Typical profile

Ap - 0 to 8 inches: silt loam

B21t - 8 to 14 inches: silty clay loam
B22tca - 14 to 22 inches: silty clay loam
B3ca - 22 to 33 inches: silty clay loam
C1 - 33 to 45 inches: silty clay loam
C2 - 45 to 60 inches: silty clay loam

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches Drainage class: Somewhat poorly drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately

low (0.00 to 0.06 in/hr)

Depth to water table: About 30 to 48 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Maximum salinity: Very slightly saline to slightly saline (2.0 to 4.0 mmhos/cm)

Sodium adsorption ratio, maximum: 50.0

Available water supply, 0 to 60 inches: High (about 10.2 inches)

Interpretive groups

Land capability classification (irrigated): 4w Land capability classification (nonirrigated): 7w

Hydrologic Soil Group: D

Ecological site: R028AY012UT - Semiwet Fresh Meadow

Hydric soil rating: No

HLA—Harrisville-Leland complex, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: j53c Elevation: 4,250 to 4,500 feet

Mean annual precipitation: 14 to 18 inches Mean annual air temperature: 48 to 52 degrees F

Frost-free period: 160 to 180 days

Farmland classification: Not prime farmland

Map Unit Composition

Harrisville and similar soils: 60 percent Leland and similar soils: 40 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Harrisville

Setting

Landform: Lake terraces

Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Alluvium and/or lacustrine deposits

Typical profile

Ap - 0 to 8 inches: silt loam

B21t - 8 to 14 inches: silty clay loam
B22tca - 14 to 22 inches: silty clay loam
B3ca - 22 to 33 inches: silty clay loam
C1 - 33 to 45 inches: silty clay loam
C2 - 45 to 60 inches: silty clay loam

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches Drainage class: Somewhat poorly drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately

low (0.00 to 0.06 in/hr)

Depth to water table: About 30 to 48 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Maximum salinity: Very slightly saline to slightly saline (2.0 to 4.0 mmhos/cm)

Sodium adsorption ratio, maximum: 50.0

Available water supply, 0 to 60 inches: High (about 10.2 inches)

Interpretive groups

Land capability classification (irrigated): 4w Land capability classification (nonirrigated): 7w

Hydrologic Soil Group: D

Ecological site: R028AY012UT - Semiwet Fresh Meadow

Hydric soil rating: No

Description of Leland

Setting

Landform: Lake terraces

Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Lacustrine deposits

Typical profile

A2 - 0 to 8 inches: silt loam
B2tca - 8 to 14 inches: clay loam
Bca - 14 to 19 inches: fine sandy loam
C1 - 19 to 31 inches: loamy very fine sand

C2 - 31 to 38 inches: silt loam

C3 - 38 to 60 inches: very fine sandy loam

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches Drainage class: Somewhat poorly drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately

low (0.00 to 0.06 in/hr)

Depth to water table: About 30 to 48 inches

Frequency of flooding: Rare Frequency of ponding: None

Calcium carbonate, maximum content: 25 percent

Maximum salinity: Strongly saline (16.0 to 32.0 mmhos/cm)

Sodium adsorption ratio, maximum: 80.0

Available water supply, 0 to 60 inches: Moderate (about 6.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7w

Hydrologic Soil Group: D

Ecological site: R028AY001UT - Alkali Bottom (Alkali Sacaton)

Hydric soil rating: No

KaA—Kidman fine sandy loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: j53y Elevation: 4,200 to 5,100 feet

Mean annual precipitation: 14 to 18 inches
Mean annual air temperature: 48 to 52 degrees F

Frost-free period: 160 to 180 days

Farmland classification: Prime farmland if irrigated

Map Unit Composition

Kidman and similar soils: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kidman

Setting

Landform: Lake plains

Landform position (three-dimensional): Rise, talf

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Lacustrine deposits

Typical profile

H1 - 0 to 11 inches: fine sandy loam
H2 - 11 to 17 inches: fine sandy loam
H3 - 17 to 27 inches: fine sandy loam
H4 - 27 to 37 inches: fine sandy loam
H5 - 37 to 49 inches: very fine sandy loam
H6 - 49 to 60 inches: very fine sandy loam

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00

in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm) Available water supply, 0 to 60 inches: Moderate (about 7.5 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 3c

Hydrologic Soil Group: A

Ecological site: R028AY310UT - Upland Loam (Bonneville Big Sagebrush) North

Other vegetative classification: Upland Loam (Mountain Big Sagebrush)

(028AY310UT)

Hydric soil rating: No

KaE2—Kidman fine sandy loam, 10 to 20 percent slopes, eroded

Map Unit Setting

National map unit symbol: j542 Elevation: 4,200 to 4,300 feet

Mean annual precipitation: 14 to 18 inches Mean annual air temperature: 48 to 52 degrees F

Frost-free period: 160 to 180 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Kidman and similar soils: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kidman

Setting

Landform: Lake terraces

Landform position (three-dimensional): Riser

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Lacustrine deposits

Typical profile

H1 - 0 to 11 inches: fine sandy loam
H2 - 11 to 17 inches: fine sandy loam
H3 - 17 to 27 inches: fine sandy loam
H4 - 27 to 37 inches: fine sandy loam
H5 - 37 to 49 inches: very fine sandy loam
H6 - 49 to 60 inches: very fine sandy loam

Properties and qualities

Slope: 10 to 20 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00

in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm) Available water supply, 0 to 60 inches: Moderate (about 7.5 inches)

Interpretive groups

Land capability classification (irrigated): 4e Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: A

Ecological site: R028AY310UT - Upland Loam (Bonneville Big Sagebrush) North

Other vegetative classification: Upland Loam (Mountain Big Sagebrush)

(028AY310UT) Hydric soil rating: No

PaD—Parleys loam, 6 to 10 percent slopes

Map Unit Setting

National map unit symbol: j55c Elevation: 4,300 to 5,050 feet

Mean annual precipitation: 14 to 18 inches
Mean annual air temperature: 48 to 52 degrees F

Frost-free period: 160 to 180 days

Farmland classification: Not prime farmland

Map Unit Composition

Parleys and similar soils: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Parleys

Setting

Landform: Escarpments, lake terraces
Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Lacustrine deposits

Typical profile

Ap - 0 to 6 inches: loam
A12 - 6 to 15 inches: loam
B2t - 15 to 26 inches: clay loam
B3ca - 26 to 33 inches: silty clay loam
C1ca - 33 to 48 inches: silt loam

C2 - 48 to 60 inches: stratified fine sand to silty clay loam

Properties and qualities

Slope: 6 to 10 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20

to 0.60 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 40 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): 2e Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C

Ecological site: R028AY310UT - Upland Loam (Bonneville Big Sagebrush) North

Other vegetative classification: Upland Loam (Mountain Big Sagebrush)

(028AY310UT) Hydric soil rating: No

So—Syracuse loamy fine sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: j56d Elevation: 4,200 to 4,600 feet

Mean annual precipitation: 14 to 18 inches
Mean annual air temperature: 48 to 52 degrees F

Frost-free period: 160 to 180 days

Farmland classification: Not prime farmland

Map Unit Composition

Syracuse and similar soils: 95 percent

Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Syracuse

Setting

Landform: Lake terraces

Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Alluvium and/or lacustrine deposits

Typical profile

A1 - 0 to 11 inches: loamy fine sand AC - 11 to 21 inches: sandy loam C1ca - 21 to 30 inches: sandy loam C2ca - 30 to 60 inches: sandy loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches Drainage class: Somewhat poorly drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20

to 0.60 in/hr)

Depth to water table: About 36 to 48 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)

Sodium adsorption ratio, maximum: 30.0

Available water supply, 0 to 60 inches: Low (about 5.9 inches)

Interpretive groups

Land capability classification (irrigated): 3w Land capability classification (nonirrigated): 7w

Hydrologic Soil Group: C

Ecological site: R028AY012UT - Semiwet Fresh Meadow

Hydric soil rating: No

Minor Components

Alkaline soils

Percent of map unit: 5 percent

Landform: Depressions

Landform position (three-dimensional): Dip

Down-slope shape: Concave Across-slope shape: Concave

Hydric soil rating: Yes

Sy—Syracuse loamy fine sand, moderately saline, sodic, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: j56f Elevation: 4,200 to 4,600 feet

Mean annual precipitation: 14 to 18 inches Mean annual air temperature: 48 to 52 degrees F

Frost-free period: 160 to 180 days

Farmland classification: Not prime farmland

Map Unit Composition

Syracuse and similar soils: 95 percent

Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Syracuse

Setting

Landform: Lake terraces

Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Alluvium and/or lacustrine deposits

Typical profile

A1 - 0 to 11 inches: loamy fine sand Ac - 11 to 21 inches: sandy loam C1ca - 21 to 30 inches: sandy loam C2ca - 30 to 60 inches: sandy loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches Drainage class: Somewhat poorly drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20

to 0.60 in/hr)

Depth to water table: About 24 to 36 inches

Frequency of flooding: Rare Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Maximum salinity: Moderately saline to strongly saline (8.0 to 16.0 mmhos/cm)

Sodium adsorption ratio, maximum: 30.0

Available water supply, 0 to 60 inches: Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): 3w Land capability classification (nonirrigated): 7w

Hydrologic Soil Group: C

Ecological site: R028AY001UT - Alkali Bottom (Alkali Sacaton)

Hydric soil rating: No

Minor Components

Alkaline soils, fine sandy loam

Percent of map unit: 5 percent

Landform: Depressions

Landform position (three-dimensional): Dip

Down-slope shape: Concave Across-slope shape: Concave

Hydric soil rating: Yes

WaA—Warm Springs fine sandy loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: j56w Elevation: 4,200 to 4,400 feet

Mean annual precipitation: 14 to 18 inches Mean annual air temperature: 48 to 52 degrees F

Frost-free period: 160 to 180 days

Farmland classification: Prime farmland if irrigated and drained

Map Unit Composition

Warm springs and similar soils: 95 percent

Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Warm Springs

Setting

Landform: Lake terraces

Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Lacustrine deposits

Typical profile

H1 - 0 to 8 inches: fine sandy loam H2 - 8 to 15 inches: fine sandy loam H3 - 15 to 24 inches: fine sandy loam H4 - 24 to 37 inches: fine sandy loam H5 - 37 to 60 inches: loamy fine sand

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches Drainage class: Somewhat poorly drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 36 to 48 inches

Frequency of flooding: Rare Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Maximum salinity: Very slightly saline to strongly saline (2.0 to 16.0 mmhos/cm)

Sodium adsorption ratio, maximum: 30.0

Available water supply, 0 to 60 inches: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): 2w Land capability classification (nonirrigated): 7w

Hydrologic Soil Group: C

Ecological site: R028AY001UT - Alkali Bottom (Alkali Sacaton)

Hydric soil rating: No

Minor Components

Warm springs, shallow water table, uncorrelated

Percent of map unit: 5 percent Landform: Lake terraces

Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Linear

Ecological site: R028AY024UT - Wet Saline Meadow (Saltgrass)

Hydric soil rating: Yes

WaB—Warm Springs fine sandy loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: j56x Elevation: 4,200 to 4,400 feet

Mean annual precipitation: 14 to 18 inches Mean annual air temperature: 48 to 52 degrees F

Frost-free period: 160 to 180 days

Farmland classification: Prime farmland if irrigated and drained

Map Unit Composition

Warm springs and similar soils: 95 percent

Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Warm Springs

Setting

Landform: Lake terraces

Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Lacustrine deposits

Typical profile

H1 - 0 to 8 inches: fine sandy loam H2 - 8 to 15 inches: fine sandy loam H3 - 15 to 24 inches: fine sandy loam H4 - 24 to 37 inches: fine sandy loam H5 - 37 to 60 inches: loamy fine sand

Properties and qualities

Slope: 1 to 3 percent

Depth to restrictive feature: More than 80 inches Drainage class: Somewhat poorly drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 36 to 48 inches

Frequency of flooding: Rare Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Maximum salinity: Very slightly saline to strongly saline (2.0 to 16.0 mmhos/cm)

Sodium adsorption ratio, maximum: 30.0

Available water supply, 0 to 60 inches: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): 2w Land capability classification (nonirrigated): 7w

Hydrologic Soil Group: C

Ecological site: R028AY001UT - Alkali Bottom (Alkali Sacaton)

Hydric soil rating: No

Minor Components

Warm springs, shallow water table, uncorrelated

Percent of map unit: 5 percent Landform: Lake terraces

Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Linear

Ecological site: R028AY024UT - Wet Saline Meadow (Saltgrass)

Hydric soil rating: Yes

WgA—Warm Springs fine sandy loam, saline, sodic, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: j56z Elevation: 4,200 to 4,400 feet

Mean annual precipitation: 14 to 18 inches Mean annual air temperature: 48 to 52 degrees F

Frost-free period: 160 to 180 days

Farmland classification: Not prime farmland

Map Unit Composition

Warm springs, strongly alkali, and similar soils: 95 percent

Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Warm Springs, Strongly Alkali

Settina

Landform: Lake terraces

Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Lacustrine deposits

Typical profile

H1 - 0 to 8 inches: fine sandy loam H2 - 8 to 15 inches: fine sandy loam H3 - 15 to 24 inches: fine sandy loam H4 - 24 to 37 inches: fine sandy loam H5 - 37 to 60 inches: loamy fine sand

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches Drainage class: Somewhat poorly drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 24 to 42 inches

Frequency of flooding: Occasional Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Maximum salinity: Strongly saline (16.0 to 32.0 mmhos/cm)

Sodium adsorption ratio, maximum: 60.0

Available water supply, 0 to 60 inches: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): 4w Land capability classification (nonirrigated): 7w

Hydrologic Soil Group: D

Ecological site: R028AY001UT - Alkali Bottom (Alkali Sacaton)

Hydric soil rating: No

Minor Components

Warm springs, shallow water table, uncorrelated

Percent of map unit: 5 percent Landform: Lake terraces

Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Linear

Ecological site: R028AY024UT - Wet Saline Meadow (Saltgrass)

Hydric soil rating: Yes

WIA—Warm Springs fine sandy loam, shallow water table, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: j571 Elevation: 4,200 to 4,400 feet

Mean annual precipitation: 14 to 18 inches Mean annual air temperature: 48 to 52 degrees F

Frost-free period: 160 to 180 days

Farmland classification: Not prime farmland

Map Unit Composition

Warm springs, shallow water table, and similar soils: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Warm Springs, Shallow Water Table

Setting

Landform: Lake plains

Landform position (three-dimensional): Dip, talf

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Lacustrine deposits

Typical profile

H1 - 0 to 8 inches: fine sandy loam H2 - 8 to 15 inches: fine sandy loam H3 - 15 to 24 inches: fine sandy loam H4 - 24 to 37 inches: fine sandy loam H5 - 37 to 60 inches: loamy fine sand

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches Drainage class: Somewhat poorly drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 0 to 24 inches

Frequency of flooding: Frequent Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Maximum salinity: Very slightly saline to strongly saline (2.0 to 16.0 mmhos/cm)

Sodium adsorption ratio, maximum: 30.0

Available water supply, 0 to 60 inches: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7w

Hydrologic Soil Group: C/D

Ecological site: R028AY024UT - Wet Saline Meadow (Saltgrass)

Hydric soil rating: Yes

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2 053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2 053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2 053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

APPENDIX G

Additional Photos



Photo Point 1



Photo Point 1



Photo Point 2 (316°-NW)



Photo Point 3 (60°-NE)



Photo Point 4 (317°-NW)



Photo Point 4 (125°-SE)



Photo Point 5 (90°-E)



Photo Point 5 (202°-S)



Photo Point 6 (284°-W)



Photo Point 7 (303°-NW)



Photo Point 8



Photo Point 9



Photo Point 10



Photo Point 11



Photo Point 12



Photo Point 13



Photo Point 14



Photo Point 14



Photo Point 15



Photo Point 16 (61°-NE)



Photo Point 17 (254°-W)



Photo Point 18 (143°-SE)



Photo Point 19 (146°-SE)



Photo Point 20 (342°-N)



Photo Point 21 (335°-NW)



Photo Point 21 (81°-E)



Photo Point 22 (137°-SE)



Photo Point 23 (325°-NW)



Photo Point 23 (158°-S)



Photo Point 24 (325°-NW)



Photo Point 24 (156°-SE)



Photo Point 25



Photo Point 26



Photo Point 27



Photo Point 27



Photo Point 28



Photo Point 29



Photo Point 30



Photo Point 30



Photo Point 31



Photo Point 32

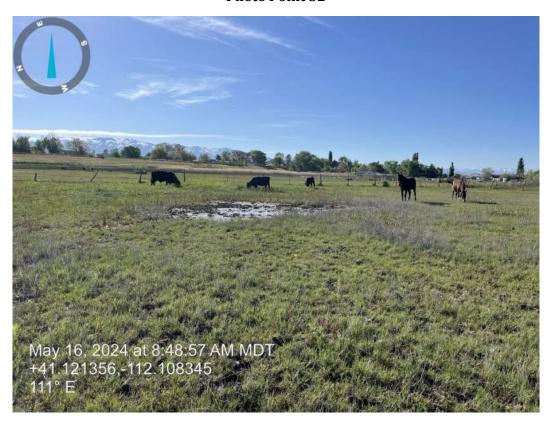


Photo Point 33



Photo Point 34

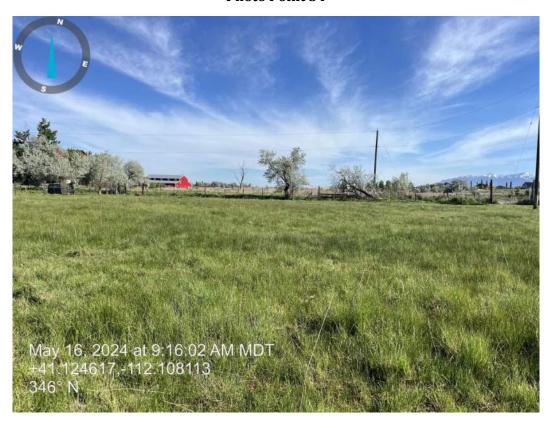


Photo Point 35



Photo Point 35

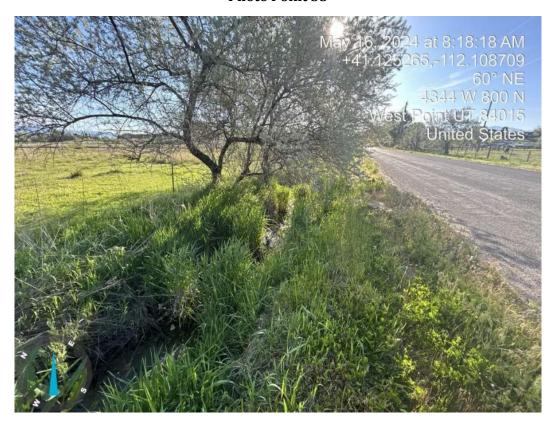


Photo Point 36



Photo Point 36



Photo Point 37



Photo Point 38



Photo Point 38



Photo Point 39



Photo Point 39



Photo Point 40



Photo Point 40

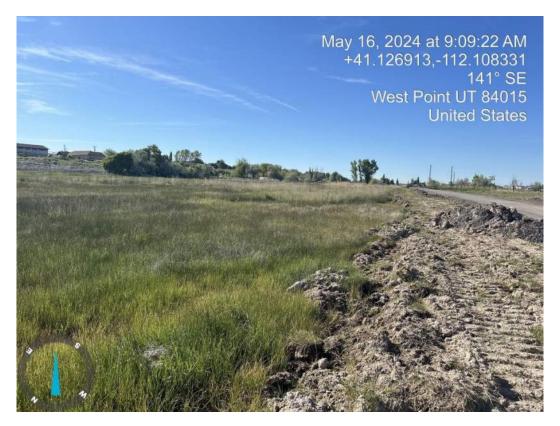


Photo Point 41



Photo Point 41



Photo Point 42



Photo Point 42

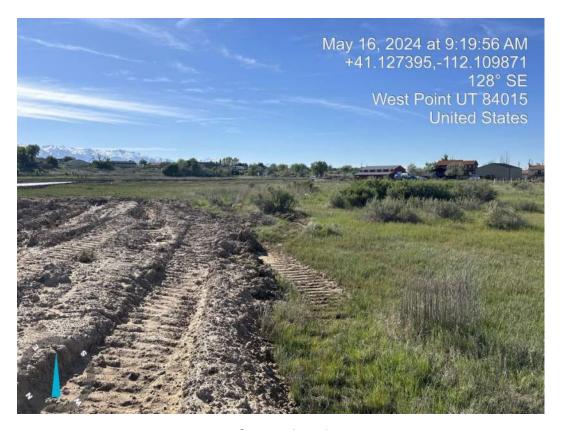


Photo Point 43



Photo Point 43



Photo Point 44



Photo Point 45



Photo Point 45



Photo Point 45



Photo Point 46



Photo Point 46



Photo Point 47

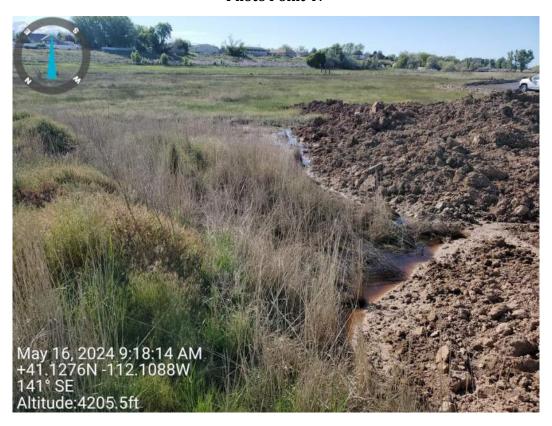


Photo Point 47



Photo Point 47



Photo Point 48 - Flooded Conditions in May



Photo Point 48 - Flooded Conditions in Mid-May



Photo Point 48 - Dry Conditions in Late-July



Photo Point 49



Photo Point 50



Photo Point 51



Photo Point 52



Photo Point 52



Photo Point 53



Photo Point 53



Photo Point 54



Photo Point 54



Photo Point 55



Photo Point 55



Photo Point 55

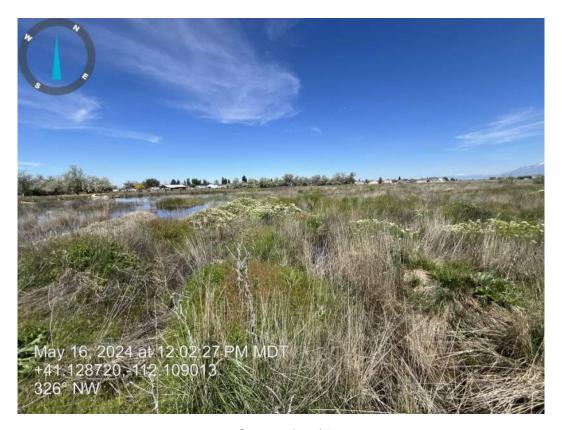


Photo Point 56



Photo Point 56



Photo Point 56



Photo Point 57



Photo Point 57



Photo Point 58



Photo Point 59

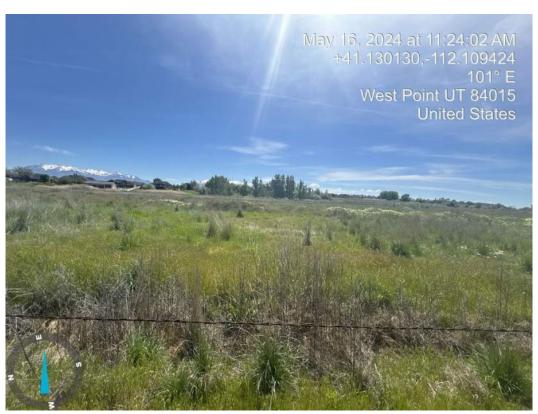


Photo Point 60



Photo Point 60



Photo Point 61



Photo Point 61

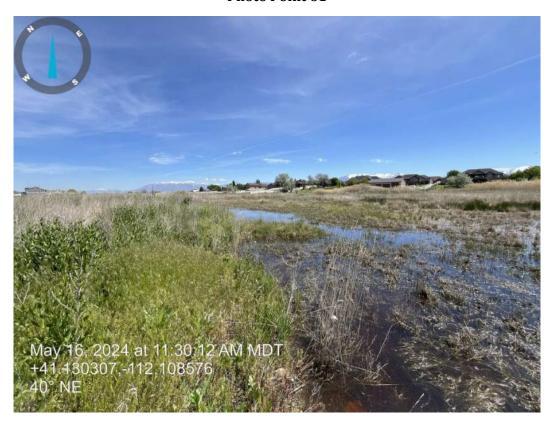


Photo Point 62



Photo Point 62



Photo Point 62



Photo Point 63

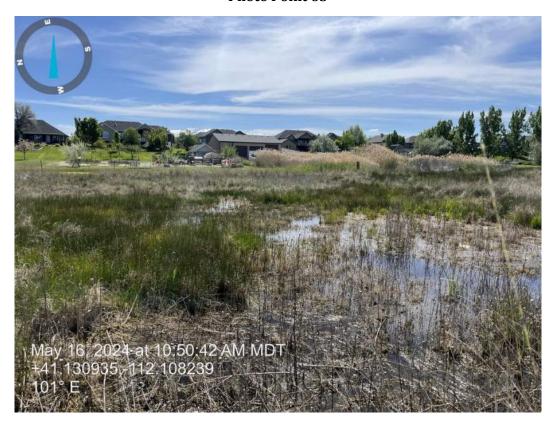


Photo Point 63



Photo Point 63



Photo Point 64



Photo Point 64



Photo Point 65



Photo Point 65



Photo Point 66



Photo Point 67



Photo Point 68



Photo Point 68



Photo Point 69



Photo Point 70



Photo Point 70



Photo Point 70



Photo Point 71



Photo Point 71



Photo Point 71



Photo Point 72

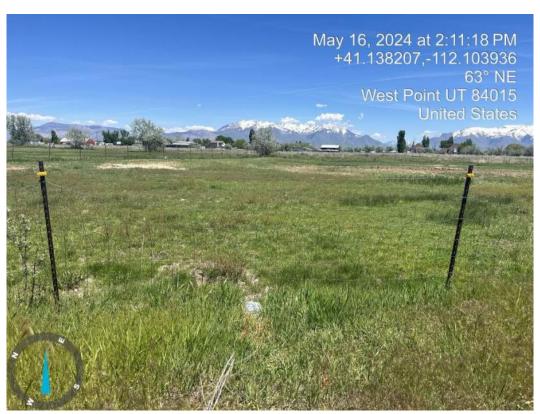


Photo Point 73



Photo Point 73



Photo Point 73



Photo Point 74

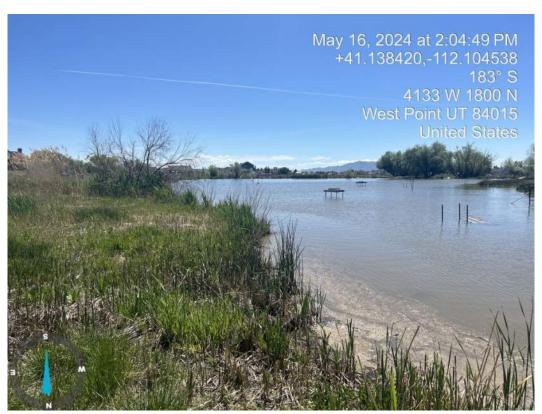


Photo Point 74



Photo Point 74



Photo Point 74



Photo Point 75



Photo Point 75

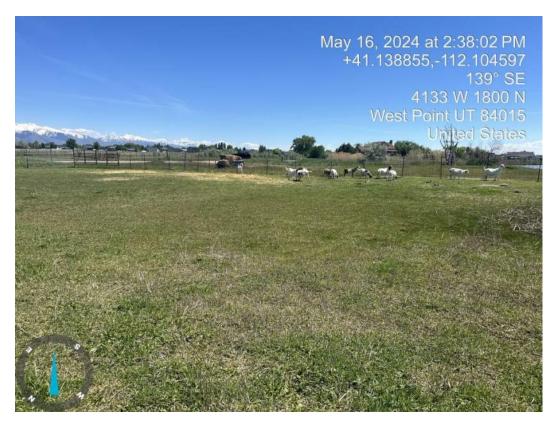


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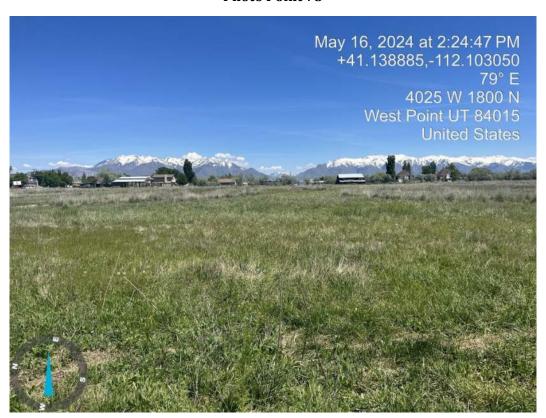


Photo Point 76



Photo Point 76



Photo Point 77

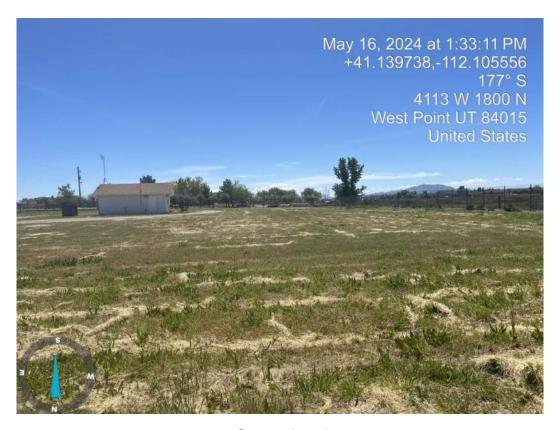


Photo Point 78



Photo Point 79



Photo Point 80



Photo Point 81



Photo Point 81



Photo Point 81



Photo Point 82



Photo Point 82



Photo Point 83

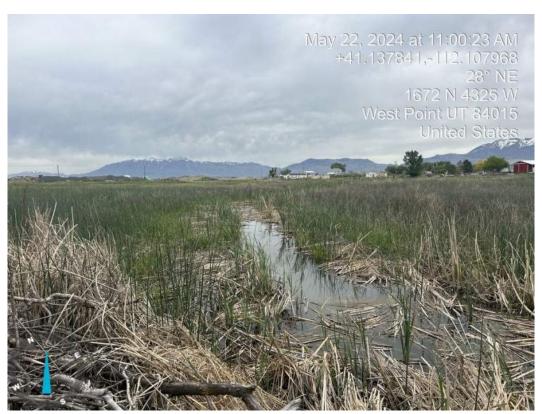


Photo Point 83



Photo Point 83

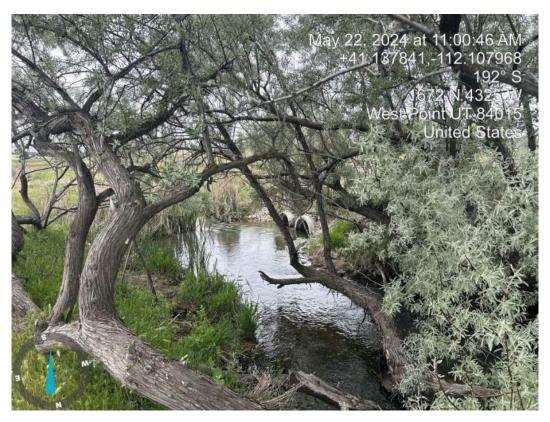


Photo Point 83

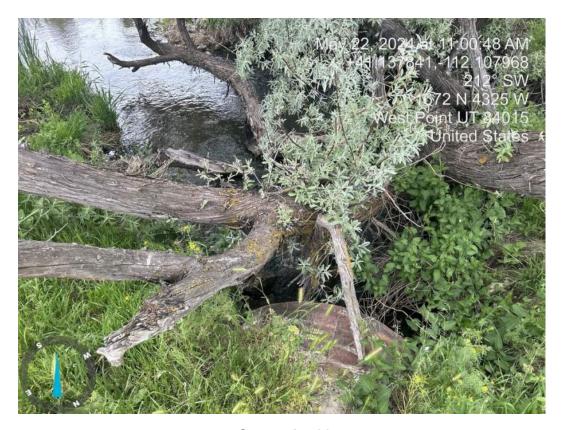


Photo Point 83



Photo Point 84

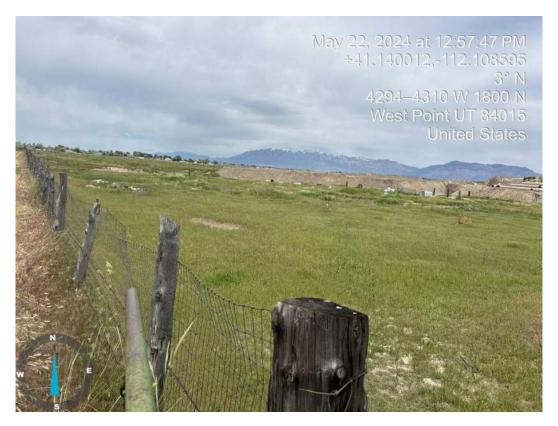


Photo Point 85

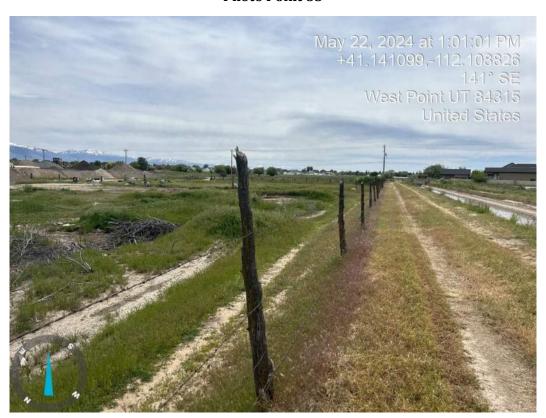


Photo Point 86



Photo Point 86



Photo Point 87



Photo Point 88



Photo Point 89



Photo Point 89



Photo Point 90



Photo Point 90



Photo Point 90



Photo Point 90



Photo Point 91



Photo Point 91

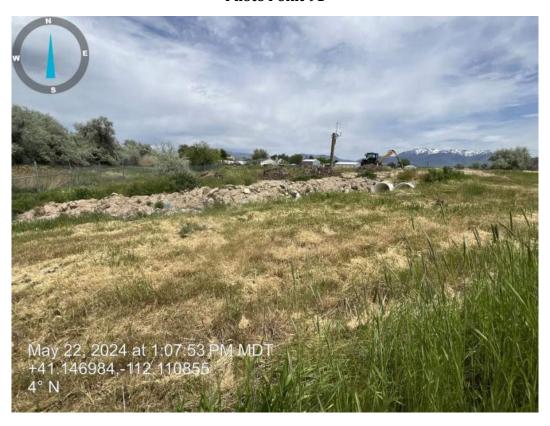


Photo Point 92



Photo Point 92



Photo Point 92



Photo Point 93



Photo Point 94



Photo Point 95



Photo Point 96



Photo Point 97



Photo Point 97



Photo Point 98



Photo Point 98



Photo Point 99



Photo Point 99



Photo Point 100



Photo Point 100



Photo Point 101



Photo Point 101



Photo Point 102



Photo Point 103

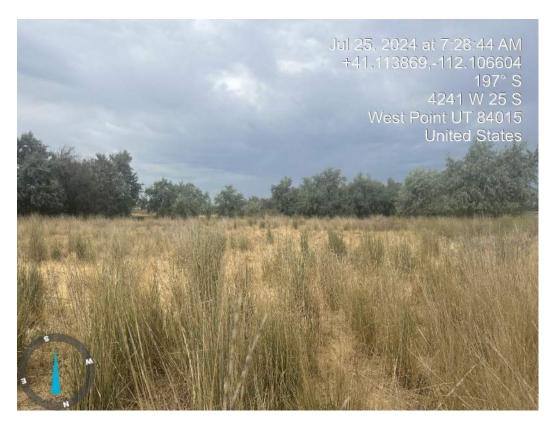


Photo Point 103



Photo Point 104



Photo Point 104



Photo Point 105



Photo Point 105



Photo Point 106



Photo Point 107



Photo Point 108



Photo Point 109



Photo Point 110



Photo Point 111



Photo Point 112



Photo Point 113



Photo Point 114



Photo Point 114



Photo Point 114



Photo Point 115



Photo Point 116

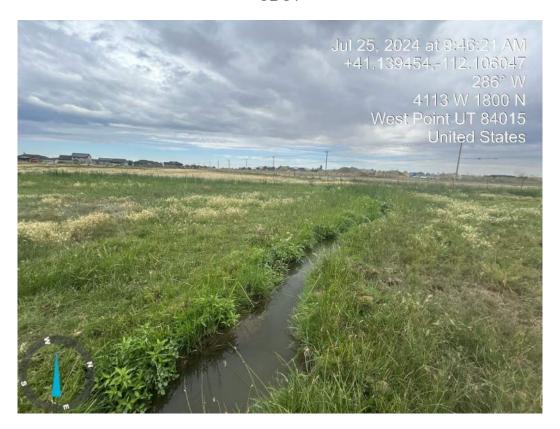


Photo Point 117



Photo Point 117



Photo Point 118

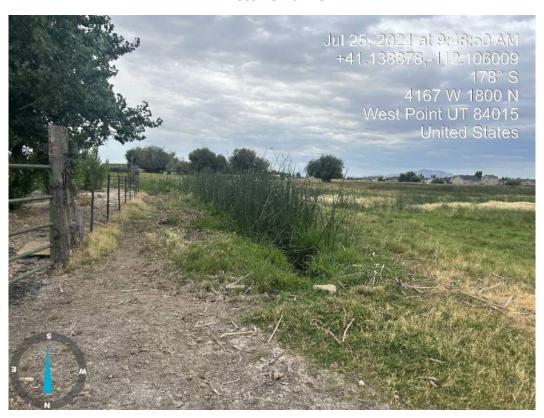


Photo Point 118



Photo Point 119



Photo Point 119



Photo Point 120



Photo Point 121



Photo Point 122



Photo Point 122



Photo Point 122



Photo Point 122



Photo Point 123



Photo Point 123



Photo Point 124



Photo Point 124

WDC SR-177, SR-193 to 1800 North UDOT



Photo Point 125

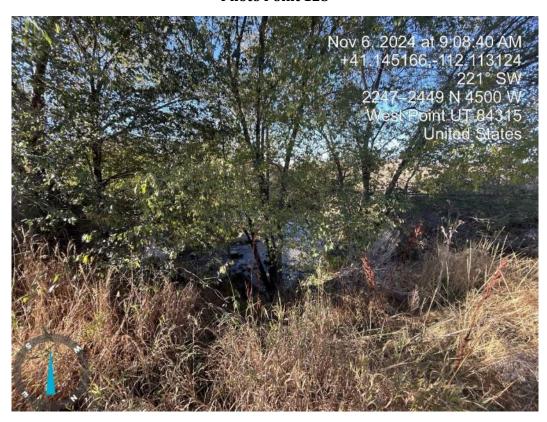


Photo Point 125

WDC SR-177, SR-193 to 1800 North UDOT



Photo Point 125

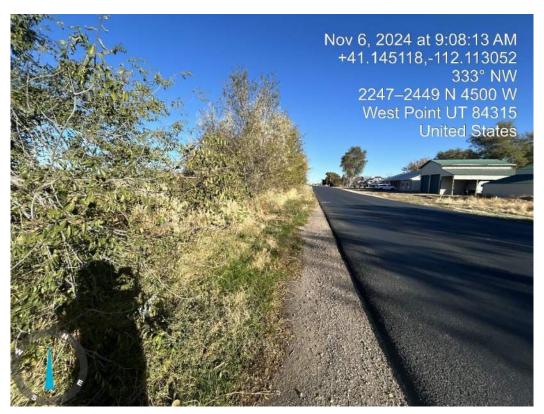


Photo Point 125

WDC SR-177, SR-193 to 1800 North UDOT



Photo Point 126



Photo Point 127 - November 22, 2024 Facing Northwest

WDC SR-177, SR-193 to 1800 NorthUDOT



Photo Point 128 - November 22, 2024 Facing Northwest



Photo Point 128 - November 22, 2024 Facing West

APPENDIX H

Ordinary High Water Mark Data Forms

INTERIM DRAFT RAPID ORDINARY HIGH WATER MARK (OHWM) FIELD IDENTIFICATION DATA SHEET

The proponent agency is Headquarters USACE CECW-CO-R.

Form Approved OMB No. 0710-0025
Expires: 01-31-2025

AGENCY DISCLOSURE NOTICE

| number. | | | | |
|---|---|---|--|--|
| Project ID #: UDDT PIN: 20927; SR-177, SR-193 to 1800 North; WDC Site Name: D1 Date and Time: May 14, 2024 @ 2:15pm | | | Date and Time: May 14, 2024 @ 2:15pm | |
| Location (lat/long): 41.110441, -112.100607 | | Investigator(s): Elen | nvestigator(s): Elena Capson | |
| Step 1 Site overview from remote and online Check boxes for online resources u | used to evaluate site: | Were there a | nd use and flow conditions from online resources. ny recent extreme events (floods or drought)? | |
| gage data LiDAR climatic data satellite imagery aerial photos topographic maps | geologic maps land use maps Other: | lands. The U | as been used to water the surrounding agricultural ISACE Antecedent Precipitation tool shows that ere wetter than normal at the time of delineation and od events had occurred recently. | |
| channel form, such as bridges, riprap | lensity, and distribution. Make , landslides, rockfalls etc. | note of natural or mar | onal and erosional features, and changes in n-made disturbances that would affect flow and as excavated and is not a natural flow channel. | |
| | fore some indicators that are ach indicator, select the appro | used to determine loca opriate location of the i | ation may be just below and above the OHWM. From ndicator by selecting either just below `b', at `x', or ervations, and to attach a photo log. | |
| Break in slope: χ on the bank: | Channel bar: | ns) on bar: | erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.) | |
| | unvegetated: | , | Secondary channels: | |
| undercut bank: | vegetation tra | nsition | Sediment indicators | |
| valley bottom: | (go to veg. ind | | Soil development: | |
| Other: | (go to sed. including upper limit of | dicators) | Changes in character of soil: | |
| Shelving: | on bar: | • | Mudcracks: | |
| shelf at top of bank: natural levee: | Instream bedform bedload transport | | Changes in particle-sized distribution: | |
| | (e.g., imbrica gravel sheets, | · | transition from to | |
| man-made berms or levees: other berms: | bedforms (e.g | ı., pools, | upper limit of sand-sized particles silt deposits: | |
| Vegetation Indicators | | | | |
| Change in vegetation type and/or density: | forbs to: | | Exposed roots below intact soil layer: | |
| Check the appropriate boxes and select the general vegetation change (e.g., | t graminoids to | 0: | Ancillary indicators | |
| graminoids to woody shrubs). Describe | | | Wracking/presence of organic litter: | |
| the vegetation transition looking from | m shrubs to: | | Presence of large wood: | |
| the middle of the channel, up the banks, and into the floodplain. | trees to: | | Leaf litter disturbed or | |
| | coniferous | | washed away: | |
| vegetation absent to: graminoids | └── trees to: Vegetation matte | ed down | Water staining: | |
| moss to: | and/or bent: | - | Weathered clasts or bedrock: | |
| Other observed indicators? Describe: | | | | |

| Project ID #: UD | OT PIN: 20927; SR-177, |
|--------------------|---|
| Step 4 Is addition | nal information needed to support this determination? Yes Vo No If yes, describe and attach information to datasheet: |
| | |
| | |
| | |
| Step 5 Describe | rationale for location of OHWM |
| | ndicated by the clear change in absent vegetation to thick grasses. The banks are |
| steep. | |
| | |
| | |
| | |
| Additional obse | rvations or notes |
| | |
| | |
| | |
| | |
| | |
| Attach a photo lo | g of the site. Use the table below, or attach separately. |
| | og attached? Yes No If no, explain why not: |
| | ns and include descriptions in the table below. |
| Number photog | graphs in the order that they are taken. Attach photographs and include annotations of features. |
| Photo Number | Photograph description |
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INTERIM DRAFT RAPID ORDINARY HIGH WATER MARK (OHWM) FIELD IDENTIFICATION DATA SHEET

The proponent agency is Headquarters USACE CECW-CO-R.

Form Approved OMB No. 0710-0025
Expires: 01-31-2025

AGENCY DISCLOSURE NOTICE

| number. | | | |
|---|---|--|---|
| Project ID #: UDOT PIN: 20927; SR-177, SR-193 to 1800 North; WDC Phase II | Site Name: D2 | | Date and Time: May 14, 2024 @ 1:45pm |
| Location (lat/long): 41.111089, -112.101418 | | Investigator(s): Elena (| Capson |
| Step 1 Site overview from remote and online Check boxes for online resources u | | | use and flow conditions from online resources. recent extreme events (floods or drought)? |
| gage data climatic data climatic data climatic data climatic data climatic magery climatic data climatic magery climatic data climatic magery | geologic maps land use maps Other: | 1997 and 2003 that conditions | y shows that the canal was constructed between . The USACE Antecedent Precipitation tool shows were wetter than normal at the time of delineation ood events had occurred recently. |
| channel form, such as bridges, riprap Flow appears to be moderate. Channel w | density, and distribution. Make b, landslides, rockfalls etc. idens where clogged by phr. | note of natural or man-mag and other vegetatio | al and erosional features, and changes in nade disturbances that would affect flow and n. Some depositional vegetation is present excavated and is lined by two-track roads. |
| Step 3 Check the boxes next to the indicate OHWM is at a transition point, there | tors used to identify the local efore some indicators that are used indicator, select the appro- | ntion of the OHWM. used to determine location priate location of the indi | on may be just below and above the OHWM. From icator by selecting either just below `b', at `x', or |
| Break in slope: X on the bank: undercut bank: valley bottom: Other: Shelving: shelf at top of bank: natural levee: man-made berms or levees: other | (e.g., imbricat gravel sheets, bedforms (e.g | nsition Vicators) X sition dicators) deposition s and other evidence: dload indicators ted clasts, etc.) L, pools, | erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.) Secondary channels: Sediment indicators Soil development: Changes in character of soil: Mudcracks: Changes in particle-sized distribution: transition from to upper limit of sand-sized particles |
| berms: Vegetation Indicators | riffles, steps, e | etc.): | silt deposits: |
| Change in vegetation type and/or density: X Check the appropriate boxes and select the general vegetation change (e.g., graminoids to woody shrubs). Describe the vegetation transition looking from the middle of the channel, up the banks, and into the floodplain. vegetation absent to: graminoids moss to: | e graminoids to | | Exposed roots below intact soil layer: Ancillary indicators Wracking/presence of organic litter: Presence of large wood: Leaf litter disturbed or washed away: Water staining: Weathered clasts or bedrock: |
| Other observed indicators? Describe: Vegetation not entirely absenting material. | t just below OHWM. | It is predominant | ly detritus and decadent plant |

| Project ID #: UD | OT PIN: 20927; SR-177, |
|--------------------|---|
| Step 4 Is addition | nal information needed to support this determination? Yes Vo No If yes, describe and attach information to datasheet: |
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| Step 5 Describe | rationale for location of OHWM |
| Bent and c | lead vegetation transitions to grasses at the break in slope. Water pools |
| | m before leaving the site. Where vegetation is absent, OHWM is indicated by |
| exposed re | ocks along a scour line. |
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| Additional obse | rvations or notes |
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| Attach a photo lo | g of the site. Use the table below, or attach separately. |
| Photo I | og attached? Yes No If no, explain why not: See D2 in Photo Points 13, 100, and 101 |
| _ | ns and include descriptions in the table below. |
| | graphs in the order that they are taken. Attach photographs and include annotations of features. |
| Photo Number | Photograph description |
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INTERIM DRAFT RAPID ORDINARY HIGH WATER MARK (OHWM) FIELD IDENTIFICATION DATA SHEET

The proponent agency is Headquarters USACE CECW-CO-R.

Form Approved -OMB No. 0710-0025

Expires: 01-31-2025

AGENCY DISCLOSURE NOTICE

The public reporting burden for this collection of information, 0710-OHWM, is estimated to average 30 **minutes** per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

| Project ID #: UDOT PIN: 20927; SR-177, SR-193 to 1800 North; WDC Site | Name: OW1 | | Date and Time: May 16, 2024 @ 10:30pm & July 25, 2024 @ 8:20am | |
|---|--------------------------------|-------------------|--|--|
| Location (lat/long): 41.129074, -112.109433 | | Investigator(s): | Elena Capson | |
| Step 1 Site overview from remote and online reso | | | be land use and flow conditions from online resources. | |
| Check boxes for online resources used | | | nere any recent extreme events (floods or drought)? | |
| gage data LiDAR | geologic maps | This po | ond is surrounded by agricultural lands. Fill material has | |
| | = | | placed in this section of land since 2009. There is no | |
| climatic data satellite imagery | land use maps | | ce of ponding to this extent in any of the Google Earth | |
| ✓ aerial photos ✓ topographic maps | Other: | | y for the area. The USACE Antecedent Precipitation tool that conditions were wetter than normal at the time of | |
| Step 2 Site conditions during field assessment. Fi | rst look for changes in cha | | | |
| vegetation and sediment type, size, densi | tv. and distribution. Make r | note of natural c | or man-made disturbances that would affect flow and | |
| channel form, such as bridges, riprap, lan | | | | |
| Water follows the irregular shape of current fill mate | erial. Water exits the pond to | the north and a | a culvert appears to drain storm water into the pond from the | |
| west. Excessive amounts of tannins from inundated | • | | | |
| Step 3 Check the boxes next to the indicators | | | <u> </u> | |
| | | | ne location may be just below and above the OHWM. From | |
| the drop-down menu next to each i | | | f the indicator by selecting either just below `b', at `x', or | |
| just above `a' the OHWM. | | | | |
| Go to page 2 to describe overall rationale | for location of OHWM, wri | te any additiona | al observations, and to attach a photo log. | |
| Geomorphic indicators | | | | |
| Busels in alanes | Channel bar: | | erosional bedload indicators | |
| Break in slope: | | | (e.g., obstacle marks, scour, | |
| on the bank: | shelving (berm | s) on bar: | smoothing, etc.) | |
| | | | Secondary channels: | |
| undercut bank: | unvegetated: vegetation tran | sition | Sediment indicators | |
| valley bottom: | (go to veg. indi | | Sail dayslanments | |
| Cub a vi | sediment trans | | Soil development: | |
| Other: | (go to sed. indi | | Changes in character of soil: | |
| Shelving: | upper limit of d | eposition | | |
| | on bar: | and other | Mudcracks: | |
| shelf at top of bank: | bedload transport | | Changes in particle-sized | |
| natural levee: | deposition bed | | distribution: | |
| Traturar revee. | (e.g., imbricate | ed clasts, | transition from to | |
| man-made berms or levees: | gravel sheets, | , | upper limit of sand-sized particles | |
| other | bedforms (e.g., | | H | |
| berms: | riffles, steps, e | (C.). | silt deposits: | |
| Vegetation Indicators | | | | |
| Change in vegetation type | to the te | | Exposed roots below | |
| and/or density: | forbs to: | | intact soil layer: | |
| Check the appropriate boxes and select | graminoids to. | • | Ancillary indicators | |
| the general vegetation change (e.g., | woody | | Wracking/presence of | |
| graminoids to woody shrubs). Describe | shrubs to: | | organic litter: | |
| the vegetation transition looking from | deciduous | | Presence of large wood: | |
| the middle of the channel, up the | trees to: | | Leaf litter disturbed or | |
| banks, and into the floodplain. | coniferous | | washed away: | |
| vegetation vegetation | trees to: | | Water staining: | |
| absent to: | Vegetation matted | d down | water stanning. | |
| moss to: | and/or bent: | | Weathered clasts or bedrock: | |
| Other observed indicators? Describe: | | | | |
| Other observed indicators? Describe: | | | | |
| There is no break or transition in vegetat | tion. Upland vegetation | n present ab | ove the water line is consistent with vegetation | |

ENG FORM 6250, DEC 2022

below the water line. Brown color in water results from tannins leaching out of inundated upland vegetation.

| Project ID #: UD | OT PIN: 20927; SR-177, |
|--------------------|---|
| Step 4 Is addition | nal information needed to support this determination? Yes Vo If yes, describe and attach information to datasheet: |
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| Step 5 Describe | rationale for location of OHWM |
| No OHWM | l indicators are present, and ponding is not present on aerial imagery available in |
| _ | rth. This suggests that this area is not generally inundated and has not had time to |
| develop O | HWM indicators. |
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| Additional obse | ervations or notes |
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| | g of the site. Use the table below, or attach separately. See OW1 in photos at Photo Points 51, 52, 53, 58, 59, 61, and 107 |
| | log attached? Yes No If no, explain why not: |
| _ | ns and include descriptions in the table below. graphs in the order that they are taken. Attach photographs and include annotations of features. |
| Photo | |
| Number | Photograph description |
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INTERIM DRAFT RAPID ORDINARY HIGH WATER MARK (OHWM) FIELD **IDENTIFICATION DATA SHEET**

The proponent agency is Headquarters USACE CECW-CO-R.

Form Approved -OMB No. 0710-0025

Expires: 01-31-2025

AGENCY DISCLOSURE NOTICE

| number. | | | |
|--|--|--|---|
| Project ID #: UDOT PIN: 20927; SR-177, SR-193 to 1800 North; WDC Phase II | Site Name: OW2 | | Date and Time: May 16, 2024 @ 11:30pm |
| Location (lat/long): 41.130983, -112.107666 | | Investigator(s): Elena | Capson |
| Step 1 Site overview from remote and online Check boxes for online resources u | | | use and flow conditions from online resources. / recent extreme events (floods or drought)? |
| gage data LiDAR climatic data aerial photos topographic maps | geologic maps land use maps Other: | lands to the we shows that co | ocated in a residential backyard with agricultural est. The USACE Antecedent Precipitation tool nditions were wetter than normal at the time of ut no major flood events had occurred recently. |
| channel form, such as bridges, riprap Due to the regular shape of the pond, it appredominantly upland turf grasses likely r Step 3 Check the boxes next to the indicat OHWM is at a transition point, there | lensity, and distribution. Make , landslides, rockfalls etc. ppears to be excavated. Sor managed by the homeowner ors used to identify the local fore some indicators that are to | me rushes exist below r. ation of the OHWM. used to determine locati | al and erosional features, and changes in made disturbances that would affect flow and the OHWM, but vegetation above the OHWM is on may be just below and above the OHWM. From dicator by selecting either just below `b', at `x', or |
| Go to page 2 to describe overall ratio | nale for location of OHWM, wi | rite any additional obser | vations, and to attach a photo log. |
| Break in slope: on the bank: undercut bank: valley bottom: Other: Shelving: shelf at top of bank: natural levee: man-made berms or levees: other berms: Vegetation Indicators | shelving (bern unvegetated: vegetation trail (go to veg. inc. sediment trans (go to sed. inc. upper limit of on bar: Instream bedform bedload transport deposition bed (e.g., imbricat gravel sheets, bedforms (e.g. riffles, steps, e.g. | nsition dicators) X sition dicators) deposition s and other evidence: dload indicators ted clasts, etc.) L, pools, | erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.) Secondary channels: Sediment indicators Soil development: Changes in character of soil: Mudcracks: Changes in particle-sized distribution: transition from to upper limit of sand-sized particles silt deposits: |
| Change in vegetation type | | | Exposed roots below |
| and/or density: Check the appropriate boxes and select the general vegetation change (e.g., graminoids to woody shrubs). Describe the vegetation transition looking from the middle of the channel, up the banks, and into the floodplain. vegetation absent to: graminoids moss to: | woody | | intact soil layer: Ancillary indicators Wracking/presence of organic litter: Presence of large wood: Leaf litter disturbed or washed away: Water staining: Weathered clasts or bedrock: |
| Other observed indicators? Describe: | | | |

| Project ID #: UD | OT PIN: 20927; SR-177, |
|--------------------|--|
| Step 4 Is addition | nal information needed to support this determination? Yes Vo If yes, describe and attach information to datasheet: |
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| Step 5 Describe | rationale for location of OHWM |
| OHWM is i | ndicated by the clear change in absent vegetation to upland grasses. |
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| Additional obse | rvations or notes |
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| Attach a photo lo | g of the site. Use the table below, or attach separately. |
| | log attached? Yes No If no, explain why not: |
| List photograph | ns and include descriptions in the table below. |
| Number photog | graphs in the order that they are taken. Attach photographs and include annotations of features. |
| Photo Number | Photograph description |
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INTERIM DRAFT RAPID ORDINARY HIGH WATER MARK (OHWM) FIELD IDENTIFICATION DATA SHEET

The proponent agency is Headquarters USACE CECW-CO-R.

Form Approved OMB No. 0710-0025
Expires: 01-31-2025

AGENCY DISCLOSURE NOTICE

| number. | | | |
|---|---|---|---|
| Project ID #: UDOT PIN: 20927; SR-177, SR-193 to 1800 North; WDC Phase II | Site Name: D4 | | Date and Time: May 22, 2024 @ 11:00pm |
| Location (lat/long): 41.137677, -112.107994 | | Investigator(s): Elena | a Capson |
| Step 1 Site overview from remote and online Check boxes for online resources u | | | d use and flow conditions from online resources. ny recent extreme events (floods or drought)? |
| gage data LiDAR climatic data satellite imagery aerial photos topographic maps Step 2 Site conditions during field assessment | nt. First look for changes in ch | This ponded surrounding; Precipitation the time of do recently. annel shape, depositio | ditch is part of an irrigation system used to water the agricultural lands. The USACE Antecedent tool shows that conditions were wetter than normal at elineation and no major flood events had occurred nal and erosional features, and changes in |
| channel form, such as bridges, riprap Water enters this ponded portion of irriga through a culvert to the west. This ditch w Step 3 Check the boxes next to the indicat OHWM is at a transition point, there | o, landslides, rockfalls etc. Ation ditch from culverts to be was excavated and is not a re tors used to identify the local efore some indicators that are eleach indicator, select the approximation. | poth the north and the natural flow channel. ation of the OHWM. used to determine loca opriate location of the in | e south. Water then flows to the middle and out tion may be just below and above the OHWM. From ndicator by selecting either just below `b', at `x', or ervations, and to attach a photo log. |
| Break in slope: X on the bank: undercut bank: valley bottom: Other: Shelving: shelf at top of bank: natural levee: man-made berms or levees: other berms: | shelving (bern unvegetated: vegetation trail (go to veg. inc sediment train (go to sed. inc upper limit of on bar: Instream bedform bedload transport deposition bed (e.g., imbrica gravel sheets, bedforms (e.g. riffles, steps, o | nsition dicators) X sition dicators) deposition s and other t evidence: dload indicators ted clasts, etc.) 1., pools, | erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.) Secondary channels: Sediment indicators Soil development: Changes in character of soil: Mudcracks: Changes in particle-sized distribution: transition from to upper limit of sand-sized particles silt deposits: |
| Vegetation Indicators | | | |
| Change in vegetation type and/or density: X Check the appropriate boxes and select the general vegetation change (e.g., graminoids to woody shrubs). Describe the vegetation transition looking from the middle of the channel, up the banks, and into the floodplain. vegetation absent to: graminoids moss to: | graminoids to | | Exposed roots below intact soil layer: Ancillary indicators Wracking/presence of organic litter: Presence of large wood: Leaf litter disturbed or washed away: Water staining: Weathered clasts or bedrock: |
| Other observed indicators? Describe: | | | |
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| Project ID #: UD | OT PIN: 20927; SR-177, |
|--------------------|---|
| Step 4 Is addition | nal information needed to support this determination? Yes Vo No If yes, describe and attach information to datasheet: |
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| Step 5 Describe | rationale for location of OHWM |
| OHWM is i | ndicated by the clear change in absent/sparse vegetation to thick upland grasses. |
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| Additional obse | rvations or notes |
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| | g of the site. Use the table below, or attach separately. See D4 in photos facing south at Photo Point 83. |
| | og attached? Yes No If no, explain why not: See 54 III process lacing south at 1 note 1 onlices. In and include descriptions in the table below. |
| _ | graphs in the order that they are taken. Attach photographs and include annotations of features. |
| Photo | Photograph description |
| Number | Thotograph description |
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INTERIM DRAFT RAPID ORDINARY HIGH WATER MARK (OHWM) FIELD IDENTIFICATION DATA SHEET

The proponent agency is Headquarters USACE CECW-CO-R.

Form Approved OMB No. 0710-0025

Expires: 01-31-2025

AGENCY DISCLOSURE NOTICE

| number. | | | |
|---|--|--|---|
| Project ID #: UDOT PIN: 20927; SR-177, SR-193 to 1800 North; WDC Phase II | Site Name: OW3 | | Date and Time: May 16, 2024 @ 4:30pm |
| Location (lat/long): 41.137306, -112.105634 | | Investigator(s): Elena | a Capson |
| Step 1 Site overview from remote and online Check boxes for online resources u | | | d use and flow conditions from online resources. by recent extreme events (floods or drought)? |
| gage data LiDAR climatic data satellite imagery aerial photos topographic maps Step 2 Site conditions during field assessmen | nt. First look for changes in ch | lands. The pound of USACE Anter wetter than no events had or annel shape, deposition | ocated near residences surrounded by agricultural and is used for regulating an irrigation system. The cedent Precipitation tool shows that conditions were bornal at the time of delineation, but no major flood courred recently. Inal and erosional features, and changes in made disturbances that would affect flow and |
| channel form, such as bridges, riprap This pond is very shallow and the levels a managed by the landowner. Step 3 Check the boxes next to the indicat OHWM is at a transition point, there | o, landslides, rockfalls etc. appear to be controlled. Veg tors used to identify the local efore some indicators that are each indicator, select the appro- | ation above the OH ation of the OHWM. used to determine local opriate location of the in | WM is predominantly upland turf grasses likely tion may be just below and above the OHWM. From dicator by selecting either just below `b', at `x', or |
| Break in slope: X on the bank: X undercut bank: valley bottom: Other: Shelving: shelf at top of bank: natural levee: man-made berms or levees: other berms: | shelving (bern unvegetated: vegetation tra (go to veg. inc go to sed. inc upper limit of on bar: Instream bedform bedload transport deposition be (e.g., imbrica gravel sheets bedforms (e.g. riffles, steps, | insition dicators) X sition dicators) deposition as and other t evidence: dload indicators ited clasts, , etc.) g., pools, | erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.) Secondary channels: Sediment indicators Soil development: Changes in character of soil: Mudcracks: Changes in particle-sized distribution: transition from to upper limit of sand-sized particles silt deposits: |
| Vegetation Indicators | | | |
| Change in vegetation type and/or density: X Check the appropriate boxes and select the general vegetation change (e.g., graminoids to woody shrubs). Describe the vegetation transition looking from the middle of the channel, up the banks, and into the floodplain. vegetation absent to: graminoids moss to: | grammoids to woody | | Exposed roots below intact soil layer: Ancillary indicators Wracking/presence of organic litter: Presence of large wood: Leaf litter disturbed or washed away: Water staining: Weathered clasts or bedrock: |
| Other observed indicators? Describe: | | | |

| Project ID #: UD | OT PIN: 20927; SR-177, |
|--------------------|---|
| Step 4 Is addition | nal information needed to support this determination? Yes Vo If yes, describe and attach information to datasheet: |
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| Step 5 Describe | rationale for location of OHWM |
| OHWM is i | ndicated by the clear change from absent vegetation to upland grasses. Little |
| | er staining suggests that the water level at the time of the delineation is the |
| OHWM. | |
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| Additional obse | rvations or notes |
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| | g of the site. Use the table below, or attach separately. og attached? Yes Von If no, explain why not: See OW3 in Photo Point 71. |
| | as and include descriptions in the table below. |
| | graphs in the order that they are taken. Attach photographs and include annotations of features. |
| Photo | Photograph description |
| Number | |
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INTERIM DRAFT RAPID ORDINARY HIGH WATER MARK (OHWM) FIELD IDENTIFICATION DATA SHEET

The proponent agency is Headquarters USACE CECW-CO-R.

Form Approved OMB No. 0710-0025

Expires: 01-31-2025

AGENCY DISCLOSURE NOTICE

| number. | | | |
|--|--|---|--|
| Project ID #: UDOT PIN: 20927; SR-177, SR-193 to 1800 North; WDC Phase II | Site Name: OW4 | | Date and Time: May 16, 2024 @ 4:00pm |
| Location (lat/long): 41.137557, -112.104833 | | Investigator(s): Elena | a Capson |
| Step 1 Site overview from remote and online Check boxes for online resources u | | | d use and flow conditions from online resources. by recent extreme events (floods or drought)? |
| channel form, such as bridges, ripraphensished the channel form, such as bridges, ripraphensished the channel form, such as bridges, ripraphensished the channel form, such as bridges, ripraphensished the channel form, such as bridges, ripraphensished the channel form, such as bridges, ripraphensished the channel form, such as bridges, ripraphensished the channel form, such as bridges, ripraphensished the channel form, such as bridges, ripraphensished the channel form, such as bridges, ripraphensished the channel form, such as bridges, ripraphensished the channel form. | nt. First look for changes in ch density, and distribution. Make o, landslides, rockfalls etc. native bird species. Artificial goo | lands. The positions we no maior floorannel shape, deposition note of natural or man- | made disturbances that would affect flow and the middle of the lake. Water enters and exits the pond |
| | tors used to identify the local efore some indicators that are each indicator, select the appro- | ation of the OHWM. used to determine local opriate location of the in | tion may be just below and above the OHWM. From dicator by selecting either just below `b', at `x', or |
| Break in slope: X on the bank: X undercut bank: valley bottom: Other: Shelving: shelf at top of bank: natural levee: man-made berms or levees: other berms: | shelving (berrium) unvegetated: vegetation trail (go to veg. inc. sediment tranl (go to sed. inc. upper limit of on bar: Instream bedform bedload transport deposition bedload transport (e.g., imbrication gravel sheets, bedforms (e.g., riffles, steps, control of the control of | nsition dicators) X sition dicators) deposition s and other t evidence: dload indicators ted clasts, , etc.) 1., pools, | erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.) Secondary channels: Sediment indicators Soil development: Changes in character of soil: Mudcracks: Changes in particle-sized distribution: transition from to upper limit of sand-sized particles silt deposits: |
| Vegetation Indicators | | | |
| Change in vegetation type and/or density: X Check the appropriate boxes and select the general vegetation change (e.g., graminoids to woody shrubs). Describe the vegetation transition looking from the middle of the channel, up the banks, and into the floodplain. vegetation absent to: graminoids moss to: | e woody | | Exposed roots below intact soil layer: Ancillary indicators Wracking/presence of organic litter: Presence of large wood: Leaf litter disturbed or washed away: Water staining: Weathered clasts or bedrock: |
| Other observed indicators? Describe: | | | |

| Project ID #: UD | OT PIN: 20927; SR-177, |
|--------------------|---|
| Step 4 Is addition | nal information needed to support this determination? Yes Vo No If yes, describe and attach information to datasheet: |
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| Step 5 Describe | rationale for location of OHWM |
| | ndicated by the clear change from absent vegetation to upland grasses. Little |
| | er staining suggests that the water level at the time of the delineation is the |
| OHWM. | |
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| Additional obse | rvations or notes |
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| | g of the site. Use the table below, or attach separately. og attached? Yes No If no, explain why not: See OW4 in Photo Points 70, 71, 72, and 74. |
| | ns and include descriptions in the table below. |
| | raphs in the order that they are taken. Attach photographs and include annotations of features. |
| Photo | Photograph description |
| Number | |
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INTERIM DRAFT RAPID ORDINARY HIGH WATER MARK (OHWM) FIELD IDENTIFICATION DATA SHEET

The proponent agency is Headquarters USACE CECW-CO-R.

Form Approved OMB No. 0710-0025

Expires: 01-31-2025

AGENCY DISCLOSURE NOTICE

| Project ID #: UDOT PIN: 20927; SR-177, SR-193 to 1800 North; WDC Phase II | Site Name: S1 | | Date and Time: May 22, 2024 @ 1:00pm |
|---|---|--|---|
| Location (lat/long): 41.146842, -112.111292 | | Investigator(s): Elena C | Capson |
| Step 1 Site overview from remote and online of Check boxes for online resources u | | | use and flow conditions from online resources. recent extreme events (floods or drought)? |
| channel form, such as bridges, riprap, | t. First look for changes in cha ensity, and distribution. Make i landslides, rockfalls etc. | This section of t surrounding agr Precipitation too the time of delin recently. annel shape, depositional note of natural or man-man | the Howard Slough has been used to water the icultural lands. The USACE Antecedent of shows that conditions were wetter than normal at leation and no major flood events had occurred and erosional features, and changes in ade disturbances that would affect flow and |
| and a canal. | water levels appear to be in | loderate. At this point, t | the slough flows into a culvert under a road |
| | fore some indicators that are u ach indicator, select the appro | used to determine location priate location of the indicate indica | n may be just below and above the OHWM. From cator by selecting either just below `b', at `x', or ations, and to attach a photo log. |
| Break in slope: on the bank: undercut bank: valley bottom: Other: Shelving: shelf at top of bank: natural levee: man-made berms or levees: other berms: Vegetation Indicators | shelving (berm unvegetated: vegetation trans (go to veg. ind. sediment trans (go to sed. ind. upper limit of of on bar: Instream bedforms bedload transport deposition bed (e.g., imbricate gravel sheets, bedforms (e.g., riffles, steps, e | nsition icators) X sition licators) deposition s and other evidence: fload indicators ed clasts, etc.) , pools, | erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.) Secondary channels: Sediment indicators Soil development: Changes in character of soil: Mudcracks: Changes in particle-sized distribution: transition from to upper limit of sand-sized particles silt deposits: |
| Change in vegetation type | | | Exposed roots below |
| and/or density: X Check the appropriate boxes and select the general vegetation change (e.g., graminoids to woody shrubs). Describe the vegetation transition looking from the middle of the channel, up the banks, and into the floodplain. vegetation absent to: graminoids moss to: | woody | | intact soil layer: Ancillary indicators Wracking/presence of organic litter: Presence of large wood: Leaf litter disturbed or washed away: Water staining: Weathered clasts or bedrock: |
| Other observed indicators? Describe: Vegetation transition is dom | inated by grasses, | , but forbs and t | trees are also present. |

| Project ID #: UD | OT PIN: 20927; SR-177, |
|--------------------|---|
| Step 4 Is addition | nal information needed to support this determination? Yes Vo No If yes, describe and attach information to datasheet: |
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| Step 5 Describe | rationale for location of OHWM |
| | ndicated by the clear change from absent vegetation to distinctly present |
| vegetation | n. Upstream banks are trampled by livestock, so no clear break in bank is visible. |
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| Additional obse | rvations or notes |
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| Attach a photo lo | g of the site. Use the table below, or attach separately. |
| Photo | og attached? Yes No If no, explain why not: See S1 in Photo Point 91. |
| _ | as and include descriptions in the table below. |
| | graphs in the order that they are taken. Attach photographs and include annotations of features. |
| Photo Number | Photograph description |
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INTERIM DRAFT RAPID ORDINARY HIGH WATER MARK (OHWM) FIELD IDENTIFICATION DATA SHEET

The proponent agency is Headquarters USACE CECW-CO-R.

Form Approved -OMB No. 0710-0025

Expires: 01-31-2025

AGENCY DISCLOSURE NOTICE

| number. | | | |
|---|--|---|--|
| Project ID #: UDOT PIN: 20927; SR-177, SR-193 to 1800 North; WDC Phase II | Site Name: D6 | | Date and Time: Varies: May 13, 14, 16, 11 & July 25, 2024 |
| Location (lat/long): 41.140173, -112.110693 | | Investigator(s): Elena | Capson |
| Step 1 Site overview from remote and online r Check boxes for online resources u | | | I use and flow conditions from online resources. y recent extreme events (floods or drought)? |
| gage data LiDAR climatic data satellite imagery | geologic maps | USACE Anted | used to water the surrounding agricultural lands. The sedent Precipitation tool shows that conditions were brmal at the time of delineation and no major flood |
| aerial photos topographic maps | | | courred recently. |
| Step 2 Site conditions during field assessmen vegetation and sediment type, size, de channel form, such as bridges, riprap, Flow direction is from north to south, and | ensity, and distribution. Make landslides, rockfalls etc. | note of natural or man- | made disturbances that would affect flow and |
| | fore some indicators that are a ach indicator, select the appro | used to determine locat opriate location of the in | ion may be just below and above the OHWM. From dicator by selecting either just below `b', at `x', or evations, and to attach a photo log. |
| Break in slope: | Channel bar: | | erosional bedload indicators (e.g., obstacle marks, scour, |
| on the bank: | shelving (bern | ns) on bar: | smoothing, etc.) Secondary channels: |
| undercut bank: | unvegetated: vegetation tra | nsition | Sediment indicators |
| valley bottom: | (go to veg. inc | dicators) | Soil development: |
| Other: | (go to sed. inc | dicators) | Changes in character of soil: |
| Shelving: | on bar: | • | Mudcracks: |
| shelf at top of bank: | Instream bedform bedload transport | | Changes in particle-sized distribution: |
| natural levee: | (e.g., imbrica gravel sheets, | ted clasts, | transition from to |
| man-made berms or levees: other | bedforms (e.g riffles, steps, e | ı., pools, | upper limit of sand-sized particles silt deposits: |
| Vegetation Indicators | | | o aspession |
| Change in vegetation type and/or density: | forbs to: | | Exposed roots below intact soil layer: |
| Check the appropriate boxes and select | graminoids to | 0: | Ancillary indicators |
| the general vegetation change (e.g., graminoids to woody shrubs). Describe | woody | | Wracking/presence of |
| the vegetation transition looking from | n shrubs to: | | organic litter: |
| the middle of the channel, up the | deciduous trees to: | | Presence of large wood: |
| banks, and into the floodplain. | coniferous | | Leaf litter disturbed or washed away: |
| vegetation | trees to: | | Water staining: X |
| absent to: moss to: | Vegetation matte and/or bent: | ed down | Weathered clasts or bedrock: |
| Other observed indicators? Describe: | | | |

| Project ID #: UD | OT PIN: 20927; SR-177, |
|--------------------|---|
| Step 4 Is addition | nal information needed to support this determination? Yes Vo No If yes, describe and attach information to datasheet: |
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| Step 5 Describe | rationale for location of OHWM |
| | ndicated by the water staining on the concrete canal lining and the bleached |
| leaves of o | overhanging vegetation. |
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| Additional obse | rvations or notes |
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| Attach a photo lo | g of the site. Use the table below, or attach separately. |
| | og attached? Yes No If no, explain why not: |
| List photograph | ns and include descriptions in the table below. |
| Number photog | graphs in the order that they are taken. Attach photographs and include annotations of features. |
| Photo Number | Photograph description |
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RAPID ORDINARY HIGH WATER MARK (OHWM) FIELD IDENTIFICATION DATA SHEET

The proponent agency is Headquarters USACE CECW-CO-R.

From Approved -OMB No. 0710-0025

Expires: 01-31-2025

AGENCY DISCLOSURE NOTICE

| number. | uning to comply with a col | lection of information | The Redes Hot display a currently valid ONIB control |
|---|---|--|---|
| Project ID #: UDOT PIN: 20927; SR-117, SR-193 to Site N | Name: D8 | | Date and Time: July 25, 2024 @ 9am |
| Location (lat/long): 41.137747, -112.103391 | | Investigator(s): Car | a Glabau |
| Step 1 Site overview from remote and online resou Check boxes for online resources used to gage data LiDAR climatic data satellite imagery aerial photos topographic maps | | Were there a This drainage west to the precently. The | and use and flow conditions from online resources. any recent extreme events (floods or drought)? the channel conveys water from agricultural lands to the cond to the east. No major flood event had occurred to USACE Antecedent Precipitation tool shows that the vere drier than normal at the time of the delineation. |
| channel form, such as bridges, riprap, lands Flow direction is from east to west, and w be a natural drainage that drains upstream | y, and distribution. Make salides, rockfalls etc. vater levels appear to springs. It has sections | o be moderate, even that have be | n-made disturbances that would affect flow and ven with the dry conditions. This appears to |
| | ome indicators that are udicator, select the appro | ised to determine loo priate location of the | ration may be just below and above the OHWM. From indicator by selecting either just below 'b', at 'x', or servations, and to attach a photo log. |
| | Channel ham | | erosional bedload indicators |
| Break in slope: x on the bank: | Channel bar: shelving (berm | s) on bar: | (e.g., obstacle marks, scour, smoothing, etc.) Secondary channels: |
| undercut bank: | unvegetated: | | Sediment indicators |
| valley bottom: Other: Shelving: shelf at top of bank: natural levee: man-made berms or levees: other berms: | vegetation trans (go to veg. ind. sediment trans (go to sed. ind. upper limit of of on bar: Instream bedforms bedload transport deposition bed (e.g., imbricate gravel sheets, bedforms (e.g. riffles, steps, e | icators) X icators) icators) icators) ieposition s and other evidence: ilload indicators ed clasts, etc.) , pools, | Soil development: Changes in character of soil: Mudcracks: Changes in particle-sized distribution: transition from to upper limit of sand-sized particles silt deposits: |
| Vegetation Indicators | | | |
| Change in vegetation type X and/or density: Check the appropriate boxes and select the general vegetation change (e.g., graminoids to woody shrubs). Describe the vegetation transition looking from the middle of the channel, up the banks, and into the floodplain. | graminoids to graminoids to woody shrubs to: deciduous trees to: coniferous trees to: | | Exposed roots below intact soil layer: Ancillary indicators Wracking/presence of organic litter: Presence of large wood: Leaf litter disturbed or washed away: |
| vegetation absent to: moss to: | Vegetation matter and/or bent: | d down | Water staining: x Weathered clasts or bedrock: |
| Other observed indicators? Describe: | | | |

| Project ID #: | |
|---|------------|
| Step 4 Is additional information needed to support this determination? Yes No If yes, describe and attach information to determination. | datasheet: |
| Vegetation change at the ordinary high water mark. This transitions from cattails to upland grasses. | |
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| Step 5 Describe rationale for location of OHWM This is a slow moving channel with pooling. Distinct change between upland grasses and cattails at the | |
| ordinary high water mark, as well as water staining on those cattails is visible. The occurs at the break | ın slope. |
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| Additional observations or notes | |
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| Attach a photo log of the site. Use the table below, or attach separately. | |
| Photo log attached? Yes No If no, explain why not: See D8 in Photo Point 109 and 110. | |
| List photographs and include descriptions in the table below. Number photographs in the order that they are taken. Attach photographs and include annotations of features. | |
| Photo Number Photograph description | |
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RAPID ORDINARY HIGH WATER MARK (OHWM) FIELD IDENTIFICATION DATA SHEET

The proponent agency is Headquarters USACE CECW-CO-R.

From Approved -OMB No. 0710-0025

Expires: 01-31-2025

AGENCY DISCLOSURE NOTICE

| Project ID #: UDOT PIN: 20927; SR-117, SR-193 to Site Name: D9 Location (lat/long): 41.138009, -112.105852 Step 1 Site overview from remote and online resources Check boxes for online resources used to evaluate site: gage data LiDAR geologic maps climatic data satellite imagery land use maps aerial photos topographic maps Other: Date and Time: July 25, 2024 @ 10 Describe land use and flow conditions from online resources Were there any recent extreme events (floods or drought)? This drainage channel conveys water from a pond through a meadow, being culverted into a larger drainage channel. No major flood event hoccurred recently. The USACE Antecedent Precipitation tool shows the conditions were drier than normal at the time of the delineation. | before had hat |
|--|----------------|
| Step 1 Site overview from remote and online resources Check boxes for online resources used to evaluate site: gage data LiDAR geologic maps climatic data satellite imagery aerial photos topographic maps Other: Describe land use and flow conditions from online resource Were there any recent extreme events (floods or drought)? This drainage channel conveys water from a pond through a meadow, being culverted into a larger drainage channel. No major flood event ho occurred recently. The USACE Antecedent Precipitation tool shows the conditions were drier than normal at the time of the delineation. | ith |
| Check boxes for online resources used to evaluate site: gage data LiDAR geologic maps climatic data aerial photos Check boxes for online resources used to evaluate site: gage data LiDAR geologic maps geologic maps land use maps Other: Were there any recent extreme events (floods or drought)? This drainage channel conveys water from a pond through a meadow, being culverted into a larger drainage channel. No major flood event h occurred recently. The USACE Antecedent Precipitation tool shows the conditions were drier than normal at the time of the delineation. | ith |
| | From |
| Step 2 Site conditions during field assessment. First look for changes in channel shape, depositional and erosional features, and changes in vegetation and sediment type, size, density, and distribution. Make note of natural or man-made disturbances that would affect flow and channel form, such as bridges, riprap, landslides, rockfalls etc. Flow direction is primarily from south to north, and then west. Water levels appear to be moderate, even we the dry conditions. This channel drains overflow form the nearby pond, and appears to have perennial flow. | |
| Step 3 Check the boxes next to the indicators used to identify the location of the OHWM. OHWM is at a transition point, therefore some indicators that are used to determine location may be just below and above the OHWM. For the drop-down menu next to each indicator, select the appropriate location of the indicator by selecting either just below 'b', at 'x', or just above 'a' the OHWM. Go to page 2 to describe overall rationale for location of OHWM, write any additional observations, and to attach a photo log. Geomorphic indicators | UI |
| Break in slope: x Channel bar: erosional bedload indicators (e.g., obstacle marks, scour, | |
| on the bank: shelving (berms) on bar: smoothing, etc.) | |
| undercut bank: unvegetated: Secondary channels: Sediment indicators | |
| valley bottom: Vegetation transition (go to veg. indicators) X Soil development: | |
| Other: sediment transition Changes in character of soil: | |
| Shelving: upper limit of deposition on bar: Mudcracks: | |
| shelf at top of bank: Instream bedforms and other bedload transport evidence: Changes in particle-sized | |
| natural levee: deposition bedload indicators deposition bedload indicators transition from to | |
| man-made berms or levees: gravel sheets, etc.) | es |
| other bedforms (e.g., pools, riffles, steps, etc.): | |
| Vegetation Indicators | |
| Change in vegetation type and/or density: Exposed roots below intact soil layer: | |
| Check the appropriate boxes and select | |
| the general vegetation change (e.g., graminoids to woody shrubs). Describe woody shrubs to: Wracking/presence of organic litter: | |
| the vegetation transition looking from | |
| the middle of the channel, up the | |
| conferous washed away: | |
| vegetation absent to: trees to: Vegetation matted down Water staining: | |
| moss to: Weathered clasts or bedrock: | |
| Other observed indicators? Describe: | |
| | |

| Project ID #: | |
|------------------------------|---|
| Step 4 Is addition | nal information needed to support this determination? Yes No If yes, describe and attach information to datasheet: |
| No vegetatio high water m | on below ordinary high water mark. A mix of bulrush and grasses growing directly above ordinary nark. |
| Distinct char | rationale for location of OHWM nge in vegetation occurs at the break in the slope, forbs and grasses transition to an absence of elow the ordinary high water mark. |
| Additional about | rvations or notes |
| | |
| Attach a photo log | g of the site. Use the table below, or attach separately. |
| | og attached? Yes No If no, explain why not: See D9 in Photo Point 117, 118, and 119. |
| _ | es and include descriptions in the table below. Traphs in the order that they are taken. Attach photographs and include annotations of features. |
| Photo Number | Photograph description |
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RAPID ORDINARY HIGH WATER MARK (OHWM) FIELD IDENTIFICATION DATA SHEET

The proponent agency is Headquarters USACE CECW-CO-R.

From Approved -OMB No. 0710-0025

Expires: 01-31-2025

AGENCY DISCLOSURE NOTICE

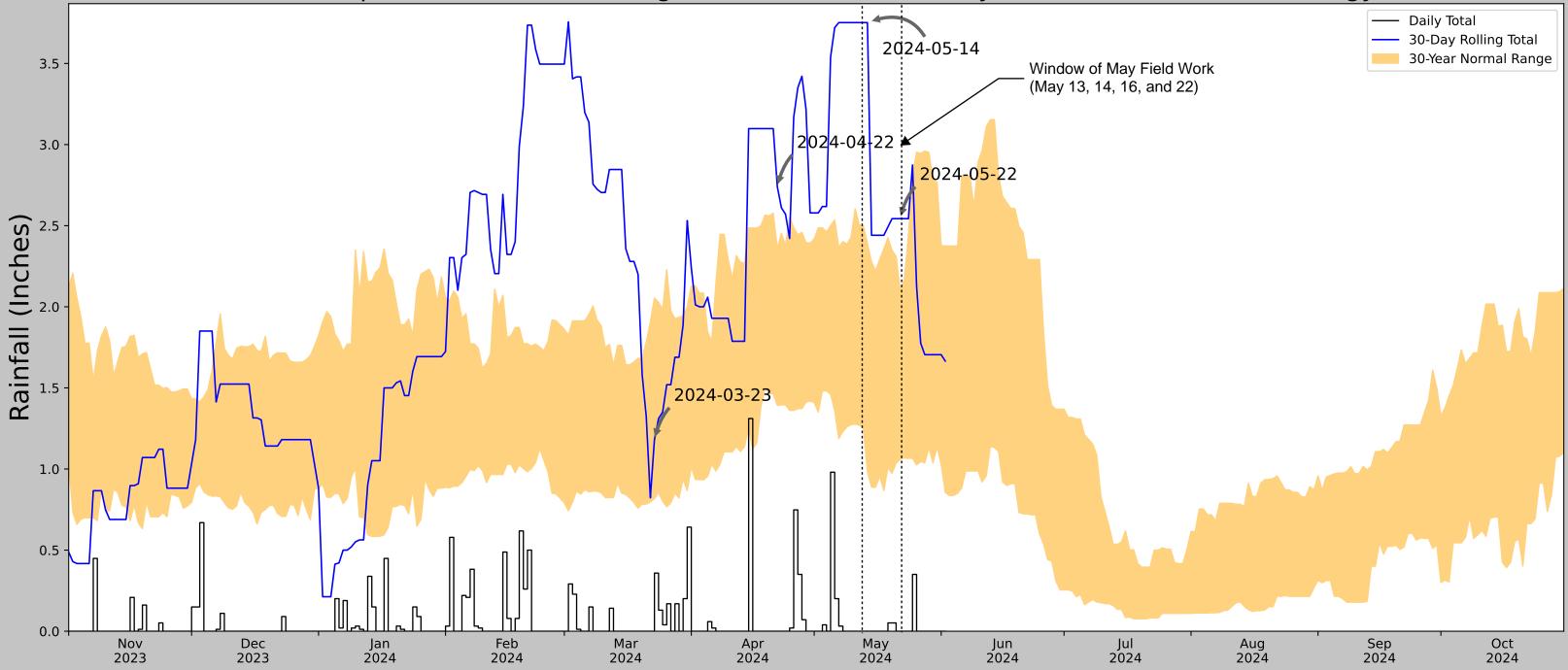
| number. | ming to comply man a col | | account display a surrently valid civil control |
|--|--|--|--|
| Project ID #: UDOT PIN: 20927; SR-117, SR-193 to Site N | lame: D10 | | Date and Time: July 25, 2024 @ 11am |
| Location (lat/long): 41.136714, -112.106109 | | Investigator(s): Cara Gla | ıbau |
| Step 1 Site overview from remote and online resou Check boxes for online resources used to gage data | | Were there any re This drainage chann being culverted into occurred recently. T | se and flow conditions from online resources. ecent extreme events (floods or drought)? eel conveys water from a pond through a meadow, before a larger drainage channel. No major flood event had the USACE Antecedent Precipitation tool shows that er than normal at the time of the delineation. |
| the drop-down menu next to each in | s, and distribution. Make slides, rockfalls etc. In to south and then a overflow form the south to identify the locations indicators that are under the south the south that are under the south the south that are under the south the sout | note of natural or man-man west. Water levels he nearby pond, and tion of the OHWM. used to determine location | de disturbances that would affect flow and |
| just above `a' the OHWM. Go to page 2 to describe overall rationale for | or location of OHWM, wri | ite any additional observat | tions, and to attach a photo log. |
| Geomorphic indicators Break in slope: x on the bank: | Channel bar: shelving (berm | ns) on bar: | erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.) Secondary channels: |
| undercut bank: x | unvegetated: | | |
| valley bottom: Other: Shelving: shelf at top of bank: natural levee: man-made berms or levees: other berms: | vegetation trans (go to veg. indi sediment trans (go to sed. indi upper limit of do on bar: Instream bedforms bedload transport deposition bed (e.g., imbricati gravel sheets, bedforms (e.g. riffles, steps, e | icators) X icators) icators) ieposition s and other evidence: lload indicators ed clasts, etc.) , pools, | Sediment indicators Soil development: Changes in character of soil: Mudcracks: Changes in particle-sized distribution: transition from to upper limit of sand-sized particles silt deposits: |
| Vegetation Indicators | | | |
| Change in vegetation type and/or density: Check the appropriate boxes and select the general vegetation change (e.g., graminoids to woody shrubs). Describe the vegetation transition looking from the middle of the channel, up the banks, and into the floodplain. Vegetation absent to: moss to: | forbs to: graminoids to woody shrubs to: deciduous trees to: coniferous trees to: Vegetation matter and/or bent: | | Exposed roots below intact soil layer: Ancillary indicators Wracking/presence of organic litter: Presence of large wood: Leaf litter disturbed or washed away: Water staining: Weathered clasts or bedrock: |
| Other observed indicators? Describe: | | | |

| Project ID #: | |
|--|-------|
| Step 4 Is additional information needed to support this determination? Yes No If yes, describe and attach information to datas | heet: |
| No vegetation below ordinary high water mark with grasses growing directly above ordinary high water r | nark. |
| Step 5 Describe rationale for location of OHWM Distinct change in vegetation occurs at the break in the slope, grasses transition to an absence of vegetation below the ordinary high water mark. Extensive undercutting is present at some locations along the channel from high flows. | |
| Additional observations or notes | |
| Attach a photo log of the site. Use the table below, or attach separately. | |
| Photo log attached? Yes No If no, explain why not: See D10 in Photo Point 122 and 123. | |
| List photographs and include descriptions in the table below. | |
| Number photographs in the order that they are taken. Attach photographs and include annotations of features. | |
| Photo Number Photograph description | |
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APPENDIX I

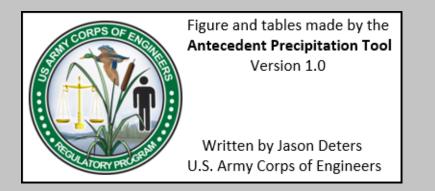
Antecedent Precipitation Figure

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



| Coordinates | 41.1111814, -112.1010244 |
|----------------------------------|--------------------------|
| Observation Date | 2024-05-22 |
| Elevation (ft) | 4243.63 |
| Drought Index (PDSI) | Mild wetness (2024-04) |
| WebWIMP H ₂ O Balance | Dry Season |

| 30 Days Ending | 30 th %ile (in) | 70 th %ile (in) | Observed (in) | Wetness Condition | Condition Value | Month Weight | Product |
|----------------|----------------------------|----------------------------|---------------|-------------------|-----------------|--------------|-------------------------|
| 2024-05-22 | 1.059449 | 2.102756 | 2.543307 | Wet | 3 | 3 | 9 |
| 2024-04-22 | 1.391732 | 2.361811 | 2.740158 | Wet | 3 | 2 | 6 |
| 2024-03-23 | 0.816929 | 2.054724 | 1.181102 | Normal | 2 | 1 | 2 |
| Result | | | | | | | Wetter than Normal - 17 |



| Weather Station Name | Coordinates | Elevation (ft) | Distance (mi) | Elevation Δ | Weighted Δ | Days Normal | Days Antecedent |
|----------------------|--------------------|----------------|---------------|-------------|------------|-------------|-----------------|
| OGDEN HINKLEY AP | 41.1942, -112.0169 | 4449.147 | 7.215 | 205.517 | 4.73 | 9256 | 90 |
| ROY 1.7 NNE | 41.1937, -112.0266 | 4457.021 | 0.506 | 7.874 | 0.232 | 2 | 0 |
| SOUTH OGDEN 1.3 N | 41.1935, -111.9623 | 4499.016 | 2.839 | 49.869 | 1.419 | 6 | 0 |
| OGDEN SUGAR FACTORY | 41.2319, -112.0283 | 4279.856 | 2.671 | 169.291 | 1.654 | 1973 | 0 |
| SUNSET 0.4 SW | 41.1341, -112.0327 | 4514.108 | 4.233 | 64.961 | 2.18 | 1 | 0 |
| WEST HAVEN 2.0 SW | 41.1848, -112.0901 | 4238.845 | 3.861 | 210.302 | 2.549 | 14 | 0 |
| OGDEN PIONEER PH | 41.2439, -111.9467 | 4350.066 | 5.01 | 99.081 | 2.751 | 94 | 0 |
| FARMINGTON 3 NW | 41.0203, -111.9328 | 4379.921 | 12.788 | 69.226 | 6.64 | 6 | 0 |

Appendix E - CULTURAL RESOURCES





Spencer J. Cox Governor

Deidre M. Henderson *Lieutenant Governor*

Donna Law Interim Executive Director



Christopher Merritt State Historic Preservation Officer Utah State Historic Preservation Office

January 23, 2025

Liz Robinson Cultural Resources Program Manager Utah Dept of Transportation (UDOT) 4501 Constitution Blvd Salt Lake City, Utah 84119

RE: PIN 20927 West Davis Corridor SR-177, SR-193 to 1800 North

For future correspondence, please reference Case No. 25-0084

am PM Grath

Dear Ms Robinson,

The Utah State Historic Preservation Office received your submission and request for our comment on the above-referenced undertaking on January 22, 2025.

We concur with your determinations of eligibility and effect for this undertaking.

This letter serves as our comment on the determinations you have made within the consultation process specified in §36CFR800.4. If you have questions, please contact me at (801) 535-2502 or by email at rmcgrath@utah.gov.

Sincerely,

Ryan McGrath

Compliance Archaeologist





DEIDRE M. HENDERSON Lieutenant Governor

DEPARTMENT OF TRANSPORTATION

CARLOS M. BRACERAS, P.E.
Executive Director
LISA J. WILSON, P.E.
Deputy Director of Engineering and Operations
BENJAMIN G. HUOT, P.E.
Deputy Director of Planning and Investment

January 22, 2024

Mr. Ryan McGrath Compliance Archaeologist Utah Division of State History 3760 Highland Dr. Millcreek, UT 84106

RE: UDOT Project No. S-R199(381)00, West Davis Corridor SR-177, SR-193 to 1800 North, West Point City,

Davis County, Utah (PIN 20927).

Determination of Eligibility and Finding of No Adverse Effect.

Dear Mr. McGrath:

The Utah Department of Transportation (UDOT) is preparing to undertake the subject federal-aid project. In accordance with Parts 3.1.1 and 3.2 of the *Memorandum of Understanding Between the Federal Highway Administration and the Utah Department of Transportation Concerning State of Utah's Participation in the Surface Transportation Project Delivery Program Pursuant to 23 USC §327 (renewed May 26, 2022)*, the UDOT assumes responsibility, assigned by the Federal Highway Administration (FHWA), for ensuring compliance with Section 106 of the NHPA and with Section 4(f) of the DOT Act of 1966, as amended. Also in accordance with the *Third Amended Programmatic Agreement among the FHWA*, the Utah State Historic Preservation Officer, the Advisory Council on Historic Preservation, the USACE Sacramento District, and the UDOT Regarding Section 106 Implementation for Federal-Aid Transportation Projects in the State of Utah (executed August 23, 2017), Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 300101 et seq.), and U.C.A.9-8-404, the UDOT has taken into account the effects of this undertaking on historic properties, and is affording the Utah State Historic Preservation Officer (SHPO) an opportunity to comment on the undertaking. Additionally, this submission is in compliance with Section 4(f) of the Department of Transportation Act of 1966, 23 U.S.C. § 138 (as amended) and 49 U.S.C. § 303 (as amended).

PROJECT DESCRIPTION

The Utah Department of Transportation (UDOT) is preparing to undertake a re-evaluation of the West Davis Corridor Environmental Impact Statement (EIS). A Final EIS and Section 4(f) Evaluation for the West Davis Corridor (WDC) was completed in June 2017 and approved through the issuance of a Record of Decision (ROD) on September 29, 2017, from the Federal Highway Administration (FHWA). This re-evaluation is evaluating the design refinements proposed to address the change of conditions in the project area between State Route 193 (SR-193) and 1800 North in Davis County, Utah since approval of the EIS Selected Alternative (ESA) in the ROD. The design refinements include the need for a four-lane freeway (increased from a two-lane freeway in the ESA), improved alignment curvature, trail alignment, updated detention ponds and utility relocations.

The original determination of eligibility, finding of effect and Section 4(f) determinations were submitted to the Utah SHPO in 2012 with a determination of Adverse Effect, which was resolved with a Programmatic Agreement (Case No. 13-0029) The area of potential affects (APE) for this re-evaluation includes the polygon of the roadway footprint as well as linear corridors to accommodate trail, drainage and utility placement.

The APE has been surveyed for archaeology by Certus Environmental Solutions, under State Antiquities Project Number U24HY0375, and the results are reported in *An Archaeological Resource Assessment for the SR-177; SR-193 to 1800 North Project (West Davis Corridor Phase 2), Davis County, Utah* (see enclosed report). An intensive level pedestrian survey was conducted using 15 meter transects to identify archaeological resources. A reconnaissance selective level survey was conducted to record architectural properties, and the results are reported in *Selective Reconnaissance-Level Historic Structures Inventory for the SR-177; SR-193 to 1800 North Project (West Davis Corridor Phase 2), Davis County, Utah* (see enclosed report).

The surveys have resulted in the identification of 3 archaeological sites and 5 architectural properties. Of these, only one archaeological site is eligible to the National Register of Historic Places (NRHP). No known traditional cultural properties are located in the APE. The Determinations of Eligibility and Findings of Effects (for both Section 106 and Section 4(f)) are provided in Table 1 for archaeological resources and in Table 2 for architectural properties. Please see attached notification letter regarding Section 4(f) *de minimis* impacts.

ARCHAEOLOGICAL RESOURCES

Table 1. Determinations of Eligibility and Findings of Effect for Archaeological Resources.

| Site | Name or Description | NRHP Eligibility | Finding of Effect | Section 4(f) Use | Section 4(f) Impact |
|---------------------|------------------------|------------------------|------------------------------------|---------------------|------------------------|
| 42DV138 | Unnamed land drain | Not Eligible | No Historic Properties Affected | N/A | N/A |
| 42DV158/ 42DV223 | Hooper Canal | Eligible (Criterion A) | No Adverse Effect | Yes | De minimis |
| 42DV182 | Layton Canal | Not Eligible | No Historic Properties Affected | N/A | N/A |

Description of Effect to Site 42DV158/42DV223: The project will impact portions of the site that are piped and some that are open channel. Approximately 2800 feet of buried pipe will be relocated to the west side of SR-177 at the request of the canal company and to increase maintenance accessibility. This portion has been recommended as non-contributing to the eligibility of the site as a whole as it is no longer visible on the landscape. Of the open channel section of the site, the project will impact 64 feet of the canal in 3 locations of sidewalk or trail crossings. The sidewalk location is at 1300 North and will expand the existing culvert to accommodate the sidewalk. The other two crossings are new trail crossings that will be carried with 24-foot-wide culverts. The project will affect a relatively small portion of the contributing components of the site and will not substantially impact or alter any contributing elements of the site or any of the character-defining features for which it was determined eligible for the NRHP. Thus, the proposed project will result in a finding of No Adverse Effect. This site qualifies as a historic property under Section 4(f) and the proposed impacts will constitute a use and de minimis impact.

ARCHITECTURAL PROPERTIES

Table 2. Determinations of Eligibility and Findings of Effect for Architectural Properties.

| Address | Date | Style | NRHP Eligibility/ SHPO Rating | Finding of Effect | Section 4(f) Use | Section 4(f) Impact |
|-------------------------------------|------|-----------------------------|----------------------------------|------------------------------------|---------------------|------------------------|
| 4133 West 1800 North West Point | 1971 | Ranch/Rambler | Not Eligible/NC | No Historic Properties Affected | N/A | N/A |
| 4182 West 1300 North, West Point | 1974 | Ranch/Rambler | Not Eligible/NC | No Historic Properties Affected | N/A | N/A |
| 4233 West 300 North, West Point | 1977 | Agricultural Outbuilding | Not Eligible/NC | No Historic Properties Affected | N/A | N/A |

| 4300 West 300 North, West Point | 1968 | Agricultural Outbuilding | Not Eligible/NC | No Historic Properties Affected | N/A | N/A |
|------------------------------------|------|-----------------------------|-----------------|------------------------------------|-----|-----|
| 4320 West 300 North, West Point | 1960 | Agricultural Outbuilding | Not Eligible/NC | No Historic Properties Affected | N/A | N/A |

CONSULTATION EFFORTS

Native American consultation was initiated through letters sent to the Confederated Tribes of the Goshute Reservation, Skull Valley Band of Goshute, Uintah and Ouray Ute Tribes, Shoshone-Bannock Tribes, and Northwestern Band of Shoshone Nation, Eastern Shoshone Tribe of the Wind River Reservation (sent August 22, 2024). No responses or comments were received.

SUMMARY

To summarize, the project will result in a finding of No Adverse Effect and Section 4(f) use for 1 archaeological site, and a finding of No Historic Properties Affected for all remaining architectural properties and archaeological sites. Therefore, the Finding of Effect for the proposed re-evaluation of UDOT Project No. S-R199(381)00, West Davis Corridor SR-177, SR-193 to 1800 North, West Point City, Davis County, Utah, is **No Adverse Effect**. However, the West Davis Corridor project as a whole retains the status of Adverse Effect.

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by UDOT pursuant to 23 *USC §327* and a Memorandum of Understanding dated May 26, 2022, and executed by FHWA and UDOT.

Please review this document and, providing you agree with the findings contained herein, provide written concurrence. Should you have any questions or need additional information, please feel free to contact Liz Robinson at 801-910-2035 or lizrobinson@utah.gov; or David Amott at 801-971-4808 or damott@utah.gov.

Sincerely,

Liz Robinson, M.A., RPA Cultural Resources Program Manager

UDOT Environmental Services

Elijah Min

David Amott, AICP Architectural Historian

UDOT Environmental Services

Enclosures

cc: Brandon Weston, Project Manager

Corey Nelson, Environmental Manager

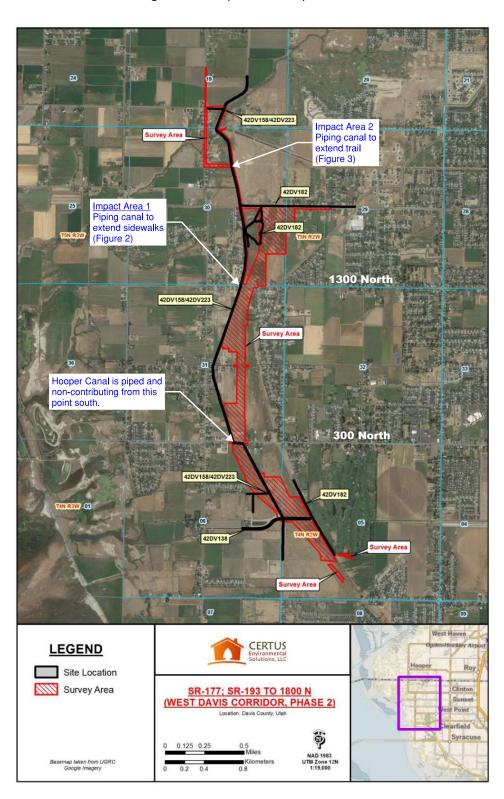


Figure 1 – Hooper Canal impact areas

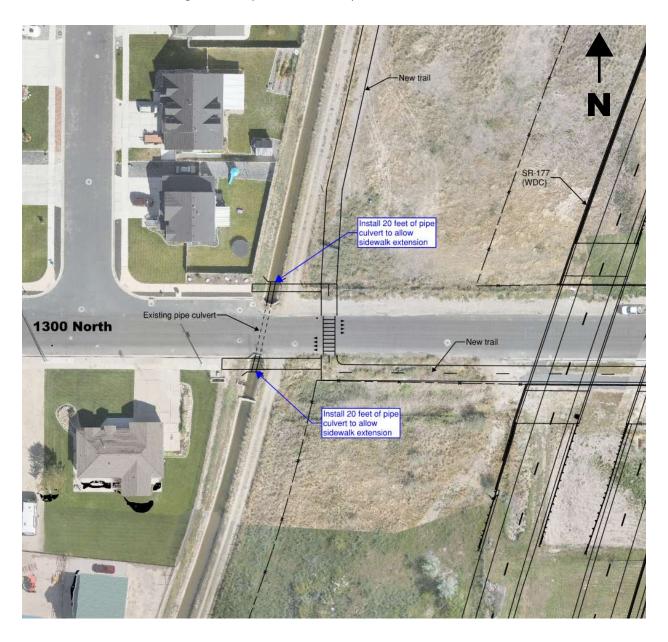


Figure 2 – Impact Area 1. Hooper Canal at 1300 North

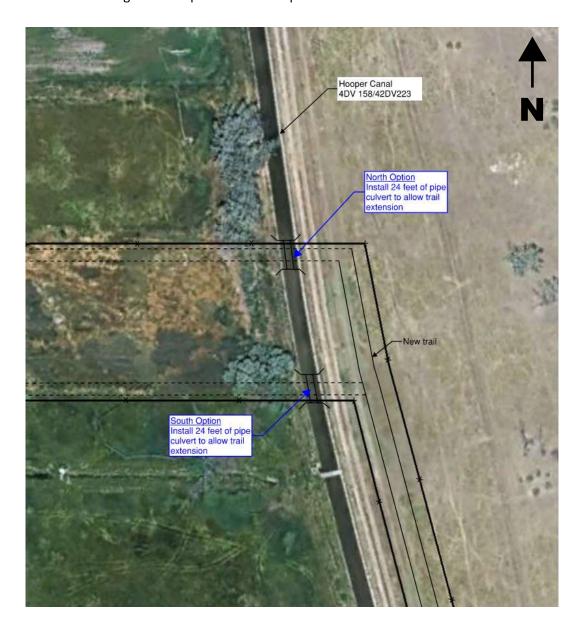


Figure 3 – Impact Area 2. Hooper Canal at about 2050 North

Historic Architecture

A Selective Reconnaissance-Level Historic Structures Inventory for the SR-177; SR-193 to 1800 North Project (West Davis Corridor Phase 2), Davis County, Utah

UDOT Project No. S-R-199(381); PIN 20927

Prepared for

Bowen Collins & Associates

Prepared by

Sheri Murray Ellis, MS, RPA Owner /Consultant



Certus Environmental Solutions, LLC Salt Lake City, Utah 801.230.7260

Utah Antiquities Report No. U24HY0375 PLPCO Permit No. 176

Certus Project Number BCA77

December 5, 2024

PROJECT ABSTRACT SHEET

Report Title: A Selective Reconnaissance-Level Historic Structures Inventory for the SR-177; SR-193 to 1800 North Project (West Davis Corridor Phase 2), Davis County, Utah

UDOT Project Number and PIN: S-R-199(381); PIN 20927

Utah State Report Number: U24HY0375

Agencies: Utah Department of Transportation (UDOT), U.S. Army Corps of Engineers (USACE)

Project Description: UDOT proposes to construct the next phase of the West Davis Corridor (SR-177) between SR-193 and 1800 North in West Point and Clinton, Davis County. The project would entail construction of a new roadway, utilities, drainage facilities, and a multi-use trail, etc. and will require acquisition of right-of-way beyond what UDOT currently owns in the area. The study is currently funded with state monies, but a permit may be required from the USACE to address impacts to wetlands or waters of the U.S. This federal agency involvement invokes the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR §800. The involvement of state funding and approvals by UDOT invokes UCA 9-8a-404, the state equivalent of 36 CFR §800. Certus Environmental Solutions (Certus), as a member of the consultant team, was contracted to carry out studies related to cultural resources that could be affected by the new construction or right-of-way acquisition. The results of a historical structures assessment are presented herein. UDOT and the USACE may use this information as part of their regulatory compliance. A report of archaeological resources located in the survey area is provided under separate cover.

Survey Area: The cultural resource assessment area comprises a series of irregular polygons and linear corridors surrounding the anticipated areas of ground disturbance, easements, and right-of-way acquisition. This area was defined in conjunction with UDOT and corresponds with the aquatic and biological resources assessment areas. The survey contains 195 acres.

Location: West Point; T. 4N, R. 2W, Sec. 5 & 6; T. 5N, R. 2W, Sec. 19, 29–32

Land Ownership: Private, Municipal, UDOT (right-of-way)

Date(s) of Fieldwork: June 4–6, August 2–3, October 11, and November 22, 2024

Methods: Selective reconnaissance-level structures inventory

Acres Surveyed for Historic Buildings: 195 acres

Properties with Historic Structures Recorded: 5 (4182 W 1300 N, 4233 W 300 N, ~4300 W 300 N,

~4310 W 300 N, and 4133 W 1800 N)

NRHP Eligible Structures: 0

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Introduction

UDOT proposes to construct the next phase of the West Davis Corridor (SR-177) between SR-193 and 1800 North in West Point and Clinton, Davis Count (see **Figure 1**, for the general project location). The project would entail construction of a new roadway, utilities, drainage facilities, and a multi-use trail, etc. and will require acquisition of right-of-way beyond what UDOT currently owns in the area. The study is currently funded with state monies, but a permit may be required from the USACE to address impacts to wetlands or waters of the U.S. This federal agency involvement invokes the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR §800. The involvement of state funding and approvals by UDOT invokes UCA 9-8a-404, the state equivalent of 36 CFR §800.

Certus Environmental Solutions (Certus), as a member of the consultant team, was contracted to carry out studies related to cultural resources that could be affected by the new construction or right-of-way acquisition. The results of a historical structures inventory in support of compliance with 36 CFR § 800 and UCA 9-8a-404 are presented herein. UDOT and the USACE may use this information as part of their regulatory compliance. A report of archaeological resources located in the survey area is provided under separate cover.

The cultural resource assessment area comprises a series of irregular polygons and linear corridors surrounding the anticipated areas of ground disturbance, easements, and right-of-way acquisition (see **Figures 2 & 3**). This area was defined in conjunction with UDOT and corresponds with the aquatic and biological resources assessment areas. The survey contains 195 acres and includes all lands on which ground disturbance, temporary construction easements, and permanent right-of-way acquisition, as they were understood at the time of fieldwork, would occur.

The general project area is located in the suburban communities of West Point and Clinton, which are found between the Great Salt Lake and the Wasatch Mountains along the north-central part of the Wasatch Front. Most land in the survey area is unoccupied in terms of building but not undeveloped or undisturbed. The majority of the area was used historically for agricultural purposes—primarily livestock grazing—with large areas used more recently for disposal of construction debris and excavated soils. The built environment of the area follows the street grid with single-family dwellings generally set on larger (1-acre) lots. Much of the development in and immediately adjacent to the current survey area occurred after 1975, and it continues in earnest today. Occasional scattered historical farmsteads and dwellings are also found in the area.

Previously Documented Properties

The Utah State Historic Preservation Office (SHPO) HUB database, which contains previously reported buildings and structures in Utah, indicates a single historical building has been reported in the area. This building is an agricultural outbuilding at 4133 West 1800 North. This building was documented in 2017 and was determined ineligible for the National Register. This property is discussed further in the **Findings** section of this report.

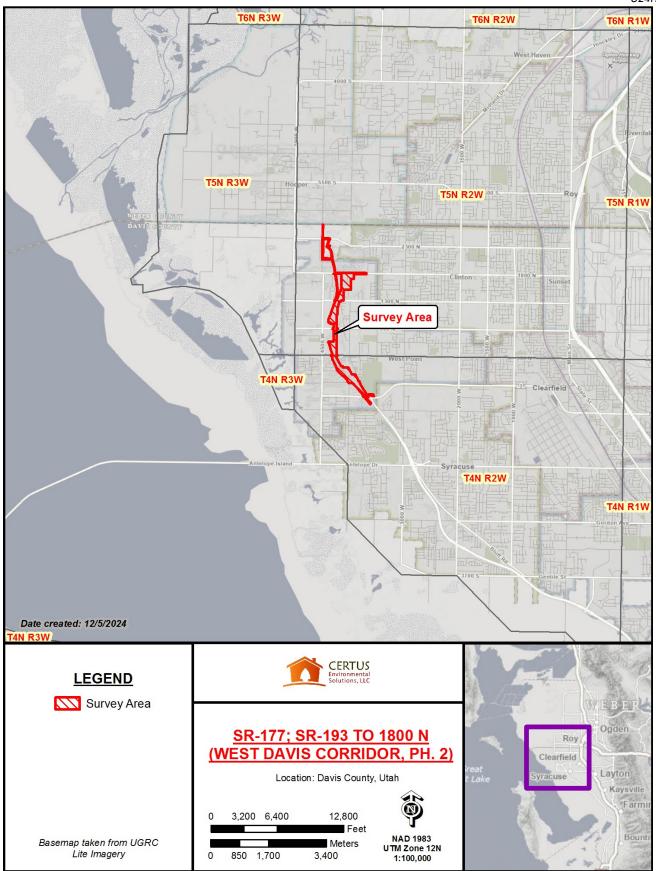


Figure 1. General location of survey area

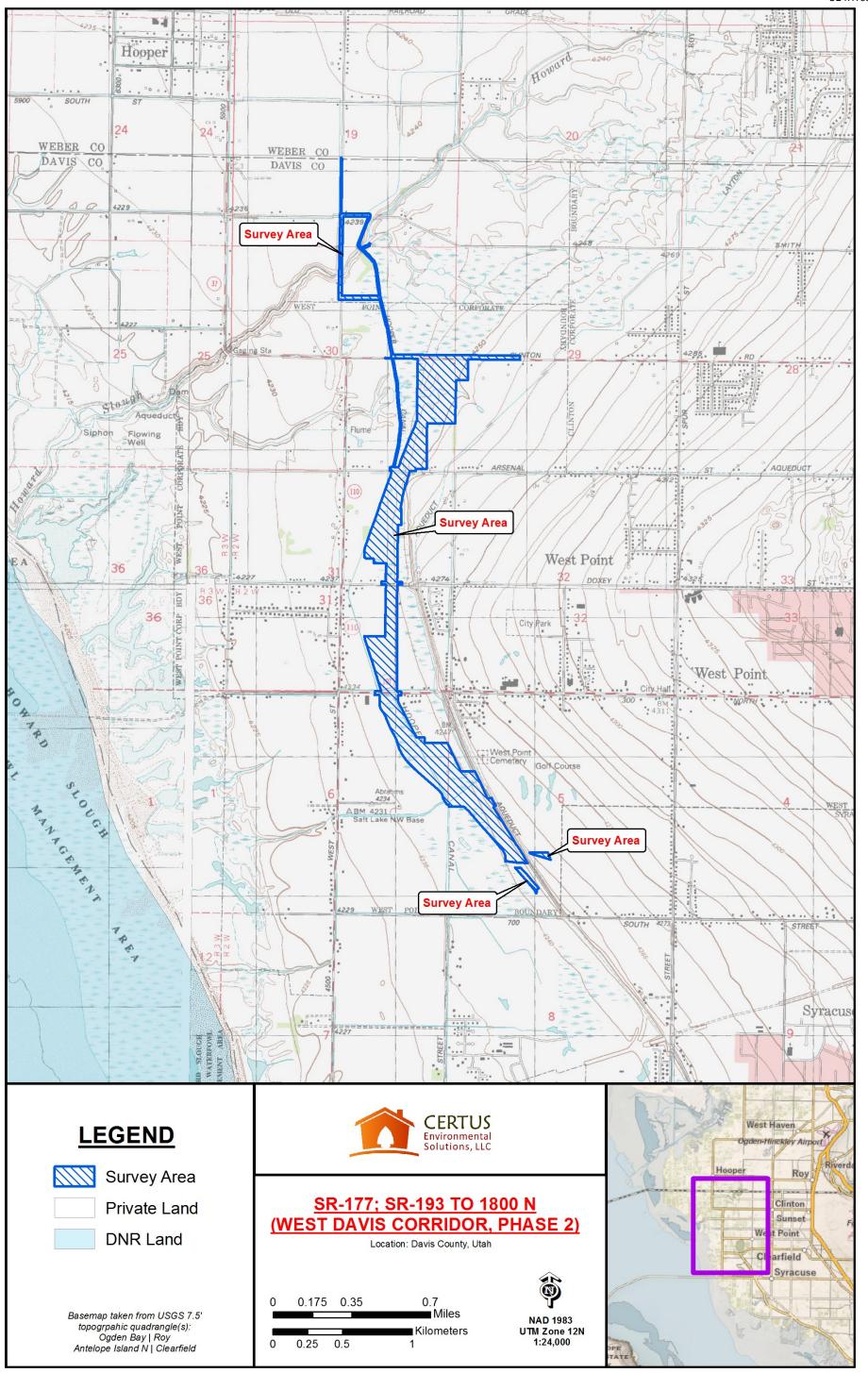


Figure 2. Survey Area; topographic map

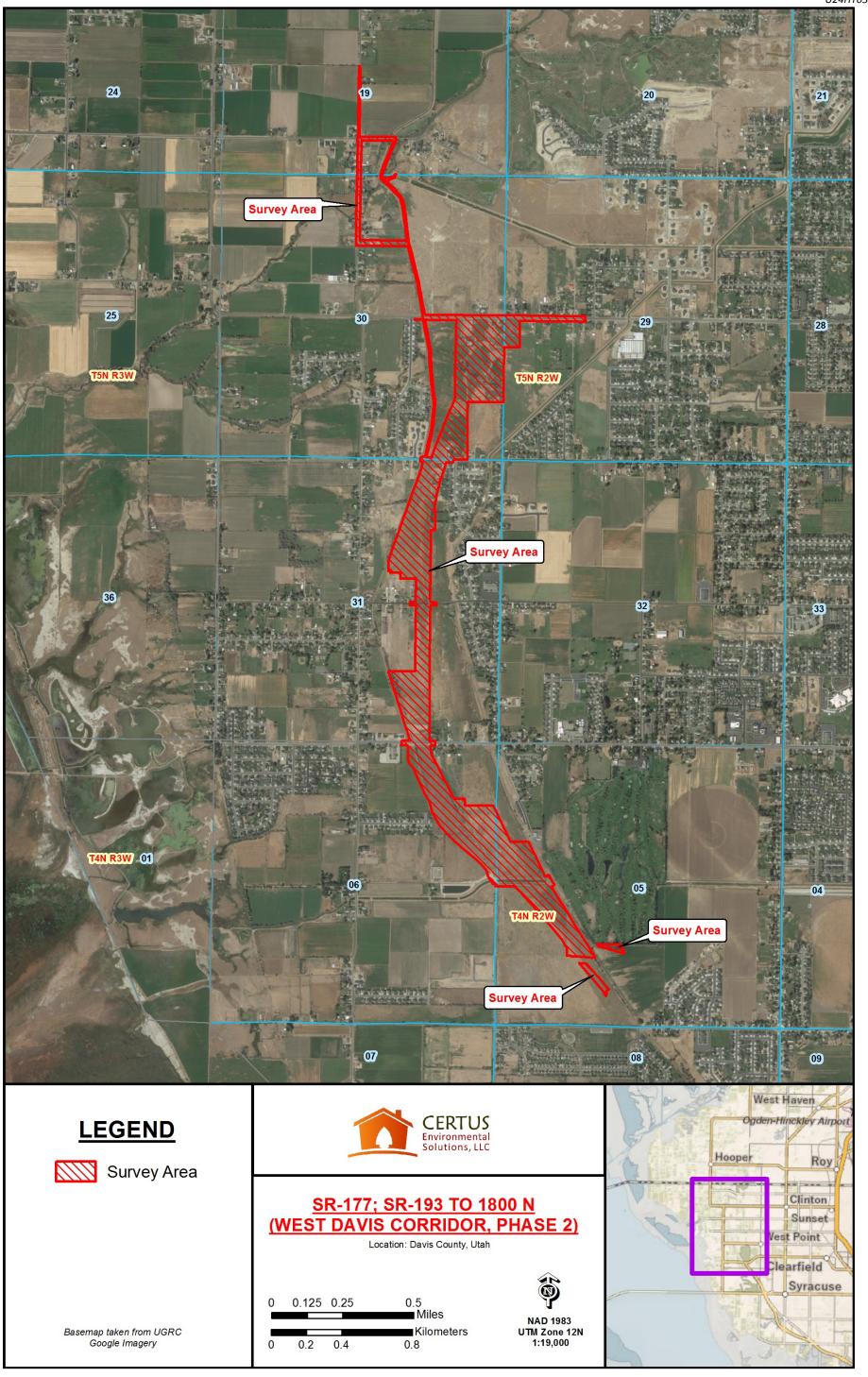


Figure 3. Survey Area; aerial map

FINDINGS

Certus identified five historical buildings in the survey area for the West Davis Corridor Phase 2 Project. These structures include three isolated agricultural outbuildings and two historical dwellings. The dwellings are post post-World War II residential properties located outside of a subdivision. The locations of the documented structures are shown in **Figure 4**, and descriptions and National Register evaluations are provided below.

Post-War Individual Dwellings

Certus identified two historical dwellings in the survey area. See **Table 1** for information about them. The dwellings were built in 1974 and 1977 and are located outside of any subdivisions. As such, they are subject to UDOT's protocols for individual (non-subdivision) post-World War II era properties.

Agricultural Outbuildings

Three historical bridges are located in the survey area. See **Table 2** for information about them. All three are isolated from any associated dwellings, and all appear to have been constructed between 1960 and 1971.

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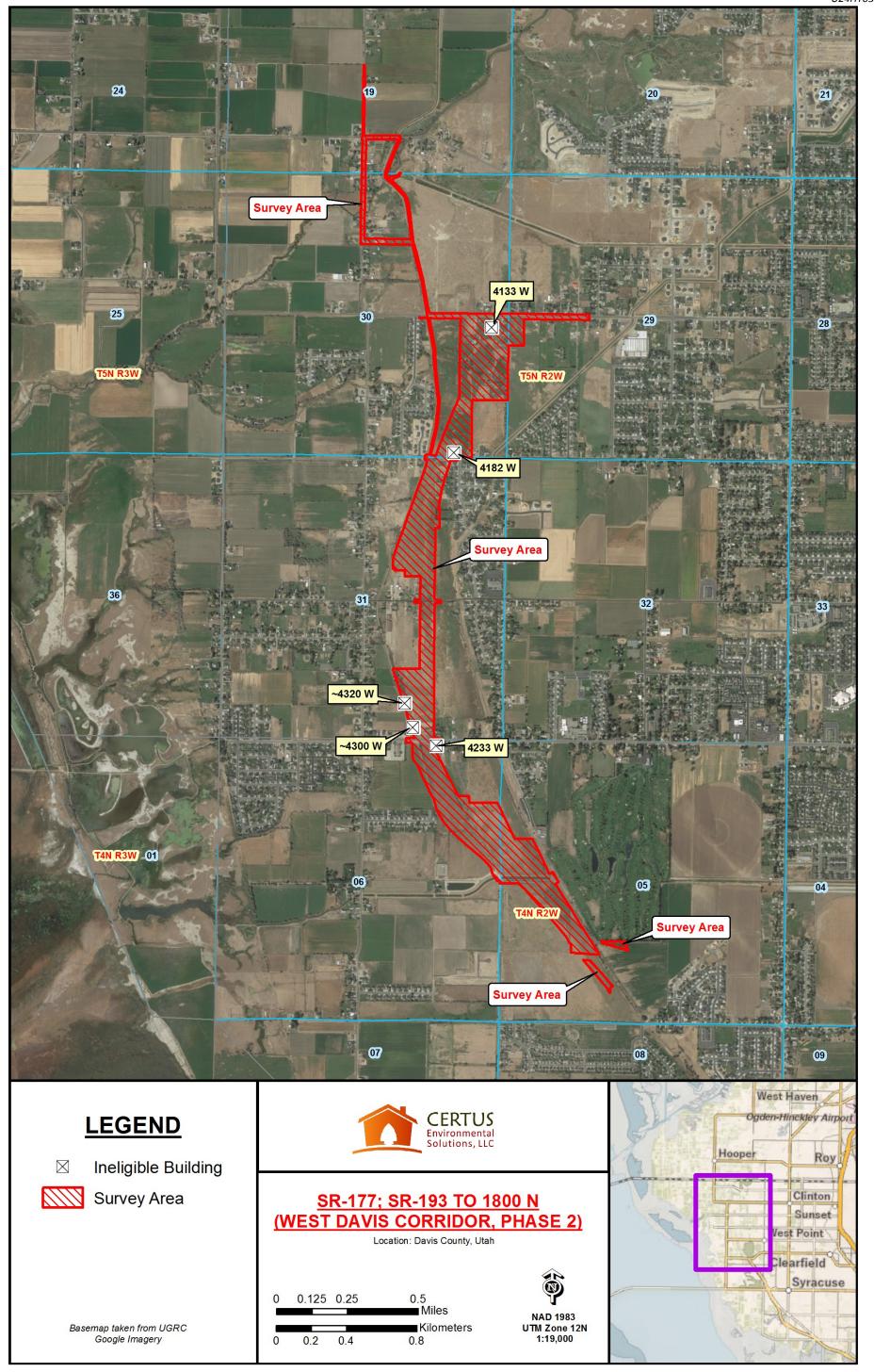


Figure 4. Survey results

Table 1. Historical dwellings

| Address | Year Built | Description | Eligibility Evaluation* | Photo |
|-----------------|------------|---|-------------------------|-------|
| 4233 W. 300 N. | c. 1977 | 1.5-story Split Entry (with garage) single-family dwelling exhibiting Split Entry and Ranch/Rambler style. Clad in regular brick and narrow vinyl siding. Notable exterior alterations include modern windows throughout in original openings and extensive use of the modern vinyl cladding. One non-contributing outbuilding was visible. | Not eligible | |
| 4182 W. 1300 N. | c. 1974 | 1.5-story Split Entry single-family dwelling exhibiting Split Entry and Ranch/Rambler style. Clad in regular brick and stone veneer. Notable exterior alterations appear to be limited to modern windows throughout in original openings. One contributing and one non-contributing outbuilding were visible. | Not eligible | |

^{*} See individual property forms for detailed evaluations

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Table 2. Agricultural outbuildings

| Address | Year Built | Description | Eligibility Evaluation | Photo |
|---------------|------------|--|------------------------|-------|
| ~4300 W 300 N | c. 1968 | Two agricultural outbuildings, including a small barn/animal shelter and a hay hold. The barn/shelter is constructed of concrete block, wood framing, and corrugated metal. The hay hold is constructed of timber framing and corrugated metal cladding and roofing. Alterations appear limited to patching and repairs of construction materials in the modern era. No obvious historical dwellings are located near these buildings. | Not eligible | |
| ~4320 W 300 N | c. 1960 | One agricultural outbuilding—a loafing shed/animal shelter. The building is constructed of wood framing and raw lumber vertical planks. Alterations appear limited to structural deterioration, especially loss of roofing materials. No obvious historical dwellings are located near this outbuilding. | Not eligible | |

Table 2. Agricultural outbuildings

| Address | Year Built Description | Eligibility Evaluation | Photo |
|-----------------------|---|----------------------------|-------|
| Address 4133 W 1800 N | Tear Built C. 1971 Agricultural outbuilding complex including a short, corrugated metal silo, a small barn, a small shed, and ruins of another unidentifiable structure. The buildings are constructed of wood framing with raw lumber vertical plank and corrugated metal siding and roofing. All of the structures except for the silo exhibit extensive deterioration, loss of cladding and roofing, and partial collapse. No historical dwellings are located near these buildings. The only dwellings in the area date well into the modern era. | Rot eligible Not eligible | Photo |

(11/17)

HISTORIC SITE SHORT FORM

UTAH OFFICE OF HISTORIC PRESERVATION For Section 106 Review Only (Do not use this form to record archeological sites)

| <u>TIDENTIFICATION</u> | | |
|--|--|---|
| Historic Property Name (if known): | • | 6 Project Title: U24HY0375; UDOT PIN 20927 |
| Address: ~4300 W. 300 N. | Lat/Long (C | |
| City, County: West Point, UT | Geographic | cal Data (Optional): |
| 2 EVALUATION Evaluation (select one) The property is considered Eligible at th • is at least 50 years old and retains its significance. ✓ The property is considered Not Eligible • is less than 50 years old, or is 50 years | historic integrity (minimal alto at this time because it: | erations to key features), and has potential |
| 3 DOCUMENTATION Required Upload two photos site sketch map (optional) other: | Research Sources (optional, c abstract of title tax card & photo building permit Sanborn Maps other: | heck all sources consulted, whether useful or not) |
| 4 ARCHITECTURAL DESCRIPTION A | AND HISTORY | |
| Building Type: Agricultural- Barn Foundation Material: None Additions: In none minor major (desc No. of contributing outbuildings and/or stru | nctures: 0 No. of non-contrib major additions or alterations o | nuting outbuildings and/or structures: 1 and their dates, and associated outbuildings and |
| Two agricultural outbuildings, including constructed of concrete block, wood fr framing and corrugated metal cladding | raming, and corrugated met gand roofing. Alterations ap | al. The hay hold is constructed of timber |
| | | tion, demolition). Use continuation sheets as |
| necessary for additional photos and text, su | | |
| UDOT proposes construction of a new roadway in extensive as demolition. | n the area of these buildings. The i | mpacts are not currently known but could be as |
| Form completed by: Sheri Murray Ellis | | Date (mo/yr): 06/2024 |

6 PHOTO UPLOAD

Upload your images. Please upload at least one current and clear image.

If you have additional documents, such as a site sketch map or project area map (a map for each individual property is not required if project features multiple properties; just submit one map highlighting all properties in project area), please submit those as a separate pdf/a or attach as part of the agency letter.





(11/17)

HISTORIC SITE SHORT FORM

UTAH OFFICE OF HISTORIC PRESERVATION For Section 106 Review Only (Do not use this form to record archeological sites)

| TIDENTIFICATION With the Property of the Prop | 10 | (D . ; , T'.] | |
|--|--|---|--|
| Historic Property Name (if known): | | 6 Project Title: U24HY0375; UDOT PIN 20927 | |
| ddress: -4320 W. 300 N. Lat/Long (Optional): City, County: West Point, UT Geographical Data (Optional): | | | |
| City, County. West Point, 01 | Geographic | | |
| <u>Evaluation</u> (select one) <u>The property is considered Eligible</u> at the significance. ✓ The property is considered Not Eligible of is less than 50 years old, or is 50 years | s historic integrity (minimal alto at this time because it: | erations to key features), and has potential | |
| 3 DOCUMENTATION Required ✓ Upload two photos ☐ site sketch map (optional) ☐ other: | Research Sources (optional, continuation of title tax card & photo building permit Sanborn Maps other: | heck all sources consulted, whether useful or not) | |
| 4 ARCHITECTURAL DESCRIPTION A | AND HISTORY | | |
| Date of Construction: 1960 Building Type: Agricultural- Misc. Foundation Material: None Additions: none minor major (described) No. of contributing outbuildings and/or structure. | No. of Stories: 1 Building Style: Other Wall Material(s): Wood ribe below) Alterations: uctures: 0 No. of non-contrib | uting outbuildings and/or structures: 0 and their dates, and associated outbuildings and | |
| One agricultural outbuilding—a loafing | appear limited to structura | uilding is constructed of wood framing and I deterioration, especially loss of roofing tbuilding. | |
| 5 PROPOSED ACTION Describe the impending action (e.g., road we necessary for additional photos and text, sur | | tion, demolition). Use continuation sheets as | |
| UDOT proposes construction of a new roadway i demolition. | n the area of this building. The imp | acts are not currently known but could include | |
| Form completed by: Sheri Murray Ellis | | Date (mo/yr): 06/2024 | |

6 PHOTO UPLOAD

Upload your images. Please upload at least one current and clear image.

If you have additional documents, such as a site sketch map or project area map (a map for each individual property is not required if project features multiple properties; just submit one map highlighting all properties in project area), please submit those as a separate pdf/a or attach as part of the agency letter.





(11/17)

Date (mo/yr): 06/2024

HISTORIC SITE SHORT FORM

UTAH OFFICE OF HISTORIC PRESERVATION
For Section 106 Review Only
(Do not use this form to record archeological sites)

| 1 IDENTIFICATION | | |
|--|---|--|
| Historic Property Name (if known): | | Project Title: U24HY0375; UDOT PIN 20927 |
| Address: 4133 W. 1800 N. | Lat/Long (Op. | |
| City, County: West Point, UT | Geographical | Data (Optional): |
| 2 EVALUATION Evaluation (select one) The property is considered Eligible at the significance. ✓ The property is considered Not Eligible is less than 50 years old, or is 50 years | s historic integrity (minimal altera at this time because it: | tions to key features), and has potential |
| | | |
| 3 DOCUMENTATION | | |
| Required | Research Sources (ontional che | ck all sources consulted, whether useful or not) |
| Upload two photos | abstract of title | en an sources consumed, whether aseful or holy |
| site sketch map (optional) | tax card & photo | |
| other: | ☑ building permit | |
| | Sanborn Maps | |
| | other: | |
| | _ | |
| 4 ARCHITECTURAL DESCRIPTION | | |
| Date of Construction: 1971 | No. of Stories: 1 | <u>Use</u> |
| Building Type: Agricultural- Barn | Building Style: Other | Original Use: Agricultural |
| Foundation Material: None | Wall Material(s): Wood | Current Use: Agricultural |
| Additions: ✓ none ☐ minor ☐ major (desc | | |
| No. of contributing outbuildings and/or stru | ictures: 0 No. of non-contributi | ing outbuildings and/or structures: 3 |
| | | |
| | | their dates, and associated outbuildings and |
| structures. Also provide a brief history of the | e building's construction and use | e (if known). Use continuation sheets as |
| necessary for additional photos and text. | | |
| of another unidentifiable structure. The plank and corrugated metal siding and | e buildings are constructed of roofing. All of the structures of fing, and partial collapse. No h | istorical dwellings are located near these |
| 5 PROPOSED ACTION | | |
| Describe the impending action (e.g., road w | videning, rehabilitation, alteration | n, demolition). Use continuation sheets as |
| necessary for additional photos and text, su | | , |
| LIDOT proposes construction of a new readway i | n the area of these buildings. The imp | cate are not currently known but could include |
| UDOT proposes construction of a new roadway i demolition. | n the area of these buildings. The imp | acts are not currently known but could include |
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Form completed by: Sheri Murray Ellis

6 PHOTO UPLOAD

Upload your images. Please upload at least one current and clear image.

If you have additional documents, such as a site sketch map or project area map (a map for each individual property is not required if project features multiple properties; just submit one map highlighting all properties in project area), please submit those as a separate pdf/a or attach as part of the agency letter.







Postwar Evaluation Individual Property Form

(Refer to the Historic Residential Development of Utah's Wasatch Front, 1940-1980 when filling out this template)

1. Property Identification

| a. County | Davis |
|----------------------|----------------------|
| b. City | West Point |
| c. Street Address | 4182 West 1300 North |

2. Property Architectural History

| a. Date(s) of Construction / Development: | c. 1974 |
|---|---|
| b. Architect: | Unknown |
| c. Builder(s) / Contractor(s): | Unknown |
| d. Landscape Architect(s): | None |
| e. Plan / Style: | Split Entry with garage / Split Entry & Ranch/Rambler style |

f. Architectural description

This building is a 1.5-story Split Entry (with garage) single-family dwelling exhibiting Split Entry and Ranch/Rambler style. It is clad in regular brick and stone veneer. Notable exterior alterations include modern windows throughout in original openings. Twoe non-contributing outbuildings were visible.

3. Property Historic Context:

The following architectural context utilizes the Split-level subtype Split-entry plan description from the *Illustrated Typology of Utah Post-World War II Residential Plans and Styles, and Associated Subtypes of Residential Subdivisions* (June 2023), prepared by Mead & Hunt, Inc. (Mead & Hunt).

Beginning in the mid-1950s, the Split-level plan was one of the most common plans nationwide. The Split-level has two or more living levels that are each separated by a partial flight of stairs. The multi-floor plan had a more compact footprint than the Ranch plan and could fit on smaller lots, allowing developers to fit more lots into a subdivision development. The Split-level plan had other benefits that compared to or superseded Ranch predecessors. The plan expanded and refined the Ranch's segregation of public and private interior space into separate "zones" or wings. It produced a house with more square footage, allowing for additional bedrooms and bathrooms.

Like the Raised Ranch, the Split-level could be used on uneven and sloping building sites, which are common along the Wasatch Front, and often included an integrated garage. The Split-level plan eventually fell out of favor as the larger Split-entry and Two-story Massed plans eclipsed its popularity.

The Split-entry plan is a variation of the Split-level that has a mid-level entry/foyer with a split stair, with one staircase going to an upper level and one to a lower level. The Split-entry has three separate levels on the interior: the entry level that includes the foyer and two levels with living space. Split-foyer or Bilevel are other terms used for this plan.

a. Demographics of Original Owner: White, Married

This dwelling was built in 1974. At that time, the property appears to have been owned by Orson J. and Hazel H. Davis. The Davises sold the property to Dee W. Hendry in 1987, and around 2006, the property entered the Gail R. Yardley Family's ownership. The property is currently owned by the Yardley Family Trust.

Orson James Davis was born in June 1895 in West Point and grew up on the family farm. He married Alta "Fern" Stoddard around 1920 and had two daughters. Fern passed away in February 1928. Orson married Dora Miller Patterson in November 1929, and they had five children together. Dora died in November 1945. He married Hazel Thurgood Hamblin in 1953, and they remained married until their deaths in 1990 and 1988, respectively. Orson Davis appears to have worked as a farmer his entire adult life. Hazel, his wife during ownership of the dwelling discussed herein, does not appear to have worked outside the home but assisted on the family farm.

b. Development Context

West Point was settled in the 1860s as an offshoot of nearby Syracuse. James Hale was the first recorded permanent settler in the community, which was known as South Hooper at the time. The settlement was later renamed Muskrat Springs and then became officially known as West Point in 1910. The community was incorporated in 1935. Throughout most of its history, West Point was a suburban agricultural community. It had a typical Utah street grid with major north-south and east-west roadways spaced one mile apart. Most residences were built along the major corridors, and they tended to be somewhat widely spaced as each usually represented a farmstead with associated cultivated lands. Corn, alfalfa, and later sugar beets, were primary crops. Growth in the community was slow. By 190, the first years independent census data is available, the community only had 396 residents. This increased to 572 in 1930 and 586 in 1940 before contracting to 433 in 1950. Growth rebounded during the 1950s, in large measure due to job opportunities created by the establishment of military facilities (Hill Air Base, the Clearfield Supply Depot, etc.). by 1960, the population had grown to 814 residents, and by 1980, just beyond UDOT's 45-year survey period, the population had reached 1241 residents.

As the population grew, farmlands began to be abandoned and sold off for new residential development. Very little commercial development occurred in the area prior to the 1990s and early-2000s, and the community remained dependent on surrounding cities for most commercial services. The majority of development that occurred between 1945 and 1978 (the end of the 45-year period) consisted of residential in-fill along the existing major roadways. Very little subdivision development occurred until well into the modern era.

c. Typical Modifications or Alterations to Building and Landscape:

The visible alterations to the exterior of the dwelling include modern windows in unaltered original openings throughout the building. Replacement of original windows and siding are, perhaps, the most common alterations made to Split-level/Split-entry dwellings built during the 1960s and 1970s. The landscape of the property appears consistent with the time of construction for the dwelling.

4. Property Current Historic Designation

| a. National Register of Historic Places: | N/A |
|--|-----|
| b. Local Landmark Designation: | N/A |

5. Property Eligibility for the National Register of Historic Places

(Refer to Chapter 4 of the *Historic Residential Development of Utah's Wasatch Front, 1940-1980* when filling out this part of the template)

Criterion A

This property is nominally associated with West Point's post-World War II development period and does not represent a historically significant property within that context. Rather, it was merely one of many properties constructed during this time as individuals or families purchased available land in the area. It is not part of any subdivision or organized development. Thus, this this property does not possess significance under Criterion A.

Criterion B

The property appears to be associated with Orson and Hazel Davis. No information could be found about the architect or construction contractor. Very little information was found about the Davises, but that which was located indicates they do not rise to the level of historical significance required by the National Register. As such, this property does not possess significance under Criterion B.

Criterion C

This Split-entry residence exhibits many of the basic character-defining features of this house style and of the "classic" architectural design of such buildings. These features include a single cross-gable roofline and an apparent interior foyer with split staircase. However, the building does not represent an important example of the Split-level (split-entry subtype) building type and is merely a common vernacular example built as a "one-off" dwelling outside of any subdivision of organized development. Thus, the property does not possess significance under Criterion C.

Criterion D

The resource is not likely to contain information important to history or prehistory beyond what is already documented and does not possess significance under Criterion D.

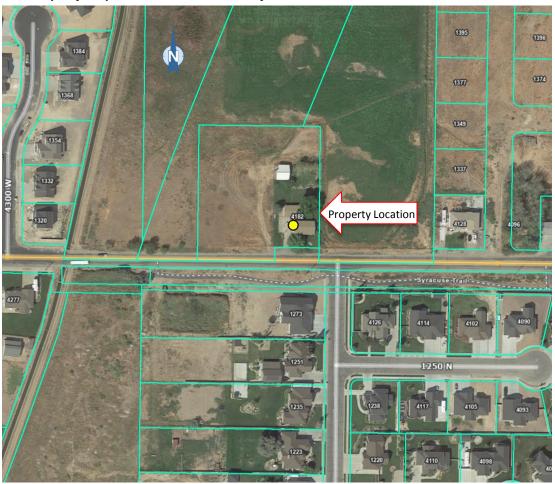
Integrity

The subject property is in its original location and continues to present its original design as a Split-level single-family residence of the 1970s. Nonetheless, the property's replaced windows reduce the property's level of integrity to "good".

The subject property is recommended **ineligible** for the National Register.

6. Property Maps and Photographs

a. Property Maps and Historic Boundary



b. Plot Photograph (include plot's buildings, structures, objects)



Overview of dwelling; looking northwest



Overview of dwelling; looking northeast



Visible outbuildings; looking north

7. Sources

Mead & Hunt. 2023. Illustrated Typology of Utah Post-World War II Residential Plans and Styles, and Associated Subtypes of Residential Subdivisions. Utah Department of Transportation, Salt Lake City.



Postwar Evaluation Individual Property Form

(Refer to the Historic Residential Development of Utah's Wasatch Front, 1940-1980 when filling out this template)

1. Property Identification

| a. County | Davis |
|----------------------|---------------------|
| b. City | West Point |
| c. Street Address | 4233 West 300 North |

2. Property Architectural History

| a. Date(s) of Construction / Development: | c. 1977 |
|---|---|
| b. Architect: | Unknown |
| c. Builder(s) / Contractor(s): | Unknown |
| d. Landscape Architect(s): | None |
| e. Plan / Style: | Split Entry with garage / Split Entry & Ranch/Rambler style |

f. Architectural description

This building is a 1.5-story Split Entry (with garage) single-family dwelling exhibiting Split Entry and Ranch/Rambler style. It is clad in regular brick and narrow vinyl siding. Notable exterior alterations include modern windows throughout in original openings and extensive use of the modern vinyl cladding. One non-contributing outbuilding was visible.

3. Property Historic Context:

The following architectural context utilizes the Split Level plan description from the *Illustrated Typology of Utah Post-World War II Residential Plans and Styles, and Associated Subtypes of Residential Subdivisions* (June 2023), prepared by Mead & Hunt, Inc. (Mead & Hunt).

Beginning in the mid-1950s, the Split-level plan was one of the most common plans nationwide. The Split-level has two or more living levels that are each separated by a partial flight of stairs. The multi-floor plan had a more compact footprint than the Ranch plan and could fit on smaller lots, allowing developers to fit more lots into a subdivision development. The Split-level plan had other benefits that compared to or superseded Ranch predecessors. The plan expanded and refined the Ranch's segregation of public and private interior space into separate "zones" or wings. It

produced a house with more square footage, allowing for additional bedrooms and bathrooms. Like the Raised Ranch, the Split-level could be used on uneven and sloping building sites, which are common along the Wasatch Front, and often included an integrated garage. The Split-level plan eventually fell out of favor as the larger Split-entry and Two-story Massed plans eclipsed its popularity.

The Split-entry plan is a variation of the Split-level that has a mid-level entry/foyer with a split stair, with one staircase going to an upper level and one to a lower level. The Split-entry has three separate levels on the interior: the entry level that includes the foyer and two levels with living space. Split-foyer or Bilevel are other terms used for this plan.

a. Demographics of Original Owner: White, Married

This dwelling was built in 1977 (outside the typical 50-year historic period and only one year before the end of UDOT's 45-year survey period). At that time, the property appears to have been occupied by Kent and LaRae Lewis. The Lewises are still alive, thus little biographical information about them is publicly available at the present time. The Lewises sold the property to their son, Darren, around 1998, and Darren sold it to the current owners, Kerry D. and Kirstine S. Lee in 2002.

b. Development Context

West Point was settled in the 1860s as an offshoot of nearby Syracuse. James Hale was the first recorded permanent settler in the community, which was known as South Hooper at the time. The settlement was later renamed Muskrat Springs and then became officially known as West Point in 1910. The community was incorporated in 1935. Throughout most of its history, West Point was a suburban agricultural community. It had a typical Utah street grid with major north-south and east-west roadways spaced one mile apart. Most residences were built along the major corridors, and they tended to be somewhat widely spaced as each usually represented a farmstead with associated cultivated lands. Corn, alfalfa, and later sugar beets, were primary crops. Growth in the community was slow. By 190, the first years independent census data is available, the community only had 396 residents. This increased to 572 in 1930 and 586 in 1940 before contracting to 433 in 1950. Growth rebounded during the 1950s, in large measure due to job opportunities created by the establishment of military facilities (Hill Air Base, the Clearfield Supply Depot, etc.). by 1960, the population had grown to 814 residents, and by 1980, just beyond UDOT's 45-year survey period, the population had reached 1241 residents.

As the population grew, farmlands began to be abandoned and sold off for new residential development. Very little commercial development occurred in the area prior to the 1990s and early-2000s, and the community remained dependent on surrounding cities for most commercial services. The majority of development that occurred between 1945 and 1978 (the end of the 45-year period) consisted of residential in-fill along the existing major roadways. Very little subdivision development occurred until well into the modern era.

c. Typical Modifications or Alterations to Building and Landscape:

The visible alterations to the exterior of the dwelling include modern windows in unaltered original openings throughout the building and extensive use of modern vinyl siding along with the original brick cladding. Replacement of original windows and siding are, perhaps, the most common alterations made to Split-level dwellings built during the 1960s and 1970s. The landscape of the property appears consistent with the time of construction for the dwelling.

4. Property Current Historic Designation

| a. National Register of Historic Places: | N/A |
|--|-----|
| b. Local Landmark Designation: | N/A |

5. Property Eligibility for the National Register of Historic Places

(Refer to Chapter 4 of the *Historic Residential Development of Utah's Wasatch Front, 1940-1980* when filling out this part of the template)

Criterion A

This property is nominally associated with West Point's post-World War II development period and does not represent a historically significant property within that context. Rather, it was merely one of many properties constructed during this time as individuals or families purchased available land in the area. It is not part of any subdivision or organized development. Thus, this this property does not possess significance under Criterion A.

Criterion B

The property appears to be associated with Kent and LaRae Lewis. No information could be found about the architect or construction contractor. No information was found to indicate the Lewises rise to the level of historical significance required by the National Register. As such, this property does not possess significance under Criterion B.

Criterion C

This Split-level residence exhibits many of the basic character-defining features of this house style and of the "classic" architectural design of such buildings. These features include a single cross-gable roofline and an apparent interior foyer with split staircase. However, the building does not represent an important example of the Split-level building type and is merely a common vernacular example built as a "one-off" dwelling outside of any subdivision of organized development. Thus, the property does not possess significance under Criterion C.

Criterion D

The resource is not likely to contain information important to history or prehistory beyond what is already documented and does not possess significance under Criterion D.

Integrity

The subject property is in its original location and continues to present its original design as a Split-level single-family residence of the 1970s. Nonetheless, the property's replaced windows and vinyl siding reduce the property's level of integrity to "fair". Unaltered Split-level properties are present elsewhere in West Point, including on adjacent properties, and are better examples of vernacular Split-level forms.

The subject property is recommended **ineligible** for the National Register.

6. Property Maps and Photographs

a. Property Maps and Historic Boundary



b. Plot Photograph (include plot's buildings, structures, objects)



Overview of dwelling; looking southeast



Overview of dwelling; looking southwest

7. Sources

Mead & Hunt. 2023. Illustrated Typology of Utah Post-World War II Residential Plans and Styles, and Associated Subtypes of Residential Subdivisions. Utah Department of Transportation, Salt Lake City.



COVER PAGE

Must Accompany All Project Reports Submitted to the Utah SHPO



Report Title: An Archaeological Resource Assessment for the SR-177; SR-193 to 1800 North Project (West Davis

Corridor Phase 2), Davis County, Utah

UDSH Project Number: U24HY0375 **Org. Project Number:** BCA77

Report Date: December 5, 2024 **County(ies):** Davis

Report Author(s): Sheri Murray Ellis
Record Search Date(s): June 1, 2024

Principal Investigator: Sheri Murray Ellis
Field Supervisor(s): Sheri Murray Ellis

Intensive Acres Surveyed (<15m intervals): 195 ac. Recon Acres Surveyed (<15m intervals): 0 ac.

USGS 7.5' Series Map Reference(s): Roy, UT and Clearfield, UT

| Sites Reported | Count | Smithsonian Trinomials |
|---|-------|---|
| Revisits (no updated site forms) | 0 | |
| Updates (updated site forms attached) | 3 | 42DV138, 42DV158/42DV223, 42DV182 |
| New recordings (site forms attached) | 0 | |
| Total Count of Archaeological Sites in APE | 3 | 42DV138, 42DV158/42DV223, 42DV182 |
| Historic Structures (structures forms Attached) | 5 | 4233 W 300 N, 4182 W 1300 N, ~4300 W 300 N, |
| | | ~4320 W 300 N, 4133 W 1800 N |
| Total National Register Eligible Sites | 1 | 42DV158/42DV223 |

^{*}Please list all site numbers per category. Number strings are acceptable (e.g. "42TO1-13; 42TO15"). Cells should expand to accommodate extensive lists.

Checklist of Required Items for Submittal to SHPO

- ⊠ "Born Digital" Report in a PDF/A format

 - ☑ File Name is the UDSH Project Number with no hyphens or landowner suffixes
- - ☑ UASF with embedded maps and photos
 - ☑ File name is Smithsonian Trinomial without leading zeros (e.g. 42TO13 not 42TO00013)
 - ☑ Photo requirements (including size and quality)
- □ Archaeological Site Tabular Data
 - Single spreadsheet for each project
 - ☑ Follows UTSHPO template (info here: https://goo.gl/7SLMqj)
- - ☑ Zipped polygon shapefile or geodatabase of survey (if different from APE) or other activity area with required field names and variable intensity denoted
 - ☑ Zipped polygon shapefile or geodatabase of site boundaries with a the required field name

An Archaeological Resource Assessment for the SR-177; SR-193 to 1800 North Project (West Davis Corridor Phase 2), Davis County, Utah

UDOT Project No. S-R-199(381); PIN 20927

Prepared for

Bowen Collins & Associates

Prepared by

Sheri Murray Ellis, MS, RPA Owner /Consultant



Certus Environmental Solutions, LLC Salt Lake City, Utah 801.230.7260

Utah Antiquities Report No. U24HY0375 PLPCO Permit No. 176

Certus Project Number BCA77

December 5, 2024

PROJECT ABSTRACT SHEET

Report Title: An Archaeological Resource Assessment for the SR-177; SR-193 to 1800 North Project (West Davis Corridor Phase 2), Davis County, Utah

UDOT Project Number and PIN: S-R-199(381); PIN 20927

Utah State Report Number: U24HY0375

Agencies: Utah Department of Transportation (UDOT), U.S. Army Corps of Engineers (USACE)

Project Description: UDOT proposes to construct the next phase of the West Davis Corridor (SR-177) between SR-193 and 1800 North in West Point and Clinton, Davis County. The project would entail construction of a new roadway, utilities, drainage facilities, and a multi-use trail, etc. and will require acquisition of right-of-way beyond what UDOT currently owns in the area. The study is currently funded with state monies, but a permit may be required from the USACE to address impacts to wetlands or waters of the U.S. This federal agency involvement invokes the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR §800. The involvement of state funding and approvals by UDOT invokes UCA 9-8-404, the state equivalent of 36 CFR §800. Certus Environmental Solutions (Certus), as a member of the consultant team, was contracted to carry out studies related to cultural resources that could be affected by the new construction or right-of-way acquisition. The results of an archaeological resources assessment are presented herein. UDOT and the USACE may use this information as part of their regulatory compliance. A report of historical buildings and structures located in the survey area is provided under separate cover.

Survey Area: The cultural resource assessment area comprises a series of irregular polygons and linear corridors surrounding the anticipated areas of ground disturbance, easements, and right-of-way acquisition. This area was defined in conjunction with UDOT and corresponds with the aquatic and biological resources assessment areas. The survey contains 195 acres.

Location: West Point; T. 4N, R. 2W, Sec. 5 & 6; T. 5N, R. 2W, Sec. 19, 29–32

Land Ownership: Private, Municipal, UDOT (right-of-way)

Date(s) of Fieldwork: June 4–6, August 2–3, October 11, and November 22, 2024

Methods: Intensive-level archaeological survey

Acres Surveyed: 195 acres

Total Archaeological Sites in the Survey Area: 3 (42DV138, 42DV158/42DV223, 42DV182)

NRHP Eligible Sites in the Survey Area: 1 (42DV158/42DV223)

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INTRODUCTION

UDOT proposes to construct the next phase of the West Davis Corridor (SR-177) between SR-193 and 1800 North in West Point and Clinton, Davis Count (see **Figure** 1, for the general project location). The project would entail construction of a new roadway, utilities, drainage facilities, and a multi-use trail, etc. and will require acquisition of right-of-way beyond what UDOT currently owns in the area. The study is currently funded with state monies, but a permit may be required from the USACE to address impacts to wetlands or waters of the U.S. This federal agency involvement invokes the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR §800. The involvement of state funding and approvals by UDOT invokes UCA 9-8-404, the state equivalent of 36 CFR §800.

Certus Environmental Solutions (Certus), as a member of the consultant team, was contracted to carry out studies related to cultural resources that could be affected by the new construction or right-of-way acquisition. The results of an archaeological resources assessment are presented herein. UDOT and the USACE may use this information as part of their regulatory compliance. A report of historical buildings and structures located in the survey area is provided under separate cover.

Fieldwork was carried out by the author June 4–6, August 2–3, October 11, and November 22, 2024, and was conducted under Utah State Antiquities Report No. U24HY0375 and Utah Public Lands Policy Coordination Office (PLPCO) Permit No. 176.

CULTURAL RESOURCES SURVEY AREA

The cultural resource assessment area comprises a series of irregular polygons and linear corridors surrounding the anticipated areas of ground disturbance, easements, and right-of-way acquisition (see Figures 2 & 3). This area was defined in conjunction with UDOT and corresponds with the aquatic and biological resources assessment areas. The survey contains 195 acres and includes all lands on which ground disturbance, temporary construction easements, and permanent right-of-way acquisition, as they were understood at the time of fieldwork, would occur. All lands in the survey area are under private and municipal ownership.

The survey areas are found in Township 4 North, Range 2 West, Sections 5 and 6 and Township 5 North, Range 2 West, Sections 19, 29–32 of the Salt Lake Base and Meridian. The area can be found on USGS 7.5 minute Utah topographic quadrangles Roy and Clearfield (see **Figure 2**).

ENVIRONMENTAL SETTING

The general project area is located in the suburban communities of West Point and Clinton, which are found between the Great Salt Lake and the Wasatch Mountains along the north-central part of the Wasatch Front. Elevation of the project area ranges from approximately 4,230 to 4,260 feet above sea level. Terrain is generally flat with a gentle overall downward slope to the west toward the lake. Most land in the survey area is unoccupied in terms of building but not undeveloped or undisturbed. The majority of the area was used historically for agricultural purposes—primarily livestock grazing—with large areas used more recently for disposal of construction debris and excavated soils.

Vegetation throughout the survey area is dominated by invasive plants, non-native bunch grasses, and introduced landscaping associated with residential properties. Ground cover ranged from barren to 100-percent with an average of greater than 60-percent at the time of survey. Occasional pockets of riparian plants are present along irrigation canals and stormwater retention facilities. Surface soils are medium brown silty loam.

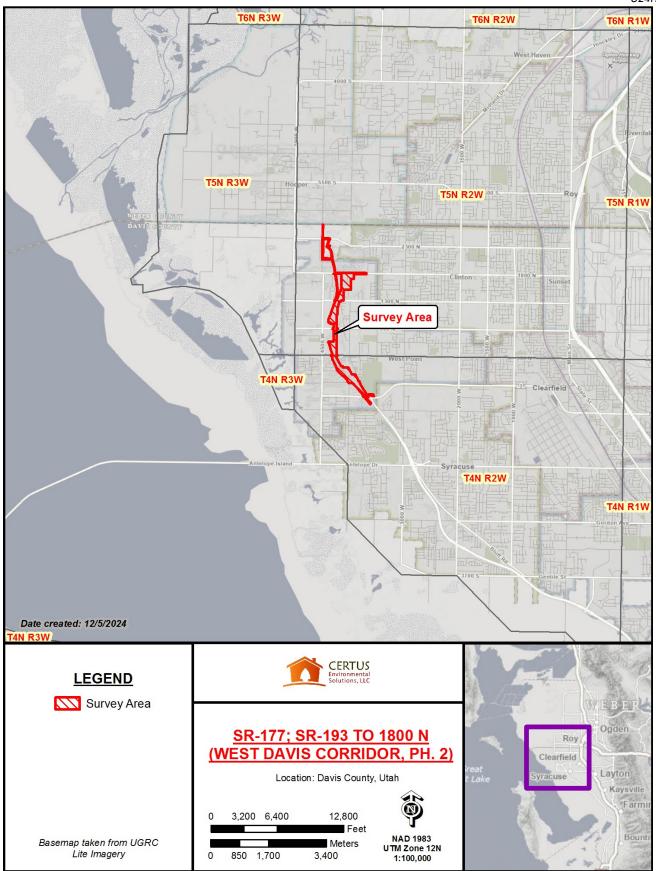


Figure 1. General location of the project

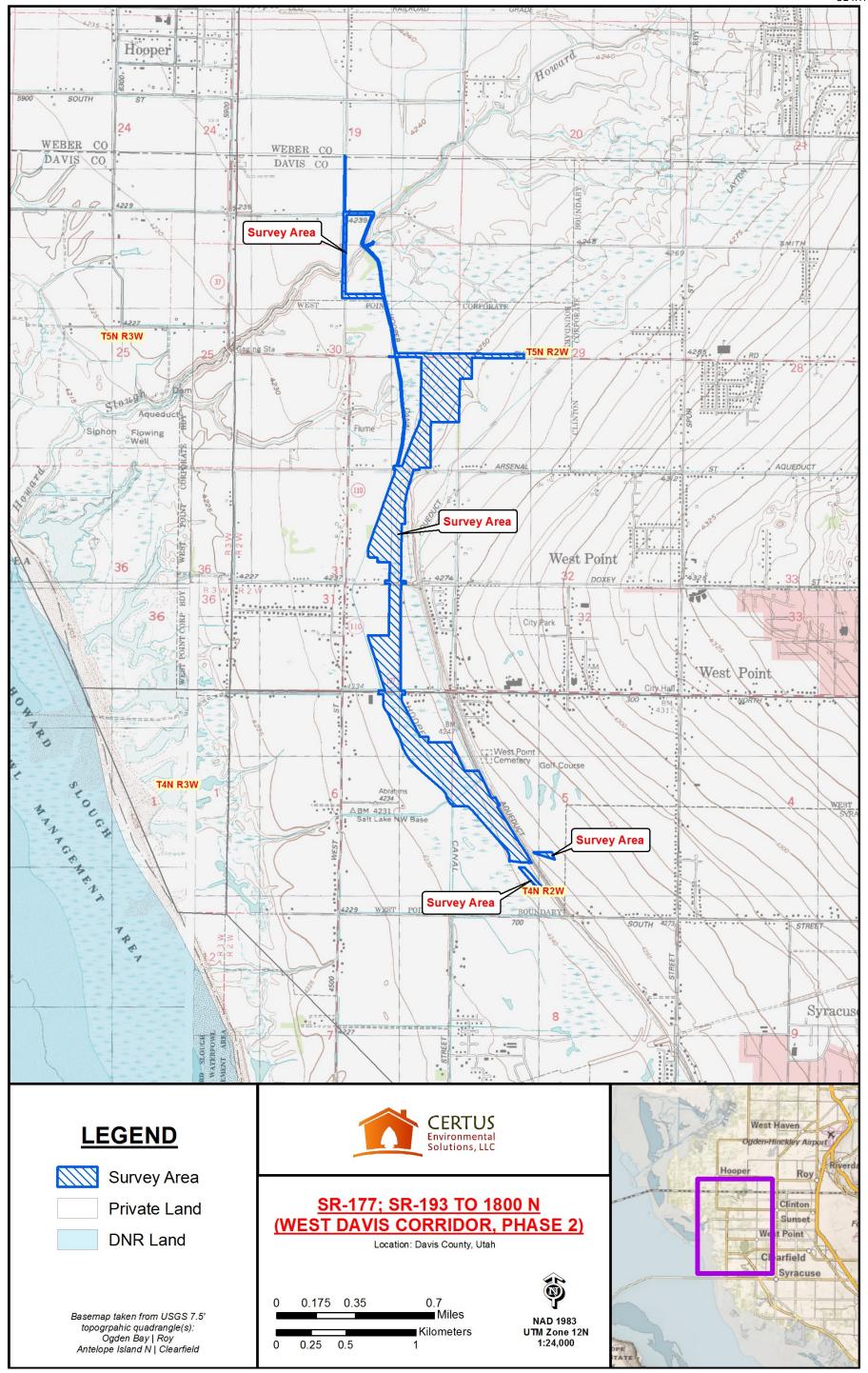


Figure 2. Location of cultural resources survey area; topographic map

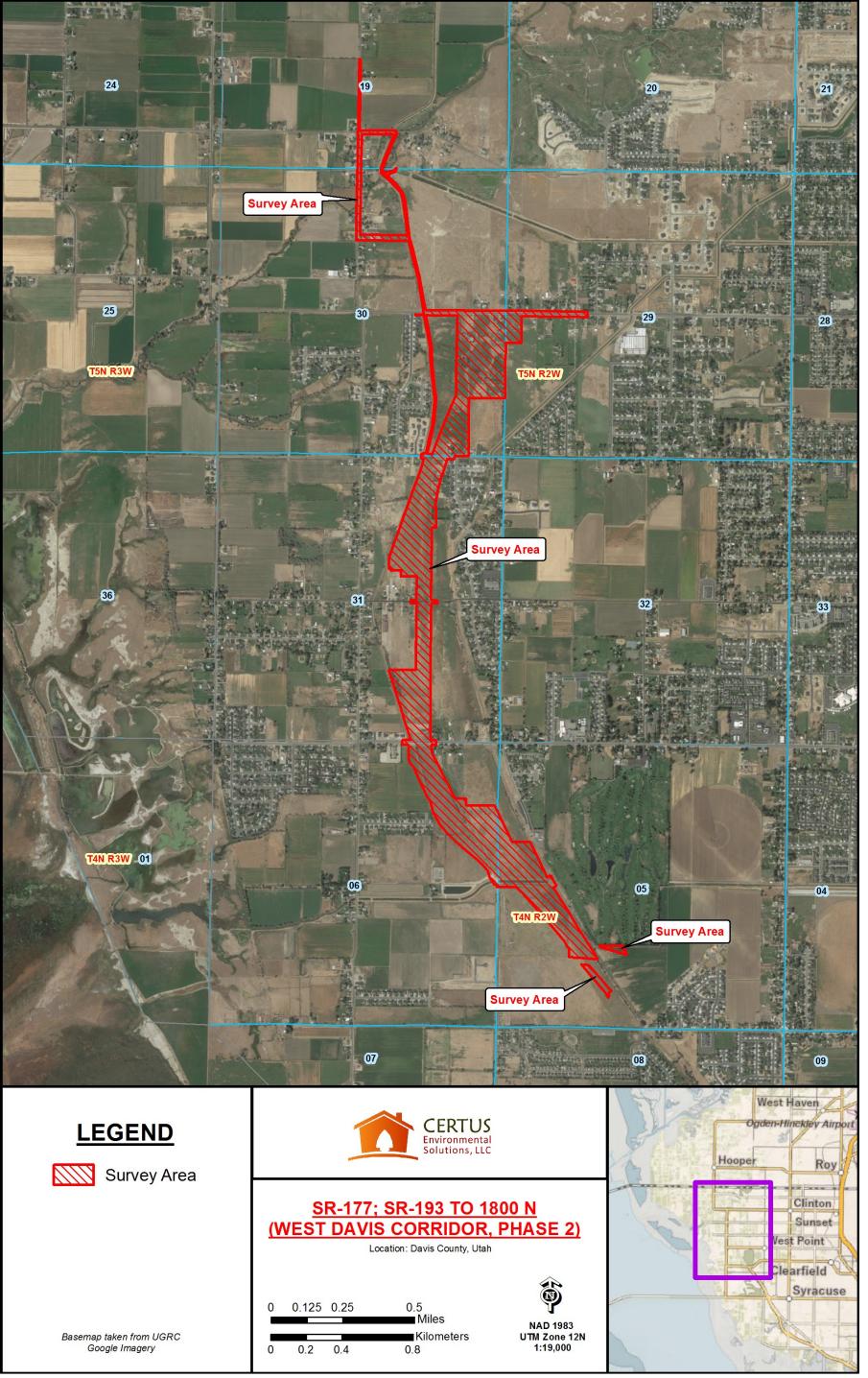


Figure 3. Location of cultural resources survey area; aerial map

FIELD METHODS

Certus applied intensive-level archaeological survey methods accepted by the Utah State Historic Preservation Officer (SHPO), UDOT, and other agencies in Utah to identify cultural resources that could be affected by the undertaking. This survey consisted of the author walking parallel transects spaced no more than 15 meters (50 feet) apart across the survey corridor. Navigation within the survey area was accomplished using aerial photos, visual landmarks, and a GPS unit capable of decimeter accuracy. A cut-off age of 45 years old or older was used per UDOT guidelines to define the historic period.

Archaeological resources encountered during the field inventory were documented through digital photographs, written description, and mapping using the GPS unit. A Utah Archaeological Site Form was prepared for each newly identified site and for any previously identified sites that required updates to their existing record.

The National Park Service (NPS) defines five cultural resource types that can be listed on the National Register of Historic Places (the National Register): buildings, sites, districts, structures, and objects (NPS 2002). For the purpose of this project, the following criteria set forth by the Utah SHPO were used to define resources as archaeological sites:

- At least 10 artifacts of a single class (e.g., 10 sherds) within a 10-meter diameter area, except when all pieces appear to originate from a single source (e.g., one ceramic pot or one glass bottle)
- At least 15 artifacts that include at least 2 classes of artifact types (e.g., sherds, nails, glass) within a 10-meter area
- One or more archaeological features in temporal association with any number of artifacts
- Two or more temporally associated archaeological features without artifacts

FILE SEARCH AND ARCHIVAL RECORDS REVIEW

Certus conducted a search of the online (Sego and HUB) sites and project files of the Utah SHPO on June 1, 2024. The file search encompassed an area extending 1/2 mile in all directions from the edge of the survey area. The file search was conducted to:

- a) identify any areas of the survey area that may not require additional field inventory;
- b) identify any previously documented sites in the survey area that should be considered relative to potential project impacts; and
- c) assess the potential for encountering cultural resources during the field survey for the project and obtain information about the types of cultural resources likely to be present.

SHPO File Review

According to SHPO records, 18 prior regulatory-based cultural resource assessments have taken place within 1/2 mile of the survey area. These surveys occurred between 1982 and 2023 with most occurring after 2010. Nine of the projects encompassed portions of the current survey area. This includes a prior reconnaissance-level survey for the West Davis Corridor EIS that encompassed a substantial portion of

the current survey area. Certus reinventoried all previously inspected portions of the current survey area for the present undertaking.

SHPO records indicate that nine archaeological sites have been reported previously in the file search area. The sites are dominated by historical irrigation canals and distribution ditch systems. No prehistoric period sites have been reported in the area. Two of the previously reported sites extend into the current survey area. They are discussed in more detail in the Findings section of this report. These sites are as follows:

- 42DV158/42DV223/42WB425: Hooper Canal system. The site has been assigned two Davis County site numbers with the later number (42DV223) appearing to have been erroneously assigned in 2021. The site has been determined both eligible and ineligible for the National Register. The majority of determinations related to documentation of segments of the system over time found it eligible under Criterion A. The sole determination that the site is ineligible was made in 2021 under site number 42DV233.
- 42DV182: Layton Canal system. This site was determined ineligible for the National Register under all criteria in 2015 following documentation of the full main canal by the Bureau of Reclamation.

Historical Map Review

As part of the file search, Certus reviewed online General Land Office (GLO) maps, topographic maps, and historical air photos for the relevant area. GLO maps providing illustration of lands in the survey area were available online for Township 4 North, Range 2 West for the year 1855 and for Township 5 North, Range 2 West for the years 1855, 1856, and 1941. These sources do not depict any man-made features that could still be present in the current survey area.

The only historical USGS topographic maps of reasonable scale available for the survey area date to 1955 (Roy and Clearfield quadrangles) and 1972 (Clearfield quadrangle). The maps depict the Hooper Canal as the only man-made feature in the survey area aside from the road network, which is actively used and maintained and not considered a historical resource for the purpose of regulatory compliance.

Paleontological Resources Consultation

Per UDOT requirements for projects with notable ground disturbance, Certus consulted with the Utah Geological Survey (UGS) regarding known and potential paleontological resources that could be affected by the proposed undertaking. UGS indicated that no fossil localities are known to be present in the survey area and that the Quaternary and Recent alluvial and lacustrine deposits exposed in the area have low potential for yielding significant fossil localities. A copy of the consultation letter from the UGS is included in **Appendix A**.

FINDINGS

Certus documented three archaeological sites in the survey area. See **Figure 4 in Appendix B** for the resource locations and the sections below for descriptions and National Register eligibility evaluations. These sites include an unnamed land drain (42DV138), the Hooper Canal system (42DV158/42DV223), and the Layton Canal (42DV182).

Site 42DV138, Unnamed Land Drain

This site is an unnamed land drain (ditch) located near 200 South in West Point. The segment of the site documented here begins on the east at the edge of the Schneiter's Bluff Golf Course where the ditch channel daylights and extends to the west for 717 meters. Along this segment, the ditch is unlined and measures approximately 20 feet wide across the top by 14-15 feet wide at the bottom. It has a shallow U-shaped cross-section and is roughly 4 feet deep. No water control features were observed along the documented segment, but several modern concrete slab crossings and corrugated metal pipe culverts were noted.

Little is known about the history of the drainage ditch. Portions of the system near 4500 West appear in aerial images from 1937 (the earliest for the area), but the full system as it appears today did not take shape until after at least 1971. The portion of the ditch east of 4500 West appears to have been enlarged after 1971 while the segment west of 4500 West remained unchanged until it was partially piped sometime between 1971 and 1985. Documentation of other segments of the ditch located further east suggests it was constructed sometime around 1913 and served as a combination irrigation ditch and storm drain/land drain (Meess 2008). It does not appear the ditch is used for irrigation purposes at this time. The ditch has been expanded along many segments to serve as a storm drain/land drain for municipal systems in the area.

The portion of the ditch documented here retains integrity of location but has seen diminishment of its integrity of materials, design, workmanship, setting, feeling, and association through a combination of piping segments to the east, expanding the system during the modern era, enlarging portions of the ditch, and developing surrounding lands, which has eliminated many of the agricultural fields that may have been irrigated by the system in the early period of its history.

National Register Evaluation

The overall ditch site was *determined ineligible* for the National Register under all criteria as a result of multiple past evaluations of segments outside the current survey area. Certus supports these prior determinations and recommends the site continue to be addressed as an ineligible resource. The portion of the site documented and evaluated here does not contain any features worthy of preservation, and no new archival information was found to identify any historical associations not previously known.

Site 42DV158/42DV223, Hooper Canal System

Site 42DV158 is the Hooper Canal system. It was assigned a duplicate site number (42DV223) in 2021. The canal flows from the Weber River in Wilson to the Syracuse area, where it eventually empties into the Great Salt Lake. Originally used to convey irrigation water, the canal now carries both irrigation and storm water. The system includes the main canal and a series of laterals and sub-laterals that branch out throughout the Syracuse area.

One 5,247-meter-long (3.3-mile-long) segment of the main canal is discussed herein as are several segments of lateral distribution ditches extending off of the canal. The documented portion of the main canal begins near 550 South in West Point and extends north to a point north of 2425 North. Near the southern end of the canal, the channel includes a combination of active open channel north of 300 North and abandoned channel south of 300 North. The abandoned channel segment appears to have been piped underground, but the exact path of the piping is unclear, as it does not appear to follow the

original alignment in its entirety. The portions of the abandoned channel that remain intact measure little more than 2 meters wide and less than 1 meter deep, but they are sporadic and discontinuous due to backfilling to accommodate land use. They are unlined. A pair of interconnected lateral distribution ditches extending off of the abandoned channel was also documented. These ditches measure approximately 1 meter wide by 50 centimeters deep. The only water control features observed along these ditches were two modern concrete turnouts. The actively used open channel of the main canal measures approximately 3-4 meters wide and up to 1 meter deep. The channel is lined with concrete. Several modern concrete slab crossings and several modern turnouts, trash racks, and other related features were observed along this portion of the canal.

Near the center of the documented segment, the canal comprises an open, concrete-lined channel with the same dimensions and feature types as the southern section. The northern section of the documented segment of the canal comprises an open, concrete-lined channel with the same dimensions and feature types as the southern section. One lateral distribution ditch extending off of this section of the main canal was also documented. This lateral ditch extends west from the main canal along the south side of 2425 North and measures approximately 1 meter wide by 50 centimeters deep.

Construction of the main canal began around 1869, and the system remains in use today. The canal was operated by the Hooper Irrigation Company, which was incorporated in 1903, well after the initial construction of the main canal, and was intended to provide irrigation water to as much as 8,440 acres. The canal was originally unlined. It is unclear exactly when the current concrete lining was installed, but it appears to have occurred during the historic period. Aerial imagery suggests that the majority of the remaining open and active channel of the 13.4-mile long main canal has been lined with concrete, and several segments have been realigned, likely to accommodate modern development in the area.

National Register Evaluation

The Hooper Canal, under site number 42DV158, was determined eligible for the National Register under Criterion A as a result of several regulatory compliance efforts during the 1990s, 2000s, and 2010s. In 2021, the site was assigned a second site number, 42DV223, and was determined ineligible under all criteria. Certus agrees with the prior determinations and recommends the site be considered *eligible* under Criterion A for the significant role it played in opening up lands in the Clinton, Syracuse, and West Point areas for agricultural development and, relatedly, settlement. The open portions of the canal (i.e., the concrete-lined segments and unpiped segments) would be considered contributing to the overall eligibility of the site. The piped segments are recommended non-contributing due to a lack of overall integrity.

Site 42DV182, Layton Canal System

This site is the Layton Canal System. The entirety of the main canal was documented by the Bureau of Reclamation in 2015. This included both the open portions of the canal and the piped segment (i.e., the southernmost 6.4 miles of the 17-mile long canal. The portion of the site in the current survey area comprises a series of distribution ditches located near 1800 North. A 62-meter-long portion of the piped main canal near the Schneitter's Bluff Golf Course *may* also pass through the survey area; however, the exact location of the pipe relative to the survey area is unclear. SHPO database records map this portion of site as being intersected by the survey area.

The portions of the distribution ditch system addressed here include a mostly-piped segment extending west from the main canal along the north side of 1800 North and an interconnected series of open field-

level ditches on the south side of 1800 North just east of the Hooper Canal. These latter features are unlined ditches measuring little more than 1 meter wide and less than 50 centimeters deep. No historical water control features were observed along these ditches. Aerial images suggest these ditches were constructed between 1965 and 1985. In large measure, they follow the paths of natural sloughs.

The Layton Canal was constructed between 1962 and 1964 as part of the federal Weber River Basin Project. It was intended for irrigation uses and was originally an unlined channel. The main canal was constructed by the Syblon-Reid Construction Company under contract to the Bureau of Reclamation.

National Register Evaluation

The Layton Canal site was *determined ineligible* for the National Register under all criteria as a result of multiple past evaluations of segments, including by Reclamation in 2015, which included the entire main canal. Certus supports these prior determinations and recommends the site continue to be addressed as an ineligible resource.

SUMMARY

Certus conducted an intensive-level cultural resource inventory for the proposed Phase 2 construction of the West Davis Corridor (SR-177) in Davis County, Utah. The inventory identified three archaeological sites—42DV138 (an unnamed land drain), 42DV158/42DV223 (the Hooper Canal System), and 42DV182 (the Layton Canal System). Certus has recommended sites 42DV138 and 42DV182 ineligible for the National Register under all criteria. Site 42DV158/42DV223 is recommended eligible under Criterion A.

UDOT, in consultation with the Utah SHPO and other appropriate parties, will make the final determinations of eligibility and findings of effect for the undertaking. These determinations and findings will be issued under separate cover.

REFERENCES CITED

Meess, Sara. 2008. Intermountain Antiquities Computer System site form for site 42DV138. On file at the Utah State Historic Preservation Office, Salt Lake City.

National Park Service (NPS). 2002. *How to Apply the National Register Criteria for Evaluation*. National Register Bulletin 15. Utah Centennial County History Series. Accessed online on January 9, 2014 at: http://www.nps.gov/history/nr/publications/bulletins/nrb15/

An Archaeological Resource Assessment for the SR-177; SR-193 to 1800 North Project (West Davis Corridor Phase 2), Davis County, Utah

UDOT Project No. S-R-199(381); PIN 20927

APPENDIX A:

PALEONTOLOGICAL RESOURCES CONSULTATION LETTER



State of Utah

SPENCER J. COX Governor

DEIDRE M. HENDERSON Lieutenant Governor

Department of Natural Resources

JOEL FERRY
Executive Director

Utah Geological Survey R. WILLIAM KEACH, II State Geologist/Division Director

June 7, 2024

Sheri Murray Ellis CERTUS Environmental Solutions, LLC 655 7th Avenue Salt Lake City UT 84103

RE: Paleontological File Search Request – UDOT Project S-R-199(381); PIN 20927

SR-177; SR-193 to 1800 North

U.C.A. 79-3-508 (Paleontological) Compliance; Request for Confirmation of Literature Search according to the UDOT/UGS Memorandum of Understanding.

Dear Sheri:

I have conducted a paleontological file search for the SR-177; SR-193 to 1800 North Project in response to your letter of June 3, 2024. This project qualifies for treatment under the UDOT/UGS executed Memorandum of Understanding.

There are no paleontological localities recorded in our files in or near this project area. Quaternary and Recent alluvial and lacustrine deposits that are exposed along this project right-of-way have a low potential for yielding significant fossil localities (PFYC 2). Unless fossils are discovered as a result of construction activities, this project should have no impact on paleontological resources.

If you have any questions, please call me at (801) 537-3311.

Sincerely,

Martha Hayden

Paleontological Assistant

Martha Hayden



An Archaeological Resource Assessment for the SR-177; SR-193 to 1800 North Project (West Davis Corridor Phase 2), Davis County, Utah

UDOT Project No. S-R-199(381); PIN 20927

APPENDIX B: SURVEY RESULTS FIGURE

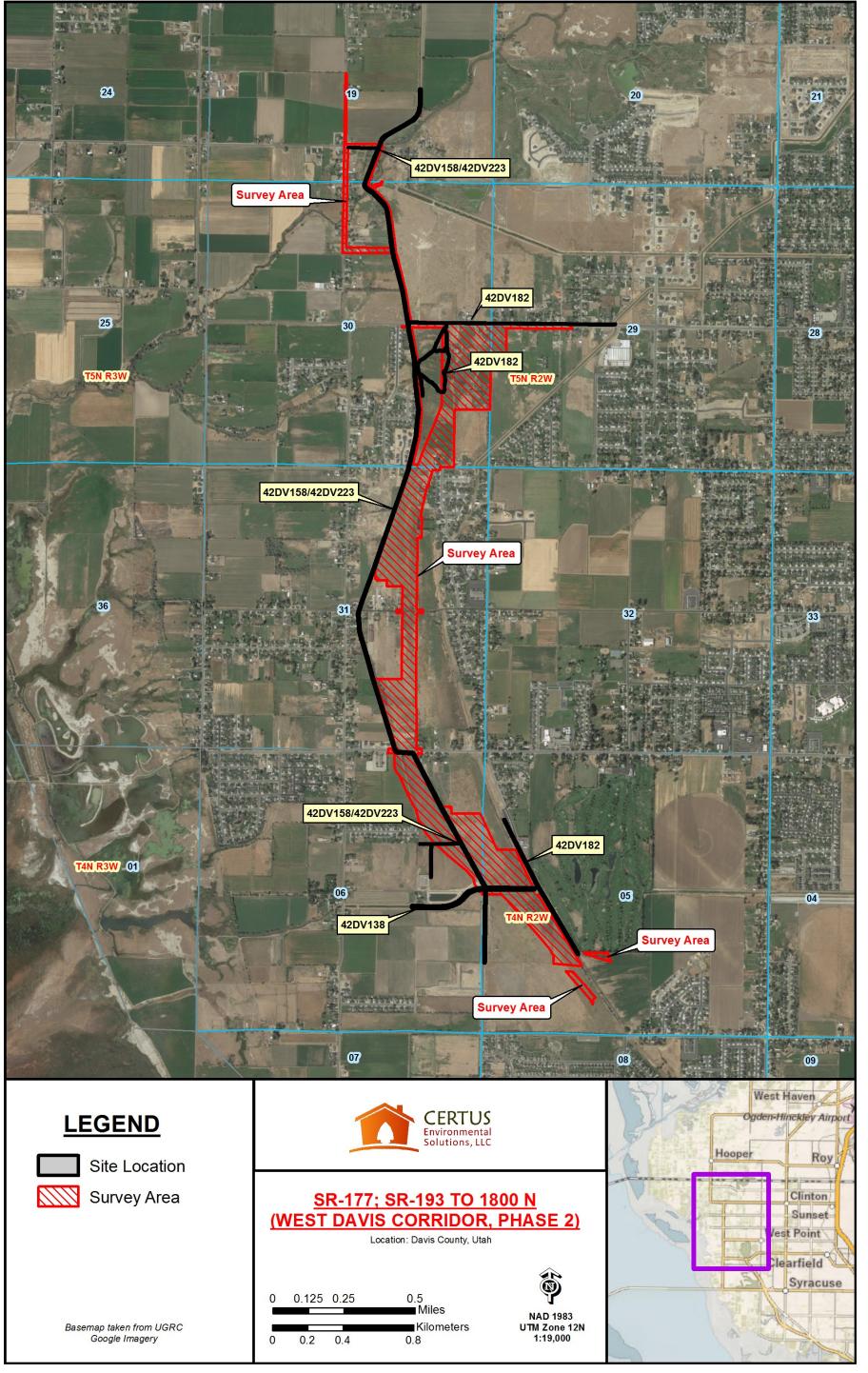


Figure 4. Survey results

PART A – Administrative Data

| | 1. Smithsonian Trinomial: 42DV138 – Segment |
|---|--|
| | 2. Temporary Site No. : |
| | 3. Site Name: |
| 4. Date Recorded: <u>08/03/2024</u> | |
| 5. Type of Recording: □First Recording □Full Re-record ☑Update | |
| 6. Project Name: SR-177; SR-193 to 1800 North (West Davis Corn | ridor, Phase 2) |
| 7. State Project Number: <u>U24HY0375</u> | |
| 8. Land Status: Private/Municipal | |
| 9. USGS 7.5' Quad Map Name and Date: Clearfield, UT | |
| 10. Township: <u>4 N</u> Range: <u>2 W</u> Section: <u>5 & 6</u> | 1/4): <u>SW & SE</u> County: <u>Davis</u> |
| 11. Meridian: ⊠Salt Lake □Uintah | |
| 12. UTMs: Zone <u>12</u> <u>407400</u> E <u>4551674</u> N | NAD83 |
| 13. Site Dimensions: Length: <u>717</u> m Width: <u>8</u> m | Area: $\underline{11,670}$ m ² \boxtimes GIS \square Estimate |
| 14. Site Class^a: □Prehistoric □Protohistoric ⊠Historic | |
| 15. Site Type: Prehistoric/Protohistoric | Historic |
| _ 2 _ 1 | □Domestic □Transportation/Communication |
| * * * * | □Agriculture/Subsistence □Defense |
| □Unknown □Other ^b | □Industry/Processing/Extraction □Unknown □Other Stormwater management |
| 16. Site Characteristics ^a : ☐ Artifact Scatter ☐ Rock Art/Inser ☐ Architectural Feature(s) ☐ Non-Architectural Feature(s) | ural Feature(s) ⊠ Linear □Recreation □Road/Trail □Vandalism/Looting □ ed □Destroyed |
| • | |
| 22. Material Collected: No Yes (describe in Site Description) Repo NRHP Evaluation 23. Is the Site Significant: No Yes, under criterion^a: | story: N/A |
| □A (event) □B (personal sequence) 24. Does it Retain Integrity: □No ⊠Yes, aspects present a: | on) $\Box C$ (design/construction) $\Box D$ (important information) |
| ⊠Location □Design | □Setting □Materials □Workmanship □Feeling □Association |
| 25. NRHP Status: Not Eligible □ Eligible □ Listed 26. Justification (include discussion of historic context, significance, and integring the state of the | ity): |

The overall ditch site was determined ineligible for the National Register under all criteria as a result of multiple past evaluations of segments outside the current survey area. Certus supports these prior determinations and recommends the site continue to be addressed as an ineligible resource. The portion of the site documented and evaluated here does not contain any features worthy of preservation, and no new archival information was found to identify any historical associations not previously known.

^a Check all that apply

^b See manual for additional categories

PART A – Administrative Data

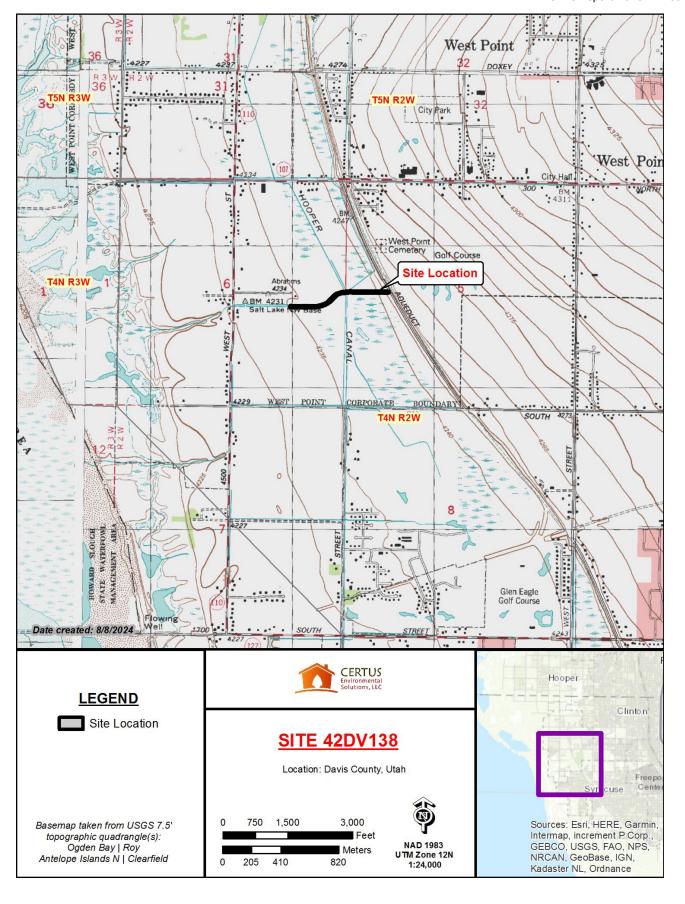
| | Smithsonian Trinomial: 42DV138 |
|-----|---|
| | Temporary Site No.: |
| 27. | Site Description (interpretation, context, size, artifact and feature assemblage, dating, previous work and curation, etc.): |
| | This site is an unnamed land drain (ditch) located near 200 South in West Point. The segment of the site documented here begins on the east at the edge of the Schneiter's Bluff Golf Course where the ditch channel daylights and extends to the west for 717 meters. Along this segment, the ditch is unlined and measures approximately 20 feet wide across the top by 14-15 feet wide at the bottom. It has a shallow U-shaped cross-section and is roughly 4 feet deep. No water control features were observed along the documented segment, but several modern concrete slab crossings and corrugated metal pipe culverts were noted. |
| | Little is known about the history of the drainage ditch. Portions of the system near 4500 West appear in aerial images from 1937 (the earliest for the area), but the full system as it appears today did not take shape until after at least 1971. The portion of the ditch east of 4500 West appears to have been enlarged after 1971 while the segment west of 4500 West remained unchanged until it was partially piped sometime between 1971 and 1985. Documentation of other segments of the ditch located further east suggests it was constructed sometime around 1913 and served as a combination irrigation ditch and storn drain/land drain (Meess 2008). It does not appear the ditch is used for irrigation purposes at this time. The ditch has been expanded along many segments to serve as a storm drain/land drain for municipal systems in the area. |
| | The portion of the ditch documented here retains integrity of location but has seen diminishment of its integrity of materials, design, workmanship, setting, feeling, and association through a combination of piping segments to the east, expanding the system during the modern era, enlarging portions of the ditch, and developing surrounding lands, which has eliminated many of the agricultural fields that may have been irrigated by the system in the early period of its history. |
| 22 | Environmental Context (topography, vegetation, ground visibility, depositional context): |
| | This portion of the site is located near 200 South in West Point. The ditch passes through abandoned/fallow agricultural (grazing) land, and vegetation comprises remnants of introduced forage grasses and extensive invasive plants with minor amounts of riparian plants in the open ditch channel. |
| 23. | Notes Regarding Access (as needed): Access to the site is generally unrestricted. |
| 24 | Additional Part A Comments: |
| | Meess, Sara. 2008. Intermountain Antiquities Computer System site form for site 42DV138. On file at the Utah State Historic Preservation Office, Salt Lake City. |

^a Check all that apply^b See manual for additional categories

PART C – Historic Component

| | | | | | Smithson | nian Trinomial: _ | 42DV138 |
|--|---------------------------------------|---------------------------------------|--------------------------|----------------|--------------------------------|--------------------------|--|
| | | | | | Tempora | ary Site No.: | |
| D.: | . 4 C - : 4 | . 10 | 112 | D | | | |
| • | ites of site use: dates of site us | | | | | | |
| Secondary | dates of site us | se: | 10 | | | | |
| Architectu | ral Features | | | | | | |
| Type | D | escription | | | | | |
| None | | | | | | | |
| Non-Archit | tectural Featu | res | | | | | |
| Туре | | | cription | | | | |
| Ditch/Dit | | | _ | the site docu | mented here begi | ns on the east at th | ne edge of the Schneiter's Bluff |
| | | Golf (| Course wh | ere the ditch | channel daylights | s and extends to th | e west for 717 meters. Along |
| | | | | | | | 0 feet wide across the top by 14 |
| | | | | | | | on and is roughly 4 feet deep. segment, but several modern |
| | | | | | , | oipe culverts were | • |
| Feature Co | mments: | | | _ | | . 1 | |
| | | | | | | | |
| <u>Cans</u> – Tota | al Quantity: | 0 | | | | | |
| Quantity | Type | | Description | n | | | |
| | | | | | | | |
| Glass Bottl | <u>es</u> – Total ENV | V: <u> </u> | | | | | |
| ENV M | Ianufacturing M | Method | Description | n | | | |
| | | | | | | | |
| | | | | | | | |
| Glass Bottl | e Comments: | No artifact | s were obs | served in asso | ciation with the | documented ditch | segment. |
| Camamiaa | Tetal ENV. | n | | | | | |
| | - Total ENV: <u>(</u> Vare | | Description | <u> </u> | | | |
| EIVV | vare | | Descriptio | <u>II</u> | | | |
| | | | | | | | |
| | omments: N | o artifacts | were obse | rved in assoc | iation with the do | ocumented ditch se | gment. |
| . Ceramic C | | | | | | | <u> </u> |
| . Ceramic C | | | | | | | |
| | Artifacts/Debi | ris: | | | | | |
| | Artifacts/Debi | ris:] Car/Car Part | s | | Glass (non-bottle) | □ Nails (wire) | □ Toys |
| . Additional | Artifacts/Deb | | | | Glass (non-bottle) Hardware | ☐ Nails (wire) ☐ Plastic | ☐ Toys |
| . Additional | Artifacts/Deb | Car/Car Part | on-tableware |) 🗆 1 | , | ` ' | • |
| . Additional Ammunition Bone Building M | Artifacts/Debi | Car/Car Part Ceramics (no Building Ma | on-tableware aterials |) _ 1 | Hardware Nails (cut) | ☐ Plastic☐ Stove Parts | □ Other |
| . Additional Ammunition Bone Building M | Artifacts/Debi | Car/Car Part Ceramics (no Building Ma | on-tableware aterials |) _ 1 | Hardware Nails (cut) | ☐ Plastic☐ Stove Parts | • |

^a Check all that apply^b See manual for additional categories







42DV138; Overview of open ditch segment; looking east

PART A – Administrative Data

| | 1. Smithsonian Trinomial: 42DV158 |
|-------------|---|
| | 2. Temporary Site No. : |
| | 3. Site Name: Hooper Canal System |
| 4. | Date Recorded: 06/03/2024 and 11/22/2024 |
| 5. | Type of Recording: □First Recording □Full Re-record ☑Update |
| 6. | Project Name: SR-177; SR-193 to 1800 North (West Davis Corridor, Phase 2) |
| 7. | State Project Number: <u>U24HY0375</u> |
| 8. | Land Status: Private |
| 9. | USGS 7.5' Quad Map Name and Date: Roy, UT and Clearfield, UT |
| | Township: <u>4 N</u> Range: <u>2 W</u> Section: <u>5 & 6</u> (1/4): <u>SW & E1/2</u> County: <u>Davis</u> |
| | Township: <u>5 N</u> Range: <u>2 W</u> Section: <u>19, 30 & 31</u> (1/4): <u>SE, SE & NE</u> |
| | Meridian: Salt Lake □Uintah |
| | UTMs: Zone 12 406882 E 4552470 N NAD83 |
| | Site Dimensions: Length: $5,247 \text{ m}$ Width: 8 m Area: $56,279 \text{ m}^2$ \boxtimes GIS \square Estimate |
| | Site Class ^a : □Prehistoric □Protohistoric ⊠Historic |
| 15. | Site Type: Prehistoric/Protohistoric Historic |
| | □Long-Term Residential □Task Specific □Domestic □Transportation/Communication |
| | □Temporary Camp □Specialty Site □Agriculture/Subsistence □Defense |
| | □Unknown □Other b □Other D □O |
| 1.0 | |
| 10. | Site Characteristics ^a : ☐ Artifact Scatter ☐ Rock Art/Inscription ☐ Lithic Source/Quarry ☐ Rock Shelter/Cave ☐ Architectural Feature(s) ☐ Non-Architectural Feature(s) ☐ Lithic Source/Quarry ☐ Rock Shelter/Cave |
| 17 | Impacting Agents: None Erosion Livestock Concentration Recreation Road/Trail Vandalism/Looting |
| | □ Other Piping of portions of the once open ditch network |
| | Site Condition: Stable □Deteriorating □Imminently Threatened □Destroyed |
| | Description (as needed): |
| | |
| | Recorded By: Sheri Murray Ellis 21. Organization: Certus Environmental Solutions |
| 22. | Material Collected: No □Yes (describe in Site Description) Repository: |
| | |
| | NRHP Evaluation |
| 23 | Is the Site Significant: □No |
| - J. | $\boxtimes A$ (event) $\square B$ (person) $\square C$ (design/construction) $\square D$ (important information) |
| | |
| 24. | Does it Retain Integrity: □No |
| | |
| 25. | NRHP Status: □ Not Eligible □ Eligible □ Listed |
| 26. | Justification (include discussion of historic context, significance, and integrity): |

The Hooper Canal, under site number 42DV158, was determined eligible for the National Register under Criterion A as a result of several regulatory compliance efforts during the 1990s, 2000s, and 2010s. In 2021, the site was assigned a second site number, 42DV223, and was determined ineligible under all criteria. Certus agrees with the prior determinations and recommends the site be considered eligible under Criterion A for the significant role it played in opening up lands in the Clinton, Syracuse, and West Point areas for agricultural development and, relatedly, settlement. The open (unpiped) portions of the canal (i.e., the concrete-lined segments) would be considered contributing to the overall eligibility of the site. The piped segments are recommended non-contributing due to a lack of overall integrity.

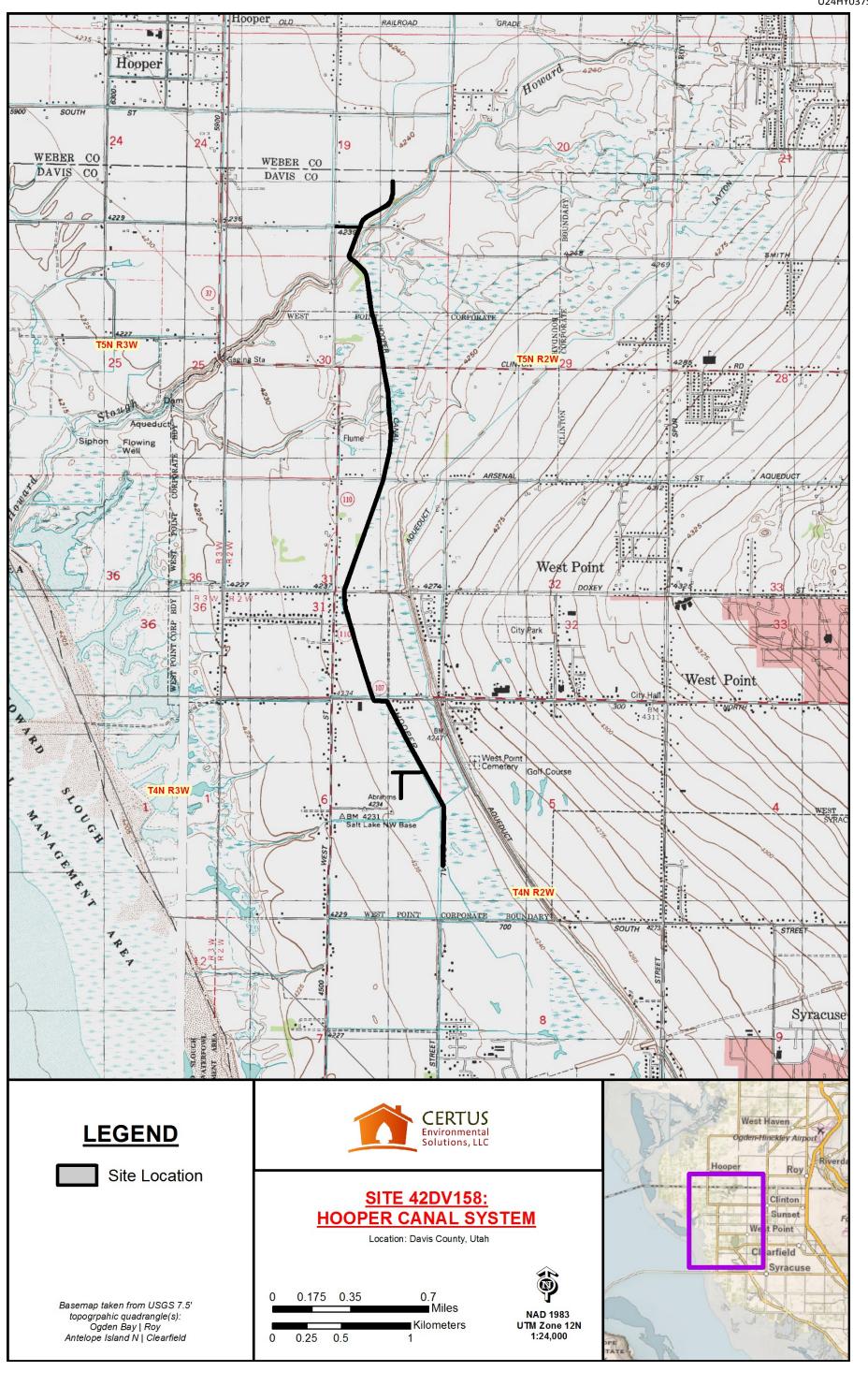
^a Check all that apply

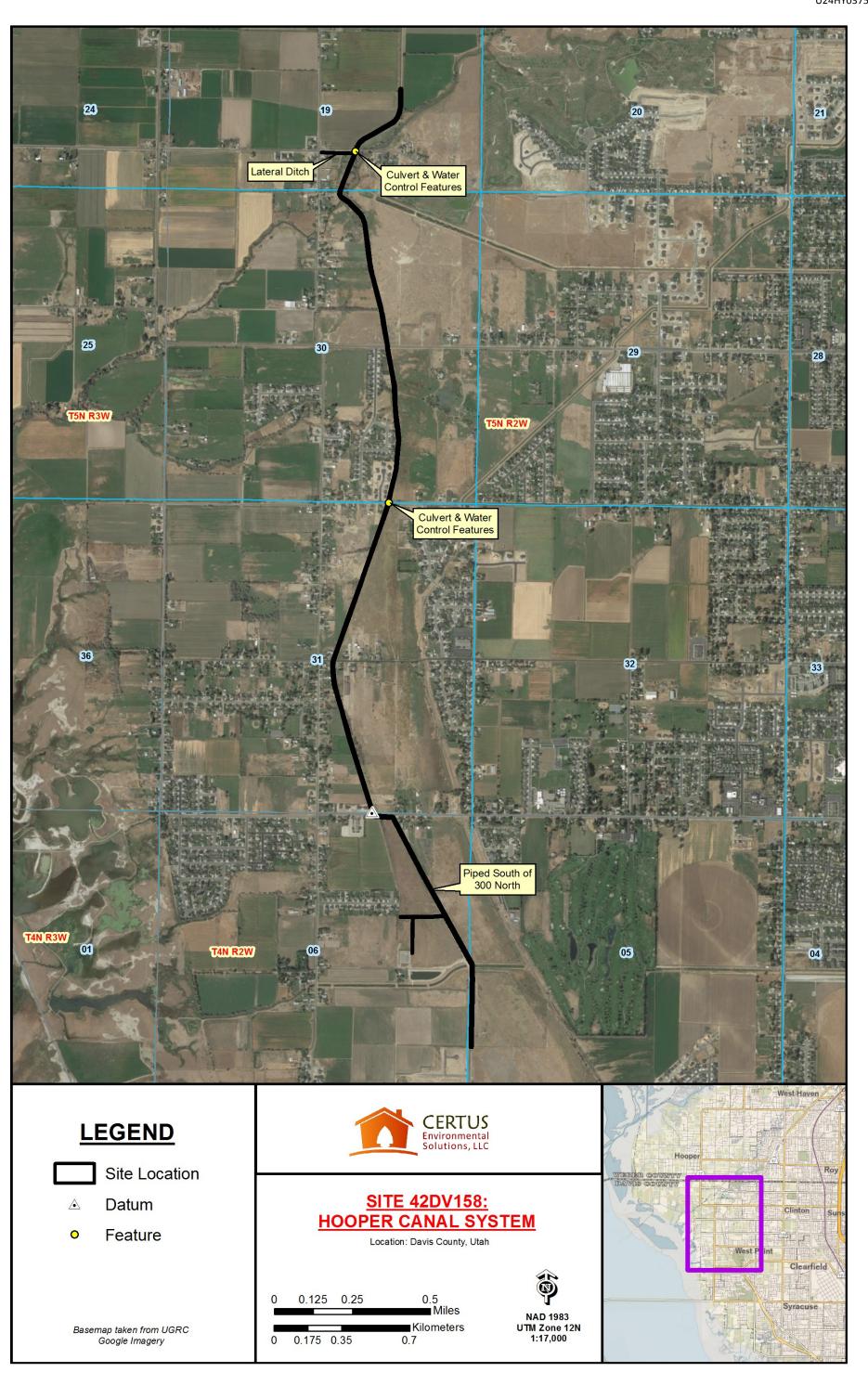
^b See manual for additional categories

PART A – Administrative Data

| | Smithsonian Trinomial: 42DV158 |
|-----|---|
| | Temporary Site No.: |
| | |
| 27. | . Site Description (interpretation, context, size, artifact and feature assemblage, dating, previous work and curation, etc.): |
| | Site 42DV158 is the Hooper Canal system. It was assigned a duplicate site number (42DV223) in 2021. The canal flows from the Weber River in Wilson to the Syracuse area, where it eventually empties into the Great Salt Lake. Originally used to convey irrigation water, the canal now carries both irrigation and storm water. The system includes the main canal and a series of laterals and sub-laterals that branch out throughout the Syracuse area. |
| | Site 42DV158 is the Hooper Canal system. It was assigned a duplicate site number (42DV223) in 2021. The canal flows from the Weber River in Wilson to the Syracuse area, where it eventually empties into the Great Salt Lake. Originally used to convey irrigation water, the canal now carries both irrigation and storm water. The system includes the main canal and a series of laterals and sub-laterals that branch out throughout the Syracuse area. |
| | One 5,247-meter-long (3.3-mile-long) segment of the main canal is discussed herein as are several segments of lateral distribution ditches extending off of the canal. The documented portion of the main canal begins near 550 South in West Point and extends north to a point north of 2425 North. Near the southern end of the canal, the channel includes a combination of active open channel north of 300 North and abandoned channel south of 300 North. The abandoned channel segment appears to have been piped underground, but the exact path of the piping is unclear, as it does not appear to follow the original alignment in its entirety. The portions of the abandoned channel that remain intact measure little more than 2 meters wide and less than 1 meter deep, but they are sporadic and discontinuous due to backfilling to accommodate land use. They are unlined. A pair of interconnected lateral distribution ditches extending off of the abandoned channel was also documented. These ditches measure approximately 1 meter wide by 50 centimeters deep. The only water control features observed along these ditches were two modern concrete turnouts. The actively used open channel of the main canal measures approximately 3-4 meters wide and up to 1 meter deep. The channel is lined with concrete. Several modern concrete slab crossings and several modern turnouts, trash racks, and other related features were observed along this portion of the canal. |
| | Near the center of the documented segment, the canal comprises an open, concrete-lined channel with the same dimensions and feature types as the southern section. The northern section of the documented segment of the canal comprises an open, concrete-lined channel with the same dimensions and feature types as the southern section. One lateral distribution ditch extending off of this section of the main canal was also documented. This lateral ditch extends west from the main canal along the south side of 2425 North and measures approximately 1 meter wide by 50 centimeters deep. |
| | Construction of the main canal began around 1869, and the system remains in use today. The canal was operated by the Hooper Irrigation Company, which was incorporated in 1903, well after the initial construction of the main canal, and was intended to provide irrigation water to as much as 8,440 acres. The canal was originally unlined. It is unclear exactly when the current concrete lining was installed, but it appears to have occurred during the historic period. Aerial imagery suggests that the majority of the remaining open and active channel of the 13.4-mile long main canal has been lined with concrete, and several segments have been realigned, likely to accommodate modern development in the area. Because this is a relatively minor update to the site record and no major historical features were observed, Certus has only completed Part A of this site form. |
| 28. | Environmental Context (topography, vegetation, ground visibility, depositional context): The portion of the ditch network documented here is located in the West Point area of Davis County. The terrain of the area is generally flat and sloping very gently to the west to the Great Salt Lake. Lands surrounding the ditches are a combination of active and fallow farm properties with introduced agricultural crops. |
| 29. | . Notes Regarding Access (as needed): _Access to the documented segments is unrestricted. |
| 30. | . Additional Part A Comments: |

^a Check all that apply^b See manual for additional categories







42DV158; Main canal at 300 North (southern section); looking north-northwest



42DV158; Main canal at 300 North showing trash racks, diversions, and culvert; looking south



42DV158; Central section; looking north



42DV158; Hooper Canal central section – water control features near 800 North; looking south



42DV158; Hooper Canal central section – water control features at 800 North; looking northeast



42DV158; Hooper Canal northern section; looking north



42DV158; Distribution ditch on southern section of main canal; looking west

PART A – Administrative Data

| | 1. Smithsonian Trinomial: 42DV182 |
|---|--|
| | 2. Temporary Site No. : |
| | 3. Site Name: Layton Canal System |
| 4. Date Recorded: 06/05/2024 | |
| 5. Type of Recording: □First Recording □Full Re-record ☑Update | |
| 6. Project Name: SR-177; SR-193 to 1800 North (West Davis O | Corridor, Phase 2) |
| 7. State Project Number: <u>U24HY0375</u> | |
| 8. Land Status: Private | |
| 9. USGS 7.5' Quad Map Name and Date: Roy, UT | |
| 10. Township: <u>5 N</u> Range: <u>2 W</u> Section: <u>29 &</u> | 30 (1/4): <u>NW & SE</u> County: <u>Davis</u> |
| 11. Meridian: ⊠Salt Lake □Uintah | |
| 12. UTMs: Zone <u>12</u> <u>407160</u> E <u>4554843</u> N | _ |
| 13. Site Dimensions: Length: 2,325 m Width: 4 m | Area: $\underline{16,233}$ m ² \boxtimes GIS \square Estimate |
| 14. Site Class ^a : □Prehistoric □Protohistoric ⊠Historic | |
| 15. Site Type: Prehistoric/Protohistoric | Historic |
| □Long-Term Residential □Task Specific | □Domestic □Transportation/Communication |
| ☐Temporary Camp ☐Specialty Site | ⊠Agriculture/Subsistence □Defense |
| □Unknown □Other ^b | □Industry/Processing/Extraction □Unknown □Other ^b |
| 16. Site Characteristics ^a : ☐ Artifact Scatter ☐ Rock Art/I☐ Architectural Feature(s) ☐ Non-Archi 17. Impacting Agents: ☐ None ☐ Erosion ☐ Livestock Concentration ☐ Other Piping of portions of the once open ditch network | itectural Feature(s) |
| 18. Site Condition: Stable □Deteriorating □Imminently Three | atened Destroyed |
| 19. Description (as needed): | |
| 20. Recorded By: Sheri Murray Ellis 21. Organiz | ation: Certus Environmental Solutions |
| · | |
| 22. Material Collected: ⊠No □Yes (describe in Site Description) R | chository. |
| | |
| NRHP Evaluation | |
| 23. Is the Site Significant: ⊠No □Yes, under criterion ^a : | |
| $\Box A \text{ (event)} \qquad \Box B \text{ (}$ | (person) \Box C (design/construction) \Box D (important information) |
| | |
| 24. Does it Retain Integrity: □No | DOMESTIC DIVISION OF THE PROPERTY OF THE PROPE |
| | gn ⊠Setting ⊠Materials □Workmanship □Feeling ⊠Association |
| 25. NRHP Status: Not Eligible □ Eligible □ Listed 26. Justification (include discussion of historic context, significance, and in | atomity). |
| 20. Justification (include discussion of historic context, significance, and in | negmy); |

The Layton Canal site was determined ineligible for the National Register under all criteria as a result of multiple past evaluations of segments, including by Reclamation in 2015, which included the entire main canal. Certus supports these prior determinations and recommends the site continue to be addressed as an ineligible resource.

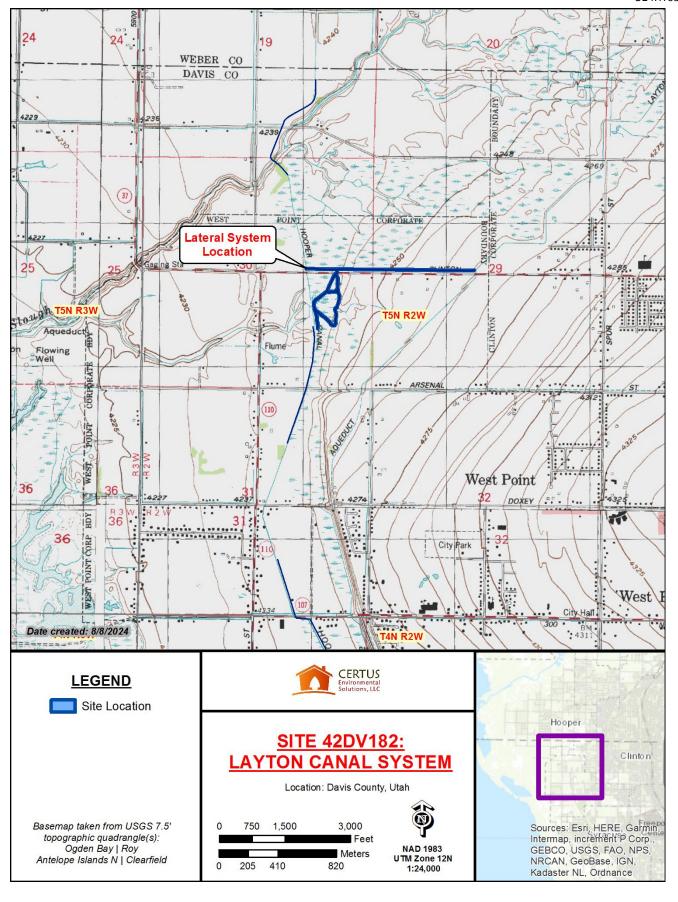
^a Check all that apply

^b See manual for additional categories

PART A – Administrative Data

| | Smithsonian Trinomial: 42DV158 |
|-----|--|
| | Temporary Site No.: |
| 27. | . Site Description (interpretation, context, size, artifact and feature assemblage, dating, previous work and curation, etc.): |
| | This site is the Layton Canal System. The entirety of the main canal was documented by the Bureau of Reclamation in 2015. This included both the open portions of the canal and the piped segment (i.e., the southernmost 6.4 miles of the 17-mile long canal. The portion of the site addressed here comprises a series of distribution ditches located near 1800 North. |
| | The portions of the distribution ditch system addressed here include a mostly-piped segment extending west from the main canal along the north side of 1800 North and an interconnected series of open field-level ditches on the south side of 1800 North just east of the Hooper Canal. These latter features are unlined ditches measuring little more than 1 meter wide and less than 50 centimeters deep. No historical water control features were observed along these ditches. Aerial images suggest these ditches were constructed between 1965 and 1985. In large measure, they follow the paths of natural sloughs. |
| | The Layton Canal was constructed between 1962 and 1964 as part of the federal Weber River Basin Project. It was intended for irrigation uses and was originally an unlined channel. The main canal was constructed by the Syblon-Reid Construction Company under contract to the Bureau of Reclamation. Because this is a relatively minor update to the site record and no major historical features were observed, Certus has only completed Part A of this site form. |
| 28. | Environmental Context (topography, vegetation, ground visibility, depositional context): The portion of the ditch network documented here is located in the West Point area of Davis County. The terrain of the area is generally flat and sloping very gently to the west to the Great Salt Lake. Lands surrounding the ditches are a combination of active and fallow farm properties with introduced agricultural crops. |
| 29. | . Notes Regarding Access (as needed): _Access to the documented segments is unrestricted. |
| 30. | Additional Part A Comments: |
| | |

^a Check all that apply^b See manual for additional categories







42DV182; Main lateral along 1800 North; looking east



42DV182; Field ditches (reeds and darker grass); looking west-southwest



42DV182; Field ditches (reeds and darker grass); looking southwest

Tribal Consultation



DEPARTMENT OF TRANSPORTATION

CARLOS M. BRACERAS, P.E.

Executive Director

LISA J. WILSON, P.E.

Deputy Director of Engineering and Operations

BENJAMIN G. HUOT, P.E.

Deputy Director of Planning and Investment

August 22, 2024

Mr. Amos Murphy Confederated Tribes of the Goshute Reservation P.O. BOX 6104/195 Tribal Center Rd. Ibapah, UT 84034

RE: UDOT Project No. S-R199(381)00, West Davis Corridor SR-177, SR-193 to 1800 North, West Point City,

Davis County, Utah (PIN 20927).

Updated Notification of Project and Invitation to be a Section 106 Consulting Party

Dear Mr. Murphy,

The Utah Department of Transportation (UDOT) is preparing to undertake a re-evaluation of the West Davis Corridor EIS. In accordance with Parts 3.1.1 and 3.2 of the *Memorandum of Understanding Between the Federal Highway Administration and the Utah Department of Transportation Concerning State of Utah's Participation in the Surface Transportation Project Delivery Program Pursuant to 23 USC §327 (dated May 26, 2022)*, the UDOT assumes responsibility, assigned by the Federal Highway Administration (FHWA), for ensuring compliance with Section 106 of the NHPA and with Section 4(f) of the DOT Act of 1966, as amended. FHWA retains the responsibility for government-to-government consultation with Indian Tribes and this notification is sent on behalf of FHWA. Direct government-to-government consultation with FHWA is available upon request.

In compliance with Section 106 of the National Historic Preservation Act, we request that you review the information in this letter and enclosed project information to determine if there are any historic properties of traditional religious and/or cultural importance that may be affected by the proposed undertaking. If you feel that there are any historic properties that may be impacted, we request your notification as such and your participation as a consulting party during the development of the environmental document. Please be assured that, in accordance with confidentiality and disclosure stipulations in Section 304 of the NHPA, the UDOT will maintain strict confidentiality about certain types of information regarding traditional religious and/or cultural places that may be affected by this proposed undertaking.

A Final Environmental Impact Statement (EIS) and Section 4(f) Evaluation for the West Davis Corridor (WDC) was completed in June 2017 and approved through the issuance of a Record of Decision (ROD) on September 29, 2017, from the Federal Highway Administration (FHWA). This re-evaluation is evaluating the design refinements proposed to address the change of conditions in the project area between State Route 193 (SR-193) and 1800 North in Davis County, Utah since approval of the EIS Selected Alternative (ESA) in the 2017 ROD. The design refinements are identified as the Refined Selected Alternative (RSA) (see Figure 1, Site Map) include the need for a four-lane freeway (increased from a two-lane freeway in the ESA), improved alignment curvature, trail alignment, updated detention ponds and utility relocations.

Certus Environmental Consultants (Certus) conducted a cultural resources inventory for the project identifying one historic archaeological site and no historic buildings eligible for the National Register of Historic Places within the project APE. The UDOT Cultural Resources Program Manager and the UDOT Architectural Historian are currently working with Certus on determining how the archaeological site (Hooper Canal system) would be affected and will consult with the Utah State Historic Preservation Officer regarding those effects once they are determined. No other cultural resources or historic properties, previously-recorded or otherwise, were identified within the project APE. A copy of the cultural resources inventory results report will be available for your review upon request.

At your request, the FHWA and the UDOT staff will be available to meet with you to discuss any concerns you might have about the project. Should you have any questions or concerns about this project and/or wish to be a consulting party, feel free to contact me at lizrobinson@utah.gov or 801-910-2035.

To facilitate our consultation with you regarding this project, we would greatly appreciate a response to this letter within 30 days of receipt.

Thank you for your attention to this project notification and any comments you may have.

Sincerely,

Liz Robinson

Elijah Min

UDOT Cultural Resources Program Manager

Enclosures

cc: Ms. Mary Pete-Freeman, Tribal Transportation Planner



DEPARTMENT OF TRANSPORTATION

CARLOS M. BRACERAS, P.E.

Executive Director

LISA J. WILSON, P.E.

Deputy Director of Engineering and Operations

BENJAMIN G. HUOT, P.E.

Deputy Director of Planning and Investment

August 22, 2024

Ms. Mary Pete-Freeman Confederated Tribes of the Goshute Reservation P.O. BOX 6104/195 Tribal Center Rd. Ibapah, UT 84034

RE: UDOT Project No. S-R199(381)00, West Davis Corridor SR-177, SR-193 to 1800 North, West Point City,

Davis County, Utah (PIN 20927).

Updated Notification of Project and Invitation to be a Section 106 Consulting Party

Dear Ms. Pete-Freeman,

The Utah Department of Transportation (UDOT) is preparing to undertake a re-evaluation of the West Davis Corridor EIS. In accordance with Parts 3.1.1 and 3.2 of the *Memorandum of Understanding Between the Federal Highway Administration and the Utah Department of Transportation Concerning State of Utah's Participation in the Surface Transportation Project Delivery Program Pursuant to 23 USC §327 (dated May 26, 2022)*, the UDOT assumes responsibility, assigned by the Federal Highway Administration (FHWA), for ensuring compliance with Section 106 of the NHPA and with Section 4(f) of the DOT Act of 1966, as amended. FHWA retains the responsibility for government-to-government consultation with Indian Tribes and this notification is sent on behalf of FHWA. Direct government-to-government consultation with FHWA is available upon request.

In compliance with Section 106 of the National Historic Preservation Act, we request that you review the information in this letter and enclosed project information to determine if there are any historic properties of traditional religious and/or cultural importance that may be affected by the proposed undertaking. If you feel that there are any historic properties that may be impacted, we request your notification as such and your participation as a consulting party during the development of the environmental document. Please be assured that, in accordance with confidentiality and disclosure stipulations in Section 304 of the NHPA, the UDOT will maintain strict confidentiality about certain types of information regarding traditional religious and/or cultural places that may be affected by this proposed undertaking.

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At your request, the FHWA and the UDOT staff will be available to meet with you to discuss any concerns you might have about the project. Should you have any questions or concerns about this project and/or wish to be a consulting party, feel free to contact me at lizrobinson@utah.gov or 801-910-2035.

To facilitate our consultation with you regarding this project, we would greatly appreciate a response to this letter within 30 days of receipt.

Thank you for your attention to this project notification and any comments you may have.

Sincerely,

Liz Robinson

Elijah Min

UDOT Cultural Resources Program Manager

Enclosures

cc: Mr. Amos Murphy, Chairman



DEPARTMENT OF TRANSPORTATION

CARLOS M. BRACERAS, P.E.

Executive Director

LISA J. WILSON, P.E.

Deputy Director of Engineering and Operations

BENJAMIN G. HUOT, P.E.

Deputy Director of Planning and Investment

August 22, 2024

Mr. Daniel Moon Skull Valley Band of Goshute Indians 407 Skull Valley Rd. Skull Valley, UT 84029

RE: UDOT Project No. S-R199(381)00, West Davis Corridor SR-177, SR-193 to 1800 North, West Point City,

Davis County, Utah (PIN 20927).

Updated Notification of Project and Invitation to be a Section 106 Consulting Party

Dear Mr. Moon,

The Utah Department of Transportation (UDOT) is preparing to undertake a re-evaluation of the West Davis Corridor EIS. In accordance with Parts 3.1.1 and 3.2 of the *Memorandum of Understanding Between the Federal Highway Administration and the Utah Department of Transportation Concerning State of Utah's Participation in the Surface Transportation Project Delivery Program Pursuant to 23 USC §327 (dated May 26, 2022)*, the UDOT assumes responsibility, assigned by the Federal Highway Administration (FHWA), for ensuring compliance with Section 106 of the NHPA and with Section 4(f) of the DOT Act of 1966, as amended. FHWA retains the responsibility for government-to-government consultation with Indian Tribes and this notification is sent on behalf of FHWA. Direct government-to-government consultation with FHWA is available upon request.

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To facilitate our consultation with you regarding this project, we would greatly appreciate a response to this letter within 30 days of receipt.

Thank you for your attention to this project notification and any comments you may have.

Sincerely,

Liz Robinson

Elijah Min

UDOT Cultural Resources Program Manager

Enclosures

cc:



DEPARTMENT OF TRANSPORTATION

CARLOS M. BRACERAS, P.E.

Executive Director

LISA J. WILSON, P.E.

Deputy Director of Engineering and Operations

BENJAMIN G. HUOT, P.E.

Deputy Director of Planning and Investment

August 22, 2024

Mr. Dennis Alex Northwestern Band of Shoshone Nation 2575 Commerce Way Ogden, UT 84401

RE: UDOT Project No. S-R199(381)00, West Davis Corridor SR-177, SR-193 to 1800 North, West Point City,

Davis County, Utah (PIN 20927).

Updated Notification of Project and Invitation to be a Section 106 Consulting Party

Dear Mr. Alex,

The Utah Department of Transportation (UDOT) is preparing to undertake a re-evaluation of the West Davis Corridor EIS. In accordance with Parts 3.1.1 and 3.2 of the *Memorandum of Understanding Between the Federal Highway Administration and the Utah Department of Transportation Concerning State of Utah's Participation in the Surface Transportation Project Delivery Program Pursuant to 23 USC §327 (dated May 26, 2022)*, the UDOT assumes responsibility, assigned by the Federal Highway Administration (FHWA), for ensuring compliance with Section 106 of the NHPA and with Section 4(f) of the DOT Act of 1966, as amended. FHWA retains the responsibility for government-to-government consultation with Indian Tribes and this notification is sent on behalf of FHWA. Direct government-to-government consultation with FHWA is available upon request.

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To facilitate our consultation with you regarding this project, we would greatly appreciate a response to this letter within 30 days of receipt.

Thank you for your attention to this project notification and any comments you may have.

Sincerely,

Liz Robinson

Elijah Min

UDOT Cultural Resources Program Manager

Enclosures

cc: Ms. Patty Timbimboo-Madsen, Cultural and Natural Resource Manager



DEPARTMENT OF TRANSPORTATION

CARLOS M. BRACERAS, P.E.

Executive Director

LISA J. WILSON, P.E.

Deputy Director of Engineering and Operations

BENJAMIN G. HUOT, P.E.

Deputy Director of Planning and Investment

August 22, 2024

Ms. Patty Timbimboo-Madsen Northwestern Band of Shoshone Nation 2575 Commerce Way Ogden, UT 84402

RE: UDOT Project No. S-R199(381)00, West Davis Corridor SR-177, SR-193 to 1800 North, West Point City,

Davis County, Utah (PIN 20927).

Updated Notification of Project and Invitation to be a Section 106 Consulting Party

Dear Ms. Timbimboo-Madsen,

The Utah Department of Transportation (UDOT) is preparing to undertake a re-evaluation of the West Davis Corridor EIS. In accordance with Parts 3.1.1 and 3.2 of the *Memorandum of Understanding Between the Federal Highway Administration and the Utah Department of Transportation Concerning State of Utah's Participation in the Surface Transportation Project Delivery Program Pursuant to 23 USC §327 (dated May 26, 2022)*, the UDOT assumes responsibility, assigned by the Federal Highway Administration (FHWA), for ensuring compliance with Section 106 of the NHPA and with Section 4(f) of the DOT Act of 1966, as amended. FHWA retains the responsibility for government-to-government consultation with Indian Tribes and this notification is sent on behalf of FHWA. Direct government-to-government consultation with FHWA is available upon request.

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To facilitate our consultation with you regarding this project, we would greatly appreciate a response to this letter within 30 days of receipt.

Thank you for your attention to this project notification and any comments you may have.

Sincerely,

Liz Robinson

Elijah Min

UDOT Cultural Resources Program Manager

Enclosures

cc: Mr. Dennis Alex, Chairman



DEPARTMENT OF TRANSPORTATION

CARLOS M. BRACERAS, P.E.
Executive Director
LISA J. WILSON, P.E.
Deputy Director of Engineering and Operations
BENJAMIN G. HUOT, P.E.

Deputy Director of Planning and Investment

August 22, 2024

Mr. LeeJuan Tyler Shoshone-Bannock Tribes of the Fort Hall Reservation P.O. Box 306 Pima Drive Fort Hall, ID 83203

RE: UDOT Project No. S-R199(381)00, West Davis Corridor SR-177, SR-193 to 1800 North, West Point City,

Davis County, Utah (PIN 20927).

Updated Notification of Project and Invitation to be a Section 106 Consulting Party

Dear Mr. Tyler,

The Utah Department of Transportation (UDOT) is preparing to undertake a re-evaluation of the West Davis Corridor EIS. In accordance with Parts 3.1.1 and 3.2 of the *Memorandum of Understanding Between the Federal Highway Administration and the Utah Department of Transportation Concerning State of Utah's Participation in the Surface Transportation Project Delivery Program Pursuant to 23 USC §327 (dated May 26, 2022)*, the UDOT assumes responsibility, assigned by the Federal Highway Administration (FHWA), for ensuring compliance with Section 106 of the NHPA and with Section 4(f) of the DOT Act of 1966, as amended. FHWA retains the responsibility for government-to-government consultation with Indian Tribes and this notification is sent on behalf of FHWA. Direct government-to-government consultation with FHWA is available upon request.

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To facilitate our consultation with you regarding this project, we would greatly appreciate a response to this letter within 30 days of receipt.

Thank you for your attention to this project notification and any comments you may have.

Sincerely,

Liz Robinson

Elijah Min

UDOT Cultural Resources Program Manager

Enclosures

cc: Ms. Carolyn Smith, Cultural Resources/Heritage Tribal Office (HeTO)



DEPARTMENT OF TRANSPORTATION

CARLOS M. BRACERAS, P.E.

Executive Director

LISA J. WILSON, P.E.

Deputy Director of Engineering and Operations

BENJAMIN G. HUOT, P.E.

Deputy Director of Planning and Investment

August 22, 2024

Ms. Carolyn Smith Shoshone-Bannock Tribes of the Fort Hall Reservation P.O. Box 306 Pima Drive Fort Hall, ID 83203

RE: UDOT Project No. S-R199(381)00, West Davis Corridor SR-177, SR-193 to 1800 North, West Point City,

Davis County, Utah (PIN 20927).

Updated Notification of Project and Invitation to be a Section 106 Consulting Party

Dear Ms. Smith,

The Utah Department of Transportation (UDOT) is preparing to undertake a re-evaluation of the West Davis Corridor EIS. In accordance with Parts 3.1.1 and 3.2 of the *Memorandum of Understanding Between the Federal Highway Administration and the Utah Department of Transportation Concerning State of Utah's Participation in the Surface Transportation Project Delivery Program Pursuant to 23 USC §327 (dated May 26, 2022)*, the UDOT assumes responsibility, assigned by the Federal Highway Administration (FHWA), for ensuring compliance with Section 106 of the NHPA and with Section 4(f) of the DOT Act of 1966, as amended. FHWA retains the responsibility for government-to-government consultation with Indian Tribes and this notification is sent on behalf of FHWA. Direct government-to-government consultation with FHWA is available upon request.

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To facilitate our consultation with you regarding this project, we would greatly appreciate a response to this letter within 30 days of receipt.

Thank you for your attention to this project notification and any comments you may have.

Sincerely,

Liz Robinson

Elijah Min

UDOT Cultural Resources Program Manager

Enclosures

cc: Mr.Devon Boyer, Chairman



DEPARTMENT OF TRANSPORTATION

CARLOS M. BRACERAS, P.E.
Executive Director
LISA J. WILSON, P.E.
Deputy Director of Engineering and Operations
BENJAMIN G. HUOT, P.E.

Deputy Director of Planning and Investment

August 22, 2024

Mr. Joshua Mann Eastern Shoshone Tribe of the Wind River Reservation P.O. Box 538/15 North Fork Rd Fort Washakie, WY 82514

RE: UDOT Project No. S-R199(381)00, West Davis Corridor SR-177, SR-193 to 1800 North, West Point City,

Davis County, Utah (PIN 20927).

Updated Notification of Project and Invitation to be a Section 106 Consulting Party

Dear Mr. Mann,

The Utah Department of Transportation (UDOT) is preparing to undertake a re-evaluation of the West Davis Corridor EIS. In accordance with Parts 3.1.1 and 3.2 of the *Memorandum of Understanding Between the Federal Highway Administration and the Utah Department of Transportation Concerning State of Utah's Participation in the Surface Transportation Project Delivery Program Pursuant to 23 USC §327 (dated May 26, 2022)*, the UDOT assumes responsibility, assigned by the Federal Highway Administration (FHWA), for ensuring compliance with Section 106 of the NHPA and with Section 4(f) of the DOT Act of 1966, as amended. FHWA retains the responsibility for government-to-government consultation with Indian Tribes and this notification is sent on behalf of FHWA. Direct government-to-government consultation with FHWA is available upon request.

In compliance with Section 106 of the National Historic Preservation Act, we request that you review the information in this letter and enclosed project information to determine if there are any historic properties of traditional religious and/or cultural importance that may be affected by the proposed undertaking. If you feel that there are any historic properties that may be impacted, we request your notification as such and your participation as a consulting party during the development of the environmental document. Please be assured that, in accordance with confidentiality and disclosure stipulations in Section 304 of the NHPA, the UDOT will maintain strict confidentiality about certain types of information regarding traditional religious and/or cultural places that may be affected by this proposed undertaking.

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Certus Environmental Consultants (Certus) conducted a cultural resources inventory for the project identifying one historic archaeological site and no historic buildings eligible for the National Register of Historic Places within the project APE. The UDOT Cultural Resources Program Manager and the UDOT Architectural Historian are currently working with Certus on determining how the archaeological site (Hooper Canal system) would be affected and will consult with the Utah State Historic Preservation Officer regarding those effects once they are determined. No other cultural resources or historic properties, previously-recorded or otherwise, were identified within the project APE. A copy of the cultural resources inventory results report will be available for your review upon request.

At your request, the FHWA and the UDOT staff will be available to meet with you to discuss any concerns you might have about the project. Should you have any questions or concerns about this project and/or wish to be a consulting party, feel free to contact me at lizrobinson@utah.gov or 801-910-2035.

To facilitate our consultation with you regarding this project, we would greatly appreciate a response to this letter within 30 days of receipt.

Thank you for your attention to this project notification and any comments you may have.

Sincerely,

Liz Robinson

Elijah Min

UDOT Cultural Resources Program Manager

Enclosures

cc:



DEPARTMENT OF TRANSPORTATION

CARLOS M. BRACERAS, P.E.

Executive Director

LISA J. WILSON, P.E.

Deputy Director of Engineering and Operations

BENJAMIN G. HUOT, P.E.

Deputy Director of Planning and Investment

August 22, 2024

Ms. Betsy Chapoose Ute Indian Tribe of the Uintah & Ouray Reservation P.O. Box 190 Fort Duchesne, UT 84026

RE: UDOT Project No. S-R199(381)00, West Davis Corridor SR-177, SR-193 to 1800 North, West Point City,

Davis County, Utah (PIN 20927).

Updated Notification of Project and Invitation to be a Section 106 Consulting Party

Dear Ms. Chapoose,

The Utah Department of Transportation (UDOT) is preparing to undertake a re-evaluation of the West Davis Corridor EIS. In accordance with Parts 3.1.1 and 3.2 of the *Memorandum of Understanding Between the Federal Highway Administration and the Utah Department of Transportation Concerning State of Utah's Participation in the Surface Transportation Project Delivery Program Pursuant to 23 USC §327 (dated May 26, 2022)*, the UDOT assumes responsibility, assigned by the Federal Highway Administration (FHWA), for ensuring compliance with Section 106 of the NHPA and with Section 4(f) of the DOT Act of 1966, as amended. FHWA retains the responsibility for government-to-government consultation with Indian Tribes and this notification is sent on behalf of FHWA. Direct government-to-government consultation with FHWA is available upon request.

In compliance with Section 106 of the National Historic Preservation Act, we request that you review the information in this letter and enclosed project information to determine if there are any historic properties of traditional religious and/or cultural importance that may be affected by the proposed undertaking. If you feel that there are any historic properties that may be impacted, we request your notification as such and your participation as a consulting party during the development of the environmental document. Please be assured that, in accordance with confidentiality and disclosure stipulations in Section 304 of the NHPA, the UDOT will maintain strict confidentiality about certain types of information regarding traditional religious and/or cultural places that may be affected by this proposed undertaking.

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To facilitate our consultation with you regarding this project, we would greatly appreciate a response to this letter within 30 days of receipt.

Thank you for your attention to this project notification and any comments you may have.

Sincerely,

Liz Robinson

Elijah Min

UDOT Cultural Resources Program Manager

Enclosures

cc: Mr. Julius Murray, Chairperson