



— BUREAU OF —
RECLAMATION

Layton Canal Relocation Final Environmental Assessment

PRO-EA-18-007

**Interior Region 7 – Upper Colorado Basin
Provo Area Office
Provo, Utah**

Mission Statements

The Department of the Interior conserves and manages the Nation's natural resources and cultural heritage for the benefit and enjoyment of the American people, provides scientific and other information about natural resources and natural hazards to address societal challenges and create opportunities for the American people, and honors the Nation's trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities to help them prosper.

The mission of the U.S. Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Layton Canal Relocation Final Environmental Assessment

PRO-EA-18-007

**Interior Region 7 – Upper Colorado Basin
Provo Area Office
Provo, Utah**

**U.S. Department of the Interior
Bureau of Reclamation
Provo Area Office
Provo, Utah**

FINDING OF NO SIGNIFICANT IMPACT

**Environmental Assessment Layton Canal Relocation
Davis County, Utah**

EA-18-007

Recommended by:

**PETER
CROOKSTON**

Digitally signed by PETER
CROOKSTON
Date: 2020.09.02 15:14:55
-06'00'

Peter Crookston
Environmental Group Chief

09/02/2020

Date

Concur:

RICK BAXTER

Digitally signed by RICK
BAXTER
Date: 2020.09.03 07:40:45
-06'00'

Rick Baxter
Water, Environmental, and Lands
Division Manager

09/03/2020

Date

Approved by:

**KENT
KOFFORD**

Digitally signed by KENT
KOFFORD
Date: 2020.09.03 14:55:13
-06'00'

Kent Kofford
Area Manager, Provo Area Office

09/03/2020

Date

I. Introduction

In compliance with the National Environmental Policy Act of 1969, as amended (NEPA), the Bureau of Reclamation, Provo Area Office has conducted a review of the Utah Department of Transportation's (UDOT) West Davis Corridor (WDC). The WDC is a new 19-mile, 4-lane divided highway project currently planned to be constructed in western Davis County.

A Final Environmental Impact Statement (EIS) and Section 4(f) Evaluation for the 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). An EIS Re-evaluation was approved by UDOT on December 5, 2019. The Re-evaluation was necessary due to proposed changes that would relocate the Layton Canal between 400 South and 1900 South in Syracuse, Utah. The Re-evaluation was intended to support a decision regarding whether UDOT would be required to prepare a supplemental EIS pursuant to applicable criteria in FHWA's regulations implementing NEPA (23 Code of Federal Regulations (CFR) Section 771.130(a)). The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being or have been carried out by the UDOT pursuant to 23 United States Code (USC) Section 327 and a Memorandum of Understanding (MOU) dated January 17, 2017 and executed between FHWA and UDOT.

Although FHWA, in cooperation with UDOT, issued a ROD in 2017, Reclamation has not issued a decision on the portion of the WDC affecting facilities and lands owned and/or managed by Reclamation. Reclamation must comply with NEPA and applicable NEPA regulations (40 CFR 1500-1508 and 43 CFR 46) prior to issuing a decision on UDOT's proposal. Therefore, Reclamation prepared an Environmental Assessment to identify whether any significant impacts were associated with Reclamation's decision. This Finding of No Significant Impact (FONSI) summarizes the potential effects identified in the Environmental Assessment (EA) and Re-evaluation to the Layton Canal, which is a Reclamation facility. The federal action evaluated was whether Reclamation should authorize UDOT's proposed changes to Reclamation's easements, fee title lands, and facilities. The remainder of the WDC project not directly affecting Reclamation was also evaluated in the Re-evaluation and were considered cumulatively in the EA with the Proposed Action.

II. Alternatives

The EA analyzed two alternatives: The No Action and the Refined Selected Alternative (Proposed Action). The Proposed Action is refined from the EIS Selected Alternative, used for comparison in the effects analysis and discussed in depth in the EA.

No Action

With the No Action Alternative, WDC would not allow for sufficient maintenance, operation, and planned future expansion of the Layton Canal and other Reclamation facilities. The Layton Canal would not be relocated, and no mitigation measures would be included for the other Reclamation drains, easements, or fee title lands for the WDC project. Under the No Action Alternative, Reclamation would not authorize UDOT to make the proposed changes and they would need to adjust their overall proposal for the Project accordingly.

Proposed Action

The Proposed Action includes relocating the Layton Canal by constructing about 1.9 miles of new pipe on new fee title lands between 400 South and 1900 South in Syracuse and includes installing new turnouts for three irrigation laterals to the relocated Layton Canal. Reclamation would issue license and easement encroachment agreements affected by the WDC to allow for new or updated utility crossings, sidewalk crossings, trails, or other items to cross the Reclamation fee title lands or easements. The Proposed Action includes the WDC crossings of or potential impacts to 12 Reclamation facilities, fee title lands, or easements in Syracuse and Farmington as described:

- **B5 Drain:** The WDC would cross two segments of the B5 Drain near 2300 South and 2900 South in Syracuse. For each of these segments of the B5 Drain, Reclamation would either abandon the B5 Drain from the WDC right-of-way west with support from Weber Basin Water Conservancy District or maintain the B5 Drain under the WDC right-of-way. If the B5 Drain is not abandoned, UDOT would obtain an Easement Encroachment Agreement from Reclamation for the WDC crossing of the Reclamation easement in this area.
- **Layton Canal Fee Title Lands Gentile Street Syracuse:** The WDC would cross the Reclamation fee title lands for the Layton Canal north of Gentile Street. The UDOT would obtain a license agreement from Reclamation for the WDC crossing of the Reclamation fee title lands in this area.
- **A6 Drain Farmington:** The WDC would cross the A6 Drain near 600 South in Farmington. As part of the WDC project, UDOT would protect the A6 Drain in place and would provide a new casing and all warranted protection requirements based on a future Reclamation engineering review of the WDC design at this crossing. The UDOT would obtain an Easement Encroachment Agreement from Reclamation for the WDC crossing of the Reclamation easement in this area.
- **West Farmington Lateral 1.8L-0.5R Easement/Irrigation Line on 1525 West in Farmington:** The WDC shifting of 1525 West could impact the Reclamation West Farmington Irrigation Lateral 1.8L-0.5R line and easement where 1525 West is realigned to the west to cross the WDC. The UDOT would either protect the West Farmington Irrigation Lateral 1.8L-0.5R line in place or shift the irrigation line to avoid conflicts with the new 1525 West if necessary. The UDOT would obtain an Easement Encroachment Agreement from Reclamation for the WDC crossing of the Reclamation easement in this area.
- **Farmington Creek Drain and Easement in Farmington:** The UDOT would install a new reinforced concrete box culvert to convey Farmington Creek under the WDC. UDOT would either have the Reclamation Farmington Creek Drain and easement cross under the WDC in the Farmington Creek culvert or provide a separate crossing of the WDC for the Reclamation Farmington Creek Drain and easement. The UDOT would obtain an Easement Encroachment Agreement from Reclamation for the WDC crossing of the Reclamation easement in this area.

- West Farmington Lateral 1.8L-0.5R-0.6L Easement on 1100 West in Farmington:** As part of the WDC project, UDOT would realign Glovers Lane to the south to allow Glovers Lane to cross over WDC without impacting the subdivisions on the north side of Glovers Lane. The realignment of Glovers Lane could impact the Reclamation West Farmington Irrigation Lateral 1.8L-0.5R-0.6L easement at 1100 West. The UDOT would either protect the West Farmington Irrigation Lateral 1.8L-0.5R-0.6L easement in place or shift the easement to avoid conflicts with the new Glovers Lane if necessary. The UDOT would ensure that the West Farmington Irrigation Lateral 1.8L-0.5R-0.6L easement is conveyed under the realigned Glovers Lane in equal or better condition compared to existing conditions. The UDOT would obtain an Easement Encroachment Agreement from Reclamation for the WDC crossing of the Reclamation easement in this area.
- West Farmington Lateral 1.8 Easement on Davis County Road in Farmington:** The WDC trail and trailhead parking lot would encroach on the Reclamation West Farmington Lateral 1.8 Easement by Davis County Road (also known as Sheep Road). UDOT and/or Farmington City would obtain an Easement Encroachment Agreement from Reclamation for the areas where the trail or trailhead would be located on Reclamation easement.
- West Farmington Lateral 1.8L that crosses Legacy Parkway north of Glovers Lane in Farmington:** The WDC project could require new striping or repaving the southbound lanes of Legacy Parkway in an area where the Reclamation West Farmington Lateral 1.8L is located near 700 South. This Reclamation irrigation pipe is in a casing, and Reclamation does not anticipate any impacts to or additional mitigation measures for this easement or irrigation line.
- West Farmington Lateral 1.8L that crosses Legacy Parkway south of Glovers Lane in Farmington:** The WDC project could require new striping, new pavement, or new ramps on Legacy Parkway just south of Glovers Lane where Reclamation has two easements and pipelines that cross under Legacy Parkway. These Reclamation irrigation pipes are in casings, and Reclamation does not anticipate any impacts to or additional mitigation measures for these easements or irrigation lines.
- West Farmington Lateral 1.8L-2.0L near 450 West in Farmington:** The WDC would cross the Reclamation West Farmington Lateral 1.8L-2.0L near 450 West in Farmington. UDOT would protect the West Farmington Lateral 1.8L-2.0L in place and would provide all warranted protection requirements based on a future Reclamation engineering review of the WDC design at this crossing. UDOT would obtain an Easement Encroachment Agreement from Reclamation for the WDC crossing of the Reclamation easement in this area.
- Davis Aqueduct 60-inch Wasteway in Farmington:** The WDC system-to-system interchange with Legacy Parkway and I-15 would cross the Reclamation easement for the 60-inch Davis Aqueduct Wasteway pipe. The 60-inch Davis Aqueduct Wasteway pipe is

in a culvert as it crosses I-15 and Legacy Parkway. The WDC changes to Legacy Parkway and I-15 would not impact the 60-inch Davis Aqueduct Wasteway pipe. The WDC southbound ramps to southbound Legacy Parkway and southbound I-15 and the relocated Legacy Parkway Trail would encroach on the Reclamation easement for the 60-inch Davis Aqueduct Wasteway pipe. The UDOT would need to extend the 60-inch Davis Aqueduct Wasteway culvert to the west to accommodate the WDC southbound ramps to Legacy Parkway and I-15 and the relocated Legacy Parkway Trail. The extension of the culvert would occur in the existing Reclamation easement. The UDOT would obtain an Easement Encroachment Agreement from Reclamation for the WDC crossing of the Reclamation easement in this area.

III. Summary of Impacts

A total of 22 resources were reviewed by Reclamation's resource specialists. Thirteen resources were eliminated from full consideration: hydrology, water quality, geology and soils, paleontological resources, threatened or endangered species, wildlife resources, riparian areas, wilderness and wild and scenic rivers, cultural resources, Indian Trust Assets, prime and unique farmlands, environmental justice, and water rights. Nine resources were retained for detailed analysis. This FONSI adopts those analyses in full, with the corresponding effects.

1. System Operations – The existing Layton Canal would continue to function at its current capacity until the relocated Layton Canal becomes operational.
2. Floodplains – Impacts would be permitted as part of UDOT's WDC Flood Control Permits from Davis County and the Floodplain Development Permits from Farmington City.
3. Waters of the United States – 5.7 acres of wetlands would be impacted and mitigated through the WDC Section 404 permit.
4. Existing Vegetation – The disturbed area would be revegetated after construction.
5. Socioeconomics and Private Properties – 20.19 acres of new fee title lands and 0.91 acres of new easements would be required for relocating the Layton Canal. Of the 29 existing parcels impacted, 12 are residential properties that have been purchased and relocated by UDOT as part of the WDC project. Of these 12 residential properties, 6 are residential properties needed only for the relocated Layton Canal.
 - a. In December 2019, Reclamation contacted property owners whose properties would be directly impacted by the Proposed Action Alternative. In October and November 2019, Reclamation also met with Syracuse City and West Point City to solicit city comments on the Proposed Action Alternative. Both property owners and cities approved of the project and coordination efforts. Because of the extensive public involvement conducted during the WDC EIS process and the targeted public involvement conducted for the directly affected Cities and property owners, no additional public involvement activities were necessary.
6. Recreation Resources – Potential temporary closure and relocation of the Old Emigration Trail.
7. Health, Safety, Air Quality, and Noise – Temporary construction impacts would be expected and minimized by following a Fugitive Dust Emission Control Plan and Stormwater Pollution Prevention Plan.

8. Access and Transportation – Temporary impacts due to construction could include lane closures and travel delays in the project area.
9. Visual Resources – Temporary impacts during the open-trench construction. The pipeline would be buried and revegetated following construction.

IV. Finding of No Significant Impact

Based on a review of the Final EA and its supporting documents, implementing the Proposed Action will not significantly affect the quality of the human or natural environment, individually or cumulatively with other actions in the area. No environmental effects meet the definition of significance in context or intensity as defined in 40 CFR 1508.27. Consequently, an Environmental Impact Statement is not required for this Proposed Action.

V. Decision

It is Reclamation's decision, therefore, to authorize UDOT to implement the Proposed Action as described in the attached EA.

The U.S. Bureau of Reclamation (Reclamation) prepared this Environmental Assessment (EA) to assess the expected consequences of the Layton Canal Relocation and other West Davis Corridor (WDC) crossings, which are being proposed by the Utah Department of Transportation (UDOT) in Davis County, Utah. The WDC project has been evaluated in a Federal Highway Administration (FHWA) Final Environmental Impact Statement that was released in June 2017 and a Record of Decision approved on September 29, 2017. Additionally, an FHWA Environmental Impact Statement Re-evaluation for the WDC changes to the Layton Canal Relocation was approved on December 5, 2019.

The Proposed Action, described in Chapter 2 of this EA, includes constructing about 1.9 miles of new pipe on new fee title lands between 400 South and 1900 South in Syracuse, Utah. The Proposed Action also includes the WDC crossings of 11 Reclamation facilities, fee title lands, or easements in Syracuse, Utah, and Farmington, Utah. The Proposed Action is needed because (1) the design of the WDC project would encroach on Reclamation fee title lands or easements for the Layton Canal and would not allow for sufficient maintenance, operation, and planned future expansion of the Layton Canal, and (2) the WDC would cross 11 Reclamation facilities, fee title lands, or easements in Syracuse and Farmington that would need to be protected or modified prior to construction of the WDC to ensure no impact to operations where these facilities cross the WDC. Chapter 2 of this EA describes other alternatives that were considered but eliminated from further study based on risk reduction, constructability reviews, environmental impacts, and economic costs.

This EA has been prepared in compliance with the National Environmental Policy Act and Reclamation procedures, and is intended to serve environmental review and consultation requirements pursuant to Executive Order 11988 (Floodplain Management), Executive Order 11990 (Wetlands Protection), Executive Order 12898 (Environmental Justice), the National Historic Preservation Act (Section 106), the Endangered Species Act [Section 7(c)], and Departmental and Reclamation Indian Trust Asset policies.

For further information, contact:

Preston Feltrop
Fish and Wildlife Biologist
Provo Area Office

Phone: (801) 379-1064;
email: pfeltrop@usbr.gov

Contents

	Page
Chapter 1 - Purpose and Need	1
1.1 Introduction and Background.....	1
1.2 Proposed Action.....	2
1.3 Purpose and Need for the Action.....	2
1.4 Relevant Statutes, Regulations, Permits, and Other Plans.....	3
1.4.1 National Environmental Policy Act of 1969, as Amended (42 United States Code [USC] Section 4321 et seq.).....	3
1.4.2 Endangered Species Act of 1973, as Amended (16 USC Section 1531 et seq.) and Related Statutes and Orders.....	3
1.4.3 National Historic Preservation Act of 1966, as Amended (16 USC Section 470 et seq.) and Related Statutes, Regulations, and Orders.....	3
1.4.4 Clean Water Act of 1972, as Amended (33 USC Section 1251 et seq.) and Related Orders.....	3
1.4.5 Other Statutes, Regulations and Orders.....	4
1.4.6 Permits.....	4
1.4.7 Related Documents.....	4
Chapter 2 - Alternatives	6
2.1 Introduction.....	6
2.2 No Action Alternative.....	6
2.3 Alternatives Considered but Eliminated from Further Study.....	6
2.4 Proposed Action Alternative.....	6
2.4.1 Construction Schedule.....	10
2.4.2 Construction Procedures.....	10
Chapter 3 - Affected Environment	17
3.1 Introduction.....	17
3.2 Resources Considered but Eliminated from Further Study.....	17
3.3 Description of Relevant Affected Issues and Resources.....	20
3.3.1 System Operations.....	20
3.3.2 Floodplains.....	20
3.3.3 Waters of the United States.....	21
3.3.4 Existing Vegetation.....	22
3.3.5 Socioeconomics and Private Properties.....	22
3.3.6 Recreation Resources.....	27
3.3.7 Health, Safety, Air Quality, and Noise.....	27
3.3.8 Access and Transportation.....	28
3.3.9 Visual Resources.....	29
3.3.10 Cumulative Effects.....	29
3.4 Summary of Environmental Effects.....	30

Chapter 4 - Environmental Commitments	34
Chapter 5 - Consultation and Coordination	37
Chapter 6 - List of Preparers	38
Chapter 7 - References	39

List of Figures

Figure 1. Layton Canal Relocation.....	11
Figure 2. B5 Land Drain in Syracuse.....	12
Figure 3. U.S. Bureau of Reclamation Fee Title Lands in Syracuse.....	13
Figure 4. West Farmington Area.....	14
Figure 5. Central Farmington Area.....	15
Figure 6. East Farmington Area.....	16
Figure 7. Layton Canal Property Impacts.....	26

List of Tables

Table 1. Reclamation Facilities Crossed by the WDC Project	8
Table 2. Resources Considered and Rationale for Eliminating Them	18
Table 3. Property Impacts from the Proposed Action Alternative	25

List of Appendices

- Appendix A. - Layton Canal Turnouts and Casings
- Appendix B. - UDOT WDC Re-evaluation #3, 404 Permit, Wetland Impact Figures, and 401 Certification

Acronyms and Abbreviations

Acronym/ Abbreviation	Meaning
BMP	Standard Reclamation best management practices
CFR	Code of Federal Regulations
EA	Environmental Assessment
EIS	Environmental Impact Statement
et seq.	and subsequent sections
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
GIS	geographic information systems
I-15	Interstate 15
I-84	Interstate 84
ITA	Indian Trust Asset
NEPA	National Environmental Policy Act
Reclamation	U.S. Bureau of Reclamation
ROD	Record of Decision
S.R.	State Route
U.S. 89	U.S. Highway 89
UDOT	Utah Department of Transportation
UPDES	Utah Pollutant Discharge Elimination System
URMCC	Utah, Reclamation, Mitigation, and Conservation Commission
USACE	U.S. Army Corps of Engineers
USC	United States Code
TNC	The Nature Conservancy
WBWCD	Weber Basin Water Conservancy District
WDC	West Davis Corridor

Chapter 1 - Purpose and Need

1.1 Introduction and Background

This Environmental Assessment (EA) was prepared to examine the expected environmental impacts to the Layton Canal and other U.S. Bureau of Reclamation (Reclamation) facilities from the Utah Department of Transportation's (UDOT) West Davis Corridor (WDC) project in Davis County, Utah.

The WDC would be a new four-lane highway in a 250-foot right-of-way that would begin in Farmington, with a connection to Interstate 15 (I-15) and Legacy Highway and terminate at 1800 North in West Point. The WDC project sponsor is UDOT. The UDOT, with the Federal Highway Administration (FHWA), initiated the National Environmental Policy Act (NEPA) process for the WDC project in 2010. A Draft Environmental Impact Statement (EIS) was released in May 2013. A Final EIS was released in June 2017 (UDOT 2017a). The Record of Decision (ROD) for the WDC was approved on September 29, 2017 (UDOT 2017c).

The preferred alternative identified in the WDC Final EIS and selected in the ROD would impact the Layton Canal between 400 South and 1900 South in Syracuse and would cross other Reclamation drains, fee title lands, and easements in Syracuse and Farmington. The UDOT included preliminary plans for relocating the Layton Canal in Syracuse as part of the Final EIS and ROD selected alternative and had done preliminary engineering that suggested that the 11 other Reclamation facilities in Syracuse and Farmington could be maintained in the WDC project right-of-way and impact area with protective measures or minor realignments. The impacts due to relocating the Layton Canal and Reclamation fee title lands had been included in the Final EIS analysis as part of the impacts from the WDC preferred alternative.

After completion of the WDC ROD, UDOT began doing more-detailed engineering work on the WDC. As part of the more-detailed engineering, UDOT coordinated with Reclamation and the Weber Basin Water Conservancy District (WBWCD), which operates and maintains the Layton Canal and other Reclamation facilities in Syracuse and Farmington on behalf of Reclamation. As part of this coordination and more-detailed engineering, changes to the design and fee title lands for the relocated Layton Canal were needed to provide Reclamation with acceptable replacement fee title lands and to maintain adequate space for operations, maintenance, and planned future pipe installations. The UDOT evaluated and approved these design and fee title lands changes to the Layton Canal relocation in WDC EIS Re-evaluation #3, Layton Canal Relocation. As summarized in the previous paragraph, the majority of the impacts from the Layton Canal relocation were included in the Final EIS analysis. The minor changes to the impacts due to the Layton Canal relocation design and fee title lands changes were evaluated in WDC EIS Re-evaluation #3. This EIS Re-evaluation was approved by UDOT on December 5, 2019 (UDOT 2019). A copy of the Re-evaluation is included in Appendix B.

Reclamation owns a 100-foot-wide fee title land for the Layton Canal. The Layton Canal is diverted from the Weber River in Ogden and ends near Gentile Street in Syracuse. The Layton Canal is open channel from the Weber River diversion to 1300 North in West Point. From 1300 North to the

southern terminus, the Layton Canal is piped. The pipe size varies and decreases in diameter as the Layton Canal goes south. Several irrigation companies have laterals off the Layton Canal.

Reclamation also owns 11 land drains, fee title lands, and easements for other irrigation laterals in Syracuse and Farmington that would be crossed or potentially impacted by the WDC project.

These components are described in detail in Section 2.4, Proposed Action, of this EA.

1.2 Proposed Action

The Proposed Action includes relocating the Layton Canal by constructing about 1.9 miles of new pipe in new lands exchanged in fee between 400 South and 1900 South in Syracuse. The Proposed Action includes the WDC crossings of or potential impacts to 11 Reclamation facilities, fee title lands, or easements in Syracuse and Farmington (see Table 1 beginning on page 8 and Figure 1 through Figure 6 beginning on page 11).

The Proposed Action includes installing new turnouts for three irrigation laterals to the relocated Layton Canal.

The Proposed Action includes land use authorizations from the United States to various applicants for use of fee title lands and easements associated with the relocated Layton Canal. The license agreements and easement encroachment agreements would authorize new or updated utility crossings, sidewalk crossings, trails, or other items to cross the Reclamation fee title lands or easements.

These components are described in detail in Section 2.4, Proposed Action, of this EA.

1.3 Purpose and Need for the Action

The need for the federal action is for Reclamation to comply with the provisions in 43 CFR Parts 423 and 429, as well as Reclamation's Directive and Standards (LND 02-01), in responding to the Proposed Action.

As described in Chapter 1 of the WDC Final EIS, the need for the WDC project is the increasing population and employment growth that is resulting in decreased mobility, increased travel times, and inadequate roadway capacity in western Davis County. The purpose of the WDC project is to improve regional mobility and enhance peak-period mobility in western Davis County.

The Proposed Action is needed because (1) the design of the WDC would encroach on Reclamation fee title lands and easements for the Layton Canal and would not allow for sufficient maintenance, operation, and planned future expansion of the Layton Canal, and (2) the WDC would cross or impact 11 Reclamation facilities, fee title lands, or easements in Syracuse and Farmington that would need to be protected or modified to ensure no impact to operations where these facilities cross the WDC. Without mitigation measures, Reclamation would not approve the WDC's impacts to Reclamation facilities, and UDOT would be required to modify the WDC selected alternative to avoid impacts to Reclamation facilities.

The purpose of the Proposed Action is to ensure that all Reclamation facilities would be maintained in similar or better condition compared to existing conditions. To achieve this purpose,

Reclamation would need to own similar or larger acreages of fee title lands or easements that allow Reclamation and WBWCD to adequately maintain, operate, and construct a planned future expansion of the Layton Canal. Additionally, all of the other Reclamation drains, easements, fee title lands, or other facilities that would cross the WDC or would be impacted by the WDC would need to be maintained in similar or better condition compared to existing conditions.

1.4 Relevant Statutes, Regulations, Permits, and Other Plans

The lead federal agency for this EA is Reclamation. This EA is prepared in compliance with all applicable federal statutes, regulations, and executive orders.

1.4.1 National Environmental Policy Act of 1969, as Amended (42 United States Code [USC] Section 4321 et seq.)

- Procedures for Implementing NEPA (33 Code of Federal Regulations [CFR] Part 230; Engineer Regulation [ER] 200-2-2)
- Regulations for Implementing the Procedural Provisions of NEPA (40 CFR Part 1500 et seq. and 43 CFR Part 46 et seq.)

1.4.2 Endangered Species Act of 1973, as Amended (16 USC Section 1531 et seq.) and Related Statutes and Orders

- Fish and Wildlife Coordination Act of 1958, as amended (16 USC Section 661 et seq.)
- Secretarial Order 3206, American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act

1.4.3 National Historic Preservation Act of 1966, as Amended (16 USC Section 470 et seq.) and Related Statutes, Regulations, and Orders

- American Indian Religious Freedom Act of 1978 (42 USC Section 1996)
- Archaeological Resources Protection Act of 1979 (16 USC Section 470)
- Native American Graves Protection and Repatriation Act of 1990 (25 USC Section 3001 et seq.)
- Protection and Enhancement of the Cultural Environment (Executive Order 11593)

1.4.4 Clean Water Act of 1972, as Amended (33 USC Section 1251 et seq.) and Related Orders

- Protection of Wetlands (Executive Order 11990)

1.4.5 Other Statutes, Regulations and Orders

- Executive Order 13807 (August 15, 2017) and Secretary’s Order 3355 (August 31, 2017) established policy to prioritize infrastructure projects and streamline the environmental review process
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 1994
- Clean Air Act of 1972, as amended (42 USC Section 7401 et seq.)
- Floodplain Management (Executive Order 11988)
- Wild and Scenic Rivers, 1968 (Public Law 90-542; 16 USC Section 1271 et seq.)
- Migratory Bird Treaty Act of 1918 (16 USC 703 et seq.) and Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds

1.4.6 Permits

- A U.S. Army Corps of Engineers (USACE) permit, in compliance with Section 404 of the Clean Water Act, is required prior to the discharge of dredged or fill material into waters of the United States. UDOT received an approved Section 404 permit for the WDC’s wetland impacts on May 15, 2020.
- As a condition of the Section 404 permit, a Clean Water Act Section 401 Water Quality Certification is also required. The UDOT received an approved Section 401 Water Quality Certification for the WDC on April 19, 2019.
- A Utah Pollutant Discharge Elimination System (UPDES) Permit from the Utah Division of Water Quality would be necessary for stormwater discharges from construction activities because the Proposed Action would impact more than 1 acre of land.

1.4.7 Related Documents

The Utah Reclamation, Mitigation, and Conservation Commission (URMCC) and The Nature Conservancy (TNC) are the owners of the Great Salt Lake Shorelands Preserve in Davis County. Portions of the eastern part of the Great Salt Lake Shorelands Preserve would be impacted by the WDC. The UDOT has coordinated with URMCC and TNC during the WDC project and would be purchasing and transferring about 800 acres of new properties and water rights to TNC to mitigate for the impacts to the Great Salt Lake Shorelands Preserve from the WDC. In coordination with UDOT and TNC, URMCC, which is a U.S. Bureau of Reclamation agency, prepared the *Great Salt Lake Shorelands Preserve Federal Lands Transfer Environmental Assessment* in August 2019 and approved a Finding of No Significant Impact in May 2020 (URMCC 2019, 2020). The Environmental Assessment and Finding of No Significant Impact authorized the conveyance of ownership of 1,297 acres of Great Salt Lake Shorelands Preserve land and appurtenant water rights from URMCC to TNC. As part of this transfer, URMCC also authorized TNC to sell 15.84 acres of this land to UDOT for the WDC project. More details about the WDC’s impacts to the Great Salt Lake Shorelands Preserve are included in Chapter 14, Ecosystem Resources, and Chapter 27, Section 4(f) Evaluation, of the WDC Final EIS.

This EA incorporates by reference the impacts, analyses, and supporting technical documentation of the UDOT WDC Final EIS approved in June 2017 and the WDC ROD approved on September 29, 2017. Copies of these documents are provided on the WDC project website at <https://westdavis.udot.utah.gov/final-eis-and-rod/>.

This EA also incorporates the impacts and analysis approved in the UDOT WDC EIS Re-evaluation #3, Layton Canal Relocation, which was approved on December 5, 2019; the WDC Section 404 Permit issued by USACE on May 15, 2020; and the WDC Section 401 Certification issued by the Utah Division of Water Quality on April 29, 2019. Copies of these documents are included in Appendix B.

Because Reclamation's actions and authorizations are required for the proposed UDOT WDC project, and because these actions and authorizations would be required for a smaller area compared to the larger areas that UDOT evaluated for the WDC project, this EA has used the information, surveys, data, and studies developed as part of UDOT's WDC Final EIS and EIS Re-evaluation #3 where applicable when developing this EA.

Chapter 2 - Alternatives

2.1 Introduction

This section describes the No Action and Proposed Action Alternatives. As described in Section 2.2, No Action Alternative, of this EA, the inclusion of the No Action Alternative serves as a benchmark against which project alternatives can be evaluated. This section also includes a short description of the alternative development process, alternatives that were considered but eliminated from further study, and a designation of the preferred alternative.

2.2 No Action Alternative

The No Action Alternative consists of the reasonably foreseeable future conditions in the absence of the Proposed Action. The purpose of defining the No Action Alternative is to allow decision-makers to compare the impacts of approving the Proposed Action to the impacts of not approving the Proposed Action. The No Action Alternative reflects existing and expected future conditions if no action is taken.

With the No Action Alternative, Reclamation would not authorize the WDC impacts to Reclamation facilities, and UDOT would be required to modify the WDC selected alternative to avoid impacts to Reclamation facilities. This alternative would not meet the purpose of, or need for, the Proposed Action.

2.3 Alternatives Considered but Eliminated from Further Study

No other standalone action alternatives were considered or evaluated by Reclamation for this EA. However, during the coordination and more-detailed engineering conducted after the WDC ROD was approved, UDOT, Reclamation, and WBWCD evaluated different variations for relocating the Layton Canal, ultimately determining that the Proposed Action described below is the best option based on engineering feasibility, operations, and right-of-way constraints.

2.4 Proposed Action Alternative

The Proposed Action Alternative is the preferred alternative.

The Proposed Action Alternative includes relocating the Layton Canal by constructing about 1.9 miles of new pipe on new fee title lands between 400 South and 1900 South in Syracuse. The bulleted list below describes the Layton Canal items included with the Proposed Action Alternative. Figure 1 provides an overview of the Layton Canal elements of the Proposed Action Alternative.

- **Reclamation Layton Canal Fee Title Lands** (see Figure 1): The Layton Canal and Reclamation 100-foot-wide fee title lands would be relocated between 400 South and 1900 South in Syracuse. The relocated Layton Canal would be located east of the WDC between 400 South and about 800 South. At about 800 South, the Layton Canal would cross to the west side of the WDC and continue on the west side of the WDC to about 1900 South in Syracuse, where it would cross back to the east side of the WDC and

reconnect with the existing Layton Canal and existing Reclamation 100-foot-wide fee title lands.

- The distance of the relocation would be about 1.9 miles.
- The relocated Layton Canal would be 54-inch-diameter pipe and designed to carry 25 cubic feet per second.
- Six 60-inch casings would be provided for the relocated Layton Canal at the crossings of the State Route (S.R.) 193 extension, 700 South, the north WDC crossing, 3000 West, Antelope Drive (S.R. 127), and the south WDC crossing.
- A 24-inch casing would be provided for the Syracuse City Bluff Pond lateral south of Antelope Drive. A figure showing the casing locations is provided in Appendix A, Layton Canal Turnouts and Casings, of this EA.
- Relocated turnouts would be provided for the Glen Eagle Golf Course just west of the 3000 West crossing, the Layton Canal Company just south of the Antelope Drive crossing, and at the Syracuse City Bluff Pond turnout south of Antelope Drive. A figure showing the turnout locations is provided in Appendix A, Layton Canal Turnouts and Casings, of this EA.
- The relocated Old Emigration Trail would be located on or would cross the new Reclamation fee title lands for the relocated Layton Canal from about 800 South in Syracuse to 400 South in West Point. It would be located on the existing Reclamation fee title lands for the Layton Canal between about 1900 South and 2100 South in Syracuse. The UDOT, Syracuse City, and/or West Point City would be required to obtain a new license agreement with Reclamation to place the relocated Old Emigration Trail on Reclamation fee title lands in these areas.
- The UDOT and other utility owners would obtain a license or easement encroachment agreement(s) from Reclamation for all encroachments on the new Reclamation fee title lands for the Layton Canal and for any encroachments on existing Reclamation fee title lands for the Layton Canal south of about 1900 South in Syracuse where the relocated Layton Canal would tie into the existing Layton Canal.

The Proposed Action Alternative also includes the WDC crossings of or potential impacts to 11 Reclamation facilities, fee title lands, or easements in Syracuse and Farmington. These elements are described in Table 1 below. Figure 2 through Figure 6 beginning on page 11 provide an overview of these elements of the Proposed Action Alternative. The final design and mitigation measures for these facilities will be determined after Reclamation completes its engineering review of the WDC design at each of the crossings.

Table 1. Reclamation Facilities Crossed by the WDC Project

Facility Number	Reclamation Facility	Proposed Action Alternative	Figure
1	B5 Drain	The WDC would cross two segments of the B5 Drain near 2300 South and 2900 South in Syracuse. For each of these segments of the B5 Drain, Reclamation would either abandon the B5 Drain from the WDC right-of-way west with support from WBWCD or maintain the B5 Drain under the WDC right-of-way. If the B5 Drain is not abandoned, UDOT would obtain an Easement Encroachment Agreement from Reclamation for the WDC crossing of the Reclamation easement in this area.	2
2	Layton Canal Fee Title Lands Gentile Street Syracuse	The WDC would cross the Reclamation fee title lands for the Layton Canal north of Gentile Street. The UDOT would obtain a license agreement from Reclamation for the WDC crossing of the Reclamation fee title lands in this area.	3
3	A6 Drain Farmington	The WDC would cross the A6 Drain near 600 South in Farmington. As part of the WDC project, UDOT would protect the A6 Drain in place and would provide a new casing and all warranted protection requirements based on a future Reclamation engineering review of the WDC design at this crossing. The UDOT would obtain an Easement Encroachment Agreement from Reclamation for the WDC crossing of the Reclamation easement in this area.	4
4	West Farmington Lateral 1.8L-0.5R Easement/Irrigation Line on 1525 West in Farmington	The WDC shifting of 1525 West could impact the Reclamation West Farmington Irrigation Lateral 1.8L-0.5R line and easement where 1525 West is realigned to the west to cross the WDC. The UDOT would either protect the West Farmington Irrigation Lateral 1.8L-0.5R line in place or shift the irrigation line to avoid conflicts with the new 1525 West if necessary. The UDOT would obtain an Easement Encroachment Agreement from Reclamation for the WDC crossing of the Reclamation easement in this area.	4
5	Farmington Creek Drain and Easement in Farmington	The UDOT would install a new reinforced concrete box culvert to convey Farmington Creek under the WDC. The UDOT would either have the Reclamation Farmington Creek Drain and easement cross under the WDC in the Farmington Creek culvert or provide a separate crossing of the WDC for the Reclamation Farmington Creek Drain and easement. The UDOT would obtain an Easement Encroachment Agreement from Reclamation for the WDC crossing of the Reclamation easement in this area.	5
6	West Farmington Lateral 1.8L-0.5R-0.6L Easement on	As part of the WDC project, UDOT would realign Glovers Lane to the south to allow Glovers Lane to cross over WDC without impacting the subdivisions on the north side of Glovers Lane. The realignment of Glovers Lane could impact	5

Facility Number	Reclamation Facility	Proposed Action Alternative	Figure
	1100 West in Farmington	the Reclamation West Farmington Irrigation Lateral 1.8L-0.5R-0.6L easement at 1100 West. The UDOT would either protect the West Farmington Irrigation Lateral 1.8L-0.5R-0.6L easement in place or shift the easement to avoid conflicts with the new Glovers Lane if necessary. The UDOT would ensure that the West Farmington Irrigation Lateral 1.8L-0.5R-0.6L easement is conveyed under the realigned Glovers Lane in equal or better condition compared to existing conditions. The UDOT would obtain an Easement Encroachment Agreement from Reclamation for the WDC crossing of the Reclamation easement in this area.	
7	West Farmington Lateral 1.8 Easement on Davis County Road in Farmington	The WDC trail and trailhead parking lot would encroach on the Reclamation West Farmington Lateral 1.8 Easement by Davis County Road (also known as Sheep Road). The UDOT and/or Farmington City would obtain an Easement Encroachment Agreement from Reclamation for the areas where the trail or trailhead would be located on Reclamation easement.	5
8	West Farmington Lateral 1.8L that crosses Legacy Parkway north of Glovers Lane in Farmington	The WDC project could require new striping or repaving the southbound lanes of Legacy Parkway in an area where the Reclamation West Farmington Lateral 1.8L is located near 700 South. This Reclamation irrigation pipe is in a casing, and Reclamation does not anticipate any impacts to or additional mitigation measures for this easement or irrigation line.	6
9	West Farmington Lateral 1.8L that crosses Legacy Parkway south of Glovers Lane in Farmington	The WDC project could require new striping, new pavement, or new ramps on Legacy Parkway just south of Glovers Lane where Reclamation has two easements and pipelines that cross under Legacy Parkway. These Reclamation irrigation pipes are in casings, and Reclamation does not anticipate any impacts to or additional mitigation measures for these easements or irrigation lines.	6
10	West Farmington Lateral 1.8L-2.0L near 450 West in Farmington	The WDC would cross the Reclamation West Farmington Lateral 1.8L-2.0L near 450 West in Farmington. The UDOT would protect the West Farmington Lateral 1.8L-2.0L in place and would provide all warranted protection requirements based on a future Reclamation engineering review of the WDC design at this crossing. The UDOT would obtain an Easement Encroachment Agreement from Reclamation for the WDC crossing of the Reclamation easement in this area.	6
11	Davis Aqueduct 60-inch Wasteway in Farmington	The WDC system-to-system interchange with Legacy Parkway and I-15 would cross the Reclamation easement for the 60-inch Davis Aqueduct Wasteway pipe. The 60-inch	6

Facility Number	Reclamation Facility	Proposed Action Alternative	Figure
		Davis Aqueduct Wasteway pipe is in a culvert as it crosses I-15 and Legacy Parkway. The WDC changes to Legacy Parkway and I-15 would not impact the 60-inch Davis Aqueduct Wasteway pipe. The WDC southbound ramps to southbound Legacy Parkway and southbound I-15 and the relocated Legacy Parkway Trail would encroach on the Reclamation easement for the 60-inch Davis Aqueduct Wasteway pipe. The UDOT would need to extend the 60-inch Davis Aqueduct Wasteway culvert to the west to accommodate the WDC southbound ramps to Legacy Parkway and I-15 and the relocated Legacy Parkway Trail. The extension of the culvert would occur in the existing Reclamation easement. The UDOT would obtain an Easement Encroachment Agreement from Reclamation for the WDC crossing of the Reclamation easement in this area.	

- License Agreement Work in Reclamation Fee Title Lands and Easement Encroachment Agreement Work in Reclamation Easements:** The Proposed Action Alternative also includes license agreement work that would occur in the relocated Layton Canal fee title lands and easement encroachment agreement work for the other Reclamation easements affected by the WDC. Agreement work on proposed encroachments would include new or relocated utility crossings, roadway crossings, driveways, parking lots, curbs, gutters, sidewalk crossings, trails, or other items that would cross the Reclamation fee title lands or easements.

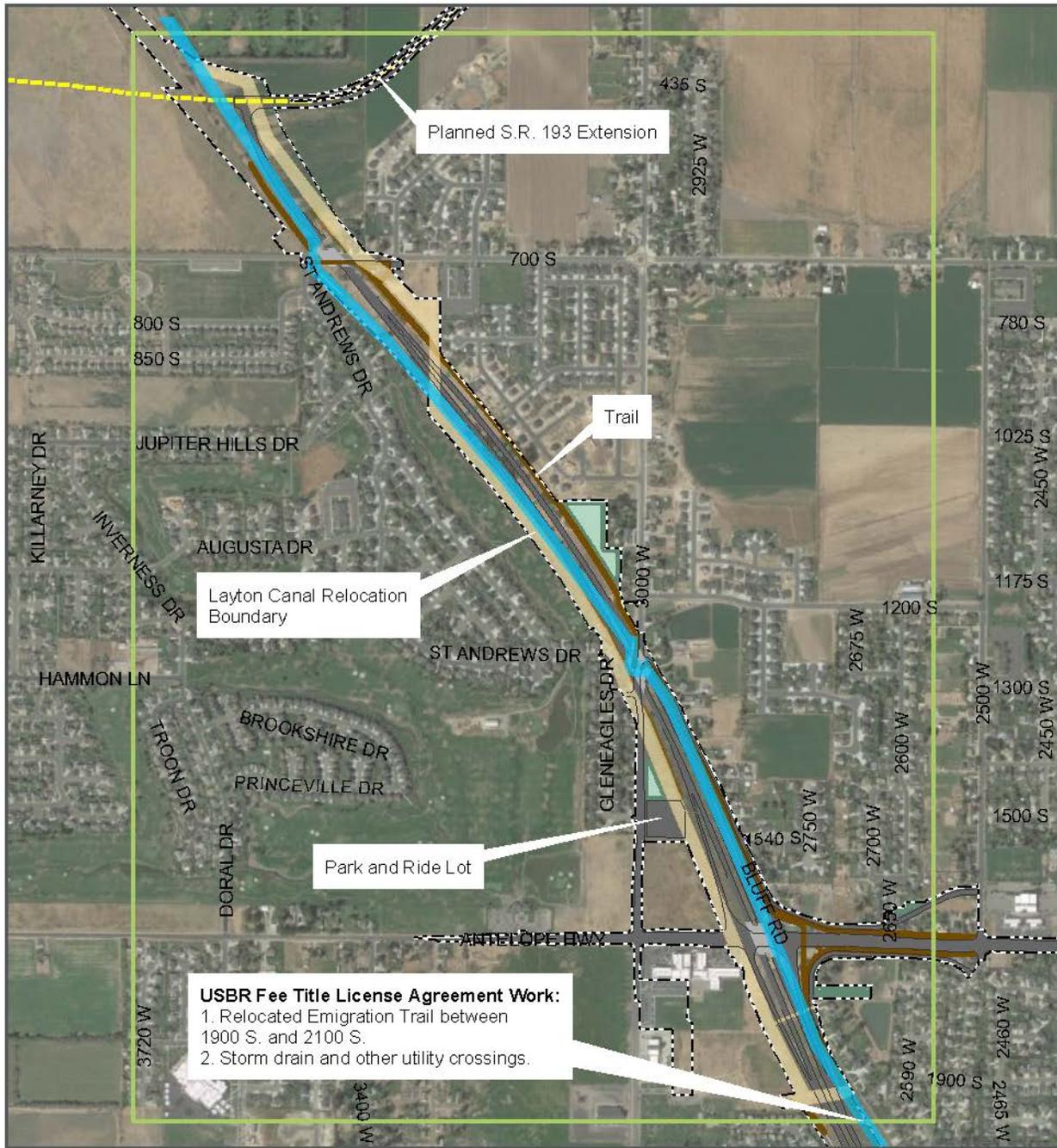
2.4.1 Construction Schedule

The WBWCD and UDOT anticipate that construction of the relocated Layton Canal would begin in the fall of 2020. The other Reclamation facilities included with the Proposed Action Alternative would be completed as part of the WDC project, which is anticipated to be constructed between November 2020 and December 2024.

2.4.2 Construction Procedures

For all Proposed Action Alternative work, UDOT, WBWCD, and their contractors will follow all general Reclamation and WBWCD procedures along with all UDOT WDC project-specific procedures, equipment, and conditions.

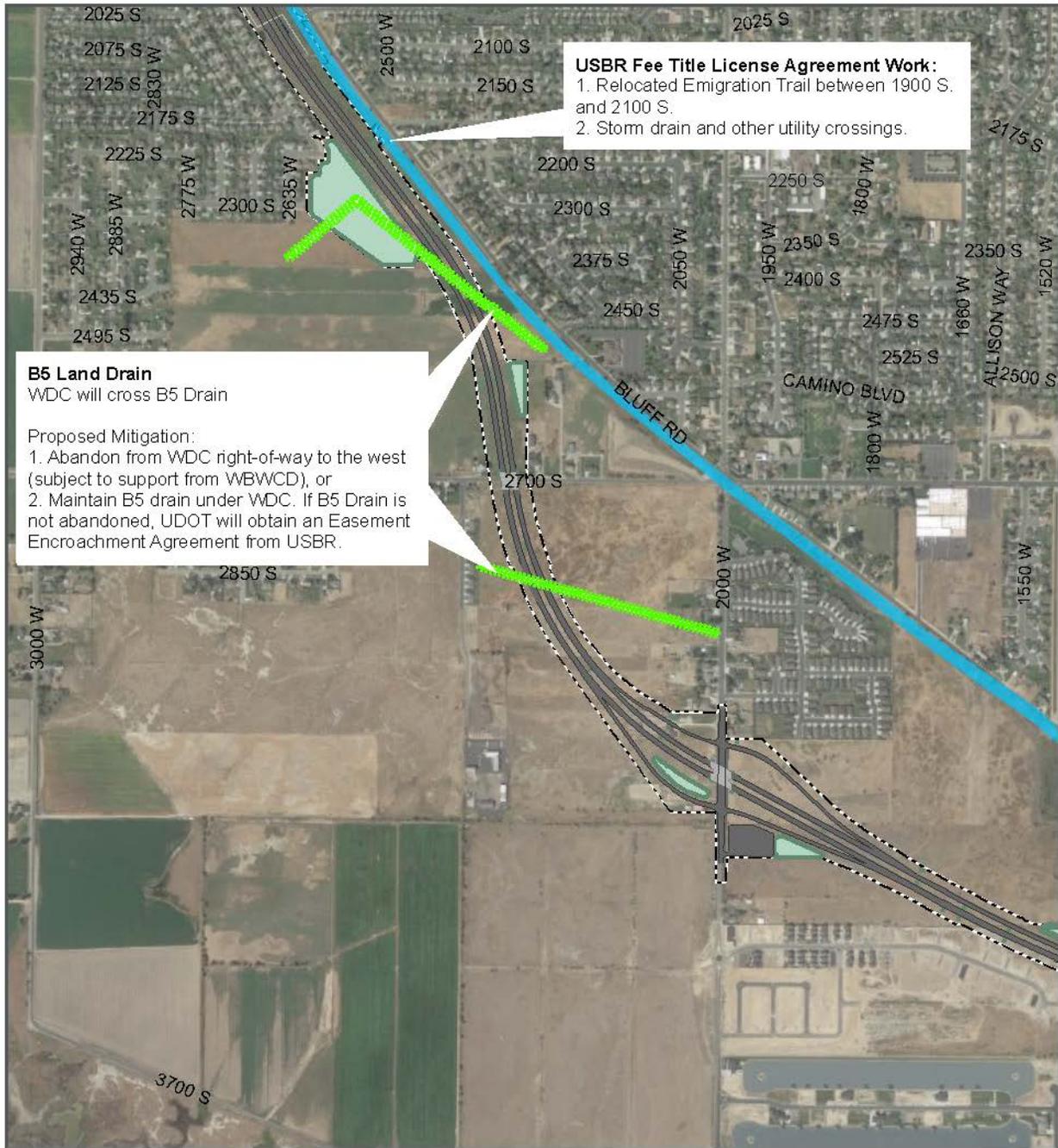
Figure 1. Layton Canal Relocation



Bureau of Reclamation Layton Canal Relocation EA



Figure 2. B5 Land Drain in Syracuse



Bureau of Reclamation Layton Canal Relocation EA



Reclamation Facilities Crossed by WDC



Figure 3. U.S. Bureau of Reclamation Fee Title Lands in Syracuse



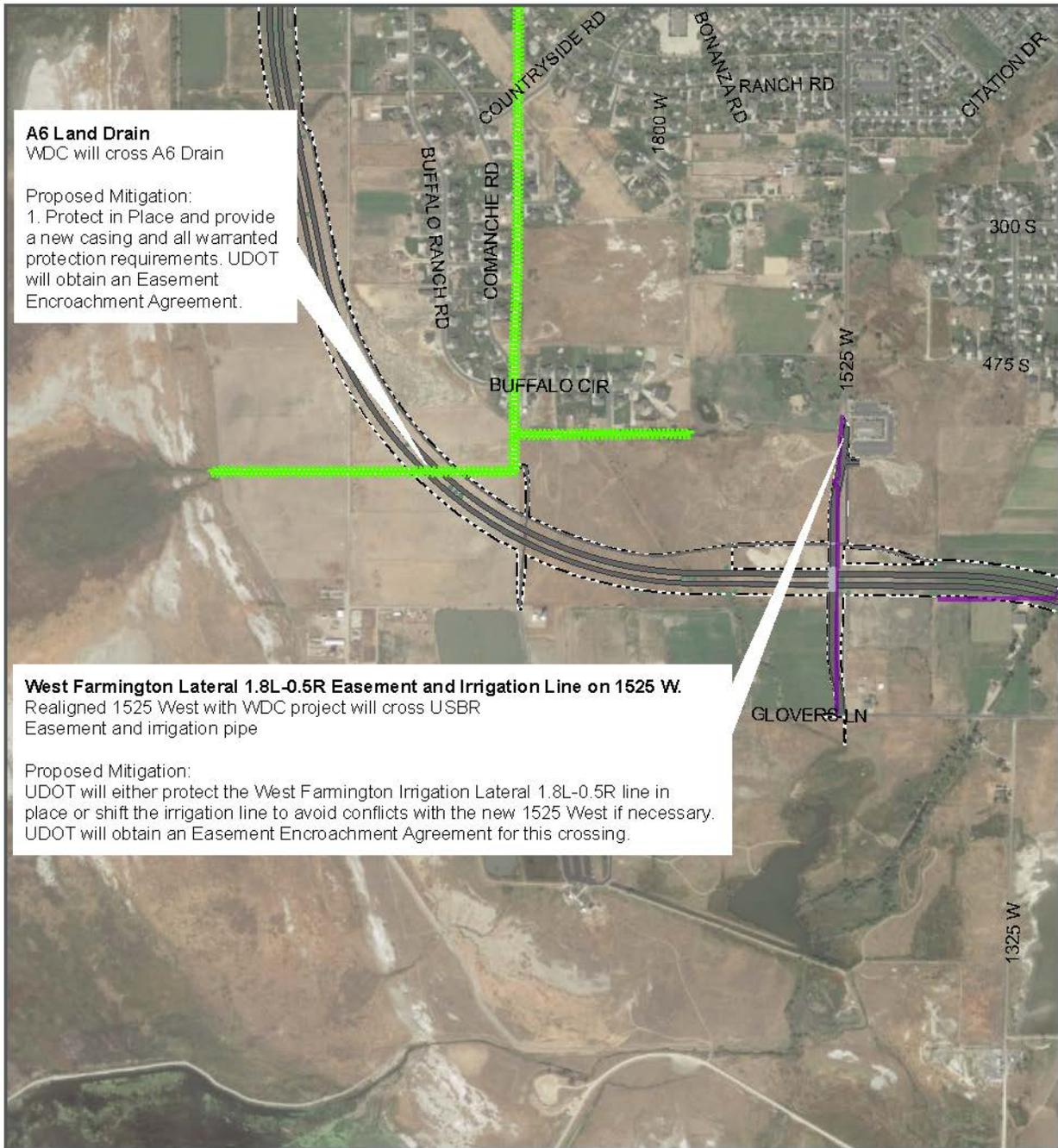
Bureau of Reclamation Layton Canal Relocation EA

-  UDOT RFP Direct Impact
-  Detention/Retention Basins
-  USBR - Fee Title Lands

Reclamation Facilities Crossed by WDC



Figure 4. West Farmington Area



A6 Land Drain
 WDC will cross A6 Drain

Proposed Mitigation:
 1. Protect in Place and provide a new casing and all warranted protection requirements. UDOT will obtain an Easement Encroachment Agreement.

West Farmington Lateral 1.8L-0.5R Easement and Irrigation Line on 1525 W.
 Realigned 1525 West with WDC project will cross USBR Easement and irrigation pipe

Proposed Mitigation:
 UDOT will either protect the West Farmington Irrigation Lateral 1.8L-0.5R line in place or shift the irrigation line to avoid conflicts with the new 1525 West if necessary. UDOT will obtain an Easement Encroachment Agreement for this crossing.

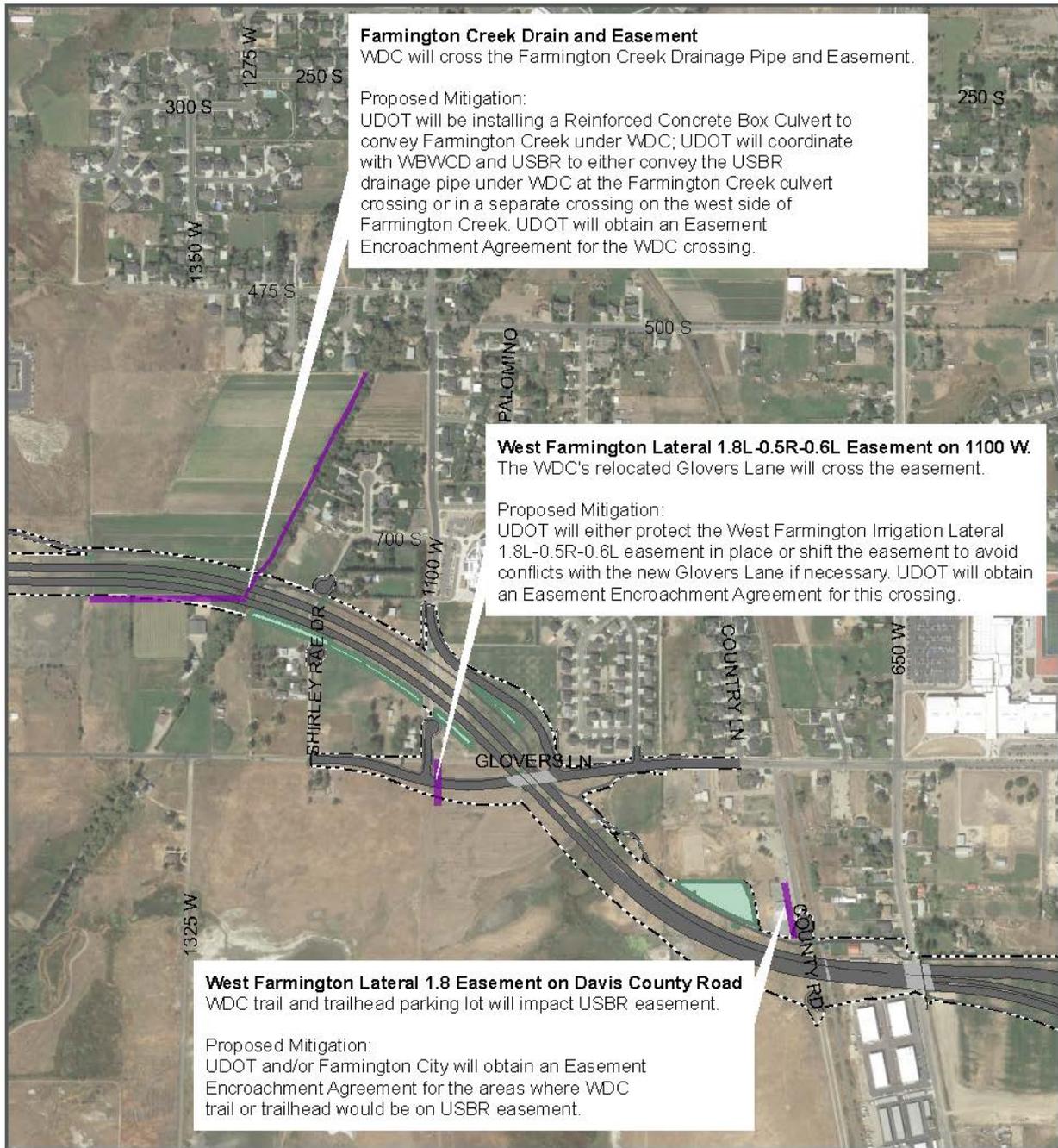
Bureau of Reclamation Layton Canal Relocation EA

- UDOT RFP Direct Impact
- USBR - Drains
- Detention/Retention Basins
- USBR - Easements

Reclamation Facilities Crossed by WDC



Figure 5. Central Farmington Area



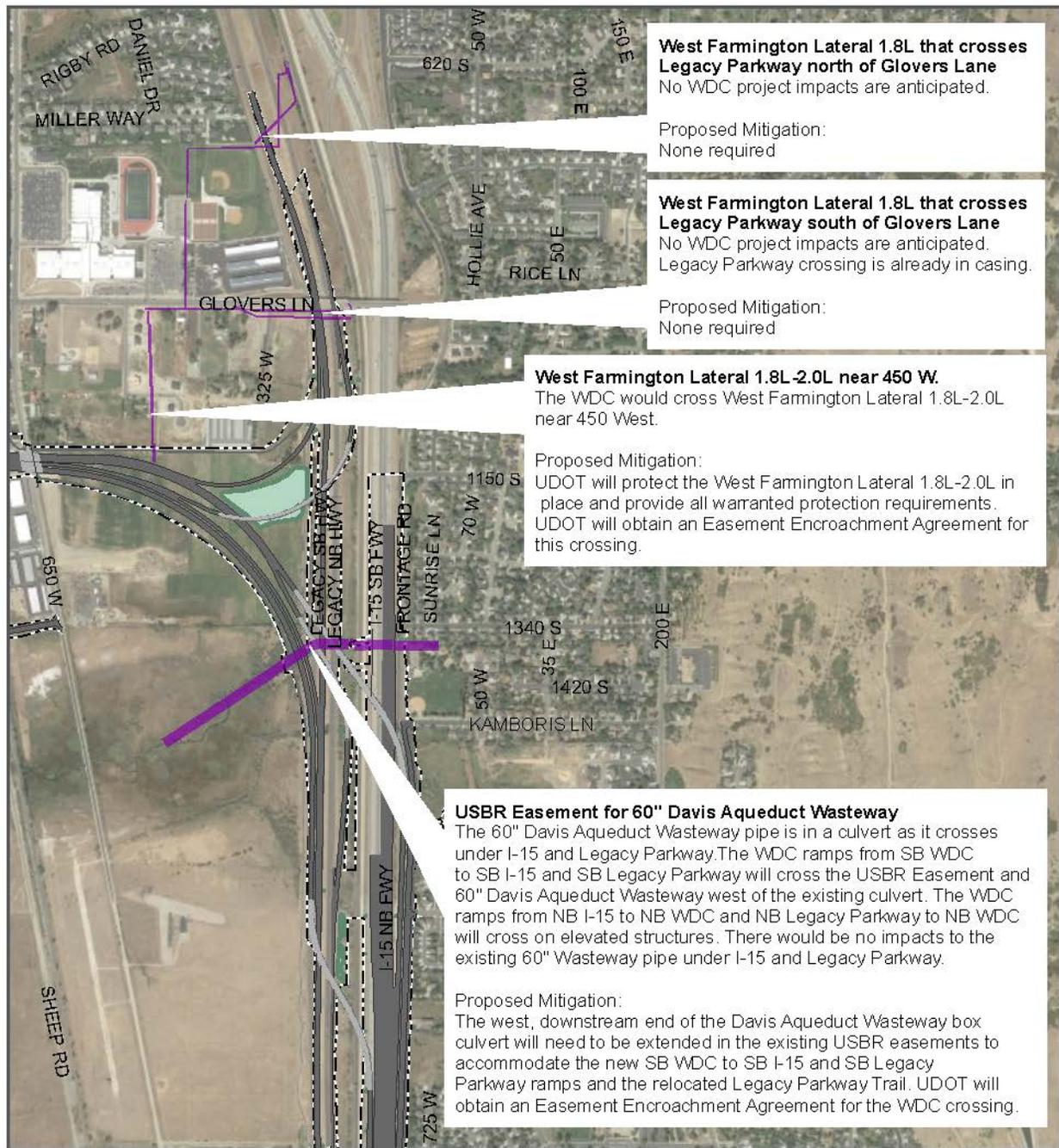
Bureau of Reclamation Layton Canal Relocation EA

-  UDOT RFP Direct
-  Detention/Retention Basins
-  USBR - Easements

Reclamation Facilities Crossed by WDC



Figure 6. East Farmington Area



Bureau of Reclamation Layton Canal Relocation EA

-  UDOT RFP Direct
-  Detention/Retention Basins
-  USBR - Easements

Reclamation Facilities Crossed by WDC



Chapter 3 - Affected Environment

3.1 Introduction

Section 3 describes the environment in which the Proposed Action Alternative would be implemented. The various associated environmental resources are discussed, including physical resources such as water resources, water quality, and air quality; biological resources such as vegetation, wetlands, noxious weeds, fish and wildlife resources, and endangered species; and socio-economic resources such as Indian Trust Assets, environmental justice, and cultural resources.

This EA incorporates by reference the impacts, analyses, and supporting technical documentation of the UDOT WDC Final EIS approved in June 2017 and the WDC ROD approved on September 29, 2017. Copies of these documents are provided on the WDC project website at <https://westdavis.udot.utah.gov/final-eis-and-rod/>.

This EA also incorporates the impacts and analysis approved in UDOT's WDC EIS Re-evaluation #3, Layton Canal Relocation, which was approved on December 5, 2019; the WDC Section 404 Permit issued by USACE on May 15, 2020; and the WDC Section 401 Water Quality Certification issued by the Utah Division of Water Quality on April 29, 2019. Copies of these documents are included in Appendix B.

Because Reclamation's actions and authorizations are required for the proposed UDOT WDC project, and because these actions and authorizations would be required for a smaller area compared to the larger areas that UDOT evaluated for the WDC project, this EA has used the information, surveys, data, and studies developed as part of UDOT's WDC Final EIS and EIS Re-evaluation #3 where applicable when developing this EA.

3.2 Resources Considered but Eliminated from Further Study

Table 2 lists the resources that were considered for analysis but were eliminated from further study in this EA.

Table 2. Resources Considered and Rationale for Eliminating Them

Resource	Rationale for Eliminating from Further Study
Hydrology	There would be no change to hydrology from the Proposed Action Alternative. The Layton Canal and other Reclamation facilities would continue to use the same water sources as they currently use, and there would be no impacts to the hydrology of other waters from the Proposed Action Alternative.
Water Quality	The Reclamation irrigation pipe on the west side of Farmington Creek is parallel to the impaired Farmington Creek. The new crossing of the Reclamation irrigation pipe under the WDC at Farmington Creek would not cause any new discharges to Farmington Creek and would not impact the water quality of Farmington Creek. The UDOT and WBWCD would obtain and follow the terms of the UPDES permit during construction to ensure that construction-related sediments or untreated water would not enter surrounding waters during construction (see the environmental commitments in Chapter 4, Environmental Commitments, of this EA).
Geology and soils resources	No unique or protected geologic resources or soils would be impacted by the Proposed Action Alternative. There would be no impacts to geology and soils resources from the Proposed Action Alternative because all geology and soils impacted by the Proposed Action Alternative would be restored to their existing condition following construction.
Paleontological resources	According to the letter received from the Utah Geological Survey for the WDC project (UGS 2011), there are no known paleontological localities in the WDC project's area of potential effects (APE), and the formations in the WDC project area have a low potential for containing fossil remains.
Threatened or endangered species	No critical habitat for threatened or endangered species is present in the larger WDC project area. The U.S. Fish and Wildlife Service's concurrence with the no effect determination for the WDC project is included in Appendix 14B, Ecosystems Correspondence, of the UDOT WDC Final EIS. Reclamation determined that the Proposed Action Alternative would have no effect on threatened or endangered species.
Wildlife resources	The Proposed Action Alternative would occur in disturbed residential or agricultural areas. The Proposed Action Alternative would have no impacts to sensitive species or areas that were identified in the UDOT WDC Final EIS as medium- or high-quality wildlife habitat.
Riparian areas	There would be no impacts to riparian areas from the Proposed Action Alternative because there are no riparian areas in the locations where the Proposed Action Alternative would be constructed.
Wilderness and wild and scenic rivers	There are no designated wilderness areas or wild and scenic rivers in the WDC project area. Therefore, the Proposed Action Alternative would not affect these resources.
Cultural resources	Reclamation used the National Historic Preservation Act Section 106 information and supporting technical reports (HDR 2014, 2017; SWCA 2012a, 2012b) from the UDOT WDC Final EIS. No historic properties are located in the areas that would be disturbed by the Proposed Action Alternative. The Proposed Action Alternative would not affect any historic properties, including

Resource	Rationale for Eliminating from Further Study
	prehistoric or historic districts, sites, buildings, structures, or objects that are at least 50 years of age and are included in, or eligible for inclusion in, the National Register of Historic Places.
Indian Trust Assets (ITAs)	As described in Chapter 16, Historic, Archaeological, and Paleontological Resources, of the UDOT WDC Final EIS, UDOT and FHWA conducted Native American consultation as part of the WDC EIS process beginning in 2010 and ending in 2017. Consultation letters were sent on multiple instances over the course of the WDC project to the Cedar Band of Paiutes, the Confederated Tribes of the Goshute Reservation, the Hopi Tribe, the Paiute Indian Tribe of Utah, the Shivwits Band of Paiutes, the Northwestern Band of the Shoshone Nation, the Eastern Shoshone Tribe of the Wind River Reservation, the Shoshone-Bannock Tribes of the Fort Hall Reservation, the Skull Valley Band of Goshute Indians, and the Ute Indian Tribe of the Uintah and Ouray Ute Indian Reservation. None of the tribes identified any specific sites, resources, or traditional cultural places of concern that would be affected by the WDC project alternatives. Because the larger WDC project would have no foreseeable negative impacts on ITAs, the Proposed Action Alternative would have no foreseeable negative impacts on ITAs.
Prime and unique farmland	The Proposed Action Alternative is located in areas defined as “urbanized areas” by the U.S. Census Bureau. Per 7 CFR Section 658.2, farmland does not include land already in or committed to urban development.
Environmental Justice	<p>As described in Chapter 6, Environmental Justice, of the UDOT WDC Final EIS, in accordance with the provisions of Executive Order 12898, the UDOT WDC selected alternative would not cause disproportionately high and adverse effects on any minority or low-income populations. All of the relocations for the WDC selected alternative would occur in non-environmental justice populations. The WDC selected alternative would not acquire any residential properties in low-income or minority areas. Other adverse effects from the WDC selected alternative, such as noise impacts, would also be greater to non-environmental justice populations compared to environmental justice populations. The FHWA and UDOT determined that the WDC selected alternative would not have any adverse effects (such as relocations and noise impacts) that would be predominantly borne by low-income or minority populations.</p> <p>Because the Proposed Action Alternative would impact a smaller area that what was included as part of the larger area that UDOT evaluated for the WDC selected alternative, the Proposed Action Alternative would also not disproportionately (unequally) affect any low-income or minority communities and would have no adverse human health or environmental effects on minority or low-income populations or Native American tribes.</p>
Water rights	There would be no change to water rights from the Proposed Action Alternative.

3.3 Description of Relevant Affected Issues and Resources

This section provides a full description of the relevant affected issues and resources that could be impacted by the Proposed Action Alternative.

3.3.1 System Operations

As described in Section 1.1, Introduction and Background, of this EA, Reclamation owns in fee a 100-foot-wide parcel of land for the Layton Canal. The Layton Canal is diverted from the Weber River in Ogden and ends near Gentile Street in Syracuse. The Layton Canal is open channel from the Weber River diversion to 1300 North in West Point. From 1300 North to the southern terminus, the Layton Canal is piped. The pipe size varies and decreases in diameter as the Layton Canal goes south. WBWCD is the operator of the Layton Canal. Several irrigation companies have laterals off the Layton Canal.

3.3.1.1 No Action Alternative

With the No Action Alternative, Reclamation would not approve the WDC's impacts to Reclamation facilities, and UDOT would be required to modify the WDC selected alternative to avoid impacts to Reclamation facilities. Because Reclamation would not approve the WDC's impacts to Reclamation facilities without mitigation measures, there would be no impacts to system operations with the No Action Alternative.

3.3.1.2 Proposed Action Alternative

The Proposed Action Alternative would construct the new Layton Canal prior to construction of the WDC, and the new Layton Canal would be operational before the UDOT WDC project would have any impacts to the existing Layton Canal. The relocated Layton Canal would carry the same hydraulic capacity and would continue to deliver water to all existing laterals and turnouts. The relocated Layton Canal is designed to carry a similar or higher capacity of water as the existing Layton Canal. All turnouts from the Layton Canal would be relocated and would continue to function.

Similarly, the Proposed Action Alternative would install protective measures or relocate other impacted Reclamation facilities prior to construction of the UDOT WDC project. With these mitigation measures, there would be no change to system operations with the Proposed Action Alternative.

3.3.2 Floodplains

The WDC crosses several Federal Emergency Management Agency (FEMA) floodplain areas in west Farmington and west Kaysville. As part of the WDC project, UDOT will obtain Flood Control Permits from Davis County and Floodplain Development Permits from the Cities to ensure that the UDOT WDC project will meet FEMA requirements and local floodplain ordinances. The Proposed Action Alternative's A6 land drain, the West Farmington Lateral 1.8L-0.5R Easement/Irrigation Line on 1525 West, the Farmington Creek drainage pipe, the West Farmington Lateral 1.8L-0.5R-0.6L Easement on 1100 West, the West Farmington Lateral 1.8 Easement by Davis County Road, and the 60-inch Davis Aqueduct Wasteway pipe are all located in floodplains designated as Zone A or Zone AE by FEMA.

3.3.2.1 No Action Alternative

The No Action Alternative would have no effect on floodplains.

3.3.2.2 Proposed Action Alternative

The Proposed Action Alternative's A6 land drain, the West Farmington Lateral 1.8L-0.5R Easement/Irrigation Line on 1525 West, the Farmington Creek drainage pipe, the West Farmington Lateral 1.8L-0.5R-0.6L Easement on 1100 West, the West Farmington Lateral 1.8 Easement by Davis County Road, and the 60-inch Davis Aqueduct Wasteway pipe are all located in Zone A or Zone AE floodplains. Any floodplain impacts related to maintaining or improving these Reclamation facilities that cross the WDC in Farmington will be permitted as part of UDOT's WDC Flood Control Permits from Davis County and the Floodplain Development Permits from Farmington City.

3.3.3 Waters of the United States

Waters of the United States (that is, wetlands and other surface waters) provide important and beneficial functions including protecting and improving water quality, providing fish and wildlife habitat, and storing floodwaters. Because they provide these important functions, this resource is protected via two acts: Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act of 1972, as amended. These acts require that Reclamation strive to first avoid adverse impacts, then minimize adverse impacts, and finally offset unavoidable adverse impacts to existing aquatic resources; and for wetlands, strive to achieve a goal of no overall net loss of wetland values and functions.

The USACE has authority to regulate work in the Nation's waters (that is, waters of the United States) through the Rivers and Harbors Act. This act established permit requirements to prevent unauthorized obstruction or alteration of any navigable water.

The USACE also regulates work in, on, or over waters of the United States via the Clean Water Act, which authorizes USACE to require permits for discharging dredge and fill material into waters of the United States. The USACE was a cooperating agency for the UDOT WDC EIS, and UDOT conducted an extensive Clean Water Act Section 404 review with USACE during the Section 404 permitting process for the WDC project.

The UDOT prepared an *Aquatic Resources Delineation Report* for the WDC project area (UDOT 2017b). The delineation fieldwork was conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* (USACE 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008a), *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual* (USACE 2008b), *Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2010), and USACE regulatory guidance letters and joint (USACE and U.S. Environmental Protection Agency) regulations, policies, references, and guidance.

The WDC Section 404 permit, approved in May 2020, authorizes impacts to 55.71 acres of waters of the United States (USACE 2020).

3.3.3.1 No Action Alternative

The No Action Alternative would have no effect on waters of the United States.

3.3.3.2 Proposed Action Alternative

The Proposed Action Alternative would impact about 5.7 acres of wetlands in the relocated Layton Canal area where the relocated Layton Canal is on the west side of the WDC between (1) 800 South and Antelope Drive and (2) the south WDC crossing near 1900 South in Syracuse (UDOT 2020).

These impacted wetlands are included in the WDC Section 404 permit (USACE 2020). A copy of the WDC Section 404 Permit is included in Appendix B. The UDOT is mitigating these wetland impacts by preserving, enhancing, rehabilitating, and establishing new wetlands on 1,100 acres of property adjacent to the Great Salt Lake Shorelands Preserve and the Farmington Bay Waterfowl Management Area (UDOT 2020). Figures from the WDC *Final Wetland Mitigation Plan* showing the areas of wetland impact are included in Appendix B, Wetland Impact Figures, of this EA.

3.3.4 Existing Vegetation

Existing vegetation that could be affected by the Proposed Action Alternative is agricultural vegetation, wetland vegetation areas, a mix of upland grasses and weeds in unirrigated vacant land, a mix of native and introduced grasses (particularly in highway rights-of-way) or maintained landscapes in residential areas.

3.3.4.1 No Action Alternative

With the No Action Alternative, there would be no change to existing vegetation.

3.3.4.2 Proposed Action Alternative

The Proposed Action Alternative would impact existing vegetation. The Proposed Action Alternative would have temporary impacts to existing vegetation in all areas where there would be excavation, grading, or staging activities. The temporary impacts would include removing some existing vegetation before construction. Impacted areas would be treated to control weeds and would be revegetated after construction.

3.3.5 Socioeconomics and Private Properties

The Proposed Action Alternative is located in Davis County, Utah, on land that is part of the incorporated jurisdictions of Syracuse and Farmington. Davis County has the third-largest population in Utah (estimated at 352,805 people in 2018). Davis County has a diverse economy. In 2019, the county's top five employment sectors were government (federal, state, and local); trade, transportation, and utilities; educational and health services; professional and business services; and leisure and hospitality services. A detailed economic analysis was performed for the WDC project as described in Chapter 8, Economics, of the UDOT WDC Final EIS.

The Proposed Action Alternative would be implemented on mostly private residential or agricultural properties, the Syracuse Arts Academy property, properties owned by Syracuse City, and fee title properties owned by Reclamation for the Layton Canal or easements owned by Reclamation for the other Reclamation irrigation lines or drains. Since the approval of the WDC ROD in 2017, UDOT

has been purchasing the private properties needed for the WDC project. The WDC private property purchases include the properties that would need to be provided to Reclamation for the relocated Layton Canal because of the impacts of the WDC project.

3.3.5.1 No Action Alternative

The No Action Alternative would have no effect on land ownership. Without mitigation measures, Reclamation would not approve the WDC's impacts to Reclamation facilities, and UDOT would be required to modify the WDC selected alternative to avoid impacts to Reclamation facilities. The UDOT would incur additional costs and delays from planning the WDC around the existing Layton Canal. If the WDC were not constructed, the anticipated economic benefits of the WDC project described in Section 8.4.2 of the WDC Final EIS would not occur. The WDC's beneficial economic impacts include a substantial decrease in daily traffic delay and a more efficient regional transportation system that is expected to result in beneficial impacts to commerce and employment.

3.3.5.2 Proposed Action Alternative

The Proposed Action Alternative would have beneficial economic impacts due to the implementation of the WDC project. As described in Section 8.4.2 of the WDC Final EIS, the WDC's beneficial economic impacts include a substantial decrease in daily traffic delay and a more efficient regional transportation system that is expected to result in beneficial impacts to commerce and employment.

The Proposed Action Alternative would require UDOT to purchase a total of about 20.19 new acres of fee title lands for Reclamation to relocate the Layton Canal and about 0.91 new acre of new easements for the Layton Canal Company and Syracuse City Bluff Pond laterals. There are 29 existing parcels that would be impacted by the Proposed Action Alternative. Of these 29 existing parcels, 12 are residential properties that have been purchased and relocated by UDOT as part of the WDC project. Of these 12 residential properties, 6 are residential properties needed only for the relocated Layton Canal that were evaluated by UDOT as part of WDC Re-evaluation #3. The other 6 residential properties are needed for both the UDOT WDC roadway and the relocated Layton Canal and were evaluated as part of the WDC Final EIS.

Table 3 lists the parcel number, impacted acreage, parcel owner (as of July 2020), and whether the parcel was a residential relocation. Figure 7 shows the location of these parcels. As previously noted, UDOT has been purchasing these parcels for the WDC project since the approval of the WDC ROD in 2017. For any parcels that are not owned by UDOT, UDOT is currently negotiating with the property owners as part of the WDC right-of-way acquisition process.

The UDOT is providing compensation to impacted property owners pursuant to the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and the Utah Relocation Assistance Act (Utah Code Annotated Section 57-12-1 et seq.). According to UDOT, as of December 2019, only two affected property owners of the six residential properties needed only for the relocated Layton Canals had not been relocated and were in negotiations for their relocation. Both individuals contacted by Reclamation said they were treated well during negotiations and received a fair offer for their property. They supported the need for the WDC and were willing to be relocated away from the new highway development. In the spring of 2020, UDOT completed the purchase and relocation process for these two property owners.

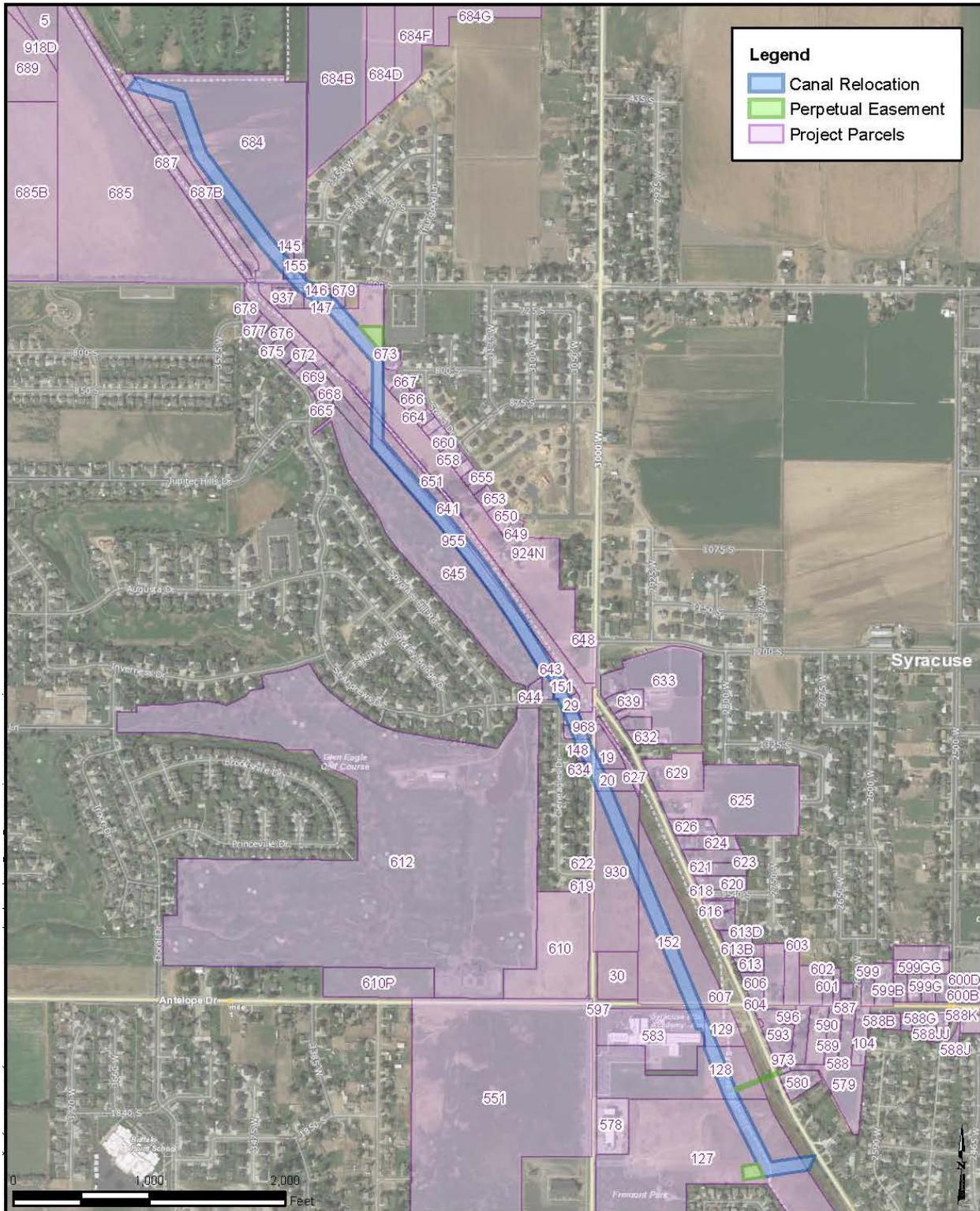
Once all properties have been purchased, UDOT would combine the 29 existing parcels into one parcel before transferring it to Reclamation.

The Proposed Action Alternative would cross many utility lines in Syracuse and Farmington. The Syracuse Arts Academy is also proposing to have a new access road that would cross the Reclamation fee title lands on the west side of the school just south of Antelope Drive. Any utility lines, access roads, sidewalks, driveways, curbs, gutters, storm drains, trails, or other encroachments that cross the Reclamation fee title lands or easements will require authorized use agreements. The UDOT will work with Reclamation and the applicable third parties during the WDC final design process to obtain these agreements. Both West Point City and Syracuse City were approached about potential concerns for the relocation of the Layton Canal. Representatives with Syracuse City stated on October 30, 2019, that they supported the WDC project, and representatives with West Point City stated their support of the WDC project during a meeting on November 6, 2019.

Table 3. Property Impacts from the Proposed Action Alternative

County Parcel Number	UDOT Parcel Number	Owner (as of July 2020)	Impacted Acreage	Residential Relocation? (Yes/No)
120390049	684	UDOT	2.82	No – undeveloped
120400095	684	UDOT	1.31	No – undeveloped
120400079	145	UDOT	0.26	Yes
120400094	155	UDOT	0.11	Yes
120470243	651	Syracuse City	0.07	No – undeveloped
120470273	924N	UDOT	2.25	No – undeveloped
120470276	682 (not labeled on Figure 7)	UDOT	0.04	No for Proposed Action Alternative UDOT is relocating as part of the WDC project
120470277	146	UDOT	0.18	Yes
120470279	679	UDOT	0.11	Yes
120470296	955	UDOT	4.10	No – undeveloped
120470302	147	UDOT	0.26	Yes
120490015	19	UDOT	0.07	No – undeveloped
120490016	20	UDOT	0.33	No – undeveloped
120490059	930	UDOT	1.50	No – undeveloped
120490111	152	UDOT	2.41	No – undeveloped
120910032	582 (not labeled on Figure 7)	Syracuse City	0.01	No – undeveloped
120910091	128	Syracuse City	1.06	No – undeveloped
120910096	129	Syracuse City	0.27	No – undeveloped
120910105	583	Syracuse Arts Academy	0.37	No – partial impact to property
122480033	634	UDOT	0.06	Yes
122480034	148	UDOT	0.17	Yes
122480035	968	UDOT	0.16	Yes
122480036	149 (not labeled on Figure 7)	UDOT	0.10	Yes
122480037	150 (not labeled on Figure 7)	UDOT	0.20	Yes
122480038	29	UDOT	0.19	Yes
122480039	151	UDOT	0.35	Yes
122480043	643	UDOT	0.11	No – partial impact to property
127170002	127	Syracuse City	2.24	No – undeveloped
128810127	No number (not labeled on Figure 7)	UDOT	<0.01	No – undeveloped

Figure 7. Layton Canal Property Impacts



HORROCKS
ENGINEERS

2162 West Grove Parkway
Suite #400
Pleasant Grove, UT
(801) 763-5100

WDC Canal Relocation

DATE	7/10/2020
DRAWN	
Figure 1	

3.3.6 Recreation Resources

Most sections of the existing Old Emigration Trail between 1000 West in Syracuse and 1300 North in West Point are located on the Reclamation fee title lands for the Layton Canal. Syracuse City and West Point City have existing license agreements with Reclamation to have the trails on the Reclamation fee title lands.

3.3.6.1 No Action Alternative

The No Action Alternative would have no effect on recreation resources.

3.3.6.2 Proposed Action Alternative

With the UDOT WDC Selected Alternative, the Old Emigration Trail would be relocated east of the WDC between 1900 South in Syracuse and 400 South in West Point with a new at-grade crossing of Antelope Drive east of the WDC/Antelope Drive interchange. With this relocation, the function of the Old Emigration Trail would be maintained after the WDC is constructed. Trails could be temporarily closed during construction.

With the Proposed Action Alternative, the relocated Old Emigration Trail would be located on or would cross the new Reclamation fee title lands for the relocated Layton Canal from about 800 South in Syracuse to 400 South in West Point. It would be located on the existing Reclamation fee title lands for the Layton Canal between about 1900 South and 2100 South in Syracuse. The UDOT, Syracuse City, and/or West Point City would be required to obtain a new license agreement with Reclamation to place the relocated Old Emigration Trail on Reclamation fee title lands in these areas.

3.3.7 Health, Safety, Air Quality, and Noise

The Proposed Action Alternative would be located in a suburban area. Because the existing Layton Canal is in a buried pipe, the current operations have no effect on health, safety, air quality, or noise in the surrounding communities.

The UDOT WDC Final EIS reviewed information from the Utah Division of Environmental Response and Remediation and Environmental Protection Agency, and neither source identified any underground storage tanks or any other potential hazardous material sites that could be affected by the Proposed Action Alternative. See Chapter 17, Hazardous Waste Sites, of the UDOT WDC Final EIS for more information.

3.3.7.1 No Action Alternative

The No Action Alternative would have no effect on health, safety, air quality, or noise.

3.3.7.2 Proposed Action Alternative

The Proposed Action Alternative would have short-term effects on air quality and noise during construction. Noise levels would temporarily increase during pipeline installation due to heavy equipment and truck traffic. Air quality could temporarily be reduced during construction of the parallel pipeline. Fugitive dust could increase during pipeline construction; however, dust-suppressing measures would be used to help reduce the increased short-term impacts. The selected

contractor would prepare and follow a *Fugitive Dust Emission Control Plan* in accordance with the Air Quality Permit from the Utah Division of Air Quality. Management of hazardous substances such as fuels or oils will be described in the *Stormwater Pollution Prevention Plan* (SWPPP) required for the UPDES permit.

Reclamation does not anticipate that the Proposed Action Alternative would affect any sites with hazardous materials. If hazardous materials are discovered during construction, UDOT, WBWCD, or the contractor would contact the Utah Division of Environmental Response and Remediation.

3.3.8 Access and Transportation

Antelope Drive (S.R. 127), 3000 West, and 700 South are the major existing roads in the area that could be affected by the Proposed Action Alternative. The planned UDOT WDC and S.R. 193 extension will be the major freeway and arterial transportation facilities once they are constructed and open to the public. The UDOT owns the underlying property for Antelope Drive, the planned WDC, and the planned S.R. 193 extension and is responsible for operations and maintenance on these facilities. 3000 West and 700 South are owned and maintained by Syracuse City.

3.3.8.1 No Action Alternative

The No Action Alternative would have an adverse effect on access and transportation. Without mitigation measures, Reclamation would not approve the WDC's impacts to Reclamation facilities, and UDOT would be required to modify the WDC selected alternative to avoid impacts to Reclamation facilities. If the WDC were not constructed, the access and transportation benefits from the WDC would not occur.

3.3.8.2 Proposed Action Alternative

The Proposed Action Alternative would have short-term impacts to access and transportation during the construction of the new pipeline where it crosses 700 South, 3000 West, and Antelope Drive. Short-term impacts could include lane closures and travel delays in the areas where the new pipeline would be installed underneath the roads.

Because the Proposed Action Alternative would be constructed before the construction of the planned WDC and S.R. 193 extension, there would be no impacts to access or transportation on these facilities. The Proposed Action Alternative would have long-term benefits to access and transportation by allowing the construction of the WDC.

For the Proposed Action Alternative, WBWCD would coordinate with and obtain permits from UDOT for any lane closures needed on Antelope Drive during construction. The UDOT or WBWCD would coordinate with Syracuse City for any lane closures needed on 700 South and 3000 West during construction.

3.3.9 Visual Resources

This section evaluates the extent to which the Proposed Action Alternative would change the visual character and quality of the environment. The Proposed Action Alternative is located in an area that includes primarily residential and agricultural land uses. Views from the inhabited areas include the surrounding residential subdivisions and Antelope Island and the Great Salt Lake to the west.

3.3.9.1 No Action Alternative

The No Action Alternative would have no effect on visual resources.

3.3.9.2 Proposed Action Alternative

The Proposed Action Alternative would have short-term visual impacts during construction when the new 54-inch pipeline is installed using an open-trench technique. Once construction is complete, there would be no permanent adverse impacts to visual resources, because the Proposed Action Alternative would install a buried pipe and the overburden would be revegetated.

3.3.10 Cumulative Effects

In addition to Proposed Action–specific impacts, Reclamation analyzed the potential for significant cumulative impacts to resources affected by the Proposed Action and by other past, present, and reasonably foreseeable activities in the Weber Basin watershed. According to the Council on Environmental Quality’s regulations for implementing NEPA (50 CFR Section 1508.7), a cumulative impact is an impact on the environment that results from the incremental impact of the proposed action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

This section focuses on whether the Proposed Action, considered together with any known or reasonably foreseeable actions by Reclamation, other federal or state agencies, or some other entity, would combine to cause an effect. There is no defined area for analyzing cumulative effects.

Reclamation used the analysis and information from Chapter 24, Cumulative Impacts, of the UDOT WDC Final EIS. Other foreseeable future actions near the Proposed Action would include URMCC’s federal land transfer to TNC, UDOT’s WDC project, UDOT’s S.R. 193 extension project, and UDOT’s Antelope Drive widening project.

The UDOT’s cumulative impacts analysis for the UDOT WDC Final EIS included an analysis of ecosystem resources, air quality, water quality, floodplains, farmland, economics, and community impacts. Because the impacts of the Proposed Action were included as part of UDOT’s Selected Alternative for the WDC project, the Proposed Action’s cumulative impacts were included in the WDC cumulative impacts analysis. The Proposed Action would not result in any new or additional impacts to ecosystem resources, air quality, water quality, floodplains, farmland, economics, or community impacts beyond what were previously disclosed in the UDOT WDC Final EIS cumulative impacts analysis.

The cumulative effects of the maintenance and repair activities on the new system, including the pipeline, turnouts, and appurtenances, would be infrequent and short-term. Any maintenance

activities would occur in previously disturbed areas. Reclamation does not anticipate that the impacts of the Proposed Action, when combined with the impacts of other reasonably foreseeable future actions, would increase the potential for prospective land development.

Therefore, based on the resource specialists’ review of the Proposed Action, Reclamation has determined that the Proposed Action would not have a significant adverse cumulative effect on any resource.

3.4 Summary of Environmental Effects

Table 4 summarizes the environmental effects of the No Action and Proposed Action Alternatives.

Table 4. Summary of Environmental Effects

Resource	No Action Alternative	Proposed Action Alternative
Hydrology	No effect	No effect
Water quality	No effect	No effect
Geology and soils	No effect	No effect
Paleontological resources	No effect	No effect
Threatened or endangered species	No effect	No effect
Wildlife resources	No effect	No effect
Riparian areas	No effect	No effect
Wilderness and wild and scenic rivers	No effect	No effect
Cultural resources	No effect	No effect
Indian Trust Assets	No effect	No effect
Prime and unique farmland	No effect	No effect
Environmental justice	No effect	No effect
Water rights	No effect	No effect

Resource	No Action Alternative	Proposed Action Alternative
System operations	Adverse effect on system operations due to the WDC having unacceptable fill on top of the existing Layton Canal and other Reclamation facilities and limiting maintenance access to these facilities. Without mitigation measures, Reclamation would not approve the WDC's impacts to Reclamation facilities, and UDOT would be required to modify the WDC selected alternative to avoid impacts to Reclamation facilities.	The Proposed Action Alternative would construct the new Layton Canal and mitigation measures for the other Reclamation facilities prior to construction of the WDC. With these proposed mitigation measures, there would be no effect on system operations. The Proposed Action Alternative would maintain the existing operations of the Layton Canal and other Reclamation facilities in equal or better condition compared to existing conditions.
Floodplains	No effect	Six Reclamation facilities in Farmington are located in FEMA Zone A or Zone AE floodplains. Any floodplain impacts related to maintaining or improving these Reclamation facilities that cross the WDC in Farmington will be permitted as part of UDOT's WDC Flood Control Permits from Davis County and the Floodplain Development Permits from Farmington City.
Waters of the United States	No effect	The Proposed Action Alternative would impact 5.7 acres of wetlands. The UDOT has received a Section 404 permit for these impacts as part of the WDC Section 404 permit. Wetland impacts are being mitigated as part of the WDC <i>Final Wetland Mitigation Plan</i> .
Existing vegetation	No effect	Temporary impacts to existing vegetation in all areas where there would be excavation, grading, or staging activities.

Resource	No Action Alternative	Proposed Action Alternative
Socioeconomics and private properties	Adverse effects to economics if the WDC project is not implemented and the anticipated economic benefits of the WDC project would not occur.	<p>The Proposed Action Alternative would have beneficial economic impacts due to the implementation of the WDC project. The WDC beneficial economic impacts include a substantial decrease in daily traffic delay and a more efficient regional transportation system that is expected to result in beneficial impacts to commerce and employment.</p> <p>The UDOT would purchase 29 parcels totaling 20.19 acres of new fee title lands for the relocated Layton Canal and 0.91 acre of new easements for the Layton Canal Company and Syracuse City Bluff Pond laterals.</p> <p>There are 12 residential properties that need to be relocated as part of the property acquisition process. Of these 12 residential properties, 6 are residential properties needed only for the relocated Layton Canal that were evaluated by UDOT as part of WDC Re-evaluation #3. The other 6 residential properties are needed for both the UDOT WDC roadway and the relocated Layton Canal and were evaluated as part of the WDC Final EIS. The UDOT has purchased all of these residential properties as part of the WDC project.</p>
Recreation resources	No effect	The relocated Old Emigration Trail would be located on or would cross the new Reclamation fee title lands for the relocated Layton Canal from about 800 South in Syracuse to 400 South in West Point. It would be located on existing Reclamation fee title lands between 1900 South and 2100 South in Syracuse. UDOT, Syracuse City, and West Point City would be required to obtain a new license agreement with Reclamation to place the relocated Old Emigration Trail on Reclamation fee title lands in this area.
Health, safety, air quality, and noise	No effect	Short-term effects on air quality and noise during construction.

Resource	No Action Alternative	Proposed Action Alternative
Access and transportation	Adverse effect because Reclamation would not approve the WDC's impacts to Reclamation facilities, and UDOT would be required to modify the WDC selected alternative to avoid impacts to Reclamation facilities.	Short-term impacts to access and transportation during the construction of the new pipeline where it crosses 700 South, 3000 West, and Antelope Drive. Long-term benefits to access and transportation because it would allow the construction of the WDC.
Visual resources	No effect	Short-term visual impacts during construction when the new 54-inch pipeline is installed using an open-trench technique.

Chapter 4 - Environmental Commitments

Following are the environmental commitments (conservation measures) that would be carried out as part of this Proposed Action. Reclamation will follow commitments that are derived from the USACE Clean Water Act Section 404 permit, Section 401 Water Quality Certification, and UPDES permit, along with other best management practices (BMPs) and commitments related to air quality, cultural resources, migratory birds, and transportation and access.

- The contractor will follow all general, regional, and special permit conditions included in the Clean Water Act Section 404 permit and Section 401 Certification. Impacts to wetlands and waters would not occur outside areas included in the Section 404 permit and Section 401 Certification.
- A UPDES permit will be required from the State of Utah before any discharges of water occur, if such water is to be discharged as a point source into a regulated water body. The UDOT and WBWCD will take appropriate measures to ensure that construction-related sediments will not enter any streams or other water bodies during or after construction. The UDOT and WBWCD will construct settlement ponds and intercepting ditches for capturing sediments, and UDOT and WBWCD will haul the sediment and other contents collected off the site for appropriate disposal upon completion of the Proposed Action.
- The Utah Division of Air Quality regulates fugitive dust from construction sites and requires compliance with rules for sites disturbing greater than 0.25 acre. Utah Administrative Code Rule R307-205-5 requires that steps be taken by UDOT and WBWCD to minimize fugitive dust from construction activities. Sensitive receptors include those individuals working at the site or motorists who could be affected by changes in air quality due to emissions from construction activities. The selected contractor would prepare and follow a *Fugitive Dust Emission Control Plan* in accordance with the Air Quality Permit from the Utah Division of Air Quality.
- If any cultural resources, either on the surface or in the subsurface, are discovered during construction, UDOT and WBWCD will notify Reclamation's Provo Area Office archaeologist, and construction in the area of the inadvertent discovery will stop until a professional archaeologist can assess the resource and make recommendations for further work. Reporting the discovery of cultural resources is also required by UDOT Standard Specification 01355, Environmental Compliance.
- If a person knows or has reason to know that she or he has inadvertently discovered possible human remains on federal land, she or he must immediately notify Reclamation's Provo Area Office archaeologist by telephone about the discovery. Work will stop until the proper authorities are able to assess the situation on site. This action will promptly be followed by written confirmation from UDOT and WBWCD to the responsible federal agency official with respect to federal land. The UDOT and WBWCD will promptly notify the Utah State Historic Preservation Officer and interested Native American tribal representatives. Consultation will begin immediately. This requirement is prescribed under the Native American Graves Protection and Repatriation Act (43 CFR Part 10) and the Archaeological Resources Protection Act of 1979 (16 USC Section 470). Reporting the

discovery of cultural resources is also required by UDOT Standard Specification 01355, Environmental Compliance.

- If vertebrate fossils are encountered by UDOT during ground-disturbing actions, construction will be suspended until UDOT and WBWCD can contact the Reclamation Provo Area Office archaeologist and a qualified paleontologist can assess the find. Reporting the discovery of paleontological resources is also required by UDOT Standard Specification 01355, Environmental Compliance.
- Raptor-protection measures will be implemented by UDOT and WBWCD to provide full compliance with environmental laws. Raptor surveys will be developed by UDOT using the *Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances* (USFWS 2002) to ensure that the Proposed Action Alternative will avoid adverse impacts to raptors, including bald and golden eagles. Locations of existing raptor nests and eagle roosting areas will be identified before project activities begin. Appropriate spatial buffer zones of inactivity will be established by UDOT during breeding, nesting, and roosting periods. Arrival at nesting sites can occur as early as December for certain raptor species. Nesting and fledging can continue through August. Wintering bald eagles can roost from November through March.
- Standard Reclamation BMPs will be applied by UDOT and WBWCD during construction activities to minimize environmental effects. Such practices or construction specifications include but are not limited to erosion control (for example, silt fencing), a traffic-control plan with notice of closures, dust and water pollution abatement, and waste material disposal.
- Staging areas will be located where they will minimize new disturbance of area soils and vegetation.
- Ground disturbance will be minimized to the extent possible.
- Only certified weed-free hay, straw, or mulch will be used as an erosion-control measure.
- In order to control the spread of any noxious weeds, the following procedures will be listed in the construction specifications. Earth-moving construction equipment will be cleaned with a high-pressure water-blasting method off site prior to use. To control the identified weed species, any existing noxious weeds will be treated with commercially available herbicides at least 10 days before starting earthwork operations. The disturbed area will be reconstructed by using native topsoil and native seeds collected from grubbing and by replacing organic matter.
- Construction vehicles and equipment will be inspected and cleaned prior to entry into the Proposed Action area to ensure that they are free of weed seeds.
- Newly disturbed sites will be monitored for impacts to native vegetation.
- Stockpiling of materials will be limited to those areas approved and cleared in advance.
- Reclamation, UDOT, and WBWCD have drafted a Project Agreement to document the proposed relocation of the Layton Canal pipeline and fee title lands, the crossings of the other Reclamation facilities, and all applicable mitigation measures that must be followed as

part of UDOT's proposed project. The UDOT and WBWCD and their contractors will follow all of the mitigation measures described in the final Project Agreement.

Chapter 5 - Consultation and Coordination

During the development of the WDC project, UDOT conducted substantial public involvement activities. Public involvement activities began in 2010 and continued through 2017 as part of the EIS process. Public involvement activities included public meetings, open houses, city council presentations, Stakeholder Working Group meetings, Resident Working Group meetings, individual meetings with stakeholders, and public comment periods on the UDOT WDC Draft EIS and Final EIS. The UDOT public involvement activities are described in detail in Chapter 30, Public and Agency Consultation and Coordination, of the UDOT WDC Final EIS.

After the completion of the EIS process, UDOT has continued to meet with all of the Cities. UDOT has also met with directly impacted property owners during the right-of-way process. UDOT has maintained a project website, phone line, and email address to respond to public comments.

In December 2019, Reclamation contacted property owners whose properties would be directly impacted by the Proposed Action Alternative. In October and November 2019, Reclamation also met with Syracuse City and West Point City to solicit city comments on the Proposed Action Alternative. Both property owners and Cities approved of the WDC project and coordination efforts.

Native American consultation and Section 106 consultation were completed by UDOT during the WDC EIS process. Copies of the Native American consultation and Section 106 consultation (including copies of the Determination of Eligibility and Finding of Effects and the Memorandum of Agreement) are included in Appendix 16B, Correspondence Pertaining to Historic, Archaeological, and Paleontological Resources, of the UDOT WDC Final EIS.

Because of the extensive public involvement conducted during the WDC EIS process and the targeted public involvement conducted in January 2020 for the directly affected Cities and property owners, no additional public involvement activities were needed for the EA.

Chapter 6 - List of Preparers

Preston Feltrop	Provo Area Office	U.S. Bureau of Reclamation
Briant Jacobs	Engineer/Project Manager	WBWCD
Kevin Kilpatrick	Environmental Planner	HDR, Inc.
Michael Perkins	Sr. Environmental Scientist	HDR, Inc.
Amy Croft	Environmental Scientist/Biologist	HDR, Inc.
Sarah Rigard	GIS Analyst/Planner	HDR, Inc.
Carrie Ulrich	Technical Editor	HDR, Inc.

Chapter 7 - References

[HDR] HDR, Inc.

- 2014 Cultural Resources Inventory of the West Davis Corridor, Alternative B1 in Weber and Davis Counties, Utah. Antiquities Project Number U-13-HK-0899ps. April.
- 2017 Historic Building Assessment Update, West Davis Corridor Project, Davis and Weber Counties, Utah. Antiquities Project Number U-10-ST-0812ps. March.

[SWCA] SWCA Environmental Consultants

- 2012a A Reconnaissance-Level Archaeological Resources Survey of the West Davis Corridor Alternatives in Davis and Weber Counties, Utah. Antiquities Project Number U-10-ST-0812ps. May.
- 2012b Historic Building Assessment for the Proposed West Davis Corridor Project, Davis and Weber Counties, Utah. Antiquities Project Number U-10-ST-0812ps. May.

[UGS] Utah Geological Survey

- 2011 Paleontological File Search and Recommendations for the West Davis Corridor Project, Davis and Weber Counties, Utah. May 2.

[URMCC] Utah Reclamation, Mitigation, and Conservation Commission

- 2019 Great Salt Lake Shorelands Preserve Federal Land Transfer Draft Environmental Assessment. August.
- 2020 Great Salt Lake Shorelands Preserve Federal Land Transfer Finding of No Significant Impact. May 27.

[UDOT] Utah Department of Transportation

- 2017a West Davis Corridor Final Environmental Impact Statement. June.
- 2017b West Davis Corridor Technical Memorandum 33: Aquatic Resource Delineation Report. July.
- 2017c West Davis Corridor Record of Decision. September 29.
- 2019 West Davis Corridor EIS Re-evaluation #3: Layton Canal Relocation. December 5.
- 2020 West Davis Corridor Final Wetland Mitigation Plan. January 17.

[USACE] U.S. Army Corps of Engineers

- 1987 Corps of Engineers Wetland Delineation Manual. January.
- 2008a Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). September.
- 2008b A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. August.
- 2010 Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. July.
- 2020 Department of the Army Permit SPK-2007-01985. May 15.

[USFWS] U.S. Fish and Wildlife Service

- 2002 Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances. January.

APPENDIX A

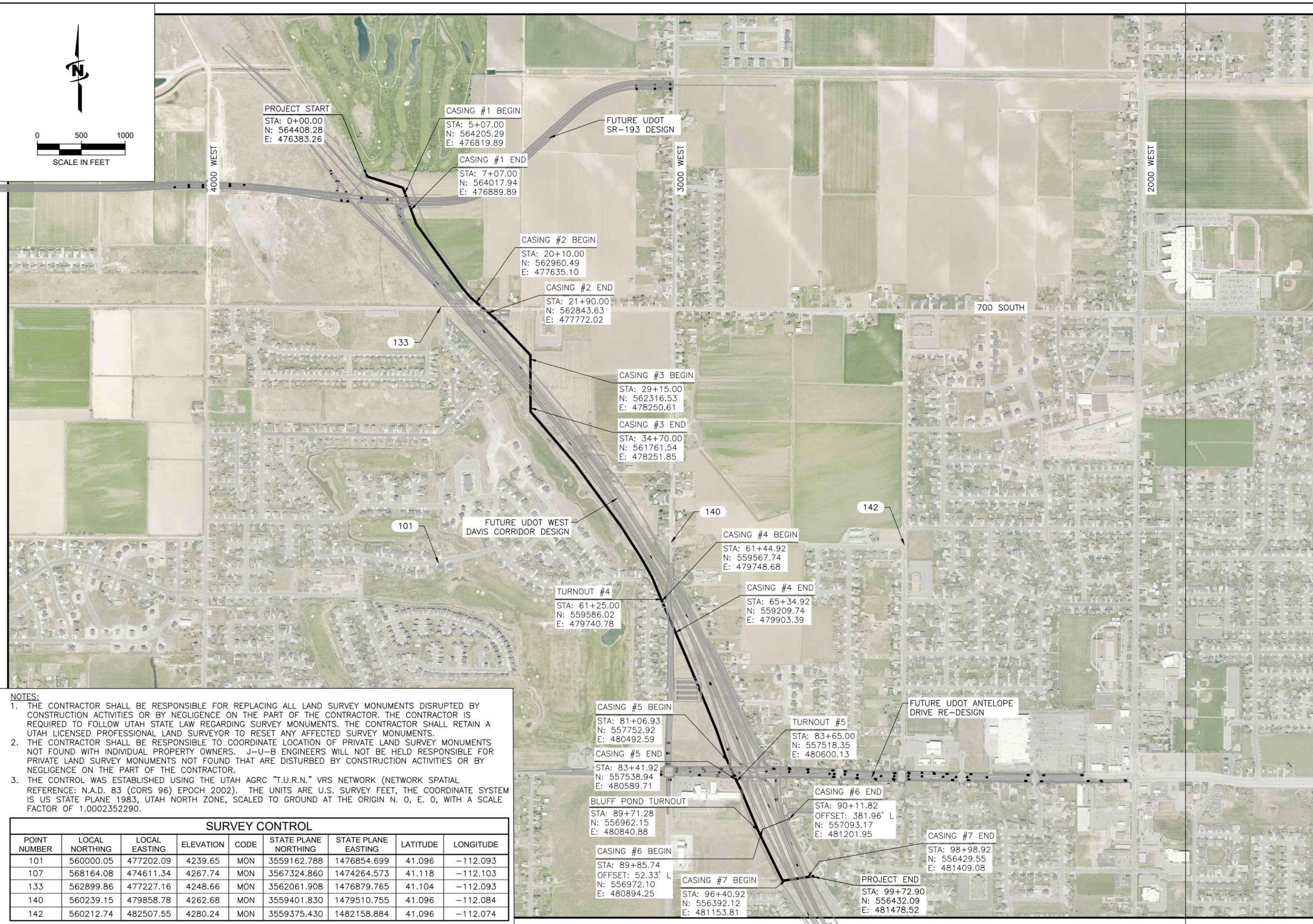
Layton Canal Turnouts and Casings

REUSE OF DRAWINGS INCORPORATED
 THIS DOCUMENT AND THE IDEAS AND DESIGNS THEREIN ARE THE PROPERTY OF J-U-B ENGINEERS, INC. AND IS NOT TO BE USED IN WHOLE OR PART FOR ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF J-U-B ENGINEERS, INC.

NO.	REVISION	DESCRIPTION	BY	DATE

LAYTON CANAL RELOCATION PROJECT
 WEBER BASIN WATER CONSERVANCY DISTRICT

SURVEY CONTROL



- NOTES:**
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ALL LAND SURVEY MONUMENTS DISRUPTED BY CONSTRUCTION ACTIVITIES OR BY NEGLIGENCE ON THE PART OF THE CONTRACTOR. THE CONTRACTOR IS REQUIRED TO FOLLOW UTAH STATE LAW REGARDING SURVEY MONUMENTS. THE CONTRACTOR SHALL RETAIN A UTAH LICENSED PROFESSIONAL LAND SURVEYOR TO RESET ANY AFFECTED SURVEY MONUMENTS.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE LOCATION OF PRIVATE LAND SURVEY MONUMENTS NOT FOUND WITH INDIVIDUAL PROPERTY OWNERS. J-U-B ENGINEERS WILL NOT BE HELD RESPONSIBLE FOR PRIVATE LAND SURVEY MONUMENTS NOT FOUND THAT ARE DISTURBED BY CONSTRUCTION ACTIVITIES OR BY NEGLIGENCE ON THE PART OF THE CONTRACTOR.
 3. THE CONTROL WAS ESTABLISHED USING THE UTAH AGRC "T.U.R.N." VRS NETWORK (NETWORK SPATIAL REFERENCE: N.A.D. 83 (CORS 96) EPOCH 2002). THE UNITS ARE U.S. SURVEY FEET, THE COORDINATE SYSTEM IS US STATE PLANE 1983, UTAH NORTH ZONE, SCALED TO GROUND AT THE ORIGIN N. 0, E. 0, WITH A SCALE FACTOR OF 1.0002352290.

SURVEY CONTROL								
POINT NUMBER	LOCAL NORTHING	LOCAL EASTING	ELEVATION	CODE	STATE PLANE NORTHING	STATE PLANE EASTING	LATITUDE	LONGITUDE
101	560000.05	477202.09	4239.65	MON	3559162.788	1476854.699	41.096	-112.093
107	568164.08	474611.34	4267.74	MON	3567324.860	1474264.573	41.118	-112.103
133	562899.86	477227.16	4248.66	MON	3562061.908	1476879.765	41.104	-112.093
140	560239.15	479858.78	4262.68	MON	3559401.830	1479510.755	41.096	-112.084
142	560212.74	482507.55	4280.24	MON	3559375.430	1482158.884	41.096	-112.074

APPENDIX B

UDOT WDC Re-evaluation #3, 404 Permit, Wetland
Impact Figures, and 401 Certification



State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

DEPARTMENT OF TRANSPORTATION

CARLOS M. BRACERAS, P.E.
Executive Director

JASON E. DAVIS, P.E.
Deputy Director of Engineering and Operations

TERIANNE S. NEWELL, P.E.
Deputy Director of Planning and Investment

December 2, 2019

Ms. Lisa Wilson
Region One Director
Utah Department of Transportation
166 West Southwell Street
Ogden, UT 84404

Subject: UDOT Project Number S-0067(14)0, SR-67, West Davis Corridor; Layton Canal Relocation between 400 South and 1900 South in Syracuse, Davis County, Utah (PIN 7176) *Environmental Impact Statement Re-evaluation #3*

Dear Ms. Wilson:

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). The subject of this Re-evaluation is a change to the Layton Canal right-of-way between 400 South and 1900 South in Syracuse, Utah.

This memorandum is intended to support a decision regarding whether a supplemental EIS is required pursuant to applicable criteria in FHWA's National Environmental Policy Act (NEPA) regulations. 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." To support that determination, this memorandum summarizes the proposed refinement to the EIS Selected Alternative, discusses changes in the affected environment, and considers whether any of the changes in the project and affected environment require a supplemental EIS. The appendices to this memorandum include the supporting figures 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 the Utah Department of Transportation (UDOT) pursuant to 23 United States Code (USC) Section 327 and a Memorandum of Understanding (MOU) dated January 17, 2017, and executed by FHWA and UDOT. The WDC was excluded from the assignment MOU, and FHWA maintained 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 review (including Re-evaluations) that are required for the WDC following issuance of the ROD. 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 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.

During the EIS process, the WDC was designed to a concept level. Comprehensive engineering and detailed studies were not conducted as part of the EIS process. UDOT had assumed, based on preliminary discussion with the Weber Basin Water Conservancy District (WBWCD) and the Bureau of Reclamation (BOR), that the right-of-way width for the relocated Layton Canal could be reduced at local road crossings to minimize impacts to adjacent private properties. After the publication of the WDC ROD, UDOT met again with WBWCD and BOR to discuss the cross-section design at these locations. WBWCD and BOR expressed concerns that the limited right-of-way for the Layton Canal in the EIS Selected Alternative would not allow adequate space for a future pipe installation or for reconstructing and/or maintaining the Layton Canal. These construction and maintenance concerns were primarily due to the close proximity of the Layton Canal to the approximately 25-foot-high retaining walls needed for the WDC to cross 700 South and 3000 West and the close proximity and reduced right-of-way width at the Antelope Drive crossing proposed as part of the EIS Selected Alternative.

Additionally, after the publication of the WDC ROD, UDOT has undertaken a State Environmental Study for the proposed UDOT State Route (S.R.) 193 extension near 400 South. The relocated Layton Canal also needed to be modified to account for the S.R. 193 extension project. The changes proposed as part of the Refined Selected Alternative were made based on this feedback.

Through these discussions, UDOT determined that it would need to maintain the existing 100-foot-wide right-of-way for the relocated Layton Canal as part of the WDC Project and provide as much as or more acreage for the Layton Canal compared to existing conditions.

The figures in Appendix A show the project location and the Refined Selected Alternative's footprint and identify the areas of new impact for this Re-evaluation.

This Re-evaluation analyzes the impacts of the Refined Selected Alternative resulting from the final design changes to the relocation of the Layton Canal. Table 1 summarizes the changes between the EIS Selected Alternative and the Refined Selected Alternative.

Table 1. Summary of Changes in the Re-evaluation

EIS Selected Alternative	Refined Selected Alternative
<ul style="list-style-type: none"> • Did not assume that the S.R. 193 extension project would be constructed. • Assumed that the relocated Layton Canal would cross 700 South in Syracuse in a 50-foot-wide right-of-way shared with UDOT's WDC right-of-way. • Assumed that the relocated Layton Canal would cross 3000 West in Syracuse in a 50-foot-wide right-of-way shared with UDOT's WDC right-of-way. • Assumed that the relocated Layton Canal would follow 3000 West to the south, then go southeast and cross Antelope Drive immediately west of the WDC and east of the Syracuse Arts Academy in a 50-foot-wide right-of-way. 	<ul style="list-style-type: none"> • To avoid conflicts with the proposed UDOT S.R. 193 extension project, the relocated Layton Canal will be east of the proposed northbound on and off ramps from S.R. 193 to the WDC between 400 South and 600 South. • The relocated Layton Canal will cross 700 South in Syracuse in a 100-foot-wide right-of-way that is not shared with the WDC right-of-way. • The relocated Layton Canal will cross the WDC south of 700 South at a 45-degree angle crossing to accommodate future maintenance. • The relocated Layton Canal will cross 3000 West in Syracuse in a 100-foot-wide right-of-way that is not shared with the WDC right-of-way. • The relocated Layton Canal will parallel the west side of the WDC southbound on and off ramps between 3000 West and about 1900 South in Syracuse in a 100-foot-wide right-of-way. • The relocated Layton Canal will cross the WDC at about 1900 South and will connect to the existing Layton Canal alignment. • To avoid conflicts with utilities or existing structures, there will be short sections of the canal at the WDC crossings south of 700 South, north of St. Andrews Drive, and east of the Syracuse Arts Academy where the Layton Canal right-of-way will be less than 100 feet wide. UDOT has provided additional acreage at both crossings of the WDC so that BOR will be receiving more acreage than it currently administers and to ensure that BOR and WBWCD can adequately maintain the relocated Layton Canal.

Re-evaluation Analysis

Following is a summary of the main components of the EIS and any changes associated with each component due to change in the Layton Canal relocation 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 Refined Selected Alternative do not change the original project concept or project purpose; therefore, the purpose of and need for the project remain valid.

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

The changes with the Refined Selected Alternative described above in 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 Selected Alternative in the ROD.

Environmental Consequences Analysis

UDOT has evaluated the expected impacts to the natural and built environment from the Refined Selected Alternative and evaluated any changes and new information against the analysis in the Final EIS. No substantial changes would occur to the natural or built environment as a result of the Refined Selected Alternative 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 for the EIS Selected Alternative.

As part of the re-evaluation process, UDOT reviewed the original biological resources, waters of the United States, cultural resources, and Section 4(f) analyses. An evaluation of the resource impacts that have changed is provided below.

Land Use Impacts

The Refined Selected Alternative would impact 1.3 more acres for the relocated Layton Canal compared to the EIS Selected Alternative. The increase in impacted acreage is due primarily to the Refined Selected Alternative's relocated Layton Canal providing the full 100-foot-wide right-of-way and additional maintenance areas at the crossings of the WDC that were not provided with the EIS Selected Alternative's relocated Layton Canal. The locations of land use impacts would change with the Refined Selected Alternative in a few locations (see Appendix A). The Layton Canal would be placed below the surface in a pipe, and land above the canal would be revegetated and managed by WBWCD. The land use impacts of the Refined Selected Alternative would be similar to those stated in the Final EIS for the EIS Selected Alternative, and the result of the analysis would not change.

Community Impacts

The Refined Selected Alternative would require UDOT to relocate an additional six residential properties that were not identified as relocations or potential relocations as part of the EIS Selected Alternative. The additional six residential properties are needed to accommodate the Refined Selected Alternative's relocated Layton Canal where it crosses 700 South and 3000 West in Syracuse. The addresses of these six residential properties are:

- 3370 West 700 South, Syracuse
- 3361 West 700 South, Syracuse
- 3383 West 700 South, Syracuse
- 1341 South Gleneagles Drive, Syracuse
- 3013 West Tryall Drive, Syracuse
- 1384 South 3000 West, Syracuse

UDOT has met with all affected property owners, and all new impacts to private property would occur on parcels for which the property owners are willing sellers. By November 2019, UDOT has purchased or is in the process of purchasing all six of these additional properties. The previous owners of most of the impacted properties listed above have already been relocated by UDOT. The community impacts of the Refined Selected Alternative would be similar to those stated in the Final EIS for the EIS Selected Alternative, and the result of the analysis would not change.

UDOT would provide just compensation to the property owners of the properties listed above pursuant to 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.

Ecosystem Resources Impacts

The Refined Selected Alternative would result in a decrease of 1.56 acres of wetland impacts compared to the wetland impacts for the EIS Selected Alternative. The reduction of 1.56 acres of wetland impacts are due to changes

in alignment for the Refined Selected Alternative's relocated Layton Canal where it is adjacent to the Gleneagles Golf Course in Syracuse. Some of the reduction in wetland impacts are due to areas that were previously being impacted by the EIS Selected Alternative's relocated Layton Canal between 3000 West and Bluff Road also being impacted by WDC features (park-and-ride lot and detention basin) in these areas. WDC design changes in this area are being evaluated with a separate re-evaluation. The reduction of 1.56 acres of wetland impacts are being accounted for in the WDC Clean Water Act Section 404 permit application and mitigation plan. The wetland impacts of the Refined Selected Alternative would be similar to those analyzed in the Final EIS for the EIS Selected Alternative, and the result of the analysis would not change. Updated wildlife and wetlands clearance memoranda are provided in Appendix B.

Environmental Consequences Summary

Table 2 below summarizes the changes to the environmental impacts from the Refined Selected Alternative compared to the EIS Selected Alternative.

Table 2. Summary of Re-evaluation Analysis

Environmental Resource	Changed?		Comments
	Yes	No	
Land Use	X		The Refined Selected Alternative would impact 1.3 more acres of land for the relocated Layton Canal compared to the EIS Selected Alternative.
Farmland		X	No changes identified.
Community Impacts	X		The Refined Selected Alternative would require the acquisition of an additional six residential properties compared to the EIS Selected Alternative.
Environmental Justice		X	No changes identified.
Transportation		X	No changes identified.
Economics		X	No changes identified.
Joint Development		X	No changes identified.
Pedestrian and Bicyclist Issues		X	No changes identified.
Air Quality		X	No changes identified.
Noise		X	No changes identified.
Water Quality		X	No changes identified.
Ecosystem Resources	X		The Refined Selected Alternative would have a decrease of 1.56 acres of wetland impact compared to the EIS Selected Alternative. These changes to wetland impacts are being accounted for in the WDC Clean Water Act Section 404 permit and mitigation plan. Updated wetland and wildlife clearance memoranda are provided in Appendix B.
Floodplains		X	No changes identified.
Historic, Archaeological, and Paleontological Resources		X	No changes identified.
Hazardous Waste		X	No changes identified.
Visual Resources		X	No changes identified.
Energy		X	No changes identified.
Construction Impacts		X	No changes identified.
Indirect Effects		X	No changes identified.

Environmental Resource	Changed?		Comments
	Yes	No	
Cumulative Impacts		X	No changes identified.
Permits, Reviews, and Approvals		X	No changes identified.
Section 4(f) Resources		X	No changes identified.
Sequencing		X	No changes identified.

Public Involvement Efforts

Based on input from UDOT Environmental Services and Region leadership, no additional formal public involvement opportunities were provided. The project team maintained a project hotline and answered questions when they were submitted.

UDOT staff have met with Syracuse City, West Point City, and the affected property owners to explain the reasons for the change to the EIS Selected Alternative and answer questions about the property acquisition process. All new impacts to private property would occur on parcels for which the property owners are willing sellers.

The project team has met with and is continuing to meet with local government staff and officials and other stakeholders to address issues and concerns identified during the design process.

Conclusion

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

UDOT has evaluated the expected impacts to the natural and built environment from the Refined Selected Alternative and evaluated any changes and new information against the analysis in the Final EIS. No substantial changes would occur to the natural or built environment as a result of the Refined Selected Alternative 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 for the EIS Selected Alternative.

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 WDC 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,



Brandon D. Weston
UDOT Environmental Services Director

Enclosures

EIS Re-evaluation Approval

UDOT Project Number S-0067(14)0, West Davis Corridor, Layton Canal Relocation between 400 South and 1900 South, Syracuse, Davis County, Utah (PIN 7176).

Lisa Wilson

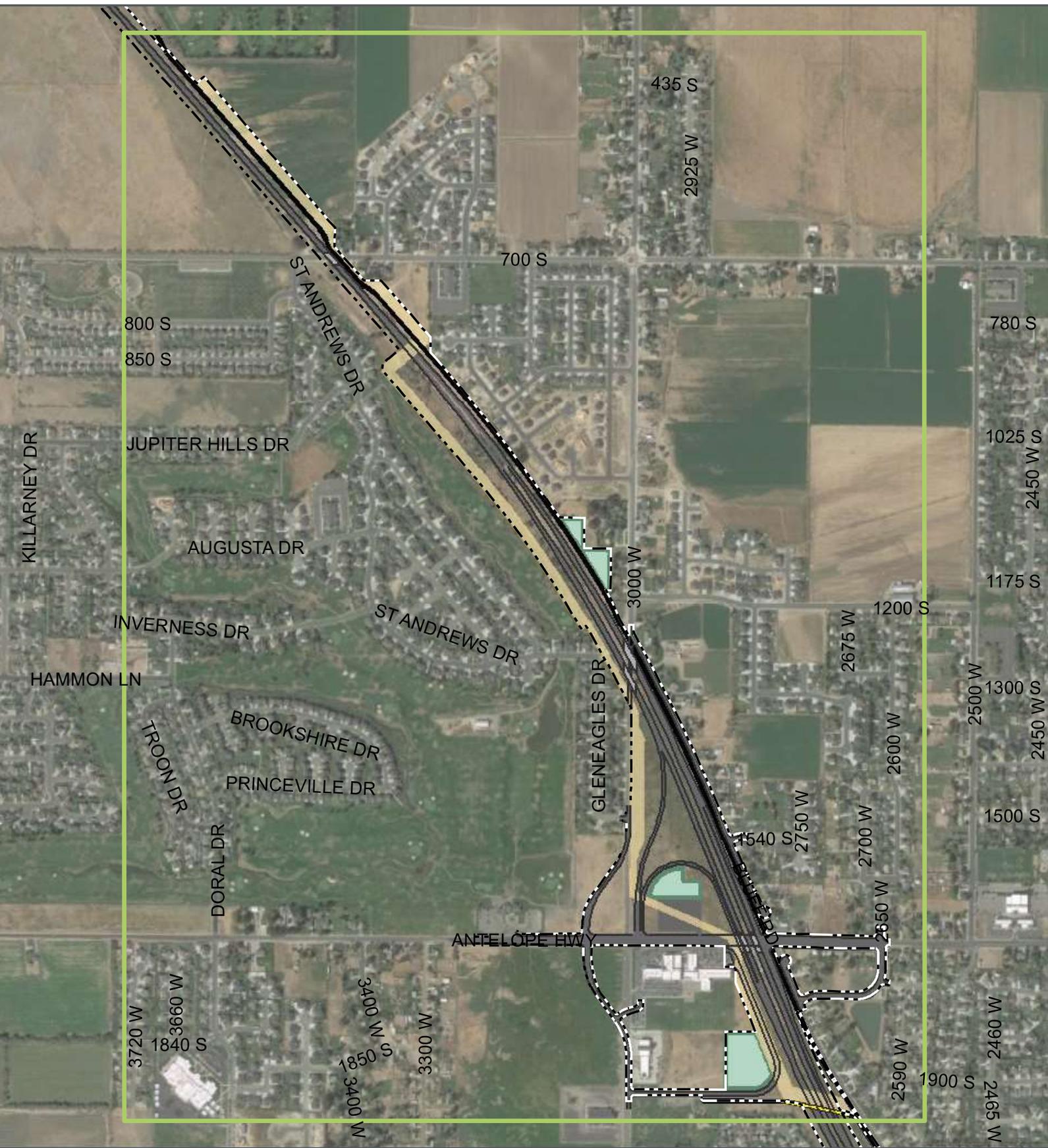
12/05/2019

Lisa J. Wilson, P.E.
Region One Director
Utah Department of Transportation

Date

APPENDIX A

Figures

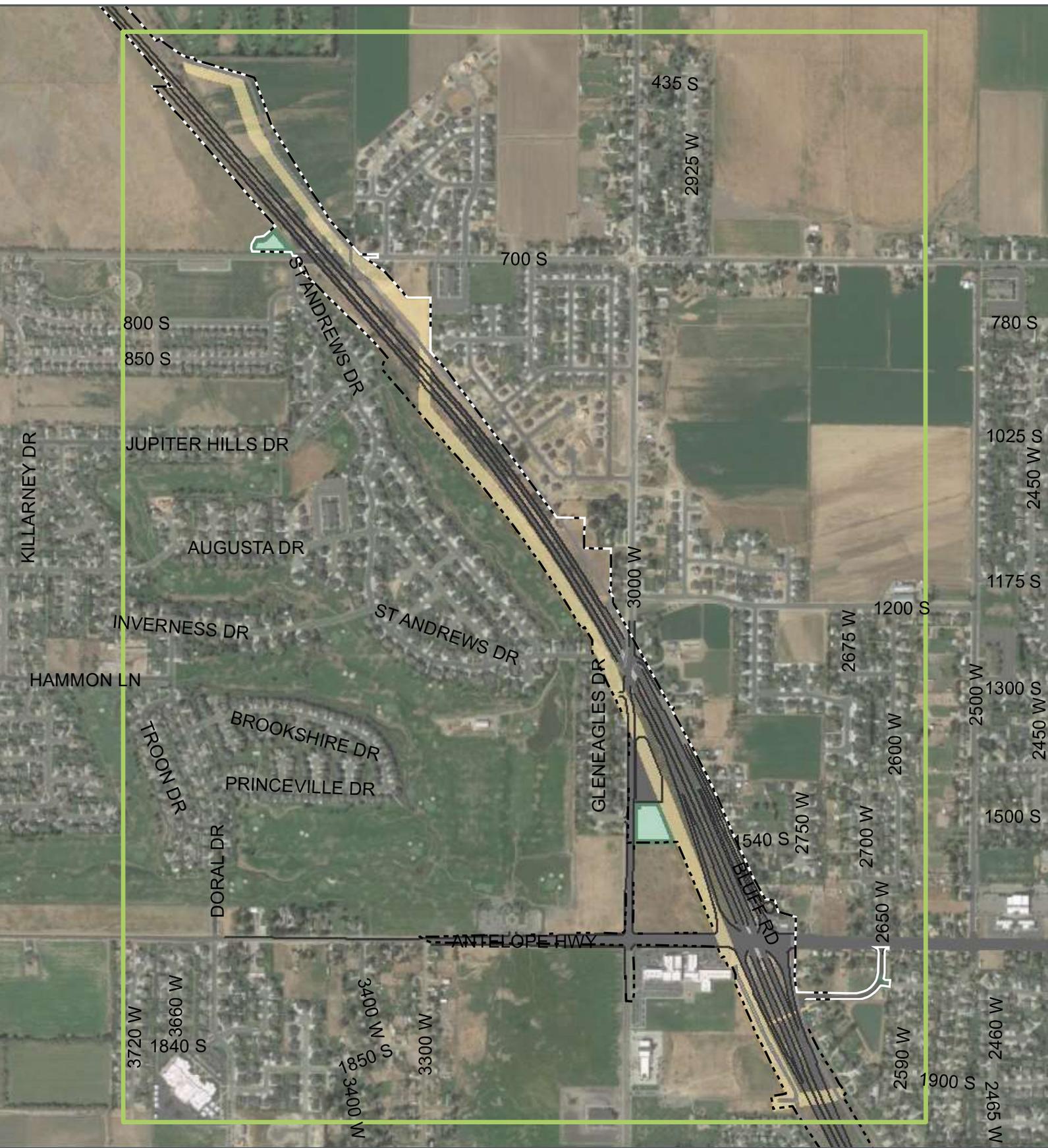


LEGEND

- Re-evaluation Area
- FEIS Direct Impact Area
- Detention/ Retention Basins
- FEIS Layton Canal Relocation Boundary

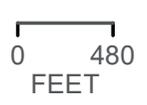
**WDC Re-Evaluation
Layton Canal
WDC FEIS Preferred Alternative**

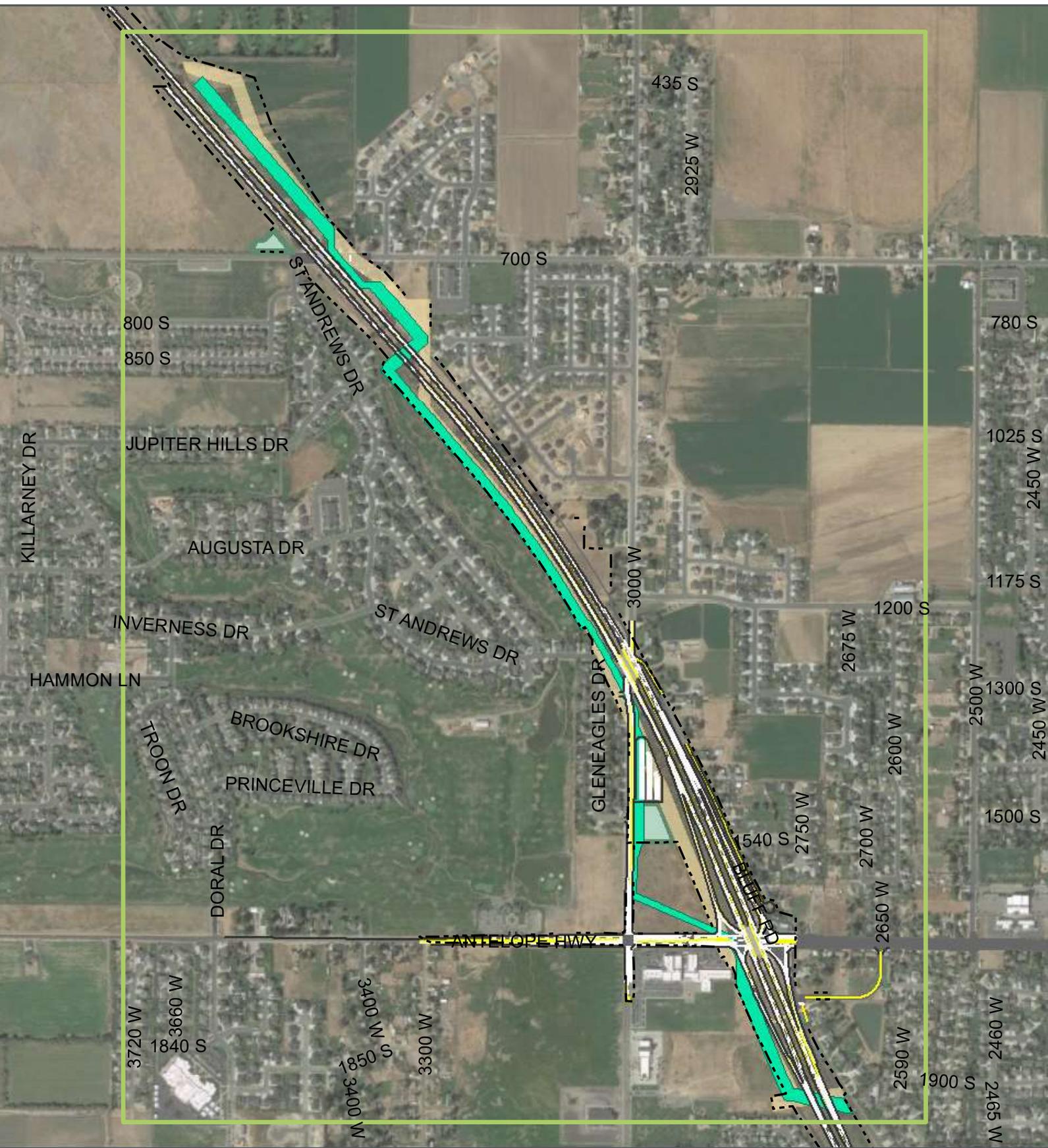




- LEGEND**
- Re-evaluation Area
 - RFP Direct Impact
 - Detention/ Retention Basins
 - RFP Layton Canal Relocation Boundary

**WDC Re-Evaluation
Layton Canal
RFP Refined Selected Alternative**





LEGEND

- Re-evaluation Area
- RFP Direct Impact
- Detention/ Retention Basins

- RFP Layton Canal Relocation Boundary
- FEIS Layton Canal Relocation Boundary

**WDC Re-Evaluation
Layton Canal
Design Changes**



APPENDIX B

Clearance Memoranda



State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

DEPARTMENT OF TRANSPORTATION

CARLOS M. BRACERAS, P.E.
Executive Director

SHANE M. MARSHALL, P.E.
Deputy Director of Engineering and Operations

TERIANNE S. NEWELL, P.E.
Deputy Director of Planning and Investment

November 19, 2019

Mr. Chris Merritt
Deputy State Historic Preservation Officer
Utah Division of State History
300 South Rio Grande
Salt Lake City, Utah 84101-1182

RE: UDOT Project No. SP-0067(14)0; West Davis Corridor Project (PIN 7176); Layton Canal Relocation between 400 South and 1900 South in Syracuse, Davis County, Utah
Environmental Impact Statement Re-evaluation #3

Dear Mr. Merritt:

This letter constitutes a revision to the Utah Department of Transportation's (UDOT) Section 106 Determinations of Eligibility (DOE) and Findings of Effect (FOE) for historic properties in the area of potential effects (APE) for the proposed West Davis Corridor (WDC) project. The proposed WDC project comprises regional transportation mobility improvements in western Davis and Weber counties, Utah, and UDOT completed an Environmental Impact Statement (EIS) for this project in September 2017. This letter also includes revised Department of Transportation Act Section 4(f) impact determinations for the current APE.

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being or have been carried out by the Utah Department of Transportation (UDOT) pursuant to 23 United States Code (USC) Section 327 and a Memorandum of Understanding (MOU) dated January 17, 2017, and executed by FHWA and UDOT. The WDC was excluded from the assignment MOU, and FHWA maintained 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 review (including re-evaluations) that are required for the WDC following issuance of the ROD. Therefore, this Re-evaluation is being processed in accordance with the assignment MOU, and UDOT is the agency responsible for approving the Re-evaluation.

In accordance with the *Third Amended Programmatic Agreement Among the Federal Highway Administration, the Utah Department of Transportation, the Utah State Historic Preservation Officer, and the Advisory Council on Historic Preservation 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 (16 United States Code [USC] 470 et seq.); and Utah Code Annotated 9-8-404, FHWA and UDOT are taking 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 and its effects. This submission is in compliance with Section 4(f) of the Department of Transportation Act of 1966, 23 USC 138 (as amended) and 23 USC 303 (as amended).

The original DOE, FOE, and Section 4(f) determinations were submitted to the Utah Division of State History (UDSH) on December 10, 2012 (UDSH Case No. 13-0029), for an APE that included all alternative alignments to be considered during the National Environmental Policy Act (NEPA) process. Those alternatives were refined and a final FOE for the preferred alternative was submitted on April 27, 2017.

UNDERTAKING DESCRIPTION

During the EIS process, the WDC was designed to a conceptual level. Comprehensive engineering and detailed studies were not conducted as part of the EIS process. UDOT had assumed, based on preliminary discussion with the Weber Basin Water Conservancy District (WBWCD) and the Bureau of Reclamation (BOR), that the right-of-way width for the relocated Layton Canal could be reduced at local road crossings to minimize impacts to adjacent private properties. After the publication of the WDC ROD, UDOT met again with WBWCD and BOR to discuss the cross-section design at these locations. WBWCD and BOR expressed concerns that the limited right-of-way for the Layton Canal in the EIS Selected Alternative would not allow adequate space for a future pipe installation or for reconstructing and/or maintaining the Layton Canal. These construction and maintenance concerns were primarily due to the close proximity of the Layton Canal to the approximately 25-foot-high retaining walls needed for the WDC to cross 700 South and 3000 West and the close proximity and reduced right-of-way width at the Antelope Drive crossing proposed as part of the EIS Selected Alternative.

Additionally, after the publication of the WDC ROD, UDOT has undertaken a State Environmental Study for the proposed UDOT State Route (S.R.) 193 extension near 400 South. The relocated Layton Canal also needed to be modified to account for the S.R. 193 extension project. The changes proposed as part of the Refined Selected Alternative were made based on this feedback.

Through these discussions, UDOT determined that it would need to maintain the existing 100-foot-wide right-of-way for the relocated Layton Canal as part of the WDC Project and provide as much as or more acreage for the Layton Canal compared to existing conditions.

The attached figure shows the project location and the Refined Selected Alternative's footprint (FEIS) and identify the areas of new impact for this Re-evaluation (RFP).

IMPACT ON CULTURAL RESOURCES

None of the previous findings regarding impacts to the Layton Canal (42DV182) have changed due to this reevaluation. The re-evaluation is located within the original WDC survey area and thus no survey for cultural resources was necessary. The Layton Canal has been determined not eligible for the NRHP and that status has not changes as a result of this re-evaluation.

CONSULTATION

In accordance with stipulations outlined in the Section 106 programmatic agreement, FHWA and UDOT initiated consultation with several Native American tribes/bands regarding this undertaking. UDOT also consulted with several other consulting parties, including certified local governments and historical societies and preservation organizations. The results of these consultations are discussed in the previous DOE, FOE, and Section 4(f) determinations letter from December 2012 and 2017. No new concerns have been raised since then by any of these parties.

SUMMARY

To summarize, the Finding of Effect for the WDC Layton Canal Relocation between 400 South and 1900 South in Syracuse, Davis County remains **Finding of No Historic Properties Affected**. The Finding of Effect for the proposed UDOT Project No. SP-067(14)0; West Davis Corridor Project Davis and Weber Counties, Utah, as a whole remains **Adverse Effect**.

Please review this document, and, providing you agree with the determinations 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 Elizabeth Giraud at 801-965-4917 or egiraud@utah.gov.

Sincerely,

Liz Robinson

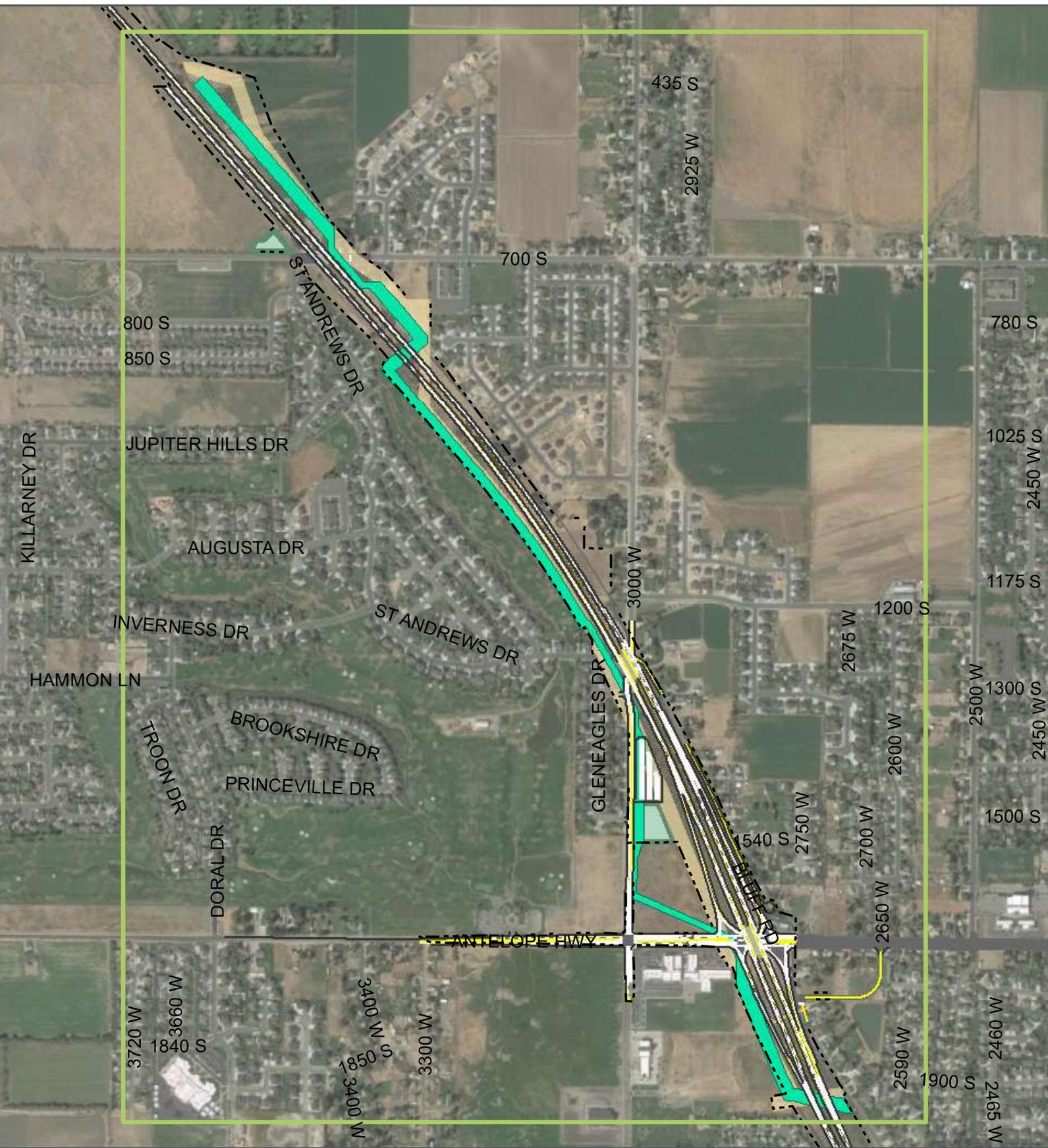
Liz Robinson, M.A., RPA
Cultural Resources Program Manager
UDOT Environmental Services

Elizabeth Giraud

Elizabeth Giraud, AICP
Architectural Historian
UDOT Environmental Services

Enclosures

cc: Randy Jeffries, Project Manager
Elisa Albury, Environmental Manager



- LEGEND**
- Re-evaluation Area
 - RFP Direct Impact
 - Detention/Retention Basins

- RFP Layton Canal Relocation Boundary
- FEIS Layton Canal Relocation Boundary

**WDC Re-Evaluation
Layton Canal
Design Changes**





GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Jill Remington Love
Executive Director
Department of
Heritage & Arts



Don Hartley
Director
State Historic Preservation Officer

November 27, 2019

Liz Robinson
Cultural Resources Program Manager
Utah Dept of Transportation (UDOT)
4501 Constitution Blvd
Salt Lake City, UT 84119

RE: PIN 7176_ West Davis Corridor Layton Canal Re-evaluation_SP-0067(14)0

For future correspondence, please reference Case No. 19-2678

Dear Ms Robinson,

The Utah State Historic Preservation Office received your request for our comment on the above-referenced undertaking on November 26, 2019.

We concur with your determination of 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 801-245-7263 or by email at cmerritt@utah.gov.

Sincerely,

Christopher W. Merritt, Ph.D.
Deputy State Historic Preservation Officer



Memorandum

Environmental Services

DATE: November 19, 2019

TO: Kevin Kilpatrick, Transportation NEPA Project Manager, HDR

FROM: Matt Howard, Natural Resources Manager

SUBJECT: S-0067(14)0, SR-67, West Davis Corridor EIS Reevaluations PIN 7176

Project Description

This assessment addresses three reevaluations to the West Davis Corridor EIS. The EIS addressed impacts anticipated based on a concept-level design. Changes proposed and addressed in this evaluation are found in the following table:

EIS Selected Alternative	Refined Selected Alternative
Layton Canal Relocation	
<ul style="list-style-type: none"> • Did not assume that the S.R. 193 extension project would be constructed. • Assumed that the relocated Layton Canal would cross 700 South in Syracuse in a 50-foot-wide right-of-way shared with UDOT's WDC right-of-way. • Assumed that the relocated Layton Canal would cross 3000 West in Syracuse in a 50-foot-wide right-of-way shared with UDOT's WDC right-of-way. • Assumed that the relocated Layton Canal would follow 3000 West to the south, then go southeast and cross Antelope Drive immediately west of the WDC and east of the Syracuse Arts Academy in a 50-foot-wide right-of-way. 	<ul style="list-style-type: none"> • To avoid conflicts with the proposed UDOT S.R. 193 extension project, the relocated Layton Canal will be east of the proposed northbound on and off ramps from S.R. 193 to the WDC between 400 South and 600 South. • The relocated Layton Canal will cross 700 South in Syracuse in a 100-foot-wide right-of-way that is not shared with the WDC right-of-way. • The relocated Layton Canal will cross the WDC south of 700 South at a 45-degree angle crossing to accommodate future maintenance. • The relocated Layton Canal will cross 3000 West in Syracuse in a 100-foot-wide right-of-way that is not shared with the WDC right-of-way. • The relocated Layton Canal will parallel the west side of the WDC southbound on and off ramps between 3000 West and about 1900 South in Syracuse in a 100-foot-wide right-of-way. • The relocated Layton Canal will cross the WDC at about 1900 South and will connect to the existing Layton Canal alignment. • To avoid conflicts with utilities or existing structures, there will be short sections of the canal at the WDC crossings south of 700 South, north of St. Andrews Drive, and east of the Syracuse Arts Academy where the Layton Canal right-of-way will be less than 100 feet wide. UDOT has provided additional acreage at both crossings of the WDC so that BOR will be getting more acreage than it currently administers and to ensure that BOR and WBWCD can adequately maintain the relocated Layton Canal.

Antelope Drive SPUI	
<ul style="list-style-type: none"> • Traffic modeling identified the need for the WDC to be a four-lane freeway with a 250-foot-wide typical section between I-15 and Antelope Drive and a two-lane freeway with a 146-foot-wide typical section between Antelope Drive and 1800 North. • The EIS Selected Alternative transitioned from the four-lane freeway to the two-lane freeway at 3000 West (just north of the WDC Antelope Drive interchange). 	<ul style="list-style-type: none"> • Updated traffic modeling performed for WFRC's 2019 to 2050 RTP showed the need for the WDC to be a four-lane freeway with a 250-foot-wide typical section between I-15 and S.R. 193 and a two-lane freeway with a 146-foot-wide typical section between S.R. 193 and 1800 North. • The Refined Selected Alternative transitions from the four-lane freeway to the two-lane freeway at S.R. 193 (about 400 South in Syracuse).
Four Lanes to SR 193	
<ul style="list-style-type: none"> • Assumed a modified diamond interchange at Antelope Drive. This modified diamond interchange included a loop ramp for the southbound on ramp to WDC. • Assumed that 3000 West in Syracuse would need to be relocated west between 1500 South and 1800 South to provide spacing between the WDC southbound on and off ramps. • Assumed that Bluff Road would have cul-de-sacs on both the north and south sides of Antelope Drive. • Assumed that the Old Emigration Trail would cross Antelope Drive in a grade-separated crossing near the existing Bluff Road. • Assumed that a new connector road and access road to the Syracuse Arts Academy would be built. 	<ul style="list-style-type: none"> • The Antelope Drive interchange will be a SPUI design. • The SPUI design does not require any relocation of 3000 West in Syracuse. Turn lanes and restriping of 3000 West are proposed with the Refined Selected Alternative. • The SPUI design requires two lanes eastbound and westbound through the Antelope Drive/3000 West intersection to accommodate expected traffic. The SPUI design tapers back to one lane eastbound and westbound west of 3000 West. • The SPUI design would make minor modifications to the cul-de-sacs on Bluff Road on both the north and south sides of Antelope Drive. • The SPUI design would shift the location of the grade-separated trail crossing east of the Antelope Drive interchange farther east. • The SPUI design would move the park-and-ride lot farther north on 3000 West. • The SPUI design would not provide a new Syracuse Arts Academy access road. UDOT is compensating for changes in access to the Syracuse Arts Academy through the right-of-way process.

This assessment has been prepared to address potential for occurrence of and impacts to species or habitat listed under the Endangered Species Act (ESA), as well as birds protected by the Migratory Bird Treaty Act (MBTA), and the Bald and Golden Eagle Protection Act (BGEPA). Greater sage-grouse (*Centrocercus urophasianus*), which are protected by Governor's Executive Order EO/2015/002, are also addressed in this memo.

Project Setting

Recent (2016-2018) aerial images show land use in the vicinity of the project area consists of residential development on private ground with some stretches of open space. Vegetation consists of landscaping and what appears to be wetland landscape/irrigated pasture in the interstitial open areas. Elevation in the vicinity of the project areas is +/- 4,200 ft. amsl.

Determinations

Threatened and Endangered Species

The U.S. Fish and Wildlife Service's Information, Planning and Consultation database was consulted for species considered to have potential to occur in the vicinity of the project area. In addition, Utah Natural Heritage Program records of occurrence were reviewed for documentation of species occurrences within the vicinity of the project. Other sources, including recent aerial imagery, USFWS Critical Habitat shapefiles, USGS, topographic data and surficial geology shapefiles from the State of Utah were used in the supporting analysis. No habitat or recent observations are found in the action area, and therefore the project would not result in take of threatened or endangered species.

Species	Designated Critical Habitat	Suitable Habitat	Previous Occurrences	Potential for Occurrence	Rationale
Canada Lynx (<i>Lynx canadensis</i>)	None present	No	None	None	Habitat does not exist within the action areas
Yellow-billed Cuckoo (<i>Coccyzus americanus</i>)	None present	No; species depends on contiguous riparian habitat stands of at least 11 acres	None	None	Suitable riparian habitat is not present in action areas
June Sucker (<i>Chasmistes liorus</i>)	None present	No; species was identified as existing in the project county because of established refuge rescue populations	None	None	Waters in which the species occurs would not be affected by the project modifications

Migratory Birds, Bald and Golden Eagles

No known raptor nests have been documented within 0.5 mile of the project, though some habitat exists in the form of scattered tree stands and power poles. The project takes place where steady traffic noise is present where nesting birds would be acclimated to noise and disturbance. This project would not result in direct or incidental take under the BGEPA, nor would it result in direct or incidental take of species protected under the MBTA.

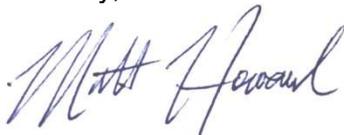
Greater Sage-grouse

A review of recent aerial imagery and Utah Sage-grouse Management Area boundaries shows that the project does not occur within a SGMA or UDWR-identified sage-grouse habitat. The project would not impact greater sage-grouse.

Summary

This assessment satisfies the UDOT's responsibilities under Section 9 of the ESA, the MBTA (50 CFR § 10.12), the BGEPA (16 USC § 668), and Governor's Executive Order EO/2015/002. If additional information or clarification is needed regarding this assessment, please contact me at matrhoward@utah.gov.

Sincerely,



Matt Howard
Natural Resource Manager



MEMORANDUM

Date: Wednesday, November 13, 2019

To: Randy Jefferies
UDOT WDC Project Manager

From: Rod Hess
UDOT Senior Landscape Architect

**RE: UDOT WEST DAVIS CORRIDOR - ENVIRONMENTAL REVIEW FOR WATER RESOURCES AND WETLANDS
EIS Re-Evaluation #3 - Layton Canal Relocation**

PROJECT PURPOSE, DESCRIPTION AND SCOPE OF WORK

During the EIS process, the WDC was designed to a concept level. Comprehensive engineering and detailed studies were not conducted as part of the EIS process. UDOT had assumed, based on preliminary discussion with the Weber Basin Water Conservancy District (WBWCD) and the Bureau of Reclamation (BOR), that the right-of-way width for the relocated Layton Canal could be reduced at local road crossings to minimize impacts to adjacent private properties. After the publication of the WDC ROD, UDOT met again with WBWCD and BOR to discuss the cross-section design at these locations. WBWCD and BOR expressed concerns that the limited right-of-way for the Layton Canal in the EIS Selected Alternative would not allow adequate space for a future pipe installation or for reconstructing and/or maintaining the Layton Canal. These construction and maintenance concerns were primarily due to the close proximity of the Layton Canal to the approximately 25-foot-high retaining walls needed for the WDC to cross 700 South and 3000 West and the close proximity and reduced right-of-way width at the Antelope Drive crossing proposed as part of the EIS Selected Alternative.

Additionally, after the publication of the WDC ROD, UDOT has undertaken a State Environmental Study for the proposed UDOT State Route (S.R.) 193 extension near 400 South. The relocated Layton Canal also needed to be modified to account for the S.R. 193 extension project. The changes proposed as part of the Refined Selected Alternative were made based on this feedback.

Through these discussions, UDOT determined that it would need to maintain the existing 100-foot-wide right-of-way for the relocated Layton Canal as part of the WDC Project and provide as much as or more acreage for the Layton Canal compared to existing conditions.

The figures in Appendix A show the project location and the Refined Selected Alternative's footprint and identify the areas of new impact for this Re-evaluation.

This Re-evaluation analyzes the impacts of the Refined Selected Alternative resulting from the final design changes to the relocation of the Layton Canal. Table 1 summarizes the changes between the EIS Selected Alternative and the Refined Selected Alternative.

UDOT Water Resources concurrence:

UDOT has reviewed the findings summarized in this WDC EIS Re-evaluation of the Layton Canal Relocation and provides the following concurrence:

- UDOT concurs with the changes to "Ecosystem Resources" in Table 2 that the changes to the Layton Canal Relocation would have a "decrease" of wetland impacts. The WDC Section 404 permit and mitigation plan should be updated based on these changes.

Table 1. Summary of Changes in the Re-evaluation

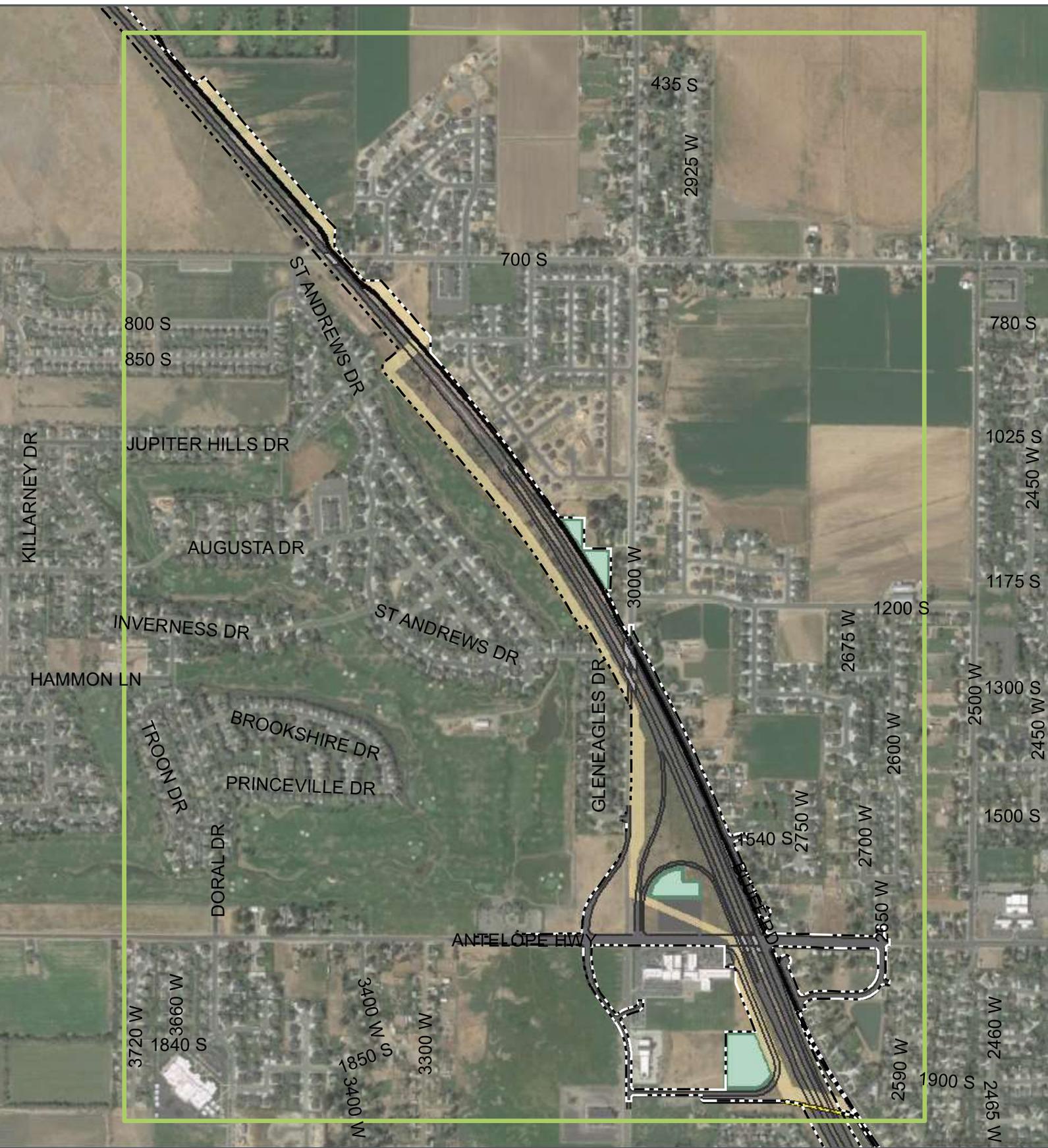
EIS Selected Alternative	Refined Selected Alternative
<ul style="list-style-type: none"> • Did not assume that the S.R. 193 extension project would be constructed. • Assumed that the relocated Layton Canal would cross 700 South in Syracuse in a 50-foot-wide right-of-way shared with UDOT's WDC right-of-way. • Assumed that the relocated Layton Canal would cross 3000 West in Syracuse in a 50-foot-wide right-of-way shared with UDOT's WDC right-of-way. • Assumed that the relocated Layton Canal would follow 3000 West to the south, then go southeast and cross Antelope Drive immediately west of the WDC and east of the Syracuse Arts Academy in a 50-foot-wide right-of-way. 	<ul style="list-style-type: none"> • To avoid conflicts with the proposed UDOT S.R. 193 extension project, the relocated Layton Canal will be east of the proposed northbound on and off ramps from S.R. 193 to the WDC between 400 South and 600 South. • The relocated Layton Canal will cross 700 South in Syracuse in a 100-foot-wide right-of-way that is not shared with the WDC right-of-way. • The relocated Layton Canal will cross the WDC south of 700 South at a 45-degree angle crossing to accommodate future maintenance. • The relocated Layton Canal will cross 3000 West in Syracuse in a 100-foot-wide right-of-way that is not shared with the WDC right-of-way. • The relocated Layton Canal will parallel the west side of the WDC southbound on and off ramps between 3000 West and about 1900 South in Syracuse in a 100-foot-wide right-of-way. • The relocated Layton Canal will cross the WDC at about 1900 South and will connect to the existing Layton Canal alignment. • To avoid conflicts with utilities or existing structures, there will be short sections of the canal at the WDC crossings south of 700 South, north of St. Andrews Drive, and east of the Syracuse Arts Academy where the Layton Canal right-of-way will be less than 100 feet wide. UDOT has provided additional acreage at both crossings of the WDC so that BOR will be getting more acreage than it currently administers and to ensure that BOR and WBWCD can adequately maintain the relocated Layton Canal.

Environmental Consequences Summary

Table 2 below summarizes the changes to the environmental impacts from the Refined Selected Alternative compared to the EIS Selected Alternative.

Table 2. Summary of Re-evaluation Analysis

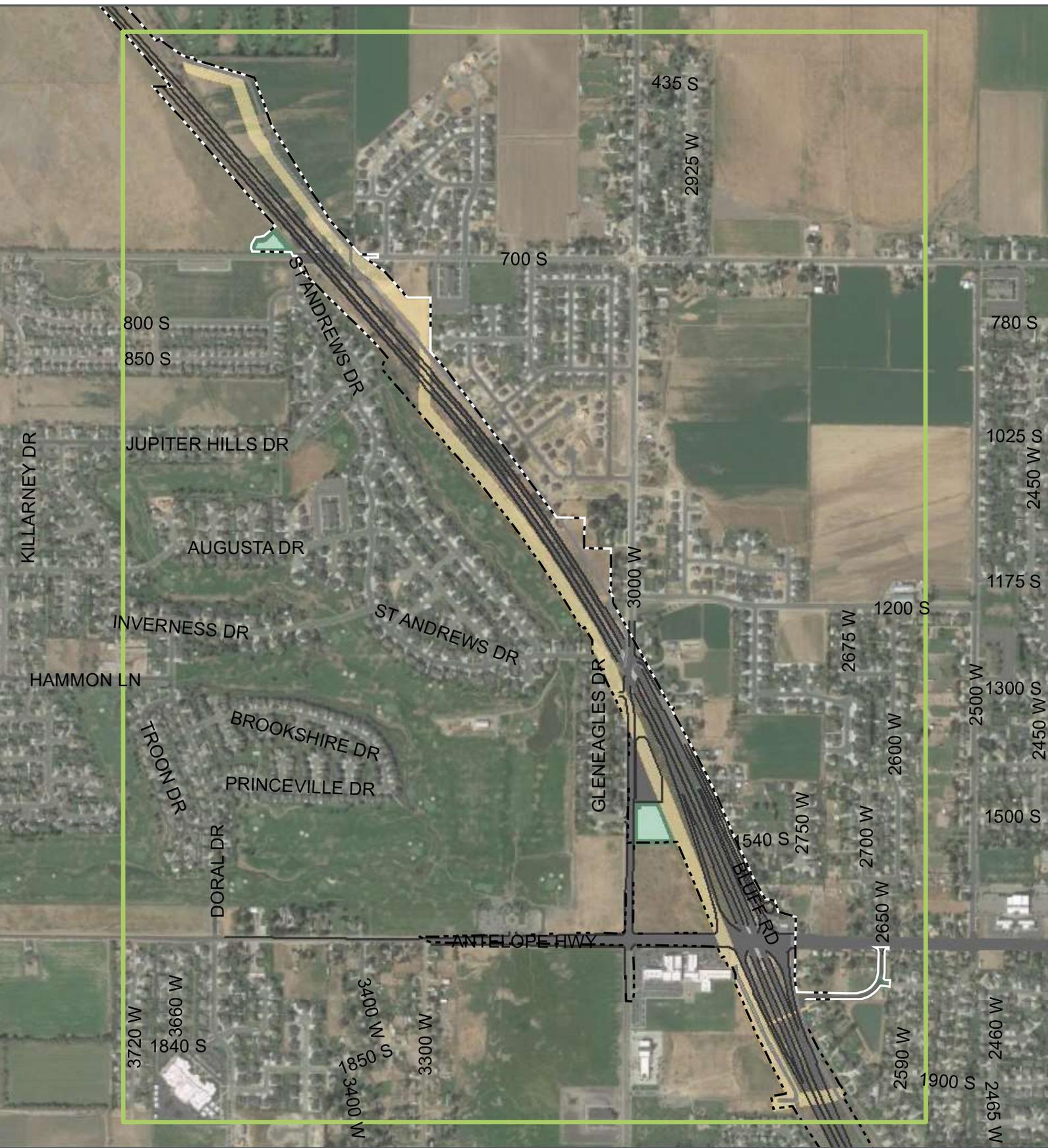
Environmental Resource	Changed?		Comments
	Yes	No	
Land Use	X		The Refined Selected Alternative would impact 1.3 more acres of land for the relocated Layton Canal compared to the EIS Selected Alternative.
Farmland		X	No changes identified.
Community Impacts	X		The Refined Selected Alternative would require the acquisition of an additional six residential properties compared to the EIS Selected Alternative.
Environmental Justice		X	No changes identified.
Transportation		X	No changes identified.
Economics		X	No changes identified.
Joint Development		X	No changes identified.
Pedestrian and Bicyclist Issues		X	No changes identified.
Air Quality		X	No changes identified.
Noise		X	No changes identified.
Water Quality		X	No changes identified.
Ecosystem Resources	X		The Refined Selected Alternative would have a decrease of 1.56 acres of wetland impact compared to the EIS Selected Alternative. These changes to wetland impacts are being accounted for in the WDC Clean Water Act Section 404 permit and mitigation plan.
Floodplains		X	No changes identified.
Historic, Archaeological, and Paleontological Resources		X	No changes identified.
Hazardous Waste		X	No changes identified.
Visual Resources		X	No changes identified.
Energy		X	No changes identified.
Construction Impacts		X	No changes identified.
Indirect Effects		X	No changes identified.
Cumulative Impacts		X	No changes identified.
Permits, Reviews, and Approvals		X	No changes identified.
Section 4(f) Resources		X	No changes identified.
Sequencing		X	No changes identified.



- LEGEND**
- Re-evaluation Area
 - FEIS Direct Impact Area
 - Detention/ Retention Basins
 - FEIS Layton Canal Relocation Boundary

**WDC Re-Evaluation
Layton Canal
WDC FEIS Preferred Alternative**

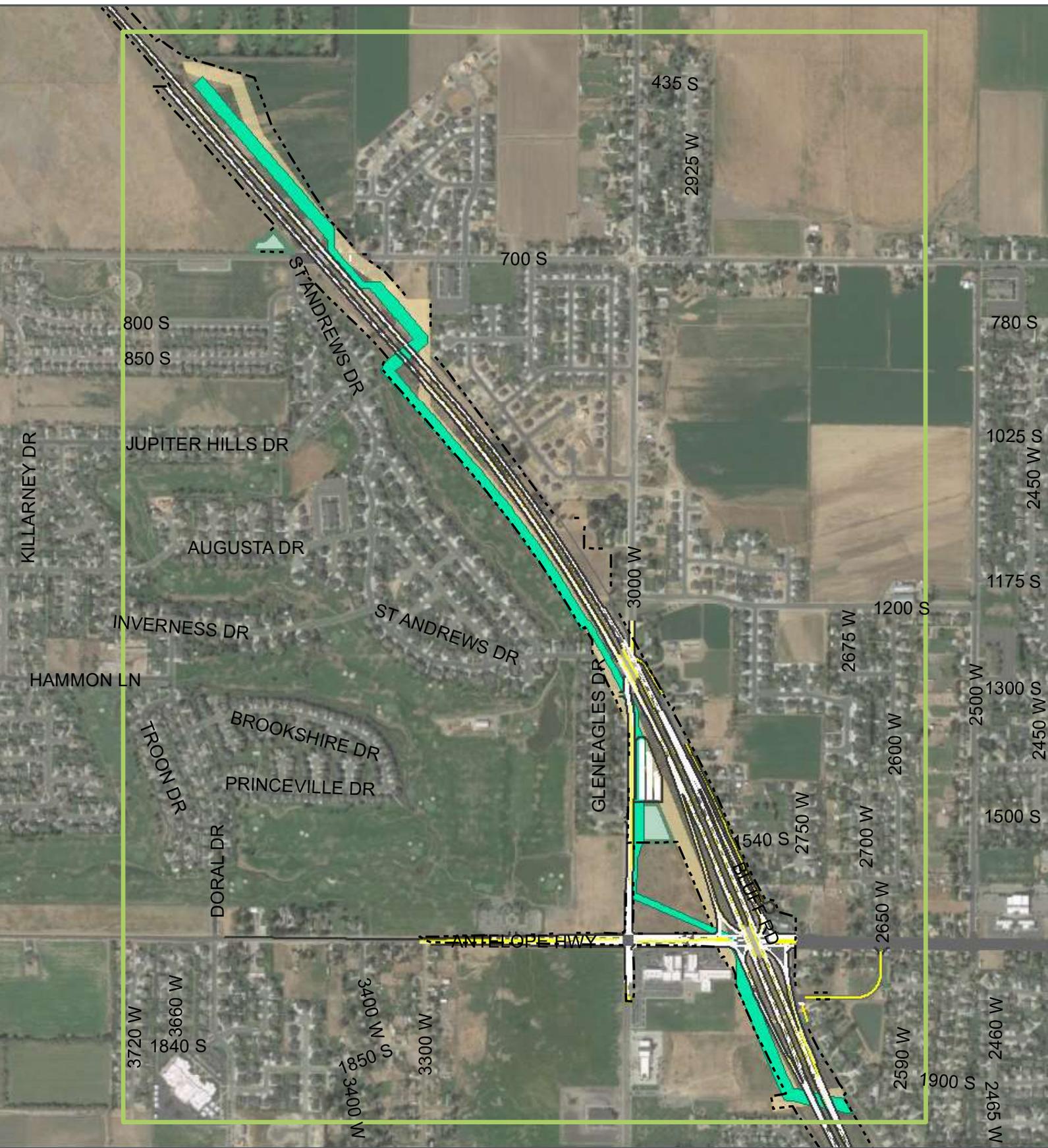




- LEGEND**
- Re-evaluation Area
 - RFP Direct Impact
 - Detention/ Retention Basins
 - RFP Layton Canal Relocation Boundary

**WDC Re-Evaluation
Layton Canal
RFP Refined Selected Alternative**





- LEGEND**
- Re-evaluation Area
 - RFP Direct Impact
 - Detention/ Retention Basins

- RFP Layton Canal Relocation Boundary
- FEIS Layton Canal Relocation Boundary

**WDC Re-Evaluation
Layton Canal
Design Changes**





DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO CA 95814-2922

DEPARTMENT OF THE ARMY PERMIT

Permittee: Utah Department of Transportation, Region 1
Attn: Randy Jefferies
166 West Southwell Street
Ogden, Utah 84404-4194

Permit Number: SPK-2007-01985

Issuing Office: U.S. Army Engineer District, Sacramento
Corps of Engineers
1325 "J" Street
Sacramento, California 95814-2922

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below. A notice of appeal options is enclosed.

Project Description:

The project involves the construction of the West Davis Corridor, which will be approximately 17.5 miles in length and will consist of a new four-lane divided highway with an average right-of-way width of 250 feet, from approximately Interstate 15 (I-15) in Farmington to about 400 South in Syracuse, Davis County, Utah. From north of approximately 400 South in Syracuse to 300 North in West Point, Davis County, the project would be a two-lane, limited-access highway with an average right-of-way width of 146 feet. The southern terminus of the overall project is the Glovers Lane system-to-system interchange connection to I-15 and Legacy Parkway in Farmington and the northern terminus is 4100 West / 300 North in West Point (Enclosure 1).

The proposed action involves the discharge of dredged or fill material into 55.71 acres of waters of the United States, including 52.03 acres of wetlands, 0.98 acre/1,875 linear feet of perennial streams, and 2.70 acres of other open waters under Section 404 of the Clean Water Act for the construction of the highway, as shown on the October 2019 West Davis Corridor Proposed Project Maps and identified in the project impact tables (Enclosure 2), as well as indirect impacts to approximately 79.77 acres of wetlands and 1.21 acres of playa, as shown on the October 2019 West Davis Corridor Indirect Wetland Impact Maps.

Construction of compensatory mitigation areas will result in the discharge of dredged or fill material into 24.06 acres of waters of the United States for aquatic habitat restoration, enhancement, and establishment activities.

All work is to be completed in accordance with the October 2019 West Davis Corridor Proposed Project Maps.

Project Location:

The approximately 925-acre project site is located in portions of West Point, Syracuse, Layton, Kaysville, Farmington, and Centerville, Utah. The approximately 19-mile-long alignment extends from Interstate 15/Glovers Lane in Farmington to 1800 North in West Point. The southern end of the project is located at approximately Latitude 40.941°, Longitude -111.891° and the northern end of the project is located at approximately Latitude 41.118°, Longitude -112.108°, Davis County, Utah.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on May 15, 2025. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. You must comply with the conditions specified in the 401 Certification approved on April 19, 2019 (Enclosure 3) as special conditions to this permit.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

1. To compensate for the loss of 52.03 acres of wetlands and 0.98 acre/1,875 linear feet of perennial streams and indirect effects to 79.77 acres of wetlands and 1.21 acres of playa authorized by this permit, you shall fully implement the approved January 17, 2020 *Final Mitigation Plan, West Davis Corridor Project*. The Final Mitigation Plan is incorporated by reference as a condition of this authorization, except as modified by the special conditions of this permit.

2. You shall complete the construction of the compensatory mitigation required by Special Condition 1 of this permit prior to or concurrent with initiation of construction activities authorized by this permit. Construction of the earthwork and initial vegetative improvements stages shall be completed in all compensatory mitigation areas within two growing seasons of initiating construction. In addition, you shall notify this office in writing at least 30 calendar days prior to the scheduled construction date and within 30 calendar days following completion of the required compensatory mitigation.

3. The final design plans for each wet meadow establishment or re-establishment site must be submitted to this office for review and approval prior to construction. The final design plans shall include plan view and cross-section maps describing the proposed earthwork, a table of design specifications for parameters such as target grading elevations, slopes, target seasonal high water elevation/depth, and a planting/revegetation plan, as well as a description of the rationale used to develop those specifications.

4. You shall complete initial construction and vegetation improvements for all stream compensatory mitigation sites prior to or concurrent with commencement of discharges within any of the seven named perennial streams covered by this authorization. The final design plans for each stream rehabilitation site must be submitted to this office for review and approval prior to construction. The final design plans shall include a table of design specifications for parameters such as valley slope, bank slopes, bed slope, bankfull flow/effective discharge, bankfull dimensions, entrenchment ratio, flood-prone width, sinuosity, riparian buffer width, target species and density for woody riparian vegetation, and habitat enhancements (e.g. root wads, large woody debris, etc.), as well as a description of the rationale used to develop those specifications.

5. You shall take the actions required to record the Declaration of Restrictions (Deed Restrictions) identified in Appendix B of the approved mitigation plan, in addition to the final permit and any applicable maps depicting the 1,117 acres of compensatory mitigation and/or preservation areas required in Special Condition 1 of this permit with the Registrar of Deeds or other appropriate official charged with the responsibility for maintaining records of title to or interest in real property. You shall ensure the Deed Restrictions are

recorded in the chain of title against the deed for all parcels comprising the 1,117 acres described in the Final Mitigation Plan. You shall not record modified Deed Restrictions unless the proposed modifications have been reviewed and specifically approved by this office in writing. Due to the potential need for the condemnation process, evidence of the recordation of the Deed Restrictions shall be provided to this office no later than 12 months from initiation of construction activities.

6. To ensure success of the compensatory mitigation areas required by the Final Mitigation Plan referenced in Special Condition 1, you shall monitor compensatory mitigation areas for a minimum of 5 years or until the performance standards described in the Final Mitigation Plan identified in Special Condition 1 are met, whichever is greater. This period shall commence upon completion of the construction of the required compensatory mitigation within a given mitigation parcel group. You shall demonstrate continued success of the compensatory mitigation, without human intervention, for three consecutive years after the final performance standards have been met, which may run concurrent with the minimum 5-year monitoring period. If the compensatory mitigation is not meeting the required performance standards at any time, this office may determine that the compensatory mitigation is not in compliance and require remedial action, including the identification of alternative compensatory mitigation.

- a. Monitoring shall be conducted in accordance with Section 10 of the Final Mitigation Plan referenced in Special Condition 1. Prior to initiation of monitoring in a given mitigation parcel group, you shall submit site-specific monitoring plans to this office for approval. The site-specific monitoring plans shall refine sampling locations and sampling methods based on as-built conditions.
- b. You shall submit annual monitoring reports to this office by December 31 for each year of the 5-year monitoring period and for each additional year, if remediation is required, until the performance standards have been met. You shall submit a monitoring report at the end of the three-year period demonstrating continued success of the compensatory mitigation without human intervention. If the three-year period occurs wholly within the 5-year monitoring period, in which case, the 5-year report may be used to meet this requirement. The annual reports shall follow the format identified in the *Final 2015 Regional Compensatory Mitigation and Monitoring Guidelines for the South Pacific Division*, which can be found online at <http://www.spd.usace.army.mil/Portals/13/docs/regulatory/mitigation/MitMon.pdf>.

7. Your responsibility to complete the required compensatory mitigation as set forth in Special Condition 1 will not be considered fulfilled until you have demonstrated mitigation success and have received written verification from this office.

8. Upon demonstration of mitigation success within a mitigation parcel group, that mitigation parcel group shall be managed in accordance with either the October 2019, *Long-Term Management Plan for mitigation sites to be managed by The Nature Conservancy* or the October 2019, *Long-Term Management Plan for mitigation sites to be*

managed by The Utah Division of Wildlife Resources (Final LTMP), as applicable and as described in the Final Mitigation Plan identified in Special Condition 1. The LTMPs may be modified prior to the transfer of the property, following coordination with the long-term manager and subject to approval by the Corps.

9. You are responsible for all work authorized herein and ensuring that all contractors and workers are made aware and adhere to the terms and conditions of this permit. You shall ensure that a copy of the permit and associated drawings are available for quick reference at the project site until all construction activities in waters of the U.S. authorized by this permit are completed.

10. You shall use only clean and nontoxic fill material for this project. The fill material shall be free from items such as trash, debris, automotive parts, asphalt, construction materials, concrete with exposed reinforcement bars, and soils contaminated with any toxic substance, in toxic amounts in accordance with Section 307 of the Clean Water Act. In addition, you shall allow all newly poured concrete to cure for a minimum of 10 days prior to coming into contact with open water.

11. At least 30 days prior to initiation of construction activities in waters of the U.S. authorized by this permit, you shall notify this office in writing of the anticipated start date for the work. No later than 30 calendar days following completion of construction activities in waters of the U.S. authorized by this permit, you shall notify this office in writing that construction activities have been completed.

12. Prior to commencement of construction activities in waters of the U.S. authorized by this permit, you shall clearly identify the limits of disturbance in the field with highly visible markers (e.g. construction fencing, flagging, silt barriers, etc.). You shall maintain such identification properly until construction is completed and the soils have been stabilized. You are prohibited from any activity (e.g. equipment usage or materials storage) that impacts waters of the U.S. outside of the permit limits as shown on the October 2019 West Davis Corridor Proposed Project Maps.

13. Prior to initiation any construction activities in waters of the U.S. authorized by this permit, you shall install and maintain construction best management practices (BMPs) on-site to prevent degradation to on-site and off-site avoided waters of the U.S. Methods shall include the use of appropriate measures to intercept and capture sediment prior to entering waters of the U.S., as well as erosion control measures along the perimeter of all work areas within 500 feet of on-site and off-site avoided waters of the U.S. to prevent the displacement of fill material. All BMPs shall be in place prior to initiation of (each phase of) construction activities in waters of the U.S. authorized by this permit. You shall ensure the BMPs are inspected bi-weekly, and are maintained in good condition while ground disturbing activities are occurring, until construction activities in waters of the U.S. authorized by this permit are complete. All BMPs shall remain until construction activities within 500 feet of waters of the U.S. are completed and all disturbed soils are stabilized. You shall submit a description of and photo-documentation of your BMPs to this office

within 30 days following commencement of construction activities authorized by this permit. Photos may be submitted electronically to cespk-regulatory-info@usace.army.mil. Please ensure to reference the West Davis Corridor project name and SPK-200701985 in the email.

14. You shall implement the June 21, 2017 Programmatic Agreement (PA), entitled *Programmatic Agreement Among The Federal Highway Administration, The Utah State Historic Preservation Officer, and the Utah Department of Transportation Regarding Project #: SP-0067(14)0; West Davis Corridor Project, Davis and Weber Counties, Utah*, and signed by these entities, in its entirety. You shall also implement the December 17, 2018 *Amended Programmatic Agreement Among the Federal Highway Administration, The Utah State Historic Preservation Officer, and the Utah Department of Transportation Regarding Project #: SP-0067(14)0; West Davis Corridor Project, Davis and Weber Counties, Utah*, and signed by these entities, in its entirety. The Federal Highway Administration has been designated the lead federal agency responsible for implementing and enforcing the MOA as signed. If you fail to comply with the implementation and associated enforcement of the MOA, this office may determine that you are out of compliance with the conditions of your permit and suspend the permit. Suspension may result in modification or revocation of the authorized work.

15. To ensure compliance with avoidance, minimization, and rectification measures discussed in the permit application materials, the August 7, 2018 *Wildlife Habitat Management Plan*, is incorporated by reference as a condition of this authorization. Design, and construction of the West Davis Corridor shall conform to the specifications therein.

16. The April 2018 *Hydrology Monitoring and Adaptive Management Plan* is incorporated by reference as a condition of this authorization, except as modified by the special conditions of this permit. You shall fully implement and comply with the Hydrology Monitoring and Adaptive Management Plan.

17. During the final design phase, you shall follow the procedures outlined in the August 2018 *Overview of UDOT Hydrologic and Hydraulic Final Design Processes*. The results of the analyses for the specific wetlands identified in that document shall be provided to this office for review and comment prior to finalizing the hydrologic connection designs.

18. Within 60 days following completion of the authorized work or at the expiration of the construction window of this permit, whichever occurs first, you shall submit as-built drawings and a description of the work conducted on the project site and within the compensatory mitigation, preservation, and avoidance area(s) to this office for review. The drawings shall be signed and sealed by a registered professional engineer and include the following:

- a. The Department of the Army Permit number.
- b. A plan view drawing of the location of the authorized work footprint (as shown on the permit drawings) with an overlay of the work as constructed in the same scale as the attached permit drawings. The drawing should show all "earth disturbance," wetland impacts, structures, and the boundaries of the compensatory mitigation and avoidance areas. The drawings shall contain, at a minimum, 1-foot topographic contours of the entire site.
- c. Ground and aerial photographs of the completed work. The camera positions and view-angles of the ground photographs shall be identified on a map, aerial photograph, or project drawing.
- d. A description and list of all minor deviations between the work as authorized by this permit and the work as constructed. Clearly indicate on the as-built drawings the location of any deviations that have been listed.

19. You shall establish a minimum endowment fund in the amount of [REDACTED], for management of the approximately 800 acres of compensatory mitigation areas identified in the Final Mitigation Plan as candidates for transfer to the Nature Conservancy and a minimum endowment fund in the amount of [REDACTED], for management of the approximately 317 acres of compensatory mitigation areas identified in the Final Mitigation Plan as candidates for transfer to the Utah Division of Wildlife Resources, in perpetuity. The endowment accounts shall be established prior to initiation of substantial construction activities in waters of the U.S. (> 10 acres of aquatic resource impacts) authorized by this permit. Funding will be implemented in annual phases, and both funds shall be fully-funded within five years following establishment of the accounts. You shall also implement the following measures:

- a. The endowment funds shall each be governed by an investment policy statement that is designed, over long periods of time, to generate investment returns sufficient to increase in value to keep pace with inflation and pay the costs of long-term management, the net of any financial investment and administrative fees. The endowment fund shall be used in funding perpetual management, maintenance, monitoring, and other activities as required by the Final Mitigation Plan identified in Special Condition 1. If, prior to transfer of all mitigation areas in the Plan into long-term management, either (1) the value of the required endowment decreases to levels that may threaten its continued existence as a source of perpetual funding for long-term management or (2) if long-term management expenses exceed those estimated in the endowment fund analysis and schedule identified in the Final Mitigation Plan identified in Special Condition 1, you shall consult with this office and the endowment holder to identify a plan to implement the management and biological monitoring tasks identified in the Final Mitigation Plan with the resources

that are available. The plan may include modifications to the endowment payments to the preserve manager and associated land management and monitoring tasks in order to protect the long-term viability of the endowment amount. This plan must be reviewed and approved, in writing, by this office.

- b. You shall ensure disbursements from the endowment fund are made available by the endowment holder to the long-term manager, to fund annual long-term management of the compensatory mitigation area(s) as described in the Final Mitigation Plan approved by this office in Special Condition 1. Any earnings beyond those necessary to provide for growth of the endowment fund commensurate with inflation shall be retained in the endowment accounts up to a maximum endowment balance of 110% of the initial endowment amount, as adjusted for inflation over a period of 5 or more years. You are eligible to receive the earnings that exceed this amount.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

() Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

() Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal projects.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data. The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant.

Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

Name Randall Jefferies
Title Program Director
 Permittee

5-15-2020
Date

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below

Michael S. Jewell
Chief, Regulatory Division

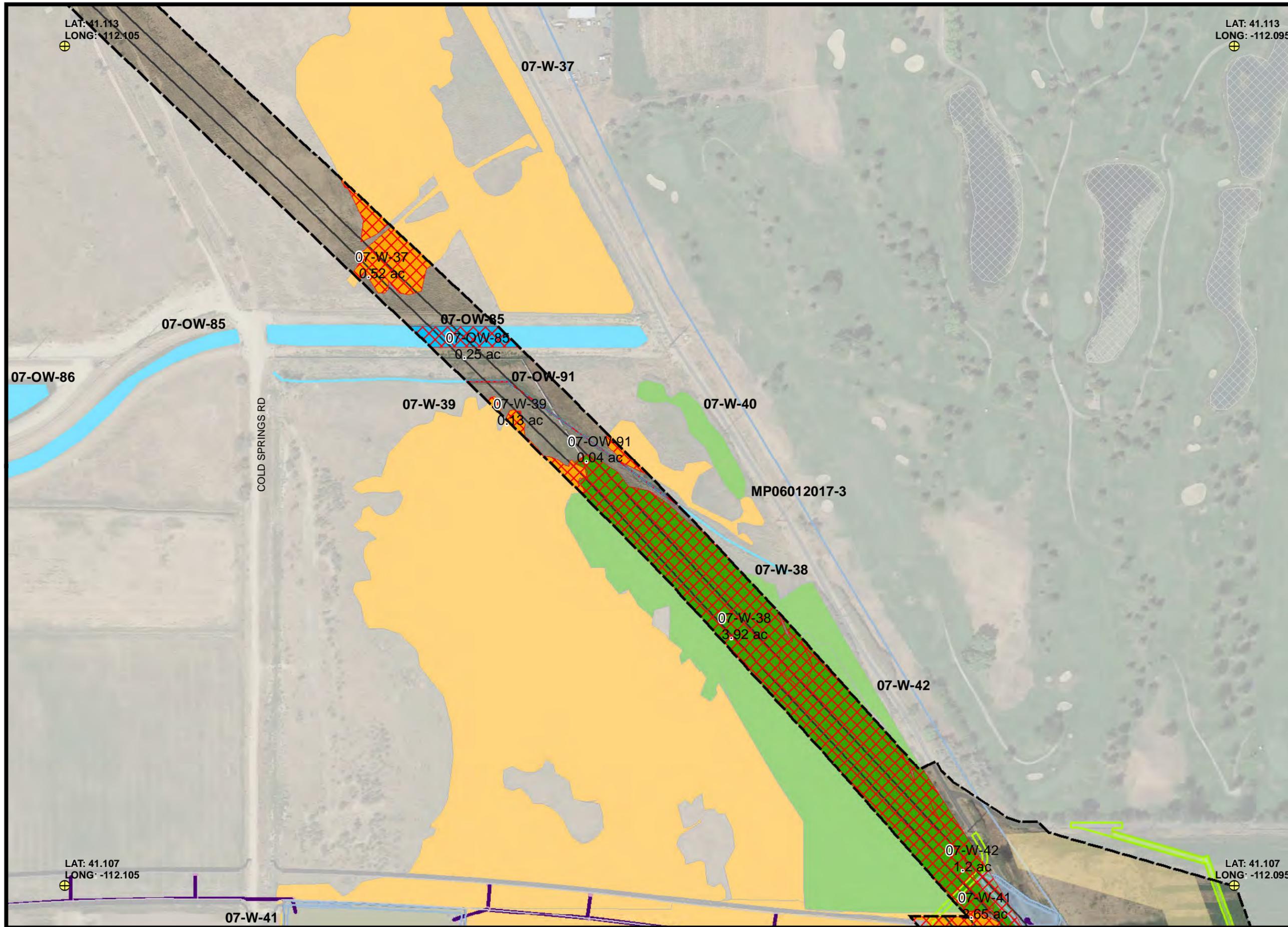
Date

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

Name _____

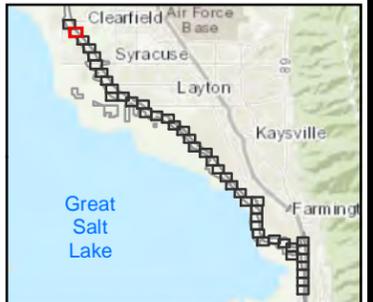
Title _____
 Transferee

Date



WEST DAVIS CORRIDOR

- Geographic Control Points
- Contour
- Agricultural/Roadside Ditch
- Waterway OHWM Transects
- Permanent Impacts
- Emergent Marsh
- Wet Meadow
- Playa
- Waterway / Open Water
- Constructed Feature
- Wetlands Outside Survey
- All Other Drainage Features
- Irrigation
- Ditches
- Cross Culverts
- Hydraulic Minor Struct
- Pipes
- Swale
- Canal Relocation
- Bridges/Structures
- Detention/Retention

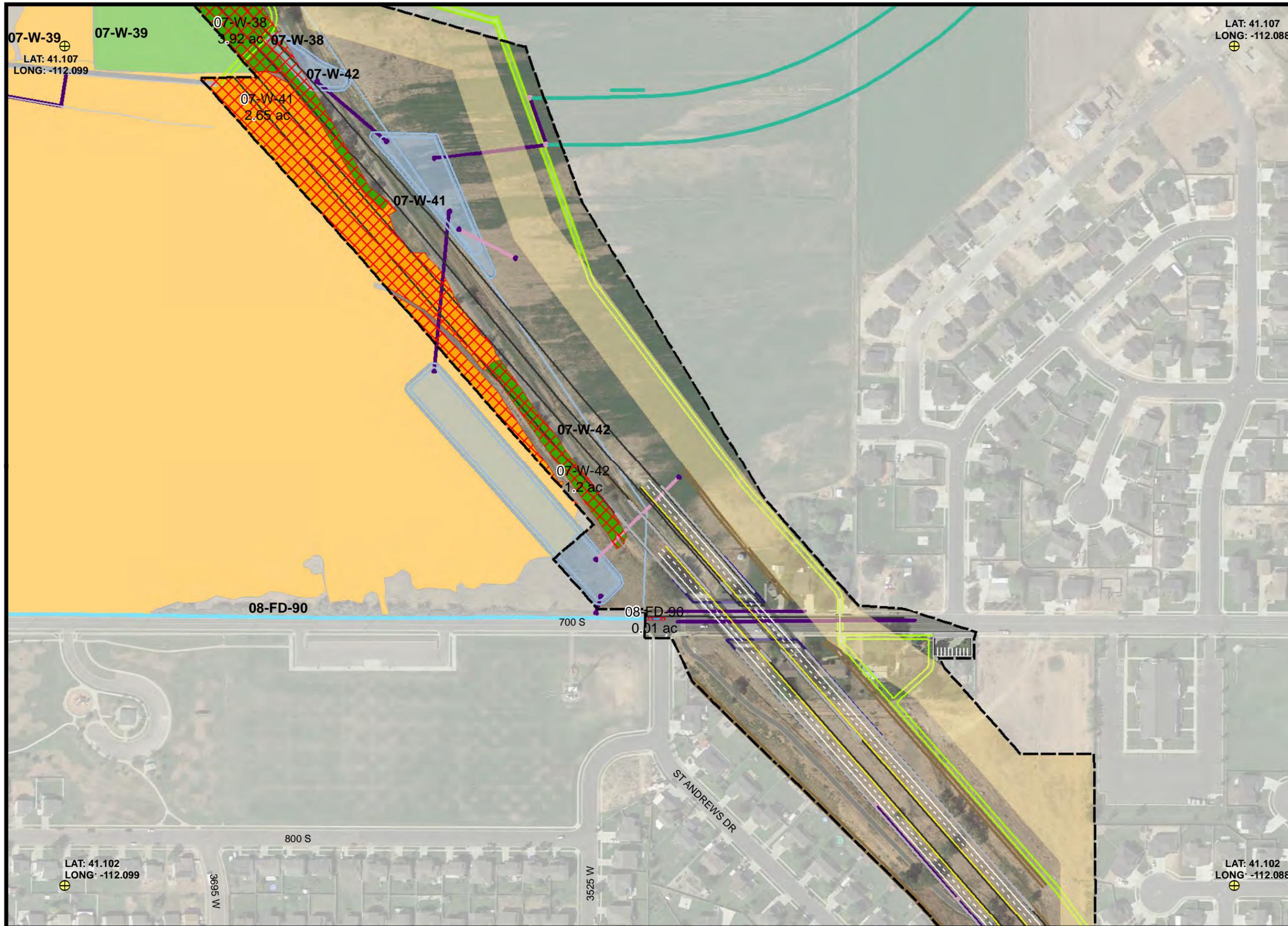


1 inch = 220 feet
 0 100 200
 Feet

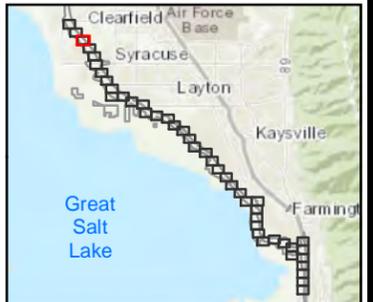


Imagery: State of Utah Google Imagery
 Base Map 2018
 Projection: West Davis Custom Projection,
 Lambert Conformal Conic
 Cartographers: HDR and Horrocks

**Proposed Project
Maps**
 January 2020
 Prepared by: HDR
 Sheet 2 of 44



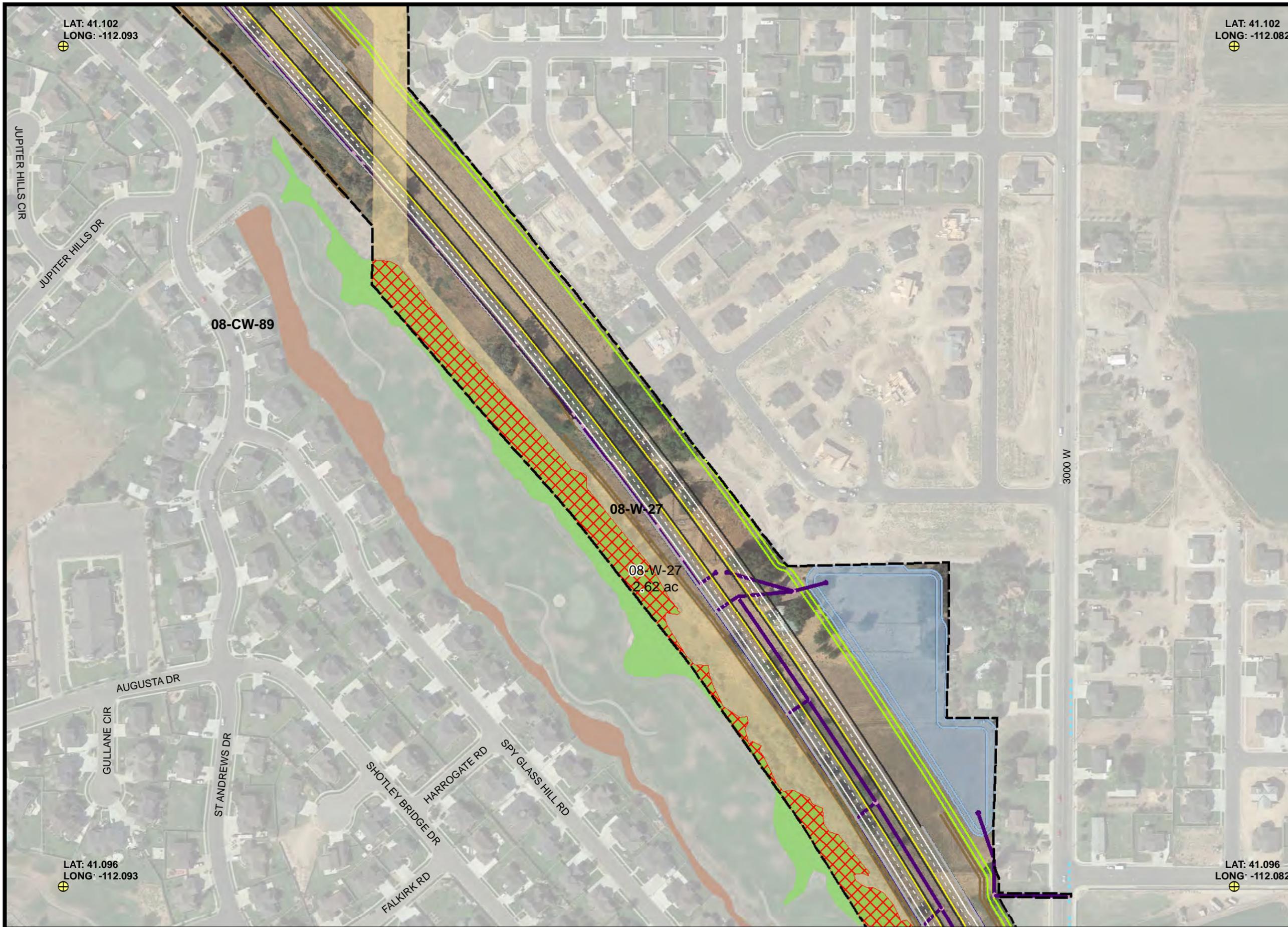
- Geographic Control Points
- Contour
- Agricultural/Roadside Ditch
- Waterway OHWM Transects
- Permanent Impacts
- Emergent Marsh
- Wet Meadow
- Playa
- Waterway / Open Water
- Constructed Feature
- Wetlands Outside Survey
- All Other Drainage Features
- Irrigation
- Ditches
- Cross Culverts
- Hydraulic Minor Struct
- Pipes
- Swale
- Canal Relocation
- Bridges/Structures
- Detention/Retention



1 inch = 220 feet
 0 100 200 Feet

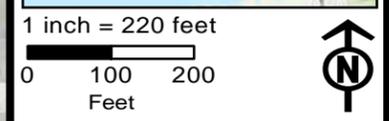
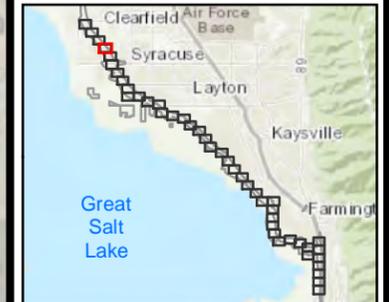
Imagery: State of Utah Google Imagery Base Map 2018
 Projection: West Davis Custom Projection, Lambert Conformal Conic
 Cartographers: HDR and Horrocks

Proposed Project Maps
 January 2020
 Prepared by: HDR
 Sheet 3 of 44



**WEST DAVIS
CORRIDOR**

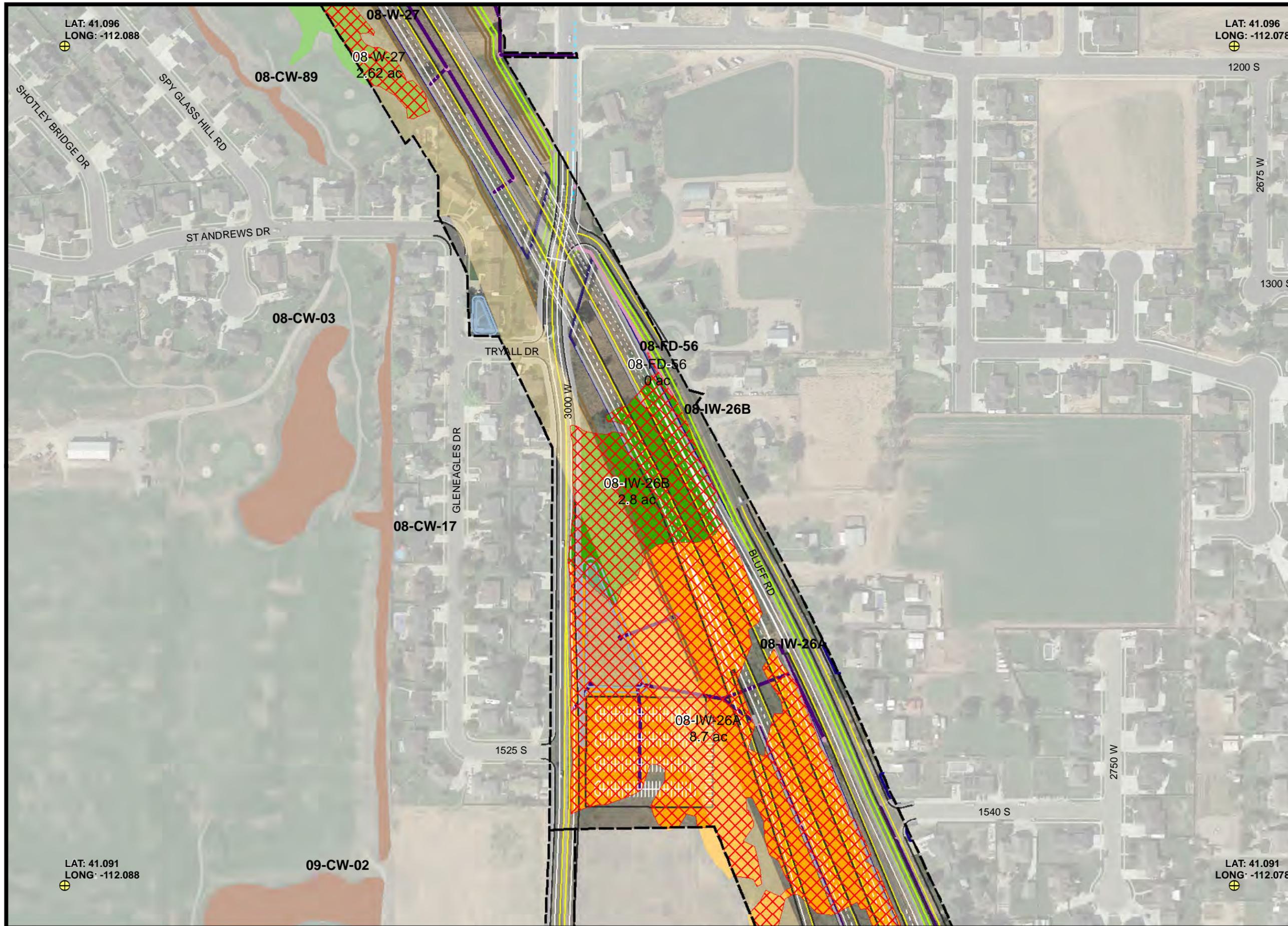
- Geographic Control Points
- Contour
- Agricultural/Roadside Ditch
- Waterway OHWM Transects
- Permanent Impacts
- Emergent Marsh
- Wet Meadow
- Playa
- Waterway / Open Water
- Constructed Feature
- Wetlands Outside Survey
- All Other Drainage Features
- Irrigation
- Ditches
- Cross Culverts
- Hydraulic Minor Struct
- Pipes
- Swale
- Canal Relocation
- Bridges/Structures
- Detention/Retention



Imagery: State of Utah Google Imagery
Base Map 2018
Projection: West Davis Custom Projection,
Lambert Conformal Conic
Cartographers: HDR and Horrocks

**Proposed Project
Maps**

January 2020
Prepared by: HDR



LAT: 41.096
LONG: -112.088

LAT: 41.096
LONG: -112.078

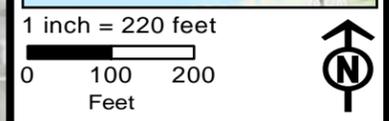
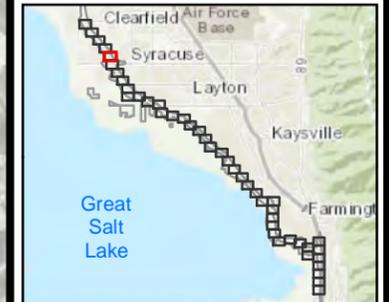
LAT: 41.091
LONG: -112.088

LAT: 41.091
LONG: -112.078



WEST DAVIS CORRIDOR

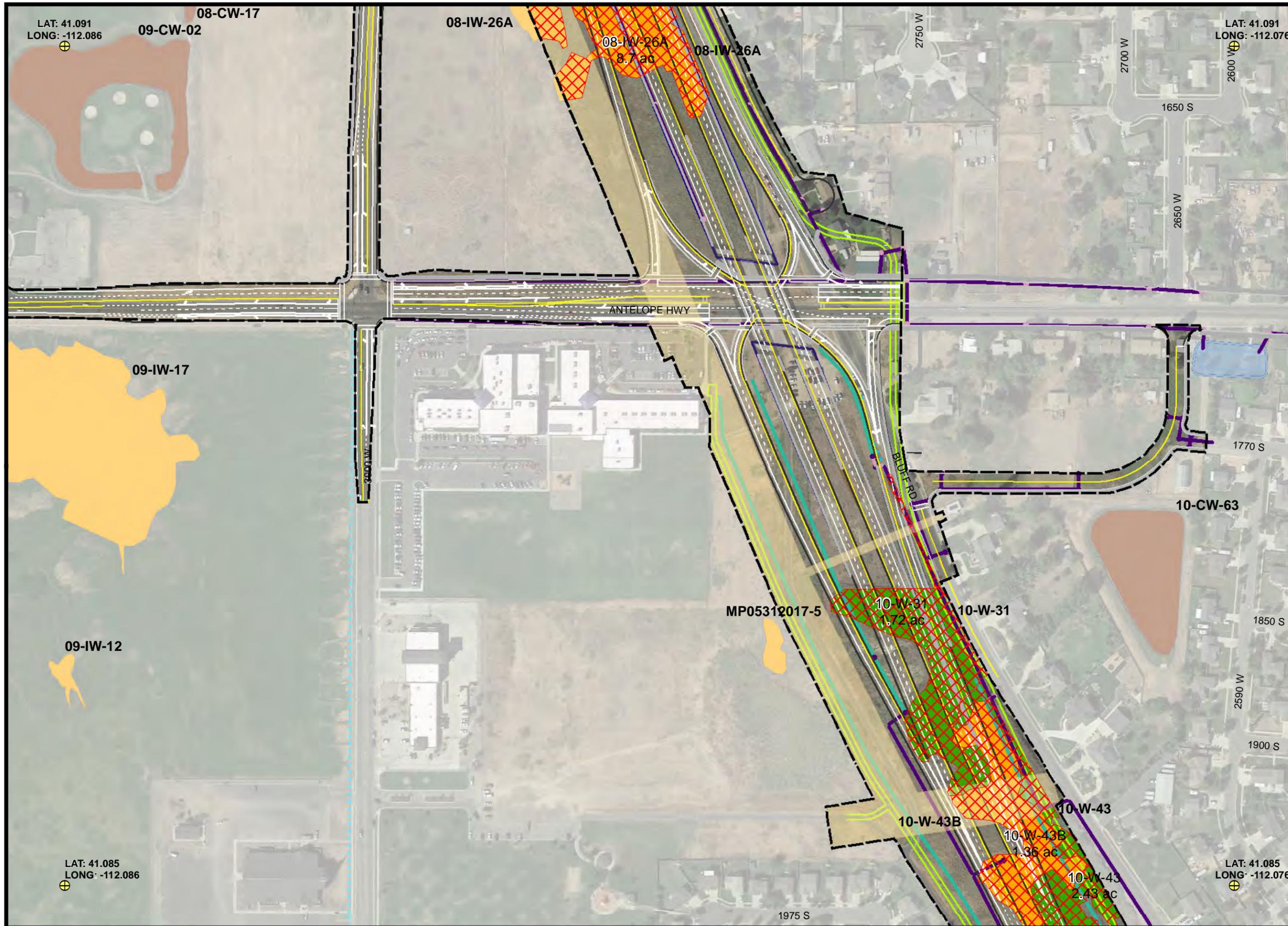
- Geographic Control Points
- Contour
- Agricultural/Roadside Ditch
- Waterway OHWM Transects
- Permanent Impacts
- Emergent Marsh
- Wet Meadow
- Playa
- Waterway / Open Water
- Constructed Feature
- Wetlands Outside Survey
- All Other Drainage Features
- Irrigation
- Ditches
- Cross Culverts
- Hydraulic Minor Struct
- Pipes
- Swale
- Canal Relocation
- Bridges/Structures
- Detention/Retention



Imagery: State of Utah Google Imagery
Base Map 2018
Projection: West Davis Custom Projection,
Lambert Conformal Conic
Cartographers: HDR and Horrocks

Proposed Project Maps

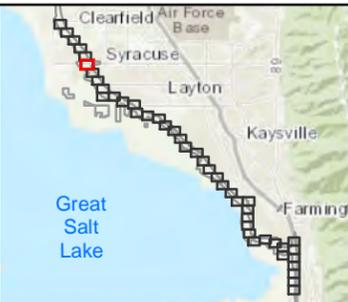
January 2020
Prepared by: HDR



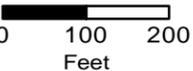


**WEST DAVIS
CORRIDOR**

-  Geographic Control Points
-  Contour
-  Agricultural/Roadside Ditch
-  Waterway OHWM Transects
-  Permanent Impacts
-  Emergent Marsh
-  Wet Meadow
-  Playa
-  Waterway / Open Water
-  Constructed Feature
-  Wetlands Outside Survey
-  All Other Drainage Features
-  Irrigation
-  Ditches
-  Cross Culverts
-  Hydraulic Minor Struct
-  Pipes
-  Swale
-  Canal Relocation
-  Bridges/Structures
-  Detention/Retention



1 inch = 220 feet




Imagery: State of Utah Google Imagery
Base Map 2018
Projection: West Davis Custom Projection,
Lambert Conformal Conic
Cartographers: HDR and Horrocks

**Proposed Project
Maps**

January 2020
Prepared by: HDR

Sheet 6 of 44



State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Alan Matheson
Executive Director

DIVISION OF WATER QUALITY
Erica Brown Gaddis, PhD
Director

April 29, 2019

Mr. Randy Jefferies
UDOT
166 Southwell Street
Ogden, UT 84404
VIA EMAIL

Subject: §401 Water Quality Certification (DWQ-2007-01985)
UDOT West Davis Corridor Project (WDC)

Dear Mr. Jefferies,

The Utah Department of Environmental Quality (DEQ), Division of Water Quality (DWQ), has had the opportunity to review the §401 Water Quality Certification application submitted to our office on October 10, 2017 for a project in Davis County, Utah. Pursuant to the Federal Clean Water Act (CWA), the State of Utah is required to certify whether projects/activities will violate any applicable water quality standards.

Enclosed you will find a §401 Water Quality Certification with Conditions, authorized by DWQ's Director. This certification is issued to UDOT for the West Davis Corridor Project (WDC). You may proceed with your project according to the terms and conditions outlined in the certification.

We appreciate your attention to water quality in the State of Utah. If you have any questions about the attached certification, please contact me at (801) 536-4397 or lnlittler@utah.gov.

Sincerely,

Leanna Littler, Environmental Scientist
UPDES Surface Water Section

LL/blj

Page 2

§401 Water Quality Certification (DWQ-2007-01985)

UDOT West Davis Corridor Project (WDC)

Enclosures (1): 1. §401 Water Quality Certification (DWQ-2019-002946)

Cc: Via Email

Matt Wilson, USACE

Rod Hess, UDOT

Terry Warner, HDR Engineering

Rachelle Blackham, Davis County Health Department

DWQ-2019-003861

**STATE OF UTAH
DIVISION OF WATER QUALITY
DEPARTMENT OF ENVIRONMENTAL QUALITY
SALT LAKE CITY, UTAH**

§401 Water Quality Certification No. DWQ-2007-01985

Pursuant to §401 of the *Federal Clean Water Act (CWA)*, the Utah Department of Environmental Quality (DEQ), Division of Water Quality (DWQ) certifies that the applicant has provided reasonable assurance that any discharges associated with the proposed project will not violate surface water quality standards, or cause additional degradation in surface water not presently meeting water quality standards. In accordance with Section 401(a)(1) of the CWA [33 U.S.C. Sec. 1341(a)(1)], DWQ hereby issues this §401 Water Quality Certification provided any listed conditions are met and included in the corresponding U.S. Army Corps of Engineers (USACE) 404 Permit.

Applicant: Utah Department of Transportation (UDOT), Region 1
Mr. Randy Jefferies
166 Southwell Street
Ogden, UT 84404

Project: The proposed West Davis Corridor (WDC) project is a new 19.2 mile roadway intended to accommodate the growth of residential and employment-based transportation needs projected for western Davis County, Utah. Federal Highway Administration (FHWA) and UDOT have identified Alternative B1 with Wetland Avoidance option as the preferred alternative. The project involves a four-lane divided highway with 250-foot right-of-way from its southern terminus, at a new interchange with I-15 south of Glovers Lane in Farmington, continuing west and northwest to Antelope Drive, in Syracuse. North of Antelope Drive to its northern terminus, at 4100 West / 1800 North in West Point, the road narrows to a limited access highway with a 146-foot right-of-way. FHWA made formal selection of the alternative in the West Davis Corridor Record of Decision dated September 29, 2017.

Location: The project site is located in West Point, Syracuse, Layton, Kaysville, Farmington, and Centerville, Davis County, Utah. The alignment extends from I-15/Glovers Lane in Farmington to 1800 North in West Point. The southern terminus is located at approximately 40.941, -111.891 and the northern terminus is located at approximately 41.118, -112.108.

Watercourse(s): 7 named streams, 28 additional linear surface waters (ditches, canals, drainages) and approximately 46.72 acres direct impact and 81.68 indirect impacts of wetlands (mix of Emergent Marsh, Wet Meadow, and Playa) in the Weber River Watershed (HUC8:16020102).

Effective Date: April 29, 2019

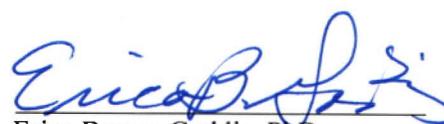

Erica Brown Gaddis, PhD
Director, Division Water Quality

Table of Contents

Section 1: Background

- I. Other Applicable PermitsPg. 3
- II. Project Description/ PurposePg. 3
- III. Site DescriptionPg. 3

Section 2: Certification Conditions

- I. Project Specific ConditionsPg. 4
- II. General ConditionsPg. 5-6

Sections 3: Aquatic Resource Impacts

- I. Impacts to Linear FeaturesPg. 6
- II. Impacts to WetlandsPg. 7
- III. Impairments & Pollutants of ConcernPg. 7

Section 4: ModificationsPg. 8

Section 5: Other Information

- I. FeesPg. 8
- II. LiabilityPg. 8

Section 6: Public Notice and Comments Received

- I. Public Notice Dates.....Pg. 9
- II. Public Notice Comment Summary & ActionPg. 9

Appendix A: Site Location/Alignment

- i. Alternative B-1 (Figure S-7)

Appendix B: Project Discharge Locations/ Impacts

- i. Table of Anticipated Discharge Locations to Linear Features
- ii. Table of Anticipated Cumulative Impacts to Waters of the State

Section 1: Background:

I. Other Applicable Permits:

1. USACE 404 Permit No.: SPK-2007-01985

II. Project Description/Purpose:

The proposed West Davis Corridor (WDC) project is a new 19.2 mile roadway intended to accommodate the growth of residential and employment-based transportation needs projected for western Davis County, Utah. Federal Highway Administration (FHWA) and UDOT have identified *Alternative B1 with Wetland Avoidance* option as the preferred alternative. The project involves a four-lane divided highway with 250-foot right-of-way from its southern terminus, at a new interchange with I-15 south of Glovers Lane in Farmington, continuing west and northwest to Antelope Drive, in Syracuse. North of Antelope Drive to its northern terminus, at 4100 West / 1800 North in West Point, the road narrows to a limited access highway with a 146-foot right-of-way. FHWA made formal selection of the alternative in the *West Davis Corridor Record of Decision* dated September 29, 2017.

WDC is expected to improve regional mobility for automobile, transit, and freight trips, and enhance traffic flow during morning and evening peak periods for the main travel directions (north-south) to help accommodate projected travel through 2040. The project will also improve the connections between transportation modes such as automobile, transit, bicycle, and pedestrian travel; support the objectives of local land-use and transportation plans for communities west of I-15 in Weber and Davis Counties; and increase bicycle and pedestrian options consistent with the adopted local and regional plans in the parts of the needs assessment study area in Weber and Davis Counties.

III. Site Description:

The study area for assessing the need of the project consists of approximately 80,000 acres located west of I-15 in Davis and Weber Counties. The study area contains portions of 14 incorporated cities as well as unincorporated land, and is located west of the Wasatch Mountains and east of the Great Salt Lake. Topography in the area includes relatively subtle depressions, gently sloped terraces and plains, small rolling knolls, and the toe of a relatively large bluff. Land use within the project area is predominantly residential and agricultural, with smaller inclusions of natural and other developed areas. There are approximately 43.5 acres of palustrine emergent wetlands and playas and more than 15,000 linear feet of streams and other drainages within the project area. There are also approximately 57.29 acres of wetlands within 300 feet of the proposed right-of-way.

Section 2: Certification Conditions:

I. Project Specific Conditions:

1. Bridges, Culverts, and Fill

- a. Wetlands outside of the permitted impact area shall be clearly marked to prevent unintentional/additional impacts to water features.
- b. Construction of bridges/culverts shall be conducted in the "dry" to the maximum extent practicable, by diverting flow utilizing cofferdams, berms constructed of sandbags, clean rock (containing no fine sediment) or other non-erodible, non-toxic material. All diversion materials shall be removed at the completion of the work.
- c. The bottom of culverts shall be installed below streambed elevation in a manner that allows for natural substrate to reestablish. All culverts with more than one barrel shall have base flow concentrated into one barrel.
- d. The culverts should not result in a disruption or cause a barrier to the movement of fish or other aquatic life on the downstream side.

2. Monitoring:

UDOT shall submit a *revised* monitoring plan for the Director's approval. The approved monitoring plan shall become a requirement under this 401 Water Quality Certification. The *revised* plan should contain at a minimum:

- a. Locations: Monitoring should occur at the outfalls of the three impaired streams (Farmington Creek, Holmes Creek, and Kays Creek).
- b. Frequency: Samples should be taken semi-annually (Fall/Spring).
- c. Parameters/Sample Type: UDOT's proposed parameters should focus on common roadway pollutants of concern. Composite samples should be collected at a minimum of one discharge location, dependent on feasibility (BMP selection/location). Grab samples may be taken at the remaining two locations.
- d. Duration: Sampling will begin at the completion of the project (road opening) and continue for five years.
- e. Reporting: UDOT shall submit a yearly report containing all sampling results for the previous year for Division review. Reports will be due annually on July 1, unless an alternative date is requested.

3. Mitigation

- a. All monitoring reports associated with mitigation required by the USACE, shall additionally be submitted to the DWQ for review.

II. General Conditions:

1. Good Housekeeping

- a. Applicant and their subcontractors shall ensure that all workers involved are continuously aware of the water quality protection measures before the start and during the construction period.
- b. Retain a copy of this §401 Certification and its affiliated USACE 404 Permit onsite.

2. Stormwater and BMPs

- a. Water quality standards in associated water resources could be violated unless appropriate Best Management Practices (BMPs) are incorporated to minimize the erosion-sediment and nutrient load to any adjacent waters during project construction. The applicant shall not use any fill material which may leach organic chemicals (e.g. discarded asphalt), noxious weeds/seeds or nutrients (e.g., phosphate rock) into waters of the State.
- b. Construction activities that disturb one acre or more, or are part of a common plan of development, are required to obtain coverage under the Utah Pollutant Discharge Elimination System (UPDES) Stormwater General Permit for Construction Activities, Permit No. UTR300000^[1]. The permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) to be implemented and updated from the commencement of any soil disturbing activities at the site, until final stabilization of the project. The SWPPP should include, but not limited to, final site maps and legible plans, location of stormwater outfalls/discharges, as well as information pertaining to any stormwater retention requirements.
- c. Dewatering activities, if necessary during construction, may require coverage under the UPDES General Permit for Construction Dewatering, Permit No. UTG070000^[2]. The permit requires water quality monitoring every two weeks to ensure that the pumped water is meeting permit effluent limitations, unless water is contained onsite.
- d. A project within a Municipal Separate Storm Sewer System (MS4) jurisdiction, must comply with all the conditions required in that UPDES MS4 Permit and associated ordinances. No condition of this 401 Certification shall reduce or minimize any requirements provided in the MS4 Permit. In the case of conflicting requirements, the most stringent criteria shall apply.
- e. Utah Administrative Code R317-2 requires that the Applicant cannot increase water turbidity by 10 NTUs. If violated shall immediately notify the DWQ. A fact sheet describing the Utah Department of Environmental Quality's (DEQ) recommended environmental BMPs for construction sites are located on our web site ^[3].

¹Link: <https://documents.deq.utah.gov/water-quality/permits/updes/DWQ-2017-003485.pdf>

² Link: <https://deq.utah.gov/legacy/permits/water-quality/utah-pollutant-discharge-elimination-system/docs/utg070000.pdf>

³Link: <https://deq.utah.gov/legacy/businesses/business-assistance/construction/index.htm>

3. Spills

- a. Refueling equipment and storage of lubricants and fuels will occur at designated staging areas and in state approved containers. The storage and refueling areas will be at least 500 feet from the edge of the nearest waterbody (including wetlands), at least 200 feet from the nearest private water supply well, and at least 100 feet from the nearest municipal water supply well.
- b. Utah Annotated Code 19-5-114 requires that any spill or discharge of oil or other substances which may cause pollution to waters of the State, including wetlands, must be immediately reported to the Utah DEQ Spill Hotline at (801) 536-4123, a 24-hour phone number.

Section 3: Aquatic Resource Impacts: All Waters of the State of Utah (defined in Administrative Code (UAC) R317-1-1) are protected from pollutant discharges that affect water quality by narrative standards (*see* UAC R317-2-7.2); broadly, discharges should not become offensive or cause undesirable conditions in human health effects of aquatic life. In addition, some particularly sensitive classes of water are further protected from deleterious effects of specific pollutants by application of numeric criteria to designated (beneficial) uses of that water body. Listed below are the water features within the project area and their associated designated beneficial uses (*see* UAC R317-2-6):

I. Impacts to linear water features:

1. Perennial Streams

- a. Class 2B: Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is low likelihood of ingestion of water or low degree of bodily contact with the water.
- b. Class 3D: Protected for waterfowl, shore birds and other water-oriented wildlife not included in classes 3A, 3B, or 3C, including the necessary organisms in their food chains.
- c. Class 4: Protected for agricultural uses including irrigation of crops and stock watering.

2. Unnamed watercourses, including irrigation and/or drainage canals & ditches:

- a. Class 2B: Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is low likelihood of ingestion of water or low degree of bodily contact with the water.
- b. Class 3E: Severely habitat-limited waters. Narrative Standards will be applied to protect these waters for aquatic wildlife.
- c. Class 4: Protected for agricultural uses including irrigation of crops and stock watering.

II. Impacts to Wetlands

1. Wetlands in the WDC project area that lie above the Great Salt Lake Meander Line (above approximate elevation of 4208 feet above sea level):
 - a. Class 2B: Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is low likelihood of ingestion of water or low degree of bodily contact with the water.
 - b. Class 3D: Protected for waterfowl, shore birds, and other water-oriented wildlife not included in Classes 3A, 3B, or 3C, including the necessary organisms in their food chain.
2. Vegetated wetlands and mudflats associated with the Great Salt Lake. These waters are classified as Transitional Waters along the Great Salt Lake shoreline:
 - a. Class 5E: Protected for infrequent primary and secondary contact recreation, waterfowl, shorebirds and other water-oriented wildlife including their necessary food chain.

III. Impairments and Pollutants of Concern:

Results from the current water quality assessment, as documented in Utah's 2016 Integrated Report [4], indicate that the water quality of three named streams within the project area (Kays Creek, Holmes Creek, and Farmington Creek) are considered to be impaired (Assessment Category 5). These impairments include degraded recreation uses (Class 2B), due to excessive concentrations of *Escherichia coli*; and degraded warm-water fish and waterfowl-based aquatic life uses (Classes 3B and 3D), due to excessive concentrations of dissolved Copper. The CWA directs states to prepare a plan to restore water quality to impaired waters, otherwise known as a total maximum daily load (TMDL) study. A TMDL is required for each parameter and water body to define pollutant reduction requirements necessary for the water body to meet water quality standards. At present, no TMDL studies for the impaired waters identified above have been finalized.

Of particular concern for the WDC project, Copper is a known pollutant of concern associated with highway discharges to surface waters via storm water events. Additional important transportation-related pollutants include total dissolved solutes (TDS) from wintertime application of de-icing salts and brine solutions, and Lead and Zinc from vehicle and roadway wear (UDOT Stormwater Quality Design Manual, 2018).

⁴Link: <https://documents.deq.utah.gov/water-quality/monitoring-reporting/integrated-report/DWQ-2017-004941.pdf>

Section 4: Modifications:

1. Without limiting DWQ's discretion to take other actions in accordance with UAC R317-15, and, as applicable, 33 USC 1341, DWQ may modify the Certification to add, delete, or modify the conditions in this Certification as necessary and feasible to address:
 - a. Adverse or potential adverse project effects on water quality of designated beneficial uses that did not exist or were not reasonably apparent when this certification was issued;
 - b. TMDLs;
 - c. Changes in water quality standards;
 - d. Any failure of Certification conditions to protect water quality or designated uses when the Certification was issued; or
 - e. Any change in the Project or its operations that will adversely affect water quality of designated beneficial uses when this Certification was issued.

Section 5: Other Information

I. Fees:

1. The legislatively-mandated fee for the 2019 fiscal year is \$100.00/hour, for review and issuance of the §401 Water Quality Certification [⁴]. A quarterly invoice will be sent once plans have been approved. Your payment is due within 30 days.

II. Liabilities:

1. Applicant must acquire all necessary easements, access authorizations and permits to ensure they are able to implement the project. This §401 Certification does not convey any property rights or exclusive privileges, nor does it authorize access or injury to private property.
2. This §401 Certification does not preclude the applicant's responsibility of complying with all applicable Federal, State or local laws, regulations or ordinances, including water quality standards. Permit coverage does not release the applicant from any liability or penalty, should violations to the permit terms and conditions or Federal or State Laws occur.

Section 6: Public Notice and Comments

I. Public Notice Dates:

1. USACE Permit No. SPK-2018-00256 : 07/21/2017 – 09/12/2017
2. Utah DEQ Certification No. DWQ-2018-00256: 02/27/2019 – 03/27/2019

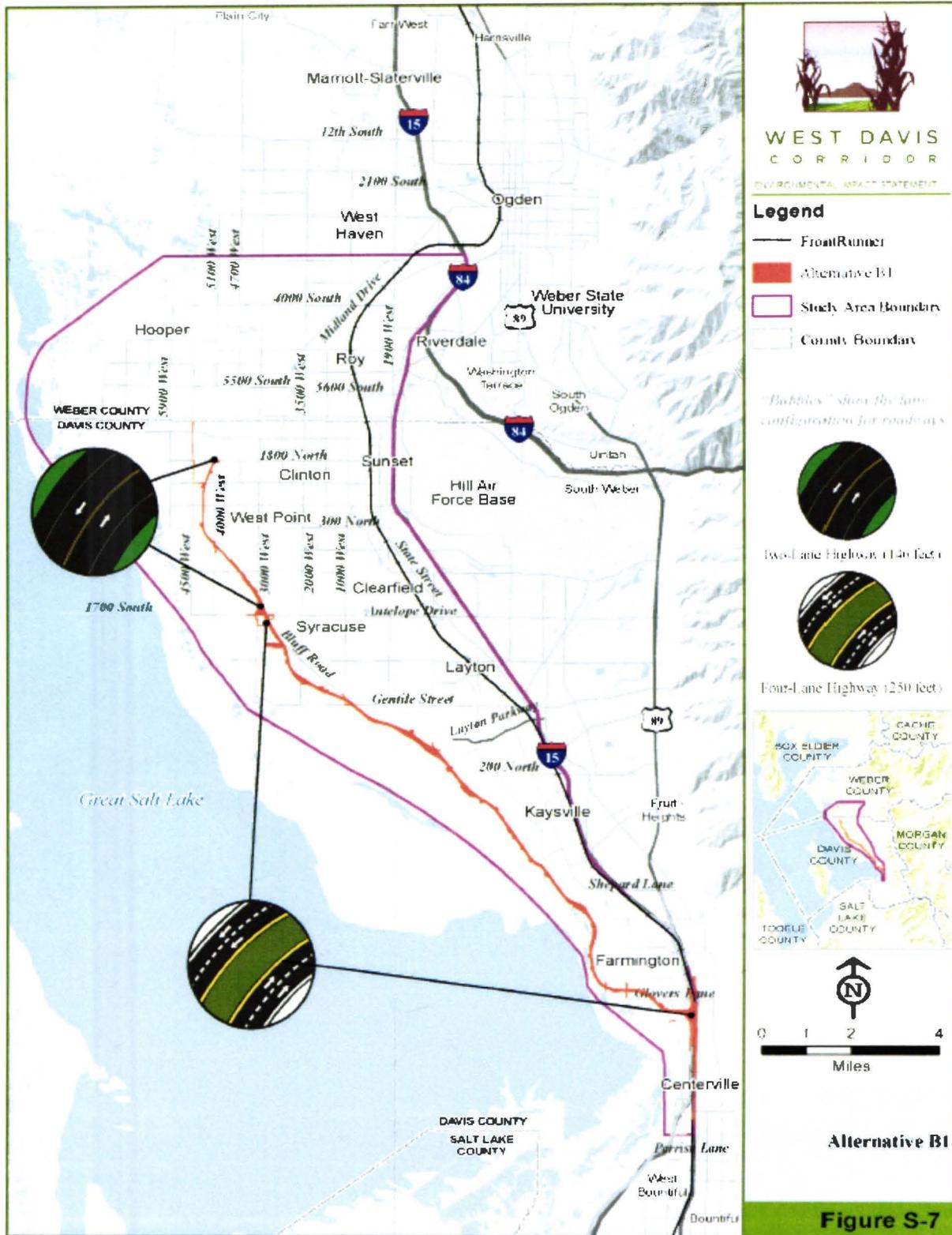
II. Public Notice Comment Summary & Action:

- 1.) UDOT had concerns with Section 2, I. 2. Stormwater and BMPs. In general their concerns were with inconsistencies between their MS4 permit and Stormwater Management Plan (SWMP) and the language used in the conditions in the draft 401 Water Quality Certification. UDOT was concerned that some of the conditions limited what type of BMPs that could be used throughout the project and requested more flexibility in using their design manual to select the most practical BMPs.
 - Although some of the language for the conditions was taken directly from the application, DWQ acknowledges that UDOT should be given flexibility in selecting the most appropriate BMPs. As a result of UDOT's concerns, DWQ has removed this section from the Certification.
- 2.) UDOT had concerns with Section 2, I. 3. Monitoring. Within the monitoring section UDOT had concerns with the requested Locations, Frequency, Parameters, Limits, Duration, and Reporting. Overall, UDOT was concerned with the costs associated with the requested monitoring and how the data collected would relate to this project. UDOT had concerns with comparing the discharges to numeric criteria and reporting exceedances of that criterion.
 - DWQ has limited the required items to be submitted in the revised monitoring plan, and focused on the three impaired waterbodies. The requests are more closely aligned with sampling they are already conducting as part of their UDOT wet-monitoring plan. UDOT will work with DWQ to get a monitoring plan approved prior to the completion of the project. The approved plan will be enforced as a condition of the 401 Water Quality Certification.

The changes that were made were not significant, and therefore this certification will not be public noticed again.

Appendix A

Site Location/ Alignment



Appendix B

Project Discharge Locations/ Impacts

Discharge Location ID	Surface Water Name	Discharge Lat./Long: (Decimal Degrees)	Discharge Lat./Long: (Degrees, Minutes, Seconds)
1	Unnamed Drainage	40.96414 N, 111.90739 W	40° 57' 50.9" N, 111° 54' 26.6" W
2	Farmington Creek	40.96753 N, 111.91552 W	40° 58' 3.1" N, 111° 54' 55.9" W
3	Unnamed Drainage	40.96787 N, 111.92456 W	40° 58' 4.3" N, 111° 55' 28.4" W
4	Unnamed Drainage	40.97793 N, 111.93733 W	40° 58' 40.6" N, 111° 56' 14.4" W
5	Unnamed Drainage	40.98995 N, 111.93684 W	40° 59' 23.8" N, 111° 56' 12.6" W
6	Baer Creek	40.99474 N, 111.94364 W	40° 59' 41.1" N, 111° 56' 37.1" W
7	Unnamed Drainage	41.00482 N, 111.95601 W	41° 0' 17.4" N, 111° 57' 21.7" W
8	Unnamed Drainage	41.01090 N, 111.96468 W	41° 0' 39.2" N, 111° 57' 52.9" W
9	Holmes Creek	41.01843 N, 111.97201 W	41° 1' 6.4" N, 111° 58' 19.2" W
10	Unnamed Drainage	41.02612 N, 111.97829 W	41° 1' 34.0" N, 111° 58' 41.9" W
11	Unnamed Drainage	41.02898 N, 111.98478 W	41° 1' 44.3" N, 111° 59' 5.2" W
12	Unnamed Drainage	41.03078 N, 111.98953 W	41° 1' 50.8" N, 111° 59' 22.3" W
13	Unnamed Drainage	41.03191 N, 111.99254 W	41° 1' 54.9" N, 111° 59' 33.2" W
14	Kays Creek	41.03923 N, 112.00085 W	41° 2' 21.2" N, 112° 0' 3.1" W
15	Unnamed Drainage	41.04463 N, 112.00703 W	41° 2' 40.7" N, 112° 0' 25.3" W
16	Sugar Factory Drain	41.04952 N, 112.01673 W	41° 2' 58.3" N, 112° 1' 0.2" W
17	Unnamed Drainage	41.05604 N, 112.03579 W	41° 3' 21.7" N, 112° 2' 8.9" W
18	Syracuse Drain	41.06427 N, 112.05487 W	41° 3' 51.4" N, 112° 3' 17.6" W
19	Syracuse Drain	41.06432 N, 112.05501 W	41° 3' 51.6" N, 112° 3' 18.1" W
20	2000 W. Drain	41.06741 N, 112.06459 W	41° 4' 2.7" N, 112° 3' 52.5" W
21	Unnamed Drainage	41.07475 N, 112.07112 W	41° 4' 29.1" N, 112° 4' 16.0" W
22	Unnamed Drainage	41.07464 N, 112.07144 W	41° 4' 28.7" N, 112° 4' 17.2" W
23	Unnamed Drainage/SD?	41.07922 N, 112.08014 W	41° 4' 45.2" N, 112° 4' 48.5" W
24	3000 W. Drain	41.08608 N, 112.08109 W	41° 5' 9.9" N, 112° 4' 51.9" W
25	3000 W. Drain	41.09010 N, 112.08373 W	41° 5' 24.4" N, 112° 5' 1.4" W
26	Unnamed Drainage/SD?	41.09569 N, 112.08391 W	41° 5' 44.5" N, 112° 5' 2.1" W
27	200 S. Drain	41.11108 N, 112.10274 W	41° 6' 39.9" N, 112° 6' 9.9" W
28	300 N. Drain	41.11820 N, 112.10904 W	41° 7' 5.5" N, 112° 6' 32.5" W
29	Unnamed Drainage	41.13245 N, 112.10840 W	41° 7' 56.8" N, 112° 6' 30.2" W
30	Unnamed Drainage	41.13267 N, 112.10689 W	41° 7' 57.6" N, 112° 6' 24.8" W

Table 5-1. Summary Impacts to Waters of the U.S.

Type of Waters of the U.S.	Amount
<i>Wetlands</i>	
Direct impacts within the right-of-way (acres)	
Category I	14.97
Category II	12.61
Category III	15.91
Total	43.49
Wetlands within 300 feet of the right-of-way (acres)	
Total	57.29
<i>Other (non-wetland) Waters</i>	
Streams (linear feet)	4,972
Other Drainages (linear feet)	10,052
Open Waters (acres)	2.44



State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

DEPARTMENT OF TRANSPORTATION

CARLOS M. BRACERAS, P.E.
Executive Director

JASON E. DAVIS, P.E.
Deputy Director of Engineering and Operations

TERIANNE S. NEWELL, P.E.
Deputy Director of Planning and Investment

December 2, 2019

Ms. Lisa Wilson
Region One Director
Utah Department of Transportation
166 West Southwell Street
Ogden, UT 84404

Subject: UDOT Project Number S-0067(14)0, SR-67, West Davis Corridor; Layton Canal Relocation between 400 South and 1900 South in Syracuse, Davis County, Utah (PIN 7176) Environmental Impact Statement Re-evaluation #3

Dear Ms. Wilson:

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). The subject of this Re-evaluation is a change to the Layton Canal right-of-way between 400 South and 1900 South in Syracuse, Utah.

This memorandum is intended to support a decision regarding whether a supplemental EIS is required pursuant to applicable criteria in FHWA's National Environmental Policy Act (NEPA) regulations. 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." To support that determination, this memorandum summarizes the proposed refinement to the EIS Selected Alternative, discusses changes in the affected environment, and considers whether any of the changes in the project and affected environment require a supplemental EIS. The appendices to this memorandum include the supporting figures 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 the Utah Department of Transportation (UDOT) pursuant to 23 United States Code (USC) Section 327 and a Memorandum of Understanding (MOU) dated January 17, 2017, and executed by FHWA and UDOT. The WDC was excluded from the assignment MOU, and FHWA maintained 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 review (including Re-evaluations) that are required for the WDC following issuance of the ROD. 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 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.

During the EIS process, the WDC was designed to a concept level. Comprehensive engineering and detailed studies were not conducted as part of the EIS process. UDOT had assumed, based on preliminary discussion with the Weber Basin Water Conservancy District (WBWCD) and the Bureau of Reclamation (BOR), that the right-of-way width for the relocated Layton Canal could be reduced at local road crossings to minimize impacts to adjacent private properties. After the publication of the WDC ROD, UDOT met again with WBWCD and BOR to discuss the cross-section design at these locations. WBWCD and BOR expressed concerns that the limited right-of-way for the Layton Canal in the EIS Selected Alternative would not allow adequate space for a future pipe installation or for reconstructing and/or maintaining the Layton Canal. These construction and maintenance concerns were primarily due to the close proximity of the Layton Canal to the approximately 25-foot-high retaining walls needed for the WDC to cross 700 South and 3000 West and the close proximity and reduced right-of-way width at the Antelope Drive crossing proposed as part of the EIS Selected Alternative.

Additionally, after the publication of the WDC ROD, UDOT has undertaken a State Environmental Study for the proposed UDOT State Route (S.R.) 193 extension near 400 South. The relocated Layton Canal also needed to be modified to account for the S.R. 193 extension project. The changes proposed as part of the Refined Selected Alternative were made based on this feedback.

Through these discussions, UDOT determined that it would need to maintain the existing 100-foot-wide right-of-way for the relocated Layton Canal as part of the WDC Project and provide as much as or more acreage for the Layton Canal compared to existing conditions.

The figures in Appendix A show the project location and the Refined Selected Alternative's footprint and identify the areas of new impact for this Re-evaluation.

This Re-evaluation analyzes the impacts of the Refined Selected Alternative resulting from the final design changes to the relocation of the Layton Canal. Table 1 summarizes the changes between the EIS Selected Alternative and the Refined Selected Alternative.

Table 1. Summary of Changes in the Re-evaluation

EIS Selected Alternative	Refined Selected Alternative
<ul style="list-style-type: none"> • Did not assume that the S.R. 193 extension project would be constructed. • Assumed that the relocated Layton Canal would cross 700 South in Syracuse in a 50-foot-wide right-of-way shared with UDOT's WDC right-of-way. • Assumed that the relocated Layton Canal would cross 3000 West in Syracuse in a 50-foot-wide right-of-way shared with UDOT's WDC right-of-way. • Assumed that the relocated Layton Canal would follow 3000 West to the south, then go southeast and cross Antelope Drive immediately west of the WDC and east of the Syracuse Arts Academy in a 50-foot-wide right-of-way. 	<ul style="list-style-type: none"> • To avoid conflicts with the proposed UDOT S.R. 193 extension project, the relocated Layton Canal will be east of the proposed northbound on and off ramps from S.R. 193 to the WDC between 400 South and 600 South. • The relocated Layton Canal will cross 700 South in Syracuse in a 100-foot-wide right-of-way that is not shared with the WDC right-of-way. • The relocated Layton Canal will cross the WDC south of 700 South at a 45-degree angle crossing to accommodate future maintenance. • The relocated Layton Canal will cross 3000 West in Syracuse in a 100-foot-wide right-of-way that is not shared with the WDC right-of-way. • The relocated Layton Canal will parallel the west side of the WDC southbound on and off ramps between 3000 West and about 1900 South in Syracuse in a 100-foot-wide right-of-way. • The relocated Layton Canal will cross the WDC at about 1900 South and will connect to the existing Layton Canal alignment. • To avoid conflicts with utilities or existing structures, there will be short sections of the canal at the WDC crossings south of 700 South, north of St. Andrews Drive, and east of the Syracuse Arts Academy where the Layton Canal right-of-way will be less than 100 feet wide. UDOT has provided additional acreage at both crossings of the WDC so that BOR will be receiving more acreage than it currently administers and to ensure that BOR and WBWCD can adequately maintain the relocated Layton Canal.

Re-evaluation Analysis

Following is a summary of the main components of the EIS and any changes associated with each component due to change in the Layton Canal relocation 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 Refined Selected Alternative do not change the original project concept or project purpose; therefore, the purpose of and need for the project remain valid.

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

The changes with the Refined Selected Alternative described above in 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 Selected Alternative in the ROD.

Environmental Consequences Analysis

UDOT has evaluated the expected impacts to the natural and built environment from the Refined Selected Alternative and evaluated any changes and new information against the analysis in the Final EIS. No substantial changes would occur to the natural or built environment as a result of the Refined Selected Alternative 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 for the EIS Selected Alternative.

As part of the re-evaluation process, UDOT reviewed the original biological resources, waters of the United States, cultural resources, and Section 4(f) analyses. An evaluation of the resource impacts that have changed is provided below.

Land Use Impacts

The Refined Selected Alternative would impact 1.3 more acres for the relocated Layton Canal compared to the EIS Selected Alternative. The increase in impacted acreage is due primarily to the Refined Selected Alternative's relocated Layton Canal providing the full 100-foot-wide right-of-way and additional maintenance areas at the crossings of the WDC that were not provided with the EIS Selected Alternative's relocated Layton Canal. The locations of land use impacts would change with the Refined Selected Alternative in a few locations (see Appendix A). The Layton Canal would be placed below the surface in a pipe, and land above the canal would be revegetated and managed by WBWCD. The land use impacts of the Refined Selected Alternative would be similar to those stated in the Final EIS for the EIS Selected Alternative, and the result of the analysis would not change.

Community Impacts

The Refined Selected Alternative would require UDOT to relocate an additional six residential properties that were not identified as relocations or potential relocations as part of the EIS Selected Alternative. The additional six residential properties are needed to accommodate the Refined Selected Alternative's relocated Layton Canal where it crosses 700 South and 3000 West in Syracuse. The addresses of these six residential properties are:

- 3370 West 700 South, Syracuse
- 3361 West 700 South, Syracuse
- 3383 West 700 South, Syracuse
- 1341 South Gleneagles Drive, Syracuse
- 3013 West Tryall Drive, Syracuse
- 1384 South 3000 West, Syracuse

UDOT has met with all affected property owners, and all new impacts to private property would occur on parcels for which the property owners are willing sellers. By November 2019, UDOT has purchased or is in the process of purchasing all six of these additional properties. The previous owners of most of the impacted properties listed above have already been relocated by UDOT. The community impacts of the Refined Selected Alternative would be similar to those stated in the Final EIS for the EIS Selected Alternative, and the result of the analysis would not change.

UDOT would provide just compensation to the property owners of the properties listed above pursuant to 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.

Ecosystem Resources Impacts

The Refined Selected Alternative would result in a decrease of 1.56 acres of wetland impacts compared to the wetland impacts for the EIS Selected Alternative. The reduction of 1.56 acres of wetland impacts are due to changes

Course in Syracuse. Some of the reduction in wetland impacts are due to areas that were previously being impacted by the EIS Selected Alternative's relocated Layton Canal between 3000 West and Bluff Road also being impacted by WDC features (park-and-ride lot and detention basin) in these areas. WDC design changes in this area are being evaluated with a separate re-evaluation. The reduction of 1.56 acres of wetland impacts are being accounted for in the WDC Clean Water Act Section 404 permit application and mitigation plan. The wetland impacts of the Refined Selected Alternative would be similar to those analyzed in the Final EIS for the EIS Selected Alternative, and the result of the analysis would not change. Updated wildlife and wetlands clearance memoranda are provided in Appendix B.

Environmental Consequences Summary

Table 2 below summarizes the changes to the environmental impacts from the Refined Selected Alternative compared to the EIS Selected Alternative.

Table 2. Summary of Re-evaluation Analysis

Environmental Resource	Changed?		Comments
	Yes	No	
Land Use	X		The Refined Selected Alternative would impact 1.3 more acres of land for the relocated Layton Canal compared to the EIS Selected Alternative.
Farmland		X	No changes identified.
Community Impacts	X		The Refined Selected Alternative would require the acquisition of an additional six residential properties compared to the EIS Selected Alternative.
Environmental Justice		X	No changes identified.
Transportation		X	No changes identified.
Economics		X	No changes identified.
Joint Development		X	No changes identified.
Pedestrian and Bicyclist Issues		X	No changes identified.
Air Quality		X	No changes identified.
Noise		X	No changes identified.
Water Quality		X	No changes identified.
Ecosystem Resources	X		The Refined Selected Alternative would have a decrease of 1.56 acres of wetland impact compared to the EIS Selected Alternative. These changes to wetland impacts are being accounted for in the WDC Clean Water Act Section 404 permit and mitigation plan. Updated wetland and wildlife clearance memoranda are provided in Appendix B.
Floodplains		X	No changes identified.
Historic, Archaeological, and Paleontological Resources		X	No changes identified.
Hazardous Waste		X	No changes identified.
Visual Resources		X	No changes identified.
Energy		X	No changes identified.
Construction Impacts		X	No changes identified.

Environmental Resource	Changed?		Comments
	Yes	No	
Indirect Effects		X	No changes identified.
Cumulative Impacts		X	No changes identified.
Permits, Reviews, and Approvals		X	No changes identified.
Section 4(f) Resources		X	No changes identified.
Sequencing		X	No changes identified.

Public Involvement Efforts

Based on input from UDOT Environmental Services and Region leadership, no additional formal public involvement opportunities were provided. The project team maintained a project hotline and answered questions when they were submitted.

UDOT staff have met with Syracuse City, West Point City, and the affected property owners to explain the reasons for the change to the EIS Selected Alternative and answer questions about the property acquisition process. All new impacts to private property would occur on parcels for which the property owners are willing sellers.

The project team has met with and is continuing to meet with local government staff and officials and other stakeholders to address issues and concerns identified during the design process.

Conclusion

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

UDOT has evaluated the expected impacts to the natural and built environment from the Refined Selected Alternative and evaluated any changes and new information against the analysis in the Final EIS. No substantial changes would occur to the natural or built environment as a result of the Refined Selected Alternative 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 for the EIS Selected Alternative.

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 WDC 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,



Brandon D. Weston
UDOT Environmental Services Director

Enclosures

EIS Re-evaluation Approval

UDOT Project Number S-0067(14)0, West Davis Corridor, Layton Canal Relocation between 400 South and 1900 South, Syracuse, Davis County, Utah (PIN 7176).

Lisa Wilson

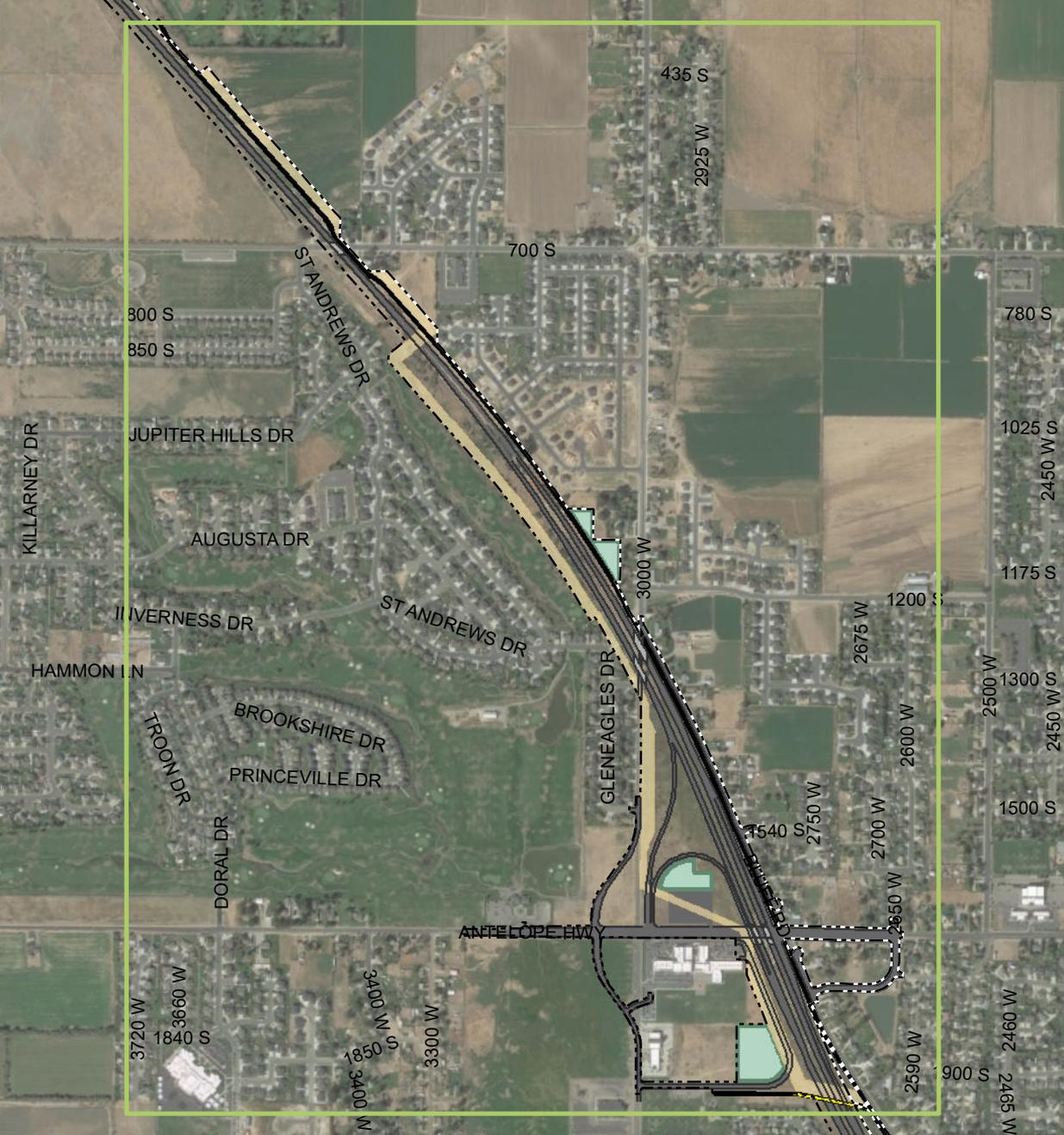
12/05/2019

Lisa J. Wilson, P.E.
Region One Director
Utah Department of Transportation

Date

APPENDIX A

Figures



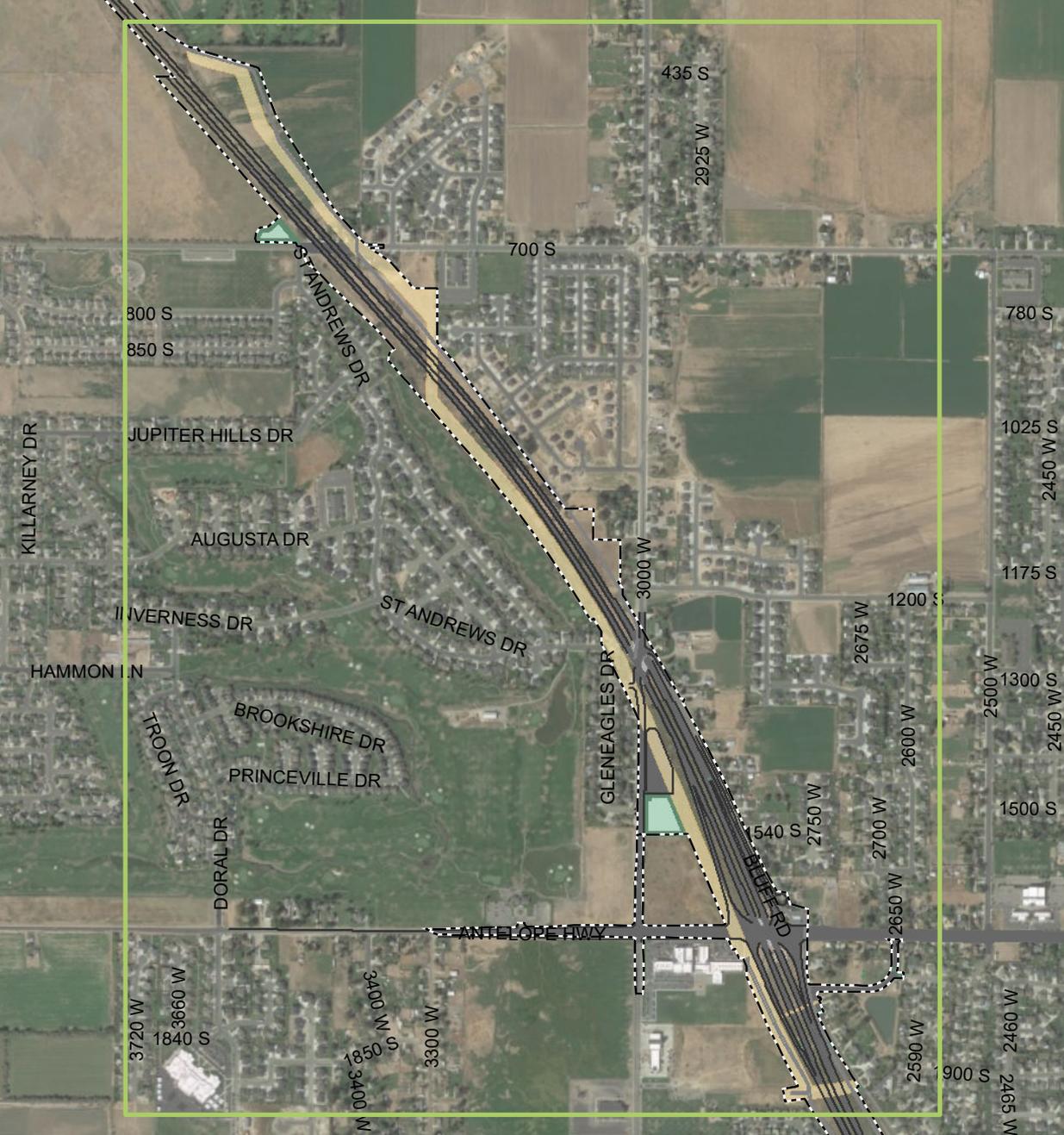
**WEST DAVIS
CORRIDOR**

LEGEND

- Re-evaluation Area
- FEIS Direct Impact Area
- Detention/ Retention Basins
- FEIS Layton Canal Relocation Boundary

**WDC Re-Evaluation
Layton Canal
WDC FEIS Preferred Alternative**



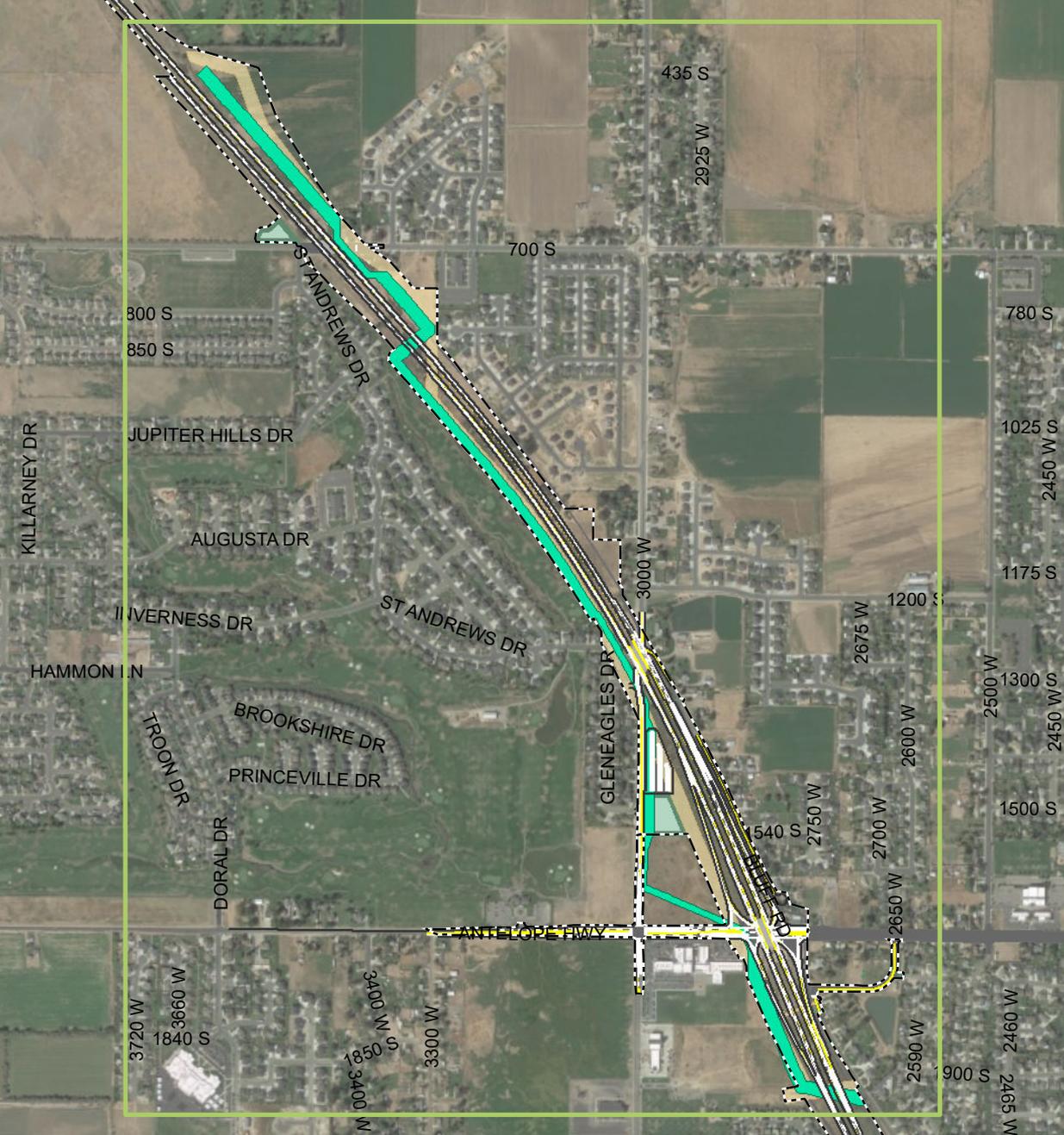


LEGEND

- Re-evaluation Area
- RFP Direct Impact
- Detention/ Retention Basins
- RFP Layton Canal Relocation Boundary

**WDC Re-Evaluation
Layton Canal
RFP Refined Selected Alternative**





LEGEND

- Re-evaluation Area
- RFP Direct Impact
- Detention/Retention Basins
- RFP Layton Canal Relocation Boundary
- FEIS Layton Canal Relocation Boundary

**WDC Re-Evaluation
Layton Canal
Design Changes**



APPENDIX B

Clearance Memoranda



State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

DEPARTMENT OF TRANSPORTATION

CARLOS M. BRACERAS, P.E.
Executive Director

SHANE M. MARSHALL, P.E.
Deputy Director of Engineering and Operations

TERIANNE S. NEWELL, P.E.
Deputy Director of Planning and Investment

November 19, 2019

Mr. Chris Merritt
Deputy State Historic Preservation Officer
Utah Division of State History
300 South Rio Grande
Salt Lake City, Utah 84101-1182

RE: UDOT Project No. SP-0067(14)0; West Davis Corridor Project (PIN 7176); Layton Canal Relocation between 400 South and 1900 South in Syracuse, Davis County, Utah
Environmental Impact Statement Re-evaluation #3

Dear Mr. Merritt:

This letter constitutes a revision to the Utah Department of Transportation's (UDOT) Section 106 Determinations of Eligibility (DOE) and Findings of Effect (FOE) for historic properties in the area of potential effects (APE) for the proposed West Davis Corridor (WDC) project. The proposed WDC project comprises regional transportation mobility improvements in western Davis and Weber counties, Utah, and UDOT completed an Environmental Impact Statement (EIS) for this project in September 2017. This letter also includes revised Department of Transportation Act Section 4(f) impact determinations for the current APE.

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being or have been carried out by the Utah Department of Transportation (UDOT) pursuant to 23 United States Code (USC) Section 327 and a Memorandum of Understanding (MOU) dated January 17, 2017, and executed by FHWA and UDOT. The WDC was excluded from the assignment MOU, and FHWA maintained 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 review (including re-evaluations) that are required for the WDC following issuance of the ROD. Therefore, this Re-evaluation is being processed in accordance with the assignment MOU, and UDOT is the agency responsible for approving the Re-evaluation.

In accordance with the *Third Amended Programmatic Agreement Among the Federal Highway Administration, the Utah Department of Transportation, the Utah State Historic Preservation Officer, and the Advisory Council on Historic Preservation 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 (16 United States Code [USC] 470 et seq.); and Utah Code Annotated 9-8-404, FHWA and UDOT are taking 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 and its effects. This submission is in compliance with Section 4(f) of the Department of Transportation Act of 1966, 23 USC 138 (as amended) and 23 USC 303 (as amended).

The original DOE, FOE, and Section 4(f) determinations were submitted to the Utah Division of State History (UDSH) on December 10, 2012 (UDSH Case No. 13-0029), for an APE that included all alternative alignments to be considered during the National Environmental Policy Act (NEPA) process. Those alternatives were refined and a final FOE for the preferred alternative was submitted on April 27, 2017.

UNDERTAKING DESCRIPTION

During the EIS process, the WDC was designed to a conceptual level. Comprehensive engineering and detailed studies were not conducted as part of the EIS process. UDOT had assumed, based on preliminary discussion with the Weber Basin Water Conservancy District (WBWCD) and the Bureau of Reclamation (BOR), that the right-of-way width for the relocated Layton Canal could be reduced at local road crossings to minimize impacts to adjacent private properties. After the publication of the WDC ROD, UDOT met again with WBWCD and BOR to discuss the cross-section design at these locations. WBWCD and BOR expressed concerns that the limited right-of-way for the Layton Canal in the EIS Selected Alternative would not allow adequate space for a future pipe installation or for reconstructing and/or maintaining the Layton Canal. These construction and maintenance concerns were primarily due to the close proximity of the Layton Canal to the approximately 25-foot-high retaining walls needed for the WDC to cross 700 South and 3000 West and the close proximity and reduced right-of-way width at the Antelope Drive crossing proposed as part of the EIS Selected Alternative.

Additionally, after the publication of the WDC ROD, UDOT has undertaken a State Environmental Study for the proposed UDOT State Route (S.R.) 193 extension near 400 South. The relocated Layton Canal also needed to be modified to account for the S.R. 193 extension project. The changes proposed as part of the Refined Selected Alternative were made based on this feedback.

Through these discussions, UDOT determined that it would need to maintain the existing 100-foot-wide right-of-way for the relocated Layton Canal as part of the WDC Project and provide as much as or more acreage for the Layton Canal compared to existing conditions.

The attached figure shows the project location and the Refined Selected Alternative's footprint (FEIS) and identify the areas of new impact for this Re-evaluation (RFP).

IMPACT ON CULTURAL RESOURCES

None of the previous findings regarding impacts to the Layton Canal (42DV182) have changed due to this reevaluation. The re-evaluation is located within the original WDC survey area and thus no survey for cultural resources was necessary. The Layton Canal has been determined not eligible for the NRHP and that status has not changes as a result of this re-evaluation.

CONSULTATION

In accordance with stipulations outlined in the Section 106 programmatic agreement, FHWA and UDOT initiated consultation with several Native American tribes/bands regarding this undertaking. UDOT also consulted with several other consulting parties, including certified local governments and historical societies and preservation organizations. The results of these consultations are discussed in the previous DOE, FOE, and Section 4(f) determinations letter from December 2012 and 2017. No new concerns have been raised since then by any of these parties.

SUMMARY

To summarize, the Finding of Effect for the WDC Layton Canal Relocation between 400 South and 1900 South in Syracuse, Davis County remains **Finding of No Historic Properties Affected**. The Finding of Effect for the proposed UDOT Project No. SP-067(14)0; West Davis Corridor Project Davis and Weber Counties, Utah, as a whole remains **Adverse Effect**.

Please review this document, and, providing you agree with the determinations 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 Elizabeth Giraud at 801-965-4917 or egiraud@utah.gov.

Sincerely,

Liz Robinson

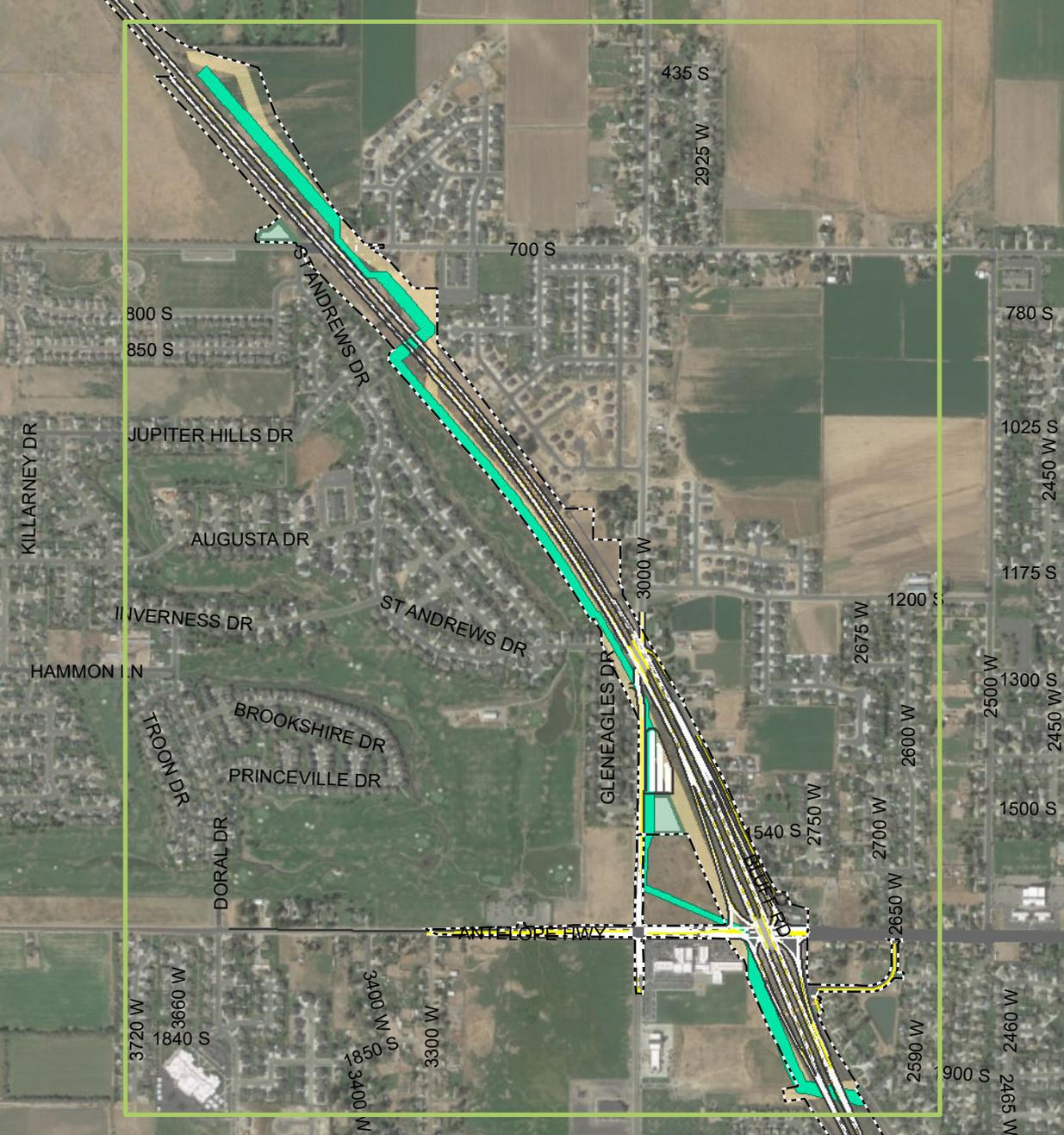
Liz Robinson, M.A., RPA
Cultural Resources Program Manager
UDOT Environmental Services

Elizabeth Giraud

Elizabeth Giraud, AICP
Architectural Historian
UDOT Environmental Services

Enclosures

cc: Randy Jeffries, Project Manager
Elisa Albury, Environmental Manager



LEGEND

- Re-evaluation Area
- RFP Direct Impact
- Detention/Retention Basins
- RFP Layton Canal Relocation Boundary
- FEIS Layton Canal Relocation Boundary

**WDC Re-Evaluation
Layton Canal
Design Changes**





GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Jill Remington Love
Executive Director
Department of
Heritage & Arts



Don Hartley
Director
State Historic Preservation Officer

November 27, 2019

Liz Robinson
Cultural Resources Program Manager
Utah Dept of Transportation (UDOT)
4501 Constitution Blvd
Salt Lake City, UT 84119

RE: PIN 7176_ West Davis Corridor Layton Canal Re-evaluation_SP-0067(14)0

For future correspondence, please reference Case No. 19-2678

Dear Ms Robinson,

The Utah State Historic Preservation Office received your request for our comment on the above-referenced undertaking on November 26, 2019.

We concur with your determination of 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 801-245-7263 or by email at cmerritt@utah.gov.

Sincerely,

Christopher W. Merritt, Ph.D.
Deputy State Historic Preservation Officer



Memorandum

Environmental Services

DATE: November 19, 2019

TO: Kevin Kilpatrick, Transportation NEPA Project Manager, HDR

FROM: Matt Howard, Natural Resources Manager

SUBJECT: S-0067(14)0, SR-67, West Davis Corridor EIS Reevaluations PIN 7176

Project Description

This assessment addresses three reevaluations to the West Davis Corridor EIS. The EIS addressed impacts anticipated based on a concept-level design. Changes proposed and addressed in this evaluation are found in the following table:

EIS Selected Alternative	Refined Selected Alternative
Layton Canal Relocation	
<ul style="list-style-type: none"> • Did not assume that the S.R. 193 extension project would be constructed. • Assumed that the relocated Layton Canal would cross 700 South in Syracuse in a 50-foot-wide right-of-way shared with UDOT's WDC right-of-way. • Assumed that the relocated Layton Canal would cross 3000 West in Syracuse in a 50-foot-wide right-of-way shared with UDOT's WDC right-of-way. • Assumed that the relocated Layton Canal would follow 3000 West to the south, then go southeast and cross Antelope Drive immediately west of the WDC and east of the Syracuse Arts Academy in a 50-foot-wide right-of-way. 	<ul style="list-style-type: none"> • To avoid conflicts with the proposed UDOT S.R. 193 extension project, the relocated Layton Canal will be east of the proposed northbound on and off ramps from S.R. 193 to the WDC between 400 South and 600 South. • The relocated Layton Canal will cross 700 South in Syracuse in a 100-foot-wide right-of-way that is not shared with the WDC right-of-way. • The relocated Layton Canal will cross the WDC south of 700 South at a 45-degree angle crossing to accommodate future maintenance. • The relocated Layton Canal will cross 3000 West in Syracuse in a 100-foot-wide right-of-way that is not shared with the WDC right-of-way. • The relocated Layton Canal will parallel the west side of the WDC southbound on and off ramps between 3000 West and about 1900 South in Syracuse in a 100-foot-wide right-of-way. • The relocated Layton Canal will cross the WDC at about 1900 South and will connect to the existing Layton Canal alignment. • To avoid conflicts with utilities or existing structures, there will be short sections of the canal at the WDC crossings south of 700 South, north of St. Andrews Drive, and east of the Syracuse Arts Academy where the Layton Canal right-of-way will be less than 100 feet wide. UDOT has provided additional acreage at both crossings of the WDC so that BOR will be getting more acreage than it currently administers and to ensure that BOR and WBWCD can adequately maintain the relocated Layton Canal.

Antelope Drive SPUI	
<ul style="list-style-type: none"> • Traffic modeling identified the need for the WDC to be a four-lane freeway with a 250-foot-wide typical section between I-15 and Antelope Drive and a two-lane freeway with a 146-foot-wide typical section between Antelope Drive and 1800 North. • The EIS Selected Alternative transitioned from the four-lane freeway to the two-lane freeway at 3000 West (just north of the WDC Antelope Drive interchange). 	<ul style="list-style-type: none"> • Updated traffic modeling performed for WFRC's 2019 to 2050 RTP showed the need for the WDC to be a four-lane freeway with a 250-foot-wide typical section between I-15 and S.R. 193 and a two-lane freeway with a 146-foot-wide typical section between S.R. 193 and 1800 North. • The Refined Selected Alternative transitions from the four-lane freeway to the two-lane freeway at S.R. 193 (about 400 South in Syracuse).
Four Lanes to SR 193	
<ul style="list-style-type: none"> • Assumed a modified diamond interchange at Antelope Drive. This modified diamond interchange included a loop ramp for the southbound on ramp to WDC. • Assumed that 3000 West in Syracuse would need to be relocated west between 1500 South and 1800 South to provide spacing between the WDC southbound on and off ramps. • Assumed that Bluff Road would have cul-de-sacs on both the north and south sides of Antelope Drive. • Assumed that the Old Emigration Trail would cross Antelope Drive in a grade-separated crossing near the existing Bluff Road. • Assumed that a new connector road and access road to the Syracuse Arts Academy would be built. 	<ul style="list-style-type: none"> • The Antelope Drive interchange will be a SPUI design. • The SPUI design does not require any relocation of 3000 West in Syracuse. Turn lanes and restriping of 3000 West are proposed with the Refined Selected Alternative. • The SPUI design requires two lanes eastbound and westbound through the Antelope Drive/3000 West intersection to accommodate expected traffic. The SPUI design tapers back to one lane eastbound and westbound west of 3000 West. • The SPUI design would make minor modifications to the cul-de-sacs on Bluff Road on both the north and south sides of Antelope Drive. • The SPUI design would shift the location of the grade-separated trail crossing east of the Antelope Drive interchange farther east. • The SPUI design would move the park-and-ride lot farther north on 3000 West. • The SPUI design would not provide a new Syracuse Arts Academy access road. UDOT is compensating for changes in access to the Syracuse Arts Academy through the right-of-way process.

This assessment has been prepared to address potential for occurrence of and impacts to species or habitat listed under the Endangered Species Act (ESA), as well as birds protected by the Migratory Bird Treaty Act (MBTA), and the Bald and Golden Eagle Protection Act (BGEPA). Greater sage-grouse (*Centrocercus urophasianus*), which are protected by Governor's Executive Order EO/2015/002, are also addressed in this memo.

Project Setting

Recent (2016-2018) aerial images show land use in the vicinity of the project area consists of residential development on private ground with some stretches of open space. Vegetation consists of landscaping and what appears to be wetland landscape/irrigated pasture in the interstitial open areas. Elevation in the vicinity of the project areas is +/- 4,200 ft. amsl.

Determinations

Threatened and Endangered Species

The U.S. Fish and Wildlife Service's Information, Planning and Consultation database was consulted for species considered to have potential to occur in the vicinity of the project area. In addition, Utah Natural Heritage Program records of occurrence were reviewed for documentation of species occurrences within the vicinity of the project. Other sources, including recent aerial imagery, USFWS Critical Habitat shapefiles, USGS, topographic data and surficial geology shapefiles from the State of Utah were used in the supporting analysis. No habitat or recent observations are found in the action area, and therefore the project would not result in take of threatened or endangered species.

Species	Designated Critical Habitat	Suitable Habitat	Previous Occurrences	Potential for Occurrence	Rationale
Canada Lynx (<i>Lynx canadensis</i>)	None present	No	None	None	Habitat does not exist within the action areas
Yellow-billed Cuckoo (<i>Coccyzus americanus</i>)	None present	No; species depends on contiguous riparian habitat stands of at least 11 acres	None	None	Suitable riparian habitat is not present in action areas
June Sucker (<i>Chasmistes liorus</i>)	None present	No; species was identified as existing in the project county because of established refuge rescue populations	None	None	Waters in which the species occurs would not be affected by the project modifications

Migratory Birds, Bald and Golden Eagles

No known raptor nests have been documented within 0.5 mile of the project, though some habitat exists in the form of scattered tree stands and power poles. The project takes place where steady traffic noise is present where nesting birds would be acclimated to noise and disturbance. This project would not result in direct or incidental take under the BGEPA, nor would it result in direct or incidental take of species protected under the MBTA.

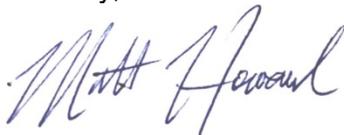
Greater Sage-grouse

A review of recent aerial imagery and Utah Sage-grouse Management Area boundaries shows that the project does not occur within a SGMA or UDWR-identified sage-grouse habitat. The project would not impact greater sage-grouse.

Summary

This assessment satisfies the UDOT's responsibilities under Section 9 of the ESA, the MBTA (50 CFR § 10.12), the BGEPA (16 USC § 668), and Governor's Executive Order EO/2015/002. If additional information or clarification is needed regarding this assessment, please contact me at matthoward@utah.gov.

Sincerely,



Matt Howard
Natural Resource Manager



MEMORANDUM

Date: Wednesday, November 13, 2019

To: Randy Jefferies
UDOT WDC Project Manager

From: Rod Hess
UDOT Senior Landscape Architect

**RE: UDOT WEST DAVIS CORRIDOR - ENVIRONMENTAL REVIEW FOR WATER RESOURCES AND WETLANDS
EIS Re-Evaluation #3 - Layton Canal Relocation**

PROJECT PURPOSE, DESCRIPTION AND SCOPE OF WORK

During the EIS process, the WDC was designed to a concept level. Comprehensive engineering and detailed studies were not conducted as part of the EIS process. UDOT had assumed, based on preliminary discussion with the Weber Basin Water Conservancy District (WBWCD) and the Bureau of Reclamation (BOR), that the right-of-way width for the relocated Layton Canal could be reduced at local road crossings to minimize impacts to adjacent private properties. After the publication of the WDC ROD, UDOT met again with WBWCD and BOR to discuss the cross-section design at these locations. WBWCD and BOR expressed concerns that the limited right-of-way for the Layton Canal in the EIS Selected Alternative would not allow adequate space for a future pipe installation or for reconstructing and/or maintaining the Layton Canal. These construction and maintenance concerns were primarily due to the close proximity of the Layton Canal to the approximately 25-foot-high retaining walls needed for the WDC to cross 700 South and 3000 West and the close proximity and reduced right-of-way width at the Antelope Drive crossing proposed as part of the EIS Selected Alternative.

Additionally, after the publication of the WDC ROD, UDOT has undertaken a State Environmental Study for the proposed UDOT State Route (S.R.) 193 extension near 400 South. The relocated Layton Canal also needed to be modified to account for the S.R. 193 extension project. The changes proposed as part of the Refined Selected Alternative were made based on this feedback.

Through these discussions, UDOT determined that it would need to maintain the existing 100-foot-wide right-of-way for the relocated Layton Canal as part of the WDC Project and provide as much as or more acreage for the Layton Canal compared to existing conditions.

The figures in Appendix A show the project location and the Refined Selected Alternative's footprint and identify the areas of new impact for this Re-evaluation.

This Re-evaluation analyzes the impacts of the Refined Selected Alternative resulting from the final design changes to the relocation of the Layton Canal. Table 1 summarizes the changes between the EIS Selected Alternative and the Refined Selected Alternative.

UDOT Water Resources concurrence:

UDOT has reviewed the findings summarized in this WDC EIS Re-evaluation of the Layton Canal Relocation and provides the following concurrence:

- UDOT concurs with the changes to "Ecosystem Resources" in Table 2 that the changes to the Layton Canal Relocation would have a "decrease" of wetland impacts. The WDC Section 404 permit and mitigation plan should be updated based on these changes.

Table 1. Summary of Changes in the Re-evaluation

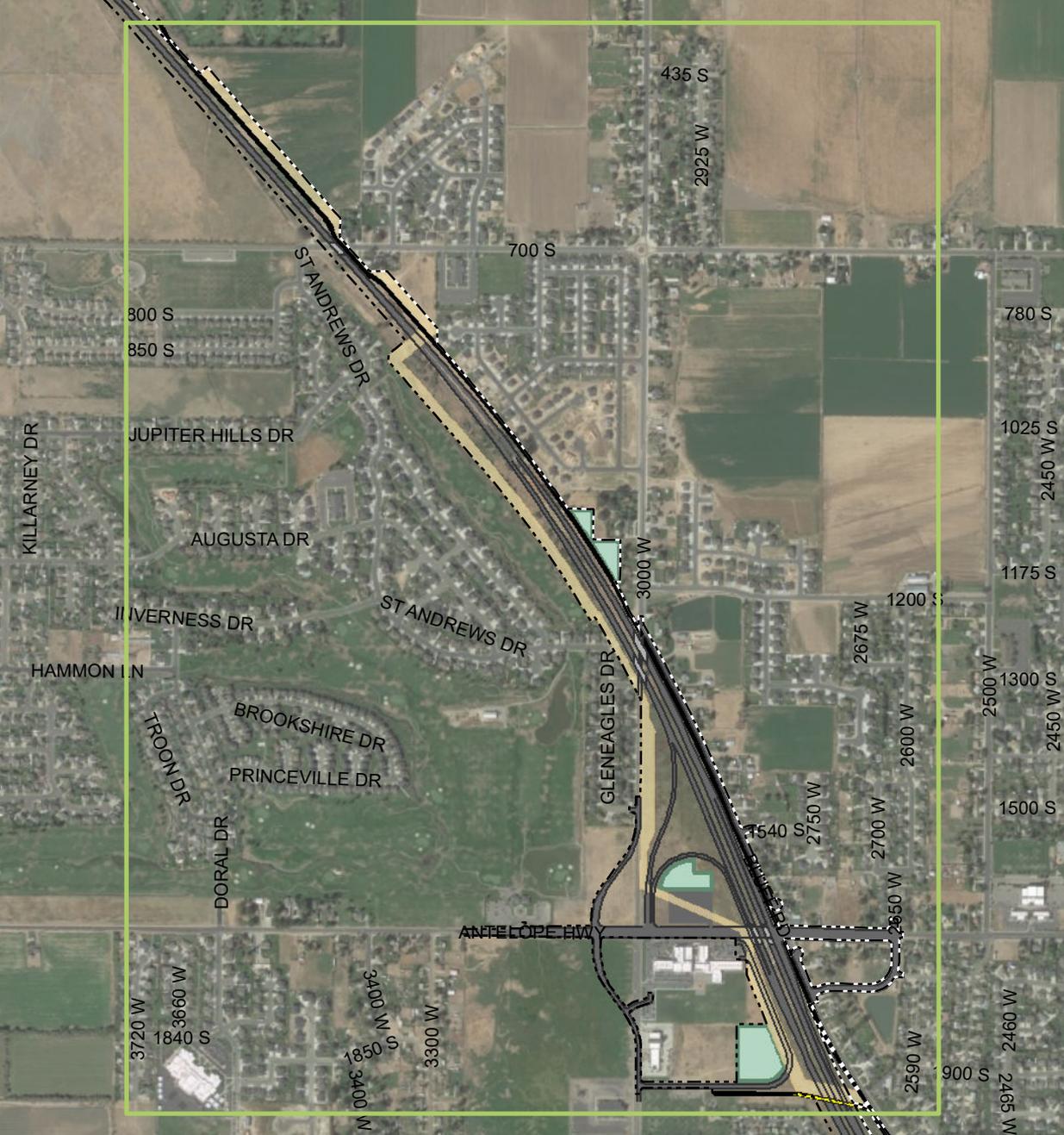
EIS Selected Alternative	Refined Selected Alternative
<ul style="list-style-type: none"> • Did not assume that the S.R. 193 extension project would be constructed. • Assumed that the relocated Layton Canal would cross 700 South in Syracuse in a 50-foot-wide right-of-way shared with UDOT's WDC right-of-way. • Assumed that the relocated Layton Canal would cross 3000 West in Syracuse in a 50-foot-wide right-of-way shared with UDOT's WDC right-of-way. • Assumed that the relocated Layton Canal would follow 3000 West to the south, then go southeast and cross Antelope Drive immediately west of the WDC and east of the Syracuse Arts Academy in a 50-foot-wide right-of-way. 	<ul style="list-style-type: none"> • To avoid conflicts with the proposed UDOT S.R. 193 extension project, the relocated Layton Canal will be east of the proposed northbound on and off ramps from S.R. 193 to the WDC between 400 South and 600 South. • The relocated Layton Canal will cross 700 South in Syracuse in a 100-foot-wide right-of-way that is not shared with the WDC right-of-way. • The relocated Layton Canal will cross the WDC south of 700 South at a 45-degree angle crossing to accommodate future maintenance. • The relocated Layton Canal will cross 3000 West in Syracuse in a 100-foot-wide right-of-way that is not shared with the WDC right-of-way. • The relocated Layton Canal will parallel the west side of the WDC southbound on and off ramps between 3000 West and about 1900 South in Syracuse in a 100-foot-wide right-of-way. • The relocated Layton Canal will cross the WDC at about 1900 South and will connect to the existing Layton Canal alignment. • To avoid conflicts with utilities or existing structures, there will be short sections of the canal at the WDC crossings south of 700 South, north of St. Andrews Drive, and east of the Syracuse Arts Academy where the Layton Canal right-of-way will be less than 100 feet wide. UDOT has provided additional acreage at both crossings of the WDC so that BOR will be getting more acreage than it currently administers and to ensure that BOR and WBWCD can adequately maintain the relocated Layton Canal.

Environmental Consequences Summary

Table 2 below summarizes the changes to the environmental impacts from the Refined Selected Alternative compared to the EIS Selected Alternative.

Table 2. Summary of Re-evaluation Analysis

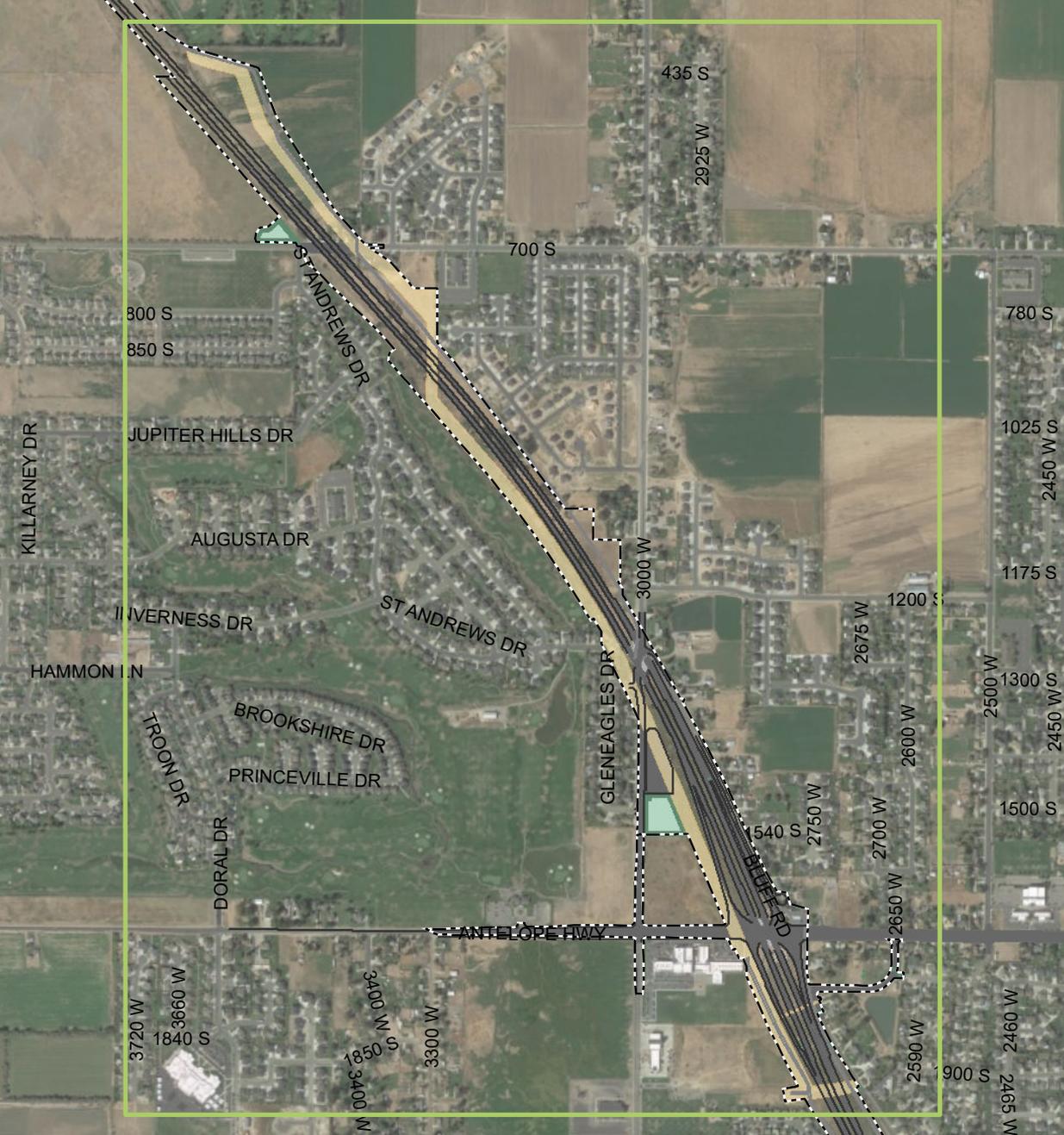
Environmental Resource	Changed?		Comments
	Yes	No	
Land Use	X		The Refined Selected Alternative would impact 1.3 more acres of land for the relocated Layton Canal compared to the EIS Selected Alternative.
Farmland		X	No changes identified.
Community Impacts	X		The Refined Selected Alternative would require the acquisition of an additional six residential properties compared to the EIS Selected Alternative.
Environmental Justice		X	No changes identified.
Transportation		X	No changes identified.
Economics		X	No changes identified.
Joint Development		X	No changes identified.
Pedestrian and Bicyclist Issues		X	No changes identified.
Air Quality		X	No changes identified.
Noise		X	No changes identified.
Water Quality		X	No changes identified.
Ecosystem Resources	X		The Refined Selected Alternative would have a decrease of 1.56 acres of wetland impact compared to the EIS Selected Alternative. These changes to wetland impacts are being accounted for in the WDC Clean Water Act Section 404 permit and mitigation plan.
Floodplains		X	No changes identified.
Historic, Archaeological, and Paleontological Resources		X	No changes identified.
Hazardous Waste		X	No changes identified.
Visual Resources		X	No changes identified.
Energy		X	No changes identified.
Construction Impacts		X	No changes identified.
Indirect Effects		X	No changes identified.
Cumulative Impacts		X	No changes identified.
Permits, Reviews, and Approvals		X	No changes identified.
Section 4(f) Resources		X	No changes identified.
Sequencing		X	No changes identified.



- LEGEND**
- Re-evaluation Area
 - FEIS Direct Impact Area
 - Detention/ Retention Basins
 - FEIS Layton Canal Relocation Boundary

**WDC Re-Evaluation
Layton Canal
WDC FEIS Preferred Alternative**



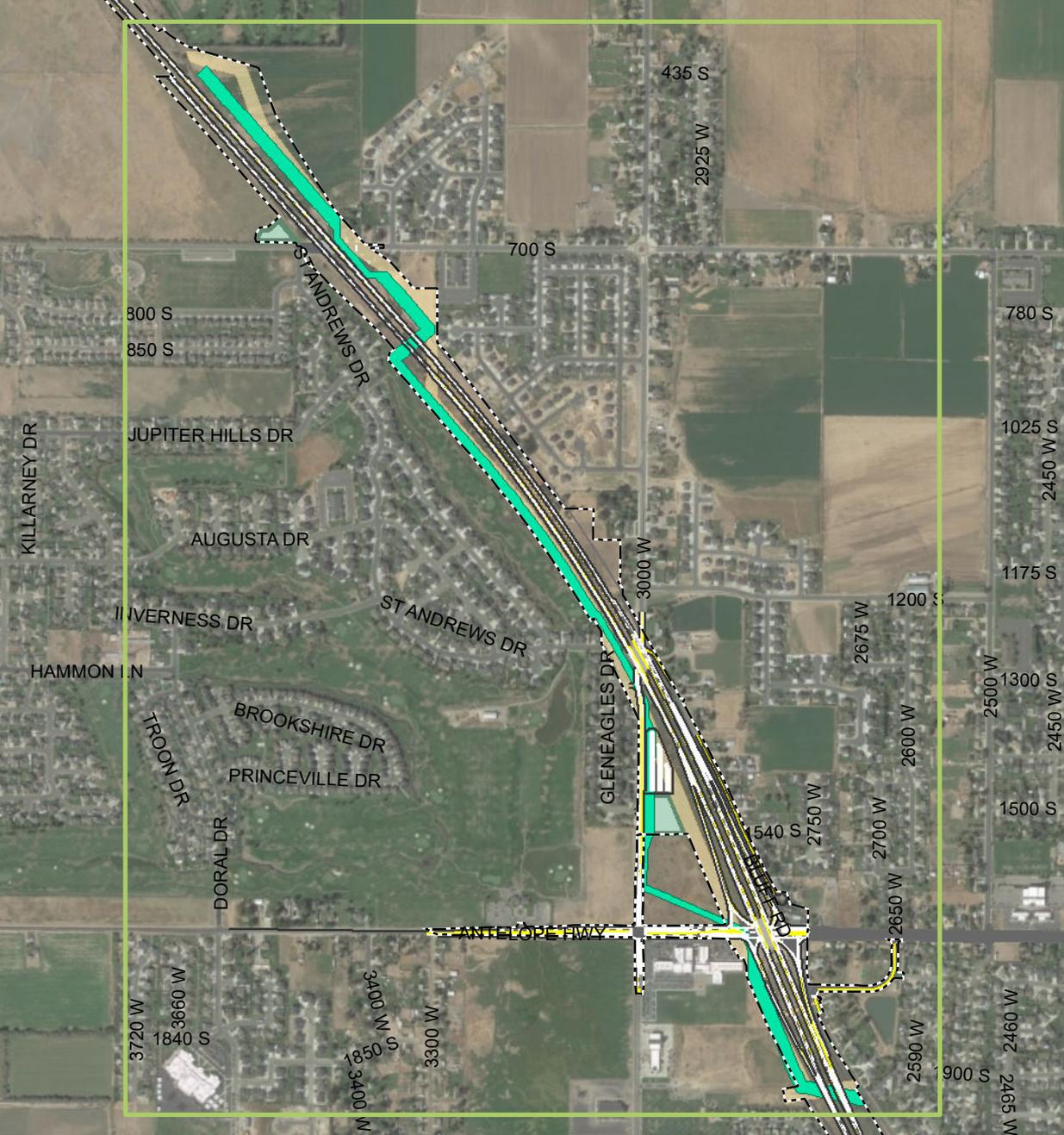


LEGEND

- Re-evaluation Area
- RFP Direct Impact
- Detention/ Retention Basins
- RFP Layton Canal Relocation Boundary

**WDC Re-Evaluation
Layton Canal
RFP Refined Selected Alternative**





LEGEND

- Re-evaluation Area
- RFP Direct Impact
- Detention/ Retention Basins
- RFP Layton Canal Relocation Boundary
- FEIS Layton Canal Relocation Boundary

**WDC Re-Evaluation
Layton Canal
Design Changes**

