Payson Interchange
ENVIRONMENTAL IMPACT STATEMENT
Main Street & Interstate 15

I-15, Payson Main Street Interchange

Final Environmental Impact Statement

Appendices
Volume I

UDOT Project No. F-I15-6(214)251

November 2018

Submitted pursuant to 42 U.S.C. 4332(2)(c) and 49 U.S.C. 303

APPENDIX A
COORDINATION

Cooperating and Participating Agencies

Agency	Type of Invitation	Response
Federal Agencies		
U.S. Army Corps of Engineers (USACE)	Cooperating	Accepted
U.S. Fish and Wildlife Service (USFWS)	Cooperating	Accepted
Advisory Council on Historic Preservation (ACHP)	Cooperating	Accepted
U.S. Environmental Protection Agency (EPA)	Cooperating	Accepted as participating only
Bureau of Indian Affairs	Participating	Declined participation
Federal Emergency Management Agency (FEMA)	Participating	Declined participation
Natural Resources Conservation Service (NRCS)	Participating	Declined participation
State Agencies		
Governor's Office of Planning & Budget, Resource Development Coordinating Committee	Participating	Declined participation
Department of Environmental Quality (DEQ), Division of Air Quality	Participating	No response
DEQ, Division of Water Quality	Participating	No response
DEQ, Division of Environmental Response & Remediation	Participating	Declined participation
Department of Natural Resources (DNR), Division of Parks & Recreation	Participating	No response
DNR, Division of Wildlife Resources	Participating	Declined participation
DNR, Division of Water Resources	Participating	No response
DNR, Division of Water Rights	Participating	Declined participation

Cooperating and Participating Agencies

Agency	Type of Invitation	Response
Utah State Historic Preservation Office (SHPO)	Participating	No response
Regional or Local Governments or Agencies		
Mountainland Association of Governments (MAG)	Participating	No response
Utah Transit Authority (UTA)	Participating	Accepted
Payson City	Participating	Accepted

Tribal and Section 106 Consultation

Native American Tribe or Organization	Response
Ute Indian Tribe of the Uintah and Ouray Reservation	No response
Shoshone-Bannock Tribes of the Fort Hall Reservation	No response
Northwestern Band of the Shoshone Nation	No response
Eastern Shoshone Tribe of the Wind River Reservation	No response
Skull Valley Band of Goshutes	No response
Paiute Indian Tribe of Utah	No response
Cedar Band of Paiute	No response
Shivwits Band of Paiute	No response

Additional Local Historic Outreach

Local Organization
Payson Certified Local Government
Peteetneet Museum and Cultural Arts Center
Daughters of the Utah Pioneers – Utah County Chapter
Payson Historical Society

U.S. Department of Transportation
Federal Highway Administration

UTAH DIVISION

March 4, 2015

2520 West 4700 South, STE 9A
Salt Lake City, UT 84129
(801) 955-3500
FAX (801) 955-3539

In Reply Refer To:
HDA-UT

Mr. Jason Gipson
Chief, Nevada-Utah Regulatory Branch
U.S. Army Corps of Engineers
533 West 2600 South, STE 150
Bountiful, UT 84010

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Cooperating Agency
UDOT Project No. S-I15-6(214)251, PIN 10263

Dear Mr. Gipson:

The Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT), is preparing an environmental impact statement (EIS) for proposed improvements to the Interstate 15 (I-15) Payson Main Street interchange. The EIS will evaluate a reasonable range of alternatives for the interchange, as well as connections from the interchange to the adjacent local road network.

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Your agency has been identified as an agency that may have interest in the project, or expertise and/or jurisdiction regarding issues pertaining to this study. This letter is an invitation to become a cooperating agency. As a cooperating agency, you would participate in the environmental review process; provide information or prepare environmental analyses to support the EIS; and make staff available at the request of FHWA and UDOT (40 CFR 1501.6).

Please respond in writing with an acceptance or denial of this invitation prior to April 2, 2015. In your response, please indicate one of the following:

- Agency accepts invitation to be a cooperating agency
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If your agency elects not to become a cooperating agency, you must decline this invitation in writing. Pursuant to Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) (23 USC 139), any federal agency that declines the invitation to be a cooperating agency must specifically state in its response that the agency:

- Has no jurisdiction or authority with respect to the project;
- Has no expertise or information relevant to the project; and
- Does not intend to submit comments on the project.

You are invited to participate in the agency scoping meeting:

WHEN: Tuesday, March 17, 2015, from 1:00 p.m. to 3:00 p.m.
WHERE: UDOT Region 2 Offices (Milestone Conference Room)
2010 South 2760 West, Salt Lake City, Utah
RSVP: If you plan to attend the meeting, please RSVP by March 13, 2015 to afellows@hwlochner.com.

In addition to the above-listed agency scoping meeting, a public scoping meeting will be held:

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We look forward to your response and to working with you as a cooperating agency. Please feel free to contact me at (801) 955-3527 or elizabeth.cramer@dot.gov if you have any questions or would like to discuss in more detail the project or the roles and responsibilities your agency would have during the preparation of the EIS.

Sincerely,

Arlene Kocher for

Elizabeth Cramer
Area Engineer/Project Manager

Enclosures - Project Area Maps, 2 copies

cc: Brandon Weston, UDOT Environmental
Rich Crosland, UDOT Region 3
Matt Parker, UDOT Project Manager

U.S. Department of Transportation
Federal Highway Administration

UTAH DIVISION

2520 West 4700 South, STE 9A
Salt Lake City, UT 84129
(801) 955-3500
FAX (801) 955-3539

March 4, 2015

In Reply Refer To:
HDA-UT

Mr. Larry Crist
Field Supervisor
U.S. Fish & Wildlife Service
2369 West Orton Circle, STE 50
West Valley City, UT 84119

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Cooperating Agency
UDOT Project No. S-I15-6(214)251, PIN 10263

Dear Mr. Crist:

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Sincerely,

Arlene Kocher for

Elizabeth Cramer
Area Engineer/Project Manager

Enclosures - Project Area Maps, 2 copies

cc: Brandon Weston, UDOT Environmental
Rich Crosland, UDOT Region 3
Matt Parker, UDOT Project Manager

U.S. Department of Transportation
Federal Highway Administration

UTAH DIVISION

March 4, 2015

2520 West 4700 South, STE 9A
Salt Lake City, UT 84129
(801) 955-3500
FAX (801) 955-3539

In Reply Refer To:
HDA-UT

Mr. John M. Fowler
Executive Director
Advisory Council on Historic Preservation
401 F Street NW, STE 308
Washington, DC 20001

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Cooperating Agency
UDOT Project No. S-I15-6(214)251, PIN 10263

Dear Mr. Fowler:

The Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT), is preparing an environmental impact statement (EIS) for proposed improvements to the Interstate 15 (I-15) Payson Main Street interchange. The EIS will evaluate a reasonable range of alternatives for the interchange, as well as connections from the interchange to the adjacent local road network.

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Sincerely,

Arlene Kocher for

Elizabeth Cramer
Area Engineer/Project Manager

Enclosures - Project Area Maps, 2 copies

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Rich Crosland, UDOT Region 3
Matt Parker, UDOT Project Manager

U.S. Department
of Transportation
Federal Highway Administration

UTAH DIVISION

**2520 West 4700 South, STE 9A
Salt Lake City, UT 84129
(801) 955-3500
FAX (801) 955-3539**

March 4, 2015

In Reply Refer To:
HDA-UT

Mr. Shaun McGrath
Regional Administrator
U.S. Environmental Protection Agency
1595 Wynkoop Street
Denver, CO 80202

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Cooperating Agency
UDOT Project No. S-I15-6(214)251, PIN 10263

Dear Mr. McGrath:

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Elizabeth Cramer
Area Engineer/Project Manager

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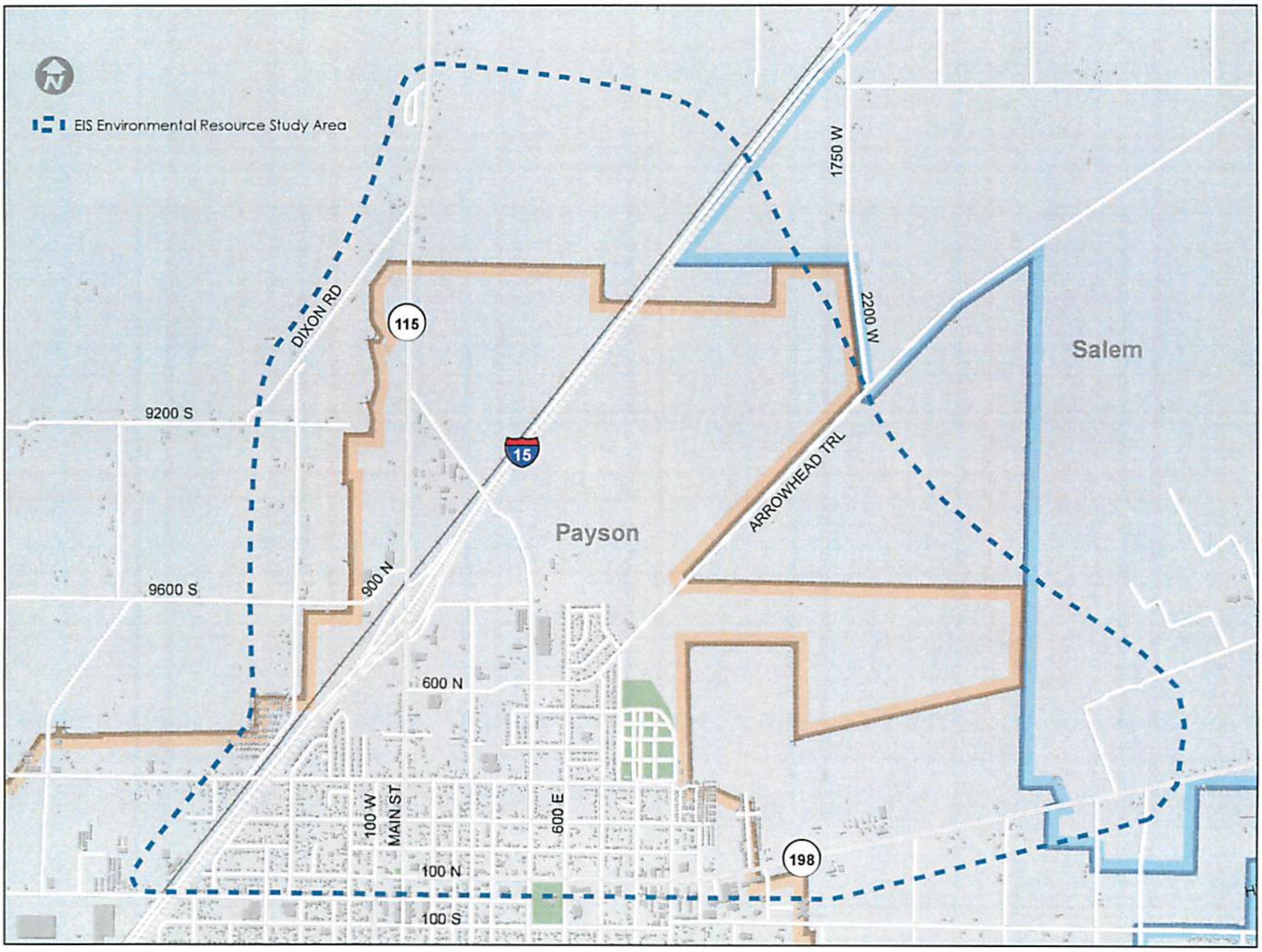
Project Area

I-15 Payson Main Street Interchange Environmental Impact Statement

UDOT Project No. S-I15-6(214)251, PIN 10263

Environmental Resource Study Area
I-15 Payson Main Street Interchange Environmental Impact Statement
UDOT Project No. S-I15-6(214)251, PIN 10263



U.S. Department of Transportation
Federal Highway Administration

UTAH DIVISION

2520 West 4700 South, STE 9A
Salt Lake City, UT 84129
(801) 955-3500
FAX (801) 955-3539

March 4, 2015

In Reply Refer To:
HDA-UT

Mr. Bryan Bowker
Regional Director
Bureau of Indian Affairs
2600 North Central Avenue
Phoenix, AZ 85004

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
UDOT Project No. S-I15-6(214)251, PIN 10263

Dear Mr. Bowker:

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Sincerely,

Arlene Kecher for

Elizabeth Cramer
Area Engineer/Project Manager

Enclosures - Project Area Maps, 2 copies

cc: Brandon Weston, UDOT Environmental
Rich Crosland, UDOT Region 3
Matt Parker, UDOT Project Manager

U.S. Department of Transportation
Federal Highway Administration

UTAH DIVISION

2520 West 4700 South, STE 9A
Salt Lake City, UT 84129
(801) 955-3500
FAX (801) 955-3539

March 4, 2015

In Reply Refer To:
HDA-UT

Ms. Sharon Loper
Acting Regional Administrator
Federal Emergency Management Agency
Denver Federal Center, Building 710
P.O. Box 25267
Denver, CO 80255

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
UDOT Project No. S-I15-6(214)251, PIN 10263

Dear Ms. Loper:

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Sincerely,

Arlene Kocher for

Elizabeth Cramer
Area Engineer/Project Manager

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Matt Parker, UDOT Project Manager

U.S. Department of Transportation
Federal Highway Administration

UTAH DIVISION

2520 West 4700 South, STE 9A
Salt Lake City, UT 84129
(801) 955-3500
FAX (801) 955-3539

March 4, 2015

In Reply Refer To:
HDA-UT

Mr. David Brown
State Conservationist
Natural Resources Conservation Service
Wallace F. Bennett Federal Building
125 South Sate Street, Room 4010
Salt Lake City, UT 84138

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
UDOT Project No. S-I15-6(214)251, PIN 10263

Dear Mr. Brown:

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Arlene Kocher for

Elizabeth Cramer
Area Engineer/Project Manager

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U.S. Department of Transportation
Federal Highway Administration

UTAH DIVISION

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March 4, 2015

In Reply Refer To:
HDA-UT

Ms. Sindy Smith
Acting Coordinator
Governor's Office of Planning & Budget,
Resource Development Coordinating Committee
Utah State Capitol
Suite 150 – PO Box 132210
Salt Lake City, UT 84114

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
UDOT Project No. S-I15-6(214)251, PIN 10263

Dear Ms. Smith:

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- Does not intend to submit comments on the project.

You are invited to participate in the agency scoping meeting:

WHEN: Tuesday, March 17, 2015, from 1:00 p.m. to 3:00 p.m.

WHERE: UDOT Region 2 Offices (Milestone Conference Room)
2010 South 2760 West, Salt Lake City, Utah

RSVP: If you plan to attend the meeting, please RSVP by March 13, 2015 to afellows@hwlochner.com.

In addition to the above-listed agency scoping meeting, a public scoping meeting will be held:

WHEN: Thursday, March 19, 2015, from 5:00 p.m. to 7:00 p.m.

WHERE: Clarion Event Center, 463 East 100 North, Payson, Utah

If you elect not be a participating agency, we would still like to receive your input and comments regarding the project.

We look forward to your response and to working with you as a participating agency. Please feel free to contact me at (801) 955-3527 or elizabeth.cramer@dot.gov if you have any questions or would like to discuss in more detail the project or the roles and responsibilities your agency would have during the preparation of the EIS.

Sincerely,

Arlene Kocher for

Elizabeth Cramer
Area Engineer/Project Manager

Enclosures - Project Area Maps, 2 copies

cc: Brandon Weston, UDOT Environmental
Rich Crosland, UDOT Region 3
Matt Parker, UDOT Project Manager

U.S. Department of Transportation
Federal Highway Administration

UTAH DIVISION

2520 West 4700 South, STE 9A
Salt Lake City, UT 84129
(801) 955-3500
FAX (801) 955-3539

March 4, 2015

In Reply Refer To:
HDA-UT

Mr. Bryce Bird
Director
Utah Department of Environmental Quality, Division of Air Quality
PO Box 144820
Salt Lake City, UT 84114

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
UDOT Project No. S-I15-6(214)251, PIN 10263

Dear Mr. Bird:

The Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT), is preparing an environmental impact statement (EIS) for proposed improvements to the Interstate 15 (I-15) Payson Main Street interchange. The EIS will evaluate a reasonable range of alternatives for the interchange, as well as connections from the interchange to the adjacent local road network.

Alternatives under consideration include relocating the existing interchange, modifying the existing interchange in its current location, and any other feasible alternatives identified through the scoping process. This project will address such needs as traffic operations and safety issues on the I-15 Main Street interchange, and future transportation needs based on future growth projections and development.

Your agency has been identified as an agency that may have interest in the project. This letter is an invitation to become a participating agency. As a participating agency, you would participate in the environmental review process and make staff available at the request of FHWA and UDOT (40 CFR 1501.6).

Please respond in writing with an acceptance or denial of this invitation prior to April 2, 2015. In your response, please indicate one of the following:

- Agency accepts invitation to be a participating agency
- Agency declines invitation to participate in this project as a participating agency

If your agency elects not to become a participating agency, you must decline this invitation in writing. Pursuant to Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation

Equity Act: A Legacy for Users (SAFETEA-LU) (23 USC 139), any federal agency that declines the invitation to be a participating agency must specifically state in its response that the agency:

- Has no jurisdiction or authority with respect to the project;
- Has no expertise or information relevant to the project; and
- Does not intend to submit comments on the project.

You are invited to participate in the agency scoping meeting:

WHEN: Tuesday, March 17, 2015, from 1:00 p.m. to 3:00 p.m.
WHERE: UDOT Region 2 Offices (Milestone Conference Room)
2010 South 2760 West, Salt Lake City, Utah
RSVP: If you plan to attend the meeting, please RSVP by March 13, 2015 to afellows@hwlochner.com.

In addition to the above-listed agency scoping meeting, a public scoping meeting will be held:

WHEN: Thursday, March 19, 2015, from 5:00 p.m. to 7:00 p.m.
WHERE: Clarion Event Center, 463 East 100 North, Payson, Utah

If you elect not be a participating agency, we would still like to receive your input and comments regarding the project.

We look forward to your response and to working with you as a participating agency. Please feel free to contact me at (801) 955-3527 or elizabeth.cramer@dot.gov if you have any questions or would like to discuss in more detail the project or the roles and responsibilities your agency would have during the preparation of the EIS.

Sincerely,

Arlene Kocher for

Elizabeth Cramer
Area Engineer/Project Manager

Enclosures - Project Area Maps, 2 copies

cc: Brandon Weston, UDOT Environmental
Rich Crosland, UDOT Region 3
Matt Parker, UDOT Project Manager

U.S. Department
of Transportation
Federal Highway
Administration

UTAH DIVISION

2520 West 4700 South, STE 9A
Salt Lake City, UT 84129
(801) 955-3500
FAX (801) 955-3539

March 4, 2015

In Reply Refer To:
HDA-UT

Mr. Walt Baker
Director
Utah Department of Environmental Quality, Division of Water Quality
PO Box 144870
Salt Lake City, UT 84114

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
UDOT Project No. S-I15-6(214)251, PIN 10263

Dear Mr. Baker:

The Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT), is preparing an environmental impact statement (EIS) for proposed improvements to the Interstate 15 (I-15) Payson Main Street interchange. The EIS will evaluate a reasonable range of alternatives for the interchange, as well as connections from the interchange to the adjacent local road network.

Alternatives under consideration include relocating the existing interchange, modifying the existing interchange in its current location, and any other feasible alternatives identified through the scoping process. This project will address such needs as traffic operations and safety issues on the I-15 Main Street interchange, and future transportation needs based on future growth projections and development.

Your agency has been identified as an agency that may have interest in the project. This letter is an invitation to become a participating agency. As a participating agency, you would participate in the environmental review process and make staff available at the request of FHWA and UDOT (40 CFR 1501.6).

Please respond in writing with an acceptance or denial of this invitation prior to April 2, 2015. In your response, please indicate one of the following:

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Equity Act: A Legacy for Users (SAFETEA-LU) (23 USC 139), any federal agency that declines the invitation to be a participating agency must specifically state in its response that the agency:

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- Does not intend to submit comments on the project.

You are invited to participate in the agency scoping meeting:

WHEN: Tuesday, March 17, 2015, from 1:00 p.m. to 3:00 p.m.
WHERE: UDOT Region 2 Offices (Milestone Conference Room)
2010 South 2760 West, Salt Lake City, Utah
RSVP: If you plan to attend the meeting, please RSVP by March 13, 2015 to afellows@hwlochner.com.

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WHEN: Thursday, March 19, 2015, from 5:00 p.m. to 7:00 p.m.
WHERE: Clarion Event Center, 463 East 100 North, Payson, Utah

If you elect not be a participating agency, we would still like to receive your input and comments regarding the project.

We look forward to your response and to working with you as a participating agency. Please feel free to contact me at (801) 955-3527 or elizabeth.cramer@dot.gov if you have any questions or would like to discuss in more detail the project or the roles and responsibilities your agency would have during the preparation of the EIS.

Sincerely,

Arlene Kocher for

Elizabeth Cramer
Area Engineer/Project Manager

Enclosures - Project Area Maps, 2 copies

cc: Brandon Weston, UDOT Environmental
Rich Crosland, UDOT Region 3
Matt Parker, UDOT Project Manager

U.S. Department of Transportation
Federal Highway Administration

UTAH DIVISION

2520 West 4700 South, STE 9A
Salt Lake City, UT 84129
(801) 955-3500
FAX (801) 955-3539

March 4, 2015

In Reply Refer To:
HDA-UT

Mr. Brent Everett
Director
Utah Department of Environmental Quality,
Division of Environmental Response & Remediation
PO Box 144840
Salt Lake City, UT 84114

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
UDOT Project No. S-I15-6(214)251, PIN 10263

Dear Mr. Everett:

The Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT), is preparing an environmental impact statement (EIS) for proposed improvements to the Interstate 15 (I-15) Payson Main Street interchange. The EIS will evaluate a reasonable range of alternatives for the interchange, as well as connections from the interchange to the adjacent local road network.

Alternatives under consideration include relocating the existing interchange, modifying the existing interchange in its current location, and any other feasible alternatives identified through the scoping process. This project will address such needs as traffic operations and safety issues on the I-15 Main Street interchange, and future transportation needs based on future growth projections and development.

Your agency has been identified as an agency that may have interest in the project. This letter is an invitation to become a participating agency. As a participating agency, you would participate in the environmental review process and make staff available at the request of FHWA and UDOT (40 CFR 1501.6).

Please respond in writing with an acceptance or denial of this invitation prior to April 2, 2015. In your response, please indicate one of the following:

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If your agency elects not to become a participating agency, you must decline this invitation in writing. Pursuant to Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) (23 USC 139), any federal agency that declines the invitation to be a participating agency must specifically state in its response that the agency:

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WHEN: Tuesday, March 17, 2015, from 1:00 p.m. to 3:00 p.m.
WHERE: UDOT Region 2 Offices (Milestone Conference Room)
2010 South 2760 West, Salt Lake City, Utah
RSVP: If you plan to attend the meeting, please RSVP by March 13, 2015 to afellows@hwlochner.com.

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If you elect not be a participating agency, we would still like to receive your input and comments regarding the project.

We look forward to your response and to working with you as a participating agency. Please feel free to contact me at (801) 955-3527 or elizabeth.cramer@dot.gov if you have any questions or would like to discuss in more detail the project or the roles and responsibilities your agency would have during the preparation of the EIS.

Sincerely,

Arlene Kocher for

Elizabeth Cramer
Area Engineer/Project Manager

Enclosures - Project Area Maps, 2 copies

cc: Brandon Weston, UDOT Environmental
Rich Crosland, UDOT Region 3
Matt Parker, UDOT Project Manager

U.S. Department of Transportation
Federal Highway Administration

UTAH DIVISION

2520 West 4700 South, STE 9A
Salt Lake City, UT 84129
(801) 955-3500
FAX (801) 955-3539

March 4, 2015

In Reply Refer To:
HDA-UT

Mr. Fred Hayes
Director
Utah Department of Natural Resources
Division of Parks & Recreation
1594 West North Temple, STE 116
Salt Lake City, UT 84116

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
UDOT Project No. S-I15-6(214)251, PIN 10263

Dear Mr. Hayes:

The Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT), is preparing an environmental impact statement (EIS) for proposed improvements to the Interstate 15 (I-15) Payson Main Street interchange. The EIS will evaluate a reasonable range of alternatives for the interchange, as well as connections from the interchange to the adjacent local road network.

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Your agency has been identified as an agency that may have interest in the project. This letter is an invitation to become a participating agency. As a participating agency, you would participate in the environmental review process and make staff available at the request of FHWA and UDOT (40 CFR 1501.6).

Please respond in writing with an acceptance or denial of this invitation prior to April 2, 2015. In your response, please indicate one of the following:

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You are invited to participate in the agency scoping meeting:

WHEN: Tuesday, March 17, 2015, from 1:00 p.m. to 3:00 p.m.
WHERE: UDOT Region 2 Offices (Milestone Conference Room)
2010 South 2760 West, Salt Lake City, Utah
RSVP: If you plan to attend the meeting, please RSVP by March 13, 2015 to afellows@hwlochner.com.

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WHEN: Thursday, March 19, 2015, from 5:00 p.m. to 7:00 p.m.
WHERE: Clarion Event Center, 463 East 100 North, Payson, Utah

If you elect not be a participating agency, we would still like to receive your input and comments regarding the project.

We look forward to your response and to working with you as a participating agency. Please feel free to contact me at (801) 955-3527 or elizabeth.cramer@dot.gov if you have any questions or would like to discuss in more detail the project or the roles and responsibilities your agency would have during the preparation of the EIS.

Sincerely,

Arlene Kocher for

Elizabeth Cramer
Area Engineer/Project Manager

Enclosures - Project Area Maps, 2 copies

cc: Brandon Weston, UDOT Environmental
Rich Crosland, UDOT Region 3
Matt Parker, UDOT Project Manager

U.S. Department
of Transportation
**Federal Highway
Administration**

UTAH DIVISION

March 4, 2015

**2520 West 4700 South, STE 9A
Salt Lake City, UT 84129
(801) 955-3500
FAX (801) 955-3539**

In Reply Refer To:
HDA-UT

Mr. Greg Sheehan
Division Director
Utah Department of Natural Resources
Division of Wildlife Resources
1594 West North Temple, STE 2110
Salt Lake City, UT 84116

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
UDOT Project No. S-I15-6(214)251, PIN 10263

Dear Mr. Sheehan:

The Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT), is preparing an environmental impact statement (EIS) for proposed improvements to the Interstate 15 (I-15) Payson Main Street interchange. The EIS will evaluate a reasonable range of alternatives for the interchange, as well as connections from the interchange to the adjacent local road network.

Alternatives under consideration include relocating the existing interchange, modifying the existing interchange in its current location, and any other feasible alternatives identified through the scoping process. This project will address such needs as traffic operations and safety issues on the I-15 Main Street interchange, and future transportation needs based on future growth projections and development.

Your agency has been identified as an agency that may have interest in the project. This letter is an invitation to become a participating agency. As a participating agency, you would participate in the environmental review process and make staff available at the request of FHWA and UDOT (40 CFR 1501.6).

Please respond in writing with an acceptance or denial of this invitation prior to April 2, 2015. In your response, please indicate one of the following:

- Agency accepts invitation to be a participating agency
- Agency declines invitation to participate in this project as a participating agency

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You are invited to participate in the agency scoping meeting:

WHEN: Tuesday, March 17, 2015, from 1:00 p.m. to 3:00 p.m.
WHERE: UDOT Region 2 Offices (Milestone Conference Room)
2010 South 2760 West, Salt Lake City, Utah
RSVP: If you plan to attend the meeting, please RSVP by March 13, 2015 to afellows@hwlochner.com.

In addition to the above-listed agency scoping meeting, a public scoping meeting will be held:

WHEN: Thursday, March 19, 2015, from 5:00 p.m. to 7:00 p.m.
WHERE: Clarion Event Center, 463 East 100 North, Payson, Utah

If you elect not be a participating agency, we would still like to receive your input and comments regarding the project.

We look forward to your response and to working with you as a participating agency. Please feel free to contact me at (801) 955-3527 or elizabeth.cramer@dot.gov if you have any questions or would like to discuss in more detail the project or the roles and responsibilities your agency would have during the preparation of the EIS.

Sincerely,

Arlene Kecher for

Elizabeth Cramer
Area Engineer/Project Manager

Enclosures - Project Area Maps, 2 copies

cc: Brandon Weston, UDOT Environmental
Rich Crosland, UDOT Region 3
Matt Parker, UDOT Project Manager

U.S. Department
of Transportation
Federal Highway
Administration

UTAH DIVISION

2520 West 4700 South, STE 9A
Salt Lake City, UT 84129
(801) 955-3500
FAX (801) 955-3539

March 4, 2015

In Reply Refer To:
HDA-UT

Mr. Eric Millis
Division Director
Utah Department of Natural Resources
Division of Water Resources
1594 West North Temple, STE 310
Salt Lake City, UT 84116

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
UDOT Project No. S-I15-6(214)251, PIN 10263

Dear Mr. Millis:

The Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT), is preparing an environmental impact statement (EIS) for proposed improvements to the Interstate 15 (I-15) Payson Main Street interchange. The EIS will evaluate a reasonable range of alternatives for the interchange, as well as connections from the interchange to the adjacent local road network.

Alternatives under consideration include relocating the existing interchange, modifying the existing interchange in its current location, and any other feasible alternatives identified through the scoping process. This project will address such needs as traffic operations and safety issues on the I-15 Main Street interchange, and future transportation needs based on future growth projections and development.

Your agency has been identified as an agency that may have interest in the project. This letter is an invitation to become a participating agency. As a participating agency, you would participate in the environmental review process and make staff available at the request of FHWA and UDOT (40 CFR 1501.6).

Please respond in writing with an acceptance or denial of this invitation prior to April 2, 2015. In your response, please indicate one of the following:

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You are invited to participate in the agency scoping meeting:

WHEN: Tuesday, March 17, 2015, from 1:00 p.m. to 3:00 p.m.
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2010 South 2760 West, Salt Lake City, Utah
RSVP: If you plan to attend the meeting, please RSVP by March 13, 2015 to afellows@hwlochner.com.

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WHERE: Clarion Event Center, 463 East 100 North, Payson, Utah

If you elect not be a participating agency, we would still like to receive your input and comments regarding the project.

We look forward to your response and to working with you as a participating agency. Please feel free to contact me at (801) 955-3527 or elizabeth.cramer@dot.gov if you have any questions or would like to discuss in more detail the project or the roles and responsibilities your agency would have during the preparation of the EIS.

Sincerely,

Arlene Kocher for

Elizabeth Cramer
Area Engineer/Project Manager

Enclosures - Project Area Maps, 2 copies

cc: Brandon Weston, UDOT Environmental
Rich Crosland, UDOT Region 3
Matt Parker, UDOT Project Manager

U.S. Department of Transportation
Federal Highway Administration

UTAH DIVISION

2520 West 4700 South, STE 9A
Salt Lake City, UT 84129
(801) 955-3500
FAX (801) 955-3539

March 4, 2015

In Reply Refer To:
HDA-UT

Mr. Kent Jones
State Engineer
Utah Department of Natural Resources
Division of Water Rights
1594 West North Temple, STE 220
Salt Lake City, UT 84116

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
UDOT Project No. S-I15-6(214)251, PIN 10263

Dear Mr. Jones:

The Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT), is preparing an environmental impact statement (EIS) for proposed improvements to the Interstate 15 (I-15) Payson Main Street interchange. The EIS will evaluate a reasonable range of alternatives for the interchange, as well as connections from the interchange to the adjacent local road network.

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Sincerely,

Arlene Kocher for

Elizabeth Cramer
Area Engineer/Project Manager

Enclosures - Project Area Maps, 2 copies

cc: Brandon Weston, UDOT Environmental
Rich Crosland, UDOT Region 3
Matt Parker, UDOT Project Manager

U.S. Department of Transportation
Federal Highway Administration

UTAH DIVISION

2520 West 4700 South, STE 9A
Salt Lake City, UT 84129
(801) 955-3500
FAX (801) 955-3539

March 4, 2015

In Reply Refer To:
HDA-UT

Mr. Brad Westwood
Historic Preservation Officer
Utah State Historic Preservation Office
300 Rio Grande
Salt Lake City, UT 84101

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
UDOT Project No. S-I15-6(214)251, PIN 10263

Dear Mr. Westwood:

The Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT), is preparing an environmental impact statement (EIS) for proposed improvements to the Interstate 15 (I-15) Payson Main Street interchange. The EIS will evaluate a reasonable range of alternatives for the interchange, as well as connections from the interchange to the adjacent local road network.

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Sincerely,

Arlene Kocher for

Elizabeth Cramer
Area Engineer/Project Manager

Enclosures - Project Area Maps, 2 copies

cc: Brandon Weston, UDOT Environmental
Rich Crosland, UDOT Region 3
Matt Parker, UDOT Project Manager

U.S. Department
of Transportation
Federal Highway Administration

UTAH DIVISION

March 4, 2015

2520 West 4700 South, STE 9A
Salt Lake City, UT 84129
(801) 955-3500
FAX (801) 955-3539

In Reply Refer To:
HDA-UT

Mr. Shawn Elliot
Mountainland Association of Governments
586 East 800 North
Orem, UT 84097

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
UDOT Project No. S-I15-6(214)251, PIN 10263

Dear Mr. Elliot:

The Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT), is preparing an environmental impact statement (EIS) for proposed improvements to the Interstate 15 (I-15) Payson Main Street interchange. The EIS will evaluate a reasonable range of alternatives for the interchange, as well as connections from the interchange to the adjacent local road network.

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Please respond in writing with an acceptance or denial of this invitation prior to April 2, 2015. In your response, please indicate one of the following:

- Agency accepts invitation to be a participating agency
- Agency declines invitation to participate in this project as a participating agency

If your agency elects not to become a participating agency, you must decline this invitation in writing. Pursuant to Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) (23 USC 139), any federal agency that declines the invitation to be a participating agency must specifically state in its response that the agency:

- Has no jurisdiction or authority with respect to the project;
- Has no expertise or information relevant to the project; and
- Does not intend to submit comments on the project.

You are invited to participate in the agency scoping meeting:

WHEN: Tuesday, March 17, 2015, from 1:00 p.m. to 3:00 p.m.
WHERE: UDOT Region 2 Offices (Milestone Conference Room)
2010 South 2760 West, Salt Lake City, Utah
RSVP: If you plan to attend the meeting, please RSVP by March 13, 2015 to afellows@hwlochner.com.

In addition to the above-listed agency scoping meeting, a public scoping meeting will be held:

WHEN: Thursday, March 19, 2015, from 5:00 p.m. to 7:00 p.m.
WHERE: Clarion Event Center, 463 East 100 North, Payson, Utah

If you elect not be a participating agency, we would still like to receive your input and comments regarding the project.

We look forward to your response and to working with you as a participating agency. Please feel free to contact me at (801) 955-3527 or elizabeth.cramer@dot.gov if you have any questions or would like to discuss in more detail the project or the roles and responsibilities your agency would have during the preparation of the EIS.

Sincerely,

Arlene Kocher for

Elizabeth Cramer
Area Engineer/Project Manager

Enclosures - Project Area Maps, 2 copies

cc: Brandon Weston, UDOT Environmental
Rich Crosland, UDOT Region 3
Matt Parker, UDOT Project Manager

U.S. Department
of Transportation
Federal Highway
Administration

UTAH DIVISION

March 4, 2015

2520 West 4700 South, STE 9A
Salt Lake City, UT 84129
(801) 955-3500
FAX (801) 955-3539

In Reply Refer To:
HDA-UT

Mr. Matt Sibul
Chief Planning Officer
Utah Transit Authority
669 West 200 South
Salt Lake City, UT 84101

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
UDOT Project No. S-I15-6(214)251, PIN 10263

Dear Mr. Sibul:

The Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT), is preparing an environmental impact statement (EIS) for proposed improvements to the Interstate 15 (I-15) Payson Main Street interchange. The EIS will evaluate a reasonable range of alternatives for the interchange, as well as connections from the interchange to the adjacent local road network.

Alternatives under consideration include relocating the existing interchange, modifying the existing interchange in its current location, and any other feasible alternatives identified through the scoping process. This project will address such needs as traffic operations and safety issues on the I-15 Main Street interchange, and future transportation needs based on future growth projections and development.

Your agency has been identified as an agency that may have interest in the project. This letter is an invitation to become a participating agency. As a participating agency, you would participate in the environmental review process and make staff available at the request of FHWA and UDOT (40 CFR 1501.6).

Please respond in writing with an acceptance or denial of this invitation prior to April 2, 2015. In your response, please indicate one of the following:

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WHEN: Tuesday, March 17, 2015, from 1:00 p.m. to 3:00 p.m.
WHERE: UDOT Region 2 Offices (Milestone Conference Room)
2010 South 2760 West, Salt Lake City, Utah
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We look forward to your response and to working with you as a participating agency. Please feel free to contact me at (801) 955-3527 or elizabeth.cramer@dot.gov if you have any questions or would like to discuss in more detail the project or the roles and responsibilities your agency would have during the preparation of the EIS.

Sincerely,

Arlene Kocher for

Elizabeth Cramer
Area Engineer/Project Manager

Enclosures - Project Area Maps, 2 copies

cc: Brandon Weston, UDOT Environmental
Rich Crosland, UDOT Region 3
Matt Parker, UDOT Project Manager

U.S. Department
of Transportation
Federal Highway
Administration

UTAH DIVISION

2520 West 4700 South, STE 9A
Salt Lake City, UT 84129
(801) 955-3500
FAX (801) 955-3539

March 4, 2015

In Reply Refer To:
HDA-UT

Mr. David Tuckett
City Manager
Payson City
439 West Utah Avenue
Payson, UT 84651

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
UDOT Project No. S-I15-6(214)251, PIN 10263

Dear Mr. Tuckett:

The Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT), is preparing an environmental impact statement (EIS) for proposed improvements to the Interstate 15 (I-15) Payson Main Street interchange. The EIS will evaluate a reasonable range of alternatives for the interchange, as well as connections from the interchange to the adjacent local road network.

Alternatives under consideration include relocating the existing interchange, modifying the existing interchange in its current location, and any other feasible alternatives identified through the scoping process. This project will address such needs as traffic operations and safety issues on the I-15 Main Street interchange, and future transportation needs based on future growth projections and development.

Your agency has been identified as an agency that may have interest in the project. This letter is an invitation to become a participating agency. As a participating agency, you would participate in the environmental review process and make staff available at the request of FHWA and UDOT (40 CFR 1501.6).

Please respond in writing with an acceptance or denial of this invitation prior to April 2, 2015. In your response, please indicate one of the following:

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WHEN: Tuesday, March 17, 2015, from 1:00 p.m. to 3:00 p.m.
WHERE: UDOT Region 2 Offices (Milestone Conference Room)
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If you elect not be a participating agency, we would still like to receive your input and comments regarding the project.

We look forward to your response and to working with you as a participating agency. Please feel free to contact me at (801) 955-3527 or elizabeth.cramer@dot.gov if you have any questions or would like to discuss in more detail the project or the roles and responsibilities your agency would have during the preparation of the EIS.

Sincerely,

Arlene Kocher for

Elizabeth Cramer
Area Engineer/Project Manager

Enclosures - Project Area Maps, 2 copies

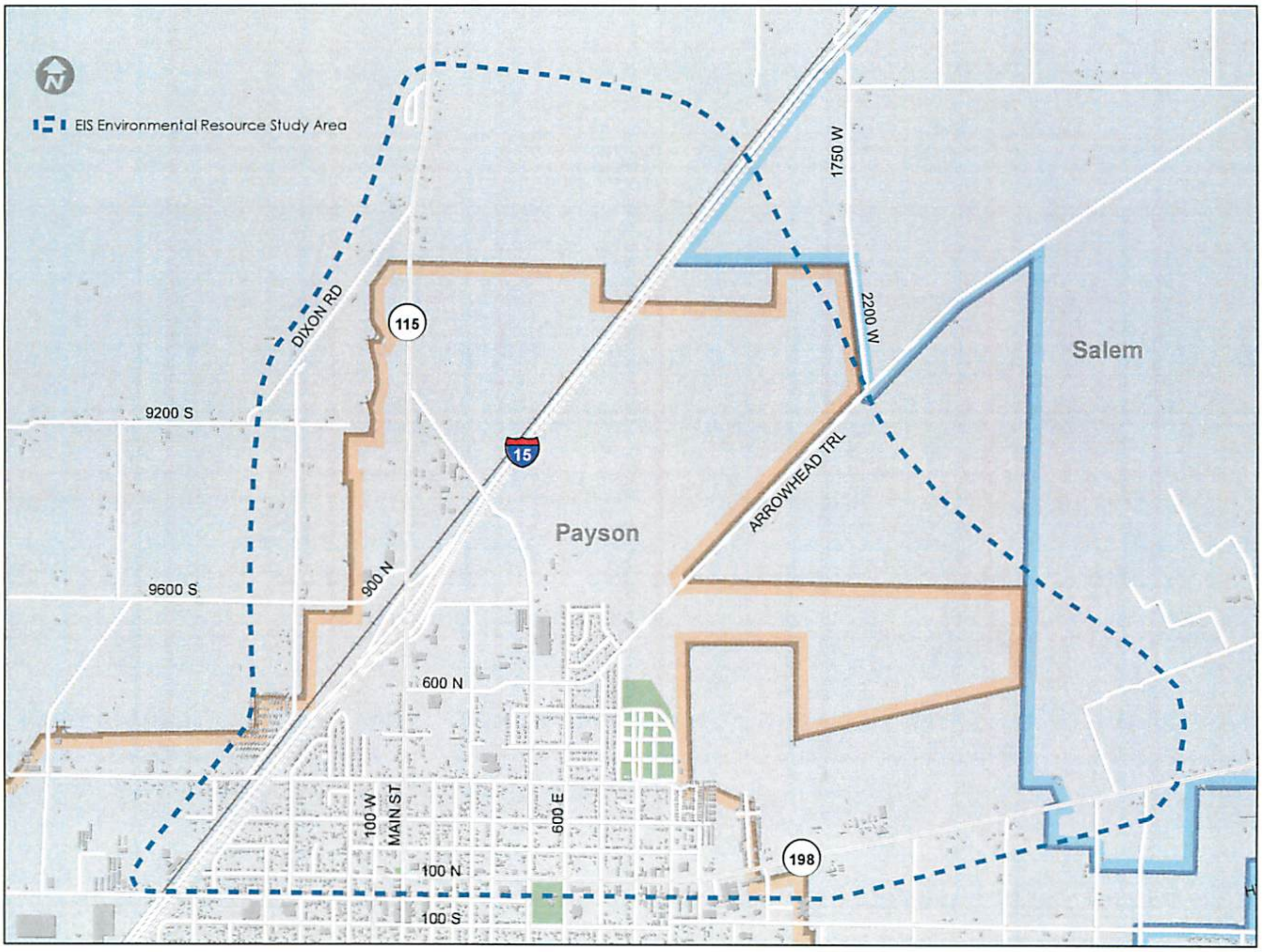
cc: Brandon Weston, UDOT Environmental
Rich Crosland, UDOT Region 3
Matt Parker, UDOT Project Manager

Project Area
I-15 Payson Main Street Interchange Environmental Impact Statement
UDOT Project No. S-I15-6(214)251, PIN 10263

Environmental Resource Study Area

I-15 Payson Main Street Interchange Environmental Impact Statement

UDOT Project No. S-I15-6(214)251, PIN 10263



U.S. Department of Transportation
Federal Highway Administration

Utah Division

2520 West 4700 South, STE 9-A
Salt Lake City, UT 84129-1874
801-955-3500
FAX 801-955-3539

May 20, 2015

In Reply Refer To:
HDA-UT

Mr. Larry Crist
Field Supervisor
U.S. Fish & Wildlife Service
2369 West Orton Circle, Suite 50
West Valley City, UT 84119

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Cooperating Agency
Project No. S-I15-6(214)251; PIN 10263

Dear Mr. Crist:

The intent of this letter is to follow up on the invitation to become a cooperating agency sent March 3, 2015. We are sending a follow-up letter to clarify the scope of the potential project alternatives. The original letter gave the impression that the project would only have impacts to existing, urbanized facilities and adjacent areas. Taking into account the broad range of potential project alternatives, this project could potentially impact undeveloped lands (see Study Area Map). We encourage you to review the additional information provided and revisit the decision to become a cooperating agency.

The Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT), is preparing an environmental impact statement (EIS) for proposed improvements to Interstate 15 (I-15) Payson Main Street interchange. The EIS will evaluate a reasonable range of alternatives for the interchange, as well as connections from the interchange to the adjacent local road network. Alternatives under consideration include relocating the existing interchange, modifying the existing interchange in its current location, and any other feasible alternatives identified through the scoping process. This project will address such needs as traffic operations and safety issues on the I-15 Main Street interchange, and future transportation needs based on future growth projections and development.

Relocating the existing interchange to the north could potentially impact undeveloped lands and up to 20 acres of wetlands (see Study Area Map). Your agency has been identified as an agency that has jurisdiction by law or special expertise with respect to an environmental impact. This letter is an invitation to become a cooperating agency. As a cooperating agency, you would participate in the environmental review process; provide information or prepare environmental analyses to support the EIS; and make staff available at the request of FHWA and UDOT (40 CFR 1501.6).

A cooperating agency has a higher degree of authority, responsibility, and involvement in the environmental review process than a participating agency. Pursuant to 40 CFR 1506.3, a cooperating agency may adopt without recirculating the environmental impact statement of a lead agency when, after independent review of the statement, the cooperating agency concludes that its comments and suggestions have been satisfied.

Please respond in writing with an acceptance or denial of this invitation prior to June 15, 2015. In your response, please indicate one of the following:

- Agency accepts invitation to be a cooperating agency.
- Agency declines invitation to be a cooperating agency, but elects to be a participating agency. If no response is received, your agency will automatically be considered a participating agency. Agency declines invitation to participate in this project as either a cooperating or participating agency.

If your agency elects not to become a cooperating or participating agency, you must decline this invitation in writing. Pursuant to Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) (23 USC 139), any federal agency that declines the invitation to be a cooperating agency must specifically state in its response that the agency:

- Has no jurisdiction or authority with respect to the project;
- Has no expertise or information relevant to the project; and
- Does not intend to submit comments on the project.

We look forward to your response and to working with you as a cooperating agency. Please feel free to contact me at (801) 955-3527 or elizabeth.cramer@dot.gov if you have any questions or would like to discuss in more detail the project or the roles and responsibilities your agency would have during the preparation of the EIS.

Sincerely,

Elizabeth Cramer
Area Engineer

Enclosure

cc: Brandon Weston, UDOT - Environmental
Rich Crosland, UDOT – Region 3
Matt Parker, Project Manager - UDOT

U.S. Department
of Transportation
Federal Highway
Administration

Utah Division

2520 West 4700 South, STE 9-A
Salt Lake City, UT 84129-1874
801-955-3500
FAX 801-955-3539

May 20, 2015

In Reply Refer To:
HDA-UT

Mr. Jim Fowler
Executive Director
Advisory Council on Historic Preservation
401 F Street NW, STE 308
Washington, DC 20001-2637

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Cooperating Agency
Project No. S-I15-6(214)251; PIN 10263

Dear Mr. Fowler:

The intent of this letter is to follow up on the invitation to become a cooperating agency sent March 3, 2015. We are sending a follow-up letter to clarify the scope of the potential project alternatives. The original letter gave the impression that the project would only have impacts to existing, urbanized facilities and adjacent areas. Taking into account the broad range of potential project alternatives, this project could potentially impact undeveloped lands (see Study Area Map). We encourage you to review the additional information provided and revisit the decision to become a cooperating agency.

The Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT), is preparing an environmental impact statement (EIS) for proposed improvements to Interstate 15 (I-15) Payson Main Street interchange. The EIS will evaluate a reasonable range of alternatives for the interchange, as well as connections from the interchange to the adjacent local road network. Alternatives under consideration include relocating the existing interchange, modifying the existing interchange in its current location, and any other feasible alternatives identified through the scoping process. This project will address such needs as traffic operations and safety issues on the I-15 Main Street interchange, and future transportation needs based on future growth projections and development.

Relocating the existing interchange to the north could potentially impact undeveloped lands and up to 20 acres of wetlands (see Study Area Map). Your agency has been identified as an agency that has jurisdiction by law or special expertise with respect to an environmental impact. This letter is an invitation to become a cooperating agency. As a cooperating agency, you would participate in the environmental review process; provide information or prepare environmental analyses to support the EIS; and make staff available at the request of FHWA and UDOT (40 CFR 1501.6).

A cooperating agency has a higher degree of authority, responsibility, and involvement in the environmental review process than a participating agency. Pursuant to 40 CFR 1506.3, a cooperating agency may adopt without recirculating the environmental impact statement of a lead agency when, after independent review of the statement, the cooperating agency concludes that its comments and suggestions have been satisfied.

Please respond in writing with an acceptance or denial of this invitation prior to June 15, 2015. In your response, please indicate one of the following:

- Agency accepts invitation to be a cooperating agency.
- Agency declines invitation to be a cooperating agency, but elects to be a participating agency. If no response is received, your agency will automatically be considered a participating agency.
- Agency declines invitation to participate in this project as either a cooperating or participating agency.

If your agency elects not to become a cooperating or participating agency, you must decline this invitation in writing. Pursuant to Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) (23 USC 139), any federal agency that declines the invitation to be a cooperating agency must specifically state in its response that the agency:

- Has no jurisdiction or authority with respect to the project;
- Has no expertise or information relevant to the project; and
- Does not intend to submit comments on the project.

We look forward to your response and to working with you as a cooperating agency. Please feel free to contact me at (801) 955-3527 or elizabeth.cramer@dot.gov if you have any questions or would like to discuss in more detail the project or the roles and responsibilities your agency would have during the preparation of the EIS.

Sincerely,

Elizabeth Cramer
Area Engineer

Enclosure

cc: Brandon Weston, UDOT - Environmental
Rich Crosland, UDOT – Region 3
Matt Parker, Project Manager - UDOT

U.S. Department of Transportation
Federal Highway Administration

Utah Division

2520 West 4700 South, STE 9-A
Salt Lake City, UT 84129-1874
801-955-3500
FAX 801-955-3539

May 20, 2015

In Reply Refer To:
HDA-UT

Mr. Jason Gipson
Chief, Nevada-Utah Regulatory Branch
U.S. Army Corps of Engineers
533 West 2600 South, Suite 150
Bountiful, UT 84010

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Cooperating Agency
Project No. S-I15-6(214)251; PIN 10263

Dear Mr. Gipson:

The intent of this letter is to follow up on the invitation to become a cooperating agency sent March 3, 2015. We are sending a follow-up letter to clarify the scope of the potential project alternatives. The original letter gave the impression that the project would only have impacts to existing, urbanized facilities and adjacent areas. Taking into account the broad range of potential project alternatives, this project could potentially impact undeveloped lands (see Study Area Map). We encourage you to review the additional information provided and revisit the decision to become a cooperating agency.

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Relocating the existing interchange to the north could potentially impact undeveloped lands and up to 20 acres of wetlands (see Study Area Map). Your agency has been identified as an agency that has jurisdiction by law or special expertise with respect to an environmental impact. This letter is an invitation to become a cooperating agency. As a cooperating agency, you would participate in the environmental review process; provide information or prepare environmental analyses to support the EIS; and make staff available at the request of FHWA and UDOT (40 CFR 1501.6).

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Sincerely,

Elizabeth Cramer
Area Engineer

Enclosure

cc: Brandon Weston, UDOT - Environmental
Rich Crosland, UDOT – Region 3
Matt Parker, Project Manager - UDOT

U.S. Department of Transportation
Federal Highway Administration

Utah Division

2520 West 4700 South, STE 9-A
Salt Lake City, UT 84129-1874
801-955-3500
FAX 801-955-3539

May 20, 2015

In Reply Refer To:
HDA-UT

Mr. Shaun McGrath
Regional Administrator
U.S. Environmental Protection Agency
1595 Wynkoop Street
Denver, CO 80202

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Cooperating Agency
Project No. S-I15-6(214)251; PIN 10263

Dear Mr. McGrath:

The intent of this letter is to follow up on the invitation to become a cooperating agency sent March 3, 2015. We are sending a follow-up letter to clarify the scope of the potential project alternatives. The original letter gave the impression that the project would only have impacts to existing, urbanized facilities and adjacent areas. Taking into account the broad range of potential project alternatives, this project could potentially impact undeveloped lands (see Study Area Map). We encourage you to review the additional information provided and revisit the decision to become a cooperating agency.

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We look forward to your response and to working with you as a cooperating agency. Please feel free to contact me at (801) 955-3527 or elizabeth.cramer@dot.gov if you have any questions or would like to discuss in more detail the project or the roles and responsibilities your agency would have during the preparation of the EIS.

Sincerely,

Elizabeth Cramer
Area Engineer

Enclosure

cc: Brandon Weston, UDOT - Environmental
Rich Crosland, UDOT – Region 3
Matt Parker, Project Manager - UDOT

I-15; Payson Main Street Interchange EIS: Study Area

U.S. Department of Transportation
Federal Highway Administration

Utah Division

2520 West 4700 South, STE 9-A
Salt Lake City, UT 84129-1874
801-955-3500
FAX 801-955-3539

May 20, 2015

In Reply Refer To:
HDA-UT

Mr. David Brown
State Conservationist
Natural Resources Conservation Service
Wallace F. Bennett Federal Building
125 South State Street, Room 4010
Salt Lake City, UT 84138

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
Project No. S-I15-6(214)251; PIN 10263

Dear Mr. Brown:

The intent of this letter is to follow up on the invitation to become a participating agency sent March 3, 2015. We are sending a follow-up letter to clarify the scope of the potential project alternatives. The original letter gave the impression that the project would only have impacts to existing, urbanized facilities and adjacent areas. Taking into account the broad range of potential project alternatives, this project could potentially impact undeveloped lands (see Study Area Map). We encourage you to review the additional information provided and revisit the decision to become a participating agency.

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If you elect not be a participating agency, we would still like to receive your input and comments regarding the project. However, your agency will forego the opportunity to provide early input on several project issues such as the development of purpose and need, the range of alternatives, and environmental resource impact assessment methodologies.

We look forward to your response and to working with you as a participating agency. Please feel free to contact me at (801) 955-3527 or elizabeth.cramer@dot.gov if you have any questions or would like to discuss in more detail the project or the roles and responsibilities your agency would have during the preparation of the EIS.

Sincerely,

Elizabeth Cramer
Area Engineer

Enclosure

cc: Brandon Weston, UDOT - Environmental
Rich Crosland, UDOT – Region 3
Matt Parker, Project Manager - UDOT

U.S. Department
of Transportation
Federal Highway
Administration

Utah Division

2520 West 4700 South, STE 9-A
Salt Lake City, UT 84129-1874
801-955-3500
FAX 801-955-3539

May 20, 2015

In Reply Refer To:
HDA-UT

Ms. Sharon Loper
Acting Regional Administrator
Federal Emergency Management Agency
Denver Federal Center, Building 710
Denver, CO 80255

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
Project No. S-I15-6(214)251; PIN 10263

Dear Ms. Loper:

The intent of this letter is to follow up on the invitation to become a participating agency sent March 3, 2015. We are sending a follow-up letter to clarify the scope of the potential project alternatives. The original letter gave the impression that the project would only have impacts to existing, urbanized facilities and adjacent areas. Taking into account the broad range of potential project alternatives, this project could potentially impact undeveloped lands (see Study Area Map). We encourage you to review the additional information provided and revisit the decision to become a participating agency.

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- Does not intend to submit comments on the project.

If you elect not be a participating agency, we would still like to receive your input and comments regarding the project. However, your agency will forego the opportunity to provide early input on several project issues such as the development of purpose and need, the range of alternatives, and environmental resource impact assessment methodologies.

We look forward to your response and to working with you as a participating agency. Please feel free to contact me at (801) 955-3527 or elizabeth.cramer@dot.gov if you have any questions or would like to discuss in more detail the project or the roles and responsibilities your agency would have during the preparation of the EIS.

Sincerely,

Elizabeth Cramer
Area Engineer

Enclosure

cc: Brandon Weston, UDOT - Environmental
Rich Crosland, UDOT – Region 3
Matt Parker, Project Manager - UDOT

U.S. Department
of Transportation
Federal Highway
Administration

Utah Division

2520 West 4700 South, STE 9-A
Salt Lake City, UT 84129-1874
801-955-3500
FAX 801-955-3539

May 20, 2015

In Reply Refer To:
HDA-UT

Mr. Bryan Bowker
Regional Director
Bureau of Indian Affairs
2600 N. Central Avenue
4th Floor Mailroom
Phoenix, AZ 85004

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
Project No. S-I15-6(214)251; PIN 10263

Dear Mr. Bowker:

The intent of this letter is to follow up on the invitation to become a participating agency sent March 3, 2015. We are sending a follow-up letter to clarify the scope of the potential project alternatives. The original letter gave the impression that the project would only have impacts to existing, urbanized facilities and adjacent areas. Taking into account the broad range of potential project alternatives, this project could potentially impact undeveloped lands (see Study Area Map). We encourage you to review the additional information provided and revisit the decision to become a participating agency.

The Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT), is preparing an environmental impact statement (EIS) for proposed improvements to the Interstate 15 (I-15) Payson Main Street interchange. The EIS will evaluate a reasonable range of alternatives for the interchange, as well as connections from the interchange to the adjacent local road network. Alternatives under consideration include relocating the existing interchange, modifying the existing interchange in its current location, and any other feasible alternatives identified through the scoping process. This project will address such needs as traffic operations and safety issues on the I-15 Main Street interchange, and future transportation needs based on future growth projections and development.

Relocating the existing interchange to the north could potentially impact undeveloped lands and up to 20 acres of wetlands. Your agency has been identified as an agency that may have interest in the project. This letter is an invitation to become a participating agency. As a participating agency, you would participate in the environmental review process and make staff available at the request of FHWA and UDOT (40 CFR 1501.6).

Please respond in writing with an acceptance or denial of this invitation prior to June 15, 2015. In your response, please indicate one of the following:

- Agency accepts invitation to be a participating agency
- Agency declines invitation to participate in this project as a participating agency

If your agency elects not to become a participating agency, you must decline this invitation in writing. Pursuant to Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) (23 USC 139), any federal agency that declines the invitation to be a participating agency must specifically state in its response that the agency:

- Has no jurisdiction or authority with respect to the project;
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If you elect not be a participating agency, we would still like to receive your input and comments regarding the project. However, your agency will forego the opportunity to provide early input on several project issues such as the development of purpose and need, the range of alternatives, and environmental resource impact assessment methodologies.

We look forward to your response and to working with you as a participating agency. Please feel free to contact me at (801) 955-3527 or elizabeth.cramer@dot.gov if you have any questions or would like to discuss in more detail the project or the roles and responsibilities your agency would have during the preparation of the EIS.

Sincerely,

Elizabeth Cramer
Area Engineer

Enclosure

cc: Brandon Weston, UDOT - Environmental
Rich Crosland, UDOT – Region 3
Matt Parker, Project Manager - UDOT

U.S. Department of Transportation
Federal Highway Administration

Utah Division

2520 West 4700 South, STE 9-A
Salt Lake City, UT 84129-1874
801-955-3500
FAX 801-955-3539

May 20, 2015

In Reply Refer To:
HDA-UT

Mr. David Tuckett
City Manager
Payson City
439 West Utah Avenue
Payson, UT 84651

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
Project No. S-I15-6(214)251; PIN 10263

Dear Mr. Tuckett:

The intent of this letter is to follow up on the invitation to become a participating agency sent March 3, 2015. We are sending a follow-up letter to clarify the scope of the potential project alternatives. The original letter gave the impression that the project would only have impacts to existing, urbanized facilities and adjacent areas. Taking into account the broad range of potential project alternatives, this project could potentially impact undeveloped lands (see Study Area Map). We encourage you to review the additional information provided and revisit the decision to become a participating agency.

The Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT), is preparing an environmental impact statement (EIS) for proposed improvements to the Interstate 15 (I-15) Payson Main Street interchange. The EIS will evaluate a reasonable range of alternatives for the interchange, as well as connections from the interchange to the adjacent local road network. Alternatives under consideration include relocating the existing interchange, modifying the existing interchange in its current location, and any other feasible alternatives identified through the scoping process. This project will address such needs as traffic operations and safety issues on the I-15 Main Street interchange, and future transportation needs based on future growth projections and development.

Relocating the existing interchange to the north could potentially impact undeveloped lands and up to 20 acres of wetlands. Your agency has been identified as an agency that may have interest in the project. This letter is an invitation to become a participating agency. As a participating agency, you would participate in the environmental review process and make staff available at the request of FHWA and UDOT (40 CFR 1501.6).

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Sincerely,

Elizabeth Cramer
Area Engineer

Enclosure

cc: Brandon Weston, UDOT - Environmental
Rich Crosland, UDOT – Region 3
Matt Parker, Project Manager - UDOT

U.S. Department of Transportation
Federal Highway Administration

Utah Division

2520 West 4700 South, STE 9-A
Salt Lake City, UT 84129-1874
801-955-3500
FAX 801-955-3539

May 20, 2015

In Reply Refer To:
HDA-UT

Mr. Shawn Elliot
Mountainland Association of Governments
586 East 800 North
Orem, UT 84097

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
Project No. S-I15-6(214)251; PIN 10263

Dear Mr. Elliot:

The intent of this letter is to follow up on the invitation to become a participating agency sent March 3, 2015. We are sending a follow-up letter to clarify the scope of the potential project alternatives. The original letter gave the impression that the project would only have impacts to existing, urbanized facilities and adjacent areas. Taking into account the broad range of potential project alternatives, this project could potentially impact undeveloped lands (see Study Area Map). We encourage you to review the additional information provided and revisit the decision to become a participating agency.

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Sincerely,

Elizabeth Cramer
Area Engineer

Enclosure

cc: Brandon Weston, UDOT - Environmental
Rich Crosland, UDOT – Region 3
Matt Parker, Project Manager - UDOT

U.S. Department of Transportation
Federal Highway Administration

Utah Division

2520 West 4700 South, STE 9-A
Salt Lake City, UT 84129-1874
801-955-3500
FAX 801-955-3539

May 20, 2015

In Reply Refer To:
HDA-UT

Mr. Brad Westwood
Historic Preservation Officer
Utah State Historic Preservation Office
300 Rio Grande
Salt Lake City UT 84101

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
Project No. S-I15-6(214)251; PIN 10263

Dear Mr. Westwood:

The intent of this letter is to follow up on the invitation to become a participating agency sent March 3, 2015. We are sending a follow-up letter to clarify the scope of the potential project alternatives. The original letter gave the impression that the project would only have impacts to existing, urbanized facilities and adjacent areas. Taking into account the broad range of potential project alternatives, this project could potentially impact undeveloped lands (see Study Area Map). We encourage you to review the additional information provided and revisit the decision to become a participating agency.

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Sincerely,

Elizabeth Cramer
Area Engineer

Enclosure

cc: Brandon Weston, UDOT - Environmental
Rich Crosland, UDOT – Region 3
Matt Parker, Project Manager - UDOT

U.S. Department
of Transportation
**Federal Highway
Administration**

Utah Division

2520 West 4700 South, STE 9-A
Salt Lake City, UT 84129-1874
801-955-3500
FAX 801-955-3539

May 20, 2015

In Reply Refer To:
HDA-UT

Mr. Kent Jones
State Engineer
Utah Department of Natural Resources
Division of Water Rights
1594 West North Temple, STE 220
Salt Lake City UT 84116

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
Project No. S-I15-6(214)251; PIN 10263

Dear Mr. Jones:

The intent of this letter is to follow up on the invitation to become a participating agency sent March 3, 2015. We are sending a follow-up letter to clarify the scope of the potential project alternatives. The original letter gave the impression that the project would only have impacts to existing, urbanized facilities and adjacent areas. Taking into account the broad range of potential project alternatives, this project could potentially impact undeveloped lands (see Study Area Map). We received an email from your agency declining the invitation to be a participating agency. We encourage you to review the additional information provided and revisit the decision not to become a participating agency.

The Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT), is preparing an environmental impact statement (EIS) for proposed improvements to the Interstate 15 (I-15) Payson Main Street interchange. The EIS will evaluate a reasonable range of alternatives for the interchange, as well as connections from the interchange to the adjacent local road network. Alternatives under consideration include relocating the existing interchange, modifying the existing interchange in its current location, and any other feasible alternatives identified through the scoping process. This project will address such needs as traffic operations and safety issues on the I-15 Main Street interchange, and future transportation needs based on future growth projections and development.

Relocating the existing interchange to the north could potentially impact undeveloped lands and up to 20 acres of wetlands. Your agency has been identified as an agency that may have interest in the project. This letter is an invitation to become a participating agency. As a participating agency, you would participate in the environmental review process and make staff available at the request of FHWA and UDOT (40 CFR 1501.6).

Please respond in writing with an acceptance or denial of this invitation prior to June 15, 2015. In your response, please indicate one of the following:

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We look forward to your response and to working with you as a participating agency. Please feel free to contact me at (801) 955-3527 or elizabeth.cramer@dot.gov if you have any questions or would like to discuss in more detail the project or the roles and responsibilities your agency would have during the preparation of the EIS.

Sincerely,

Elizabeth Cramer
Area Engineer

Enclosure

cc: Brandon Weston, UDOT - Environmental
Rich Crosland, UDOT – Region 3
Matt Parker, Project Manager - UDOT

U.S. Department of Transportation
Federal Highway Administration

Utah Division

2520 West 4700 South, STE 9-A
Salt Lake City, UT 84129-1874
801-955-3500
FAX 801-955-3539

May 20, 2015

In Reply Refer To:
HDA-UT

Mr. Greg Sheehan
Division Director
Utah Department of Natural Resources
Division of Wildlife Resources
1594 West North Temple, STE 2110
Salt Lake City UT 84116

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
Project No. S-I15-6(214)251; PIN 10263

Dear Mr. Sheehan:

The intent of this letter is to follow up on the invitation to become a participating agency sent March 3, 2015. We are sending a follow-up letter to clarify the scope of the potential project alternatives. The original letter gave the impression that the project would only have impacts to existing, urbanized facilities and adjacent areas. We received an email from your agency declining the invitation to be a participating agency. Taking into account the broad range of potential project alternatives, this project could potentially impact undeveloped lands (see Study Area Map). We encourage you to review the additional information provided and revisit the decision not to become a participating agency.

The Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT), is preparing an environmental impact statement (EIS) for proposed improvements to the Interstate 15 (I-15) Payson Main Street interchange. The EIS will evaluate a reasonable range of alternatives for the interchange, as well as connections from the interchange to the adjacent local road network. Alternatives under consideration include relocating the existing interchange, modifying the existing interchange in its current location, and any other feasible alternatives identified through the scoping process. This project will address such needs as traffic operations and safety issues on the I-15 Main Street interchange, and future transportation needs based on future growth projections and development.

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We look forward to your response and to working with you as a participating agency. Please feel free to contact me at (801) 955-3527 or elizabeth.cramer@dot.gov if you have any questions or would like to discuss in more detail the project or the roles and responsibilities your agency would have during the preparation of the EIS.

Sincerely,

Elizabeth Cramer
Area Engineer

Enclosure

cc: Brandon Weston, UDOT - Environmental
Rich Crosland, UDOT – Region 3
Matt Parker, Project Manager - UDOT

U.S. Department of Transportation
Federal Highway Administration

Utah Division

2520 West 4700 South, STE 9-A
Salt Lake City, UT 84129-1874
801-955-3500
FAX 801-955-3539

May 20, 2015

In Reply Refer To:
HDA-UT

Mr. Fred Hayes
Director
Utah Department of Natural Resources
Division of Parks and Recreation
1594 West North Temple, STE 116
Salt Lake City UT 84116

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
Project No. S-I15-6(214)251; PIN 10263

Dear Mr. Hayes:

The intent of this letter is to follow up on the invitation to become a participating agency sent March 3, 2015. We are sending a follow-up letter to clarify the scope of the potential project alternatives. The original letter gave the impression that the project would only have impacts to existing, urbanized facilities and adjacent areas. Taking into account the broad range of potential project alternatives, this project could potentially impact undeveloped lands (see Study Area Map). We encourage you to review the additional information provided and revisit the decision to become a participating agency.

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Sincerely,

Elizabeth Cramer
Area Engineer

Enclosure

cc: Brandon Weston, UDOT - Environmental
Rich Crosland, UDOT – Region 3
Matt Parker, Project Manager - UDOT

U.S. Department of Transportation
Federal Highway Administration

Utah Division

2520 West 4700 South, STE 9-A
Salt Lake City, UT 84129-1874
801-955-3500
FAX 801-955-3539

May 20, 2015

In Reply Refer To:
HDA-UT

Mr. Eric Millis
Division Director
Utah Department of Natural Resources
Division of Water Resources
1594 West North Temple, STE 310
Salt Lake City UT 84116

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
Project No. S-I15-6(214)251; PIN 10263

Dear Mr. Millis:

The intent of this letter is to follow up on the invitation to become a participating agency sent March 3, 2015. We are sending a follow-up letter to clarify the scope of the potential project alternatives. The original letter gave the impression that the project would only have impacts to existing, urbanized facilities and adjacent areas. Taking into account the broad range of potential project alternatives, this project could potentially impact undeveloped lands (see Study Area Map). We encourage you to review the additional information provided and revisit the decision to become a participating agency.

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Sincerely,

Elizabeth Cramer
Area Engineer

Enclosure

cc: Brandon Weston, UDOT - Environmental
Rich Crosland, UDOT – Region 3
Matt Parker, Project Manager - UDOT

U.S. Department of Transportation
Federal Highway Administration

Utah Division

2520 West 4700 South, STE 9-A
Salt Lake City, UT 84129-1874
801-955-3500
FAX 801-955-3539

May 20, 2015

In Reply Refer To:
HDA-UT

Mr. Brent Everett
Director
Utah Department of Environmental Quality
Division of Environmental Response & Remediation
P.O. Box 144840
Salt Lake City UT 84114

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
Project No. S-I15-6(214)251; PIN 10263

Dear Mr. Everett:

The intent of this letter is to follow up on the invitation to become a participating agency sent March 3, 2015. We are sending a follow-up letter to clarify the scope of the potential project alternatives. The original letter gave the impression that the project would only have impacts to existing, urbanized facilities and adjacent areas. Taking into account the broad range of potential project alternatives, this project could potentially impact undeveloped lands (see Study Area Map). We encourage you to review the additional information provided and revisit the decision to become a participating agency.

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- Does not intend to submit comments on the project.

If you elect not be a participating agency, we would still like to receive your input and comments regarding the project. However, your agency will forego the opportunity to provide early input on several project issues such as the development of purpose and need, the range of alternatives, and environmental resource impact assessment methodologies.

We look forward to your response and to working with you as a participating agency. Please feel free to contact me at (801) 955-3527 or elizabeth.cramer@dot.gov if you have any questions or would like to discuss in more detail the project or the roles and responsibilities your agency would have during the preparation of the EIS.

Sincerely,

Elizabeth Cramer
Area Engineer

Enclosure

cc: Brandon Weston, UDOT - Environmental
Rich Crosland, UDOT – Region 3
Matt Parker, Project Manager - UDOT

U.S. Department of Transportation
Federal Highway Administration

Utah Division

2520 West 4700 South, STE 9-A
Salt Lake City, UT 84129-1874
801-955-3500
FAX 801-955-3539

May 20, 2015

In Reply Refer To:
HDA-UT

Mr. Walt Baker
Director
Utah Department of Environmental Quality
Division of Water Quality
P.O. Box 144870
Salt Lake City UT 84114

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
Project No. S-I15-6(214)251; PIN 10263

Dear Mr. Baker:

The intent of this letter is to follow up on the invitation to become a participating agency sent March 3, 2015. We are sending a follow-up letter to clarify the scope of the potential project alternatives. The original letter gave the impression that the project would only have impacts to existing, urbanized facilities and adjacent areas. Taking into account the broad range of potential project alternatives, this project could potentially impact undeveloped lands (see Study Area Map). We encourage you to review the additional information provided and revisit the decision to become a participating agency.

The Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT), is preparing an environmental impact statement (EIS) for proposed improvements to the Interstate 15 (I-15) Payson Main Street interchange. The EIS will evaluate a reasonable range of alternatives for the interchange, as well as connections from the interchange to the adjacent local road network. Alternatives under consideration include relocating the existing interchange, modifying the existing interchange in its current location, and any other feasible alternatives identified through the scoping process. This project will address such needs as traffic operations and safety issues on the I-15 Main Street interchange, and future transportation needs based on future growth projections and development.

Relocating the existing interchange to the north could potentially impact undeveloped lands and up to 20 acres of wetlands. Your agency has been identified as an agency that may have interest in the project. This letter is an invitation to become a participating agency. As a participating agency, you would participate in the environmental review process and make staff available at the request of FHWA and UDOT (40 CFR 1501.6).

Please respond in writing with an acceptance or denial of this invitation prior to June 15, 2015. In your response, please indicate one of the following:

- Agency accepts invitation to be a participating agency
- Agency declines invitation to participate in this project as a participating agency

If your agency elects not to become a participating agency, you must decline this invitation in writing. Pursuant to Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) (23 USC 139), any federal agency that declines the invitation to be a participating agency must specifically state in its response that the agency:

- Has no jurisdiction or authority with respect to the project;
- Has no expertise or information relevant to the project; and
- Does not intend to submit comments on the project.

If you elect not be a participating agency, we would still like to receive your input and comments regarding the project. However, your agency will forego the opportunity to provide early input on several project issues such as the development of purpose and need, the range of alternatives, and environmental resource impact assessment methodologies.

We look forward to your response and to working with you as a participating agency. Please feel free to contact me at (801) 955-3527 or elizabeth.cramer@dot.gov if you have any questions or would like to discuss in more detail the project or the roles and responsibilities your agency would have during the preparation of the EIS.

Sincerely,

Elizabeth Cramer
Area Engineer

Enclosure

cc: Brandon Weston, UDOT - Environmental
Rich Crosland, UDOT – Region 3
Matt Parker, Project Manager - UDOT

U.S. Department of Transportation
Federal Highway Administration

Utah Division

2520 West 4700 South, STE 9-A
Salt Lake City, UT 84129-1874
801-955-3500
FAX 801-955-3539

May 20, 2015

In Reply Refer To:
HDA-UT

Mr. Bryce Bird
Director
Utah Department of Environmental Quality
Division of Air Quality
P.O. Box 144820
Salt Lake City UT 84114

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
Project No. S-I15-6(214)251; PIN 10263

Dear Mr. Bird:

The intent of this letter is to follow up on the invitation to become a participating agency sent March 3, 2015. We are sending a follow-up letter to clarify the scope of the potential project alternatives. The original letter gave the impression that the project would only have impacts to existing, urbanized facilities and adjacent areas. Taking into account the broad range of potential project alternatives, this project could potentially impact undeveloped lands (see Study Area Map). We encourage you to review the additional information provided and revisit the decision to become a participating agency.

The Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT), is preparing an environmental impact statement (EIS) for proposed improvements to the Interstate 15 (I-15) Payson Main Street interchange. The EIS will evaluate a reasonable range of alternatives for the interchange, as well as connections from the interchange to the adjacent local road network. Alternatives under consideration include relocating the existing interchange, modifying the existing interchange in its current location, and any other feasible alternatives identified through the scoping process. This project will address such needs as traffic operations and safety issues on the I-15 Main Street interchange, and future transportation needs based on future growth projections and development.

Relocating the existing interchange to the north could potentially impact undeveloped lands and up to 20 acres of wetlands. Your agency has been identified as an agency that may have interest in the project. This letter is an invitation to become a participating agency. As a participating agency, you would participate in the environmental review process and make staff available at the request of FHWA and UDOT (40 CFR 1501.6).

Please respond in writing with an acceptance or denial of this invitation prior to June 15, 2015. In your response, please indicate one of the following:

- Agency accepts invitation to be a participating agency
- Agency declines invitation to participate in this project as a participating agency

If your agency elects not to become a participating agency, you must decline this invitation in writing. Pursuant to Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) (23 USC 139), any federal agency that declines the invitation to be a participating agency must specifically state in its response that the agency:

- Has no jurisdiction or authority with respect to the project;
- Has no expertise or information relevant to the project; and
- Does not intend to submit comments on the project.

If you elect not be a participating agency, we would still like to receive your input and comments regarding the project. However, your agency will forego the opportunity to provide early input on several project issues such as the development of purpose and need, the range of alternatives, and environmental resource impact assessment methodologies.

We look forward to your response and to working with you as a participating agency. Please feel free to contact me at (801) 955-3527 or elizabeth.cramer@dot.gov if you have any questions or would like to discuss in more detail the project or the roles and responsibilities your agency would have during the preparation of the EIS.

Sincerely,

Elizabeth Cramer
Area Engineer

Enclosure

cc: Brandon Weston, UDOT - Environmental
Rich Crosland, UDOT – Region 3
Matt Parker, Project Manager - UDOT

U.S. Department of Transportation
Federal Highway Administration

Utah Division

2520 West 4700 South, STE 9-A
Salt Lake City, UT 84129-1874
801-955-3500
FAX 801-955-3539

May 20, 2015

In Reply Refer To:
HDA-UT

Ms. Sindy Smith
Chief, Nevada-Utah Regulatory Branch
Acting Coordinator
Governor's Office of Planning & Budget
Resource Development Coordinating Committee
Utah State Capitol – STE 150
P.O. Box 132210
Salt Lake City UT 84114

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
Project No. S-I15-6(214)251; PIN 10263

Dear Ms. Smith:

The intent of this letter is to follow up on the invitation to become a participating agency sent March 3, 2015. We are sending a follow-up letter to clarify the scope of the potential project alternatives. The original letter gave the impression that the project would only have impacts to existing, urbanized facilities and adjacent areas. Taking into account the broad range of potential project alternatives, this project could potentially impact undeveloped lands (see Study Area Map). We received an email from your agency declining the invitation to be a participating agency because you are usually involved with projects located in rural Utah (not cities). We encourage you to review the additional information provided and revisit the decision not to become a participating agency.

The Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT), is preparing an environmental impact statement (EIS) for proposed improvements to the Interstate 15 (I-15) Payson Main Street interchange. The EIS will evaluate a reasonable range of alternatives for the interchange, as well as connections from the interchange to the adjacent local road network. Alternatives under consideration include relocating the existing interchange, modifying the existing interchange in its current location, and any other feasible alternatives identified through the scoping process. This project will address such needs as traffic operations and safety issues on the I-15 Main Street interchange, and future transportation needs based on future growth projections and development.

Relocating the existing interchange to the north could potentially impact undeveloped lands and up to 20 acres of wetlands. Your agency has been identified as an agency that may have interest in the project. This letter is an invitation to become a participating agency. As a participating agency, you would participate in the environmental review process and make staff available at the request of FHWA and UDOT (40 CFR 1501.6).

Please respond in writing with an acceptance or denial of this invitation prior to June 15, 2015. In your response, please indicate one of the following:

- Agency accepts invitation to be a participating agency
- Agency declines invitation to participate in this project as a participating agency

If your agency elects not to become a participating agency, you must decline this invitation in writing. Pursuant to Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) (23 USC 139), any federal agency that declines the invitation to be a participating agency must specifically state in its response that the agency:

- Has no jurisdiction or authority with respect to the project;
- Has no expertise or information relevant to the project; and
- Does not intend to submit comments on the project.

If you elect not be a participating agency, we would still like to receive your input and comments regarding the project. However, your agency will forego the opportunity to provide early input on several project issues such as the development of purpose and need, the range of alternatives, and environmental resource impact assessment methodologies.

We look forward to your response and to working with you as a participating agency. Please feel free to contact me at (801) 955-3527 or elizabeth.cramer@dot.gov if you have any questions or would like to discuss in more detail the project or the roles and responsibilities your agency would have during the preparation of the EIS.

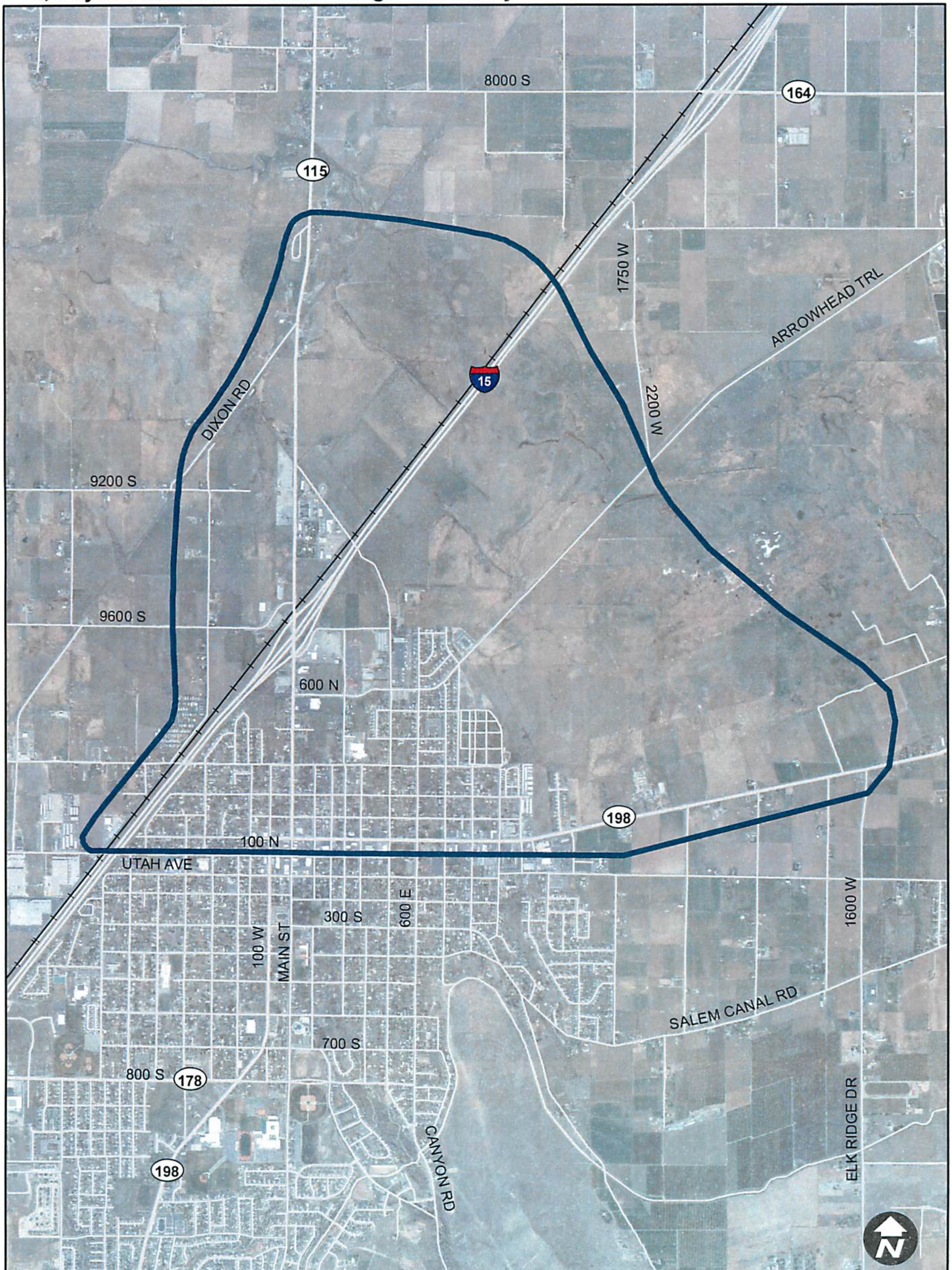
Sincerely,

Elizabeth Cramer
Area Engineer

Enclosure

cc: Brandon Weston, UDOT - Environmental
Rich Crosland, UDOT – Region 3
Matt Parker, Project Manager - UDOT

I-15; Payson Main Street Interchange EIS: Study Area



United States Department of the Interior
FISH AND WILDLIFE SERVICE
UTAH FIELD OFFICE
2369 WEST ORTON CIRCLE, SUITE 50
WEST VALLEY CITY, UTAH 84119

April 20, 2015

FWS/R6
ES/UT
15-CPA-0008

Elizabeth Cramer, Area Engineer
Federal Highway Administration
2520 West 4700 South, Suite 9A
Salt Lake City, Utah 84129

RE: Notice of Intent to prepare an Environmental Impact Statement (EIS): City of Payson Highway Interchange Improvement Project, Utah County, Utah.

Dear Ms. Cramer,

We received your notice of intent to prepare an Environmental Impact Statement (EIS) for the subject project. Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT) and the City of Payson, will prepare an EIS for proposed improvements to the Interstate 15 (I-15) Payson Main Street interchange. The 4.6-square mile study area centers on I-15 Exit 251 in Payson. The project will address (1) traffic operations and safety issues on the I-15 Main Street interchange; and (2) future transportation needs based on future growth projections and development. We are providing the following comments to you for your consideration.

Pursuant to the National Environmental Policy Act (NEPA), the Migratory Bird Treaty Act, the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*), we are identifying issues that should be addressed relative to fish and wildlife resources for this project. In Section 1, we identify issues that should be addressed in the NEPA compliance document for this project. In Section 2, we address your ESA section 7 responsibilities.

<u>Section 1</u>

Wetland habitat

The Environmental Resource Study Area (project area) contains numerous wetlands that are part of a larger wetland complex between the Wasatch mountains and Utah Lake. This wetland complex functions to store run-off, releasing it slowly to Utah Lake over the growing season. Consequently, these wetlands provide valuable flood control. They also provide critical habitat for a diverse assemblage of species including many macro-invertebrates, amphibians, reptiles, fish, birds, mammals, plants, and pollinators. Wetlands and open water are rare in Utah, and comprise less than five percent of the land mass in the state (Sutter et al. 2005). Impacts to these areas should be avoided to the greatest extent possible.

Wetlands function optimally for flood control, water quality improvement, and wildlife habitat when an upland buffer exists to separate them from adjacent development. For wetland wildlife species, upland buffers provide movement corridors, nesting and foraging habitat. As you consider whether to improve the existing interchange or relocate it, we recommend that you ensure an adequate upland buffer for wetlands in the area.

Roads have significant ecological effects, creating permanent negative impact to the land on which they are built as well as to the function and value of adjacent lands. Your EIS should fully analyze all direct, indirect and cumulative effects of build alternatives to water resources, including wetlands and their upland buffers, and the wildlife species that depend on them. We specifically recommend that you evaluate the effects of direct habitat loss, on-road mortality, wildlife displacement by noise, light and noise disturbance, fragmentation, hydrologic modification including possible impacts to groundwater from soil compaction, introduction and spread of noxious weeds, and water quality impacts (Forman and Alexander, 1998).

We further recommend that you analyze the potential effect of this project to induce land use changes. Population growth in Utah County has been rapid in the last decade resulting in the conversion of agricultural fields to either commercial or residential use. The EIS should analyze each alternative relative to its potential to increase development in the surrounding area.

Where impacts to wetland and wildlife resources are unavoidable, we recommend full compensatory mitigation. We encourage FHWA and UDOT to explore mitigation opportunities in conjunction with the many other projects in the eastern Utah Lake vicinity that are either in planning or implementation phases. Compensatory mitigation should be consolidated into larger areas within the landscape to provide high quality and functional wildlife habitat and allow for more effective land management.

Migratory Birds

The Migratory Bird Treaty Act prohibits the take of migratory birds, their parts, nests, eggs, and nestlings. Executive Order 13186, issued on January 11, 2001, affirmed the responsibilities of Federal agencies to comply with the MBTA. In your EIS, we recommend that you identify potential short-term and long-term impacts to migratory birds and their habitat. You may wish to focus on impacts to species on the Service's 2008 List of Birds of Conservation Concern and those identified as priority species by the Utah Partners in Flight (Parrish et al. 2002).

To ensure ground-disturbing activities do not result in the "take" of an active nest or migratory bird protected under the MBTA, we recommend:

a. Any ground-disturbing activities or vegetation treatments should be performed before migratory birds begin nesting or after all young have fledged to avoid incidental take. Arrival at nesting sites can occur as early as January for certain species. Nesting and fledging can continue through August;
b. If activities must be scheduled to start during the migratory bird breeding season, take appropriate steps to prevent migratory birds from establishing nests in the potential impact area. These steps could include covering equipment and structures and use of various excluders (e.g., noise). Prior to nesting, birds can be harassed to prevent them from nesting on the site.
c. If activities must be scheduled during the migratory bird breeding season, a site-specific survey for nesting birds should be performed starting at least two weeks prior to groundbreaking activities or vegetation treatments. Established nests with eggs or young cannot be moved, and the birds cannot be harassed (see b., above), until all young have fledged and are capable of leaving the nest site;
d. If nesting birds are found during the survey, appropriate spatial buffers should be established around nests. Vegetation treatments or ground-disturbing activities within the buffer areas should be postponed until the birds have left the nest. Confirmation that all young have fledged should be made by a qualified biologist.

For raptors, we recommend use of the *Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances* (Romin and Muck 2002) which were developed in part to provide consistent application of raptor protection measures and provide full compliance with environmental laws regarding raptor protection. Raptor surveys and mitigation measures are provided in the Guidelines as recommendations to ensure that proposed projects will avoid adverse impacts to raptors. Locations of existing raptor nests should be identified prior to the initiation of project activities. Appropriate spatial buffer zones of inactivity should be established during crucial breeding and nesting periods relative to raptor nest sites or territories. Arrival at nesting sites can occur as early as December for certain raptor species. Nesting and fledging can continue through August.

Section 2

Federal agencies have specific additional responsibilities under Section 7 of the Endangered Species Act (ESA). We recommend that you visit our Information, Planning, and Conservation System (http://ecos.fws.gov/ipac/) to determine whether any threatened and endangered species, designated critical habitat, and proposed critical habitat may be affected by your proposed project. If you determine, with our concurrence that the action is not likely to adversely affect listed species or critical habitat, the consultation process is complete, and no further action is necessary.

Ute ladies'-tresses (*Spiranthes diluvialis*) is a threatened species under the ESA and may occur within the proposed project area. We recommend that you evaluate the project area for Ute ladies'-tresses habitat and conduct plant surveys where habitat exists. Please reference the *U.S.*

Fish and Wildlife Service Utah Field office Guidelines for Conducting and Reporting Botanical Inventories and Monitoring of Federally Listed, Proposed and Candidate Plants, dated August 31, 2011, for additional guidance. Three years of surveys is necessary to confirm species absence where habitat exists. We are able to assist you in developing an appropriate survey protocol.

Formal consultation (50 CFR 402.14) with us is required if you determine that an action is "likely to adversely affect" a listed species or will result in jeopardy or adverse modification of critical habitat (50 CFR 402.02). You should also confer with us on any action which is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat (50 CFR 402.10). A written request for formal consultation or conference should be submitted to us with a completed biological assessment and any other relevant information (50 CFR 402.12).

We also direct your attention to section 7(d) of the ESA, as amended, which underscores the requirement that the Federal agency or the applicant shall not make any irreversible or irretrievable commitment of resources during the consultation period which, in effect, would deny the formulation or implementation of reasonable and prudent alternatives regarding their actions on any endangered or threatened species.

Only a Federal agency can enter into formal ESA section 7 consultation with the U.S. Fish and Wildlife Service. A Federal agency may designate a non-Federal representative to conduct informal consultation or prepare a biological assessment by providing written notice of such a designation. The ultimate responsibility for compliance with ESA section 7, however, remains with the Federal agency.

We appreciate the opportunity to provide these comments. For further correspondence, please contact Amy Defreese, Ecologist, at (801) 975-3330 ext. 128 or amy_defreese@fws.gov.

Sincerely,

Larry Crist
Utah Field Supervisor

Cc: UDWR – Central Region (Attn: Terri Pope) – by email
EPA – Denver (Attn: Julia McCarthy) – by email

References

Forman, R. T. and L. E. Alexander. 1998. Roads and their major ecological effects. Annu. Rev. Ecol. Syst. 29:207-31.

Parrish, J.R., F.P. Howe, R.E. Norvell. 2002. Utah Partners in Flight Avian Conservation Strategy Version 2.0. Utah Partners in Flight Program, Utah Division of Wildlife Resources, 1594 West North Temple, Salt Lake City, UT 84116, UDWR Publication Number 02-27. i-xiv + 302 pp. [Online version available at http://wildlife.utah.gov/publications/pdf/utah_partners_in_flight.pdf]

Romin, L.A., and J.A. Muck. 2002. U.S. Fish and Wildlife Service. Utah field office guidelines for raptor protection from human and land use disturbances.

Sutter J.V., M.E.. Anderson, K.D. Bunnell, M.F. Canning, A.G. Clark, D.E. Dolsen, and F.P. Howe. 2005. Utah Comprehensive Wildlife Conservation Strategy. Utah Division of Wildlife Resources. Salt Lake City, Utah.

U.S. Fish and Wildlife Service. 2008. Birds of Conservation Concern 2008. United States Department of Interior, Fish and Wildlife Service, Division of Migratory Bird Management, Arlington, Virginia. 85 pp. [Online version available at http://www.fws.gov/migratorybirds]

U.S. Fish and Wildlife Service. 2011. U.S. Fish and Wildlife Service Utah Field Office Guidelines for Conducting and Reporting Botanical Inventories and Monitoring of Federally Listed, Proposed and Candidate Plants.

USDA

United States Department of Agriculture

March 20, 2015

Elizabeth Cramer
Area Engineer / Project Manager
U.S. Department of Transportation
2520 West 4700 South, STE 9A
Salt Lake City, UT 84129

SUBJECT: HAD-UT Response
I-15 Payson Main Street Interchange Environmental Impact Sate
UDOT Project No. S-115-6(214)251, PIN 10263

Dear Ms. Cramer,

This letter is in response to your invitation to participate in the environmental impact statement process for the Interstate 15 Payson Main Street interchange. USDA Natural Resources Conservation Service (NRCS) decline to participate in the process for the following reasons:

- NRCS has no jurisdiction or authority with respect to the project;
- NRCS has no expertise or information relevant to the project; and
- NRCS does not intend to submit comments on the project.

If you have any questions or concerns please feel free to contact me.

Sincerely,

DAVID C BROWN
USDA NRCS
State Conservationist

Natural Resources Conservation Service
125 South State St., Room 4010, Salt Lake City, UT 84138
Voice 801 524-4550 Fax 1-844-715-4928

UTAH TRANSIT AUTHORITY

UTA
669 West 200 South
Salt Lake City, UT 84101

Elizabeth Cramer
Area Engineer
Federal Highway Administration
2520 West 4700 South, Suite 9A
Salt Lake City, Utah 84129

SUBJECT: I-15 Payson Main Street Interchange Environmental Impact Statement
Invitation to Become a Participating Agency
UDOT Project No. S-I15-6(214)251, PIN 10263

Dear Ms. Cramer,

Thank you for the invitation to be a participating agency on the Payson Main Street environmental impact statement. Given the nexus to our future expansion plans for FrontRunner commuter rail to Payson, the Utah Transit Authority accepts your invitation and we look forward to participating in the environmental review process.

Sincerely,

Matthew Sibul
Chief Planning Officer

March 24, 2015

Ms. Elizabeth Cramer
Federal Highway Administration
Utah Division
2520 West 4700 South, #9A
Salt Lake City, Utah 84129

Re: I-15 Payson Main Street Interchange Environmental Impact Statement
UDOT Project No. S-I15-6(214)251, PIN 10263

Dear Ms. Cramer:

Payson City is more than willing to participate in the I-15 Payson Main Street Interchange Environmental Impact Statement. This study will shape the way Payson City grows for years to come. It is a very important issue to our mayor and city council.

Payson City therefore accepts the invitation to be a participating agency in this process. Representatives of the city look forward to participating in the environmental review process and staff will be available at the request of your office and/or the UDOT office.

Thank you for the invitation. We look forward to working with you.

Sincerely,

David C. Tuckett
Payson City Manager

cc: Mayor & City Council

RECEIVED
MAR 27 2015
FHWA Utah Division

Fellows, Angie

From: Amy Defreese <amy_defreese@fws.gov>
Sent: Friday, June 12, 2015 1:53 PM
To: Clayton, Andrea
Cc: Naomi Kisen; Fellows, Angie; Markham, Loretta; Betsy Herrmann
Subject: RE: 10263 I-15 Payson Main Street EIS - follow up from meeting this morning

Hi Andrea,
Thank you for your email.

At this time, the Utah Field Office of the U.S. Fish and Wildlife Service would like to be a cooperating agency for the Payson project. We may choose to withdraw from cooperating agency status if impacts to our trust resources are minimized.

Sincerely,
Amy Defreese

Amy Defreese, Ecologist
Utah Field Office
U.S. Fish and Wildlife Service
2369 W. Orton Circle, Suite 50
West Valley City, Utah 84119
(801) 975-3330 x 128
amy_defreese@fws.gov

From: Clayton, Andrea [mailto:aclayton@hwlochner.com]
Sent: Monday, June 08, 2015 12:21 PM
To: Amy Defreese
Cc: Naomi Kisen; Fellows, Angie; Markham, Loretta
Subject: 10263 I-15 Payson Main Street EIS - follow up from meeting this morning

Amy,

Thanks for taking time to meet with us this morning.

Follow up on a couple of items:

- I verified with Ivan (traffic lead) that Frontrunner south is included in the 2040 Regional Transportation Plan (RTP) and the travel demand model. The 2040 RTP shows the station at 800 S. It probably does not have a big effect on traffic numbers at the Main St. interchange.
- Attached is the draft agency coordination plan (it was attached to the scoping meeting appointment 3/17/15), we still need to finalize:
    - Cooperating/participating agency status
    - Review time
    - Potentially point of contact too

Let me know if you have any questions or comments on the coordination plan.

It sounds like USFWS is leaning towards accepting the invitation to be a cooperating agency (with the caveat that you could pull back efforts if it looks like impacts would be mostly urban). We look forward to your response.

Thanks,

Andrea

Andrea Clayton, P.E.
Project Manager
LOCHNER
1245 E. Brickyard Rd., Suite 400
SLC, UT 84106
Phone: 801.415.5800
www.hwlochner.com

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

REPLY TO
ATTENTION OF

RECEIVED
JUN 0 8 2015
FHWA Utah Division

June 5, 2015

Regulatory Division (SPK-2015-00329)

Federal Highway Administration-Utah Division
Attn: Elizabeth Cramer
2520 West 4700 South, Suite 9-A
Salt Lake City, Utah 84129-3539

Dear Ms. Cramer:

We are responding to your May 28, 2015 request for the U.S. Army Corps of Engineers (Corps) to participate as a cooperating agency under the National Environmental Policy Act (NEPA) for the preparation of an Environmental Impact Statement (EIS) for the Payson Main Street Interchange project. The proposed project is centered on the Interstate 15 Exit 251 in Payson, Section 3, Township 9 South, Range 2 East, Salt Lake Meridian, Latitude 40.0585°, Longitude -111.7192°, Utah County, Utah (enclosure 1).

The Corps' jurisdiction over the proposed project is under the authority of Section 404 of the Clean Water Act. In accordance with Title 40 of the Code of Federal Regulations (CFR) Part 1501.6, the Corps agrees to participate as a cooperating agency in the preparation of the EIS. The Corps' involvement in the EIS process will be limited to those areas within the Corps' statutory authority, including, but not limited to:

1. Verify delineations of aquatic resources within the project area;

2. Assist in developing the purpose and need statement;

3. Assist in developing alternatives sufficient to meet the requirements of the U.S. Environmental Protection Agency's §404(b)(1) Guidelines, in order to ensure that impacts to the aquatic environment are avoided and minimized to the maximum extent practicable;

4. Assist in integrating the requirements of NEPA and the §404(b)(1) Guidelines into the EIS;

5. Participate in meetings as resources allow;

6. When requested, review and comment on technical studies that pertain to the Corps' regulatory authority;

7. Review and comment on portions of the administrative draft/final EIS that pertain to the Corps regulatory authority. The review of all administrative draft/final documents will require a minimum of 30 days; and

8. Assist in identifying appropriate and practicable compensatory mitigation for unavoidable impacts to the aquatic environment;

In addition, the Corps acknowledges that the Federal Highway Administration (FHWA) is the lead Federal agency for compliance with Section 7 of the Endangered Species Act (ESA), Section 305(b)(4)(B) of the Magnuson-Stevens Fisheries Conservation and Management Act (MSFCMA), and Section 106 of the National Historic Preservation Act (NHPA). Pursuant to 50 CFR Part 402.07, 50 CFR 600.920(b) and 36 CFR 800.2(a)(2), the Corps designates the FHWA to act on our behalf in any consultations conducted for compliance with ESA, MSFCMA and NHPA. We request that you include the Corps within any consultations conducted for compliance with these laws.

Please refer to identification number SPK-2015-00329-UO in any correspondence concerning this project. If you have any questions, please contact Mike Pectol by telephone, 801-295-8380 ext. 15, by email at *Michael.A.Pectol@usace.army.mil*, or at the Utah Regulatory Office, 533 West 2600 South, Suite 150, Bountiful, Utah 84010.

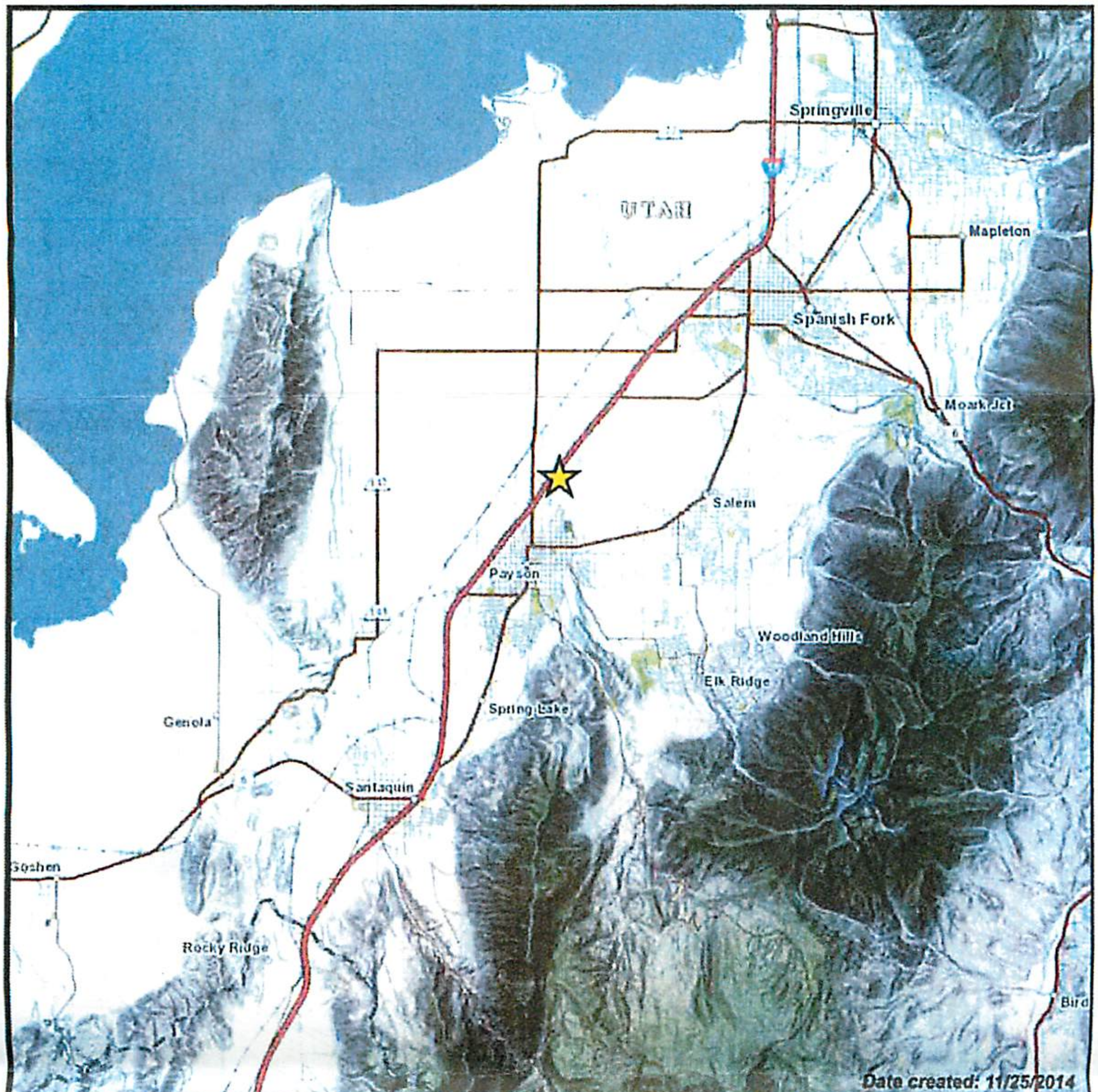
Sincerely,

Jason A. Gipson
Chief, Utah-Nevada Branch
Regulatory Division

Enclosure

cc: (w/o encls)

Brandon West, UDOT-Environmental (brandonwest@utah.gov)
Rich Crosland, UDOT Region 3 (richardcrosland@utah.gov)
Matt Parker, UDOT Project Manager (mattparker@utah.gov)



Payson Main Street Interchange EIS

★ Project Location

0 1.25 2.5 5 Miles

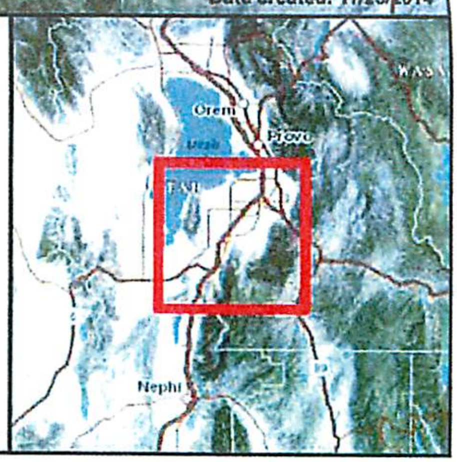
0 1.75 3.5 7 Kilometers

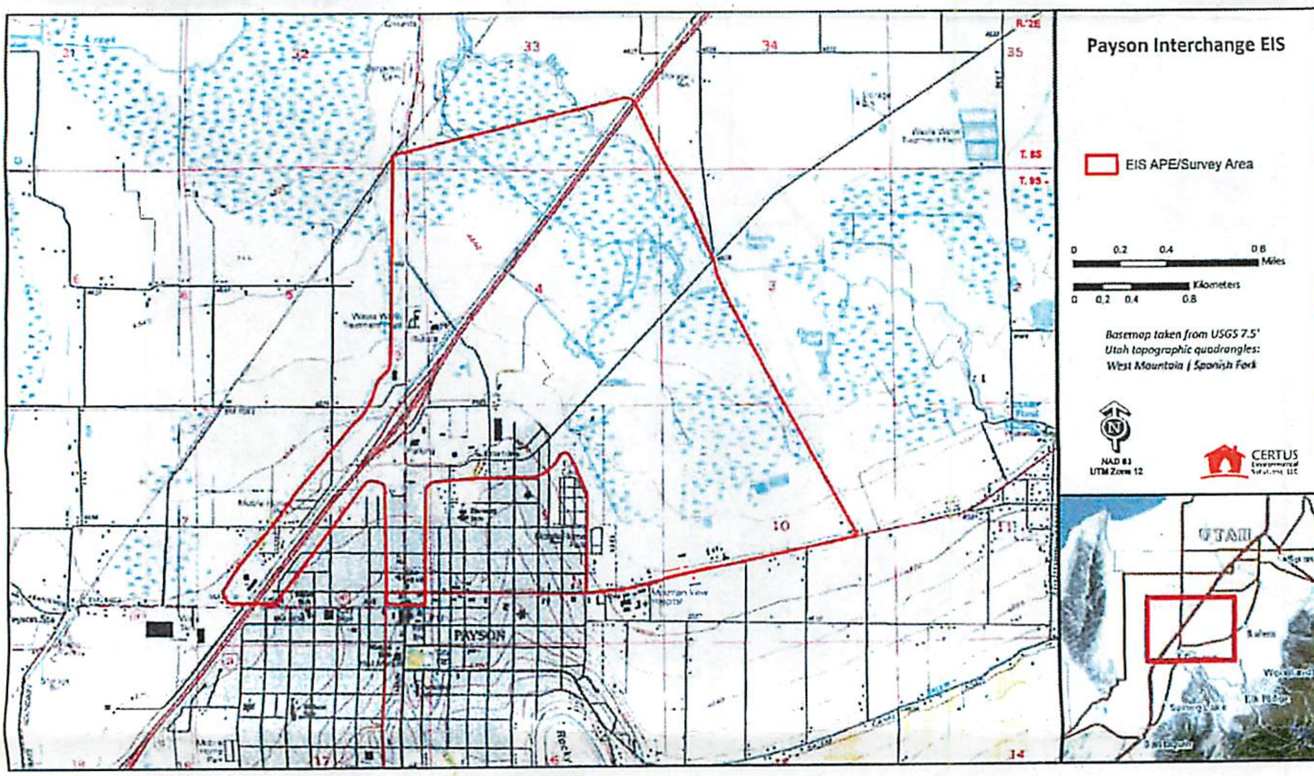
N

NAD 1983
UTM Zone 12N

Basemap taken from Utah AGRC Terrain Imagery

CERTUS Environmental Solutions, LLC




Payson Interchange EIS
EIS APE/Survey Area
0 0.2 0.4 0.8 Miles
Kilometers 0 0.2 0.4 0.8
Basemap taken from USGS 7.5' Utah topographic quadrangles: West Mountain / Spanish Fork
NAD 83 UTM Zone 12
CERTUS
PAYSON
T. 8S
T. 9S
R. 2E

U.S. Department of Homeland Security
Region VIII
Denver Federal Center, Building 710
P.O. Box 25267
Denver, CO 80225-0267

FEMA

R8-MT

June 4, 2015

Ms. Elizabeth Cramer
Area Engineer,
US Department of Transportation
2520 West 4700 South, STE 9-A
Salt Lake City, Utah 84129-1874

Re: I-15 Payson Main Street Interchange EIS, Utah County

Dear Ms. Cramer:

Thank you for your inquiry regarding the opportunity to become a participating agency in the review process for the I-15 Payson Main Street Interchange located in Utah County. FEMA's major concern is if the property/area is located within a mapped Special Flood Hazard Area, as development in these area requires further consideration. We are not able to participate in the environmental review process or make staff available at the request of the requesting agency.

We recommend that you contact the local Floodplain Manager, Travis Jockumsen, City Engineer at (801) 465-5235, to receive further guidelines regarding the impact that this project might have relative to the regulations and policies of the National Flood Insurance Program. Considering that floods are the most devastating of all natural disasters in this country, any efforts to reduce the impacts of that hazard is worthwhile.

Let me know if I can be of assistance and please feel free to contact me at (303) 235-4715. Thank you for giving us the opportunity to assist you in the proposed I-15 Payson Main Street Interchange EIS.

Sincerely,

Barbara Fitzpatrick

Barbara Fitzpatrick, Senior Specialist
Floodplain Management and Insurance
Mitigation Division

RECEIVED
JUN 08 2015

Tietze, Johanna

From: David Bird <dgbird@utah.gov>
Sent: Monday, June 08, 2015 3:15 PM
To: Cramer, Elizabeth A (FHWA)
Subject: I-15 Payson Main Street Interchange EIS

Categories: 10263 Payson

Elizabeth,

Pursuant to our telephone conversation earlier today, I am responding to the letter dated May 20, 2015 from the U.S. DOT inviting the Utah Department of Environmental Quality (UDEQ), Division of Environmental Response and Remediation (DERR) to become a participating agency for the above referenced project. At this time, and based on the information received to date, the DERR declines the invitation to be a participating agency. We are not in a position to comment on the scoping or formulation of alternatives for the project. However, when the draft Environmental Impact Statement (EIS) is ready for review, we request that the DERR be included in that review and comment process.

We encourage you to review the DERR interactive map, among other other sources, in the process of preparing the EIS. We also encourage you to communicate with the UDEQ Division of Solid and Hazardous Waste and the UDEQ Division of Water Quality.

It is possible that future construction activities associated with this project will encounter hazardous substances. These materials must be managed and disposed of properly. If impacted materials are encountered during construction, please notify the DERR. I may be contacted at (801) 536-4219. Thank you.

David Bird

Fellows, Angie

From: David Bird <dgbird@utah.gov>
Sent: Monday, June 08, 2015 3:15 PM
To: Cramer, Elizabeth A (FHWA)
Subject: I-15 Payson Main Street Interchange EIS

Categories: 10263 Payson

Elizabeth,

Pursuant to our telephone conversation earlier today, I am responding to the letter dated May 20, 2015 from the U.S. DOT inviting the Utah Department of Environmental Quality (UDEQ), Division of Environmental Response and Remediation (DERR) to become a participating agency for the above referenced project. At this time, and based on the information received to date, the DERR declines the invitation to be a participating agency. We are not in a position to comment on the scoping or formulation of alternatives for the project. However, when the draft Environmental Impact Statement (EIS) is ready for review, we request that the DERR be included in that review and comment process.

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It is possible that future construction activities associated with this project will encounter hazardous substances. These materials must be managed and disposed of properly. If impacted materials are encountered during construction, please notify the DERR. I may be contacted at (801) 536-4219. Thank you.

David Bird

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
www.epa.gov/region08

RECEIVED
JUL 15 2015
FHWA Utah Division

JUN 11 2015

Ref: 8EPR-N

Ms. Elizabeth Cramer, Area Engineer
U.S. Department of Transportation
Federal Highway Administration
2520 West 4700 South, STE 9-A
Salt Lake City, UT 84129-1874

Re: I-15 Payson Main Street Interchange Environmental Impact Statement: Invitation to Become a Cooperating Agency

Dear Ms. Cramer:

This letter is in response to your May 20, 2015, letter to Shaun McGrath requesting that the Region 8 EPA revisit the decision to become a cooperating agency for the I-15 Payson Main Street Interchange Environmental Impact Statement (EIS) and Project.

We learned from the last conference call that one of the alternatives, relocating the existing interchange to the north, could potentially impact undeveloped lands and up to 20 acres of wetlands. Since the EPA has special jurisdiction and expertise with respect to wetlands, we do agree that increased involvement at the early stages of this project is warranted, especially with regard to wetland issues. We think a cooperating agency level of involvement may not be necessary and will commit to participating agency status. As a participating agency, the EPA will make every effort to participate in the early scoping and environmental review process leading up to a Draft EIS, including attendance at conference call meetings. Further, we may provide specific expertise advice and comment on wetlands issues that arise.

We look forward to working with you as a participating agency. If you have any questions, please feel free to contact me at (303)-312-6704, or contact Robin Coursen of my staff at (303)-312-6695.

Sincerely,

David Fronczak

for Philip S. Strobel
Acting Director, NEPA Compliance and Review Program
Office of Ecosystems Protection and Remediation

cc: Brandon Weston, UDOT-Environmental
Rich Crosland, UDOT-Region 3
Matt Parker, Project Manager -UDOT

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
WESTERN REGIONAL OFFICE
2600 North Central Avenue
Phoenix, Arizona 85004

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:
Division of Transportation
MS-370

JUL 0 8 2015

Ms. Elizabeth Cramer, Area Engineer
Federal Highway Administration – Utah Division
2520 West 4700 South, Suite 9-A
Salt Lake City, Utah 84129-1874

Dear Ms. Cramer:

Thank you for your letter dated May 20, 2015, inviting our participation as a Cooperating Agency for the purposes of preparing an Environmental Impact Statement (EIS) for the proposed I-15 Payson Main Street Interchange project. The Bureau of Indian Affairs (BIA), Western Region, respectfully declines your invitation to be a participating agency for the subject EIS.

The BIA Western Region has determined that our agency has no jurisdiction or authority with respect to the project; no expertise or information relevant to the project; and does not intend to submit comments on the project. The BIA does, however, recommend that the Federal Highway Administration consult with potentially affected tribes.

Should the scope of the project change or if we can be of assistance in any way, please contact Mr. Chip Lewis or Mr. Gary Cantley, of my staff, at (602) 379-6750.

Sincerely,

Rodney M. [illegible]

ACTING Regional Director

United States Department of the Interior
BUREAU OF INDIAN AFFAIRS
WESTERN REGIONAL OFFICE
2600 North Central Avenue
Phoenix, Arizona 85004

TAKE PRIDE IN AMERICA

In Reply Refer To:
Division of Transportation
MS-370

JUL 0 8 2015

Ms. Elizabeth Cramer, Area Engineer
Federal Highway Administration - Utah Division
2520 West 4700 South, Suite 9-A
Salt Lake City, Utah 84129-1874

Dear Ms. Cramer:

Thank you for your letter dated May 20, 2015, inviting our participation as a Cooperating Agency for the purposes of preparing an Environmental Impact Statement (EIS) for the proposed I-15 Payson Main Street Interchange project. The Bureau of Indian Affairs (BIA), Western Region, respectfully declines your invitation to be a participating agency for the subject EIS.

The BIA Western Region has determined that our agency has no jurisdiction or authority with respect to the project, no expertise or information relevant to the project, and does not intend to submit comments on the project. The BIA does, however, recommend that the Federal Highway Administration consult with potentially affected tribes.

Should the scope of the project change or if we can be of assistance in any way, please contact Mr. Chip Lewis or Mr. Garry Cantley, of my staff, at (602) 379-6750.

Sincerely,

ACTING Regional Director

Preserving America's Heritage

July 15, 2015

Ms. Elizabeth Cramer
Area Engineer/Project Manager
Federal Highway Administration
2520 West 4700 South, STE 9A
Salt Lake City, Utah 84129

Ref: *I-15 Payson Main Street Interchange Environmental Impact Statement, Invitation to become a Cooperating Agency, UDOT Project No. S-I15-6(214)251, PIN 10263*

Dear Ms. Cramer:

On March 12, 2015 the Advisory Council on Historic Preservation (ACHP) received the Federal Highway Administration's (FHWA's) initial invitation to become a cooperating agency for the above mentioned project. We then received a follow-up letter on May 27th, 2015, requesting our response to the initial invitation to become a cooperating agency. We apologize for the delay in responding. The ACHP accepts your invitation to become a cooperating agency. However, we do not at this time anticipate attending meetings or providing formal comments at environmental review milestones. We would appreciate your keeping us informed of progress, as we may decide to become more actively involved in the future, as warranted. We would also be pleased to provide FHWA with technical assistance related to historic preservation and Section 106 of the National Historic Preservation Act as you fulfill your compliance responsibilities.

In addition, the ACHP encourages FHWA to coordinate the Section 106 process with the National Environmental Policy Act (NEPA) compliance by notifying, at your earliest convenience, the appropriate State Historic Preservation Officer (SHPO) and/or Tribal Historic Preservation Officer (THPO), Indian tribes, and other consulting parties pursuant to our regulations, "Protection of Historic Properties" (36 CFR Part 800). Through early consultation, your agency will be able to determine the appropriate strategy to ensure Section 106 compliance is completed in a timely manner for this undertaking.

Likewise, FHWA should continue consultation with the appropriate SHPO/THPO, Indian tribes, and other consulting parties to identify and evaluate historic properties and to assess any potential adverse effects on those historic properties. If your agency determines through consultation with the consulting parties that the undertaking will adversely affect historic properties or that the development of a programmatic agreement is necessary, the agency must notify the ACHP and provide the documentation detailed at 36 CFR §800.11(e).

ADVISORY COUNCIL ON HISTORIC PRESERVATION

401 F Street NW, Suite 308 • Washington, DC 20001-2637
Phone: 202-517-0200 • Fax: 202-517-6381 • achp@achp.gov • www.achp.gov

Thank you for inviting our participation in the development of this project. Should you have any questions as to how your agency should comply with the requirements of Section 106, please contact Meghan Hesse at (202) 517-0214 or via e-mail at mhesse@achp.gov

Sincerely,

Charlene Dwin Vaughn

Charlene Dwin Vaughn, AICP
Assistant Director
Office of Federal Agency Programs
Federal Permitting, Licensing, and Assistance Section

Fellows, Angie

From: elizabeth.cramer@dot.gov
Sent: Tuesday, March 17, 2015 8:57 AM
To: Fellows, Angie
Cc: Markham, Loretta; mattparker@utah.gov
Subject: FW: Invitation to Attend Agency Scoping Meeting for I-15, Payson Main St. EIS

FYI

Liz Cramer
Bridge Engineer
Area Engineer, UDOT Region 3

Federal Highway Administration - Utah Division
2520 W 4700 S Suite 9A
Salt Lake City, UT 84129
(801) 955-3527
elizabeth.cramer@dot.gov

From: Teresa Wilhelmsen [mailto:teresawilhelmsen@utah.gov]
Sent: Tuesday, March 17, 2015 8:55 AM
To: Cramer, Elizabeth A (FHWA)
Subject: Invitation to Attend Agency Scoping Meeting for I-15, Payson Main St. EIS

Elizabeth -

Per our phone conversation this morning and your description of the proposed project, I don't see that our agency needs to be a participating agency in this initial process. If you have any specific water right, or stream alteration questions, please contact our office.

--

Teresa Wilhelmsen, P.E.
Regional Engineer - Utah Lake / Jordan River Region

Department of Natural Resources
Division of Water Rights
1594 West North Temple, Suite 220
PO Box 146300
Salt Lake City, Utah 84114-6300
www.waterrights.utah.gov

801-537-3119 office
801-538-7467 fax
teresawilhelmsen@utah.gov

To the world you may be just one person, but to just one dog you may be the world!

Peterson, Justin

From: elizabeth.cramer@dot.gov
Sent: Wednesday, March 11, 2015 1:59 PM
To: Fellows, Angie
Cc: Markham, Loretta; mattparker@utah.gov
Subject: FW: Declining participation in the Payson I-15 / Main Street interchange EIS

FYI

Liz Cramer
Bridge Engineer
Area Engineer, UDOT Region 3

Federal Highway Administration - Utah Division
2520 W 4700 S Suite 9A
Salt Lake City, UT 84129
(801) 955-3527
elizabeth.cramer@dot.gov

From: Bill James [mailto:billjames@utah.gov]
Sent: Wednesday, March 11, 2015 1:57 PM
To: Cramer, Elizabeth A (FHWA)
Cc: Marrero, Ivan (FHWA)
Subject: Declining participation in the Payson I-15 / Main Street interchange EIS

Ms. Cramer,

The Utah Division of Wildlife Resources chooses not to become a "participating agency" in the preparation of the Payson / I-15 Interchange EIS. Thank you nonetheless for the opportunity.

Bill James
Wildlife Program Coordinator
Utah Division of Wildlife Resources
P.O. Box 146301
Salt Lake City, UT 84114-6301
(801) 538-4752 office

U.S. Department of Transportation
Federal Highway Administration

Utah Division

2520 West 4700 South
Salt Lake City, UT 84129
(801)955-3500
(801) 955-3539

March 2, 2015

In Reply Refer To:
HDA-UT

Ms. Irene Cuch, Chairperson
Uintah & Ouray Ute Indian Reservation
P.O. Box 190
Fort Duchesne, UT 84062

Subject: Notification of Project and Invitation to become a Consulting Party for the I-15; Payson Interchange Environmental Impact Statement, Utah County, Utah. UDOT Project No.S-I15-6(214)251:

Dear Ms. Cuch,

The Federal Highway Administration (FHWA), in cooperation with the Utah Department of Transportation (UDOT), are initiating an Environmental Impact Statement (EIS) to evaluate improvements to the Interstate 15 (I-15) interchange at Main Street in Payson, Utah County. The study area for the EIS centers on I-15 Exit 251 in Payson. The western boundary generally follows the railroad tracks west of I-15 and 3550 West. The southern boundary parallels State Route (SR) 198, and the eastern boundary follows a northwest line across agricultural fields for approximately 2.3 miles until it crosses I-15. The northern boundary continues east along 1500 North before terminating west of Dixon Road along SR-115 (3200 West/Main Street). (see enclosed Project Location Map).

In accordance with the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA), the FHWA and the UDOT would like to initiate consultation with your Tribe regarding this project. At this time, we request your assistance in identifying any historic properties of traditional religious and/or cultural importance that may be affected by the proposed undertaking, as well as any concerns that you may have regarding the proposed project. We consider your input into the project to be important and would appreciate your participation as a consulting party during the development of the environmental document.

Please be assured that, in accordance with confidentiality and disclosure stipulations in Section 304 of the NHPA, the FHWA and the UDOT will maintain strict confidentiality about certain types of information regarding traditional religious and/or cultural places that may be affected by this proposed undertaking. At your request, the FHWA and the UDOT staff will be available to meet with you to discuss any concerns you might have about the project. We would also appreciate any suggestions you might have about other groups or individuals that we should contact regarding this project or ways that we may more effectively consult with you.

Should you have any questions or concerns about this project, information regarding sensitive resources, and/or wish to be a consulting party, please contact me at 801-955-3527 or at Elizabeth.cramer@dot.gov, or contact Rich Allen at 801-709-9694 or richallen@utah.gov. To facilitate our consultation with your Tribe, we would greatly appreciate a response to this letter within 30 days of receipt.

Thank you for your attention to this project notification and any comments you may have.

Sincerely yours,

DAVID COX
FOR

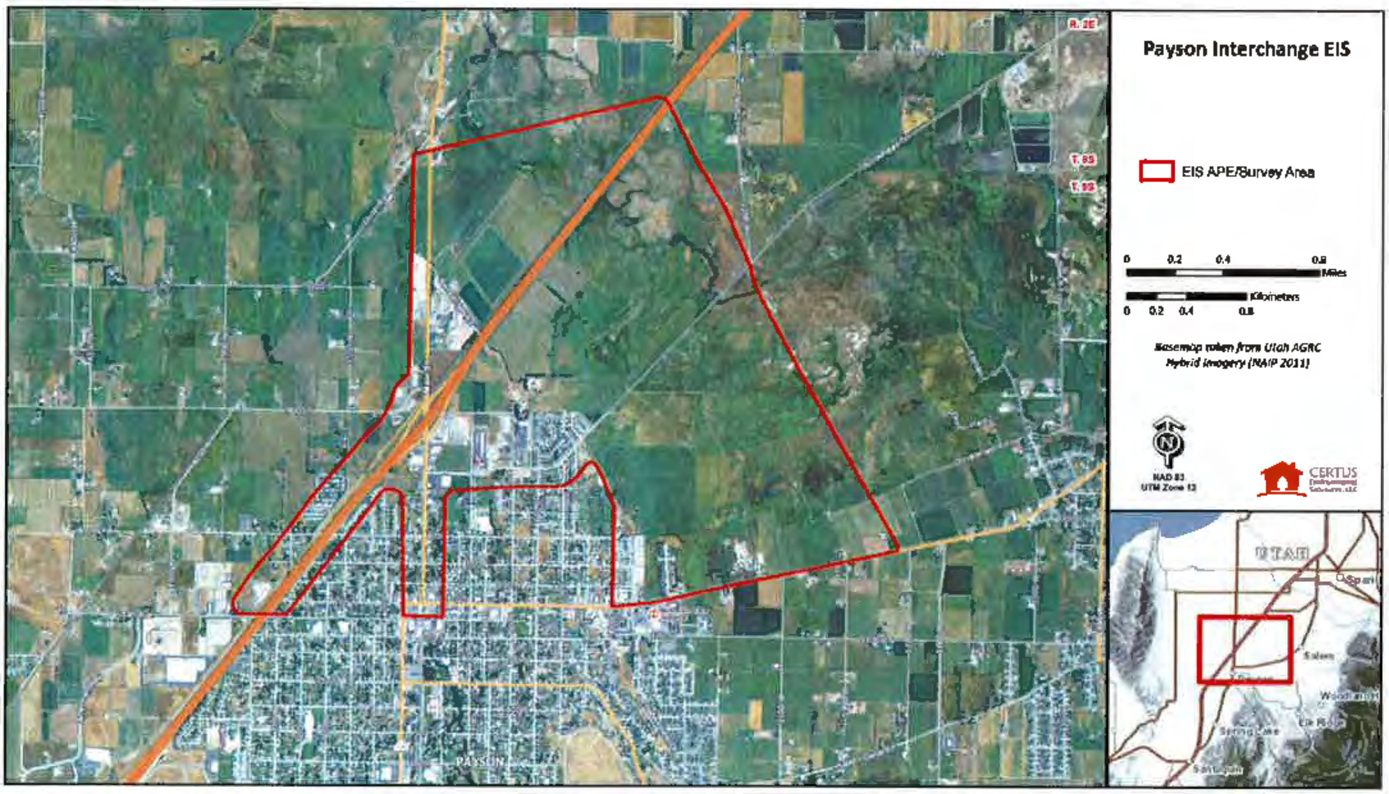
Elizabeth Cramer
Area Engineer

Enclosure(s):
- Project Maps

cc: Betsy Chapoose, Director

ECramer:dm

Original to:	**CC to:**
Mr. Nathan Small, Chair Shoshone-Bannock Tribes of the Fort Hall Reservation P.O. Box 306 Pima Drive Fort Hall, Idaho 83203	Ms. Carolyn Smith, HETO Cultural Resources Coordinator Shoshone-Bannock Tribes of the Fort Hall Reservation P.O. Box 306 Pima Drive Fort Hall, Idaho 83203
Mr. Jason Walker, Chairman Northwestern Band of the Shoshone Nation 707 North Main Street Brigham City, UT 84302	Ms. Patti Timbimboo-Madsen, Cultural Resources Specialist Northwestern Band of the Shoshone Nation 707 North Main Street Brigham City, UT 84302
Mr. Darwin St. Clair Jr., Chairman Eastern Shoshone Tribe of the Wind River Reservation P.O. Box 538/15 North Fork Road Fort Washakie, WY 82514	Mr. Wilfred Ferris, THPO Eastern Shoshone Tribe of the Wind River Reservation P.O. Box 538/15 North Fork Road Fort Washakie, WY 82514
	Ms. Glenda Trosper, Director Cultural Center Eastern Shoshone Tribe of the Wind River Reservation P.O. Box 538/15 North Fork Road Fort Washakie, WY 82514
Ms. Lori Bear Skiby, Chairperson Skull Valley Band of Goshute Indians P.O. Box 448 Grantsville, UT 84029	
Ms. Irene Cuch, Chairperson Uintah and Ouray Ute Indian Reservation P.O. Box 190 Fort Duchesne, UT 84062	Ms. Betsy Chapoose, Director Cultural Rights & Protection Uintah and Ouray Ute Indian Reservation P.O. Box 190 Fort Duchesne, UT 84062
Ms. Gari Lafferty, Tribal Chairwoman Paiute Indian Tribe of Utah 440 North Paiute Drive Cedar City, UT 84720	Ms. Dorena Martineau, Cultural Resources Manager Paiute Indian Tribe of Utah 440 North Paiute Drive Cedar City, UT 84720
Ms. Lora Tom, Band Chairwoman Cedar Band of the Paiute Indians 4655 North Utah Trail Enoch, UT 84720	Ms. Eleanor Tom Cedar Band of the Paiute Indians 4562 N. Wagonwheel Dr. Cedar City, Utah 84721
Ms. Jetta Wood, Band Chairwoman Shivwits Band of Paiute Indian Tribe of Utah 6060 West 3650 North Ivins, UT 84738	Ms. Shanan Anderson, Cultural Resource Director Shivwits Band of Paiute Indian Tribe of Utah 6060 West 3650 North Ivins, UT 84738



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UTM Zone 12
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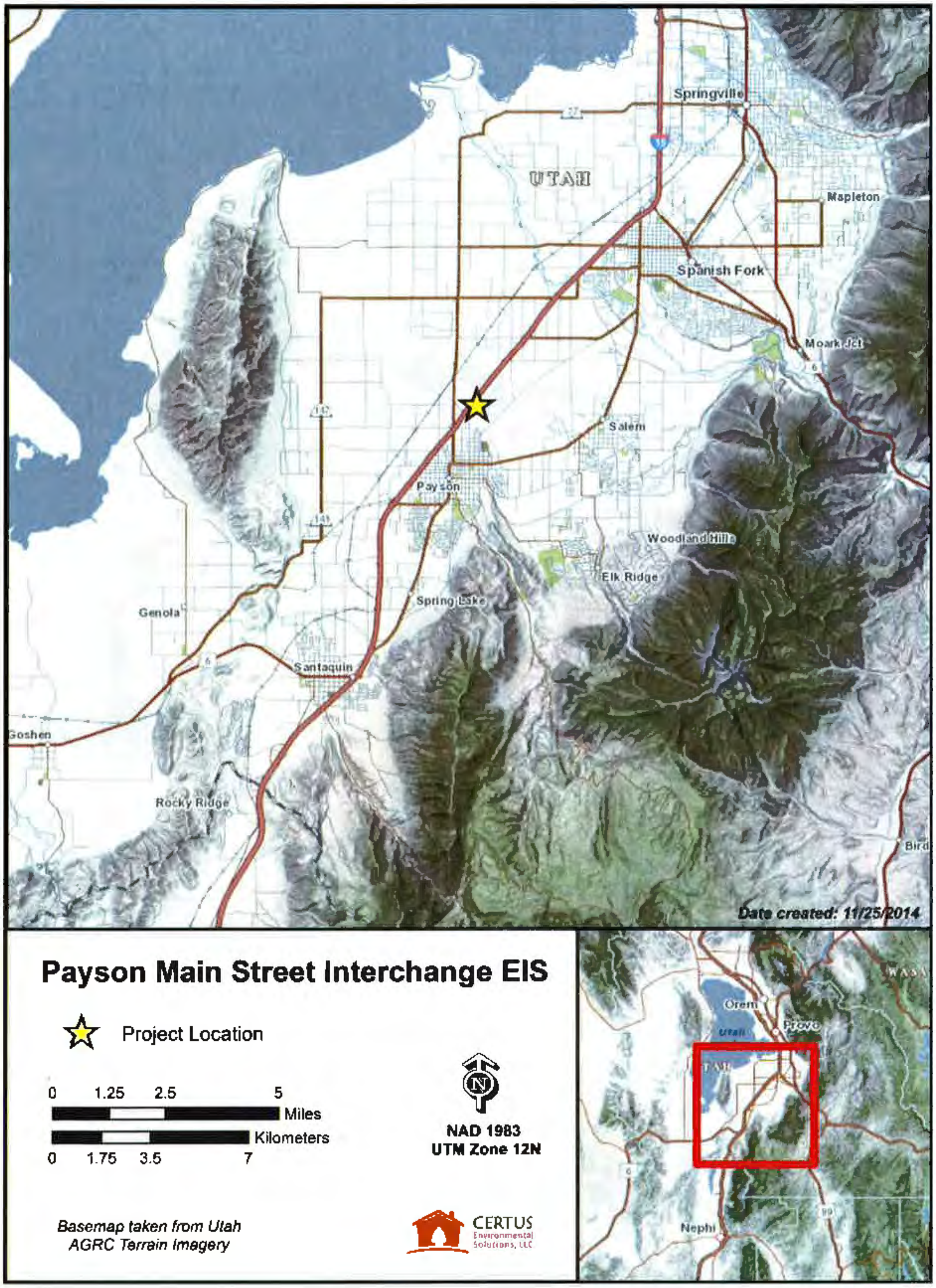
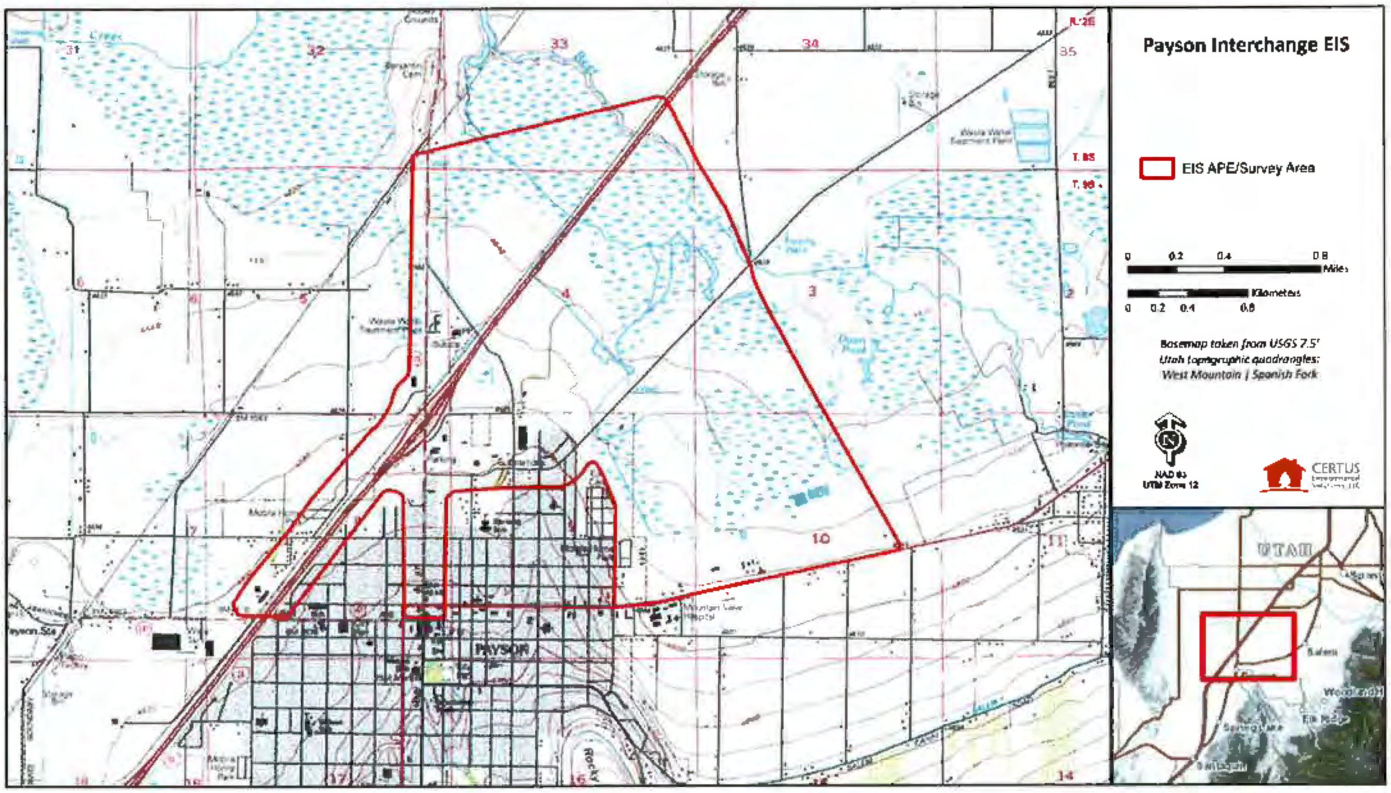

Springville
UTAH
Mapleton
Spanish Fork
Moark Jct
Salem
Payson
Woodland Hills
Elk Ridge
Spring Lake
Genola
Santaquin
Goshen
Rocky Ridge
Bird
Date created: 11/25/2014
Payson Main Street Interchange EIS
Project Location
0 1.25 2.5 5
Miles
Kilometers
0 1.75 3.5 7
NAD 1983
UTM Zone 12N
Basemap taken from Utah AGRC Terrain Imagery
CERTUS Environmental Solutions, LLC
Orem
Provo
Utah
Nephi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Utah topographic quadrangles:
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NAD 83
UTM Zone 12
CERTUS
UTAH
PAYSON
Salem
Spring Lake

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

August 31, 2015

Mr. Dale Barnett
Peteetneet Museum and Cultural Arts Center
P.O. Box 603
10 N. 600 E.
Payson, Utah 84651

RE: Project No. S-I15-6(214), I-15, Payson Main Street Interchange (UDOT PIN 10263)

Dear Mr. Barnett:

The Federal Highway Administration (FHWA) and the Utah Department of Transportation (UDOT) are conducting an environmental study to improve the I-15 Exit 250 interchange at Payson Main Street. Various transportation and planning studies indicate that the existing transportation infrastructure will not support the population growth of Payson and its environs. Additionally, the existing design deficiencies compromise vehicle safety and limit the overall functionality of the interchange. The intent of the environmental study is thus to examine alternatives that will improve the design of the interchange and accommodate future traffic demand. The engineering firm of H.W. Lochner is preparing the environmental study under the direction of FHWA and UDOT.

As part of the environmental review, the cultural resources firm of Certus Environmental Solutions, LLC, represented by Sheri Ellis, conducted a historic architecture survey to determine the location and number of resources that could potentially be impacted by the alternatives under study. In accordance with the regulations (36 CFR Part 800) for implementing Section 106 of the National Historic Preservation Act (NHPA), I am writing to let you know that the survey is available for your review and to request that you notify us with concerns you might have regarding historic sites in the project area, a map of which is attached. An archaeological survey will be completed at a later date, and information from that survey will be available for your consideration at that time.

Ms. Ellis' historic architecture report identifies 155 buildings, 86 of which are considered eligible for the National Register of Historic Places (NRHP), or have already been listed individually or are included in the Payson Historic District. Those resources deemed eligible but not yet listed meet the criteria of the NRHP by being at least 45 years old and exhibiting sufficient physical character to impart their historic or architectural association with the development of Payson. Because UDOT and FHWA are continuing to explore options for the improvements to the interchange, UDOT has not yet determined what effect the project may have on eligible or listed architectural properties.

I am sending a similar letter to residents involved in the preservation of Payson's history, including Karl Teemant, L. Dee Stevenson, Cynthia Peacock and Brian Hulet. If you know of other citizens who I should contact, please forward their names to me. At your request, members of the project team will be available to meet with you to discuss any concerns and suggestions you may have to avert or minimize the effect of the alternatives under consideration on historic resources in the project area.

Please feel free to contact me at (801) 633-8484, or via email at egiraud@utah.gov, if you have any questions or if you would like to set up a meeting to discuss the project.

I appreciate your attention to this project notification and any comments you may have.

Sincerely,

Elizabeth Giraud

Elizabeth Giraud, AICP
Architectural Historian, Utah Department of Transportation

Enclosure

CC: Matt Parker, Project Manager, UDOT Region 3
Loretta Markham, Project Manager, H.W. Lochner
Liz Robinson, UDOT Cultural Resources Manager
Rich Allen, UDOT Region 3 NEPA/NHPA Specialist
Sheri Ellis, Certus Environmental Solutions, LLC

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

August 31, 2015

Mr. Brian Hulet
Payson Certified Local Government
4214 W. 12000 S.
Payson, Utah 84651

RE: Project No. S-I15-6(214), I-15, Payson Main Street Interchange (UDOT PIN 10263)

Dear Mr. Hulet:

The Federal Highway Administration (FHWA) and the Utah Department of Transportation (UDOT) are conducting an environmental study to improve the I-15 Exit 250 interchange at Payson Main Street. Various transportation and planning studies indicate that the existing transportation infrastructure will not support the population growth of Payson and its environs. Additionally, the existing design deficiencies of the interchange compromise vehicle safety and limit its overall functionality. The intent of the environmental study is thus to examine alternatives that will improve the design of the interchange and accommodate future traffic demand. The engineering firm of H.W. Lochner is preparing the environmental study under the direction of FHWA and UDOT.

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I am sending a similar letter to residents involved in the preservation of Payson's history, including Dale Barnett, L. Dee Stevenson, Cynthia Peacock and Karl Teemant. If you know of other citizens who I should contact, please forward their names to me. At your request, members of the project team will be available to meet with you to discuss any concerns and suggestions you may have to avert or minimize the effect of the alternatives under consideration on historic resources in the project area.

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I appreciate your attention to this project notification and any comments you may have.

Sincerely,

Elizabeth Giraud

Elizabeth Giraud, AICP
Architectural Historian, Utah Department of Transportation

Enclosure

CC: Matt Parker, Project Manager, UDOT Region 3
Loretta Markham, Project Manager, H.W. Lochner
Liz Robinson, UDOT Cultural Resources Manager
Rich Allen, UDOT Region 3 NEPA/NHPA Specialist
Sheri Ellis, Certus Environmental Solutions, LLC

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

August 31, 2015

Ms. Cynthia Peacock
Daughters of the Utah Pioneers – Utah County Chapter
5011 W. 12400 S.
Payson, Utah 84651

RE: Project No. S-I15-6(214), I-15, Payson Main Street Interchange (UDOT PIN 10263)

Dear Ms Peacock:

The Federal Highway Administration (FHWA) and the Utah Department of Transportation (UDOT) are conducting an environmental study to improve the I-15 Exit 250 interchange at Payson Main Street. Various transportation and planning studies indicate that the existing transportation infrastructure will not support the population growth of Payson and its environs. Additionally, the existing design deficiencies compromise vehicle safety and limit the overall functionality of the interchange. The intent of the environmental study is thus to examine alternatives that will improve the design of the interchange and accommodate future traffic demand. The engineering firm of H.W. Lochner is preparing the environmental study under the direction of FHWA and UDOT.

As part of the environmental review, the cultural resources firm of Certus Environmental Solutions, LLC, represented by Sheri Ellis, conducted a historic architecture survey to determine the location and number of resources that could potentially be impacted by the alternatives under study. In accordance with the regulations (36 CFR Part 800) for implementing Section 106 of the National Historic Preservation Act (NHPA), I am writing to let you know that the survey is available for your review and to request that you notify us with concerns you might have regarding historic sites in the project area, a map of which is attached. An archaeological survey will be completed at a later date, and information from that survey will be available for your consideration at that time.

Ms. Ellis' historic architecture report identifies 155 buildings, 86 of which are considered eligible for the National Register of Historic Places (NRHP), or have already been listed individually or are included in the Payson Historic District. Those resources deemed eligible but not yet listed meet the criteria of the NRHP by being at least 45 years old and exhibiting sufficient physical character to impart their historic or architectural association with the development of Payson. Because UDOT and FHWA are continuing to explore options for the improvements to the interchange, UDOT has not yet determined what effect the project may have on eligible or listed architectural properties.

I am sending a similar letter to residents involved in the preservation of Payson's history, including Dale Barnett, L. Dee Stevenson, Karl Teemant and Brian Hulet. If you know of other citizens who I should contact, please forward their names to me. At your request, members of the project team will be available to meet with you to discuss any concerns and suggestions you may have to avert or minimize the effect of the alternatives under consideration on historic resources in the project area.

Please feel free to contact me at (801) 633-8484, or via email at egiraud@utah.gov, if you have any questions or if you would like to set up a meeting to discuss the project.

I appreciate your attention to this project notification and any comments you may have.

Sincerely,

Elizabeth Giraud

Elizabeth Giraud, AICP
Architectural Historian, Utah Department of Transportation

Enclosure

CC: Matt Parker, Project Manager, UDOT Region 3
Loretta Markham, Project Manager, H.W. Lochner
Liz Robinson, UDOT Cultural Resources Manager
Rich Allen, UDOT Region 3 NEPA/NHPA Specialist
Sheri Ellis, Certus Environmental Solutions, LLC

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

August 31, 2015

Mr. L. Dee Stevenson
Payson Historical Society
c/o Peteetneet Museum and Cultural Arts Center
P.O. Box 603
10 N. 600 E.
Payson, Utah 84651

RE: Project No. S-I15-6(214), I-15, Payson Main Street Interchange (UDOT PIN 10263)

Dear Mr. Stevenson:

The Federal Highway Administration (FHWA) and the Utah Department of Transportation (UDOT) are conducting an environmental study to improve the I-15 Exit 250 interchange at Payson Main Street. Various transportation and planning studies indicate that the existing transportation infrastructure will not support the population growth of Payson and its environs. Additionally, the existing design deficiencies compromise vehicle safety and limit the overall functionality of the interchange. The intent of the environmental study is thus to examine alternatives that will improve the design of the interchange and accommodate future traffic demand. The engineering firm of H.W. Lochner is preparing the environmental study under the direction of FHWA and UDOT.

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DEPARTMENT OF TRANSPORTATION

CARLOS M. BRACERAS, P.E.
Executive Director

SHANE M. MARSHALL, P.E.
Deputy Director

August 31, 2015

Mr. Karl Teemant
Payson Certified Local Government
439 W. Utah Ave.
Payson, Utah 84651

RE: Project No. S-I15-6(214), I-15, Payson Main Street Interchange (UDOT PIN 10263)

Dear Mr. Teemant:

The Federal Highway Administration (FHWA) and the Utah Department of Transportation (UDOT) are conducting an environmental study to improve the I-15 Exit 250 interchange at Payson Main Street. Various transportation and planning studies indicate that the existing transportation infrastructure will not support the population growth of Payson and its environs. Additionally, the existing design deficiencies compromise vehicle safety and limit the overall functionality of the interchange. The intent of the environmental study is thus to examine alternatives that will improve the design of the interchange and accommodate future traffic demand. The engineering firm of H.W. Lochner is preparing the environmental study under the direction of FHWA and UDOT.

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Rich Allen, UDOT Region 3 NEPA/NHPA Specialist
Sheri Ellis, Certus Environmental Solutions, LLC

APPENDIX B
TECHNICAL REPORTS

The following technical reports have been prepared to support the I-15, Payson Main Street Interchange Environmental Impact Statement (EIS).

Technical Report Title	Prepared By	Contact
An Archeological Assessment for the Interstate 15 Payson Main Street Interchange EIS, Utah County, Utah	Certus Environmental Solutions, LLC Sheri Murray Ellis, MS RPA	Sheri Murray Ellis, MS RPA 655 7th Ave Salt Lake City, UT 84103
An Addendum to: An Archaeological Assessment for the Interstate 15 Payson Main Street Interchange EIS, Utah County, Utah Final	Certus Environmental Solutions, LLC Sheri Murray Ellis, MS RPA	Sheri Murray Ellis, MS RPA 655 7th Ave Salt Lake City, UT 84104
Selective Reconnaissance-Level Historic Structures Assessment for the Interstate 15 Payson Main Street Interchange EIS, Utah County, Utah	Certus Environmental Solutions, LLC Sheri Murray Ellis, MS RPA	Sheri Murray Ellis, MS RPA 655 7th Ave Salt Lake City, UT 84104
Addendum to: Selective Reconnaissance-Level Historic Structures Assessment for the Interstate 15 Payson Main Street Interchange EIS, Utah County, Utah Final	Certus Environmental Solutions, LLC Sheri Murray Ellis, MS RPA	Sheri Murray Ellis, MS RPA 655 7th Ave Salt Lake City, UT 84104
Wetland and Waters of the U.S. Delineation I-15 Payson Main Street Interchange EIS	Wetland Resources Todd Sherman	Todd Sherman 182 East 300 North Logan, UT 84321
Air Quality Assessment I-15, Payson Main Street Interchange EIS	Lochner Dave Shannon, PE	Dave Shannon, PE Lochner 225 West Washington Street Chicago, IL 60606
Project of Air Quality Concern Determination I-15, Payson Main Street Interchange EIS	Lochner Dave Shannon, PE	Dave Shannon, PE Lochner 225 West Washington Street Chicago, IL 60606

Technical Report Title	Prepared By	Contact
Noise Assessment I-15, Payson Main Street Interchange EIS	Lochner Dave Shannon, PE	Dave Shannon, PE 225 West Washington Street Chicago, IL 60606
Economic Impact Technical Report I-15, Payson Main Street Interchange EIS	Leland Consulting Group Ted Kamp Chris Zahas	Ted Kamp, AICP 610 SW Alder Street # 1008 Portland, OR 97205
Wildlife Inventory Report I-15 Payson Main Street Interchange EIS	InterWest Wildlife Glen Gantz	Glen Gantz 11255 North 2000 East Richmond, UT 84333
Sprianthes diluvialis Survey I-15 Payson Main Street Interchange EIS	Wetland Resources Todd Sherman	Todd Sherman 182 East 300 North Logan, UT 84321
I-15 Payson Main Street Interchange Biological Assessment (including Not Likely to Adversely Affect Determination)	Lochner Justin Peterson, AICP	Justin Peterson, AICP 3995 South 700 East, Ste 450 Salt Lake City, UT 84107
Traffic Report I-15, Payson Main Street Interchange EIS	Avenue Consultants Ivan Hooper, PE Bill Hereth, PE	Ivan Hooper, PE 6575 S Redwood Rd., Ste 101 Taylorsville, UT 84123
Bamberger Ranch Sensitivity Analysis	Avenue Consultants Ivan Hooper, PE Bill Hereth, PE	Ivan Hooper, PE 6575 S Redwood Rd., Ste 101 Taylorsville, UT 84123

APPENDIX B
TECHNICAL REPORTS

AN ARCHEOLOGICAL ASSESSMENT FOR THE INTERSTATE 15 PAYSON MAIN STREET INTERCHANGE ENVIRONMENTAL IMPACT STATEMENT, UTAH COUNTY, UTAH

An Archaeological Assessment for the Interstate 15 Payson Main Street Interchange EIS, Utah County, Utah

FINAL

UDOT Project No. F-I15-6(214)251; PIN 10263

Prepared for

The Utah Department of Transportation
and
H.W. Lochner, Inc.

Prepared by

Sheri Murray Ellis, MS, RPA
Owner / Consultant

Certus Environmental Solutions, LLC
Salt Lake City, Utah
801.230.7260

Utah Antiquities Project No. U14HY1270ps
PLPCO Permit No. 47

Certus Project Number LOCH08

July 8, 2016

Project Abstract Sheet

Report Title: *An Archaeological Assessment for the Interstate 15 Payson Main Street Interchange EIS, Utah County, Utah*

UDOT Project Number and Name: F-I15-6(214)251; Payson Interchange EIS; PIN 10263

Utah State Project Number: U14HY1270ps

Project Description: The Utah Department of Transportation (UDOT) is considering improvements to Interstate 15 interchange at Main Street in Payson, Utah. These improvements may include changes to the existing interchange configuration or relocation of the interchange. The UDOT is preparing an EIS to evaluate alternatives for the interchange improvements.

Area of Potential Effects: The area of potential effects (APE) for the archaeological assessment was established as a large, irregularly shaped polygon surrounding the combined area of four build alternatives being considered in the EIS. The area includes the anticipated footprints of each of the four alternatives plus a 91-meter (300-foot) buffer around those footprints. This APE, which contains approximately 325 hectares (803 acres), includes those areas where physical ground disturbance, property acquisition, and proximal visual impacts may occur. The survey area is equal to the APE.

Agencies: Utah Department of Transportation; Payson City; U.S. Army Corps of Engineers; U.S. Fish and Wildlife Service, Federal Highway Administration

Location: Payson City, Utah County

Land Ownership: Private, UDOT, Municipal

Date(s) of Fieldwork: June 12-19, 2016

Methods: Intensive-level and reconnaissance-level archaeological survey

Acres Surveyed – Intensive: 209 hectares (515 acres)

Acres Surveyed – Reconnaissance: 128 hectares (315 acres)

Archaeological Resources in the APE: 11 (42UT000935/42UT001331, 42UT001029, 42UT001101,
42UT001721, 42UT001722, 42UT001942, 42UT001943,
42UT001944, 42UT001945, 42UT001946, 42UT001947)

NRHP Eligible Resources: 7 (42UT000935/42UT001331, 42UT001029, 42UT001194, 42UT001722,
42UT001943, 42UT001945, 42UT001946)

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

INTRODUCTION

The Utah Department of Transportation (UDOT), in conjunction with the Federal Highway Administration (FHWA) is evaluating potential improvements to the Interstate 15 interchange at Main Street in Payson, Utah (**Figure 1**). The improvements may include changes to the existing interchange and/or construction of a new interchange at a different location. Alternatives to address the project purpose and need are being evaluated in an environmental impact statement (EIS). The project is hereafter referred to as the Interchange Project or the I-15 Payson Main Street Interchange Project.

H.W. Lochner, Inc. (Lochner) is assisting UDOT with environmental studies for the Interchange Project. Lochner contracted with Certus Environmental Solutions, LLC (Certus) to conduct an assessment of cultural resources in the area of potential effects for the proposed project. Both archaeological and architectural/structural assessments will be completed. The results of the architectural/structural inventory are reported under separate cover (Ellis 2015).

Sheri Murray Ellis, Principal Investigator for Certus under State of Utah Principal Investigator Permit No. 47, conducted archaeological fieldwork for the project June 12-19, 2016. All work was carried out under Utah State Antiquities Project No. U14HY1270ps.

THE AREA OF POTENTIAL EFFECTS AND SURVEY AREA

The project area is located in the community of Payson in Utah County, Utah (see **Figure 1**). Implementation of the project, whether reconstruction of the existing interchange or construction of a new interchange, would require ground disturbance at least several feet deep and would necessitate acquisition of new right-of-way as well as temporary construction easements.

The area of potential effects (APE) for the archaeological assessment was defined as a large irregularly shaped polygon surrounding the combined area of four build alternatives being considered in the EIS (see **Figures 2 and 3**). The area includes the anticipated footprints of each of the four alternatives plus a 91-meter (300-foot) buffer around those footprints. This APE, which contains approximately 325 hectares (803 acres), includes those areas where physical ground disturbance, property acquisition, and proximal visual impacts may occur. The survey area is equal to the APE.

The APE/survey area is located in Township 8 South, Range 2 East, Sections 32-34 and Township 9 South, Range 2 East, Sections 4, 5, and 8-10 on USGS 7.5' topographic quadrangles West Mountain, Utah and Spanish Fork, Utah (see **Figures 2 and 3**). Lands on which the undertaking would occur are owned by Payson City, UDOT, and private parties.

PROJECT SETTING

The APE/survey area encompasses portions of both the developed core area of Payson and the rural agricultural lands surrounding the community. Lands in the northern and eastern portions of the APE/survey area are almost exclusively undeveloped, comprising open agricultural fields (both active and fallow), grazing pastures, and scattered historical and modern farmsteads. The southern

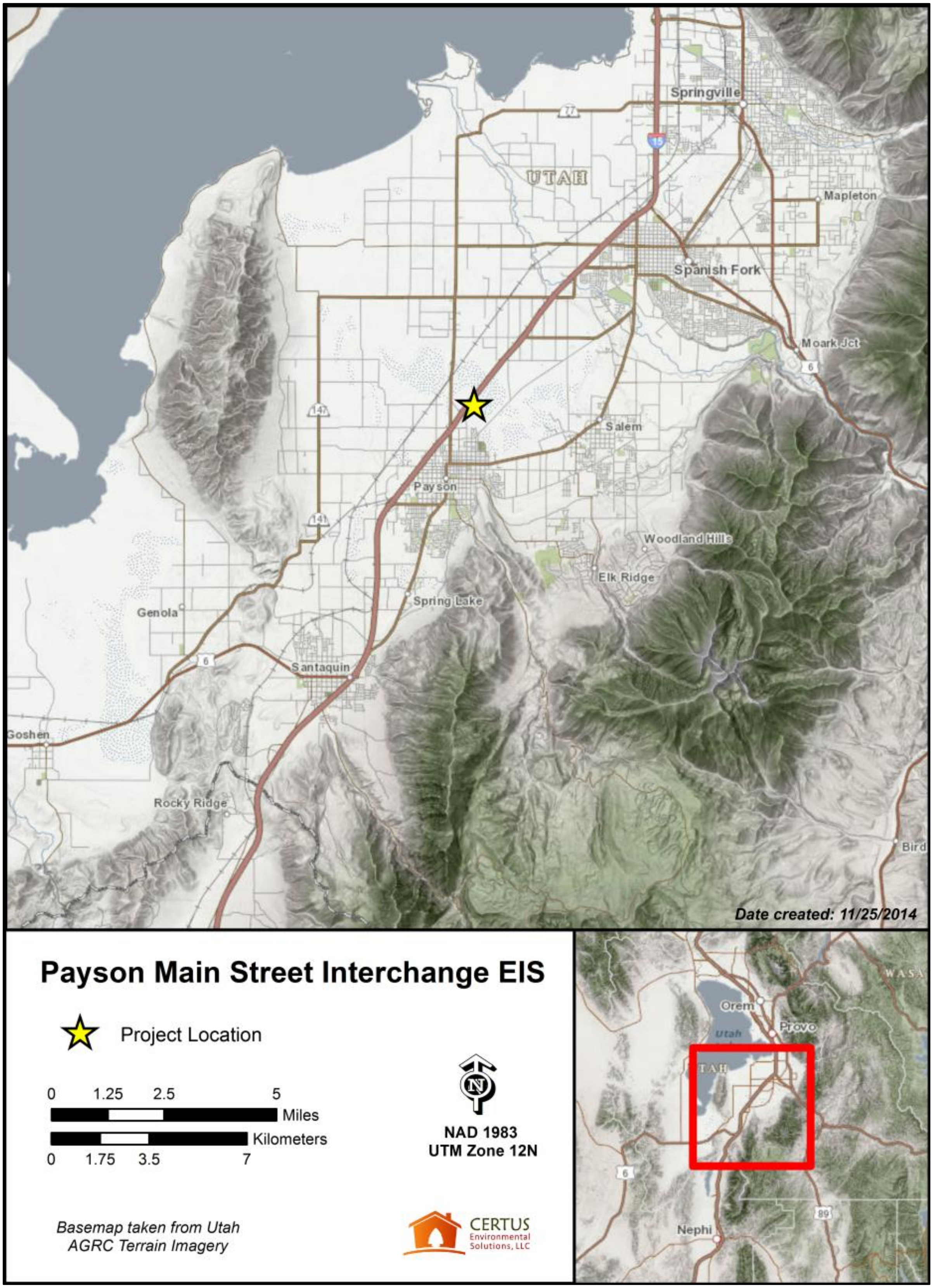


Figure 1. General project location; I-15 Payson Main Street Interchange Project

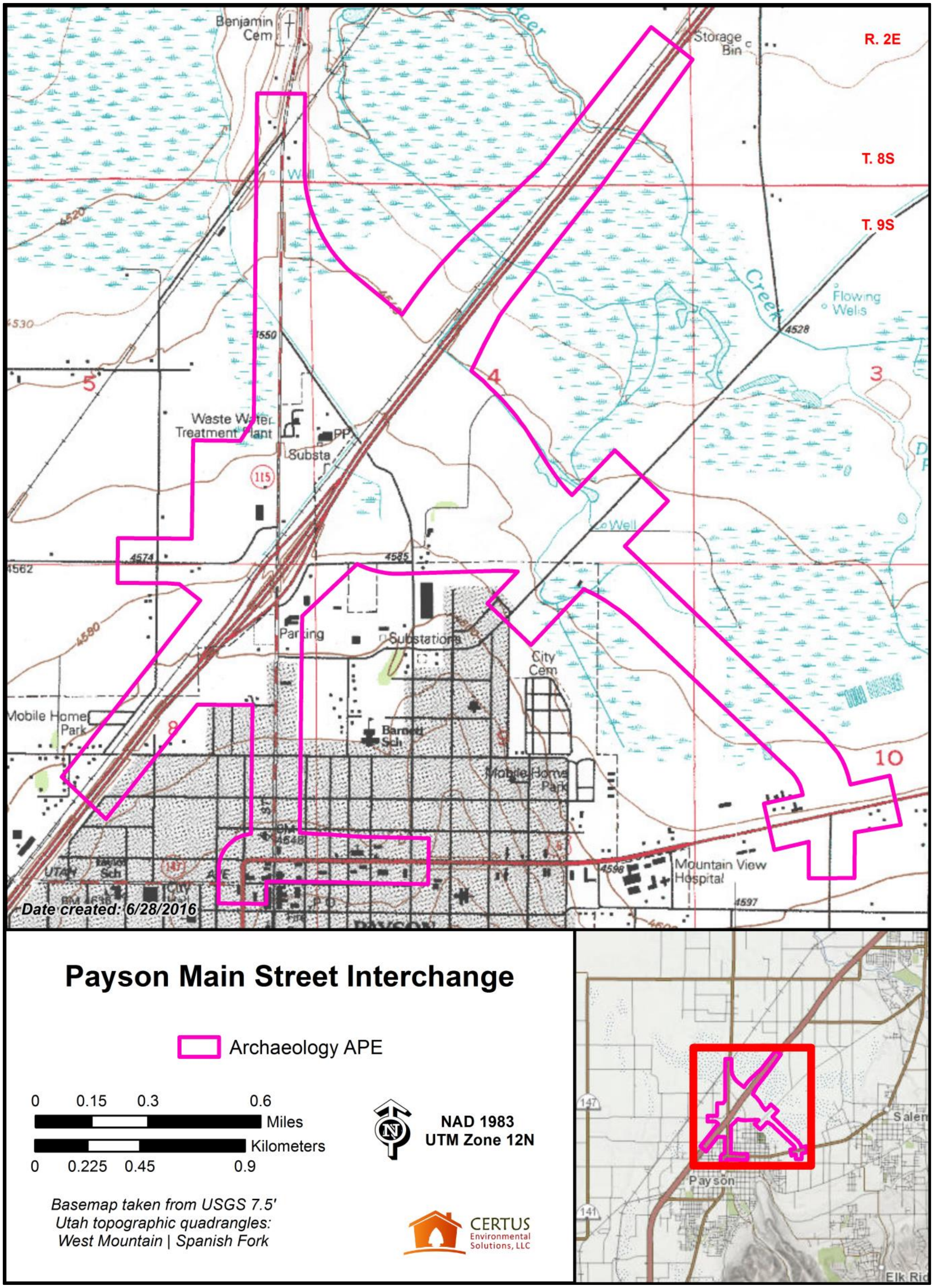


Figure 2. APE/Survey Area; I-15 Payson Main Street Interchange Project

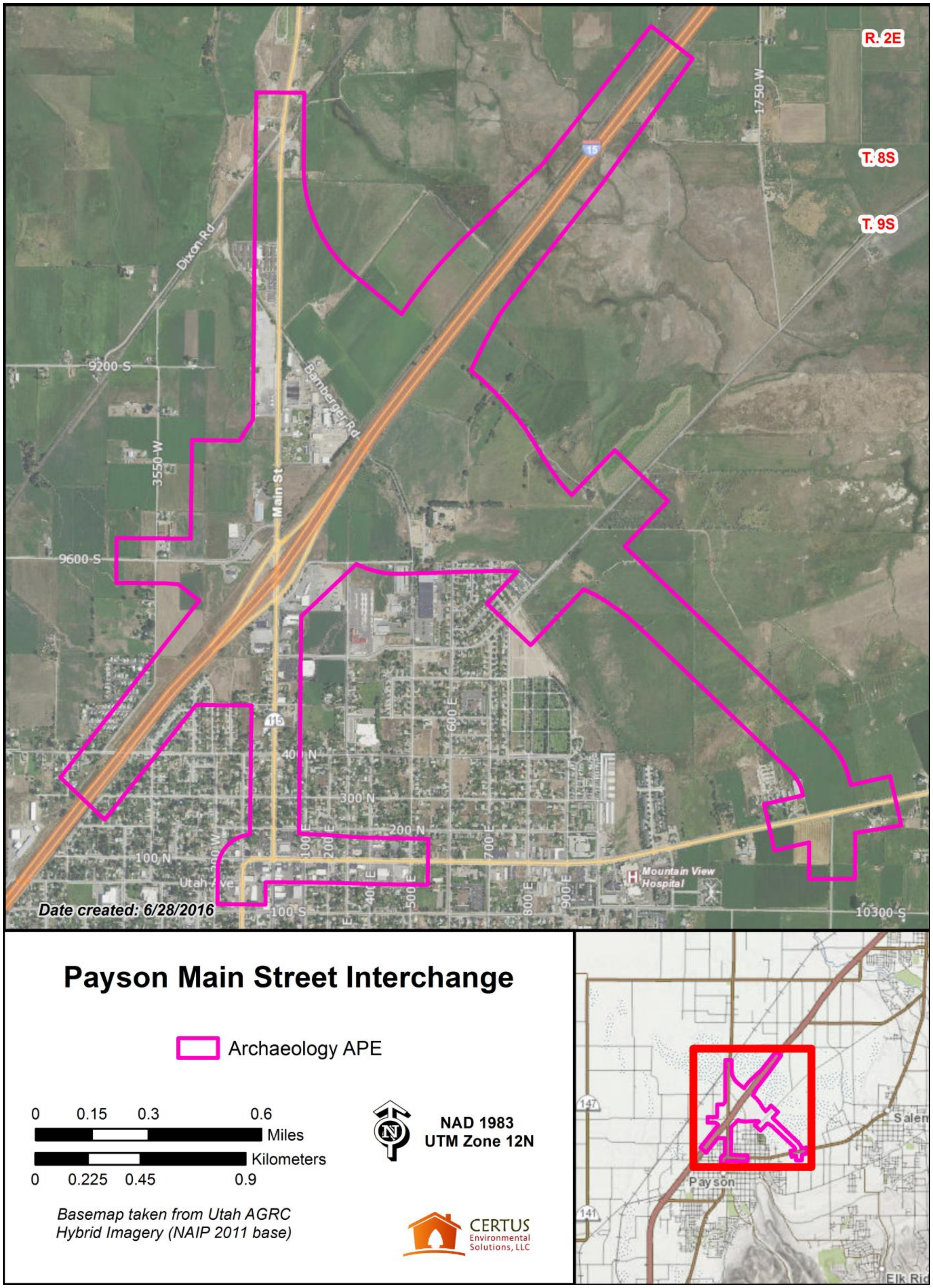


Figure 3. APE/Survey Area; I-15 Payson Main Street Interchange Project

portion of the APE/survey area is dominated by a combination of historical and modern residential and commercial development, while the western part of the area is a mix of residential, agricultural, and industrial uses. The core area of historical development extends along the Main Street portion of the APE/survey area.

Elevation of the APE ranges from approximately 4530 feet above sea level west of Interstate 15 to 4585 feet above sea level east of Interstate 15, near SR-198. Vegetation is a mixture of residential and commercial landscaping in the developed area of the community, agricultural crops (mostly hay) north and east of the developed area, and invasive plants, including Scottish thistle, cheat grass, and Russian olive trees. Riparian and wetland vegetation is prevalent in the northern portion of the APE, near the Beer Creek area. Occasional remnant stands of low sagebrush are present in pockets around the community. Soils throughout much of the APE have been altered by the introduction of organic material for agricultural development; however, base soils are medium brown, fine-grained silty loam with a moderate content of subangular gravel.

PREVIOUS SURVEYS AND KNOWN ARCHAEOLOGICAL RESOURCES

Certus conducted a file search on December 8, 2014, for the general area of the interchange project. This file search was updated on June 9, 2016, just prior to the field effort reported herein. The file search took place via the Utah State Historic Preservation Office (SHPO) online system, Preservation Pro. Certus also conducted a general literature review of historical archaeological investigations in the Payson area and reviewed historical air photos, USGS topographic maps, and General Land Office (GLO) maps for the area.

The file search via the Preservation Pro system encompassed the APE and an area extending up to 1/2-mile beyond the APE. This area is depicted on **Figure 4** in **Appendix A**, attached, along with the locations of previous projects and documented archaeological resources. The file search indicated that 12 previous cultural resource investigations have taken place in and within 1/2-mile of the current APE. These projects are summarized in **Table 1**, below.

Table 1. Prior Cultural Resource Projects and Documented Archaeological Sites in and near the APE

Project Number	Survey Description / Survey Entity	Sites Documented in File Search Area[1]
U76BL0025	South Utah Lake Alternate Transmission Line / Bureau of Land Management	None
U84BC0286	Proposed Payson Commuter Park Lot / BYU – Office of Public Archaeology	None
U90NP0459	Santaquin Waste Water Project / A.K. Nielson & Assoc.	None
U93NP0118	RB&G Spanish Fork I-15 South Loop Road / A.K. Nielson & Assoc.	None
U95SJ0228	Four Union Pacific Railroad Crossing Closings near Payson / Sagebrush Consultants	None
U00SY0537	Silver State Fiber Optic / Summit Envirosolutions	**42UT001191**, 42UT001192
U02BS0779	700 North Upgrade in Payson / Baseline Data	None

Table 1. Prior Cultural Resource Projects and Documented Archaeological Sites in and near the APE

Project Number	Survey Description / Survey Entity	Sites Documented in File Search Area[1]
U02EP0113	Payson Parcel / EarthTouch	42UT001330, 42UT001331
U07HO1323	Payson Parkway Health Center / Bighorn Archaeological Consultants	None
U07JS0337	I-15 Corridor Improvements / Jones & Stokes	42UT000935
U08BS0543	Nebo Loop Scenic Byway Trail / Baseline Data	None
U09EP0796	Addendum: I-15 Project Utah County to Salt Lake County / EarthTouch	42UT000935, **42UT001721, 42UT001722**

[1] Site numbers in bold represent sites or site segments located in the current APE.

Of the 12 previous investigations, none encompassed any substantive portion of the current APE except for projects U07JS0337 and U09EP0796, which covered the entire UDOT right-of-way along Interstate 15 through the APE. Because these assessments were conducted fewer than 10 years ago and used a 45-year age criterion for documenting resources, Certus *did not resurvey the interstate right-of-way* as part of the current undertaking.

Nine archaeological sites have been documented in the APE—some as part of the past projects noted above, and some as part of other efforts. The nature of these resources is summarized in **Table 2**, below, and their locations are depicted of **Figure 4 in Appendix A**, attached.

Table 1. Previously documented sites in the file search area

Site #[1]	Description	NRHP Eligibility
42UT000152	Prehistoric – Two burial pits with human remains	Undetermined
42UT000935	South Field Canal	Eligible
42UT001029/42UT001191	Historic railroad – Union Pacific/Utah Southern	Eligible
42UT001101[2]	Historic railroad – D&RGW Railroad	Eligible
42UT001192	Benjamin Cemetery	Eligible
42UT001330	Historic homestead	Ineligible
42UT001331[3]	Historic ditches	Ineligible
42UT001721	Historic ditch	Ineligible
42UT001722	Historic ditch	Ineligible

[1] Site numbers in bold represent sites located in the current APE.

[2] The segment of the D&RGW Railroad documented in the current APE was erroneously assigned site number 42UT001101. It should have been documented under site number 42UT001194, as part of the Tintic Range Railway.

[3] Site 42UT001331 is part of the South Field Canal system, which is documented as site 42UT000935

As indicated in Table 2, five of the previously documented sites are located—at least partially—in the current APE. Two of the sites are historic railroad alignments, and three are historic ditches. Both railroads have been determined eligible for the National Register of Historic Places (NRHP) as a result of prior documentation. However, it should be noted that the railroad site documented as site 42UT001101 was erroneously assigned that site number, which pertains to the D&RGW mainline railroad and not the branch line (the Tintic Range Railway or Tintic Branch) actually represented by the rail alignment in the current APE. This site should have been documented under site number 42UT001194. The ditch segments have been determined ineligible. Certus revisited the locations of all previously documented sites in the APE as part of the current undertaking. Updates to their site records were prepared as needed.

In addition to the project and site files available through Preservation Pro, Certus reviewed historical GLO maps, USGS topographic maps, and air photos for information about potential cultural resources in the APE. GLO maps from 1856, 1871, and 1892 were reviewed. More recent GLO maps do not depict any detail of the APE. The 1856 and 1871 GLO maps depict a number of natural springs and sloughs as well as Duck Creek (now called Beer Creek) crossing the northern part of the APE near present-day Interstate 15 and Dixon Road. Several ditches and wagon roads are also shown in the area. Most of these features are located in areas now occupied by the interstate or Dixon Road, though a few are located in what are now developed livestock grazing fields. The 1891 map illustrates the beginnings of the Payson townsite plat in the core area of the community around present-day SR-198 and Main Street as well as a few unnamed linear features that may be ditches in the area of the present-day Interstate 15 interchange.

Historic topographic maps for the area were located for the years 1948 and 1950. These maps depict the D&RGW and Union Pacific Railroads running through the current APE, as well as the majority of existing roadway infrastructure in and around Payson. The areas north and east of Payson-proper are depicted as undeveloped lands with numerous marshy areas.

Air photos were available online for the Payson area for the years 1946, 1947, 1953, 1954, and 1969. These images depict the majority of the land development currently present in the area. They depict the lands north and east of Payson as undeveloped agricultural lands divided by numerous fences. By the 1940s, the current pattern of fields (e.g., size and shape) appears from the air photos to have been established. No structures are visible in the areas of the APE outside the developed townsite and extant farmsteads.

Paleontological Consultation

In accordance with UDOT guidelines, Certus consulted with the Utah Geological Survey (UGS) regarding the presence/absence of and potential for encountering fossil resources within the APE. This consultation was undertaken via written letter to Ms. Martha Hayden of the UGS. Ms. Hayden indicated that no known paleontological localities have been recorded in the APE or its immediate vicinity. She also noted that the Quaternary and Recent alluvial and lacustrine deposits (PFYC 2) exposed in the project area have little potential for yielding significant fossil localities. A copy of Ms. Hayden's consultation letter is included in **Appendix B** of this document.

HISTORIC OVERVIEW

The following brief overview of the history of the Payson City area is meant to provide a basic context within which to consider the relative significance of cultural resources encountered during the assessment of the Main Street Interchange Project APE. This context is derived heavily from the Payson Historic District National Register nomination form (Broschinsky 2007).

Payson was permanently settled by Euro-Americans in the early 1850s, when Mormon pioneers were sent to the area with direction to establish a settlement (Broschinsky 2007). Subsistence agriculture formed the basis of the early economy, with homes located near the center of the settlement and communal and individual agricultural fields located around the periphery. The first buildings in the area were constructed of locally available logs and adobe. As saw mills, a nail factory, and similar enterprises were established, the initial makeshift homes gave way to more substantial structures. By the mid-1860s the population of Payson had already risen to nearly 1,140 residents, and the number of dwellings was approaching 300 (Broschinsky 2007).

Change came to Payson in 1875 with the completion of the Utah Central Railroad through the community. Ultimately connected to the larger Transcontinental Railroad, the Utah Central Railroad connected Payson directly to national landscape for the first time in the community's history. Not only were new markets available for locally produced products, but goods from across the nation were now far more accessible to Payson residents. The rail connection boosted the local economy, which in turn drove construction of additional building stock. The number of commercial structures increased substantially, and a commercial district formed at the center of town. As brick became more widely available in Payson, earlier wooden storefronts in the commercial district were replaced with brick façades. Not surprisingly, most commercial structures, as well as most dwellings, constructed during at this time and over the next 15 years heavily reflected Victorian architectural styles also common throughout Utah and the rest of the nation.

In 1882, the town embarked on a major undertaking to improve the community's infrastructure. Over the next 10 years, dirt roads were realigned and graveled, water mains were improved, and electric lights were installed, among other improvements (Broschinsky 2007).

As the 1800s came to a close, Payson experienced an economic boom created by the availability of wage employment from several large, regional projects, including the massive Strawberry Irrigation Project and the Orem Railroad (Broschinsky 2007). By 1900, the population of Payson had risen to 2,636 residents and had experienced a diversification of the town's cultural and ethnic complexion. The commercial district continued to thrive and a number of large scale public buildings, such as the iconic Peteetneet School, were constructed around this time.

The proliferation of interurban railroads and the increased agricultural productivity resulting from the Strawberry Irrigation Project served as the basis of a booming economy that fostered new housing and commercial development. Between 1910 and 1920 the number of dwellings increased by approximately 50 percent, and by the mid-1920s, Payson's Main Street commercial district boasted more than 60 businesses (Broschinsky 2007).

The onset of the Great Depression at the end of the 1920s served to slow the economy of Payson, as it did with communities across America. Heavily reliant on sales of agricultural products, Payson's economy suffered greatly; although the sugar beet industry, a major component of the local agricultural industry, remained surprisingly stable. Despite the downturn, however, the local government continued to invest in community development, at times leveraging labor and funding available through federal New Deal programs. Concrete sidewalks, rock-lined ditches, sewer system upgrades, and changes to school athletic fields and community parks were all part of the improvements implemented during the 1930s and early 1940s in Payson (Broschinsky 2007).

The onset of World War II had an immediate and boosting effect on the national economy, including that of Payson. The wartime demand for agricultural products fostered the shift from small family farms to consolidated commercial agribusiness. With economic vitality once again came an increase in new construction and investment in community infrastructure. As most of the core area of Payson had been built upon by this time, larger town lots began to be subdivided and new subdivisions, many comprising street upon street of similar Ranch houses, sprang up around the fringes of the developed townsite. The rise of the automobile culture after World War II further served to change the complexion of the community as residents could live further and further away from the town proper. Construction of new roads and expansion of existing roads to accommodate increased automobile traffic transitioned the look of Payson into the modern urban city it is today.

FIELD METHODS

Certus applied standard intensive-level archaeological survey methods accepted by the Utah State Historic Preservation Officer (SHPO) and the UDOT. UDOT guidelines call for a 45-year age cutoff for considering resources historical—an effort to accommodate a time lag between the compilation of the survey data and actual construction associated with the undertaking. As such, Certus employed a cutoff date of 1971 to designate structures as historical.

Sheri Murray Ellis of Certus inventoried the APE by transects spaced no more than 15 meters (50 feet) apart across all undeveloped lands; developed lands are defined as those lands paved with asphalt or concrete or covered by residential or commercial landscape. Fenced back yards in the Payson townsite were not subjected to intensive-level survey, but all open lots and agricultural fields were inventoried in this manner. Developed areas were inventoried via a combination of a windshield survey and documentation of archaeological resources during the survey of historic buildings. Although all open lands were inventoried using intensive-level transect spacing, several parcels in the area north and east of the Payson townsite contained tall grasses (waist high) and other dense vegetation such that the ground surface was almost entirely obscured, and sight distance was no greater than 5 feet either side of the transect. As such, the inventory should be considered a reconnaissance of the area rather than a detailed visual inspection. The areas of the APE considered covered at intensive and reconnaissance levels are depicted in **Figure 5**, below. In total, approximately 515 acres received intensive-level coverage and approximately 315 acres received reconnaissance-level coverage.

Due to vegetation cover and the high potential for prehistoric land uses in the marshy, wetlands area around Beer Creek in the northern portion of the APE, Certus excavated a series of shovel probes to inspect the subsurface context of the area. The use of shovel probes and their subjective

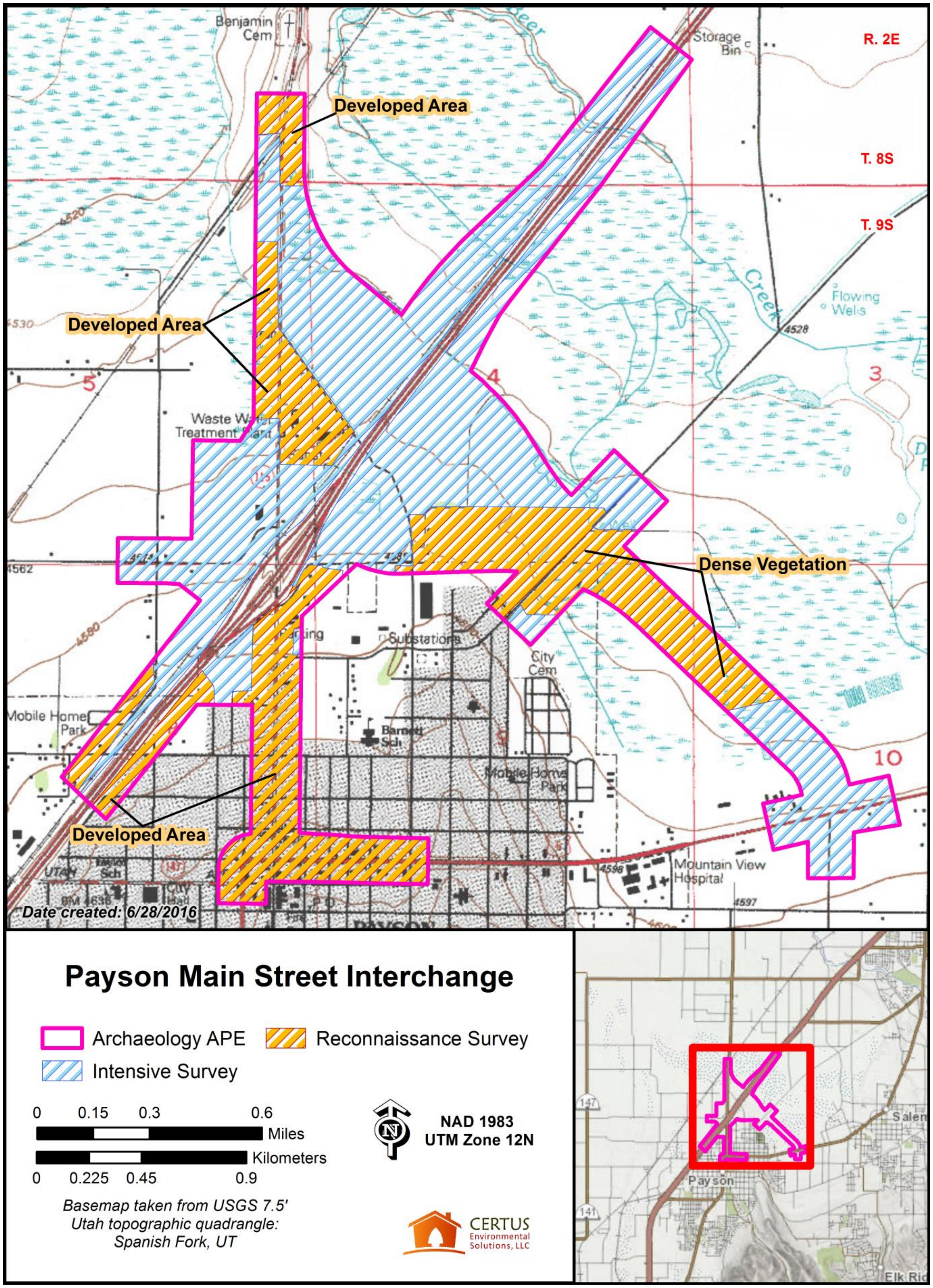


Figure 5. Areas of intensive and reconnaissance coverage within the APE

Typical shovel probe east of Interstate 15

placement was directed by the UDOT, in consultation with the Utah State Historic Preservation Office. In all, Certus excavated 39 shovel probes in the high probability areas east and west of Interstate 15. The tested landforms comprise shallow rises above wetlands and natural sloughs and drainages, including Beer Creek. Probes were excavated to a depth of 15 to 24 inches, depending on landowner permission and other limitations. All probes were backfilled. The locations of the probes are shown on **Figure 6**, below. East of Interstate 15, soils in the upland areas were homogenous medium brown fine-grained silty loam for the depth of all excavations. Gravels were scarce and when present, were small and subangular in nature. The soils were hard packed, dry, and dense. West of Interstate 15, soils were of the same type but wet throughout the tested area; the rises amidst the sloughs and wetlands are lower on the west side of the interstate than on the east side.

Archaeological resources encountered during the survey were documented on Intermountain Antiquities Computer System (IMACS) site forms with accompanying digital photographs. Locational information was obtained using a handheld GPS unit capable of sub-meter accuracy.

Resource Evaluation Methods

In accordance with 36 CFR § 60, cultural resources documented as part of federal undertakings are to be evaluated for their eligibility for the NRHP under four specific criteria and with consideration for seven elements of integrity. A resource may be considered eligible for listing on the NRHP if it:

- A- is associated with events that have made a significant contribution to the broad patterns of our history; OR
- B- is associated with the lives of persons significant in our past; OR
- C- embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; OR
- D- has yielded, or may be likely to yield, information important in prehistory or history.

Resources considered potentially eligible under one of the above criteria are also to be evaluated for integrity of location, design, setting, materials, workmanship, feeling, and association. To be eligible for listing on the NRHP, a resource must possess integrity of those elements directly related to the criterion or criteria under which it would be determined eligible.

Findings

Certus identified 11 site and two isolated occurrences in the APE as a result of the field inventory. The sites include portions of five previously documented sites: 42UT000935/1331, 42UT001029,

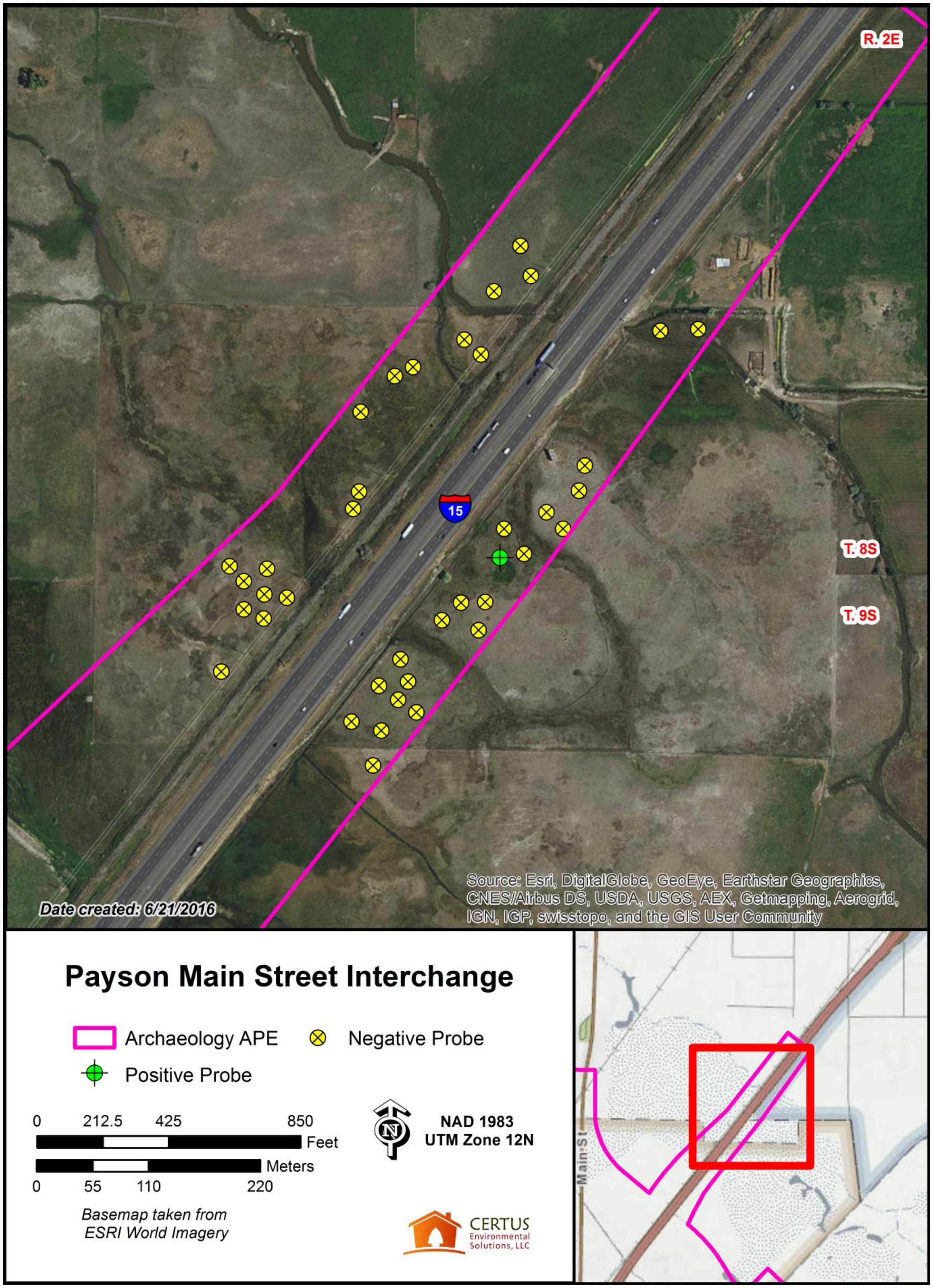


Figure 6. Locations of shovel probes

42UT001194, 42UT001721, and 42UT001722. In some cases, new components or segments of these previously documented sites were identified in the APE.

In addition to these previously documented sites, Certus identified six previously undocumented archaeological resources in the APE. These include a historic corral site (42UT001942), a historic depression with intact subsurface artifact deposits (42UT001943), the remains of demolished historic residential property (42UT001944), a segment of the historical Arrowhead Trail highway (42UT001945), and segments of the 4th North Ditch System (42UT001946) and the Utah Avenue Ditch System (42UT001947).

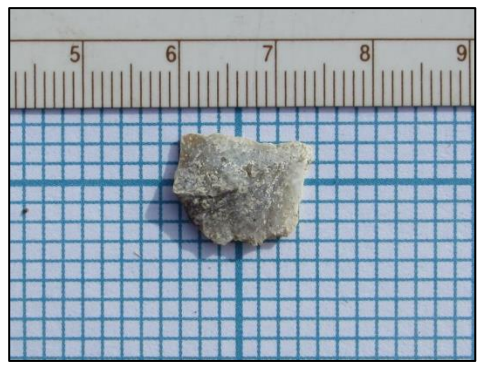
Descriptions of all archaeological resources identified in the APE are presented below, along with information about National Register of Historic Places (NRHP) eligibility considerations. The locations of these resources are illustrated on **Figures 7 and 8 in Appendix C**, attached.

Isolated Occurrences

Two isolated occurrences were documented in the APE. These include an individual prehistoric artifact (IO-01) and the remains of an unidentifiable historic structure (IO-02). See **Figures 7 and 8 in Appendix C** for the locations of these occurrences.

Isolated Occurrence 1 (IO-01)

IO-01 is a single piece of prehistoric lithic debitage. It consists of a secondary flake of mottled grey chert found on a low rise in an area of wetlands and sloughs south of Beer Creek and on the east side of Interstate 15. The artifact measured approximately 1.3 cm long by 1.1 cm wide by 0.2 cm thick. The item retains the bulb of percussion and exhibits three small flake scars on the dorsal surface.



IO-01

Isolated Occurrence 2 (IO-02)

IO-02 is a series of sawed-off wooden posts that appear to represent a former structure. Although the exact age of the feature is unknown, it is assumed to date to the historic period based on the nature of weathering of the wooden posts, which were cut off near ground-height with a handsaw or similar tool. No artifacts were found in association with the feature, which is located on a low rise just south of Beer Creek.

The nature and former function of the structure could not be determined, as no historical maps or aerial photographs depict a structure in this location, and the current landowner and other local informants were unaware of the feature. The posts are round—similar to wooden utility poles—and vary in diameter from 6 to 10 inches. A total of 17 posts were observed.

IO-02; facing east

Archaeological Sites

As noted above, Certus identified 11 archaeological sites in the APE for the Payson Main Street Interchange EIS alternatives. Descriptions of these resources are provided below.

Site 42UT000935/42UT001331, South Field Canal System

Site 42UT000935/42UT001331 is the South Field Canal system. The portion of the system documented here comprises lateral field ditches located north of Payson on the east and west sides of Interstate 15. In all, approximately 1.25 miles of the ditch network were documented, though only a small portion of that is located within the current APE. Throughout the newly documented segment, the ditch is unlined (earthen) and averages approximately 5 feet wide across the top and between 2 and 3 feet deep. No historical features were noted, though modern turnouts and similar water control features were observed and likely replaced older versions of such structures.

According to the previous documentation of other segments of the system nearby, the South Field Canal was originally constructed in 1855 and is, therefore, one of the earliest constructed canals in the Utah Valley (Billat and Billat 2009a). The lateral network was no doubt constructed shortly after the primary canal was completed.

Segments of the site have been documented previously under two different site numbers. Upon first documentation, the site was assigned number 42UT000935. In 2002, EarthTouch documented segments of the system near Payson but did not identify it as part of the South Field Canal network. Rather, it was assigned a new site number (42UT001331) and identified as an unnamed irrigation network. In 2009, EarthTouch documented another segment of the system north of Payson and identified it as part of the South Field Cabak site under number 42UT000935.

> **NRHP Considerations for Site 42UT000935/42UT001331:** Site 42UT000935/42UT001331 is the South Field Canal system. The overall ditch system has previously been determined to be eligible for the NRHP under Criterion A. Some segments have also been determined eligible for the NRHP under Criterion C. The segments of the system documented as part of the current undertaking retain integrity of location, setting, association, feeling, and workmanship. The integrity of design and materials has been compromised somewhat by the replacement of historical features with modern corollaries. Although the newly documented segments are unremarkable in their engineering aspects, they are largely intact elements of the original historical ditch network. As such, Certus recommends they be considered contributing to the overall determination that the site is eligible for the NRHP under Criterion A.

Site 42UT001029, Union Pacific Railroad/Utah Southern Railroad

Site 42UT001029 is the Union Pacific Railroad/Utah Southern Railroad corridor, which crosses the current APE at an oblique angle on Dixon Road, north of Payson and west of Interstate 15. This segment of the railroad was documented in 2000 by Summit Envirosolutions. Specifically, the consultant documented this portion of the rail line as "Segment E" in the IMACS site form.

Certus revisited the site location in the APE as part of the current undertaking. The segment retains the same dimensions, materials, and overall design as when it was documented in 2000. As such, Certus did not prepare an update to the site record.

NRHP Considerations for Site 42UT001029: As a whole, the Union Pacific Railroad/Utah Southern Railroad has been determined eligible for the NRHP under Criterion A as a result of previous documentation. Specific segments or features have also been determined eligible under Criterion C. The segment in the current APE was determined eligible for the NRHP as a result of the documentation by Summit Envirosolutions in 2000. As there have been no notable changes to this site segment since that documentation, Certus recommends the current determination stand as is—the site is eligible for the NRHP under Criterion A, and the segment in question contributes to the overall eligibility of the site.

Site 42UT001194, Denver & Rio Grande Western Railroad/Tintic Range Railway

Site 42UT001194 is the Denver & Rio Grande Western Railroad (D&RGW) Tintic Railway corridor, which crosses the current APE at an oblique angle along the west side of Interstate 15; the rail line parallels the interstate. A short segment of the rail line on the east side of Main Street/Dixon Road was documented by Jones & Stokes in 2007. Certus documented an additional 2.5 miles of the rail site north and south of this previously documented segment.

Site 42UT001194; Typical D&RGW Segment in the APE

Through the current APE, the D&RGW line has been abandoned and is no longer actively used. The line crosses Main Street/Dixon Road in Payson at grade, but the remainder of the documented segment is characterized by an obvious berm ranging in height from 2 feet to 6 feet. The rails, ties, and ballast remain intact along the documented segment, though they are heavily overgrown with vegetation. No other historical features were observed along the newly documented segment. Any rail crossings and signals once present at the crossing of the railroad at Main Street/Dixon Road, were removed when the rail line was abandoned.

The segment of the railroad documented here was originally part of the Tintic Range Railway, which was completed between Springville and Silver City in 1892 (Robertson 1986:289). This rail line served to transport ore from the mines in Silver City, Mammoth, and Eureka to the main Rio Grande Western Railroad at Springville. The railroad was merged into the Denver & Rio Grande Western Railroad system in August 1908 (Robertson 1986:289). It appears the line was abandoned sometime prior to 1995.

NRHP Considerations for Site 42UT001194: As a whole, the Denver & Rio Grande Western Railroad Tintic Range Railway has been determined eligible for the NRHP under Criterion A as a result of much previous documentation of segments of the rail line. Specific segments or features have also been determined eligible under Criterion C. The short segment that was previously documented in the current APE was determined eligible for the NRHP as a result of the documentation by Jones & Stokes in 2007 under the incorrect site number 42UT001101. The remaining portions of the segment of the railroad reported here all retain their integrity of location, setting, feeling, association, materials, design, and workmanship, as they have essentially been abandoned in place, as-is. As such, Certus recommends the newly documented sections of the D&RGW Tintic Range Railway be considered to contribute to the overall site as being eligible for the NRHP under Criterion A.

Site 42UT001721, Old Field Ditch System

Site 42UT001721; Old Field Ditch; west of Main Street, looking west

Site 42UT001721 is the Old Field Ditch system. A portion of the site was documented in 2009 by EarthTouch (Billat and Billat 2009b) and was identified as an unnamed ditch. Approximately 1.5 miles of the ditch were documented as part of the current undertaking, including the previously documented segment. Most of the identified segments of the canal network are concrete lined and measure approximately 3 feet wide by 1-2 feet deep. Other segments with similar dimensions are unlined.

Though the exact date of construction is unclear, the Old Field Ditch appears likely to have been constructed by 1900, as the agricultural fields north of the developed core area of Payson were in place by that time and would have required irrigation water to be productive. It is fed by Peteetneet Creek and crosses Main Street in Payson near 600 North. It extends east and west from here, with only a small portion of the original open ditch system remaining to the east and north. A more extensive open portion of the system remains west of Interstate 15. Most of the system has been piped.

NRHP Considerations for Site 42UT001721: When documented by Billat and Billat in 2009 as an unnamed ditch, site 42UT001721 was determined ineligible for the NRHP under all criteria. The basis for this determination was a lack of known historical associations and a general lack of integrity on a systemic level due to piping of most of the associated ditch network; the piping makes it difficult to trace the path and extent of the ditch system based on its surface manifestation. Certus agrees that although the Old Field Ditch system was likely constructed relatively early in the settlement period for Payson, the extensive piping of most of the network has severely compromised the site's integrity of setting, feeling, association, design, materials, and workmanship. Certus further recommends the site remain determined ineligible for the NRHP.

Site 42UT001722, Bamberger Ditch System

Site 42UT001722 is the Bamberger Ditch system. The site was first documented in 2009 by Earth Touch as part of improvements to Interstate 15 (Billat and Billat 2009c). The portion of the site documented in 2009 passes through the current APE and is included in the documentation presented here. Certus documented numerous additional components of this ditch network as part of the current effort. In total 7.3 miles of the Bamberger Ditch system are reported here.

For the most part, historical features along the ditch network are extremely limited; most historical features, such as turnouts and check dams, have been replaced by modern corollaries. A single historical, cast-in-place concrete diversion was noted along a segment of the main ditch paralleling the east side of Bamberger Road. The ditch channels of the Bamberger system vary in size. All are unlined

U-shaped channels, with the main channel following Bamberger Road measuring approximately 8 feet wide across the top and averaging 3 feet deep. The lateral channels are typically smaller, averaging roughly 3 feet wide and 1-2 feet deep. Some segments of the ditch have been piped underground, but a large network of surface ditches remains.

Site 42UT001722; Bamberger Ditch; typical ditch channel and historic water diversion east of I-15 near Bamberger Road

No specific date of construction was located for the Bamberger Ditch system, though it likely dates to the pre-1900 settlement period of Payson. It is clear the system is of historical age, as segments of the network can be deciphered on a 1946 aerial photograph of the area. The system, which is fed by Peteetneet Creek, was likely renamed for the Bamberger Railroad line built next to the main ditch in the early 1800s.

NRHP Considerations for Site 42UT001722: As a result of the documentation of portions of site 42UT001722 in 2009 by Earth Touch, the site was determined ineligible for the NRHP due to a lack of integrity resulting from presumed extensive piping and a lack of important historical associations. While portions of the system have been piped, especially from the weir on Peteetneet Creek and through the town of Payson, the ditch network north of town remains relatively intact. These portions of the system retain integrity of location, setting, feeling, association, and design. Their integrity of workmanship and materials has been compromised somewhat due to the replacement of most historical features (e.g., turnouts, check dams, etc.) with modern versions.

It appears likely that the Bamberger Ditch system was established during the settlement period of Payson, when lands north of the settled community were developed for agricultural purposes. Such development not only sustained the early settlement but allowed it to transition from subsistence agriculture to a cash economy based on surplus agricultural products. For this reason, Certus recommends site 42UT001722 be considered eligible for the NRHP under Criterion A.

No information suggesting an association of the Bamberger Ditch system with important historical individuals was identified. As such, Certus recommends this site ineligible for the NRHP under Criterion B.

This site lacks notable architectural or engineering characteristics, at least amongst the segments documented as part of this undertaking. Certus recommends the site ineligible for the NRHP under Criterion C.

The site has not yielded information important in expanding or refining our understanding of past land uses or irrigation practices in the Payson area, and it does not appear to have the potential to do so. Certus recommends the site ineligible for the NRHP under Criterion D.

Site 42UT001942, Historic Corral Site

Site 42UT001942 is a historic livestock corral, stock shelter, and smaller lean-to style shelter located along the north side of 920 North, just east of the northbound Interstate 15 on-ramp. The site is located in an agricultural field. The corral is constructed of juniper and wood planks, while the shelters are constructed of wood planks and corrugated metal sheeting. A ca. 1940s-1950s manure spreader was found west of the corral/shelter complex.

Manure spreader at site 42UT001942

The exact age of the structures at the site is unknown. Evidence of structures first appears on the 1969 air photo; they are not visible on air photos from the 1940s. The features—corral and shelters—show substantial deterioration from weathering and lack of maintenance.

NRHP Considerations for Site 42UT001942: Site 42UT001942 is a historic corral with associated livestock shelters and an abandoned historical manure spreader. The site appears to retain integrity of location, and its integrity of setting, feeling, and association remain relatively intact. The site's integrity of design, materials, and workmanship are all compromised due to deterioration of the structures and intermixing of modern materials with the historic ones. The site is not associated with important events in the history of the local, regional, national, or international communities. Rather, it is representative of the late historic period (i.e., recent past) of farming and ranching in Payson. The site is not known to be associated with important historical persons, and does not appear to have the potential to yield additional information about local history, land uses, or agriculture through its physical remains. The structural remains at the site are sufficiently deteriorated and lacking in notable architectural or engineering design to not represent a type, style, or manner of construction. As such, Certus recommends site 42UT001942 be considered ineligible for the NRHP under all criteria.

Site 42UT001943, Historic Depression

Site 42UT001943 is a small depression located on a low rise south of Beer Creek and amidst a series of sloughs east of Interstate 15. The depression measures approximately 17 feet long and 10 feet wide across the top. It is approximately 3 feet deep. The depression is oriented in a roughly north-south direction, with the southern 4-5 feet of it comprising a narrow and tapering "ramp" entry into the deeper part of the depression. A series of eight small cobbles are arranged end-to-end in an east-west alignment roughly 10 feet south-southwest of the "ramp." The cobble alignment measures approximately 4 feet long.

Site 42UT001943. Strap from plow, wagon, or yoke

A large rock was embedded in the ground at the center of the depression. The rock showed evidence of fire effects, including reddening of the stone and spalling. One fragment of clear flat glass was found on the surface inside the depression, but no other artifacts were observed in or surrounding it. A shovel probe placed in the bottom of the depression, immediately north of the fire-affected rock, yielded a number of historic artifacts beginning at approximately 6 inches below modern ground surface (bmgs) and extending to at least 18 inches bmgs. The artifacts, which were mixed with ash and charcoal, included numerous fragments of an aqua colored canning jar with light bubbles in the glass, one fragment of plain white stoneware, a rusted fragment of a cap from a hole-in-cap can and numerous fragments of tin cans, several cut and whole faunal bones (likely pig and/or goat), two wire nails, and a steel strap with D-rings from the end of a single tree from a wagon, plow, or yoke.

Based on the limited artifact assemblage found through the shovel probe, the site appears likely to date to the early 1900s/turn-of-the-last-century. Land patent records from 1874 indicate the land on which the site is located was patented to Andrew Cowan. However, it is unclear if Cowan or his family retained the land into the early 1900s. Available GLO maps from 1871 show the general area as marshy and containing a ditch, Duck Creek (now Beer Creek), and a fenced field. It does not depict any structures that would be related to this site. Later GLO maps do not depict the area in any detail. Historical USGS maps and aerial photographs from the 1940s and 1950s likewise do not show any visible structures or constructed features in the area of the site.

> **NRHP Considerations for Site 42UT001943:** Site 42UT001943 is a newly documented historical site comprising an earthen depression, a short alignment of cobbles, and subsurface artifacts. No information about the history of the site has yet been located. Based on the general lack of information or knowledge of the resource amongst local informants suggest it was not associated with events or persons of significance in local, regional, national, or international history. As such, Certus recommends the site ineligible for the NRHP under Criteria A and B.
>
> Although the site is "structural" in nature, it does not represent a type, style, or work of a master. Further, it does not possess high artistic value and does not reflect any particular type or manner of construction. For these reasons, Certus recommends the site ineligible for the NRHP under Criterion C.
>
> A shovel probe placed in the bottom of the depression at the site yielded subsurface historic artifacts. The quantity was relatively plentiful for a small shovel probe. Some of the items contained temporally diagnostic marks and other information that allow for their placement in historical context. As such, the site does appear to have the potential to yield information that could expand or refine our understanding of land uses in the Payson area around the turn-of-the-last-century, especially given that no information about the site has yet been located. Therefore, Certus recommends site 42UT1943 eligible for the NRHP under Criterion D**.**

Site 42UT001944, Historic Residential Property

Site 42UT001944 is the remains of an early 1900s residential property. The site is located on the west side of SR-198, west of downtown Payson. The property address is 51 North 100 West. The former residential buildings on the property were demolished following a fire in 2013 leaving behind foundation remnants, driveway and patio pavement, and residential landscaping. Historical artifacts present at the site were limited to structural debris such as concrete, bricks, and wire nails, and one fragment of violet colored glass.

The former dwelling on the property appears to have been constructed prior to 1946 based on aerial photographs. Structures on adjacent properties were constructed ca. 1915. A modern photograph of the property suggests the dwelling may have been a Victorian form such as a crosswing structure that had been added onto many times during the modern era.

Site 42UT001944. Overview of site looking west

Given the age of the site, no features such as privy vaults that might contain buried resources are expected to be present at the site, and no evidence of such features was encountered during the field documentation.

> **NRHP Considerations for Site 42UT001944:** Site 42UT001944 is the remains of a historic residential property. The site retains integrity of location and, to some degree, association, but lacks integrity of design, materials, workmanship, setting, and feeling due to the demolition of the historical dwelling and associated outbuildings. Based on this lack of integrity, Certus recommends the site ineligible for the NRHP under all criteria.

Site 42UT001945, Arrowhead Trail Highway

Site 42UT0001945 is the Arrowhead Trail Highway. A segment of the historic route of the highway passes through Payson along what is now referred to as Arrowhead Trail Road. The road segment through Payson and the current APE is actively used and maintained. An approximately 1.2-mile long segment of the two-lane road was documented as part of the current undertaking. No historic features other than the alignment itself were noted along this segment.

Site 42UT001945. Typical road segment; looking northeast

The Arrowhead Trail Highway was created as an all-weather auto route between Los Angeles and Salt Lake City around 1915. In most areas, the highway was created by combining segments of existing routes; very little new construction occurred. In the Payson area, the highway incorporated what would become a segment of US-91 (before it was reassigned), which extended northeast from Payson to Salem and Spanish Fork. The Arrowhead Trail moniker faded into obscurity by 1926 with the creation of the interstate highway system and the designation of most of the route as US-91. The route through Payson remained known as the Arrowhead Trail Road as an alternate road alignment was designated as US-91 through this area. The road segment still serves as a main thoroughfare between Payson and communities to the northeast.

NRHP Considerations for Site 42UT001945: Segments of the Arrowhead Trail Highway route have been documented in other counties in Utah, including Wasatch and Box Elder counties (site numbers 42WS004409 and 42BE002191). No segments have been previously documented in Utah County. Some of the segments documented in Wasatch and Box Elder counties exhibit the same characteristics as the segment documented here—they remain actively maintained and used roads. The previously documented segments were determined eligible for the NRHP under Criterion A. A few segments were also determined eligible under Criterion D, as additional features were associated with them. Certus recommends the segment documented near Payson be considered a contributing element of this eligible site.

Site 42UT001946, 4th North Ditch System

Site 42UT001946 is the 4th North Ditch system. This ditch network diverts from Peteetneet Creek in the Payson City Park near 200 South and Main Street. From here the system flows northeast to serve farmlands east and northeast of the city (Brent Arns, personal communication, June 28, 2016). Certus documented approximately 10.3 miles of the system as part of the current undertaking. Most of this comprises lateral ditches extending through and around agricultural fields north of SR-198.


Site 42UT001946. Example of concrete ditch along SR-198; looking east--northeast

The documented ditch segments vary from unlined field ditches measuring approximately 2-3 feet wide and 1 foot deep to concrete-lined ditches measuring approximately 5 feet wide and 2 feet deep. The concrete ditch segments are primarily located along the north side of SR-198. Aerial photographs and the physical nature of the concrete suggest the lining of the ditch along SR-198 occurred during the late historic period. No notable historical features beyond the ditches themselves were identified, as most of the system appears to have been upgraded to include modern turnouts, culverts, and other diversion structures.

The exact construction date for the ditch system could not be determined from available records and local informants, but it appears likely this ditch is illustrated on a 1908 Sanborn fire insurance map for Payson, as a ditch matching the general alignment and diversion of the 4th North Ditch is present. Further, it seems highly likely the system was established quite early in the settlement period to help irrigate agricultural fields northeast of the developed town plat.

NRHP Considerations for Site 42UT001946: Site 42UT001946 is the 4th North Ditch system. While the portion of the system through the developed part of Payson has been piped, the ditch network northeast of town remains relatively intact. These portions of the system retain integrity of location, setting, feeling, association, and design. Their integrity of workmanship and materials has been compromised somewhat due to the replacement of most historical features (e.g., turnouts, check dams, etc.).

The 4th North Ditch system was established during the settlement period of Payson, when lands northeast of the settled community were developed for agricultural purposes. Such development not only sustained the early settlement but allowed it to transition from subsistence agriculture to a cash economy based on surplus agricultural products. For this reason, Certus recommends site 42UT001946 be considered eligible for the NRHP under Criterion A.

No information suggesting an association of the 4th North Ditch system with important historical individuals was identified. As such, Certus recommends this site ineligible for the NRHP under Criterion B.

This site lacks notable architectural or engineering characteristics, at least amongst the segments documented as part of this undertaking. Certus recommends the site ineligible for the NRHP under Criterion C.

The site has not yielded information important in expanding or refining our understanding of past land uses or irrigation practices in the Payson area, and it does not appear to have the potential to do so. Certus recommends the site ineligible for the NRHP under Criterion D.

Site 42UT001947, Utah Avenue Ditch System

Site 42UT001947 is the Utah Avenue Ditch system. This network diverts from Peteetneet Creek at the Payson City Park near 200 South and Main Street. From here the system flows northeast to Utah Avenue and then extends west through the developed community and beyond. Certus documented approximately 0.5 miles of the system as part of the current undertaking. These segments are primarily located along 100 North west of 200 West, along Utah Avenue and 100 South just west of Main Street, along the east side of 100 East just north of SR-198, and west of Interstate 15 near 300 North and 400 North.

Site 42UT001947. Example of concrete ditch along 100 South; looking west

Most of the identified segments of the system are lined, though a few short segments east of Interstate 15 and all segments west of the interstate were unlined. The documented segments are all very short, with the shortest being only a few feet long and the longest being no more than 450 feet long. Nearly the entire system has been piped and converted to a pressurized secondary water system. The ditch network, as documented here, manifests on the surface in a variety of ways from J-gutters, to small U-trenches and V-ditches. Most, if not all, of these ditch segments are currently unused since the in-town irrigation system has been pressurized. Staff in Payson City's water department indicate that only a single user remains on the unpressurized part of the system, and this user is located west of Interstate 15 in the agricultural lands (Brent Arns, personal communication, June 28, 2016).

The exact construction date for the ditch system could not be determined from available records and local informants, but it appears likely this ditch is illustrated on an 1890 Sanborn fire insurance map for Payson, as a ditch matching the general alignment and diversion of the Utah Avenue Ditch is present. Further, it seems highly likely the system was established quite early in the settlement period to help irrigate backyard subsistence gardens in the developed town plat.

NRHP Considerations for Site 42UT001947: Site 42UT001947 is the Utah Avenue Ditch system. Certus recommends the site ineligible for the NRHP under all criteria owing to a lack of integrity. The vast majority of the system has been piped underground, and remnant ditches have either been removed or are buried. While the remnant ditch segments documented here retain integrity of location and materials, the system as a whole lacks integrity of setting, feeling, association, design, and workmanship. Because of this, the site as a whole is no longer able to convey its historical role in the Payson community.

Summary and Conclusions

Certus conducted an intensive-level archaeological inventory for the I-15 Payson Main Street Interchange Project in Payson, Utah County, Utah, in support of UDOT's proposed interchange improvements. The assessment included both intensive-level and reconnaissance-level survey coverage. Reconnaissance-level coverage primarily occurred in the developed portion of Payson; however, some areas surveyed using intensive-level transect spacing were so densely vegetated as to render the actual visual inspection more comparable to reconnaissance-level coverage. Certus also conducted shovel probing in the northern part of the APE in areas considered to have high potential for buried prehistoric resources.

The archaeological inventory resulted in the identification of 11 archaeological sites and two isolated occurrences. All of the archaeological sites and one of the isolates are historic period resources. The remaining isolate is of prehistoric origin. The documented sites are as follows:

- Site 42UT000935/42UT001331 – South Field Canal system
- Site 42UT001029 – the Union Pacific/Utah Southern Railroad
- Site 42UT001194 – the Denver & Rio Grande Western Railroad/Tintic Range Railway
- Site 42UT001721 – the Old Field Ditch system
- Site 42UT001722 – the Bamberger Ditch system
- Site 42UT001942 – a historic corral site
- Site 42UT001943 – a historic depression with subsurface artifacts
- Site 42UT001944 – the remains of a historic residential property
- Site 42UT001945 – the Arrowhead Trail Highway
- Site 42UT001946 – the 4th North Ditch system
- Site 42UT001947 – the Utah Avenue Ditch system

Certus recommends that seven sites—42UT000935/42UT001331, 42UT001029, 42UT001194, 42UT001722, 42UT001943, 42UT001945, and 42UT001946—be considered eligible for the NRHP. The remaining sites—42UT001721, 42UT001942, 42UT001944, and 42UT001947—are recommended ineligible for the NRHP.

Anticipated effects on the historic properties from the proposed interchange project were not known to Certus at the time of this report. Those effects will be assessed by UDOT and documented in a determination of eligibility and finding of effect (DOE-FOE) letter.

References Cited

Billat, Scott and Lorna Billat

2009a IMACS site form for site 42UT000935, the South Field Canal. On file at the Utah State Historic Preservation Office, Salt Lake City.

2009b IMACS site form for site 42UT001721. On file at the Utah State Historic Preservation Office, Salt Lake City.

2009c IMACS site form for site 42UT001722. On file at the Utah State Historic Preservation Office, Salt Lake City.

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An Archaeological Assessment for the Interstate 15 Payson Main Street Interchange EIS, Utah County, Utah

UDOT Project No. F-I15-6(214)251; PIN 10263

APPENDIX A: FILE SEARCH FIGURE

Per Section 304 of the National Historic Preservation Act [16 U.S.C. 470w-3], this page has been removed

An Archaeological Assessment for the
Interstate 15 Payson Main Street Interchange EIS,
Utah County, Utah

UDOT Project No. F-I15-6(214)251; PIN 10263

APPENDIX B: UGS PALEONTOLOGICAL CONSULTATION LETTER

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director

Utah Geological Survey
RICHARD G. ALLIS
State Geologist Division Director

June 15, 2016

Sheri Murray Ellis
CERTUS Environmental Solutions, LLC
655 7th Avenue
Salt Lake City UT 84103

RE: Paleontological File Search and Recommendations for UDOT Project F-I15-6(214)251; PIN 10263; Interstate 15 Payson Main Street Interchange, Utah County, Utah U.C.A. 79-3-508 (Paleontological) Compliance; Request for Confirmation of Literature Search according to the UDOT/UGS Memorandum of Understanding.

Dear Sheri:

I have conducted a paleontological file search for the I-15 Payson Main Street Interchange Project in response to your letter of November 10, 2014. This project qualifies for treatment under the UDOT/UGS executed Memorandum of Understanding.

There are no paleontological localities recorded in our files for this project area. Quaternary and Recent alluvial and lacustrine deposits that are exposed along this project right-of-way have a low potential for yielding significant fossil localities (PFYC 2). Unless fossils are discovered as a result of construction activities, this project should have no impact on paleontological resources.

If you have any questions, please call me at (801) 537-3311.

Sincerely,

Martha Hayden

Martha Hayden
Paleontological Assistant

1594 West North Temple, Suite 3110, PO Box 146100, Salt Lake City, UT 84114-6100
telephone (801) 537-3300 • facsimile (801) 537-3400 • TTY (801) 538-7458 • *geology.utah.gov*

UTAH DNR GEOLOGICAL SURVEY

An Archaeological Assessment for the Interstate 15 Payson Main Street Interchange EIS, Utah County, Utah

UDOT Project No. F-I15-6(214)251; PIN 10263

APPENDIX C: SURVEY RESULTS FIGURES

Per Section 304 of the National Historic Preservation Act [16 U.S.C. 470w-3], this page has been removed

Per Section 304 of the National Historic Preservation Act [16 U.S.C. 470w-3], this page has been removed

APPENDIX B
TECHNICAL REPORTS

AN ADDENDUM TO: AN ARCHAEOLOGICAL ASSESSMENT FOR THE INTERSTATE 15 PAYSON MAIN STREET INTERCHANGE ENVIRONMENTAL IMPACT STATEMENT, UTAH COUNTY, UTAH FINAL

An Addendum to: An Archaeological Assessment for the Interstate 15 Payson Main Street Interchange EIS, Utah County, Utah

Final

UDOT Project No. F-I15-6(214)251; PIN 10263

Prepared for

The Utah Department of Transportation
and
H.W. Lochner, Inc.

Prepared by

Sheri Murray Ellis, MS, RPA
Owner / Consultant

Certus Environmental Solutions, LLC
Salt Lake City, Utah
801.230.7260

Utah Antiquities Project No. U17HY0045p
PLPCO Permit No. 47

Certus Project Number LOCH08

February 28, 2017

PROJECT ABSTRACT SHEET

Report Title: *An Addendum to: An Archaeological Assessment for the Interstate 15 Payson Main Street Interchange EIS, Utah County, Utah*

UDOT Project Number and Name: F-I15-6(214)251; Payson Interchange EIS; PIN 10263

Utah State Project Number: U17HY0045p

Project Description: The Utah Department of Transportation (UDOT) is considering improvements to Interstate 15 interchange at Main Street in Payson, Utah. These improvements may include changes to the existing interchange configuration or relocation of the interchange. The UDOT is preparing an EIS to evaluate alternatives for the interchange improvements. Certus Environmental Consultants completed a survey of the original EIS study area in in 2014-2016 (Ellis 2016). Subsequent to those surveys, the EIS study area was expanded into areas not previously surveyed. The assessment of that expanded area is presented herein.

Area of Potential Effects: The area of potential effects (APE) for the addendum archaeological assessment was established as three small block areas at the north, south, and northwestern edges of the original study area. These areas encompass portions of the R Alternatives being considered in the EIS. Collectively they contain approximately 39.1 acres.

Agencies: Utah Department of Transportation; Payson City; U.S. Army Corps of Engineers; U.S. Fish and Wildlife Service, Federal Highway Administration

Location: Payson and Benjamin, Utah County

Land Ownership: Private

Date(s) of Fieldwork: December 14, 2016

Methods: Intensive-level archaeological survey; no historic structures are present in the survey area

Acres Surveyed: 15.8 hectares (39.1 acres)

Archaeological Sites in the APE: 2 (42UT001194 and 42UT001722)

NRHP Eligible Sites: 1 (42UT001194 and 42UT001722)

TABLE OF CONTENTS

LIST OF FIGURES

INTRODUCTION

The Utah Department of Transportation (UDOT), in conjunction with the Federal Highway Administration (FHWA) is evaluating potential improvements to the Interstate 15 interchange at Main Street in Payson, Utah (**Figure 1**). The improvements may include changes to the existing interchange and/or construction of a new interchange at a different location. Alternatives to address the project purpose and need are being evaluated in an environmental impact statement (EIS). The project is hereafter referred to as the Interchange Project or the I-15 Payson Main Street Interchange Project. The environmental review, consultation and other actions required by applicable Federal environmental laws for this project are being or have been carried-out by UDOT pursuant to 23 USC 327 and a Memorandum of Understanding dated January 17, 2017, and executed by FHWA and UDOT.

H.W. Lochner, Inc. (Lochner) is assisting UDOT with environmental studies for the Interchange Project. Lochner contracted with Certus Environmental Solutions, LLC (Certus) to conduct an assessment of cultural resources in the area of potential effects for the proposed project. Certus Environmental Consultants (Certus) completed a survey of the original EIS study area in in 2014-2016 (Ellis 2016). Subsequent to those surveys, the EIS study area was expanded into areas not previously surveyed (see **Figures 2 and 3**). The assessment of that expanded area is presented herein.

Sheri Murray Ellis, Principal Investigator for Certus under State of Utah Principal Investigator Permit No. 47, conducted fieldwork for the addendum survey project December 14, 2016. All work was carried out under Utah State Antiquities Project No. U17HY0045p. As no buildings or structures are present in the addendum survey area, Certus conducted only an archaeological inventory.

THE AREA OF POTENTIAL EFFECTS AND SURVEY AREA

The project area is located in the community of Payson in Utah County, Utah (see **Figure 1**). Implementation of the project, whether reconstruction of the existing interchange or construction of a new interchange, would require ground disturbance at least several feet deep and would necessitate acquisition of new right-of-way as well as temporary construction easements.

The area of potential effects (APE) for the addendum archaeological assessment was established as three small block areas at the north, south, and northwestern edges of the original study area. These areas encompass portions of the R Alternatives being considered in the EIS. Collectively they contain approximately 39.1 acres (see **Figures 2 and 3**).

The addendum APE is located in Township 8 South, Range 2 East, Sections 33 and 34 and Township 9 South, Range 2 East, Sections 8 of the Salt Lake Base and Meridian. The area can be found on USGS 7.5' topographic quadrangle Spanish Fork, Utah (see **Figure 2**). Lands on which the addendum APE is located are owned by private parties.

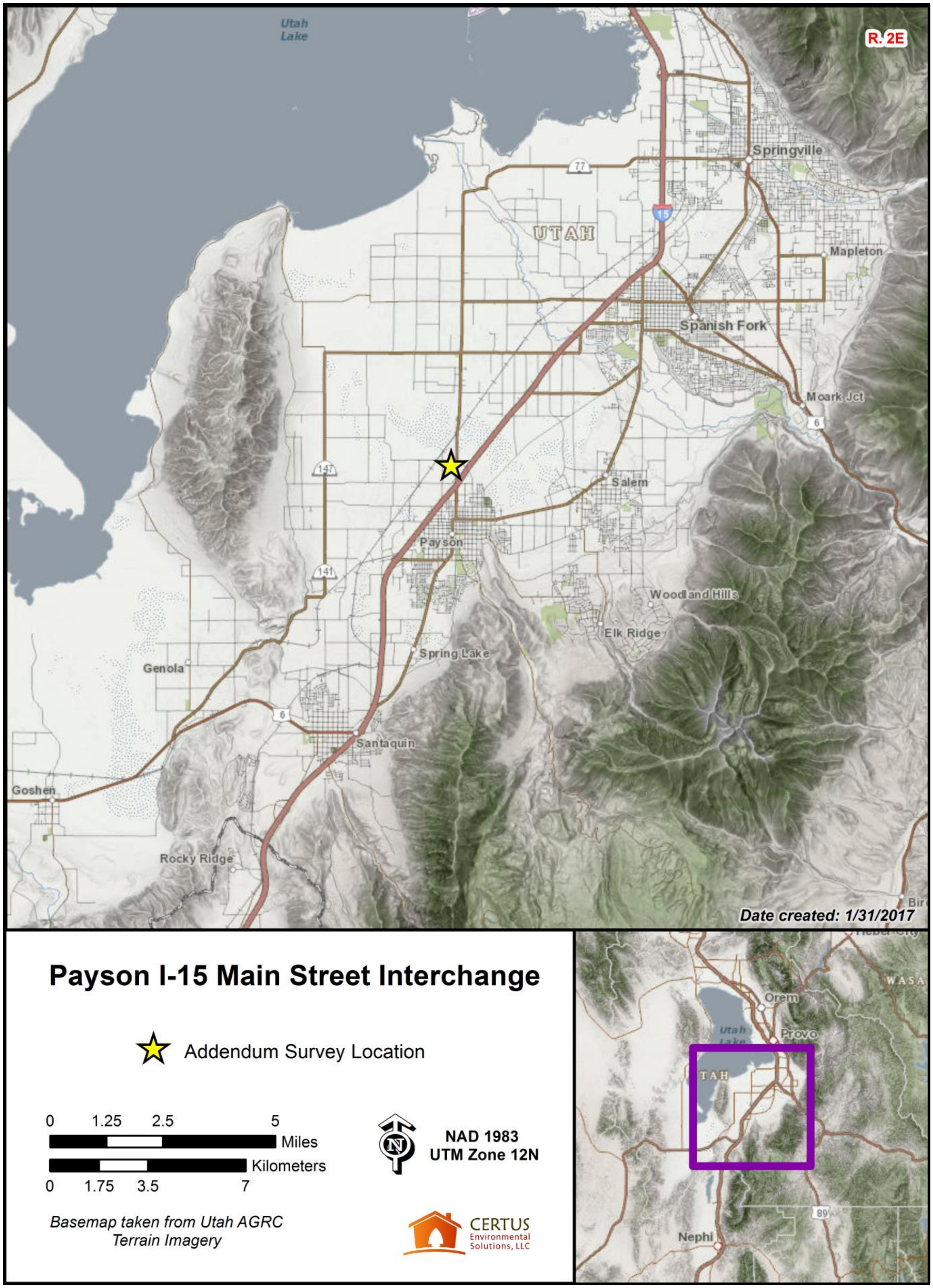

Figure 1. General addendum survey location; I-15 Payson Main Street Interchange Project

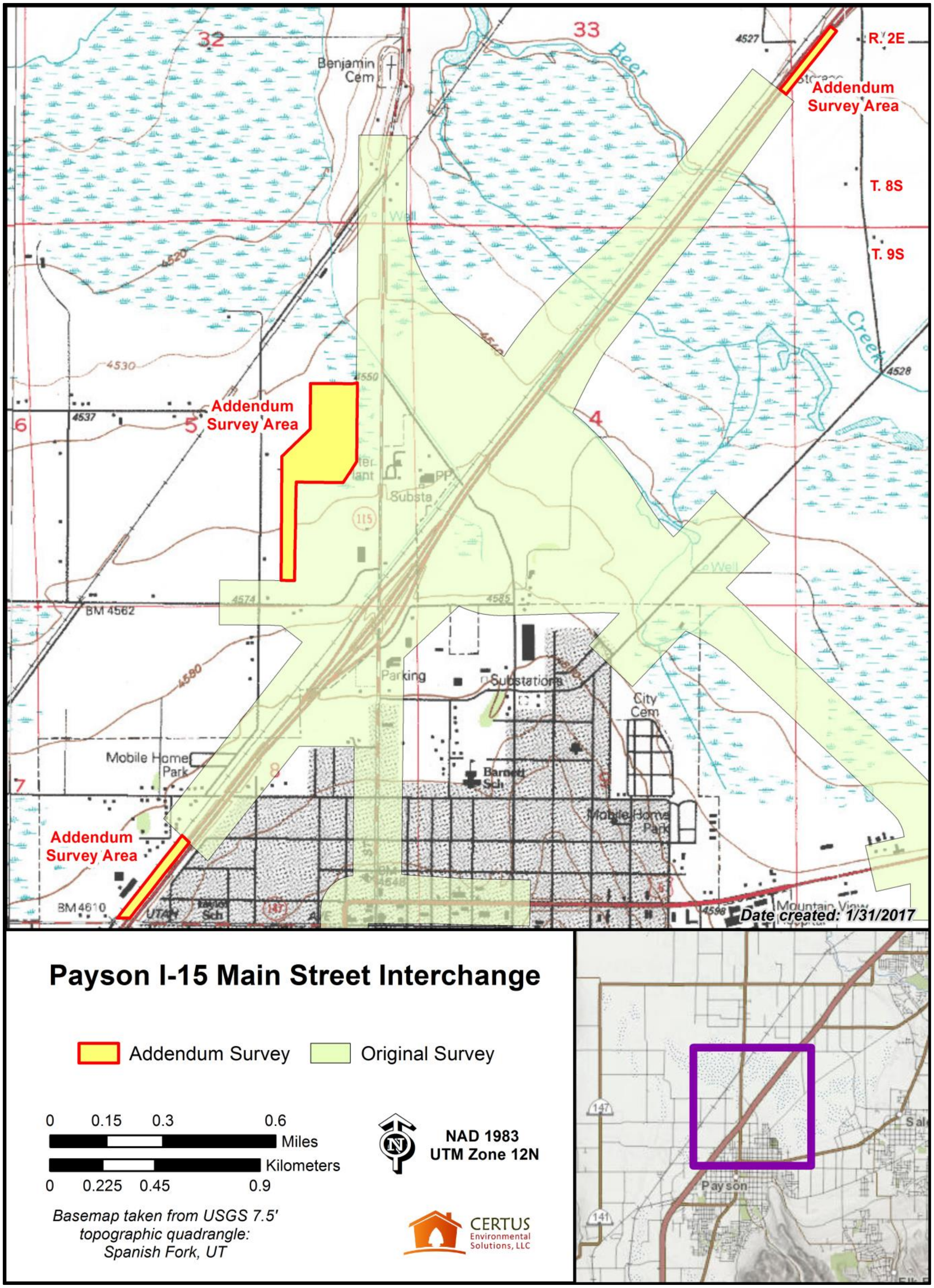

Figure 2. Addendum APE/Survey Area; I-15 Payson Main Street Interchange Project

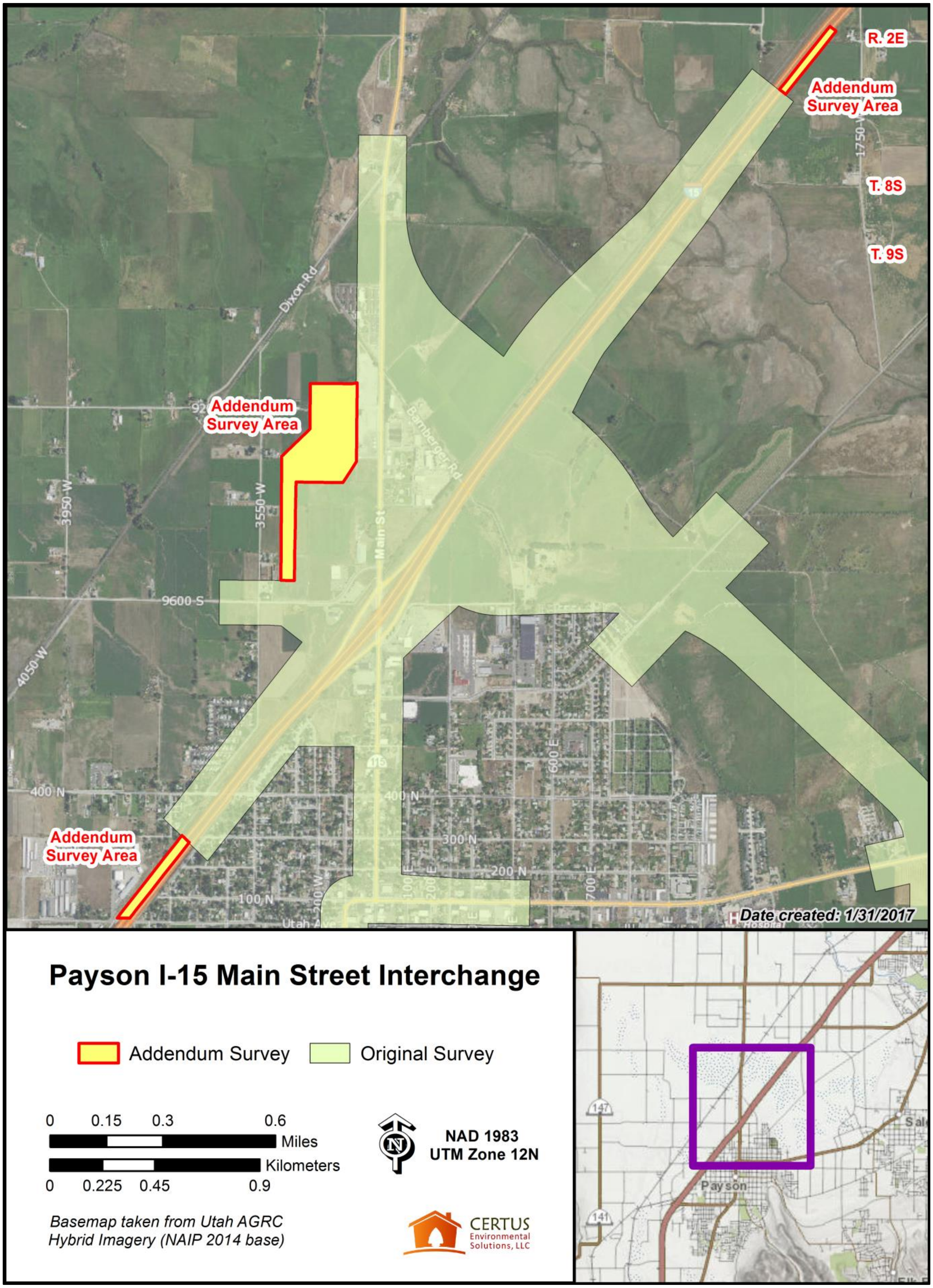

Figure 3. Addendum APE/Survey Area; I-15 Payson Main Street Interchange Project

Project Setting

The addendum APE is located in a series of agricultural fields used for livestock grazing and alfalfa cultivation. Some of the fields contained short grasses at the time of survey, and ground visibility was good. In the northeastern part of the APE, grasses were taller, especially along ditches and drains, where ample water has spurred tall vegetation growth with grasses and reeds. Invasive plants, such as thistle and Russian olive trees, are also common in this portion of the APE.

Elevation of the APE is approximately 4553 feet above sea level. Soils throughout the APE have been altered by the introduction of organic material for agricultural development; however, base soils are medium brown, fine-grained silty loam with a moderate content of subangular gravel. The Natural Resources Conservation Service classifies them as Holdaway silt loam, Kirkham silty clay loam, McBeth silt loam, Peteetneet-Holdaway complex, and Sunset loam.

Previous Surveys and Known Archaeological Resources

A detailed review of previous projects and known sites in the vicinity of the EIS study area is contained in the original survey report prepared by Certus (Ellis 2016). For the purpose of the current effort, Certus conducted a review update of the addendum APE on December 13, 2016, via the Preservation Pro system. This review was limited to the boundary of the addendum APE, as the entire area and beyond was already included in the original file search for the project.

The updated review confirmed that no previous cultural resource surveys have been conducted in the addendum APE. Additionally, no archaeological resources or historic structures have been reported.

Historical topographic maps and General Land Office maps for the area indicate the historical wall that once surrounded the early Payson settlement of the 1850s was located north of the main addendum survey block in Township 9 South, Range 2 East, Section 5. No other man-made structures or land uses are identified in the area. Historic air photos also do no depict any structures or notable land uses other than open agricultural fields.

Paleontological Consultation

Consultation with the Utah Geological Survey (UGS) regarding the presence/absence of and potential for encountering fossil resources in the project area was carried out as part of the original archaeological survey for the EIS (Ellis 2016). This consultation indicated that no known paleontological localities have been recorded in the project area, including the current addendum APE.

Field Methods

Certus applied standard intensive-level archaeological survey methods accepted by the Utah State Historic Preservation Officer (SHPO) and the UDOT. UDOT guidelines call for a 45-year age cutoff for considering resources historical—an effort to accommodate a time lag between the compilation of the survey data and actual construction associated with the undertaking. Given the timing of the survey in late 2016, Certus employed a cutoff date of 1972 to designate resources as historical.

Sheri Murray Ellis of Certus inventoried the APE by transects spaced no more than 15 meters (50 feet) apart across the survey area. Navigation within the survey area was accomplished using a hand held GPS unit capable of sub-meter accuracy, aerial maps, and visual landmarks. Archaeological resources encountered during the survey were documented on Intermountain Antiquities Computer System (IMACS) site forms with accompanying digital photographs. Locational information was obtained using a handheld GPS unit capable of sub-meter accuracy.

FINDINGS

Certus identified two archaeological sites and one isolated occurrence in the APE as a result of the field inventory. The sites are a portion of the Denver & Rio Grande Western (D&RGW)/Tintic Range Railway (site 42UT001194) and part of the field ditch network of the Bamberger Ditch System (site 42UT001722). The locations of the sites and isolated occurrence are depicted in **Figure 4**, and descriptions of each are provided below.

Isolated Occurrences

One isolated occurrence was documented in the APE. A description of the isolate is provided below.

Isolated Occurrence 1 (IO-01)

IO-01 is a collection of historical farm equipment stored along a fenceline in an agricultural field. The equipment includes a manure spreader, a wagon, a seeder, a tumbler, and components of other discarded machinery. The machinery appears to date to the late 1800s and early 1900s. Isolated occurrences are, by definition, ineligible for the National Register of Historic Places (NRHP).

IO-01. Farm equipment

Archaeological Sites

As noted above, Certus identified two archaeological sites in the APE. Descriptions of the sites are provided below.

Site 42UT001194, Denver & Rio Grande Western Railroad/Tintic Range Railway

Site 42UT001194 is the Denver & Rio Grande Western Railroad (D&RGW) Tintic Railway corridor. It extends into the addendum survey area along the west side of Interstate 15. Certus documented 2.5 miles of the rail site as part of the original surveys for the interchange EIS (Ellis 2016). This included the portions of the site extending through the current addendum survey areas. As such, no additional documentation was required as part of the addendum survey effort.

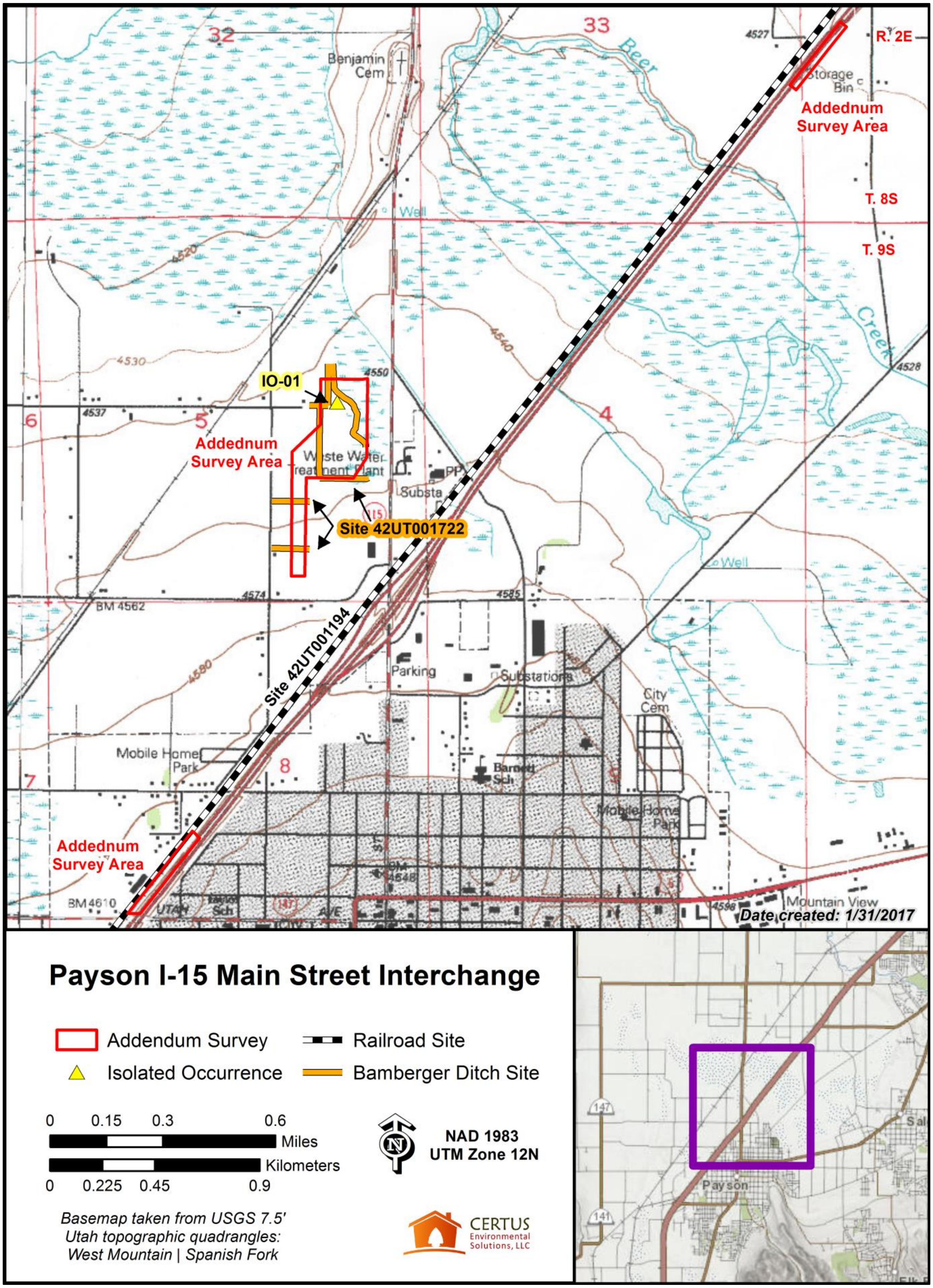

Figure 4. Addendum survey results; topographic map

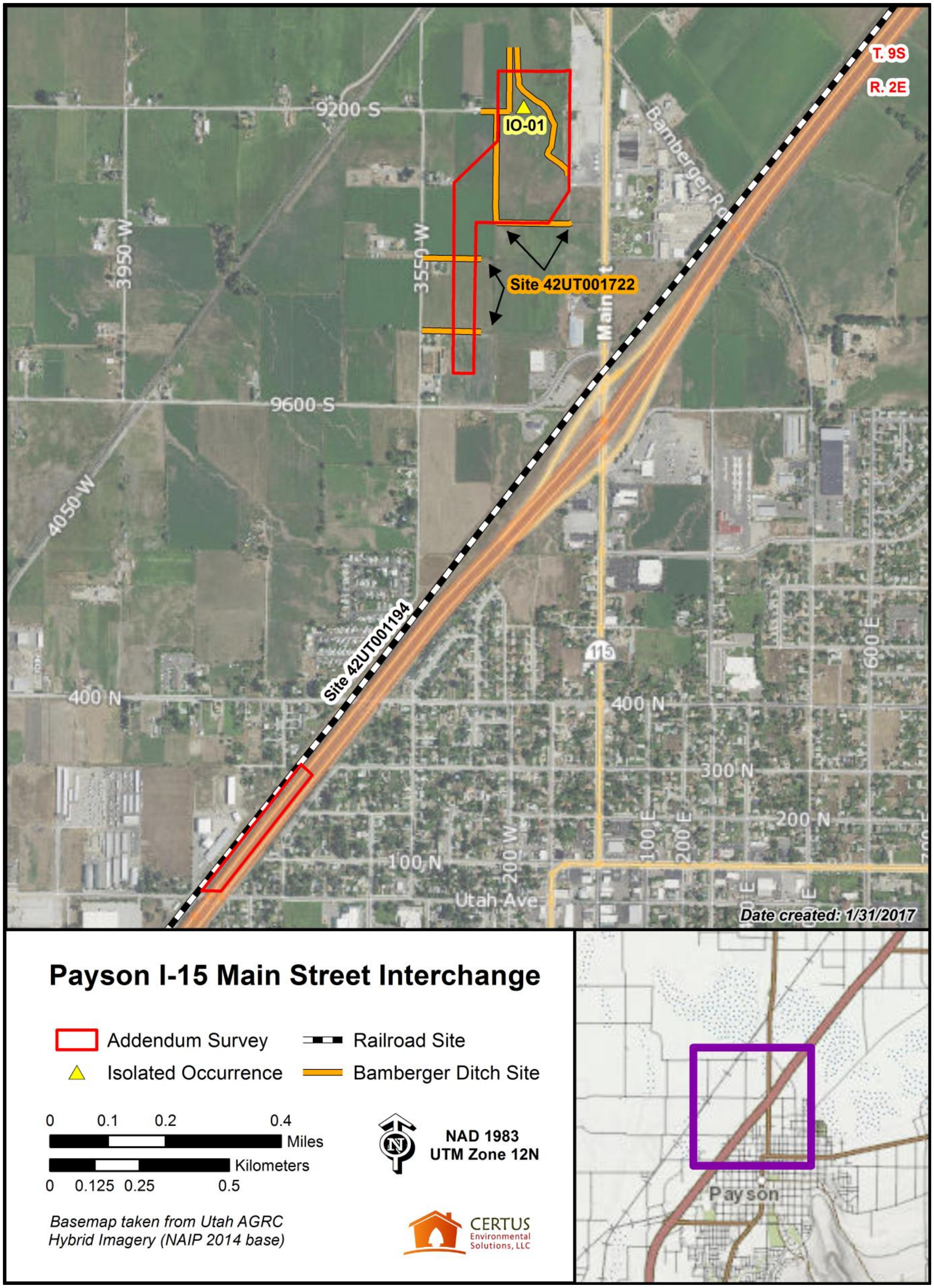

Figure 5. Addendum survey results; air photo map

The segment of the railroad in the current survey area was originally part of the Tintic Range Railway, which was completed between Springville and Silver City in 1892 (Robertson 1986:289). This rail line served to transport ore from the mines in Silver City, Mammoth, and Eureka to the main Rio Grande Western Railroad at Springville. The railroad was merged into the Denver & Rio Grande Western Railroad system in August 1908 (Robertson 1986:289). It appears the line was abandoned sometime prior to 1995.

Site 42UT001194; D&RGW railroad in the addendum APE

NRHP Considerations for Site 42UT001194: As a whole, the Denver & Rio Grande Western Railroad Tintic Range Railway has been determined eligible for the NRHP under Criterion A as a result of much previous documentation of segments of the rail line. Specific segments or features have also been determined eligible under Criterion C. Certus recommended the portion of the railroad documented as part of the original EIS survey effort, including those sections extending into the current addendum survey area, be considered to contribute to the overall site as being eligible for the NRHP under Criterion A.

Site 42UT001722, Bamberger Ditch System

Site 42UT001722 is the Bamberger Ditch system. The site was first documented in 2009 by Earth Touch as part of improvements to Interstate 15 (Billat and Billat 2009c). Certus documented numerous additional components of this ditch network as part of surveys for the I-15 Payson Main Street Interchange EIS. In total Certus reported 7.3 miles of the Bamberger Ditch system as part of that effort (Ellis 2016). Most of the documented components comprise lateral field ditches, though a portion of the main ditch was documented.

Site 42UT001722; Bamberger Ditch; typical ditch channel in the addendum APE; view to the east

As part of the current survey effort, Certus identified numerous additional lateral field ditches associated with the Bamberger Ditch System (site 42UT001722). These ditches are all unlined (i.e., earthen) and average roughly 3-4 feet wide and 1-2 feet deep. Some segments of the lateral ditches have become deflated and are wider and shallower than others. In total, Certus documented an additional 1,542 linear meters of lateral ditches. Additionally, Certus identified one historical feature along the newly documented portion of the field ditch network. This feature is a combination of an abandoned concrete turnout frame and a steel and concrete guzzler pipe. This feature is located at the intersection of several fences demarcating individual agricultural fields in the southeastern portion of the addendum survey area.

No specific date of construction was located for the Bamberger Ditch system, though it likely dates to the pre-1900 settlement period of Payson. It is clear the system is of historical age, as segments of the network can be deciphered on a 1946 aerial photograph of the area. The system, which is fed by

Peteetneet Creek, was likely renamed for the Bamberger Railroad line built next to the main ditch in the early 1800s.

> **NRHP Considerations for Site 42UT001722:** Site 42UT001722—the Bamberger Ditch System—was recommended eligible for the NRHP under Criterion A as a result of the documentation by Certus for the Interchange Project EIS (Ellis 2016). The components of the system documented as part of this addendum survey would be considered contributing to that eligibility, as they retain integrity of location, design, materials, workmanship, setting, feeling, and association.

Summary and Conclusions

Certus conducted an addendum intensive-level archaeological inventory for the I-15 Payson Main Street Interchange Project in Payson, Utah County, Utah, in support of UDOT's proposed interchange improvements. The assessment was an intensive-level archaeological survey; no historical buildings or structures are located in the addendum survey area or on lands intersected by the addendum survey area.

The archaeological inventory resulted in the identification of two archaeological sites and one isolated occurrence. The archaeological sites comprise additional sections of the D&RGW/Tintic Range Railway (site 42UT001194) and several segments and one historical feature of the lateral field ditch network of the Bamberger Ditch System (site 42UT001722). Site 42UT001194 as a whole was previously determined eligible for the NRHP. The segments in the addendum survey area contribute to that eligibility. Site 42UT001722 was recommended eligible for the NRHP as a result of documentation prepared during the original survey for the interchange project (Ellis 2016). Certus recommends the components of the site documented during this addendum survey effort be considered contributing to the eligibility of the site under Criterion A.

Anticipated effects on the historic properties from the proposed interchange project were not known to Certus at the time of this report. Those effects will be assessed by UDOT and documented in a determination of eligibility and finding of effect (DOE-FOE) letter.

References Cited

Ellis, Sheri Murray
2016 *An Archaeological Assessment for the Interstate 15 Payson Main Street Interchange EIS, Utah County, Utah*. Certus Environmental Solutions, Salt Lake City. Submitted to the Utah Department of Transportation, Region Three.

Utah Department of Transportation (UDOT)
2010 *UDOT Guidelines for Identifying, Recording, and Evaluating Archaeological and Paleontological Resources.* Utah Department of Transportation, Environmental Services, Salt Lake City.

APPENDIX B
TECHNICAL REPORTS

SELECTIVE RECONNAISSANCE-LEVEL HISTORIC STRUCTURES ASSESSMENT FOR THE INTERSTATE 15 PAYSON MAIN STREET INTERCHANGE ENVIRONMENTAL IMPACT STATEMENT, UTAH COUNTY, UTAH

Selective Reconnaissance-Level Historic Structures Assessment for the Interstate 15 Payson Main Street Interchange EIS, Utah County, Utah

REVISED FINAL

UDOT Project No. F-I15-6(214)251; PIN 10263

Prepared for

The Utah Department of Transportation
and
H.W. Lochner, Inc.

Prepared by

Sheri Murray Ellis, MS, RPA
Manager/Sr. Consultant

Certus Environmental Solutions, LLC
Salt Lake City, Utah
801.230.7260

Utah Antiquities Project No. U-14-HY-1270ps
PLPCO Permit No. 47

Certus Project Number LOCH08

October 26, 2015

Project Abstract Sheet

Report Title: *Selective Reconnaissance-Level Historic Structures Assessment for the Interstate 15 Payson Main Street Interchange EIS, Utah County, Utah*

UDOT Project Number and Name: F-I15-6(214)251; Payson Interchange EIS; PIN 10263

Utah State Project Number: U-14-HY-1270ps

Project Description: The Utah Department of Transportation (UDOT) is considering improvements to Interstate 15 interchange at Main Street in Payson, Utah. These improvements may include changes to the existing interchange configuration or relocation of the interchange. The UDOT is preparing an EIS to evaluate alternatives for the interchange improvements.

Area of Potential Effects: The area of potential effects (APE) was established as a large, irregularly shaped polygon surrounding the existing interchange and encompassing all areas wherein a potential new interchange and associated new connector roads may be located. This APE, which contains approximately 770 hectares (1,902 acres), includes those areas where physical ground disturbance, property acquisition, and proximal visual impacts may occur. The survey area is equal to the APE.

Agencies: Utah Department of Transportation; Payson City; U.S. Army Corps of Engineers; Federal Highway Administration

Location: Payson City, Utah County

Land Ownership: Private, UDOT, Municipal

Date(s) of Fieldwork: December 9-12, 2014; September 2, 2015

Methods: Selective reconnaissance-level buildings inventory and intensive-level archaeological survey (to be reported under separate cover).

Acres Surveyed for Historic Buildings: 798 hectares (1,970 acres)

Properties with Historic Structures Recorded: 209 (see Table S1, below)

NRHP Eligible Structures: 114 (see Table S1, below)

Table S1. Summary of Historic Structures and National Register Eligibility Recommendations

Eligible for the NRHP		
35 N. 100 E.	57 W. 200 N.	8741 S. 3200 W.
149 N. 100 E.	558 W. 200 N.	2 N. Main St.[1]
175 N. 100 E.	90 N. 200 W.	3-5 N. Main St.
209 N. 100 E.	596 N. 300 E.	10 N. Main St.
235 N. 100 E.	60 E. 300 N.	50 N. Main St.
48 E. 100 N.	488 W. 300 N.	95 N. Main St.
123 E. 100 N.	520 W. 300 N.	?183 N. Main St.
171 E. 100 N.	610 W. 300 N.	215 N. Main St.[2]
197 E. 100 N.	708 W. 300 N.	218 N. Main St.[2]
240 E. 100 N.	787 W. 300 N.	248 N. Main St.[2]
280 E. 100 N.	25 E. 400 N.[1]	280 N. Main St.[1]
315 E. 100 N.	59 E. 400 N.	281 N. Main St.[1]
54 W. 100 N.	99 E. 400 N.	291 N. Main St.[1]
228 W. 100 N.	101 E. 400 N.	297 N. Main St.[1]
586 W. 100 N.	98 W. 400 N.	330 N. Main St.[1]
70 W. 100 S.	108 W. 400 N.	335 N. Main St.[1]
96 W. 100 S.	394 W. 400 N.	340 N. Main St.[1]
43 N. 100 W.	660 W. 400 N.	341 N. Main St.[1]
89 N. 100 W.	791 W. 400 N.	347 N. Main St.[1]
171 N. 100 W.	331 N. 400 W.	350 N. Main St.[1]
189 N. 100 W.	665 N. 500 E.	360 N. Main St.[1]
192 N. 100 W.	806 N. 500 E.	363 N. Main St.[1]
252 N. 100 W.	808 N. 500 E.	395 N. Main St.[1]
255 N. 100 W.	81 E. 500 N.	413 N. Main St.[1]
280 N. 100 W.	591 E. 500 N.	443 N. Main St.[1]
285 N. 100 W	85 W. 500 N.	446 N. Main St.
327 N. 100 W.	90 W. 500 N.	447 N. Main St.[1]
337 N. 100 W.	145 N. 600 E.	452 N. Main St.
340 N. 100 W.	210 N. 600 E.	485 N. Main St.[1]
345 N. 100 W.	290 N. 600 E.	495 N. Main St.[1]
347 N. 100 W.	619 N. 600 E.	496 N. Main St.[1]
349 N. 100 W.	95 N. 600 W.	511 N. Main St.[1]
80 S. 100 W.	325 N. 600 W.	550 N. Main St.
75 E. 200 N.	395 N. 600 W.	581 N. Main St.

[1] Listed as part of Payson Historic District
[2] Listed individually and as part of Payson Historic District

Table S1. Summary of Historic Structures and National Register Eligibility Recommendations

Eligible for the NRHP (Continued)		
625 N. Main St.	2232 W. SR-198	640 W. Utah Ave.
2204 W. SR-198	85 E. Utah Ave.[1]	652 W. Utah Ave.
2218 W. SR-198	70-98 W. Utah Ave.[1]	858 W. Utah Ave.
?2224 W. SR-198	596 W. Utah Ave.[1]	868 W. Utah Ave.
Not Eligible for the NRHP		
145 N. 100 E.	94 W. 200 N.	37 E. 500 N.
189 N. 100 E.	544 W. 200 N.	61 E. 500 N.[3]
327 N. 100 E.	547 W. 200 N.	158 N. 600 E.
389 N. 100 E.	562 W. 200 N.	179 N. 600 E.
190 E. 100 N.	115 N. 300 E.	191 N. 600 E.
208 E. 100 N.	590 N. 300 E.	371 N. 600 E.
297 E. 100 N.	47 E. 300 N.	103 N. 600 W.
64 W. 100 N.	75 E. 300 N.	297 N. 600 W.
180 W. 100 N.	590 E. 300 N.	308 N. 600 W.
560 W. 100 N.	42 W. 300 N.	326 N. 600 W.
596 W. 100 N.	43 W. 300 N.	340 N. 600 W.
625 W. 100 N.	62 W. 300 N.	343 N. 600 W.
31 N. 100 W.	535 W. 300 N.	8678 S. 3200 W.
101 N. 100 W.	559 W. 300 N.	6 N. Main St.
153 N. 100 W.	571 W. 300 N.	39 N. Main St.
209 N. 100 W.	40 E. 400 N.	40 N. Main St.
260 N. 100 W.	84 W. 400 N.	54 N. Main St.
265 N. 100 W.	412 W. 400 N.	67 N. Main St.
309 N. 100 W.	630 W. 400 N.	309 N. Main St.[3]
314 N. 100 W.	635 W. 400 N.	310 N. Main St.[3]
350 N. 100 W.	638 W. 400 N.	410 N. Main St.
375 N. 100 W.	643 W. 400 N.	420 N. Main St.
391 N. 100 W.	682 W. 400 N.	448 N. Main St.[3]
20 S. 100 W.	696 W. 400 N.	451 N. Main St.[3]
30 S. 100 W.	698 W. 400 N.	467 N. Main St.
?43 S. 100 W.	785 W. 400 N.	540 N. Main St.
52 S. 100 W.	377 N. 400 W.	543 N. Main St.
61 S. 100 W.	383 N. 400 W.	1766 W. SR-198
585 E. 200 N.	602 N. 500 E.	?2300 W. SR-198
60 W. 200 N.	645 N. 500 E.	2466 W. SR-198

[1] Listed as part of Payson Historic District
[3] Listed as part of Payson Historic District but recommended ineligible due to subsequent changes

Table S1. Summary of Historic Structures and National Register Eligibility Recommendations

Not Eligible for the NRHP (continued)		
26 W. Utah Ave.	60 W. Utah Ave.[3]	820 W. Utah Ave.
36 W. Utah Ave.[3]	115 W. Utah Ave.	

[3] Listed as part of Payson Historic District but recommended ineligible due to subsequent changes

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

INTRODUCTION

The Utah Department of Transportation (UDOT), in conjunction with the Federal Highway Administration (FHWA) is evaluating potential improvements to the Interstate 15 interchange at Main Street in Payson, Utah (**Figure 1**). The improvements may include changes to the existing interchange and/or construction of a new interchange at a different location. Alternatives to address the project purpose and need are being evaluated in an environmental impact statement (EIS). The project is hereafter referred to as the Interchange Project or the I-15 Payson Main Street Interchange Project.

H.W. Lochner, Inc. (Lochner) is assisting UDOT with environmental studies for the Interchange Project. Lochner contracted with Certus Environmental Solutions, LLC (Certus) to conduct an assessment of cultural resources in the area of potential effects for the proposed project. Both archaeological and architectural/structural assessments will be completed. The results of the architectural/structural inventory are reported here; the results of the archaeological inventory will be reported under separate cover.

Sheri Murray Ellis, Principal Investigator for Certus under State of Utah Principal Investigator Permit No. 47 and architectural historian, conducted fieldwork for the project December 9-12, 2014. All work was carried out under Utah State Antiquities Project No. U-14-HY-1270ps.

THE AREA OF POTENTIAL EFFECTS AND SURVEY AREA

The project area is located in the community of Payson in Utah County, Utah (see **Figure 1**). Implementation of the project, whether reconstruction of the existing interchange or construction of a new interchange, would require ground disturbance up to several feet deep and would necessitate acquisition of new right-of-way as well as temporary construction easements. Historical structural properties in the footprint of the final interchange improvements would need to be demolished or relocated. Additional historical structural properties adjacent to the final project site may be indirectly affected by visual intrusion.

The area of potential effects (APE) for the reconstruction was defined as a large irregularly shaped polygon encompassing the existing interchange and surrounding lands where alternatives are being considered in the EIS and where physical and proximate impacts could affect historic properties (see **Figures 2 and 3**). The APE as defined here encompasses all anticipated ground disturbance, possible right-of-way acquisition, temporary construction easements, and proximal effects. In total, the APE encompasses approximately 798 hectares (1,970 acres). The survey area is equal to the APE.

The APE/survey area is located in Township 8 South, Range 2 East, Sections 32-34 and Township 9 South, Range 2 East, Sections 3-5 and 8-10 on USGS 7.5' topographic quadrangles West Mountain, Utah and Spanish Fork, Utah (see **Figures 2 and 3**). Lands on which the undertaking would occur are owned by Payson City, UDOT, and private parties.

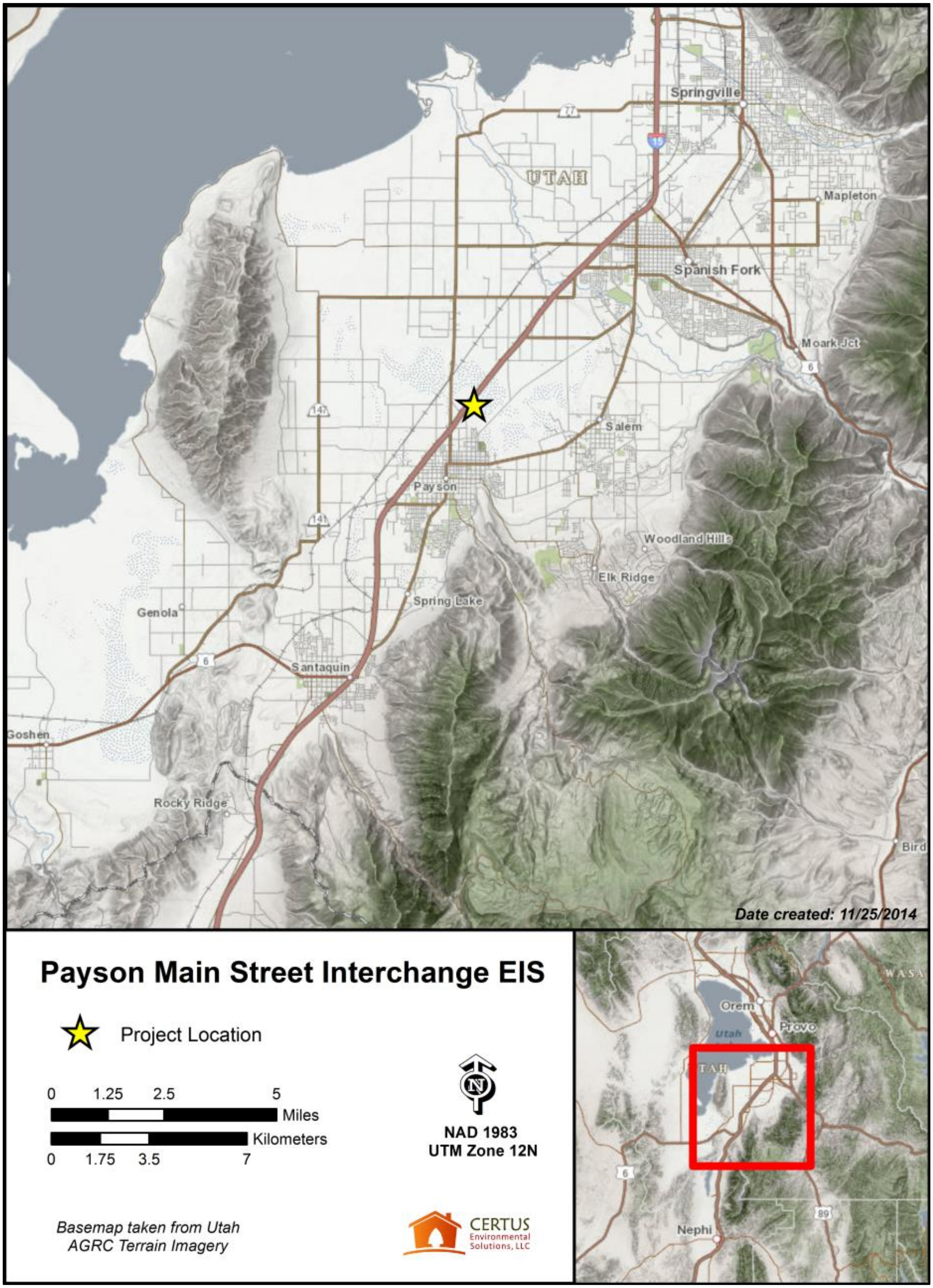

Figure 1. General project location; I-15 Payson Main Street Interchange Project

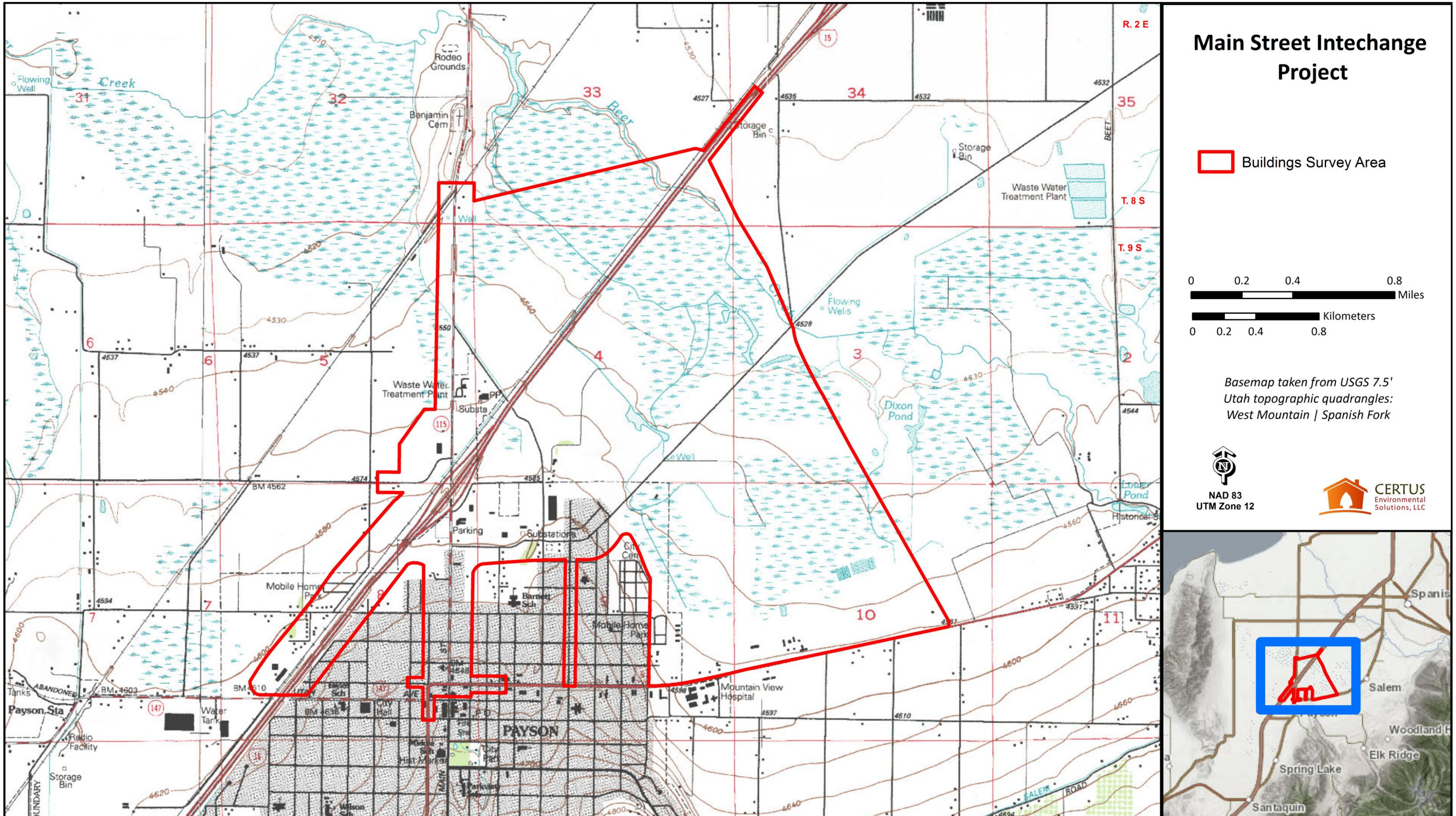

Figure 2. APE/Survey Area; I-15 Payson Main Street Interchange Project

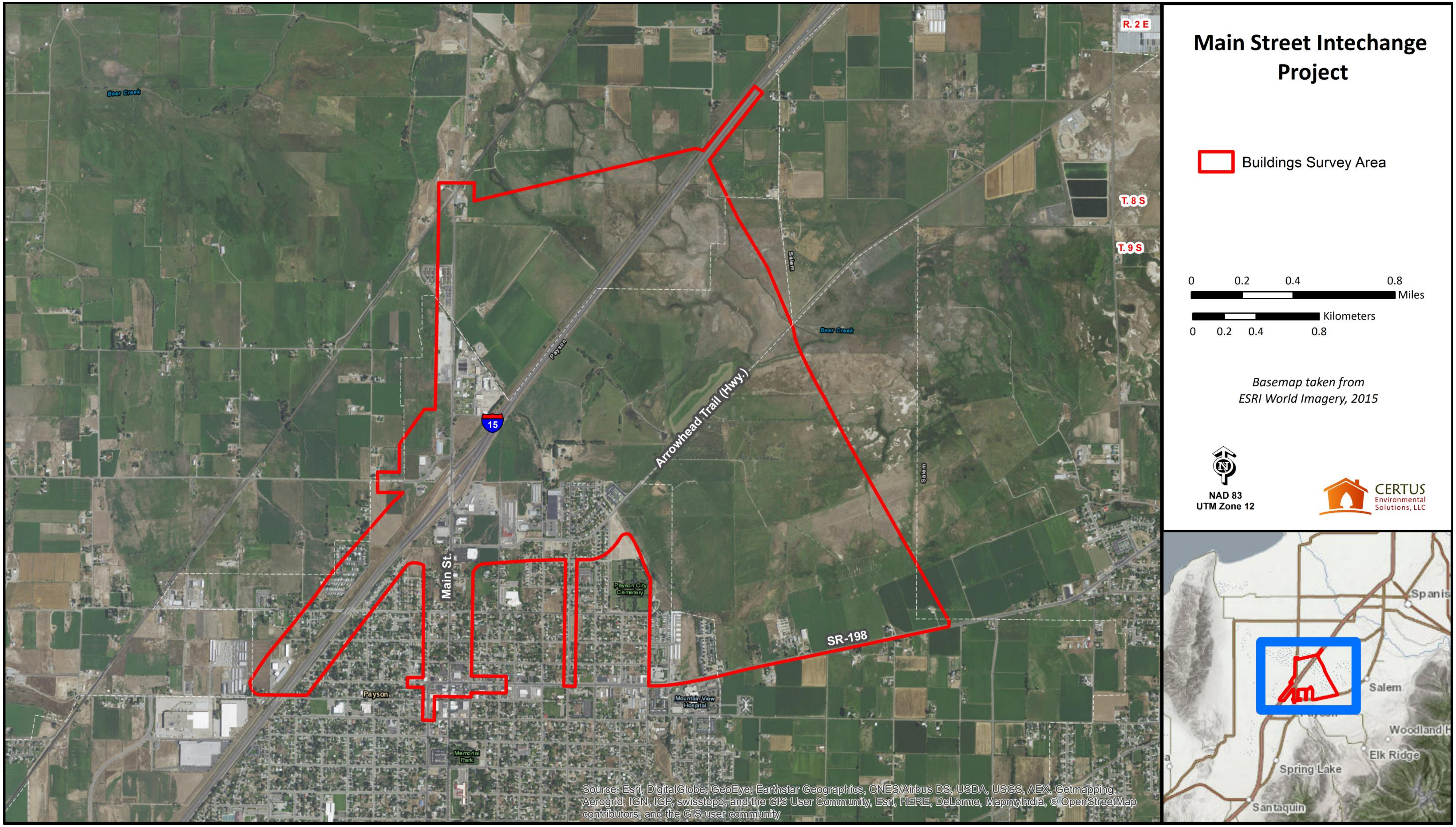

Figure 3. APE/Survey Area; I-15 Payson Main Street Interchange Project

Project Setting

The APE/survey area encompasses portions of both the developed core area of Payson and the rural agricultural lands surrounding the community. Lands in the northern and eastern portions of the APE/survey area are almost exclusively undeveloped, comprising open agricultural fields (both active and fallow), grazing pastures, and scattered historical and modern farmsteads. The southern portion of the APE/survey area is dominated by a combination of historical and modern residential and commercial development, while the western part of the area is a mix of residential, agricultural, and industrial uses. The core area of historical development extends along the Main Street portion of the APE/survey area.

The built environment within the APE/survey area reflects a broad range of development in Payson. The earliest structures in the area are from the late 1800s, while the most recent date to the last few years. Teardown projects wherein historical structures were demolished to accommodate the construction of new structures appear relatively common throughout the area. Major periods of development appear to have occurred in the early 1900s (1900-1930) and in the post-World War II period.

Previous Resource Surveys and Known Historical Structures

Certus conducted a file search on December 8, 2014, for areas within the boundaries of the APE/survey area. The primary file search took place via the Utah State Historic Preservation Office (SHPO) online system, Preservation Pro, but was supplemented by a review of hard copy records held at the SHPO offices in Salt Lake City.

The file search indicates that several hundred historical structures have been previously documented in Payson; several dozen of these buildings are located in the current APE/survey area. This documentation appears to have resulted primarily from a community-level reconnaissance survey conducted in 2007 and carried out in support of the National Register listing of the Payson Historic District. Within the current APE/survey area, most of the previously documented properties are located along Main Street and Utah Avenue. Many, but not all, are included in the historic district listing. Due to the amount of time since the last documentation of historical structures in the APE/survey area, Certus revised all previously documented historical structures and updated their records.

Historic Overview

The following brief overview of the history of the Payson City area is meant to provide a basic context within which to consider the relative significance of historic structures encountered during the assessment of the Main Street Interchange Project APE. This context is derived heavily from the Payson Historic District National Register nomination form (Broschinsky 2007).

Payson was permanently settled by Euro-Americans in the early 1850s, when Mormon pioneers were sent to the area with direction to establish a settlement (Broschinsky 2007). Subsistence agriculture formed the basis of the early economy, with homes located near the center of the settlement and communal and individual agricultural fields located around the periphery. The first buildings in the area were constructed of locally available logs and adobe. As saw mills, a nail factory, and similar enterprises were established, the initial makeshift homes gave way to more substantial structures. By the mid-1860s the population of Payson had already risen to nearly 1,140 residents, and the number of dwellings was approaching 300 (Broschinsky 2007).

Change came to Payson in 1875 with the completion of the Utah Central Railroad through the community. Ultimately connected to the larger Transcontinental Railroad, the Utah Central Railroad connected Payson directly to national landscape for the first time in the community's history. Not only were new markets available for locally produced products, but goods from across the nation were now far more accessible to Payson residents. The rail connection boosted the local economy, which in turn drove construction of additional building stock. The number of commercial structures increased substantially, and a commercial district formed at the center of town. As brick became more widely available in Payson, earlier wooden storefronts in the commercial district were replaced with brick façades. Not surprisingly, most commercial structures, as well as most dwellings, constructed during at this time and over the next 15 years heavily reflected Victorian architectural styles also common throughout Utah and the rest of the nation.

In 1882, the town embarked on a major undertaking to improve the community's infrastructure. Over the next 10 years, dirt roads were realigned and graveled, water mains were improved, and electric lights were installed, among other improvements (Broschinsky 2007).

As the 1800s came to a close, Payson experienced an economic boom created by the availability of wage employment from several large, regional projects, including the massive Strawberry Irrigation Project and the Orem Railroad (Broschinsky 2007). This infusion of money led to an increase in the number of "elaborate high-Victorian" buildings that were constructed in Payson (Broschinsky 2007). By 1900, the population of Payson had risen to 2,636 residents and a diversification of the town's cultural and ethnic complexion. The commercial district continued to thrive and a number of large scale public buildings, such as the iconic Peteetneet School, were constructed around this time.

The first few decades of the 1900s in Payson are notable for the transformation in the community's architectural stock from Victorian designs to early American styles, such as Bungalow and Period Cottage structures (Broschinsky 2007). Of particular note for Payson for this period are an atypically high number of "extra-wide" Bungalows (Broschinsky 2007). The proliferation of interurban railroads and the increased agricultural productivity resulting from the Strawberry Irrigation Project served as the basis of a booming economy that fostered new housing and commercial development. Between 1910 and 1920 the number of dwellings increased by approximately 50 percent, and by the mid-1920s, Payson's Main Street commercial district boasted more than 60 businesses (Broschinsky 2007).

The onset of the Great Depression at the end of the 1920s served to slow the economy of Payson, as it did with communities across America. Heavily reliant on sales of agricultural products, Payson's economy suffered greatly; although the sugar beet industry, a major component of the local agricultural industry, remained surprisingly stable. Despite the downturn, however, the local government continued to invest in community development, at times leveraging labor and funding available through federal New Deal programs. Concrete sidewalks, rock-lined ditches, sewer system upgrades, and changes to school athletic fields and community parks were all part of the improvements implemented during the 1930s and early 1940s in Payson (Broschinsky 2007).

Architecturally, this period represents the slow decline in the popularity of Early American styles and the rise in popularity of mid-century forms such as World War II Era Cottages (Broschinsky 2007). The transition was somewhat protracted; thus, the building stock from this period shows a relatively high diversity of forms as the transition occurred.

The onset of World War II had an immediate and boosting effect on the national economy, including that of Payson. The wartime demand for agricultural products fostered the shift from small family farms to consolidated commercial agribusiness. With economic vitality once again came an increase in new construction and investment in community infrastructure. As most of the core are of Payson had been built upon by this time, larger town lots began to be subdivided and new subdivisions, many comprising street upon street of similar Ranch houses, sprang up around the fringes of the developed townsite. The rise of the automobile culture after World War II further served to change the complexion of the community as residents could live further and further away from the town proper. Construction of new roads and expansion of existing roads to accommodate increased automobile traffic transitioned the look of Payson into the modern urban city it is today.

As the post-war period wore on, a rise in multi-family housing, infill projects, the continued evolution of the Ranch form, and the rise of newer split level house forms all came to Payson. This period also saw a large number of renovations to historical storefronts along Main Street to "update" these commercial properties to more current styles.

Field Methods

Certus applied the methods outlined in the 2012 Utah SHPO Standard Operating Procedures for selective reconnaissance-level buildings surveys as well as the applicable components of the UDOT cultural resource inventory guidelines (UDOT 2010, as updated). Pursuant to the guidelines for selective reconnaissance-level surveys, Certus only documented those buildings identified as dating to the historic period historic; modern buildings were not documented. Age of construction for each primary building was derived from a combination of estimation based upon architectural characteristics, records from prior documentation, and information obtained from the Utah County Assessor.

UDOT guidelines call for a 45-year age cutoff for considering resources historical—an effort to accommodate a time lag between the compilation of the survey data and actual construction associated with the undertaking. Given the timing of the field survey late in 2014, Certus employed a cutoff date of 1970 (using 2015 as the base year) to designate structures as historical.

Each primary historical building on each identified property was assessed for architectural type and style, historical integrity, and other basic architectural details. Each property was photographed using a digital camera set to a minimum resolution of 300 dpi, and photographic index sheets were produced. Upon acceptance by the Utah SHPO of the final historical buildings eligibility ratings, Certus will enter the relevant data for each documented property into the SHPO Preservation Pro online database system.

Resource Evaluation Methods

In accordance with 36 CFR § 60, historical structures (and other cultural resources) documented as part of federal undertakings are to be evaluated for their eligibility for the NRHP under four specific criteria and with consideration for seven elements of integrity. A structure may be considered eligible for listing on the NRHP if it:

A- is associated with events that have made a significant contribution to the broad patterns of our history; OR

B- is associated with the lives of persons significant in our past; OR

C- embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; OR

D- has yielded, or may be likely to yield, information important in prehistory or history.

Structures considered potentially eligible under one of the above criteria are also to be evaluated for integrity of location, design, setting, materials, workmanship, feeling, and association. To be eligible for listing on the NRHP, a structure must possess integrity of those elements directly related to the criterion or criteria under which it would be determined eligible.

Utah-Specific Considerations for Buildings

In Utah, all historic buildings documented at a reconnaissance-level are also evaluated using a rating system established by the Historic Preservation program at the Utah SHPO. This rating system assigns one of four ratings to buildings based on the degree to which they retain historical and architectural integrity. These ratings are as follows:

ES - Eligible/Significant: built within the historic period and retains integrity; excellent example of a style or type; unaltered or only minor alterations or additions; individually eligible for the [NRHP] under criterion "C"; also buildings of known <u>historical significance</u>.

EC - Eligible/Contributing: built within the historic period and retains integrity; good example of a style or type, but not as well-preserved or well-executed as "ES" buildings; more substantial alterations or additions than "ES" buildings, though overall integrity is retained; eligible for [the NRHP] as part of a potential historic district or primarily for historical, rather than architectural, reasons.

NC - Ineligible/Non-Contributing: built during the historic period but has had major alterations or additions; no longer retains integrity.

OP - Ineligible/Out-of-period: constructed outside the historic period.

The interaction between the SHPO ratings system and the criteria of the NRHP focuses on NRHP Criteria A and C and SHPO ratings ES and EC. Buildings assigned a SHPO rating of "ES" are considered eligible for listing under NRHP both Criteria A and C (Giraud 2007). Buildings assigned a SHPO rating of "EC" are considered eligible for the NRHP under Criterion A only (Giraud 2007).

Historical Boundaries

To evaluate potential impacts to historic properties resulting from implementation of the proposed roadway improvements, appropriate historical boundaries must be established. National Register Bulletin 21, Defining Boundaries for National Register Properties (Seifert et al. 1997), offers guidance on how to establish such boundaries. The Bulletin offers the following recommendations for defining property boundaries associated with historical buildings:

- Select boundaries that encompass the entire resource, including both historic and modern additions. Include surrounding land historically associated with the resource that retains integrity and contributes to the property's historic significance.
- Use the legally recorded parcel number or lot lines for urban and suburban properties that retain their historic boundaries and integrity.
- For small rural properties, select boundaries that encompass significant resources, including outbuildings and the associated setting.
- For larger rural properties, select boundaries that include fields, forests, and open rangeland that is historically associated with the property and conveys the property's historic setting. The areas included must have integrity and contribute to the property's historic significance.

The APE for the Main Street Interchange Project is both urban and rural in nature. For the identified urban properties, the current legal boundaries for each parcel represent either the original historical boundaries or the sole remaining component of the original boundary as it is associated with the primary building. In these cases, current legal property boundaries were used to define the boundaries for most of the historic buildings in the APE. For rural properties (e.g., farmsteads) historical boundaries may include agricultural fields listed under separate parcel numbers from those containing the primary residence. In these cases, Certus made an effort to identify historically associated lands and include them in the definition of the historical boundary.

In certain cases, the property associated with a historical structure has lost, or otherwise does not possess, the ability to contribute to the historical integrity of the primary historical structure. For example, residential property that has been paved to create a parking lot to accommodate customer parking for a former residence converted to commercial use no longer contributes to the historical residential nature of the primary building. In these cases, the boundary for the purpose of assessing the effects of the undertaking was defined to only encompass those features of the property that contribute to understanding and evaluating its historical use.

FINDINGS

A total of 199 properties with historical structures were identified as a result of the selective reconnaissance-level survey for the Interchange Project. Additionally, the APE/survey area encompasses portions of the Payson National Register Historic District. The locations of the properties and the approximate boundaries of the historic district are illustrated on **Figures 4-8**, and descriptions of the properties are summarized in **Table 1**, below. Note that only those portions of the APE/survey area containing documented structures are depicted on the figures. Historical landscape features were observed in the front yards of a few of the properties, and these features are noted in Table 1.

Not surprisingly, the majority of the historical buildings are located along Main Street and the blocks immediately adjacent to it. However, an additional concentration of historical structures was noted east and west of Interstate 15 near 400 North (west of I-15) and along 600 West (east of I-15).

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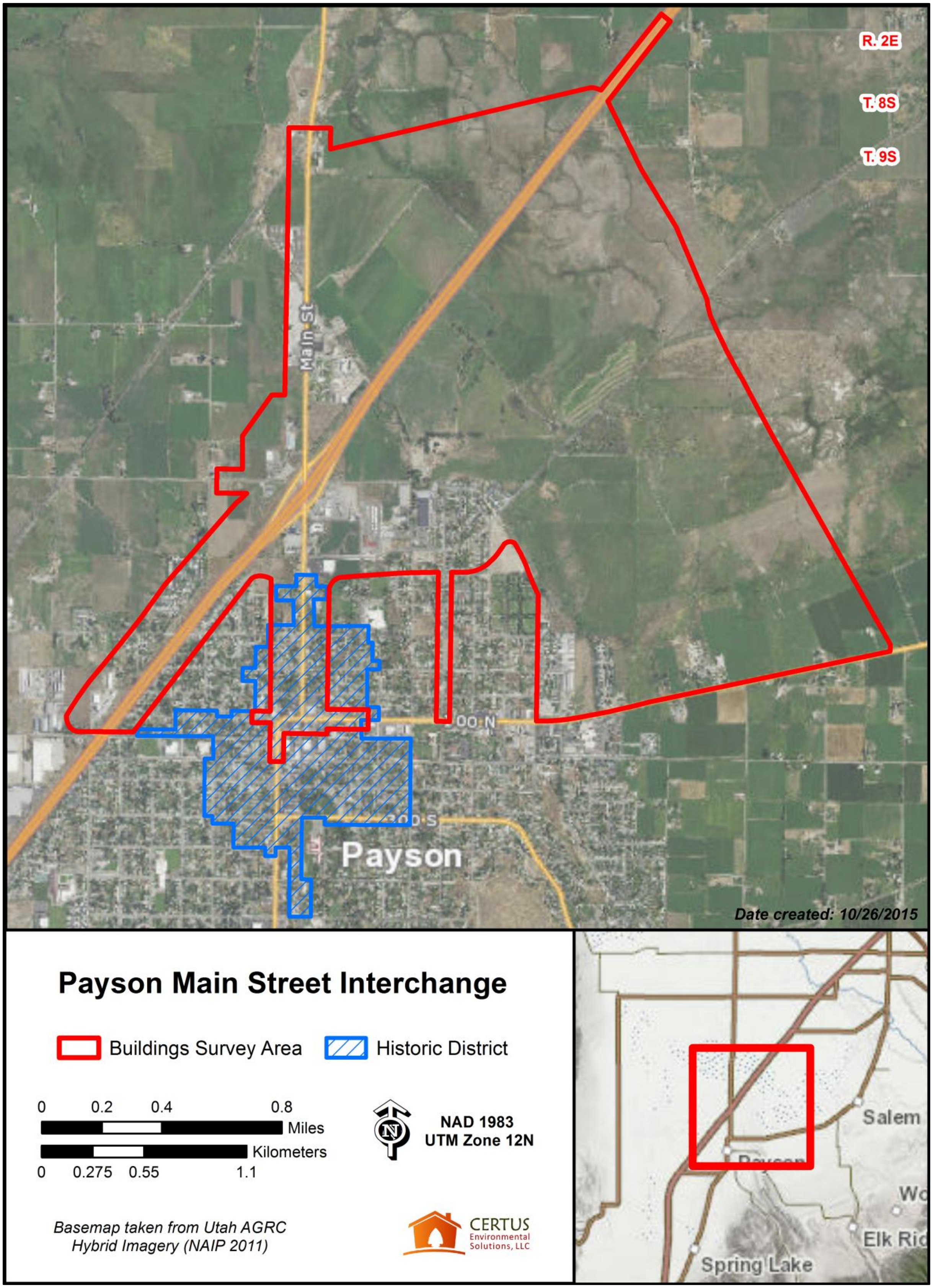


Figure 4. Documented resources; 1-15 Payson Main Street Interchange Project; Map 1 of 6

Figure 5. Documented resources; 1-15 Payson Main Street Interchange Project; Map 2 of 6

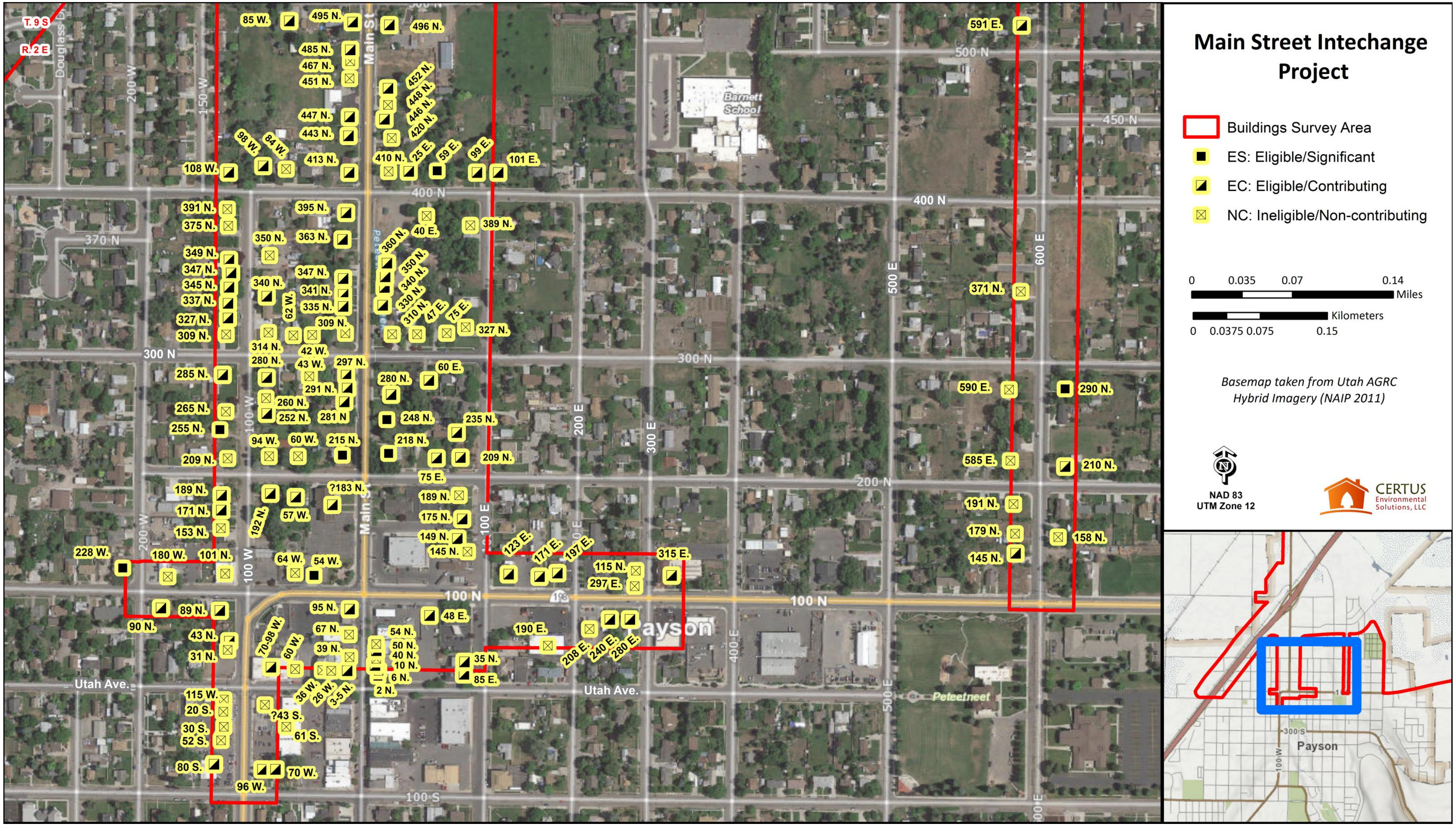


Figure 6. Documented resources; 1-15 Payson Main Street Interchange Project; Map 3 of 6

Figure 7. Documented resources; 1-15 Payson Main Street Interchange Project; Map 4 of 6

Figure 8. Documented resources; 1-15 Payson Main Street Interchange Project; Map 5 of 6

Figure 9. Documented resources; 1-15 Payson Main Street Interchange Project; Map 6 of 6

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
35 N. 100 E.	c. 1930	2-story Apartment Block multi-family dwelling exhibiting Victorian Eclectic style. Clad in regular brick and plaster. Alterations include modern windows throughout and enclosure of a 2nd story doorway in the primary façade. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
145 N. 100 E.	c. 1950	1-story Other building of indeterminate function exhibiting Post-WWII: Other and Mansard styles. Clad in striated brick. Alterations include several modern windows and a temporary Mansard style awning. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
149 N. 100 E.	c. 1902	1-story Foursquare single family dwelling exhibiting Victorian Eclectic style. Clad in regular brick. Alterations include an in-period rear addition, several modern windows, and the in-period enclosure of one entryway. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
175 N. 100 E.	c. 1911	2-story Central Passage single family dwelling exhibiting Classical: Other style. Clad in historical plaster. Alterations include several modern windows, a few with minor changes to the openings, and several in-period rear additions. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
189 N. 100 E.	c. 1884	2-story Crosswing single family dwelling exhibiting Gothic Revival and Arts & Crafts styles. Clad in narrow aluminum siding. Alterations include an in-period Bungalow porch addition, modern windows throughout with some possible changes to openings, and the modern cladding. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
209 N. 100 E.	c. 1936	1.5-story Period Cottage single family dwelling exhibiting muted English Tudor Revival style. Clad in historic plaster and striated brick. Alterations include several modern windows and in-period rear additions. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
235 N. 100 E.	c. 1947	1-story Early Ranch single family dwelling exhibiting Minimal Traditional and Early Ranch styles. Clad in asbestos siding. Alterations include modern windows throughout and an in-line addition clad in vinyl siding. One contributing and one non-contributing outbuilding were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
327 N. 100 E.	c. 1920	1-story WWII-Era Cottage single family dwelling exhibiting Minimal Traditional and Late 20th Century: Other styles. Clad in synthetic stucco and vinyl siding. Alterations include the remodel of the exterior with modern cladding and a carport addition. Two contributing and one non-contributing outbuilding were observed. **Historic Boundary:** N/A	NC/Ineligible	
389 N. 100 E.	c. 1857	William Wignall House. 1.5-story Central Passage single family dwelling exhibiting Classical: Other style. Clad in synthetic stucco. Alterations include the modern cladding and modern (faux divided light) windows throughout. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
48 E. 100 N.	c. 1950	Daley Freeze. 1-story Drive Through restaurant exhibiting Contemporary style. Clad in rock-faced concrete block. Alterations include several modern windows. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
123 E. 100 N.	c. 1907	1.5-story Bungalow single family dwelling exhibiting Bungalow and Victorian Eclectic styles. Clad in regular brick and shingle siding. Alterations limited to several modern windows in original window openings. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
171 E. 100 N.	c. 1936	1-story Period Cottage single family dwelling exhibiting English Tudor Revival style. Clad in striated brick and synthetic stucco. Alterations include several modern windows in original window openings, minor use of synthetic stucco, and alteration of the porch landing and railing to create a wheelchair ramp. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
190 E. 100 N.	c. 1958	1-story Other Commercial/Public building exhibiting Late 20th Century: Other style. Clad in synthetic stucco and concrete block. Alterations include a complete exterior remodel of cladding and windows. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
197 E. 100 N.	c. 1923	1-story Bungalow single family dwelling exhibiting Bungalow and Prairie School styles. Clad in regular brick. Alterations limited to several modern windows in original window openings. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
208 E. 100 N.	c. 1939	1-story Service Bay/Business exhibiting Other/Unclear style. Clad in concrete block and vinyl siding. Alterations include the vinyl siding and modern concrete block veneer. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
240 E. 100 N.	c. 1938	1.5-story Period Cottage single family dwelling exhibiting English Tudor Revival style. Clad in striated brick. Alterations include several modern windows in original window openings and alteration of the porch landing and railing. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
280 E. 100 N.	c. 1915	2-story Crosswing single family dwelling exhibiting Victorian Eclectic style. Clad in regular brick and drop siding. Alterations include multiple in-period additions and several modern windows in original window openings. One contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
297 E. 100 N.	c. 1898	1-story Crosswing single family dwelling exhibiting Other/Unclear style. Clad in narrow vinyl siding. Alterations include modern windows in original window openings and use of the modern vinyl siding. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
315 E. 100 N.	c. 1915	1-story Church building exhibiting Spanish Colonial Revival style. Clad in regular brick and cast concrete. Alterations include an out-of-period addition and several modern windows in original window openings. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
54 W. 100 N.	c. 1916	Strawberry Water Users Association building. 1-story 1-Part Block building exhibiting Federal Revival style. Clad in regular brick. No notable alterations. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	ES/Eligible	
64 W. 100 N.	c. 1939	1-story Other Residential Type single family dwelling exhibiting Other style. Clad in synthetic stucco and regular brick. Alterations include multiple additions of indeterminate age, modern cladding, modern windows, and probable alteration of fenestration. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
180 W. 100 N.	c. 1949	1-story Shed exhibiting Other/Unclear style. Clad in corrugated metal. Alterations include enclosure of all windows and general disrepair. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	
228 W. 100 N.	c. 1898	1.5-story Crosswing single family dwelling exhibiting Victorian Eclectic style. Clad in regular brick. Alterations limited to a small carport addition and several modern windows. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	ES/Eligible	
560 W. 100 N.	c. 1927	1-story Bungalow single family dwelling exhibiting Bungalow and Late 20th Century: Other styles. Clad in synthetic stucco and stone veneer. Alterations include a complete exterior remodel, including modern cladding and windows and metal roofing. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
586 W. 100 N.	c. 1930	1-story Other Residential Type single family dwelling exhibiting Other style. Clad in tongue-and-groove siding. Alterations include modern windows throughout, a carport addition, and in-period additions. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
596 W. 100 N.	c. 1920	1-story Bungalow single family dwelling exhibiting Bungalow and Arts & Crafts styles. Clad in narrow vinyl siding. Alterations include the modern cladding and modern windows throughout. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	
625 W. 100 N.	c. 1949	1-story WWII-Era Cottage exhibiting Other style. Clad in concrete block. Alterations include a large carport addition and modern windows throughout. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
70 W. 100 S.	c. 1924	1-story Period Cottage single family dwelling exhibiting Tudor Revival style. Clad in striated brick. Alterations include several modern windows. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
96 W. 100 S.	c. 1920	1-story Bungalow single family dwelling exhibiting Prairie School style. Clad in regular brick. Alterations include modern windows throughout and in-fill of one window opening in the primary façade. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
31 N. 100 W.	c. 1916	1.5-story Bungalow single family dwelling exhibiting Bungalow style. Clad in narrow vinyl and shiplap siding. Alterations include enclosure of the front porch, modern windows, and modern cladding. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
43 N. 100 W.	c. 1916	1.5-story Bungalow single family dwelling exhibiting Arts & Crafts and Bungalow styles. Clad in regular brick and shiplap siding. Alterations limited to several modern windows. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
89 N. 100 W.	c. 1915	1.5-story Bungalow single family dwelling exhibiting Prairie School style. Clad in regular brick and shingle siding. Alterations limited to several modern windows. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
101 N. 100 W.	c. 1949	1-story Other Commercial/Public (Corner Entry) building exhibiting Late 20th Century: Other style. Clad in narrow vinyl siding. Alterations include a complete exterior remodel with synthetic stucco and probable enclosure of all window openings. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
153 N. 100 W.	c. 1916	1.5-story Bungalow exhibiting Bungalow and Late 20th Century: Other styles. Clad in narrow vinyl siding. Alterations include a complete exterior remodel with cladding, modern windows, and a large, 2-story rear addition. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	
171 N. 100 W.	c. 1916	1.5-story Bungalow single family dwelling exhibiting Bungalow and Arts & Crafts styles. Clad in regular brick and shiplap siding. Alterations include several modern windows and a concrete block chimney addition. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
189 N. 100 W.	c. 1901	1.5-story Central Block with Projecting Bays exhibiting Victorian Eclectic and Prairie School styles. Clad in regular brick and shingle siding. Alterations include several modern windows and a minor rear addition of indeterminate age. Building may have started as a Foursquare structure. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
192 N. 100 W.	c. 1934	1-story Period Cottage single family dwelling exhibiting Period Revival (muted English Tudor Revival) style. Clad in plaster over striated brick. Alterations include modern windows throughout, probable in-period application of plaster, and an in-period addition. One contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
209 N. 100 W.	c. 1915	1-story Bungalow single family dwelling exhibiting Bungalow style. Clad in plaster, narrow vinyl siding, and wood sheet (T-1-11). Alterations include a large, out-of-period 2^{nd} story addition and several modern windows. Historical iron fence along frontage and south side yard. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
252 N. 100 W.	c. 1940	1-story WWII-Era Cottage single family dwelling exhibiting Minimal Traditional style. Clad in striated brick and stone veneer. Alterations include several modern windows, an in in-scale carport addition. The veneer may be historical. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
255 N. 100 W.	c. 1900	1.5-story Side Passage/Entry single family dwelling exhibiting Victorian Eclectic and Classical: Other styles. Clad in historical plaster. Alterations include several modern windows with some alteration of fenestration on a side elevation and several in-period additions. Two non-contributing outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	ES/Eligible	
260 N. 100 W.	c. 1931	1-story WWII-Era Cottage single family dwelling exhibiting Minimal Traditional style. Clad in narrow vinyl siding. Alterations include the remodel of the exterior with modern siding and modern windows throughout. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
265 N. 100 W.	c. 1955	1-story Ranch (with garage) single family dwelling exhibiting Ranch style. Clad in narrow vinyl siding and stone veneer. Alterations include a complete exterior remodel, including modern cladding and windows and enclosure of the attached garage to create living space. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
280 N. 100 W.	c. 1903	2-story Crosswing single family dwelling exhibiting Classical: Other style. Clad in plaster. Alterations include a carport addition, modern windows throughout, and a metal sheet roof. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
285 N. 100 W.	c. 1914	1-story Bungalow single family dwelling exhibiting Bungalow style. Clad in historic plaster. Alterations include several modern windows and boarding up of a transom window. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
309 N. 100 W.	c. 1943	1-story Early Ranch single family dwelling exhibiting Minimal Traditional and Early Ranch styles. Clad in narrow vinyl siding. Alterations include several modern windows, a carport addition on the rear elevation, and the modern cladding. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
314 N. 100 W.	c. 1913	2-story Hall-Parlor single family dwelling exhibiting Other style. Clad in narrow vinyl siding. Alterations include modern internal divided light windows throughout, multiple additions of indeterminate age, and modern siding. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
327 N. 100 W.	c. 1943	1-story Early Ranch single family dwelling exhibiting Minimal Traditional and Early Ranch styles. Clad in asbestos siding and tongue-and-groove siding. Alterations appear limited to several modern windows. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
337 N. 100 W.	c. 1943	1-story WWII-Era Cottage single family dwelling exhibiting Minimal Traditional style. Clad in asbestos siding. Alterations limited to a carport addition. One contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
340 N. 100 W.	c. 1962	1-story Early Ranch single family dwelling exhibiting Minimal Traditional and Early Ranch styles. Clad in striated brick and vinyl siding. Alterations include modern windows throughout, a small side addition of indeterminate age, and minor use of vinyl siding. Two non-contributing outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
345 N. 100 W.	c. 1939	1-story Period Cottage single family dwelling exhibiting Rustic style. Clad in split logs and stone veneer. Alterations limited to a few modern windows in side elevation openings. Two non-contributing outbuilding were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
347 N. 100 W.	c. 1938	1-story Period Cottage single family dwelling exhibiting general Period Revival style. Clad in wide aluminum siding. Alterations include small side and rear additions that appear to be of historical age, modern windows in most openings, and a carport addition. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
349 N. 100 W.	c. 1938	1-story Period Cottage single family dwelling exhibiting muted English Tudor Revival style. Clad in striated brick. Alterations appear limited to several modern windows. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
350 N. 100 W.	c. 1869	1.5-story Hall-Parlor single family dwelling exhibiting Other style. Clad in narrow vinyl siding. Alterations include the modern cladding, modern windows throughout, and additions of indeterminate age. Three non-contributing outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
375 N. 100 W.	c. 1932	1-story Other Residential Type single family dwelling exhibiting Other style. Clad in narrow vinyl siding. Alterations include modern windows throughout, modern vinyl siding, an in-period rear addition, and possible enclosure of an original porch and construction of a new one. One contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
391 N. 100 W.	c. 1874	1-story Other Residential Type single family dwelling exhibiting Other style. Clad in narrow vinyl siding. Alterations include modern windows throughout, the modern vinyl cladding, and the probable in-period addition of the porch. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
20 S. 100 W.	c. 1947	1-story 1-Part Block commercial building exhibiting Ranch/Rambler style. Clad in striated brick. Alterations include the addition of a large, Ranch style awning to the primary façade. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
30 S. 100 W.	c. 1947	1-story 1-Part Block commercial building exhibiting Mansard and Late 20th Century: Other styles. Clad in concrete block, stone veneer, and aluminum sheet siding. Alterations include the cladding, a façade addition, and the Mansard style awning (a 1970s remodel). No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
?43 S. 100 W.	c. 1950	1-story Service Station building exhibiting Post-WWII: Other style. Clad in brick veneer (brick: other) and concrete block. Alterations include an exterior remodel with the modern brick veneer. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
52 S. 100 W.	c. 1930	1-story Garage building exhibiting Rustic style. Clad in stucco, corrugated metal, and diagonal wood planks. Alterations include changes to fenestration and cladding and the addition of a false front. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
61 S. 100 W.	c. 1958	1-story Grocery store exhibiting Late 20th Century: Other style. Clad in synthetic stucco, stone veneer, and oversized brick. Alterations include modern cladding (a modern exterior remodel). No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
80 S. 100 W.	c. 1930/ 1965	1-story Service Bay/Business building exhibiting Contemporary style. Clad in striated brick, stone veneer, and concrete block. Alterations include the large, 1960s additions to what was a single bay garage. Alterations are in-period and eligible in their own right. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
75 E. 200 N.	c. 1943	1-story WWII-Era Cottage single family dwelling exhibiting Minimal Traditional style. Clad in wide aluminum siding. Alterations include several modern windows and modern but historically compatible aluminum siding. Two contributing outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
585 E. 200 N.	c. 1919	1-story Other Residential Type single family dwelling exhibiting Ranch and Late 20th Century: Other style. Clad in synthetic stucco. Alterations include a modern remodel with a large modern addition, synthetic stucco, and modern windows throughout. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
57 W. 200 N.	c. 1930	1-story Bungalow single family dwelling exhibiting Arts & Crafts style. Clad in regular brick and tongue-and-groove siding. Alterations include modern windows throughout. One contributing and one non-contributing outbuilding were observed on the property. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
60 W. 200 N.	c. 1900	1.5-story Crosswing single family dwelling exhibiting Rustic style. Clad in wood sheet and stone veneer. Alterations include a complete, modern, exterior remodel of cladding and windows. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	
94 W. 200 N.	c. 1900	1-story Other Residential Type single family dwelling exhibiting Other style. Clad in synthetic stucco and narrow vinyl siding. Alterations include a complete, modern, exterior remodel of cladding and windows as well as a side addition of indeterminate age. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
544 W. 200 N.	c. 1952	1-story Other Residential Type single family dwelling exhibiting Other style. Clad in tongue-and-groove siding, wood sheet, and plaster. Alterations include modern windows throughout and a large side addition resulting in relocation of the entryway. Two non-contributing outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
547 W. 200 N.	c. 1904	1.5-story Hall-Parlor single family dwelling exhibiting Other style. Clad in narrow vinyl siding. Alterations include the modern cladding, modern windows throughout, and additions of indeterminate age. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
558 W. 200 N.	c. 1952	1-story WWII-Era Cottage single family dwelling exhibiting Minimal Traditional style. Clad in striated brick. Alterations include modern windows throughout and an in-scale carport addition. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
562 W. 200 N.	c. 1940	1-story WWII-Era Cottage single family dwelling exhibiting Minimal Traditional style. Clad in wide aluminum siding, concrete block, and plaster. Alterations include modern windows throughout and multiple additions (likely in-period). Two contributing and one non-contributing outbuilding were observed. **Historic Boundary:** N/A	NC/Ineligible	
90 N. 200 W.	c. 1916	1-story Bungalow single family dwelling exhibiting Arts & Crafts and Bungalow styles. Clad in regular brick and shiplap siding. Alterations limited to several modern windows. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
115 N. 300 E.	c. 1923	1-story Crosswing single family dwelling exhibiting Classical: Other and Late 20th Century: Other styles. Clad in narrow plaster. Alterations include modern synthetic stucco windows surrounds and modern windows throughout. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
590 N. 300 E.	c. 1930	1-story Other Residential Type single family dwelling exhibiting Other style. Clad in narrow vinyl siding. Alterations include modern windows throughout, modern cladding, and additions of indeterminate age. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	
596 N. 300 E.	c. 1944	1-story WWII-Era Cottage single family dwelling exhibiting Minimal Traditional style. Clad in striated brick. Alterations include several modern windows and an in-period rear addition. One contributing and one non-contributing outbuilding were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
47 E. 300 N.	c. 1877	George Patten House. 2-story Crosswing single family dwelling exhibiting Classical: Other style. Clad in historical plaster and vinyl siding. Alterations include the minor use of vinyl siding, modern faux divided light windows throughout, and in-period additions. One contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
60 E. 300 N.	c. 1951	1-story WWII-Era Cottage single family dwelling exhibiting Minimal Traditional style. Clad in tongue-and-groove siding. Alterations include several modern windows. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
75 E. 300 N.	c. 1906	2-story Crosswing single family dwelling exhibiting Other style. Clad in aluminum siding and imitation stone veneer. Alterations include the modern cladding and possible changes to window openings. Two contributing outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
590 E. 300 N.	c. 1949	1.5-story Other Residential Type single family dwelling exhibiting Ranch and Split Level styles. Clad in vinyl siding. Alterations appear to include a split level addition and the modern vinyl cladding. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
42 W. 300 N.	c. 1894	2-story Crosswing single family dwelling exhibiting Victorian: Other style. Clad in narrow vinyl siding. Alterations include 1950s porch posts, modern siding, and modern windows throughout. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	
43 W. 300 N.	c. 1924	1-story Bungalow single family dwelling exhibiting Arts & Crafts style. Clad in narrow vinyl siding. Alterations include modern windows throughout and the modern cladding. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	
62 W. 300 N.	c. 1925	1-story Hall-Parlor single family dwelling exhibiting Other style. Clad in narrow vinyl siding. Alterations include modern windows throughout, multiple additions of indeterminate age, a modern porch railing, and the modern siding. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
488 W. 300 N.	c. 1933	1-story Bungalow single family dwelling exhibiting Clipped Gable Cottage style. Clad in asbestos siding. Alterations include several modern windows and a modern door. Three contributing outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
520 W. 300 N.	c. 1913	1.5-story Other Residential Type single family dwelling exhibiting Bungalow and Other styles. Clad in striated brick and stucco. Alterations include modern windows throughout. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
535 W. 300 N.	c. 1970	1-story Ranch (w/ carport) single family dwelling exhibiting Ranch/Rambler style. Clad in narrow vinyl siding. Alterations include several modern windows, the modern siding, and either expansion or addition of the carport. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

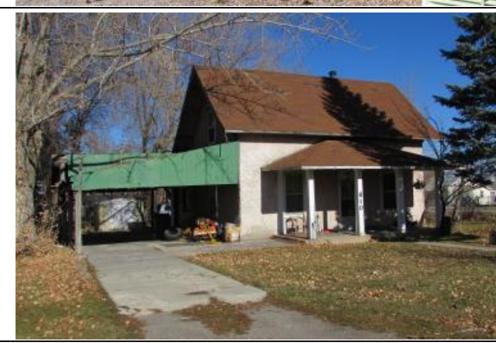
Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
559 W. 300 N.	c. 1933	1-story Bungalow single family dwelling exhibiting Bungalow style. Clad in narrow vinyl siding. Alterations include probable partial enclosure of the porch, the modern siding, and several modern windows. The front yard has also been altered with roughly half now comprising a gravel driveway/parking area. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	
571 W. 300 N.	c. 1950	1-story Other Residential Type single family dwelling exhibiting Late 20th Century: Other style. Clad in modern Hardie board siding and modern stone veneer. Alterations include modern windows throughout and the modern veneer. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	
610 W. 300 N.	c. 1910	1.5-story Hall-Parlor single family dwelling exhibiting Victorian: Other style. Clad in plaster and aluminum siding. Alterations include a carport addition, modern windows throughout, minor use of aluminum siding, and enclosure of a rear porch. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
708 W. 300 N.	c. 1900	1.5-story Other Residential Type single family dwelling exhibiting Classical: Other and Arts & Crafts styles. Clad in regular brick and tongue-and-groove siding. Alterations include a Bungalow addition, several modern windows, and a metal or vinyl shingle roof. Two non-contributing outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
787 W. 300 N.	c. 1956	1-story Ranch single family dwelling exhibiting Ranch/Rambler and Minimal Traditional styles. Clad in Roman brick. Alterations include an in-period rear addition, a garage addition, and several modern windows. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
25 E. 400 N.	c. 1908	1-story Crosswing single family dwelling exhibiting Other style. Clad in regular brick and asbestos siding. Alterations include modern windows throughout, several in-period additions, an in-period porch enclosure, a carport addition, and possible changes to a few window openings. Two non-contributing outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Listed as part of Payson Historic District	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
40 E. 400 N.	c. 1934	1.5-story WWII-Era Cottage single family dwelling exhibiting Minimal Traditional style. Clad in narrow vinyl siding. Alterations include a carport addition, modern windows throughout, and the modern cladding. Two non-contributing outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
59 E. 400 N.	c. 1904	1.5-story Central-block-with-projecting-bays single family dwelling exhibiting Victorian Eclectic and Victorian Romanesque styles. Clad in regular brick and sandstone. Alterations include several modern windows. Three contributing and two non-contributing outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	ES/Eligible	
99 E. 400 N.	c. 1947	1-story Period Cottage exhibiting Period Revival: Other and Minimal Traditional styles. Clad in striated brick. Alterations include a possible side porch addition or change of an entryway. One contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
101 E. 400 N.	c. 1908	1.5-story Central-block-with-projecting-bays single family dwelling exhibiting Victorian Eclectic style. Clad in regular brick and shingle siding. Alterations include a rear addition of indeterminate age and several modern windows. One contributing and one non-contributing outbuilding were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
84 W. 400 N.	c. 1900	1.5-story Crosswing single family dwelling exhibiting Classical: Other style. Clad in stucco. Alterations include multiple additions (including one in-progress), modern windows throughout with some changes to openings, and possible modern stucco over historical plaster. **Historic Boundary:** N/A	NC/Ineligible	
98 W. 400 N.	c. 1924	1-story Bungalow single family dwelling exhibiting Bungalow and Prairie School styles. Clad in regular brick. Alterations include several modern windows, the addition of a basement entry to a side elevation, and a rear addition of indeterminate age. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
108 W. 400 N.	c. 1900	1.5-story Hall-Parlor single family dwelling exhibiting Victorian Eclectic style. Clad in plaster. Alterations include modern windows throughout, a two-bay garage addition to the west elevation, and an in-period rear addition. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
394 W. 400 N.	c. 1937	1-story Foursquare single family dwelling exhibiting Classical: Other style. Clad in medium width aluminum siding. Alterations include ca. 1970s aluminum frame windows, the modern siding, and an in-period rea addition. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
412 W. 400 N.	c. 1883	2-story Crosswing single family dwelling exhibiting Victorian Eclectic style. Clad in tongue-and-groove siding and shiplap siding. Alterations include raising the building (in-progress) to construct a basement, removal of the brick chimneys, and several modern windows. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
630 W. 400 N.	c. 1900	1-story Hall-Parlor single family dwelling exhibiting Other style. Clad in narrow vinyl siding. Alterations include modern windows throughout, rear additions of indeterminate age, and the modern cladding. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
635 W. 400 N.	c. 1940	1-story Bungalow single family dwelling exhibiting Bungalow style. Clad in medium width aluminum siding. Alterations include changes to the front porch, modern windows throughout, and modern cladding. Three non-contributing outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
638 W. 400 N.	c. 1969	1-story Ranch single family dwelling exhibiting Ranch/Rambler style. Clad in narrow vinyl siding. Alterations include a modular home (trailer) addition to the façade, a carport addition, and the modern cladding. Three contributing outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
643 W. 400 N.	c. 1900	1-story Bungalow single family dwelling exhibiting Prairie School style. Clad in narrow vinyl siding. Alterations include several modern windows and the modern cladding. One contributing and three non-contributing outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
660 W. 400 N.	c. 1936	1-story Crosswing single family dwelling exhibiting Classical: Other style. Clad in asbestos siding over drop siding. Alterations include an in-period side addition and several modern windows. One contributing (cabin) and 1 non-contributing outbuilding were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
682 W. 400 N.	c. 1941	1-story WWII-Era Cottage single family dwelling exhibiting Other style. Clad in synthetic stucco. Alterations include modern windows throughout, modern cladding, and a metal sheet roof. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
696 W. 400 N.	c. 1900	1-story Hall-Parlor single family dwelling exhibiting Classical: Other style. Clad in plaster and wood sheet. Alterations include enclosure of the porch and a metal sheet roof. One contributing and two non-contributing outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
698 W. 400 N.	c. 1959	1-story Ranch single family dwelling exhibiting Ranch/Rambler and Post-WWII: Other style. Clad in striated brick. Alterations include modern windows throughout, an out-of-period rear addition, a modern porch railing, a garage addition, and a carport addition. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	
785 W. 400 N.	c. 1940	1-story Bungalow single family dwelling exhibiting Late 20th Century: Other style. Clad in narrow vinyl siding. Alterations include modern windows throughout, modern cladding, and additions of indeterminate age. One contributing and one non-contributing outbuilding were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
791 W. 400 N.	c. 1947	1-story Ranch single family dwelling exhibiting Ranch/Rambler style. Clad in oversized brick and wood sheet (T-1-11). Alterations include several modern windows. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
331 N. 400 W.	c. 1949	1-story Other Residential Type single family dwelling exhibiting Other style. Clad in asbestos siding, concrete block, tongue-and-groove siding, and drop siding. Alterations include several in-period additions. Two non-contributing outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
377 N. 400 W.	c. 1955	1-story Ranch single family dwelling exhibiting Minimal Traditional and Ranch/Rambler styles. Clad in narrow vinyl siding. Alterations include several modern windows, the modern cladding, and probable enclosure of a breezeway between the house and garage. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
383 N. 400 W.	c. 1900	1-story Other Residential Type single family dwelling exhibiting Late 20th Century: Other style. Clad in synthetic stucco. Alterations include a complete remodel of the exterior with modern cladding and windows. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	
602 N. 500 E.	c. 1930	2-story Bungalow single family dwelling exhibiting Clipped Gable Cottage style. Clad in narrow vinyl siding. Alterations include the modern siding, modern windows throughout, and a 2nd story addition. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	
645 N. 500 E.	c. 1900	1-story Crosswing single family dwelling exhibiting Other style. Clad in wood sheet (T-1-11). Alterations include the modern cladding, modern windows throughout, and an addition of indeterminate age. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
665 N. 500 E.	c. 1933	1-story Early Ranch (w/ carport) single family dwelling exhibiting Early Ranch and Minimal Traditional styles. Clad in asbestos siding. Alterations include modern windows throughout and a porch cover extension. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
806 N. 500 E.	c. 1903	Farmstead. 1.5-story Crosswing single family dwelling exhibiting Victorian Eclectic style. Clad in regular brick and shingle siding. Alterations include modern faux divided light windows throughout with some minor alteration of opening and a metal sheet roof. Four contributing and four non-contributing outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
808 N. 500 E.	c. 1932	1.5-story Other Residential Type single family dwelling exhibiting Other style. Clad in drop siding and wide aluminum siding. Alterations include modern windows throughout and in-period side additions. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
37 E. 500 N.	c. 1923	1-story Foursquare single family dwelling exhibiting Late 20th Century: Other style. Clad in narrow vinyl siding. Alterations include modern windows throughout, a carport addition, modern porch railings, and the modern cladding. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
61 E. 500 N.	c. 1900	1.5-story Hall-Parlor single family dwelling exhibiting Classical: Other style. Clad in potentially historical plaster. Alterations include in-period additions, several modern windows, an in-period porch cover alteration, and a chimney addition resulting in altered fenestration. One contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible Listed as part of Payson Historic District	
81 E. 500 N.	c. 1928	1-story Crosswing single family dwelling exhibiting Period Revival: Other style. Clad in asbestos siding. Alterations include modern windows throughout, an in-period crosswing ell, and possible changes to a few window openings. One contributing and one non-contributing outbuilding were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
591 E. 500 N.	c. 1934	1-story Bungalow single family dwelling exhibiting Bungalow style. Clad in striated brick and plaster. Alterations include modern windows in several openings. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
85 W. 500 N.	c. 1957	1-story Ranch (w/ carport) single family dwelling exhibiting Ranch/Rambler style. Clad in striated brick. Alterations include modern windows throughout. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
90 W. 500 N.	c. 1912	1.5-story Crosswing single family dwelling exhibiting Victorian Eclectic style. Clad in regular brick and shingle siding. Alterations include several modern windows with minor changes to openings and an in-period addition. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
145 N. 600 E.	c. 1958	1-story Ranch (with carport) single family dwelling exhibiting Ranch/Rambler style. Clad in Roman brick and vinyl siding. Alterations include partial enclosure of the carport (clad in vinyl siding) and modern windows throughout. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
158 N. 600 E.	c. 1890	2-story Hall-Parlor single family dwelling exhibiting Late 20th Century: Other, Ranch/Rambler, and Classical: Other styles. Clad in stucco and stone veneer. Alterations include the modern cladding, modern windows throughout, and multiple additions of indeterminate age. Two contributing and one non-contributing outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
179 N. 600 E.	c. 1921	1.5-story Bungalow single family dwelling exhibiting Other/Unclear style. Clad in narrow vinyl siding. Alterations include the modern cladding and modern windows throughout. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
191 N. 600 E.	c. 1905	1-story Bungalow single family dwelling exhibiting Clipped Gable Cottage and Late 20th Century: Other styles. Clad in synthetic stucco and narrow vinyl siding. Alterations include the modern cladding, modern windows in most openings, and a rear addition of indeterminate age. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
210 N. 600 E.	c. 1900	1-story Hall-Parlor single family dwelling exhibiting Other/Unclear style. Clad in plaster. Alterations include large, in-period additions and modern windows in several openings. Two non-contributing outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
290 N. 600 E.	c. 1897	1.5-story Central Block with Projecting Bays single family dwelling exhibiting Victorian Eclectic style. Clad in regular brick. Alterations limited to several modern windows with minor alteration of fenestration in one case. One contributing and three non-contributing outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	ES/Eligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
371 N. 600 E.	c. 1947	1-story Other Residential Type single family dwelling exhibiting Minimal Traditional, Ranch/Rambler, and Other/Unclear styles. Clad in plaster, vinyl siding, Roman brick, and wood sheet (T-1-11). Alterations appear to include a 2-story addition, changes to the cladding, and modern windows in many openings. One non-contributing outbuilding was observed **Historic Boundary:** N/A	NC/Ineligible	
619 N. 600 E.	c. 1969	1-story Ranch (w/carport) single family dwelling exhibiting Ranch/Rambler style. Clad in striated brick. Alterations include modern windows throughout and a temporary wheelchair ramp. One contributing and one non-contributing outbuilding were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
95 N. 600 W.	c. 1949	1-story Early Ranch single family dwelling exhibiting Minimal Traditional style. Clad in striated brick. Alterations include several modern windows. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
103 N. 600 W.	c. 1930	1-story WWII-Era Cottage single family dwelling exhibiting Other style. Clad in medium width aluminum siding. Alterations include multiple additions of indeterminate age. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
297 N. 600 W.	c. 1915	1.5-story Bungalow single family dwelling exhibiting Bungalow and Other styles. Clad in brick veneer and stone (lava rock) veneer. Alterations include modern windows throughout, a large rear addition, and the modern cladding. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
308 N. 600 W.	c. 1941	1-story WWII-Era Cottage single family dwelling exhibiting Minimal Traditional style. Clad in synthetic stucco. Alterations include an in-period rear addition, modern windows throughout, and the modern cladding. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
325 N. 600 W.	c. 1955	1-story Early Ranch single family dwelling exhibiting Early Ranch and Minimal Traditional styles. Clad in striated brick and wood sheet (T-1-11). Alterations include modern windows throughout and alteration of cladding around the windows. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
326 N. 600 W.	c. 1943	1-story WWII-Era Cottage single family dwelling exhibiting Other style. Clad in narrow vinyl siding. Alterations include an in-period rear addition, modern windows throughout, and the modern cladding. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	
340 N. 600 W.	c. 1939	1-story Crosswing single family dwelling exhibiting Late 20th Century: Other style. Clad in synthetic stucco. Alterations include modern windows throughout and the modern cladding. Two non-contributing outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
343 N. 600 W.	c. 1968	1.5-story Other Residential Type single family dwelling exhibiting Late 20th Century: Other style. Clad in synthetic stucco and stone veneer. Alterations include a complete, modern, exterior remodel of cladding and windows. **Historic Boundary:** N/A	NC/Ineligible	
395 N. 600 W.	c. 1918	1.5-story Other Residential Type single family dwelling exhibiting Classical: Other style. Clad in plaster. Alterations include modern windows throughout with some possible changes to openings and an in-period addition of indeterminate age. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
8678 S. 3200 W.	c. 1942	1-story Early Ranch single family dwelling exhibiting Ranch/Rambler style. Clad in narrow vinyl siding. Alterations include modern cladding (vinyl siding and metal roofing) and modern windows in most window openings. One contributing and three non-contributing outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
8741 S. 3200 W.	c. 1955	2-story Intermountain Barn (hay loft) exhibiting rustic style. Clad in vertical plank, horizontal plank, and wood sheet (T-1-11). Alterations include the application of wood sheet siding and general disrepair. Six non-contributing outbuildings and a modern residence were observed on the property. **Historic Boundary:** Building only; remainder of property contains modern buildings	EC/Eligible	
2 N. Main St.	c. 1903	Lewis Block. 2-story 2-Part Block commercial building exhibiting Italianate style. Clad in regular brick and tongue-and-groove siding. Alterations include an in-period rear addition and infilling of some side elevation windows and doors. No outbuildings were observed. **Historic Boundary:** Building footprint	ES/Eligible Listed as part of Payson Historic District	
3-5 N. Main St.	c. 1955	1-story 1-Part Block commercial building exhibiting Post-WWII: Other style. Clad in striated brick and enameled aluminum panels. No notable alterations. No outbuildings were observed. **Historic Boundary:** Building footprint	EC/Eligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
6 N. Main St.	c. 1940	2-story 2-Part Block commercial building exhibiting Italianate style. Clad in wood sheet and regular brick. Alterations include an awning addition and the application of wood sheet (T-1-11) siding. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
10 N. Main St.	c. 1947	1-story 1-Part Block commercial building exhibiting Post-WWII: Other style. Clad in ceramic tile. Alterations include probable in-period application of the tile cladding. No outbuildings were observed. **Historic Boundary:** Building footprint	EC/Eligible	
39 N. Main St.	c. 1945	1-story Other Public/Commercial building exhibiting Classical Revival style. Clad in regular brick, modern brick veneer, tongue-and-groove siding, and concrete block. Alterations include a façade remodel in 2002. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
40 N. Main St.	c. 1940	1-story 1-Part Block commercial building exhibiting Other style. Clad in regular brick and wood plank siding. Alterations include the wood veneer. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
50 N. Main St.	c. 1940	1-story 1-Part Block commercial building exhibiting 20th Century Commercial style. Clad in regular brick and wood sheet. No notable alterations. No outbuildings were observed. **Historic Boundary:** Building footprint	EC/Eligible	
54 N. Main St.	c. 1898	1-story 1-Part Block commercial building exhibiting Mansard style. Clad in plaster, shingle siding, and concrete block. Alterations include the conversion to Mansard style and modern cladding. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
67 N. Main St.	c. 1935	Other Public/Commercial building exhibiting Other style. Clad in regular brick and synthetic stucco. Alterations include the modern stucco on the façade. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
95 N. Main St.	c. 1918	Payson State Bank. 1-story 1-Part Block bank building exhibiting Federal Revival style. Clad in brick (other) and granite panels. Alterations include several modern windows and the drive-through addition. No outbuildings were observed. **Historic Boundary:** Building footprint	EC/Eligible	
?183 N. Main St.	c. 1931	LDS Ward House. 2-story Church building exhibiting Georgian Revival style. Clad in regular brick and granite. Alterations include modern windows throughout. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
215 N. Main St.	c. 1874/ 1912	Samuel Douglass House. 2-story Central Passage single family dwelling exhibiting Picturesque: Other and Arts & Crafts styles. Clad in plaster, adobe, and stone veneer. Alterations include the 1912 Arts & Crafts porch and several modern windows. One contributing and one non-contributing outbuilding were observed. A historical wrought-iron fence is present along the frontage of the yard. **Historic Boundary:** Current legal parcel boundary	ES/Eligible Individually listed on NRHP Listed as part of Payson Historic District	
218 N. Main St.	c. 1893	John Dixon House. 2-story Central-block-with-projecting-bays single family dwelling exhibiting Richardsonian Romanesque style. Clad in sandstone. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	ES/Eligible Individually listed on NRHP Listed as part of Payson Historic District	
248 N. Main St.	c. 1892	Christopher Dixon, Jr. House. 2-story Central-block-with-projecting-bays single family dwelling exhibiting Richardsonian Romanesque style. Clad in regular brick and sandstone. Alterations include several modern windows and several in-period additions. Two contributing and one non-contributing outbuilding were observed. **Historic Boundary:** Current legal parcel boundary	ES/Eligible Individually listed on NRHP Listed as part of Payson Historic District	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
280 N. Main St.	c. 1918	1-story Bungalow single family dwelling exhibiting Bungalow and Prairie School styles. Clad in regular brick. Alterations include an in-period garage addition, ca. 1950s porch posts, and modern windows throughout. Two contributing outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Listed as part of Payson Historic District	
281 N. Main St.	c. 1922	1.5-story Bungalow single family dwelling exhibiting Arts & Crafts style. Clad in regular brick and vinyl siding. Alterations include the minor use of modern vinyl cladding and several modern windows with minor changes to a few openings. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Listed as part of Payson Historic District	
291 N. Main St.	c. 1900	1.5-story Bungalow single family dwelling exhibiting Arts & Crafts style. Clad in regular brick and tongue-and-groove siding. Alterations include a deck addition, addition of French doors in the upper half story to access the deck, and several modern windows. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Listed as part of Payson Historic District	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
297 N. Main St.	c. 1915	1.5-story Bungalow single family dwelling exhibiting Arts & Crafts style. Clad in regular brick and plaster. Alterations include several modern windows. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Listed as part of Payson Historic District	
309 N. Main St.	c. 1915	1-story Bungalow single family dwelling exhibiting Prairie School and Late 20th Century: Other styles. Clad in synthetic stucco. Alterations include a large, out-of-period rear addition and complete modern remodel of the cladding. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible Listed as part of Payson Historic District	
310 N. Main St. (aka, 15 E. 300 N.)	c. 1910	1.5-story Period Cottage single family dwelling exhibiting Period Revival: Other style. Clad in vinyl siding. Alterations include modern windows throughout with changes to openings, multiple additions of indeterminate age, and the modern cladding. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible Listed as part of Payson Historic District	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
330 N. Main St.	c. 1951	1-story Early Ranch single family dwelling exhibiting Minimal Traditional style. Clad in asbestos siding and vinyl narrow siding. Alterations include modern windows throughout, minor use of modern vinyl siding, and modern porch alteration. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Listed as part of Payson Historic District	
335 N. Main St.	c. 1922	1-story Bungalow single family dwelling exhibiting Bungalow style. Clad in tongue-and-groove and drop siding. Alterations include modern windows throughout. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Listed as part of Payson Historic District	
340 N. Main St.	c. 1943	1-story WWII-Era Cottage single family dwelling exhibiting Minimal Traditional style. Clad in asbestos siding. Alterations include several modern windows and a side awning addition. Neighbor thought the building had been relocated to the current site. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary (shares parcel with 350 N. Main St.)	EC/Eligible Listed as part of Payson Historic District	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
341 N. Main St.	c. 1919	1-story Bungalow single family dwelling exhibiting Bungalow style. Clad in regular brick and clinker brick. Alterations include modern windows throughout. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Listed as part of Payson Historic District	
347 N. Main St.	c. 1922	1-story Bungalow single family dwelling exhibiting Arts & Crafts style. Clad in regular brick and tongue-and-groove siding. Alterations include a carport addition and several modern windows. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Listed as part of Payson Historic District	
350 N. Main St.	c. 1939	1-story Other Residential Type single family dwelling exhibiting Other style. Clad in stucco. Alterations include several modern windows. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary (shares parcel with 340 N. Main St.)	EC/Eligible Listed as part of Payson Historic District	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
360 N. Main St.	c. 1941	1-story Period Cottage single family dwelling exhibiting muted English Tudor Revival style. Clad in striated brick. Alterations include an in-period rear addition and several modern windows. One contributing and one non-contributing outbuilding were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Listed as part of Payson Historic District	
363 N. Main St.	c. 1915	1.5-story Bungalow single family dwelling exhibiting Arts & Crafts style. Clad in regular brick and plaster. Alterations include several modern windows with minor changes to a few openings. One contributing outbuilding was observed. A historical fence is present along the frontage of the property. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Listed as part of Payson Historic District	
395 N. Main St.	c. 1915	1.5-story Bungalow single family dwelling exhibiting Arts & Crafts style. Clad in rock-faced concrete block and tongue-and-groove siding. Alterations include modern windows throughout. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Listed as part of Payson Historic District	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
410 N. Main St.	c. 1896	1.5-story Hall-Parlor single family dwelling exhibiting Classical: Other and Late 20th Century: Other styles. Clad in brick veneer. Alterations include a modern era exterior remodel. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
413 N. Main St.	c. 1904	1-story Bungalow single family dwelling exhibiting Prairie School style. Clad in plaster and shiplap siding. Alterations include several modern windows and a carport addition. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Listed as part of Payson Historic District	
420 N. Main St.	c. 1924	1.5-story Bungalow single family dwelling exhibiting Clipped Gable Cottage and Other styles. Clad in brick veneer and narrow vinyl siding. Alterations include modern windows throughout, metal roofing, and modern cladding. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
443 N. Main St.	c. 1955	1-story Early Ranch single family dwelling exhibiting Ranch/Rambler style. Clad in oversized rock-faced brick and wood sheet. No notable alterations. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Listed as part of Payson Historic District	
446 N. Main St.	c. 1953	1-story Early Ranch single family dwelling exhibiting Early Ranch and Minimal Traditional styles. Clad in clapboard and tongue-and-groove siding. Alterations include a carport addition and several modern windows with minor changes to a few openings. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
447 N. Main St.	c. 1955	1-story Early Ranch single family dwelling exhibiting Ranch/Rambler style. Clad in striated brick and wood sheet. Alterations include several modern windows. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Listed as part of Payson Historic District	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
448 N. Main St.	c. 1952	1-story Early Ranch single family dwelling exhibiting Early Ranch and Minimal Traditional styles. Clad in wide aluminum siding and Roman brick. Alterations include a carport addition, a probable façade addition, and possible changes to the cladding. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible Listed as part of Payson Historic District	
451 N. Main St.	c. 1920	1-story Bungalow single family dwelling exhibiting Prairie School style. Clad in synthetic stucco. Alterations include a modern, exterior remodel with new cladding, modern windows, and a metal sheet roof. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible Listed as part of Payson Historic District	
452 N. Main St.	c. 1948	1-story Early Ranch single family dwelling exhibiting Minimal Traditional style. Clad in tongue-and-groove siding. Alterations include modern windows throughout and a carport addition. One contributing and one non-contributing outbuilding were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
467 N. Main St.	c. 1957	1-story WWII-Era Cottage (w/ garage) exhibiting Minimal Traditional style. Clad in asbestos siding and tongue-and-groove siding. Alterations include multiple additions of indeterminate age, enclosure of an attached garage, and metal roofing. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
485 N. Main St.	c. 1940	Basement house single family dwelling exhibiting Other style. Clad in wide aluminum siding and wood sheet. Alterations include minor changes to fenestration and modern windows throughout. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Listed as part of Payson Historic District	
495 N. Main St.	c. 1910	1-story Foursquare single family dwelling exhibiting Victorian: Other and Bungalow styles. Clad in drop siding and wide aluminum siding. Alterations include several in-period additions, 1950s porch rail and aluminum siding, and several modern windows. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Listed as part of Payson Historic District	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
496 N. Main St.	c. 1904	1.5-story Crosswing single family dwelling exhibiting Victorian Eclectic style. Clad in regular brick and wide aluminum siding. Alterations include modern windows throughout with possible minor changes to a few openings and an in-period rear addition. One contributing and two non-contributing outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Listed as part of Payson Historic District	
511 N. Main St.	c. 1931	1-story Period Cottage exhibiting muted English Tudor Revival style. Clad in plaster. Alterations include several modern windows, and in-period rear addition, and a basement entry addition. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Listed as part of Payson Historic District	
540 N. Main St.	c. 1910	1-story Hall-Parlor single family dwelling exhibiting Other style. Clad in medium width aluminum siding. Alterations include multiple additions of indeterminate age, modern windows throughout, a carport addition, and the modern cladding. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
543 N. Main St.	c. 1952	1-story Early Ranch single family dwelling exhibiting Minimal Traditional style. Clad in narrow vinyl siding and imitation stone veneer. Alterations include modern windows throughout and the modern cladding. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	
550 N. Main St.	c. 1915	Payson City Substation. 1.5-story 1-Part Block building exhibiting Italianate style. Clad in regular brick. Alterations include several modern windows with partial enclosure of a few openings. One non-contributing outbuilding was observed. **Historic Boundary:** Building footprint	EC/Eligible	
581 N. Main St.	c. 1951	1-story Ranch single family dwelling exhibiting Ranch/Rambler style. Clad in striated brick. No notable alterations. Two non-contributing outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
625 N. Main St.	c. 1948	1-story Early Ranch (w/ garage) single family dwelling exhibiting Minimal Traditional and Early Ranch styles. Clad in striated brick. Alterations include a carport addition and modern windows throughout. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
1766 W. SR-198	c. 1952	1-story Early Ranch single family dwelling exhibiting Minimal Traditional style. Clad in narrow vinyl siding. Alterations include the modern cladding and an in-period rear addition. Three contributing and two non-contributing outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
2204 W. SR-198	c. 1940	1-story WWII-Era Cottage single family dwelling exhibiting Minimal Traditional style. Clad in asbestos siding over wood plank. Alterations include several modern windows. No outbuildings were observed. This building is located on the property with 2232 W., which is the primary historical dwelling for the farmstead. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
2218 W. SR-198	c. 1955	1-story Other Residential Type single family dwelling exhibiting Ranch/Rambler style. Clad in concrete block. Alterations include several modern windows. No outbuildings were observed. This building is located on the property with 2232 W., which is the primary historical dwelling for the farmstead. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
?2224 W. SR-198	c. 1930	1-story Other Residential Type single family dwelling exhibiting Minimal Traditional and Other styles. Clad in tongue-and-groove siding. Alterations include several modern windows and in-period additions. No outbuildings were observed. This building is located on the property with 2232 W., which is the primary historical dwelling for the farmstead. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
2232 W. SR-198	c. 1884	2-story Side Passage/Entry single family dwelling exhibiting Victorian: Other style. Clad in asbestos siding. Alterations include in-period siding and several modern windows with some possible changes to the openings. Approximately 10 contributing outbuildings (farmstead) were noted, including dwellings documented separately. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
?2300 W. SR-198	c. 1960	Agricultural outbuilding complex exhibiting no particular style. Loafing shed, sheds, corrals, etc. Alterations include general deterioration and patching with reclaimed material. **Historic Boundary:** N/A	NC/Ineligible	
2466 W. SR-198	c. 1964	1-story Ranch single family dwelling exhibiting Ranch/Rambler and Late 20th Century: Other styles. Clad in modern brick veneer (brick: other). Alterations include additions of indeterminate age and a probable exterior remodel with the modern brick veneer. Three non-contributing outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
85 E. Utah Ave.	c. 1884	Payson Opera House. 2-story Other Public/Commercial building exhibiting Italianate style. Clad in regular brick and sandstone. Alterations include modern windows throughout. No outbuildings were observed. **Historic Boundary:** Building footprint	EC/Eligible Listed as part of Payson Historic District	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
26 W. Utah Ave.	c. 1950	1-story 1-Part Block commercial building exhibiting Later 20th Century: Other style. Clad in vinyl siding, tin sheet, and stone veneer. Alterations include the exterior remodel over various periods of time. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
36 W. Utah Ave.	c. 1914	IOOF Building. 2-story 2-Part Block commercial building exhibiting Late 20th Century: Other style. Clad in concrete block and synthetic stucco. Alterations include several modern windows and modern veneer. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible Listed as part of Payson Historic District	
60 W. Utah Ave.	c. 1915	1-story 1-Part Block commercial building exhibiting Late 20th Century: Other style. Clad in synthetic stucco and vinyl siding. Alterations include a complete exterior remodel. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible Listed as part of Payson Historic District	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

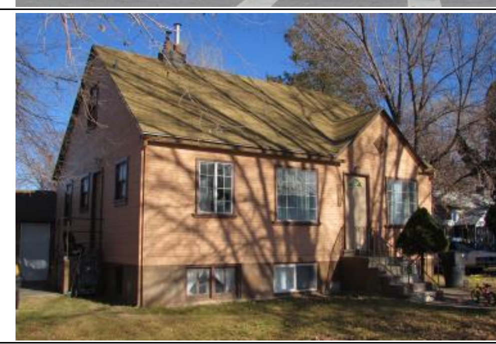
Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
70-98 W. Utah Ave.	c. 1950	Huish Theater. 1-story Other Public/Commercial building exhibiting Late 20th Century: Other style. Designed by architect Fred Markham. Clad in striated brick, stone veneer, tongue-and-groove siding, and concrete block. Alterations include several modern windows. The stone veneer is original (Paul Mower, personal communication to Elizabeth Giraud, 2015). No outbuildings were observed. **Historic Boundary:** Building footprint	EC/Eligible Listed as part of Payson Historic District	
115 W. Utah Ave.	c. 1945	1-story 1-Part Block commercial building exhibiting Late 20th Century: Other and Minimal Traditional styles. Clad in striated brick and synthetic stucco. Alterations include the modern synthetic cladding and possible altered fenestration. No outbuildings were observed on the property. **Historic Boundary:** N/A	NC/Ineligible	
596 W. Utah Ave.	c. 1939	1.5-story Period Cottage exhibiting Period Revival: Other style. Clad in tongue-and-groove siding. Alterations include several modern windows. One contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Listed as part of Payson Historic District	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
640 W. Utah Ave.	c. 1920	1-story Bungalow single family dwelling exhibiting Bungalow and Prairie School styles. Clad in tongue-and-groove siding and drop siding. No notable alterations. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
652 W. Utah Ave.	c. 1914	1.5-story Bungalow single family dwelling exhibiting Arts & Crafts style. Clad in regular brick and vinyl siding. Alterations include the minor use of modern cladding and modern windows throughout. Two non-contributing outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
820 W. Utah Ave.	c. 1900	1-story Crosswing single family dwelling exhibiting Other style. Clad in narrow vinyl siding. Alterations include changes to fenestration, several in-period additions, including a wrap-around porch, and modern cladding. Three contributing outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the APE—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
858 W. Utah Ave.	c. 1900	1-story Hall-Parlor single family dwelling exhibiting Other style. Clad in synthetic stucco. Alterations include modern windows throughout and a metal sheet roof. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
868 W. Utah Ave.	c. 1942	1-story Period Cottage single family dwelling exhibiting Period Revival: Other style. Clad in plaster. Alterations include several modern windows. Two non-contributing outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

SUMMARY AND CONCLUSIONS

Certus conducted a selective reconnaissance-level structures inventory for the I-15 Payson Main Street Interchange Project in Payson, Utah County, Utah, in support of UDOT's proposed interchange improvements. The assessment resulted in the identification of 209 properties with historical structures. Portions of the Payson (National Register) Historic District are also located in the APE/survey area. Certus recommends that 114 of the properties receive SHPO ratings of "ES" or "EC" and be considered eligible for the NRHP. Three properties are individually listed on the NRHP while many others are listed as contributing features of the Payson Historic District. Certus recommends the remaining 95 properties receive SHPO ratings of "NC" and be considered ineligible for the NRHP. **Table 3** summarizes these recommendations.

Table 2. Summary of Historic Structures and National Register Eligibility Recommendations

Address	SHPO Rating	NRHP Eligibility
35 N. 100 E.	EC	Eligible
145 N. 100 E.	NC	Ineligible
149 N. 100 E.	EC	Eligible
175 N. 100 E.	EC	Eligible
189 N. 100 E.	NC	Ineligible
209 N. 100 E.	EC	Eligible
235 N. 100 E.	EC	Eligible
327 N. 100 E.	NC	Ineligible
389 N. 100 E.	NC	Ineligible
48 E. 100 N.	EC	Eligible
123 E. 100 N.	EC	Eligible
171 E. 100 N.	EC	Eligible
190 E. 100 N.	NC	Ineligible
197 E. 100 N.	EC	Eligible
208 E. 100 N.	NC	Ineligible
240 E. 100 N.	EC	Eligible
280 E. 100 N.	EC	Eligible
297 E. 100 N.	NC	Ineligible
315 E. 100 N.	EC	Eligible
54 W. 100 N.	ES	Eligible
64 W. 100 N.	NC	Ineligible
180 W. 100 N.	NC	Ineligible
228 W. 100 N.	ES	Eligible
560 W. 100 N.	NC	Ineligible
586 W. 100 N.	EC	Eligible
596 W. 100 N.	NC	Ineligible
625 W. 100 N.	NC	Ineligible
70 W. 100 S.	EC	Eligible
96 W. 100 S.	EC	Eligible
31 N. 100 W.	NC	Ineligible
43 N. 100 W.	EC	Eligible
89 N. 100 W.	EC	Eligible
101 N. 100 W.	NC	Ineligible
153 N. 100 W.	NC	Ineligible

Table 2. Summary of Historic Structures and National Register Eligibility Recommendations

Address	SHPO Rating	NRHP Eligibility
171 N. 100 W.	EC	Eligible
189 N. 100 W.	EC	Eligible
192 N. 100 W.	EC	Eligible
209 N. 100 W.	NC	Ineligible
252 N. 100 W.	EC	Eligible
255 N. 100 W.	ES	Eligible
260 N. 100 W.	NC	Ineligible
265 N. 100 W.	NC	Ineligible
280 N. 100 W.	EC	Eligible
285 N. 100 W.	EC	Eligible
309 N. 100 W.	NC	Ineligible
314 N. 100 W.	NC	Ineligible
327 N. 100 W.	EC	Eligible
337 N. 100 W.	EC	Eligible
340 N. 100 W.	EC	Eligible
345 N. 100 W.	EC	Eligible
347 N. 100 W.	EC	Eligible
349 N. 100 W.	EC	Eligible
350 N. 100 W.	NC	Ineligible
375 N. 100 W.	NC	Ineligible
391 N. 100 W.	NC	Ineligible
20 S. 100 W.	NC	Ineligible
30 S. 100 W.	NC	Ineligible
?43 S. 100 W.	NC	Ineligible
52 S. 100 W.	NC	Ineligible
61 S. 100 W.	NC	Ineligible
80 S. 100 W.	EC	Eligible
75 E. 200 N.	EC	Eligible
585 E. 200 N.	NC	Ineligible
57 W. 200 N.	EC	Eligible
60 W. 200 N.	NC	Ineligible
94 W. 200 N.	NC	Ineligible
544 W. 200 N.	NC	Ineligible
547 W. 200 N.	NC	Ineligible
558 W. 200 N.	EC	Eligible
562 W. 200 N.	NC	Ineligible
90 N. 200 W.	EC	Eligible
115 N. 300 E.	NC	Ineligible
590 N. 300 E.	NC	Ineligible
596 N. 300 E.	EC	Eligible
47 E. 300 N.	NC	Ineligible
60 E. 300 N.	EC	Eligible
75 E. 300 N.	NC	Ineligible
590 E. 300 N.	NC	Ineligible
42 W. 300 N.	NC	Ineligible
43 W. 300 N.	NC	Ineligible
62 W. 300 N.	NC	Ineligible

Table 2. Summary of Historic Structures and National Register Eligibility Recommendations

Address	SHPO Rating	NRHP Eligibility
488 W. 300 N.	EC	Eligible
520 W. 300 N.	EC	Eligible
535 W. 300 N.	NC	Ineligible
559 W. 300 N.	NC	Ineligible
571 W. 300 N.	NC	Ineligible
610 W. 300 N.	EC	Eligible
708 W. 300 N.	EC	Eligible
787 W. 300 N.	EC	Eligible
25 E. 400 N.	EC	Eligible[1]
40 E. 400 N.	NC	Ineligible
59 E. 400 N.	ES	Eligible
99 E. 400 N.	EC	Eligible
101 E. 400 N.	EC	Eligible
84 W. 400 N.	NC	Ineligible
98 W. 400 N.	EC	Eligible
108 W. 400 N.	EC	Eligible
394 W. 400 N.	EC	Eligible
412 W. 400 N.	NC	Ineligible
630 W. 400 N.	NC	Ineligible
635 W. 400 N.	NC	Ineligible
638 W. 400 N.	NC	Ineligible
643 W. 400 N.	NC	Ineligible
660 W. 400 N.	EC	Eligible
682 W. 400 N.	NC	Ineligible
696 W. 400 N.	NC	Ineligible
698 W. 400 N.	NC	Ineligible
785 W. 400 N.	NC	Ineligible
791 W. 400 N.	EC	Eligible
331 N. 400 W.	EC	Eligible
377 N. 400 W.	NC	Ineligible
383 N. 400 W.	NC	Ineligible
602 N. 500 E.	NC	Ineligible
645 N. 500 E.	NC	Ineligible
665 N. 500 E.	EC	Eligible
806 N. 500 E.	EC	Eligible
808 N. 500 E.	EC	Eligible
37 E. 500 N.	NC	Ineligible
61 E. 500 N.	NC	Ineligible[2]
81 E. 500 N.	EC	Eligible
591 E. 500 N.	EC	Eligible
85 W. 500 N.	EC	Eligible
90 W. 500 N.	EC	Eligible
145 N. 600 E.	EC	Eligible
158 N. 600 E.	NC	Ineligible
179 N. 600 E.	NC	Ineligible
191 N. 600 E.	NC	Ineligible
210 N. 600 E.	EC	Eligible

Table 2. Summary of Historic Structures and National Register Eligibility Recommendations

Address	SHPO Rating	NRHP Eligibility
290 N. 600 E.	ES	Eligible
371 N. 600 E.	NC	Ineligible
619 N. 600 E.	EC	Eligible
95 N. 600 W.	EC	Eligible
103 N. 600 W.	NC	Ineligible
297 N. 600 W.	NC	Ineligible
308 N. 600 W.	NC	Ineligible
325 N. 600 W.	EC	Eligible
326 N. 600 W.	NC	Ineligible
340 N. 600 W.	NC	Ineligible
343 N. 600 W.	NC	Ineligible
395 N. 600 W.	EC	Eligible
8678 S. 3200 W.	NC	Ineligible
8741 S. 3200 W.	EC	Eligible
2 N. Main St.	ES	Eligible[1]
3-5 N. Main St.	EC	Eligible
6 N. Main St.	NC	Ineligible
10 N. Main St.	EC	Eligible
39 N. Main St.	NC	Ineligible
40 N. Main St.	NC	Ineligible
50 N. Main St.	EC	Eligible
54 N. Main St.	NC	Ineligible
67 N. Main St.	NC	Ineligible
95 N. Main St.	EC	Eligible
?183 N. Main St.	EC	Eligible
215 N. Main St.	ES	Eligible[3]
218 N. Main St.	ES	Eligible[3]
248 N. Main St.	ES	Eligible[3]
280 N. Main St.	EC	Eligible[1]
281 N. Main St.	EC	Eligible[1]
291 N. Main St.	EC	Eligible[1]
297 N. Main St.	EC	Eligible[1]
309 N. Main St.	NC	Ineligible[2]
310 N. Main St.	NC	Ineligible[2]
330 N. Main St.	EC	Eligible[1]
335 N. Main St.	EC	Eligible[1]
340 N. Main St.	EC	Eligible[1]
341 N. Main St.	EC	Eligible[1]
347 N. Main St.	EC	Eligible[1]
350 N. Main St.	EC	Eligible[1]
360 N. Main St.	EC	Eligible[1]
363 N. Main St.	EC	Eligible[1]
395 N. Main St.	EC	Eligible[1]
410 N. Main St.	NC	Ineligible
413 N. Main St.	EC	Eligible[1]
420 N. Main St.	NC	Ineligible
443 N. Main St.	EC	Eligible[1]

Table 2. Summary of Historic Structures and National Register Eligibility Recommendations

Address	SHPO Rating	NRHP Eligibility
446 N. Main St.	EC	Eligible
447 N. Main St.	EC	Eligible[1]
448 N. Main St.	NC	Ineligible[2]
451 N. Main St.	NC	Ineligible[2]
452 N. Main St.	EC	Eligible
467 N. Main St.	NC	Ineligible
485 N. Main St.	EC	Eligible[1]
495 N. Main St.	EC	Eligible[1]
496 N. Main St.	EC	Eligible[1]
511 N. Main St.	EC	Eligible[1]
540 N. Main St.	NC	Ineligible
543 N. Main St.	NC	Ineligible
550 N. Main St.	EC	Eligible
581 N. Main St.	EC	Eligible
625 N. Main St.	EC	Eligible
1766 W. SR-198	NC	Ineligible
2204 W. SR-198	EC	Eligible
2218 W. SR-198	EC	Eligible
?2224 W. SR-198	EC	Eligible
2232 W. SR-198	EC	Eligible
?2300 W. SR-198	NC	Ineligible
2466 W. SR-198	NC	Ineligible
85 E. Utah Ave.	EC	Eligible[1]
26 W. Utah Ave.	NC	Ineligible
36 W. Utah Ave.	NC	Ineligible[2]
60 W. Utah Ave.	NC	Ineligible[2]
70-98 W. Utah Ave.	EC	Eligible[1]
115 W. Utah Ave.	NC	Ineligible
596 W. Utah Ave.	EC	Eligible[1]
640 W. Utah Ave.	EC	Eligible
652 W. Utah Ave.	EC	Eligible
820 W. Utah Ave.	NC	Ineligible
858 W. Utah Ave.	EC	Eligible
868 W. Utah Ave.	EC	Eligible

[1] Listed as part of Payson Historic District
[2] Listed as part of Payson Historic District but recommended ineligible due to subsequent changes
[3] Listed individually and as part of Payson Historic District

Anticipated effects on the historic properties from the proposed interchange project were not known to Certus at the time of this report. Those effects will be assessed by UDOT and documented in a determination of eligibility and finding of effect (DOE-FOE) letter.

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APPENDIX B

TECHNICAL REPORTS

ADDENDUM TO: SELECTIVE RECONNAISSANCE-LEVEL HISTORIC STRUCTURES ASSESSMENT FOR THE INTERSTATE 15 PAYSON MAIN STREET INTERCHANGE ENVIRONMENTAL IMPACT STATEMENT, UTAH COUNTY, UTAH FINAL

Addendum to:
Selective Reconnaissance-Level Historic Structures Assessment for the Interstate 15 Payson Main Street Interchange EIS, Utah County, Utah

FINAL

UDOT Project No. F-I15-6(214)251; PIN 10263

Prepared for

The Utah Department of Transportation
and
H.W. Lochner, Inc.

Prepared by

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Manager/Sr. Consultant

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Salt Lake City, Utah
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Utah Antiquities Project No. U16HY0504p
PLPCO Permit No. 47

Certus Project Number LOCH08

July 8, 2016

PROJECT ABSTRACT SHEET

Report Title: *Addendum to: Selective Reconnaissance-Level Historic Structures Assessment for the Interstate 15 Payson Main Street Interchange EIS, Utah County, Utah*

UDOT Project Number and Name: F-I15-6(214)251; Payson Interchange EIS; PIN 10263

Utah State Project Number: U16HY0504p

Project Description: The Utah Department of Transportation (UDOT) is considering improvements to Interstate 15 interchange at Main Street in Payson, Utah. These improvements may include changes to the existing interchange configuration or relocation of the interchange. The UDOT is preparing an EIS to evaluate alternatives for the interchange improvements. Four "build alternatives" are being carried forward for analysis in the EIS.

Area of Potential Effects: The area of potential effects (APE) for this addendum survey was established based on a comparison of the current combined APE for the four EIS alternatives and the boundaries of the previous historic structures reconnaissance-level survey (Ellis 2015) conducted for the interchange project. The APE for the addendum assessment encompasses approximately 91 acres.

Agencies: Utah Department of Transportation; Payson City; U.S. Army Corps of Engineers; Federal Highway Administration

Location: Payson City, Utah County

Land Ownership: Private

Date(s) of Fieldwork: June 30, 2016

Methods: Selective reconnaissance-level buildings inventory

Acres Surveyed for Historic Buildings: 37 hectares (91 acres)

Properties with Historic Structures Recorded: 55 (see Table S1, below)

NRHP Eligible Structures: 30 (see Table S1, below)

Table S1. Summary of Historic Structures and National Register Eligibility Recommendations

	Eligible for the NRHP	
50 N. 100 E.	450 E. 200 N.	80 S. Main St. [1]
140 N. 100 E.	49 S. 200 W.	86 S. Main St. [1]
150 N. 100 E.	19 N. 300 E.	2025 W. SR-198
443 E. 100 N.	125 N. 300 E.	115 E. Utah Ave. [1]
523 E. 100 N.	155 N. 300 E.	197 E. Utah Ave.
150 W. 100 S.	180 N. 500 E.	205 E. Utah Ave. [1]
170 W. 100 S.	195 N. 300 E.	263 E. Utah Ave. [1]
129 N. 200 E.	10 S. 600 E.[3]	313 E. Utah Ave.
150 E. 200 N	10 S. Main St.[1]	174 W. Utah Ave. [1]
210 E. 200 N.	12-14 S. Main St. [1]	196 W. Utah Ave. [1]
	Not Eligible for the NRHP	
170 N. 100 E.	45 N. 300 E.	2009 W. SR-198
190 N. 100 E.	49 N. 300 E.	135 W. Utah Ave.
350 E. 100 N.	140 N. 300 E.	144 W. Utah Ave. [2]
395 E. 100 N.	188 N. 300 E.	145 E. Utah Ave. [2]
166 N. 200 E.	190 N. 400 E.	155 W. Utah Ave. [2]
189 N. 200 E.	160 N. 500 E.	175 W. Utah Ave. [2]
528 E. 200 N.	20-22 S. Main St. [2]	187 W. Utah Ave.
484 E. 100 N.	30-40 S. Main St. [2]	
50 N. 200 W.	66-68 S. Main St.	

[1] Listed as part of Payson Historic District
[2] Listed as part of Payson Historic District but recommended ineligible due to alterations
[3] Individually listed on NRHP

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

INTRODUCTION

The Utah Department of Transportation (UDOT), in conjunction with the Federal Highway Administration (FHWA) is evaluating potential improvements to the Interstate 15 interchange at Main Street in Payson, Utah (**Figure 1**). The improvements may include changes to the existing interchange and/or construction of a new interchange at a different location. Four "build alternatives" to address the project purpose and need are being evaluated in an environmental impact statement (EIS). The project is hereafter referred to as the Interchange Project or the I-15 Payson Main Street Interchange Project.

H.W. Lochner, Inc. (Lochner) is assisting UDOT with environmental studies for the Interchange Project. Lochner contracted with Certus Environmental Solutions, LLC (Certus) to conduct an assessment of cultural resources in the area of potential effects for the proposed project. Both archaeological and architectural/structural assessments have been completed. The results of the archaeological inventory will be reported under separate cover. Certus conducted a selective reconnaissance-level survey (RLS) of historical structures in a large study area around the interchange project area in 2014 and 2015. The results of this RLS were reported in 2015 (Ellis 2015). *Subsequent to the completion of that report, the study area for the interchange project was revised, and several areas located outside the original study area were identified. These additional areas are collectively referred to hereafter as the addendum study area or addendum area of potential effects (APE).*

Sheri Murray Ellis, architectural historian, conducted fieldwork for the addendum study area on June 19 and 30, 2016. All work was carried out under Utah State Antiquities Project No. U16HY0504p. The results of the addendum RLS are reported herein.

THE AREA OF POTENTIAL EFFECTS AND SURVEY AREA

The project area is located in the community of Payson in Utah County, Utah (see **Figure 1**). Implementation of the project, whether reconstruction of the existing interchange or construction of a new interchange, would require ground disturbance up to several feet deep and would necessitate acquisition of new right-of-way as well as temporary construction easements. Historical structural properties in the footprint of the final interchange improvements would need to be demolished or relocated. Additional historical structural properties adjacent to the final project site may be indirectly affected by visual intrusion.

A large study area/survey area was defined to assess historic structures in 2014. This area was inventoried and the results reported (Ellis 2015). Subsequently, the study area was revised, and certain areas now under consideration for alternatives being evaluated in the EIS fall outside the original study area. The APE for the addendum RLS corresponds to the combined footprint of four build alternatives under consideration in the EIS plus an additional 300-foot buffer beyond the anticipated edge of right-of-way for those alternatives. Only those portions of that APE located outside the 2014 study area are addressed in this report (see **Figures 2 and 3**). The addendum APE encompasses approximately 37 hectares (91 acres). The addendum RLS survey area is equal to the APE.

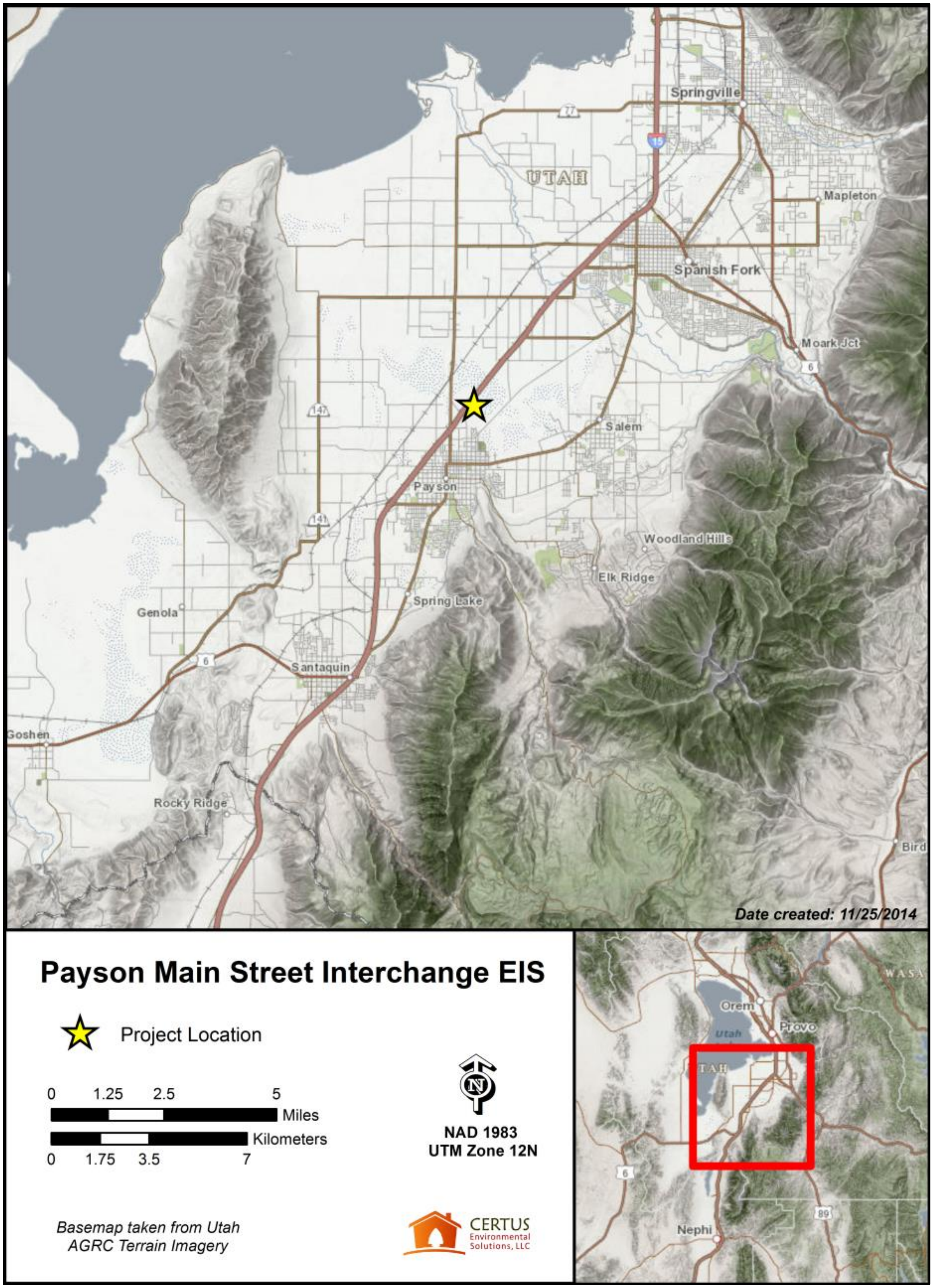

Figure 1. General project location; I-15 Payson Main Street Interchange Project

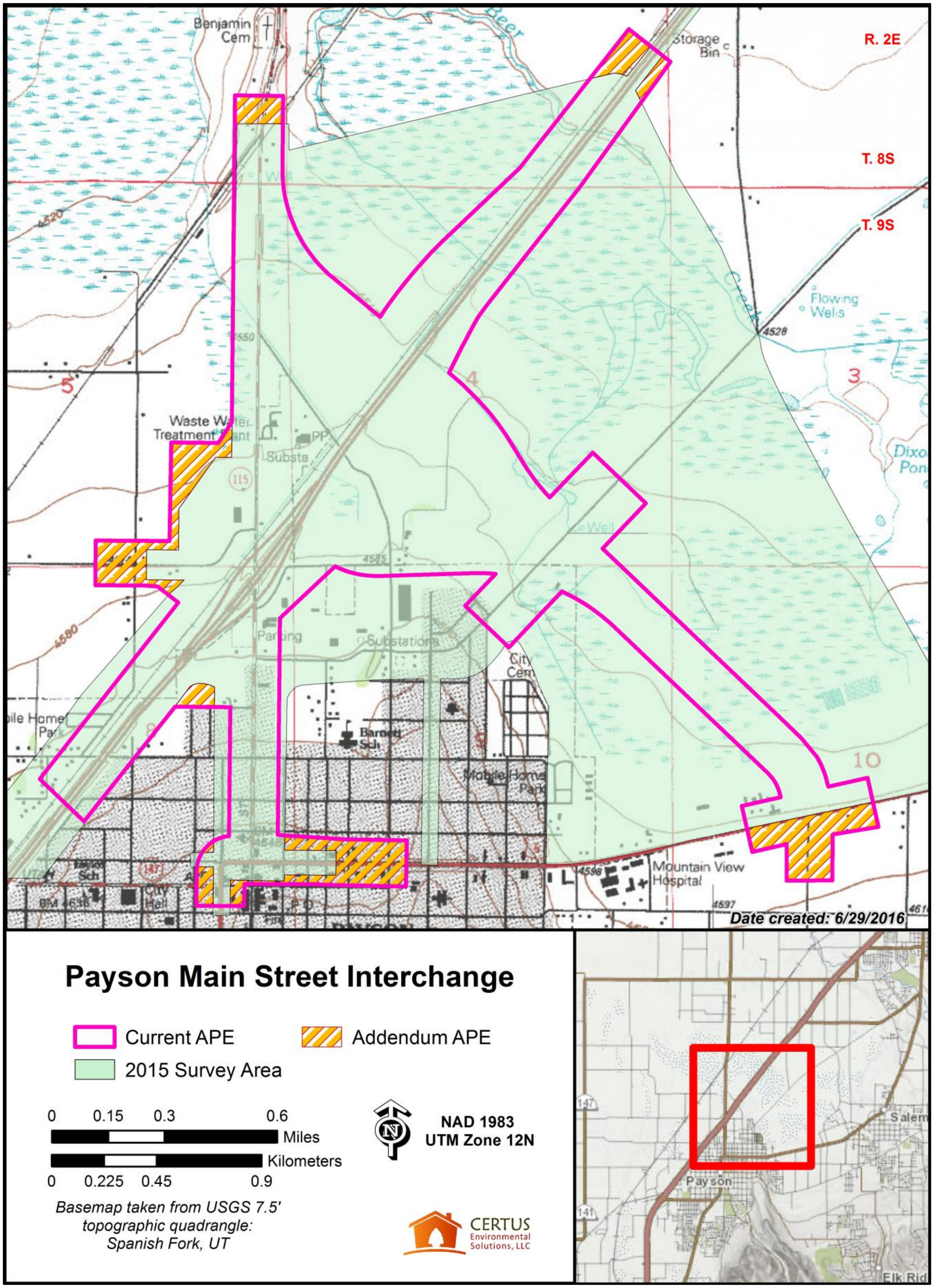

Figure 2. APE/Survey Area; I-15 Payson Main Street Interchange Project—Addendum

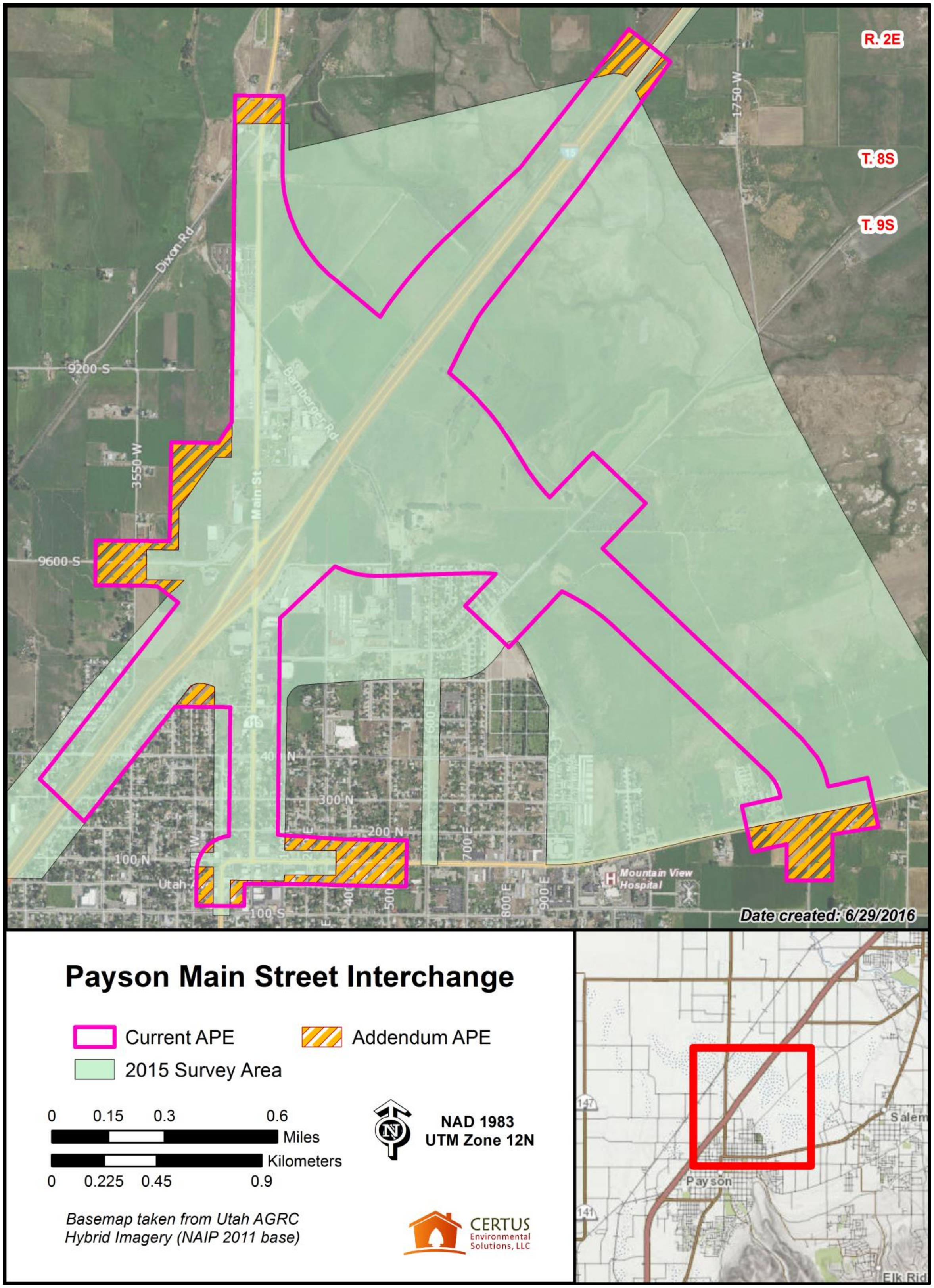

Figure 3. APE/Survey Area; I-15 Payson Main Street Interchange Project—Addendum

The addendum APE/survey area is located in Township 8 South, Range 2 East, Sections 32 and 33 and Township 9 South, Range 2 East, Sections 5 and 8-10 on USGS 7.5' topographic quadrangle Spanish Fork, Utah (see **Figure 2**). Lands subject to the addendum RLS are privately owned.

Project Setting

The APE/survey area encompasses portions of both the developed core area of Payson and the rural agricultural lands surrounding the community. Lands in the northern and eastern portions of the APE/survey area are almost exclusively undeveloped, comprising open agricultural fields (both active and fallow), grazing pastures, and scattered historical and modern farmsteads. The southern portion of the APE/survey area is dominated by a combination of historical and modern residential and commercial development, while the western part of the area is a mix of residential, agricultural, and industrial uses.

The built environment within the APE/survey area reflects a broad range of development in Payson. The earliest structures in the area are from the late 1800s, while the most recent date to the last few years. Teardown projects wherein historical structures were demolished to accommodate the construction of new structures appear relatively common throughout the area. Major periods of development appear to have occurred in the early 1900s (1900-1930) and in the post-World War II period.

Previous Resource Surveys and Known Historical Structures

Certus conducted a file search on December 8, 2014, for areas within the boundaries of the original APE/survey area and within ½-mile of it (see Ellis 2015). As this area encompasses the current addendum APE, Certus did not conduct a new file search for the current effort. Interested readers are referred to the original report, and the file search results therein are incorporated here by reference.

Historic Overview

Certus prepared a historic overview as part of the original survey effort. This overview is provided in Ellis 2015 and is incorporated here by reference.

Field Methods

Certus applied the methods outlined in the 2012 Utah SHPO Standard Operating Procedures for selective reconnaissance-level buildings surveys as well as the applicable components of the UDOT cultural resource inventory guidelines (UDOT 2010, as updated). Pursuant to the guidelines for selective reconnaissance-level surveys, Certus only documented those buildings identified as dating to the historic period historic; modern buildings were not documented. Age of construction for each primary building was derived from a combination of estimation based upon architectural characteristics, records from prior documentation, and information obtained from the Utah County Assessor.

UDOT guidelines call for a 45-year age cutoff for considering resources historical—an effort to accommodate a time lag between the compilation of the survey data and actual construction associated with the undertaking. Given the timing of the field survey late in 2016, Certus employed a cutoff date of 1971 to designate structures as historical.

Each primary historical building on each identified property was assessed for architectural type and style, historical integrity, and other basic architectural details. Each property was photographed using a digital camera set to a minimum resolution of 300 dpi, and photographic index sheets were produced. Upon acceptance by the Utah SHPO of the final historical buildings eligibility ratings, Certus will enter the relevant data for each documented property into the SHPO Preservation Pro online database system.

Resource Evaluation Methods

In accordance with 36 CFR § 60, historical structures (and other cultural resources) documented as part of federal undertakings are to be evaluated for their eligibility for the NRHP under four specific criteria and with consideration for seven elements of integrity. A structure may be considered eligible for listing on the NRHP if it:

A- is associated with events that have made a significant contribution to the broad patterns of our history; OR

B- is associated with the lives of persons significant in our past; OR

C- embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; OR

D- has yielded, or may be likely to yield, information important in prehistory or history.

Structures considered potentially eligible under one of the above criteria are also to be evaluated for integrity of location, design, setting, materials, workmanship, feeling, and association. To be eligible for listing on the NRHP, a structure must possess integrity of those elements directly related to the criterion or criteria under which it would be determined eligible.

Utah-Specific Considerations for Buildings

In Utah, all historic buildings documented at a reconnaissance-level are also evaluated using a rating system established by the Historic Preservation program at the Utah SHPO. This rating system assigns one of four ratings to buildings based on the degree to which they retain historical and architectural integrity. These ratings are as follows:

ES - Eligible/Significant: built within the historic period and retains integrity; excellent example of a style or type; unaltered or only minor alterations or additions; individually eligible for the [NRHP] under criterion "C"; also buildings of known <u>historical significance</u>.

EC - Eligible/Contributing: built within the historic period and retains integrity; good example of a style or type, but not as well-preserved or well-executed as "ES" buildings; more substantial alterations or additions than "ES" buildings, though overall integrity is retained; eligible for [the NRHP] as part of a potential historic district or primarily for historical, rather than architectural, reasons.

NC - Ineligible/Non-Contributing: built during the historic period but has had major alterations or additions; no longer retains integrity.

OP - Ineligible/Out-of-period: constructed outside the historic period.

The interaction between the SHPO ratings system and the criteria of the NRHP focuses on NRHP Criteria A and C and SHPO ratings ES and EC. Buildings assigned a SHPO rating of "ES" are considered eligible for listing under NRHP both Criteria A and C (Giraud 2007). Buildings assigned a SHPO rating of "EC" are considered eligible for the NRHP under Criterion A only (Giraud 2007).

Historical Boundaries

To evaluate potential impacts to historic properties resulting from implementation of the proposed roadway improvements, appropriate historical boundaries must be established. National Register Bulletin 21, Defining Boundaries for National Register Properties (Seifert et al. 1997), offers guidance on how to establish such boundaries. The Bulletin offers the following recommendations for defining property boundaries associated with historical buildings:

- Select boundaries that encompass the entire resource, including both historic and modern additions. Include surrounding land historically associated with the resource that retains integrity and contributes to the property's historic significance.
- Use the legally recorded parcel number or lot lines for urban and suburban properties that retain their historic boundaries and integrity.
- For small rural properties, select boundaries that encompass significant resources, including outbuildings and the associated setting.
- For larger rural properties, select boundaries that include fields, forests, and open rangeland that is historically associated with the property and conveys the property's historic setting. The areas included must have integrity and contribute to the property's historic significance.

The addendum APE for the Main Street Interchange Project is both urban and rural in nature. For the identified urban properties, the current legal boundaries for each parcel represent either the original historical boundaries or the sole remaining component of the original boundary as it is associated with the primary building. In these cases, current legal property boundaries were used to define the boundaries for most of the historic buildings in the APE. For rural properties (e.g., farmsteads) historical boundaries may include agricultural fields listed under separate parcel numbers from those containing the primary residence. In these cases, Certus made an effort to identify historically associated lands and include them in the definition of the historical boundary.

In certain cases, the property associated with a historical structure has lost, or otherwise does not possess, the ability to contribute to the historical integrity of the primary historical structure. For example, residential property that has been paved to create a parking lot to accommodate customer parking for a former residence converted to commercial use no longer contributes to the historical residential nature of the primary building. In these cases, the boundary for the purpose of assessing the effects of the undertaking was defined to only encompass those features of the property that contribute to understanding and evaluating its historical use.

FINDINGS

A total of 55 properties with historical structures were identified as a result of the addendum selective reconnaissance-level survey for the Interchange Project. Additionally, the addendum APE/survey area encompasses portions of the Payson National Register Historic District. The locations of the properties and the approximate boundaries of the historic district are illustrated on **Figures 4-6**, and descriptions of the properties are summarized in **Table 1**, below.

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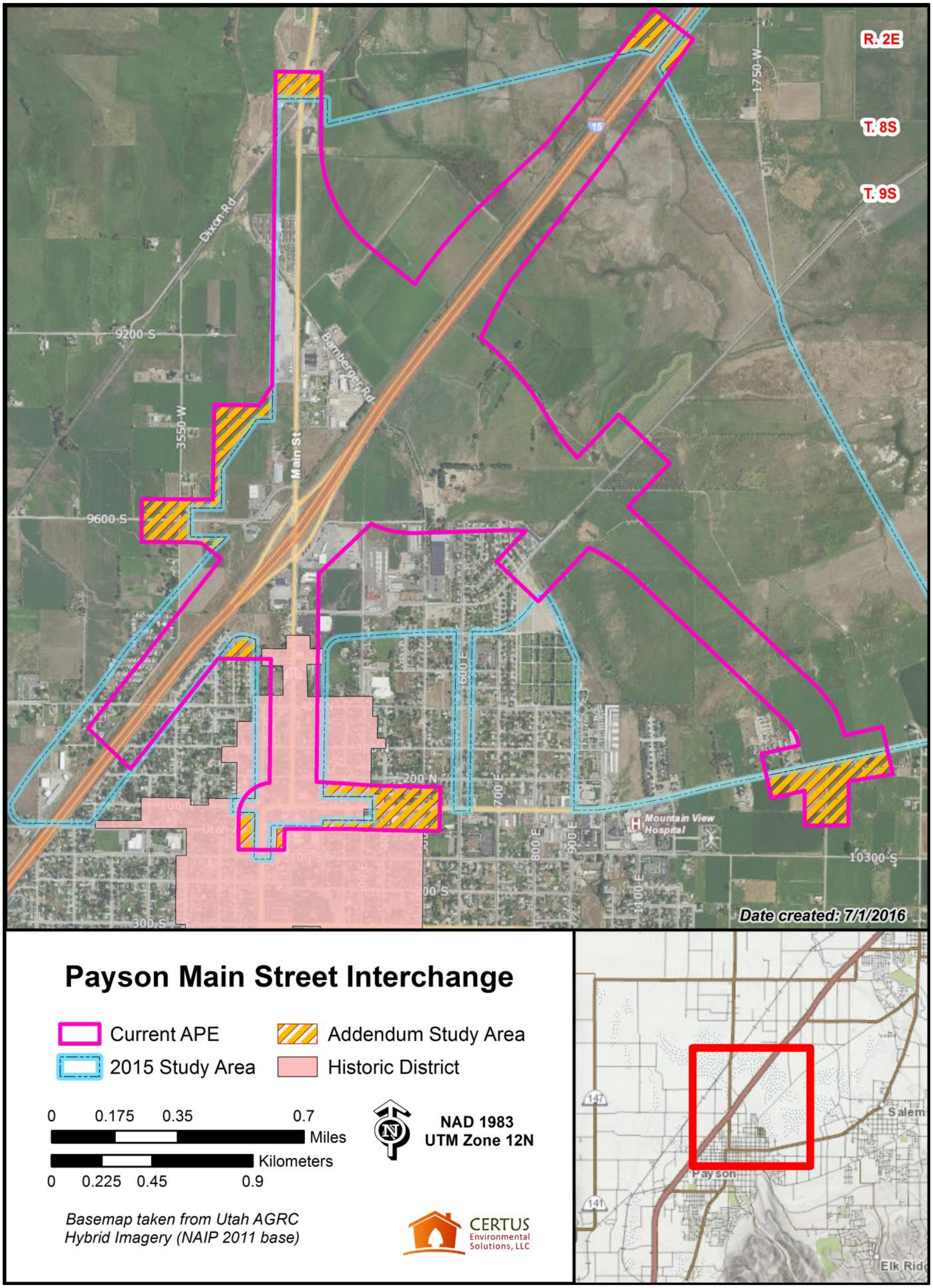

Figure 4. Results; I-15 Payson Main Street Interchange Project—Addendum Survey; Map 1 of 3

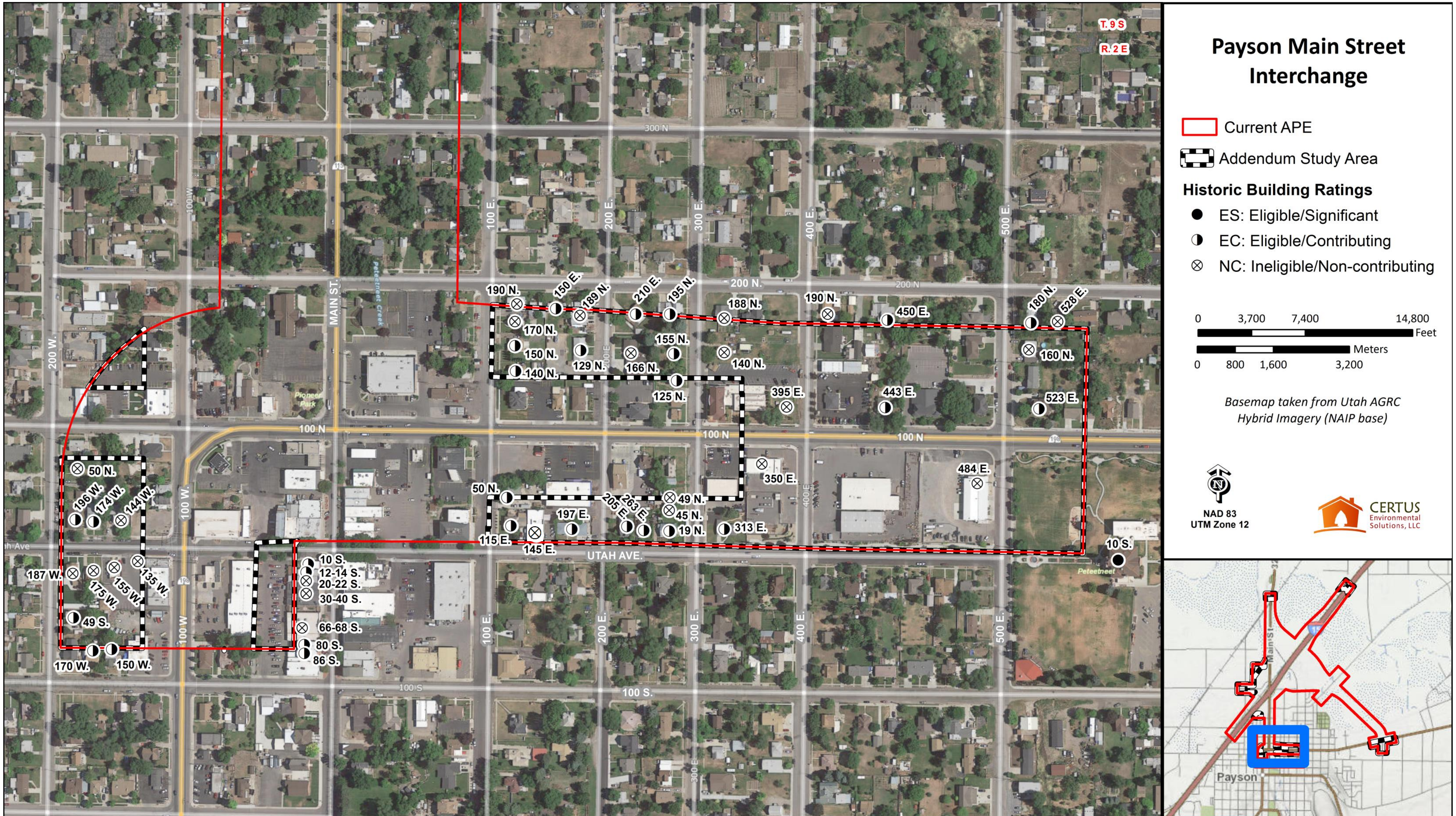

Figure 5. Documented resources; I-15 Payson Main Street Interchange Project—Addendum Survey; Map 2 of 3

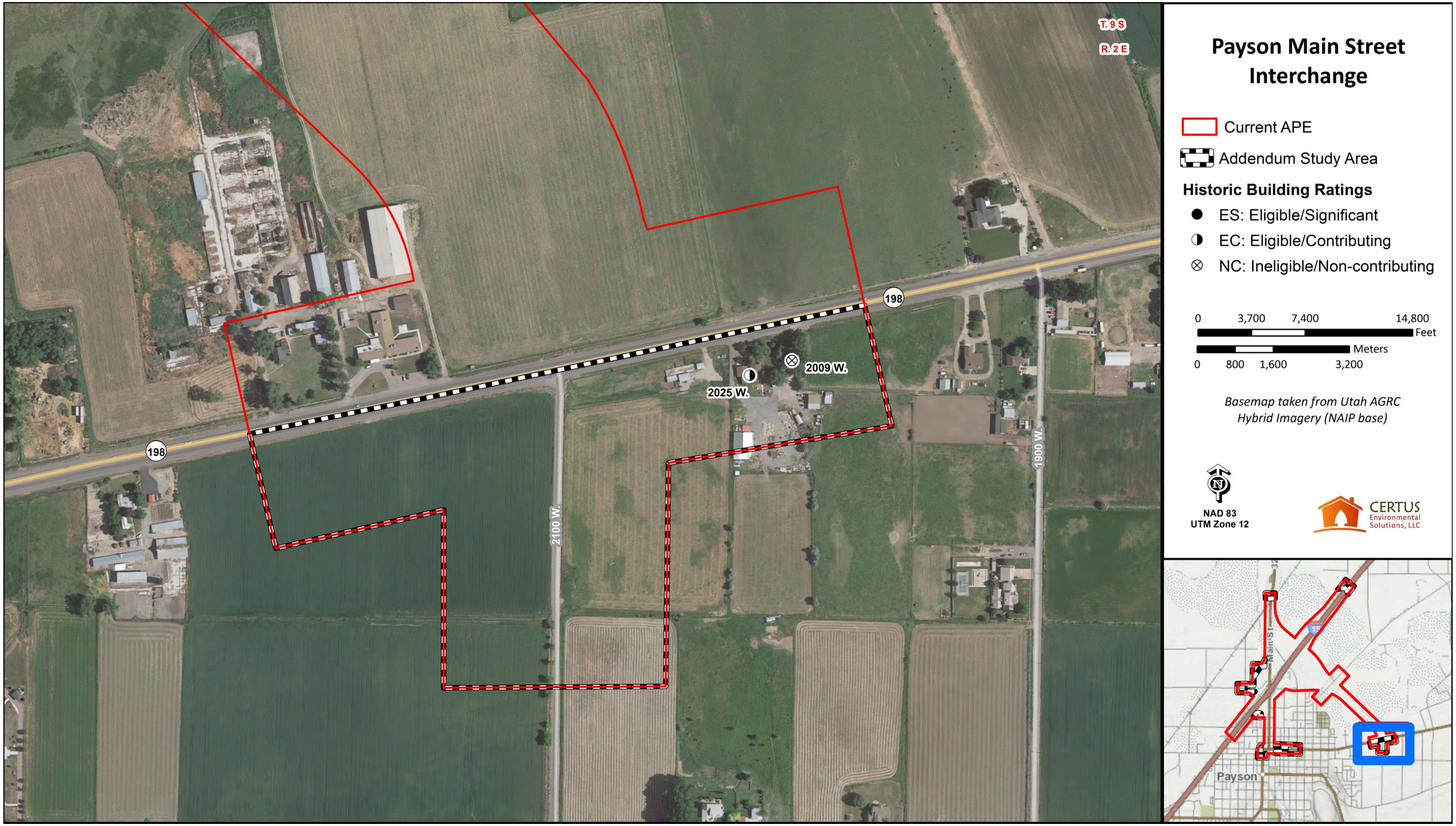

Figure 6. Documented resources; I-15 Payson Main Street Interchange Project—Addendum Survey; Map 3 of 3

Table 1. Historical structures in the Addendum Study Area—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
50 N. 100 E.	c. 1930	1-story Bungalow single-family dwelling exhibiting Bungalow and Arts & Crafts styles. Clad in regular brick and shiplap siding. No notable alterations. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
140 N. 100 E.	c. 1928	1-story Bungalow single-family dwelling exhibiting Bungalow and Period Revival: Other styles. Clad in striated brick. Notable alterations include modern windows in several openings. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
150 N. 100 E.	c. 1922	1-story Bungalow single-family dwelling exhibiting Bungalow and Prairie School styles. Clad in regular brick. Notable alterations include modern windows throughout. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the Addendum Study Area—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
170 N. 100 E.	c. 1941	1.5-story Period Cottage single-family exhibiting Period Revival: Other style. Clad in plaster. Notable alterations include the plaster cladding, a dormer addition, and changes to fenestration. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
190 N. 100 E.	c. 1940	1-story WWII-Era Cottage single-family dwelling exhibiting Minimal Traditional and Other styles. Clad in narrow vinyl siding. Notable alterations include the modern cladding, changes to window openings, modern windows throughout, and several additions of unknown age. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
350 E. 100 N.	c. 1970	1-story Other Commercial/Public building exhibiting Victorian Eclectic and Other styles. Clad in brick veneer (brick: other), sandstone veneer, and synthetic stucco. Notable alterations include a complete modern exterior remodel. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the Addendum Study Area—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
395 E. 100 N.	c. 1938	1-story Period Cottage single-family dwelling exhibiting Period Revival: Other style. Clad in synthetic stucco. Notable alterations include the modern cladding and modern windows in several openings. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	
443 E. 100 N.	c. 1899	1.5-story Other Residential Type single-family dwelling exhibiting Classical: Other and Minimal Traditional styles. Clad in regular brick. Notable alterations include modern windows in several openings with minor changes to openings and a ca. 1940s façade addition. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
484 E. 100 N.	c. 1950	1-story Service Bay/Business building exhibiting Post-WWII: Other style. Clad in concrete block and aluminum sheet. Notable alterations include modern windows in several openings and a large out-of-period addition. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the Addendum Study Area—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
523 E. 100 N.	c. 1915	2-story Bungalow single-family dwelling exhibiting Prairie School and Other styles. Clad in regular brick. Notable alterations include modern windows throughout. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
150 W. 100 S.	c. 1910	1-story Crosswing single-family dwelling exhibiting Victorian Eclectic style. Clad in regular brick. Notable alterations include a rear addition (likely in-period), modern windows throughout, and a carport addition. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
170 W. 100 S.	c. 1942	1-story Early Ranch single-family dwelling exhibiting Early Ranch and Minimal Traditional styles. Clad in striated brick. Notable alterations include modern windows throughout with a possible bay window addition. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the Addendum Study Area—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
129 N. 200 E.	c. 1966	1-story Ranch (w/ carport) single-family dwelling exhibiting Ranch/Rambler style. Clad in Roman brick, stone veneer, and vinyl siding. Notable alterations include modern windows throughout and minor use of vinyl siding on gable walls. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
166 N. 200 E.	c. 1968	1-story Ranch (w/ garage) single-family dwelling exhibiting Ranch/Rambler style. Clad in Roman brick and synthetic stucco. Notable alterations include modern windows throughout and enclosure of the attached garage. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	
189 N. 200 E.	c. 1930	1.5-story Other Residential Type single-family dwelling exhibiting Other style. Clad in brick veneer (brick: other) and vinyl siding. Notable alterations include the modern cladding, changes to fenestration, and enclosure of an attached garage. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the Addendum Study Area—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
150 E. 200 N.	c. 1948	1-story Early Ranch single-family dwelling exhibiting Minimal Traditional and Early Ranch styles. Clad in striated brick. Notable alterations include modern windows throughout. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
210 E. 200 N.	c. 1959	1-story Ranch single-family dwelling exhibiting Ranch/Rambler style. Clad in striated brick. Notable alterations include modern windows throughout. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
450 E. 200 N.	c. 1929	2-story Other Residential Type single-family dwelling exhibiting Minimal Traditional and Early Ranch styles. Clad in striated brick and vinyl. Notable alterations include the minor use of vinyl siding, a carport addition, a small second story on the rear part of the roof. One contributing and one non-contributing outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the Addendum Study Area—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
528 E. 200 N.	c. 1933	1-story Other Residential Type single-family dwelling exhibiting Other style. Clad in vinyl siding and stone veneer. Notable alterations include a modern exterior remodel with new cladding and windows. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
50 N. 200 W.	c. 1919	1-story Bungalow single-family dwelling exhibiting Bungalow and Other styles. Clad in aluminum siding. Notable alterations include the modern cladding, modern windows in many openings, and ca. 1950s porch posts. One contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	
49 S. 200 W.	c. 1950	1-story WWII-Era Cottage single-family dwelling exhibiting Minimal Traditional style. Clad in striated brick. Notable alterations include modern windows in several openings and a front porch deck addition. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the Addendum Study Area—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
19 N. 300 E.	c. 1911	1.5-story Bungalow single-family dwelling exhibiting Arts & Crafts style. Clad in regular brick and shiplap siding. Notable alterations include modern windows throughout with minor opening changes on a side elevation. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
45 N. 300 E.	c. 1940	1-story WWII-Era Cottage single-family dwelling exhibiting Minimal Traditional style. Clad in narrow vinyl siding. Notable alterations include the modern cladding and modern windows throughout. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
49 N. 300 E.	c. 1941	1-story WWII-Era Cottage single-family dwelling exhibiting Minimal Traditional and Other styles. Clad in plaster and brick veneer (brick: other). Notable alterations include changes to cladding and fenestration. One contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the Addendum Study Area—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
125 N. 300 E.	c. 1909	1.5-story Bungalow single-family dwelling exhibiting Arts & Crafts style. Clad in drop siding and shingle siding. Notable alterations include modern windows in several openings. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
140 N. 300 E.	c. 1938	1-story Period Cottage single-family dwelling exhibiting Period Revival: Other and Minimal Traditional styles. Clad in narrow vinyl siding. Notable alterations include the modern cladding and modern windows in several original openings. Two non-contributing outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
155 N. 300 E.	c. 1910	1-story Hall-Parlor single-family dwelling exhibiting Other style. Clad in historical plaster. Notable alterations include a Period Revival style porch. One contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the Addendum Study Area—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
188 N. 300 E.	c. 1898	1-story Bungalow single-family dwelling exhibiting Bungalow and Arts & Crafts styles. Clad in historical plaster and vinyl siding. Notable alterations include modern windows throughout and the modern vinyl cladding. Inverted porch columns are unusual and may be a post-construction alteration. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
195 N. 300 E.	c. 1893	2-story Central Passage single-family dwelling exhibiting Greek Revival style. Clad in historical plaster. Notable alterations include an in-period rear addition, an out-of-period carport addition, and modern windows in many openings. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
190 N. 400 E.	c. 1890	1-story Other Residential Type single-family dwelling exhibiting Other style. Clad in synthetic stucco. Notable alterations include the modern cladding, modern windows throughout, and metal roofing on the front porch cover. One contributing and two non-contributing outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the Addendum Study Area—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
160 N. 500 E.	c. 1948	2-story Other Residential Type single-family dwelling exhibiting Other style. Clad in wood sheet (T-1-11) and clapboard siding. Notable alterations include the wood sheet siding, numerous large additions, and probable changes to fenestration. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
180 N. 500 E.	c. 1964	1-story Ranch (w/ garage) single-family dwelling exhibiting Ranch/Rambler style. Clad in striated brick. No notable alterations. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
10 S. 600 E.	c. 1900	Peteetneet School. 3.5-story School Block building exhibiting Victorian Romanesque and Post-WWII: Other styles. Clad in regular brick and sandstone. Notable alterations include a ca. 1950s addition and modern windows in several openings. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	ES/Eligible Individually listed on NRHP	

Table 1. Historical structures in the Addendum Study Area—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
10 S. Main St.	c. 1900	1-story 1-Part Block commercial building exhibiting Period Revival (English Tudor Revival) style. Clad in striated brick. Notable alterations include a ca. 1930s exterior remodel and modern windows in several openings. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Currently listed as contributing to Payson Historic District	
12-14 S. Main St.	c. 1902	2-story 2-Part Block commercial building exhibiting Victorian Eclectic style. Clad in regular brick, rock-faced brick, and synthetic stucco. Notable alterations include in- and out-of-period façade changes and modern windows throughout. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Currently listed as contributing to Payson Historic District	
20-22 S. Main St.	c. 1900	2-story 2-Part Block commercial building exhibiting Victorian: Other style. Clad in brick veneer (brick: other) and plaster. Notable alterations include a façade remodel and modern windows throughout. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible Currently listed as contributing to Payson Historic District	

Table 1. Historical structures in the Addendum Study Area—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
30-40 S. Main St.	c. 1890	1-story 1-Part Block commercial building exhibiting Late 20th Century: Other style. Clad in synthetic stucco and marble panels. Notable alterations include the modern cladding. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible Currently listed as contributing to Payson Historic District	
66-68 S. Main St.	c. 1934	2-story 2-Part Block commercial building exhibiting Other style. Clad in synthetic stucco, various veneers, and regular brick. Notable alterations include a complete façade remodel with changes in cladding and fenestration. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible Currently listed as non-contributing to Payson Historic District	
80 S. Main St.	c. 1891	2-story 2-Part Block commercial building exhibiting Victorian Eclectic style. Clad in regular brick, plaster, and sandstone. Notable alterations include in-period façade changes. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Currently listed as contributing to Payson Historic District	

Table 1. Historical structures in the Addendum Study Area—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
86 S. Main St.	c. 1891	2-story 2-Part Block commercial building exhibiting Victorian Eclectic style. Clad in regular brick, striated brick, and sandstone. Notable alterations include modern windows in many openings, minor changes to windows openings, and cladding changes to the lower façade. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	
2009 W. SR-198	c. 1914	1-story Crosswing single-family dwelling exhibiting Victorian: Other style. Clad in novelty-style vinyl siding. Notable alterations include the modern cladding, modern windows throughout, and enclosure of the eave returns. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible	
2025 W. SR-198	c. 1970	1-story Ranch single-family dwelling exhibiting Ranch/Rambler style. Clad in regular brick and vinyl siding. Notable alterations appear limited to minor use of the modern vinyl cladding and modern windows throughout. One contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the Addendum Study Area—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
115 E. Utah Ave.	c. 1900	1.5-story Central-Block-with-Projecting-Bays single-family dwelling exhibiting Victorian Eclectic style. Clad in regular brick, shingle siding, and rock-faced brick. Notable alterations include minor changes to fenestration, modern windows in many openings, and enclosure of the corner porch (likely in-period). No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Currently listed as contributing to Payson Historic District	
145 E. Utah Ave.	c. 1950	1-story 1-Part Block commercial building exhibiting Post-WWII: Other and Late 20th Century: Other (1970s Mansard) styles. Clad in concrete block and ceramic tile. Notable alterations include a 1970s Mansard style awning with metal shingles, the tile veneer, which appears to be a post-construction addition, and minor changes to fenestration. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	NC/Ineligible Currently listed as contributing to Payson Historic District	
197 E. Utah Ave.	c. 1956	1-story Ranch single-family dwelling exhibiting Ranch/Rambler style. Clad in striated brick. Notable alterations include modern windows throughout. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the Addendum Study Area—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
205 E. Utah Ave.	c. 1923	2-story Period Cottage single-family dwelling exhibiting Period Revival: Other style. Clad in regular brick and plaster. Notable alterations include in-period additions. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Currently listed as contributing to Payson Historic District	
263 E. Utah Ave.	c. 1925	1-story Clipped Gable Cottage single-family dwelling exhibiting Clipped Gable Cottage style. Clad in striated brick and tongue-and-groove siding. Notable alterations include modern windows throughout with some minor changes to one or more openings. One contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Currently listed as contributing to Payson Historic District	
313 E. Utah Ave.	c. 1961	1.5-story Split Level (w/ carport) single-family dwelling exhibiting Split Level style. Clad in Roman brick and original aluminum siding. No notable alterations. No outbuildings were observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible	

Table 1. Historical structures in the Addendum Study Area—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
135 W. Utah Ave.	c. 1950	1-story 1-Part Block commercial building exhibiting Other style. Clad in wood sheet (T-1-11) and concrete block. Notable alterations include a false Victorian front and changes to window openings. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible Currently listed as non-contributing to Payson Historic District	
144 W. Utah Ave.	c. 1910	2-story Central Passage single-family dwelling exhibiting Victorian Eclectic and Other styles. Clad in shiplap siding, shingle siding, and wood sheet (T-1-11). Notable alterations include changes to the cladding and fenestration. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible Currently listed as contributing to Payson Historic District	
155 W. Utah Ave.	c. 1944	1-story 1-Part Block commercial building exhibiting Late 20th Century style. Clad in synthetic stucco. Notable alterations include the modern cladding, changes to window openings, and a modern awning on the primary façade. No outbuildings were observed. **Historic Boundary:** N/A	NC/Ineligible Currently listed as contributing to Payson Historic District	

Table 1. Historical structures in the Addendum Study Area—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
174 W. Utah Ave.	c. 1919	1-story Bungalow single-family dwelling exhibiting Bungalow and Prairie School styles. Clad in striated brick and plaster. Notable alterations include modern windows in several openings and a basement entry addition on a side elevation. One contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Currently listed as contributing to Payson Historic District	
175 W. Utah Ave.	c. 1931	1-story WWII-Era Cottage (w/ garage) single-family dwelling exhibiting Minimal Traditional style. Clad in regular brick and stucco. Notable alterations include minor changes to fenestration, enclosure of the attached garage, and a possible post-construction chimney addition. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible Currently listed as contributing to Payson Historic District	
187 W. Utah Ave.	c. 1935	1-story Bungalow single-family dwelling exhibiting Bungalow and Clipped Gable Cottage styles. Clad in regular brick, stone veneer, and vinyl siding. Notable alterations include a second story addition, modern stone veneer and vinyl cladding, modern windows through with some changes to window openings. One non-contributing outbuilding was observed. **Historic Boundary:** N/A	NC/Ineligible	

Table 1. Historical structures in the Addendum Study Area—I-15 Payson Main Street Interchange Project

Address	Year Built	Description and Historic Boundary	SHPO Rating/ NRHP Eligibility	Photo
196 W. Utah Ave.	c. 1920	1-story Bungalow single-family dwelling exhibiting Bungalow and Prairie School styles. Clad in regular brick. Notable alterations limited to modern windows in many openings. One non-contributing outbuilding was observed. **Historic Boundary:** Current legal parcel boundary	EC/Eligible Currently listed as contributing to Payson Historic District	

SUMMARY AND CONCLUSIONS

Certus conducted a supplemental selective reconnaissance-level structures inventory for the I-15 Payson Main Street Interchange Project in Payson, Utah County, Utah, in support of UDOT's proposed interchange improvements. The assessment resulted in the identification of 55 properties with historical structures. Portions of the Payson (National R0of the properties receive SHPO ratings of "ES" or "EC" and be considered eligible for the NRHP. One of these properties—the Peteetneet School—is individually listed on the NRHP while several others are listed as contributing features of the Payson Historic District. Certus recommends the remaining 25 properties receive SHPO ratings of "NC" and be considered ineligible for the NRHP. **Table 2** summarizes these recommendations.

Table 2. Summary of Historic Structures and National Register Eligibility Recommendations

Address	SHPO Rating	NRHP Eligibility
50 N. 100 E.	EC	Eligible
140 N. 100 E.	EC	Eligible
150 N. 100 E.	EC	Eligible
170 N. 100 E.	NC	Ineligible
190 N. 100 E.	NC	Ineligible
350 E. 100 N.	NC	Ineligible
395 E. 100 N.	NC	Ineligible
443 E. 100 N.	EC	Eligible
484 E. 100 N.	NC	Ineligible
523 E. 100 N.	EC	Eligible
150 W. 100 S.	EC	Eligible
170 W. 100 S.	EC	Eligible
129 N. 200 E.	EC	Eligible
166 N. 200 E.	NC	Ineligible
189 N. 200 E.	NC	Ineligible
150 E. 200 N.	EC	Eligible
210 E. 200 N.	EC	Eligible
450 E. 200 N.	EC	Eligible
528 E. 200 N.	NC	Ineligible
50 N. 200 W.	NC	Ineligible
49 S. 200 W.	EC	Eligible
19 N. 300 E.	EC	Eligible
45 N. 300 E.	NC	Ineligible
49 N. 300 E.	NC	Ineligible
125 N. 300 E.	EC	Eligible
140 N. 300 E.	NC	Ineligible
155 N. 300 E.	EC	Eligible
188 N. 300 E.	NC	Ineligible
195 N. 300 E.	EC	Eligible
190 N. 400 E.	NC	Ineligible
160 N. 500 E.	NC	Ineligible
180 N. 500 E.	EC	Eligible
10 S. 600 E.	ES[3]	Eligible
10 S. Main St.	EC[1]	Eligible

Table 2. Summary of Historic Structures and National Register Eligibility Recommendations

Address	SHPO Rating	NRHP Eligibility
12-14 S. Main St.	EC[1]	Eligible
20-22 S. Main St.	NC[2]	Ineligible
30-40 S. Main St.	NC[2]	Ineligible
66-68 S. Main St.	NC	Ineligible
80 S. Main St.	EC[1]	Eligible
86 S. Main St.	EC	Eligible
2009 W. SR-198	NC	Ineligible
2025 W. SR-198	EC	Eligible
115 E. Utah Ave.	EC[1]	Eligible
145 E. Utah Ave.	NC[2]	Ineligible
197 E. Utah Ave.	EC	Eligible
205 E. Utah Ave.	EC[1]	Eligible
263 E. Utah Ave.	EC[1]	Eligible
313 E. Utah Ave.	EC	Eligible
135 W. Utah Ave.	NC	Ineligible
144 W. Utah Ave.	NC[2]	Ineligible
155 W. Utah Ave.	NC[2]	Ineligible
174 W. Utah Ave.	EC[1]	Eligible
175 W. Utah Ave.	NC[2]	Ineligible
187 W. Utah Ave.	NC	Ineligible
196 W. Utah Ave.	EC[1]	Eligible

[1] Listed as part of Payson Historic District
[2] Listed as part of Payson Historic District but recommended ineligible due to alterations
[3] Individually listed on NRHP

Anticipated effects on the historic properties from the proposed interchange project were not known to Certus at the time of this report. Those effects will be assessed by UDOT and documented in a determination of eligibility and finding of effect (DOE-FOE) letter.

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APPENDIX B
TECHNICAL REPORTS

WETLAND AND WATERS OF THE U.S. DELINEATION I-15 PAYSON MAIN STREET INTERCHANGE ENVIRONMENTAL IMPACT STATEMENT

Wetland and Waters of the U.S. Delineation

I-15 Payson Main Street Interchange EIS

Utah County, Utah

April 2017

Wetland Resources

Wetland and Waters of the U.S. Delineation

I-15 Payson Main Street Interchange EIS

UDOT Project No. F-I15-6(214)251; PIN 10263

Prepared for:

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Region 3
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Orem, Utah 84057

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April 2017

CONTENTS

A. INTRODUCTION

A Wetland and Waters of the U.S. delineation was conducted in October 2015, May 2016, and April 2017 for a potential new interchange on Interstate 15 (I-15) in Payson, Utah (Appendix A: Map 1). The delineation was prepared for Lochner Engineering who is providing environmental and engineering services for the Utah Department of Transportation on the project. The project area is located in the vicinity of the existing Payson Main Street interchange on I-15, and includes mostly agricultural lands with a few residential areas. To get to the project area from Salt Lake City, travel south on I-15 to the Payson Main Street exit at milepost 251.

The environmental review, consultation and other actions required by applicable Federal environmental laws for this project are being or have been carried-out by UDOT pursuant to 23 USC 327 and a Memorandum of Understanding dated January 17, 2017, and executed by FHWA and UDOT.

B. METHODOLOGY

Wetland Resources surveyed the project area for wetlands, natural stream channels, canals, and ditches on October 12 through 14, 2015, and May 9 through 11, 2016. There had not been any significant recent precipitation, temperatures were normal, and northern Utah was experiencing mild drought conditions during the 2015 and 2016 fieldwork. Northern Utah was not experiencing any drought conditions during the 2017 fieldwork.

Wetlands

The wetland delineation was completed in accordance with the U.S. Army Corps of Engineers' 1987 Wetland Delineation Manual (USACOE 1987) and the Arid West Supplement (USACOE 2008). All potential wetland areas were checked for wetland indicators. The following procedure was implemented at each sample point:

1. The herbaceous and shrub plant species within a five foot radius of the sample point were recorded, as directed in the 1987 Manual (USACOE 1987). A 30 foot radius was used for tree species (USACOE 1987). The percent of relative cover for each species was determined by estimating areal cover. The indicator status of each species was determined by using the National Wetland Plant List: Arid West (Lichvar 2016). If a plant species comprised at least 20 percent of the total relative cover in its stratum, it was considered to be a dominant plant species. If more than 50 percent of the dominant plant species had an indicator status of obligate (OBL), facultative wetland (FACW), or facultative (FAC), the sample point met the wetland vegetation parameter.

2. A 20 inch-deep soil pit was dug at each sample point to assess soil characteristics. Soil color, texture, and moisture at different depths within the soil profile were recorded. Color was determined by comparing a moistened soil sample with the Munsell Soil Color Charts. If the soil characteristics met the hydric soil criteria provided in the Arid West Supplement and the Field Indicators of Hydric Soils (NRCS 2006) manuals, the sample point met the wetland soils parameter.

3. Each soil pit was examined to determine correlation with the wetland hydrology criteria. Field indicators of periodic saturation and/or inundation include redox features, drainage patterns in the wetland, sulfur odor, gleyed soils, soils with low chroma, sediment deposits, salt crust, surface soil cracks, or water stained leaves. If at least one primary indicator or two secondary indicators were present, the sample point met the wetland hydrology parameter.

If a sample point met all three parameters, it was classified as occurring in a wetland. Wetland boundaries were surveyed by Wetland Resources using a sub-meter accuracy Trimble GPS unit.

Waters of the U.S. Channels

The Waters of the U.S. channel survey was conducted in accordance with the Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (Lichvar and McColley 2008), and the Updated Datasheet for the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States (Curtis and Lichvar 2010). The Waters of the U.S. channels were surveyed using a sub-meter GPS unit. OHWM data sheets were completed for Waters of the U.S. channels that were not ditches.

Irrigation Ditches and Canals

Irrigation ditches and canals were surveyed using a sub-meter GPS unit, but no OHWM data sheets were completed for these features. Recent EPA and Corps guidance states that non-tidal ditches (including roadside and agricultural ditches) are not Waters of the U.S. unless they have a bed, bank, and ordinary high water mark; connect directly or through other tributaries to a traditional navigable or interstate water; and have at least one of the following four characteristics:

- Natural streams that have been altered (e.g., channelized, straightened or relocated);
- Ditches that have been excavated in waters of the U.S., including wetlands;
- Ditches that have relatively permanent flowing or standing water; or
- Ditches that connect two or more jurisdictional waters of the U.S.

C. RESULTS AND DISCUSSION

Wetlands

The 968-acre project area contains a total of 37.9 acres of wetland. Most of the wetlands within the project area are Palustrine Emergent wetlands, with one small area of Palustrine Scrub Shrub wetland. There are also numerous ditches and irrigation canals within the project area, and one perennial stream. Table 1 provides the wetland acreages, and Table 2 lists all of the wetland plant species identified within the project corridor. Maps showing the project area and the surveyed wetland and Waters of the U.S. boundaries are provided in Appendix A. Photos of the project area are provided in Appendix B, and data sheets supporting the wetland boundaries are provided in Appendix C. Soil descriptions for all soils in the project area is provided in Appendix D. A description of each of the wetland areas follows:

W1 - This Palustrine Emergent wetland occurs in the borrow ditch between I-15 and an abandoned railroad track. The wetland is dominated by Baltic rush with some saltgrass, teasel, reed canary grass, and common reed. The soils are classified as Benjamin silty clay and were saturated in the upper profile at the time of the delineation. The soils had a matrix color of 10YR5/2 with 2% redox, meeting the criteria for depleted matrix. Hydrology for the wetland appears to be provided by a high water table associated with the lowlands around Beer Creek, where there is an extensive wetland complex. The wetlands are connected to the larger wetland complex by culverts under the railroad grade. Map 4; Sample points 1 through 4; Photo 1.

W2 - This Palustrine Emergent wetland is part of a large wetland complex that occurs in the lowlands south of Beer Creek and west of the abandoned railroad tracks. The wetland supports Baltic rush, Nebraska sedge, beaked sedge, scratchgrass, meadow barley, spikerush, saltgrass, western seepweed, and clustered field sedge. The soils are classified as mostly Payson silty clay loam and were saturated in the upper profile at the time of the delineation. The soils had a matrix color of 10YR5/1, meeting the criteria for depleted matrix. These wetlands extend to the east and west a considerable distance and are supported by a high water table and several groundwater seeps. The wetlands are adjacent to Beer Creek and an irrigation ditch (D2). Maps 4 and 5; Sample points 5 through 16; Photos 2 and 3.

W3 - This Palustrine Emergent wetland is part of the same large wetland complex as Wetland W2, but W3 occurs on the east side of I-15 (W2 is on the west side of I-15 and west of the railroad tracks). The wetland supports Baltic rush, Nebraska sedge, beaked sedge, scratchgrass, meadow barley, spikerush, saltgrass, and clustered field sedge. The soils include Ironton loam, Kirkham silty clay loam, Benjamin silty clay, and Payson silty clay loam. Most of the soils in the wetland complex were either inundated or at least saturated in the upper profile at the time of the delineation. The soils had a matrix color of 10YR2/1 or 10YR4/1 with no redox, which does not meet any of the typical hydric soil indicators. The soils are not particularly alkaline, but based on the wetland vegetation and the saturated soil conditions during the dry season, the soils meet the definition of a hydric soil. These wetlands extend to the east and west a considerable distance and are supported by a high water table and several groundwater seeps. The wetlands are adjacent to Beer Creek and an irrigation ditch (D2). Maps 4 and 5; Sample points 44 through 57; Photos 4 and 5.

W4 - This Palustrine Emergent wetland includes a cattail marsh surrounded by wet meadow vegetation on slopes that are a groundwater discharge zone. The wetland is dominated by cattails in the middle, with the surrounding slopes supporting Baltic rush, Nebraska sedge, hardstem bulrush, spikerush, rabbitfoot grass, and Kentucky bluegrass. The soils are classified as Vineyard fine sandy loam and were saturated near the surface at the time of the delineation. The soils at the south end of the wetland had a matrix color of 10YR3/2 with 5% redox, meeting the criteria for redox dark surface. The soils at the north end of the wetland had a matrix color of 10YR2/1 with no redox, which does not meet any of the typical hydric soil indicators. The soils are not particularly alkaline, but based on the wetland vegetation and the saturated soil conditions during the dry season, the soils meet the definition of a hydric soil. Hydrology for the wetland is provided by the groundwater discharge zone on the surrounding slopes, and by irrigation ditch D2 along its northern boundary. The wetlands are adjacent to an irrigation ditch. Map 6; Sample points 25 through 28 and 40 through 43; Photo 6.

W5 - This Palustrine Emergent wetland occurs in a depression around a groundwater seep. The wetland is dominated by Olney threesquare, spikerush, cursed buttercup, and rabbitfoot grass. The soils are classified as Ironton loam and were inundated approximately 1 inch at the time of the delineation. The soils had a matrix color of 10YR3/1 with no redox, which does not meet any of the typical hydric soil indicators. The soils are not particularly alkaline, but based on the wetland vegetation and the inundated soil conditions during the dry season, the soils meet the definition of a hydric soil. Hydrology for the wetland is provided by the groundwater seep. The wetlands are confined to a closed depression with no surface connection to other Waters of the U.S. Map 7; Sample points 38 and 39; Photo 7.

W6 - This Palustrine Emergent wetland occurs in a depression around a groundwater seep. The wetland is dominated by Olney threesquare, spikerush, and Nebraska sedge. The soils are classified as Ironton loam and were saturated near the surface at the time of the delineation. The soils had a matrix color of 10YR3/1 with no redox, which does not meet any of the typical hydric soil indicators. The soils are not particularly alkaline, but based on the wetland vegetation and the inundated soil conditions during the dry season, the soils meet the definition of a hydric soil. Hydrology for the wetland is provided by the groundwater seep. The wetlands are connected to irrigation ditch D2 via a wetland drainage swale. Map 7; Sample points 36 and 37; Photo 8.

W7 - This Palustrine Emergent wetland occurs in a depression around a groundwater seep. The wetland is dominated by common threesquare, spikerush, rabbitfoot grass, and watercress. The soils are classified as Ironton loam and were inundated in some areas and saturated in the upper profile in other areas at the time of the delineation. The soils had a matrix color of 10YR3/1 with no redox, which does not meet any of the typical hydric soil indicators. The soils are not particularly alkaline, but based on the wetland vegetation and the inundated soil conditions during the dry season, the soils meet the definition of a hydric soil. Hydrology for the wetland is provided by the groundwater seep. The wetlands are connected to irrigation ditch D2 via a wetland drainage swale. Map 7; Sample points 34 and 35; Photo 9.

W8 - This Palustrine Emergent wetland occurs in a depression around an artesian well pipe. The wetland is dominated by Baltic rush, common threesquare, spikerush, rabbitfoot grass, reed canary grass, and hardstem bulrush. The soils are classified as Vineyard fine sandy loam and were saturated in the upper profile at the time of the delineation. The soils had a matrix color of 10YR3/1 with 5% redox, which meets the criteria for redox dark surface. Hydrology for the wetland is provided by the artesian well pipe. The wetlands are connected to irrigation ditch D6 via a wetland drainage swale. Map 8; Sample points 31 and 32; Photo 10.

W9 - This Palustrine Emergent wetland occurs in a grazed pasture near the south end of the project area. The wetland supports Baltic rush, common threesquare, spikerush, rabbitfoot grass, Nebraska sedge, watercress, redtop, scratchgrass, saltgrass, reed canary grass, and foxtail barley. The soils are classified as Bramwell silty clay loam and were saturated in the upper profile at the time of the delineation. The soils had a matrix color of 10YR6/2, which meets the criteria for depleted matrix. Hydrology for the wetland appears to be provided by a groundwater discharge zone on the slopes along the southern boundary of the wetland. The wetlands are connected to irrigation ditch D5 and D6. Map 8; Sample points 29 and 30; Photos 11 and 12.

W10 - This Palustrine Emergent wetland occurs in the borrow ditch on the east side of I-15. The wetland supports rabbitfoot grass, Nebraska sedge, redtop, and reed canary grass. The soils are classified as McBeth silt loam and were dry at the time of the delineation. The soils had a matrix color of 10YR2/2 with 5% redox, which meets the criteria for redox dark surface, and exhibited oxidized rhizospheres, indicating wetland hydrology. Hydrology for the wetland appears to be provided by stormwater runoff from I-15 and the adjacent pastures ponding in this low area of the landscape. The wetland occurs in a closed depression with no culvert outlet. Map 11; Sample points 23 and 24; Photo 13.

W11 - This Palustrine Emergent wetland occurs in a depression adjacent to Main Street. The wetland is dominated by cattails, with some common reed, willow herb, and beaked sedge. The soils are classified as McBeth silt loam and were saturated at the surface at the time of the delineation. The soils had a matrix color of 10YR3/1 and emitted a hydrogen sulfide odor when excavated, which meets the criteria for hydric soils and wetland hydrology. The source of hydrology for this wetland is unclear, but it may receive stormwater runoff from the adjacent Payson wastewater treatment facility. The wetland occurs in a manmade depression with no outlet. Map 11; Sample points 19 and 20; Photo 14.

W12 - This Palustrine Emergent wetland occurs around the periphery of a depression that is mostly open water. The wetland fringe Baltic rush, Nebraska sedge, spikerush, and spearmint. The soils are classified as Sunset loam, and were saturated at the surface at the time of the delineation. The soils had a matrix color of 10YR2/1 and emitted a hydrogen sulfide odor when excavated, which meets the criteria for hydric soils and wetland hydrology. The source of hydrology for this wetland is unclear, but it may receive stormwater runoff from the Payson wastewater treatment facility that is piped under Main Street from Wetland W10. The wetland occurs in a depression but there is a culvert outlet that ties into a nearby irrigation ditch. Map 11; Sample points 21 and 22; Photo 15.

W13 - This Palustrine Emergent wetland occurs in a grazed pasture on the west side of Main Street. The wetland supports common threesquare, spikerush, Nebraska sedge, clustered field sedge, and cattails. The soils are classified as Sunset loam and were inundated 1 inch at the time of the delineation. The soils had a matrix color of 10YR2/1 and emitted a hydrogen sulfide odor when excavated, which meets the criteria for hydric soils and wetland hydrology. Hydrology for the wetland appears to be provided by groundwater discharge that may either be natural or may be coming from an old artesian well pipe located on the southern edge of the wetland. The wetland is connected to ditches that eventually connect to Beer Creek. Map 11; Sample points 58 and 59, 80 and 81; Photo 16.

W14 - This Palustrine Emergent and Palustrine Scrub Shrub wetland occurs in a swale between Main Street and the Payson wastewater treatment facility. The wetland supports Baltic rush, common reed, American licorice, and Nebraska sedge. The north end of the wetland supports a dense stand of coyote willow. The soils are classified as Vineyard fine sandy loam and were saturated at the surface at the time of the delineation, with a water table at a depth of 11 inches. The soils had a matrix color of 10YR5/1, which meets the criteria for depleted matrix. Hydrology for the wetland appears to be provided by either a high water table, and/or from runoff from the treatment facility. The wetland occurs in a manmade depression with no outlet. Map 10; Sample points 60 through 62; Photo 17.

W15 - This Palustrine Emergent wetland occurs around a groundwater seep in the middle of a cultivated field. The wetland is dominated by common threesquare, hardstem bulrush, spikerush, Baltic rush, and watercress. The soils are classified as Vineyard fine sandy loam and were inundated at the time of the delineation. The soils had a matrix color of 10YR3/1 and emitted a hydrogen sulfide odor when excavated, which meets the criteria for hydric soils and wetland hydrology. Hydrology for the wetland is provided by the groundwater seep. The wetlands are surrounded on all sides by the cultivated field and do not exhibit a surface connection to any other wetland or Waters of the U.S. Map 10; Sample points 63 and 64; Photo 18.

W16 - This Palustrine Emergent wetland occurs in a swale below an artesian well pipe. The wetland is dominated by spikerush, watercress, and cursed buttercup. The soils are classified as Holdaway silt loam and were saturated at the surface at the time of the delineation. The soils had a matrix color of 10YR4/2 with 5% redox, which meets the criteria for depleted matrix. Hydrology for the wetland is provided by the artesian well pipe. The wetlands are connected to irrigation ditches that eventually connect to Beer Creek. Map 9; Sample points 65 and 66; Photo 19.

W17 - This Palustrine Emergent wetland occurs in a depression around an artesian well pipe. The wetland is dominated by Nebraska sedge and spikerush. The soils are classified as Holdaway silt loam and were saturated at the surface at the time of the delineation. The soils had a matrix color of 10YR4/2 with 5% redox, which meets the criteria for depleted matrix. Hydrology for the wetland is provided by the artesian well pipe. The wetlands are surrounded on all sides by uplands with no surface connection to other Waters of the U.S. Map 9; Sample points 67 and 68; Photo 20.

W18 - This Palustrine Emergent wetland occurs in a depression around an artesian well pipe. The wetland is dominated by common threesquare, spikerush, Nebraska sedge, reed canary grass, and cattails. The soils are classified as Taylorsville silty clay loam and were inundated several inches at the time of the delineation. The soils had a matrix color of 10YR4/2 with 5% redox, which meets the criteria for depleted matrix. Hydrology for the wetland is provided by the artesian well pipe. The wetlands are surrounded on all sides by uplands with no surface connection to other Waters of the U.S. Map 9; Sample points 69 and 70; Photo 21.

W19 - This Palustrine Emergent wetland occurs in a depression around an artesian well pipe. The wetland is dominated by watercress, Nebraska sedge, and common threesquare. The soils are classified as Ironton loam and were inundated several inches at the time of the delineation. The soils had a matrix color of 10YR3/1 and emitted a hydrogen sulfide odor when excavated, which meets the criteria for hydric soils and wetland hydrology. Hydrology for the wetland is provided by the artesian well pipe. The wetlands are surrounded on all sides by uplands with no surface connection to other Waters of the U.S. Map 6; Sample points 74 and 75; Photo 22.

W20 - This Palustrine Emergent wetland occurs in a grazed pasture on the west side of Main Street. The wetland supports Baltic rush, common threesquare, spikerush, Nebraska sedge, and clustered field sedge. The soils are classified as McBeth silt loam and were inundated in some areas and saturated near the surface in other areas at the time of the delineation. The soils had a matrix color of 10YR2/1 and emitted a hydrogen sulfide odor when excavated, which meets the criteria for hydric soils and wetland hydrology. Hydrology for the wetland appears to be provided by a high water table, likely influence by the perennial flow entering the wetland from ditch D-11. The wetland is connected to ditches that eventually connect to Beer Creek. Map 10; Sample points 76 through 79; Photos 23 and 24.

No examples of interstate or foreign commerce were observed or documented in the project area. Much of the project area is used for agricultural purposes, but it is unknown whether any of the landowners are engaging in interstate or foreign commerce. The project area is all private land, so there is no recreation occurring by interstate or foreign travelers.
The uplands in the project area are dominated by tall wheatgrass, meadow fescue, strawberry clover, Canada thistle, saltgrass, and field brome. A complete list of upland species identified in the project area can be found in Table 3. The soils in the upland areas were dry and did not exhibit any indicators of hydric soil or wetland hydrology.

Table 1. Wetland Acreages

Wetland Number	PEM Wetland (acres)	PSS Wetland (acres)	Lat/Long
W-1	1.162	0	40.07438/-111.71459
W-2	9.239	0	40.07306/-111.71672
W-3	13.471	0	40.07285/-111.71471
W-4	2.833	0	40.05987/-111.71896
W-5	0.218	0	40.05767/-111.71718
W-6	0.491	0	40.05642/-111.71718
W-7	1.105	0	40.05439/-111.71838
W-8	0.102	0	40.05178/-111.70844
W-9	3.132	0	40.05046/-111.70670
W-10	0.078	0	40.05862/-111.72891
W-11	0.105	0	40.05965/-111.73203
W-12	0.016	0	40.06016/-111.73258
W-13	1.202	0	40.06081/-111.73392
W-14	0.538	0.233	40.06372/-111.73194
W-15	0.062	0	40.06604/-111.73172
W-16	0.199	0	40.07081/-111.73244
W-17	0.147	0	40.07094/-111.73334
W-18	0.216	0	40.07172/-111.73328
W-19	0.142	0	40.05767/-111.71582
W-20	3.232	0	40.06373/-111.734096
Total	**37.69**	**0.233**	

Table 2. Wetland plant species identified in the project area.

Botanical Name	Common Name	Indicator Status[1]
Agrostis stolonifera	redtop	FACW
Carex nebrascensis	Nebraska sedge	OBL
Carex praegracilis	clustered field sedge	FACW
Carex rostrata	beaked sedge	OBL
Distichlis spicata	saltgrass	FAC
Eleocharis palustris	spikerush	OBL
Epilobium ciliatum	fringed willowherb	FACW
Hordeum brachyantherum	meadow barley	FACW
Hordeum jubatum	meadow foxtail	FAC
Juncus Balticus	Baltic rush	FACW
Lepidium latifolium	perennial pepperweed	FAC
Mentha spicata	spearmint	FACW
Muhlenbergia asperifolia	scratchgrass	FACW
Nasturtium officinale	watercress	OBL
Phalaris arundinacea	reed canary grass	FACW
Phragmites australis	common reed	FACW
Polypogon monspeliensis	rabbitfoot grass	FACW
Ranunculus sceleratus	cursed buttercup	OBL
Rumex crispus	curly dock	FAC
Salix exigua	coyote willow	FACW
Schoenoplectus acutus	hardstem bulrush	OBL
Schoenoplectus americanus	Olney threesquare	OBL
Schoenoplectus pungens	common threesquare	OBL
Suaeda occidentalis	western seepweed	FACW
Trifolium fragiferum	strawberry clover	FAC
Typha latifolia	common cattail	OBL

Table 3. Upland plant species identified in the project area.

Botanical Name	Common Name	Indicator Status[1]
Agropyron elongatum	tall wheatgrass	UPL
Atriplex micrantha	twoscale saltbush	UPL
Bromus arvensis	field brome	FACU
Bromus inermis	smooth brome	UPL
Bromus tectorum	cheatgrass	UPL
Cardaria draba	whitetop	UPL
Carduus nutans	musk thistle	FACU
Cirsium arvense	Canada thistle	FACU
Convolvulus arvensis	field bindweed	UPL
Descurainia sophia	flixseed tansy mustard	UPL
Festuca pratensis	meadow fescue	FACU
Grindelia squarrosa	curly cup gumweed	FACU
Lactuca serriola	prickly lettuce	FACU
Poa pratensis	Kentucky bluegrass	FAC
Taraxacum officinale	dandelion	FACU

Waters of the U.S. Channels

The project area includes one perennial stream and one small area of open water. Table 4 provides the dimensions of the Waters of the U.S. within the project area, and an OHWM data form is provided for Beer Creek in Appendix E.

C1 – Beer Creek crosses under I-15 in a concrete box culvert. The channel averages 21 feet in width, and from 1 to 3 feet in depth at the OHWM. Beer Creek maintains a perennial flow and is a tributary to Benjamin Slough, which is a tributary to Utah Lake. Map 4; Photo 25.

C2 – This is a small area of unvegetated open water in a man-made stock pond with a wetland fringe (W12). The small pond has a culvert outlet that connects it to an irrigation ditch (D11), but it is an excavated stock pond. Map 11; Photo 15.

Table 4. Dimensions of Waters of the U.S.

Waters of the U.S.	Linear Feet	Acres	Lat/Long
C-1	738	0.352	40.07307/-111.71694
C-2	36	0.014	40.06018/-111.73253
Total	**774**	**0.366**	

Irrigation Ditches and Canals

The project area contains numerous irrigation ditches and canals. Table 5 provides the dimensions of the ditches and canals within the project area, and cross sections of each ditch are provided on Maps 12 and 13. All of the ditches are likely jurisdictional since they support wetland vegetation along their banks and connect with other Waters of the U.S.

D1 - This irrigation ditch averages 6 feet wide and flows south into Beer Creek. The ditch supports a narrow fringe of reed canary grass within its banks. Map 4; Photo 26.

D2 – This irrigation ditch flows through the project area for over 5,800 linear feet. It averages 4 feet wide and passes through several of the wetlands within the project area. The ditch supports a narrow fringe of reed canary grass within its banks along much of its length. Maps 5 through 8; Photos 27 and 28.

D3 - This irrigation ditch averages 8 feet wide and connects with ditch D-2 north of the project area. The ditch supports cattails within its ditch banks. Map 10; Photo 29.

D4 – This 6 foot wide ditch appears to carry the outflow from the Payson wastewater treatment facility. It flows north and eventually connects to Beer Creek. Map 10; Photo 30.

D5 – This 5 foot wide ditch appears to be a drainage ditch, not an irrigation ditch, based on the stagnant water and wetland vegetation in the channel. It flows through Wetland W9 and then connects with ditch D-6. Map 8; Photo 31.

D6 - This irrigation ditch averages 4 feet wide and connects with ditch D-2. The ditch supports a narrow fringe of wetland vegetation along the bank. Map 8; Photo 32.

D7 - This irrigation ditch averages 3 feet wide and connects with ditch D-2. The ditch supports a narrow fringe of wetland vegetation along the bank. Map 5; Photo 33.

D8 – This 4 foot wide drainage ditch parallels the east side of I-15 and connects several sections of Wetland W3. It is culverted under I-15 and connects to ditch D-2. Maps 4 and 5; Photo 34.

D9 - This 4 foot wide drainage ditch supports wetland vegetation within its banks and flows into Beer Creek. Map 4; Photo 35.

D10 - This 4 foot wide irrigation ditch supports reed canary grass within its banks and eventually flows into Beer Creek. A Payson city official reported that this irrigation ditch carries flows from Peteeneet Creek. The USGS topographic maps show Peteeneet Creek ending in downtown Payson at approximately 100 South and 100 East. The Peteeneet Creek channel is piped for much of its length and could potentially flow into this ditch, but this irrigation ditch has other sources of water based on the observation that during one site visit the natural Peteeneet Creek channel where it comes out of Payson Canyon was dry, but the irrigation ditch had flowing water in it. The foreman of the large FRI farm property adjacent to this ditch said that this is one of their irrigation ditches and that they can turn the water on and off as needed. He had never heard of this ditch carrying flows from Peteeneet Creek. Map 11; Photos 36 and 37.

D11 - This ditch varies from 4 to 8 feet wide and supports wetland vegetation within its banks. It eventually flows into Beer Creek. Map 11; Photo 38.

Table 5. Dimensions of Ditches.

Ditches	Linear Feet	Width	Lat/Long
D-1	1510	6	40.07470/-111.71451
D-2	6964	4	40.06830/-111.72180
D-3	899	8	40.06613/-111.72907
D-4	513	6	40.06581/-111.73291
D-5	548	7	40.05048/-111.70825
D-6	904	4	40.05063/-111.70850
D-7	158	3	40.06606/-111.72080
D-8	583	4	40.07056/-111.71734
D-9	423	4	40.07305/-111.71444
D-10	1266	4	40.06101/-111.72830
D-11	933	8	40.06095/-111.73352
Total	**14,701**		

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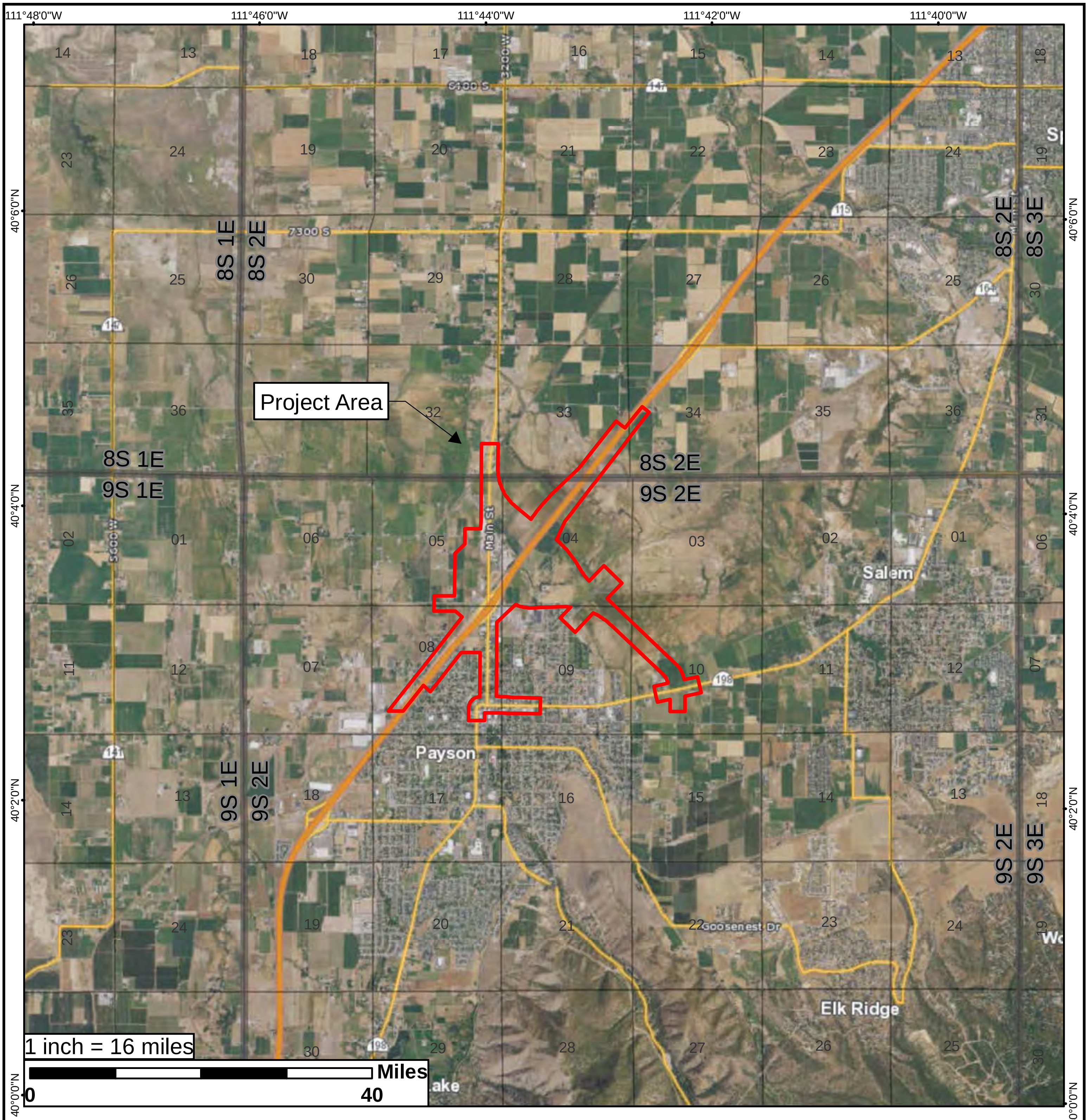
APPENDIX A: MAPS



Project Location

I-15;
Payson Interchange

Sections 32, 33, 34
in T8S, R2E
Sections 4, 5, 8, 9, 10
in T9S, R2E

Legend

Project Area

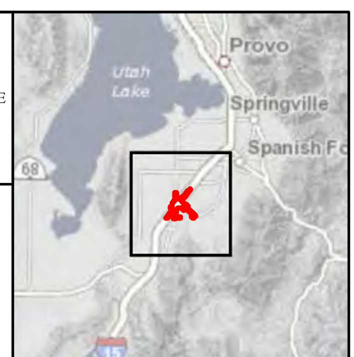
Projection:
NAD 83 UTM Zone 12N

Source:
Utah AGRC Basemap-Hybrid

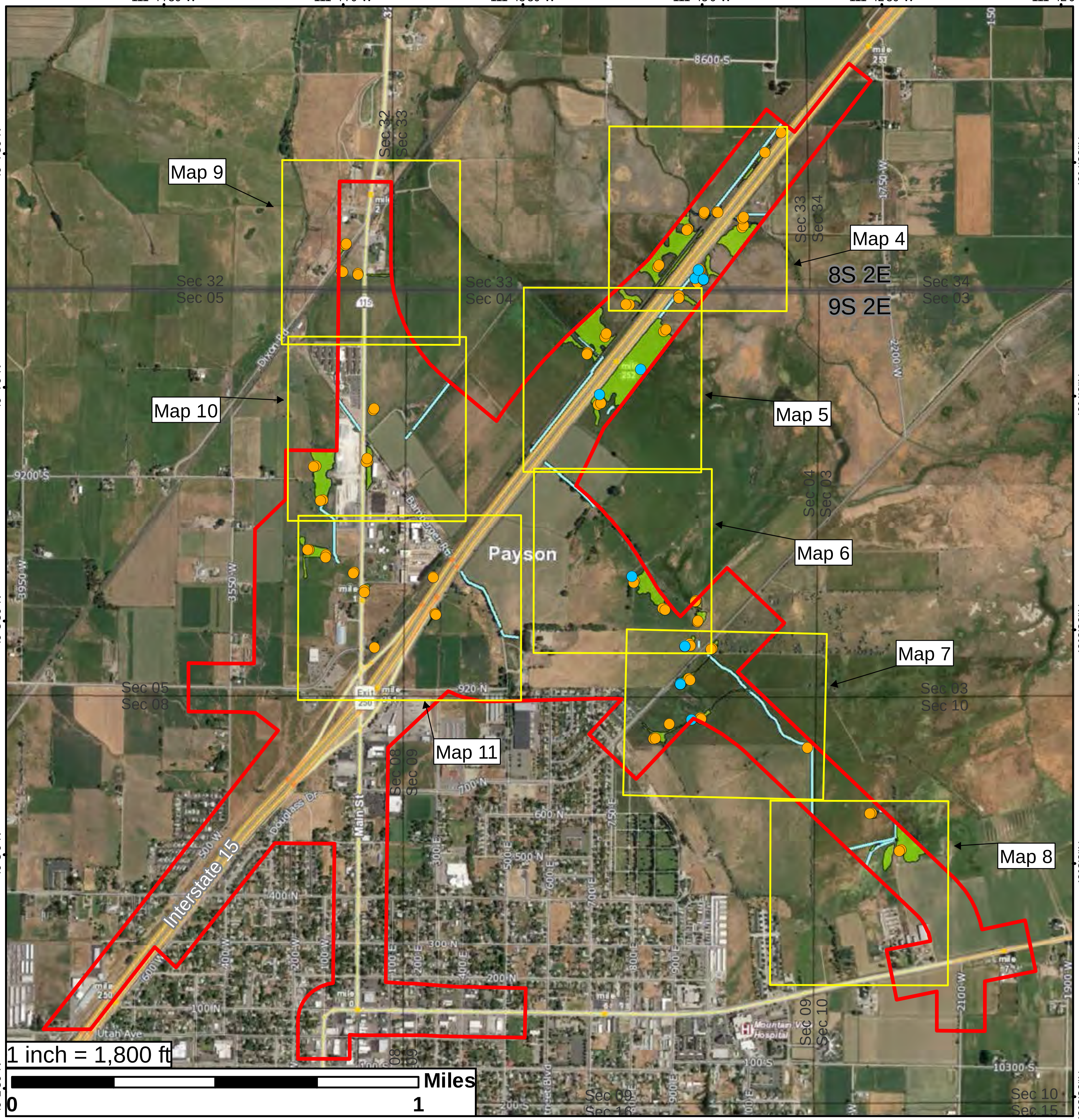
Survey Performed by
Todd Sherman

Wetland Resources, Inc.

Created: 4/12/2017
Author: CMM



Map 1



Aerial Overview

I-15;
Payson Interchange

Sections 32, 33, 34
in T8S, R2E
Sections 4, 5, 8, 9, 10
in T9S, R2E

Legend

- Project Area
- Irrigation Ditch
- Waters of the U.S. with OHWM
- Groundwater Seeps
- Sample Point (SP)
- Palustrine Emergent Wetland (PEM)

Projection:
NAD 83 UTM Zone 12N

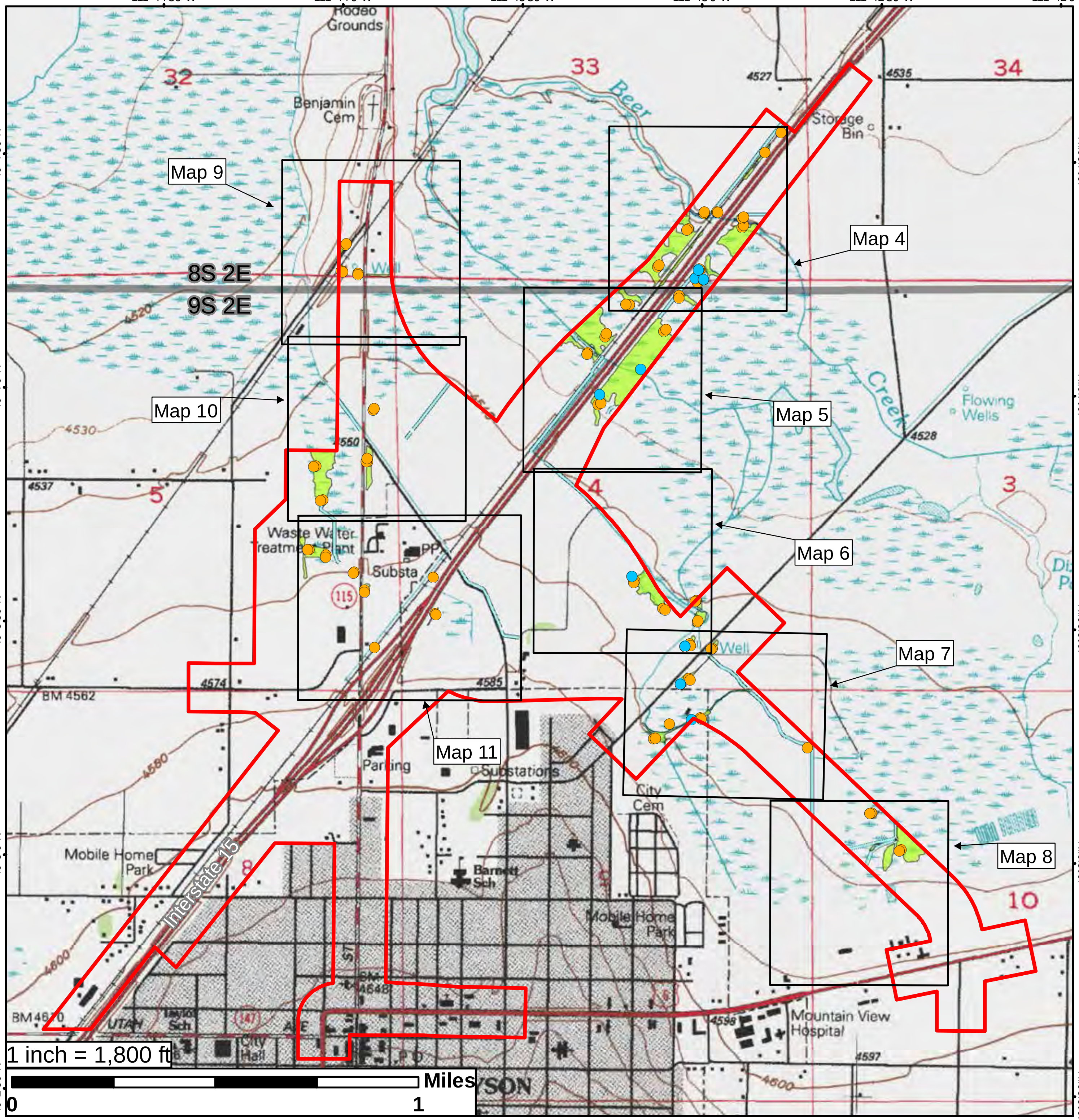
Source:
Utah AGRC Basemap-Hybrid

Survey Performed by
Todd Sherman

Wetland Resources, Inc.

Created: 4/12/2017
Author: CMM

Map 2



Topographic Overview

I-15;
Payson Interchange

Sections 32, 33, 34
in T8S, R2E
Sections 4, 5, 8, 9, 10
in T9S, R2E

Legend

- Project Area
- Irrigation Ditch
- Waters of the U.S. with OHWM
- Groundwater Seeps
- Sample Point (SP)
- Palustrine Emergent Wetland (PEM)

Projection:
NAD 83 UTM Zone 12N

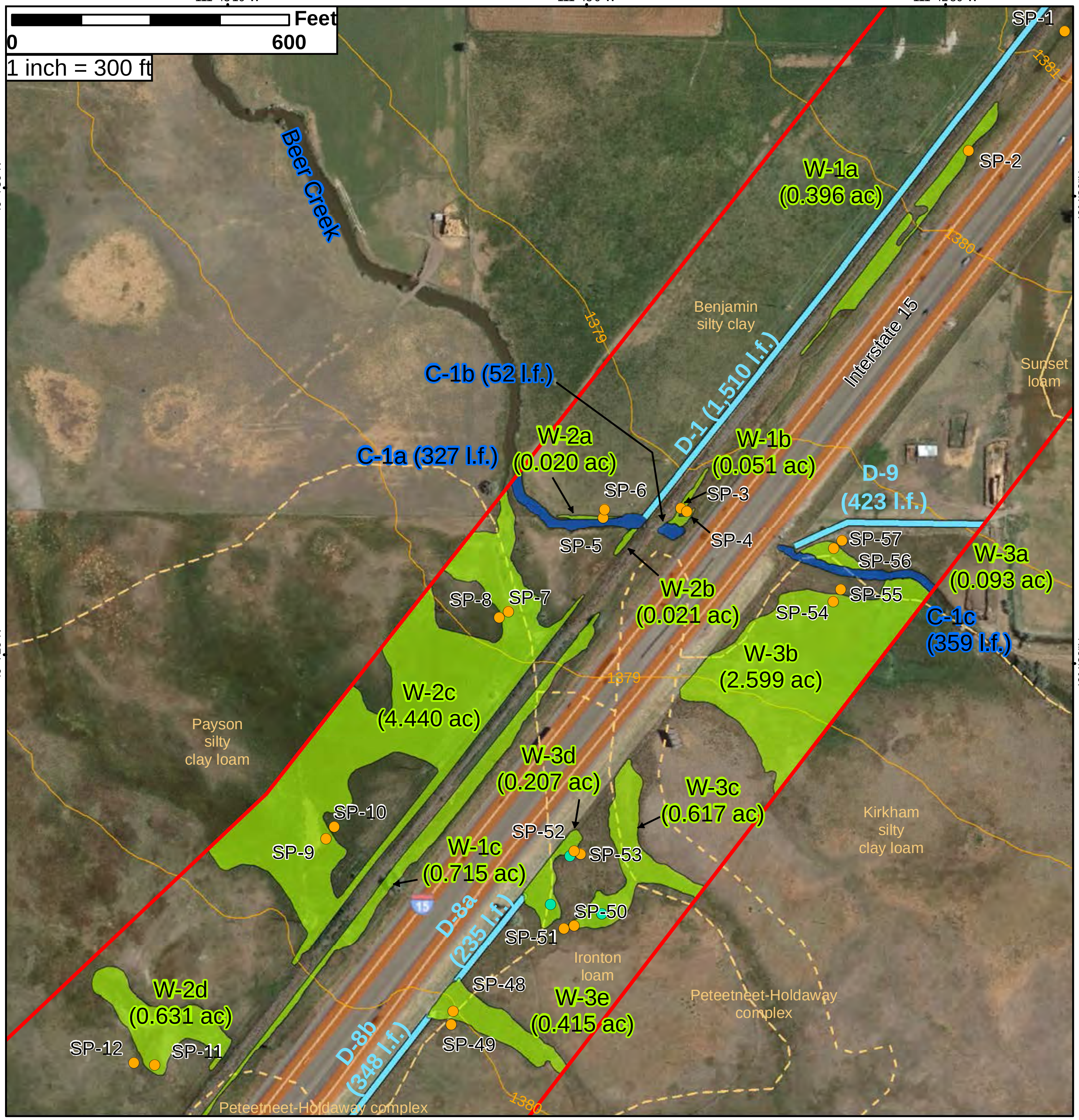
Source:
USGS 7.5' Topo Spanish Fork

Survey Performed by
Todd Sherman

Wetland Resources, Inc.

Created: 4/12/2017
Author: CMM

Map 3



Delineation Detail
I-15; Payson Interchange

Project Dimensions:

Note: dimensions include entire project area

Project Area:
= 968.439 ac
Wetlands
= 37.923 ac
Irrigation Ditches
= 2.212 ac; 14,701 l.f.
Waters of the U.S.
= 0.366 ac; 774 l.f.

Legend

- Project Area
- Waters of the U.S. with OHWM
- Palustrine Emergent Wetland (PEM)
- Sample Point (SP)
- Groundwater Seeps
- Irrigation Ditch
- Soils
- Contours (1m height interval)

Projection:
NAD 83 UTM Zone 12N

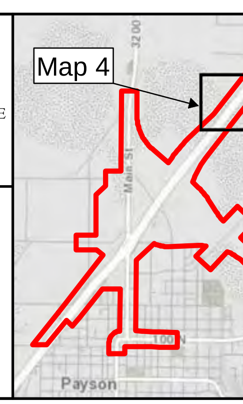
N W E S

Source:
2017 Google Imagery

Survey Performed by
Todd Sherman

Wetland Resources, Inc.

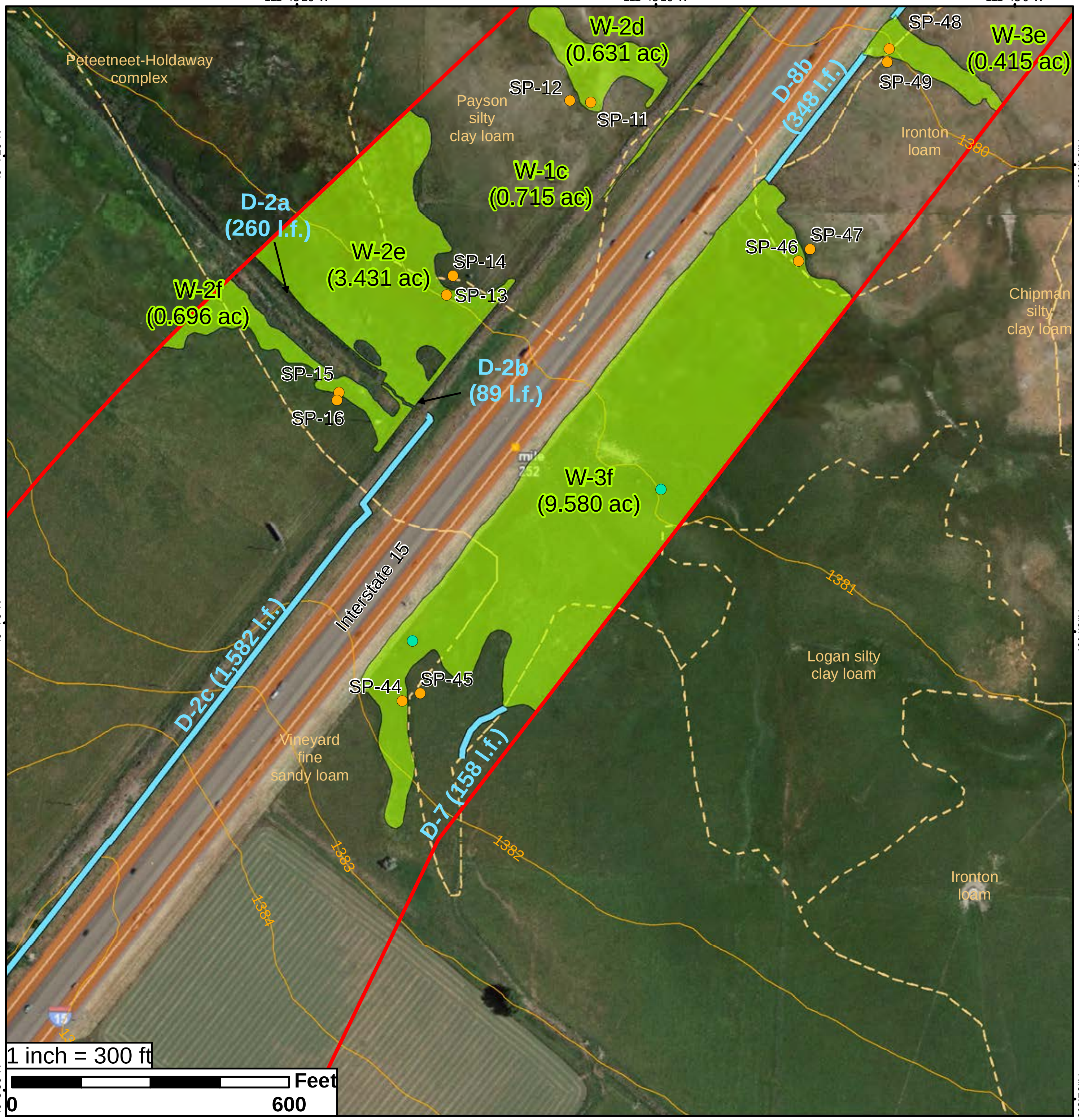
Created: 4/12/2017
Author: CMM



Map 4

111°43'20"W 111°43'10"W 111°43'0"W

40°4'10"N 40°4'0"N 40°3'50"N



Delineation Detail
I-15;
Payson Interchange

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Note: dimensions include entire project area

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Waters of the U.S.
= 0.366 ac; 774 l.f.

Legend

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- Palustrine Emergent Wetland (PEM)
- Sample Point (SP)
- Groundwater Seeps
- Irrigation Ditch
- Soils
- Contours (1m height interval)

Projection:
NAD 83 UTM Zone 12N

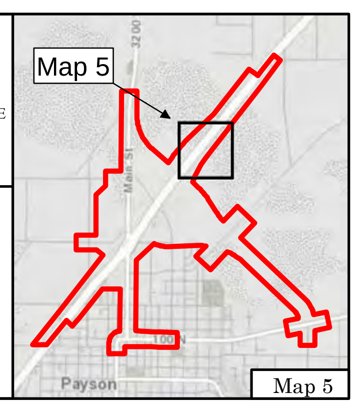
N W E S

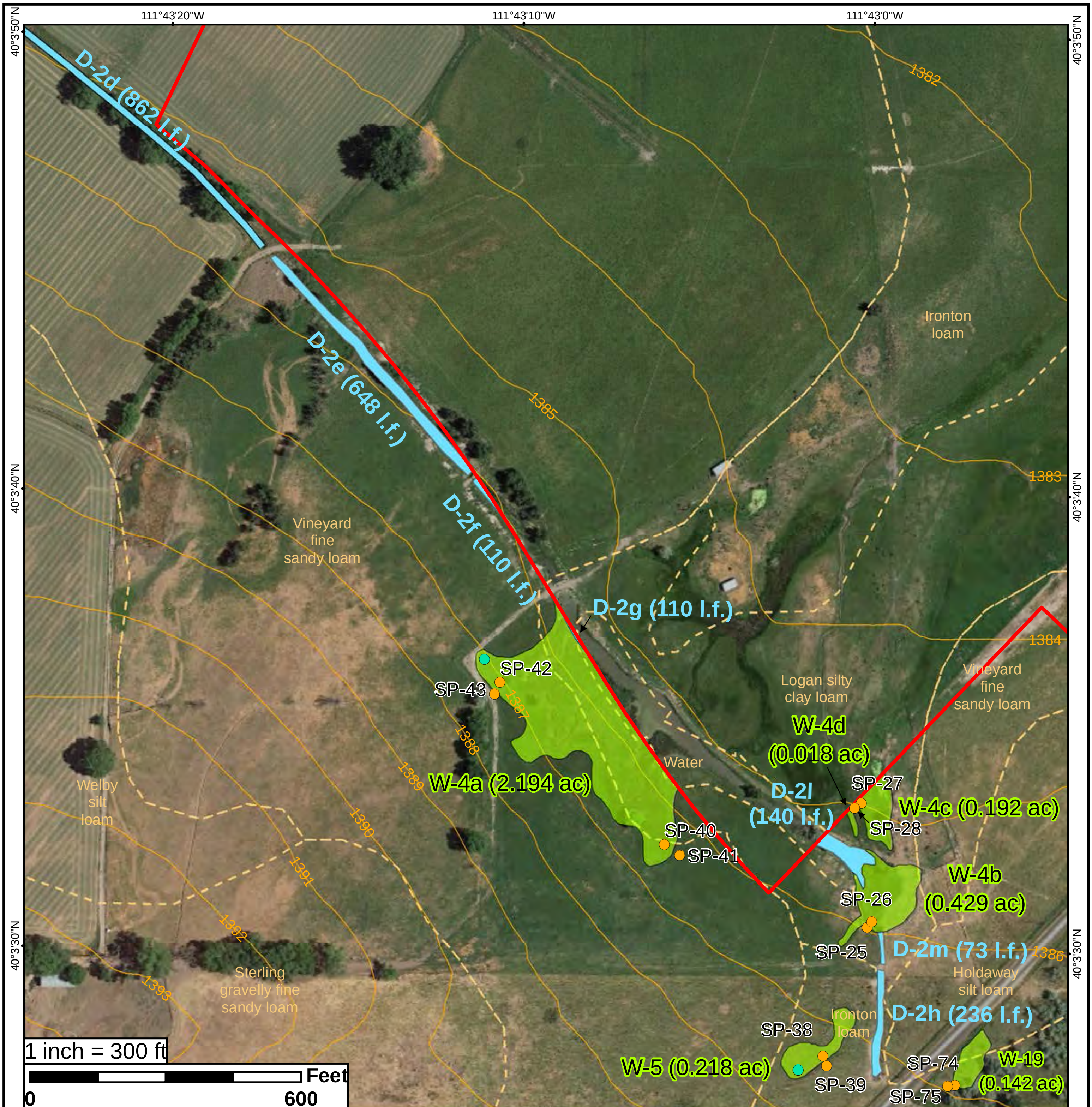
Source:
2017 Google Imagery

Survey Performed by
Todd Sherman

Wetland Resources, Inc.

Created: 4/12/2017
Author: CMM





Delineation Detail
I-15;
Payson Interchange

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Note: dimensions include entire project area

Project Area:
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Irrigation Ditches
= 2.212 ac; 14,701 l.f.
Waters of the U.S.
= 0.366 ac; 774 l.f.

Legend
- Project Area
- Waters of the U.S. with OHWM
- Palustrine Emergent Wetland (PEM)
- Sample Point (SP)
- Groundwater Seeps
- Irrigation Ditch
- Soils
- Contours (1m height interval)

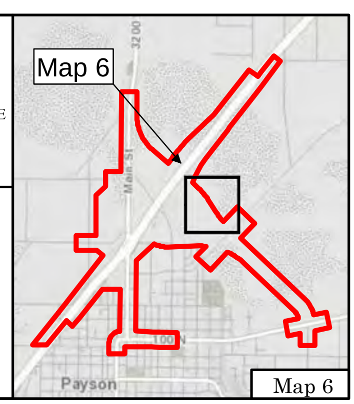
Projection:
NAD 83 UTM Zone 12N

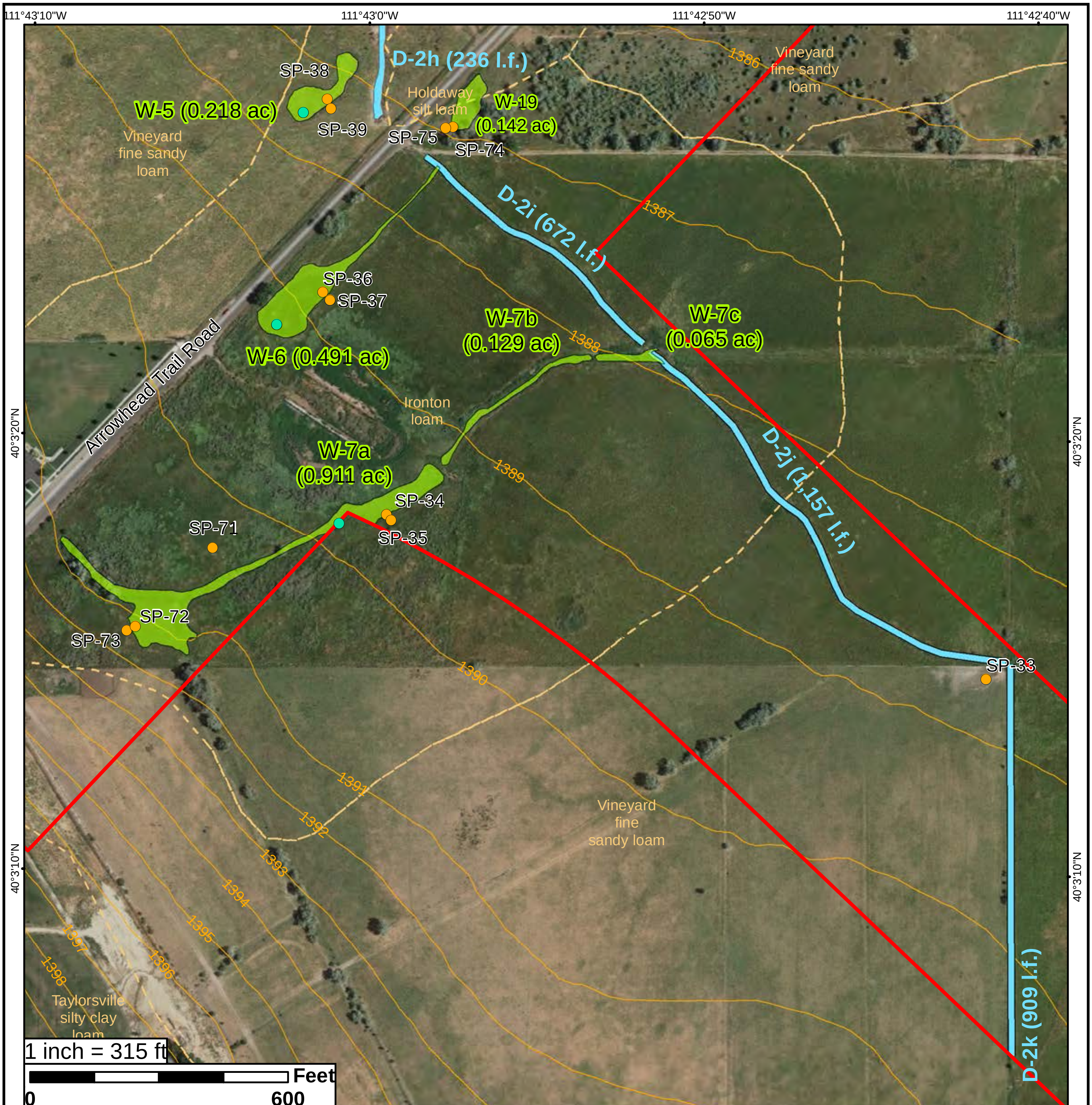
Source:
2017 Google Imagery

Survey Performed by
Todd Sherman

Wetland Resources, Inc.

Created: 4/12/2017
Author: CMM





Delineation Detail
I-15;
Payson Interchange

Project Dimensions:
Note: dimensions include entire project area

Project Area:
= 968.439 ac
Wetlands
= 37.923 ac
Irrigation Ditches
= 2.212 ac; 14,701 l.f.
Waters of the U.S.
= 0.366 ac; 774 l.f.

Legend
- Project Area
- Waters of the U.S. with OHWM
- Palustrine Emergent Wetland (PEM)
- Sample Point (SP)
- Groundwater Seeps
- Irrigation Ditch
- Soils
- Contours (1m height interval)

Projection:
NAD 83 UTM Zone 12N

Source:
2017 Google Imagery

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Survey Performed by
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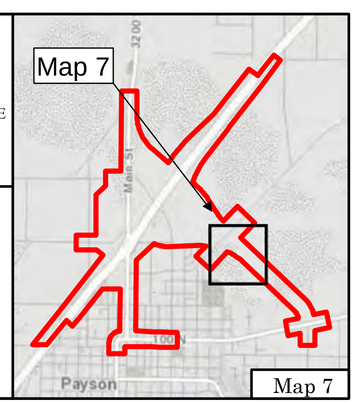
Wetland Resources, Inc.

Created: 4/12/2017
Author: CMM



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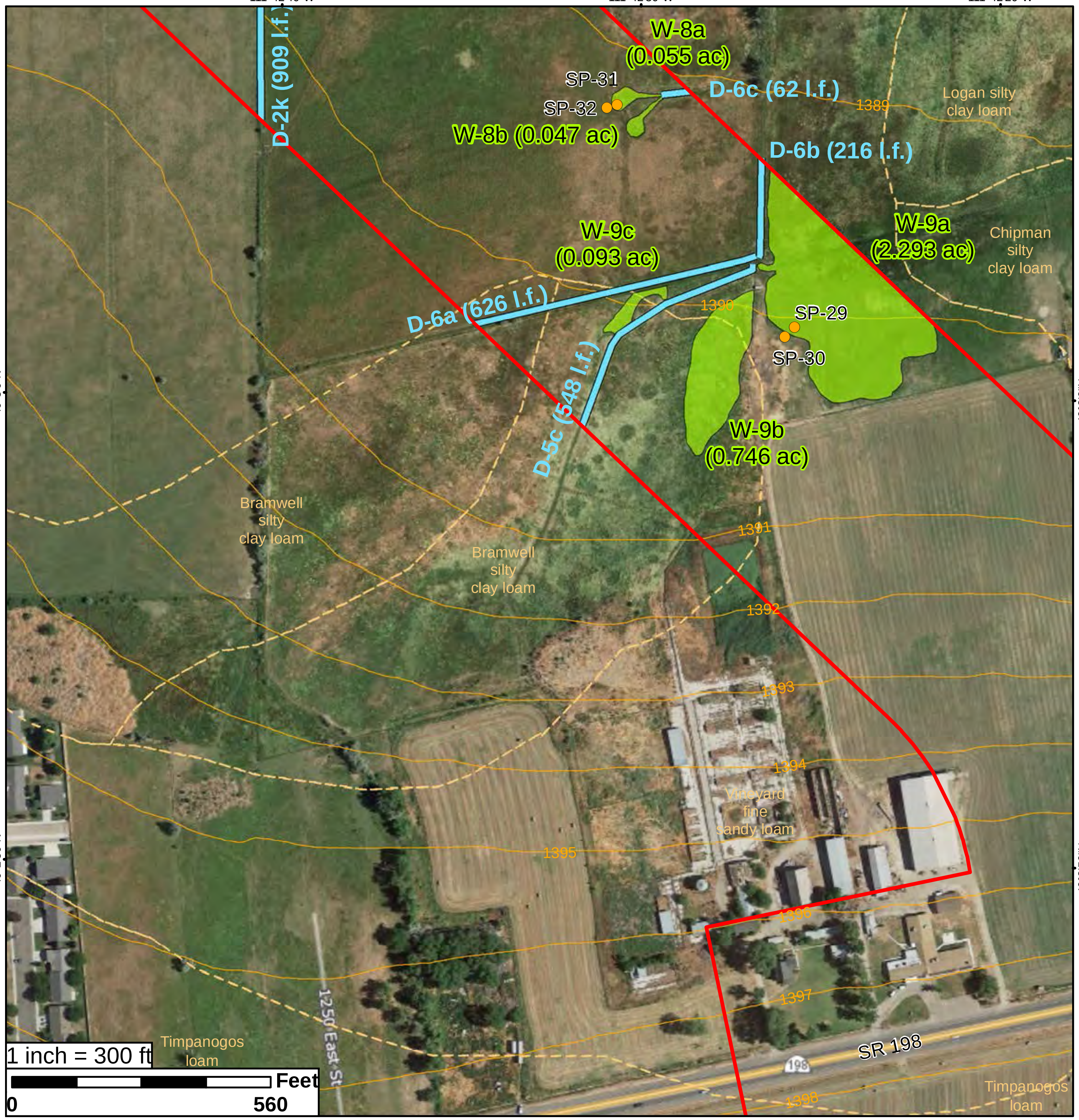

Delineation Detail
I-15; Payson Interchange

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Irrigation Ditches
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Waters of the U.S.
= 0.366 ac; 774 l.f.

Legend

- Project Area
- Waters of the U.S. with OHWM
- Palustrine Emergent Wetland (PEM)
- Sample Point (SP)
- Groundwater Seeps
- Irrigation Ditch
- Soils
- Contours (1m height interval)

Projection:
NAD 83 UTM Zone 12N

Source:
2017 Google Imagery

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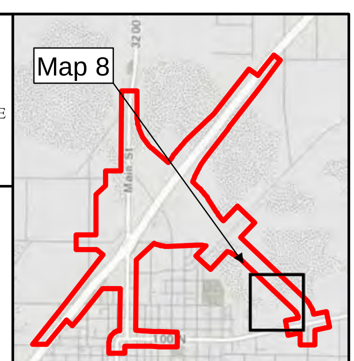
Wetland Resources, Inc.

Created: 4/12/2017
Author: CMM



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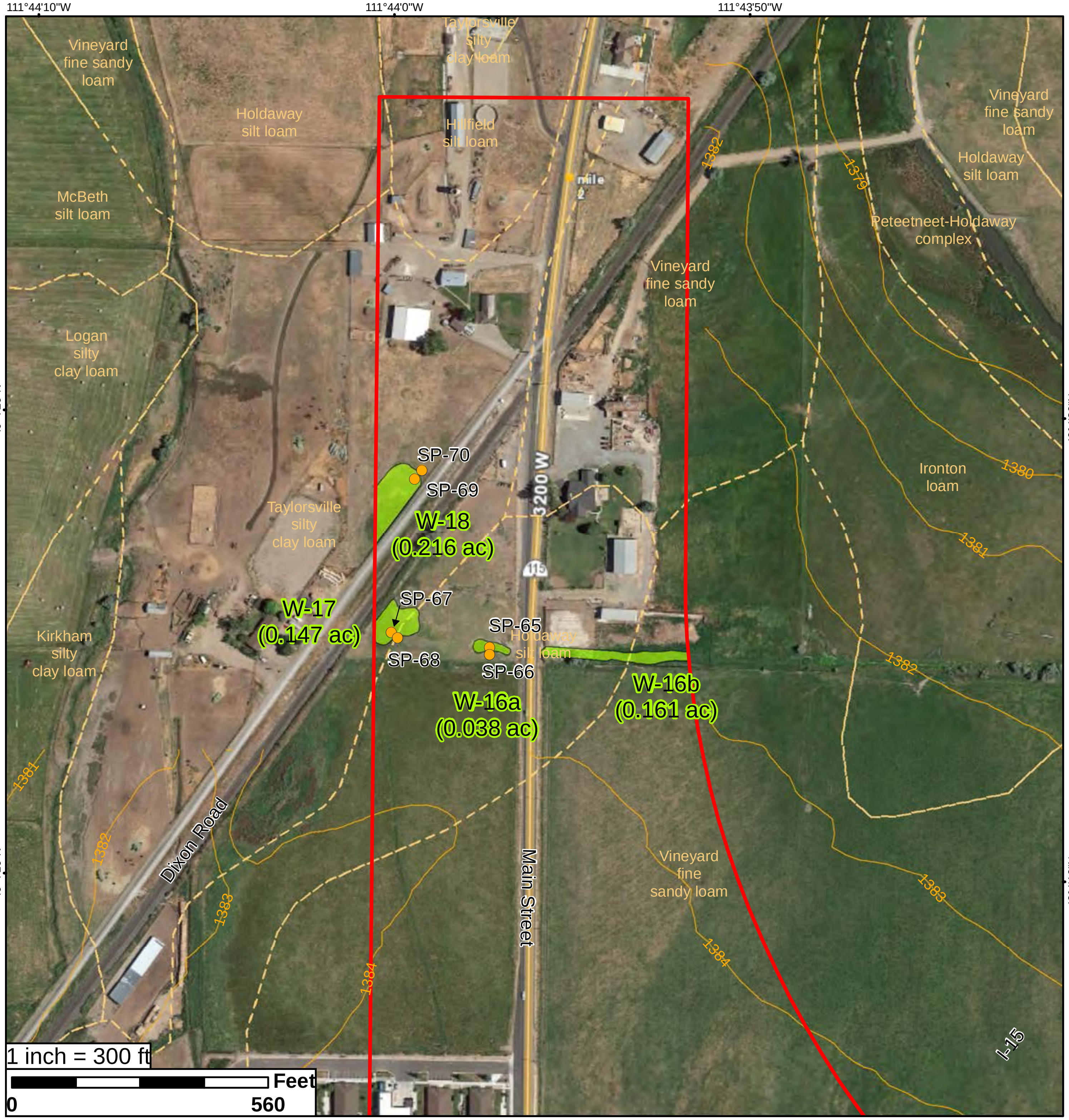

Delineation Detail
I-15; Payson Interchange

Project Dimensions:

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Wetlands
= 37.923 ac
Irrigation Ditches
= 2.212 ac; 14,701 l.f.
Waters of the U.S.
= 0.366 ac; 774 l.f.

Legend

- Project Area
- Waters of the U.S. with OHWM
- Palustrine Emergent Wetland (PEM)
- Sample Point (SP)
- Groundwater Seeps
- Irrigation Ditch
- Soils
- Contours (1m height interval)

Projection:
NAD 83 UTM Zone 12N

Source:
2017 Google Imagery

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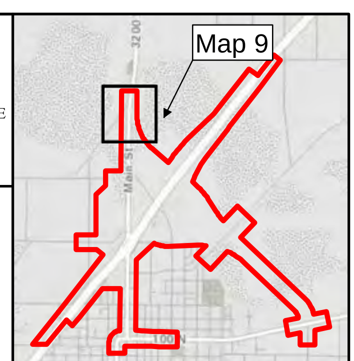
Survey Performed by
Todd Sherman

Wetland Resources, Inc.

Created: 4/12/2017
Author: CMM



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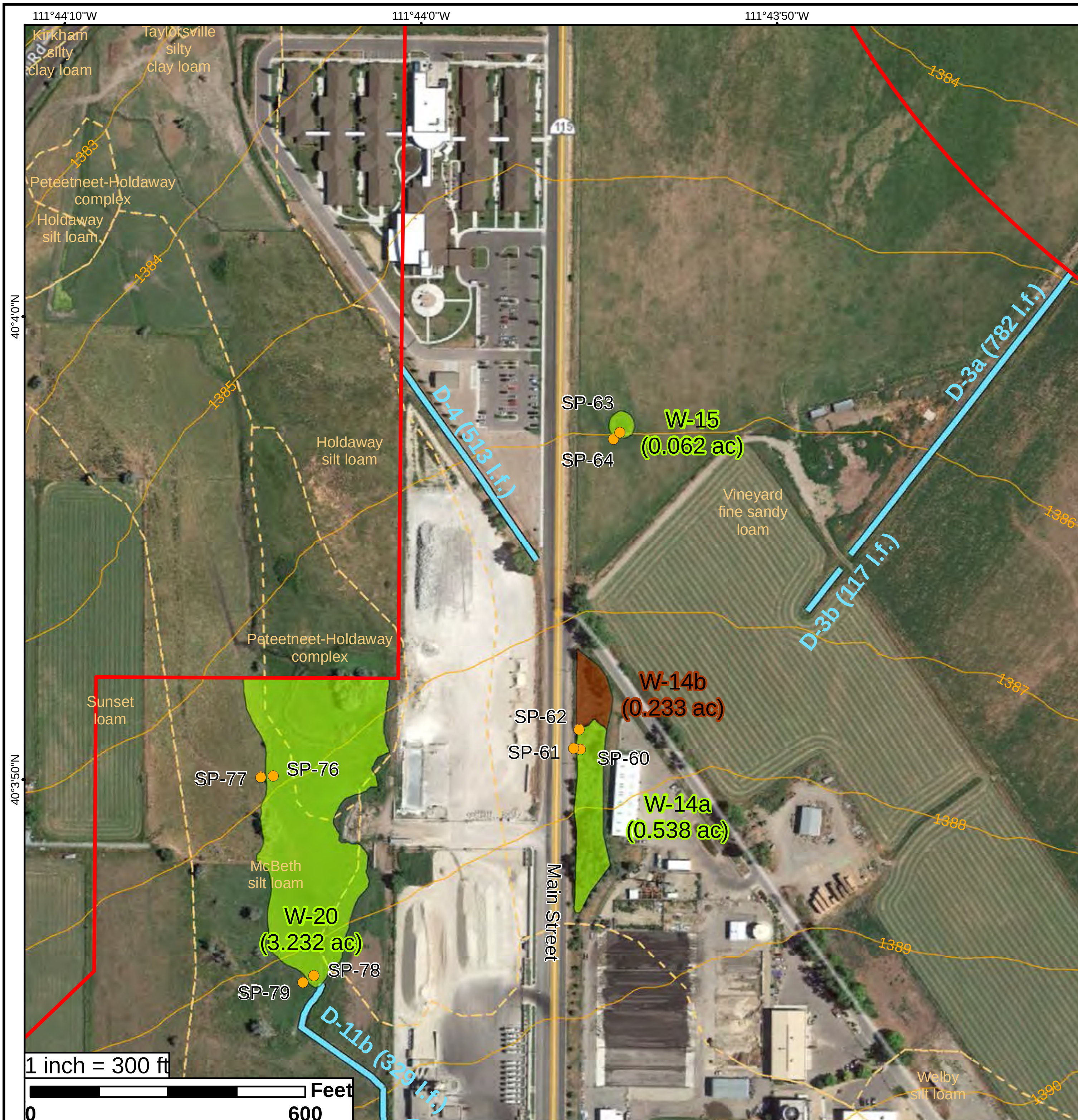


Delineation Detail

I-15;

Payson Interchange

Project Dimensions:

Note: dimensions include entire project area

Project Area:
= 968.439 ac
Wetlands
= 37.923 ac
Irrigation Ditches
= 2.212 ac; 14,701 l.f.
Waters of the U.S.
= 0.366 ac; 774 l.f.

Legend

- Project Area
- Waters of the U.S. with OHWM
- Irrigation Ditch
- Groundwater Seeps
- Sample Point (SP)

Wetlands

- Palustrine Emergent
- Palustrine Scrub Shrub
- Soils
- Contours (1m height interval)

Projection:

NAD 83 UTM Zone 12N

N W E S

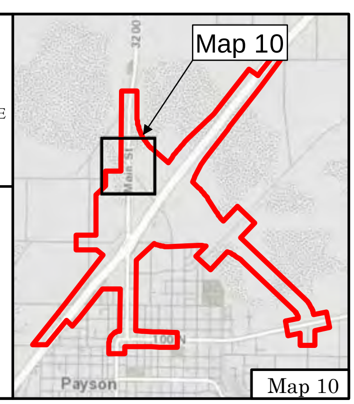
Source:

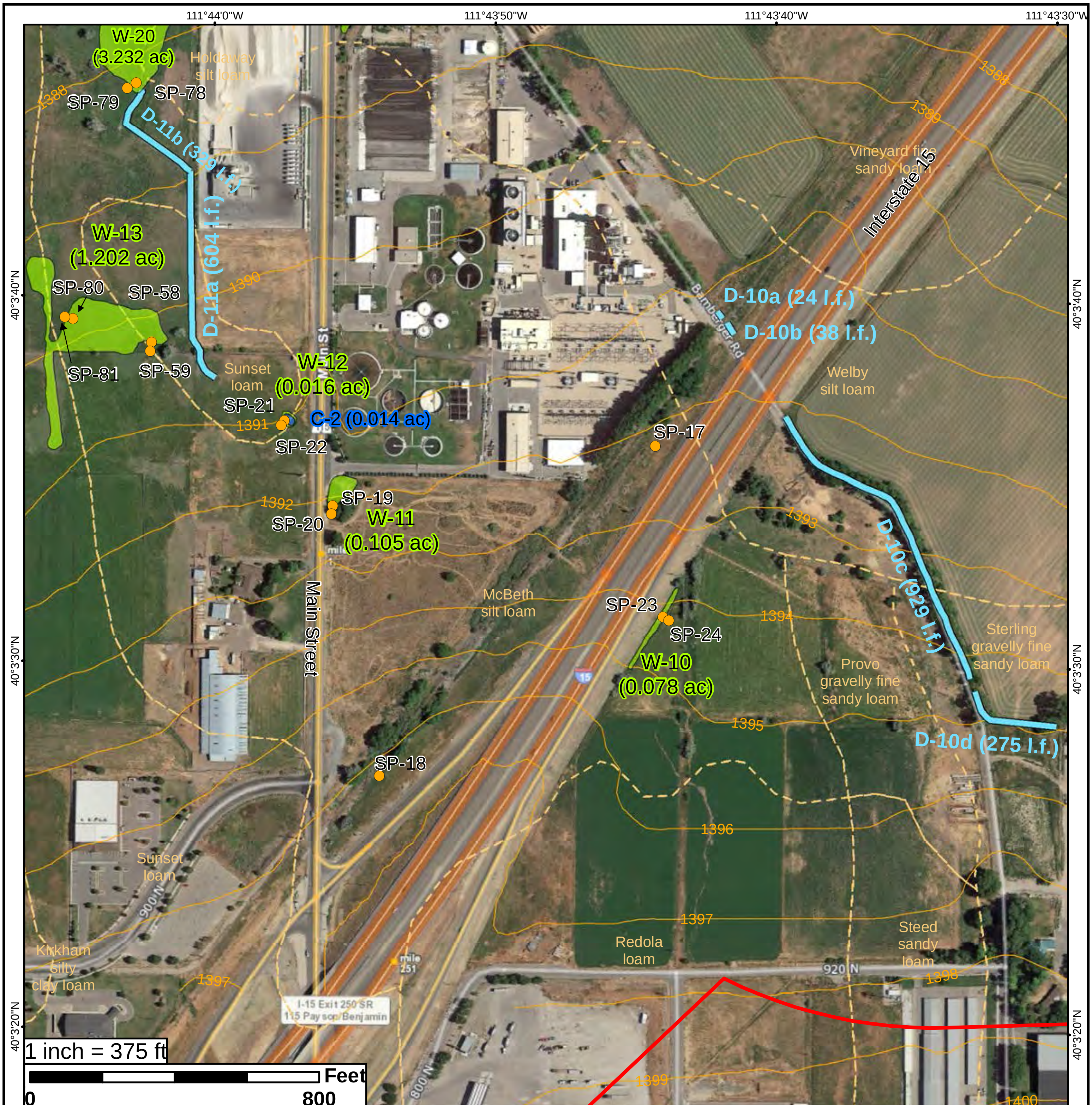
2017 Google Imagery

Survey Performed by
Todd Sherman

Wetland Resources, Inc.

Created: 4/12/2017
Author: CMM





Delineation Detail
I-15; Payson Interchange

Project Dimensions:

Note: dimensions include entire project area

- Project Area: = 968.439 ac
- Wetlands = 37.923 ac
- Irrigation Ditches = 2.212 ac; 14,701 l.f.
- Waters of the U.S. = 0.366 ac; 774 l.f.

Legend

- Project Area
- Waters of the U.S. with OHWM
- Palustrine Emergent Wetland (PEM)
- Sample Point (SP)
- Groundwater Seeps
- Irrigation Ditch
- Soils
- Contours (1m height interval)

Projection:
NAD 83 UTM Zone 12N

Source:
2017 Google Imagery

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Survey Performed by
Todd Sherman

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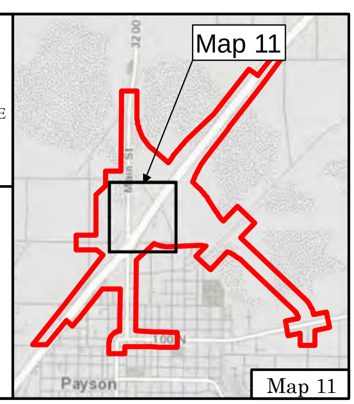
Created: 4/12/2017
Author: CMM



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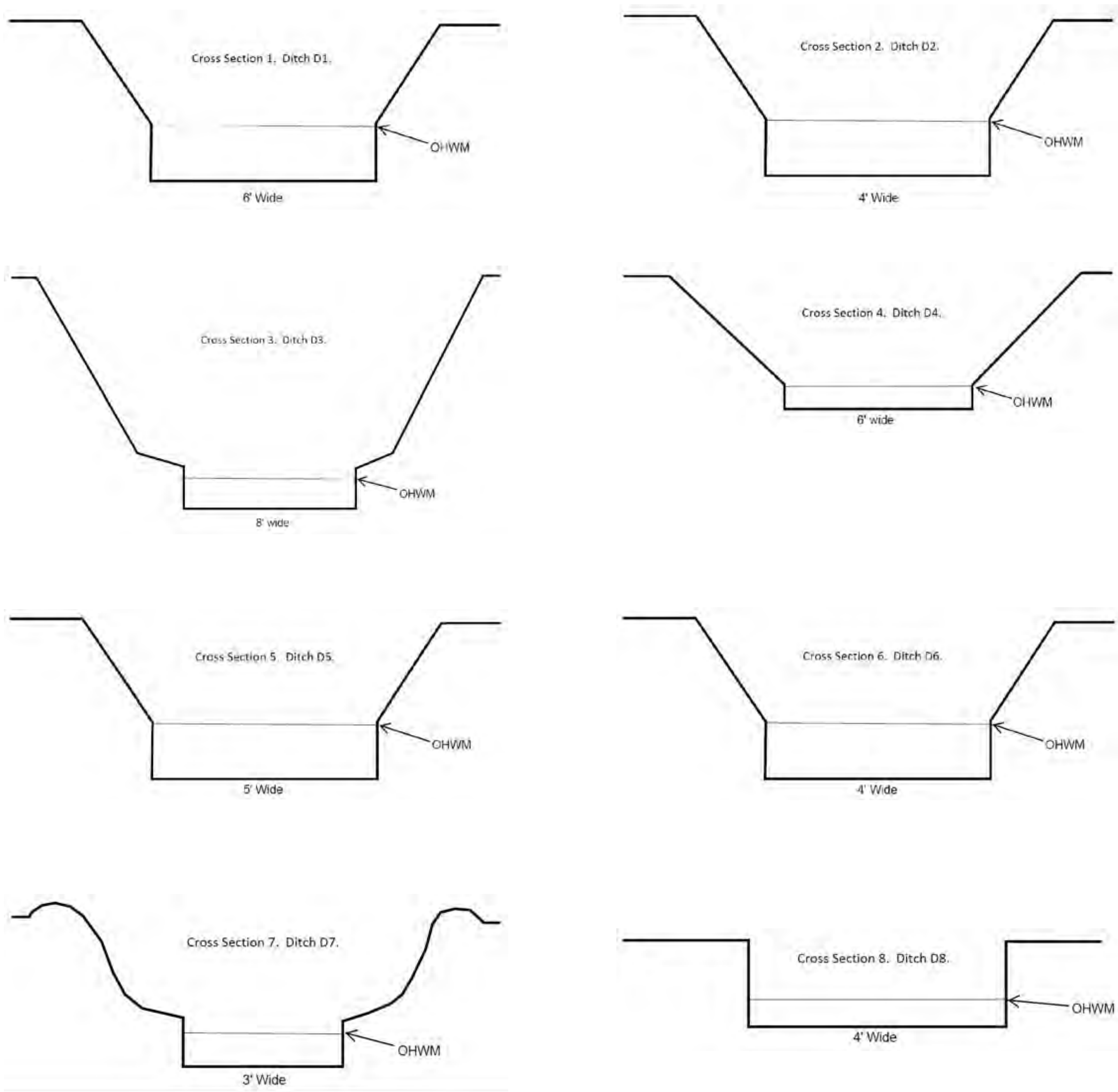


Cross Sections

I-15;
Payson Interchange

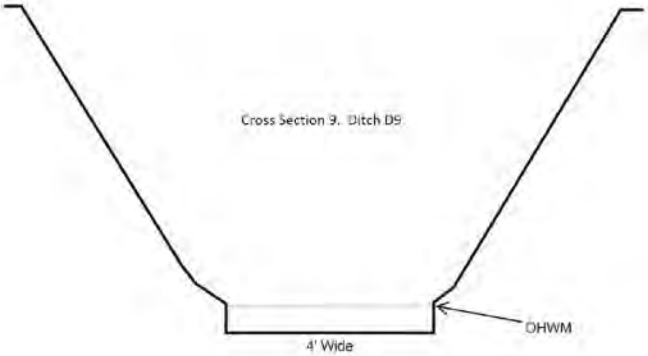
Sections 32, 33, 34
in T8S, R2E
Sections 4, 5, 8, 9, 10
in T9S, R2E

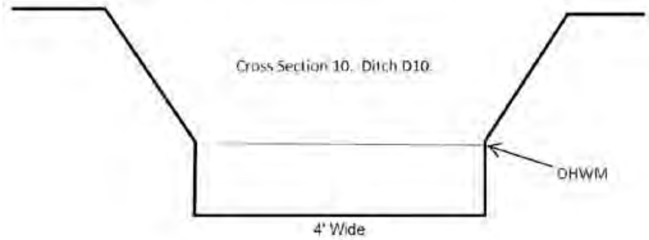
Survey Performed by
Todd Sherman

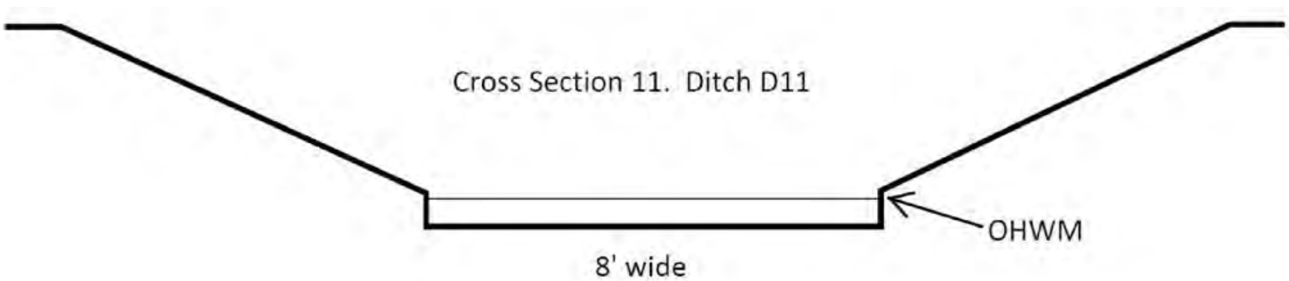
Wetland Resources, Inc.

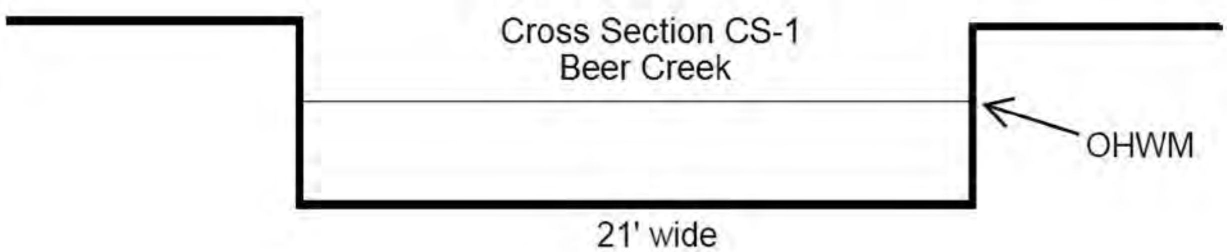
Created: 4/12/2017
Author: CMM

Map 12









Cross Sections

I-15;
Payson Interchange

Sections 32, 33, 34
in T8S, R2E
Sections 4, 5, 8, 9, 10
in T9S, R2E

Survey Performed by
Todd Sherman

Wetland Resources, Inc.

Created: 4/12/2017
Author: CMM

Map 13

APPENDIX B: PHOTOS

Photo 1. Wetland W1 near SP-2 in the borrow area of I-15.

Photo 2. Wetland W2 near SP-9.

Photo 3. Wetland W2 near SP-15 showing the Nebraska sedge plant community.

Photo 4. Wetland W3 near SP-44 with I-15 in the background.

Photo 5. Wetland W3 near the groundwater seep at SP-50.

Photo 6. Wetland W4 near SP-40 showing the sedge plant community on the slopes above the cattail marsh.

Photo 7.
Wetland W5 near SP-38 showing the bulrush in the center of the groundwater seep.

Photo 8.
Wetland W6 near SP-36 showing the bulrush in the center of the groundwater seep.

Photo 9. Wetland W7 near groundwater seep at SP-26.

Photo 10. Wetland W8 showing the artesian well pipe.

Photo 11.
Wetland W9 near SP-29.

Photo 12.
Wetland W9 near SP-25.

Photo 13. Wetland W10 in the borrow ditch of I-15.

Photo 14. Wetland W11 on the east side of Main Street.

Photo 15. Wetland W12 around the periphery of the open water pond (C2).

Photo 16. Wetland W13 near SP-58.

Photo 17. Wetland W14 near SP-60

Photo 18. Wetland W15 in field on east side of Main Street.

Photo 19. Wetland W16 created by the two flowing artesian wells.

Photo 20. Wetland W17 created by a flowing artesian well.

Photo 21. Wetland W18 created by a flowing artesian well.

Photo 22. Wetland W19 created by a flowing artesian well.

Photo 23.
Wetland W20.

Photo 24.
Wetland W20.

Photo 25. Beer Creek (C1) on the east side of I-15.

Photo 26. Ditch D1.

Photo 27.
Ditch D2 west of I-15 in the borrow area.

Photo 28.
Ditch D2 south of Arrowhead Trail Road.

Photo 29.
Ditch D3.

Photo 30.
Ditch D4.

Photo 31.
Ditch D5.

Photo 32.
Ditch D6.

**Photo 33.
Ditch D7.**

**Photo 34.
Ditch D8 parallel to the east side of I-15.**


Photo 35.
Ditch D9 north of Beer Creek.


Photo 36.
Ditch D10.

Photo 37. Headgate at the south end of ditch D10 that controls the flow.

Photo 38. Ditch D11.

APPENDIX C: WETLAND DATA SHEETS

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 12-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 01

Investigator(s): Todd Sherman **Section, Township, Range:** S 33 T 8S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 2.0 % / 1.1 °

Subregion (LRR): LRR D **Lat.:** 439210 **Long.:** 4436434 **Datum:** NAD83

Soil Map Unit Name: Benjamin silty clay **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes (●) No ( )	**Is the Sampled Area within a Wetland?**	Yes ( ) No (●)
Hydric Soil Present?	Yes ( ) No (●)		
Wetland Hydrology Present?	Yes ( ) No (●)		

Remarks: Area of mesic vegetation that does not meet the soil or hydrology criteria. The borrow ditch is outside of the project area at this location, this sample point is on the higher area adjacent to the borrow ditch.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Juncus balticus	45	☑ 45.0%	FACW
2. Distichlis spicata	45	☑ 45.0%	FAC
3. Lactuca serriola	5	☐ 5.0%	FACU
4. Atriplex micrantha	5	☐ 5.0%	UPL
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

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

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species	0	x 1 = 0
FACW species	45	x 2 = 90
FAC species	45	x 3 = 135
FACU species	5	x 4 = 20
UPL species	5	x 5 = 25
Column Totals:	100 (A)	270 (B)

Prevalence Index = B/A = 2.700

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes (●) No ( )

Remarks:

The area meets the vegetation criteria, but is at the same elevation and landscape position as adjacent obvious uplands.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 01

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/3	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ●

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ● Depth (inches):

Water Table Present? Yes ○ No ● Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ● Depth (inches):

Wetland Hydrology Present? Yes ○ No ●

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 12-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 02

Investigator(s): Todd Sherman **Section, Township, Range:** S 33 T 8S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 439147 **Long.:** 4436355 **Datum:** NAD83

Soil Map Unit Name: Benjamin silty clay **NWI classification:** PEM

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

Are Vegetation [ ] **, Soil** [ ] **, or Hydrology** [ ] **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (•) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes (•) No ( )	**Is the Sampled Area within a Wetland?**	Yes (•) No ( )
Hydric Soil Present?	Yes (•) No ( )		
Wetland Hydrology Present?	Yes (•) No ( )		

Remarks: Palustrine emergent wetland located in the borrow ditch between I-15 and the railroad tracks.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	[ ] 0.0%	
2.	0	[ ] 0.0%	
3.	0	[ ] 0.0%	
4.	0	[ ] 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	[ ] 0.0%	
2.	0	[ ] 0.0%	
3.	0	[ ] 0.0%	
4.	0	[ ] 0.0%	
5.	0	[ ] 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Juncus balticus	90	[x] 90.0%	FACW
2. Distichlis spicata	10	[ ] 10.0%	FAC
3.	0	[ ] 0.0%	
4.	0	[ ] 0.0%	
5.	0	[ ] 0.0%	
6.	0	[ ] 0.0%	
7.	0	[ ] 0.0%	
8.	0	[ ] 0.0%	
9.	0	[ ] 0.0%	
10.	0	[ ] 0.0%	
11.	0	[ ] 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	[ ] 0.0%	
2.	0	[ ] 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	90	x 2 =	180
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		210 (B)

Prevalence Index = B/A = 2.100

Hydrophytic Vegetation Indicators:

- [x] **Dominance Test is > 50%**
- [x] **Prevalence Index is ≤3.0** [1]
- [ ] **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- [ ] **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes (•) No ( )

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 02

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		%	Type[1]	Loc²	Texture	Remarks
0-7	10YR	4/2	100%						Loam	
7-20	10YR	5/2	98%	5YR	4/6	2%	C	M	Clay Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ◉ No ○

Remarks:

Soils meet the criteria for depleted matrix.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ◉	No ○	Depth (inches): 10

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

Soils are saturated in the upper profile.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 12-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 03

Investigator(s): Todd Sherman **Section, Township, Range:** S 33 T 8S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 439147 **Long.:** 4436355 **Datum:** NAD83

Soil Map Unit Name: Benjamin silty clay **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Palustrine emergent wetland located in the borrow ditch between I-15 and the railroad tracks, near Beer Creek.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size:)				
1. Juncus balticus	100	☑	100.0%	FACW
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 2.000

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 03

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-7	10YR	4/2	100%						Loam	
7-20	10YR	5/2	98%	5YR	4/6	2%	C	M	Clay Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [x] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils meet the criteria for depleted matrix.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ( )	No (●)	Depth (inches):
Water Table Present?	Yes ( )	No (●)	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes (●)	No ( )	Depth (inches): 10

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

Soils are saturated in the upper profile.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 12-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 04

Investigator(s): Todd Sherman **Section, Township, Range:** S 33 T 8S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 2.0 % / 1.1 °

Subregion (LRR): LRR D **Lat.:** 438961 **Long.:** 4436117 **Datum:** NAD83

Soil Map Unit Name: Benjamin silty clay **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( ) No (●)	**Is the Sampled Area within a Wetland?** Yes ( ) No (●)
Hydric Soil Present?	Yes ( ) No (●)	
Wetland Hydrology Present?	Yes ( ) No (●)	

Remarks: Upland area adjacent to SP-3.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Juncus balticus	40	☑ 50.0%	FACW
2. Cirsium arvense	20	☑ 25.0%	FACU
3. Lactuca serriola	20	☑ 25.0%	FACU
4.		☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	80	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 20 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	33.3%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species	0	x 1 = 0
FACW species	40	x 2 = 80
FAC species	0	x 3 = 0
FACU species	40	x 4 = 160
UPL species	0	x 5 = 0
Column Totals:	80 (A)	240 (B)

Prevalence Index = B/A = 3.000

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 04

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/3	100%						Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 12-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 05

Investigator(s): Todd Sherman **Section, Township, Range: S** 33 **T** 8S **R** 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 **%** / 0.6 **°**

Subregion (LRR): LRR D **Lat.:** 438906 **Long.:** 4436113 **Datum:** NAD83

Soil Map Unit Name: Benjamin silty clay **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Palustrine emergent wetland fringe adjacent to Beer Creek.

VEGETATION - Use scientific names of plants.

Stratum / Species	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
= Total Cover	0			
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
= Total Cover	0			
Herb Stratum (Plot size:)				
1. Juncus balticus	50	☑	50.0%	FACW
2. Carex rostrata	40	☑	40.0%	OBL
3. Muhlenbergia asperifolia	10	☐	10.0%	FACW
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
= Total Cover	100			
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
= Total Cover	0			

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	40	x 1 =	40
FACW species	60	x 2 =	120
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		160 (B)

Prevalence Index = B/A = 1.600

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 05

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR	4/2	100%						Loam	
6-20	10YR	5/2	98%	5YR	4/6	2%	C	M	Clay Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ◉ No ○

Remarks:

Soils meet the criteria for depleted matrix.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ◉	No ○	Depth (inches): 10

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

Soils are saturated in the upper profile.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 12-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 06

Investigator(s): Todd Sherman **Section, Township, Range:** S 33 T 8S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 2.0 % / 1.1 °

Subregion (LRR): LRR D **Lat.:** 438906 **Long.:** 4436114 **Datum:** NAD83

Soil Map Unit Name: Benjamin silty clay **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Upland area adjacent to SP-5.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Agropyron elongatum	50	☑ 50.0%	UPL
2. Distichlis spicata	50	☑ 50.0%	FAC
3.		☐ 0.0%	
4.		☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	50.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	50	x 3 =	150
FACU species	0	x 4 =	0
UPL species	50	x 5 =	250
Column Totals:	100 (A)		400 (B)

Prevalence Index = B/A = 4.000

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 06

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/3	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 12-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 07

Investigator(s): Todd Sherman **Section, Township, Range: S** 33 **T** 8S **R** 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 **% /** 0.6 **°**

Subregion (LRR): LRR D **Lat.:** 438843 **Long.:** 4436051 **Datum:** NAD83

Soil Map Unit Name: Payson silty clay loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Palustrine emergent wetland that is part of a large wetland complex.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	0	= **Total Cover**		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= **Total Cover**		
Herb Stratum (Plot size:)				
1. Juncus balticus	50	☑	50.0%	FACW
2. Carex rostrata	20	☑	20.0%	OBL
3. Carex nebrascensis	20	☑	20.0%	OBL
4. Hordeum brachyantherum	10	☐	10.0%	FACW
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
	100	= **Total Cover**		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= **Total Cover**		

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:		
OBL species	40	x 1 =	40	
FACW species	60	x 2 =	120	
FAC species	0	x 3 =	0	
FACU species	0	x 4 =	0	
UPL species	0	x 5 =	0	
Column Totals:	100	(A)	160	(B)

Prevalence Index = B/A = 1.600

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 07

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-8	10YR	2/1	100%						Loam	
8-20	10YR	5/1	100%						Clay Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ◉ No ○

Remarks:

Soils meet the criteria for depleted matrix.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ◉	No ○	Depth (inches): 11

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

Soils are saturated in the upper profile.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 12-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 08

Investigator(s): Todd Sherman **Section, Township, Range:** S 33 T 8S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 2.0 % / 1.1 °

Subregion (LRR): LRR D **Lat.:** 438837 **Long.:** 4436047 **Datum:** NAD83

Soil Map Unit Name: Payson silty clay loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Upland area adjacent to SP-7.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Agropyron elongatum	80	☑ 80.0%	UPL
2. Distichlis spicata	10	☐ 10.0%	FAC
3. Juncus balticus	10	☐ 10.0%	FACW
4.		☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	80	x 5 =	400
Column Totals:	100 (A)		450 (B)

Prevalence Index = B/A = 4.500

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 08

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	2/2	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 12-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 09

Investigator(s): Todd Sherman **Section, Township, Range:** S 33 T 8S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438843 **Long.:** 4436051 **Datum:** NAD83

Soil Map Unit Name: Payson silty clay loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Palustrine emergent wetland that is part of a large wetland complex.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Juncus balticus	50	☑ 50.0%	FACW
2. Eleocharis palustris	20	☑ 20.0%	OBL
3. Carex nebrascensis	20	☑ 20.0%	OBL
4. Hordeum brachyantherum	5	☐ 5.0%	FACW
5. Agrostis stolonifera	5	☐ 5.0%	FACW
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)

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

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	40	x 1 =	40
FACW species	60	x 2 =	120
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		160 (B)

Prevalence Index = B/A = 1.600

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 09

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-8	10YR	2/1	100%						Loam	
8-20	10YR	5/1	100%						Clay Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [x] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils meet the criteria for depleted matrix.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ( )	No (●)	Depth (inches):
Water Table Present?	Yes (●)	No ( )	Depth (inches): 16
Saturation Present? (includes capillary fringe)	Yes (●)	No ( )	Depth (inches): 7

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

Soils are saturated in the upper profile.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 12-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 10

Investigator(s): Todd Sherman **Section, Township, Range:** S 33 T 8S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 2.0 % / 1.1 °

Subregion (LRR): LRR D **Lat.:** 438723 **Long.:** 4435901 **Datum:** NAD83

Soil Map Unit Name: Payson silty clay loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Upland area adjacent to SP-9.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Agropyron elongatum	85	☑ 85.0%	UPL
2. Juncus balticus	15	☐ 15.0%	FACW
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	85	x 5 =	425
Column Totals:	100 (A)		455 (B)

Prevalence Index = B/A = 4.550

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 10

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	2/2	100%						Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: ______

Depth (inches): ______

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): ______

Water Table Present? Yes ○ No ◉ Depth (inches): ______

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): ______

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 12-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 11

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438843 **Long.:** 4436051 **Datum:** NAD83

Soil Map Unit Name: Payson silty clay loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Palustrine emergent wetland that is part of a large wetland complex.

VEGETATION - Use scientific names of plants.

Stratum / Species	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size:)				
1. Juncus balticus	30	☑	30.0%	FACW
2. Distichlis spicata	35	☑	35.0%	FAC
3. Carex praegracilis	20	☑	20.0%	FACW
4. Hordeum brachyantherum	10	☐	10.0%	FACW
5. Suaeda occidentalis	5	☐	5.0%	FACW
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	65	x 2 =	130
FAC species	35	x 3 =	105
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		235 (B)

Prevalence Index = B/A = 2.350

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 11

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc²	Texture	Remarks
0-8	10YR	3/1	100%					Loam	
8-20	10YR	5/1	100%					Clay Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ◉ No ○

Remarks:

Soils meet the criteria for depleted matrix.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☑ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

The soils exhibit surface cracks, indicating periodic inundation/saturation.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 12-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 12

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 2.0 % / 1.1 °

Subregion (LRR): LRR D **Lat.:** 438723 **Long.:** 4435901 **Datum:** NAD83

Soil Map Unit Name: Payson silty clay loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Upland area adjacent to SP-11.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Agropyron elongatum	70	☑ 77.8%	UPL
2. Distichlis spicata	20	☑ 22.2%	FAC
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	90	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 10 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	50.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	0	x 4 =	0
UPL species	70	x 5 =	350
Column Totals:	90	(A)	410 (B)

Prevalence Index = B/A = 4.556

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 12

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/3	100%						Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 13-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 13

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438515 **Long.:** 4436525 **Datum:** NAD83

Soil Map Unit Name: Peteetneet-Holdaway complex **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Palustrine emergent wetland that is part of a large wetland complex.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Juncus balticus	80	☑ 80.0%	FACW
2. Distichlis spicata	15	☐ 15.0%	FAC
3. Muhlenbergia asperifolia	5	☐ 5.0%	FACW
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

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

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	85	x 2 =	170
FAC species	15	x 3 =	45
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		215 (B)

Prevalence Index = B/A = 2.150

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 13

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-10	10YR	2/1	100%						Loam	
10-20	10YR	5/1	100%						Clay Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [x] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils meet the criteria for depleted matrix.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [x] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ( )	No (●)	Depth (inches):
Water Table Present?	Yes ( )	No (●)	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ( )	No (●)	Depth (inches):

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

The soils were dry at the time of the delineation, but two secondary indicators are present.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 13-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 14

Investigator(s): Todd Sherman **Section, Township, Range:** S 33 T 8S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 2.0 % / 1.1 °

Subregion (LRR): LRR D **Lat.:** 438519 **Long.:** 4435637 **Datum:** NAD83

Soil Map Unit Name: Payson silty clay loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( ) No (●)	**Is the Sampled Area within a Wetland?**	Yes ( ) No (●)
Hydric Soil Present?	Yes ( ) No (●)		
Wetland Hydrology Present?	Yes ( ) No (●)		

Remarks: Upland area adjacent to SP-13.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Agropyron elongatum	80	☑ 80.0%	UPL
2. Distichlis spicata	20	☑ 20.0%	FAC
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	50.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	0	x 4 =	0
UPL species	80	x 5 =	400
Column Totals:	100	(A)	460 (B)

Prevalence Index = B/A = 4.600

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 14

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	2/2	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 13-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 15

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438442 **Long.:** 4435555 **Datum:** NAD83

Soil Map Unit Name: Peteetneet-Holdaway complex **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes (●) No ( )	**Is the Sampled Area within a Wetland?** Yes (●) No ( )
Hydric Soil Present?	Yes (●) No ( )	
Wetland Hydrology Present?	Yes (●) No ( )	

Remarks: Palustrine emergent wetland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size:)				
1. Carex nebrascensis	85	☑	94.4%	OBL
2. Agropyron elongatum	5	☐	5.6%	UPL
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
	90	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

% Bare Ground in Herb Stratum: 10 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

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

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	85	x 1 =	85
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	5	x 5 =	25
Column Totals:	90 (A)		110 (B)

Prevalence Index = B/A = 1.222

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes (●) No ( )

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 15

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc²	Texture	Remarks
0-8	10YR	3/2	100%						Loam	
8-20	10YR	3/1	100%						Clay Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ◉ No ○

Remarks:

Soils do not exhibit any typical hydric soil indicators, but the soils are saturated at the surface during the dry season, meeting the definition of a hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☑ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ◉	No ○	Depth (inches): 8
Saturation Present? (includes capillary fringe)	Yes ◉	No ○	Depth (inches): 0

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

The soils were saturated at the surface with a shallow water table. Potentially from irrigation.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 13-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 16

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 2.0 % / 1.1 °

Subregion (LRR): LRR D **Lat.:** 438441 **Long.:** 4435550 **Datum:** NAD83

Soil Map Unit Name: Peteetneet-Holdaway complex **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Upland area adjacent to SP-15.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Agropyron elongatum	70	☑ 70.0%	UPL
2. Festuca pratensis	20	☑ 20.0%	FACU
3. Juncus balticus	5	☐ 5.0%	FACW
4. Carex nebrascensis	5	☐ 5.0%	OBL
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	5	x 2 =	10
FAC species	0	x 3 =	0
FACU species	20	x 4 =	80
UPL species	70	x 5 =	350
Column Totals:	100 (A)		445 (B)

Prevalence Index = B/A = 4.450

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 16

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/2	100%						Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 13-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 17

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 2.0 % / 1.1 °

Subregion (LRR): LRR D **Lat.:** 437834 **Long.:** 4434672 **Datum:** NAD83

Soil Map Unit Name: McBeth silt loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( ) No (●)	**Is the Sampled Area within a Wetland?** Yes ( ) No (●)
Hydric Soil Present?	Yes ( ) No (●)	
Wetland Hydrology Present?	Yes ( ) No (●)	

Remarks: Mesic upland in the borrow area between the interstate and the railroad.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Phalaris arundinacea	30	☑ 33.3%	FACW
2. Cardaria draba	20	☑ 22.2%	UPL
3. Cirsium arvense	20	☑ 22.2%	FACU
4. Carex nebrascensis	10	☐ 11.1%	OBL
5. Convolvulus arvensis	10	☐ 11.1%	UPL
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	90	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 10 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	33.3%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	30	x 2 =	60
FAC species	0	x 3 =	0
FACU species	20	x 4 =	80
UPL species	30	x 5 =	150
Column Totals:	90 (A)		300 (B)

Prevalence Index = B/A = 3.333

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 17

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	2/2	100%						Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 13-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 18

Investigator(s): Todd Sherman **Section, Township, Range: S** 5 **T** 9S **R** 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 2.0 **%** / 1.1 **°**

Subregion (LRR): LRR D **Lat.:** 437601 **Long.:** 4434394 **Datum:** NAD83

Soil Map Unit Name: McBeth silt loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( ) No (●)	**Is the Sampled Area within a Wetland?** Yes ( ) No (●)
Hydric Soil Present?	Yes ( ) No (●)	
Wetland Hydrology Present?	Yes ( ) No (●)	

Remarks: Mesic upland in the borrow area between the interstate and the railroad. The area supports willows with an upland understory.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1. Salix exigua	100	☑ 100.0%	FACW
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	100	= Total Cover	
Herb Stratum (Plot size:)			
1. Cirsium arvense	50	☑ 100.0%	FACU
2.		☐ 0.0%	
3.		☐ 0.0%	
4.		☐ 0.0%	
5.		☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	50	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 50 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	50.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	50	x 4 =	200
UPL species	0	x 5 =	0
Column Totals:	150 (A)		400 (B)

Prevalence Index = B/A = 2.667

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks:

The area supports willows with an upland understory, and does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: **18**

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	2/2	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 13-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 19

Investigator(s): Todd Sherman **Section, Township, Range:** S 5 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 437561 **Long.:** 4434621 **Datum:** NAD83

Soil Map Unit Name: McBeth silt loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ● No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Palustrine emergent wetland adjacent to Main Street.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Typha latifolia	80	☑ 80.0%	OBL
2. Phragmites australis	10	☐ 10.0%	FACW
3. Epilobium ciliatum	5	☐ 5.0%	FACW
4. Carex rostrata	5	☐ 5.0%	OBL
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	85	x 1 =	85
FACW species	15	x 2 =	30
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		115 (B)

Prevalence Index = B/A = 1.150

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ● No ○

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 19

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/1	100%						Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [x] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils emit a hydrogen sulfide odor when excavated.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [x] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ( )	No (●)	Depth (inches):
Water Table Present?	Yes (●)	No ( )	Depth (inches): 3
Saturation Present? (includes capillary fringe)	Yes (●)	No ( )	Depth (inches): 0

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

Soils emit a hydrogen sulfide odor when excavated, and were saturated at the surface with a shallow water table.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 13-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 20

Investigator(s): Todd Sherman **Section, Township, Range:** S 5 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 437560 **Long.:** 4434614 **Datum:** NAD83

Soil Map Unit Name: McBeth silt loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Upland area adjacent to SP-19.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Agropyron elongatum	100	☑ 100.0%	UPL
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	100	x 5 =	500
Column Totals:	100 (A)		500 (B)

Prevalence Index = B/A = 5.000

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 20

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	2/2	100%						Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ●

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ● Depth (inches):

Water Table Present? Yes ○ No ● Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ● Depth (inches):

Wetland Hydrology Present? Yes ○ No ●

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 13-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 21

Investigator(s): Todd Sherman **Section, Township, Range:** S 5 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 437521 **Long.:** 4434693 **Datum:** NAD83

Soil Map Unit Name: Sunset loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Palustrine emergent wetland fringe around a small open water stock pond.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size:)	**Absolute % Cover**	**Dominant Species? Rel.Strat. Cover**	**Indicator Status**
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Juncus balticus	30	☑ 30.0%	FACW
2. Carex nebrascensis	25	☑ 25.0%	OBL
3. Eleocharis palustris	25	☑ 25.0%	OBL
4. Mentha spicata	20	☑ 20.0%	OBL
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	4	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	70	x 1 =	70
FACW species	30	x 2 =	60
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		130 (B)

Prevalence Index = B/A = 1.300

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 21

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	2/1	100%						Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [x] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils emit a hydrogen sulfide odor when excavated.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [x] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ( )	No (●)	Depth (inches):
Water Table Present?	Yes (●)	No ( )	Depth (inches): 4
Saturation Present? (includes capillary fringe)	Yes (●)	No ( )	Depth (inches): 0

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

Soils emit a hydrogen sulfide odor when excavated, and were saturated at the surface with a shallow water table.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 13-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 22

Investigator(s): Todd Sherman **Section, Township, Range:** S 5 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 437518 **Long.:** 4434689 **Datum:** NAD83

Soil Map Unit Name: Sunset loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( )	No (●)	**Is the Sampled Area within a Wetland?**	Yes ( ) No (●)
Hydric Soil Present?	Yes ( )	No (●)		
Wetland Hydrology Present?	Yes ( )	No (●)		

Remarks: Upland area adjacent to SP-21.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Festuca pratensis	100	☑ 100.0%	FACU
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 4.000

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 22

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	2/2	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 13-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 23

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 437840 **Long.:** 4434527 **Datum:** NAD83

Soil Map Unit Name: McBeth silt loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes (●) No ( )	**Is the Sampled Area within a Wetland?** Yes (●) No ( )
Hydric Soil Present?	Yes (●) No ( )	
Wetland Hydrology Present?	Yes (●) No ( )	

Remarks: Palustrine emergent wetland in the borrow ditch on the east side of I-15.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size:)				
1. Polypogon monspeliensis	35	☑	35.0%	FACW
2. Carex rostrata	35	☑	35.0%	OBL
3. Phalaris arundinacea	20	☑	20.0%	FACW
4. Agrostis stolonifera	10	☐	10.0%	FACW
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)

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

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	35	x 1 =	35
FACW species	65	x 2 =	130
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		165 (B)

Prevalence Index = B/A = 1.650

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes (●) No ( )

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 23

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	2/2	95%	5YR	4/6	5%	C	M	Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [x] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils meet the criteria for redox dark surface.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [x] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ( )	No (●)	Depth (inches):
Water Table Present?	Yes (●)	No ( )	Depth (inches): 4
Saturation Present? (includes capillary fringe)	Yes (●)	No ( )	Depth (inches): 0

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

Soils exhibit oxidized rhizospheres.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 13-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 24

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 437845 **Long.:** 4434525 **Datum:** NAD83

Soil Map Unit Name: McBeth silt loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ● No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Upland area adjacent to SP-23.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	**= Total Cover**	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	**= Total Cover**	
Herb Stratum (Plot size:)			
1. Trifolium fragiferum	40	☑ 40.0%	FACU
2. Festuca pratensis	30	☑ 30.0%	FACU
3. Taraxacum officinale	10	☐ 10.0%	FACU
4. Carex nebrascensis	10	☐ 10.0%	OBL
5. Juncus balticus	10	☐ 10.0%	FACW
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	**= Total Cover**	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	**= Total Cover**	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	80	x 4 =	320
UPL species	0	x 5 =	0
Column Totals:	100 (A)		350 (B)

Prevalence Index = B/A = 3.500

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ●

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 24

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	2/2	100%						Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 11-May-16

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 25

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 438879 **Long.:** 4434495 **Datum:** NAD83

Soil Map Unit Name: Logan silty clay loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( ) No (●)	**Is the Sampled Area within a Wetland?** Yes ( ) No (●)
Hydric Soil Present?	Yes ( ) No (●)	
Wetland Hydrology Present?	Yes ( ) No (●)	

Remarks: Upland area adjacent to SP-26.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Festuca pratensis	70	☑ 70.0%	FACU
2. Poa pratensis	10	☐ 10.0%	FAC
3. Trifolium repens	10	☐ 10.0%	FACU
4. Hordeum murinum	10	☐ 10.0%	FACU
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	10	x 3 =	30
FACU species	90	x 4 =	360
UPL species	0	x 5 =	0
Column Totals:	100 (A)		390 (B)

Prevalence Index = B/A = 3.900

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 25

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/4	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 11-May-16

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 26

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Swale **Local relief (concave, convex, none):** concave **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 438882 **Long.:** 4434498 **Datum:** NAD83

Soil Map Unit Name: Logan silty clay loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes (●) No ○	**Is the Sampled Area within a Wetland?** Yes (●) No ○
Hydric Soil Present?	Yes (●) No ○	
Wetland Hydrology Present?	Yes (●) No ○	

Remarks: Palustrine emergent wetland in a grazed pasture.

VEGETATION - Use scientific names of plants.

Stratum / Species	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
= Total Cover	0			
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
= Total Cover	0			
Herb Stratum (Plot size:)				
1. Typha latifolia	50	☑	58.8%	OBL
2. Eleocharis palustris	10	☐	11.8%	OBL
3. Schoenoplectus pungens	10	☐	11.8%	OBL
4. Nasturtium officinale	10	☐	11.8%	OBL
5. Carex nebrascensis	5	☐	5.9%	OBL
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
= Total Cover	85			
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
= Total Cover	0			

% Bare Ground in Herb Stratum: 15 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 1.000

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes (●) No ○

Remarks:

100% obligate vegetation.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 26

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-5	10YR	2/1	100%						Loam	
5-20	10YR	3/1	100%						Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [x] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils emit a hydrogen sulfide odor when excavated.

Hydrology

Wetland Hydrology Indicators:

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

- [x] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [x] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes (●)	No ( )	Depth (inches): 1
Water Table Present?	Yes (●)	No ( )	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes (●)	No ( )	Depth (inches): 0

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

Soils emit a hydrogen sulfide odor when excavated, and were inundated.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 11-May-16

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 27

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Swale **Local relief (concave, convex, none):** concave **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 438875 **Long.:** 4434578 **Datum:** NAD83

Soil Map Unit Name: Logan silty clay loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Palustrine emergent wetland in a grazed pasture.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size:)				
1. Juncus balticus	40	☑	40.0%	FACW
2. Carex praegracilis	20	☑	20.0%	FACW
3. Carex nebrascensis	20	☑	20.0%	OBL
4. Festuca pratensis	20	☑	20.0%	FACU
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)

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

Percent of dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	60	x 2 =	120
FAC species	0	x 3 =	0
FACU species	20	x 4 =	80
UPL species	0	x 5 =	0
Column Totals:	100 (A)		220 (B)

Prevalence Index = B/A = 2.200

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 27

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR	3/2	100%						Loam	
5-20	10YR	4/1	100%						Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [x] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils meet the criteria for depleted matrix.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ( )	No (●)	Depth (inches):
Water Table Present?	Yes ( )	No (●)	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes (●)	No ( )	Depth (inches): 10

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

Soils are saturated in the upper profile.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 11-May-16

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 28

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** convex **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 438870 **Long.:** 4434575 **Datum:** NAD83

Soil Map Unit Name: Logan silty clay loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( ) No (●)	**Is the Sampled Area within a Wetland?**	Yes ( ) No (●)
Hydric Soil Present?	Yes ( ) No (●)		
Wetland Hydrology Present?	Yes ( ) No (●)		

Remarks: Upland area adjacent to SP-27.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Festuca pratensis	80	☑ 80.0%	FACU
2. Carex praegracilis	10	☐ 10.0%	FACW
3. Juncus balticus	10	☐ 10.0%	FACW
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	0	x 3 =	0
FACU species	80	x 4 =	320
UPL species	0	x 5 =	0
Column Totals:	100 (A)		360 (B)

Prevalence Index = B/A = 3.600

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 28

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/4	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 13-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 29

Investigator(s): Todd Sherman **Section, Township, Range:** S 10 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 439685 **Long.:** 4433593 **Datum:** NAD83

Soil Map Unit Name: Vineyard fine sandy loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ⦿ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Palustrine emergent wetland in a grazed pasture.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Schoenoplectus pungens	50	☑ 50.0%	OBL
2. Distichlis spicata	20	☑ 20.0%	FAC
3. Hordeum jubatum	20	☑ 20.0%	FAC
4. Muhlenbergia asperifolia	10	☐ 10.0%	FACW
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	50	x 1 =	50
FACW species	10	x 2 =	20
FAC species	40	x 3 =	120
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		190 (B)

Prevalence Index = B/A = 1.900

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ⦿ No ○

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 29

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-8	10YR	2/2	100%						Loam	
8-20	10YR	6/2	100%						Clay Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ◉ No ○

Remarks:

Soils meet the criteria for depleted matrix.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ◉	No ○	Depth (inches): 11

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

Soils are saturated in the upper profile.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 13-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 30

Investigator(s): Todd Sherman **Section, Township, Range:** S 10 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 439679 **Long.:** 4433587 **Datum:** NAD83

Soil Map Unit Name: Vineyard fine sandy loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( ) No (●)	**Is the Sampled Area within a Wetland?**	Yes ( ) No (●)
Hydric Soil Present?	Yes ( ) No (●)		
Wetland Hydrology Present?	Yes ( ) No (●)		

Remarks: Upland area adjacent to SP-29.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size:)				
1. Hordeum jubatum	60	☑	60.0%	FAC
2. Atriplex micrantha	30	☑	30.0%	UPL
3. Trifolium fragiferum	10	☐	10.0%	FACU
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	50.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	60	x 3 =	180
FACU species	10	x 4 =	40
UPL species	30	x 5 =	150
Column Totals:	100 (A)		370 (B)

Prevalence Index = B/A = 3.700

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 30

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/3	100%						Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 31

Investigator(s): Todd Sherman **Section, Township, Range:** S 10 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 439569 **Long.:** 4433740 **Datum:** NAD83

Soil Map Unit Name: Vineyard fine sandy loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Palustrine emergent wetland created by an artesian well pipe.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover		Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size:)				
1. Juncus balticus	30	☑	30.0%	FACW
2. Eleocharis palustris	25	☑	25.0%	OBL
3. Phalaris arundinacea	20	☑	20.0%	FACW
4. Polypogon monspeliensis	20	☑	20.0%	FACW
5. Schoenoplectus pungens	5	☐	5.0%	OBL
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	4	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	x 1 =	30
FACW species	70	x 2 =	140
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100	(A)	170 (B)

Prevalence Index = B/A = 1.700

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 31

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/1	95%	5YR	4/6	5%	C	M	Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: ______

Depth (inches): ______

Hydric Soil Present? Yes ◉ No ○

Remarks:

Soils meet the criteria for redox dark surface.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☑ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches): 6
Saturation Present? (includes capillary fringe)	Yes ◉	No ○	Depth (inches): 3

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

Soils are saturated in the upper profile and exhibit oxidized rhizospheres.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 32

Investigator(s): Todd Sherman **Section, Township, Range:** S 10 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 439562 **Long.:** 4433738 **Datum:** NAD83

Soil Map Unit Name: Vineyard fine sandy loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( ) No (●)	**Is the Sampled Area within a Wetland?** Yes ( ) No (●)
Hydric Soil Present?	Yes ( ) No (●)	
Wetland Hydrology Present?	Yes ( ) No (●)	

Remarks: Upland area adjacent to SP-31.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Festuca pratensis	100	☑ 100.0%	FACU
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 4.000

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 32

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	4/3	100%						Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 33

Investigator(s): Todd Sherman **Section, Township, Range:** S 9 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 439562 **Long.:** 4433738 **Datum:** NAD83

Soil Map Unit Name: Vineyard fine sandy loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes (●) No ( )	**Is the Sampled Area within a Wetland?** Yes ( ) No (●)
Hydric Soil Present?	Yes ( ) No (●)	
Wetland Hydrology Present?	Yes ( ) No (●)	

Remarks: Upland area that meets the vegetation criteria. This area shows as wet in the recent 2105 Google imagery, but was never wet in previous years of imagery. It appears that the adjacent ditch needed cleaning, and it had inundated this area for a short period. It was completely dry at the time of the delineation, and at the same elevation as the adjacent upland vegetation.

VEGETATION - Use scientific names of plants.

Stratum / Species	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size:)				
1. Carex nebrascensis	30	☑	85.7%	OBL
2. Muhlenbergia asperifolia	5	☐	14.3%	FACW
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
	35	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	x 1 =	30
FACW species	5	x 2 =	10
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	35 (A)		40 (B)

Prevalence Index = B/A = 1.143

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes (●) No ( )

Remarks:

The area meets the vegetation criteria, but is at the same elevation and landscape position as adjacent obvious uplands.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 33

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/2	100%						Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ●

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ● Depth (inches):

Water Table Present? Yes ○ No ● Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ● Depth (inches):

Wetland Hydrology Present? Yes ○ No ●

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 34

Investigator(s): Todd Sherman **Section, Township, Range:** S 9 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438863 **Long.:** 4434102 **Datum:** NAD83

Soil Map Unit Name: Ironton loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes (●) No ( )	**Is the Sampled Area within a Wetland?** Yes (●) No ( )
Hydric Soil Present?	Yes (●) No ( )	
Wetland Hydrology Present?	Yes (●) No ( )	

Remarks: Palustrine emergent wetland created by a ground water seep.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Eleocharis palustris	50	☑ 50.0%	OBL
2. Nasturtium officinale	20	☑ 20.0%	OBL
3. Schoenoplectus pungens	20	☑ 20.0%	OBL
4. Polypogon monspeliensis	10	☐ 10.0%	FACW
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	90	x 1 =	90
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		110 (B)

Prevalence Index = B/A = 1.100

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes (●) No ( )

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 34

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-5	10YR	3/2	100%						Loam	
5-20	10YR	3/1	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☑ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ◉ No ○

Remarks:

Soils do not exhibit any typical hydric soil indicators, but the soils are saturated at the surface during the dry season, meeting the definition of a hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ◉	No ○	Depth (inches): 4
Saturation Present? (includes capillary fringe)	Yes ◉	No ○	Depth (inches): 0

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

The soils were saturated at the surface with a shallow water table. Located below an obvious groundwater seep.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 35

Investigator(s): Todd Sherman **Section, Township, Range:** S 9 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438864 **Long.:** 4434093 **Datum:** NAD83

Soil Map Unit Name: Ironton loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Upland area adjacent to SP-34.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Festuca pratensis	80	☑ 80.0%	FACU
2. Carduus nutans	20	☑ 20.0%	FACU
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 4.000

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 35

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/2	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 36

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438846 **Long.:** 4434271 **Datum:** NAD83

Soil Map Unit Name: Ironton loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Palustrine emergent wetland created by a ground water seep.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Schoenoplectus americanus	50	☑ 50.0%	OBL
2. Eleocharis palustris	30	☑ 30.0%	OBL
3. Carex nebrascensis	20	☑ 20.0%	OBL
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 1.000

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 36

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-5	10YR	2/2	100%						Loam	
5-20	10YR	3/1	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☑ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ◉ No ○

Remarks:

Soils do not exhibit any typical hydric soil indicators, but the soils are saturated at the surface during the dry season, meeting the definition of a hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ◉	No ○	Depth (inches): 8
Saturation Present? (includes capillary fringe)	Yes ◉	No ○	Depth (inches): 2

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

The soils were saturated near the surface with a shallow water table. Located below an obvious groundwater seep.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 37

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438851 **Long.:** 4434265 **Datum:** NAD83

Soil Map Unit Name: Ironton loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( ) No (●)	**Is the Sampled Area within a Wetland?** Yes ( ) No (●)
Hydric Soil Present?	Yes ( ) No (●)	
Wetland Hydrology Present?	Yes ( ) No (●)	

Remarks: Upland area adjacent to SP-36.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size:)				
1. Festuca pratensis	50	☑	50.0%	FACU
2. Poa pratensis	50	☑	50.0%	FAC
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	50.0%	(A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 3.500

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 37

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	2/2	100%						Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 38

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438849 **Long.:** 4434408 **Datum:** NAD83

Soil Map Unit Name: Ironton loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Palustrine emergent wetland created by a ground water seep.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Schoenoplectus americanus	50	☑ 50.0%	OBL
2. Eleocharis palustris	40	☑ 40.0%	OBL
3. Polypogon monspeliensis	5	☐ 5.0%	FACW
4. Ranunculus sceleratus	5	☐ 5.0%	OBL
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	95	x 1 =	95
FACW species	5	x 2 =	10
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		105 (B)

Prevalence Index = B/A = 1.050

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 38

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-8	10YR	2/2	100%						Loam	
8-20	10YR	3/1	100%						Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [x] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils do not exhibit any typical hydric soil indicators, but the soils are saturated at the surface during the dry season, meeting the definition of a hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [x] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes (●)	No ( )	Depth (inches): 1
Water Table Present?	Yes (●)	No ( )	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes (●)	No ( )	Depth (inches): 0

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

The soils were inundated.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 39

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438851 **Long.:** 4434401 **Datum:** NAD83

Soil Map Unit Name: Ironton loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( ) No (●)	**Is the Sampled Area within a Wetland?** Yes ( ) No (●)
Hydric Soil Present?	Yes ( ) No (●)	
Wetland Hydrology Present?	Yes ( ) No (●)	

Remarks: Upland area adjacent to SP-38.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Festuca pratensis	100	☑ 100.0%	FACU
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 4.000

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 39

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	2/2	100%					Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 40

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438742 **Long.:** 4434550 **Datum:** NAD83

Soil Map Unit Name: Vineyard fine sandy loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Palustrine emergent wetland created by a hillslope ground water seep.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover		Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size:)				
1. Schoenoplectus acutus	40	☑	40.0%	OBL
2. Carex nebrascensis	35	☑	35.0%	OBL
3. Eleocharis palustris	20	☑	20.0%	OBL
4. Polypogon monspeliensis	5	☐	5.0%	FACW
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	95	x 1 =	95
FACW species	5	x 2 =	10
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		105 (B)

Prevalence Index = B/A = 1.050

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 40

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-6	10YR	2/2	100%						Peat	
6-20	10YR	3/2	95%	5YR	4/6	5%	C	M	Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ◉ No ○

Remarks:

Soils meet the criteria for redox dark surface.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☑ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ◉	No ○	Depth (inches): 7
Saturation Present? (includes capillary fringe)	Yes ◉	No ○	Depth (inches): 0

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

Soils are saturated at the surface and exhibit oxidized rhizospheres.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 41

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438752 **Long.:** 4434543 **Datum:** NAD83

Soil Map Unit Name: Vineyard fine sandy loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Upland area adjacent to SP-40.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Festuca pratensis	80	☑ 80.0%	FACU
2. Juncus balticus	10	☐ 10.0%	FACW
3. Poa pratensis	10	☐ 10.0%	FAC
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	10	x 3 =	30
FACU species	80	x 4 =	320
UPL species	0	x 5 =	0
Column Totals:	100 (A)		370 (B)

Prevalence Index = B/A = 3.700

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 41

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	4/2	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 42

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438631 **Long.:** 4434660 **Datum:** NAD83

Soil Map Unit Name: Vineyard fine sandy loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes (●) No ○	**Is the Sampled Area within a Wetland?** Yes (●) No ○
Hydric Soil Present?	Yes (●) No ○	
Wetland Hydrology Present?	Yes (●) No ○	

Remarks: Palustrine emergent wetland created by a hillslope ground water seep.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Juncus balticus	20	☑ 20.0%	FACW
2. Carex nebrascensis	20	☑ 20.0%	OBL
3. Eleocharis palustris	20	☑ 20.0%	OBL
4. Festuca pratensis	20	☑ 20.0%	FACU
5. Poa pratensis	20	☑ 20.0%	FAC
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	4	(A)
Total Number of Dominant Species Across All Strata:	5	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	80.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	40	x 1 =	40
FACW species	20	x 2 =	40
FAC species	20	x 3 =	60
FACU species	20	x 4 =	80
UPL species	0	x 5 =	0
Column Totals:	100 (A)		220 (B)

Prevalence Index = B/A = 2.200

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes (●) No ○

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 42

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc²	Texture	Remarks
0-2	10YR	3/3	100%					Peat	
2-20	10YR	2/1	100%					Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [x] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils do not exhibit any typical hydric soil indicators, but the soils are saturated in the upper profile during the dry season, meeting the definition of a hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [x] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ( )	No (●)	Depth (inches):
Water Table Present?	Yes (●)	No ( )	Depth (inches): 16
Saturation Present? (includes capillary fringe)	Yes (●)	No ( )	Depth (inches): 9

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

Soils are saturated in the upper profile.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 43

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438627 **Long.:** 4434652 **Datum:** NAD83

Soil Map Unit Name: Vineyard fine sandy loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( ) No (●)	**Is the Sampled Area within a Wetland?** Yes ( ) No (●)
Hydric Soil Present?	Yes ( ) No (●)	
Wetland Hydrology Present?	Yes ( ) No (●)	

Remarks: Upland area adjacent to SP-42.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Festuca pratensis	60	☑ 60.0%	FACU
2. Trifolium fragiferum	40	☑ 40.0%	FACU
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 4.000

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 43

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/3	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 44

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438485 **Long.:** 4435357 **Datum:** NAD83

Soil Map Unit Name: Vineyard fine sandy loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (•) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes (•) No ( )	**Is the Sampled Area within a Wetland?** Yes (•) No ( )
Hydric Soil Present?	Yes (•) No ( )	
Wetland Hydrology Present?	Yes (•) No ( )	

Remarks: Palustrine emergent wetland that is part of a large wetland complex.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size:)				
1. Carex nebrascensis	50	☑	50.0%	OBL
2. Juncus balticus	20	☑	20.0%	FACW
3. Schoenoplectus pungens	20	☑	20.0%	OBL
4. Polypogon monspeliensis	4	☐	4.0%	FACW
5. Phalaris arundinacea	2	☐	2.0%	FACW
6. Rumex crispus	2	☐	2.0%	FAC
7. Persicaria lapathifolia	2	☐	2.0%	FACW
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)

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

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	70	x 1 =	70
FACW species	28	x 2 =	56
FAC species	2	x 3 =	6
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		132 (B)

Prevalence Index = B/A = 1.320

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes (•) No ( )

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 44

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR	2/2	100%						Loam	
8-20	10YR	3/2	95%	5YR	4/6	5%	C	M	Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [x] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils meet the criteria for redox dark surface.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [x] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

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

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

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

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

Soils exhibit oxidized rhizospheres.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 45

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438497 **Long.:** 4435361 **Datum:** NAD83

Soil Map Unit Name: Peteetneet-Holdaway complex **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Upland area adjacent to SP-44.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size:)				
1. Festuca pratensis	80	☑	80.0%	FACU
2. Trifolium fragiferum	20	☑	20.0%	FACU
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 4.000

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 45

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/2	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 46

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438747 **Long.:** 4435647 **Datum:** NAD83

Soil Map Unit Name: Ironton loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes (●) No ( )	**Is the Sampled Area within a Wetland?** Yes (●) No ( )
Hydric Soil Present?	Yes (●) No ( )	
Wetland Hydrology Present?	Yes (●) No ( )	

Remarks: Palustrine emergent wetland that is part of a large wetland complex.

VEGETATION - Use scientific names of plants.

Stratum / Species	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	0		= Total Cover	
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0		= Total Cover	
Herb Stratum (Plot size:)				
1. Juncus balticus	40	☑	40.0%	FACW
2. Carex praegracilis	30	☑	30.0%	FACW
3. Carex nebrascensis	20	☑	20.0%	OBL
4. Muhlenbergia asperifolia	10	☐	10.0%	FACW
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
	100		= Total Cover	
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0		= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	80	x 2 =	160
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		180 (B)

Prevalence Index = B/A = 1.800

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes (●) No ( )

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 46

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc²	Texture	Remarks
0-7	10YR	2/1	100%					Loam	
7-20	10YR	4/1	100%					Clay Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [x] Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils do not exhibit any typical hydric soil indicators, but the soils are saturated in the upper profile during the dry season, meeting the definition of a hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ( )	No (●)	Depth (inches):
Water Table Present?	Yes ( )	No (●)	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes (●)	No ( )	Depth (inches): 10

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

Soils are saturated in the upper profile.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 47

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438754 **Long.:** 4435655 **Datum:** NAD83

Soil Map Unit Name: Ironton loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( ) No (●)	**Is the Sampled Area within a Wetland?** Yes ( ) No (●)
Hydric Soil Present?	Yes ( ) No (●)	
Wetland Hydrology Present?	Yes ( ) No (●)	

Remarks: Upland area adjacent to SP-46.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Agropyron elongatum	70	☑ 70.0%	UPL
2. Muhlenbergia asperifolia	15	☐ 15.0%	FACW
3. Hordeum jubatum	10	☐ 10.0%	FAC
4. Juncus balticus	5	☐ 5.0%	FACW
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	70	x 5 =	350
Column Totals:	100 (A)		420 (B)

Prevalence Index = B/A = 4.200

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 47

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/2	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 48

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438807 **Long.:** 4435357 **Datum:** NAD83

Soil Map Unit Name: Vineyard fine sandy loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes (●) No ( )	**Is the Sampled Area within a Wetland?** Yes (●) No ( )
Hydric Soil Present?	Yes (●) No ( )	
Wetland Hydrology Present?	Yes (●) No ( )	

Remarks: Palustrine emergent wetland that is part of a large wetland complex.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Juncus balticus	95	☑ 95.0%	FACW
2. Muhlenbergia asperifolia	5	☐ 5.0%	FACW
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

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

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 2.000

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes (●) No ( )

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 48

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	2/1	100%					Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [x] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils do not exhibit any typical hydric soil indicators, but the soils are saturated in the upper profile during the dry season, meeting the definition of a hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [x] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ( )	No (●)	Depth (inches):
Water Table Present?	Yes ( )	No (●)	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes (●)	No ( )	Depth (inches): 10

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

Soils are saturated in the upper profile and exhibit oxidized rhizospheres.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 49

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438806 **Long.:** 4435778 **Datum:** NAD83

Soil Map Unit Name: Ironton loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Upland area adjacent to SP-48.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Agropyron elongatum	60	☑ 60.0%	UPL
2. Muhlenbergia asperifolia	20	☑ 20.0%	FACW
3. Bromus arvensis	20	☑ 20.0%	FACU
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	33.3%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	0	x 3 =	0
FACU species	20	x 4 =	80
UPL species	60	x 5 =	300
Column Totals:	100 (A)		420 (B)

Prevalence Index = B/A = 4.200

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 49

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/2	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 50

Investigator(s): Todd Sherman **Section, Township, Range:** S 33 T 8S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438887 **Long.:** 4435843 **Datum:** NAD83

Soil Map Unit Name: Ironton loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes (●) No ( )	**Is the Sampled Area within a Wetland?** Yes (●) No ( )
Hydric Soil Present?	Yes (●) No ( )	
Wetland Hydrology Present?	Yes (●) No ( )	

Remarks: Palustrine emergent wetland created by a ground water seep.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Juncus balticus	50	☑ 50.0%	FACW
2. Carex praegracilis	30	☑ 30.0%	FACW
3. Ranunculus sceleratus	20	☑ 20.0%	OBL
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species	20	x 1 = 20
FACW species	80	x 2 = 160
FAC species	0	x 3 = 0
FACU species	0	x 4 = 0
UPL species	0	x 5 = 0
Column Totals:	100 (A)	180 (B)

Prevalence Index = B/A = 1.800

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes (●) No ( )

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 50

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc²	Texture	Remarks
0-7	10YR	2/1	100%					Loam	
7-20	10YR	4/1	100%					Clay Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [x] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils do not exhibit any typical hydric soil indicators, but the soils are saturated at the surface during the dry season, meeting the definition of a hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ( )	No (●)	Depth (inches):
Water Table Present?	Yes (●)	No ( )	Depth (inches): 6
Saturation Present? (includes capillary fringe)	Yes (●)	No ( )	Depth (inches): 0

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

The soils were saturated at the surface with a shallow water table.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 51

Investigator(s): Todd Sherman **Section, Township, Range:** S 33 T 8S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438880 **Long.:** 4435841 **Datum:** NAD83

Soil Map Unit Name: Ironton loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( ) No (●)	**Is the Sampled Area within a Wetland?** Yes ( ) No (●)
Hydric Soil Present?	Yes ( ) No (●)	
Wetland Hydrology Present?	Yes ( ) No (●)	

Remarks: Upland area adjacent to SP-50.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Agropyron elongatum	90	☑ 90.0%	UPL
2. Juncus balticus	10	☐ 10.0%	FACW
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	90	x 5 =	450
Column Totals:	100 (A)		470 (B)

Prevalence Index = B/A = 4.700

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 51

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/2	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 52

Investigator(s): Todd Sherman **Section, Township, Range:** S 33 T 8S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438887 **Long.:** 4435843 **Datum:** NAD83

Soil Map Unit Name: Ironton loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes (●) No ( )	**Is the Sampled Area within a Wetland?** Yes (●) No ( )
Hydric Soil Present?	Yes (●) No ( )	
Wetland Hydrology Present?	Yes (●) No ( )	

Remarks: Palustrine emergent wetland created by a ground water seep.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size:)				
1. Eleocharis palustris	40	☑	40.0%	OBL
2. Carex nebrascensis	35	☑	35.0%	OBL
3. Juncus balticus	15	☐	15.0%	FACW
4. Polypogon monspeliensis	10	☐	10.0%	FACW
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	75	x 1 =	75
FACW species	25	x 2 =	50
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		125 (B)

Prevalence Index = B/A = 1.250

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes (●) No ( )

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 52

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-8	10YR	2/1	100%						Loam	
8-20	10YR	4/1	100%						Clay Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [x] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils do not exhibit any typical hydric soil indicators, but the soils are saturated at the surface during the dry season, meeting the definition of a hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ( )	No (●)	Depth (inches):
Water Table Present?	Yes (●)	No ( )	Depth (inches): 3
Saturation Present? (includes capillary fringe)	Yes (●)	No ( )	Depth (inches): 0

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

The soils were saturated at the surface with a shallow water table.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 53

Investigator(s): Todd Sherman **Section, Township, Range:** S 33 T 8S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 438891 **Long.:** 4435891 **Datum:** NAD83

Soil Map Unit Name: Ironton loam **NWI classification:** Upland

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

Are Vegetation [ ] **, Soil** [ ] **, or Hydrology** [ ] **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (•) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( ) No (•)	**Is the Sampled Area within a Wetland?**	Yes ( ) No (•)
Hydric Soil Present?	Yes ( ) No (•)		
Wetland Hydrology Present?	Yes ( ) No (•)		

Remarks: Upland area adjacent to SP-52.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	[ ] 0.0%	
2.	0	[ ] 0.0%	
3.	0	[ ] 0.0%	
4.	0	[ ] 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	[ ] 0.0%	
2.	0	[ ] 0.0%	
3.	0	[ ] 0.0%	
4.	0	[ ] 0.0%	
5.	0	[ ] 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Agropyron elongatum	90	[✓] 90.0%	UPL
2. Juncus balticus	10	[ ] 10.0%	FACW
3.	0	[ ] 0.0%	
4.	0	[ ] 0.0%	
5.	0	[ ] 0.0%	
6.	0	[ ] 0.0%	
7.	0	[ ] 0.0%	
8.	0	[ ] 0.0%	
9.	0	[ ] 0.0%	
10.	0	[ ] 0.0%	
11.	0	[ ] 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	[ ] 0.0%	
2.	0	[ ] 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	90	x 5 =	450
Column Totals:	100	(A)	470 (B)

Prevalence Index = B/A = 4.700

Hydrophytic Vegetation Indicators:

- [ ] **Dominance Test is > 50%**
- [ ] **Prevalence Index is ≤3.0** [1]
- [ ] **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- [ ] **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ( ) No (•)

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 53

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/2	100%						Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 54

Investigator(s): Todd Sherman **Section, Township, Range:** S 33 T 8S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 439058 **Long.:** 4436057 **Datum:** NAD83

Soil Map Unit Name: Kirkham silty clay loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ● No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Palustrine emergent wetland created by a ground water seep.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Juncus balticus	80	☑ 80.0%	FACW
2. Carex nebrascensis	20	☑ 20.0%	OBL
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	80	x 2 =	160
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		180 (B)

Prevalence Index = B/A = 1.800

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ● No ○

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 54

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-8	10YR	2/1	100%						Loam	
8-20	10YR	4/1	100%						Clay Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [x] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils do not exhibit any typical hydric soil indicators, but the soils are saturated in the upper profile during the dry season, meeting the definition of a hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ( )	No (●)	Depth (inches):
Water Table Present?	Yes ( )	No (●)	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes (●)	No ( )	Depth (inches): 11

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

Soils are saturated in the upper profile.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 55

Investigator(s): Todd Sherman **Section, Township, Range:** S 33 T 8S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 439062 **Long.:** 4436065 **Datum:** NAD83

Soil Map Unit Name: Kirkham silty clay loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Upland area adjacent to SP-54.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover		Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size:)				
1. Agropyron elongatum	70	☑	70.0%	UPL
2. Juncus balticus	20	☑	20.0%	FACW
3. Distichlis spicata	10	☐	10.0%	FAC
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	50.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	70	x 5 =	350
Column Totals:	100 (A)		420 (B)

Prevalence Index = B/A = 4.200

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 55

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/2	100%						Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 56

Investigator(s): Todd Sherman **Section, Township, Range:** S 33 T 8S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 439058 **Long.:** 4436093 **Datum:** NAD83

Soil Map Unit Name: Benjamin silty clay **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes (●) No ( )	**Is the Sampled Area within a Wetland?** Yes (●) No ( )
Hydric Soil Present?	Yes (●) No ( )	
Wetland Hydrology Present?	Yes (●) No ( )	

Remarks: Palustrine emergent wetland adjacent to Beer Creek.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Juncus balticus	100	☑ 100.0%	FACW
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 2.000

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes (●) No ( )

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 56

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-10	10YR	2/1	100%						Loam	
10-20	10YR	4/1	100%						Clay Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☑ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ◉ No ○

Remarks:

Soils do not exhibit any typical hydric soil indicators, but the soils are saturated in the upper profile during the dry season, meeting the definition of a hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ◉ No ○ Depth (inches): 11

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

Soils are saturated in the upper profile.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 14-Oct-15

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 57

Investigator(s): Todd Sherman **Section, Township, Range:** S 33 T 8S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 439063 **Long.:** 4436098 **Datum:** NAD83

Soil Map Unit Name: Benjamin silty clay **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (•) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( ) No (•)	**Is the Sampled Area within a Wetland?** Yes ( ) No (•)
Hydric Soil Present?	Yes ( ) No (•)	
Wetland Hydrology Present?	Yes ( ) No (•)	

Remarks: Upland area adjacent to SP-56.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Agropyron elongatum	80	☑ 80.0%	UPL
2. Juncus balticus	10	☐ 10.0%	FACW
3. Distichlis spicata	10	☐ 10.0%	FAC
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

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

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	80	x 5 =	400
Column Totals:	100 (A)		450 (B)

Prevalence Index = B/A = 4.500

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ( ) No (•)

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 57

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/2	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 09-May-16

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 58

Investigator(s): Todd Sherman **Section, Township, Range:** S 5 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 437409 **Long.:** 4434759 **Datum:** NAD83

Soil Map Unit Name: Sunset loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (•) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes (•) No ( )	**Is the Sampled Area within a Wetland?** Yes (•) No ( )
Hydric Soil Present?	Yes (•) No ( )	
Wetland Hydrology Present?	Yes (•) No ( )	

Remarks: Palustrine emergent wetland in a grazed pasture.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Eleocharis palustris	20	☑ 20.0%	OBL
2. Schoenoplectus americanus	20	☑ 20.0%	OBL
3. Carex praegracilis	20	☑ 20.0%	FACW
4. Carex nebrascensis	20	☑ 20.0%	OBL
5. Typha latifolia	20	☑ 20.0%	OBL
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	5	(A)
Total Number of Dominant Species Across All Strata:	5	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	80	x 1 =	80
FACW species	20	x 2 =	40
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100	(A)	120 (B)

Prevalence Index = B/A = 1.200

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes (•) No ( )

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 58

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	2/1	100%						Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [x] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils emit a hydrogen sulfide odor when excavated, and are inundated.

Hydrology

Wetland Hydrology Indicators:

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

- [x] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [x] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes (●)	No ( )	Depth (inches): 1
Water Table Present?	Yes (●)	No ( )	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes (●)	No ( )	Depth (inches): 0

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

Soils emit a hydrogen sulfide odor when excavated, and were inundated.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 09-May-16

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 59

Investigator(s): Todd Sherman **Section, Township, Range:** S 5 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 437407 **Long.:** 4434752 **Datum:** NAD83

Soil Map Unit Name: McBeth silt loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Upland area adjacent to SP-58.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Taraxacum officinale	30	☑ 30.0%	FACU
2. Trifolium repens	25	☑ 25.0%	FACU
3. Poa pratensis	20	☑ 20.0%	FAC
4. Festuca pratensis	20	☑ 20.0%	FACU
5. Dipsacus fullonum	5	☐ 5.0%	FAC
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	25.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	25	x 3 =	75
FACU species	75	x 4 =	300
UPL species	0	x 5 =	0
Column Totals:	100 (A)		375 (B)

Prevalence Index = B/A = 3.750

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 59

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR 2/2						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 09-May-16

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 60

Investigator(s): Todd Sherman **Section, Township, Range: S** 5 **T** 9S **R** 2E

Landform (hillslope, terrace, etc.): Swale **Local relief (concave, convex, none):** concave **Slope:** 0.0 **% /** 0.0 **°**

Subregion (LRR): LRR D **Lat.:** 437573 **Long.:** 4435128 **Datum:** NAD83

Soil Map Unit Name: Vineyard fine sandy loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Palustrine emergent wetland in a roadside swale between Main Street and the wastewater treatment facility.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	**= Total Cover**	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	**= Total Cover**	
Herb Stratum (Plot size:)			
1. Phragmites australis	70	☑ 70.0%	FACW
2. Glycyrrhiza lepidota	10	☐ 10.0%	FAC
3. Juncus balticus	10	☐ 10.0%	FACW
4. Carex nebrascensis	10	☐ 10.0%	OBL
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	**= Total Cover**	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	**= Total Cover**	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	80	x 2 =	160
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100	(A)	200 (B)

Prevalence Index = B/A = 2.000

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 60

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-11	10YR	2/1	100%						Loam	
11-20	10YR	5/1	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ◉ No ○

Remarks:

Soils meet the criteria for depleted matrix.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ◉	No ○	Depth (inches): 11
Saturation Present? (includes capillary fringe)	Yes ◉	No ○	Depth (inches): 0

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

Soils are saturated at the surface.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 09-May-16

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 61

Investigator(s): Todd Sherman **Section, Township, Range:** S 5 T 9S R 2E

Landform (hillslope, terrace, etc.): Shoulder slope **Local relief (concave, convex, none):** convex **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 437568 **Long.:** 4435129 **Datum:** NAD83

Soil Map Unit Name: Vineyard fine sandy loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Upland area adjacent to SP-60.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size:)				
1. Agropyron elongatum	80	☑	100.0%	UPL
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
	80	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

% Bare Ground in Herb Stratum: 20 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 5.000

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 61

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	4/3	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 09-May-16

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 62

Investigator(s): Todd Sherman **Section, Township, Range:** S 5 T 9S R 2E

Landform (hillslope, terrace, etc.): Swale **Local relief (concave, convex, none):** concave **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 437572 **Long.:** 4435141 **Datum:** NAD83

Soil Map Unit Name: Vineyard fine sandy loam **NWI classification:** PSS

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ● No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Shrub wetland in a roadside swale between Main Street and the wastewater treatment facility.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1. Salix exigua	100	☑ 100.0%	FACW
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	100	= Total Cover	
Herb Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	0	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 100 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

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

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 2.000

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ● No ○

Remarks:

Thick stand of willows with no herbaceous understory at the time of the delineation.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 62

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc²	Texture	Remarks
0-11	10YR	2/1	100%					Loam	
11-20	10YR	5/1	100%					Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ◉ No ○

Remarks:

Soils meet the criteria for depleted matrix.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ◉	No ○	Depth (inches): 11
Saturation Present? (includes capillary fringe)	Yes ◉	No ○	Depth (inches): 0

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

Soils are saturated at the surface.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 09-May-16

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 63

Investigator(s): Todd Sherman **Section, Township, Range:** S 5 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 437599 **Long.:** 4435339 **Datum:** NAD83

Soil Map Unit Name: Vineyard fine sandy loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes (●) No ( )	**Is the Sampled Area within a Wetland?**	Yes (●) No ( )
Hydric Soil Present?	Yes (●) No ( )		
Wetland Hydrology Present?	Yes (●) No ( )		

Remarks: Palustrine emergent wetland created by a ground water seep.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Eleocharis palustris	25	☑ 25.0%	OBL
2. Schoenoplectus acutus	25	☑ 25.0%	OBL
3. Schoenoplectus americanus	20	☑ 20.0%	OBL
4. Juncus balticus	20	☑ 20.0%	FACW
5. Nasturtium officinale	10	☐ 10.0%	OBL
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	4	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	80	x 1 =	80
FACW species	20	x 2 =	40
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		120 (B)

Prevalence Index = B/A = 1.200

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes (●) No ( )

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 63

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/1	100%						Peat	

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

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

- [x] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [x] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soil is a histosol, and emits a hydrogen sulfide odor when excavated.

Hydrology

Wetland Hydrology Indicators:

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

- [x] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [x] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes (●)	No ( )	Depth (inches): 1
Water Table Present?	Yes (●)	No ( )	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes (●)	No ( )	Depth (inches): 0

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

Soils emit a hydrogen sulfide odor when excavated, and were inundated.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 09-May-16

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 64

Investigator(s): Todd Sherman **Section, Township, Range:** S 5 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 437595 **Long.:** 4435334 **Datum:** NAD83

Soil Map Unit Name: Vineyard fine sandy loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (•) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( ) No (•)	**Is the Sampled Area within a Wetland?** Yes ( ) No (•)
Hydric Soil Present?	Yes ( ) No (•)	
Wetland Hydrology Present?	Yes ( ) No (•)	

Remarks: Upland area adjacent to SP-63.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Festuca pratensis	80	☑ 80.0%	FACU
2. Taraxacum officinale	10	☐ 10.0%	FACU
3. Poa pratensis	10	☐ 10.0%	FAC
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

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

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	10	x 3 =	30
FACU species	90	x 4 =	360
UPL species	0	x 5 =	0
Column Totals:	100	(A)	390 (B)

Prevalence Index = B/A = 3.900

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ( ) No (•)

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 64

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/3	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 10-May-16

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 65

Investigator(s): Todd Sherman **Section, Township, Range:** S 32 T 8S R 2E

Landform (hillslope, terrace, etc.): Swale **Local relief (concave, convex, none):** concave **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 437536 **Long.:** 4435875 **Datum:** NAD83

Soil Map Unit Name: Holdaway silt loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Palustrine emergent wetland created by an artesian well pipe.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Eleocharis palustris	40	☑ 40.0%	OBL
2. Ranunculus sceleratus	30	☑ 30.0%	OBL
3. Nasturtium officinale	30	☑ 30.0%	OBL
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 1.000

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 65

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-8	10YR	3/2	100%						Loam	
8-20	10YR	4/2	95%	2.5YR	4/6	5%	C	M	Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [x] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils meet the criteria for depleted matrix.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ( )	No (●)	Depth (inches):
Water Table Present?	Yes (●)	No ( )	Depth (inches): 8
Saturation Present? (includes capillary fringe)	Yes (●)	No ( )	Depth (inches): 0

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

Soils are saturated at the surface.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 10-May-16

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 66

Investigator(s): Todd Sherman **Section, Township, Range:** S 32 T 8S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 437536 **Long.:** 4435870 **Datum:** NAD83

Soil Map Unit Name: Holdaway silt loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Upland area adjacent to SP-65.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size:)				
1. Festuca pratensis	55	☑	55.0%	FACU
2. Trifolium repens	30	☑	30.0%	FACU
3. Taraxacum officinale	15	☐	15.0%	FACU
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 4.000

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 66

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/3	100%						Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 10-May-16

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 67

Investigator(s): Todd Sherman **Section, Township, Range:** S 32 T 8S R 2E

Landform (hillslope, terrace, etc.): Swale **Local relief (concave, convex, none):** concave **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 437470 **Long.:** 4435885 **Datum:** NAD83

Soil Map Unit Name: Taylorsville silty clay loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Palustrine emergent wetland created by an artesian well pipe.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Carex nebrascensis	40	☑ 57.1%	OBL
2. Eleocharis palustris	30	☑ 42.9%	OBL
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	70	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 1.000

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 67

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-8	10YR	3/2	100%						Loam	
8-20	10YR	4/2	95%	2.5YR	4/6	5%	C	M	Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [x] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils meet the criteria for depleted matrix.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ( )	No (●)	Depth (inches):
Water Table Present?	Yes (●)	No ( )	Depth (inches): 8
Saturation Present? (includes capillary fringe)	Yes (●)	No ( )	Depth (inches): 0

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

Soils are saturated at the surface.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 10-May-16

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 68

Investigator(s): Todd Sherman **Section, Township, Range:** S 32 T 8S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 437474 **Long.:** 4435881 **Datum:** NAD83

Soil Map Unit Name: Holdaway silt loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( ) No (●)	**Is the Sampled Area within a Wetland?** Yes ( ) No (●)
Hydric Soil Present?	Yes ( ) No (●)	
Wetland Hydrology Present?	Yes ( ) No (●)	

Remarks: Upland area adjacent to SP-67.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Festuca pratensis	70	☑ 70.0%	FACU
2. Trifolium repens	30	☑ 30.0%	FACU
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 4.000

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 68

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/3	100%						Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 10-May-16

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 69

Investigator(s): Todd Sherman **Section, Township, Range:** S 32 T 8S R 2E

Landform (hillslope, terrace, etc.): Swale **Local relief (concave, convex, none):** concave **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 437486 **Long.:** 4435987 **Datum:** NAD83

Soil Map Unit Name: Holdaway silt loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes (●) No ( )	**Is the Sampled Area within a Wetland?** Yes (●) No ( )
Hydric Soil Present?	Yes (●) No ( )	
Wetland Hydrology Present?	Yes (●) No ( )	

Remarks: Palustrine emergent wetland created by an artesian well pipe.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Carex nebrascensis	15	☑ 21.4%	OBL
2. Eleocharis palustris	15	☑ 21.4%	OBL
3. Phalaris arundinacea	15	☑ 21.4%	FACW
4. Schoenoplectus americanus	10	☐ 14.3%	OBL
5. Typha latifolia	15	☑ 21.4%	OBL
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	70	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 30 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 4 (A)

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

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	55	x 1 =	55
FACW species	15	x 2 =	30
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	70 (A)		85 (B)

Prevalence Index = B/A = 1.214

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes (●) No ( )

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 69

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-8	10YR	3/2	100%						Loam	
8-20	10YR	4/2	95%	2.5YR	4/6	5%	C	M	Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [x] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils meet the criteria for depleted matrix.

Hydrology

Wetland Hydrology Indicators:

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

- [x] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes (●)	No ( )	Depth (inches): 2
Water Table Present?	Yes (●)	No ( )	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes (●)	No ( )	Depth (inches): 0

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

Soils are inundated.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 10-May-16

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 70

Investigator(s): Todd Sherman **Section, Township, Range:** S 32 T 8S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 437490 **Long.:** 4435993 **Datum:** NAD83

Soil Map Unit Name: Taylorsville silty clay loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( ) No (●)	**Is the Sampled Area within a Wetland?** Yes ( ) No (●)
Hydric Soil Present?	Yes ( ) No (●)	
Wetland Hydrology Present?	Yes ( ) No (●)	

Remarks: Upland area adjacent to SP-69.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size:)				
1. Festuca pratensis	50	☑	50.0%	FACU
2. Poa pratensis	50	☑	50.0%	FAC
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	50.0%	(A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 3.500

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 70

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/3	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 10-May-16

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 71

Investigator(s): Todd Sherman **Section, Township, Range:** S 9 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 438768 **Long.:** 4434090 **Datum:** NAD83

Soil Map Unit Name: Vineyard fine sandy loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Mesic upland area.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size:)				
1. Juncus balticus	25	☑	27.8%	FACW
2. Festuca pratensis	20	☑	22.2%	FACU
3. Trifolium repens	20	☑	22.2%	FACU
4. Carex nebrascensis	10	☐	11.1%	OBL
5. Ranunculus sceleratus	10	☐	11.1%	OBL
6. Taraxacum officinale	5	☐	5.6%	FACU
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
	90	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

% Bare Ground in Herb Stratum: 10 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	33.3%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	25	x 2 =	50
FAC species	0	x 3 =	0
FACU species	45	x 4 =	180
UPL species	0	x 5 =	0
Column Totals:	90 (A)		250 (B)

Prevalence Index = B/A = 2.778

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 71

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	2/2	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 10-May-16

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 72

Investigator(s): Todd Sherman **Section, Township, Range:** S 9 T 9S R 2E

Landform (hillslope, terrace, etc.): Swale **Local relief (concave, convex, none):** concave **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 438713 **Long.:** 4434035 **Datum:** NAD83

Soil Map Unit Name: Vineyard fine sandy loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes (●) No ( )	**Is the Sampled Area within a Wetland?** Yes (●) No ( )
Hydric Soil Present?	Yes (●) No ( )	
Wetland Hydrology Present?	Yes (●) No ( )	

Remarks: Palustrine emergent wetland created by a hillslope ground water seep.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Juncus balticus	30	☑ 30.0%	FACW
2. Eleocharis palustris	25	☑ 25.0%	OBL
3. Ranunculus sceleratus	15	☐ 15.0%	OBL
4. Mentha spicata	15	☐ 15.0%	FACW
5. Schoenoplectus americanus	15	☐ 15.0%	OBL
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:		
OBL species	55	x 1 =	55	
FACW species	45	x 2 =	90	
FAC species	0	x 3 =	0	
FACU species	0	x 4 =	0	
UPL species	0	x 5 =	0	
Column Totals:	100	(A)	145	(B)

Prevalence Index = B/A = 1.450

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes (●) No ( )

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 72

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	2/1	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☑ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ◉ No ○

Remarks:

Soils do not exhibit any typical hydric soil indicators, but the soils are saturated at the surface, meeting the definition of a hydric soil. Based on the presence of obligate species and surface saturation, these soils are assumed to be hydric.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ◉	No ○	Depth (inches): 1
Saturation Present? (includes capillary fringe)	Yes ◉	No ○	Depth (inches): 0

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

Soils are saturated at the surface. Hillside seep zone above a drainage.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 10-May-16

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 73

Investigator(s): Todd Sherman **Section, Township, Range:** S 9 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 438707 **Long.:** 4434032 **Datum:** NAD83

Soil Map Unit Name: Vineyard fine sandy loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (•) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( ) No (•)	**Is the Sampled Area within a Wetland?** Yes ( ) No (•)
Hydric Soil Present?	Yes ( ) No (•)	
Wetland Hydrology Present?	Yes ( ) No (•)	

Remarks: Upland area adjacent to SP-72.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Festuca pratensis	85	☑ 85.0%	FACU
2. Trifolium repens	10	☐ 10.0%	FACU
3. Taraxacum officinale	5	☐ 5.0%	FACU
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 4.000

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ( ) No (•)

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 73

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	2/2	100%						Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ●

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ● Depth (inches):

Water Table Present? Yes ○ No ● Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ● Depth (inches):

Wetland Hydrology Present? Yes ○ No ●

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 11-May-16

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 74

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 438938 **Long.:** 4434388 **Datum:** NAD83

Soil Map Unit Name: Ironton loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes (●) No ○	**Is the Sampled Area within a Wetland?** Yes (●) No ○
Hydric Soil Present?	Yes (●) No ○	
Wetland Hydrology Present?	Yes (●) No ○	

Remarks: Palustrine emergent wetland created by an artesian well pipe.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Nasturtium officinale	35	☑ 87.5%	OBL
2. Schoenoplectus pungens	5	☐ 12.5%	OBL
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	40	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 60 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 1.000

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes (●) No ○

Remarks:

100% obligate vegetation. 60% shallow open water

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 74

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/1	100%						Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [x] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils emit a hydrogen sulfide odor when excavated.

Hydrology

Wetland Hydrology Indicators:

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

- [x] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [x] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes (●)	No ( )	Depth (inches): 2
Water Table Present?	Yes (●)	No ( )	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes (●)	No ( )	Depth (inches): 0

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

Soils emit a hydrogen sulfide odor when excavated, and were inundated.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 11-May-16

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 75

Investigator(s): Todd Sherman **Section, Township, Range:** S 4 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 438933 **Long.:** 4434387 **Datum:** NAD83

Soil Map Unit Name: Ironton loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○ No (●)	**Is the Sampled Area within a Wetland?** Yes ○ No (●)
Hydric Soil Present?	Yes ○ No (●)	
Wetland Hydrology Present?	Yes ○ No (●)	

Remarks: Upland area adjacent to SP-74.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Festuca pratensis	80	☑ 80.0%	FACU
2. Cardaria draba	20	☑ 20.0%	UPL
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	80	x 4 =	320
UPL species	20	x 5 =	100
Column Totals:	100 (A)		420 (B)

Prevalence Index = B/A = 4.200

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No (●)

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 75

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/3	100%						Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 11-Apr-17

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 76

Investigator(s): Todd Sherman **Section, Township, Range:** S 5 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 40.06392 **Long.:** -111.73400 **Datum:** NAD83

Soil Map Unit Name: McBeth silt loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes (●) No ( )	**Is the Sampled Area within a Wetland?** Yes (●) No ( )
Hydric Soil Present?	Yes (●) No ( )	
Wetland Hydrology Present?	Yes (●) No ( )	

Remarks: Emergent wetland in a a pasture.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Juncus balticus	30	☑ 30.0%	FACW
2. Carex praegracilis	30	☑ 30.0%	FACW
3. Carex nebrascensis	20	☑ 20.0%	OBL
4. Taraxacum officinale	10	☐ 10.0%	FACU
5. Trifolium repens	10	☐ 10.0%	FACU
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	60	x 2 =	120
FAC species	0	x 3 =	0
FACU species	20	x 4 =	80
UPL species	0	x 5 =	0
Column Totals:	100 (A)		220 (B)

Prevalence Index = B/A = 2.200

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes (●) No ( )

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 76

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-7	10YR	3/2	100%						Silt Loam	
7-20	10YR	2/1	100%						Silt Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [x] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils emit a hydrogen sulfide odor when excavated.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [x] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

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

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

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

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

Soils emit a hydrogen sulfide odor when excavated, and were saturated in the upper profile with a shallow water table.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 11-Apr-17

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 77

Investigator(s): Todd Sherman **Section, Township, Range:** S 5 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 40.06392 **Long.:** -111.73400 **Datum:** NAD83

Soil Map Unit Name: McBeth silt loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Upland area adjacent to SP-76.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Festuca pratensis	25	☑ 25.0%	FACU
2. Poa pratensis	25	☑ 25.0%	FAC
3. Juncus balticus	20	☑ 20.0%	FACW
4. Trifolium repens	20	☑ 20.0%	FACU
5. Taraxacum officinale	10	☐ 10.0%	FACU
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	50.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	25	x 3 =	75
FACU species	55	x 4 =	220
UPL species	0	x 5 =	0
Column Totals:	100 (A)		335 (B)

Prevalence Index = B/A = 3.350

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 77

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/2	100%						Clay Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 11-Apr-17

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 78

Investigator(s): Todd Sherman **Section, Township, Range:** S 5 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** concave **Slope:** 2.0 % / 1.1 °

Subregion (LRR): LRR D **Lat.:** 40.06392 **Long.:** -111.73400 **Datum:** NAD83

Soil Map Unit Name: McBeth silt loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ● No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Emergent wetland in a a pasture.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover		Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size:)				
1. Eleocharis palustris	30	☑	40.0%	OBL
2. Schoenoplectus americanus	30	☑	40.0%	OBL
3. Nasturtium officinale	10	☐	13.3%	OBL
4. Rumex crispus	5	☐	6.7%	FAC
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
	75	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

% Bare Ground in Herb Stratum: 25 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	70	x 1 =	70
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	75 (A)		85 (B)

Prevalence Index = B/A = 1.133

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ● No ○

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 78

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-7	10YR	3/2	100%						Silt Loam	
7-20	10YR	2/1	100%						Silt Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [x] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils emit a hydrogen sulfide odor when excavated.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [x] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

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

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

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

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

Soils emit a hydrogen sulfide odor when excavated, and were saturated in the upper profile with a shallow water table.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 11-Apr-17

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 79

Investigator(s): Todd Sherman **Section, Township, Range:** S 5 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 40.06392 **Long.:** -111.73400 **Datum:** NAD83

Soil Map Unit Name: McBeth silt loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ⦿ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Upland area adjacent to SP-78.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size:)				
1. Festuca pratensis	40	☑	40.0%	FACU
2. Trifolium repens	30	☑	30.0%	FACU
3. Taraxacum officinale	20	☑	20.0%	FACU
4. Phalaris arundinacea	10	☐	10.0%	FACW
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	90	x 4 =	360
UPL species	0	x 5 =	0
Column Totals:	100	(A)	380 (B)

Prevalence Index = B/A = 3.800

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ⦿

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 79

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/2	100%						Clay Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 11-Apr-17

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 80

Investigator(s): Todd Sherman **Section, Township, Range:** S 5 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 1.0 % / 0.6 °

Subregion (LRR): LRR D **Lat.:** 40.06093 **Long.:** -111.735000 **Datum:** NAD83

Soil Map Unit Name: McBeth silt loam **NWI classification:** PEM

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes (●) No ( )

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes (●) No ( )	**Is the Sampled Area within a Wetland?**	Yes (●) No ( )
Hydric Soil Present?	Yes (●) No ( )		
Wetland Hydrology Present?	Yes (●) No ( )		

Remarks: Emergent wetland in a a pasture.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Juncus balticus	30	☑ 30.0%	FACW
2. Carex nebrascensis	25	☑ 25.0%	OBL
3. Carex praegracilis	25	☑ 25.0%	FACW
4. Phalaris arundinacea	10	☐ 10.0%	FACW
5. Trifolium repens	10	☐ 10.0%	FACU
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)

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

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	25	x 1 =	25
FACW species	65	x 2 =	130
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	100 (A)		195 (B)

Prevalence Index = B/A = 1.950

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes (●) No ( )

Remarks:

The area meets the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 80

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-9	10YR	3/2	100%						Clay Loam	
9-20	10YR	4/2	95%	2.5YR	4/6	5%	C	M	Clay Loam	

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

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

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [x] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes (●) No ( )

Remarks:

Soils meet the criteria for depleted matrix.

Hydrology

Wetland Hydrology Indicators:

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

- [ ] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift deposits (B3) (Noneriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [x] FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ( )	No (●)	Depth (inches):
Water Table Present?	Yes ( )	No (●)	Depth (inches): 7
Saturation Present? (includes capillary fringe)	Yes ( )	No (●)	Depth (inches): 0

Wetland Hydrology Present? Yes (●) No ( )

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

Remarks:

Soils are saturated at the surface.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-15 Payson Main Street Interchange EIS **City/County:** Payson/Utah **Sampling Date:** 11-Apr-17

Applicant/Owner: Utah Department of Transportation **State:** UT **Sampling Point:** 81

Investigator(s): Todd Sherman **Section, Township, Range:** S 5 T 9S R 2E

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** flat **Slope:** 0.0 % / 0.0 °

Subregion (LRR): LRR D **Lat.:** 40.06392 **Long.:** -111.73400 **Datum:** NAD83

Soil Map Unit Name: McBeth silt loam **NWI classification:** Upland

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

Remarks: Upland area adjacent to SP-80.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1. Festuca pratensis	35	☑ 35.0%	FACU
2. Trifolium repens	20	☑ 20.0%	FACU
3. Taraxacum officinale	20	☑ 20.0%	FACU
4. Poa pratensis	20	☑ 20.0%	FAC
5. Arctium minus	5	☐ 5.0%	FACU
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

% Bare Ground in Herb Stratum: 0 **% Cover of Biotic Crust** 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	25.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	80	x 4 =	320
UPL species	0	x 5 =	0
Column Totals:	100 (A)		380 (B)

Prevalence Index = B/A = 3.800

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

The area does not meet the vegetation criteria.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: 81

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

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc²	Texture	Remarks
0-20	10YR	3/2	100%						Clay Loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[3]

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

3 Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

No indicators of hydric soil.

Hydrology

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift deposits (B3) (Noneriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

No indicators of wetland hydrology.

APPENDIX D: SOIL INFORMATION

Utah County, Utah - Central Part

Be—Benjamin silty clay, moderately alkali

Map Unit Setting

National map unit symbol: j6wf
Elevation: 4,700 to 5,000 feet
Mean annual precipitation: 14 to 18 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 130 to 150 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Benjamin and similar soils: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Benjamin

Setting

Landform: Flood plains
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Alluvium derived from limestone and shale

Typical profile

Ap1 - 0 to 1 inches: silty clay
Ap2 - 1 to 4 inches: silty clay
A1 - 4 to 17 inches: silty clay
C1 - 17 to 25 inches: silty clay
C2g - 25 to 38 inches: silty clay
C3 - 38 to 46 inches: silty clay loam
C4 - 46 to 52 inches: silty clay
IIC5 - 52 to 60 inches: sandy loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 30 to 60 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum in profile: 30 percent
Salinity, maximum in profile: Moderately saline to strongly saline (8.0 to 32.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 60.0
Available water storage in profile: Low (about 5.5 inches)

Interpretive groups

Land capability classification (irrigated): 4w
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: C
Ecological site: Alkali Bottom (Alkali Sacaton) (R028AY001UT)

Minor Components

Depressional soils

Percent of map unit: 3 percent
Landform: Flood plains
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: Alkali Bottom (Alkali Sacaton) (R028AY001UT)

Strongly saline-alkali soils

Percent of map unit: 2 percent

Data Source Information

Soil Survey Area: Utah County, Utah - Central Part
Survey Area Data: Version 8, Sep 23, 2015

Utah County, Utah - Central Part

Br—Bramwell silty clay loam

Map Unit Setting

National map unit symbol: j6wn
Elevation: 4,320 to 4,600 feet
Mean annual precipitation: 12 to 16 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 130 to 150 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Bramwell and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Bramwell

Setting

Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Lacustrine deposits derived from mixed sources

Typical profile

Ap - 0 to 6 inches: silty clay loam
A1 - 6 to 11 inches: silty clay loam
C1 - 11 to 20 inches: silty clay loam
C2ca - 20 to 31 inches: silty clay loam
C3ca - 31 to 60 inches: silty clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 24 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 30 percent
Salinity, maximum in profile: Moderately saline to strongly saline (8.0 to 16.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 30.0
Available water storage in profile: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 7w

Hydrologic Soil Group: D
Ecological site: Alkali Bottom (Alkali Sacaton) (R028AY001UT)

Minor Components

Chipman
Percent of map unit: 5 percent

Strongly saline soils
Percent of map unit: 3 percent

Taylorsville
Percent of map unit: 3 percent

Depressional soils
Percent of map unit: 2 percent
Landform: Depressions on lake terraces
Landform position (three-dimensional): Tread, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Ecological site: Alkali Bottom (Alkali Sacaton) (R028AY001UT)

Hardpan soils
Percent of map unit: 2 percent

Data Source Information

Soil Survey Area: Utah County, Utah - Central Part
Survey Area Data: Version 8, Sep 23, 2015

Utah County, Utah - Central Part

Ir—Ironton loam

Map Unit Setting

National map unit symbol: j6xm
Elevation: 4,500 to 4,550 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 130 to 150 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Ironton and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ironton

Setting

Landform: Lake terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Lacustrine deposits derived from mixed sources

Typical profile

Ap - 0 to 8 inches: loam
C1,2,3,cag - 8 to 32 inches: loam
IIC4g - 32 to 60 inches: very fine sandy loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: About 12 to 24 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum in profile: 40 percent
Salinity, maximum in profile: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 13.0
Available water storage in profile: High (about 9.3 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: B/D

Ecological site: Semiwet Fresh Meadow (R028AY012UT)

Data Source Information

Soil Survey Area: Utah County, Utah - Central Part
Survey Area Data: Version 8, Sep 23, 2015

Utah County, Utah - Central Part

Mh—McBeth silt loam

Map Unit Setting

National map unit symbol: j6yj
Elevation: 4,500 to 4,600 feet
Mean annual precipitation: 12 to 16 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 130 to 150 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Mcbeth and similar soils: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mcbeth

Setting

Landform: Lake terraces, alluvial fans, flood plains
Landform position (three-dimensional): Tread, talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, convex, concave
Parent material: Alluvium derived from mixed sources

Typical profile

Ap - 0 to 8 inches: silt loam
A1 - 8 to 12 inches: silt loam
C1g - 12 to 18 inches: silt loam
C2g - 18 to 24 inches: very fine sandy loam
C3g,C4g - 24 to 68 inches: silt loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: About 12 to 24 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Calcium carbonate, maximum in profile: 40 percent
Salinity, maximum in profile: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 13.0
Available water storage in profile: High (about 10.1 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 7w

Hydrologic Soil Group: B/D
Ecological site: Semiwet Fresh Meadow (R028AY012UT)

Minor Components

Chipman
Percent of map unit: 5 percent

Data Source Information

Soil Survey Area: Utah County, Utah - Central Part
Survey Area Data: Version 8, Sep 23, 2015

Utah County, Utah - Central Part

Pd—Payson silty clay loam

Map Unit Setting

National map unit symbol: j6z0
Elevation: 4,550 to 4,600 feet
Mean annual precipitation: 12 to 14 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 130 to 150 days
Farmland classification: Not prime farmland

Map Unit Composition

Payson and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Payson

Setting

Landform: Escarpments
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Lacustrine deposits derived from limestone and shale

Typical profile

A21,A22 - 0 to 9 inches: silty clay loam
B1 - 9 to 14 inches: silty clay
B2t - 14 to 21 inches: clay
B3ca&C1ca - 21 to 33 inches: clay
C2ca - 33 to 48 inches: clay
C3 - 48 to 68 inches: clay

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 36 to 54 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum in profile: 40 percent
Salinity, maximum in profile: Moderately saline to strongly saline (8.0 to 16.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 90.0
Available water storage in profile: High (about 9.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w

Hydrologic Soil Group: C
Ecological site: Alkali Bottom (Alkali Sacaton) (R028AY001UT)

Data Source Information

Soil Survey Area: Utah County, Utah - Central Part
Survey Area Data: Version 8, Sep 23, 2015

Utah County, Utah - Central Part

RdA—Redola loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: j6zp
Elevation: 4,600 to 5,000 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 130 to 150 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Redola and similar soils: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Redola

Setting

Landform: Flood plains, alluvial fans
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Concave, convex
Parent material: Alluvium derived from limestone and sandstone

Typical profile

Ap - 0 to 8 inches: loam
C1,C2 - 8 to 30 inches: loam
C3 - 30 to 50 inches: stratified gravelly coarse sand to very fine sandy loam
IIC4 - 50 to 60 inches: gravelly coarse sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 30 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Moderate (about 8.1 inches)

Interpretive groups

Land capability classification (irrigated): 2c
Land capability classification (nonirrigated): 3c
Hydrologic Soil Group: B

Ecological site: Loamy Bottom (Great Basin Wildrye) (R028AY006UT)
Other vegetative classification: Loamy Bottom (Great Basin Wildrye) (028AY006UT)

Minor Components

Martin

Percent of map unit: 5 percent

Data Source Information

Soil Survey Area: Utah County, Utah - Central Part
Survey Area Data: Version 8, Sep 23, 2015

Utah County, Utah - Central Part

Sd—Steed sandy loam

Map Unit Setting

National map unit symbol: j6zs
Elevation: 4,550 to 5,200 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 47 to 50 degrees F
Frost-free period: 150 to 170 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Steed and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Steed

Setting

Landform: Alluvial fans
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Alluvium derived from limestone, sandstone, quartzite, and shale

Typical profile

A1 - 0 to 7 inches: sandy loam
C1 - 7 to 31 inches: extremely gravelly loamy sand
C2,C3 - 31 to 60 inches: extremely gravelly sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: About 48 to 72 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Calcium carbonate, maximum in profile: 40 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 5.0
Available water storage in profile: Low (about 3.5 inches)

Interpretive groups

Land capability classification (irrigated): 4s
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A

Ecological site: Semiwet Fresh Streambank (R028AY014UT)

Data Source Information

Soil Survey Area: Utah County, Utah - Central Part
Survey Area Data: Version 8, Sep 23, 2015

Utah County, Utah - Central Part

VnA—Vineyard fine sandy loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: j70c
Elevation: 4,500 to 4,900 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 47 to 50 degrees F
Frost-free period: 130 to 170 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Vineyard and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Vineyard

Setting

Landform: Lake terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Lacustrine deposits derived from limestone, sandstone, and shale

Typical profile

Ap - 0 to 7 inches: fine sandy loam
AC - 7 to 13 inches: fine sandy loam
C1ca,C2ca - 13 to 35 inches: fine sandy loam
C3ca - 35 to 42 inches: very fine sandy loam
C4 - 42 to 60 inches: very fine sandy loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: About 30 to 60 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 40 percent
Salinity, maximum in profile: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 10.0
Available water storage in profile: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): 2w

Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: A
Ecological site: Semiwet Fresh Meadow (R028AY012UT)

Minor Components

Timpanogos
Percent of map unit: 5 percent

Welby
Percent of map unit: 5 percent

Data Source Information

Soil Survey Area: Utah County, Utah - Central Part
Survey Area Data: Version 8, Sep 23, 2015

Utah County, Utah - Central Part

WbB—Welby silt loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: j70g
Elevation: 4,500 to 5,200 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 47 to 50 degrees F
Frost-free period: 130 to 170 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Welby and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Welby

Setting

Landform: Lake terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Lacustrine deposits derived from limestone, sandstone, and shale

Typical profile

Ap - 0 to 7 inches: silt loam
A1 - 7 to 12 inches: loam
AC - 12 to 22 inches: silt loam
C1ca,C2ca,C3 - 22 to 65 inches: silt loam

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 40 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 13.0
Available water storage in profile: High (about 10.1 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B

Ecological site: Upland Loam (Bonneville Big Sagebrush) North (R028AY310UT)
Other vegetative classification: Upland Loam (Mountain Big Sagebrush) (028AY310UT)

Data Source Information

Soil Survey Area: Utah County, Utah - Central Part
Survey Area Data: Version 8, Sep 23, 2015

Utah County, Utah - Central Part

HmE—Hillfield silt loam, 10 to 20 percent slopes

Map Unit Setting

National map unit symbol: j6xg
Elevation: 4,700 to 5,200 feet
Mean annual precipitation: 12 to 14 inches
Mean annual air temperature: 48 to 52 degrees F
Frost-free period: 150 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Hillfield and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hillfield

Setting

Landform: Escarpments, lake terraces
Landform position (three-dimensional): Riser
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Lacustrine deposits derived from mixed sources

Typical profile

Ap - 0 to 4 inches: silt loam
AC - 4 to 12 inches: silt loam
C1ca - 12 to 26 inches: silt loam
C2ca - 26 to 35 inches: loam
C3ca - 35 to 40 inches: loam
IIC4 - 40 to 60 inches: sandy loam

Properties and qualities

Slope: 10 to 20 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 50 percent
Salinity, maximum in profile: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 20.0
Available water storage in profile: Moderate (about 8.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: Upland Loam (Bonneville Big Sagebrush) North (R028AY310UT)
Other vegetative classification: Upland Loam (Mountain Big Sagebrush) (028AY310UT)

Minor Components

Taylorsville
Percent of map unit: 5 percent

Welby
Percent of map unit: 5 percent

Data Source Information

Soil Survey Area: Utah County, Utah - Central Part
Survey Area Data: Version 8, Sep 23, 2015

Utah County, Utah - Central Part

Hr—Holdaway silt loam

Map Unit Setting

National map unit symbol: j6xk
Elevation: 4,400 to 4,500 feet
Mean annual precipitation: 12 to 16 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 130 to 150 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Holdaway and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Holdaway

Setting

Landform: Lake terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Lacustrine deposits derived from mixed sources

Typical profile

Ap - 0 to 7 inches: silt loam
A1 - 7 to 13 inches: silt loam
C1cag - 13 to 20 inches: silt loam
C2camg - 20 to 28 inches: indurated
C3cag - 28 to 32 inches: silt loam
C4cam-C6camg - 32 to 67 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 20 to 40 inches to petrocalcic
Natural drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)
Depth to water table: About 12 to 24 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum in profile: 75 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 15.0
Available water storage in profile: Low (about 3.4 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 7w

Hydrologic Soil Group: D
Ecological site: Wet Fresh Meadow (R028AY020UT)

Data Source Information

Soil Survey Area: Utah County, Utah - Central Part
Survey Area Data: Version 8, Sep 23, 2015

Utah County, Utah - Central Part

Ks—Kirkham silty clay loam

Map Unit Setting

National map unit symbol: j6y0
Elevation: 4,500 to 4,600 feet
Mean annual precipitation: 13 to 17 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 150 to 170 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Kirkham and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kirkham

Setting

Landform: Flood plains, alluvial fans
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Concave, convex
Parent material: Alluvium derived from sandstone, quartzite and granite

Typical profile

Ap - 0 to 11 inches: silty clay loam
C1,C2 - 11 to 28 inches: silty clay loam
C3 - 28 to 42 inches: silty clay
C4,C5 - 42 to 65 inches: silt loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 24 to 48 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum in profile: 40 percent
Salinity, maximum in profile: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 13.0
Available water storage in profile: High (about 10.2 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: D
Ecological site: Semiwet Fresh Meadow (R028AY012UT)

Minor Components

Benjamin
Percent of map unit: 5 percent

Pleasant vale
Percent of map unit: 5 percent

Data Source Information

Soil Survey Area: Utah County, Utah - Central Part
Survey Area Data: Version 8, Sep 23, 2015

Utah County, Utah - Central Part

Pw—Provo gravelly fine sandy loam

Map Unit Setting

National map unit symbol: j6zh
Elevation: 4,500 to 4,800 feet
Mean annual precipitation: 11 to 16 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 130 to 150 days
Farmland classification: Not prime farmland

Map Unit Composition

Provo and similar soils: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Provo

Setting

Landform: Flood plains
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Alluvium derived from limestone, sandstone, quartzite, and shale

Typical profile

Ap - 0 to 7 inches: gravelly fine sandy loam
A1g - 7 to 15 inches: gravelly fine sandy loam
C1g - 15 to 25 inches: extremely gravelly sand
IIC2 - 25 to 40 inches: extremely gravelly loamy sand
IIC3 - 40 to 60 inches: extremely gravelly sand

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: About 18 to 48 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 13.0
Available water storage in profile: Very low (about 2.8 inches)

Interpretive groups

Land capability classification (irrigated): 4w

Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: B
Ecological site: Semiwet Fresh Streambank (R028AY014UT)

Minor Components

Sunset

Percent of map unit: 5 percent

Data Source Information

Soil Survey Area: Utah County, Utah - Central Part
Survey Area Data: Version 8, Sep 23, 2015

Utah County, Utah - Central Part

SgB—Sterling gravelly fine sandy loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: j6zv
Elevation: 4,600 to 5,000 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 47 to 50 degrees F
Frost-free period: 150 to 170 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Sterling and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sterling

Setting

Landform: Benches, lake terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Lacustrine deposits derived from mixed sources

Typical profile

Ap - 0 to 5 inches: gravelly fine sandy loam
A1 - 5 to 11 inches: gravelly sandy loam
C1ca - 11 to 16 inches: gravelly sandy loam
C2ca - 16 to 21 inches: very gravelly sandy loam
C3ca - 21 to 60 inches: extremely gravelly sand

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 40 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 10.0
Available water storage in profile: Very low (about 2.8 inches)

Interpretive groups

Land capability classification (irrigated): 4s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A

Ecological site: Upland Stony Loam (Wyoming Big Sagebrush) (R028AY334UT)
Other vegetative classification: Upland Stony Loam (Mountain Big Sagebrush) (028AY334UT)

Data Source Information

Soil Survey Area: Utah County, Utah - Central Part
Survey Area Data: Version 8, Sep 23, 2015

Utah County, Utah - Central Part

Sr—Sunset loam

Map Unit Setting

National map unit symbol: j6zz
Elevation: 4,500 to 4,900 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 130 to 150 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Sunset and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sunset

Setting

Landform: Flood plains
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Alluvium derived from limestone, granite and shale

Typical profile

Ap - 0 to 7 inches: loam
A1 - 7 to 14 inches: loam
C1,C2,C3 - 14 to 41 inches: stratified very fine sandy loam to loam
C4,C5 - 41 to 60 inches: stratified loam to silty clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: About 30 to 48 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Salinity, maximum in profile: Moderately saline to strongly saline (8.0 to 16.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 13.0
Available water storage in profile: Moderate (about 7.5 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 6w
Hydrologic Soil Group: C

Ecological site: Semiwet Fresh Meadow (R028AY012UT)

Data Source Information

Soil Survey Area: Utah County, Utah - Central Part
Survey Area Data: Version 8, Sep 23, 2015

Utah County, Utah - Central Part

TaB—Taylorsville silty clay loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: j704
Elevation: 4,500 to 4,800 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 47 to 50 degrees F
Frost-free period: 130 to 170 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Taylorsville and similar soils: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Taylorsville

Setting

Landform: Lake terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Lacustrine deposits derived from limestone and shale

Typical profile

Ap - 0 to 7 inches: silty clay loam
AC - 7 to 13 inches: silty clay loam
C1,C2 - 13 to 36 inches: silty clay loam
C3ca - 36 to 56 inches: silty clay loam
C4 - 56 to 62 inches: silty clay loam

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 40 percent
Salinity, maximum in profile: Slightly saline to moderately saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 25.0
Available water storage in profile: High (about 10.1 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: Upland Loam (Bonneville Big Sagebrush) North (R028AY310UT)
Other vegetative classification: Upland Loam (Mountain Big Sagebrush) (028AY310UT)

Minor Components

Bramwell
Percent of map unit: 5 percent

Data Source Information

Soil Survey Area: Utah County, Utah - Central Part
Survey Area Data: Version 8, Sep 23, 2015

APPENDIX E: OHWM DATA SHEETS

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: I-15 Payson Main Street Interchange EIS
Date: 11/10/15
Time: CS-1
Project Number:
Town: Payson
State: UT
Stream: Beer Creek
Photo begin file#:
Photo end file#:
Investigator(s): Todd Sherman

Y ☑ / N ☐ Do normal circumstances exist on the site?

Y ☐ / N ☑ Is the site significantly disturbed?

Location Details:
Section 33, Township 8 South, Range 2 East

Projection: UTM 12N **Datum:** WGS84
Coordinates: 439048 E 4436082 N

Potential anthropogenic influences on the channel system:

Banks have been grazed, and the creek has been culverted under I-15.

Brief site description:

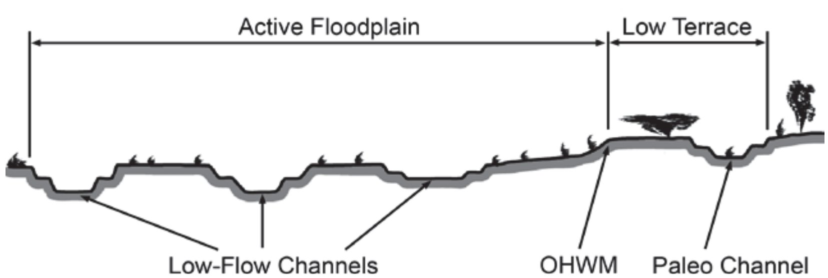
Beer Creek is a perennial stream that flows through a large wetland complex adjacent to both sides of I-15.

Checklist of resources (if available):

☑ Aerial photography
Dates:
☑ Topographic maps
☐ Geologic maps
☐ Vegetation maps
☐ Soils maps
☐ Rainfall/precipitation maps
☐ Existing delineation(s) for site
☑ Global positioning system (GPS)
☐ Other studies

☐ Stream gage data
Gage number:
Period of record:
☐ History of recent effective discharges
☐ Results of flood frequency analysis
☐ Most recent shift-adjusted rating
☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units



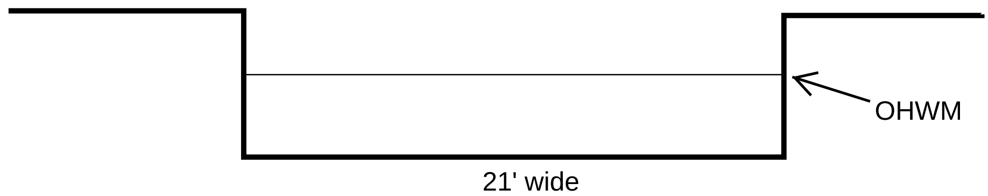
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:

☐ Mapping on aerial photograph
☐ GPS
☐ Digitized on computer
☐ Other:

Project ID: **Cross section ID:** CS-1 **Date:** 11/10/15 **Time:**

Cross section drawing:



OHWM

GPS point: CS-1

Indicators:

- ☐ Change in average sediment texture
- ☑ Change in vegetation species
- ☑ Change in vegetation cover
- ☑ Break in bank slope
- ☐ Other: ____________________
- ☐ Other: ____________________

Comments:

The OHWM is defined by a vertical break in the bank slope, with no vegetation below the OHWM.

Floodplain unit: ☑ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: CS-1

Characteristics of the floodplain unit:

Average sediment texture: fine sand

Total veg cover: 0 % Tree: _____% Shrub: _____% Herb: _____%

Community successional stage:

- ☑ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☑ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☑ Surface relief
- ☐ Other: ____________________
- ☐ Other: ____________________
- ☐ Other: ____________________

Comments:

The low-flow channel is characterized by the presence of bed and bank. The channel is deeply incised and has cut off the hydrologic connection to the floodplain. There is no active floodplain and no low terrace associated with Beer Creek within the project area.