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

April 9, 2026

Regulatory Division (SPK-2025-00702)

Regional Transportation Commission of Washoe County, Nevada
Attn: Ms. Jessica Dover
Reno, Nevada 89502-2158
jdover@rtcwashoe.com

Dear Ms. Dover:

We are responding to your December 4, 2025, request for an approved jurisdictional determination for the Sun Valley Boulevard Corridor Improvements Project site. The approximately 67.5-acre review area is located within the community of Sun Valley on Sun Valley Boulevard between the intersections with East 7th Avenue and Scottsdale Road, approximate centroid Latitude 39.58028°, Longitude -119.78247°, City of Reno, Washoe County, Nevada.

Based on available information, we concur with your aquatic resource delineation for the site, as depicted on the enclosed September 15, 2025, *Sun Valley Boulevard Corridor Improvements Project Project ARD Map* [Figures 1-1 to 1-6] prepared by NCE (enclosure 1). Approximately 2.23 acres/21,419 linear feet (lf) of aquatic resources, consisting of 0.14 acres/836 linear feet of ephemeral riverine, 0.35 acres/1,060 linear feet of Upper Perennial Riverine, 0.09 acres of Riparian Wetland and 1.65 acres/19,523 linear feet of Upland (roadside ditch) are present within the survey area. This letter verifies that the location and boundaries of wetlands were delineated consistent with the wetland definition at 33 CFR §328.3(c)(16), the 1987 *Corps of Engineers Wetlands Delineation Manual* (Wetlands Research Program Technical Report Y-87-1) and the applicable regional supplements; and the location and boundaries of non-tidal waters conform with the ordinary high water mark definition at 33 CFR §328.3(c)(7), Regulatory Guidance Letter 05-05, and any applicable regional guide.

Of these aquatic resources, we have determined that two (2) features totaling 0.44 acres/1,060 linear feet are waters of the United States pursuant to 33 CFR Part 328 and are regulated under Section 404 of the Clean Water Act; fourteen (14) features totaling 1.79 acres/20,359 linear feet are not waters of the U.S. regulated under Section 404 of the Clean Water Act or under Section 10 of the Rivers and Harbors Act. We are enclosing a copy of the Memorandum for Record prepared to support this Approved Jurisdictional for your site (enclosure 2). This approved jurisdictional determination is valid for five years from the date of this letter unless new information warrants revision of the determination before the expiration date.

If you object to this determination, you may request an administrative appeal under Corps regulations at 33 Code of Federal Regulations (CFR) Part 331. A *Notification of*

Appeal Process (NAP) and Request for Appeal (RFA) Form is enclosed (enclosure 3). If you request to appeal this determination, you must submit a completed RFA form to the South Pacific Division Office at the following address: Administrative Appeal Review Officer, Army Corps of Engineers, South Pacific Division, CESPD-PDO, 1455 Market Street, 2052B, San Francisco, California 94103-1399, Telephone: (415) 503-6574, FAX: (415) 503-6646.

In order for an RFA to be accepted by the Corps, we must determine that the form is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that the form was received by the Division Office within 60 days of the date of the NAP. It is not necessary to submit an RFA form to the Division Office unless you object to the determination in this letter.

The delineation included herein has been conducted to identify the location and extent of the aquatic resource boundaries and/or the jurisdictional status of aquatic resources for purposes of the Clean Water Act for the particular site identified in this request. This delineation and/or jurisdictional determination may not be valid for the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should discuss the applicability of a certified wetland determination with the local USDA service center, prior to starting work. We recommend that you provide a copy of this letter and notice to all other affected parties, including any individual who has an identifiable and substantial legal interest in the property.

Please refer to identification number SPK-2025-00702 in any correspondence concerning this project. If you have any questions, please contact Matthew Di Loreto by email at matthew.j.diloreto@usace.army.mil, or telephone at (916) 557-7882. For program information or to complete our Customer Survey, visit our website at www.spk.usace.army.mil/Missions/Regulatory.aspx.

Sincerely,

Michael Nepstad

Michael Nepstad
Deputy Chief
Regulatory Division

Enclosures

cc:
Mr. Joseph Morgan, U.S. EPA Region 9, morgan.joseph@epa.gov
Mr. Zachary Carter, Nevada Department of Environmental Protection, zcarter@ndep.nv.gov
Ms. Debra Lemke, Nichols Consulting Engineers, dlemke@ncenet.com

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Regional Transportation Commission of Washoe County, Nevada, Attn: Ms. Jessica Dover	File No.: SPK-2025-00702	Date: April 9, 2026

Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of Permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of Permission)	B
	PERMIT DENIAL	C
→	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at *http://www.usace.army.mil/cecw/pages/reg_materials.aspx* or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.

- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also, you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

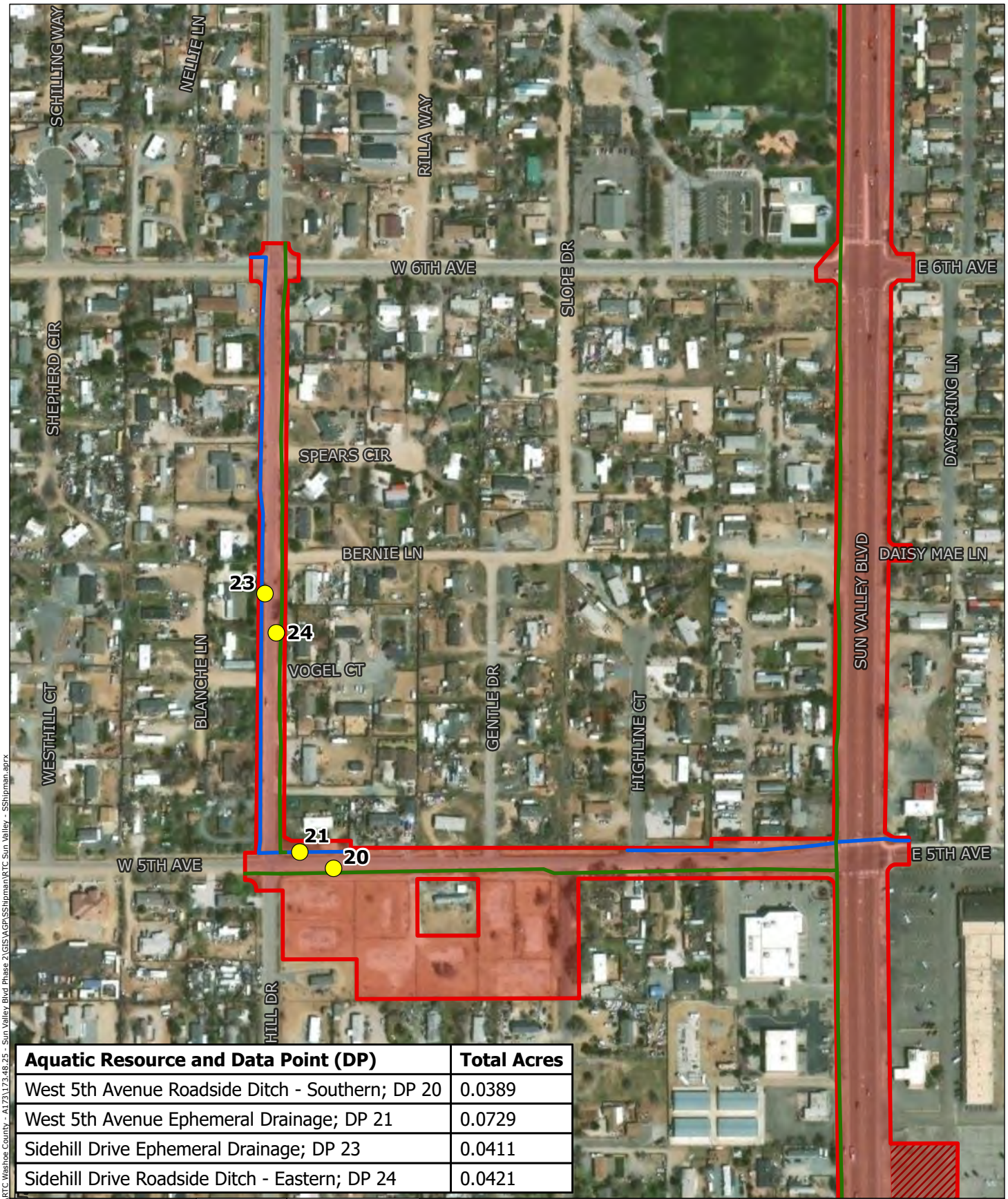
Matthew Di Loreto
Senior Project Manager
Nevada Section
U.S. Army Corps of Engineers
Phone: (916) 557-7882, FAX 916-557-7803
Email: matthew.j.diloreto@usace.army.mil

If you only have questions regarding the appeal process you may also contact:

Travis Morse
Administrative Appeal Review Officer
U.S. Army Corps of Engineers
South Pacific Division
Phillip Burton Federal Building, Post Office Box 36023
450 Golden Gate Avenue
San Francisco, California 94102
Phone: 970-243-1199x1014, FAX: 971-241-2358
Email: W.Travis.Morse@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided with a 15-day notice of any site investigation and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
_____ Signature of appellant or agent.		



Aquatic Resource and Data Point (DP)	Total Acres
West 5th Avenue Roadside Ditch - Southern; DP 20	0.0389
West 5th Avenue Ephemeral Drainage; DP 21	0.0729
Sidehill Drive Ephemeral Drainage; DP 23	0.0411
Sidehill Drive Roadside Ditch - Eastern; DP 24	0.0421

Project Area
Staging Area
Data Point
Roadside Ditches
Riverine

NCE
RTC

Sun Valley Boulevard Corridor Improvements Project

Project ARD Map

N

1 in. = 300 ft.

0 300 ft.

FIGURE 1-1

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
ESRI World Imagery	173.48.25	S. Shipman	9/10/2025	9/15/2025	G. Pennanen

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Aquatic Resource and Data Point (DP)	Total Acres
West 4th Avenue Roadside Ditch - Northern; DP 22A	0.101
West 4th Avenue Roadside Ditch - Southern; DP 22	0.076

Project Area
Staging Area
Data Point
Roadside Ditches

NCE
RTC

Sun Valley Boulevard Corridor Improvements Project

Project ARD Map

N

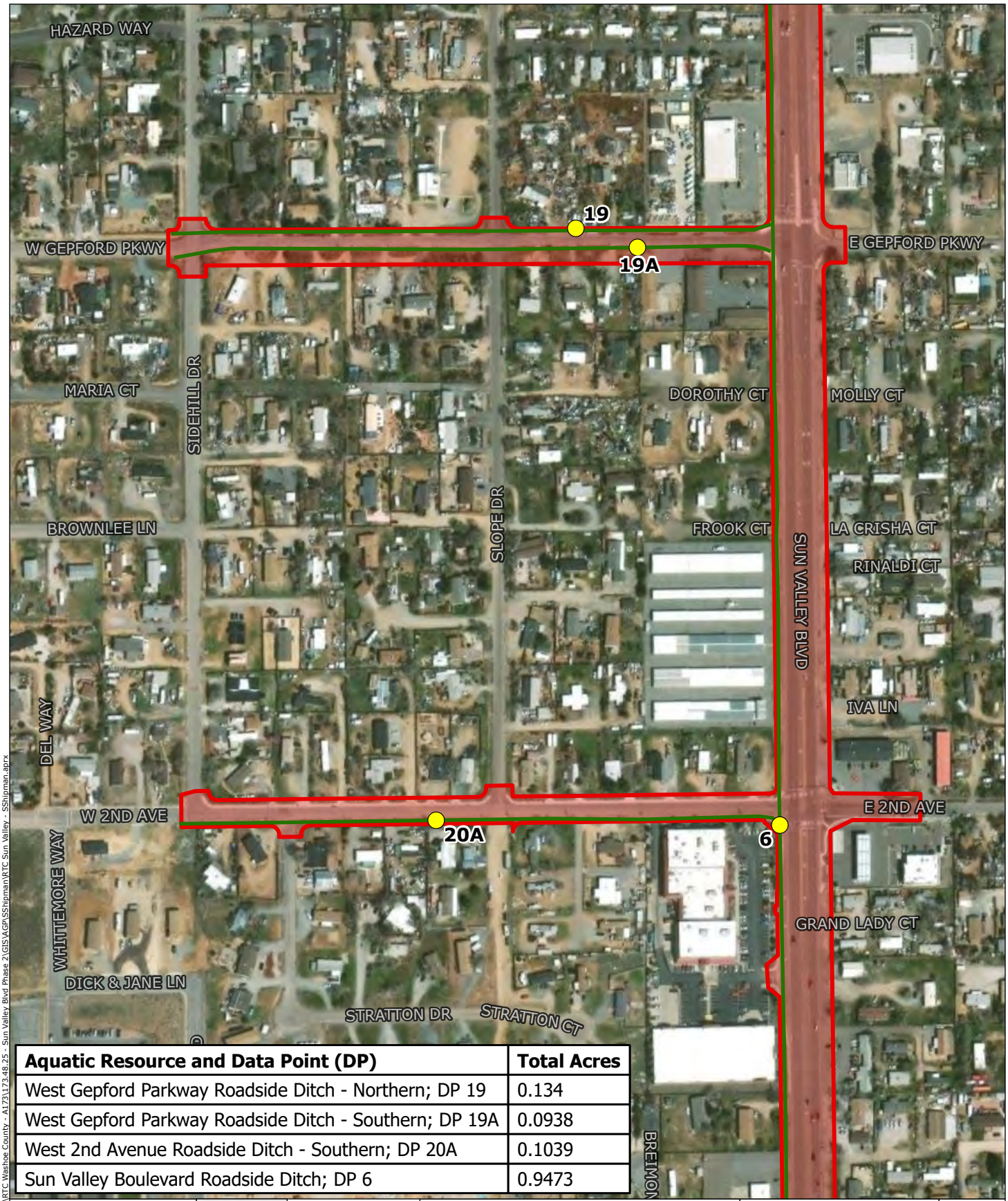
1 in. = 200 ft.

0 100 200 ft.

FIGURE 1-2

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
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Aquatic Resource and Data Point (DP)	Total Acres
West Gepford Parkway Roadside Ditch - Northern; DP 19	0.134
West Gepford Parkway Roadside Ditch - Southern; DP 19A	0.0938
West 2nd Avenue Roadside Ditch - Southern; DP 20A	0.1039
Sun Valley Boulevard Roadside Ditch; DP 6	0.9473

Project Area
Data Point
Roadside Ditches

NCE
RTC

Sun Valley Boulevard Corridor Improvements Project

Project ARD Map

N

1 in. = 300 ft.

0 300 ft.

FIGURE 1-3

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
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Aquatic Resource and Data Point (DP)	Total Acres
West 1st Avenue Roadside Ditch - Southern; DP 26	0.0621

Project Area
Data Point
Roadside Ditches

NCE
RTC

Sun Valley Boulevard Corridor Improvements Project

Project ARD Map

N

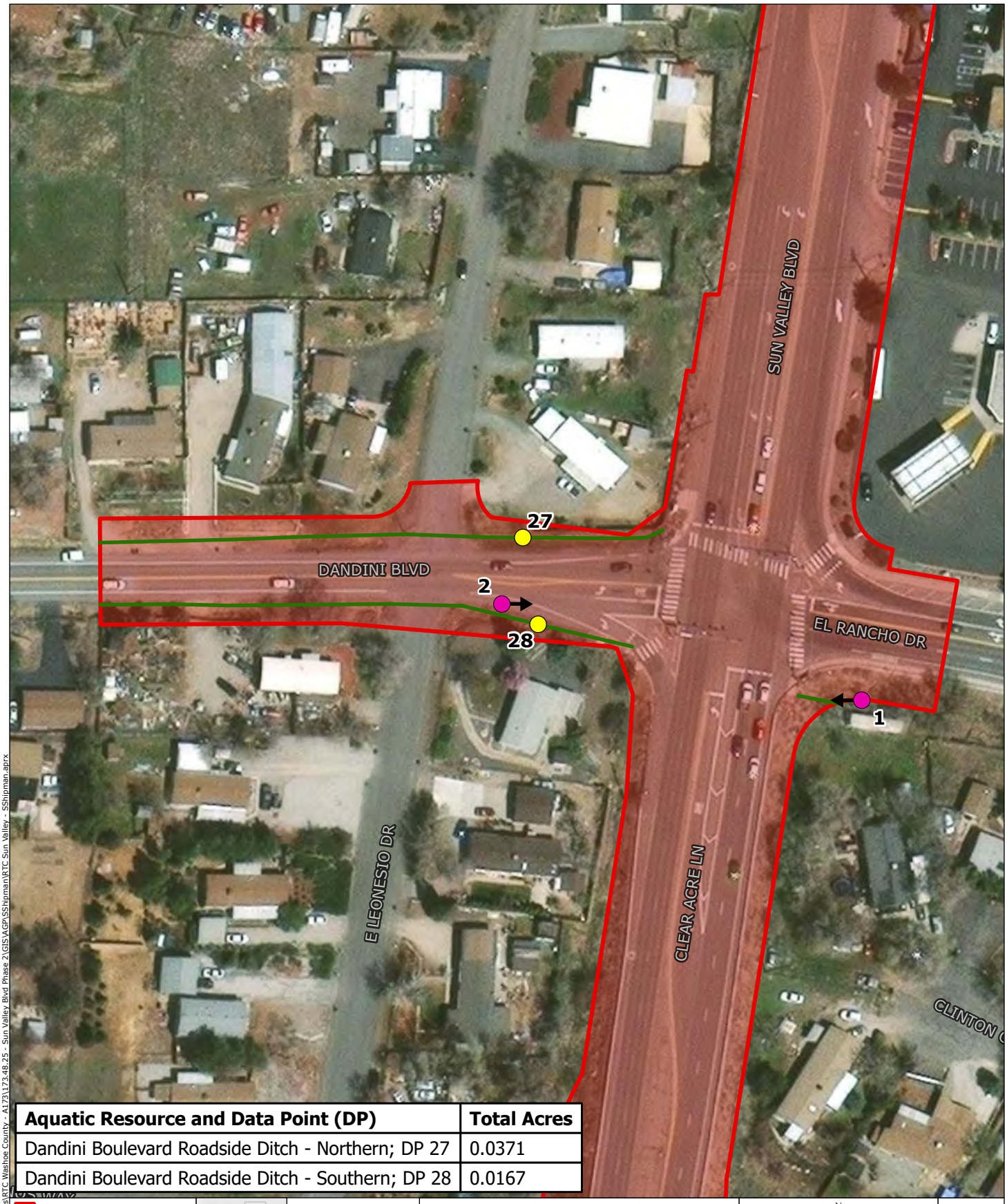
1 in. = 100 ft.

0 50 100 ft.

FIGURE 1-4

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
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Aquatic Resource and Data Point (DP)	Total Acres
Dandini Boulevard Roadside Ditch - Northern; DP 27	0.0371
Dandini Boulevard Roadside Ditch - Southern; DP 28	0.0167

Project Area
Data Point
Roadside Ditches
Photo Point with Direction

NCE
RTC

Sun Valley Boulevard Corridor Improvements Project

Project ARD Map

N

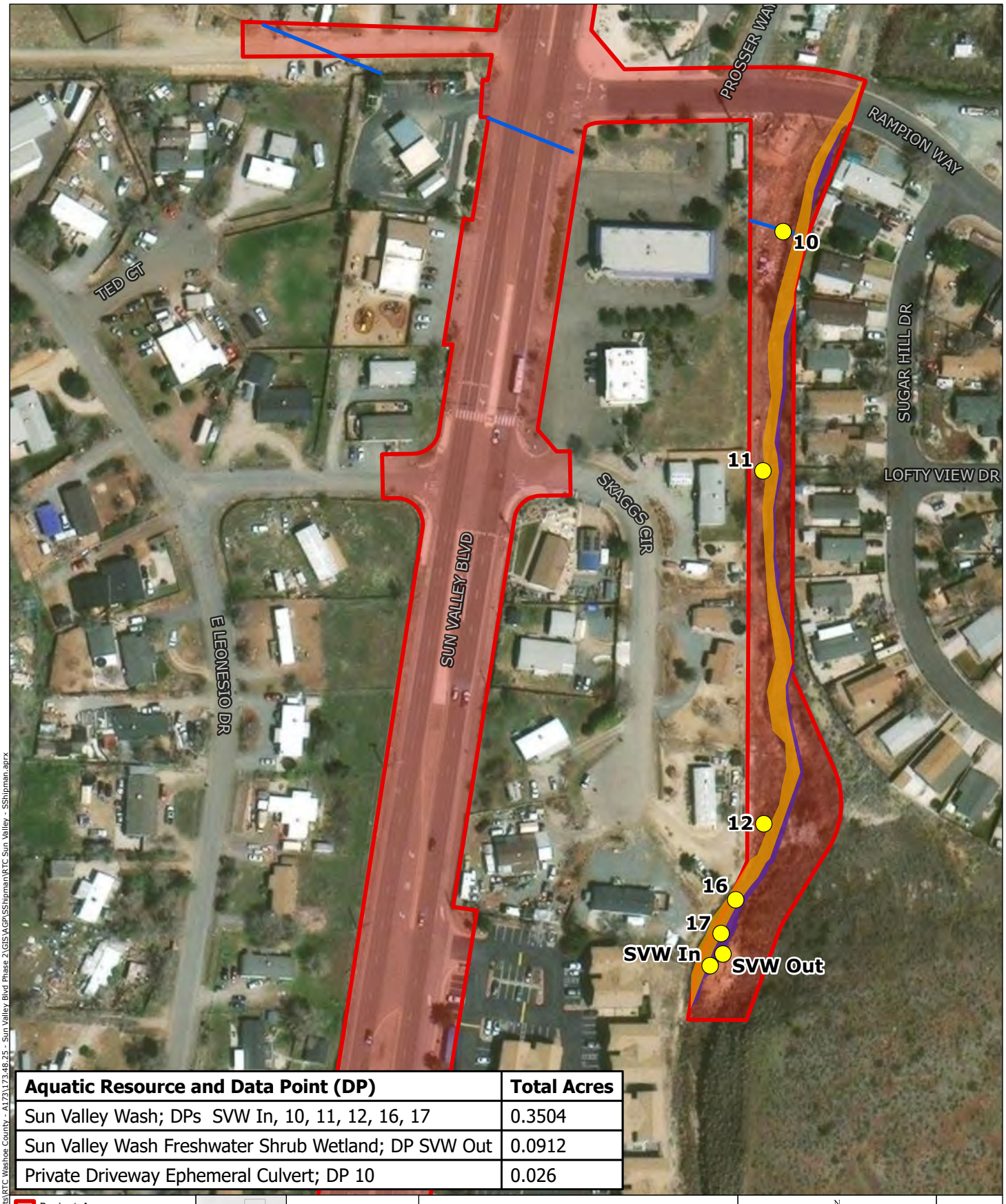
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FIGURE 1-5

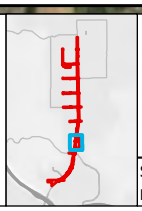
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Aquatic Resource and Data Point (DP)	Total Acres
Sun Valley Wash; DPs SVW In, 10, 11, 12, 16, 17	0.3504
Sun Valley Wash Freshwater Shrub Wetland; DP SVW Out	0.0912
Private Driveway Ephemeral Culvert; DP 10	0.026

- Project Area
- Data Point
- Sun Valley Wash
- Fresh Water Shrub Wetland
- Riverine



NCE

RTC

Sun Valley Boulevard Corridor Improvements Project

Project ARD Map

N

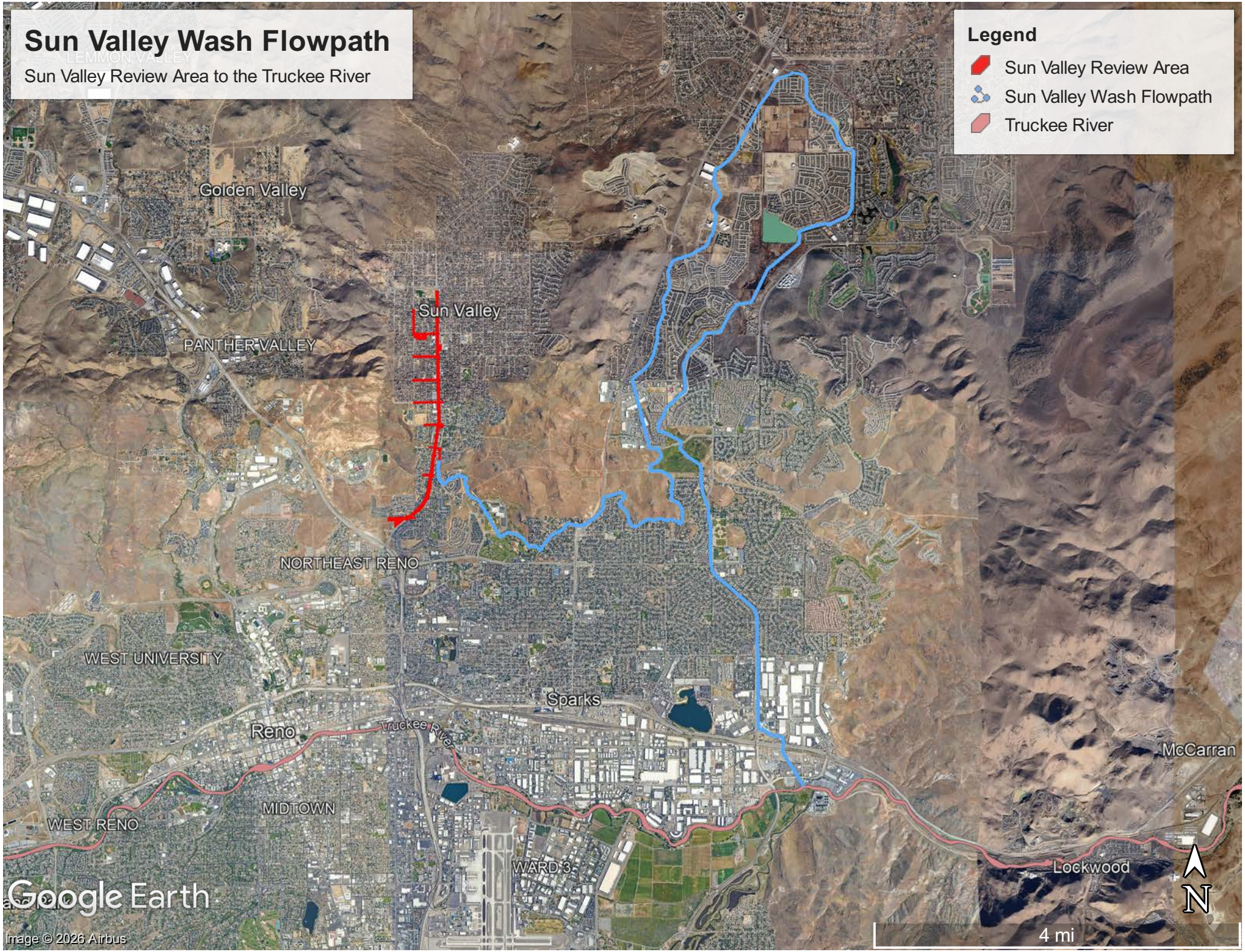
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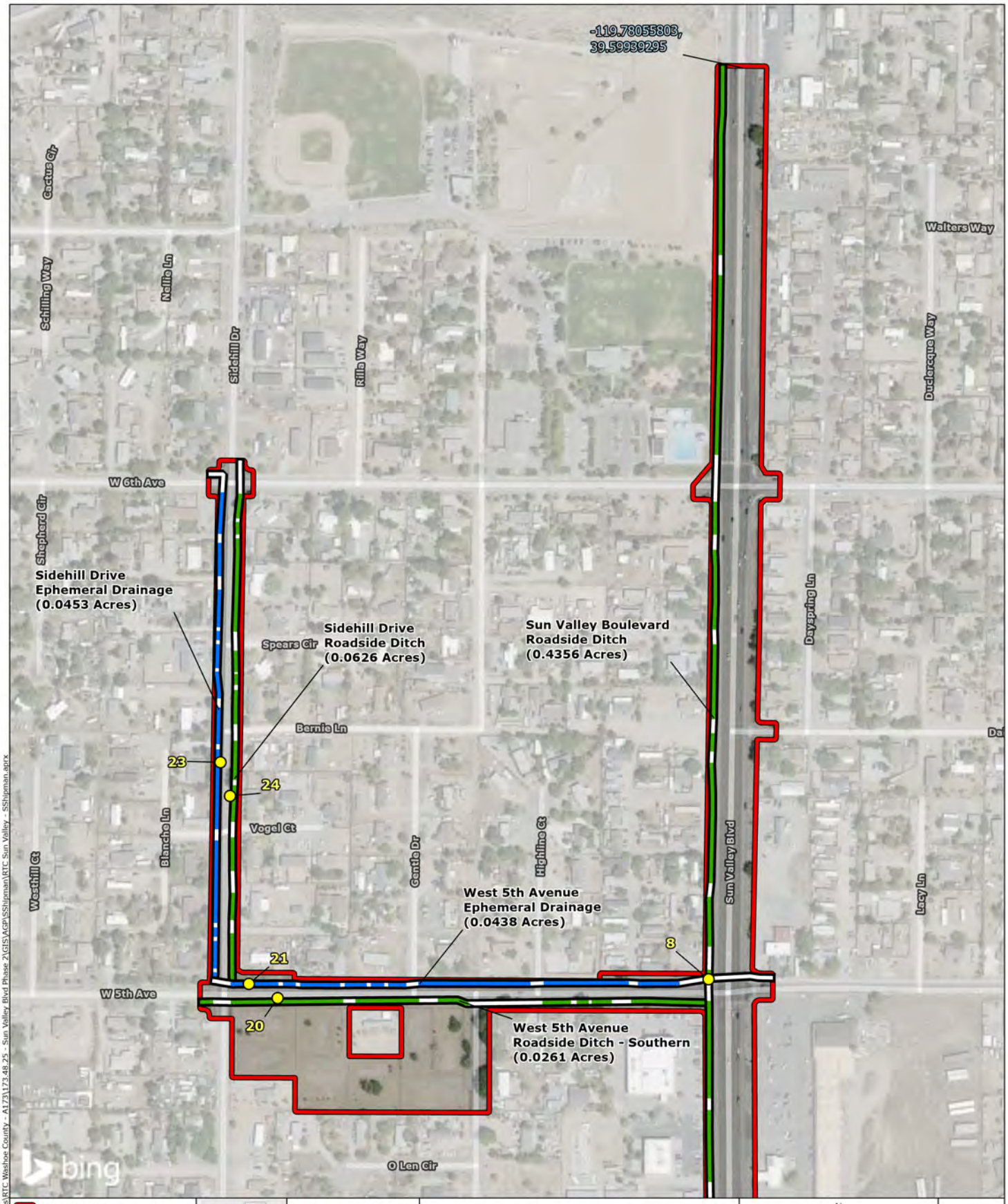
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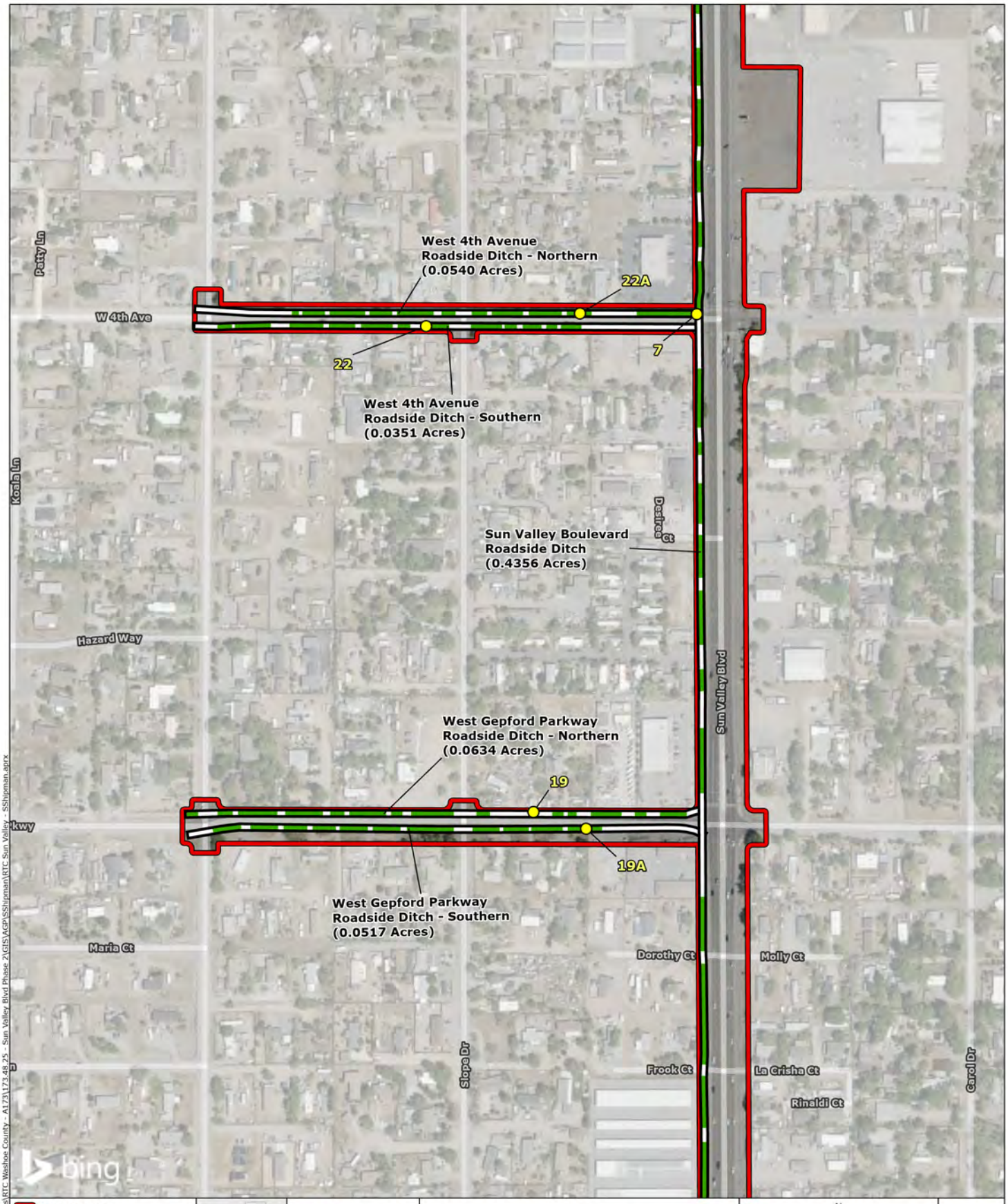
FIGURE 1-6

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
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Sun Valley Wash Flowpath
Sun Valley Review Area to the Truckee River
Legend
Sun Valley Review Area
Sun Valley Wash Flowpath
Truckee River
Golden Valley
Sun Valley
PANTHER VALLEY
NORTHEAST RENO
WEST UNIVERSITY
Reno
Truckee River
Sparks
McCarran
MIDTOWN
WEST RENO
WARD 3
Lockwood
N
4 mi
Google Earth
Image © 2026 Airbus


-119.78055803, 39.59939295
Cactus Cir
Schilling Way
Nellie Ln
Sidehill Dr
Rilla Way
Walters Way
Duclorcque Way
W 6th Ave
Shepherd Cir
Sidehill Drive Ephemeral Drainage (0.0453 Acres)
Spears Cir
Sidehill Drive Roadside Ditch (0.0626 Acres)
Sun Valley Boulevard Roadside Ditch (0.4356 Acres)
Dayspring Ln
Bernie Ln
23
24
Vogel Ct
Blanche Ln
Westhill Ct
Gentle Dr
Highline Ct
Sun Valley Blvd
Lucy Ln
West 5th Avenue Ephemeral Drainage (0.0438 Acres)
8
21
W 5th Ave
20
West 5th Avenue Roadside Ditch - Southern (0.0261 Acres)
O Len Cir
bing
Project Area
Data Point
Culvert
Riverine
Roadside Ditch
NCE
RTC
Sun Valley Boulevard Corridor Improvements Project
Project ARD Map
N
1 in. = 350 ft.
0
350
ft.
FIGURE
1-1
SOURCE
Bing World Imagery
JOB NUMBER
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DATE
9/10/2025
REVISED
2/5/2026
APPROVED
D. Karlowicz
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Project Area
Data Point
Culvert
Roadside Ditch

NCE
RTC

Sun Valley Boulevard Corridor Improvements Project

Project ARD Map

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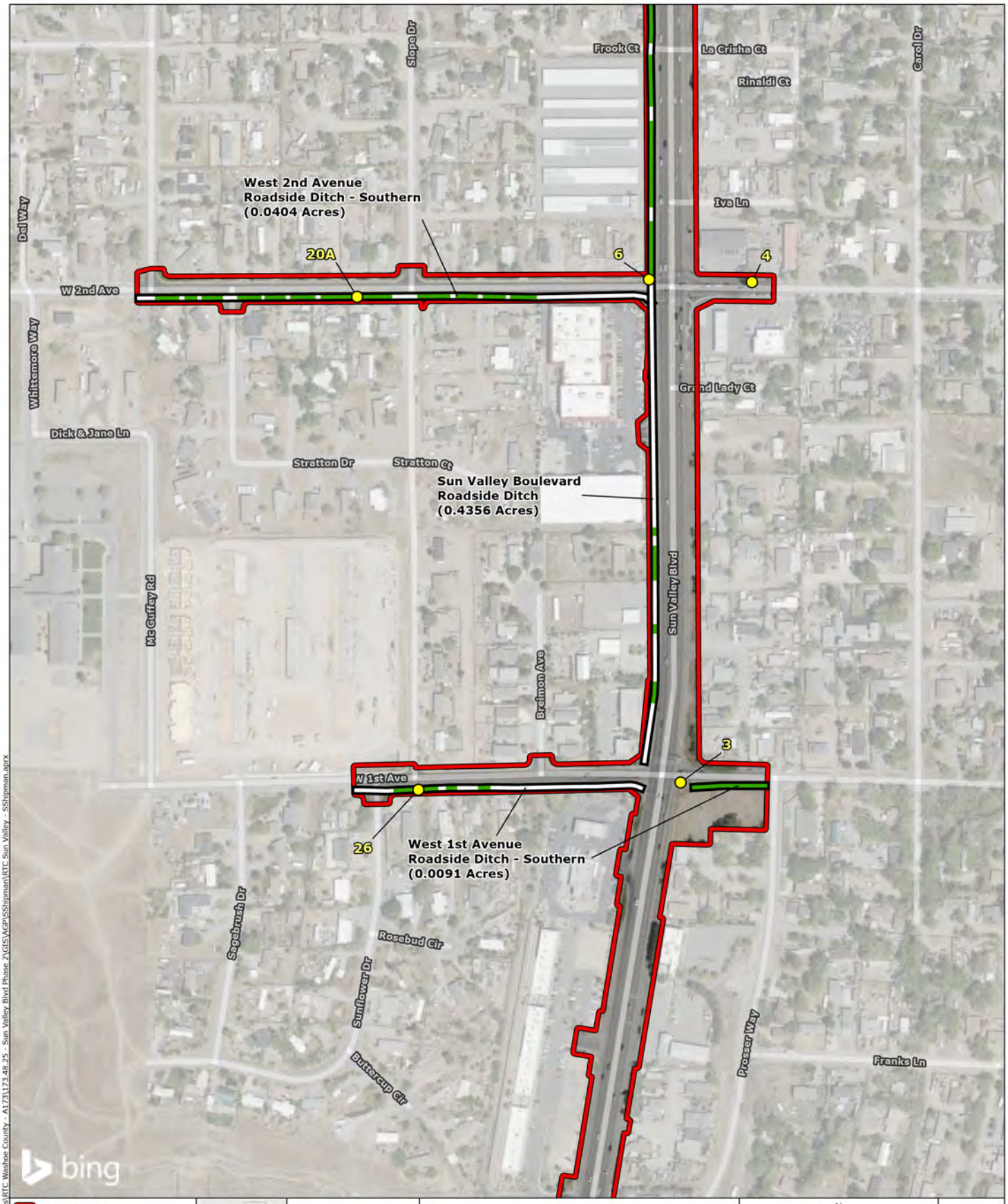
1 in. = 350 ft.

0 350 ft.

FIGURE 1-2

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
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Project Area
Data Point
Culvert
Roadside Ditch

NCE
RTC

Sun Valley Boulevard Corridor Improvements Project

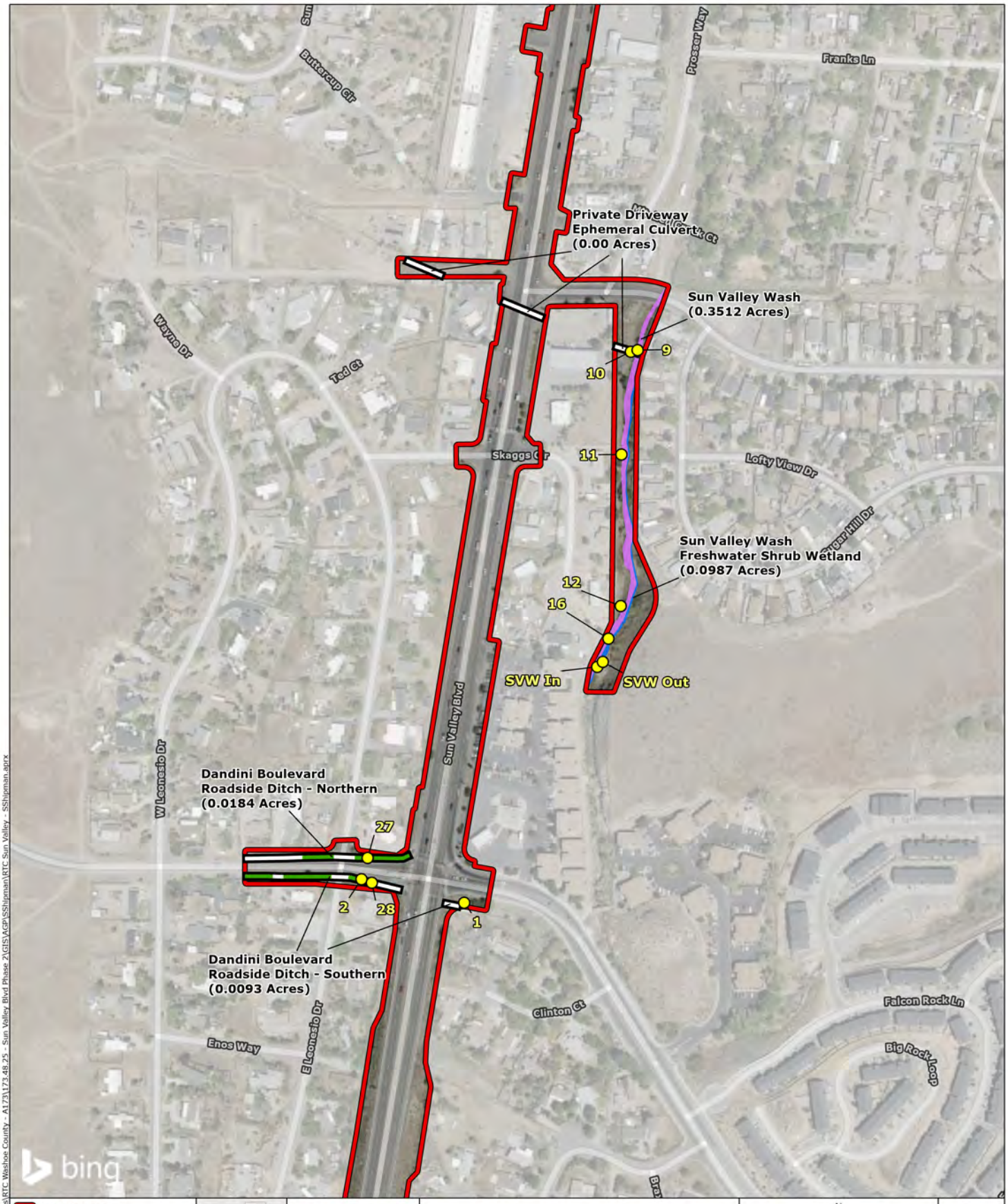
Project ARD Map

N
1 in. = 350 ft.
0 350 ft.

FIGURE
1-3

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
Bing World Imagery	173.48.25	NCE	9/10/2025	2/5/2026	D. Karlowicz

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Project Area
Data Point
Culvert
Roadside Ditch
Freshwater Shrub Wetland
Sun Valley Wash

NCE
RTC

Sun Valley Boulevard Corridor Improvements Project

Project ARD Map

N
1 in. = 350 ft.
0 350 ft.

FIGURE
1-4

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
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Project Area

NCE

RTC

Sun Valley Boulevard Corridor Improvements Project

Project ARD Map

N

1 in. = 350 ft.

0 350 ft.

FIGURE 1-5

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
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Aquatic Resources Delineation Report

Sun Valley Boulevard Corridor Improvements Project

Sun Valley, NV



Regional Transportation Commission of Washoe County, Nevada

1105 Terminal Way
Reno, NV 89509

June 2025

NCE

300 E. 2nd Street, Suite 1210
Reno, NV 89501

NCE Project No. 173.48.25

Collaboration. Commitment. Confidence.℠

Aquatic Resources Delineation Report

Sun Valley Boulevard Corridor Improvements Project

Sun Valley, NV

June 2025

Prepared for:

Regional Transportation Commission of Washoe County, Nevada
1105 Terminal Way
Reno, NV 89509

Prepared by:

Debra Lemke, PWS, CPESC
Associate Scientist

Nick Brogna
Staff Scientist

NCE
300 E. 2nd Street, Suite 1210
Reno, NV 89501
(775) 329-4955

NCE Project No. 173.48.25

Executive Summary

NCE performed field investigations on May 14, 2024, and due to an increased project area, an additional field investigation occurred on May 12, 2025, of the 67.55 acre Sun Valley Boulevard Corridor Improvements Project (Project). The purpose of the field investigation was to evaluate the potential jurisdictional status of waters of the United States for the Regional Transportation Commission of Washoe County, Nevada.

NCE conducted an aquatic resources delineation of the Project area and delineated the following potentially jurisdictional features (**Appendix A, Figure 1**):

- West 5th Avenue Ephemeral Drainage: This ephemeral drainage is downstream of a U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) mapped Riverine feature. This ephemeral drainage (including culverts) is a non-relatively permanent water, Cowardin classified as Riverine, Ephemeral, and is 0.0729 acres in size within the Project area.
- Sidehill Drive Ephemeral Drainage: This ephemeral drainage is downstream of two USFWS NWI mapped Riverine features. This ephemeral drainage (including culverts) is a non-relatively permanent water, Cowardin classified as Riverine, Ephemeral, and is 0.0411 acres in size within the Project area.
- Private Driveway Ephemeral Ditch: This culvert is downstream of a USFWS NWI mapped Riverine feature. The culvert is within a portion of an ephemeral drainage, a non-relatively permanent water, Cowardin classified as Riverine, Ephemeral, and is 0.0260 acres in size within the Project area.
- Sun Valley Wash: This open water drainage is Cowardian classified as Riverine, Upper Perennial and is 0.3504 acres in size within the Project area.
- Sun Valley Wash Freshwater Shrub Wetland: This freshwater shrub wetland is adjacent to Sun Valley Wash, is Cowardian classified as Riparian, Scrub-Shrub, Lotic, Riparian, and is 0.0912 acres in size within the Project area.

NCE also delineated the following potentially non-jurisdictional features (**Appendix A, Figure 1**):

- Sun Valley Boulevard Roadside Ditch: This dry roadside ditch (including culverts) was created in an upland for the purposes of stormwater management, is Cowardin classified as Uplands, Ephemeral, and is 0.9473 acres in size within the Project area.
- West 5th Avenue Roadside Ditch - Southern: This dry roadside ditch (including culverts) was created in an upland for the purposes of stormwater management, is Cowardin classified as Uplands, Ephemeral, and is 0.0389 acres in size within the Project area.
- Sidehill Drive Roadside Ditch - Eastern: This dry roadside ditch (including culverts) was created in an upland for the purposes of stormwater management, is Cowardin classified as Uplands, Ephemeral, and is 0.0421 acres in size within the Project area.
- West 4th Avenue Roadside Ditch - Northern: This dry roadside ditch (including culverts) was created in an upland for the purposes of stormwater management, is Cowardin classified as Uplands, Ephemeral, and is 0.1010 acres in size within the Project area.

- West 4th Avenue Roadside Ditch - Southern: This dry roadside ditch (including culverts) was created in an upland for the purposes of stormwater management is Cowardin classified as Uplands, Ephemeral, and is 0.0760 acres in size within the Project area.
- West Gepford Parkway Roadside Ditch - Northern: This dry roadside ditch (including culverts) was created in an upland for the purposes of stormwater management, is Cowardin classified as Uplands, Ephemeral, and is 0.1340 acres in size within the Project area.
- West Gepford Parkway Roadside Ditch - Southern: This dry roadside ditch (including culverts) was created in an upland for the purposes of stormwater management is Cowardin classified as Uplands, Ephemeral, and is 0.0938 acres in size within the Project area.
- West 2nd Avenue Roadside Ditch - Southern: This dry roadside ditch (including culverts) was created in an upland for the purposes of stormwater management, is Cowardin classified as Uplands, Ephemeral, and is 0.1039 acres in size within the Project area.
- West 1st Avenue Roadside Ditch - Southern: This dry roadside ditch (including culverts) was created in an upland for the purposes of stormwater management, is Cowardin classified as Uplands, Ephemeral, and is 0.0621 acres in size within the Project area.
- Dandini Boulevard Roadside Ditch - Northern: This dry roadside ditch (including culverts) was created in an upland for the purposes of stormwater management, is Cowardin classified as Uplands, Ephemeral, and is 0.0371 acres in size within the Project area.
- Dandini Boulevard Roadside Ditch - Southern: This dry roadside ditch (including culverts) was created in an upland for the purposes of stormwater management is Cowardin classified as Uplands, Ephemeral, and is 0.0167 acres in size within the Project area.

These findings should be considered preliminary until the United States Army Corps of Engineers issues an approved jurisdictional determination. This delineation was conducted in accordance with the following guidance:

- 1987 Corps of Engineers Wetland Delineation Manual.
- Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), September 2008.
- A Field Guide to the Identification of the Ordinary High-Water Mark (OHWM) in the Arid West Region of the Western United States, August 2008.

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List of Abbreviations

Abbreviation	Definition
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
OHWM	Ordinary High Water Mark
PP	Photo Point
Project	Sun Valley Boulevard Corridor Improvements Project
ROW	Right of way
RTC	Regional Transportation Commission of Washoe County, Nevada
TNW	Traditional Navigable Waterway
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

1 Introduction

1.1 Contact and Project Information

On behalf of the Regional Transportation Commission of Washoe County, Nevada (RTC), NCE conducted a formal United States Army Corps of Engineers (USACE) aquatic resources delineation for the Sun Valley Boulevard Corridor Improvements Project (Project). The RTC contact is Ms. Jessica Dover:

Ms. Jessica Dover
Project Manager
Regional Transportation Commission of Washoe County, Nevada
1105 Terminal Way
Reno, NV 89502
(775) 335-1831
jdover@rtcwashoe.com

Two NCE scientists conducted the aquatic resources delineation on May 14, 2024, and due to an increased Project area, an additional field investigation occurred on May 12, 2025. Ms. Debra Lemke will act as the agent for RTC.

The Project limits along Clear Acre Lane/Sun Valley Boulevard span from just south of Scottsdale Road to 7th Avenue. From just south of Scottsdale Road to just north of Crystal Lane, along Clear Acre Lane, the Project limits are within the City of Reno, Nevada. From just north of Crystal Lane to 7th Avenue, along Clear Acre Lane/Sun Valley Boulevard, the Project limits are within Washoe County, Nevada (**Appendix B, Figures 1, 2,** and **3**). Surrounding the Project are residential communities, corporate areas, and small businesses which make up portions of the Cities of Reno and Sun Valley, Nevada.

The Project is within a 67.55 acre Project area primarily located within the right of way (ROW) of Clear Acre Lane and Sun Valley Boulevard from Scottsdale Road to 7th Avenue and portions of Sidehill Drive, West 5th Avenue, West 4th Avenue, West Gepford Way, West 2nd Avenue, West 1st Avenue, Rampion Way, Dandini Boulevard, and Scottsdale Road (**Appendix B, Figure 3**).

1.2 Purpose

The purpose of this report is to identify and describe aquatic resources in the Project area. Specifically, this report will be used to:

- Document aquatic resources boundary determinations for review by the USACE.
- Provide background information.
- Support future permit applications.

2 Background

2.1 Site Description

2.1.1 Location

The Project area is within Washoe County, Nevada (**Appendix B, Figures 1** and **2**). The Project area is within Sections 18, 19, 30, 31, and 36, Township 20 North, Range 19, 20 East and within the USGS Reno 7.5-minute quadrangle map (**Appendix B**, **Figure 4**). The northernmost point of the Project area has a latitude of 39.5994° north and a longitude of -119.7806° west. The southernmost point of the Project area has a latitude of 39.5622° north and a longitude of -119.7892° west. The Project area primarily exists within the public ROW of Clear Acre Lane and Sun Valley Boulevard and adjacent streets of Sidehill Drive, West 5th Avenue, West 4th Avenue, West Gepford Way, West 2nd Avenue, West 1st Avenue, Rampion Way, Dandini Boulevard, and Scottsdale Road.

2.1.2 Site Access

To access the Project area from Reno, Nevada, follow US 395 north and take exit 70B to merge onto Clear Acre Lane. Then continue along Clear Acre Lane for approximately 0.65 miles to the intersection of Scottsdale Road and Clear Acre Lane. The Project area spans approximately 2.58 miles to the intersection of Sun Valley Boulevard and 7th Avenue.

2.1.3 USGS and National Wetland Inventory

The United States Geological Survey (USGS) identifies the abandoned Prosser Valley Ditch within the western portion of the Project area, north of a Private Driveway, and across West 1st Avenue and West 2nd Avenue (**Appendix B, Figure 4**). The USGS depicts a portion of the Sun Valley Wash within a southeastern portion of the Project area, along a service road near Rampion Way (USGS 2025).

The United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) identifies the same aquatic resources within the Project area as USGS, stated above (USFWS n.d.). In addition, USFWFS NWI depicts riverine features terminating near a Private Driveway just west of Rampion Way, West 5th Avenue, and two riverine features near Sidehill Drive. Furthermore, USFWS NWI identified Riverine features west of the Project area, as well as Freshwater Forested/Shrub Wetland, Freshwater Emergent Wetland, Freshwater Pond, and Riverine features east of the Project area (**Appendix B, Figure 5**).

2.1.4 Soils

The soils in the Project area have been mapped by the United States Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS), and were downloaded from the Web Soil Survey (USDA 2025). NRCS identified 8 soil types within the Project area (**Appendix B**, **Figure 6**). The soil type and its hydric status is presented below and in **Table 1**.

Table 1. Soils within the Project Area

Map Unit Symbol	Name	Acreage in Project Area (Acre)	Percent of Project Area	National Hydric List (Y or N)
110	Jowec variant sandy loam, 4 to 8 percent slopes	5.2	8.0%	N
131	Greenbrae fine sandy loam, 0 to 2 percent slopes	23.7	36.4%	N
132	Greenbrae sandy loam, 2 to 4 percent slopes	6.5	9.9%	N
171	Indian Creek gravelly sandy loam, 0 to 4 percent slopes	2.3	3.6%	N
172	Indian Creek sandy loam, 4 to 8 percent slopes	4.6	7.1%	N
190	Manogue cobbly clay, 2 to 8 percent slopes	13.85	17.5%	N
191	Manogue cobbly clay, 8 to 15 percent slopes	11.1	17.1%	N
861	Reywat extremely stony loam, 15 to 30 percent slopes	0.3	0.4%	N
Totals for Areas of Interest		67.55	100.0%	

110: Jowec variant sandy loam, 4 to 8 percent slopes

Jowec variant sandy loam, 4 to 8 percent slopes is a soil component that occurs in fan remnants. The parent material consists of alluvium derived from granite. This is a well-drained soil with more than 80 inches to a restrictive feature (duripan). This soil is not on the national hydric soils list (USDA 2023).

131: Greenbrae fine sandy loam, 0 to 2 percent slopes

Greenbrae fine sandy loam, 0 to 2 percent slopes is a soil component that occurs in alluvial fans. The parent material consists of loamy alluvium derived from granite over alluvium derived from granite. This is a well-drained soil with more than 80 inches to a restrictive feature (duripan). This soil is not on the national hydric soils list (USDA 2023).

132: Greenbrae sandy loam, 2 to 4 percent slopes

Greenbrae sandy loam, 2 to 4 percent slopes is a soil component that occurs in fan remnants. The parent material consists of alluvium derived from granite rocks. This is a well-drained soil with more than 80 inches to a restrictive feature (duripan). This soil is not on the national hydric soils list (NRCS 2023).

171: Indian Creek gravelly sandy loam, 0 to 4 percent slopes

Indian Creek gravelly sandy loam, 0 to 4 percent slopes is a soil component in fan remnants. The parent material consists of mixed alluvium. This is a well-drained soil with 14 to 20 inches to the restrictive feature (duripan). This soil is not on the national hydric soils list (USDA 2023).

172: Indian Creek sandy loam, 4 to 8 percent slopes

Indian Creek sandy loam, 4 to 8 percent slopes is a soil component in fan remnants. The parent material consists of mixed alluvium. This is a well-drained soil with 14 to 20 inches to the restrictive feature (duripan). This soil is not on the national hydric soils list (USDA 2023).

190: Manogue cobbly clay, 2 to 8 percent slopes

Manogue cobbly clay, 2 to 8 percent slopes is a soil component in hills. The parent material consists of colluvium derived from volcanic rock over residuum weathered from volcanic rock. This is a well-drained soil with 39 to 65 inches to paralithic bedrock. This soil is not on the national hydric soils list (USDA 2023).

191: Manogue cobbly clay, 8 to 15 percent slopes

Manogue cobbly clay, 8 to 15 percent slopes is a soil component in hills. The parent material consists of colluvium derived from basalt. This is a well-drained soil with 61 to 65 inches to paralithic bedrock. This soil is not on the national hydric soils list (USDA 2023).

861: Reywat extremely stony loam, 15 to 30 percent slopes

Reywat extremely stony loam, 15 to 30 percent slopes, is a soil component in hills. The parent material consists of residuum and colluvium derived from volcanic rocks. This is a well-drained soil with 10 to 20 inches to lithic bedrock. This soil is not on the national hydric soils list (USDA 2023).

2.1.5 Hydrology

The sources of water for the Project area include direct precipitation, stormwater runoff from adjacent streets, and nuisance (irrigation) water. In addition, there are roadside ditches and/or culverts that were created in uplands for stormwater management at the following locations:

- A roadside ditch with culverts along portions of the western side of Sun Valley Boulevard
- A roadside ditch with culverts along the southern side of West 5th Avenue
- A roadside ditch with culverts along the eastern side of Sidehill Drive
- A roadside ditch with culverts along the northern and southern sides of West 4th Avenue
- A roadside ditch with culverts along the northern and southern sides of West Gepford Parkway
- A roadside ditch with culverts along the southern side of West 2nd Avenue
- A roadside ditch with culverts along the southern side of West 1st Avenue
- A roadside ditch with culverts on both the northern and southern sides of Dandini Boulevard

It appears that USFWS NWI-mapped Riverine features have been relocated to roadside ditches due to housing developments at three locations. These Riverine features are ephemeral drainages located in roadside ditches

with culverts across a Private Driveway (culvert only), along the northern side of West 5th Avenue, and along the western side of Sidehill Drive.

The Project hydrology generally flows from the west and south to Sun Valley Wash. The Sun Valley Wash flows into the Wildcreek Detention Facility. The Wildcreek Detention Facility discharges into the Orr Ditch. The Orr Ditch discharges into the North Truckee Drain which discharges to the Truckee River, a traditional navigable waterway (TNW).

2.1.6 Vegetation

Based on the USGS, National Gap Analysis Program (USGS 2025), the survey area vegetation communities include a combination of 7 categories (**Appendix B, Figure 7**). Based on NCE's site visits, the vegetation in the Project area is limited to tree and shrub ornamental landscaping, ruderal forbs, grasses, shrubs, and sparse riparian/wetland species on some roadside ditches and shoulders and Sun Valley Wash, and disturbed sagebrush steppe in the staging area at the southern end of the Project area.

3 Methods

3.1 Site Description

The Project area is 67.55 acres and was field delineated by NCE on May 14, 2024, and May 12, 2025. Prior to the field investigation, USGS topographic maps, aerial photographs, USFWS NWI mapping, and a NRCS custom soil report of the survey area were reviewed for indications of ephemeral, intermittent, and perennial drainages as well as mapped wetlands and spring locations.

3.1.1 Wetlands

The Project area was investigated for the presence of wetlands utilizing the USACE 1987 3-parameter methodology (vegetation, hydrology, and soils). This methodology was refined in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), September 2008 and requires the collection of data on soils, vegetation, and hydrology at several locations to establish the potential jurisdictional boundary of wetlands (USACE 2008).

3.1.2 Drainages

The Project area was delineated for drainages utilizing the presence of Ordinary High Water Mark (OHWM) indicators, evidence of frequent surface water flows, and a connection to a TNW. These characteristics are indicative of jurisdictional waters of the United States. The OHWM indicator locations were recorded with a Trimble Geo7x GPS unit and representative photographs were taken. Arid West Ephemeral and Intermittent Stream OHWM Data Sheets were completed for the drainages with the presence of OHWM indicators. If the drainage had OHWM indicators, the field team would follow the drainage to determine whether it flowed into another drainage with OHWM indicators or if the indicators terminated. Where the drainage exhibited OHWM indicators, width was measured to calculate the average width of the drainage, and depth was measured from the OHWM to the drainage bottom.

3.2 Survey Data Integration

Boundaries of the potential aquatic resources within the survey area were delineated using a Trimble Geo7x GPS unit and maps were produced using ESRI ArcGIS Pro 3.5.1 software. The datum used for horizontal spatial data collection was WGS 1984 and no vertical data was collected. The map coordinate system is NAD 1983 State Plane Nevada West.

3.3 Property Owner Access

The Project area is within the public ROW of Clear Acre Lane, Sun Valley Boulevard, Sidehill Drive, West 5th Avenue, West 4th Avenue, West Gepford Way, West 2nd Avenue, West 1st Avenue, Rampion Way, Dandini Boulevard, and Scottsdale Road, as well as private property in the surrounding area. If the USACE would like to conduct a site visit, then coordination with RTC will be necessary to secure signed letters from the property owners allowing the USACE to access the properties.

4 Results

4.1 Landscape Setting

The Project area is primarily located along Clear Acre Lane and Sun Valley Boulevard upon exiting US 395 north. Businesses, ornamental landscaping, roadside ditches, public parks, residential communities, and cross streets surround the Project area. Topography generally slopes upward to the north and west (**Appendix B, Figure 4**).

4.2 Aquatic Resources

Aquatic resources were delineated and are presented below. The photographs are noted as Photo Point (PP) in **Appendix C** and the PP and photo direction are indicated on **Appendix B, Figure 8.** The PP also represents a data point when an OHWM or wetland datasheet was completed, or a representative photograph was taken. A list of the vegetation identified within the Project area during the biological resources field work on June 12, 2024, and on April 3, 2025, due to the increased Project Area, is in **Appendix D**. The OHWM and wetland datasheets are in **Appendix E**. The culvert systems described below are depicted on **Appendix B, Figure 9**.

4.2.1 Drainages, Freshwater Shrub Wetland, Roadside Ditches, and Culverts

Ephemeral Drainages

West 5th Avenue Ephemeral Drainage: A USFWS NWI mapped Riverine feature is located west of West 5th Avenue (**Appendix B, Figure 5**). Two OHWM datasheets were completed and data points 8 and 21 were collected. NCE's Conceptual Drainage Design Report (NCE 2024), shows that the USFWS NWI-mapped Riverine feature was intercepted on the western side of Sidehill Drive as a roadside ditch with culverts to the northern side of West 5th Avenue, then culverted across Sun Valley Boulevard to East 5th Avenue. The 24-inch culvert eventually discharges to the Sun Valley Wash east of the Project area. The roadside ditch along the northern side of West 5th Avenue is considered an ephemeral drainage due to the interception of the USFWS NWI-mapped Riverine feature.

Sidehill Drive Ephemeral Drainage: Two USFWS NWI mapped Riverine features are located west of Sidehill Drive (**Appendix B, Figure 5**). An OHWM datasheet was completed and data point 23 was collected. Based on NCE's Conceptual Drainage Design Report (NCE 2024), it appears that the two USFWS NWI-mapped Riverine features were intercepted on the western side of Sidehill Drive as a roadside ditch with culverts. This roadside ditch flows to the northern side of West 5th Avenue, then is culverted across Sun Valley Boulevard to East 5th Avenue. A 24-inch culvert eventually discharges to the Sun Valley Wash east of the Project area. The roadside ditch along the western side of Sidehill Drive is considered an ephemeral drainage due to the interception of the USFWS NWI-mapped Riverine features.

Private Driveway Ephemeral Culvert: A UFWS NWI mapped Riverine feature is located west of the Project area near Private Driveway (**Appendix B, Figure 5**). An OHWM datasheet was completed although there was no drainage present within the Project area. Based on Google Imagery, west of the Project area the Riverine feature (ephemeral drainage) was channelized on the northern side of Private Driveway. NCE's Conceptual Drainage Design Report (NCE 2024), shows that USFWS NWI-mapped Riverine feature was intercepted on the northern side of Private Driveway and culverted (36-inch culvert) through the Project area to the Sun Valley Wash. Data point 10 was collected at the culvert outfall into Sun Valley Wash. The Private Driveway culvert is considered an ephemeral drainage due to the interception of the USFWS NWI mapped Riverine feature.

Perennial Drainage

Sun Valley Wash: Flow was present in the Sun Valley Wash. Data points 9, 11, and 12 were recorded, and an OHWM datasheet was created at data point 16. The drainage's OHWM width was 5 feet wide and 5 inches deep.

Freshwater Shrub Wetland

Sun Valley Wash Freshwater Shrub Wetland: Two data points were collected to determine the limits of the freshwater shrub wetland; data point SVW IN is within the wetland and data point SVN OUT is outside of the wetland. The wetland had a soil matrix of 10YR 6/2 and was very sandy. The dominant vegetation is narrow leaf willow (*Salix exigua*), and hydrology was present. The wetland is adjacent to the Sun Valley Wash on the southeastern side of the drainage.

Roadside Ditches with Culverts

Sun Valley Boulevard Roadside Ditch: A roadside ditch with culverts is located along the western side of Sun Valley Boulevard. Within the Project area, the roadside ditch starts just south of the intersection of West 7th Avenue, East 7th Avenue, and Sun Valley Boulevard and travels south to East 1st Avenue. Once the ditch hits just north of West 2nd Avenue it is then piped to the east outside of the Project area. An OHWM datasheet was created at West 2nd Avenue and Sun Valley Boulevard, and data point 6 was collected. The roadside ditch averaged 50 inches wide and 18 inches deep.

West 5th Avenue Roadside Ditch - Southern: A roadside ditch with culverts is located on the southern side of West 5thAvenue. Within the Project area, the roadside ditch starts at the intersection of Sidehill Drive and West 5thAvenue, continues along the southern side of West 5th Avenue, and then is culverted along the western side of Sun Valley Boulevard to the south. An OHWM datasheet was created, and data point 20 was collected. The roadside ditch averaged 16 inches wide and 3 inches deep.

Sidehill Drive Roadside Ditch - Eastern: A roadside ditch with culverts is located on the eastern side of Sidehill Drive. Within the Project area, the roadside ditch starts at the intersection of West 6th Avenue and Sidehill Drive, continues along the eastern side of Sidehill Drive and then along the northern side of West 5th Avenue, and is culverted through the Project area to the east. An OHWM datasheet was created, and data point 24 was collected. The roadside ditch averaged 36 inches wide and 3 inches deep.

West 4thAvenue Roadside Ditch - Northern: A roadside ditch with culverts is located on the northern side of West 4thAvenue. Within the Project area, the roadside ditch starts east of the intersection of Sidehill Drive and West 4thAvenue, continues along the northern side of West 4thAvenue, and then is culverted along the western side of Sun Valley Boulevard to the south. An OHWM datasheet was created, and data point 22A was collected. The roadside ditch averaged 40 inches wide and 3 inches deep.

West 4thAvenue Roadside Ditch - Southern: A roadside ditch with culverts is located on the southern side of West 4thAvenue. Within the Project area, the roadside ditch starts east of the intersection of Sidehill Drive and West 4th Avenue, continues along the southern side of West 4thAvenue, and then is culverted along the western side of Sun Valley Boulevard to the south. An OHWM datasheet was created, and data point 22 was collected. The roadside ditch averaged 30 inches wide and 3 inches deep.

West Gepford Parkway Roadside Ditch - Northern: A roadside ditch with culverts is located on the northern side of West Gepford Parkway. Within the Project area, the roadside ditch starts at the intersection of Sidehill Drive and West Gepford Parkway, continues along the northern side of West Gepford Parkway, and then it is

culverted through the Project area to the east. An OHWM datasheet was created, and data point 19 was collected. The roadside ditch averaged 48 inches wide and 4 inches deep.

West Gepford Parkway Roadside Ditch - Southern: A roadside ditch with culverts is located on the southern side of West Gepford Parkway. Within the Project area, the roadside ditch starts at the intersection of Sidehill Drive and West Gepford Parkway, continues along the southern side of West Gepford Parkway, and then it is culverted through the Project area to the east. An OHWM datasheet was created, and data point 19A was collected. The roadside ditch averaged 36 inches wide and 3 inches deep.

West 2nd Avenue Roadside Ditch - Southern: A roadside ditch with culverts is located on the southern side of West 2nd Avenue. Within the Project area, the roadside ditch starts at the intersection of West 2nd Avenue and Sidehill Drive and continues along the southern side of West 2nd Avenue, and then it is culverted through the Project area to the east. An OHWM datasheet was created, and data point 20A was collected. The roadside ditch averaged 30 inches wide and 8 inches deep.

West 1st Avenue Roadside Ditch - Southern: A roadside ditch with culverts is located on the southern side of West 1st Avenue. Within the Project area, the roadside ditch starts at the intersection of West 1st Avenue and Sagebrush Drive and continues along the southern side of West 1st Avenue, and then it is culverted through the Project area to the east. An OHWM datasheet was created, and data point 26 was collected. The roadside ditch averaged 14 inches wide and 4 inches deep.

Dandini Boulevard Roadside Ditch – Northern: A roadside ditch with culverts is located on the northern side of Dandini Boulevard and the roadside ditch is culverted under Sun Valley Boulevard to the east. An OHWM datasheet was created, and data point 27 was collected. The roadside ditch averaged 46 inches wide and 2 inches deep.

Dandini Boulevard Roadside Ditch – Southern: A roadside ditch with culverts is located on the southern side of Dandini Boulevard and the roadside ditch is culverted under Sun Valley Boulevard to the east. An OHWM datasheet was created, and data point 28 was collected. The roadside ditch averaged 20 inches wide and 8 inches deep.

Summary

NCE's professional opinion is the ephemeral drainages (West 5th Avenue Ephemeral Drainage, 0.07295 acres, and Sidehill Drive Ephemeral Drainage, 0.0411 acres) and ephemeral culvert (Private Driveway Ephemeral Culvert, 0.0260 acres) in the Project area are potentially jurisdictional aquatic resources due to a downstream connection to Sun Valley Wash, which flows into the Wildcreek Detention Facility which discharges into the Orr Ditch, which discharges into the North Truckee Drain, which discharges to the Truckee River, a TNW.

NCE's professional opinion is the Sun Valley Wash (0.3504 acres), Sun Valley Wash Freshwater Shrub Wetland (0.0912 acres) are potentially jurisdictional aquatic resources due to the Sun Valley Wash flowing into the Wildcreek Detention Facility. The Wildcreek Detention Facility which eventually discharges to the Truckee River, a TNW.

NCE's professional opinion is the roadside ditches are non-federal jurisdictional aquatic resources due to the ditches being man-made in uplands for stormwater purposes. The roadside ditches and culvert in the Project area are 1.6529 acres in size.

The aquatic resources within the Project Area are depicted on **Appendix A, Figure 1**.

4.3 Aquatic Resource Types, Amounts, and Federal Jurisdictional Status

The aquatic resources identified within the Project area are presented in **Table 2**. The proposed jurisdictional status of each aquatic resource within the Project area is presented in **Table 3**.

Table 4.1. Aquatic Resources within the Project Area

Aquatic Resource Name	Cowardin Classification	Location (latitude/longitude)	Aquatic Resource Size (acre) Required for all Resources	Aquatic Resource Size (linear feet) Required only for Stream Channels*
West 5th Avenue Ephemeral Drainage	R6 – Riverine, Ephemeral	39.5928091 N -119.7805734 W	0.0729	281
Sidehill Drive Ephemeral Drainage	R6 – Riverine, Ephemeral	39.5940036 N -119.7853809 W	0.0411	422
Private Driveway Ephemeral Culvert	R6 – Riverine, Ephemeral	39.5745132 N -119.7811021 W	0.0260	133
Sun Valley Wash	R6 – Riverine, Upper Perennial	39.5769083 N -119.7779804 W	0.3504	1,060
Sun Valley Wash Freshwater Shrub Wetland	RP1SS – Riparian, Scrub-Shrub, Lotic, Riparian	39.5684656 N -119.7744270 W	0.0912	N/A
Sun Valley Boulevard Roadside Ditch	U – Upland	39.5820001 N -119.7805103 W	0.9473	9,904
West 5th Avenue Roadside Ditch - Southern	U – Upland	39.5925951 N -119.7841115 W	0.0389	1,332
Sidehill Drive Roadside Ditch - Eastern	U – Upland	39.5952036 N -119.7852297 W	0.0421	1,386
West 4th Avenue Roadside Ditch - Northern	U – Upland	39.5891110 N -119.7807089 W	0.1010	1,060
West 4th Avenue Roadside Ditch - Southern	U – Upland	39.5890191 N -119.7846934 W	0.0760	955
West Gepford Parkway Roadside Ditch - Northern	U – Upland	39.5855181 N -119.7850153 W	0.1340	1,355
West Gepford Parkway Roadside Ditch - Southern	U – Upland	39.5853656 N -119.7849081 W	0.0938	1,083
West 2nd Avenue Roadside Ditch - Southern	U – Upland	39.5782995 N -119.7817821 W	0.1039	1,493
West 1st Avenue Roadside Ditch - Southern	U – Upland	39.5782816 N -119.7825750 W	0.0621	450

Aquatic Resource Name	Cowardin Classification	Location (latitude/longitude)	Aquatic Resource Size (acre) Required for all Resources	Aquatic Resource Size (linear feet) Required only for Stream Channels*
Dandini Boulevard Roadside Ditch – Northern	U – Upland	39.5705218 N -119.7824245 W	0.0371	147
Dandini Boulevard Roadside Ditch – Southern	U – Upland	39.5703796 N -119.7826361 W	0.0167	358
Total			**2.2345**	**21,419**

*Includes culverts

Table 4.2. Aquatic Resources Proposed Jurisdictional Status

Aquatic Resource	Total Acres	Jurisdictional	Non-Jurisdictional
West 5th Avenue Ephemeral Drainage	0.0729	0.0729	
Sidehill Drive Ephemeral Drainage	0.0411	0.0411	
Private Driveway Ephemeral Culvert	0.0260	0.0260	
Sun Valley Wash	0.3504	0.3504	
Sun Valley Wash Freshwater Shrub Wetland	0.0912	0.0912	
Sun Valley Boulevard Roadside Ditch	0.9473		0.9473
West 5th Avenue Roadside Ditch - Southern	0.0389		0.0389
Sidehill Drive Roadside Ditch - Eastern	0.0421		0.0421
West 4th Avenue Roadside Ditch - Northern	0.1010		0.1010
West 4th Avenue Roadside Ditch - Southern	0.0760		0.0760
West Gepford Parkway Roadside Ditch – Northern	0.1340		0.1340
West Gepford Parkway Roadside Ditch - Southern	0.0938		0.0938
West 2nd Avenue Roadside Ditch - Southern	0.1039		0.1039
West 1st Avenue Roadside Ditch - Southern	0.0621		0.0621
Dandini Boulevard Roadside Ditch – Northern	0.0371		0.0371
Dandini Boulevard Roadside Ditch – Southern	0.0167		0.0167
Total	**2.2345**	**0.5816**	**1.6529**

The Aquatic Resource Excel Sheet and the GIS metadata will be submitted under separate cover.

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Distribution and Quality Control

Aquatic Resources Delineation Report

Sun Valley Boulevard Corridor Improvements Project

Sun Valley, NV

June 2025

Copy 1: Ms. Jessica Dover, Regional Transportation Commission of Washoe County

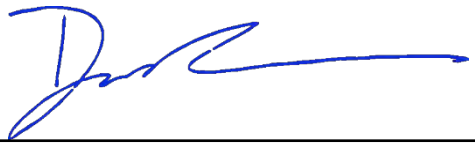
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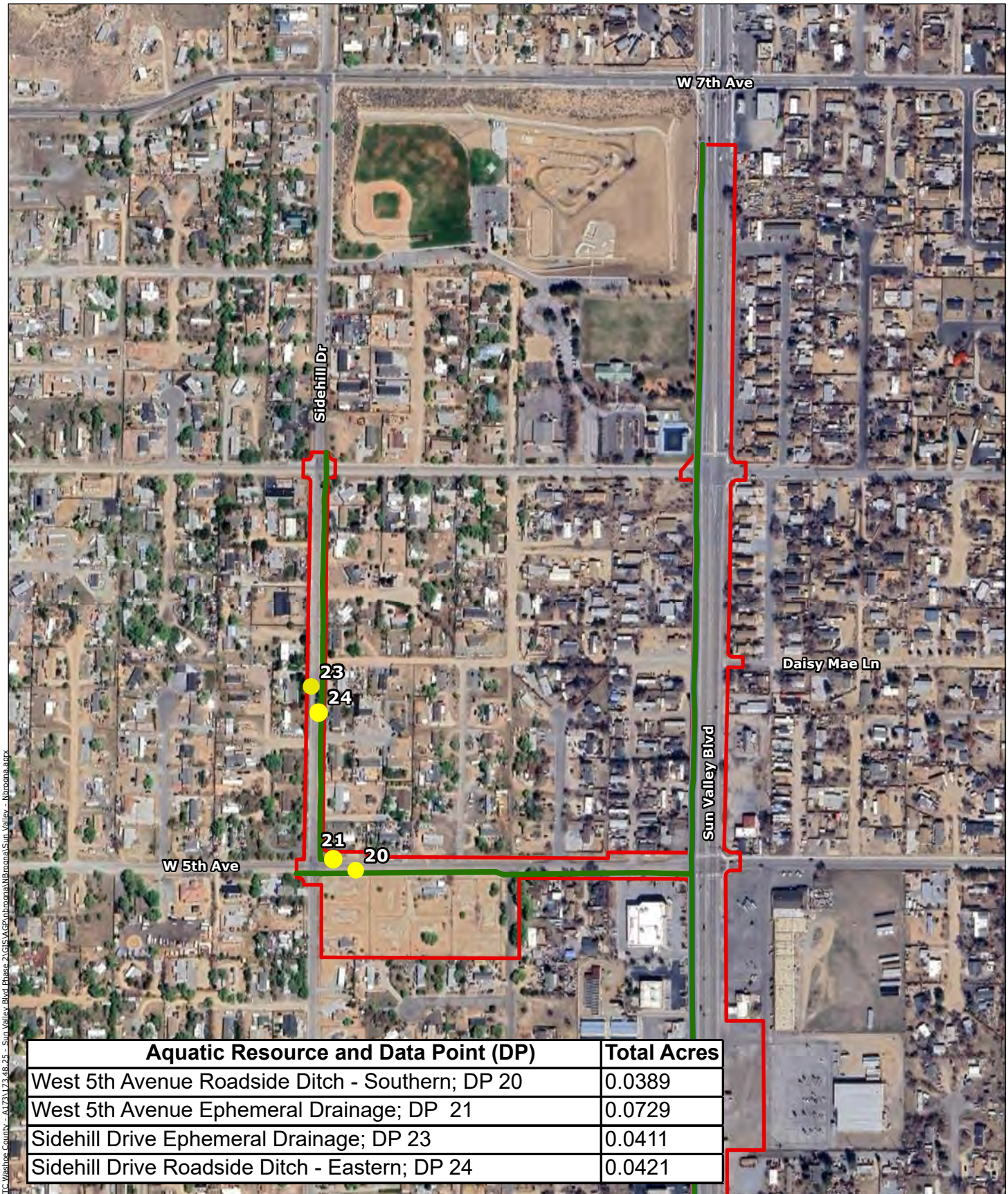


Dave Rios, CPESC, CPSWQ
Principal

NCE Project No. 173.48.25

Appendix A

Aquatic Resources Delineation Map



Aquatic Resource and Data Point (DP)	Total Acres
West 5th Avenue Roadside Ditch - Southern; DP 20	0.0389
West 5th Avenue Ephemeral Drainage; DP 21	0.0729
Sidehill Drive Ephemeral Drainage; DP 23	0.0411
Sidehill Drive Roadside Ditch - Eastern; DP 24	0.0421

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Project Area
Data Point
Roadside Ditch

Sun Valley Boulevard Corridor Improvements Project

Project ARD Map

N

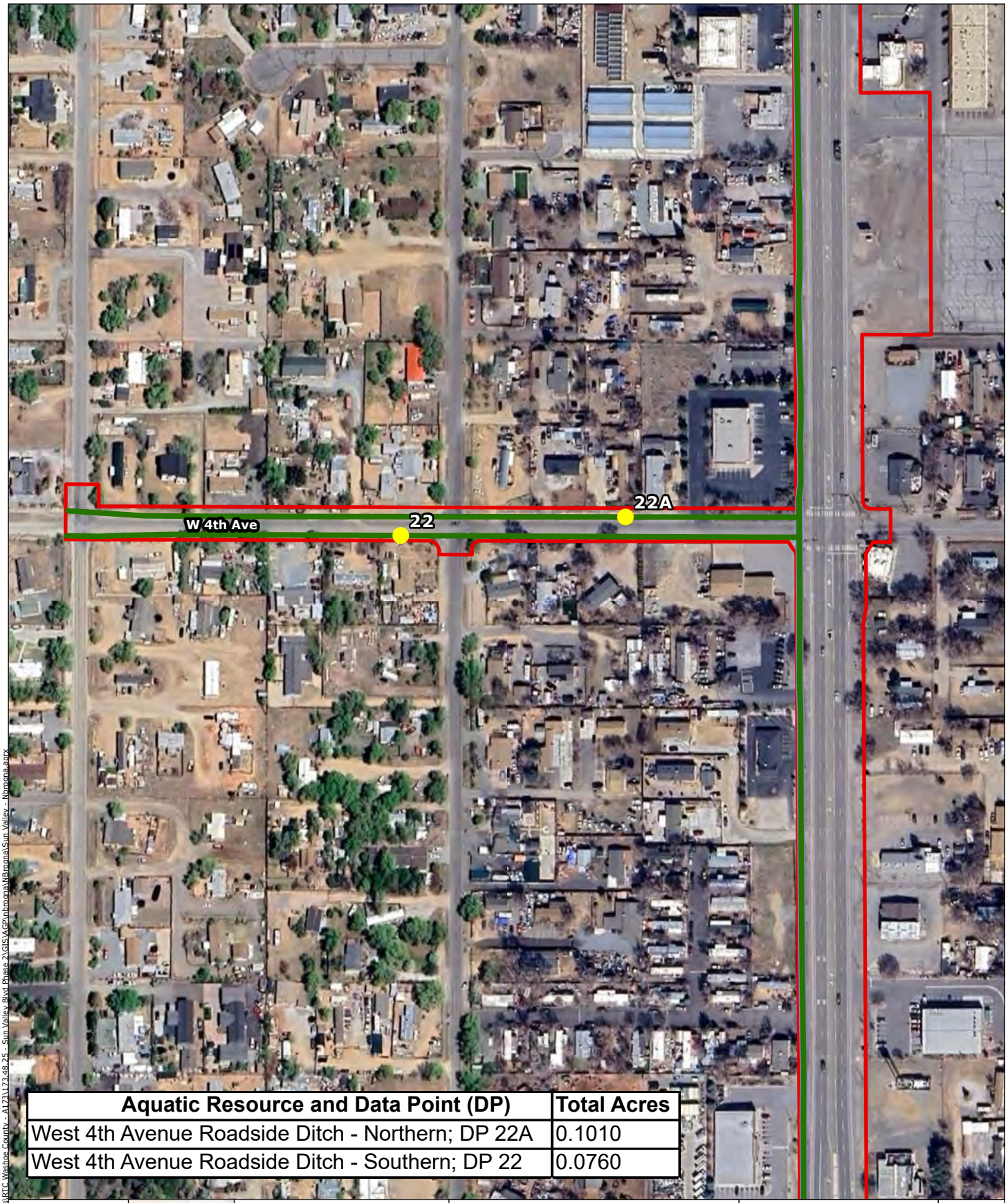
1 in. = 450 ft.

0 150 300 450 ft.

FIGURE 1-1

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
Google Satellite	173.48.25	N.Brogna	06/26/2025	N.Brogna	D.Rios

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Aquatic Resource and Data Point (DP)	Total Acres
West 4th Avenue Roadside Ditch - Northern; DP 22A	0.1010
West 4th Avenue Roadside Ditch - Southern; DP 22	0.0760

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RTC

Sun Valley

RTHEAST

Project Area

Roadside Ditch

Sun Valley Boulevard Corridor Improvements Project

Project ARD Map

N

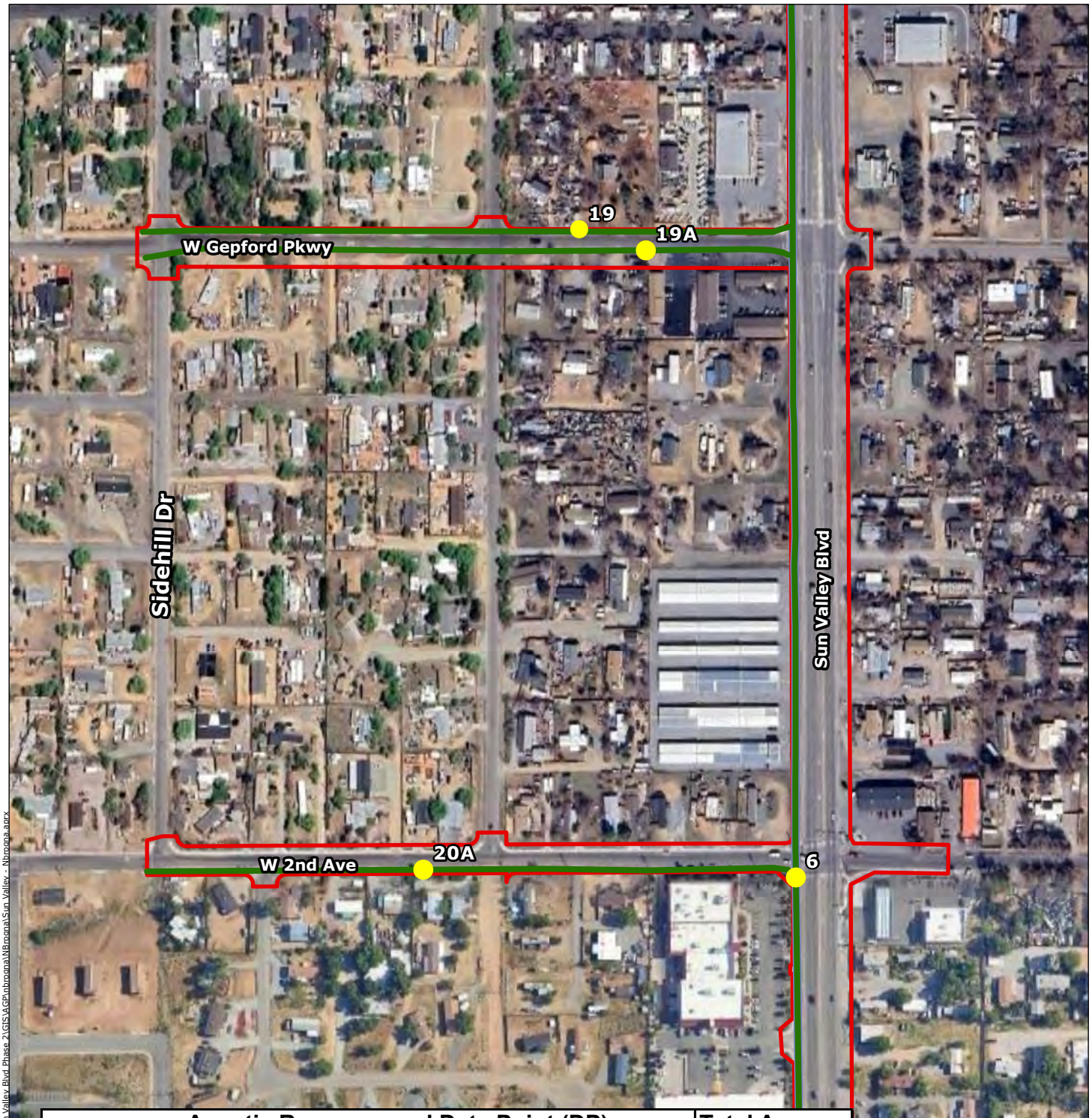
1 in. = 240 ft.

0 80 160 240 ft.

FIGURE 1-2

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
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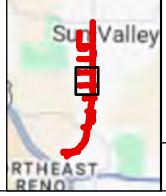
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Aquatic Resource and Data Point (DP)	Total Acres
West Gepford Parkway Roadside Ditch - Northern; DP 19	0.1340
West Gepford Parkway Roadside Ditch - Southern; DP 19A	0.0938
West 2nd Avenue Roadside Ditch - Southern; DP 20A	0.1039
Sun Valley Boulevard Roadside Ditch; DP 6	0.9473

NCE

RTC



Legend
Project Area
Data Point
Roadside Ditch

Sun Valley Boulevard Corridor Improvements Project

Project ARD Map

N

1 in. = 300 ft.

0 100 200 300 ft.

FIGURE 1-3

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
Google Satellite	173.48.25	N.Brogna	06/26/2025	N.Brogna	D.Rios

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Aquatic Resource and Data Point (DP)	Total Acres
West 1st Avenue Roadside Ditch - Southern; DP 26	0.0621

NCE

RTC

Legend
Project Area
Data Point
Roadside Ditch

Sun Valley Boulevard Corridor Improvements Project

Project ARD Map

N

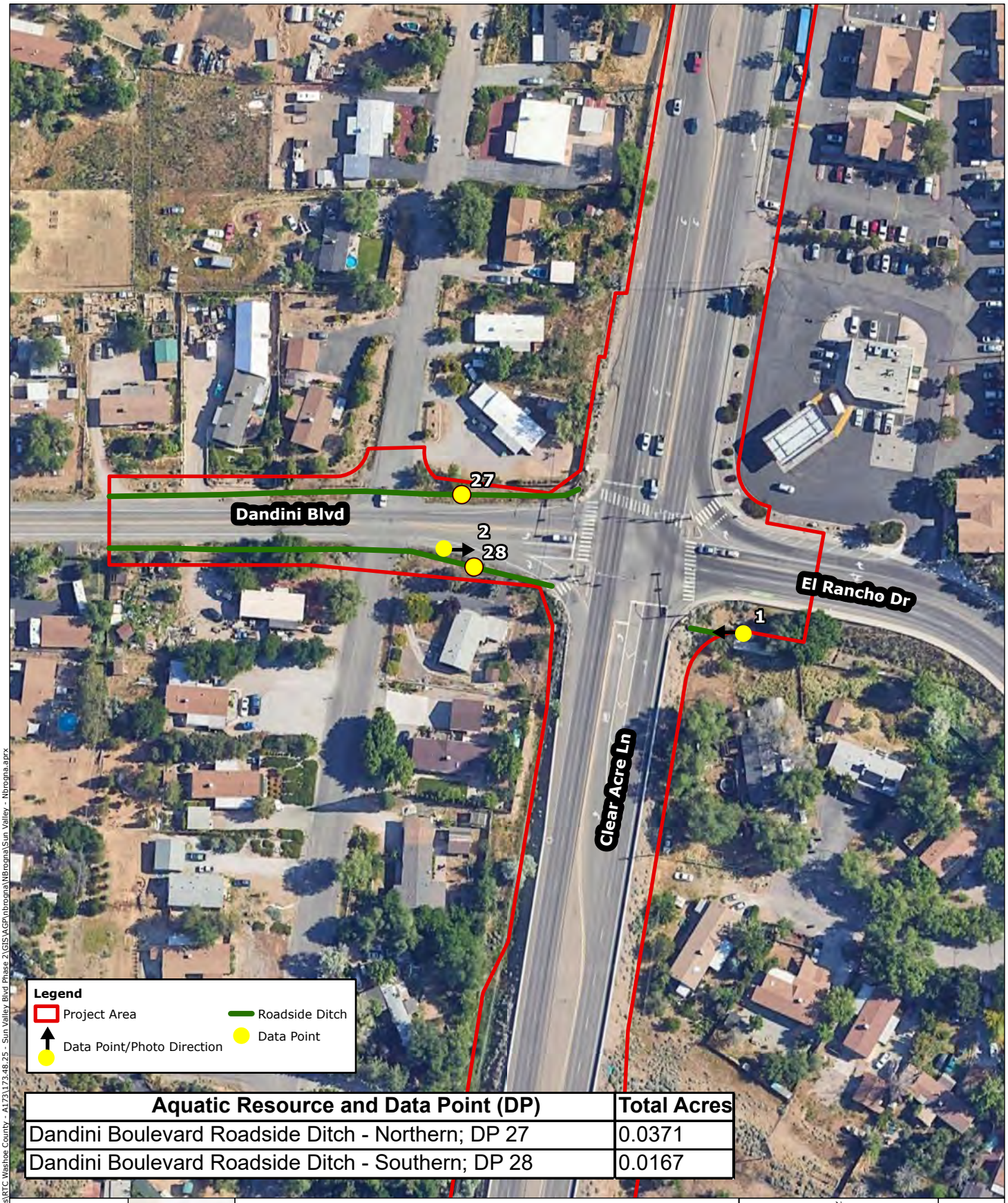
1 in. = 150 ft.

0 50 100 150 ft.

FIGURE 1-4

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
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Aquatic Resource and Data Point (DP)	Total Acres
Dandini Boulevard Roadside Ditch - Northern; DP 27	0.0371
Dandini Boulevard Roadside Ditch - Southern; DP 28	0.0167

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Sun Valley Boulevard Corridor Improvements Project

Project ARD Map

N

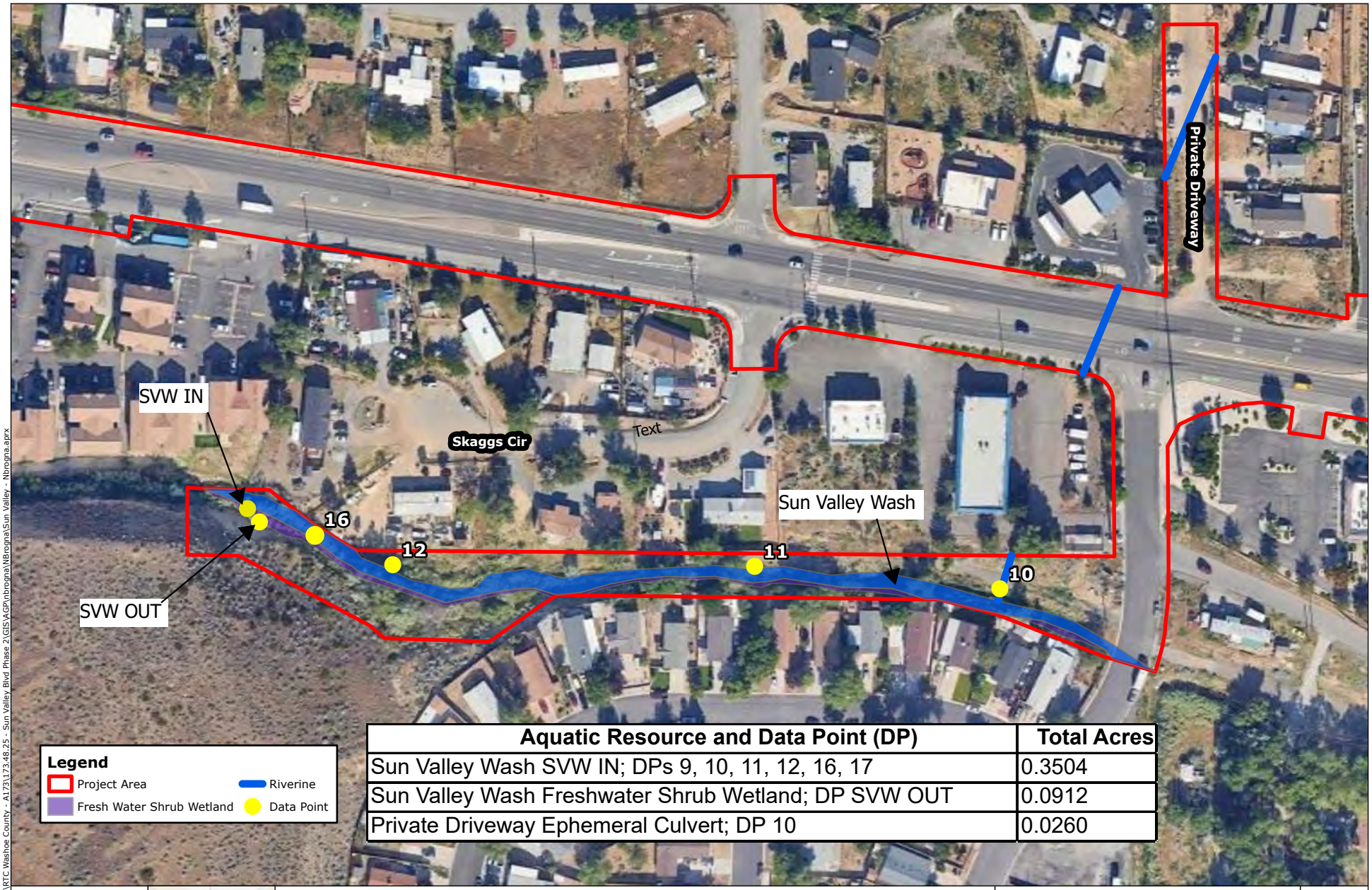
1 in. = 120 ft.

0 40 80 120 ft.

FIGURE 1-5

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
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Aquatic Resource and Data Point (DP)	Total Acres
Sun Valley Wash SVW IN; DPs 9, 10, 11, 12, 16, 17	0.3504
Sun Valley Wash Freshwater Shrub Wetland; DP SVW OUT	0.0912
Private Driveway Ephemeral Culvert; DP 10	0.0260

Legend

- Project Area
- Riverine
- Fresh Water Shrub Wetland
- Data Point

Sun Valley Boulevard
Corridor Improvements Project

Project ARD Map

1 in. = 150 ft.

0 50 100 150 ft.

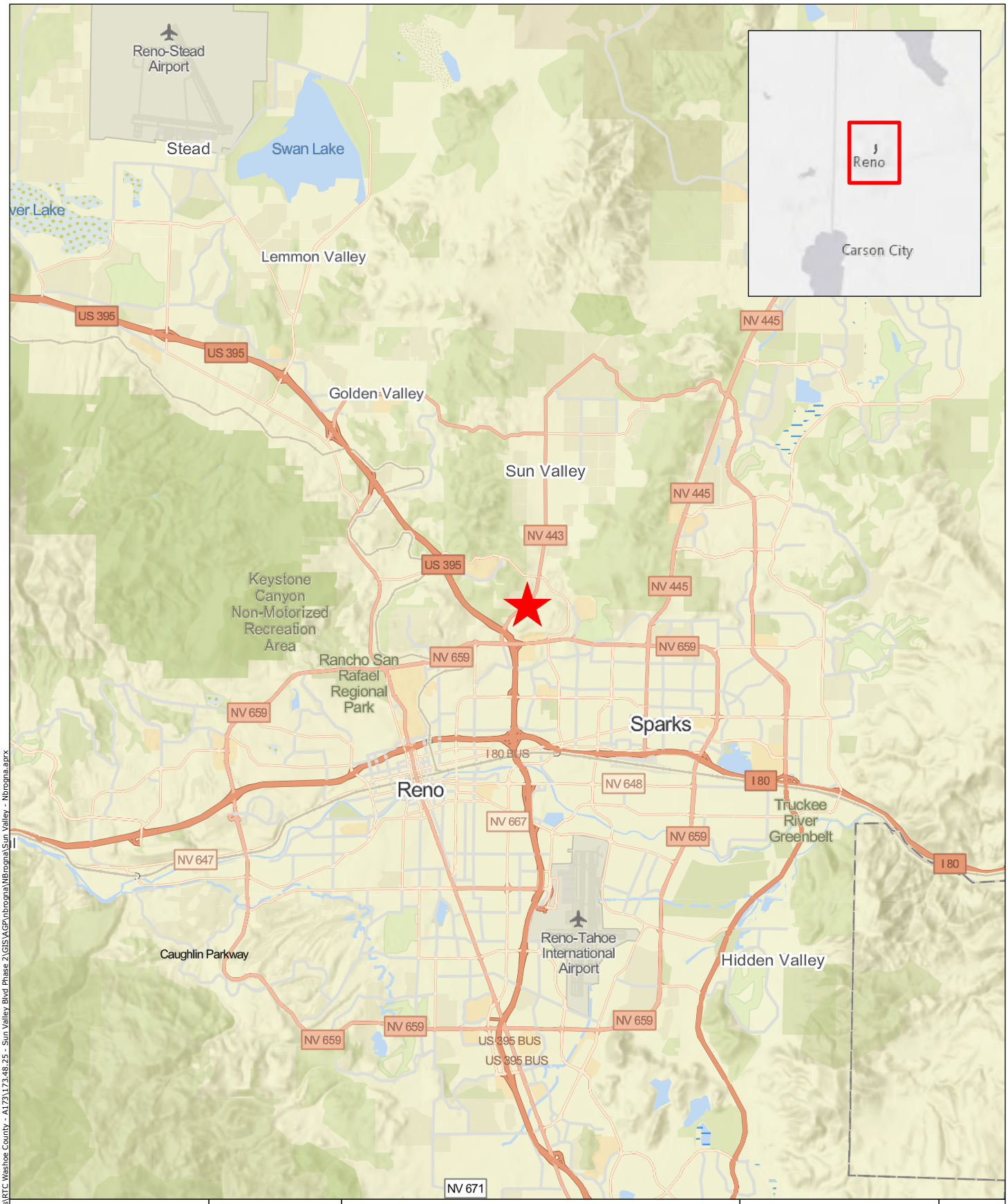
FIGURE 1-6

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
Google Satellite	173.48.25	N.Brogna	06/26/2025	N.Brogna	D.Rios

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Appendix B

Figures



Legend

★ Project Area

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Sun Valley Boulevard Corridor Improvements Project

Project Vicinity Map

N

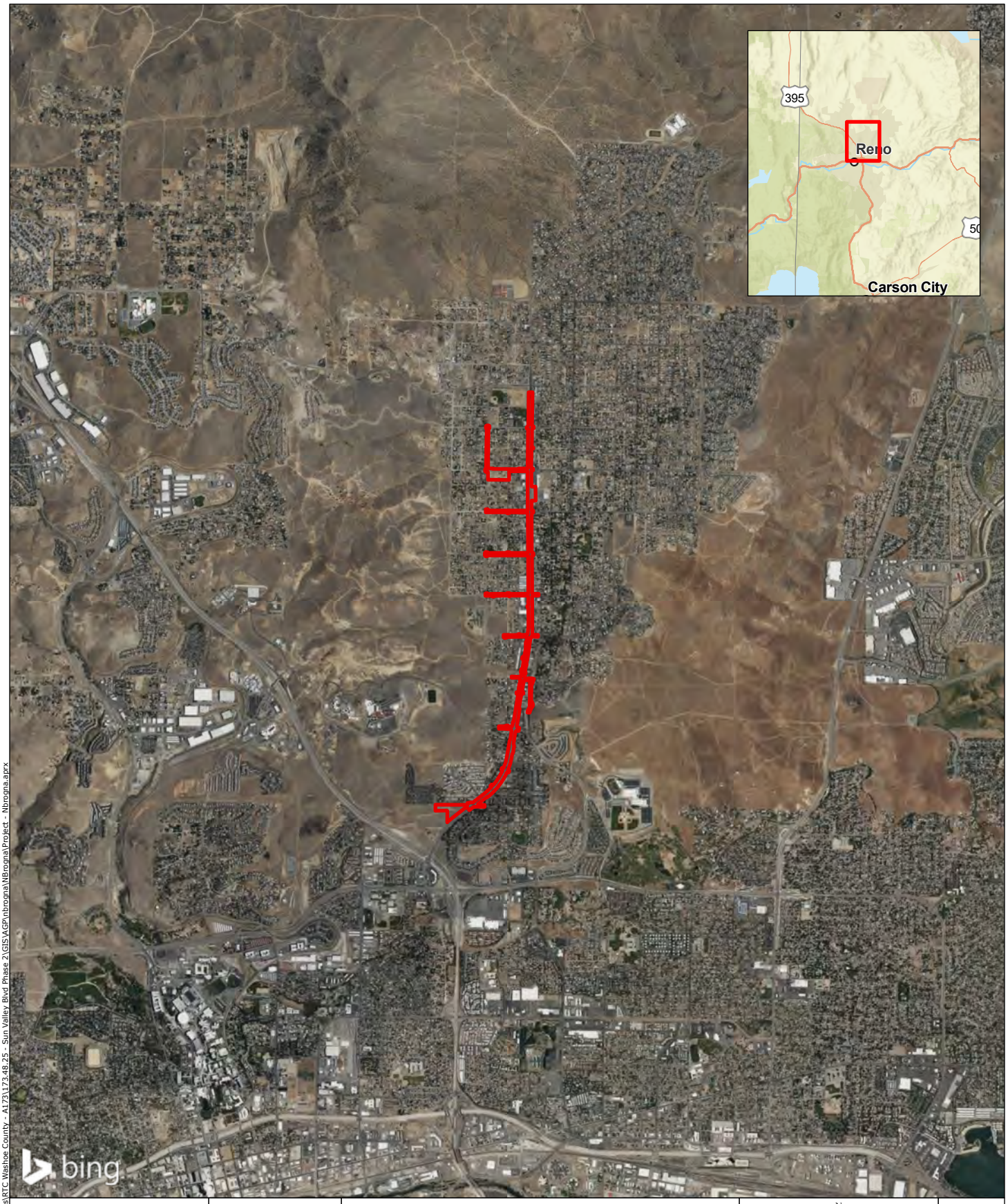
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0 5,000 10,000 ft.

FIGURE 1

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
Open Streets with Relief	173.48.25	N.Brogna	06/09/2025	N.Brogna	D.Rios

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Legend

Project Area

NCE

RTC

Sun Valley Boulevard Corridor Improvements Project

Project Location Map

N

1:50,000

0 2,000 4,000 ft.

FIGURE 2

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
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Legend

Project Area

NCE

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Sun Valley Boulevard Corridor Improvements Project

Project Area Map

N

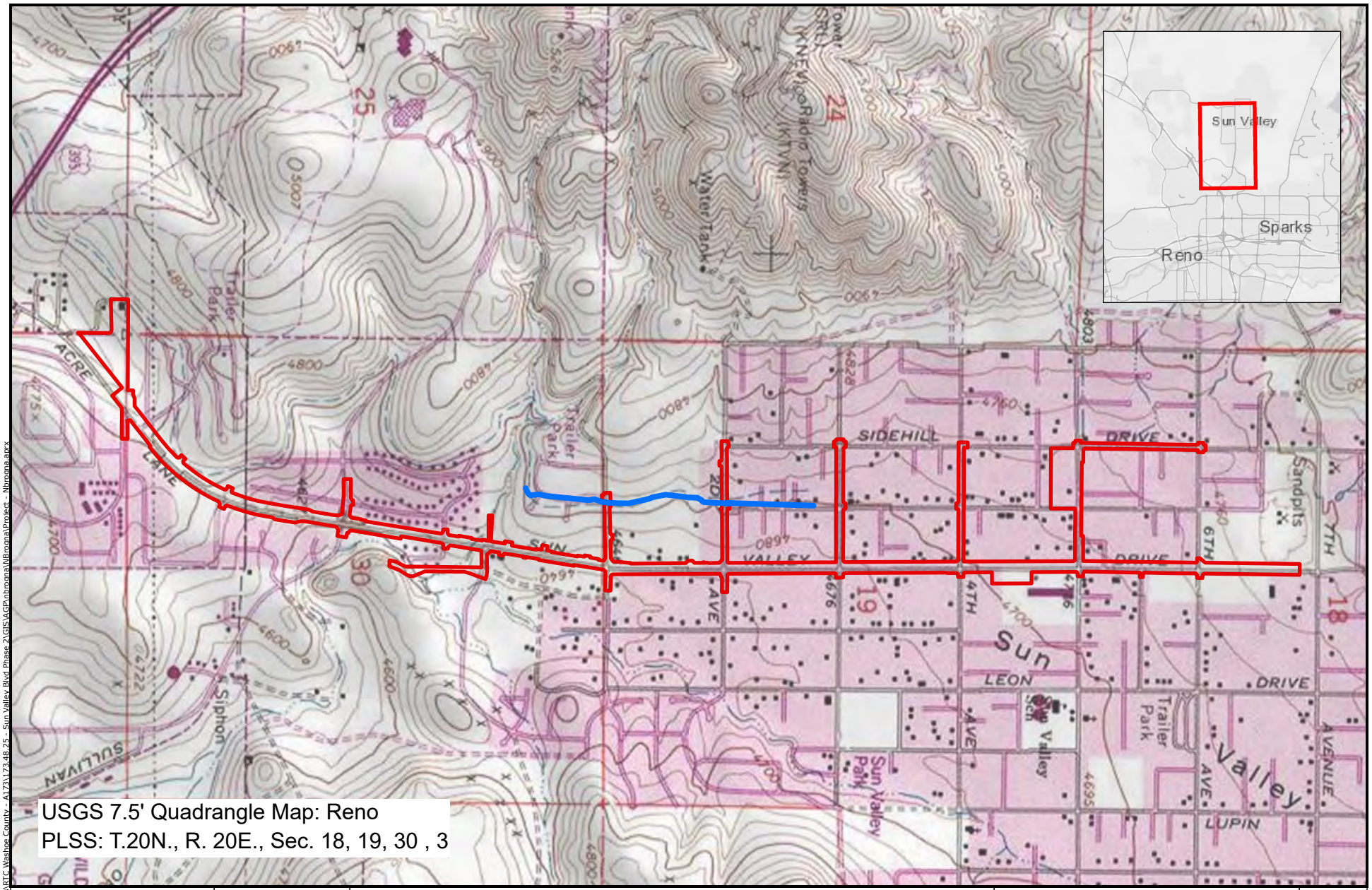
1 in. = 1,500 ft.

0 500 1,000 1,500 ft.

FIGURE 3

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
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Legend
- Project Area
- Prosser Valley Ditch

NCE
RTC

Sun Valley Boulevard Corridor Improvements Project

USGS Topographic Quadrangle Map

N

1 in. = 1,500 ft.

0 500 1,000 1,500 ft.

FIGURE 4

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
USGS 7.5' Quandrangle Basemap	173.48.25	N.Brogna	06/27/2025	N.Brogna	D.Rios

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Legend

- Project Area
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine

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Sun Valley Boulevard Corridor Improvements Project

National Wetlands Database (NWI) Map

N

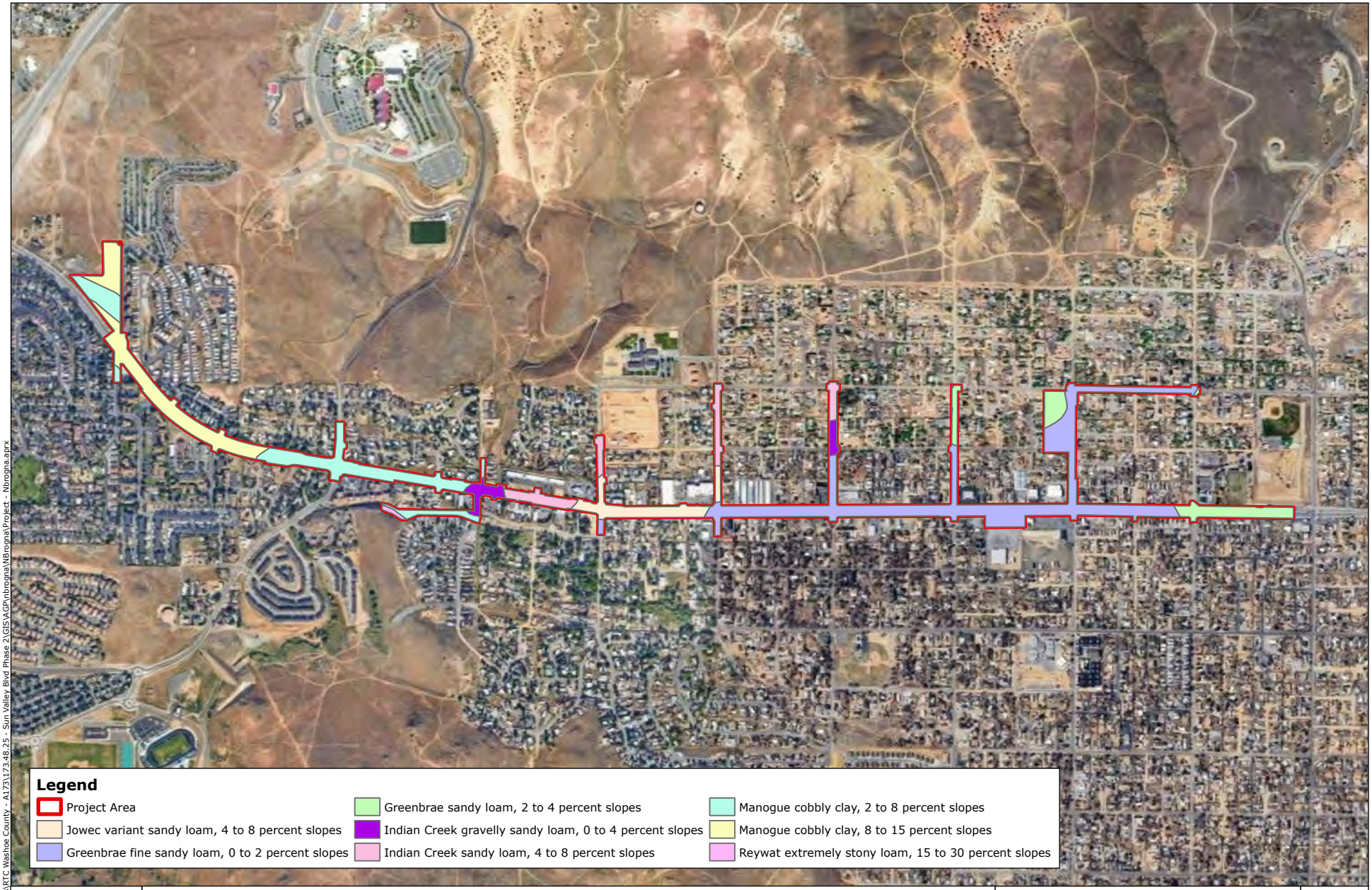
1 in. = 1,500 ft.

0 500 1,000 1,500 ft.

FIGURE 5

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
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Sun Valley Boulevard Corridor Improvements Project

Natural Resources Conservation Service (NRCS) Soils Map

N

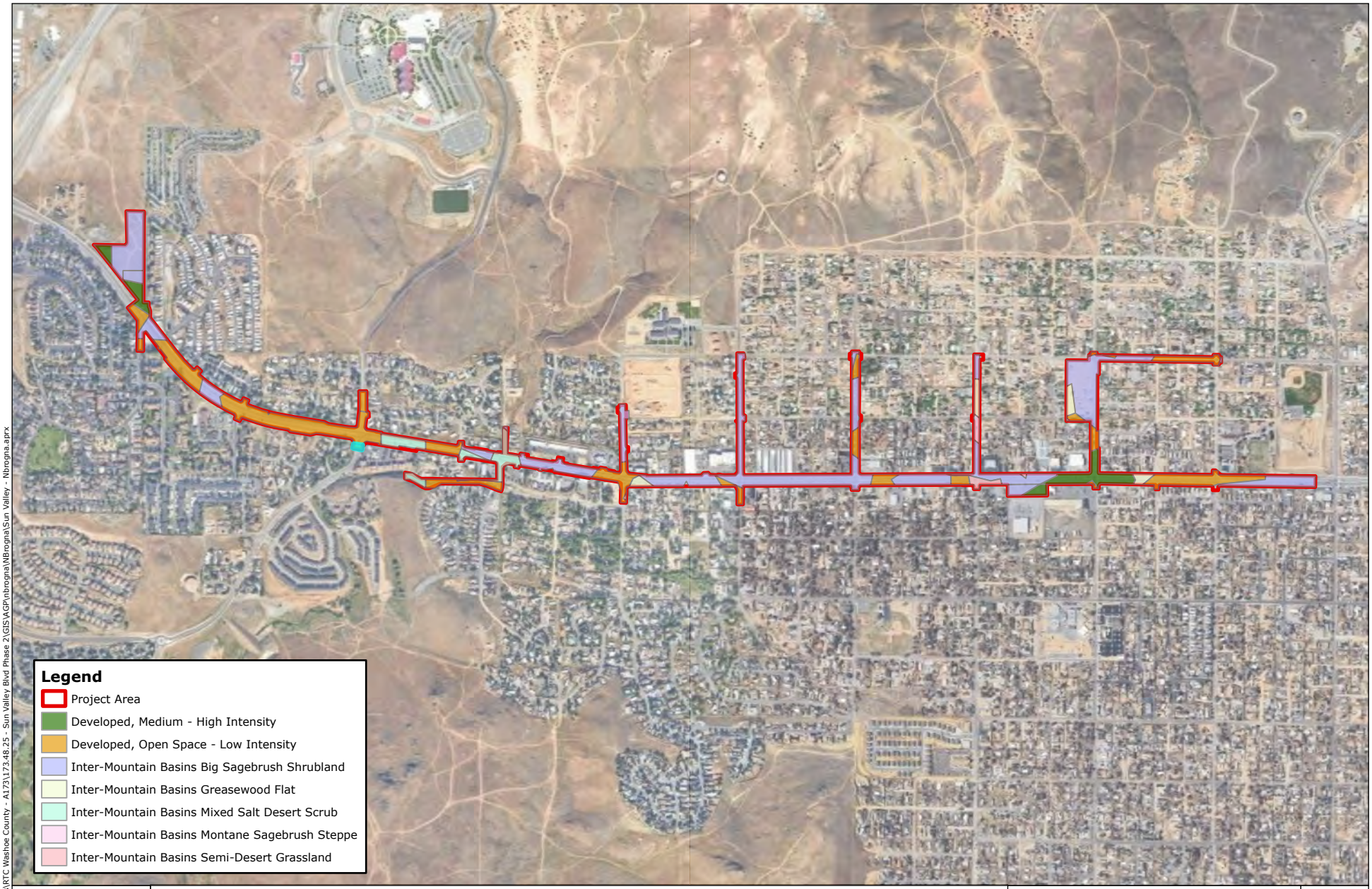
1 in. = 1,500 ft.

0 500 1,000 1,500 ft.

FIGURE 6

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
Google Satellite/NRCS Soils Inventory	173.48.25	N. Brogna	06/27/2025	N. Brogna	D.Rios

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Sun Valley Boulevard Corridor Improvements Project

Vegetation Cover Map

N

1 in. = 1,500 ft.

0 500 1,000 1,500 ft.

FIGURE 7

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
Google Satellite/Nevada Vegetation Database	173.48.25	N.Brogna	06/27/2025	N.Brogna	D.Rios

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Sun Valley Boulevard Corridor Improvements Project

Photo/Data Points Location Map

N

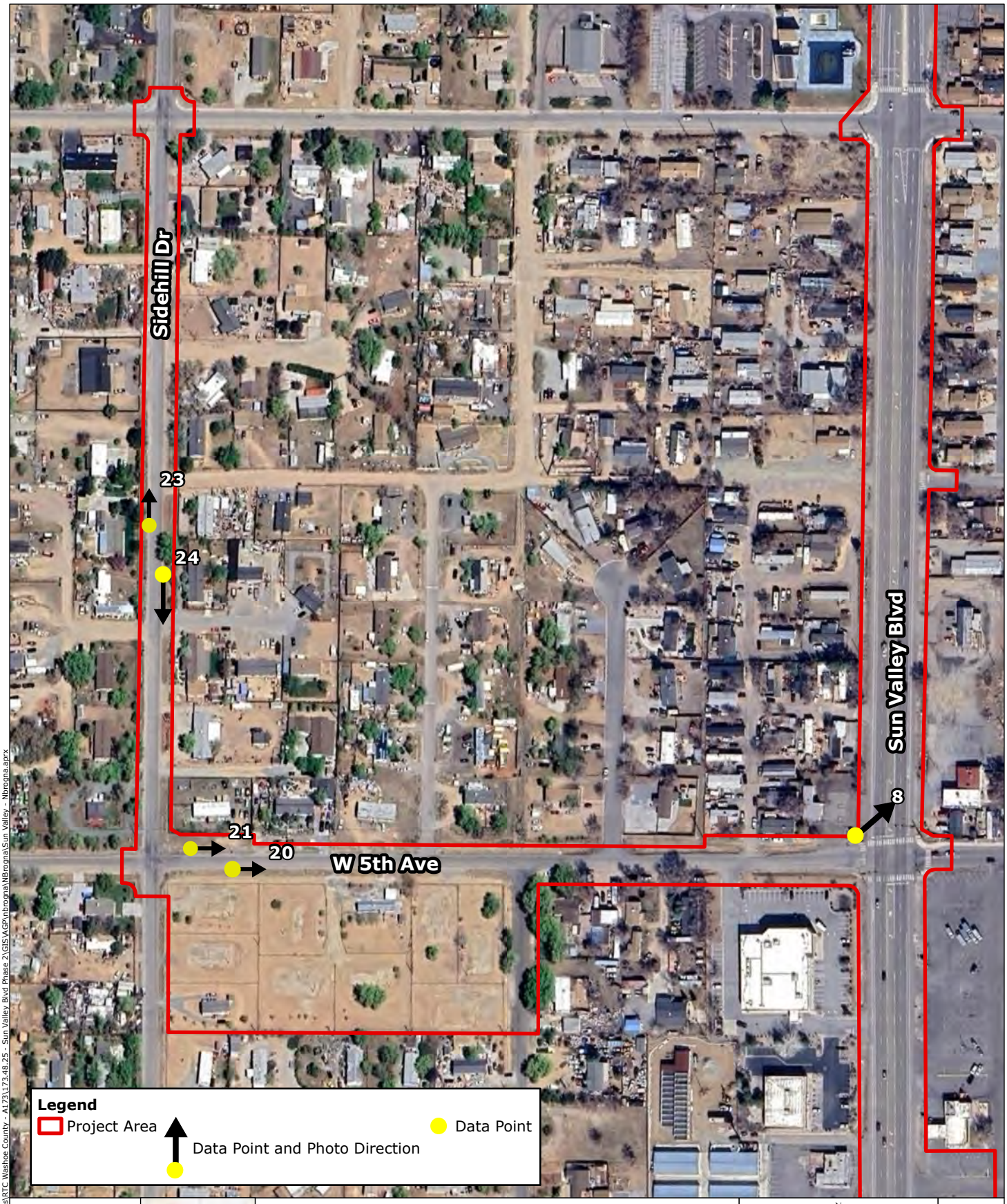
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0 50 100 150 ft.

FIGURE 8-1

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NCE

RTC

Sun Valley

NORTHEAST RENO

Sun Valley Boulevard Corridor Improvements Project

Photo/Data Points Location Map

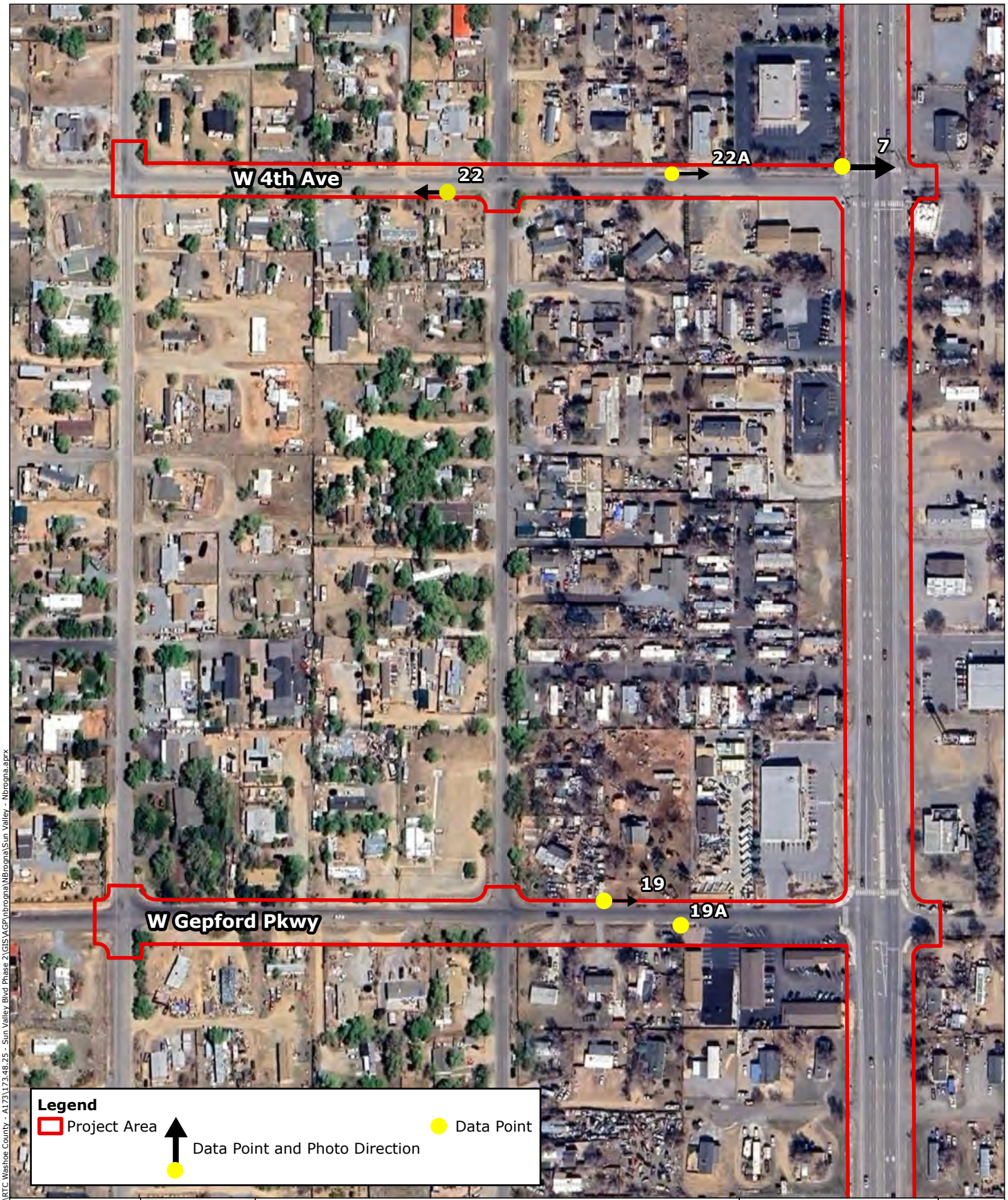
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1 in. = 240 ft.

0 80 160 240 ft.

FIGURE 8-2

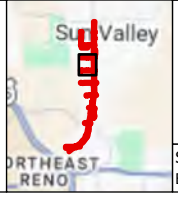
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RTC



Sun Valley Boulevard Corridor Improvements Project

Photo/Data Points Location Map

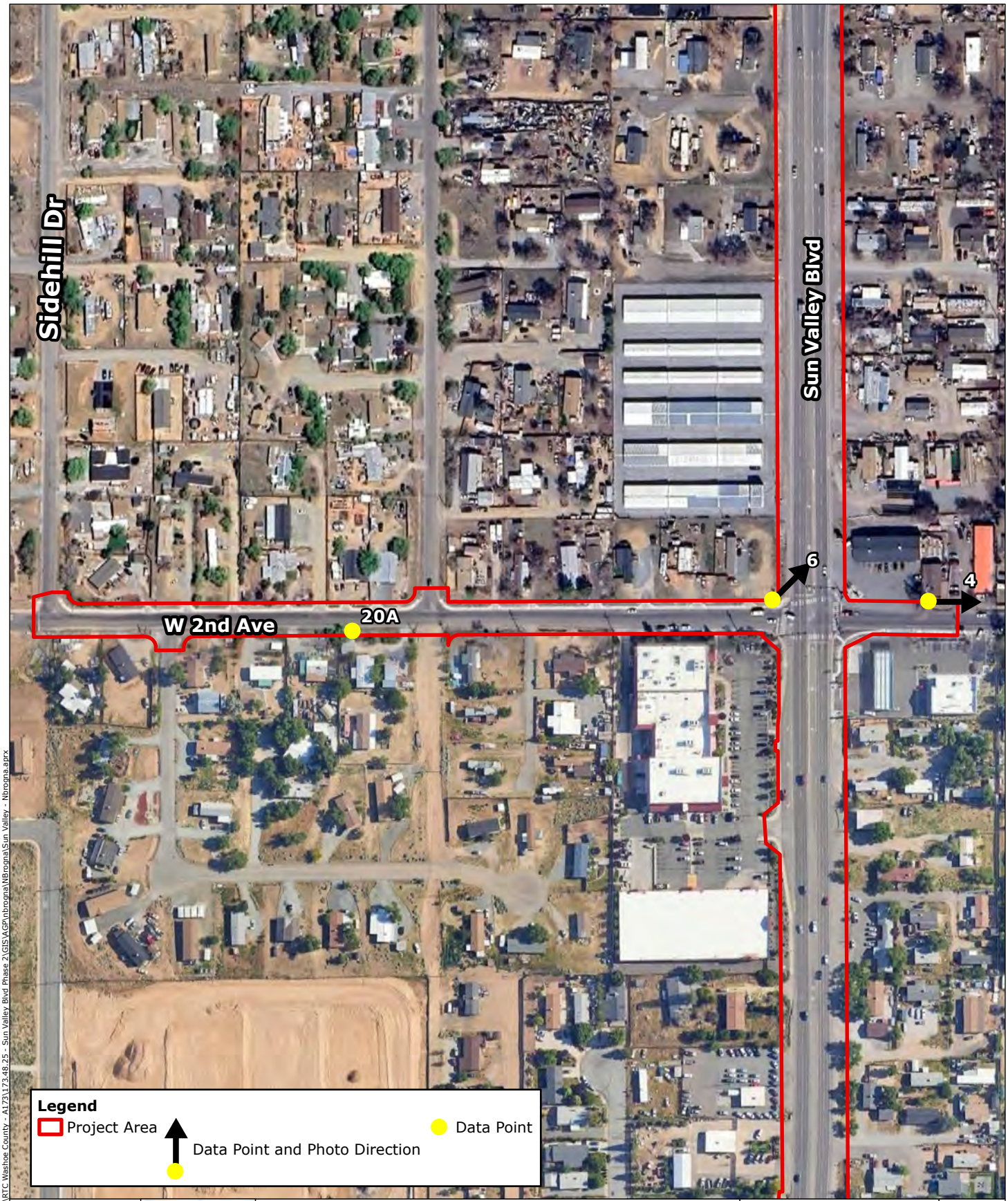
N

1 in. = 240 ft.

0 80 160 240 ft.

FIGURE 8-3

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
Bing World Imagery	173.48.25	N.Brogna	06/26/2025	N.Brogna	D.Rios



Sun Valley Boulevard
Corridor Improvements Project

Photo/Data Points Location Map

1 in. = 240 ft.

0 80 160 240 ft.

FIGURE 8-4

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
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RTC

Sun Valley

NORTHEAST RENO

Sun Valley Boulevard Corridor Improvements Project

Photo/Data Points Location Map

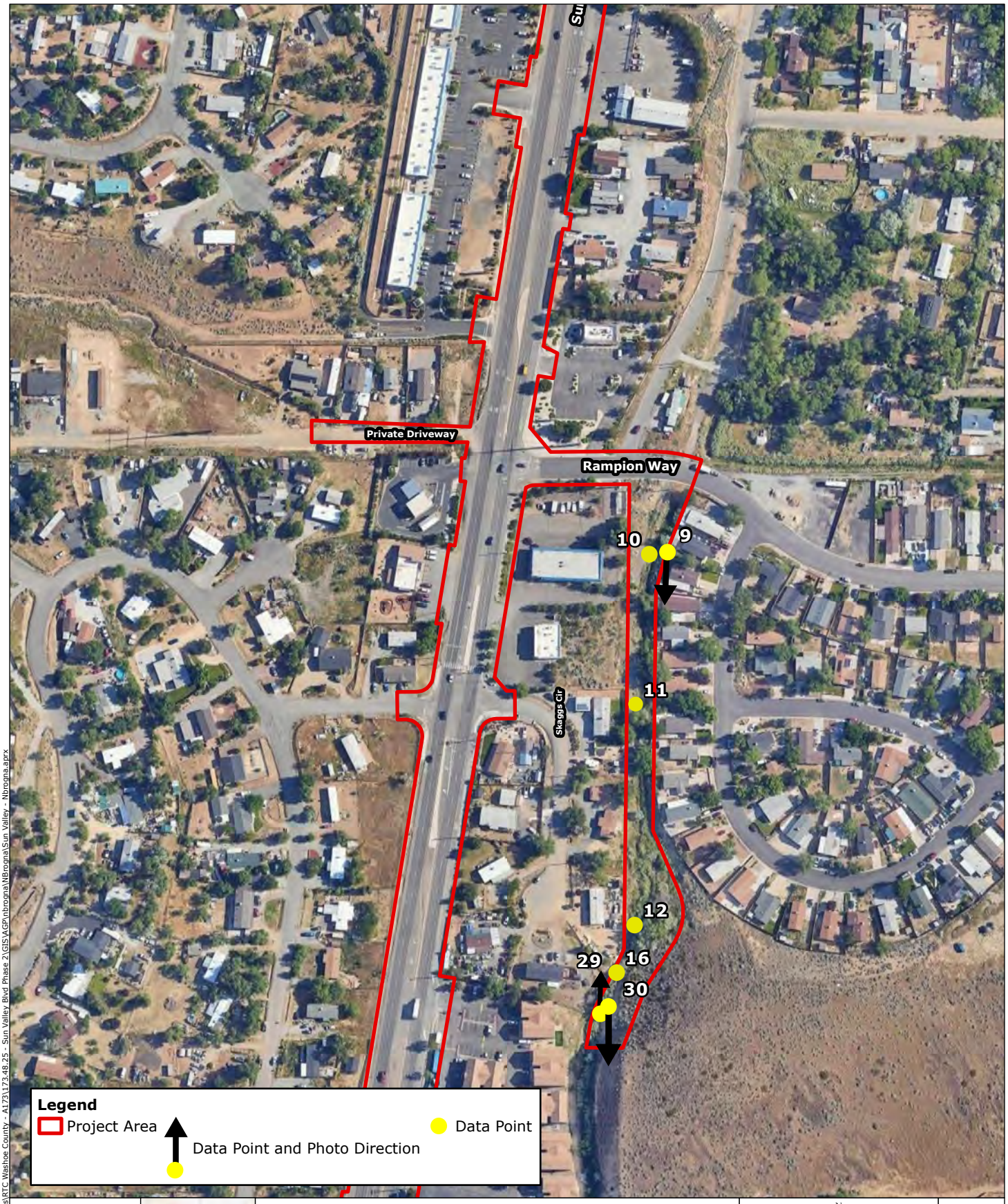
N

1 in. = 180 ft.

0 60 120 180 ft.

FIGURE 8-5

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
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NCE

RTC

Sun Valley

NORTHEAST RENO

Sun Valley Boulevard Corridor Improvements Project

Photo/Data Points Location Map

N

1 in. = 240 ft.

0 80 160 240 ft.

FIGURE 8-6

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
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RTC

Sun Valley

NORTHEAST RENO

Sun Valley Boulevard Corridor Improvements Project

Photo/Data Points Location Map

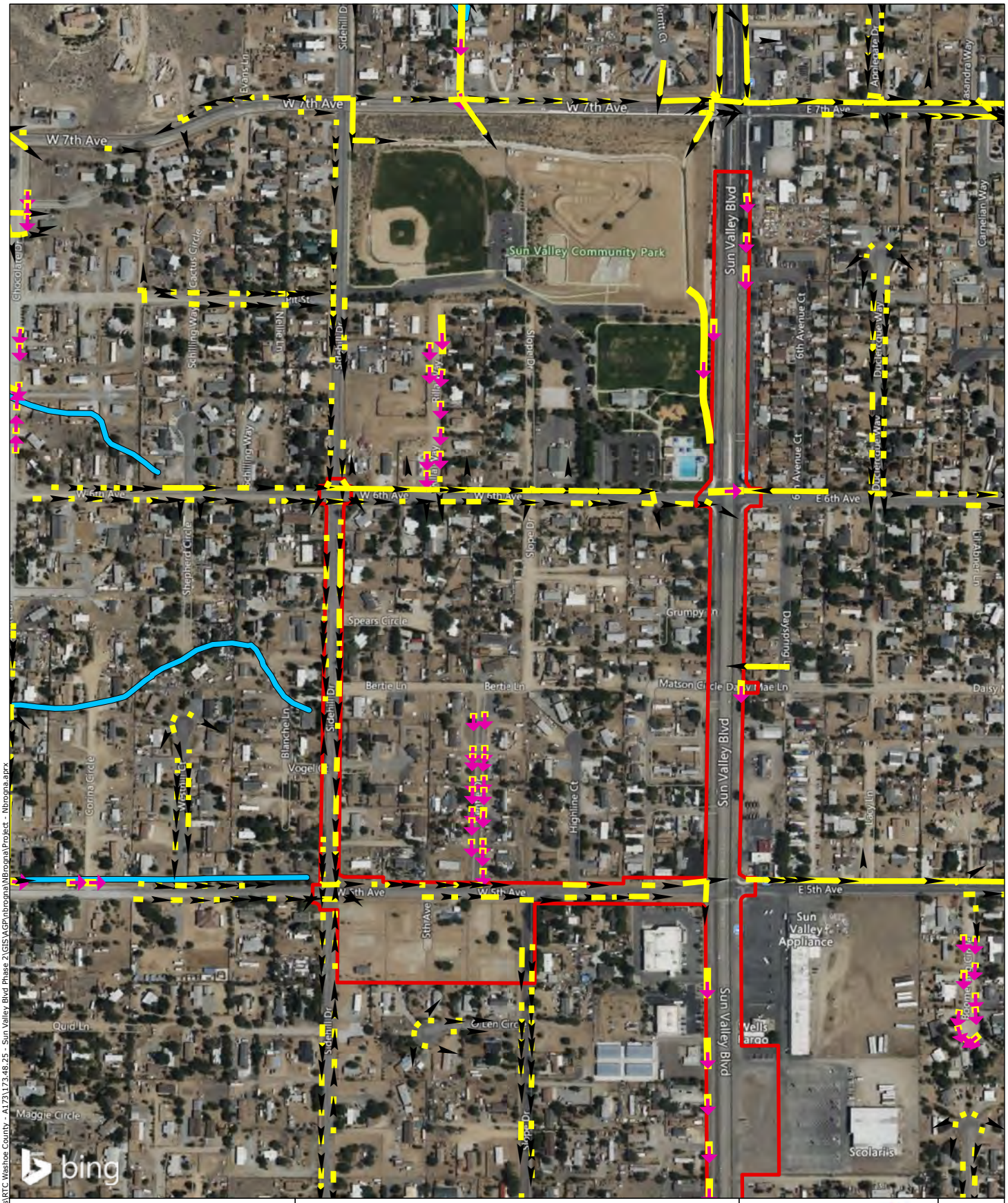
N

1 in. = 120 ft.

0 40 80 120 ft.

FIGURE 8-7

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
Bing World Imagery	173.48.25	N.Brogna	06/26/2025	N.Brogna	D.Rios



Legend

- Project Area
- Other
- Washoe County
- National Wetland Inventory

Sun Valley Boulevard Corridor Improvements Project

Existing Culverts Map

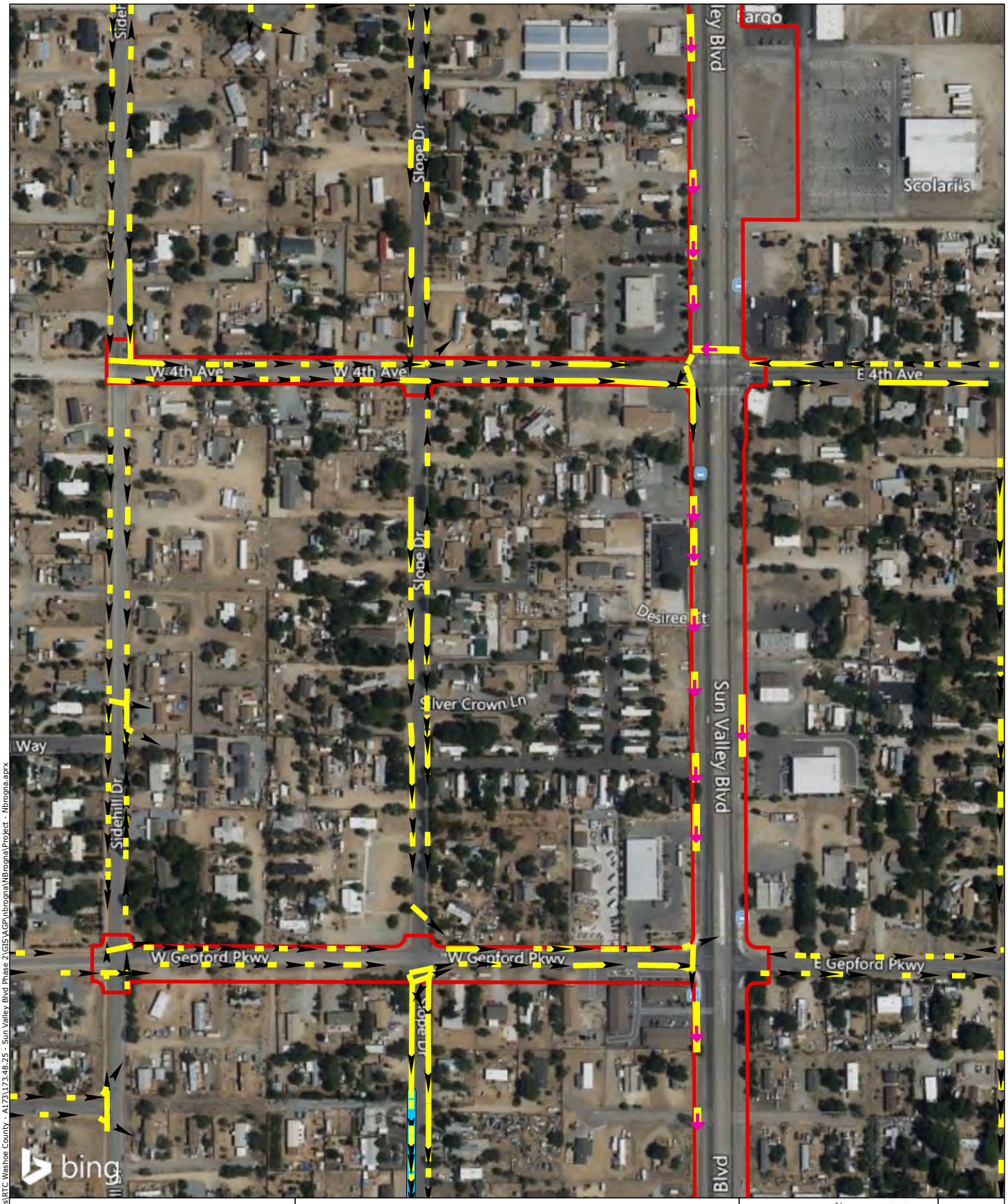
1 in. = 450 ft.

0 150 300 450 ft.

FIGURE 9-1

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
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Document Path: P:\Active Projects\RTC Washoe County – A173\173.48.25 - Sun Valley Blvd Phase 2\GIS\AGP\nbrogna\NBrogna\Project - Nbrogna.aprx



Legend

- Project Area
- Other
- Washoe County
- National Wetland Inventory

Sun Valley Boulevard
Corridor Improvements Project

Existing Culverts Map

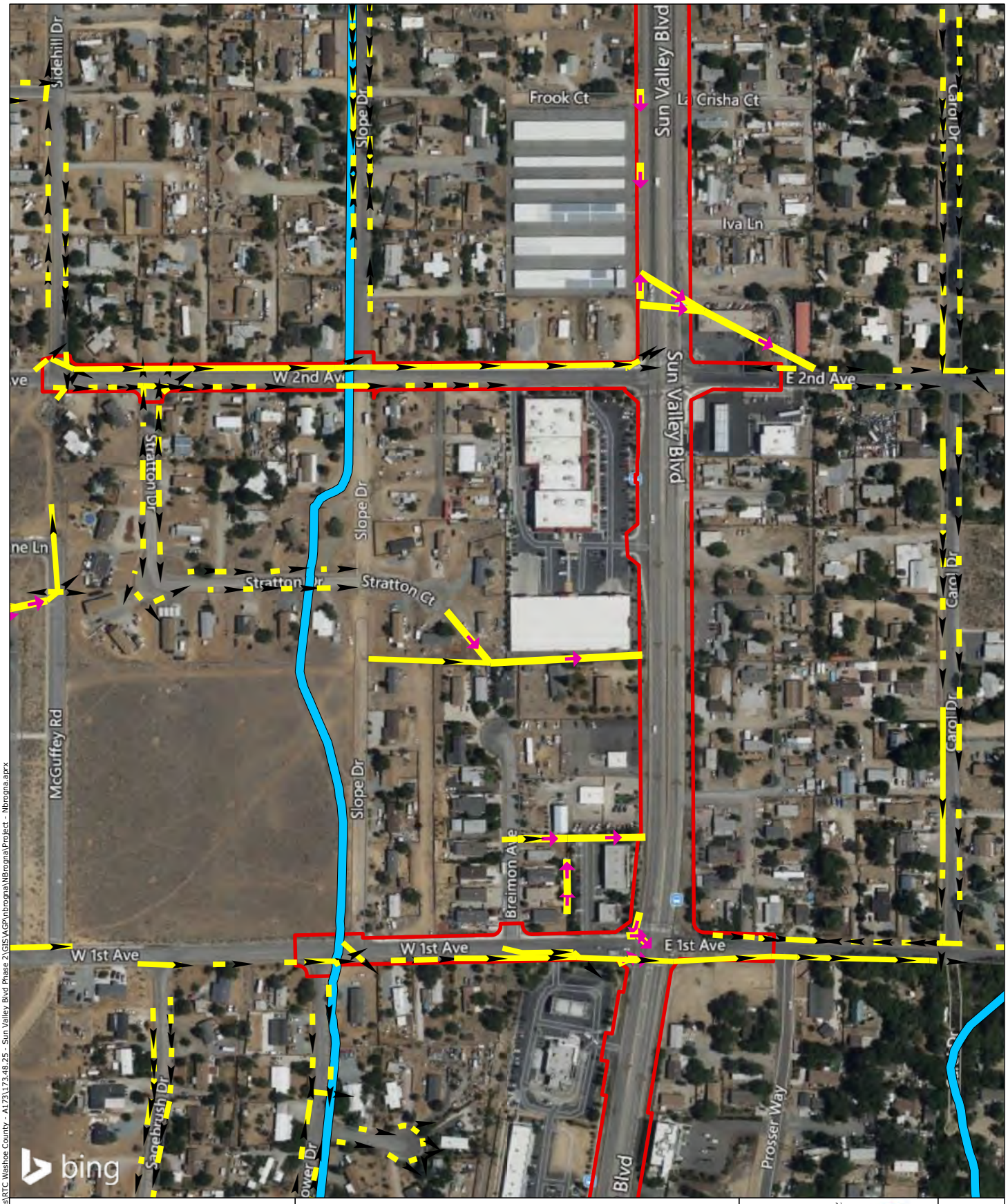
1 in. = 300 ft.

0 100 200 300 ft.

FIGURE 9-2

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
Bing World Imagery	173.48.25	N.Brogna	06/27/2025	N.Brogna	D.Rios

Document Path: P:\Active Projects\RTC Washoe County - A173\173.48.25 - Sun Valley Blvd Phase 2\GIS\AGP\nbrogna\NBrogna\Project - Nbrogna.aprx



Legend

- Project Area
- Other
- Washoe County
- National Wetland Inventory

Sun Valley Boulevard Corridor Improvements Project

Existing Culverts Map

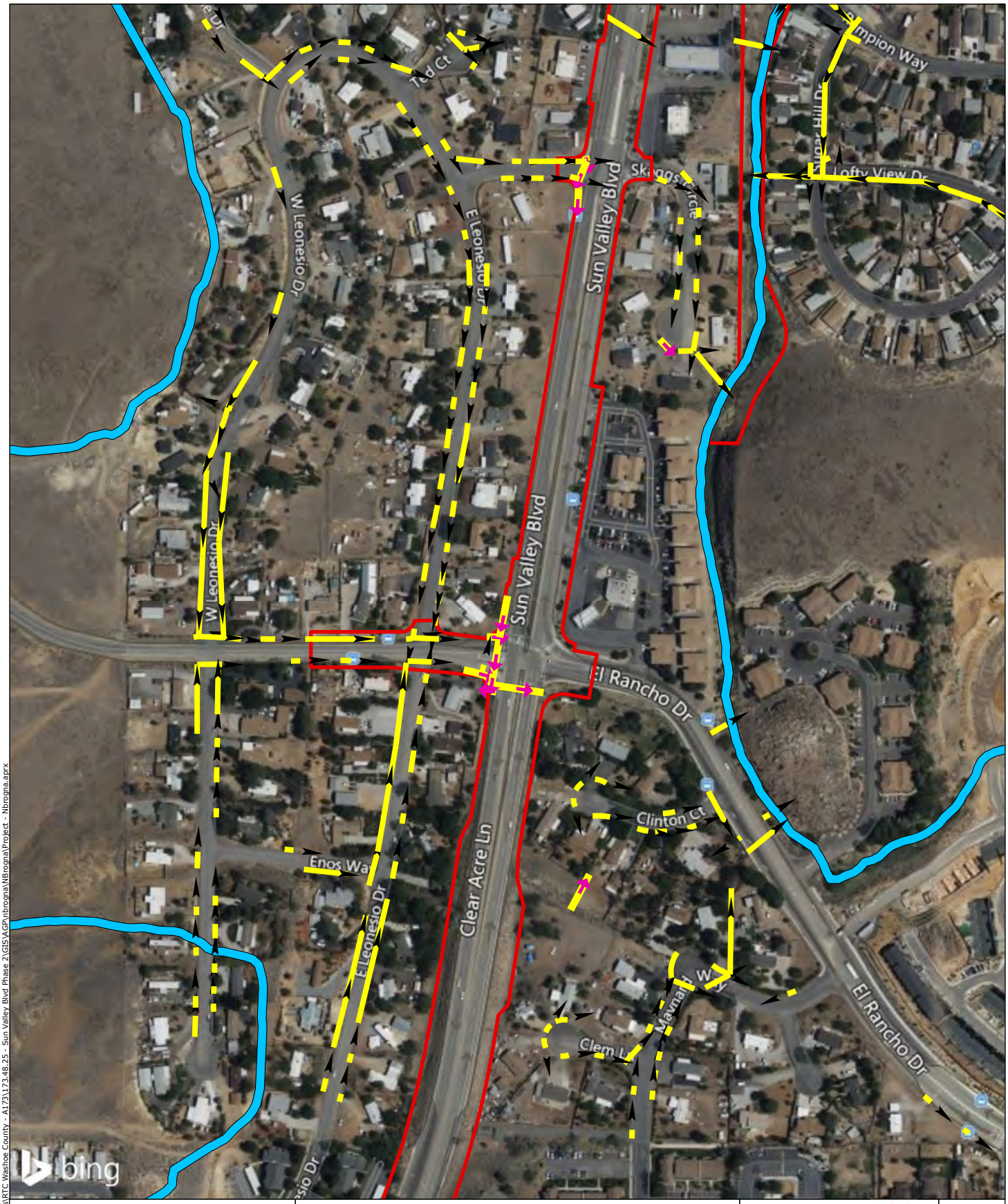
1 in. = 300 ft.

0 100 200 300 ft.

FIGURE 9-3

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
Bing World Imagery	173.48.25	N.Brogna	06/27/2025	N.Brogna	D.Rios

Document Path: P:\Active Projects\RTC Washoe County - A173\173.48.25 - Sun Valley Blvd Phase 2\GIS\AGP\nbrogna\NBrogna\Project - Nbrogna.aprx



Legend

- Project Area
- Other
- Washoe County
- National Wetland Inventory

Sun Valley Boulevard Corridor Improvements Project

Existing Culverts Map

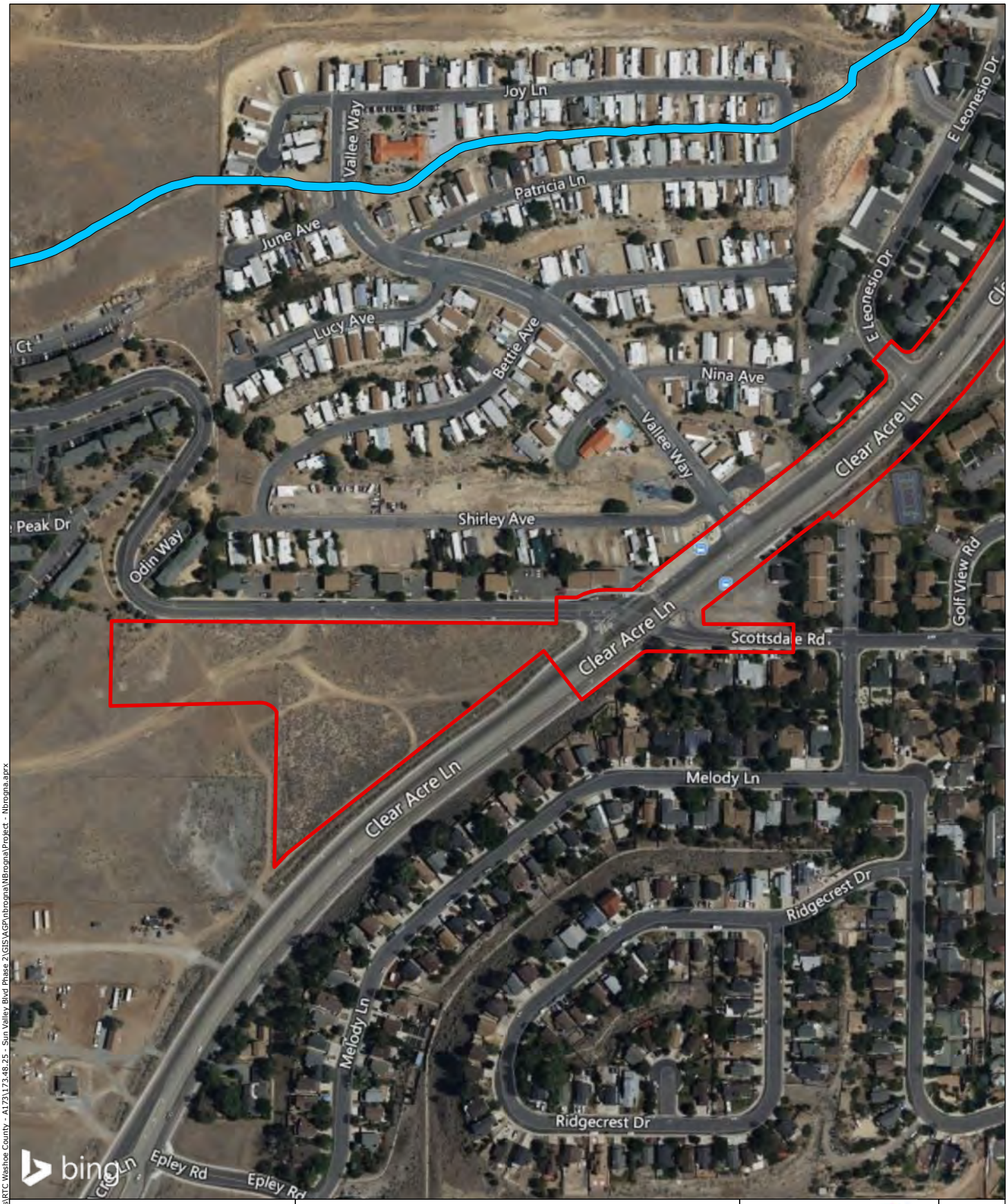
1 in. = 300 ft.

0 100 200 300 ft.

FIGURE 9-4

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
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Legend

- Project Area
- National Wetland Inventory

Sun Valley Boulevard Corridor Improvements Project

Existing Culverts Map

1 in. = 300 ft.

0 100 200 300 ft.

FIGURE 9-5

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
Bing World Imagery	173.48.25	N.Brogna	06/27/2025	N.Brogna	D.Rios

Document Path: P:\Active Projects\RTC Washoe County - A173\173.48.25 - Sun Valley Blvd Phase 2\GIS\AGP\nbrogna\NBrogna\Project - Nbrogna.aprx

Appendix C

Representative Photographs



PP 1, photograph 1: facing west, looking at a storm drain culvert southeast of El Rancho Drive and Sun Valley Boulevard.



PP 2, photograph 2: facing east, looking at a culvert southwest of Dandini Boulevard and Sun Valley Boulevard.



PP 3, photograph 3: facing east, looking at East 1st Avenue, upstream is West 1st Avenue Roadside Ditch - Southern



PP 4, photograph 4: facing east looking at East 2nd Avenue, upstream is West 2nd Avenue Roadside Ditch - Southern

PP 5 was a GPS field error, and there is no associated photo or PP for PP5.



PP 6, photograph 5: looking at the culvert inlet under Sun Valley Boulevard at West 2nd Avenue.



PP 7, photograph 6: facing west, looking upstream of the culvert at West 4th Avenue and Sun Valley Boulevard, this is West 4th Avenue Roadside Ditch – Northern.



PP 7, photograph 7: facing east, looking at the culvert on the corner of West 4th Avenue and Sun Valley Boulevard.



PP 8, photograph 8: facing northeast, looking at the culvert on the corner of West 5th Avenue and Sun Valley Boulevard. The culvert to the right crosses below Sun Valley Boulevard.



PP 9, photograph 9: facing south, looking downstream at the Sun Valley Wash. The Private Driveway outfall is visible in the photo, near the center right.



PP 16*, photograph 10: facing south, looking downstream at the Sun Valley Wash.

*Due to representative photos being shown, some photos are not being used, therefore the PP's are not in sequential order.



PP SVW IN, photograph 11: facing north, looking upstream at the edge of the Sun Valley Wash Freshwater Scrub Wetland.



PP SVW OUT, photograph 12: facing south, looking downstream at the edge of the Sun Valley Wash Freshwater Scrub Wetland.



PP 19, photograph 13: facing east, looking at the Gepford Parkway Roadside Ditch - Northern.



PP 20, photograph 14: facing east, looking at the West 5th Avenue Roadside Ditch - Southern.



PP 21, photograph 15: facing east, looking at the West 5th Avenue Ephemeral Drainage.



PP 22, photograph 16: facing west, looking at the West 4th Avenue Roadside Ditch - Southern.



PP 22A, photograph 17: facing east, looking at the West 4th Avenue Roadside Ditch - Northern.



PP 23, photograph 18: facing north, looking at the Sidehill Drive Ephemeral Drainage.



PP 24, photograph 19: facing south, looking at the Sidehill Drive Roadside Ditch - Eastern.



PP 27, photograph 20: facing east, looking at the Dandini Boulevard Roadside Ditch - Northern.



PP 28, photograph 21: facing east, looking at the Dandini Boulevard Roadside Ditch - Southern.

Appendix D

Plant List

Plant Species Identified Within the Sun Valley Boulevard Corridor Improvements Project Study Area June 12, 2024 and April 3, 2025

Species Name	Common Name	Native: Y, N	Wetland Indicator Status*
Acer platanoides	Norway maple	N	UPL
Agropyron sp.	Crested wheatgrass	N	NL
Ailanthus altissima	Tree of heaven	N	FACU
Ambrosia acanthicarpa	Annual bursage	Y	NL
Amsinckia tessellata	Bristly fiddleneck	Y	NL
Artemisia tridentata	Big sagebrush	Y	NL
Asclepias fascicularis	Narrow leaf milkweed	Y	FAC
Atriplex confertifolia	Shadscale saltbush	Y	NL
Berberis thunbergii	Japanese barberry	N	FACU
Betula pendula	European white birch	N	FACU
Bromus tectorum	Cheatgrass	N	NL
Buddleja davidii	Butterfly bush	N	FACU
Centaurea solstitialis	Yellow starthistle	N	NL
Ceratocephala testiculata	Bur buttercup	N	NL
Chorispora tenella	Crossflower	N	NL
Conium maculatum	Poison hemlock	N	FACW
Convolvulus arvensis	Field bindweed	N	NL
Descurainia sophia	Flix weed	N	NL
Draba verna	Spring draba	N	NL
Elaeagnus angustifolia	Russian olive	N	FAC
Elymus cinereus	Great basin wild rye	Y	NL
Elymus elymoides	Squirreltail	Y	FACU
Ephedra viridis	Green ephedra	Y	NL
Ericameria nauseosa	Rubber rabbitbrush	Y	NL
Eriogonum umbellatum	Sulphur buckwheat	Y	NL
Erodium cicutarium	Red stemmed filaree	N	NL
Festuca rubra	Red fescue	Y	FAC
Gleditsia triacanthos	Honeylocust	N	FAC
Grindelia squarrosa	Curlycup gumweed	N	FACU
Helianthus sp.	Sunflower	-	-
Hordeum jubatum	Foxtail barley	Y	FAC
Hordeum murinum	Farmer's foxtail	N	FACU
Juncus sp.	Rush	-	-
Juniperus sp.	Juniper	-	-

Species Name	Common Name	Native: Y, N	Wetland Indicator Status*
Kochia scoparia	Summer cypress	N	NL
Lactuca serriola	Prickly lettuce	N	FACU
Lagophylla ramosissima	Branched lagophylla	Y	NL
Lepidium latifolium	Perennial pepperweed	N	FAC
Lepidium perfoliatum	Clasping pepperweed	N	FACU
Lonicera japonica	Japanese honeysuckle	N	FACU
Lotus corniculatus	Bird's foot trefoil	N	FAC
Malva neglecta	Common mallow	N	NL
Medicago polymorpha	Bur clover	N	FACU
Medicago sativa	Alfalfa	N	UPL
Melilotus officinalis	Yellow sweetclover	N	FACU
Muhlenbergia sp.	Muhly	-	-
Nasturtium officinale	Watercress	Y	OBL
Onopordum acanthium	Scotch thistle	N	NL
Pinus contorta	Lodgepole pine	Y	FAC
Plantago lanceolata	Narrow leaved plantain	N	FAC
Platanus racemosa	Western sycamore	Y	FAC
Poa bulbosa	Bulbous blue grass	N	FACU
Poa secunda	One sided blue grass	Y	FACU
Populus fremontii	Fremont cottonwood	Y	FACW
Portulaca oleracea	Common purslane	N	FAC
Prunus cerasifera	Cherry plum	N	NL
Pyrus calleryana	Callery pear	N	NL
Pyrus communis	Common pear	N	NL
Quercus sp.	Oak	-	-
Rhus aromatica	Fragrant sumac	Y	FACU
Rosa sp.	Rose	-	-
Rumex crispus	Curly dock	N	FAC
Salix exigua	Narrowleaf willow	Y	FACW
Salsola tragus	Russian thistle	N	FACU
Sambucus nigra ssp. *caerulea*	Blue elderberry	Y	FACU
Sisymbrium altissimum	Tall tumblemustard	N	FACU
Spartium junceum	Spanish broom	N	NL
Stipa hymenoides	Indian rice grass	Y	NL
Taraxacum officinale	Common dandelion	N	FACU
Tragopogon dubius	Yellow salsify	N	NL
Tribulus terrestris	Puncture vine	N	NL

Species Name	Common Name	Native: Y, N	Wetland Indicator Status*
Trifolium repens	White clover	N	FACU
Typha latifolia	Broadleaf cattail	Y	OBL
Ulmus pumila	Siberian elm	N	UPL
Veronica beccabunga	European speedwell	N	OBL

* Wetland Indicator Status:
OBL = Obligate Wetland; occurs in aquatic resources > 99% of time
FACW = Facultative Wetland; occurs in aquatic resources 67-99% of time
FAC = Facultative; occurs in aquatic resources 34-66% of time
FACU = Facultative Upland; occurs in aquatic resources 1-33% of time
UPL = Obligate Upland; occurs in uplands > 99% of time
NL = Not Listed

Appendix E

Ordinary High Water Mark and Wetland Datasheets

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: RTC SunValley
Project Number:
Stream: SunValley Wash
Investigator(s): Debra Lemke, Ian Fox

Date: 5-12-25 **Time:** 10:45
Town: SunValley **State:** NV
Photo begin file#: 0 5 **Photo end file#:** 0 6

Y ☒ / N ☐ Do normal circumstances exist on the site?

Y ☐ / N ☒ Is the site significantly disturbed?

Location Details: SunValley Wash

Projection: 39.57690 **Datum:** WGS 1984
Coordinates: 83N -119.7779804 W

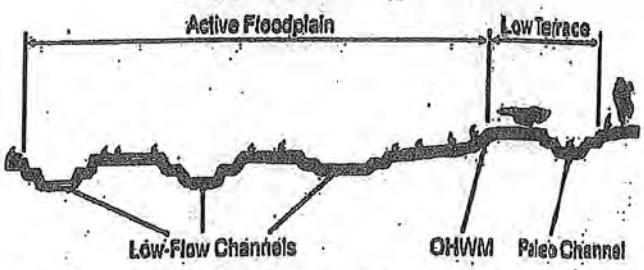
Potential anthropogenic influences on the channel system:
houses Adjacent to the drainage.

Brief site description:
Right slope is tall whitetop dominated + left slope is narrow-leaf willow. Flow is present.

Checklist of resources (if available):

- ☒ Aerial photography
  Dates: 6-26-2023
- ☒ 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



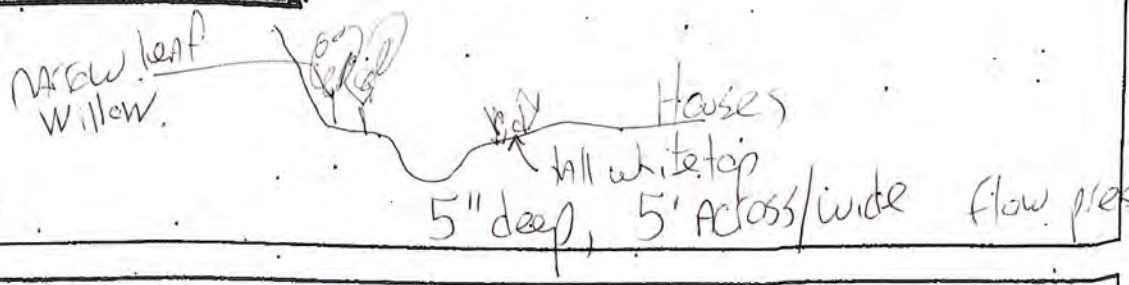
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

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
   - ☐ Digitized on computer
   - ☒ GPS
   - ☐ Other:

Project ID: sunValley Cross section ID: 16 Date: 5.12.25 Time: 10.45

Sun Valley Wash

Cross section drawing:



OHWM

GPS point: 16 + 17 culvert into Sun Valley Wash

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☒ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

photo looking downstream
" 2 " upstream
• Data point Unknown Pipe - 17. Has flow discharging into drainage
photo 3.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: ____% 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:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Sun Valley | City/County: Washoe | Sampling Date: 5/12/25
Applicant/Owner: RTC | State: NV | Sampling Point: SVW IN
Investigator(s): Debra Lemke + Ian Fox | Section, Township, Range: S 18, 19, 30, 31, 36, T 20 North, R 19, 20 East
Landform (hillside, terrace, etc.): Drainage Bank | Local relief (concave, convex, none): Drainage Bank | Slope (%): 5
Subregion (LRR): LRR D | Lat: 39.5684656 N | Long: -119.7744270 W | Datum: WGS1984
Soil Map Unit Name: Manogue cobbly clay, 2 to 8 percent slopes | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes x 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 10 x10)			
1. *Narrow leaf willow*	80	Yes	FACW
2. *Tall Whitetop*	10	No	FAC
3.			
4.			
5.			
	90 =Total Cover		
Herb Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	=Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 10 % Cover of Biotic Crust ____

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	80	x 2 =	160
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	90 (A)		190 (B)

Prevalence Index = B/A = 2.11

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** X **No** ____

Remarks:

SOIL

Sampling Point: SVW IN

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10yr 6/2	100					Sandy	

[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 Mucky 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is 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) **(Nonriverine)**
- ___ 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 on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two 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 x	Depth (inches): ___		
Water Table Present?	Yes ___	No x	Depth (inches): ___		
Saturation Present? (includes capillary fringe)	Yes x	No ___	Depth (inches): 2	**Wetland Hydrology Present?**	**Yes** X **No** ___

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

Remarks:
Water at bottom of soil pit

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Sun Valley City/County: Washoe Sampling Date: 5/12/25
Applicant/Owner: RTC State: NV Sampling Point: SVW OUT
Investigator(s): Debra Lemke + Ian Fox Section, Township, Range: S 18, 19, 30, 31, 36, T 20 North, R 19, 20 East
Landform (hillside, terrace, etc.): Slope Local relief (concave, convex, none): Slope Slope (%): 8
Subregion (LRR): LRR D Lat: 39.571983 Long: -119.780314 Datum: WGS1984
Soil Map Unit Name: Reywat extremely stony loam, 15 to 30 percent slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes x 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 10 x10)			
1. *Tall Whitetop*	5	Yes	FAC
2.			
3.			
4.			
5.			
	5 =Total Cover		
Herb Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	=Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 95 % Cover of Biotic Crust ____

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	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	5 (A)		15 (B)

Prevalence Index = B/A = 3.00

Hydrophytic Vegetation Indicators:

X 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** X **No** ____

Remarks:

SOIL

Sampling Point: SVW OUT

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10yr 6/2	100					Sandy	

[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 Mucky 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two 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 x Depth (inches): ___

Water Table Present? Yes ___ No x Depth (inches): ___

Saturation Present? Yes ___ No x Depth (inches): 2

(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

dry

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Sun Valley ARD
Project Number: 173.48.25
Stream: Private Driveway Culvert to Sun Valley Wash
Investigator(s): Debra Lemke + Ian Fox

Date: 5-14-24 **Time:** 10:36 AM
Town: Reno **State:** NV
Photo begin file#: **Photo end file#:** 5 - 6

Y ☒ / N ☐ Do normal circumstances exist on the site?

Y ☐ / N ☒ Is the site significantly disturbed?

Location Details: Private Driveway Culvert

Projection: 119.7800° W **Datum:** WGS 1984
Coordinates: 39.5743° N

Potential anthropogenic influences on the channel system:

Unhoused population just above Private Driveway Culvert outlet into Sun Valley Wash. Homes and businesses are adjacent to Sun Valley Wash and Private Driveway Culvert. Invasive weeds and trash present.

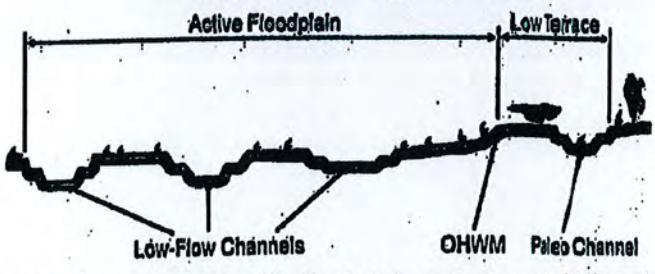
Brief site description:

Flow is present in the Sun Valley Wash. Tall white top, willows, and cat tails within Sun Valley Wash. Private Driveway Culvert passes under Sun Valley Boulevard and discharges into the Sun Valley Wash at the Private Driveway Culvert outlet.

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 H+H Report
- ☐ 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



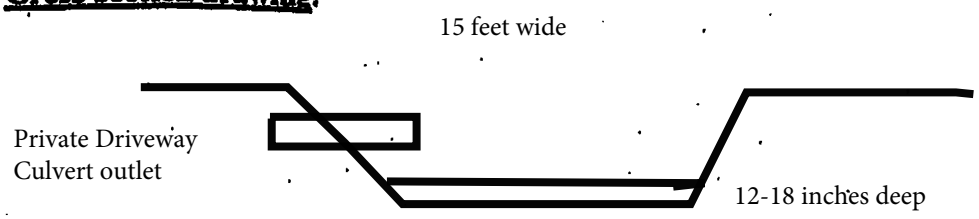
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

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
   - ☐ Digitized on computer
   - ☒ GPS
   - ☐ Other:

Private Driveway
Culvert Data

Project ID: Sun Valley **Cross section ID:** Point 9 **Date:** 5-14-24 **Time:** 10:36 AM

Cross section drawing:



OHWM

GPS point: Private Driveway Culvert Out

119.7800° W 39.5743° N

GPS Point 9 was collected

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☐ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

Private Driveway Culvert In

119.7812° W 39.5750° N

Floodplain unit:

☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: ____% 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:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: RTC Sun Valley
Project Number:
Stream: West 5th Ave - North - Eph. Drainage
Investigator(s): Debra Lemke + Ian Fox

Date: 5-12-25 **Time:** 12:45
Town: Sun Valley **State:** NV
Photo begin file#: 11 **Photo end file#:** 12

Y [X] / N [ ] Do normal circumstances exist on the site?

Y [ ] / N [X] Is the site significantly disturbed?

Location Details: Northern ~~eph~~ ephemeral drainage

Projection: 39.5928091 N **Datum:** WGS 1984
Coordinates: -119.7805734 W

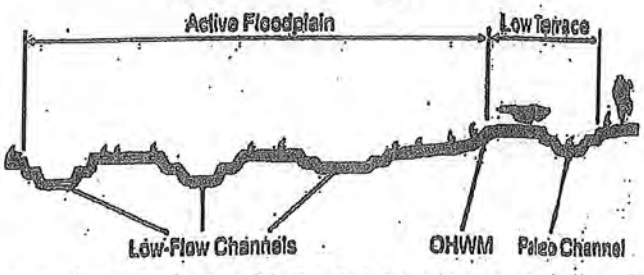
Potential anthropogenic influences on the channel system:
Houses adjacent to roadside ditch which is likely an ephemeral drainage due to USFWS NWI mapping.

Brief site description:
Upstream of the Project Area is a mapped USFWS NWI Riverine. This feature appears to continue along the northern side of W 5th Ave as a roadside ditch, but will call this an ephemeral drainage due to upstream mapping.

Checklist of resources (if available):

- [X] Aerial photography
  Dates: 6-28-2023
- [X] Topographic maps
- [ ] Geologic maps
- [X] Vegetation maps
- [X] 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
   - [ ] Digitized on computer
   - [X] GPS
   - [ ] Other:

Project ID: Sun Valley Cross section ID: West 5th Avenue Ephemeral Drainage Date: 5-12-25 Time: 12:45

Cross section drawing:



OHWM

GPS point: 21

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☒ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

Dry - no evidence of flow

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: ____% 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:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Sun Valley ARD
Project Number: 173/48.25
Stream: 5th Ave culvert
Investigator(s): Debra Lemke + Ian Fox

Date: 5-14-24 **Time:**
Town: Reno **State:** NV
Photo begin file#: 17 **Photo end file#:** 18 & 19

Y ☒ / N ☐ Do normal circumstances exist on the site?

Y ☐ / N ☒ Is the site significantly disturbed?

Location Details: 5th Ave Culvert

Projection: 39.5928 N **Datum:** WGS1984
Coordinates: 119.7865W

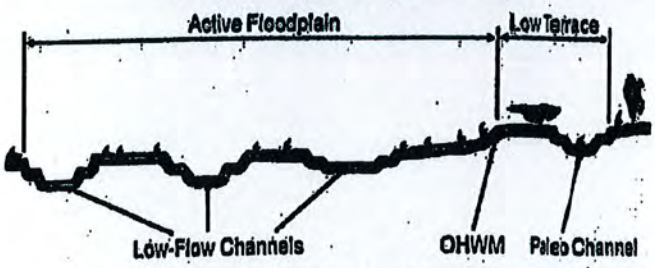
Potential anthropogenic influences on the channel system:
Roads, houses, invasive weeds, + trash. no open channel system in the study area. Located culverts for Sun Valley Blvd road side ditch.

Brief site description:
no roadside ditch or drainage present on 5th Ave. Roadside ditch present on Sun Valley Blvd. West of project area on USFWS NWI are 3 drainages, these have been piped through the study area. dry.

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 H+H Report
- ☐ 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



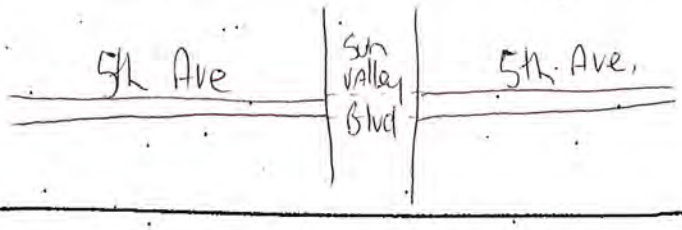
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

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
   - ☐ Digitized on computer
   - ☒ GPS
   - ☐ Other:

Data Point 8

Project ID: Sun Valley **Cross section ID:** 5th Ave **Date:** 5-14-24 **Time:**

Cross section drawing:



OHWM

GPS point: 5th Ave Data Point 8 yes, likely jurisdictional due to existing culverts.

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☐ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

no OHWM indicators because of existing culverts. Upstream on USFWS, NWI is the presence of 3 drainages - these have been rated & piped under Sun Valley Blvd.

Floodplain unit: ☐ Low-Flow Channel ☒ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: ____% 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:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: RTC SunValley
Project Number:
Stream: Sidehill Drive Ephemeral Drainage
Investigator(s): Debra Lemke + Ian Fox
Date: 5-12-25 **Time:** 2:00
Town: SunValley **State:** NV
Photo begin file#: 21 **Photo end file#:** 22

Y ☒ / N ☐ Do normal circumstances exist on the site?

Y ☐ / N ☒ Is the site significantly disturbed?

Location Details: Ephemeral Drainage

Projection: 39.594°36N; -119.785809W **Datum:** WGS1984
Coordinates:

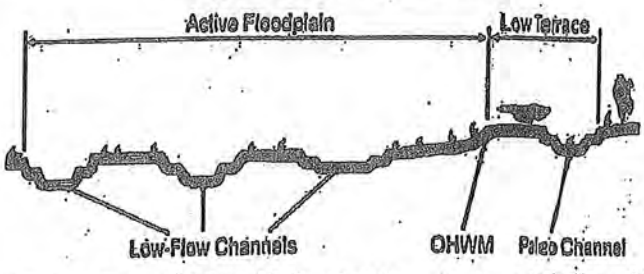
Potential anthropogenic influences on the channel system:
Houses Adjacent to Sidehill Drive west side of reach.

Brief site description:
There are TWO USGS NWI mapped Riverine features west of Sidehill Drive. It appears these were intercepted & put along the westernside of Sidehill Drive.

Checklist of resources (if available):

- ☒ Aerial photography
  Dates: 6-28-2023
- ☒ 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
   - ☐ Digitized on computer
   - ☒ GPS
   - ☐ Other:

Project ID: Sun Valley Cross section ID: Sidehill Drive - Ephemeral Drainage Date: 5-12-25 Time: 2:00

Cross section drawing:



OHWM

GPS point: 23

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☒ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

Dry Drainage. Two USFWS NWI riverine features appear to be captured and located along the western side of Sidehill Drive.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: ____% 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:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Sun Valley ARD
Project Number: 173.48.25
Stream: Roadside Ditch
Investigator(s): Debra Lemke + Ian Fox

Date: 5-14-24
Town: Reno
Photo begin file#: 13, 14, 15, 16
Time:
State: NV
Photo end file#:

Y [X] / N [ ] Do normal circumstances exist on the site?

Y [ ] / N [X] Is the site significantly disturbed?

Location Details: Sun Valley Blvd Roadside Ditch

Projection: 39.582001 **Datum:**
Coordinates: 119.780503 W

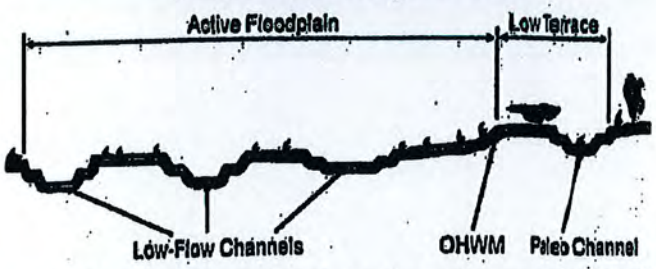
Potential anthropogenic influences on the channel system:
Trash, invasive weeds present. Homes + business are along Sun Valley Boulevard.

Brief site description:
There is a dry roadside ditch along the western side of Sun Valley Blvd. There is no evidence of recent flows, no OHWM.

Checklist of resources (if available):

- [X] Aerial photography
  Dates:
- [X] Topographic maps
- [ ] Geologic maps
- [ ] Vegetation maps
- [X] Soils maps
- [ ] Rainfall/precipitation maps
- [ ] Existing delineation(s) for site
- [ ] Global positioning system (GPS)
- [X] Other studies H+H Report
- [ ] 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

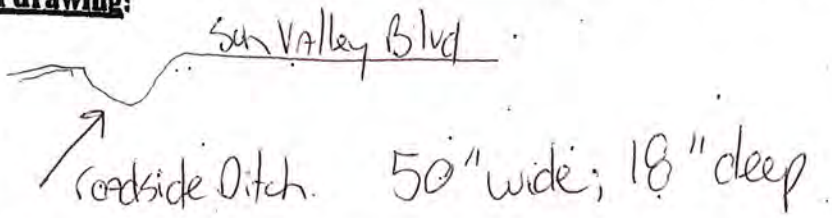


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

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
   - [ ] Digitized on computer
   - [X] GPS
   - [ ] Other:

Project ID: Sun Valley **Cross section ID:** Sun Valley Blvd, Roadside Ditch **Date:** 5.14.24 **Time:**

Cross section drawing:



OHWM

GPS point: Data Point 6 collected

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☐ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

no OHWM indicators

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: ____% 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:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: RTC SunValley
Project Number:
Stream: Dandini Roadside Ditch - Northern
Investigator(s): Debra Lemke + Ian Fox

Date: 5.12.25 **Time:** 2:30
Town: SunValley **State:** NV
Photo begin file#: 23 **Photo end file#:** 24

Y [X] / N [ ] Do normal circumstances exist on the site?

Y [ ] / N [X] Is the site significantly disturbed?

Location Details: Roadside Ditch -

Projection: **Datum:** WGS 1984
Coordinates: ~~39.5820 N~~

Potential anthropogenic influences on the channel system:
Homes Adjacent to Roadside Ditch

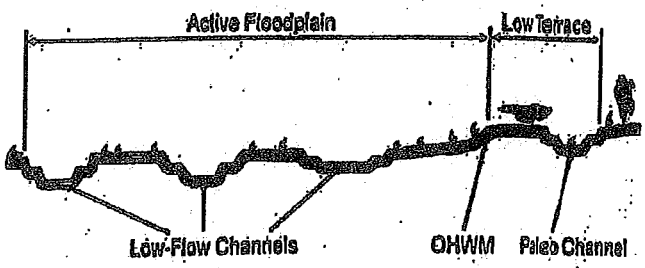
39.5705218 N
-119.7824245 W

Brief site description:
Northern side of Dandini - is a roadside ditch. no evidence of flow + no USFWS NWI or USGS mapped resources

Checklist of resources (if available):

- [X] Aerial photography
  Dates: 6-28-2023
- [X] Topographic maps
- [ ] Geologic maps
- [X] Vegetation maps
- [X] 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

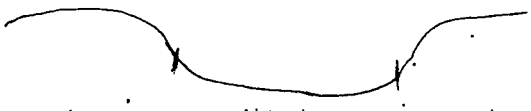


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

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
   - [X] GPS
   - [ ] Digitized on computer
   - [ ] Other:

Project ID: Sun Valley **Cross section ID:** Dardini Blvd Roadside Ditch-Northern **Date:** 5-12-25 **Time:** 2:30

Cross section drawing:



46" wide x 2" deep OHWM

OHWM

GPS point: 27

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☐ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

dry, no evidence of flow, trash in roadside ditch. This ditch has been weed whacked

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: ____% 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:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: RTC Sun Valley
Project Number: Dandini Roadside Ditch, Southern
Stream:
Investigator(s): Debra Lemke + Jan Fox
Date: 5-12-25 **Time:** 2:45
Town: Sun Valley **State:** NV
Photo begin file#: 25 **Photo end file#:** 26

Y ☒ / N ☐ Do normal circumstances exist on the site?

Y ☐ / N ☒ Is the site significantly disturbed?

Location Details: roadside ditch

Projection: 39.5703796 N **Datum:** WGS1984
Coordinates: -119.7826361 W

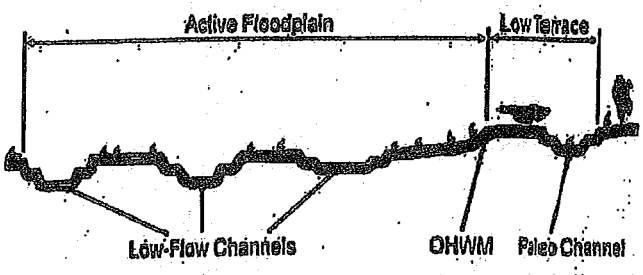
Potential anthropogenic influences on the channel system:
Homes adjacent to roadside ditch

Brief site description:
Southern side of Dandini is a roadside ditch, NO evidence of flow + no USFWS NWI or USGS mapped resources.

Checklist of resources (if available):

- ☒ Aerial photography
  Dates: 6-28-2023
- ☒ 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
   - ☐ Digitized on computer
   - ☒ GPS
   - ☐ Other:

Project ID: Sun Valley Cross section ID: Oandini Blvd. Roadside Ditch - Southern Date: 5-12-25 Time: 2:45

Cross section drawing:



20" wide x 8" deep

OHWM

GPS point: 28

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☐ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

foxtail, trash. no evidence of flow. Roadside Ditch

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: ____% 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:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: RTC - Sun Valley
Project Number:
Stream: West 1st Ave. Roadside Ditch
Investigator(s): Debra Lemke + Ian Fox Sattler

Date: 5-12-25 **Time:** 9:30
Town: Sun Valley **State:** NV
Photo begin file#: 1 **Photo end file#:** 2

Y [X] / N [ ] Do normal circumstances exist on the site?

Y [ ] / N [X] Is the site significantly disturbed?

Location Details: roadside ditch + culvert

Projection: 39.578261 **Datum:** WGS1984
Coordinates: -119.782575 6N

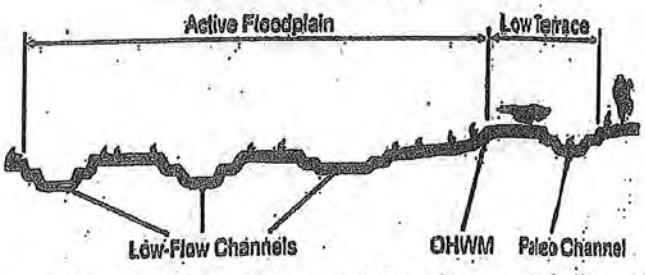
Potential anthropogenic influences on the channel system:
Roadside ditch with Adjacent homes And businesses.

Brief site description:
Roadside ditch Along Sathern side of West 1st Ave.. No evidence of flow And no US FWS. NWI. mapped resource & USGS

Checklist of resources (if available):

- [X] Aerial photography
  Dates: 6-28-2023
- [X] Topographic maps
- [ ] Geologic maps
- [X] Vegetation maps
- [X] 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



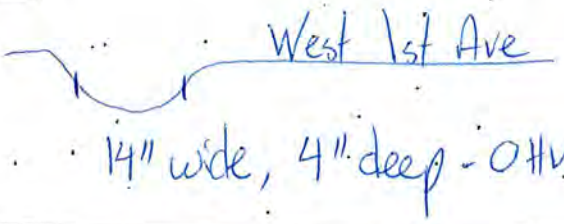
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

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
   - [ ] Digitized on computer
   - [X] GPS
   - [ ] Other:

Roadside Ditch - Southern

Project ID: SunValley **Cross section ID:** West 1st Ave ~~Southern~~ **Date:** 5-12-25 **Time:** 9:30

Cross section drawing:



OHWM

GPS point: ~~25~~ 26

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☐ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

Dry, no evidence of flow. Stormwater ditch created in uplands. Ditch is @ 510 feet long & then is culverted.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: ____% 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:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: RTC Sun Valley
Project Number:
Stream: West 2nd Ave - Roadside Ditch Southern
Investigator(s): Debra Lemke, TA Fox
Date: 5-12-25 **Time:** 9:50
Town: Sun Valley **State:** NV
Photo begin file#: 3 **Photo end file#:** 4

Y [X] / N [ ] Do normal circumstances exist on the site?

Y [ ] / N [X] Is the site significantly disturbed?

Location Details: roadside ditch

Projection: 39.578290 **Datum:** WGS 1984
Coordinates: -119.781821

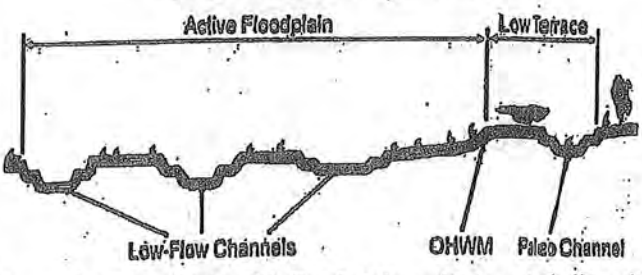
Potential anthropogenic influences on the channel system:
Roadside ditch with adjacent homes + businesses.

Brief site description:
West 2nd Ave roadside ditch on southern side of the street. NO USGS or USFWS NWI mapped feature

Checklist of resources (if available):

- [X] Aerial photography
  Dates: 6-28-2023
- [X] Topographic maps
- [ ] Geologic maps
- [X] Vegetation maps
- [X] 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

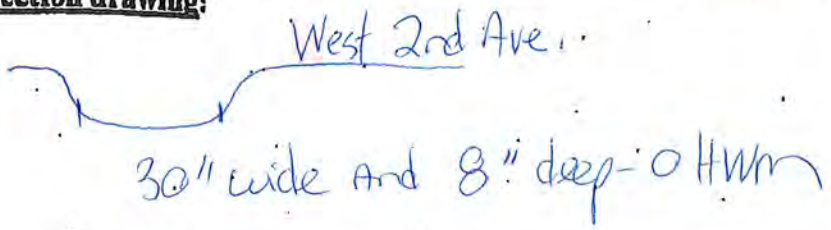


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

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
   - [ ] Digitized on computer
   - [X] GPS
   - [ ] Other:

Project ID: SunValley **Cross section ID:** West 2nd Ave Roadside Ditch - Southern **Date:** 5-12-25 **Time:** 9:50

Cross section drawing:



OHWM

GPS point: ~~20~~ ~~21~~ 20A

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☐ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

dry ditch, no evidence of recent flow. Stormwater ditch created in uplands. Series of culverts.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: ____% 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:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: RTC SunValley
Project Number:
Stream: W. Gepford Pkway roadside ditch - North
Investigator(s): Debra Lemke - Tetra Tech
Date: 5-12-25 **Time:** 11:45
Town: SunValley **State:** NV
Photo begin file#: 6 **Photo end file#:** 7 & 8

Y ☒ / N ☐ Do normal circumstances exist on the site?

Y ☐ / N ☒ Is the site significantly disturbed?

Location Details: northern side - roadside ditch

Projection: 39.585516 **Datum:** WGS 1984
Coordinates: -119.785015 3

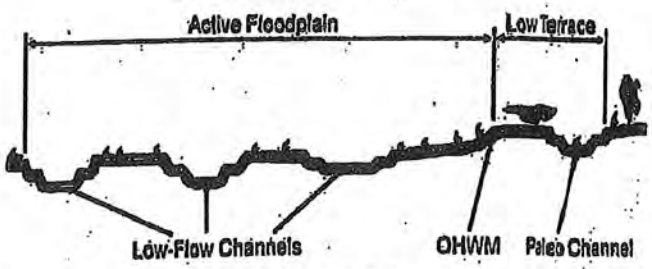
Potential anthropogenic influences on the channel system:
Homes and businesses adjacent to North side of W. Gepford Pkway roadside ditch

Brief site description:
roadside ditch - Along Gepford pkwy photos 6 & 7. Photos on N side of Gepford looking at ditch in #7 - downstream

Checklist of resources (if available):

- ☒ Aerial photography
  Dates: 6-8-2023
- ☒ 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



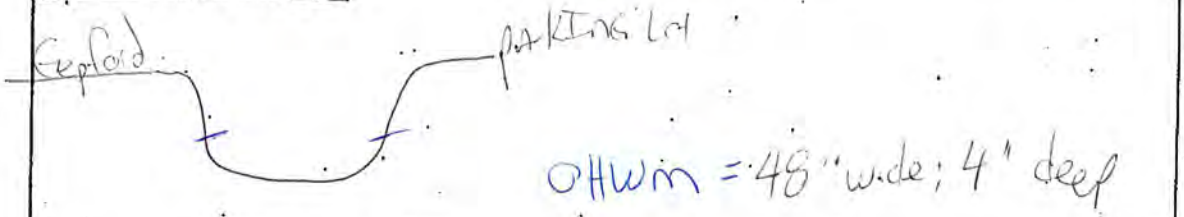
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

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
   - ☐ Digitized on computer
   - ☒ GPS
   - ☐ Other:

~~19A- South side of Gepford Pkwy~~

Project ID: SunValley **Cross section ID:** ~~X~~ 19 **Date:** 5-12-25 **Time:** 11:45

Cross section drawing:



OHWM

GPS point: ~~X~~ 19

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☒ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

dry ditch, stormwater ditch. no veg.
starts at Sidehill drive + ends at Sun Valley Blvd.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____
Total veg cover: ____% 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:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: RTC SunValley
Project Number:
Stream: W. Gepford Parkway - Southern roadside Ditch
Investigator(s): Debra Lemke + Ian Fox
Date: 5-12-25 **Time:** 12:15
Town: SunValley **State:** NV
Photo begin file#: 9 **Photo end file#:** 10

Y [X] / N [ ] Do normal circumstances exist on the site?

Y [ ] / N [X] Is the site significantly disturbed?

Location Details: Sath side - roadside ditch

Projection: 39.5853656 **Datum:** WGS 1984
Coordinates: -119.7849081W

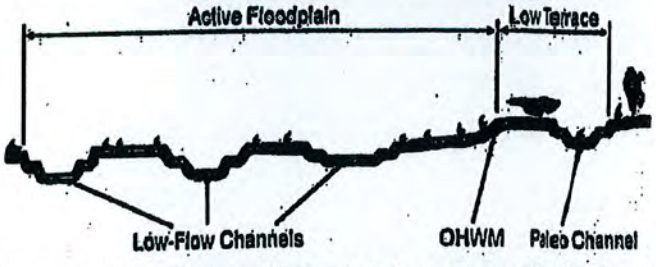
Potential anthropogenic influences on the channel system:
Houses + business adjacent to W. Gepford Parkway - sath side of road

Brief site description:
Sath ~~West~~ side of Gepford - Stormwater Ditch. Stops At Catholic church +

Checklist of resources (if available):

- [X] Aerial photography
  Dates: 6-8-2023
- [X] Topographic maps
- [ ] Geologic maps
- [X] Vegetation maps
- [X] 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

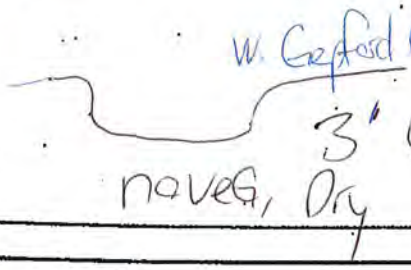


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

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
   - [ ] Digitized on computer
   - [X] GPS
   - [ ] Other:

Project ID: SunValley **Cross section ID:** 19A **Date:** 5-12-25 **Time:** 12:15

Cross section drawing:



OHWM

GPS point: ~~19~~ ~~[illegible]~~ 19A

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☒ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

Stormwater Ditch. Dry, no evidence of recent flows.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: ____% 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:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: RTC Sun Valley
Project Number:
Stream: West 4th Ave - Roadside Ditch - North
Investigator(s): Debra Lemke-Fox

Date: 5-12-25 **Time:** 1:20
Town: Sun Valley **State:** NV
Photo begin file#: 17 **Photo end file#:** 18

Y ☒ / N ☐ Do normal circumstances exist on the site?

Y ☐ / N ☒ Is the site significantly disturbed?

Location Details: Roadside Ditch - Northern

Projection: ~~39.589011~~ **Datum:** WGS 1984
Coordinates: ~~-119.785192~~ W

39.589111°N
-119.7807069°W

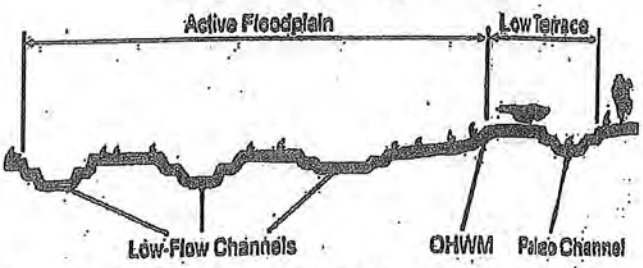
Potential anthropogenic influences on the channel system:
Homes + business are adjacent to the roadside ditch along the northern side of West 4th Ave.

Brief site description:
West 4th Ave - on the northern side is a roadside ditch w/ culverts

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
   - ☐ Digitized on computer
   - ☒ GPS
   - ☐ Other:

Project ID: Sun Valley Cross section ID: West 4th Ave - Roadside Ditch - North Date: 5-12-25 Time: 1:20

Cross section drawing:



OHWM = 40" wide x 3" deep

OHWM

GPS point: 22A

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☐ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

Dry ditch - stormwater management in uplands.

Foxtail present

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: ____% 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:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: RTC Sun Valley
Project Number:
Stream: West 4th Ave. Roadside Ditch South
Investigator(s): Debra Lemke + Ian Fox
Date: 5-12-25 **Time:** 1:15
Town: Sun Valley **State:** NV
Photo begin file#: 15 **Photo end file#:** 10

Y [X] / N [ ] Do normal circumstances exist on the site?

Y [ ] / N [X] Is the site significantly disturbed?

Location Details: roadside ditch - south

Projection: 39.589091 N **Datum:** WGS 1984
Coordinates: -119.7846934 W

39.589091 N
-119.7846934 W

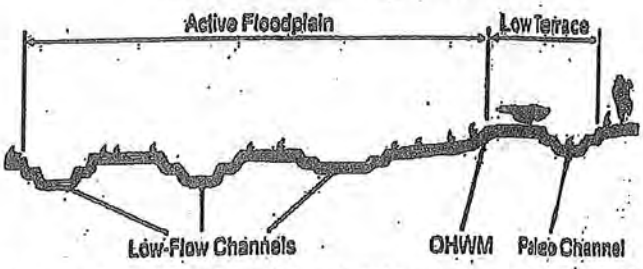
Potential anthropogenic influences on the channel system:
Homes and business are adjacent to the roadside ditch.

Brief site description:
West 4th Avenue Roadside ditch on the southern side of the road.

Checklist of resources (if available):

- [X] Aerial photography
  Dates: 6-8-2023
- [X] Topographic maps
- [ ] Geologic maps
- [X] Vegetation maps
- [X] 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

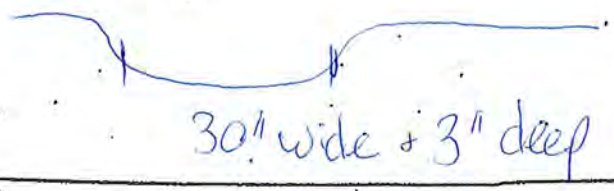


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

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
   - [ ] Digitized on computer
   - [X] GPS
   - [ ] Other:

Project ID: Sun Valley Cross section ID: West 4th Ave. Roadside Ditch South Date: 5-12-25 Time: 1:15

Cross section drawing:



OHWM

GPS point: 22

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☐ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

Dry ditch, stormwater management in uplands

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: ____% 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:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: RTC Sun Valley
Project Number:
Stream: West 5th Ave - Roadside Ditch - South
Investigator(s): Debra Lenke + Ian Fox
Date: 5-12-25
Town: Sun Valley
Photo begin file#: 13
Time: 1:00
State: NV
Photo end file#: 14

Y [X] / N [ ] Do normal circumstances exist on the site?

Y [ ] / N [X] Is the site significantly disturbed?

Location Details: West 5th Ave - Roadside Ditch South

Projection: 39.5925951 N **Datum:** WGS 1984
Coordinates: -119.7841115 W

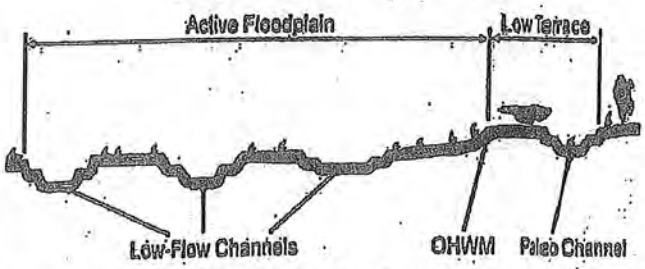
Potential anthropogenic influences on the channel system:
Houses, open space lots, business adjacent to West 5th Ave. Southern side of the road

Brief site description:
A roadside ditch for stormwater management on the southern side of W. 5th Ave.

Checklist of resources (if available):

- [X] Aerial photography
  Dates: 6-26-2023
- [X] Topographic maps
- [ ] Geologic maps
- [X] Vegetation maps
- [X] 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



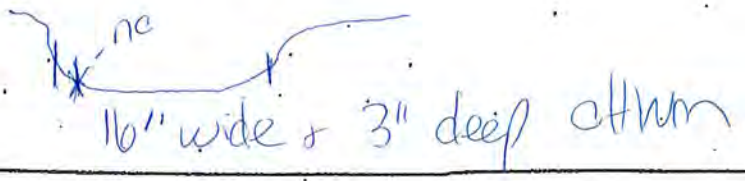
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

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
   - [ ] Digitized on computer
   - [X] GPS
   - [ ] Other:

West 5th Ave Roadside Ditch - South

Project ID: SunValley **Cross section ID:** West 5th Ave **Date:** 5-12-25 **Time:** 1:00

Cross section drawing:



OHWM

GPS point: 20

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☐ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

dry ditch - no evidence of recent flows.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: ____% 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:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: RTC SunValley
Project Number:
Stream: Sidehill Drive - Roadside Ditch EAST
Investigator(s): Debra Lemke + Jan Fox
Date: 5-12-25 **Time:** 1:45
Town: NV **State:** NV
Photo begin file#: 19 **Photo end file#:** 20

Y [X] / N [ ] Do normal circumstances exist on the site?

Y [ ] / N [X] Is the site significantly disturbed?

Location Details: Roadside Ditch - EAST

Projection: 39.595203611 **Datum:** WGS 1984
Coordinates: -119.7852297W

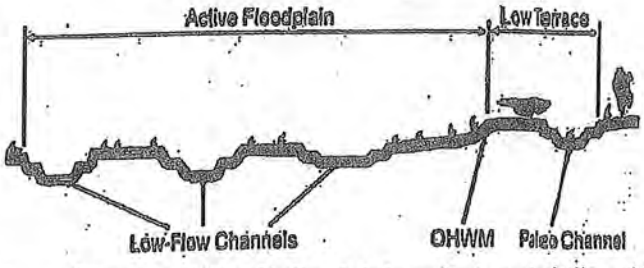
Potential anthropogenic influences on the channel system:
Houses adjacent to Roadside Ditch on the eastern side of Sidehill Drive.

Brief site description:
Dry Roadside ditch used for stormwater management.

Checklist of resources (if available):

- [X] Aerial photography
  Dates: 9-28-2023
- [X] Topographic maps
- [ ] Geologic maps
- [X] Vegetation maps
- [X] 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.
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   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
   - [ ] Digitized on computer
   - [X] GPS
   - [ ] Other:

Project ID: Sunvalley Cross section ID: Sidehill Drive Roadside Ditch EAST Date: 5-12-25 Time: 1:45

Cross section drawing:



OHWM = 36" wide And 3" deep

OHWM

GPS point: 24

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☐ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

Dry roadside ditch, no evidence of recent flows.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: ____% 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:



PP 1, photograph 1: facing west, looking at a storm drain culvert southeast of El Rancho Drive and Sun Valley Boulevard.



PP 2, photograph 2: facing east, looking at a culvert southwest of Dandini Boulevard and Sun Valley Boulevard.



PP 3, photograph 3: facing east, looking at East 1st Avenue, upstream is West 1st Avenue Roadside Ditch - Southern



PP 4, photograph 4: facing east looking at East 2nd Avenue, upstream is West 2nd Avenue Roadside Ditch - Southern

PP 5 was a GPS field error, and there is no associated photo or PP for PP5.



PP 6, photograph 5: looking at the culvert inlet under Sun Valley Boulevard at West 2nd Avenue.



PP 7, photograph 6: facing west, looking upstream of the culvert at West 4th Avenue and Sun Valley Boulevard, this is West 4th Avenue Roadside Ditch – Northern.



PP 7, photograph 7: facing east, looking at the culvert on the corner of West 4th Avenue and Sun Valley Boulevard.



PP 8, photograph 8: facing northeast, looking at the culvert on the corner of West 5th Avenue and Sun Valley Boulevard. The culvert to the right crosses below Sun Valley Boulevard.



PP 9, photograph 9: facing south, looking downstream at the Sun Valley Wash. The Private Driveway outfall is visible in the photo, near the center right.



PP 16*, photograph 10: facing south, looking downstream at the Sun Valley Wash.

*Due to representative photos being shown, some photos are not being used, therefore the PP's are not in sequential order.



PP SVW IN, photograph 11: facing north, looking upstream at the edge of the Sun Valley Wash Freshwater Scrub Wetland.



PP SVW OUT, photograph 12: facing south, looking downstream at the edge of the Sun Valley Wash Freshwater Scrub Wetland.



PP 19, photograph 13: facing east, looking at the Gepford Parkway Roadside Ditch - Northern.



PP 20, photograph 14: facing east, looking at the West 5th Avenue Roadside Ditch - Southern.



PP 21, photograph 15: facing east, looking at the West 5th Avenue Ephemeral Drainage.



PP 22, photograph 16: facing west, looking at the West 4th Avenue Roadside Ditch - Southern.



PP 22A, photograph 17: facing east, looking at the West 4th Avenue Roadside Ditch - Northern.



PP 23, photograph 18: facing north, looking at the Sidehill Drive Ephemeral Drainage.



PP 24, photograph 19: facing south, looking at the Sidehill Drive Roadside Ditch - Eastern.



PP 27, photograph 20: facing east, looking at the Dandini Boulevard Roadside Ditch - Northern.



PP 28, photograph 21: facing east, looking at the Dandini Boulevard Roadside Ditch - Southern.

The following table lists the parcels adjacent to the impacted aquatic resources within the Sun Valley Wash and Wetlands.

APN	Owner	Zip Code
035-064-06	Rodriguez, Jose L P	89433
035-064-07	Castellanos-Bernales et al, Nerlos	89433
035-064-08	McDonald, Patricc A & Brandi M	89433
035-074-03	Ludlow Living Trust, Sara K	89433
035-366-01	Washoe County	89433
035-366-02	Jiminez, Maria M	89433
035-366-03	Nunez, Ismael & Patricia	89433
035-366-04	Delgado, Adolfo F	89433
035-366-05	Pulido-Mariscal et al, Gladys E	89433
035-366-06	Cervin Guerrero et al, Jose E	89433
035-366-07	Anderson, Richard G Jr & Sara	89433
035-366-08	Berrocal, Jesus F	89433
035-366-09	Melendez, Miguel E Juana I	89433
035-366-10	Carrillo, Ascension & Irma G	89433
035-366-11	Carrillo, Graciela I	89433
035-366-12	Medina, Valentina	89433
035-366-13	Carranza-Padilla Living Trust	89433
035-366-14	Torem, Celedonia G	89433