LIMITED-RESULTS CULTURAL RESOURCE SURVEY FORM

This form (#1420) is for small scale limited results projects - block surveys less than 160 acres with linear surveys under four miles. Additionally, there should be no sites and a maximum of four Isolated Finds. This form must be typed.

I. IDENTIFICATION

1. Report Title (include County): Limited Results Archaeological Resource Survey and Testing Region 1 Project I-25 US 36 to 104th Avenue Safety Ops Design Engineering Services, Adams County, Colorado
2. Date of Field Work: September 6, 2024
3. Form completed by: Tyrel Sorensen Date: September 26, 2024
4. Survey Organization/Agency: ERO Resources Corporation (ERO)

   Principal Investigator: Jonathan Hedlund

   Principal Investigator's Signature: 

   Other Crew: Katherine Mayo and Mark Richter

   Address: 1626 Cole Boulevard, Suite 100, Lakewood, CO 80401
5. Lead Agency / Land Owner: Colorado Department of Transportation (CDOT)

   Contact: Greg Wolff, Senior Staff Archaeologist/Native American Consultation Liaison

   Address: 2829 West Howard Place, Denver, CO 80204
6. Client: CDOT
7. Permit Type and Number: CO State Permit 84050
8. Report / Contract Number: AM.CH.NR47/ ERO 21274
9. Comments: None

II. DESCRIPTION OF UNDERTAKING / PROJECT

- 10. Type of Undertaking: CDOT and the Federal Highway Administration (FHWA) are proposing transportation improvements to Interstate 25 (I-25) between US Highway 36 (US 36; milepost 217) and 104th Avenue (milepost 221) to address traffic and transit operations, and safety concerns. To achieve this, the proposed project is considering construction of new northbound and southbound general purpose, climbing, and auxiliary lanes; new outside and inside shoulders of varying width; a replacement bridge at 88th Avenue; a median transit station at the Thornton Park-n-Ride; a new northbound two-lane collector/distributor road on the east side of I-25 between I-270 and 84th Avenue; and realignment of the I-25 adjacent existing trail and pedestrian network in the Niver Creek Open Space and its connections to the Thornton Park-n-Ride.

Because the project is receiving funds from the FHWA, administered by CDOT, the project requires compliance with Section 106 (54 United States Code [U.S.C.] § 306108) of the National Historic Preservation Act (NHPA; 1966, as amended; 54 U.S.C. § 300101 et seq.). CDOT has previously completed an Environmental Impact Statement, a Planning and Environmental Linkages Study, and an unpublished Environmental Assessment that included an archaeological inventory (Redman 2018). However, due to project design changes, additional archaeological clearance work is necessary to identify archaeological resources and assess project effects on potential historic properties.
CDOT archaeologist Greg Wolff defined the area of potential effects (APE) as the potential limits of construction (391.8 acres; Greg Wolff, personal communication, July 8, 2024).Based on historic and modern aerial imagery, ERO's archaeological survey area excluded areas of complete disturbance, including the existing highway, roads, residential properties, and artificially landscaped stormwater catchments (Nationwide Environmental Title Research 2024). An additional 15.2 acres of the previous archaeological survey were not surveyed (Redman 2018). Therefore, ERO surveyed only those areas added to the APE outside of the original cultural resources inventory that remain undisturbed by development (survey area, 38.6 acres, Figure 1 and Figure 2). ERO also conducted limited exploratory testing of suspected Holocene-aged terraces to identify buried archaeological resources in the survey area.

11. Size of Undertaking (acres): 391.8 acres Size of Project (if different): Survey area is 38.6 acres

12. Nature of the Anticipated Disturbance: Anticipated disturbances include staging and operating heavy equipment, excavating and other ground-disturbing activities, and constructing new traffic lanes, shoulders, roads, and other associated infrastructure.

13. Comments: None.

III. PROJECT LOCATION

Please attach a photocopy of USGS Quad. clearly showing the project location. The Quad. should be clearly labeled with the Prime Meridian, Township, Range, Section(s), Quad. map name, size, and date. Please do not reduce or enlarge the photocopy.

14. Description: The proposed project APE is considerably larger than the survey area. The survey area consists of eight small, isolated survey blocks along the I-25 corridor—six on the east side and two on the west side—from the I-25 and I-76 interchange to the south to the I-25 and Thornton Parkway interchange to the north. The survey blocks are located at each interchange as well as between East 80th Avenue and East 84th Avenue, between East 84th Avenue and East 88th Avenue, and between East 88th Avenue and Thornton Parkway (Figure 3 through Figure 5).

15. Legal Location: Quad. Map: Commerce City; Eastlake Date(s): 1980, 1980

Principal Meridian: 6th X NM Ute

NOTE: Only generalized subdivision ("quarter quarters") within each section is needed

Township: 3S	Range:	68W	Sec.: 3	1/4s SE NE
Township: 2S	Range:	68W	Sec.: 27	1/4s SW SE
Township: 2S	Range:	68W	Sec.: 27	1/4s SE NE
Township: 2S	Range:	68W	Sec.: 27	1/4s SW NE
Township: 2S	Range:	68W	Sec.: 27	1/4s SE NW
Township: 2S	Range:	68W	Sec.: 27	1/4s NW NE
Township: 2S	Range:	68W	Sec.: 27	1/4s NE NW
Township: 2S	Range:	68W	Sec.: 22	1/4s SW SE
Township: 2S	Range:	68W	Sec.: 22	1/4s SE SW
Township: 2S	Range:	68W	Sec.: 22	1/4s NW SE
Township: 2S	Range:	68W	Sec.: 22	1/4s NE SW
Township: 2S	Range:	68W	Sec.: 22	1/4s NE NW
Township: 2S	Range:	68W	Sec.: 15	1/4s SE SW

If section(s) is irregular, explain alignment method: N/A

16. Total number of acres surveyed: 38.6

17. Comments: None.

IV. ENVIRONMENT

18. General Topographic Setting: The APE is in the Flat to Rolling Plains of the High Plains (Chapman et al. 2006). The survey blocks are in a mixed topographic environment in the Denver Basin (Figure 6).

    Current Land Use: The land is currently used as part of the I-25 corridor and for commercial and residential buildings and recreation open space.

19. Flora: The survey area is covered with grasses, forbs, and some shrubs and trees. Riparian and wetland vegetation is present along the streams and drainages (Figure 7).

20. Soils/Geology: According to the Web Soil Series, sediments in the APE consist of loamy alluvial land, loamy alluvial land with a gravelly substratum, gravel pits, Renohill loam, Samsil-Shingle complex with clay and silty clay atop weathered bedrock, and Ulm loam (Natural Resources Conservation Service 2024). According to aerial imagery, most of the APE has been disturbed by construction and agricultural activity (Nationwide Environmental Title Research 2024).

21. Ground Visibility: Generally less than 10 percent due to thick grasses.

22. Comments: None.

V. LITERATURE REVIEW

23. Location of File Search: Office of Archaeology and Historic Preservation (OAHP) (File Search No. 26211)

    Date: May 14, 2024

24. Previous Survey Activity – In the project area: According to OAHP records, four previous surveys overlap the APE and one previous survey overlaps the survey area. In 2007, CDOT conducted *A Class III Archaeological Inventory of Corridor Alternatives and Miscellaneous Facilities Associated with the North I-25 Front Range Corridor Environmental Impact Statement, Adams, Boulder, Broomfield, Larimer, and Weld Counties* (MC.CH.R184). ERO conducted a Class III survey and exploratory testing along Niver Creek in 2022, which overlaps a small portion of the survey area at the Niver Creek Open Space (AM.AE.NR8) (Matsuda 2022).

    In the general region: Surveys in the general region were conducted for activities related to road and transportation infrastructure development and maintenance (AM.CH.R28, AM.CH.R29, AM.CH.R40, AM.CH.R43, AM.CH.R44, DV.CH.R4, MC.CH.NR78, MC.CH.R153, MC.CH.R184, and MC.CH.R96); telecom infrastructure development (AM.FC.NR4, MC.CH.NR33, and MC.CH.R96); subdivision development (AM.CH.R69, AM.CH.R74, and AM.CH.R76); water management (AM.LG.R2); and other miscellaneous reasons (AM.CH.NR29, AM.CH.NR31, AM.HW.R1, AM.HW.R2, and MC.CH.NR63).

25. Known Cultural Resources - In the project area: There are no known Indigenous or historical archaeological resources in the survey area.

    In the general region (summarize): Based on previous cultural resource survey data, Indigenous resources in the general region have been infrequently recorded. Historical resources are primarily roads, ditches, historic districts, and other resources related to residential and infrastructural development.

26. Expected Results: Given the paucity of Indigenous resources in the general area, as well as the long history of development in the APE, ERO did not anticipate archaeological resources.

VI. STATEMENT OF OBJECTIVES

27. ERO conducted a systematic pedestrian survey of the APE areas in 10-meter (m) transects and excavated shovel tests (STs) in suspected high-probability areas to identify unknown cultural resources (Figure 3).

VII. FIELD METHODS

28. Definitions – Site: A locus of human activity (older than 50 years) with interpretable evidence that constitutes meaningful activity; sites will contain an artifact assemblage or features that are interpretable as to activity or together reflect meaningful occupation of an area.

IF: A single or small collection of artifacts of a similar type that reflect an event of either limited meaningful activity or limited interpretive value; examples of limited activity or interpretive value include the intentional or accidental discard of artifacts away from their point of manufacture or primary point of use or an activity of limited scope and duration.

29. Describe Survey Method: ERO archaeologists Katherine Mayo and Mark Richter surveyed the survey area in 10-m transects and excavated STs in suspected high-probability areas (Figure 3).

VIII. RESULTS

30. List IFs if applicable. Indicate IF locations on the map completed for Part III.

    A. Smithsonian Number: N/A Description: N/A

31. Using your professional knowledge of the region, why are there none or very limited cultural remains in the project area? Is there subsurface potential?

ERO conducted a desktop review of the APE prior to conducting fieldwork to evaluate the extent of previous ground disturbance. Historical aerial imagery revealed that the area has been used intensively for agriculture since at least the 1950s and that it has been undergoing extensive urban residential, commercial, and transportation-related infrastructure development since the mid-1960s (Nationwide Environmental Title Research 2024). ERO identified seven survey blocks that were intact enough to warrant a pedestrian survey (survey area).

On May 16, 2024, ERO archaeologists Katherine Mayo and Mark Richter conducted a pedestrian inventory of the survey area and conducted exploratory testing in areas with the potential for buried cultural materials (i.e., the survey block at the Niver Creek Open Space). ERO's survey revealed that a majority of the survey area blocks are disturbed, including the survey block southeast of the Starlight Road and Polaris Place (Figure 7), northeast of the I-25 and 84th Avenue intersection (Figure 8), and between 70th Avenue and Clear Creek (Figure 5 and Figure 11). ERO documented historical archaeological debris associated with the Weingarten Farm (5AM4335; Figure 4), but this resource was reported on by ERO in August 2024 as part of the History clearance (Moore et al. 2024). No other archaeological resources were identified on the surface (Figure 9 and Figure 10).

ERO excavated ST1 through ST4 in the APE at the Niver Creek Open Space (Figure 3). All were negative for cultural material. STs were excavated from 40 to 70 centimeters below ground surface. In each case, STs confirmed that the least disturbed areas in the APE have sediments consisting of residual sands and clays and fine-grained Pleistocene-aged alluvium. ERO did not test recent alluvial terraces in the APE because they contain modern sediments.

Based on the testing and survey results, ERO recommends no archaeological resources are in the APE and recommends a finding of *no historic properties affected* pursuant to 36 Code of Federal Regulations § 800.4(d)(1) of the NHPA.

References:

Chapman, Shannen S., Glenn E. Griffith, James M. Omernik, Alan B. Price, Jerry Freeouf, and Donald L. Schrupp
2006 Ecoregions of Colorado (Color poster with map, descriptive text, summary tables and photographs). Reston, VA. U.S. Geological Survey (map scale 1:1,200,000).

Matsuda, Marie
2022 *Limited Results Cultural Resource Survey and Exploratory Testing of Niver Creek Tributary M Downstream of Huron Street, Adams County, Colorado (AM.AE.NR8)*. Prepared by ERO Resources Corporation for the U.S. Army Corps of Engineers.

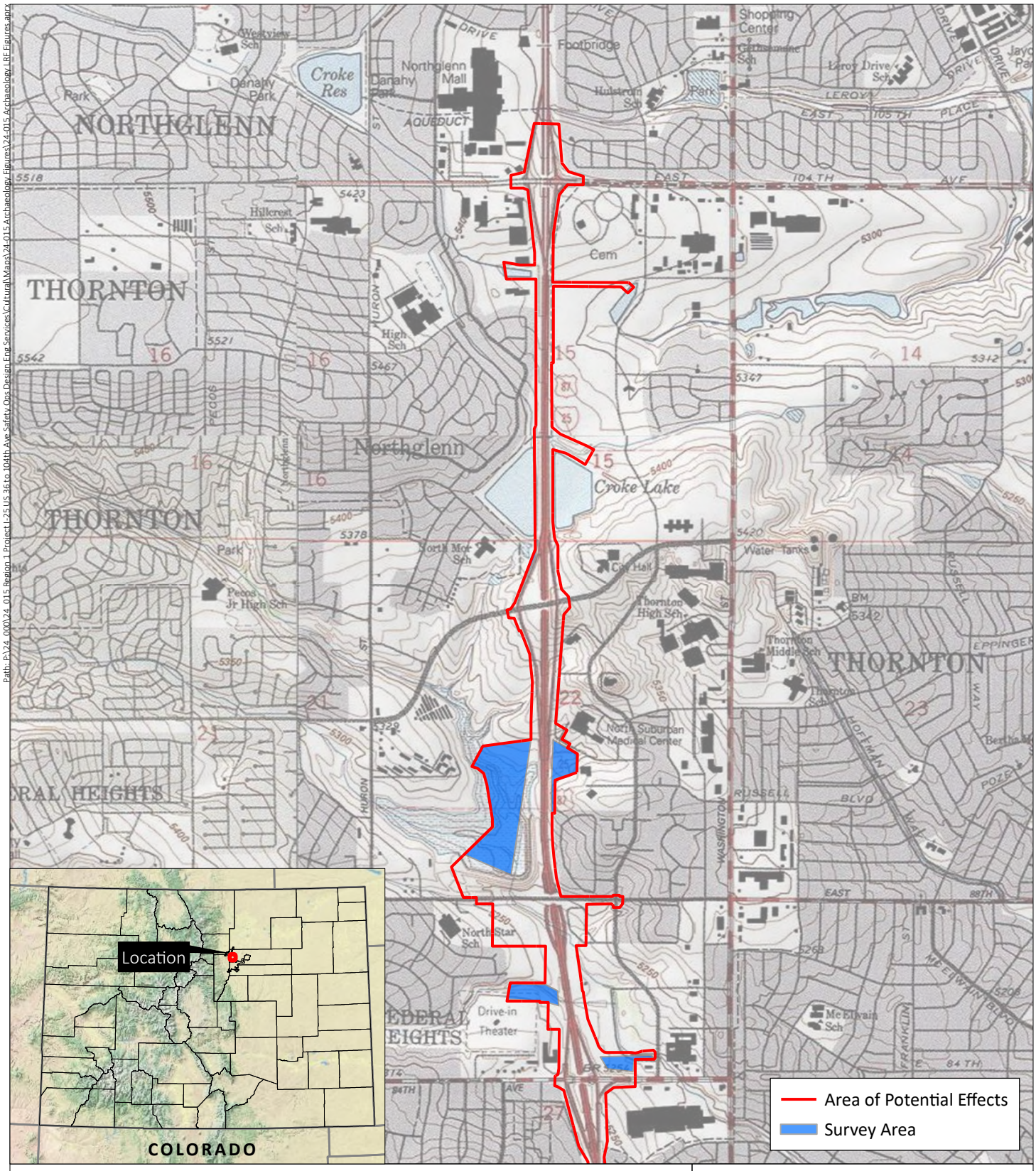
Moore, Leslie, Emily Ortiz, Katherine Mayo, and Mark Richter
2024 5AM4335 Cultural Resource Documentation Form. Prepared by ERO Resources Corporation. Prepared for the Colorado Department of Transportation, On file at the Colorado Office of Archaeology and Historic Preservation, Denver, Colorado.

Nationwide Environmental Title Research
2024 Historic Aerials. *National Environmental Title Research LLC*. Online database, https://www.historicaerials.com/viewer.

Natural Resources Conservation Service
2024 Web Soil Survey. Electronic document, http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm, accessed April 12, 2024.

Redman, Kimberly
2018 *Archaeological Resources Survey Along I-25 Between US Highway 36 and 104th Avenue, Adams County, Colorado*. Prepared by Alpine Archaeological Consultants, Inc. On file at the Colorado Office of Archaeology and Historic Preservation, Denver, Colorado.

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Limited Results Archaeological Resource Survey and Testing
Region 1 Project I-25 US 36 to 104th Avenue Safety Ops Design
Engineering Services, Adams County, Colorado

Sections 10, 15, 22, 27, 34, and 35, T2S, R68W; 6th PM
Sections 2 and 3, T3S, R68W; 6th PM
USGS Commerce City, CO Quadrangle (1:24,000; 1980)
USGS Eastlake, CO Quadrangle (1:24,000; 1980)
Adams County, Colorado

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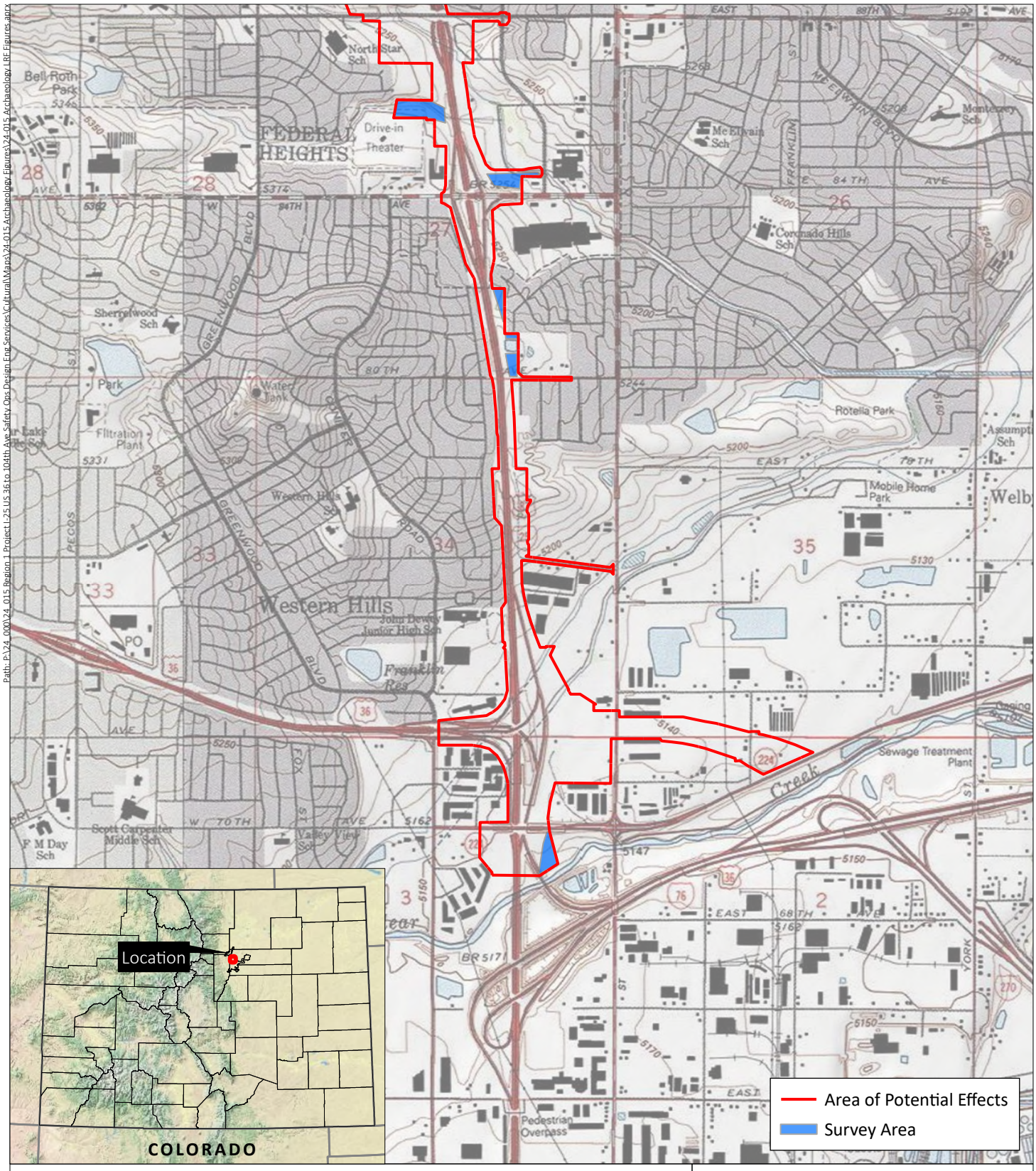
Figure 1
Project Location

Prepared for:
Colorado Department of Transportation
Region 1
File: 24-015 Archaeology LRF Figures.mxd (ME)
September 25, 2024

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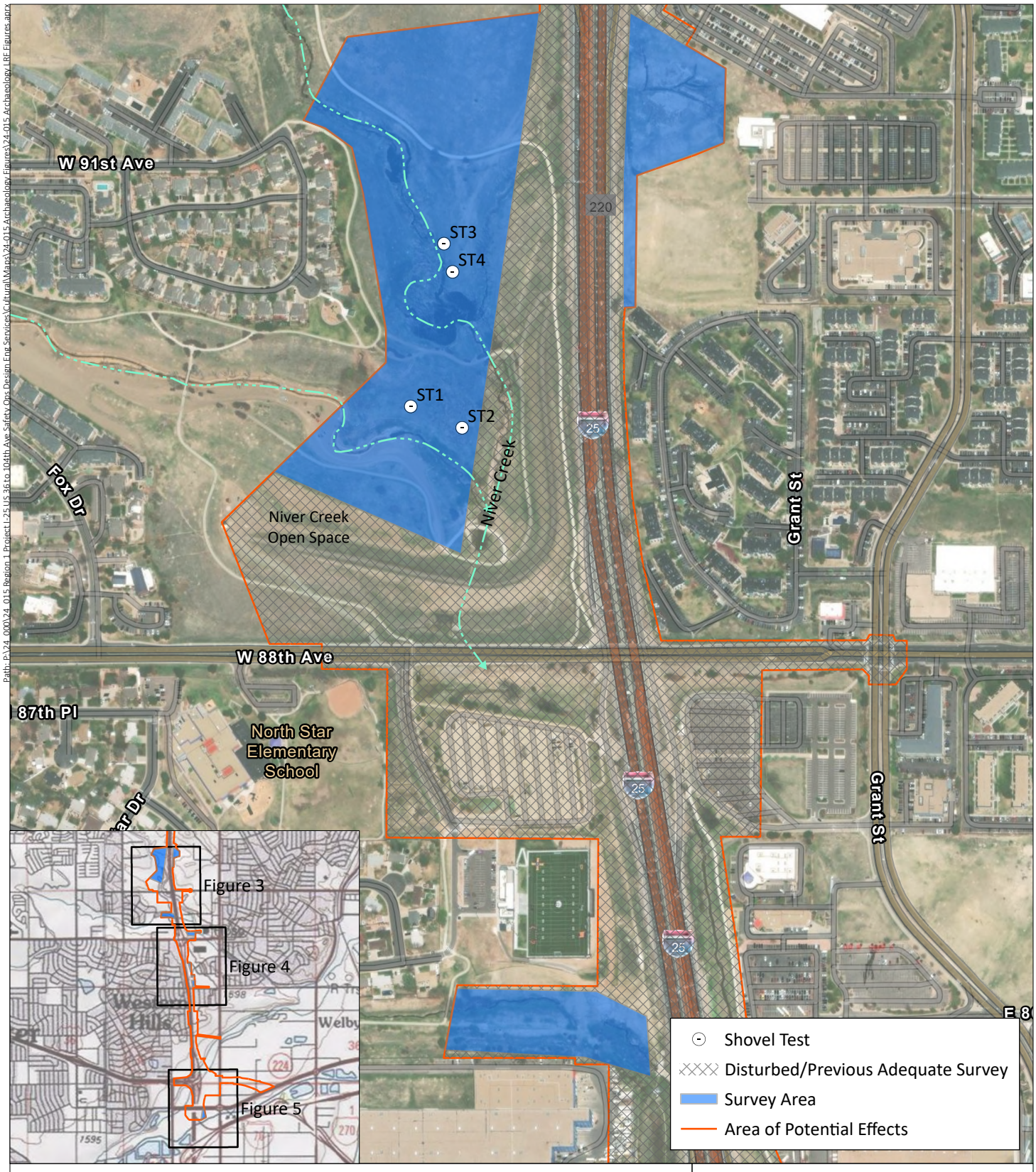
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Figure 2
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Adams County, Colorado

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Figure 3
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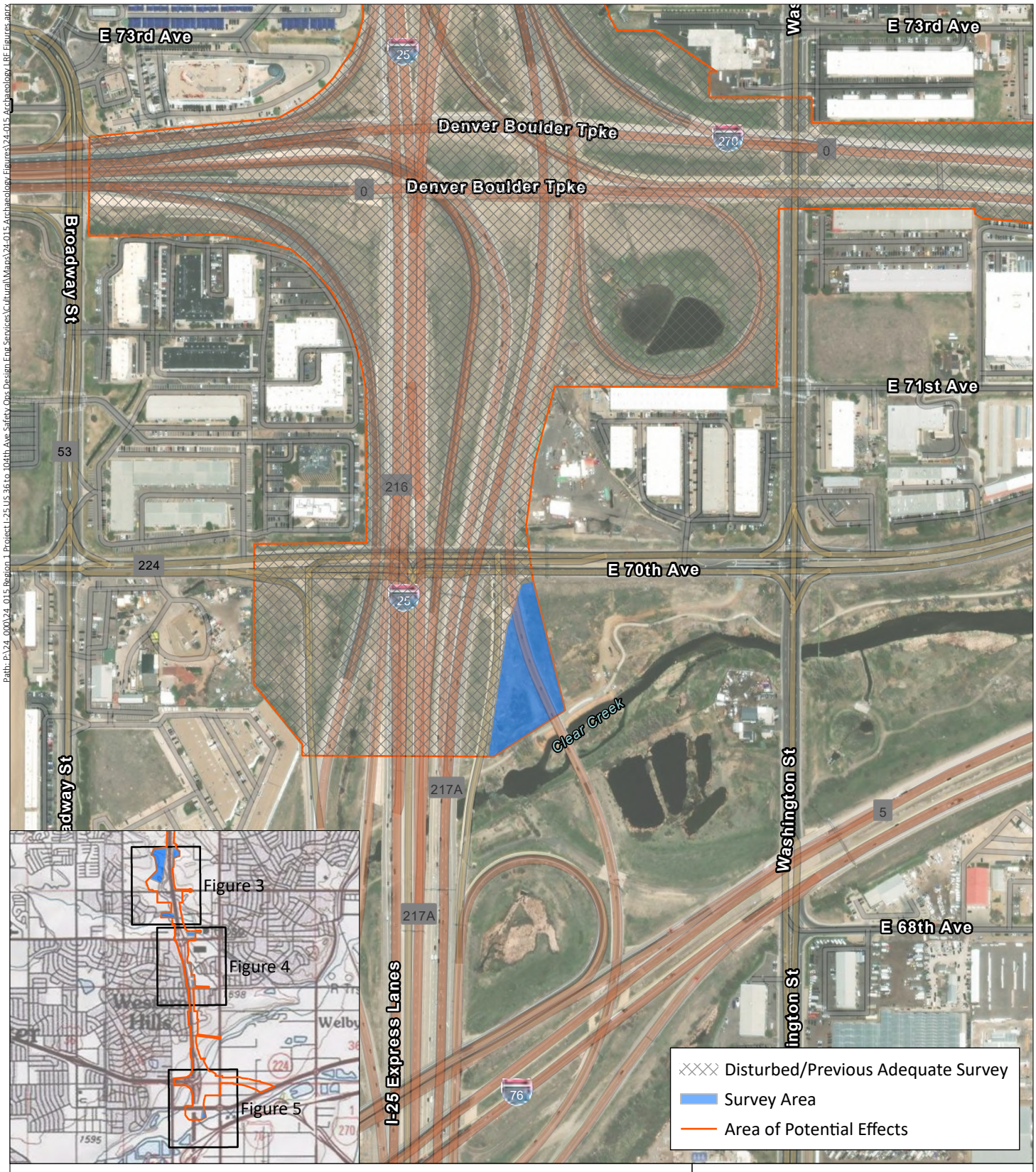
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Figure 4
Project Location

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Limited Results Archaeological Resource Survey and Testing Region 1 Project I-25 US 36 to 104th Avenue Safety Ops Design Engineering Services, Adams County, Colorado

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Adams County, Colorado

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Figure 5
Project Location

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Figure 6. Overview Niver Creek Open Space survey block at Niver Creek, view to the west. The APE is covered by fine-grained silty clay deposits overlying Denver formation bedrock, and the terraces are confined to the riparian-dominated floodplains of the active creeks.



Figure 7. APE southeast of the Starlight Road and Polaris Place intersection, view to the east, showing graded slopes associated with nearby commercial construction.



Figure 8. APE northeast of the I-25 and 84th Avenue intersection, view to the southwest.



Figure 9. APE northeast of the I-25 and 80th Avenue intersection, and the location of the preferred maintenance facility, view to the north.



Figure 10. APE east of I-25 and southwest of the Grant Way and Grant Street intersection, view to the south.



Figure 11. APE between 70th Avenue and Clear Creek, and between I-25 offramps and onramps, view to the southwest. The area is disturbed and has been transformed into a storm water catchment that has infilled with riparian vegetation.