# US 50 West: Wills Boulevard to McCulloch Boulevard (Milepost 313 to Milepost 307) 

Project Number: STA-0503-088
Project Code: 20448

# Historic and Archaeology Resources Technical Report 

Prepared for:<br>Colorado Department of Transportation, Region 2<br>905 Erie Avenue<br>Pueblo, CO 81002

Prepared by:
Felsburg Holt \& Ullevig
6300 South Syracuse Way, Suite 600
Centennial, CO 80111
(303) 721-1440

FHU Reference No. 112407-05

May 2016

## Table of Contents

Page

1. Introduction ..... 1
2. Project Description ..... 4
2.1 Proposed Action ..... 4
2.2 No Action Alternative ..... 5
3. Historic and Archaeological Resources Assessment ..... 7
3.1 Inventory Methods ..... 7
3.2 Eligibility Determinations ..... 8
3.2.1 SHPO Concurrence with Determinations of Eligibility ..... 8
3.3 Effects Determinations ..... 9
3.3.1 SHPO Concurrence with Determinations of Effects ..... 9
4. References ..... 10
Appendices
Appendix A. Site FormsAppendix B. Correspondence
List of Figures
Figure 1. Proposed Action and PEL Study Corridor ..... 3
Figure 2. Proposed Action ..... 6

## List of Acronyms and Abbreviations

APE
Ave
Blvd
CBC
CDOT
EA
FHWA
NRHP
OAHP
PEL
PWMD
Rd
ROW
SHPO
US 50
area of potential effects
Avenue
Boulevard
concrete box culvert
Colorado Department of Transportation
environmental assessment
Federal Highway Administration
National Register of Historic Places
Office of Archaeology and Historic Preservation
Planning and Environmental Linkages
Pueblo West Metropolitan District
Road
right-of-way
State Historic Preservation Officer
United States Highway 50

## 1. Introduction


#### Abstract

This environmental assessment (EA) is for safety and capacity improvements to US Highway 50 (US 50) between Wills Boulevard (Blvd) and McCulloch Blvd that the Colorado Department of Transportation (CDOT) is proposing, in consultation with Federal Highway Administration (FHWA), is proposing within the City of Pueblo, Pueblo County, and Pueblo West Metropolitan District (PWMD). This project is the third in a sequence of improvements that CDOT is making to US 50, all under the framework of the US 50 West Planning and Environmental Linkages (PEL) Study (CDOT, 2012a). The US 50 West PEL established the purpose and need, evaluated a full range of alternatives, and developed the US 50 West PEL Implementation Plan (CDOT, 2012b) for the PEL recommended Preferred Alternative within a 12-mile corridor from Swallows Road to Baltimore Avenue. Safety and capacity improvements included in the PEL recommended Preferred Alternative generally consist of widening US 50 from four lanes to six lanes from McCulloch Blvd to Wills Blvd and establishing grade-separated interchanges at McCulloch Blvd, Purcell Blvd, and Pueblo Blvd. US 50 would remain a four-lane highway west of McCulloch Blvd.


At the completion of the PEL Study, funds were not available to construct the recommended improvements for the entire PEL Corridor, leading CDOT to implement a sequence of improvement projects in coordination with FHWA. The following summarizes the sequence of completed National Environmental Policy Act (NEPA) studies and recent improvements for US 50 that have led to this US 50 West Wills Blvd to McCulloch Blvd EA, as shown in Figure 1:

- The US 50 West Purcell Blvd to Wills Blvd EA (CDOT, 2014) provides widening 3.4 miles of eastbound US 50 from two lanes to three lanes from Purcell Blvd to Wills Blvd to establish five lanes (three eastbound and two westbound). Safety improvements include adding northbound right turns onto US 50 at McCulloch Blvd and Purcell Blvd and establishing two water quality ponds on the east and west sides of Wild Horse Dry Creek. In addition, widening the eastbound bridge at Wild Horse Dry Creek accommodates a future pedestrian/bicycle path. Construction of these improvements is scheduled for completion in 2016.
- The US 50 West Wills Blvd to BNSF Acceleration Lane Categorical Exclusion (CDOT, 2015), recently approved by CDOT, establishes a westbound acceleration lane on US 50 from Wills Blvd to the BNSF right-of-way (ROW), east of the BNSF bridge, shown on Figure 1. Construction of the acceleration lane is scheduled for 2016.
- CDOT and FHWA are currently undertaking the US 50 West Wills Blvd to McCulloch Blvd EA to provide additional safety and capacity improvements to US 50. Improvements include widening 3.4 miles of westbound US 50 between Wills Blvd and Purcell Blvd, from two lanes to three lanes; and widening 2.4 miles of westbound and eastbound US 50 between Purcell Blvd and McCulloch Blvd, from two lanes to three lanes in each direction. Gradeseparated interchanges would be established within the US 50 ROW at Purcell Blvd and Pueblo Blvd. A future pedestrian/bicycle path would also be accommodated between Wills Blvd and Pueblo Blvd. A regional water quality pond is proposed to treat US 50 runoff and PWMD municipal runoff.

The Proposed Action, in combination with the improvements under construction from Purcell Blvd to Wills Blvd, would establish six-lane capacity (three lanes in each direction) in the most congested portion of the PEL Corridor, between Wills Blvd and McCulloch Blvd.

For this EA, the existing features of US 50, including the improvements approved through the US 50 West Purcell Blvd to Wills Blvd EA (CDOT, 2014) and the US 50 West Wills Blvd to BNSF Acceleration Lane Categorical Exclusion, represent the No Action Alternative. The No Action Alternative assumes that no other major capacity improvements would be made to US 50 . The No Action Alternative also includes routine maintenance to keep the existing transportation network in good operating condition.

CDOT and FHWA prepared this EA to evaluate the Proposed Action benefits and environmental impacts, relevant to the No Action Alternative. This EA will also ensure that the Proposed Action would have logical termini and independent utility and would not restrict other reasonably foreseeable transportation improvements identified in the PEL recommended Preferred Alternative.

Future elements of the PEL recommended Preferred Alternative will undergo NEPA analysis as funding for design, ROW, and construction becomes available.

## 

1 Figure 1. Proposed Action and PEL Study Corridor


## 2. Project Description

### 2.1 Proposed Action

The Proposed Action for this US 50 West Wills Blvd to McCulloch Blvd EA involves widening 3.4 miles of westbound US 50 from two lanes to three lanes, to include a third westbound lane from Wills Blvd (Milepost 313.15) to Purcell Blvd (Milepost 309.78), and widening 2.4 miles of both westbound and eastbound US 50 from Purcell Blvd (Milepost 309.78) to McCulloch Blvd (Milepost 307.34). Grade-separated interchanges would be established at Pueblo Blvd and at Purcell Blvd. The Proposed Action from Wills Blvd to McCulloch Blvd, in combination with the eastbound improvements under construction from Purcell Blvd to Wills Blvd, would six-lane capacity (three lanes in each direction), for 5.8 miles of US 50, consistent with the US 50 West PEL Implementation Plan (CDOT, 2012b).

CDOT is proposing the following transportation improvements between Wills Blvd and McCulloch Blvd:

- Wills Blvd Intersection to BNSF Railroad Bridge (Milepost 313.15 to Milepost 312.87)
- A third westbound lane would be established by restriping the Wills Blvd to BNSF acceleration lane (US 50 West Wills Blvd to BNSF Acceleration Lane Categorical Exclusion; CDOT, 2015) and by extending the westbound lane through the BNSF railroad bridge underpass to Pueblo Blvd.
- BNSF Railroad Bridge through Pueblo Blvd Intersection (Milepost 312.87 to Milepost 312.65) - The westbound lanes of US 50 in the vicinity of Pueblo Blvd would be realigned to be parallel to the eastbound lanes from Milepost 311.45 to Milepost 312.65, and the existing westbound bridge over Wild Horse Dry Creek would be replaced. A gradeseparated interchange would be established, with Pueblo Blvd crossing over US 50. The Williams Creek concrete box culvert (CBC) under the eastbound US 50 lanes would be extended 160 ft . to accommodate the realigned westbound lanes, including the westbound third-lane widening. Pueblo Blvd would be widened to accommodate two additional left turn lanes onto westbound US 50 via a right-side exit ramp. The existing westbound US 50 lanes would be retained and modified to provide access from US 50 onto southbound Pueblo Blvd. The US 50 West PEL Implementation Plan (CDOT, 2012b) identifies the Proposed Action at US 50 at Pueblo Blvd to be implemented as phased improvements over time. The Proposed Action would implement a diamond-type interchange at Pueblo Blvd. The PEL recommends a Diverging Diamond Interchange configuration, which would be implemented at some time in the future when the Pueblo Blvd Extension is developed as an expressway between US 50 and I-25 (CDOT, 2012a).
- Pueblo Blvd to Purcell Blvd Intersection (Milepost 312.65 to Milepost 309.78) - The westbound third lane would extend from Pueblo Blvd to Purcell Blvd, and a full six-lane grade-separated interchange would be developed, with US 50 crossing over Purcell Blvd. A CBC under Purcell Blvd would be extended to accommodate a future pedestrian/bicycle trail and future widening of Purcell Blvd.
- Purcell Blvd to McCulloch Blvd (Milepost 309.78 to Milepost 307.34) - The Proposed Action would include a third westbound lane extending from Purcell Blvd and terminating at a right turn onto northbound McCulloch Blvd; and a third eastbound lane extending from the newly established northbound right turn from McCulloch Blvd and terminating at Purcell Blvd. The ultimate configuration for US 50 and McCulloch Blvd, although not part of this EA, is a grade-separated interchange as identified in the US 50 West PEL Implementation Plan (CDOT, 2012b).
- Pedestrian/Bicycle Path - The Proposed Action would accommodate a future pedestrian/bicycle path within CDOT ROW along the south side of US 50 from Wills Blvd to Pueblo Blvd, which is an element of the PEL recommended Preferred Alternative (CDOT, 2012a). The slope paving adjacent to the eastbound lanes at the BNSF railroad underpass would be modified to accommodate the pedestrian/bicycle path.
- Municipal Separate Storm Sewer System (MS4) Improvements/Regional Pond - The Proposed Action would include water quality improvements and a regional pond. Stormwater runoff for the westbound lane widening and interchange improvements between Wills Blvd and the Pueblo Blvd (Milepost 313.5 to Milepost 311.15) would be directed to the two extended detention basins under construction on the east and west sides of Wild Horse Dry Creek. Stormwater runoff for the westbound and eastbound lanes between Pueblo Blvd and McCulloch Blvd (Milepost 311.5 to Milepost 307.34) would be directed to a proposed regional pond site within a private parcel west of Pueblo Blvd and south of US 50.

Figure 2 provides a general map of the Proposed Action.

### 2.2 No Action Alternative

The existing features of US 50, including the improvements approved through the US 50 West Purcell Blvd to Wills Blvd EA (CDOT, 2014) and the US 50 West Wills Blvd to BNSF Acceleration Lane Categorical Exclusion, represent the No Action Alternative. The No Action Alternative assumes that no other major capacity improvements would be made to US 50. The No Action Alternative also includes routine maintenance to keep the existing transportation network in good operating condition.

## 

Figure 2. Proposed Action


## 3. Historic and Archaeological Resources Assessment

Section 106 of the National Historic Preservation Act of 1966, as amended, requires projects proposed or funded by federal agencies to identify and assess effects to historic properties listed on or eligible for inclusion in the National Register of Historic Places (NRHP). The following subsections discuss the steps to determine whether the Proposed Action would have an effect on historic properties.

### 3.1 Inventory Methods

Inventory methods used on this project include the following:

- Established an Area of Potential Effects (APE). An APE was defined using existing US 50 ROW, including a narrow ROW acquisition along the south side of US 50 ROW between Purcell Blvd and McCulloch Blvd. The APE includes all properties subject to direct and indirect effects resulting from the construction of the Proposed Action. The APE includes the footprint of the Proposed Action.
- Conducted a file search through the Office of Archaeology and Historic Preservation (OAHP) online Compass database to determine whether previously recorded NRHP eligible or listed resources were located within or near the proposed project area.
- Reviewed Pueblo County Assessor's Office records to determine if any buildings within the project study area met the minimum age requirement for historic eligibility.
- Inventoried the APE to determine changes in the built and natural landscape over time. CDOT conducted an inventory of the APE between Wills Blvd and Purcell Blvd as a part of the US 50 West Purcell Blvd to Wills Blvd EA in September 2013 (An Intensive Archaeological Resources Inventory Along US Highway 50 in Northwest Pueblo, Pueblo County, Colorado, CDOT, 2013). This inventory was supplemented for the section of the APE from Purcell Blvd to McCulloch Blvd by analyzing historic topographical maps and historic aerial photography.
- Reviewed previous reports and site forms in the area surrounding the Proposed Action.
- Conducted site visits to verify the condition of existing and potential resources.
- Consulted with the State Historic Preservation Officer (SHPO) and the City of Pueblo Historic Preservation Commission for concurrence on CDOT's determinations of eligibility.
- Consulted with six federally recognized Native American tribes as a part of the US 50 West Purcell Blvd to Wills Blvd EA (CDOT, 2014). One tribe, the Kiowa Tribe of Oklahoma, expressed an interest in consulting. CDOT and FHWA will include the Kiowa Tribe in all notification and other public documents related to this EA.


### 3.2 Eligibility Determinations

The OAHP Compass database revealed four previously recorded resources:

- Dry Creek Bridge (5PE3913) - Dry Creek Bridge (5PE3913) was determined officially not eligible in CDOT's 2002 statewide historic bridge inventory.
- Kansas Colorado Railroad (5PE320.3) - A segment of the former Kansas Colorado Railroad (5PE320) originally crossed through the project area just east of Pueblo Blvd; the segment was documented in 2014. The overall railroad is considered eligible, but segment 5PE320.3 is an abandoned rail grade truncated by the construction of US 50 and found to be non-supporting due to extensive disturbance and urbanization. Construction of the railroad pre-dates that of the highway. A 2013 field survey indicated that the railroad segment between the eastbound and westbound lanes of US 50 and south of the eastbound lane has been destroyed, which is why the segment in the previous recording is limited to the section north of the westbound lanes. Additional information is provided on the 2014 site form (see Appendix A).
- US Highway 50 (5PE8108.1) - US 50 segment 5PE8108.1 was evaluated during a recent CDOT acceleration lane project. The overall highway is considered NRHP eligible, but the segment was found to be non-supporting to the overall resource. Additional information is provided in the 2014 site form (see Appendix A).
- Topeka and Santa Fe Railroad (5PE1665.19) - Segment 5PE1665.19, now owned and operated by BNSF, is located at the east end of the APE. The overall railroad is considered NRHP eligible, and the recorded segment was determined to support the overall resource (see Appendix A).

A review of the other sources, including historic USGS topographical maps and Pueblo County Assessor's Office records, indicated no buildings over 45 years of age and no other built environment or archaeological resources are located in the APE.

### 3.2.1 SHPO Concurrence with Determinations of Eligibility

CDOT consulted with SHPO and the City of Pueblo Historic Preservation Commission on the determinations of eligibility (see Appendix B for correspondence):

- In January 2016, CDOT consulted with SHPO and the City of Pueblo on the eligibility determinations for the Dry Creek Bridge (5PE3913), Kansas Colorado Railroad (5PE320.3), US Highway 50 (5PE8108.1), and Topeka and Santa Fe Railroad (5PE1665.19).
- The SHPO responded in correspondence dated February 1, 2016, and concurred with the APE and CDOT's eligibility determinations for 5PE3913, 5PE1665.19, 5PE8108.1, and 5PE1665.19.
- CDOT did not receive any comments from the City of Pueblo within the 30-day review period stipulated by regulation.


### 3.3 Effects Determinations

CDOT evaluated the effects of the Proposed Action on the Dry Creek Bridge (5PE3913), Kansas Colorado Railroad (5PE320.3), US Highway 50 (5PE8108.1), and Topeka and Santa Fe Railroad (5PE1665.19) by applying criteria of adverse effects in 36 CFR Part 800.5(a)(1).

- Dry Creek Bridge (5PE3913) - The Proposed Action will involve the removal of the Dry Creek Bridge. Because the bridge is not eligible, its removal would result in no historic properties affected.
- Kansas Colorado Railroad (5PE320.3) - The Proposed Action involves modifications to US 50 at Pueblo Blvd, including realigning the westbound lanes, widening the CBC at Williams Creek, and widening Pueblo Blvd. All of actions have the potential to affect the area where the railroad grade was once present. However, because the segment is no longer extant and is considered non-supporting, the project would result in no adverse effect with regard to the Kansas Colorado Railroad (5PE320), including segment 5PE320.3.
- US Highway 50 (5PE8108.1) - The Proposed Action would modify the alignment of US 50 at the Pueblo Blvd intersection. Because the resource is non-supporting, the project will result in no adverse effect with regard to 5PE8108, including segment 5PE8108.1.
- Topeka and Santa Fe Railroad (5PE1665.19) - The Proposed Action would construct a pedestrian/bicycle path within the CDOT ROW on the south side of US 50 from Wills Blvd to Pueblo Blvd. The path would pass beneath the railroad at bridge structure K-18-BL, which carries the railroad over the highway. The trail would not impact either bridge K-18BL (built in 1972) or the recorded railroad segment. The recorded segment is defined by the railroad grade, and bridge $\mathrm{K}-18$-BL is considered a non-contributing feature of the railroad resource. Because there would be no impacts to the railroad and the bike path would be outside the resource boundary, the project will result in no adverse effect.


### 3.3.1 SHPO Concurrence with Determinations of Effects

CDOT consulted with SHPO and the City of Pueblo Historic Preservation Commission on the determinations of effects (see Appendix B for correspondence):

- In January 2016, CDOT consulted with SHPO and the City of Pueblo on the effects of the Proposed Action for the Dry Creek Bridge (5PE3913), Kansas Colorado Railroad (5PE320.3), US Highway 50 (5PE8108.1), and Topeka and Santa Fe Railroad (5PE1665.19).
- The SHPO responded in correspondence dated February 1, 2016, and concurred with the effects determinations for 5PE3913, 5PE1665.19, 5PE8108.1, and 5PE1665.19.
- CDOT did not receive any comments from the City of Pueblo within the 30-day review period stipulated by regulation.


## 4. References

Colorado Department of Transportation (CDOT). 2012a. US 50 West PEL Study: Swallows Road to Baltimore Avenue. June.
—. 2012b. US 50 West PEL Implementation Plan. June.
—. 2013. An Intensive Archaeological Resources Inventory Along US Highway 50 in Northwest Pueblo, Pueblo County, Colorado. September.
—. 2014. US 50 West Purcell Blvd to Wills Blvd Environmental Assessment. June.
—. 2015. US 50 West Wills Blvd to BNSF Acceleration Lane Categorical Exclusion. October.

## Appendix A. Site Forms

- Kansas Colorado Railroad (5PE320.3)
- US Highway 50 (5PE8108.1)
- Topeka and Santa Fe Railroad (5PE1665.19)

A Management Data Form should be completed for each cultural resource recorded during an archaeological survey, Isolated finds and revisits are the exception and they do not require a Management Data Form. Please attach the appropriate component forms and use continuation pages if necessary. Fields can be expanded or compressed as necessary.

1. Resource Number: $\quad$ PEE 320.3
2. Attachments (check as many as apply)
$\square$ Prehistcric Archaeological Component
Historic Archaeological Component
Q Linear Component
Q Sketch/lnstrument Map (required)
U U.S.G.S. Map Photocopy (required)
$\triangle$ Photograph(s) (required)
Other, specify:
3. Temporary Resource Number: Temp 1
4. Official determination (OAHP use only)

Determined Eligible NRISR
Determined Not Eligible NRISR


Nominated
Need Data NRISR
$\square$ Contributing to NR Dist. ISR Dist.
Not Contributing to NR Dist. ISR Dist.
Supports overall linear eligibility NRISR
Does not support overall linear eligibility NRISR
I. IDENTIFICATION
5. Resource Name: Colorado-Kansas Railroad - segment (also known as the Kansas-Colorado Railroad and the Colorado Railroad)
6. Project Name/Number: US 50 West, Purcell to Wills (CDOT Project NH C020-027)
7. Government Involvement: $\square$ Local $\boxtimes$ State $\boxtimes F e d e r a l ~$ Agency: CDOT and Federwal Highway Administration
8. Site Categories (check as many as apply):

Prehistoric: $\square$ archaeological site $\quad \square$ paleontological site $\quad \square$ In existing National Register District
National Register District name:
Historic: $\boxtimes$ archaeology site $\square$ building(s) $\square$ structure(s) $\square$ object(s)
$\square$ In existing National Register District
National Register District name:
9. Owner(s) Name and Address: State of Colorado (highway ROW)
10. Boundary Description and Justification: Extent of visible grade and surface artifact scatter, located between the westbound highway ROW and Capri Circle, east of Wildhorse Road.

| 11. Site/Property Dimensions | Length: $\quad 95 \mathrm{~m}$ | Width: 20 m | Area: $1900 \mathrm{~m}^{2}$ | Acres ( $\mathrm{m}^{2} / 4047$ ): 0.47 |
| :---: | :--- | :--- | :---: | :---: | :---: | :---: |
| Area was calculated as: | $\boxtimes$ Length $\times$ Width (rectangle/square) | $\square$ Length $\times$ Width $\times 0.785$ (Ellipse) $\square$ GIS |  |  |

## II. LOCATION

| PM | 6th | Township | $\underline{20 S}$ | Range | 65W | Section | 15 | NE | $1 / 4$ | NW | $1 / 4$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PM |  | Township |  | Range |  | Section |  | - | 1/4 | - | $1 / 4$ |
| PM |  | Township |  | Range |  | Section |  | - | $1 / 4$ | - | $1 / 4$ |
| PM |  | Township |  | Range |  | Section |  |  | $1 / 4$ | - | $1 / 4$ |

If section is irregular, explain alignment method: Aligned on SW section corner
13. USGS Quad: Northwest Pueblo (1961, rev, 1994) 14. County: Pueblo
15. UTM Coordinates:
A. Zone 13;
B. Zone 13;
C. Zone 13;
D. Zone 13;

Datum usedNAD 27 区NAD 83WGS 84 Other:
16. UTM Source:

## $\square$ Corrected GPS/rectified survey (<5m error)

【 Uncorrected GPSMap template Other (explain):
17. Site elevation (feet): 4820 ft .
18. Address:

Lot:
Block:
Addition:
19. Location/Access: Exit on to northbound Wildhorse Road from westbound US 50. Turn right on to eastbound Capri Circle. The site is located south of Capri Circle at the SE/NW oriented fence line which marks the boundary between a private residence (with geodesic dome) and highway ROW.

## III. NATURAL ENVIRONMENT/SITE CONDITION

20. General Description (should include both on site as well as geographical setting with aspect, landforms, vegetation, soils, depositional environment, water, ground visibility): The railroad grade generally follows Williams Creek northwest from Pueblo, climbing in elevation along the way. The creek is SW from this segment of the grade by about 110 m . Sparse vegetation allows excellent visibility ( $95 \%$ ) and consists mainly of greasewood, saltbush, grasses, rabbitbrush, and yucca. There is evidence of prairie dog burrowing.
21. Soil depth (cm) and description: Light grayish brown silt with limestone and gravel, depth unknown

## 22. Condition

a. Architectural/Structural
b. Archaeological/Paleontological $\begin{aligned} & \square \text { Undisturbed } \\ & \square \text { Light disturbance } \\ & \square \text { Moderate disturbance } \\ & \text { Q Heavy disturbance } \\ & \square \text { Total disturbance }\end{aligned}$
$\square$ Excellent
$\square$ Good
$\square$ Fair
$\square$ Deteriorated
$\square$ Ruin
23. Describe condition: This segment of the railroad grade has been truncated by Capri Circle on the north and Highway 50 on the south. As a result of removal of the rails and ties in 1958 and more than fifty years of subsequent disturbance from erosion and prairie dog burrows, the grade has deteriorated noticeably. The cinders and clinkers which comprised the grade's ballast have washed away in some places.
24. Vandalism: $\square$ Yes $\boxtimes$ No

Describe: Due to easy access from the local roads and its documentation on topographic maps, it is possible that artifacts have been collected from the grade over the years.

## IV. NATIONAL/STATE REGISTER ELIGIBILITY ASSESSMENT

25. Context or Theme: Railroads in Colorado, 1858-1948 (Fraser and Strand 1997)
26. Applicable National Register Criteria:
$\triangle$ A. Associated with events that have made a significant contribution to the broad pattern of our history
$\square$ B. Associated with the lives of persons significant in our past
$\square$ C. Embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction
$\square$ D. Has yielded, or may be likely to yield, information important in history or prehistory
$\square$ Does not meet any of the National Register criteria
$\square$ Qualifies under exceptions A through G. List exception(s):
27. Applicable State Register Criteria:
$\boxtimes$ A. Property is associated with events that have made a significant contribution to history
$\square$ B. Property is connected with persons significant in history
$\square$ C. Property has distinctive characteristics of a type, period, method of construction or artisan
$\square$ D. Property is of geographic importance
$\square$ E. Property contains the possibility of important discoveries related to prehistory or history
$\square$ Does not meet any of the State Register criteria
28. Area(s) of significance: Transportation
29. Period(s) of significance: 1912-1958 (dates of operation)
30. Level of significance: $\square$ National $\square$ State $\boxtimes ~ L o c a l ~$
3.1. Statement of significance: The railroad played an important role in transporting sandstone and clay from the quarries at Stone City to Pueblo for use in construction projects in the city (such as the Pueblo County Courthouse) and for redistribution elsewhere between 1912 and 1958 (but primarily 1912-1934). Eligibility of the entire linear resource is undetermined, but is assumed eligible for purposes of Section 106 consultation regarding the present undertaking. However, this segment lacks sufficient integrity to convey historical significance and thus is evaluated as a nonsupporting segment of the linear resource.
31. Statement of historic integrity related to significance: After abandonment of the railroad in August 1958, the rails and ties were removed. Subsequent construction and maintenance of the highway and local roads, plus installation of buried utilities, has extensively disturbed the railroad grade in this vicinity. Years of erosion has rendered the grade barely distinguishable from the surrounding landscape. As a result, this portion of the grade lacks in all aspects of historic integrity (location, design, setting, materials, workmanship, feeling, and association).
$\begin{array}{lll}\text { 33. National Register Eligibility Field Assessment: } & \square \text { Eligible } & \square \text { Not eligible } \\ \text { Linear Segment Evaluation (if applicable): } & \square \text { Supporting } & \text { Non Supporting } \\ \text { 34. Status in an Existing National Register District: } & \square \text { Need data } \\ \text { 35. State Register Eligibility Field Assessment: } & \square \text { Eligibuting } & \square \text { Non-contributing } \\ \text { 36. Status in an Existing State Register District: } & \square \text { Contributing } & \square \text { Not eligible } \\ & \square \text { Non-contributing }\end{array}$
32. National/State Register District Potential: $\square$ Yes $\boxtimes$ No Describe: Extensive disturbance within and adjacent to the highway ROW has essentially destroyed the railroad grade and any associated features in this vicinity
33. Cultural Landscape Potential: $\square$ Yes $\boxtimes$ No Describe: Extensive disturbance within the highway ROW and modern development adjacent to the highway has drastically changed the cultural landscape in this vicinity
34. If Yes to either 37 or $\mathbf{3 8}$, is this site: $\qquad$ ContributingNon-contributing Explain:

## V. MANAGEMENT AND ADMINISTRATIVE DATA

40.Threats to Resource: $\quad$ Water erosion $\square$ Wind erosion $\square$ Grazing $\quad$ Neglect $\square$ Vandalism $\square$ Recreation $\boxtimes$ Construction $\square$ Other (explain):

41. Existing protection | Other (specify): |
| :--- |
| Comments: |$\quad \square$ Marked $\quad \square$ Fenced $\quad \square$ Patrolled $\quad \square$ Access controlled
42. Local landmark designation: None
43. Recorder's Management Recommendations: No further work

## VI. DOCUMENTATION

45. Previous actions accomplished at the site: $\quad \square$ Tested $\quad \square$ Partial excavation $\square$ Complete excavation

Date(s):
a. Excavations:
b. Stabilization:
43. Easement: None
c. HABS/HAER documentation [date(s) and numbers]:
d. Other:
46. Known collections/reports/interviews and other references (list): Shortline to Stone City: A History of the Colorado-Kansas Railway, Utah State University M.A. Thesis, J. Bradford Bowers (2005); "Fort Carson: A Tradition of Victory" (Fort Carson Public Affairs Office, n.d., p. vii); photographs at Pueblo County Historical Society (also available on line); Tracking Ghost Railroads in Colorado (Robert Ormes 1975); Colorado Railroads: Chronological Development (Tivis E. Wilkins (1974); "Railroads in Colorado, 1858-1948: Multiple Property Listing" (Fraser and Strand 1997; pp. 74 and 97); previous OAHP site documentation for 5PE. 320 (Martin and Born 1978; Carrillo and Jepson 1989; Nathan et al. 1997; Pfertsh and Pawlowski 2010); Interstate Commerce Commission Reports: Decisions of the Interstate Commerce Commission of the United States, Volume 103 (U.S. Interstate Commerce Commission 1926); a 1918 biography of Robert K. Potter, VP and general manager of Colorado \& Kansas Railroad Company, at http://files.usgwarchives.net/co/pueblo/bios/potter90nbs.txt

## 47. Primary location of additional data:

48. State or Federal Permit number: State of Colorado Non-Collection Survey Permit 2013-11
49. Collection: Artifact collection authorized: $\square$ Yes $\boxtimes$ No Were artifacts collected: $\square$ Yes $\boxtimes$ No Artifact repository:

Collection method: $\quad \square$ Diagnostics $\square$ Grab Sample $\square$ Random Sample
Other (specify):
50. Photograph Numbers: IMG_6274-IMG_6284

Files or negatives stored at: CDOT Archaeological Unit, Denver
51. Report title: An Intensive Archaeological Resource Inventory Along U.S. Highway 50 West of Pueblo, Pueblo County, Coiorado
52. Recorder(s): Greg Wolff

Date: 7/26/2103
53. Recorder affiliation: Colorado Department of Transportation

Phone number/Email: (303) 757-9158 Greg.Wolff@state.co.us
NOTE: Please attach a site map, a photocopy of the USGS 1:24000 map indicating resource location, and photographs.

> History Colorado - Office of Archaeology \& Historic Preservation
> 1200 Broadway, Denver, CO 80203
> $303-866-3395$

This form should be completed for each linear resource or linear segment. Use this form in conjunction with the Management Data Form. Call OAHP staff (303-866-5216) prior to assigning a resource number.

## I. Resource Identification

1. Resource Number: 5PE. 320.3 2. Temporary Resource Number: Temp 1
2. Site Name: Colorado-Kansas Railroad (originally the Kansas-Colorado Railroad, later the Colorado Railroad)
3. Record of: $\square$ Entire resource $\boxtimes$ Segment
II. Resource Description
4. Resource Type:Road

Q Railroad
$\square$ Trail
$\square$ Ditch/Canal
Other (specify):
6. Component Description: The resource consists of a short, deteriorated segment of railroad grade and a light scatter of associated artifacts. The grade is roughly 10 meters wide (varying slightly due to slumping from erosion over the last 55 years), with artifacts scattered up to a few meters beyond either side of the grade. The segment is about 95 meters long, truncated on the south by the westbound US Highway 50 ROW and on the north by Capri Circle, a local road which provides access to a residence immediately east of the resource.

## 7. Original use: Raiiroad grade

## 8. Current use: Abandoned

9. Modifications (describe and include dates): Construction of the original railroad began in 1908 and the last new construction along the line concluded in 1912. This portion of the grade was constructed in 1911. Construction of the original two-lane State Highway 6 (now US Highway 50) by the US Public Works Project 271-H in 1934 crossed the grade between Williams Creek and Wild Horse Creek/Dry Creek. The railroad was dismantled in August 1958. Ensuing improvements to the highway in 1962 from Federal Aid Project F 001-3(14), in addition to the construction of two additional eastbound lanes circa 1974 by Federal Aid Project F 050-3(5) and the subsequent realignment of the old graveled county road from Pueblo to Wiidhorse to the existing SH 45NWildhorse Road alignment, truncated the railroad grade and resulted in the isolated segment presently documented. Recent installation of buried and overhead utilities has also impacted the vicinity.
10. Extent of Entire Resource: Based on historical records, the entire resource is roughly 22 miles long, extending from Pueblo northwest to the former quarry at Stone City (now located within the Fort Carson Military Reservation). Aerial images suggest that the eastern half of the resource has been extensively disturbed by urban and residential development in Pueblo and Pueblo West. The aerial imagery suggests that there is potential for better preservation of the resource in the western half, on private range lands and on Fort Carson.
11. Associated Artifacts: Numerous cinders, clinkers, and pieces of coal; one 6 " railroad spike; a large metal bolt and nut; and a few pieces of clear window pane glass, small concrete fragments, and small cinder block fragments. The latter may represent small scale episodes of refuse dumping.

## 12. Associated Features or Resources: None

## III. Research Information

13. Architect/Engineer: Kansas-Colorado Construction Company

Source(s) of Information: Interstate Commerce Commission Reports, Volume 103 (U.S. ICC 1926)
14. Builder: A.B. Hulit (contractor)

Source(s) of Information: Interstate Commerce Commission Reports, Volume 103 (U.S. ICC 1926)
15. Date of Construction / Date Range:

Railroad constructed October 1908-August 1912 (this segment constructed in 1911); operated June 1912-August 1958
Fraser and Strand 1997; Wilkins 1974; Ormes 1975; ICC 1926; previous OAHP site Source(s) of Information: documentation (Martin and Born 1978; Carrillo and Jepson 1989; Nathan et al. 1997; Pfertsh and Pawlowski 2010); and other historical records (see MDF Item 46)
16. Historical / Archival Data: The Kansas-Colorado Railway Company was incorporated perhaps as early as 1898, although a 1926 ICC report indicates incorporation in Colorado in June 1908. However, initial construction of the short railroad which operated between Pueblo and the stone quarries and clay mines to the west at Stone City didn't commence until 1908. A commemorative "last spike" was driven on November 23, 1909, signifying completion of the preliminary portion of the railroad. It operated only briefly as the Kansas-Colorado Railroad, with the company going bankrupt in 1910. After bankruptcy, the company reorganized as the Colorado-Kansas Railway Company and resumed operations in March 1911. This particular segment of the railroad was constructed in 1911, when 14.8 miles of grade were completed between northwest Pueblo and Turkey Creek. The first train reached Stone City in June 1912. As stone gradually fell from favor as a building material and the Great Depression slowed major construction projects, the Stone City quarries closed in 1930 and the railway company became financially insolvent. After dissolution of the Colorado-Kansas Railway Company in 1934, the railroad was operated on a limited basis by the Colorado Railroad, Inc., hauling clay and freight beginning in September 1938 until traffic was halted after several bridges were destroyed by flash floods in 1957. The rails and ties were removed in August 1958 after the railroad was officially abandoned. At its peak, the railroad consisted of 22.8 miles of standard-gauge track which utilized $70 / 75 \mathrm{lb}$. rails on a $2.0 \%$ maximum grade. The Colorado-Kansas Railroad operated a steam engine, 16 freight cars, and one passenger car. After 1938, the Colorado Railroad operated an electric engine.

## 17. Cultural Affiliation and Justification: Euroamerican (historical records)

## IV. Management Recommendations

18. Eligibility of Entire Resource
$\square$ Eligible $\square$ Not Eligible $\boxtimes$ Need Data is this an official determination? $\square$ Yes $\boxtimes$ No
Remarks / Justification: The historical significance of the railroad (as a whole) remains undetermined. Although the railroad was recommended as NRHP-eligible when segment 5 PE320.1 was recorded in 1978, justification for its historical significance was not provided. When that segment was re-evaluated in 1989 and 1997, the railroad was evaluated as not eligible for the NRHP with minimal justification. When segment 5PE320.2 was recorded in 2010, the railroad as a whole was evaluated as not eligible. However, the official determination recorded in Compass reflects only that segment 5PE320.2 does not support the eligibility of the entire linear resource.
19. Evaluation of integrity of the segment of the entire linear resource being recorded (Complete only if "Segment" under item 4 is checked and the entire resource is marked as Eligible under item 18)
$\square$ Supporting $\triangle$ Non-supporting $\square$ Not applicable
Remarks / Justification: After abandonment of the railroad in August 1958, the rails and ties were removed. Subsequent construction and maintenance of the highway and local roads, plus installation of buried utilities, has extensively disturbed the railroad grade in this vicinity. Years of erosion has rendered the grade difficult to distinguish from the surrounding landscape. As a result, this portion of the grade lacks in all aspects of historic integrity (location, design, setting, materials, workmanship, feeling, and association).
20. Recorder(s): Greg Wolff, Colorado Department of Transportation 21. Date: 7/26/2013

Colorado Historical Society - Office of Archaeology \& Historic Preservation
1560 Broadway, Suite 400 Denver, CO 80202
303-866-3395


Looking northwest at 5PE320.3, US 50 on ieft, Capri Circle in background, ROW fence on right.

## Linear Component Form

## Resource Number: 5PE. 320.3

Temporary Resource Number: Temp 1


Looking northwest at middle portion of 5PE320.3, Capri Circle in background. Note eroded grade.

## Linear Component Form

Resource Number: 5PE. 320.3
Temporary Resource Number: Temp 1


Looking southeast at 5PE320.3, Capri Circle on left, US 50 in background.

## Resource Number: 5PE.320.3

Temporary Resource Number: Temp 1


Looking northwest at northern terminus of 5PE320.3, truncated by Capri Circle.



Portion of Northwest Pueblo 7.5' USGS topographic map showing location of 5PE302.3

## 5PE320.3

7/26/13
G. Wolff, CDOT





1 inch $=400$ feet

FELSBURG HOLT \& ULLEVIG

Area of Potential Effects Site Map US 50 West: Wills to McCulloch

A Management Data Form should be completed for each cultural resource recorded during an archaeological survey. Isolated finds and revisits are the exception and they do not require a Management Data Form. Please attach the appropriate component forms and use continuation pages if necessary. Fields can be expanded or compressed as necessary.

1. Resource Number: 5PE.8108.1
2. Attachments (check as many as apply)
$\square$ Prehistoric Archaeological Component
$\square$ Historic Archaeological Component
$\boxtimes$ Linear Component
Sketch/Instrument Map (required)
U.S.G.S. Map Photocopy (required)

X Photograph(s) (required)
$\square$ Other, specify:

## 2. Temporary Resource Number:

4. Official determination (OAHP use only)
$\square$ Determined Eligible NRISR
$\square$ Determined Not Eligible NRISR
$\square$ NominatedNeed Data NRISR
Contributing to NR Dist. $\overline{\text { SRR Dist. }}$Not Contributing to NR Dist.ISR Dist. Supports overall linear eligibility NRISR Does not support overall linear eligibility $N R \overline{S R}$

## I. IDENTIFICATION

5. Resource Name: US Highway 50
6. Project Name/Number: US 50 West Wills to BNSF Acceleration Lane Categorical Exclusion
7. Government Involvement: $\quad \square$ Local $\quad \boxtimes$ State $\quad \square$ Federal
Agency: Colorado Department of Transportation, Region 2
8. Site Categories (check as many as apply):

Prehistoric: $\quad \square$ archaeological site
$\square$ paleontological site
$\square$ In existing National Register District
National Register District name: n/a
Historic: $\square$ archaeology site $\square$ $\square$ building(s)
$\boxtimes$ structure(s)object(s)
$\square$ In existing National Register District

National Register District name: $\mathrm{n} / \mathrm{a}$
9. Owner(s) Name and Address: Colorado Department of Transportation - 4201 E Arkansas Ave, Denver, CO 80222
10. Boundary Description and Justification: The boundary consists of the length of the highway (approx. 6 miles) and the width of the right-of-way along US Hwy 50 between Wills Boulevard and McCulloch Boulevard in Pueblo West. The right-of-way varies between 300 feet and 900 feet throughout the recorded segment.
11. Site/Property Dimensions Length: 8800 m Width: 100 m Area: $880,000 \mathrm{~m}^{2}$ Acres ( $\mathrm{m}^{2} / 4047$ ): $\underline{220}$ Area was calculated as: $\boxtimes$ Length $\times$ Width (rectangle/square) $\square$ Length $\times$ Width $\times 0.785$ (Ellipse) $\square$ GIS

## II. LOCATION

## 12. Legal Location

$\begin{array}{llllllll}\mathrm{PM} & \underline{6} & \text { Township } \underline{20 S} & \text { Range } \underline{65 \mathrm{~W}} & \text { Sections } & \underline{7,8,9,} & 1 / 2 & 1 / 4\end{array}$ If section is irregular, explain alignment method: n/a
13. USGS Quad: Northwest Pueblo, 1961, rev. 1994
15. UTM Coordinates: $\quad$ Datum used $\quad \square$ NAD 27
14. County: Pueblo

| A. Zone | $\underline{13} ;$ | $\underline{522373}$ | mE | $\underline{4243120}$ | mN |
| :--- | :--- | :--- | :--- | :--- | :--- |
| B. Zone | $\underline{13} ;$ | $\underline{522370}$ | mE | $\underline{4243059}$ | mN |
| C. Zone | $\underline{13} ;$ | $\underline{531304}$ | mE | $\underline{\underline{2240394}}$ | mN |
| D. Zone | $\underline{13} ;$ | $\underline{531308}$ | mE | $\underline{4240429}$ | mN |

16. UTM Source:
$\square$ Corrected GPS/rectified survey (<5m error)

Other (explain):
17. Site elevation (feet): 4,990
18. Address:

Lot: n/a Block: n/a Addition: $\underline{n} / \mathrm{a}$
19. Location/Access: US Hwy 50 between Wills Boulevard and McCulloch Boulevard

## III. NATURAL ENVIRONMENT/SITE CONDITION

20. General Description (should include both on site as well as geographical setting with aspect, landforms, vegetation, soils, depositional environment, water, ground visibility): This segment of US Highway 50 extends from Wills Boulevard at the east end, to McCulloch Boulevard on the west in what is known as the town of Pueblo West. The entire recorded segment consists of a 4-lane highway. The segment splits approximately 0.5 miles west of Wills Boulevard and remains split through the Pueblo Boulevard intersection before re-merging approximately 0.5 miles west of Pueblo Boulevard. Williams Creek and Wild Horse Creek both cross the recorded segment in proximity to Pueblo Boulevard. Commercial development is common along the recorded segment, with some areas of undeveloped shortgrass prairie.
21. Soil depth (cm) and description: n/a
22. Condition
a. Architectural/StructuralExcellent
Good
b. Archaeological/Paleontological
FairUndisturbed
Deteriorated
$\square$ Moderate disturbance
$\square$ Heavy disturbance
$\square$ Total disturbance
$\square$ Ruin
23. Describe condition: The recorded segment is in relatively good condition overall. Bridge structures located at both Williams Creek and Wild Horse Creek require complete reconstruction. The highway is regularly maintained.
24. Vandalism: $\square$ Yes
『 No
Describe: n/a

## IV. NATIONALISTATE REGISTER ELIGIBILITY ASSESSMENT

25. Context or Theme: Colorado Engineering

## 26. Applicable National Register Criteria:

® A. Associated with events that have made a significant contribution to the broad pattern of our historyB. Associated with the lives of persons significant in our pastC. Embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinctionD. Has yielded, or may be likely to yield, information important in history or prehistoryDoes not meet any of the National Register criteriaQualifies under exceptions A through G. List exception(s):
27. Applicable State Register Criteria:
A. Property is associated with events that have made a significant contribution to historyB. Property is connected with persons significant in history
$\square$
C. Property has distinctive characteristics of a type, period, method of construction or artisanD. Property is of geographic importanceE. Property contains the possibility of important discoveries related to prehistory or history

Does not meet any of the State Register criteria
28. Area(s) of significance: Transportation, Commerce
29. Period(s) of significance: 1916 -1945
30. Level of significance: $\square$ National $\boxtimes$ State $\boxtimes$ Local
31. Statement of significance: The entire highway is considered significant as an engineered route under Criterion A for its contribution to the development of transportation in Colorado and as a transcontinental highway.
32. Statement of historic integrity related to significance: The segment in the project area is represented by two westbound and two eastbound lanes with paved shoulders and paved/painted median and then a grassy median. As it approaches Pueblo West from the west, the highway right of way expands and a broad grassy median separates the east and westbound lanes. Overall the segment has lost integrity of setting, workmanship, materials, feeling, and association. The segment includes an interchange at the State Highway 45 intersection that was built within the past 40 years and is not within the period of significance for this highway of 1916-1945. For these reasons, the highway lacks integrity and is considered non-supporting.
$\begin{array}{llll}\text { 33. National Register Eligibility Field Assessment: } & \boxed{y} \text { Eligible } & \square \text { Not eligible } & \square \text { Need data } \\ \text { Linear Segment Evaluation (if applicable): } & \square \text { Supporting } & \square \text { Non Supporting } & \\ \text { 34. Status in an Existing National Register District: } & \square \text { Contributing } & \square \text { Non-contributing } & \\ \text { 35. State Register Eligibility Field Assessment: } & \boxed{\text { Eligible }} & \square \text { Not eligible } & \square \text { Need data } \\ \text { 36. Status in an Existing State Register District: } & \square \text { Contributing } & \square \text { Non-contributing } & \end{array}$ 37. National/State Register District Potential: $\square$ Yes $\triangle$ No Describe: There are no known districts in the immediate project area. The highway may be part of a larger district but this was not evaluated for the project.
38. Cultural Landscape Potential: $\square$ Yes $\boxtimes$ No Describe: The area along this segment of highway has seen significant change over time including the construction of the interchange at SH 45 and recent commercial development. Therefore, it is unlikely that there is potential for a cultural landscape designation in the project area.
39. If Yes to either 37 or 38, is this site: $\square$ Contributing $\square$ Non-contributing Explain: $\underline{\mathrm{n} / \mathrm{a}}$

## V. MANAGEMENT AND ADMINISTRATIVE DATA

40.Threats to Resource: $\quad \square$ Water erosion $\quad \square$ Wind erosion $\square$ Grazing $\square$ Neglect $\square$ Vandalism $\square$ Recreation $\boxtimes$ Construction $\square$ Other (explain): The road is an operating highway subject to maintenance.
41. Existing protection
$\boxtimes$ None
$\square$ Marked
$\square$ Fenced
Patrolled
$\square$ Access controlled
Other (specify): n/a
Comments: n/a
42. Local landmark designation: n/a
43. Easement: n/a
44. Recorder's Management Recommendations: No further work.

## VI. DOCUMENTATION

45. Previous actions accomplished at the site: $\square$ Tested $\quad \square$ Partial excavation $\square$ Complete excavation

Date(s): n/a
a. Excavations: n/a
b. Stabilization: n/a

Date(s): $\underline{n} / \mathrm{a}$
c. HABS/HAER documentation [date(s) and numbers]: $\underline{\mathrm{n} / \mathrm{a}}$
d. Other: $\underline{n} / \mathrm{a}$

## Management Data Form

46. Known collections/reports/interviews and other references (list):

Edlund, Alvin Jr. A Brief History of America's Backbone (aka the loneliest road in America) and How it Came to Pass Through Central Colorado. At http://www.route50.com/history.htm.

Salek, Matt. The Highways of Colorado. Available at: http://www.mesalek.com/colo/. Accessed on 5/22/2015.
Maps of the State Highway System, 1916-1980s.
47. Primary location of additional data: $\underline{n / a}$
48. State or Federal Permit number: n/a
49. Collection: Artifact collection authorized: $\quad \square$ Yes $\square$ No Were artifacts collected: $\square$ Yes $\boxtimes$ No

Artifact repository: n/a
Collection method: $\square$ Diagnostics $\quad \square$ Grab Sample $\quad \square$ Random Sample
Other (specify): $\underline{\mathrm{n} / \mathrm{a}}$
50. Photograph Numbers: 5PE8108.1_1, 5PE8108.1_2, 5PE8108.1_3, 5PE8108.1_4, Files or negatives stored at: CDOT Headquarters - 4201 E Arkansas Ave, Denver, CO 80222
51. Report title: None
52. Recorder(s): Lisa Schoch

Date: July 2015
53. Recorder affiliation: CDOT

Phone number/Email: $\underline{303.512 .4258}$
NOTE: Please attach a site map, a photocopy of the USGS 1:24000 map indicating resource location, and photographs.

> History Colorado - Office of Archaeology \& Historic Preservation
> 1200 Broadway, Denver, CO 80203
> $303-866-3395$

This form should be completed for each linear resource or linear segment. Use this form in conjunction with the Management Data Form. Call OAHP staff (303-866-5216) prior to assigning a resource number.

## I. Resource Identification

1. Resource Number: 5PE.8108.1

## 2. Temporary Resource Number:

3. Site Name: US Highway 50
4. Record of: $\square$ Entire resource
Q Segment
II. Resource Description
5. Resource Type: $\quad$ Road $\quad \square$ Railroad $\quad \square$ Trail $\quad$ Ditch/Canal

Other (specify):
6. Component Description: This segment of US Highway 50 generally runs in an east-west orientation. The recorded segment, approximately 6 miles long and 300 feet in width, extends between Wills Boulevard on the east and McCulloch Boulevard on the west. The segment provides access into the community of Pueblo West and various commercial enterprises are located along the recorded segment. The entire recorded segment consists of a 4-lane highway, and splits approximately 0.5 miles west of Wills Boulevard where it crosses through the Pueblo Boulevard intersection before re-merging approximately 0.5 miles west of the Pueblo Boulevard intersection. Williams Creek and Wild Horse Creek both cross the recorded segment in proximity to Pueblo Boulevard.
7. Original use: Road
8. Current use: Highway
9. Modifications (describe and include dates): The highway has been widened over time and a large interchange at Pueblo Boulevard (SH 45) was built in 1974. Other associated Federal Aid or other projects for this segment of the highway include: Federal Aid Project F 001-3(14), 1962-1963, and Federal Aid Project F-050-3(5), circa 1973.
10. Extent of Entire Resource: The overall US Highway 50 extends for over 3,000 miles from Ocean City, Maryland to Sacramento California. In Colorado, the highway extends through 11 counties from the Kansas border to the Utah border.
11. Associated Artifacts: None
12. Associated Features or Resources: n/a

## III. Research Information

13. Architect/Engineer: n/a

Source(s) of Information: n/a
14. Builder: Colorado State Highway Department

Source(s) of Information: State Highway Map, 1916
15. Date of Construction / Date Range: Circa 1916, though the route was likely built much earlier. Source(s) of Information: State Highway Map, 1916

## Linear Component Form <br> Temporary Resource Number: 5PE.8108.1

16. Historical / Archival Data: US Highway 50 is known nationally as "America's Backbone"-and extends from Ocean City, Maryland to Sacramento, California for a total of 3,073 miles.

US Highway 50 in Colorado extends for over 440 miles through eleven counties from the Kansas to the Utah borders. Statewide, the highway has remained on its alignment in rural areas. By 1938, all of US 50 was paved, except for Monarch Pass, which was paved by 1946.

The segment west of Pueblo appears as early as 1916 on state highway maps. It was initially identified as State Route 5 in maps up to 1922. From the mid-1920s to the late 1960s, the highway was labeled for US Highways 6 and 50 . By the 1980s, it was identified just as US 50 in the segment extending west from Pueblo to the Fremont County line. In Pueblo County, the highway has undergone several changes in alignment. Initially it extended from the Fremont/Pueblo County line southeast to what is now Pueblo West, across the Turkey Creek Arroyo near present Carrizo Avenue. From the current US 50/SH 45 intersection, the highway initially extended southeast on Wild Horse Road into Pueblo. In 1934, the route was changed so it no longer extended through Pueblo West. Rather, from the Fremont/Pueblo County line, the US 50 alignment was moved to its current alignment north of Pueblo where it intersects US 85 at Elizabeth Street. By 1951, US 85/87 was moved to the I-25 alignment. The current alignment of US 50 north of Pueblo and east of I-25 was built around 1957.

Within the documented segment, the interchange at the intersection of SH 45 and US 50 was under construction in 1974.

Edlund, Alvin Jr. A Brief History of America's Backbone (aka the loneliest road in America) and How it Came to Pass Through Central Colorado. At http://www.route50.com/history.htm.

Salek, Matt. The Highways of Colorado. Available at: http://www.mesalek.com/colol. Accessed on 5/22/2015.
Maps of the State Highway System, 1916-1980s.
17. Cultural Affiliation and Justification: n/a

## IV. Management Recommendations

## 18. Eligibility of Entire Resource



Remarks / Justification: The entire highway is considered significant as an engineered route under Criterion A for its contribution to the development of transportation in Colorado and as a transcontinental highway.
19. Evaluation of integrity of the segment of the entire linear resource being recorded (Complete only if "Segment" under item 4 is checked and the entire resource is marked as Eligible under item 18)
$\square$ Supporting $\boxtimes$ Non-supporting $\square$ Not applicable
Remarks / Justification: The segment in the project area is represented by two westbound and two eastbound lanes with paved shoulders and paved/painted median and then a grassy median. As it approaches Pueblo West from the west, the highway right of way expands and a broad grassy median separates the east and westbound lanes. Overall the segment has lost integrity of setting, workmanship, materials, feeling, and association. The segment includes an interchange at the State Highway 45 intersection that was built within the past 40 years and is not within the period of significance for this highway of 1916-1945. For these reasons, the highway lacks integrity and is considered non-supporting.
20. Recorder(s): Lisa Schoch - CDOT Headquarters 21. Date: July 2015

Colorado Historical Society - Office of Archaeology \& Historic Preservation 1560 Broadway, Suite 400 Denver, CO 80202

303-866-3395


5PE.8108.1 Sketch Map US 50 West Wills to BNSF Acceleration Lane CatEx


FELSBURG
HOLT \&
ULLEVIG

Resource Number: 5PE.8108.1
Resource Name: US Highway 50 Segment

## Photographs



5PE8108.1_1: View west from Wills Boulevard at the east end of the recorded segment


5PE8108.1_2: View east from McCulloch Boulevard at the west end of the recorded segment

Resource Number: 5PE.8108.1
Resource Name: US Highway 50 Segment

## Photographs



5PE8108.1_3: View west toward Pueblo Boulevard where US Highway 50 splits. Bridges that span Wild Horse Creek can be seen in the background


5PE8108.1_4: View east toward the highway split. This photo was taken approximately one-half mile west of Pueblo Boulevard where the highway merges again

A Management Data Form should be completed for each cultural resource recorded during an archaeological survey. Isolated finds and revisits are the exception and they do not require a Management Data Form. Please attach the appropriate component forms and use continuation pages if necessary. Fields can be expanded or compressed as necessary.

1. Resource Number: 5PE.1665.19
2. Attachments (check as many as apply)
$\square$ Prehistoric Archaeological Component
$\square$ Historic Archaeological Component
$\boxtimes$ Linear Component
Sketch/Instrument Map (required)
$\boxtimes$ U.S.G.S. Map Photocopy (required)
X Photograph(s) (required)
$\square$ Other, specify:

## 2. Temporary Resource Number:

4. Official determination (OAHP use only)
$\square$ Determined Eligible NRISR
$\square$ Determined Not Eligible NRISR
$\square$ Nominated
$\square$ Need Data NRISR
$\square$ Contributing to NR Dist. $\overline{\text { ISR Dist. }}$ ist.
$\square$ Not Contributing to NR Dist.ISR Dist.
$\square$ Supports overall linear eligibility NRISR
$\square$ Does not support overall linear eligibility NRISR

## I. IDENTIFICATION

5. Resource Name: Atchison, Topeka \& Santa Fe Railway
6. Project Name/Number: US 50 West Wills to BNSF Acceleration Lane Categorical Exclusion
7. Government Involvement: $\quad \square$ Local $\quad \boxtimes$ State $\quad \square$ Federal
Agency: Colorado Department of Transportation, Region 2
8. Site Categories (check as many as apply):

Prehistoric: $\square$ archaeological site
$\square$ paleontological site
In existing National Register District
National Register District name: n/a
Historic: $\quad \square$ archaeology site $\quad \square$ $\square$ building(s)

】structure(s)object(s)
$\square$ In existing National Register District
National Register District name: n/a
9. Owner(s) Name and Address: Burlington Northern and Santa Fe (BNSF) Railway - 2650 Lou Menk Dr, Fort Worth, TX 76131-2830
10. Boundary Description and Justification: This 2,600 -foot ( 0.49 mile) long segment contains the section of the railroad located within Section 15, Township 20S, Range 65W, which crosses US Highway 50 in northwest Pueblo. The segment begins approximately 1,400 feet northeast of the US Hwy 50 right of way and ends approximately 1,000 feet southwest of US Hwy 50, just west of Kachina Place - a private industrial park road. The railroad boundary width is confined to the railroad grade and ballast throughout the recorded segment which varies between 20 and 30 feet in width.
11. Site/Property Dimensions Length: $\underline{814 \mathrm{~m}}$ Width: $\underline{8 m} \quad$ Area: $\underline{6,512 \mathrm{~m}^{2}}$ Acres ( $\mathrm{m}^{2} / 4047$ ): 1.61

Area was calculated as: $\quad$ Length $\times$ Width (rectangle/square) $\quad \square$ Length $\times$ Width $\times 0.785$ (Ellipse) $\square$ GIS

## II. LOCATION

## 12. Legal Location

$\begin{array}{lllllllllll}\text { PM } \underline{6} & \text { Township } \underline{20 S} & \text { Range } & \underline{65 W} & \text { Section } & \underline{15} & \underline{E} & 1 / 2 & \underline{N E} & 1 / 4\end{array}$
If section is irregular, explain alignment method: $\underline{n} / \mathrm{a}$
13. USGS Quad: Northwest Pueblo, 1961
15. UTM Coordinates:

| Datum used |  | $\square$ NAD 27 | $\boxed{\bigotimes N A D ~ 83 ~}$ |
| :--- | :--- | :--- | :--- |
| $\underline{530766}$ | mE | $\underline{4240162}$ | mN |
| $\underline{530788}$ | mE | $\underline{4240159}$ | mN |
| $\underline{530933}$ | mE | $\underline{4240954} \mathrm{mN}$ |  |Does not meet any of the State Register criteria

## 28. Area(s) of significance: Transportation, Commerce

29. Period(s) of significance: 1887-1945. The period of significance begins with the construction of the recorded segment in 1887, which ran between Pueblo and Denver. After 1945, auto and truck traffic had a much greater influence on the location of transportation corridors and commercial development than the railroad (Colorado Southern Frontier Historic Context, 1984).
30. Level of significance: $\square$ National $\boxtimes$ State $\square$ Local
31. Statement of significance: The entire Atchison, Topeka \& Santa Fe (AT\&SF) Railway was determined eligible to the National Register of Historic Places under Criterion A because of its association with a significant theme in the historical development of southern Colorado, The Railroad Era (1870-1945). The AT\&SF first made its way west from the Kansas border into Pueblo in 1876. This segment of the AT\&SF was constructed in 1887 when the line was extended from Pueblo to Denver, providing a standard gauge route between the two cities.
32. Statement of historic integrity related to significance: Some visual changes to the surrounding context have occurred over time, primarily in the area east of the recorded segment where residential and commercial development and the construction of US Highway 50 have occurred. However, these changes do not significantly affect the feeling and association of the railway. The lack of modern powerlines and other visual changes to the landscape, especially west of the resource provide a glimpse into the original historic landscape along the railroad. Furthermore, the alignment of the railway appears to have not changed over time. Therefore, the segment is recommended as supporting to the overall eligibility of the entire railroad resource.
33. National Register Eligibility Field Assessment: Linear Segment Evaluation (if applicable):
34. Status in an Existing National Register District:
35. State Register Eligibility Field Assessment:
36. Status in an Existing State Register District:

区 Eligible
37. National/State Register District Potential: $\square$ Yes $\square$ No Describe: While this segment of the railroad resource supports the overall eligibility of the entire resource, no other resources are located in proximity to the railroad that would contribute to a district designation.
38. Cultural Landscape Potential: $\square$ Yes $\boxtimes$ No Describe: The area along this segment of railroad has seen significant change over time including the construction of US Highway 50 and recent development that has modified the landscape from its historic character. As a result, the opportunity for a cultural landscape designation has been lost.
39. If Yes to either $\mathbf{3 7}$ or $\mathbf{3 8}$, is this site: $\square$ Contributing $\square$ Non-contributing Explain: $\underline{n} / \mathrm{a}$

## V. MANAGEMENT AND ADMINISTRATIVE DATA



## Management Data Form

Other (explain):
17. Site elevation (feet): 4,825
18. Address:

$$
\text { Lot: } \underline{n} / \mathrm{a} \quad \text { Block: } \quad \underline{\mathrm{n} / \mathrm{a}} \quad \text { Addition: } \underline{\mathrm{n} / \mathrm{a}}
$$

19. Location/Access: US Hwy 50 where it crosses the railroad.

## III. NATURAL ENVIRONMENT/SITE CONDITION

20. General Description (should include both on site as well as geographical setting with aspect, landforms, vegetation, soils, depositional environment, water, ground visibility): This segment of the Atchison, Topeka \& Santa Fe Railway, now owned and operated by BNSF, runs from northeast to southwest and crosses US Hwy 50 in northwest Pueblo. This segment defines the edge between Pueblo and Pueblo West. East of the railroad, residential and commercial development are common along US Hwy 50. West of the railroad, the area is undeveloped for a short distance before entering Pueblo West, where commercial and residential development occurs again. Vegetation along the railroad is sparse and consists mostly of dry, shortgrass prairie grasses, wildflowers, and shrubs.
21. Soil depth (cm) and description: n/a
22. Condition
a. Architectural/StructuralExcellent
b. Archaeological/Paleontological
$\square$ Good
$\square$ Light disturbance
Fair
$\square$ Moderate disturbance
$\square$ Deteriorated
$\square$ Heavy disturbance
Ruin
$\square$ Total disturbance
23. Describe condition: This segment of railroad is owned and operated by BNSF and is maintained regularly and in excellent condition.
24. Vandalism:
Describe:
n/a $\square \mathrm{Yes} \boxtimes$ No

## IV. NATIONALISTATE REGISTER ELIGIBILITY ASSESSMENT

25. Context or Theme: Colorado Southern Frontier Historic Context, The Railroad Era (1870-1945)

## 26. Applicable National Register Criteria:

$\boxtimes$ A. Associated with events that have made a significant contribution to the broad pattern of our historyB. Associated with the lives of persons significant in our pastC. Embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinctionD. Has yielded, or may be likely to yield, information important in history or prehistoryDoes not meet any of the National Register criteriaQualifies under exceptions A through G. List exception(s):
27. Applicable State Register Criteria:
$\boxtimes$ A. Property is associated with events that have made a significant contribution to history
$\square$
B. Property is connected with persons significant in historyC. Property has distinctive characteristics of a type, period, method of construction or artisan
$\square$ D. Property is of geographic importanceE. Property contains the possibility of important discoveries related to prehistory or history

## Management Data Form

b. Stabilization: $\mathrm{n} / \mathrm{a}$

Date(s): n/a
c. HABS/HAER documentation [date(s) and numbers]: n/a
d. Other: n/a
46. Known collections/reports/interviews and other references (list):

Hand "Atchison Topeka \& Santa Fe Railroad Grade, 5EP.1665.1, Management Data Form." 1994.
Barclay, D. \& Fariello, J. "Atchison Topeka and Santa Fe Railroad, 5EP.1665.2, Management Data Form." 2002.
Barclay, D. "Denver \& Santa Fe/Atchison Topeka \& Santa Fe, 5EP.1003.8, Management Data Form." 2000.
Lewis, Allan C. "Railroads of the Pikes Peak Region 1870-1900" 2004.
Beebe, Lucius \& Clegg, Charles "Rio Grande - Mainline of the Rockies" 1962.
Blaszak, Michael W., "ATSF History - Santa Fe: A Chronology" 1995.
Carter, Carrol Joe \& Mehls, Steven F. "Colorado Southern Frontier Historic Context" 1984.
47. Primary location of additional data: Denver Public Library Western History Collection
48. State or Federal Permit number: n/a
49. Collection: Artifact collection authorized: $\square$ Yes $\square$ No Were artifacts collected: $\square$ Yes $\boxtimes$ No

Artifact repository: n/a
Collection method: $\square$ Diagnostics $\quad \square$ Grab Sample $\quad \square$ Random Sample
Other (specify): $\underline{n} / \mathrm{a}$
50. Photograph Numbers: 5PE1665.19_1, 5PE1665.19_2, 5PE1665.19_3, 5PE1665.19_4

Files or negatives stored at: Office of Felsburg, Holt \& Ullevig - 6300 S. Syracuse Way, Centennial, CO 80111
51. Report title: None
52. Recorder(s): Jake Lloyd

Date: August 2015
53. Recorder affiliation: Felsburg, Holt \& Ullevig

Phone number/Email: $\underline{303.721 .1440}$
NOTE: Please attach a site map, a photocopy of the USGS 1:24000 map indicating resource location, and photographs.
History Colorado - Office of Archaeology \& Historic Preservation
1200 Broadway, Denver, CO 80203
303-866-3395

This form should be completed for each linear resource or linear segment. Use this form in conjunction with the Management Data Form. Call OAHP staff (303-866-5216) prior to assigning a resource number.

## I. Resource Identification

1. Resource Number: 5PE.1665.19 2. Temporary Resource Number:
2. Site Name: Atchison, Topeka \& Santa Fe Railway
3. Record of:
$\square$ Entire resource
$\boxtimes$ Segment
II. Resource Description
4. Resource Type: $\quad \square$ Road $\quad \square$ Railroad $\quad \square$ Trail Ditch/Canal

Other (specify):
6. Component Description: This segment of the Atchison, Topeka \& Santa Fe Railway, now owned and operated by BNSF, runs from northeast to southwest and crosses US Hwy 50 in northwest Pueblo. The recorded segment, approximately 2,600 feet ( 0.49 miles) in length and ranging from 20 to 30 feet in width, begins approximately 1,400 feet northeast of the US Hwy 50 right of way and ends approximately 1,000 feet southwest of US Hwy 50 , just west of Kachina Place - a private industrial park road. This segment defines the edge between Pueblo and Pueblo West. East of the railroad, residential and commercial development are common along US Hwy 50 . West of the railroad, the area is undeveloped for a short distance before entering Pueblo West, where commercial and residential development occurs again. The present grade is approximately 4 feet high throughout the recorded segment.
7. Original use: Railroad
8. Current use: Railroad
9. Modifications (describe and include dates): The railroad is currently owned and operated by BNSF and is regularly maintained. The rails and ballast appear to have been replaced or improved over time and is in good condition. The bridge that carries the railroad over US Hwy 50 was built in 1973 when US Hwy 50 was widened to accommodate new development in Pueblo West.
10. Extent of Entire Resource: The Atchison, Topeka and Santa Fe Railway was originally constructed to link Atchison, Kansas to Santa Fe, New Mexico. The line into Colorado was originally constructed in 1876, which ran from the Kansas border to Pueblo. The recorded segment was part of a northern route constructed in 1887 that runs from Pueblo to Denver.
11. Associated Artifacts: n/a
12. Associated Features or Resources: Bridge K-18-BL, built in 1973, carries the recorded railroad segment over US Hwy 50. The bridge was not recorded since it fails to meets the minimum age requirement of 50 years for the NRHP. Furthermore, the bridge does not exemplify a structure of exceptional significance which would qualify it under Criteria Consideration G.

## III. Research Information

13. Architect/Engineer: n/a

Source(s) of Information: n/a
14. Builder: Denver \& Santa Fe Construction Company

Source(s) of Information: Railroads of the Pike's Peak Region, Allan C. Lewis c. 2004
15. Date of Construction / Date Range: 1887

Source(s) of Information: Railroads of the Pike's Peak Region, 2004, Allan C. Lewis; Site Form 5PE1665.2, 2002, D. Barclay, J. Fariello; Colorado Southern Frontier Historic Context, 1984.


FELSBURG HOLT \& ULLEVIG

5PE.1665.19 Sketch Map US 50 West Wills to BNSF Acceleration Lane CatEx

Pueblo, CO


FELSBURG HOLT \& ULLEVIG

Resource Number: 5PE.1665.19
Resource Name: Atchison, Topeka \& Santa Fe Railway Segment
Photographs


5PE1665.19_1: View north where the railroad crosses US Highway 50 at bridge structure K-18-BL (built 1973)


5PE1665.19_2: View south from the railroad crossing at bridge structure K-18-BL

Resource Number: 5PE.1665.19
Resource Name: Atchison, Topeka \& Santa Fe Railway Segment
Photographs


5PE1665.19_3: View northwest toward bridge structure K-18-BL (built 1973) which carries the AT\&SF Railroad over US Highway 50 in Northwest Pueblo


5PE1665.19_4: View of an AT\&SF Train entering Pueblo in the 1930's (courtesy Denver Public Library)

## Linear Component Form <br> Temporary Resource Number: 5PE.1665.19

16. Historical / Archival Data: Atchison, Topeka \& Santa Fe (AT\&SF) Railway made a decision to build its own tracks to Denver from Pueblo when the company failed to acquire the Denver \& New Orleans Railroad in the mid-1880's. In order to do this, AT\&SF formed the Denver \& Santa Fe Construction Company, and in 1887, built a connection north from Pueblo to Denver. The AT\&SF became a strong competitor of the Denver \& Rio Grande Western Railroad which already had a line from Denver to Pueblo, constructed in 1871. The AT\&SF exited Pueblo on the west side of town, unlike the Denver \& Rio Grande Western Railroad which followed the course of Fountain Creek along modern day Interstate 25. North of Pueblo, the AT\&SF and Denver \& Rio Grande Western lines ran parallel along Fountain Creek. The availability of rail transportation during the nineteenth century was seen as the key to the economic growth by people of the era. This railroad has operated on standard gauge track since its original construction. The railroad provided a link between Denver and AT\&SF's extensive rail network in southern Colorado and surrounding areas of Kansas, Oklahoma, New Mexico and Texas.
17. Cultural Affiliation and Justification: n/a

## IV. Management Recommendations

## 18. Eligibility of Entire Resource

】
Eligible $\quad \square$ Not EligibleNeed Data Is this an official determination?
$\boxtimes$ YesNo

Remarks / Justification: The entire Atchison, Topeka \& Santa Fe (AT\&SF) Railway was determined eligible to the National Register of Historic Places under Criterion A because of its association with a significant theme in the historical development of southern Colorado, The Railroad Era (1870-1945). The AT\&SF first made its way west from the Kansas border into Pueblo in 1876. This segment of the AT\&SF was constructed in 1887 when the line was extended from Pueblo to Denver, providing a standard gauge route between the two cities. The AT\&SF was the first standard gauge railway to be built along the Colorado High Plains unlike the Denver \& Rio Grande Western which was a narrow gauge railway.
19. Evaluation of integrity of the segment of the entire linear resource being recorded (Complete only if "Segment" under item 4 is checked and the entire resource is marked as Eligible under item 18)

```
\(\boxtimes\) Supporting \(\quad \square\) Non-supporting \(\square\) Not applicable
```

Remarks / Justification: Some visual changes to the surrounding context have occurred over time, primarily in the area east of the recorded segment where residential and commercial development and the construction of US Highway 50 have occurred. However, these changes do not significantly affect the feeling and association of the railway. The lack of modern powerlines and other visual changes to the landscape, especially west of the resource provide a glimpse into the original historic landscape along the railroad. Furthermore, the alignment of the railway appears to have not changed over time. Therefore, the segment is recommended as supporting to the overall eligibility of the entire railroad resource.
20. Recorder(s): Jake Lloyd - Felsburg, Holt \& Ullevig 21. Date: $\underline{\text { August } 2015}$

Colorado Historical Society - Office of Archaeology \& Historic Preservation 1560 Broadway, Suite 400 Denver, CO 80202

303-866-3395

## Appendix B. Correspondence

- Letter to State Historic Preservation Officer dated January 28, 2016, with Determinations of Eligibility and Effects, CDOT Project STA 050A-002, US 50 West Wills Boulevard to McCulloch Boulevard Environmental Assessment
- Letter to City of Pueblo, Historic Preservation Commission, January 28, 2016, with Determinations of Eligibility and Effects, CDOT Project STA 050A-002, US 50 West Wills Boulevard to McCulloch Boulevard Environmental Assessment
- Letter from State Historic Preservation Officer, dated February 1, 2016, regarding Determinations of Eligibility and Effects, CDOT Project STA 0505A-002, US 50 West Wills Blvd to McCulloch Blvd Environmental Assessment, Pueblo County (CHS \#69577)
- Email dated October 19, 2015, from Daniel Jepson, CDOT, providing clearance for archaeology resources
- Email dated December 15, 2015, from Daniel Jepson, regarding Archaeology Clearance, Project STA 0503-088, US 50 West EA (Regional Pond Site)
- An Intensive Archaeological Resources Inventory Along US Highway 50 in Nortbwest Pueblo, Pueblo County, Colorado, by Greg Wolff, dated September 2013

COLORADO
Department of Transportation
Division of Transportation Development
Environmental Programs Branch
4201 E. Arkansas Ave., Shumate Bidg.
Denver, CO 80222-3400
(303) $757-9281$

January 27, 2016
Mr. Steve Turner
State Historic Preservation Officer
History Colorado Center
1200 Broadway
Denver, CO 80203
SUBJECT: Determinations of Eligibility and Effects, CDOT Project STA 050A-002, US 50 West Wills Blvd. to McCulloch Blvd. Environmental Assessment, Pueblo County

Dear Mr. Turner:
This letter and the enclosed materials constitute the request for concurrence with determinations of eligibility and effects for the Colorado Department of Transportation (CDOT) project referenced above. CDOT and the Federal Highway Administration (FHWA) are proposing improvements to a six-mile segment US Highway 50 in the City of Pueblo, as follows:

- Wills Boulevard Intersection (Milepost 313.15) - A third westbound lane would be established by restriping the existing Wills Blvd. to BNSF railroad acceleration lane and extending the westbound lane through the BNSF railroad bridge underpass to Pueblo Blvd.
- Pueblo Boulevard Intersection (Milepost 311.45 to Milepost 312.65) - The westbound lanes of US 50 in the vicinity of Pueblo Blvd. would be realigned to parallel the eastbound lanes, and the existing westbound bridge over Wild Horse Dry Creek would be replaced. A grade-separated interchange would be established, with Pueblo Blvd. crossing over US 50. The Williams Creek concrete box culvert (CBC) under the eastbound lanes would be extended to accommodate the realigned westbound lanes, including the westbound widening. Pueblo Blyd. would be widened to accommodate two additional left turn lanes onto westbound US 50. The existing westbound US 50 lanes would be retained and modified to provide left turn access from US 50 onto southbound Pueblo Blvd., for a right turn access from southbound Wild Horse Road on to westbound US 50.
- Purcell Blvd. Intersection (Milepost 309.5) - The westbound third lane would extend from Pueblo Blvd. to Purcell Blvd., and a full six-lane grade-separated interchange would be developed, with US 50 crossing over Purcell Blvd.
- McCulloch Blvd. (Milepost 307) - The Proposed Action would include a third westbound lane extending from Purcell Blvd. and terminating at a right turn onto northbound McCulloch Blvd.; and an eastbound lane extending from newly established northbound right turn from McCulloch Blvd. and terminating at Purcell Blvd.
- Pedestrian/Bike Path - The Proposed Action would include a pedestrian/bicycle path along the south side of US 50 from Wills Blvd. to Pueblo Blvd. The slope paving adjacent to the eastbound lanes at the BNSF railroad underpass would be modified to accommodate the bike/pedestrian path, and an extended roof over the trail would extend 30 ft . from each side of the BNSF bridge in compliance with BNSF requirements.
- MS4 Improvements / Regional Pond - The Proposed Action would include water quality improvements and a regional pond. Stormwater runoff for the westbound lane widening and interchange improvements between Wills Blvd. and the Pueblo Blvd. (MP 313.15-311.5) would be
- directed to the two extended detention basins under construction on the east and west sides of Wild Horse Dry Creek. Stormwater runoff for the westbound and eastbound lanes between Pueblo Blvd. and McCulloch Blvd. (MP 311.5-307) would be directed to a proposed regional pond site west of Pueblo Blvd. and south of US 50.


## Area of Potential Effects (APE)

The Area of Potential Effects (APE) was defined using existing US 50 ROW, including a narrow ROW acquisition along the south side of the highway ROW between Purcell Blvd. and McCulloch Blvd. The APE includes all properties subject to direct and indirect effects resulting from construction of the Proposed Action including the location of the proposed detention ponds. No parcels with buildings over 45-years are located within the APE. Refer to the attached APE map for additional detail.

## Survey Methods and Results

Archival research and survey methodology involved several resources to determine whether historic properties would be affected by the Proposed Action, including:

- A file search through the Office of Archaeology and Historic Preservation (OAHP) online Compass database to determine whether previously recorded National Register of Historic Places (NRHP) eligible or listed resources were located within or near the proposed project area.
- Review of Pueblo County Assessor's Office records to determine if any buildings within the APE met the minimum age requirement for historic eligibility. Properties 45 years and older were evaluated.
- Analysis of historic topographic maps and historic aerial photography to determine changes in the built and natural landscape over time.
- Review of previous reports and site forms in the area surrounding the Proposed Action.
- Site visits to verify the condition of existing and potential resources.


## Eliqibility Determinations

The OAHP Compass database revealed four previously-recorded resources, including the Dry Creek Bridge (CDOT structure K-18-AC; 5PE3913), a segment of the Kansas Colorado Railroad (5PE320.3), a segment of US Highway 50 (5PE8108.1), and a segment of the Atchison, Topeka and Santa Fe Railroad (5PE1665.19). A review of other sources indicated no buildings over 45 years of age and no other built environment or archaeological resources are located within the APE.

- Dry Creek Bridge (5PE3913) - The bridge was determined officially not eligible as part of CDOT's 2002 statewide historic bridge inventory.
- Kansas Colorado Railroad (5PE320.3) - A segment of the former Kansas Colorado Railroad originally crossed through the project area just east of Pueblo Boulevard; the segment was documented in 2014. The overall railroad is considered eligible, but segment 5PE320.3 is an abandoned rail grade that was truncated by construction of US 50 and found to be non-supporting due to extensive disturbance and urbanization. Construction of the railroad pre-dates that of the highway. A field survey in 2013 indicated that the railroad segment between the east- and westbound lanes of US 50 and south of the eastbound lane has been destroyed, which is why the segment in the previous recording is limited to the section north of the westbound lanes. The 2014 site forms are enclosed herewith.
- US Highway 50 (5PE8108.1) - US 50 segment 5PE8108.1 was evaluated during a recent CDOT acceleration lane project. The overall highway is considered NRHP eligible, but the segment was found to be non-supporting to the overall resource. See the enclosed form for more information.
- Topeka and Santa Fe Railroad (5PE1665.19) - Segment 5PE1665.19, now owned and operated by BNSF, is located at the east end of the APE. The overall railroad is considered NRHP eligible, and the recorded segment was determined to support the overall resource, with concurrence by your office dated September 16, 2015.


## Effects Determinations

- Dry Creek Bridge (5PE3913) - The Proposed Action will involve the removal of the Dry Creek Bridge. Because the bridge is not eligible, its removal would result in no historic properties affected.
- Kansas Colorado Railroad (5PE320.3) - The project involves work on US Highway 50 at Pueblo Boulevard including some realignment, widening the concrete box culvert at Williams Creek, and widening Pueblo Boulevard. All of these actions have the potential to affect the area where the railroad grade was once present. However, because the segment is no longer extant and is considered non-supporting, the project would result in no adverse effect with regard to the Kansas Colorado Railroad 5PE320, including segment 5PE320.3.
- US Highway 50 (5PE8108.1) - The Proposed Action would modify the alignment of US Highway 50 at the Pueblo Blvd. intersection. Because the resource is non-supporting, the project will result in no adverse effect with regard to 5PE8108, including segment 5PE8108.1.
- Topeka and Santa Fe Railroad (5PE1665.19) - The Proposed Action would construct a pedestrian/bicycle path within the CDOT ROW on the south side of US 50 from Wills Blvd. to Pueblo Blvd. The path would pass beneath the railroad at bridge structure $\mathrm{K}-18$-BL, which carries the railroad over the highway. The trail would not impact either bridge K-18-BL (built in 1972) or the recorded railroad segment. The recorded segment is defined by the railroad grade, and bridge $\mathrm{K}-18$ BL is considered a non-contributing feature of the railroad resource. Because there would be no impacts to the railroad and the bike path would be outside of the resource boundary, the project will result in no adverse effect.

This information has been forwarded concurrently to the City of Pueblo Historic Preservation Commission for review. We will forward any comments received from that entity.

We request your concurrence with the determinations of eligibility and effect outline above. If you have questions or require additional information, please contact CDOT Senior Staff Historian Lisa Schoch at (303) 512-4258 or lisa.schoch@state.co.us.


Enclosures: Area of Potential Effects Map Site forms (5PE320.3, 5PE8:108.1, PE1665.19)
cc: $\quad$ Craig Clark, CDOT Region 2
Tim Tetherow, FHU


## COLORADO

Department of Transportation
Division of Transportation Development
Environmental Programs Branch
4201 E. Arkansas Ave., Shumate Bldg.
Denver, CO 80222-3400
(303) 757-9281

January 28, 2016
Mr. Steven Meier
City of Pueblo
Historic Preservation Commission
211 East D Street
Pueblo, CO 81003

SUBJECT: Determinations of Eligibility and Effects, CDOT Project STA 050A-002, US 50 West Wills Blvd. to McCulloch Blvd. Environmental Assessment, Pueblo County

Dear Mr. Meier:
This letter and the enclosed materials constitute the request for concurrence with determinations of eligibility and effects for the Colorado Department of Transportation (CDOT) project referenced above. CDOT and the Federal Highway Administration (FHWA) are proposing improvements to a six-mile segment US Highway 50 in the City of Pueblo, as follows:

- Wills Boulevard Intersection (Milepost 313.15) - A third westbound lane would be established by restriping the existing Wills Blvd. to BNSF railroad acceleration lane and extending the westbound lane through the BNSF railroad bridge underpass to Pueblo Blvd.
- Pueblo Boulevard Intersection (Milepost 311.45 to Milepost 312.65) - The westbound lanes of US 50 in the vicinity of Pueblo Blvd. would be realigned to parallel the eastbound lanes, and the existing westbound bridge over Wild Horse Dry Creek would be replaced. A grade-separated interchange would be established, with Pueblo Blvd. crossing over US 50 . The Williams Creek concrete box culvert (CBC) under the eastbound lanes would be extended to accommodate the realigned westbound lanes, including the westbound widening. Pueblo Blvd. would be widened to accommodate two additional left turn lanes onto westbound US 50 . The existing westbound US 50 lanes would be retained and modified to provide left turn access from US 50 onto southbound Pueblo Blvd., for a right turn access from southbound Wild Horse Road on to westbound US 50.
- Purcell Blvd. Intersection (Milepost 309.5) - The westbound third lane would extend from Pueblo Blvd. to Purcell Blvd., and a full six-lane grade-separated interchange would be developed, with US 50 crossing over Purcell Blvd.
- McCulloch Blvd. (Milepost 307) - The Proposed Action would include a third westbound lane extending from Purcell Blvd. and terminating at a right turn onto northbound McCulloch Blvd.; and an eastbound lane extending from newly established northbound right turn from McCulloch Blvd. and terminating at Purcell Blvd.
- Pedestrian/Bike Path - The Proposed Action would include a pedestrian/bicycle path along the south side of US 50 from Wills Blvd. to Pueblo Blvd. The slope paving adjacent to the eastbound lanes at the BNSF railroad underpass would be modified to accommodate the bike/pedestrian path, and an extended roof over the trail would extend 30 ft . from each side of the BNSF bridge in compliance with BNSF requirements.
- MS4 Improvements / Regional Pond - The Proposed Action would include water quality improvements and a regional pond. Stormwater runoff for the westbound lane widening and interchange improvements between Wills Blvd. and the Pueblo Blvd. (MP 313.15-311.5) would be
- directed to the two extended detention basins under construction on the east and west sides of Wild Horse Dry Creek. Stormwater runoff for the westbound and eastbound lanes between Pueblo Blvd. and McCulloch Blvd. (MP 311.5-307) would be directed to a proposed regional pond site west of Pueblo Blvd. and south of US 50.


## Area of Potential Effects (APE)

The Area of Potential Effects (APE) was defined using existing US 50 ROW, including a narrow ROW acquisition along the south side of the highway ROW between Purcell Blvd. and McCulloch Blvd. The APE includes all properties subject to direct and indirect effects resulting from construction of the Proposed Action including the location of the proposed detention ponds. No parcels with buildings over 45 -years are located within the APE. Refer to the attached APE map for additional detail.

## Survey Methods and Results

Archival research and survey methodology involved several resources to determine whether historic properties would be affected by the Proposed Action, including:

- A file search through the Office of Archaeology and Historic Preservation (OAHP) online Compass database to determine whether previously recorded National Register of Historic Places (NRHP) eligible or listed resources were located within or near the proposed project area.
- Review of Pueblo County Assessor's Office records to determine if any buildings within the APE met the minimum age requirement for historic eligibility. Properties 45 years and older were evaluated.
- Analysis of historic topographic maps and historic aerial photography to determine changes in the built and natural landscape over time.
- Review of previous reports and site forms in the area surrounding the Proposed Action.
- Site visits to verify the condition of existing and potential resources.


## Elipibility Determinations

The OAHP Compass database revealed four previously-recorded resources, including the Dry Creek Bridge (CDOT structure K-18-AC; 5PE3913), a segment of the Kansas Colorado Railroad (5PE320.3), a segment of US Highway 50 (5PE8108.1), and a segment of the Atchison, Topeka and Santa Fe Railroad (5PE1665.19). A review of other sources indicated no buildings over 45 years of age and no other built environment or archaeological resources are located within the APE.

- Dry Creek Bridge (5PE3913) - The bridge was determined officially not eligible as part of CDOT's 2002 statewide historic bridge inventory.
- Kansas Colorado Railroad (5PE320.3) - A segment of the former Kansas Colorado Railroad originally crossed through the project area just east of Pueblo Boulevard; the segment was documented in 2014. The overall railroad is considered eligible, but segment 5PE320.3 is an abandoned rail grade that was truncated by construction of US 50 and found to be non-supporting due to extensive disturbance and urbanization. Construction of the railroad pre-dates that of the highway. A field survey in 2013 indicated that the railroad segment between the east- and westbound lanes of US 50 and south of the eastbound lane has been destroyed, which is why the segment in the previous recording is limited to the section north of the westbound lanes. The 2014 site forms are enclosed herewith.
- US Highway 50 (5PE8108.1) - US 50 segment 5PE8108.1 was evaluated during a recent CDOT acceleration lane project. The overall highway is considered NRHP eligible, but the segment was found to be non-supporting to the overall resource. See the enclosed form for more information.
- Topeka and Santa Fe Railroad (5PE1665.19) - Segment 5PE1665.19, now owned and operated by BNSF, is located at the east end of the APE. The overall railroad is considered NRHP eligible, and the
recorded segment was determined to support the overall resource, with concurrence by your office dated September 16, 2015.


## Effects Determinations

- Dry Creek Bridge (5PE3913) - The Proposed Action will involve the removal of the Dry Creek Bridge. Because the bridge is not eligible, its removal would result in no historic properties affected.
- Kansas Colorado Railroad (5PE320.3) - The project involves work on US Highway 50 at Pueblo Boufevard including some realigmment, widening the concrete box culvert at Williams Creek, and widening Pueblo Boulevard. All of these actions have the potential to affect the area where the railroad grade was once present. However, because the segment is no longer extant and is considered non-supporting, the project would result in no adverse effect with regard to the Kansas Colorado Railroad 5PE320, including segment 5PE320.3.
- US Highway 50 (5PE8108.1) - The Proposed Action would modify the alignment of US Highway 50 at the Pueblo Blvd. intersection. Because the resource is non-supporting, the project will result in no adverse effect with regard to 5PE8108, including segment 5PE8108.1.
- Topeka and Santa Fe Railroad (5PE1665.19) - The Proposed Action would construct a pedestrian/bicycle path within the CDOT ROW on the south side of US 50 from Wills Blvd. to Pueblo Blvd. The path would pass beneath the railroad at bridge structure K-18-BL, which carries the railroad over the highway. The trail would not impact either bridge K-18-BL (built in 1972) or the recorded railroad segment. The recorded segment is defined by the railroad grade, and bridge K-18BL is considered a non-contributing feature of the railroad resource. Because there would be no impacts to the railroad and the bike path would be outside of the resource boundary, the project will result in no adverse effect.

As a Certified Local Government, we welcome your comments on this project. Should you choose to respond, we request that you do so within 30 days of receipt of these materials. If you would like to respond via Email, please send your comments to CDOT Senior Historian Lisa Schoch at lisa.schoch@state.co.us. If we do not receive a response from you within the 30 -day time frame, we will assume you do not plan to comment. Thank you in advance for your prompt attention to this matter. If you require additional information, please contact Ms. Schoch at (303) 512-4258.

Enclosures: Area of Potential Effects Map Site forms (5PE320.3, 5PE8108.1, PE1665.19)
cc: $\quad$ Craig Clark, CDOT Region 2
Tim Tetherow, FHU

February 1, 2016

Jane Hann<br>Manager, Environmental Programs Branch<br>Colorado Department of Transportation<br>4201 E. Arkansas Avenue<br>Detver, CO 80222-3400

Re: Determinations of Eligibility and Effects, CDOT Project STA 050A-002, US 50 West Wills Blvd. to MrcCulloch Blvd. Environmental Assessment, Pueblo County (CHS \#69577)

Dear Ms. Hann:

Thank you for your correspondence dated January 27, 2016 and received on January 29, 2016 by our office regarding the consultation of the above-mentioned project under Section 106 of the National Historic Preservation Act (Section 106).

After review of the provided information, we do not object to the proposed Area of Potential Effects (APE) for the proposed project. After review of the provided survey information, we concur that segment 5PE. 1665.19 supports the overall eligibility of resource 5PE. 1665/Atchison, Topeka \& Santa Fe Railway for the National Register of Historic Places. W'e also concur that segments 5PE.320.3 and 5PE.8108.1 do not support the overall eligibility of resources 5PE.320/Kansas Colorado Railroad and 5PE.8108/US Highway 50 for the National Register of Historic Places. Additionally, we concur that resource 5PE,3913/Dry Creek Bridge is not eligible for the National Register of Historic Places.

After review of the scope of work and assessment of adverse effects, we concur with the finding of no bistoric properties affected [36 CFR 800.4(d)(1)] under Section 106 for resource 5PE.3913. We also concur with the finding of no adverse effect [36 CFR 800.5(d)(1)] for resources 5PE.320, including segment 5PE.320.3, 5PE. 1665 , including segment 5PE. 1665.19 , and 5PE.8108, including segment 5PE.8108.1.

If unidentified archaeological resources are discovered during construction, work must be interrupted until the resources have been evaluated in terms of the National Register criteria, 36 CFR 60.4, in consultation with this office.

W'e request being involved in the consultation process with the local government, which as stipulated in 36 CFR 800.3 is required to be notified of the undertaking, and with other consulting parties. Additional information provided by the local government or consulting parties might cause our office to re-evaluate our eligibility and potential effect findings.

Please note that our compliance letter does not end the 30 -day review period provided to other consulting parties. If we may be of further assistance, please contact Jennifer Bryant, our Section 106 Compliance Manager, at (303) 866-2673 or jennifer.bryant@state.co.us.


Stere Turner, AIA
State Historic Preservation Officer

Subject:
Archaeology Clearance, Project STA 0503-088, US 50 West, Wills to McCulloch Blvd. EA

From: Jepson - CDOT, Daniel [mailto:daniel.jepson@state.co.us]
Sent: Monday, October 19, 2015 10:28 AM
To: Tim.Tetherow
Cc: Craig Clark - CDOT
Subject: Archaeology Clearance, Project STA 0503-088, US 50 West, Wills to McCulloch Blvd. EA
Tim -
Based on the scope of work proposed for the US 50 corridor referenced above that is limited to construction within the existing highly disturbed right-of-way, there are no known or anticipated archaeology issues. Inventory of the ROW is not required given the lack of both physical integrity and known archaeological resources, and in that context formal Section 106 consultation with the State Historic Preservation Officer is also unnecessary. Please notify me when the location of the water quality pond is identified, as that site may require additional analysis.

With regard to the US 50 ROW corridor proper between Wills Blvd. and McCulloch Blvd., clearance to proceed is recommended without further actions -

Dan
Dan Jepson, Senior Staff Archaeologist
Cultural Resources Section Manager
$\square$
4201 E. Arkansas Ave., Shumate Bldg.
Denver, CO 80222
(303) 757-9631
daniel.jepson@state.co.us | www.codot.gov/programs/environmental

| From: | Jepson-CDOT, Daniel [daniel.jepson@state.co.us](mailto:daniel.jepson@state.co.us) |
| :--- | :--- |
| Sent: | Tuesday, December 15, 2015 8:01 AM |
| To: | Tim.Tetherow |
| Cc: | Craig Clark -CDOT |
| Subject: | Re: Archaeology Clearance, Project STA 0503-088, US 50 West EA (Regional Pond Site) |

Tim -
The revised primary siting area for the WQ pond on the private parcel adjacent to US 50 exhibits the same poor physical condition and limited archaeological potential as the original (now secondary) site immediately to the south. As such the clearance I provided for the pond on December 14th remains valid, and no further work is required -

Dan

Dan Jepson, Senior Staff Archaeologist
Cultural Resources Section Manager


COLORADO
Department of Transportation
Division of Transportation Development
4201 E. Arkansas Ave., Shumate Bldg.
Denver, CO 80222
(303) 757-9631
daniel.jepson@state.co.us | www.codot.gov/programs/environmental
On Mon, Dec 14, 2015 at 10:18 AM, Jepson - CDOT, Daniel < daniel.jepson@state.co.us> wrote:
Tim -
The area proposed for a water quality pond related to the project referenced above is highly disturbed such that the potential for intact archaeological remains is extremely limited; in addition, a small portion of the site was previously surveyed for an earlier non-CDOT undertaking, with negative results.

Consequently, neither on-the-ground inventory nor formal Section 106 compliance with the State Historic Preservation Officer were conducted specific to archaeological resources. Clearance to proceed is recommended without further actions -

## Dan

Dan Jepson, Senior Staff Archaeologist
Cultural Resources Section Manager


COLORADO
Department of Transportation
Division of Transportation Development
4201 E. Arkansas Ave., Shumate Bldg.
Denver, CO 80222
(303) 757-9631
daniel.jepson@state.co.us | www.codot.gov/programs/environmental

# AN INTENSIVE ARCHAEOLOGICAL RESOURCES INVENTORY AL̇ONG US HIGHWAY 50 IN NORTHWEST PUEBLO, PUEBLO COUNTY, COLORADO 

by

Greg Wolff

Transportation Project NH C020-027, US 50 West, Purcell to Wills

Prepared by:
Archaeological Unit Colorado Department of Transportation Daniel A. Jepson, Principal Investigator

All work conducted under the terms and conditions of State of Colorado Archaeological Permit No. 2013-11


#### Abstract

The Colorado Department of Transportation (CDOT) proposes safety improvements along a 3.4mile segment of US Highway 50 in northwest Pueblo between Purcell Boulevard and Wills Boulevard. Work will include adding a third eastbound lane, replacing the eastbound bridge at Wild Horse Creek, and construction of storm water detention ponds. A bicycle/pedestrian lane will be constructed using existing facilities south of the eastbound lane within CDOT right-of-way. An additional northbound lane on Pueblo Boulevard between the north and south intersections, including geometric improvements, may also be constructed.

A search of Office of Archaeology and Historic Preservation files revealed that several previous cultural resource inventories have been conducted within portions of the current project corridor. No historic properties were previously identified within the current study area.

A pedestrian survey of the Area of Potential Effects completed in July 2013 resulted in the documentation of one segment of the former Colorado-Kansas Railroad (5PE320.3); the segment does not support the eligibility of the larger railroad resource for the National Register of Historic Places.


## TABLE OF CONTENTS

SECTION PAGE
Introduction ..... 1
Environmental Setting ..... 1
Existing Data and Literature Review ..... 5
File Search Data ..... 5
Culture History ..... 5
Research Design ..... 11
Field Methods ..... 12
Results and Recommendations. ..... 13
References Cited ..... 15
Appendix I: Site Location Map (attached; limited distribution)
Appendix II: Colorado OAHP Inventory Record Forms (attached; limited distribution)
LIST OF FIGURES
FIGURE
1 Pueblo County map showing project location .....  2
2 Portion of 7.5' USGS topographic map showing project area .....  3

## Colorado Historical Society－Office of Archaeology and Historic Preservation

 Colorado Cultural Resource Survey Cultural Resource Survey Management Information Form
## I．Project Size

Total federal acres in project $\qquad$ Total federal acres surveyed $\qquad$
Total state acres surveyed
ca． 137
Total private acres surveyed
$\qquad$
Total other acres surveyed $\qquad$
Total other acres in project $\qquad$

## il．Project Location

County：Pueblo
USGS Quad Map：Northwest Pueblo（1961，rev．1994）
Principal Meridian：Sixth

| Township | 20S | Range | 65W | Section | 14 | SW | NW |  |  |  |
| :--- | :--- | :--- | :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| Township | Range | Section | 15 | N | NW； | NW | NE； | E | NE |  |
| Township | Range | Section | 16 | N | NE |  |  |  |  |  |
| Township | Range | Section | 10 | SW | SW |  |  |  |  |  |
| Township | Range | Section | $\mathbf{9}$ | S | SW； | S | SE |  |  |  |
| Township | Range | Section | 8 | N | SW； | NW | SE； | S | SE |  |
| Township | Range | Section | 7 | NE | SE； | SE | NE | $\cdots$ | ． |  |

III．Sites

|  | Resource Type |  |  |  | Eligibility |  |  |  | Management Recommendations |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Smithsonian Number |  | $\begin{aligned} & \text { 雁 } \\ & \text { 咅 } \end{aligned}$ | $\overline{8}$ <br> $\frac{8}{8}$ <br> $\frac{0}{2}$ <br> $\frac{8}{0}$ | $\begin{aligned} & \text { 骨 } \\ & \text { 5y } \end{aligned}$ |  |  |  |  |  |  | $\frac{\grave{2}}{\frac{0}{5}}$ | $\stackrel{\rightharpoonup}{\stackrel{\rightharpoonup}{\bullet}}$ | $$ |  | ¢ |
| 5PE320．3 |  | X |  |  |  |  |  | X | X |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

IV．ISOLATED FINDS（By definition IFs are not eligible to the National Register and require no further work．）

|  | Resource Type |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Smithsonian Number |  |  |  | § col c 5 |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |


|  | Resource Type |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Smithsonian Number | $\begin{aligned} & 0.0 \\ & \frac{0}{0} \\ & \text { W. } \\ & \text { Did } \end{aligned}$ | $\begin{aligned} & \text { 号 } \\ & \text { 耪 } \end{aligned}$ |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## INTRODUCTION

The Colorado Department of Transportation (CDOT) proposes safety improvements along a 3.4mile segment of US Highway 50 in northwest Pueblo between Purcell Boulevard and Wills Boulevard (mileposts 309.77-313.14) (Figure 1). Work will include adding a third eastbound lane, replacing the eastbound bridge at Wild Horse Creek, and construction of storm water detention ponds. A bicycle/pedestrian lane will be constructed using existing facilities south of the eastbound lane within CDOT right-of-way (ROW). An additional northbound lane on Pueblo Boulevard between the north and south intersections, including geometric improvements, may also be constructed.

A search of Office of Archaeology and Historic Preservation (OAHP) files revealed that several previous cultural resource inventories have been conducted within portions of the current project corridor. No historic properties were previously identified within the study area.

The Area of Potential Effects (APE) established for the undertaking consists of the existing highway right-of-way (ROW), encompassing approximately 137 ac ( 55 ha) (Figure 2).

An intensive archaeological resources inventory of the APE was conducted on July 26, 2013 by CDOT Staff Archaeologist Greg Wolff. Funding for the project was provided jointly by the Federal Highway Administration (FHWA) and CDOT. The survey was conducted under the terms and conditions of State of Colorado Non-Collection Archaeological Permit 2013-11. This work was legislated by the National Historic Preservation Act of 1966 (as amended), Executive Order 11593, the Archaeological Preservation Act of 1974, the Colorado Historical, Prehistorical, and Archaeological Resources Act of 1973 (as amended), and the Colorado Register of Historic Places Act of 1975.

One segment of the former Colorado-Kansas Railroad (5PE320.3) was documented during the survey; the segment does not support the potential eligibility of the larger railroad resource for the National Register of Historic Places (NRHP).

## ENVIRONMENTAL SETTING

The project is located in southeastern Colorado within the primary drainage system of the Arkansas River. Williams Creek, Wildhorse Creek, and Dry Creek are the main watercourses in the vicinity of the study corridor. The Arkansas River Basin covers two physiographic regions, including the east side of the Southern Rocky Mountain province and the western fringe of the Great Plains (Fenneman 1931; Thornbury 1965). The western portion of the drainage is characterized by high mountains, inter-mountain valleys and steep canyons, and includes the east slopes of the Sawatch Range, the Wet Mountains, and portions of the Sangre de Cristo, Mosquito and Rampart Ranges. East of the foothill-mountain transition, the Great Plains Province is divided into three sections. The Piedmont abuts the foothills and continues northward, and is distinguished from the High Plains section to the east by its lower elevation. It is physically lower due to the removal of Tertiary alluvial cover by the South Platte and Arkansas stream systems, resulting in extensively cut river valleys (Thornbury 1965). The High Plains retains this cover and as such is a high, flat plain occurring on the eastern edge of Colorado and beyond (Thornbury 1965). The Raton section enters the state from the south, abutting the Piedmont, with approximately two-thirds of the section occurring in New Mexico and a small portion in Oklahoma. This highest section of the Great Plains is a series of plateaus and mesas in advanced stages of dissection. Although lacking the Tertiary mantle, the Raton section attributes its elevation to Pleistocene volcanic activity. The Raton

CDOT Project NH C020-027, US 50 West, Purcell Boulevard to Wills Boulevard
Northwest Pueblo (1961, revised 1994) 7.5’USGS quad map
Sixth P.M., T20S, R65W, Sections 7, 8, 9, 14, 15, and 16
Sixth P.M., T20S, R65W, Sections 7, 8, 9, 14, 15, and 16
Pueblo County, Colorado
3
A
$\rightarrow \longrightarrow$ 是
Q 1 -
 4 $\}$

section is divided into three subsections, the Park Plateau to the west, the Raton Mesa south along the state line, and the Chaquaqua Plateau north of the other two (Thornbury 1965).

Much of the eastern portion of the Arkansas River Basin, including the High Plains, Piedmont and Raton section, is dominated by Brown soils derived from the calcareous marls of the Ogallala formation (Armstrong 1972). The parent material consists of unconsolidated, wind-borne deposits, and the soils have matured under a temperate, subhumid climate. Surface horizons are brown and grade into pale gray calcareous horizons at one to two feet (Armstrong 1972). The area along the Arkansas River and other major drainages is dominated by alluvial soils of recent origin. Alluvial soils are typically pale in color and poor in organic matter. However, their character varies locally and is dependent on parent materials, the manner of sorting, and the mode of deposition. Regosols are located north of the Arkansas River, and are characterized by wide areas of stabilized dune sand; the deposits are eolian, originating from Tertiary sandstones. Armstrong (1972) indicates that the western, upland area is characterized by woodland lithosols which are derived from a variety of parent material, either in situ or on talus, fans or terraces. These soils are shallow, stony, and without definable profile development.

Fitzgerald et al. (1994) identifies seven ecosystems based on plant communities that are present within the Arkansas River Basin. The grassland ecosystem, at an elevation of $1220-3050 \mathrm{~m}(4000-10,000$ ft ), covers approximately 75 percent of the study region, including the High Plains, Piedmont, and Raton sections. Vegetation includes a variety of grasses, sagebrush, yucca, and prickly pear cactus. The pinyon-juniper woodland ecosystem (1675-2440 m [5500-8000 ft]), involves 7 percent of the study area and is located in the upper portion of the basin above the grassland, and in isolated communities along Mesa de Maya and the Chaquaqua Plateau. Vegetation includes pinyon, juniper or red cedar, grasses, yucca and prickly pear. The montane shrublands ecosystem (1675-2590 m [5500-8500 ft]), includes 4 percent of the area above the pinyon-juniper woodlands at the Palmer Divide, encircling the Wet Mountains, and on the eastern slopes of the Sangre de Cristo range. Vegetation includes gambel oak, serviceberry, current, rabbitbrush, chokecherry, wild rose and grasses. The montane forest ecosystem (1710-2745 m [5600-9000 ft]), encompasses 8 percent of the area on all mountain slopes and is extensive on the Rampart Range and Palmer Divide. Dominant vegetation types are ponderosa pine, Douglas fir, aspen, blue spruce, lodgepole pine, current, and kinnikinnik. The subalpine forest ecosystem (2740-3475 m [9000-11,400 ft]), includes 3 percent of the area on high mountain slopes just below the alpine tundra. Vegetation includes spruce, fir, aspen bristlecone pine, lodgepole pine, blueberry, and arnica. The alpine tundra ecosystem (above 3475 m [11,400 ft]), is located at the crest of the high mountain ranges and includes sedges, short-grasses, willows, and a variety of perennials. The riparian ecosystem occurs at all elevations below timberline and is characterized by dense vegetation along drainages and isolated ponds or lakes. In higher elevations willow, alder, and sedges are found, while lower elevations feature cottonwood, cat-tail, bulrush and river birch.

Fauna in the Arkansas River Basin are varied (Fitzgerald et al. 1994). In the lower elevations, including the grasslands, there is a variety of rabbit, ground squirrel, prairie dogs, coyote, fox, bobcat, badger, and herding animals such as bison, mule and white-tailed deer, elk, and pronghorn. Many of these species are found throughout several ecosystems, but an increase in elevation also includes pika, chipmunk, marmot, porcupine, mountain lion, bear and bighorn sheep.

Silicified shale, basalt, quartzite, and quartz are available on the plains in the form of redeposited cobbles. Chalcedony, chert, and obsidian occur in association with Trinidad sandstone in the Purgatoire River area (Wood and Bair 1980). In the foothill-mountain zone, primary chert deposits are located in the Leadville limestone deposits of the Arkansas River canyon west of Canon City, and on Trout Creek Pass in the Manitou limestone deposits (Chambellan et al. 1984). Petrified wood is located to the north in the Palmer Divide area, originating from the Dawson Arkose formation.

## EXISTING DATA AND LITERATURE REVIEW

## File Search Data

On July 22, 2013, Mr. Wolff conducted a search of the site files housed at the Colorado Office of Archaeology and Historic Preservation (OAHP) via the online database COMPASS, as well as a review of internal CDOT project records. Four previous inventories were completed within portions of the current project corridor. The previous investigations documented a highly disturbed highway ROW which has limited potential for significant archaeological resources.

The Colorado Department of Highways surveyed much of the western portion of the project corridor for construction of the two current eastbound lanes between Canon City and Pueblo West (Ireland 1974). No historic properties were identified within or near the present study corridor.

The vicinity of the intersection of State Highway 45 (Pueblo Boulevard) and US Highway 50 was surveyed by CDOT with negative results (CDOT 1994). Shortly thereafter, the eastern portion of the project corridor was inventoried with negative results for highway improvements (Hand 1995).

Recently, the western portion of the project corridor was reexamined with negative results in advance of improvements to the Purcell Boulevard intersection (Hand 2007).

## Culture History

The culture history of the Arkansas River Basin is lengthy but incompletely documented. The cultural sequence includes four stages: Paleoindian, Archaic, Late Prehistoric and Historic. Detailed information concerning the developmental sequence for the Arkansas River Basin is found in Eighmy (1984) and Zier and Kalasz (1999). For information about the historic period, see Church et al. (2007), Mehls (1984), and Mehls and Carter (1984).

## Paleoindian Stage (>11,500-7800 B.P.)

The Paleoindian stage includes four developmental periods: Pre-Clovis (pre-11,500 B.P.), Clovis (11,500 B.P.-10,950 B.P.), Folsom ( 10,950 B.P.-10, 250 B.P.), and Plano ( 10,250 B.P. 7,800 B.P.) (Zier and Kalasz 1999). This early stage occurred during the end of the Pleistocene epoch, the last period of global glaciation. Climatic conditions throughout Colorado ranged from moderately cool during the earlier periods to more contemporary conditions later. The Paleoindian economy was long attributed to the hunting of Pleistocene megafauna (mammoth, bison, camel), a model attributed to early research at open kill sites. Different forms of megafauna were indeed part of the economy, and that the predatory use of mammoth followed by bison was linked to the extinction of certain species and the adaptation of smaller forms to warmer climatic conditions (Kalasz et al. 1993). However, more recent investigations have noted that smaller game such as deer, bear and rabbit, as well as vegetable products, also served an important role (Dixon 1999; Frison 1992; Zier and Kalasz 1999). There are indications that megafauna may have played a more limited role in the foothill-mountain regions where quantities of large herding animals were not readily available (Frison 1992). Physical evidence of Paleoindians is varied, but diagnostic artifacts include a variety of lanceolate projectile points associated with the specific periods and complexes.

There is relatively little evidence of Paleoindian occupations in the Arkansas River Basin. While occasional projectile points have been discovered as isolated finds or heirloom artifacts, only the OlsenChubbuck and Runberg sites have produced significant intact deposits (Black 1986; Slessman et al. 2003; Wheat 1972). Most of the well documented sites are located along the South Platte River drainage in northeastern Colorado, and west in the Rio Grande River basin (Cassells 1997; Gilmore et al. 1999;

Martorano et al. 1999). The paucity of sites in the southeast may be a result of the physical processes of site formation and transformation, a lack of research, a lower prehistoric population density, or a combination of these factors (Eighmy 1984).

Evidence for the Pre-Clovis period is limited and controversial. Although lithic material is represented, a bone working technology appears to have had a greater emphasis. The Pre-Clovis currently is not associated the stylized diagnostic material indicative of later Paleoindian development (Anderson 1989; Zier and Kalasz 1999). The Lamb Spring, Dutton, and Selby sites, all located in the South Platte River drainage, are the only Colorado sites attributed to the Pre-Clovis (Gilmore et al. 1999). However, the Cooperton Site in western Oklahoma suggest that Pre-Clovis occupations may be found in southeastern Colorado (Anderson 1989).

The Clovis, Folsom, and Plano periods are generally represented through surface finds in southeastern Colorado (Anderson 1989b; Bair 1977; Campbell 1969, 1976). The Clovis period is a widespread manifestation commonly associated with mammoth procurement, but there is frequent exploitation of smaller game and gathered vegetation (Zier and Kalasz 1999). Sites represent small populations and limited scale occupations and game procurement. The Clovis projectile point, a large bifacially fluted lanceolate form, is diagnostic of the period. Although limited, Clovis sites in Colorado (Dent, Dutton, Claypool, and Drake sites) are found on or near the Kersey terrace of the South Platte River in the vicinity of Greeley (Cassells 1997).

The Folsom period is largely a Great Plains manifestation. The period is commonly associated with the procurement of Bison antiquus, and the efficient use of trapping techniques involying arroyo head-cuts was a well-developed trait (Frison 1991). The economic base was broadened again through the use of smaller game and more significant reliance on vegetation. Sites appear to have been occupied by small band-level populations, but with a greater density than during the Clovis period. The Folsom projectile point, although smaller than the Clovis, demonstrates a continuation of bifacial fluting techniques. Folsom sites are located to the north in the South Platte River drainage (Lindenmeier, Fowler-Parrish, Powars, and Johnson sites), and to the west in the Rio Grande River drainage (Black Mountain, Stewart's Cattle Guard, Zapata, Reddin, and Linger sites) (Cassells 1997). Although no Folsom period sites have been identified in the Arkansas River drainage, the Folsom type-site is located just south of the Colorado state line, in Colfax County, New Mexico.

The Plano period is better represented in the region than both the Clovis and Folsom. Interpretations suggest populations increased during this period, but there is also speculation that warming climatic conditions resulted in a decrease in fauna, which ultimately had an effect on the human population (Cassells 1997; Zier and Kalasz 1999). The increase in site frequency is indicative of the longevity of this period. The economy saw a continuation of bison procurement, but generally on a larger scale than the preceding era. Larger kills indicate that various bands joined for seasonal hunts, and evidence indicates a specialization in trapping methods (Frison 1991). Although bison kills dominate the Plano archaeological record, occupation sites document small game use and the presence of increased numbers of milling stones indicate a greater reliance on vegetation as a dietary source. Black (1991) identifies the foothill-mountain Plano occupation as part of the Mountain tradition, a localized population with economies based on local fauna procurement, and not large scale kills.

The Plano period is diverse, represented by a variety of temporally and spatially overlapping traditions which are identified by large, non-fluted lanceolate projectile points. The traditions commonly represented during this period include Agate Basin, Alberta, Cody, and Hell Gap, and foothill-mountain complexes such as James Allen, Lusk, Fredrick, Lovell Constricted, and Pryor Stemmed (Frison 1991). Many of the well-studied Plano period sites are located along the South Platte River well to the north
(Gilmore et al. 1999). However, two Plano period sites are located in the Arkansas River Basin: the Olsen-Chubbuck site ( $5 \mathrm{CH1}$ ) is a large communal bison kill and butchering locality (ca. 10,000 B. P.) located in the northern part of the basin in Cheyenne County (Wheat 1972). The second, the Runberg site (5CF358), is a multicomponent camp on Cottonwood Pass in Chaffee County, with the earliest component yielding projectile points suggesting occupation between 10,000 and 9,500 B.P. (Black 1986).

## Archaic Stage (7800 B.P.--1850 B.P.)

The Archaic stage is defined by three contiguous periods: the Early Archaic (7800 B.P.-5000 B.P.), Middle Archaic (5000 B.P.-3000 B.P.), and Late Archaic (3000 B.P.-1850 B.P.) (Zier and Kalasz 1999). This time period is characterized by a continuation of the hunting-gathering economy developed earlier, wherein small bands subsisted on a diverse assortment of post-Pleistocene fauna and a wide variety of gathered flora. The increased presence of milling stones through the Archaic indicates a greater reliance on vegetation. Archaic sites are generally multi-component localities, although few components are well defined due to the complexity of inter-site assemblages.

The Early Archaic period coincides with the Althithermal climatic episode subsequent to the end of the Pleistocene. This period is noted for an apparent occupation hiatus on the plains, with one hypothesis suggesting that populations retreated to the foothill-mountain region to take advantage of more favorable environmental conditions (Benedict and Olson 1978). However, a second theory suggests that the foothill-mountain region was occupied with a well-established tradition at the onset of the Althithermal, and it is probable that the plains populations reduced rather than participated in a significant migration (Black 1991; Zier and Kalasz 1999). Though limited, sites attributed to the Early Archaic occur in both open and sheltered terrain and are often located in upland environments. Semi-subterranean pit-structures found in the mountain region first appear during the Early Archaic (Metcalf and Black 1988; Zier and Kalasz 1999). In the Eagle Peaks region of the Platte River Basin Benedict and Olsen (1978) have identified sites in high valleys close to water, and often on passes along the Continental Divide. Sites are commonly associated with short term occupations, and evidence indicates the development and use of high-altitude game drive systems.

However, Early Archaic sites are uncommon in both the lower and upper Arkansas River Basin. Most of the material associated with this period consists of surface finds, isolated or in a site context with little excavation evidence. Diagnostic material marks a distinct transition from Plano to Early Archaic, where the early lanceolate forms were replaced with large, wide side-notched and corner-notched projectile points (Black 1986; Zier and Kalasz 1999). Sites producing Early Archaic materials in the Arkansas River Basin have been identified west of Interstate 25 between Trinidad and Walsenburg (Lutz and Hunt 1979), at Lorencito Canyon west of Trinidad (McKibbin et al. 1997), at Trout Creek Quarry in Chaffee County (Chambellan et al. 1984), and at the Pinon Canyon Maneuver Site (Andersen 1989b).

The Middle Archaic period saw a widespread distribution of populations within the Arkansas River Basin, a reflection of general trends identified in the Great Plains and Southern Rocky Mountains. The broad distribution of sites during this period may represent growth in the existing population or an outward spread of people form core population areas (Zier and Kalasz 1999). Sites occur in open and sheltered settings, generally associated with water. Sheltered sites are common in the foothills region and in the canyon lands of the plains; cultural deposits often represent repeated use of shelters by Middle Archaic and later populations. Open sites vary in complexity-from sparse lithic scatters to complex camps-and are often containing thermal feature remnants. Features such as stone circles, basin shaped pit structures, and upland game drive systems are less frequent in the Arkansas drainage than in the South Platte basin (Frison 1991; Rood 1990; Zier and Kalasz 1999). Individual sites or components represent small group exploitation of a region, with an economy based on hunting and gathering. Vegetal materials
played an important role in the diet, and a wide variety of fauna was exploited, with the bison's role seemingly reduced (Zier and Kalasz 1999).

The McKean complex defined the lithic technology of the Middle Archaic, and utilization of locally available materials was characteristic. The assemblage consists of a mixture of both formal and expedient tools, and projectile points range from lanceolate to stemmed-indented based forms such as McKean lanceolate, Duncan, Hanna, and Mallory (Frison 1991; Kalasz et al. 1993). Middle Archaic period sites are extensive in the Arkansas River Basin, and include sites on the Fort Carson Military Reservation in El Paso County (Zier et al. 1997), Lorencito Canyon west of Trinidad in Las Animas County (McKibbin et at. 1997), and on the US Army's Pinon Canyon Maneuver Site (Andrefsky et al. 1990). Sites attributed to the Middle Archaic include Draper Cave, Recon John Shelter, Gooseberry Shelter, Dead of Winter, Trout Creek Quarry, and Wolf Spider Shelter (Hagar 1976; Zier et al. 1989; Kalasz et al. 1993; Chambellan et al. 1984; Hand and Jepson 1996).

The Late Archaic period provides little evidence of distinct cultural shifts from the Middle Archaic, and many sites suggest continued occupation during this period. The increased number of Late Archaic sites indicate population growth, which was probably internally generated (Zier and Kalasz 1999). Sites are located in open and sheltered terrain but exhibit a wider distribution than earlier manifestations. The larger, more complex base camps are closely aligned to water sources, while the smaller, short-term occupation sites exhibit fewer correlations and are often located in upland areas away from water (Zier and Kalasz 1999). Hearths are a common feature, but large burned rock middens associated with vegetal processing are also present (Nowak and Jones 1985; Nowak and Kantner 1991). There is continued evidence of pit-structures, as documented by Shields (1980) at the McEndree Ranch site (5BA30) on Two Butte Creek. Hunting and gathering continues as the economic base, and as with the Middle Archaic period there is a wide distribution of both flora and fauna exploitation. Maize appears at several sites in the lower Arkansas River Basin, providing a minor dietary supplement (Zier and Kalasz 1999). Evidence for bison procurement, is stronger during the Late Archaic, and although there are communal kill/processing sites known in the northern plains (Frison 1991), they are lacking in southeastern Colorado. Game drives associated with the Late Archaic have been identified near Monarch Pass and to the north in the Indian Peaks area, probably associated with mountain sheep or bison (Hutchinson 1990; Benedict and Olson 1979).

Diagnostic material includes a variety of stemmed and corner-notched projectile points, all associated with atl-atl use (Anderson 1989b). Specimens from the upper Arkansas and foothill-mountain region often exhibit serrated blades, a trait of the Mountain tradition extending back to the Early Archaic (Black 1986). Late Archaic period sites have been identified on the Chaquaqua Plateau (Campbell 1969, 1976), at the Pinon Canyon Maneuver Site (Andrefsky et at. 1990), and on the Fort Carson Military Reservation (Zier et al. 1997). Individual sites exhibiting Late Archaic components include the Trout Creek Quarry (Chambellan et al. 1984), the Runberg site on Cottonwood Pass (Black 1986), Recon John and Gooseberry Shelters at Fort Carson (Kalasz et al. 1993; Zier et al. 1989) and Trinchera Cave and Wolf Spider Shelter on Trinchera Creek in Las Animas County (Wood-Simpson 1976; Hand and Jepson 1996).

## Late Prehistoric Stage (1850 B.P.-255 B.P.)

The Late Prehistoric stage includes three periods: the Developmental ( 1850 B.P.- 900 B.P.), Diversification (900 B.P.-500 B.P.), and Protohistoric ( 500 B.P.-255 B.P.). In addition, the Diversification period is further divided into two distinct phases, the Apishapa ( 900 B.P.-500 B.P.) and Sopris (900 B.P.-750 B.P.) (Zier and Kalasz 1999). The Late Prehistoric, previously known as the Ceramic stage (Eighmy 1984), is a continuation of the hunter and gather economy that was well
established through the Archaic. The beginning of the Late Prehistoric is characterized by the introduction of new technologies such as the bow and arrow, and ceramics. However, as the stage continued to develop in the Arkansas River Basin there were significant changes in settlement, subsistence, technology, trade and demographics (Zier and Kalasz 1999).

The Developmental period was a continuation of the Late Archaic lifeway, and although a population increase has been noted there is little evidence of an outside infusion (Zier and Kalasz 1999). The period was initiated through technological advancements, first marked by the introduction of the bow and arrow, which gradually replaced the atlatl. A key indication of this shift was the introduction of the small, triangular corner-notched arrow points that replaced the larger dart points of the Late Archaic. Ceramics are also characteristic of the period, but their introduction occurred 200-300 years later. Varieties include a cord-marking influenced from the Central Plains, and a local plain ware that extended into the following Diversification period (Zier and Kalasz 1999). Site locations are in open and sheltered settings, though with greater likelihood of architectural features in either setting. Architecture includes stone partition walls within shelters, circular stone enclosures, and basin pit structures with slab elements. These structural remains are often associated with prepared floors, interior hearths, and storage features (Lowendorf et al. 1996). Open non-architectural sites are generally identified as special activity loci within a larger settlement area. At most sites it is rare to have a single Developmental period component, and though the presence of architecture is suggestive of sedentism, the lack of extensive midden deposits suggests seasonal use (Zier and Kalasz 1999).

The hunting and gathering economy included a wide variety of wild flora, although corn-which was first introduced during the Late Archaic-is significant to the diet of this period (Zier and Kalasz 1999). Faunal remains are also varied, but focus on smaller animals such as rabbit and prairie dog rather than the larger deer, elk, and bison. Developmental period sites have been documented at the Pinon Canyon Maneuver Site (Andrefsky et al. 1990; Lowendorf et al. 1996), at Fort Carson (Kalasz et al. 1993; Zier et al. 1997), and the Chaquaqua Plateau (Campbell 1969, 1976). Individual sites include Recon John Shelter, Gooseberry Shelter, Metate Cave, Wolf Spider Shelter, Belwood site, and the Forgotten site (Campbell 1969, 1976; Hand and Jepson 1996; Kalasz et al. 1993; Lowendorf et al. 1996; Zier et al. 1989).

The Diversification period is characterized by increased population and sedentism, as identified by site density, the construction of multi-room architectural settlements, and the diversity of architectural features. The period is defined by two geographically and culturally distinct phases, the Apishapa and Sopris. Though probably originating from a common Developmental period ancestry, the Apishapa maintained Plains Village influences while the Sopris was influenced by northern Rio Grande Pueblo groups (Zier and Kalasz 1999).

The Apishapa phase is widely distributed in the Arkansas River Basin and south into New Mexico east of the foothills-mountain region, extending from Colorado Springs south to the Dry Cimarron River in northeastern New Mexico (Zier and Kalasz 1999). It is hypothesized that the Apishapa is a western variant of the Plains Village tradition, maintaining more of the hunter/gather economy established during the Archaic and less of the horticultural sedentary lifestyle characteristic of the parent tradition. Sheltered and open architectural sites are best represented. The architecture includes isolated structures or large aggregated room structures, interpreted as settlements. Structural elements are semisubterranean constructed of vertical or horizontal slab masonry with curvilinear walls, supporting a post and brush superstructure. Defensive sites have been identified on canyon rims associated with barrier walls.

The economy was founded on a wide variety of wild plant material, and smaller game seems to
have been preferred, although there is evidence for bison procurement at several sites (Zier and Kalasz 1999). The presence of corn at several sites provides evidence of horticulture. The technology of the period included small, triangular side-notched and unnotched arrow-points (Anderson 1989b), and locally manufactured cord-marked ceramics (Hummer 1989). Other ceramic styles denote an interaction with Ancestral Puebloan, Plains Village, and Sopris peoples (Zier and Kalasz 1999). Apishapa assemblages include one-handed manos and slab or basin metates, an assortment of bone tools, and ornamentation. Apishapa phase sites have been located on the Pinon Canyon Maneuver Site (Lowendorf et al. 1996), the Fort Carson Military Reservation (Zier et al. 1988; Zier et al. 1997), and the Chaquaqua Plateau (Campbell 1969, 1976).

The Sopris phase is located in a relatively restricted area along the Purgatoire River and its tributaries in the vicinity of Trinidad and south into New Mexico on the Park Plateau. The phase most likely developed from the Developmental period, though influenced strongly by the Taos district in the eleventh century (Zier and Kalasz 1999). Sites are located in sheltered and open terrain, with architectural habitations predominately in open areas close to alluvial bottom lands. Upland sites were specialized, associated with resource procurement and processing activities. Habitation sites are identified as homesteads that consist of single structures and associated features, and hamlets, which contain multiple contemporaneous habitation structures. Architecture of the Sopris phase is represented by semi-subterranean house pits, with origins probably predating the phase, and rectangular to subrectangular, multi-room surface structures constructed of heavily mortared stone slabs or blocks. Vertical stone slab, jacal, and adobe construction techniques were also utilized. The economy was based on a close coordination of hunting and gathering, and horticulture. Diet relied on a wide variety of game, both small and large, and an assortment of wild plant material. Horticultural activity was focused on corn, but there is also evidence of beans and squash. Surplus of both wild and domestic plant forms is evident, as storage pits are a common architectural feature.

Technology of the Sopris phase included a wide variety of ceramic types such as locally manufactured plain wares, but also forms from the Taos district to the south and cord-marked ceramics probably associated with the Apishapa (Mitchell 1997; Zier and Kalasz 1999). Projectile point styles include a small corner-notched and stemmed variety, and a small triangular unnotched variety. Larger corner-notched dart points are also present, but probably utilized as knives (Zier and Kalasz 1999). Other traits of the Sopris phase include a diverse assemblage of milling stones, bone/antler tools, and ornamentation (Zier and Kalasz 1999). As indicated earlier, most of the Sopris phase sites in Colorado are along the Purgatoire River drainage, with extensive investigations conducted in association with the Trinidad Lake Flood Control Project (Hand et al. 1977; Wood and Bair 1980; Zier and Kalasz 1999).

The Protohistoric period is defined by Athapaskan occupations, beginning with the termination of the Apishapa phase and the arrival of Athapaskan groups, and terminating with the reduction of Apachean occupations. The terminus is marked by an influx of Comanche into the southern plains and an increase in Spanish incursions (Zier and Kalasz 1999). The Dismal River aspect is the most prominent archaeological manifestation (Gunnerson 1987, 1989). Centered primarily in Kansas and Nebraska, a regional extension of the Dismal River has been identified in the Arkansas River Basin. The economy of this period was hunting and gathering, with emphasis on bison procurement, but site data and ethnographic documentation indicate that some level of horticulture was also adopted. Sites of this period are located in open and sheltered terrain and feature sparse artifact and feature assemblages suggestive of short-term nomadic occupations (Andrefsky et al. 1990; Campbell 1969, 1976). Architecture is commonly identified as spaced stone circles, but earth lodge structures are associated with the Dismal River aspect to the northeast, and adobe multi-room structures in New Mexico (Zier and Kalasz 1999). Technology was characterized by the continued use of the bow and arrow, and small triangular unnotched and side-notched projectile points. Ceramics are the most diagnostic artifactual element of the period:
generally globular shaped jars featuring a heavily micaceous paste manufactured through coiling and/or hand forming. Northern Rio Grande Puebloean trade ware is also found during this period. There are relatively few documented sites of the Protohistoric period in the Arkansas River Basin, but they are known at the Pinon Canyon Maneuver Site, Trinidad Reservoir, and the West Carrizo Creek region (Andrefsky et al. 1990; Hand et al. 1977; Kingsbury and Nowak 1980).

## Historic Native American Stage (225 B.P.- 83 B.P.)

Later Native American populations occupied the Arkansas River Basin during the period of increased contact with Euro-Americans (Zier and Kalasz 1999). Historic Native Americans are identified as nomadic groups with economies based on hunting and gathering and, frequently incorporating equestrian hunting techniques. Site assemblages are sparse, but include trade items such as glass beads and metal projectile points. Sites affiliated with the Historic stage are rare, and information about the period is known largely through ethnohistoric documentation. There were successive incursions by several tribal groups. The earliest occupants, particularly on the plains, included a continuation of the Apacheans of the Protohistoric period. The Utes, who traditionally occupied the mountainous regions, ventured onto the plains beginning about A.D. 1600. The Comanche entered the Arkansas River Basin in the early 1700 s, and formed a short-lived alliance with the Utes to force the Apache southward. The Kiowa and Kiowa-Apache entered the area in the late 1700s, occupying the area along with the Comanche only a short time before the Cheyenne and Arapaho arrived in the late 1700s and early 1800s. By the 1870s the tribes were confined to reservations in Oklahoma, clearing the way for settlement by Euro-Americans and ending aboriginal occupation of the area (Eighmy 1984).

## Historic/Non-Native Stage (300 B.P.-50 B.P.)

Exploration of the Arkansas River basin began in the mid-1600s primarily by the Spanish, with limited incursions by the French (Mehls and Carter 1984). United States explorers, both private and military, entered the region after the Louisiana Purchase of 1803 and continued to 1865. The fur trapping industry also began in the early 1800 s. With a focus on beaver, the trapping era resulted in the establishment of several trading posts. That industry collapsed in 1840, but was revived between 1865 and 1880 with a demand for buffalo robes (Mehls and Carter 1984).

Historically, the Great Plains portion of the Arkansas River Basin functioned as graze land for native fauna. This land use pattern began to change in the 1840s when ranching and farming were initiated in the Arkansas Valley. However, the most significant change occurred with irrigation farming, which has been used extensively since the late 19th century (Mehls and Carter 1984). In contrast, the western/mountain region witnessed development associated with mining from the mid to late 1800 s . The logging industry and agriculture were established during the same period, often continuing long after mining ceased (Mehls 1984).

For further information regarding detailed artifact inventories, subsistence strategies, and complete chronologies, the reader is referred to Eighmy (1984) and Zier and Kalasz (1999). For information concerning the historic period, see the regional overviews prepared by Mehls and Carter (1984) and CDOT (2009).

## RESEARCH DESIGN

This project is located within the Arkansas River drainage system of Colorado's southeastern plains. The archaeological record in this area is lengthy, and evidence indicates, fairly continuous. Data
are available for the later Archaic and Formative occupations, while early occupations are more sparsely represented (Zier and Kalasz 1999).

Based on data from the Platte River Basin of northeastern Colorado, Paleoindian sites are commonly in open terrain and can be deeply buried. The earlier Clovis and Folsom period occupations have been identified on the plains, and the later Plano period site expand into the foothill-mountain region. Paleoindian sites are more commonly associated with Pleistocene faunal procurement, however, the more rare occupation sites have been noted to provide data about a broader and complex economy, based on hunting and gathering.

Available regional data indicate that Archaic stage sites are found in open and sheltered terrain. Sites may represent complex base camp localities, in some instances with architectural features, or very short-term use, special activity localities. Early Archaic period sites are rare in the Arkansas River Basin, with Middle and Late Archaic occupations more common and frequently representing site reuse. The economy reflected a continuation of hunting and gathering, with possibly more emphasis on wild plant use. Corn as a domestic crop was introduced during the Late Archaic period.

Late Prehistoric stage sites are again located in open and sheltered terrain commonly associated with larger drainages, and limited activity sites are often located in upland areas away from the drainages (Campbell 1969, 1976; Kihm and Chenault 1982; Lutz and Hunt 1979). Apishapa phase sites are usually located on the southern tributaries of the Arkansas River: the Apishapa, Cucharas, and Purgatoire Rivers (Ireland 1968). Technological change marks the beginning of the stage, with the introduction of the bow and arrow, and ceramics. Further cultural development is noted, as the economy is based on hunting and gathering, with a growing reliance on horticulture from the Developmental to Diversification periods. Domestic architectural features continue to develop from the Archaic, but become more complex during the later Diversification period, with evidence of outside regional influences. There is very little information concerning the Athabaskan occupations of the Protohistoric period.

Little data is present concerning the Historic Native American occupations in either the Arkansas or Platte River Basins. Sites of this period are often identified through ethnohistoric documentation, frequently in association with a ceremonial event, a conflict, or documented through Euroamerican interaction. The sites are commonly short-term occupations, with a very limited artifact assemblage.

The principal objective of the inventory was to locate and record all cultural resources that may be affected by the proposed project, and to formulate appropriate management recommendations. These data are intended for integration into the broader data base for the Arkansas River Basin region. It is only through a process of data integration that results from small-scale inventories such as the present effort can contribute to specific research topics formulated in response to existing cultural overviews.

Previous investigations along US 50 have resulted in the identification of a limited number of prehistoric sites and isolated artifacts within and adjacent to the ROW. However, the project corridor is narrow and has been disturbed by transportation construction and maintenance activities. As a result, the discovery of cultural remains was not anticipated during the current survey. Prehistoric open camps and lithic scatters documented in the area are associated with Archaic and Late Prehistoric stage occupations. Historic sites are commonly associated with agriculture, transportation and settlement.

## FIELD METHODS

A prehistoric site is defined as any locality exhibiting structures or features (e.g., stone circle or
hearth) or having five or more artifacts in apparent association with one another and occurring within a restricted area. Prehistoric isolated finds are nonstructural remains and consist of four or fewer artifacts.

A historic site is defined minimally as any structural remnant (e.g., house outbuilding, root cellar), any trash concentration or scatter suggesting residential or industrial use of the area, or any refuse dump. Historic isolated finds are individual historic artifacts or small clusters of artifacts that do not represent established refuse dumps. The minimum age criterion for historic sites and isolates is 50 years.

The inventory involved one individual walking sinuous transects at 15 m intervals north and south of the highway within the fenced ROW, and between the eastbound and westbound lanes in the vicinity of the State Highway 45 intersection where the highway is widely divided. Previously inventoried portions of the project corridor at the eastern and western project limits were resurveyed. When artifacts were encountered, a broad area surrounding the locality was surveyed. None of the artifacts encountered during the inventory were collected. The attached Management Data Form and Linear Component Form (Appendix II) provide a comprehensive description of the single archaeological site recorded during the survey.

The corridor is located on the northern flank of the Arkansas River valley on open shortgrass prairie dissected by intermittent drainages. Not surprisingly, the highway ROW in this area exhibits substantial ground disturbance as a result of previous road construction and maintenance. That portion of the ROW where the highway is undivided exhibits approximately 95 percent disturbance; the portion with divided eastbound and westbound lanes near State Highway 45 contains more undisturbed land. Much of the property adjacent to the ROW has been developed for residential and commercial uses. Vegetation is dominated by short grasses, weeds, rabbit brush, saltbush, cacti, and yucca, with tamarisk, skunkbush, sunflower, and other riparian species growing adjacent to Dry Creek and Williams Creek. Ground surface visibility was generally good, with vegetation allowing surface visibility estimated at 70 percent at the time of survey.

All project records are housed in perpetuity at the offices of the CDOT Archaeological Unit in Denver.

## RESULTS AND RECOMMENDATIONS

The survey resulted in the identification of one historic archaeological site (5PE320.3). These results were anticipated based on the results of prior inventories in this portion of the highway corridor. The lack of additional cultural remains is undoubtedly related to the limited width of the study area and impacts associated with earlier highway construction.

Site 5PE320.3 is a short segment of abandoned rail grade that operated between Pueblo and the stone quarries and clay mines at Stone City in northwest Pueblo County between 1909 and 1958. The railroad initially operated briefly as the Kansas-Colorado Railroad, and after bankruptcy as the ColoradoKansas Railroad. After dissolution of the Colorado-Kansas Railroad in 1934, the line was operated by the Colorado Railroad until it was abandoned after several bridges were destroyed by flash floods in 1957. The grade has been truncated on the south by subsequent construction of US Highway 50 and by a local frontage road (Capri Circle) on the north. The grade has slumped due to years of gradual erosion after the rails and ties were removed in August 1958. A light scatter of artifacts is present, but there are no associated features and no potential for intact subsurface cultural deposits which could provide significant data regarding early- to mid $-20^{\text {th }}$ century railroads. Because this segment of the railroad exhibits extensive disturbance and has been isolated from other extant portions of the grade by urban and residential development, it lacks sufficient integrity to convey the historical significance of the railroad.

Consequently, this segment of the grade does not support the potential eligibility of the entire railroad for the National Register of Historic Places. The project proposes improvements to the eastbound lanes of US Highway 50 ; no construction is proposed on the westbound lanes of the highway, where the site is located.

## REFERENCES CITED

| Anderso |  |
| :---: | :---: |
| 1989a | "Chronological Framework". In Temporal Assessment of Diagnostic Materials from the Pinon Canyon Maneuver Site. Edited by Christopher Lintz and Jane L. Anderson. Memoirs of the Colorado Archaeological Society, No. 4. |
| 1989b | "Projectile Points". In Temporal Assessment of Diagnostic Materials from the Pinon Canyon Maneuver Site. Edited by Christopher Lintz and Jane L. Anderson. Memoirs of the Colorado Archaeological Society, No. 4. |
| Andrefsk 1990 | William, Marilyn J. Bender, John D. Benko, Judy K. Michaelsen Test Excavations in the Pinon Canyon Maneuver Site, Southeastern Colorado. 2 volumes. Larson-Tibesar Associates, Inc., Laramie, Wyoming. |
| $\begin{gathered} \text { Armstrc } \\ 1972 \end{gathered}$ | vid M. <br> Distribution of Mammals in Colorado. Monograph of the Museum of Natural History, University of Kansas, No. 3, edited by W.E. Duellman. University of Kansas Printing Service, Lawrence. |
| $\begin{gathered} \text { Bair, Ge } \\ 1977 \end{gathered}$ | A Preliminary Appraisal of Cultural Resources in the Bureau of Land Management's Raton Basin Coal Lease Resource Area, Las Animas County, Colorado. Office of Archaeology and Historic Preservation, Denver. |
| Benedic 1978 | B. and Byron L. Olson <br> The Mount Albion Complex: A Study of Prehistoric Man and the Altithermal. Center for Mountain Archaeology Research Report No. 1. Ward, Colorado. |
| $\begin{gathered} \text { Black, } \\ 1986 \end{gathered}$ | Mitigative Archaeological Excavations at Two Sites for the Cottonwood Pass Project, Chaffee and Gunnison Counties, Colorado. Metcalf Archaeological Consultants, Inc., Eagle, Colorado. |
| 1991 | Archaic Continuity in the Colorado Rockies: The Mountain Tradition. Plains Anthropologist 36 (133):1-29. |
| Campbell | ert Gordon |
| $1969$ | Prehistoric Panhandle Culture on the Chaquaqua Plateau, Southeast Colorado. Unpublished Ph.D. dissertation, Department of Anthropology, University of Colorado, Boulder. |
| 1976 | The Panhandle Aspect of the Chaquaqua Plateau. Texas Tech University Graduate Studies, No. 11. Lubbock, Texas. |
| Cassells, |  |
| 1997 | The Archaeology of Colorado. Johnson Books, Boulder. |
| $\begin{aligned} & \text { Chambella } \\ & 1984 \end{aligned}$ | Collette, Margaret Kadziel, Thomas J. Lennon, and Eliza K. Wade A Cultural Resource Evaluation of Site 5CF84, Salida Ranger District, Pike and San Isabel National Forest, Colorado. Western Cultural Resource Management, Inc., Boulder, Colorado. |

Church, Minette C. Steven g. Baker, Bonnie J. Clark, Richard F. Carrillo, Jonathon C. Horn, Carl D. Spath, David R. Guilfoyle, and E. Steve Cassells 2007 Colorado History: A Context for Historical Archaeology. Colorado Council of Professional Archaeologists, Denver.

Colorado Department of Transportation
1994 A Cultural Resources Survey Along State Highway 45 Northwest of Pueblo, Pueblo County, Colorado. Archaeological Unit, Colorado Department of Transportation, Denver.

2009 Historic Context Overview: Lower Arkansas Valley Historic Resources Along U.S. 50 in Pueblo, Otero, Bent, and Prowers Counties, Colorado. Colorado Department of Transportation, Denver.

Dixon, E. James
1999 Bones, Boats, and Bison: Archaeology and the First Colonization of Western North America. University of New Mexico Press, Albuquerque.

Eighmy, Jeffrey L.
1984 Colorado Plains Prehistoric Context. Office of Archaeology and Historic Preservation, Colorado Historical Society, Denver.

Fenneman, N.M.
1931 Physiography of the Western United States. McGraw Hill Book Co., New York
Fitzgerald, James P., Carron A. Meaney, and David M. Armstrong
1994 Mammals of Colorado. University Press of Colorado, Niwot, Colorado.
Frison, George C.
1991 Prehistoric Hunters of the High Plains. Second edition, Academic Press, Inc., San Diego.

1992 The Foothills-Mountains and the Open Plains: The Dichotomy in Paleoindian Subsistence Strategies Between Two Ecosystems. In, Ice Age Hunters of the Rockies, edited by D. J. Stanford and J.S. Day. Denver Museum of Natural History and the University Press of Colorado, Denver.

Gilmore, Kevin P., Marcia Tate, Mark L. Chenault, Bonnie Clark, Terri McBride, and Margaret Wood
1999 Colorado Prehistory: A Context for the Platte River Basin. Colorado Council of Professional Archaeologists, Denver.

Gunnerson, James H.
1987 Archaeology of the High Plains. Bureau of Land Management Cultural Resource Series, No. 19. Denver.

Apishapa Canyon Archaeology: Excavations at the Cramer, Snake Blakeslee and Nearby Sites. Reprints in Anthropology Volume 41. J \& L Reprint Company, Lincoln, Nebraska.

Hagar, Ivol K.
1976 5CR1- Draper Cave Excavation and Research Report. Southwestern Lore 42(3).

Cultural Resources Survey of the Proposed Improvements to Interstate 25, US Highway 50, and State Highway 47 in Pueblo, Pueblo County, Colorado. Colorado Department of Transportation, Denver.

2007
An Intensive Cultural Resources Inventory of the US Highway 50/Purcell Boulevard Intersection at Pueblo West, Pueblo County, Colorado. Colorado Department of Transportation, Denver.

Hand, O D, Carla Latuda, and Gerald A. Bair
1977 Trinidad Lake Cultural Resource Study, Part 1: An Evaluative Survey of Historic and Archaeological Sites Within the Corps of Engineers Trinidad Lake Flood Control Project, Las Animas County, Colorado. Laboratory of Contract Archaeology, Trinidad State Junior College, Trinidad, Colorado.

Hand O D and Daniel A. Jepson
1996 Archaeological Excavations at Wolf Spider Shelter (5LA6197), Las Animas County, Colorado. Colorado Department of Transportation Research Series No. 5, Office of Environmental Services, Colorado Department of Transportation, Denver.

Horn, Jonathon C., Alan D. Reed, and Stan A. McDonald
1987 Archaeological Investigations at the Indian Creek Site, 5ME1373: A Stratified Archaic Site in Mesa County, Colorado. Manuscript on file at the Office of Archaeology and Historic Preservation, Denver.

Hutchinson, Lewis A.
1990 Archaeological Investigations of High Altitude Sites Near Monarch Pass, Colorado. Unpublished Master's thesis, Department of Anthropology, Colorado State University, Fort Collins.

Hummer, Anne G.
1989 Prehistoric Ceramics. In, Temporal Assessment of Diagnostic Materials from the Pinyon Canyon Maneuver Site. Edited by Christopher Lintz and Jane. L. Anderson. Memoirs of the Colorado Archaeological Society, No. 4.

Ireland, Stephen K.
1968 Five Apishapa Focus Sites in the Arkansas Valley, Colorado. Unpublished Master's thesis, Department of Anthropology, University of Denver, Denver.

1974 Archaeological Survey of US Highway 50, Canon City-Penrose (Extending to Pueblo West). Colorado Department of Highways Salvage Report No. 7. Denver.

Kalasz, Stephen M., Daniel A. Jepson, Christian J. Zier, and Margaret A. Van Ness 1993 Test Excavation of Seven Prehistoric Sites on the Fort Carson Military Reservation, El Paso County, Colorado. Centennial Archaeology, Inc., Fort Collins, Colorado.

Kihm, Allen J., and Mark L. Chenault
1982 Archaeological Resources of the Muddy Creek Drainage Along State Highway 69, West of Gardner. Colorado Department of Highways Salvage Report No. 41. Denver.

| Kingsbury, L. A., and M. Nowak |  |
| :---: | :---: |
| 1980 | Archaeological Investigations on Carrizo Ranches, Inc. 1974-1979. Colorado College Publications in Archaeology No. 2. Department of Anthropology, The Colorado College, Colorado Springs. |
| Loendorf, Lawrence L., Jeani L. Borchert, and Duane G. Klinner |  |
| 1996 | Archaeological Investigations at Ceramic Stage Sites in the Pinon Canyon Maneuver Site, Colorado. Contribution No. 308. Department of Anthropology, University of North Dakota, Grand Forks. |
| Lutz, Bruce, and William J. Hunt, Jr. |  |
| 1979 | Models for Patterns and Change in Prehistoric Settlement-Subsistence Systems of the Purgatoire and Apishapa Highlands. Interagency Archaeology Services, U.S. Department of the Interior, Denver. |
| Martor 1999 | rilyn A., Ted Hoefer III, Margaret A. Jodry, Vince Spero, and Melissa L. Taylor Colorado Prehistory: A Context for the Rio Grande Basin. Colorado Council of Professional Archaeologists, Denver. |
| McKibbin, Anne, Carole Graham, Grant D. Smith, and Michael McFaul |  |
| 1997 | The Lorencito Canyon Mine: Results of a Cultural Resource Inventory, Research Design and Treatment Plan, Las Animas County, Colorado. Metcalf Archaeological Consultants, Inc., Eagle Colorado. |
| Mehls, Steven F. |  |
| 1984 | Colorado Mountains Historic Context. Office of Archaeology and Historic Preservation, Colorado Historical Society, Denver. |
| Mehls, Steven F., and Carroll Joe Carter |  |
| 1984 | Colorado Southern Frontier Historic District. Office of Archaeology and Historic Preservation, Colorado Historical Society, Denver. |
| Metcalf, Michael D. and Kevin D. Black |  |
| 1991 | Archaeological Excavations at the Yarmony Pit House Site. Bureau of Land Management Cultural Resource Series, No. 31. Denver. |
| Mitchell, Mark |  |
| 1997 | Interregional Perspectives on the Sopris Phase: An Examination of Prehistoric Frontiers in Southeastern Colorado and Northeastern New Mexico. Unpublished Master's thesis, Department of Anthropology, University of Colorado, Denver. |
| Nowak, Michael and Christopher A. Jones |  |
| 1985 | Archaeological Investigations in Southeastern Colorado. Publications in Archaeology No. 8. Department of Anthropology, Colorado College, Colorado Springs. |
| Nowak, Michael and John W. Kantner |  |
| 1991 | Archaeological Investigations In Southeastern Colorado. Publications in Archaeology No. 16. Department of Anthropology, Colorado College, Colorado Springs. |
| Rood, Ronald J. |  |
| 1990 | Archaeological Excavations at 5LA2190: Evidence for Late Archaic Architecture in Southern Colorado. Southwestern Lore 56(3):22-29. |

Shields, William Lane
Preliminary Investigations at the McEndree Ranch Site, 5BA30. Southwestern Lore 46(3):1-17.

Slessman, Scott A., Stephen M. Kalasz, Christopher C. Kinneer, John d. Kennedy, Michael McFaul, Christian J. Zier, Jannifer W. Gish
2003 Archaeological Investigations at the Lopez Ranch Site (5LA2204) and the Leef Ranch Site (5LA9853) Along State Highway 12 Near Sarcillo, Las Animas County, Colorado. Archaeological Research Series No. 7. Environmental Programs Branch, Colorado Department of Transportation, Denver.

Thornbury, William D.
1965 Regional Geomorphology of the United States. John Wiley and Sons, Inc., New York.
Wheat, Joe Ben
1972 The Olsen-Chubbuck Site: A Paleo-Indian Bison Kill. Memoirs of the Society of American Archaeology No. 26, Washington D.C.

Wood, Caryl E., and Gerald A. Bair
1980 Trinidad Lake Cultural Resources Study, Part II. The Prehistoric Occupation of the Upper Purgatoire River Valley, Southeastern Colorado. Interagency Archaeological Services, U.S. Department of the Interior, Denver.

Wood-Simpson, Caryl
1976 Trinchera Cave: A Rock Shelter in Southeastern Colorado. Unpublished MA thesis, Department of Anthropology, University of Wyoming. On file at the Office of Archaeology and Historic Preservation, Denver.

Zier, Christian J. and Stephen M. Kalasz
1999 Colorado Prehistory: A Context for the Arkansas River Basin. Colorado Council of Professional Archaeologists, Denver.

Zier, Chriṣtian J., Stephen M. Kalasz, Anne H. Peebles, Margaret A. Van Ness, and Elaine Anderson 1988 Archaeological Excavation of the Avery Ranch Site (5PE56) on the Fort Carson Military Reservation, Pueblo County, Colorado. Centennial Archaeology, Inc., Fort Collins, Colorado.

Zier, Christian J., Stephen M. Kalasz, Margaret A. Van Ness, Renee Johnson, Richard F. Madole, Jane L. Anderson, Elaine Anderson, Larry Grantham, and Linda Scott Cummings
1989 Archaeological Excavation of Recon John Shelter (5PE648) on the Fort Carson Military Reservation, Pueblo County, Colorado. Edited by C.J. Zier. Centennial Archaeology, Inc., Fort Collins, Colorado.

Zier, Christian J., Kurt P. Schweigert, Mary W. Painter, Marilynn A. Mueller, and Kenneth R. Weber 1997 Cultural Resource Management Plan for Fort Carson Military Reservation, Colorado. Centennial Archaeology, Inc., Fort Collins, Colorado.

## APPENDIX I

SITE LOCATION MAP

Northwest Pueblo (1961, revised 1994) 7.5’USGS topo map
Sixth P.M., T20S, R65W, Section 15
Pueblo County, Colorado


Portion of Northwest Pueblo 7.5' USGS topographic map showing location of 5PE302.3

