

For Official Use Only: Disclosure of Site Locations if Prohibited (43 CFR 7.18)

**AN ARCHAEOLOGICAL ASSESSMENT OF BRIDGEPORT TUNNEL,
5ME21645
IN MESA COUNTY, COLORADO**

**BLM Reference No. 15817-02
OAHF Reference No. ME.LM.R989
SHF Project No. 2017-AS-004**

DARG Project No. D2017-01
29 March 2018

Prepared by
Carl E. Conner, Principal Investigator
and Nicole Inman

❖ DOMINQUEZ ARCHAEOLOGICAL RESEARCH GROUP ❖
P.O. Box 3543
Grand Junction, Colorado 81502
BLM Antiquities Permit No. C-67009

Submitted to

**COLORADO HISTORICAL SOCIETY
OFFICE OF ARCHAEOLOGY AND HISTORIC PRESERVATION**
1200 Broadway
Denver, Colorado 80203

FOR OFFICIAL USE ONLY: DISCLOSURE OF SITE LOCATIONS IS
PROHIBITED (43 CFR 7.18)

PUBLIC DISTRIBUTION COPY.

PORTIONS OF THIS REPORT MAY HAVE BEEN REDACTED AND PAGES MAY
HAVE BEEN REMOVED TO PROTECT THE SITE LOCATIONS.

Abstract

Dominquez Archaeological Research Group (DARG), by means of a grant from the Colorado State Historical Fund (2017-AS-004), conducted a site assessment of the Bridgeport Tunnel railway site (5ME21645) located above the Gunnison River in Mesa County, Colorado for the Bureau of Land Management Grand Junction Field Office (BLM GJFO). Fieldwork was conducted on the 12th and 13th of October 2017 under BLM Antiquities Permit No. C-67009. Carl Conner served as Principal Investigator and Nicole Inman served as Project Director.

As a research project proposed under Section 110, a historic site assessment, the project boundary is equivalent to the site boundary based on a visual inspection of features and artifacts. Section 110 of the National Historic Preservation Act (NHRP) outlines the responsibilities of federal agencies to ensure that historic preservation is fully integrated into the ongoing programs of all Federal agencies. Benchmarks include (a) historic properties under the jurisdiction or control of the agency are to be managed and maintained in a way that considers the preservation of their historic, archaeological, architectural, and cultural values; (b) historic properties not under agency jurisdiction or control but potentially affected by agency actions are to be fully considered in agency planning; (c) agency preservation-related activities are to be carried out in consultation with other Federal, State, and local agencies, Indian tribes, Native Hawaiian organizations, and the private sector; (d) agency procedures for compliance with section 106 of the Act are to be consistent with regulations issues by the Advisory Council on Historic Preservation; and (e) an agency may not grant assistance or a license or permit to an applicant who damages or destroys property with the intent of avoiding the requirements of section 106, unless specific circumstances warrant such assistance.

The project recorded the construction site for Bridgeport Tunnel. The construction of the tunnel took place between October 1883 and April 1884. Overall, the project recorded the 12 acre site and 8 features within its bounds. All of the work took place on federal lands. The work identified the construction site for the tunnel, but due to railroad regulations, did not include an evaluation of the tunnel itself.

The site was field evaluated as eligible under Criteria A and D. Recommendations for the historic site include protection and preservation, which might include periodic monitoring for disturbances caused by recreationalists who camp in the river bottom below the site or interpretive signs to discourage disturbance. Additional research might include metal detecting within and around the features to determine if any cultural remains are present that could provide additional context regarding the occupants of the site. Continual archival research should be conducted to find reference to the construction details of the extant structures.

TABLE OF CONTENTS

Abstract.	ii
Cultural Resource Survey Management Information.. . . .	v
Introduction.	1
Location.	1
Environment.. . . .	1
Cultural History.	2
Settlement.	2
Railroads.	5
General Land Office Records.. . . .	8
Project Background.	9
Statement of Objectives.. . . .	10
Methods.	11
Site Description.	11
Discussion.	21
Management Recommendations.	24
References.	25
Appendix A: Overview maps, OAHP Site Forms.	A.1

FIGURES

Figure 1. Project location map.	vi
Figure 2. Fruit box label from Bridgeport, Colorado.. . . .	4
Figure 3. Right of way and track map for Bridgeport, Colo.	6
Figure 4. Right of way and track map of Tunnel location.	7
Figure 5. GLO map dated 1916 showing Bridgeport Tunnel.	8
Figure 6. Site map.	13
Figure 7. Reconstruction of features excavated in Tenmile Canyon.	24
Figure A-1. Cultural resource location map.. . . .	A.2

PLATES

Plate 1. Trolley ferry over the Gunnison River.	5
Plate 2. The section house and passenger platform at Bridgeport.	6
Plate 3. James Bradley Orman.	9
Plate 4. Bridgeport Tunnel construction camp site overview.	11
Plate 5. Spoon end.	12
Plate 6. Close-up view of Feature 1.	14
Plate 7. Close-up view of Feature 2.	15
Plate 8. Close-up view of Feature 3.	15
Plate 9. Close-up view of Feature 4.	16
Plate 10. Close-up view of Feature 5.	17
Plate 11. Close-up view of Feature 6.	17
Plate 12. Close-up view of Feature 7.	18
Plate 13. Close-up view of Feature 8.	19
Plate 14. View of Feature 9.	20

PAGE(S) REDACTED

INTRODUCTION

Dominquez Archaeological Research Group (DARG), by means of a grant from the Colorado State Historical Fund (2017-AS-004), conducted a site assessment of the Bridgeport Tunnel railway site (5ME21645) located above the Gunnison River in Mesa County, Colorado for the Bureau of Land Management Grand Junction Field Office (BLM GJFO). Fieldwork was conducted on the 12th and 13th of October 2017 under BLM Antiquities Permit No. C-67009. Carl Conner served as Principal Investigator and Nicole Inman served as Project Director.

Bridgeport Tunnel is located within the Dominguez-Escalante National Conservation Area, which includes the 66,280-acre Dominguez Canyon Wilderness. From the Bureau of Land Management website: “Known for its breathtaking scenery, the Dominguez- Escalante NCA is a fine example of the spectacular canyon country of the Uncompahgre Plateau. Red-rock canyons and sandstone bluffs hold geological and paleontological resources spanning 600 million years, as well as many cultural and historic sites.” One of the unique historic sites is Bridgeport Tunnel.

LOCATION

The project area is located on the north bank of the Gunnison River approximately 12 miles southeast of Whitewater, Colorado. The site is located in T. 3 S., R. 2 E., Sections 29 and 32; Ute P.M. (Figure 1).

ENVIRONMENT

This section provides a brief overview of the environment of the study area. The present land use in the surrounding area is primarily grazing and recreational activities such as river rafting, horseback riding, hiking, camping, and hunting.

The site is near the northern end of the Uncompahgre Plateau, a southeast-to-northwest structural uplift on the northeast margin of the Colorado Plateau physiographic province. The Colorado Plateau is characterized by nearly horizontal geologic formations, deeply incised vertical-walled canyons, high elevations and sedimentary rock formations (Fenneman 1931). The Uncompahgre Plateau is a remnant of a late Paleozoic mountain range, the Uncompahgria, which covered most of Western Colorado. It reached its present elevation after several reactivations, the last of which occurred during the Cenozoic Era. The geologic formations were deposited on the resistant Precambrian gneiss, schist, granite and pegmatite (Young and Young 1977:61-63). In the study area, erosion has removed the overlying rocks down to the Triassic-age Wingate Sandstone and Chinle Formation. South of the project area, sedimentary rocks of Precambrian age are exposed in the bottom of Big Dominguez Canyon, and form a set of waterfalls. Large boulders from the Wingate Sandstone have been deposited on the canyon

slopes and floor, and form many of the shelters for the camps and backdrops for the rock art.

In this part of the Uncompahgre Plateau, many streams have cut northeast-flowing valleys and canyons including Big Dominguez and Little Dominguez Canyons. These are tributaries to the Gunnison River. The soils in the canyon bottom are light-brown and reddish-brown sandy loams whose depths are highly variable (0 to 50 centimeters), and which sometimes occur as stabilized dunes.

The site lies at 4800 feet in elevation, which occurs within the Upper Sonoran plant zone. Vegetation is greasewood, sagebrush, and rabbitbrush, mixed with desert saltbush community. Riparian community occurs along the banks of the Gunnison River. Mule deer, antelope, and coyote are common, as are cottontail rabbits and various rodents. Mountain lion, bobcat, black bear, elk, fox, skunk, badger, and weasel are also likely inhabitants. Bird species observed in the area include the jay, raven, magpie, red-shafted flicker, long-eared owl, golden eagle and various other raptors.

Presently, the area has a cool semiarid climate where temperatures can drop to -10 degrees F during the winters and summer temperatures may reach 100 degrees F or more; there is a maximum of 160 frost-free days and the annual precipitation is about 12-16 inches (USDA SCS 1978: 6).

CULTURAL HISTORY

Cultural resource investigations in the vicinity of the project area have yielded surface diagnostic artifacts and excavated cultural materials consistent with Paleoindian, Archaic, Formative, and Protohistoric occupations. The material culture for these time periods has been extensively documented in *Colorado Prehistory: A Context for the Northern Colorado River Basin* (Reed and Metcalf 1999) and in Class I Cultural Resource Inventory for Grand Junction Field Office of the Bureau of Land Management (Conner et al. 2011). Since this report is historic in nature, these cultural eras will be excluded from this discussion. The reader is encouraged to explore the referenced documents for more information. Historic overviews and records indicate occupation by various bands of the Ute Tribe and by EuroAmerican settlers, miners, railway workers, and ranchers. A history of this region is provided in *The Valley of Opportunity: A History of West-Central Colorado* (Mehls 1988), *Colorado History: A Context for Historical Archaeology* (Church et al. 2007) and in the aforementioned Class I (Conner et al. 2011). The following provides relevant historical background pertaining to the area considered by this project.

Settlement

It has been well documented that the Ute people occupied large areas of western Colorado until they were officially removed on 1 September 1881 as the result of the Treaty of 1880. The

treaty stipulated that the White River bands were to go to the Uintah Reservation in northeastern Utah and the Uncompahgre band was to be given a small reservation in the vicinity of the confluence of the Colorado and Gunnison Rivers. Aware of the value of these agricultural lands; however, the commission charged with enforcing the terms of the treaty, under the direction of Otto Mears, manipulated the location process using a loophole in the treaty language, and the Uncompahgre bands were given lands in Utah near the Uintah Reservation. The Southern Ute bands remained on their small reservation in southwestern Colorado as a result of the Treaty of 1873. Unofficially, many Utes remained in hiding in their homeland and many others returned each year to hunt; however, with the dissolution of the treaties that previously set up reservation lands for the White River and Uncompahgre bands in western Colorado, most of the Western Slope was opened for EuroAmerican settlement.

Cattlemen ranged on Colorado and Utah lands as early as the 1870s. Herds were moved back and forth through the Grand Valley and Unaweep Canyon as ranchers grazed in the Sinbad Valley, La Sal Mountains, and Gateway area. Tension occasionally turned violent as cattle ranchers and Ute Indians experienced conflict over these lands (Mehls 1988).

Interest in the potential agricultural lands along the Uncompahgre, Gunnison, Colorado, Dolores, San Miguel, White, and La Plata River valleys of western Colorado had been growing for some time prior to the Utes' banishment. By the spring of 1881 the frontier towns closest to the Ute lands were "crowded with people, anxious to enter the Reservation and take possession of the most desirable locations" (Haskell 1886:2). Only days after the Utes had been expelled, settlers began rushing onto the old reservation lands. During the autumn months of 1881, settlement activity spread quickly - land claims were staked, townsites were chosen, and railroad routes were surveyed (Haskell 1886, Borland 1952, and Rait 1932). The first year of settlement activity was marked by a degree of uncertainty regarding the legality of land claims because former reservation lands were not officially declared public lands until August 1882. When finally announced, the 1882 declaration did not allow homestead entries but only preemptions, or cash entries, at the rate of \$1.25 per acre for agricultural land and \$5.00 per acre for mineral land (Borland 1952:75). By 1895, the majority of the former Ute lands had been claimed, mostly under Cash Entry patents.

The settlers raised their own food and availed themselves to the plentiful game in the area. Gardens, hay fields, and orchards were planted, and irrigation ditches were dug to divert creek water to cultivated fields. Large herds of cattle and sheep were accumulating, grazing the valley floor and the vast open ranges of the Roan Plateau, Grand Mesa, and Uncompahgre Plateau, and driven to the uplands via trails up the various gulches and canyons.

Several town sites were established in the Grand Valley shortly after the area was opened for settlement. In 1881, three parties of men led by O.D. Russell, J. Clayton Nichols, and William McGinley followed the Gunnison River north to the Colorado River (known then as the Grand) staking claims at the junction. At the same time, J.S. Gordon, William Green, and Mr. Forbush made their way east into the Grand Valley. Additionally, George A. Crawford, R.D.

Mobley, M. Rush Warner, Colonel Morris, and S.W. Harper also made their way north from the Gunnison area as soon as the Ute were removed. In the fall of 1881, Crawford filed paperwork to incorporate the town of Grand Junction. His town plan included parks, schools, churches, and government buildings. Half of the funding for his town plan came from selling stock to the Denver and Rio Grande Junction Railway (McCreanor 1986:1).

Whitewater was established in 1881. It was reported to have been larger than Grand Junction at the time, with a hotel, blacksmith shop, railroad and telegraph station, two restaurants, stores, a dance hall, stockyards, and a ferry across the Gunnison River. A school house was constructed in 1883 and also served as a community center and a church. The school was operational from 1883 to 1959. Cattle ranching and orchards were early industries, but the orchards faced the same problems with poor drainage and alkali as were found in the surrounding communities (McCreanor 1986:11).

Bridgeport, which was first known as Arlington, was located 20 miles southeast of Grand Junction on the Mesa-Delta county line. It served as a train stop on the Gunnison Division of the Denver and Rio Grande Railroad and was home to a 370-acre apple orchard. “This was one of the largest orchards in Mesa County. It was established in the 1890s by Fred and Avery Burford. The orchard was bought by John Moore in 1903 and acquired by his son Frank and cousin George Emerson around 1926. The orchard was then replanted to peaches” (McCreanor 1986:11; Figure 2). A bread oven at the farm, which is the size of a small cabin, was reputed to have fed hundreds of (primarily) Mexican immigrants (Marshall 1988:56).

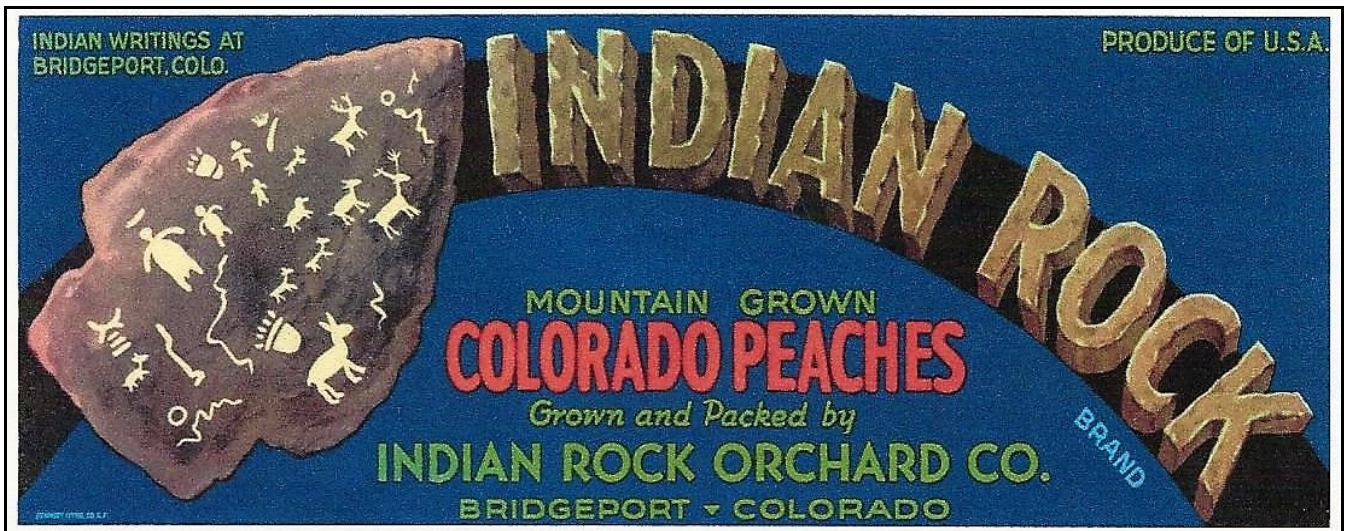


Figure 2. Fruit box label from Bridgeport, Colorado (Author’s personal collection).

A trolley ferry provided the first method for crossing the Gunnison at Bridgeport (Plate 1). In 1906, a bridge was brought from DeBeque to Bridgeport, which allowed livestock and vehicles to cross (Daily Sentinel 2014).



Plate 1. Trolley ferry over the Gunnison River. Bridgeport Siding is visible in the background (Daily Sentinel 2014; Museum of the West Lloyd Files Research Library collections).

Railroads

In 1882, the Denver and Rio Grande railroad constructed the Western Gunnison route, which ran north out of Montrose for 74 miles. It was referred to as the Third/Gunnison Division mainline until it was replaced by the standard gauge in 1906 and renamed the North Fork Branch. It followed the Uncompahgre and Gunnison Rivers into Grand Junction. The original route crossed the Gunnison River four times in the vicinity of Bridgeport Siding. Numerous problems with bridge instability and washouts necessitated the construction of the Bridgeport Tunnel in 1883.

Bridgeport Siding is located 2.5 miles south of the tunnel. A track map shows that a bunkhouse, section house, open shelter, and tool house were present (Figure 3). A historic photo of Bridgeport Siding confirms the presence of the structures shown on the track map (Plate 2).

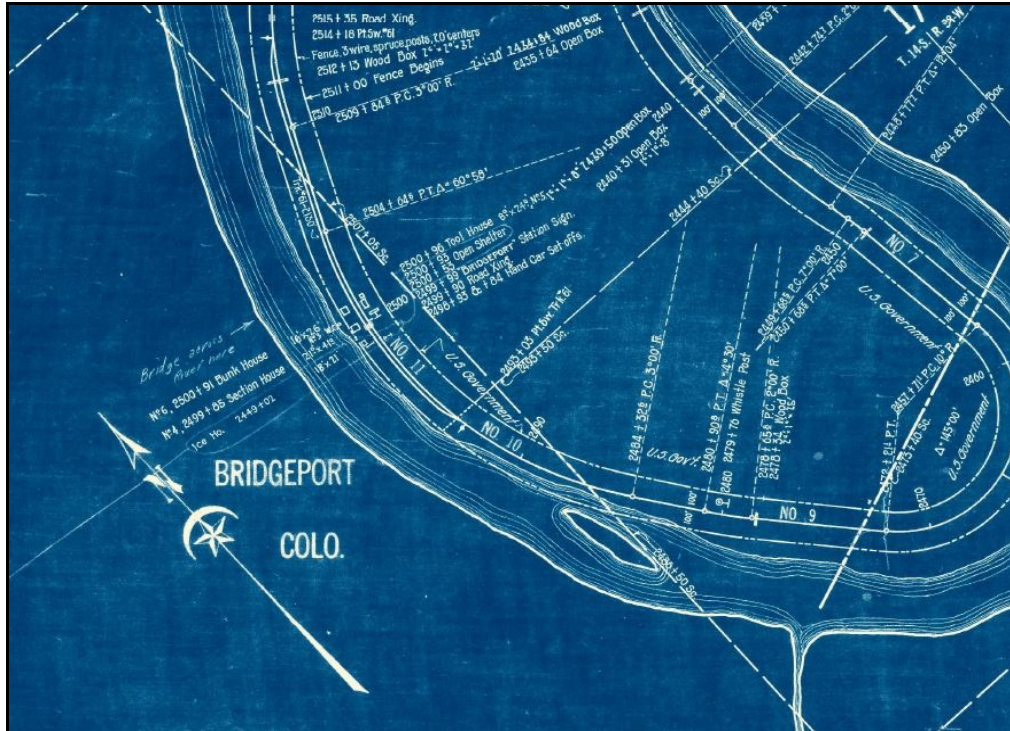


Figure 3. Right of way and track map of Bridgeport, Colo. for the Denver and Rio Grande Railroad (Mesa County GIS Department 2012a).

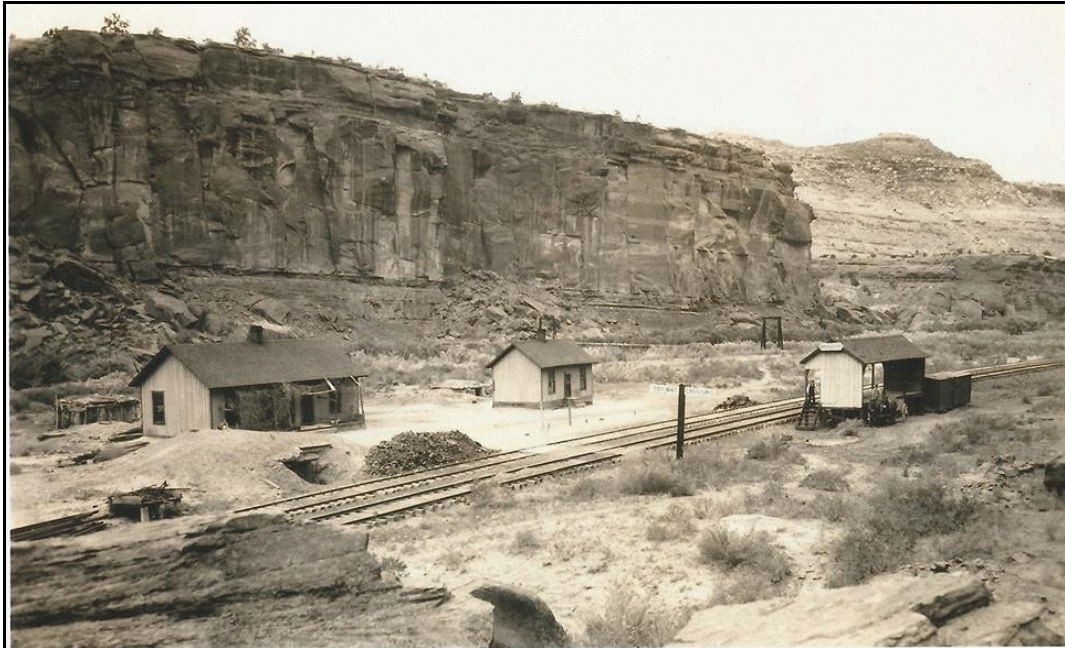


Plate 2. The section house and passenger platform at Bridgeport. The photo was taken some time after the line was standard gauged in 1906. Photo by Gail Jacobs, Palisade Historical Society collection.

Railroad records were also culled for pertinent information regarding the tunnel construction. Although no information could be directly obtained regarding the construction of the tunnel, right of way and track maps dated to June 1919 (corrected to 1927) were obtained from the Mesa County GIS Department online survey documents of the railroad from Whitewater to the Delta County Line (Figure 4).



Figure 4. Right of way and track map of Tunnel location on the Denver and Rio Grande Railroad (Mesa County GIS Department 2012b).

General Land Office Records

Relevant General Land Office (GLO) survey maps were reviewed to identify any additional man-made cultural features. The original survey of the Bridgeport area was conducted by D.G. Major, U.S. Surveyor for the General Land Office from 1880-1881. A GLO map dated to 1916 shows the old railroad grade that previously wrapped around Tunnel Point as well as the tunnel that was constructed making the old grade obsolete (Figure 5).



Figure 5. GLO map dated to 1916 showing Bridgeport Tunnel.

PROJECT BACKGROUND

Bridgeport Tunnel is located within the Dominguez-Escalante National Conservation Area, which includes the 66,280-acre Dominguez Canyon Wilderness. From the Bureau of Land Management website: “Known for its breathtaking scenery, the Dominguez- Escalante NCA is a fine example of the spectacular canyon country of the Uncompahgre Plateau. Red-rock canyons and sandstone bluffs hold geological and paleontological resources spanning 600 million years, as well as many cultural and historic sites.” One of the unique historic sites is Bridgeport Tunnel.

The construction of the narrow gauge line from Montrose to Grand Junction was completed in 1882. The original construction included four bridges spanning the Gunnison River near Bridgeport, Colorado. In September 1883, only five months after the first train to Salt Lake passed over the line, the D&RG contracted to have a half-mile tunnel built to bypass those bridges. At the time of its construction, the tunnel was considered one of the most important building projects in the state (Leadville Daily Herald 1884b:4).

Tunnels Versus Bridges - Gunnison News-Democrat. The Denver and Rio Grande Railroad company has decided to build a tunnel at Bridgeport this side of Grand Junction, which will obviate the necessity of four bridges now in use. The bridges have been giving a great deal of trouble and the company find that by building the proposed tunnel at least four of the bridges can be done away with altogether. The tunnel will be from two to three thousand feet in length, and the work will begin at once with a force of about 150 men. Engineer Ed. F. Higgins will have charge of the work. It is estimated that the work will take from seven to ten months to complete (Dolores News 1883:1).

Orman, Crook, and Co. of Pueblo, Colorado, undertook the construction. James Bradley Orman (Plate 3), owner of the company also served as Governor of Colorado from 1901-1903. He and his brother came from Iowa by mule train in 1868. They became involved in shipped freight animals to the Denver area until the completion of the Sheridan to Denver line of the Kansas Pacific railroad, on which he and his brother worked. They then contracted with the Denver and Rio Grande Railroad from its inception. In the different firms of Orman & Co., Moore, Carlile, Orman, & Co., Carlile, Orman, and Crook, and Orman and Crook, James helped to build five-sixth of the main line of the Denver and Rio Grande from Denver to Leadville, and nearly the whole of all of its extensions. In addition, he worked on construction of the Canadian Pacific; Oregon Pacific; Colorado Midland; Denver, Northwestern & Pacific; the Colorado &

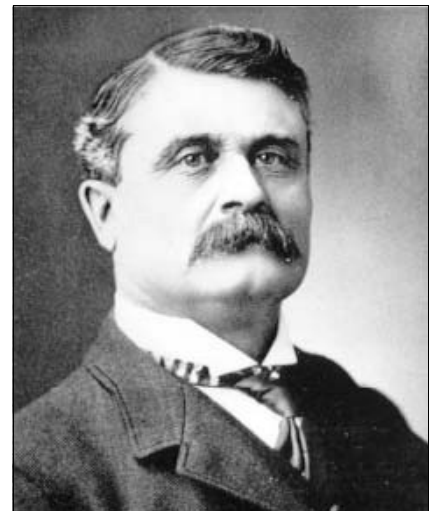


Plate 3. James Bradley Orman (State of Colorado Archives).

Northwestern; Santa Fe & Northern; and the Florence & Cripple Creek. According to the Colorado State Archives, he holds the distinction of having built more miles of railroad in Colorado than any other man. He was also involved with state irrigation projects, including the Uncompahgre tunnel near Montrose, Colorado, and the Bessemer irrigation project in Pueblo County.

At the time of the Bridgeport Tunnel construction, newspaper articles from the time reported the following:

Orman & Crook have completed grading the Monarch extension of the Denver and Rio Grande and have moved their grading outfit and men to Bridgeport, below Delta on the Salt Lake branch, where they have taken a heavy contract for straightening the railroad by the cut-off of from five to seven miles. It will involve an immense amount of cutting, filling and blasting, but will save the expense of keeping up four or five costly bridges, besides lessening the distance. The work will include the excavation of a tunnel 2,300 feet long (Fairplay Flume 1883:3).

As predicted, construction was completed in less than a year. By spring 1884, narrow gauge trains were moving through the 2252-ft Bridgeport Tunnel.

STATEMENT OF OBJECTIVES

The focus of this grant was the research and documentation of the Bridgeport Tunnel site. The field recording portion of the grant was to address the need to record the site and to assess and complete a detailed site report and associated forms, along with analysis of the site eligibility. Additionally, a search of historic records was to be completed in an effort to determine whether ethnic minorities were present at the site.

Local archaeologists at the Grand Junction Field Office of the Bureau of Land Management and Dominquez Archaeological Research Group visited the site in 2012. They noted that the site had undergone vandalism and illicit collection, based on the presence of looters' piles in and around the site area. Accordingly, recording the site would provide land managers a baseline in which to monitor future impacts to the site.

One research goal was to analyze the site for its potential to contribute to a National or State register district, based on either its location in relation to other historic sites in the vicinity, or as an historic theme based on railroad sites. This allows for the assessment of the rail line as a system, rather than as single stations scattered along a particular line or as a single site within a larger landscape of historic use. Rail lines connect the world at large as points of beginning and ending that serve to connect communities and economies. Their periods of significance, especially during construction phases can link groups of under-represented people, specifically immigrants and other minorities. The study of individual components of a rail line leaves an

unintentional gap in the record. These sites - sidings, stations, and construction camps - are often documented as single elements from which only their local history is examined.

METHODS

This site was recorded using the following methods of mapping and note taking. The basic approach to the data collection was the continuous mapping of observed artifacts and features by recording UTM coordinates (NAD 83 Datum) using a Trimble Geo XT. The site map was created using differentially corrected GPS data and ArcMap. Photographs were taken that included general overviews, specific artifacts and features. Field notes for this project are on file at DARG, while the photographs are submitted to the History Colorado's Office of Archaeology and Historic Preservation and the BLM. No artifacts were collected.

SITE DESCRIPTION

Site **5ME21645**, is located on a level protruding ridge nose overlooking the Gunnison River. Elevation is 4800 feet. Vegetation is sparse, consisting of juniper trees, short bunch grasses, and cactus. Closer to the river, riparian vegetation habitat is present. Geology is Triassic era Wingate Sandstone. Soils consist of Rock outcrop-Biedsaw complex. Biedsaw soils are characterized as colluvium derived from sandstone and shale over residuum weathered from clayey shale. Upper layers are cobbly clay loams with silty clay loams found at greater depths. Rock outcrops with large boulders are present throughout (Plate 4).



Plate 4. Bridgeport Tunnel construction camp site overview.

The site measures 585m (1760 feet) northwest-southeast by 150m (500 feet) northeast-southwest (Figure 6). It consists of six structures (Features 1-6), a dugout (Feature 7), an incline shaft (Feature 8), and a backfill pile from the tunnel construction (Feature 9). All of the structures are constructed of locally available sandstone. Milled and hand-hewn lumber are also present in small quantities. Artifacts are limited and located near the features. Collection piles were observed. Artifacts located on the site included cutlery (the end of a spoon), and miscellaneous metal objects (Plate 5). Many observed are of an industrial nature and would have been used during the construction of the tunnel.



Plate 5. Spoon end, which likely had a wooden handle.

Several bottle base fragments were located. These consisted of a bottle base fragment with MILW that was manufactured by either Chase Valley Glass Co., ca. 1880 (“C / MILW”, “CVGCO / + / MILW” and “CCO / MILW”); or Chase Valley Glass Co. No. 2, ca. 1880-1881 (“CCO2 / MILW” “CCNo2 / MILW” and “CVCNo2 / MILW”) (Lockhart et al., 2014:216). A bottle base fragment with S.K. & Co. was found that has an early date of 1880 (Lockhart, et al. 2015:237). A bottle base fragment that was located during the 2012 visit to the site is embossed with “CC&Co” and was manufactured by Carl Conrad and Co. between 1876-1882. Carl Conrad's beer is known as “the Original Budweiser.” (Lockhart et al 2014:133).

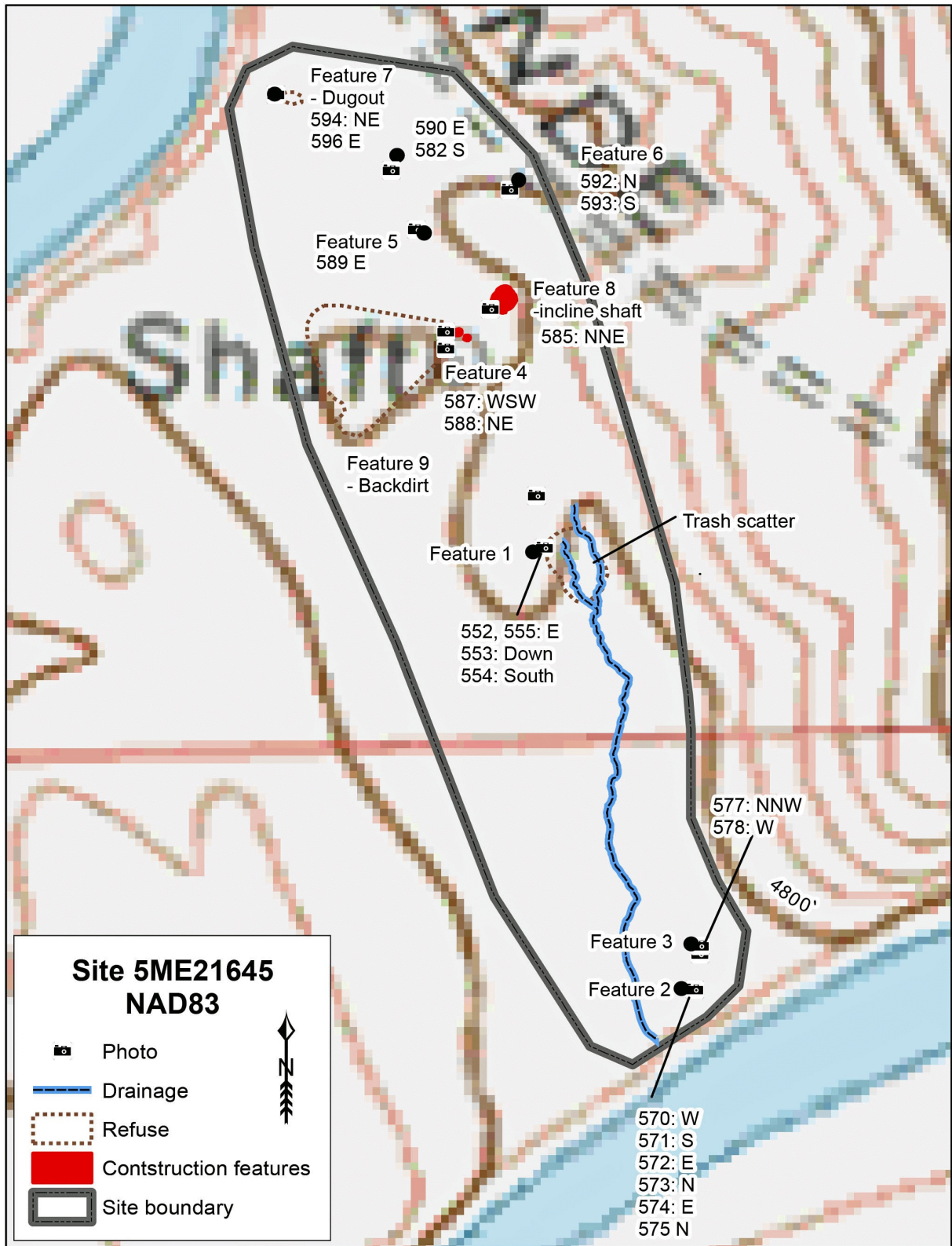


Figure 6. Site map.

Feature 1 is associated with a clinker pile and a large concentration of metal items. Although its purpose is not known, it possibly functioned as a forge, due to the presence of fire-reddened rock and the proximity of clinkers. The feature has a wall that has collapsed towards the center, obscuring the original shape. The remaining walls are less than 1m in height. A trash scatter is located at this feature and measures 35 by 25m (Plate 6).



Plate 6. Close-up view of Feature 1.

Features 2 and 3 are located away from the construction area at the southeast end of the site. The features are approximately 25m from one another. Feature 2 measures 2.5 by 3.5 meters in size and approximately 1m in height (Plate 7). Hand hewn and milled lumber are present, as are a large number of flat sandstone slabs. Many of these slabs are placed over the hand hewn lumber and may have supported a canvas covering to create a tent structure. Other slabs are placed haphazardly around the walls of the feature. Feature 3 is a rock feature of unknown function. It measures 2.5m in diameter (Plate 8). Due to the number of large rocks on the floor of the structure, it is not likely that a person utilized it for habitation. It may have been used for storage or the rocks served as a foundation for a floor for a tent.



Plate 7. Close-up view of Feature 2.



Plate 8. Close-up view of Feature 3.

Feature 4 is a small rock structure associated with the backfill pile. It is located at the point closest to the incline shaft and is associated with a large number of metal artifacts. It is presumed that at least some of these artifacts were placed there by collectors. The structure measures approximately 1m in diameter and is less than 1m in height (Plate 9).



Plate 9. Close-up view of Feature 4.

Feature 5 is a horseshoe shaped rock structure of unknown function located due north of the incline shaft (Plate 10). It measures 2.5 x 3.5m in size. The walls are less than a meter in height. There are hand hewn limbs and milled lumber present over the top of the structure. The opening is two meters in size. Feature 6 is a small rock wall that measures 0.8 by 2m in size (Plate 11). Again, the function is unknown but it is associated with slag spoils.

Feature 7 is an apparent dugout (Plate 12). Measured from the inside of the berm, it is 3m wide and 4m long. Two sets of stacked rocks are present on either side of the berm and may have been used as part of the construction of the dugout.



Plate 10. Close-up view of Feature 5.



Plate 11. Close-up view of Feature 6.



Plate 12. Close-up view of Feature 7, an apparent dugout.

Feature 8 consists of an incline shaft (Plate 13) and Feature 9 is the backfill pile, created from the actual construction of the tunnels (Plate 14). The rock pile measures roughly 70m in diameter. While very little is stated with regard to the people or living conditions at the site, construction of the tunnel is described in detail in newspaper. Four groups of drillers worked from the center to the outside and from the outside in. According to the Leadville Daily Herald, (1884a:3) they were using Ingersoll machine drills to complete the work.

Orman, Crook, and Co. are arranging for the utmost possible speed in the excavation of the big new tunnel for the Rio Grande company at Bridgeport, by driving four headings at once, all in the same tunnel. To do this they will reach the line of the tunnel by an incline, 600 feet from the east end, from which the men will work toward the two ends. Four steam drills will thus be at work simultaneously. It will be the quickest made tunnel of equal length in the state. That's the way this firm does railroad work (Colorado Daily Chieftain 1883a:7).

Orman and Crook have been working only two months on the big tunnel at Bridgeport, and already about 750 feet of tunnel has been excavated. It is a mammoth bore, sixteen feet high and twenty two feet wide. Work goes on night and day, in two shifts of eleven hours each (Colorado Daily Chieftain 1883b:5).

The Leadville Daily Herald (1883b:5) also reported that “an incline tunnel was run down to the center of the line of the tunnel, and a head of the tunnel here opened each way. Work is also being prosecuted on both ends of the tunnel. In this way four sets of men are worked in driving the tunnel in. The length of the opening is twenty-two feet and the width is sixteen. This is probably the largest tunnel in the state, being within a few feet of half a mile long, and when completed will be of immense benefit to the road as it will do away with a large number of bridges, which heretofore have been so much trouble in operating the road, and it will considerably shorten the line. A large camp has been organized near the scene of the work, and the large number of men live happily and work continually. As they are working under ground, they can work more comfortably in winter than summer.”



Plate 13. Close-up view of Feature 8, incline shaft.



Plate 14. View of backfill pile (Feature 9) from the tunnel construction.

Evaluation and Management Recommendations

The site is field evaluated as eligible for listing on the National Register of Historic Places under Criterion A, as it contributes to the broad pattern of history; Criterion B, for its association with James Orman of Orman, Crook, and Company, who were responsible for a tremendous amount of state infrastructure projects relating to the transportation and extractive minerals industry; and Criterion D, for the potential presence of buried cultural materials. For the most part, the site retains all aspects of integrity including setting, feeling, workmanship, design, materials, location, and association. Location has been disturbed to an extent by visits to the site by recreationalists utilizing the river bottomland as a campground and rest stop by river rafters. There is clear evidence of artifact redistribution and collection. Large scale vandalism is not evident and the site should be periodically monitored for disturbance. Informative signs to encourage good stewardship of cultural resources may aid in discouraging artifact collection.

DISCUSSION

Current research domains and questions have been developed relating to ethnicity of the occupants of historical sites. A review of the Office of Archaeology and Historic Preservation (OAHP) Compass database indicates that categories of ethnicity are frequently used in an arbitrary manner. The most common ethnicity associated with historic sites is Euro-American. Railroad sites, however, had a wide variety of ethnic occupants. This can be attributed to active recruitment by railroad company agents in foreign countries and the relative ease of utilizing recent immigrants that have not established ties to communities. Recent research along the Denver and Rio Grande Railroad revealed evidence of Italian workman used for tunnel construction (Conner and Inman 2016). Historic railroad camps in the Curecanti National Recreation Area have also presented evidence of Italian occupants (Rossillon 1984). A railroad siding along an abandoned siding west of Fruita, Colorado has evidence of Chinese occupants (Conner and Darnell 2012). Part of the purpose of the proposed study was the investigation of the site with particular interest in evaluating the remains for evidence of occupation by ethnic minorities.

The purpose of this assessment was to record the site in full and to assess the artifacts and features for ethnic hallmarks. At this time, none of the cultural materials at the site hint at the ethnicity of the occupants. Historic records only speak to the ethnicity of a small group of workers brought to the site. According to the National Park Service's Black Canyon of the Gunnison Narrow Gauge Railroad history, the track laying west of Gunnison, Colorado was accomplished by mostly Italian and Irish railroad workers (NPS 2015). No additional references were given to support this claim. References, both historic and modern were culled for mention of minority workers at the site. Ads for workers were vague:

WANTED – 15 FIRST-CLASS TUNNELMEN, GOOD WAGES, STEADY WORK ALL WINTER; WILL SHIP FOR BRIDGEPORT SATURDAY NIGHT, 22D. APPLY AT C ST. EMPLOYMENT AGENCY. WILLIAMS & MALLABY (Colorado Daily Chieftain 1883c:3)

WANTED – 25 men for Bridgeport tunnel. Ship to-night. Apply to Williams & Mallaby, No. 4 C at South Pueblo (Colorado Daily Chieftain 1884b:3).

A newspaper report does mention the use of Mexican workers at the site:

Mr. J.B. Orman, the well-known railroad contractor, who has been here fore several months past, leaves to-day with his force of 250 railroad laborers. Mr. Orman has completed his contract for grading the Rio Grande branch from the city limits to the mines on Iron hill.... Mr. Orman brought his working force, consisting mostly of Mexicans, with him from the place of his last contract in New Mexico, and will take it with him to-day to Mesa county, where he has a large contract. The work in hand, which has been going on for some time, is the driving of a long

tunnel at Bridgeport, on which there is still a great deal of work to be done (Leadville Daily Herald 1883a:3).

Although Italian workers at the site were not cited in the literature available at this time, it is widely known they were used during railroad construction projects in western Colorado. In William G. Buckles report of his investigations of the historic communities in Tenmile Canyon (1976), he indicates labor contractors were employed in recruiting foreign born ethnic or religious minorities and other labor crews for railroad construction and these brought many workers to Colorado, including Mormons, “negroes” from the southern United States and Milanese Italians. In 1890, the Rio Grande Southern recruited Swedes, Mormons, Mexicans, Italians, and Irish; however, by 1891, Italians and Irish were hired exclusively because they were considered the best workers (Buckles 1976:75). Buckles goes on to state that Italians and Irish were the dominant members of the Denver and Rio Grande construction crews in the Black Canyon of the Gunnison and appear to have been favored elsewhere for railroad construction. In the Denver South Park and Pacific construction in Tenmile Canyon, at least 200 Italians were hired to work throughout the winter of 1883-1884 (ibid:75-76).

Newspaper accounts read, “Alamosa has been overrun by Italian railroad laborers who are without work, a knowledge of the English language or money, but each in possession of an appetite” (Castle Rock Journal 1884:1). It was also discovered that Orman and Crook used Italian workers on other railroad projects. “Reports of an Italian working in the vicinity of a blasting accident: ‘An Italian who was standing near when the explosion occurred was blown into the river, but he crawled out again without having received any injuries.’ This crew was supervised by Mr. Lew Maloney, a member of the firm Orman Crook & Co., the contractors for the grading of the Midland road” (Aspen Weekly Times 1886:4).

The Colorado Daily Chieftain reported that more than a thousand men were employed to complete the construction, “The Denver & Rio Grande has now 1,000 men at work on its Bridgeport tunnel and bridge. The work there will be finished, it is expected, by April 1st (Colorado Daily Chieftain 1884a:5). No mention of ethnicity of the workers was made beyond the 250 that Orman brought with him from New Mexico. Interestingly, in 2010, a rock art panel with painted elements “ZUNI, N. MEX” was recorded at Bridgeport Siding, 5ME14351 (Panel 1) (Keene et al. 2010).

Considering that more than a thousand men were working on the tunnel construction for approximately six months, there appears to be a lack of evidence supporting the presence of that many people at the construction site. Artifacts are relatively scarce, as are structures associated with day to day living at the site. The tunnel location lacked the raw materials necessary for the construction of habitation structures needed during the winter months. It is possible that the majority of the structures were of a temporary nature, such as large tents for habitation, meals, and commissary needs. Reports at other railroad sites detail tent structures used for habitation (Anderson 1980; Buckles 1976; Rossillon 1984). These tended to be constructed on raised platforms with ditches or dug out with berms around the structure (Anderson 1980:225-238). No

ditches or platforms were located at this site, nor was any other indication of tent structures found. Structures, like those at Marion railroad camp, were constructed using short rock walls similar in nature to those at Bridgeport Tunnel (Rossillon 1984:77). Despite their presence, they were not consistent with the size usually attributed to tent communities. Also, unlike many other previously documented railroad sites, there was very little to suggest physical segregating of specific activity work areas, e.g. cooking, sleeping, blacksmith, commissary, etc. The only suggestion of such was the separation of Features 3 and 4 from the rest of the site.

Bread ovens are generally described as small domed rock structures that are found throughout western North America. Those that occur on railroad-related sites are mainly associated with railroad construction camps; a few are known to have been built by later section gang workers (Wegars 1991:37). Bread ovens can be attributed to various ethnic groups, including Scandinavians, Germans, Greeks, and Italians. These features were searched for at Bridgeport Tunnel, but no indication of such was found.

It is plausible that the workers enjoyed their downtime somewhere off site. During the records search for this report, it was noted that there were historic shelters located south of the site in nearby Dominquez Canyon. Bridgeport Siding is located 2.5 miles from the tunnel site and Big Dominquez Canyon is located an additional 1.5 miles from the siding. Big Dominquez may have been an appealing area due the presence of Big Dominquez Creek. Railroad handcarts and pack animals could have been utilized to reduce travel time if people from the construction site occupied this area. Many of the historic structures in Big Dominquez Canyon are similar in nature to those recorded in DeBeque Canyon (Conner and Inman 2016). They follow a similar pattern of construction, rock walls constructed of locally available sandstone rocks that are positioned against a large boulder for shelter. While it may be reaching to assume that workers could have been camping in this area, it may be worthwhile to reexamine those historic structures in search of ethnically identifying hallmarks, such as bread ovens or the presence of handcrafted fireplaces, which may hint at seasonality.

The features at the Bridgeport Tunnel construction site were compared to others previously recorded at other railroad construction sites. Feature 5 resembles another found at a railroad site in DeBeque Canyon, site 5ME21641, Feature 14. These consist of three walls and are open on one side in the shape of a horseshoe. William Buckles describes a feature, a forge, at a site located in Tenmile Canyon, 5ST1, Feature 12 (Figure 7). Although it was not likely utilized as a forge, it is possible that the feature at the tunnel construction site could have had a fourth wall of a structure that was buttressed against a temporary feature that was removed when the camp was abandoned. Feature 4 may have been utilized as a small blacksmith's forge, based on the presence of a number of industrial artifacts and the proximity to the tunnel shaft. It is also possible that it was an interior fireplace, based on the size.

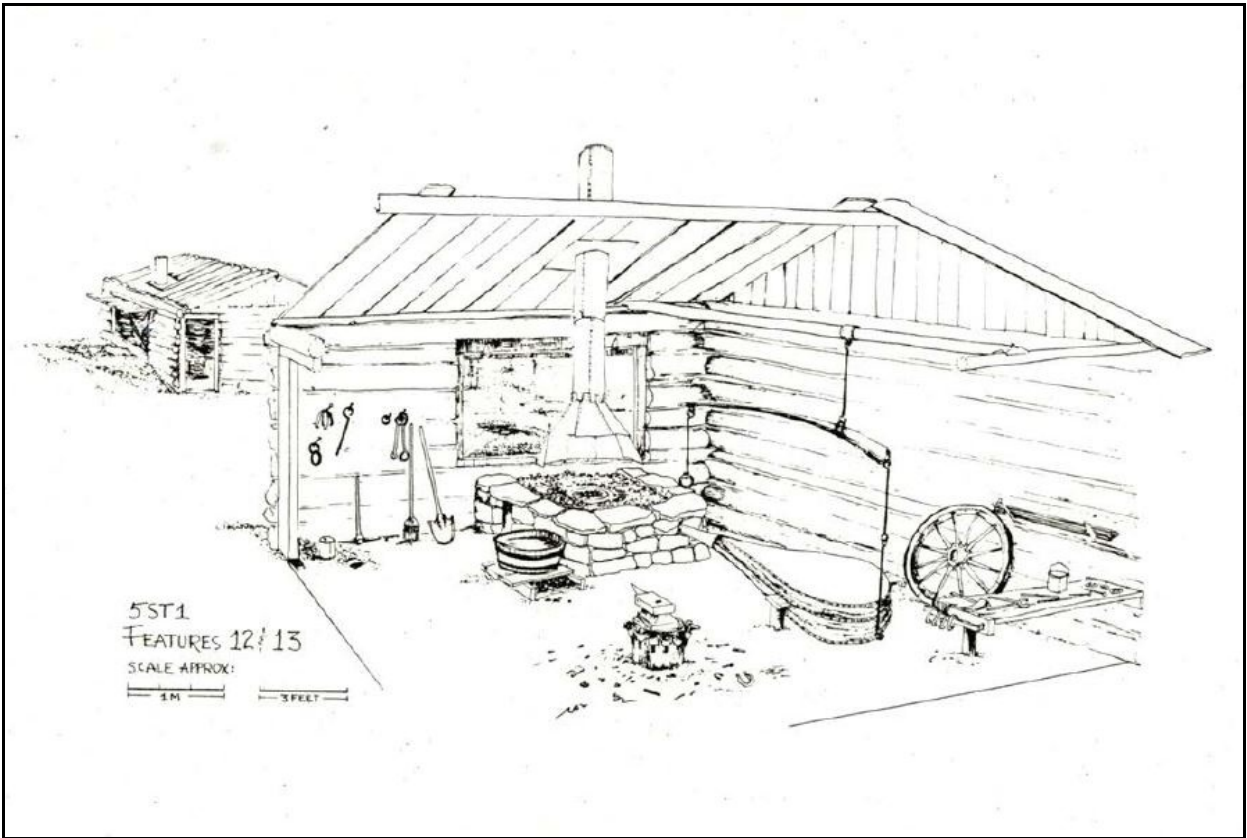


Figure 7. Reconstruction of features excavated in Tenmile Canyon (Buckles 1974:305).

MANAGEMENT RECOMMENDATIONS

The site was field evaluated as eligible under Criteria A, B, and D. Recommendations for the historic site include protection and preservation, which might include periodic monitoring for disturbances caused by recreationalists who camp in the river bottom below the site or interpretive signs to discourage disturbance. Additional research might include metal detecting within and around the features to determine if any cultural remains are present that could provide additional context regarding the occupants of the site. Continued archival research should be conducted to find reference to the construction details of the extant structures.

REFERENCES

Anderson, Adrienne B.

- 1980 Ancillary Construction on Promontory Summit, Utah: Those Domestic Structures Built by Railroad Workers. Paper presented at the 13th Annual Meeting of the Society for Historical Archaeology, Albuquerque, New Mexico.

Aspen Weekly Times

- 1886 "An awful death." 29 May:4. Electronic document, <https://www.coloradohistoricnewspapers.org> accessed 1 Feb 2018.

Borland, Lois

- 1952 Ho for the reservation; settlement of the Western Slope. *Colorado Magazine* 29(1):56-75.

Buckles, William G.

- 1976 *Investigations of Historic Communities in Tenmile Canyon Summit County, Colorado*. Laboratory of Anthropology, University of Southern Colorado. Ms on file at the Office of Archaeology and Historic Preservation, Denver.

Castle Rock Journal

- 1884 "Alamosa has been overrun by Italians." 23 Jan:1. Electronic document, <https://www.coloradohistoricnewspapers.org> accessed 1 Feb 2018.

Church, Minette C. and 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 Daily Chieftain

- 1883a "Orman, Crook, and Co." 14 Oct:7. Electronic document, <https://www.coloradohistoricnewspapers.org> accessed 1 Feb 2018.

- 1883b "Orman and Crook." 23 Nov:5. Electronic document, <https://www.coloradohistoricnewspapers.org> accessed 1 Feb 2018.

- 1883c "Wanted - 15 First-class Tunnelmen." 22 Dec:3. Electronic document, <https://www.coloradohistoricnewspapers.org> accessed 1 Feb 2018.

- 1884a "The Denver & Rio Grande." 9 Jan:5. Electronic document, <https://www.coloradohistoricnewspapers.org> accessed 1 Feb 2018.

Colorado Daily Chieftain

1884b “Wanted - 25 men.” 17 Feb:3. Electronic document,
<https://www.coloradohistoricnewspapers.org> accessed 1 Feb 2018.

Conner, Carl E. and Nicole Darnell

2012 Archaeological Investigation of Site 5ME7351.1, Excelsior Train Station, Mesa County, Colorado. Dominquez Archaeological Research Group. Ms on file at the Office of Archaeology and Historic Preservation, Denver.

Conner, Carl E., Nicole Darnell, Brian O’Neil, Richard Ott, Curtis Martin, Dakota Kramer, James C. Miller, Barbara Davenport, Sally Cole, Jim Keyser, Claudia F. Berry, and Michael S. Berry (ed.)

2011 *Class I Cultural Resource Overview for the Grand Junction Field Office of the Bureau of Land Management*. Grand River Institute, Grand Junction.

Conner, Carl E. and Nicole (Darnell) Inman

2016 An Archaeological Assessment of Roan Creek Toll Road (5ME924) and Associated Sites in Mesa County, Colorado. Dominquez Archaeological Research Group. Ms on file at the Office of Archaeology and Historic Preservation, Denver.

Daily Sentinel

2014 “Bridgeport’s history rooted in crossings and connections.” 20 March. Grand Junction, Colorado.

Dolores News

1883 “Tunnels Versus Bridges.” 13 Oct:1. Electronic document,
<https://www.coloradohistoricnewspapers.org> accessed 1 Feb 2018.

Fairplay Flume

1883 “Orman and Crook.” 27 Sept:3. Electronic document,
<https://www.coloradohistoricnewspapers.org> accessed 1 Feb 2018.

Fenneman, Nevin M.

1931 *Physiography of Western United States*. New York.

Haskell, Charles W.

1886 History and Description of Mesa County, Colorado. Edited and published by the *Mesa County Democrat*, Grand Junction.

Keene Scott, Ashley Wisehart, Jason C. Flay

- 2010 Site form, Class III Cultural Resources Inventory for a Proposed Railroad Crossing for the Bridgeport Trail in the Dominguez-Escalante NCA, Mesa County, Colorado (BLM GJFO CRIR 1010-10). Bureau of Land Management Grand Junction Field Office. Ms on file at OAHP, Denver.

Leadville Daily Herald

- 1883a "THE WORK COMPLETED." 28 Nov:3. Electronic document, <https://www.coloradohistoricnewspapers.org> accessed 1 Feb 2018.
- 1883b "An incline tunnel." 9 Dec:5. Electronic document, <https://www.coloradohistoricnewspapers.org> accessed 1 Feb 2018.
- 1884a "Ingersoll machine drills." 10 Jan:3. Electronic document, <https://www.coloradohistoricnewspapers.org> accessed 1 Feb 2018.
- 1884b "Bridgeport Tunnel." 9 March:4. Electronic document, <https://www.coloradohistoricnewspapers.org> accessed 1 Feb 2018.

Lockhart, Bill, Beau Schriever, Carol Serr, and Bill Lindsey

- 2014 Encyclopedia of Manufacturer's Marks on Glass Containers C, "Chase Valley Glass Co." Compiled and edited by Bottle Research Group. Online database <https://sha.org/bottle/pdffiles/ChaseValleyGlass.pdf> accessed 13 Nov 2017

Lockhart, Bill, Beau Schriever, Carol Serr, and Bill Lindsey

- 2015 Encyclopedia of Manufacturer's Marks on Glass Containers D-E, "Newark Star and the Everett Factory." Compiled and edited by Bottle Research Group. Online database <https://sha.org/bottle/pdffiles/Everett.pdf> accessed 13 Nov 2017

Marshall, Muriel

- 1988 *Red Hole in Time*. Texas A&M University Press, College Station, Texas

McCreanor, Emma

- 1986 *Mesa County, Colorado: A 100 Year History (1883-1983)*. Museum of Western Colorado Press, Grand Junction.

Mehls, Steven F.

- 1988 *The Valley of Opportunity*. Cultural Resources Series No. 12. Bureau of Land Management, Denver.

Mesa County GIS Department

2012a Historic Surveys: Survey Plats, ROW, and GPS. Map I.D. 4748944, page 1.
Electronic document. <https://emap.mesacounty.us/viewer/> accessed 1 Feb 2018.

2012b Historic Surveys: Survey Plats, ROW, and GPS. Map I.D. 4748944, page 2.
Electronic document. <https://emap.mesacounty.us/viewer/> accessed 1 Feb 2018.

National Park Service

2015 “Narrow Gauge Railroad.” Black Canyon of the Gunnison, National Park,
Colorado. Electronic document,
<https://www.nps.gov/blca/learn/historyculture/railroad.htm> accessed 5 Feb 2018.

Rait, Mary

1932 History of the Grand Valley. M.A. thesis, University of Colorado, Boulder.

Reed, Alan D. and Michael D. Metcalf

1999 *Colorado Prehistory: A Context for the Northern Colorado River Basin*. Colorado
Council of Professional Archaeologists, Denver.

Rossillon, Mary P.

1984 *The Curecanti Archaeological Project: The Archaeology of Marion, an Historic
Railroad Camp in Curecanti National Recreation Area, Colorado*. Midwest
Archaeological Center Occasional Studies in Anthropology, No. 9. National Park
Service, Lincoln, Nebraska.

U.S.D.A., Soil Conservation Service

1978 *Soil Survey of Mesa County Area, Colorado*.

Wegars, Priscilla

1991 Who’s Been Workin’ on the Railroad?: An Examination of the Construction,
Distribution, and Ethnic Origins of Domed Rock Ovens on Railroad-Related Sites.
Historical Archaeology 25(1):37-65.

Young, Robert G. and Joann W. Young

1968 *Geology and Wildflowers of Grand Mesa*. Wheelwright Press, Ltd.

For Official Use Only: Disclosure of Site Locations Prohibited (43 CFR 7.18)

Appendix A:
Overview Maps
OAHHP Site Forms