

Valmont Butte Archaeological Monitoring and Discovery Plan

Final

August 25, 2011

1. OVERVIEW

1.1. Project Description

The City of Boulder, Facilities and Asset Management, will be coordinating remediation of the Valmont Butte Site ("Site") per the approved Voluntary Clean-Up Plan (VCUP). The work will include excavation of radiation and metals impacted soils and tailings, demolition of selected buildings, structural protection of buildings during excavation, grading, importing clean soil and rock, and re-vegetation of excavated areas, and management of prairie dogs.

1.2. Scope of Work

The following tasks are planned as part of the remediation project:

1. Construct prairie dog barrier outside planned construction areas and remove prairie dogs per City of Boulder ordinance.
2. Scrub the primary and secondary tailings ponds and other construction areas of vegetation.
3. Remove selected buildings and place materials in the primary tailings pond area.
4. Excavate and fill/grade approximately 14 areas of radiation and metals impacted soils and place removed soils in the primary tailings pond area.
5. Excavate and fill/grade radiation and metals impacted soils from the secondary tailings pond area and place removed soils in the primary tailings pond area.
6. Install a culvert in the secondary dam and grade Site for proper drainage per plan.
7. Cover the primary tailings pond area with approximately 2 feet of clean, inert soil and an additional 1.5 feet of 12" nominal natural rock.
8. Re-vegetate excavated/graded areas.

To address potential impacts to prehistoric and historic resources from these proposed project activities, archaeological monitoring and discovery plans are outlined below. The Archaeological Monitoring Plan addresses the approach to dealing with previously identified prehistoric/Native American and historic cultural resources at the Site. The Discovery Plan outlines the protocols in the event of an inadvertent discovery of additional, previously unidentified historic or prehistoric artifacts, features or human remains.

1.3. Background

The Valmont Butte Site is located at 3000 N. 63rd Street, at the eastern edge of the current Boulder city limits and within unincorporated Boulder County, Colorado. It is approximately 104 acres in size and located approximately four miles east of the Boulder central business district in an area that includes industrial, residential and agricultural uses. The Boulder Valley Comprehensive Plan (BVCP) land use designation (adopted jointly by the city and the county) for the Site is General Industrial and Open Space, Acquired and Open Space, Other. The Site is also designated as Area III, Rural Preservation.

The Site has been used for a variety of industrial uses since the turn of the century, including an ore milling operation that was in operation until 1991. A variety of smaller office and manufacturing operations were on the Site until the property was purchased by the City of Boulder in 2000. Cultural and historic resources on the Site include buildings associated with the mill complex and evidence of use of the Site by Native Americans. The historic Valmont Cemetery is located adjacent to and south of the Site.

1.4. Previously Identified Cultural Resources

1.4.1. Valmont Cemetery (Smithsonian site numbers 5BL9119/5BL10035)

The Valmont Cemetery is located just south of and adjacent to the Site. The cemetery is one of Colorado's oldest, with grave markers dating back as far as 1865. Land for the cemetery was deeded in 1873. The Valmont Cemetery is owned by the descendents of the pioneer families buried there, and operated by the Valmont School District #4 Cemetery Association, a registered nonprofit organization. The Valmont Cemetery has been recommended eligible for local and potentially national historic designation.

1.4.2. Native American Resources (within the boundary of Smithsonian site number 5BL44)

Evidence of use of the Site by Native Americans includes archaeological material (features and artifacts). These resources were documented, mapped and recorded on January 16, 2004 by RMC Consultants, Inc. (RMC Consultants, Inc. 2004) assisted by Gary Brown, Northern Arapaho tribal monitor. The Native American resources are located within the boundary of 5BL44, the Valmont Mill. Avoidance of the Native American resources has been recommended by tribal consultants and RMC Consultants, Inc.

1.4.3. Valmont Mill (Smithsonian site number 5BL44)

The western portion of the Site (approximately eight acres) was the location of a mined ore mill for nearly 60 years (Mead and Bunyak 2001). The property contains the original mill building, an office building, assay office, wash room, pump house, converted garage and other small buildings housing support operations. A 14-acre Primary Tailings Pond and a 3-acre Secondary Tailings Pond as well as associated dams are located to the east of the mill buildings and near the center of the Site. The Valmont Mill is an intact example of an early flotation mill used for processing gold, silver and fluorspar. The St. Joe Mining Company constructed the Valmont Mill as a gold mill in 1935. The mill, located on the edge of the dike, was in an ideal location for a gravitational flotation mill. The ore concentrator drew water up the hill to the Site for use in its flotation process. Gravitational pull causes ore and water to flow down and through the concentrating process with the least amount of effort. The flotation process was reconfigured to concentrate fluorspar in 1938. In the early 1940s, market conditions prompted Allied Chemical to purchase and enlarge the mill. By the late 1970s, the mill was reconfigured again to extract gold from mine tailings. In 1991, due to high rent costs and intermittent operation, the mill was closed. After the mill closed in 1991, the Site was used for offices and a production housing (log-home) facility. The Site has been vacant since November 2003.

1.4.4. Sioss Railroad Spur (Smithsonian site number 5BL8918.1)

The Sioss Railroad Spur (5BL8918.1) is located south of the Valmont Mill (5BL44). This spur originally connected the mill with the main tracks of the Colorado and Southern Railroad to the south of the Site. The spur has lost most of its integrity since the only remaining segment with rails and ties is 140 meters in length. The spur has been recommended as not eligible for listing in the National Register of Historic

Places. The City and County Historic Preservation programs have found the spur to be of historic significance to the Site and should be preserved as part of the larger Valmont Mill Site Historic Landmark.

1.4.5. Other Potential Cultural Resources

Other potential cultural resources within the Site could include human remains, historic or prehistoric artifacts or features related to Native American or Euro-American utilization of the Site and that are 50 years old or older.

1.5. Potential Impacts from the Proposed Project

The primary potential impacts to cultural resources from implementation of the proposed project tasks described in Section 1.2 above would include the following:

- Potential impacts to previously identified and unidentified prehistoric/Native American artifacts or features, or human remains. This could include cultural materials located at or below the surface.
- Potential impacts to previously identified and unidentified historic artifacts or features, or human remains. This could include cultural materials located at or below the surface.

The level of potential impacts are categorized based on the type of planned action (see map in Appendix A):

1. Areas where no earthwork or re-vegetation will be conducted (no anticipated impact to cultural resources)
2. Areas where no earthwork will be conducted but the area will be over-seeded (potential impact to cultural resources)
3. Areas that will be graded and re-vegetated (potential significant impact to cultural resources)

The previously identified cultural resources are discussed below based on the associated planned action:

Valmont Cemetery - Due to the known past use of the Site by both Native Americans and Euro-Americans, unmarked graves could occur anywhere on the Site, but especially in the vicinity of the Valmont Cemetery. It is known that unmarked graves often exist within or near formal cemeteries, especially those that date to early historic times like the Valmont Cemetery. The reasons these graves are unmarked can vary. Early grave markers were often made of wood and may have disintegrated, leaving the grave unmarked. Other unmarked graves often resulted from burial during epidemics or other catastrophic events where single or multiple graves may have been dug but never marked.

Planned Action: The area within the existing cemetery boundary is located offsite and will not be impacted. The areas adjacent to the cemetery that are located within the Site are scheduled for both no earthwork/over-seeding, and grading/complete re-vegetation.

Native American Resources – The previously identified Native American resources are located in several areas on the Site. Although no surface artifacts or features were previously identified, there is potential for additional Native American resources to be found in subsurface deposits in the areas surrounding the identified resources.

Planned Action: These areas will not be disturbed.

Valmont Mill – The mill is significant for its architectural and machinery/operations remains. Those features have been previously identified and recorded.

Planned Action: The main significant mill buildings and structures will be avoided. Areas surrounding the mill are identified for a combination of no earthworks/over-seeding, and grading/complete re-vegetation.

Sioos Railroad Spur – The Sioos Railroad Spur segment has been recommended as significant to the potential local Valmont Mill Site Historic Landmark.

Planned Action: The existing Sioos Railroad Spur segment within the Site will be avoided. The area surrounding the spur is identified for grading/complete re-vegetation.

2. ARCHAEOLOGICAL MONITORING PLAN

Based on the identified potential impacts to previously identified cultural resources, two culturally sensitive areas are recommended for archaeological monitoring:

- The vicinity of the Valmont Cemetery
- The vicinities of the previously identified Native American resources

Valmont Cemetery

1. It is recommended that an area approximately 100 feet in width (minimum) around and outside of the boundary of the cemetery (to the NW, N, and NE) be monitored by the archaeological monitor during ground disturbing activities (earthwork/over-seeding, and grading/complete re-vegetation).

Location of Previously Identified Native American Resources

1. During the over-seeding and grading/complete re-vegetation that are planned adjacent to the Native American resources, it is recommended that an area approximately 100 feet in width (minimum) around the resources be monitored by the Native American monitor and by the Archaeological monitor, as necessary.

2.1. Archaeological Monitor

The archaeological monitor will work closely with the City of Boulder Project Manager and construction contractors to determine when the above-listed activities will take place to plan for field monitoring requirements. The monitors will discuss the archaeological requirements and goals with the project construction crew in the field prior to monitoring activities. The archaeological monitor will wear safety gear (hard hat and safety vest) and will maintain a safe distance from all construction equipment. They will also meet the Health and Safety Plan requirements.

2.1.1. Native American Monitor

The Native American monitor would be required as described above, during work adjacent to the previously identified Native American Resources. The Native American monitor would also be available on an on-call basis in the event of an inadvertent discovery of human remains or significant archaeological artifacts or features.

2.1.2. Archaeological Monitor

The archaeological monitor would be required to monitor in the vicinity of the Valmont Cemetery. The archaeological monitor would also be available on an on-call basis in the event of an inadvertent discovery of human remains or significant archaeological artifacts or features during any ground disturbing activities within the Site, as identified in 3.1 below. The results of the inventory will be documented daily per 3.3 below.

3. DISCOVERY PLAN

The Archaeological Monitoring Plan covers all required archaeological monitoring based on known, previously documented cultural resources within the Site. The Discovery Plan provides for protocol should there be an inadvertent discovery of additional, previously unidentified historic or prehistoric/Native American artifacts, features or human remains.

3.1. Potentially Historic or Prehistoric remains (non-human)

Previously unidentified historic or prehistoric/Native American artifacts or features could be found during ground disturbing activities in any location within the Site. Artifacts could include prehistoric/Native American items such as: stone tools (projectile points, scrapers, etc.), debris from tool making (flakes), groundstone artifacts such as manos or metates, or Native American ceramics. Historic artifacts could include such items as glass bottles, ceramics, or metal artifacts. Features could include privy pits, trash deposits, or structural remains such as foundations or other remains related to the Valmont Mill. Note: small fragments of glass and metal are considered common artifacts. The contractor will notify the Project Manager before disturbing common artifacts; the Project Manager will determine if work in the area should proceed.

3.1.1. Protocol for Inadvertent Discovery of Historic or Prehistoric Remains (Non-Human)

If an archaeological monitor is present:

- Work may be temporarily halted in the area of the find in order to document artifacts or features. Work may proceed after documentation is completed. If significant or complex features or cultural remains are identified, additional time and personnel may be needed to complete documentation or conduct additional archaeological work. If additional time is necessary to record, document and evaluate cultural remains, the City of Boulder Project Manager shall be notified and the finding discussed to determine appropriate next steps.

If an archaeological monitor is not present:

- Work shall be halted in the area of the find and all artifacts/features shall be left in place and secured. The City of Boulder Project Manager shall be notified immediately. The archaeological monitor and the Native American tribal monitor, as necessary, will be called to examine the find and provide direction as to the appropriate next steps.

3.2. Human Remains

Human remains and associated materials could include any human bone, associated funerary object, burial container or fragments thereof.

3.2.1. Protocol for Inadvertent Discovery of Human Remains or Funerary Objects

In the event of an inadvertent discovery of potential human remains and/or associated funerary items during project-related activities pursuant to the regulations of the Native American Graves Protection and Repatriation Regulations (NAGPRA, 1990, as amended), and the Colorado Historical, Prehistorical, and Archaeological Resources Act (revised 01/11); Colorado Statutes - CRS 24-80-1301-1305 dealing with Unmarked Human Graves (see Appendix B), the following procedures will be implemented:

If an archaeological or tribal monitor is present or is not present:

- All work on and within 200 feet of the area will immediately be stopped and the site secured. The human remains and any artifacts found in association with the remains will be left in place. The City of Boulder Project Manager will be called immediately.
- Accurate notes (including names, dates, and times) concerning the inadvertent discovery will be compiled and provided to authorized personnel.
- The City of Boulder Project Manager will immediately contact the Boulder County Coroner (the coroner is contacted to ensure that the discovery does not have forensic value and is required to respond within 48 hours of notification), and the Boulder County Sheriff. Notification will also be given to the State Archaeologist who will provide further guidance.
- No further work will take place at the location until authorized by the City of Boulder Project Manager and other consulting parties.
- The Project Manager will notify the Native American tribal monitor of the find.

3.2.2. Contact Information:

City of Boulder Project Manager:

Bill Boyes
Facilities and Asset Management
P.O. Box 791
Boulder CO 80306
303-441-4058
Cell 303-884-4128

Boulder County Coroner:

Emma R. Hall
Justice Center
1777 6th Street
Boulder, CO 80302
(mailing address: P.O. Box 471, Boulder, CO 80306)
303-441-4444 (24 hour on-call investigator)

Boulder County Sheriff:

Joe Pelle
Sheriff's Headquarters
5600 Flatiron Parkway
Boulder, CO 80301
303-441-4444 (non-emergency number)

Colorado State Archaeologist:

Richard H. Wilshusen
Office of Archaeology and Historic Preservation
Colorado Historical Society
1560 Broadway, Suite 400
Denver, CO 80202
303-866-2736

Archaeological Monitor:

Marilyn A. Martorano
RMC Consultants, Inc.
12295 West 48th Ave
Wheat Ridge, CO 80033
303-980-4101
Cell 720-272-1334

Native American Monitor:

Gary Brown

3.3. Project Documentation

The archaeologist will document all findings and non-findings each day of monitoring conducted. At a minimum, the following will be documented in a project log:

1. Dates/times
2. Description of area being disturbed
3. Location: specific GPS coordinates
4. Construction activities: types of tasks being conducted
5. Depth of excavation
6. Equipment used
7. Construction crew names
8. Results

Photographs will be taken of construction activities and all finds, as appropriate.

3.4. References Cited

Mead, Earl S. and Dawn Bunyak

2001 A Cultural Resource Inventory of the Valmont Mill, 5BL796, and Associated Properties, Boulder County, Colorado. Prepared for City of Boulder, Colorado. Prepared by RMC Consultants, Inc.

RMC Consultants, Inc.

2004 Summary Report, Archaeological Investigations, Valmont Butte Mill Site 5BL44, Boulder County, Colorado (2004 Addendum). Prepared for City of Boulder Open Space and Mountain Parks, Colorado. Prepared by RMC Consultants, Inc.

3.5. Appendices:

Appendix A: Map Showing Re-vegetation Plan and Areas Defined for Monitoring.

Appendix B: Applicable Laws and Regulations:

- Native American Graves Protection and Repatriation Regulations
- Historical, Prehistorical, and Archaeological Resources Act; CRS 24-80-1301-1305, Unmarked Human Graves