

**Appendix 4-1**

**Archaeological Reconnaissance in Crandall Canyon**

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*1980*  
*11/29/80*

SUBJECT: Archaeological Reconnaissance  
in the Crandall Canyon Vicinity  
Emery County, Utah

AUTHOR: Wayne K. Howell, Staff Archaeologist, UTARC

DATE: June 26, 1980

PROJECT: GCC-80-1

PERMIT:

PREPARED FOR: Mr. Reed Christensen, Supervisor  
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received and filed

*J. L. ...*

7/29/80

#### INTRODUCTION:

On June 19th and 20th of 1980, an archaeological survey was conducted for Genwal Coal Company, Inc. on a proposed coal mine site and associated access road in the Crandall Canyon vicinity of Emery County, Utah. The area is located in the Price District of the Manti-La Sal National Forest. The area to be impacted is in the SE $\frac{1}{4}$  of the NE $\frac{1}{4}$  of Section 6, the SW $\frac{1}{4}$  of the NW $\frac{1}{4}$  of Section 5, both in Township 16S Range 7E, and an access road which extends east from the mine property through the SE $\frac{1}{4}$  of the NW $\frac{1}{4}$  and the S $\frac{1}{2}$  of the NE $\frac{1}{4}$  of Section 5, and the NW $\frac{1}{4}$  of Section 4, both in Township 16S Range 7E. An area located in the S $\frac{1}{2}$  of the SE $\frac{1}{4}$  of the NW $\frac{1}{4}$  of Section 5 was also investigated as a possible part of the project area.

The survey was conducted by Utah Archaeological Research Corporation Staff Archaeologist Wayne Howell, the author of this report. The project was conducted under Forest Service Permit #

#### METHODOLOGY:

Access Road- The entire length of the access road was investigated by walking a zig-zag transect which extended up to 100 feet on both sides of the existing road. In places where the creek to the south or the high cliff to the north were close to the existing road, the area was cleared up to that barrier. This procedure succeeded in clearing the entire canyon bottom.

Since an entry point for the access road from Highway 31 in Huntington Canyon into the mouth of Crandall Canyon is not yet decided, the entire mouth of the canyon was checked by walking parallel transects over the area indicated on the map.

Mine Area- The area of the proposed mine facility was checked by walking roughly parallel transects over the entire area. Since the topography of the canyon is dominated by steep and rugged slopes which are broken up by vertical cliffs in many places, parallel transects could not be placed at regular intervals, nor could straight lines be strictly maintained. Areas with greater potential for archaeological sites such as the canyon bottoms and along cliff bases where alcoves might be present were investigated more closely than the steep sloped areas where sites would be less likely to occur.

A total of about 100 acres were cleared both along the access road and mine property. A total of 2 man-days were required to clear the area.

#### ENVIRONMENT:

Crandall Canyon is a west bank tributary of Huntington Creek, one of the major drainages of the Wasatch Plateau. Elevations in the area range from 7500 feet in the canyon bottoms to over 10,000 feet on the ridges and plateaus. This great difference in elevations makes for steep sided and very rugged canyons.

Soils in the project area are colluvial along the canyon slopes and alluvial along the canyon bottoms. Vegetation consists of heavy stands of Quaking Aspen and both Pine and Fir on the south side of the canyon. On the north, scattered Pinyon-Juniper and Mountain Mahogany dominate. The creek through Crandall Canyon has a permanent flow of fresh water.

#### PREVIOUS WORK IN THE AREA:

An archaeological survey was conducted by the U.S. Forest Service in Crandall Canyon in 1975 for the purpose of examining a mine road which was

proposed for the area. This survey located one site, 42EM722, located to the north of the proposed road. In a report dated September 5, 1975, David A. Gillio, Zone Archaeologist, recommended cultural clearance for the road. However, he did consider 42EM722 to be a significant archaeological site and recommended that the site be posted and possibly fenced-in to protect it.

SURVEY RESULTS:

No unrecorded archaeological sites were found in the project area. A number of historic mining remains are scattered along the road and at the mine location, but these are not of sufficient age nor archaeological significance to warrant recording and preservation.

Site 42EM722 consists of an area of prehistoric habitation under an overhanging cliff on the north side of Crandall Canyon. The site extends for approximately 50 meters east-west along the base of the cliff. It shows evidence of at least 1 meter of cultural depth in areas where looter's trenches have been dug. Artifacts include large quantities of bone and charcoal, with very little lithic or ceramic material present. Some red Fremont style pictographs are painted on the cliff face above the site. Extensive vandalism has taken place at the site, but there are still areas of undisturbed cultural fill.

Three isolated artifacts were found during the reconnaissance. Two were non-diagnostic waste flakes found in an open flat area near the mouth of Crandall Canyon. These were located about 50 meters apart. One was made of red and white banded chert and one was of a gray translucent chert. The third isolated artifact was the basal portion of a Humboldt point (M-IA:57).

Humboldt points are archaic style points and are found throughout the Great Basin and the western Colorado Plateau. Heizer and Hester (1977) date the Humboldt series between 4000 B.C. and 1100 B.C. Other Humboldt points have been found in the area of the Wasatch Plateau (Louthan, 1978).

This point was also found on the flat at the mouth of Grandall Canyon. Since the two flakes and the point were all found on this flat it appears that there was some limited activity which took place there. However, all three artifacts were widely scattered and no concentrations of any kind could be found.

The presence of the Humboldt point in fairly close proximity to 42EM722 (within 300 meters) raises the possibility that the alcove site might also contain archaic deposits. Such a possibility makes 42EM722 a potentially valuable site in that it might contain a lengthy record of human use in an area of low site density.

#### RECOMMENDATIONS:

No National Register Properties are located in or near the project area. However, because site 42EM722 still has areas of undisturbed cultural fill and has to be considered a rather unique site because of its location in an area of low site density, it must be regarded as a significant archaeological site and potential National Register property. As such it deserves protection.

The two major concerns in protecting the site from project related impacts are:

1. Insure that construction activities do not disturb the ground surface on or near (within 15 meters) of the site.

2. Insure that impacts such as looting and relic hunting do not increase as a result of improved accessibility from road construction.

In order to eliminate these potential impacts it is recommended that a fence be built prior to the commencement of road construction. This fence should extend from the cliff face to the west of the main component of the site and to the south along the perimeter of the site for approximately 50 meters. It should terminate at the cliff face to the east of the second component of the site (see figure 2). The fence should have a locking gate and should be of sufficient height to discourage people from climbing over it. It should also be posted with signs warning against antiquities violations as contained in the Archaeological Resources Protection Act of 1979. This fence should be built according to Forest Service stipulations and under their direction.

In addition it is recommended that Genwal Coal adhere to the following stipulations:

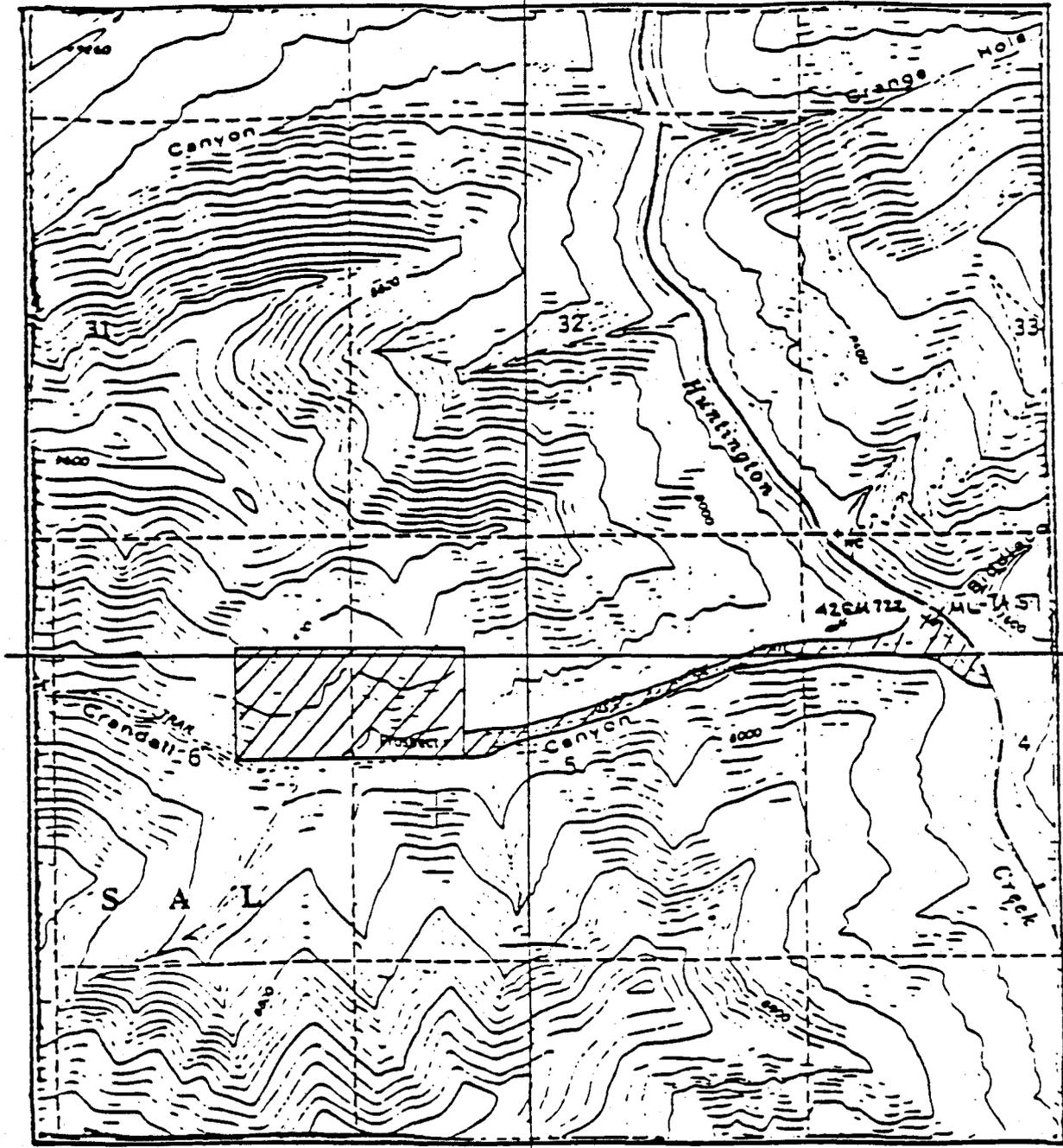
1. All construction activities be restricted to those areas surveyed.
2. All personnel refrain from collecting articles of antiquity.
3. A qualified archaeologist be notified should sub-surface archaeological materials be exposed during construction.

With adherence to these stipulations, it is recommended that Genwal Coal Company, Inc., be given archaeological clearance for their project in Grandall Canyon.

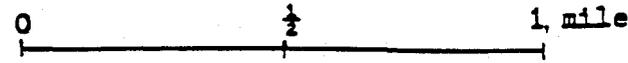
*Wayne Howell*  
Wayne Howell  
Staff Archaeologist

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SCALE 1:24000



PROJECT: GOC-80-1

TOWNSHIP: 16S

COUNTY: Emery

RANGE: 7E

QUADRANGLE: Rilda Canyon 7.5'

LEGEND:

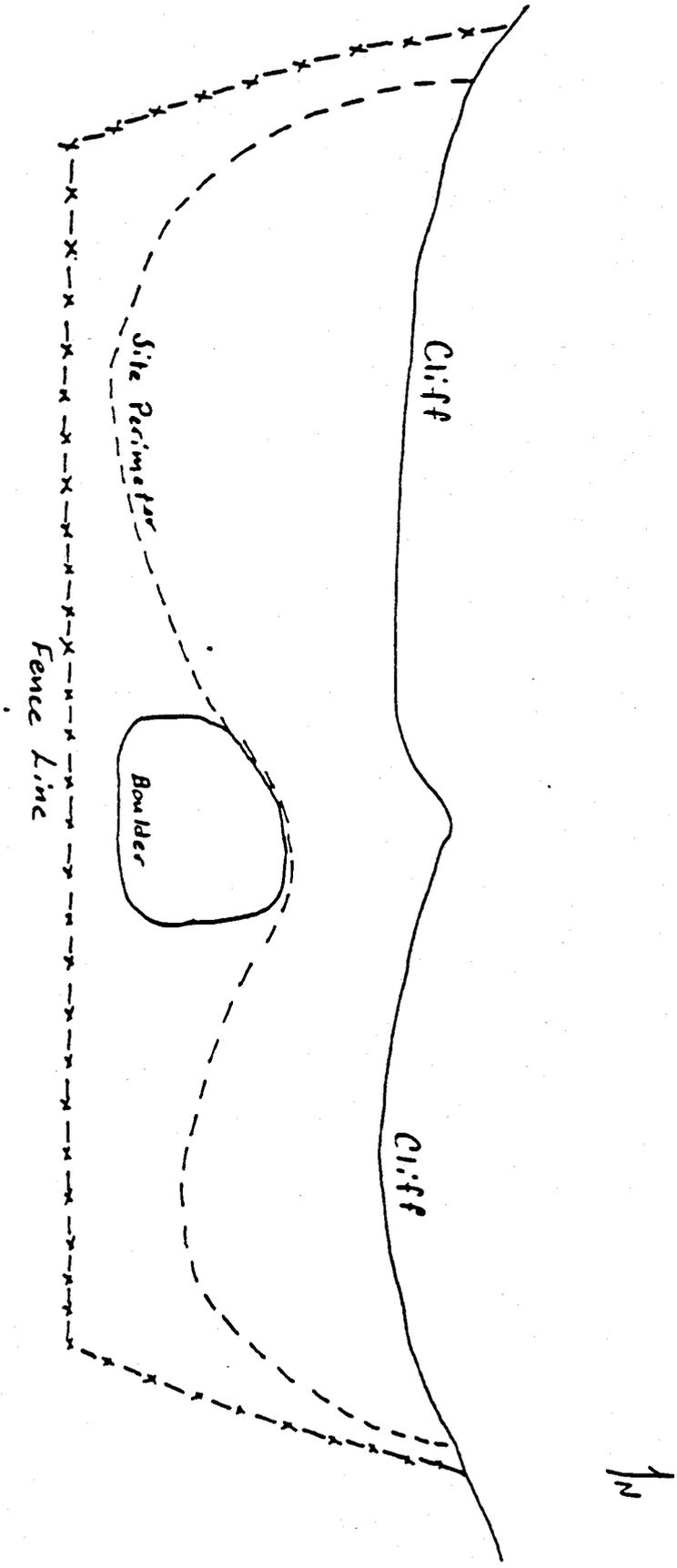
-  Survey Area
-  Archaeological Site
-  Isolated Artifact



7ML-IA:57

Figure 1

Figure 2



Approximate scale  
0 meters

0 1 2

REFERENCES

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1977 "Great Basin Projectile Points: Forms and Chronology";  
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Louthan, Bruce

1978 Final Clearance of the Huntington-Spanish Fork Transmission  
Line; Ms. on file at Moab District Office, Bureau of Land  
Management, Moab, Utah.