

Wayland, Joshua

From: Keller, Kevin <Kevin.Keller@hdrinc.com>
Sent: Tuesday, May 28, 2019 12:19 PM
To: Wayland, Joshua; Diller, Elizabeth
Subject: UBRy revised cultural resources methodology for transmittal to STB.
Attachments: UBRy Draft Cultural Resources reconnaissance methodology_revised 20190523.docx

Josh and Elizabeth,

Attached is revised cultural resources methodology for the three rail corridors, covering both the archeology and architecture surveys for UT parcels, outside of tribal lands. This revised methodology addresses STB comments (received April 12, 2019). This revision was delayed, as we wanted to meet with the UT and CO SHPO's to incorporate their comments. Let me know if you have any questions.

Kevin

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TECHNICAL MEMORANDUM

To: Kevin Keller, HDR

From: Mike Cannon, Principal Investigator, SWCA Environmental Consultants

Date: May 23, 2019

Re: **Uinta Basin Railway: Draft Cultural Resources Field Reconnaissance Methodology / SWCA Project No. 53323 (revised)**

BACKGROUND

This plan outlines SWCA Environmental Consultant's (SWCA) proposed methodology for collecting comparable affected environment data pertaining to cultural resources for three alternative routes (Indian Canyon, Wells Draw and Craig; Figure 1) proposed by the Seven County Infrastructure Coalition (Coalition) for the Uinta Basin Railway project (Project) to be evaluated by the Surface Transportation Board (STB) in an Environmental Impact Statement (EIS). The methodology pertains only to non-tribal lands in Utah. The methodology for tribal lands is being developed independently with the Ute Indian Tribe of the Uintah and Ouray Reservation. The methodology for non-tribal lands in Colorado is being discussed with the Colorado State Historic Preservation Office (SHPO) but is expected to be similar or identical to the process described below. If additional alternatives are identified during the EIS scoping process, the methods described here (and any methods developed specifically for tribal lands and non-tribal lands in Colorado) will be applied to those alternatives as well.

STB will be the lead federal agency for the purposes of review under Section 106 of the National Historic Preservation Act. STB's Office of Environmental Analysis (OEA) will be responsible for coordinating with the appropriate SHPOs, Tribal Historic Preservation Officers (THPOs), other Section 106 consulting parties, and the public to identify historic properties that could be affected by the proposed rail line. The information collected during fieldwork will inform OEA's identification efforts under Section 106 (as well as the analysis in the EIS), but it may not be sufficient for either archaeological or architectural resources. More specifically, the methodology described here for archaeology is intended to support analysis in the EIS only and alone will not constitute adequate identification for compliance with Section 106, which will be required for final project permitting once an alternative is selected.

Based on the proposed route alternatives provided to SWCA on April 24, 2019, the study corridor for the EIS is composed of about 93,735 acres, approximately 71,971 acres of which are in Utah. The Indian Canyon and Wells Draw routes are entirely within Utah, while the Craig route extends into Colorado. The area of potential effect (APE) for the project has not been finalized. OEA will develop the APE in consultation with the appropriate SHPOs, THPOs, and other consulting parties during the Section 106 review process.

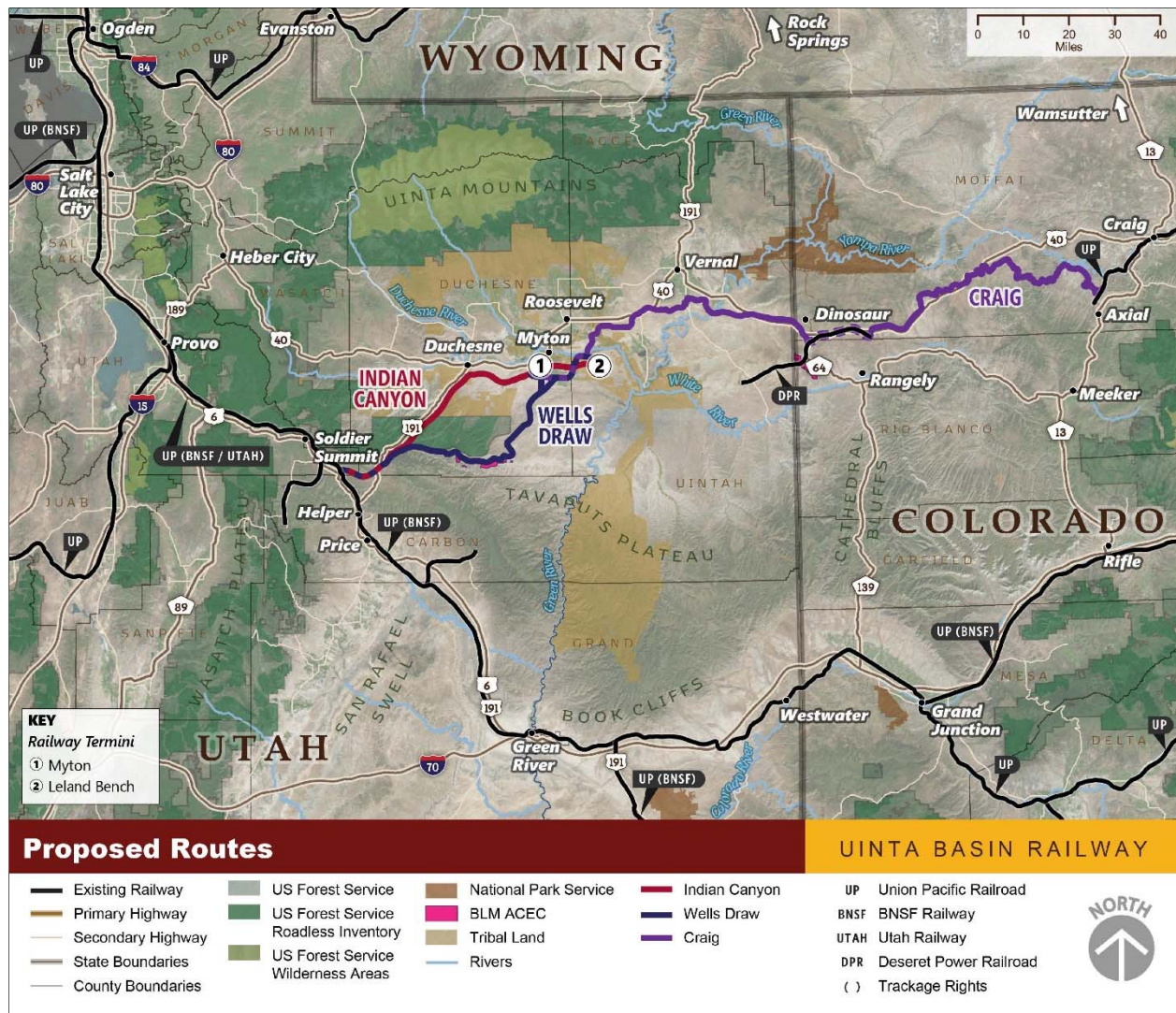


Figure 1. Proposed Route Alternatives

Previous Work

In 2014, HDR and SWCA conducted cultural resources assessments for Utah Department of Transportation's (UDOT) Uinta Basin Railroad feasibility study, consisting of an archaeological sample (Class II) survey and a selective architectural reconnaissance-level survey (RLS). Much of the Indian Canyon alternative proposed by the current Project follows the route evaluated during this previous study. Therefore, given that this project will involve the same tribes and agencies as UDOT's study, the methodology described here is intended to match that study as closely as possible so that the three Project alternatives can be adequately compared in the EIS. Since that study was completed less than five years ago, SWCA proposes that the data from that study can be updated and applied for the current analysis. Although UDOT's study was shelved prior to publication of an EIS, data from the cultural resources reconnaissance efforts were submitted to the Utah State Historic Preservation Office (SHPO). The results were not formally reviewed by them or any of the involved federal agencies.

DESKTOP ANALYSIS

High level consideration for impacts to particularly important cultural resources or areas was included in the development of alternatives being carried forward in the EIS. Additionally, as a first step before performing any fieldwork, SWCA will conduct a formal (Class I) file search to identify previous cultural resources studies and previously recorded archaeological sites and historic architectural resources within a half-mile buffer of each alternative; this will include acquisition of data from the Utah Division of State History (UDSH) Preservation Pro database, an on-line search in the National Register of Historic Places (NRHP) database, and a review of historic topographic maps and General Land Office maps. Data from this desktop analysis will be used to prepare a historic context for the project area for reference when evaluating the significance of cultural resources potentially affected by the project, primarily regarding their eligibility for the NRHP.

For historic architectural resources, SWCA will also 1) consult historic maps that may identify the locations of historic-age resources in the study corridor; 2) map all parcel boundaries and associated parcel numbers in the project area, and then consult on-line county assessors' websites to identify previously undocumented properties with architectural resources of historic age; and 3) use publicly available aerial imagery and, when available, aerial imagery produced for the project to identify the locations of previously undocumented but potentially historic architectural resources, such as abandoned homesteads known to be in the area.

RECONNAISSANCE SURVEY OF ARCHAEOLOGICAL RESOURCES

SWCA will build upon the information collected from the desktop analysis by conducting a Class II (reconnaissance) survey of archaeological resources. The reconnaissance survey will involve Class III (intensive) pedestrian inventories across a sample of 10 percent of each environmental zone crossed by the project alternatives. These environmental zones will be based on U.S. EPA Level IV Ecoregions. The intent of the reconnaissance survey is to produce a reasonable sample of current field data that can be used together with the results of the desktop analysis to analyze the impacts of each alternative on archaeological resources for the EIS. Preliminary review of file search data for Utah indicates that only approximately 5 percent of the land within the study corridor has been surveyed at a Class III level since 2011 (thereby meeting Utah land management agency requirements for survey adequacy). This review further indicates that survey coverage varies widely among ecoregions, ranging from less than 1 percent to over 13 percent per ecoregion. The archaeological reconnaissance survey to be conducted will increase the overall dataset available for analysis in the EIS and will ensure adequate coverage of all environmental zones, both of which outcomes will result in more thorough and defensible analyses in the EIS.

Complete Class III (intensive) survey will be conducted for the entire APE of the preferred alternative carried forward in the final EIS or as stipulated in a programmatic agreement developed in support of the NEPA record of decision (ROD). The Class II (reconnaissance) survey will be conducted using Class III methods for all sample areas so that these areas will not require resurvey during the Class III inventory of the preferred alternative. Per standard agency permit conditions in Utah, these surveys will be conducted using systematic survey transects spaced at 15 meter intervals.

The reconnaissance survey sample areas will be identified using a stratified random sampling approach. Quarter-sections will be used as sampling units; these are a preferred sampling unit because they are easily communicable and can be tracked using data readily available through the Public Land Survey System. Sample areas will be selected with consideration to previously inventoried areas, as new field data will likely be most informative in areas that have not been previously sampled. The sample will exclude any land that, according to data provided by UDSH, has been surveyed at an intensive (Class III)

level in 2011 or later. The sample will be stratified by ecoregion and land ownership or status such that approximately 10% of the land within each environmental zone and land status represented will be surveyed (acreage within the study corridor by land status is shown in Table 1). However, consideration will also be given to access, as well as to areas of existing disturbance, so that only intact ground surfaces with the potential to contain archaeological material are sampled. After selecting the initial sample areas, they will be screened to ensure that they can be accessed by survey crews and that they are not overly disturbed, and any areas that do not meet these criteria will be replaced by other randomly selected areas. And finally, input from land-managing agencies regarding land suitable for survey will also be sought, and the initial sample areas will be modified as appropriate in response to that input.

Table 1. Acreage by Land Status within the Study Corridor (All Three Alternatives) In Utah

Land Status	Total Acreage	Approximate Reconnaissance Survey Acreage
Bureau of Land Management (Vernal, Price, and Salt Lake Field Offices)	32,218	3,200
U.S. Forest Service (Ashley National Forest)	7,475	750
State (School and Institutional Trust Lands Administration; Division of Forestry, Fire and State Lands; and Department of Transportation)	5,246	520
Tribal (Uintah and Ouray Reservation)	2,538	n/a ^a
Private	24,494	2,400
Total	71,971	6,870 or greater

a. The methodology for tribal lands is being developed independently with the Ute Indian Tribe of the Uintah and Ouray Reservation. Reconnaissance survey acreage may be made up on land of other status and same environmental zone(s).

The result of this reconnaissance survey will be a representative sample of archaeological resources per environmental zone, allowing for a valid comparison of potential impacts to archaeological resources among alternatives in the EIS. The roughly 15% sample, comprising previously surveyed areas and areas to be surveyed during the archaeological reconnaissance survey for the project, which will represent over 10,000 acres surveyed in Utah, will strike a balance between providing enough data for alternatives comparison on the one hand and, on the other hand, expending a reasonable amount of time and money at this stage in the planning process. Based on preliminary background research that SWCA has conducted, it is estimated that archaeological site density across the Utah portion of the study corridor is approximately one site per 135 acres. Given this, it is estimated that approximately 80 sites will be present in the 15% sample for Utah, a sample size that should be statistically sufficient for estimating the density and nature of sites per environmental zone and for assessing the potential impact of each alternative on archaeological resources.

Federal and state agencies with land management responsibilities within the reconnaissance survey area will be consulted prior to fieldwork, and their survey and reporting guidelines will be followed; this will include obtaining fieldwork authorizations from the agencies, as applicable, and meeting all other agency cultural resource permitting requirements. All archaeological sites encountered during the reconnaissance survey will be documented on Utah Archaeological Site Forms, and each site will be evaluated for its eligibility to the NRHP. Previously documented sites located in the reconnaissance survey area will be revisited, and their site records will be updated as required by agency guidelines. To the extent practical given landowner considerations, archaeological resources will be documented in their entirety, and documentation will not be limited to the sample area boundary.

Minor adjustments to project alternatives over the course of the EIS may not require supplemental fieldwork if the relative ratio of survey coverage between alternatives is maintained; however, major

adjustments that result in disproportionate survey coverage between alternatives are likely to necessitate additional fieldwork. The results of the reconnaissance survey will be reported in a summary technical report with accompanying site forms.

RECONNAISSANCE LEVEL SURVEY OF HISTORIC ARCHITECTURAL RESOURCES

The project area is composed almost entirely of rural and undeveloped land. It is anticipated that historic architectural resources will be identified but that they will be few and widely scattered. Therefore, a selective reconnaissance-level survey (RLS) of historic architectural resources, including buildings, structures, objects, sites, and potential districts (including rural historic landscapes) that are of historic age (defined as 43 years old or older) for the entire length of the three proposed alignments (the study corridor) will be conducted, excluding only tribal lands. A selective RLS of Indian Canyon was conducted in 2014 during the UDOT study, although this may require updates to include any resources that have aged into consideration during the intervening five years.

SWCA will adhere to the Utah Division of State History 's *Reconnaissance Level Survey Standard Operating Procedures (For Section 106 Purposes Only)* (2015) for areas of the study corridor in Utah. A research design will be submitted to the Utah SHPO and comments will be addressed prior to commencement of fieldwork.

During field survey, SWCA will document all properties with historic-age architectural resources identified in the desktop analysis. In accordance with the Utah guidelines, documentation will comprise examination of the exteriors of the resources on each property, notation on architectural type and style, documentation of alterations that would affect the eligibility of the resources and property for the NRHP, and photographic documentation. SWCA will also evaluate properties for their eligibility as part of a larger historic district and as rural historic landscapes in accordance with National Park Service guidance. Finally, SWCA will drive all major and secondary roads in the project area to locate and document any additional resources that, based on professional opinion, are of historic age based on architectural type, style, and materials. If a landowner has not granted access to private property or access cannot be coordinated in a timely way, SWCA will document any resources of historic age visible from the public right-of-way and note all access limitations in the survey report.

Upon completion of the selective RLS, a technical report will be prepared summarizing methods, survey results, and recommendations of NRHP eligibility for each documented property. The report will meet state guidelines for selective RLS reports and will include all standard architectural inventory forms.