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Utah SHPO

CULTURAL RESOURCE COMPLIANCE GUIDANCE

UTAH STATE HISTORIC PRESERVATION OFFICE

DEPARTMENT OF CULTURAL & COMMUNITY ENGAGEMENT

State of Utah

This document is a summary of accepted Utah standards for archaeological compliance and data management. Much of this material mirrors the Bureau of Land Management's manual for cultural resources in Utah. Individual state and federal agencies may, and often do, establish their own internal guidelines for cultural compliance, and it is the responsibility of the consultant to meet and exceed those standards, which will likely be more exacting than those described within.

Utah Department of Cultural & Community Engagement

Contents

Chapter 1: Introduction

This guidance document is created in hopes of collating all the expectations of the Utah State Historic Preservation Office (UTSHPO) for completing an expeditious and adequate review of cultural resources compliance projects. The UTSHPO recognizes that in both state and federal law, the agencies hold the most authority in setting standards and expectations, and this document is not meant to supersede their instruction but to merely augment and support their direction. Any questions by consultants and proponents on any guidance in this document should be routed first through the responsible state or federal agency, or in some cases directly to the Utah State Historic Preservation Office (UTSHPO) and Staff. UTSHPO hopes this document will assist agencies, proponents, and cultural resource practitioners to understand the basics of meeting compliance with the UTSHPO. You can find UTSHPO's website at ushpo.utah.gov.

Staff

For projects with an archaeological component needing cultural resource review please contact the Compliance Archaeologist (see below). Projects affecting historic structures should be directed towards the Architectural Reviewer (see below). For questions on Archaeological Records, please use the dedicated email address archrecords@utah.gov and they will respond to your query. For general questions on the status of cases or to obtain copies of old compliance documentation please contact anyone listed below.

<u>For projects that are disturbing the ground or may affect archaeological resources:</u>

Compliance Archaeologist

3760 S. Highland Drive
Millcreek, Utah 84106
Email & Phone Number available at https://ushpo.utah.gov/about-us/contact-us/

<u>For projects affecting historic structures:</u>

Architectural Reviewer

3760 S. Highland Drive
Millcreek, Utah 84106
Email & Phone Number available at https://ushpo.utah.gov/about-us/contact-us/

Chapter 2: Consultation Process

The UTSHPO reviews projects under two authorities, Section 106 of the National Historic Preservation Act (NHPA) codified in §36CFR800 for federal undertakings and the Utah Code Annotated 9-8-404 for state undertakings. Both processes are similar to each other, with the only major difference being how adverse effects are resolved. Federal and State authorities feel that historic and archaeological resources are important to the history of our communities and need to be taken into account during projects. The role of the UTSHPO is to provide technical assistance and advice to communities, individuals and agencies and to provide a formal review for state and federal undertakings. UTSHPO lives by the motto "early and often" consultation for all projects; the staff are open to discussions and queries well in advance of a project being submitted to the office for review. What follows are some basic guidance on the process.

What is an Undertaking?

An "undertaking" is the basic starting point to assess compliance with the relevant state or federal cultural resources compliance law. According to §36CFR800.16(y) a federal agency is responsible to comply with the provisions of Section 106 of the NHPA when:

> any project, activity, or program [is] funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; those requiring a Federal permit, license or approval; and those subject to State or local regulation administered pursuant to a delegation or approval by a Federal agency.

Alternately, UCA 9-8-404(1)(a) states that "before expending any state funds or approving any undertaking," each state agency will take into account its actions on historic properties. If there is a question on whether a proposed action falls under either state or federal law, please contact the UTSHPO. §36CFR800 can be found here, and UCA 9-8-404 can be found here.

Who Consults?

Under both state and federal cultural resource laws, each agency is responsible for completing their compliance obligations. Proponents, archaeological consultants, individuals, or state agencies receiving federal monies are not the legally responsible party for completing the process nor are allowed to directly consult with the UTSHPO, unless there is a pre-existing agreement delegating that responsibility. All formal consultation communications with the UTSHPO should come from a responsible agency and should be signed by the Agency Official, or the person with authority to sign agreements and take responsibility for actions. If there is a question on which agency or who within an agency is the signature responsibility, please contact the UTSHPO. Formal communications from anyone other than the Agency and Agency Official will be returned unless there is an agreement otherwise.

Defining the Area of Potential Effects

As described in §36CFR800.16(d), an Area of Potential Effects, or APE, is "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties…". When considering the undertaking's effects on cultural resources, it is critical to think in three dimensions. For example, a housing project may be on a vacant lot with no standing architecture, but will require excavation of several feet of soil and possibly encounter subsurface archaeological materials. There may also be an extension of utilities into the property or staging areas for equipment, etc. An agency is responsible for defining all aspects of a project into an area of potential effects (APE) in consultation. However, per §36CFR800.4(g), multiple steps in the process could be condensed to expedite the process "as long as the consulting parties and the public have an adequate opportunity to express their views". There is no clear equivalent to this process in UCA 9-8-404, but UTSHPO urges state agencies to discuss the APE with interested parties.

Extending beyond a physical effect, federal law requires taking into account the project's auditory, atmospheric and visual effects as well. For example, installation of a high-voltage transmission line through the grounds of a historic monastery would not have a physical consequence to any standing buildings, but could potentially affect the overall setting and feeling of the site with visual effects and through the humming and crackling.

Agencies must consult the UTSHPO for defining the APE of an undertaking. For simple projects this can oftentimes be rolled into the final submission packet. For complex undertakings, agencies are urged to contact the UTSHPO before identification efforts begin.

Eligibility & Effect

After defining the APE, the Agency is responsible to conduct identification efforts (See Chapter 3 and 4 for more details) to determine if cultural resources are present within the APE. More specifically, both state and federal law requires that agencies take into account the project's effects on 'historic properties,' or those buildings, structures, districts, sites, or objects that are eligible for, or listed in, the National Register of Historic Places (NRHP). After completing identification efforts, there could likely be a number of cultural resources documented but not all are "historic properties", as some will likely be determined "Not Eligible." An agency is responsible for reviewing the identified resources, determining their status for the NRHP, and asking for the UTSHPO's concurrence with those determinations. There are numerous guidance documents, bulletins, and training courses available for judging the eligibility of cultural resources and how to understand the effect of an undertaking on those resources, so only the minimum will be covered in this section.

Both prehistoric and historic-period archaeological historic resources should be judged by all four of the NRHP criteria at the local, state, and national levels of significance. See the National Park Service's Bulletin 15 for the NRHP criteria and its application.

After determining the nature of the resources and historic properties within the APE, the agency is responsible for determining the effect of the project on those properties. There is significant variability with projects and effect determinations, and any questions on thresholds should be considered through dealing with the UTSHPO and other consulting parties through consultation. Avoidance of historic properties is always the preferred option, but we realize that it is not always feasible.

Inadvertent or Unanticipated Discoveries

If background research (historic map reviews, oral histories, findings from previous projects, etc.) or other information suggests a potential to encounter previously undocumented subsurface archaeological deposits during an undertaking, the UTSHPO highly encourages the Agency to include a discovery clause to all contracts. An example discovery clause (see below) should be included in all Scopes of Work and contracts for State undertakings, so that all parties are aware of the potential:

> Discovery Clause: If during ground disturbing activity, contractors encounter any subsurface archaeological deposits including, but not limited to, prehistoric artifacts or features (pithouses, charcoal staining from hearths, etc.), human remains, historic

building foundations or walls, outhouse/privies, or dense trash deposits, work must be halted within 50' of the discovery and notification made to the responsible Agency. The Agency will continue to halt work until an assessment of the discovery is completed by the agency, or a State and/or Federally permitted archaeologist and discussions with the Utah State Historic Preservation Office (UTSHPO). If the discovery is considered a significant, or a National Register Eligible property, the agency will coordinate the mitigation of the discovery with the UTSHPO.

The training of private excavators or building contractors on archaeological discovery potential is well-worth the investment in time and effort to avoid inadvertent adverse effects. UTSHPO has developed a Cultural Sensitivity Training in PDF and PowerPoint form to aid agencies or contractors who do not have an internal sensitivity training developed. Please contact the Compliance Archaeologist to obtain a copy of the PDF and/or PowerPoint versions of the Cultural Sensitivity Training.

What Is in the Agency Letter?

An agency letter is the formal statement, or determination, of the responsible Agency Official (usually a Director or above) regarding a project's effects on cultural resources. Currently, only the Federal Communications Commission (FCC) and the United States Department of Agriculture Rural Utility Service (RUS) has authority to delegate their Section 106 duties to corporations or individuals. Thus, other than an FCC case, all agency letters received by UTSHPO for review should be from a designated Federal Agency Official, as described in §36CFR800.2(a), or from a responsible state agency for undertakings under UCA 9-8-404. UTSHPO does not review requests for concurrence on determinations of effect and eligibility for any individuals or organizations that do not meet those specifications. Any report and letter received from an unrecognized Federal or State Agency Official will be returned.

The agency letter should clearly include, at the minimum, the lead agency, associated agencies and other pertinent consulting parties; a description of the undertaking; its location and APE; inventory methods and results; and a formal determination of effect and eligibility, as necessary. For ease of review, the UTSHPO requests that all sites and their eligibilities be included in a single table within the agency letter. Finally, we require a map to be included with the letter that illustrates the APE and its relative location in the state, generally with a topographic map background. Insufficient quality maps may result in the consultation package being returned or a request for clarification.

Many individuals confuse the UTSHPO Cover Page with the agency letter or interpret it as a Cover Letter a submission. These are distinctly different legal documents that live in different record series. The agency letter should summarize all pertinent details of the project and the eligibilities and effects, as this document is the legal statement by the Agency Official pursuant to cultural resource laws and lives in the appropriate case file. A UTSHPO Cover Sheet is an internal tracking form for use as a data quality tool to ensure the Records Staff receive all pertinent and required information and lives with the report, not the case file.

If you are responding to a letter from UTSHPO regarding a previously submitted report, please ensure that you include the Section 106 Case # that was included on our correspondence. It will appear as Case # Year-Number, (e.g. Case #: 13-0100). This is how UTSHPO tracks correspondence regarding compliance projects, and failure to include this information leads to our staff trying to find the right project using other information, such as project title, etc. The more detail you can provide, the better we can respond to your queries. If you have an internal tracking name or a number that you want us to reference in response letters, please include that information and clearly call it out. See the following page for an example agency letter (If more examples are needed, please email a UTSHPO staff member).

Checking Status of Cases

The UTSHPO has a 30-day statutory turnaround time for reviewing consultation packets, and this clock begins when the complete package arrives at our office. Generally, the UTSHPO aspires to complete all reviews within a 15-day turnaround time, but that is not always possible with large and complex projects. It is highly unlikely that constantly checking in the status of your project with UTSHPO reviewers will aid in its expeditious review and is not helpful. In an average year, the UTSHPO reviews approximately 1,700 projects, some with multiple requests for comments. We are responsive to the needs of agencies and will do our best to move through the process as quickly as possible. Providing all the pertinent information in the format, quality, and organization outlined in this document will assist in a timely review for your project.

With deployment of the new electronic Section 106 online system, there is an online public viewer where anyone can review the status of a case without any login or credentials. Visit https://cce.my.site.com/e106/s/ to access the viewer. Please note that projects received at the UTSHPO *prior* to Nov 28, 2017 may not be available online. Please contact a UTSHPO staff member for assistance for older consultation.

Example Agency Letter (Federal Undertaking)

Continued on next page

Dear [SHPO Reviewer]

As Agency Official per purposes of54 U.S.C. 406108 (commonly referred to as Section 106 of the National Historic Preservation Act), we wish to consult with you pursuant to 36CFR800.3(g) about the proposed undertakings, approval of leases for well pads and grants of easement for associated access roads and pipelines (Project No. *U12MX0255*), on lands administered by the [Agency] in [County]. The area of potential effects includes all pad locations, easement, access road and pipeline corridors and comprises an area of [Acres].

In consultation with [list any additional consulting parties or agencies] as identified in 36CFR800.3, we have made a reasonable and good faith effort to carry out appropriate identification efforts as prescribed in 36CFR800.4 and have gathered sufficient information to evaluate the eligibility of the identified properties for the National Register of Historic Places (National Register). Identification efforts included an intensive pedestrian inventory of [Acres] and identified [Number of Resources] cultural resources, including [Number] historic properties. Documentation of this finding is provided in the enclosed report:

U12MX0255i,s: [Insert Bibliographic Reference that accompanies the agency letter]

It is our opinion that application of the National Register criteria has the following results:

Site Number	Type	Eligible	Criteria	Effect
42XX01111	Canal	Yes	A, C	No Adverse
42XX01122	Lithic Scatter	No	None	No Historic Properties
42XX01133	Historic Trash Dump	Yes	D	No Historic Properties

The proposed undertaking will avoid by project design both 42XX01122 and 42XX01133 by a minimum of 100’, thus the [Agency] determines “No Historic Properties” affected for these two properties.

A road will cross 42XX01111, a historic canal, on an existing bridge that will need to be widened and re-surfaced. As the proposed widening and use of road does not significantly affect the character defining features of the property, nor diminish its eligibility for the National Register, the [Agency] determines “No Adverse Effect” for this property.

We conclude that a determination of “No Adverse Effect” pursuant to 36CFR800.5(b) is appropriate for the undertakings, as the projects will not alter those characteristics of the historic property that qualify it for the National Register.

As required at 36CFR800.5(c), we are submitting documentation of this finding of eligibility and effect and await your response within thirty days of receipt. We trust you will agree with this finding and seek concurrence that the Section 106 consultation process has been successfully completed for the subject undertaking.

If there are any questions, please contact [Agency Official or Archaeologist].

Sincerely,
[Agency Official Signature]

Agency Officials must sign the agency letter, such as a responsible person at a Field Office Manager, Director, or other high-level position (rarely a cultural resources specialist)

Ute Tribal Historic Preservation Office (THPO) Consultations

In September 2021, the Ute Indian Tribe of the Uintah & Ouray Reservation became an official Tribal Historic Preservation Office (THPO). THPO's have the same authority as SHPOs in the Section 106 compliance process, applicable to the areas within the external boundaries of the respective Indian Reservation. Therefore, the Ute THPO has consultation authority for federal undertakings within the external reservation boundaries of the Uintah & Ouray Reservation, which is approximately 4 million acres in Duchesne and Uintah Counties. Within the external reservation boundaries is Ute-owned land, private land, state land, and federal land. Any Section 106 undertaking within the external boundaries will be sent to the Ute THPO instead of the UTSHPO. However, this designation does not apply to state land or undertakings within the reservation – UTSHPO will still have authority over and review state undertakings pursuant to UCA 9-8-404. Additionally, some undertakings may be joint-jurisdictional between the UTSHPO and Ute THPO (i.e. the federal undertaking APE would be delineated both inside and outside of the Uintah & Ouray Reservation external boundaries). For joint-jurisdictional undertakings, either a lead SHPO/THPO will be designated for Section 106 review, or each office would review portions of their undertaking within their respective authority. Decisions on how joint-jurisdictional projects are handled will be made on a case-by-case basis by the agency, SHPO, and THPO.

Chapter 3: Archaeological Guidance

Chapter 3.1: Pre-Fieldwork

The UTSHPO feels that the most important component of any archaeological endeavor is the work completed before any fieldwork actually commences. Collecting all permissions and permits and completing a pre-field literature and historical research review is critical to the successful completion of the Section 106 or UCA 9-8-404 process. A literature review should provide the agency and consultant with a basic knowledge of the area's specific resources, their range and variation, and identify gaps in data. Pre-field research is more than consultation of General Land Office maps, but should be a comprehensive review of existing prehistoric and historic narratives and summaries to guide identification efforts and eligibility discussions through a thorough understanding of contexts. Agencies will likely have specific pre-field guidance, and the UTSHPO guidance does not supersede those requirements and standards.

Permitting

There are numerous permits and authorizations required to complete archaeological research, fieldwork, and data recovery. It is the responsibility of the consultant or private individual to follow all pertinent state and federal guidelines. If you are a consultant working on federal or state lands, the first call should be to the managing agency and their archaeologist to determine what steps you need to take to gain permission to enter their lands for archaeological inventory or research. Failure to follow proper permitting and authorizations could lead to civil and criminal penalties.

More specifically, the State of Utah has its own permitting process for archaeology. By Utah Administrative Code 9-8-305(5) and Rule R694, the Public Lands Policy Coordination Office (PLPCO) oversees archaeological permitting on State lands. There are two separate archaeological permits offered through PLPCO:

- Principal Investigator to Conduct Archaeological Surveys: Issued to qualified individuals to conduct surveys on state land (§ 9-8-305) and is required by the UTSHPO to access archaeology site files and receive site and project numbers.

- Archaeological Excavation/Data Recovery: Issued to PLPCO-permitted principal investigators who need to perform testing or excavation of archaeological resources on state lands.

General qualifications for a PLPCO Principal Investigator Permit holder include a graduate degree in anthropology, archeology or history, at least one year of full-time professional experience, and at least one year of field and analytical experience in Utah archaeology. Administrative Rule R694-1-1 does allow for submission of evidence of significant ability to design and execute a research project in lieu of a graduate degree to acquire a permit. Application materials and procedures, along with more detailed information on the permitting process, are located on the PLPCO Archaeological Permitting website. That same website includes a listing of all active PLPCO permit holders.

The UTSHPO requires a PLPCO permit in order to access on-site archaeological records or to work with the online data viewer, Sego 2.0 (previously Preservation Pro). Those completing a file search are allowed to work under another person's PLPCO permit authority with pre-approval with the UTSHPO and consent from the PLPCO permit holder. This requirement does not include federal archaeologists.

How to Request an Organizational Code

Organizations submitting archaeological reports in Utah need an IMACS Survey Organization Code. This code is a two letter/digit sequence assigned as part of the now defunct Intermountain Antiquities Computer System (IMACS) which Archaeology Records still uses to help distinguish an organization's records. If you are unsure if your organization already has an IMACS code please check with Archaeology Records (archrecords@utah.gov). Even though IMACS has been officially replaced as the standard archaeological site form for Utah, the IMACS Organization Code is still an important component of project tracking.

If your organization has not yet received an IMACS code, please contact the Archaeology Records for assignment with the following information:

- Organization's name and address
- Name of your organization's associated PLPCO archaeological principal investigator permit holder (including the PI #)

Note: we will only assign IMACS codes to organizations currently working in the State of Utah.

Report Number Assignment

Most state and federal agencies in Utah require a State Report Number be assigned to a project prior to on-the-ground work starting. This is a statewide, cross-agency number that helps the UTSHPO manage and track archaeological reports in Utah. Report numbers are only assigned to projects led by an individual with a State of Utah Public Lands policy Coordinating Office Archaeological Principal Investigator Permit. **See below for when a report number needs to be assigned.** Class I Literature Reviews or documentation of individual archaeological sites without an associated report *will not be assigned State Report Numbers*. A State Report Number tracks new archaeological investigation only (new survey or excavation), and not Section 106/UCA 9-8-404 undertaking consultations. Undertaking consultations are tracked using the e106 case numbering system.

State Report Numbers are obtained prior to fieldwork and can be received by contacting Archaeology Records (archrecords@utah.gov). The following pertinent information must be provided (no spatial data needed):

- Organization name
- Project name or report title
- Principal investigator's name (including PLPCO permit number)
- County(ies) involved
- Landowner(s) (e.g. private; state; BLM; county; etc).

Report numbers are assigned to the following:

- Archaeological surveys (Class II and III)
- Monitoring projects with discoveries.
- Large-scale excavations (does not include shovel testing).
- Site recordings where a report is generated.

Report numbers are *not* assigned to the following (with exceptions):

- Class I literature searches
- Monitoring projects without discoveries.
- Site recordings where a report is not generated.

New report numbers ***must*** be requested for addendum reports. Reusing previous report numbers for new, distinct report submissions is not acceptable. This assures a full accounting of all reports associated with an existing project.

Literature Review

Please refer to your land managing agency, or contract holder, concerning your literature search requirements and needs. Due to the protected nature of the archaeology records, we require a State of Utah Archaeological Permit administered by PLPCO for access, except for federal archaeologists. As the Records program is only partially funded by state and federal funds, fees are assessed to access the records. Please contact the Records staff for the current fee schedule, which is included in Appendix B as well.

All archaeological site forms and archaeological reports held by the UTSHPO are scanned and available online through our secured data management system known as Sego and UDAM. Contact Archaeology Records (archrecords@utah.gov) for more information about this system, including how to qualify for access and how to pay (Appendix B).

A staff-performed GIS search of an area of interest is not required for UTSHPO consultation if (1) a search is completed using Sego, (2) if the consulting agency agrees and (3) if pertinent landowner and other related records are also thoroughly searched. If requested, Archaeology Records staff will complete a spatial search of a specified area according to the current fee schedule (Appendix B). To complete the search, staff requires a shapefile or other spatial reference and will, in return, deliver a simple list of intersecting archaeological sites and projects for patron retrieval from Sego. GIS data cuts on a PLSS section basis are available according to the current fee schedule (Appendix B). Payments for records services are made online by credit card via payment link provided by Archaeology Records.

UTSHPO always recommends checking the records of the land managing agency or landowner for information potentially missing from our files. There are often records that were not submitted, misfiled/plotted in our records, or just plain missing from our collection.

Another lesson learned through past experiences with archaeological compliance projects is the necessity of a periodic completion of a second (or more) file search if a project lingers for several years. For instance, a large-scale linear undertaking completed a file search in 2008, but the actual implementation did not occur until 2014. In the intervening period there were a number of additional surveys and documented sites within the APE that could have informed project implementation. Identification of additional resources within a previously completed inventory and file search boundary may create complications and delays in projects.

Finally, a literature review is a critically important step in completing the compliance process. Many consultants complete a minimum level of report review (largely a tally of basic bibliographic information). Checking these reports is absolutely necessary because many projects might have completed inventories using non-standard methodology, excluded areas from survey that might not display well in GIS layers, indicated site leads within the past project area or directly adjacent, or other potentially significant information that a simple bibliographic effort would fail to identify. For many past reports, an entire grazing allotment might have been displayed by an agency as being inventoried when, in fact, the report makes it clear that only a selected area(s) was intensively inventoried. In this example, GIS might display a block inventory when in reality there is only a small area that was surveyed. File searches at UTSHPO and the agency should be comprehensive, not a simple checkbox exercise.

Sego (Previously Preservation Pro)

The UTSHPO can provide access to the Department of Cultural and Community Engagement's archaeology mapping and content management system: Sego. Access to Sego is limited to individuals holding a PLPCO Archaeology Permit and individuals working directly under such an individual, with both the UTSHPO's vetting and the permit holder's approval. Federal agency archaeologists can request access as well without a PLPCO permit requirement according to agency data sharing agreements. Subscriptions are charged by user and run yearly on the State's fiscal calendar (July 1-June 30), pro-rated subscriptions to Sego are not available at this time. Sego provides access to a map viewer of the Section's archaeology GIS dataset and currently scanned documents. The map viewer provides visual access to the GIS layers, but GIS datasets are not available for download. Users are welcome to take screenshots for future reference or external GIS digitization, a print option is also available in the Sego application.

Use of Sego alone will not meet your complete literature search needs. The lack of available digital reports and the site forms from certain counties likely necessitates an onsite search to the UTSHPO and/or visit to land managing agencies. Additionally, while the Section works hard to quickly GIS digitize all incoming reports and sites, a digitization backlog is a reality and may lead to an underrepresentation of resources or previous investigations. The UTSHPO's backlog should be checked. Additional historic and prehistoric research will likely be required based upon your expertise and area of investigation. As previously stated, SHPO always recommends checking with pertinent landowners for records that are missing or were never submitted to the Section. Please see the previous section on Literature Review.

Historic Research

Many archaeologists fail to employ historic research in a manner appropriate to the expectations of the compliance process. Thorough historical research is not limited to merely a summary review of General Land Office maps. A broader suite of materials is available in paper form in archives, courthouses, or libraries and in freely available digital formats. All of these resources should be part of a normal pre-field research and the post-field reporting and eligibility discussions. Investing time before fieldwork will assist in identifying and understanding the nature of sites encountered during inventory and provides a better context for judging site eligibilities. It would be an expectation that every archaeological site form documenting a homestead or itinerant occupation will have minimally reviewed the GLO plats, land patent records, and any relevant secondary historic research. Without this contextual information and research into individuals, it is not truly possible to assess site eligibility under all criteria.

Appendix G includes a list of available online historic resources appropriate to Utah. Also, several archaeologists have demonstrated the utility of completing historic research even for prehistoric topics. For instance, Jerry Spangler's (2012) work reviewing early archaeological expeditions to Utah in the 1920s-1930s has identified dozens of undocumented sites, and Simms et al.'s (2012) review of surveying notes located Fremont-period canals. While both of these projects are research and not compliance driven, the overall relevancy of referring to historic documents for prehistoric sites is germane for some situations.

Spangler, Jerry D., 2012. The Archaeologists of Nine Mile Canyon: Serendipity, Science and an American Treasure. University of Utah Press: Salt Lake City.

Simms, Steven R., Chimalis Kuehn, N.K. Harrison. 2012. The Archaeology of Fremont Irrigation. Poster Presentation, 33rd Great Basin Anthropological Conference, Stateline, Nevada.

Permissions

Responsibility for gaining appropriate permissions to access state, federal, or private lands is solely upon the consultant or individual. Failure to gain proper permissions before entering lands could lead to potential state and federal penalties at the discretion of the land managing agency. If there is a question on who to contact at these agencies for gaining land access, the UTSHPO can assist in directing the query to an appropriate party.

Chapter 3.2: Fieldwork

As noted elsewhere in this document, specifics of fieldwork need to be coordinated with the appropriate responsible and/or land managing agency. For consultants, any alteration to field methods needs to be discussed solely between the Agency and the UTSHPO and other consulting parties. Agencies need to consult with the UTSHPO before any alteration of identification strategies beyond the well-accepted norms detailed below. Submission of a report and site forms that are different from the details below without prior consultation will be rejected for consultation purposes. Please feel free to contact the UTSHPO and Agencies to discuss any unclear aspect of guidance regarding fieldwork expectations.

Inventory Methods

Completion of a pedestrian survey is the most common means of identifying archaeological sites in Utah, though some use of remote sensing and limited test excavations have been employed to assist in those efforts. Some basic rules of thumb for completion of archaeological inventories in Utah are below:

- 15-meter transect spacing is a commonly accepted transect standard in Utah. Alteration of this spacing (which may be appropriate in certain circumstances) will necessitate consultation between the Agency and UTSHPO.
- Any inventory over 10 years old will likely require re-survey unless documentation of the adequacy of that inventory is provided in advance by the Agency to UTSHPO. In only rare cases should an agency submit a package to UTSHPO for formal consultation without first discussing use of surveys over 10 years old and the rationale behind that decision.
- All fieldwork and report writing need to be supervised by an archaeologist meeting the Secretary of Interior's Standards, Office of Personnel Management standards for a GS-0193 federal archaeologist, or holding a valid PLPCO Principal Investigator Permit.
- There are no site type exemptions from documentation in Utah, unlike other neighboring states. All sites that meet the definition below must be documented on an appropriate archaeological site form.
- Given Utah's generally high ground visibility, it is not expected that any inventory would use shovel probes to identify archaeological sites.
- Testing of archaeological sites during inventory is generally discouraged by the UTSHPO, unless there is question on the potential for the presence of important data and/or subsurface deposits, or the density of ground cover obscures visibility of cultural materials. Several federal and state agencies in Utah possess formal policies regarding the testing of archaeological sites for eligibility and extent. If limited testing such as shovel probes are planned, we ask that you send the Compliance Archaeologist a courtesy email notifying of the small-scale excavation before the testing occurs. Large-scale excavations will require an Archaeology Excavation Permit issued by PLPCO.

The UTSHPO recognizes three basic levels of identification efforts for historic properties, Class I, II, and III:

- **Literature Review/Class I.** Reserved for the completion of a literature review of existing information for the APE or other geographic area defined by the Agency and UTSHPO in consultation. This is often a common exercise for the in-fill development of an oil and gas field where an existing well pad is being expanded and has already been inventoried.
- **Class II: Reconnaissance or Intuitive Survey.** This covers any archaeological survey that uses transects greater than 15 meters in spacing, projects that exclude areas from investigation due to slope, wetlands, etc., or for scientifically derived sample inventories of large block areas. Report maps need to clearly display the areas subjected to inventory at an intensive level (<15m transect), reconnaissance/intuitive (>15m transect), and those areas excluded from inventory. Surveys using over 15-meter transect spacing could be considered intensive, dependent wholly upon consultation with the UTSHPO before implementation per 36CFR800.4(b). An Agency must consult with the UTSHPO prior to completion of this type of inventory, unless Class II Survey is conducted during a normal Class III Survey only due to a slope or vegetation exclusion that is thoroughly documented within the report. UTSHPO understands that surveying through dense vegetation is often physically impossible or unsafe, as is surveying on steep slopes above 30°. However, survey to Class III standards should be conducted on steep slopes to the extent possible if historic evidence suggests potential for cultural resources, such as mining activities. Acreage falling under recon and intensive should be clearly articulated on the UTSHPO Cover Sheet and within the report text.
- **Class III: Intensive Pedestrian Survey.** This is the most common type of archaeological survey in Utah, and is marked by the use of consistently spaced 15 meter transects (or less) across the entire project area. It is felt that this level of inventory is appropriate for most undertakings, although if a specific project or area seems to require a less intensive strategy, then the agency should consult with the UTSHPO. Surveys using over 15-meter transect spacing could be considered intensive, dependent wholly upon consultation with the UTSHPO before implementation per 36CFR800.4(b).

Archaeological Site Definition

The UTSHPO does not articulate its own archaeological site definition, but instead references the BLM Manual 8110 “Cultural Resources Manual” for Utah. Some practitioners in the state approach a site definition as a dogmatic and unchanging fixture in the landscape of archaeological practice, but this is not the case. There is no statute or regulation that establishes the definition of an archaeological site either nationally or within the state. However, the BLM site definition is the generally accepted standard throughout the state across most land managing agencies.

Any alteration to this site definition needs to be completed in consultation between the Agency and the UTSHPO BEFORE fieldwork commences as site definition is considered part of the “Identification Phase” of the Section 106 process. Any report received with an alteration of site definition without prior consultation will be returned until such time the issue is resolved.

All archaeological or historic properties that are over 50 years old and meet the following site definition will be recorded on an appropriate site form. Utah's archaeological site definition is as follows:

- At least 10 artifacts of a single class (e.g. debitage, ceramics, glass, cans) within 10-meter diameter area, except when all are from a single source (e.g. single pot, bottle).
- At least 15 artifacts of at least two classes within a 10-meter diameter area.
- One or more archaeological features in temporal association with any number of artifacts.
    - A single structure or building such as a barn, concrete reservoir tank, or similar construction, should be documented as a site as it meets this definition.
- Two or more temporally associated archaeological features without artifacts.

The UTSHPO encourages documentation of sites that fall below these thresholds if the consultant, agency, or avocationalist feels it is important to formally document a resource. Documentation of sites below the above thresholds does not need pre-consultation with the UTSHPO. Finally, the UTSHPO encourages a 'better safe than sorry' mantra for site documentation, meaning that if a site is questionable in age or number and types of artifacts/features, it is best to document and provide to the Agency and UTSHPO for review and comment.

Linear Sites

Linear sites (e.g. roads, canals, railroads, trails, etc.), have their own suite of guidance completed by the Utah Professional Archaeological Council (Appendix C). Key points from this document are that nearly all linear sites should be documented as formal archaeological sites. It is critical to complete pre-field research to ensure identification of features on the ground while also ensuring that you do not check out multiple numbers for a single resource.

Guidelines and information on the recording of linear archaeological sites in Utah can be found here.

Archaeology Records maintains a master dataset of named linear archaeological sites which can be accessed through Sego. If you need a site number assigned to a linear resource please see the section below on How to Request Site Numbers. Some basic information about how linear site numbers are managed can be found below. Further questions can be directed to Archaeology Records (archrecords@utah.gov).

- Although a site number may have been assigned to a linear site, we may not yet have a copy of a site form associated with the site. If we *do* have a copy of a site form associated with the linear site, it is possible (or *likely*) that the form does not directly record the segment you are particularly interested in.

- A complete archaeological literature search through Sego may not turn up all linear sites found within your defined area. Although a number may be assigned to a linear site within your project area, if a segment of the resource has not been directly recorded in your area it will not turn up spatially in your search. Please consult the UPAC linear sites guidelines to ensure all linear resources are properly assessed.

- We *do not* assign segment numbers to linear site numbers (e.g. 42TO1077.3, 42TO1077.4). When completing a site form for a segment of a linear site, the site number should be listed with the site number first, followed by "segment" (e.g. "42TO1077 segment", *not* "42TO1077 segment 2") with *no* segment number defining notation following. Segment numbers are not tracked or assigned by UTSHPO.

- The names provided in Sego are names provided by the archaeologist recording the resource. Beyond the UTSHPO consultation process, SHPO does not check the accuracy of the names or the other recording issues beyond what was reported by the field archaeologist. If you find an error please contact Archaeology Records.

- Consult with your land managing agency for additional specifics pertaining to linear resources occurring on their land.

Isolated Finds

All cultural material that falls below stated site thresholds is recorded as an "Isolated Find" and should be summarized in the text of any report as a table providing an individual Isolated Find number, description of cultural period, cultural affiliation, UTM coordinates and estimated date range in addition to the area extent in which the Isolated Find(s) occur in (e.g., 9 flakes within 20m). Each diagnostic and/or unique isolated find should include at least one digital photograph. UTSHPO strongly recommends including photographs of isolated features, even if not diagnostic. Consultants and agencies should submit a shapefile containing this information for each project, with photographs for each isolated find within the report itself. Per the BLM-UTSHPO Protocol, UTSHPO recommends isolated finds that consist entirely of lithic debitage, ceramics, bottle, or cans will not be recorded, unless the archaeologist feels it warranted using professional judgment.

Numerous agencies and archaeologists perpetuate the inappropriate perspective that isolated finds are categorically not eligible for the National Register of Historic Places. While it is unclear where this perspective has its origin, it is clearly erroneous given the NRHP's "Object" property type. Further, it is clear that isolated finds on a holistic view might shed important information on broad land use patterns through projectile point distributions, reduction areas, itinerant historic/prehistoric encampments, etc. Isolated finds are important and should be documented appropriately.

Site Number Assignments

The Archaeology Records staff maintains the statewide ledger for archaeological site numbers. The State of Utah uses the standard Smithsonian trinomial site number system which defines the state number (42=Utah), the county (e.g. KA=Kane), and a sequential number (e.g. 500). This numbering system is recognized by the vast majority of state and federal agencies and landowners. **We do not assign Smithsonian Trinomial numbers for sites yet-to-be discovered**.

If, as a result of fieldwork, archaeological sites are identified and will be reported, site numbers can be requested from staff at archrecords@utah.gov.

We require basic information, including location, about a site prior to the assignment of a number. This information assures sites are not double recorded under different numbers. An Archaeology Records geodatabase or shapefile template (shapefile template; geodatabase template) is the preferred submission method, with all sites stored as polygons (linear sites are buffered to their width). Those not employing the template are required to provide the following information in a spreadsheet or written in an email with an accompanying map:

- Temp number
- Date recorded
- Site class (e.g. historic; prehistoric; ethnohistoric)
- Site type
- State Report Number
- Name of site recorder
- Site name (if appropriate)

The following references are available to assist in preparing your request:
- Site number request geodatabase template
- Site number request shapefile template
- Schema for spatial data
- PDF tutorial

In the rare cases where GIS technology is not available to an individual or contractor, a digital map and associated spreadsheet will be accepted.

Linear sites offer their own unique numbering issues, and the UTSHPO maintains a master list of these sites. Please see the section above titled Linear Sites for more information on recording and reporting linear sites. If you need to request Smithsonian site numbers for a linear site, please follow the instructions listed above, additionally including the resource name and buffering the lines to polygons.

Do You Use a Building or an Archaeological Site Form?

Perhaps the largest gray zone in site documentation and UTSHPO review is the presence of historic-period architectural elements. A general rule within the UTSHPO to differentiate the use of an Archaeological Site Form or the Historic Site Form (for buildings) is the presence or absence of a street address. This is easily relatable for architectural properties within developed urban areas, but abandoned rural homesteads and communities may lack a formal address but still contain architecture with a high degree of integrity.

The UTSHPO requires use of the Historic Site Form (see Appendix E) for archaeological sites with standing architecture, as defined by the presence of recognizable wall elements above 4' tall. This form would be used in addition to the archaeological site form and included at the end of the archaeological site form as an addenda. Use of a Historic Site Form (buildings) is required as it is structured to guide a recorder to answer specific questions regarding architecture in a manner and format not found in general archaeological site forms. Documentation on archaeological and building forms directly relates to guidance referring to documentation and evaluation of recreation sites. Please view the "Recreational Facilities Documentation and Evaluation Expectations" section for more information.

Documentation Expectations for Site Revisits

During archaeological inventories, crews oftentimes encounter previously documented sites within the APE. The UTSHPO has no requirement of revisiting specific sites, but it is expected that the Agency will require the revisit of all previously documented sites in the APE. Variation from this can be accomplished through both formal and informal consultation with the UTSHPO, where rationale for alterations to this guideline can be discussed. Updates to site documentation should be completed when any of the thresholds are met below:

- Site recording is over 10-years-old.
- Notable changes to the site content or structure were identified.
- The site could not be relocated or was destroyed.
- Unrecorded segment of a linear site.
- Change to National Register of Historic Places status.
- Sites are combined or split. Each affected site must have a new site form submitted.
- Duplicate numbers are discovered for a single site. The standard is to use the lowest site number but please consult with the Archaeology Records staff if there is complexity. Site updates for the dropped site number(s) is required.

A fully updated Utah Archaeology Site Form is not necessarily expected for site updates, but a Part A (administrative information) is required at minimum. Please do not submit an older site form, especially site forms completed under a different report and state project number, with "updated information" as a site update. A site update must include a new UASF Part A that is usually accompanied by at least one photo and map.

If it is determined that an updated site form is not necessary for a site revisit, each site revisit should still be briefly addressed in the report, including a basic site description, current condition, and eligibility status of the revisited site. This way site revisits are still thoroughly documented without an updated archaeology site form.

Ancient Human Remains Process

It is possible in inventory and/or data recovery excavations to encounter human remains. If you find human remains, do not disturb them further. In Utah it is a third degree felony for anyone except an archaeologist, the Medical Examiner's office, law enforcement, or a licensed mortician to disturb, move, remove, conceal, or destroy human remains.

No matter what the age of the bones appears to be, leave them in place and call the local law enforcement agency. It is recommended that all work stop within 50'-100' of the discovery. If the remains are ancient and not on federal lands, law enforcement will contact the Antiquities Section of UTSHPO. For more information please the Human Remains Reference Page.

Human remains discovered on federally managed land will be treated consistent with all requirements of NAGPRA and its implementing regulations at 43 CFR 10. Human remains discovered on State, SITLA, or privately owned land will be treated consistent with all requirements of applicable Utah State Laws regarding the treatment of human remains including Utah Code Annotated (UCA) 76-9-704, UCA 9-8-302, UCA 9-8-309, and UCA 9-9-401 et seq.

Chapter 3.3: Reporting

The UTSHPO has a series of expectations for reporting on archaeological inventories, testing, and data recovery projects. All of the following standards have been the accepted procedures and formatting in Utah for many years, and it is expected that all consultants and agencies will adhere to these guidelines. Failure to meet these standards may lead to non-concurrence and/or return of submitted materials.

Currently, UTSHPO only accepts digital submissions of agency letters, reports, and site forms for Section 106 or 9-8-404 consultation. All reports must be formally provided by an Agency, unless otherwise discussed before submission with the UTSHPO. All submissions must be made through Utah's electronic Section 106 online portal, termed e106. For more information please refer to Chapter 6 and visit https://cce.my.site.com/e106/s/.

Survey and Data Recovery Reporting

The UTSHPO currently does not have a preferred format for reports, but generally the provisions included in Appendix 2 of the Bureau of Land Management's "Guidelines for Identifying Cultural Resources, Handbook H-8110" for Utah is followed. The agency managing the lands or permitting an action may have specific requirements and expectations for reporting standards above and beyond the UTSHPO, and it is the responsibility of the consultant to meet those standards. Beyond a report, updated site forms, GIS data and updated tabular site database information (i.e. UASF site spreadsheet) are required as part of the submission for any site testing or data recovery.

General Report Guidance

Pertinent information and expectations of a survey report will include:

UTSHPO Cover Sheet: This is a required component of all excavation or inventory reports submitted to the UTSHPO, as this is the critical data sheet for tracking all projects entering the UTSHPO. A submission without a UTSHPO Cover Page will be returned to the responsible agency or independent party (for non-compliance related projects). The UTSHPO Cover Sheet is located here with instructions for its completion located here . *Please bundle your project cover sheet to the full pdf version of the report.*

Title Page: In order to properly track the significant connections of a survey report, the title page is highly recommended to include at least the following information:

- UTSHPO State Report Number
  - Each new undertaking should receive its own new number.
  - Each new report should receive its own new number
- Title (Same or similar to the title provided when requesting project number)
- Agency or Agencies
- Author(s) and Organization(s)
- Date

- Internal organization project number (if appropriate)

Nature of Proposed Undertaking: Regardless of the results of the inventory, it is important to explicitly state the nature of the proposed undertaking highlighting the specific techniques and activities proposed. For instance, an undertaking described as “reducing fuel loads by removing trees and shrubbery” is an insufficient description of the undertaking as it does not specifically call out the proposed action. Is the project using heavy equipment? Hand tools? Piled burning post-treatment? It is impossible for the UTSHPO to comment on an undertaking when it is not clear what the proposed action entails. Each specific type of action has a different potential to effect historic properties.

Area of Potential Effect (APE): After defining the proposed action, it is secondly important to account for the most appropriate APE. Only after understanding the nature of the proposed action can you adequately define the APE, and in some cases the APE may reflect input from consulting parties. Also consider direct versus indirect effects: for example, while the direct footprint of a new transmission line is rather small, the potential visual effect can extend much further, perhaps even miles, from the proposed action. The report should include a specific description of the APE, and how the Agency defined this area. Please ensure that if you have a linear APE or survey area, you properly define its width for both documentation and our digitization efforts. Be specific in your definition of APE, simply regurgitating the definition of an APE from §36CFR800.16(d) without specific undertaking details will not suffice.

File and Pre-Field Research: While most consultants and agencies are skilled at the file search requirements of the UTSHPO, there is need to be more explicit in the buffer for the undertaking based on the APE described above. UTSHPO prefers a 1/2-mile buffer for all file searches, but that buffer may be inappropriate for the potential visual effects of a transmission line, open-pit mine, or other similar action. In addition to the standard file search, the report should also include an appropriate amount of detail on the primary or secondary historical research completed before conducting inventory efforts. This should be scaled to the nature of the undertaking, its location, and the potential for sites. While General Land Office plats are good resources, these should usually not be the only historical record consulted. Aerial photography provides landscape level views of potentially constructed prehistoric and/or historic features, as well as topographic and geological features that can inform fieldwork.

Field Methods: This section of the report must include specific techniques used during the inventory process, including the description of survey intervals, survey corridor width (if a linear corridor), areas of reconnaissance versus intensive survey, and site definitions. The most common and widely accepted site definition is defined by the Bureau of Land Management, reflected in the BLM-UTSHPO Statewide Protocol and in the BLM’s 8100 Manual. . In addition, any alteration to routine inventory should be explicitly described, including, but not limited to, testing (shovel or auger probes), collection, field sampling by portable XRF, etc. If there is any testing or probing conducted, the report should include a separate section describing the results of these activities on both a site-specific and synthetic basis. No testing or surface collection of a site should be done without prior consultation between the UTSHPO and the responsible Federal or State Agency. If the survey corridor in a linear project does not match the previously described APE, include the surveyed corridor width in meters.

The UTSHPO also requests at least one or two photographic overviews of the project areas, especially for small projects or for those with a high potential of a visual effect (towers, transmission lines, etc.).

Project Maps & Geographic Information Systems (GIS): UTSHPO understands that not all projects lend themselves to be easily represented on a 7.5' USGS topographic quadrangle. However, it is necessary that project maps provide sufficient scale and detail to allow understanding of the APE, inventory areas, and the location of the project within Utah. This includes a formally referenced base map, including the name of the quadrangle and the year of publication. *The actual inventory area should be clearly illustrated including variation in inventory intensity*. Areas excluded from inventory, but still within the APE, perhaps because they were inventoried within the last ten years, should also be clearly defined. Accompanying GIS information with the report is extremely useful, but should not be a substitute for a good map. Please contact the UTSHPO Records Office for more information on maps and GIS submissions.

General Comments:

- While seemingly a "no-brainer," the report agency letter and report itself should make specific reference to the agency (or agencies) the report is completed for, and under what regulatory framework (Section 106 of the NHPA and/or Utah Code 9-8-404).
- Agencies <u>must</u> review a consultant report before submission to UTSHPO to ensure the attachment of all pertinent information, but also to formally make *determinations* on the *recommendations* of consultants for eligibility and effect.
- Reports should be free of major grammatical and spelling errors before arrival at the UTSHPO. Consultants and Agencies must ensure that the product received by UTSHPO is of the highest quality. Any report that requires more than minimal editing by UTSHPO will lead to the return of the entire report for correction, <u>without</u> concurrence.
- Agencies should work with consultants to ensure that the cultural context portions of reports are appropriate for the scale of the undertaking. It is not usually necessary to have a thick historic context for an inventory that failed to locate any cultural resources. Fluffing up reports is not necessary and is not environmentally friendly.
- The UTSHPO discourages copy/paste of site descriptions into reports. If you must include that material, however, it is important to ensure that both the site form and the report reflect the same information. Some examples exist of apparently post-report editing of site forms with failure to update the body of the text (or vice-versa).
- Please ensure you are following the Digital Submission Standards for the UTSHPO when you provide digital data to your agency or our office.
- When documenting historic buildings and structures, use the Historic Site Form in place of, or in addition to, the archaeological site form where appropriate. Historic structures identified on archaeological sites might be more adequately recorded on Historic Site Forms to standardize descriptions, with final attachment to the archaeological site form.

All site recording and reporting should be completed in consultation and compliance with relevant land managing agency standards and practices. Where such standards do not match those listed above, please contact us.

Short Cultural Resources Report Form

The UTSHPO released a "Short Cultural Resources Report Form" in 2014 in hopes of streamlining report submission for Class II – Reconnaissance Level Field Survey and Class III - Intensive Pedestrian Surveys that are small in nature and did not locate any archaeological resources (sites). UTSHPO noted rampant issues of inappropriately large copy/paste cultural contexts were being provided for small negative inventories, adding useless bulk to such reports. To alleviate this issue, the 'Short Cultural Resources Report Form' (Appendix F) was created and identifies only those portions of a normal report that are necessary for completion of the compliance process. It is hoped that all agencies in Utah will allow use of this form to trim costs and wasted effort for small inventories. The provided form focuses consultants and agencies on providing clear and concise information on project background, definition of Area of Potential Effects (APE), identification strategies, and findings. Removed from this form are lengthy cultural or historical contexts and backgrounds that are not necessary for negative reports that offer little to review or management of cultural resources.

For the purposes of this form, the UTSHPO generally views its use for any project that is 100 acres in size or less with limited findings (such as zero to one archaeological site(s) and/or a few isolated finds identified). Findings with eligibility evaluations will need to be discussed in the report regardless of project acreage.

Use of this form is up to the individual agency, and the consultant is encouraged to discuss use of the Short Cultural Resources Report Form before submission to the agency. The Short Cultural Resources Form can be found here and also in Appendix E below.

Archaeological Site Form

Since the 1980s, all archaeologists in Utah have used the IMACS form, which created a consistent documentation standard for nearly four decades. However, the IMACS was showing its age and was deemed to be collecting information no longer necessary in the world of available GIS data layers for environment and geology. Thus, in 2017 all agencies agreed to switch officially to the Utah Archaeological Site Form (UASF).

In February 2017, the Interagency Task Force, which includes leaders from state and federal agencies and UTSHPO, met and approved the official launch of the new archaeological site form for use in Utah. Named the Utah Archaeology Site Form (UASF), this form is the current standard for documenting archaeological resources in Utah. IMACS forms are no longer accepted without prior discussion and approval from UTSHPO.

Digital copies of the Utah Archaeology Site Form (UASF) manual and the associated fillable PDF forms, generously built and provided by UDOT can be found here. If you have better functioning UASF forms that you are willing to share please contact Archeological Records (archrecords@utah.gov).

In addition to the new form, UTSHPO requires the submission of a spreadsheet populated with core site data in a standardized format to populate the sites database. Any site form generator built or used needs to populate a properly formatted spreadsheet or the user will manually need to enter the information into a template spreadsheet provided by the UTSHPO. A spreadsheet that explains the required field structure and example values can be found here. Please note all UASF submissions need to be accompanied by a tabular data sheet, even if there is no associated report for the project or documentation effort.

Information regarding the electronic submission requirements of the UASF and other records submissions can be found here.

Following are some general comments and perspectives by the UTSHPO on archaeological site form data quality:

General Comments: UTSHPO requires site forms are submitted as individual PDF/As.

- Site forms should not be included as part of the report PDF. Site forms should be included separately.
- Site forms should be typed and professionally formatted. Handwritten forms are unacceptable.
- Concerning the Smithsonian Trinomial, we do not require a six-digit expression of the numeric component. We prefer no leading zeros be added. For example 42KA111 is the preferred composition versus 42KA000111.
- If the site form is an update or addendum of a previously recorded site, it should be clearly noted next to the site number in brackets (or prominently displayed in the site description).
- Sites that straddle county boundaries require two numbers--one for each county and the PDF file name should reflect both Smithsonian Trinomial numbers.
- Site forms should not contain fillable PDF fields or be submitted in a PDF portfolio.

Locational Information: There has been some issue as of late with errors in the Legal Description of site location (Township & Range), but also the UTM coordinates. Please ensure that this information is correct before submission. UTSHPO requires the use of the NAD83 as the datum used for UTM coordinates.

Eligibility Statements: It is important to check the appropriate eligibility box on all site forms. Currently, the UTSHPO does not recognize the category “unevaluated” for located/documented sites as professionals and agencies should be able to make some type of determination. Sites that cannot be relocated due to being destroyed by previous actions may be considered “Not Eligible” in lieu of a blank or “Unevaluated” eligibility determination. Sites that cannot be relocated due to poor information or misplotting should retain the original eligibility determination (if one was present). If the previous site form did not have an eligibility determination, only then shall the site remain “Unevaluated” until which time it can be relocated and re-assessed. Within the National Register of Historic Places (NRHP) Eligibility Justification section, the agency/consultant should account for all four of the NRHP Criteria, including a discussion of the site’s integrity. DO NOT state that the “site’s data potential has been exhausted by the recording," as that is not appropriate to the consultation process. That statement recognizes that the site possessed data potential, thus making it eligible to the NRHP, and that the organization/agency removed its eligibility during inventory, thus becoming judge, jury, and executioner of a site's eligibility while on-site. It is also expected that the seven aspects of integrity are included in site eligibility discussions (location, setting, workmanship, materials, design, feeling, association) to help in determining NRHP status. For more information, including guidance on evaluating cultural resources within their own historic context, review National Register Bulletin: 15 How to Apply the National Register Criteria.

Historical Research: For sites including historic roads, homesteads, mining claims, ditches, or other similar resources, it is not only important, but necessary to identify the historical resources consulted to compile the historical background on a site. Similarly, it is inappropriate to record a site without at least attempting some type of historical research to understand the site's contextual associations. Take, for example, the identification of a "ranching camp" within the center of a historically defined, mapped, and recorded mining district. While that is a possible function, the site form did not discuss how the determination of a ranching camp was made versus the preponderance of historical evidence to the contrary. There are numerous websites and in-person sources that can be consulted to conduct sufficient historic research (Appendix G).

Site Maps: Consultants and agencies provide a wide variety of quality site maps, but from UTSHPO the most critical information is in regards to the location of this site in space. Submission of a site map with no spatial reference, or a small site plotted on anything greater than 1:24,000 scale quadrangle, creates an error in the UTSHPO database. While providing GIS files does alleviate this error, many consultants rely on the site maps in the site form to relocate sites on a landscape. Poor site maps create poor data, and thus poor management. Please follow the guidelines for "Cartographic Best Practices for Archaeological Records Submissions" to the UTSHPO:

1. Reports must include a clearly defined inventory or archaeological activity area. This activity area may be different from the APE and the activity area must be depicted. If applicable, include a clearly defined site boundary(ies). Actual defined site boundaries should be portrayed.

2. Show all relevant data on the map(s). If you have a project map, clearly show the inventory area with inventory intensity differentiated. If the project encompasses a large area, please provide a properly scaled map showing the project in its entirety. Also include maps breaking the project into smaller areas for map viewing, ensuring the audience will be able to read the information on the map.

3. All report and site maps should have a relevant USGS 24k base map and be scaled appropriately for future interpretation. The map legend should include the name of the 7.5' Quadrangle(s) displayed. This does not mean the maps need to be displayed at a 1:24,000 scale – only that the basemap needs to be a USGS 24k map. Map scales larger than 1:24,000 are often preferred.

4. Include clearly defined symbology. Each item of information in the map(s) should have its own, clear symbology. For example, if you have a canal survey, the canal should be colored in such a way to distinguish itself from other linear features in the area (e.g. rivers, streams, or roads).

5. The map(s) should have each element of data that is represented in the map symbolized in a directly associated table of contents or legend.

6. At a minimum, each map should contain the Utah state report number (e.g.UXXXXXXXX), scale bar (meters for prehistoric sites, and feet and meters for historic sites), scale text, a north arrow orientation, projection and datum information, legal location, map author, and PLSS or graticule.

7. Any sourced data that was not directly created by the map's author should be cited, including the creator agency, corporation, etc., and the year it was created if available.

Photographic Standards

Digital submissions of site and report documents (.pdf) are required. Currently the best way to submit site photographs digitally is through a .pdf document of the site form. Because these records must endure and remain accessible in perpetuity, all records submitted to this office must be of the best quality possible and on the best materials possible. We encourage additional photos of diagnostic or unknown types of artifacts, features, or other pertinent views.

Digital Data

All submitted records will be required to arrive already prepared for long-term digital preservation and quick ingestion. Please review the UTSHPO Digital Records Submission Requirements in Appendix H here (and contact Archaeological Records staff at archrecords@utah.gov with any questions).

Required Submission Materials Checklist

For all federal and state cultural resources compliance cases, there is a set of required materials that meet the minimum standards for completing the review by the UTSHPO. It is the responsibility of the Agency to ensure that the submitted packet contains all required information per the standards in this section and throughout this guidance document. Failure to provide the following required information will likely lead to delays in the review process as the UTSHPO requests the missing materials and provides a formal comment of "insufficient materials," which restarts the 30-day review clock. While there should be no deviation to the required materials, if there is an extenuating circumstance that requires omission or late submission of a component, please contact the UTSHPO before submission to discuss. Unless specifically discussed with the reviewer, the UTSHPO does not accept reports or site forms in "Draft" or "Final Draft" format.

- Consultation Materials
  - Agency Letter clearly detailing the project, APE, eligibilities and effect.
  - Agency Map of APE
- Archaeological Report
  - SHPO Cover Sheet
  - Final Report

        - Inventory or Investigation area map with varying inventory intensities denoted
    - Archaeological Site Forms
        - Completed UASF Archaeological Site Form(s)
        - Site Sketch & Locator Map
        - Photographs to UTSHPO Standards
    - Digital Data (see Digital Data Section Above)
        - PDFs of all submitted materials
        - GIS of inventory areas, site locations and isolated finds
        - Spreadsheet with UASF Tabular Data

Non-Compliance Submissions

The UTSHPO is happy to accept all archaeological site forms and inventory reports regardless of their status as a compliance case. There are many instances where projects were canceled, volunteers completed site assessments or documentations, or Agency staff completed in-house inventories, updates and documentations, and the resulting records were never submitted. As codified in both state and federal statute, the UTSHPO is recognized as the central repository for all archaeological and historical inventory and documentations.

As such, we encourage avocational archaeologists, volunteers, and agency archaeologists to provide copies of this information for our records. Of course we prefer that this information is funneled through the appropriate land managing agency with formal determinations of eligibility, but with extenuating circumstances, we can accept direct submissions. In these cases we prefer that the documentation adhere to all other pertinent requirements in this guidance document, but understand that some parties may be incapable or unable to comply due to budget and time constraints.

> Non-Compliance Archaeological Sites: Submissions for archaeological sites should be routed through an appropriate land managing agency, unless there is no archaeologist on staff or the sites are on private lands. When archaeological sites are submitted directly without formal determinations of National Register of Historic Places eligibility from an Agency, the UTSHPO will add these to the files as "undetermined eligibility" Future archaeologists will then need to reassess the eligibility if the site is encountered in a future inventory or undertaking. It is more important to the UTSHPO to have these records on file for future projects and planning than to hold volunteers and avocational archaeologists to the high standards reserved for agencies and consultants.

> Non-Compliance Inventories: Submissions for inventories should also be sent through the responsible land managing agency, unless the inventory is on private lands. Any inventory received will be added to our database, but only those completed by a professional archaeologist meeting the Secretary of Interior's Standards will be indicated as an intensive inventory. All others will be considered a reconnaissance survey, such as rock imagery inventories by volunteers, etc.

Please visit this Google Drive folder for additional archaeological resources (forms, guidance, tutorials, etc.).

Chapter 4: Underwater Archaeology Guidance

Introduction

Although a landlocked state, Utah contains numerous underwater cultural resources which have the potential to be eligible for, or listed on, the National Register of Historic Places (NRHP). Thus, effects on these resources must be considered during federal or state actions (undertakings). While guidance for terrestrial cultural resources is well-developed by the UTSHPO and other agencies (e.g. BLM 8100 Manual), underwater cultural resources require a distinct set of guidance for identification efforts, effects assessment, and mitigation recommendations. This guidance is specifically written to address underwater archaeological resources in relation to Section 106 or UCA 9-8-404 undertakings. However, since underwater archaeology is not well-practiced in the state of Utah and full guidance is not provided in this guidance, UTSHPO recommends referring to the Bureau of Ocean Energy Management (BOEM) Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585 or the Naval History and Heritage Command (NHHC) Methods and Guidelines For Conducting Methods and Guidelines for Underwater Archaeological Fieldwork for specific underwater archaeology guidance not outlined herein. Please note that components of these guidelines are geared towards oceanic cultural resources and not inland underwater resources, and as such some elements may not apply to Utah. It is the UTSHPO's hope that with the basic framework provided below in combination with technical guidelines, that enough information is available to properly identify, evaluate, and assess archaeological sites for the Section 106 or UCA 9-8-404 compliance processes.

Utah's Underwater Cultural Resources

Underwater archaeological sites can generally be separated into three types: shipwrecks, sites created on land that subsequently submerged, and sites that were created in submerged contexts (FHDR, n.d.). The most common type of underwater archaeological resource in Utah are terrestrial prehistoric sites that were subsequently inundated by reservoirs, however shipwrecks are also present in Utah's varying water bodies. Approximately 3% of Utah is underwater (NPS 2022).

Natural Water Bodies

- Great Salt Lake (GSL): GSL is thought to contain at least 60-70 shipwrecks, including historic shipwreck sites include Brigham Young's boat from the 1850s, the Promontory paddle boat from 1902, and a turn of the century fleet boat used in the construction of the Transcontinental Railroad causeway bypassing Promontory (Tanner 2021). In addition to the shipwrecks, Willard Bay of the GSL contains prehistoric Fremont village sites with numerous human remains discoveries.
- Utah Lake: Utah Lake is best known for underwater Fremont-era archaeological sites. Currently, the UTSHPO's database indicates around 38 recorded archaeological sites currently underwater or directly on the shoreline of Utah Lake, including the Smith Family Archaeological Preserve containing hundreds of rock imagery panels.
- Navigable waters: Utah has over 100 navigable waterways, most notably the Green, Colorado, Bear, Jordan, Weber, and San Juan Rivers. These rivers were historically navigated by steamboats, river boats, barges, rowboats, and skiffs. Some known steamboat wrecks on the

Colorado River include the Major Powell (lost in 1894), the Undine (lost in 1902), and the Wilmont (abandoned in 1908) (NPS 2022).

Reservoirs

- Lake Powell: Also known as Glen Canyon, Lake Powell was filled as a reservoir in 1963. This area is home to at least several hundred Ancestral Puebloan sites, including architectural and non-architectural sites in the canyon bottom and in alcoves (NPS 2022). Glen Canyon also contains shipwrecks as well as many proto-historic Native American and historic Euroamerican archaeological sites (NPS 2022). While mitigation (including survey and excavations) was completed before Lake Powell was filled, most sites within the canyon, or at least a component of them, became submerged in water. In recent years as Utah struggles with severe drought, some of these sites have re-emerged again, needing to be documented and assessed for the NRHP. Glen Canyon Recreation Area, a National Park Service unit that now manages the area, has conducted several condition assessments for shoreline archaeological sites in addition to documentation of sites recently emerged from the reservoir, often buried in deep deposits of lake sediment.
- Steinaker Reservoir: Steinaker Reservoir in Uintah County covers a natural drainage and irrigable lands that were frequented by the Fremont cultures. The Steinaker area is the home of early Fremont agricultural activities (maize farming), and the reservoir itself is known to contain buried Fremont sites and multiple human remains discoveries.
- Rockport Reservoir: Rockport Reservoir contains the town of Rockport, a “ghost town” that was founded in 1860 but abandoned in 1952 before Wanship Dam was built and the reservoir filled, submerging the remains of the town. Rockport is currently re-emerging due to drought conditions, where archaeological structural remains occur in the old reservoir bed.
- Flaming Gorge Reservoir: Flaming Gorge is the second largest reservoir in Utah beyond Lake Powell, and contains the historic townsite of Linwood. Linwood was founded in the 1890s and now lies within Flaming Gorge Reservoir, which was filled in the 1960s.
- Jordanelle Reservoir: Filled by the Bureau of Reclamation in 1987-1993, Jordanelle Reservoir inundated the historic agricultural/logging/mining communities of Hailstone (42WA73) and Keetley (42WA77) and some historic mining elements. Keetley was a voluntary relocation site for Japanese Americans in WWII, where farms and businesses were developed versus moving to an Internment camp like Topaz.

Recent drought conditions have caused previously submerged underwater sites to become exposed. Changing climatic conditions pose a higher probability of inadvertent cultural resource discoveries of previously inundated sites, in addition to looting and/or vandalism. Although normal discovery protocols should be followed during an inadvertent discovery of a cultural resource once submerged, the Eligibility section of this guidance should be referenced (below) in order to make proper eligibility evaluations for underwater resources.

Regulatory Framework

Section 106 and UCA 9-8-404 require that agencies take into account an undertaking's effects on historic properties. Although both compliance laws have nearly only been practiced for terrestrial cultural resources, underwater cultural resources have the potential to be eligible for the NHRP, and as such are potentially historic properties and should be accounted for in undertaking effects. When defining an Area of Potential Effects (APE) per §36CFR800.16(d) for an undertaking involving aquatic areas and resources, both depth and extent of potentially bottom-disturbing activities should be accounted for within the water body. Identification, eligibility, and effects determinations should be made by a professional archaeologist that meets the Secretary of Interior's Professional Qualification Standards and, as appropriate, retains a Public Land Policy Coordinating Office (PLPCO) Principal Investigator (PI) Permit for Archaeological Survey with experience in underwater archaeology. UTSHPO recommends that a Scope of Work for the undertaking requires specific underwater archaeology experience for the type of resources involved, such as shipwrecks or prehistoric underwater sites.

Research Design

A well-developed Research Design is crucial to the identification phase of an undertaking for underwater cultural resources. A Research Design should include, at minimum, the following elements:

- Lake-level history;
- Local geological background, usually encompassing the process of soil development and local sources of sediment for the water body;
- Historic context to inform when and where people were likely to live on a landscape now submerged, or areas where shipwrecks are likely to occur due to historic use of the water body(ies). This may also include a synopsis of previous terrestrial surveys of an area that may be now submerged to set a baseline of site conditions and inform new identification efforts.

High probability areas occur within river or lake channels, lithic sources/quarries, and lakeshore or beach environments. In lake environments, primary sources (inlets) are also potential high probability areas due to the likely presence of sites and sediment preservation (for example, the Jordan River inlet of Utah Lake).

Identification Methodology & Documentation

Identification of underwater archaeological sites vastly differs from the methodology of terrestrial Class III surveys. Given Utah's geological and cultural environments, a trio of underwater technologies are recommended for identifying underwater prehistoric archaeological sites. Firstly, a bathymetric survey should be carried out in order to identify bottom depths and cultural features. Following a bathymetric survey, a magnetometer and sub-bottom profiler will identify bottom profiling and magnetic anomalies. Used as a suite, these methods may identify magnetic anomalies that co-locate with high probability areas or bottom anomalies, resulting in target areas (high probability) for cultural resources. It is possible to avoid high probability areas identified through this process during an undertaking in order to save on additional underwater identification costs.

For shipwreck sites, a combination of remote sensing through sonar survey and a magnetometer should be carried out. Although a magnetometer can detect metal (and thus is useful in identifying shipwrecks), it can also identify disturbances on the lake-bottom such as depressions or ditches (as the disturbed minerals on the bottom will reflect a mis-alignment of the magnetic field). Magnetometers and sub-bottom profilers can also detect heat-treated mineral materials, such as hearths and ceramics.

Transecting width for the above-listed technologies should be established within the research design; the recommended standard transecting width is 30 meters. Once high-probability areas are determined through these methods, avoidance of the high-probability areas from undertaking activities within the APE should be prescribed, if possible. If avoidance from undertaking activities is not possible, then additional identification methods such as characterization of paleosoils to determine the age of the sediments can be completed. If additional identification efforts indicate the likelihood of cultural resources, mitigation is recommended (see below).

To supplement these technologies, in-person underwater surveys through professional scuba diving may also be carried out. Persons undertaking an underwater survey must possess the appropriate scuba certifications for professional/technical/commercial divers and adhere to the recommended transecting widths outlined in the BOEM Guidelines. During an underwater diving survey, steel or water jet probes in addition to cores can be used to identify buried deposits.

Once underwater cultural resources are identified, documentation of sites and Isolated Finds should follow the documentation standards for terrestrial surveys (referenced above in this guidance), including documentation on a Utah Archaeology Site Form (UASF) and Isolated Finds listed in the cultural resources report. Data from the bathymetric, sonar scan, magnetometer, and/or sub-bottom profiler (per the BOEM Guidelines, pages 19-21) can be submitted to the Utah SHPO for informational purposes, however survey methods for these technologies or a diving survey should be thoroughly described in the cultural resources report, in addition to the research design, findings, eligibility evaluations, and management recommends (if specified by the agency). A standard GIS shapefile of the survey area in addition to the tabular datasheet and site GIS shapefiles for any UASFs are required as per a normal Class III Survey. An underwater camera to provide site overviews as well as artifacts and featured photos for the UASF is required.

Eligibility

It is not appropriate to assume that water bodies are absent of cultural resources, or that submerged cultural resources are automatically Not Eligible for the NRHP. Increasing evidence indicates that submerged archaeological sites, specifically prehistoric sites, retain enough integrity and data potential (Criteria D) to Eligible for the NRHP (Grøn et al. 2021; Horn et al.; Puckett 2021). There are several factors that should be considered when assessing the eligibility of a submerged archaeological site, including the context in which the site was submerged. If a site was submerged quickly and deeply, artifacts and features are more likely to retain original spatial patterning (integrity of location and workmanship). In comparison, sites that have been repeatedly submerged and exposed tend to exhibit more degradation of integrity. Additionally, wave action has the potential to disperse or size-sort artifacts, which results in a loss of spatial integrity. Size-sorted artifacts in an area of wave action is a good indicator of artifact displacement. However, recent undertaking archaeological investigations in the Great Basin (Puckett, 2016) prove that it is possible for sites that have gone through a series of submergence and exposure and in areas of wave action may still exhibit intact integrity. Overall, the underwater taphonomic processes are not yet well understood, making most underwater archaeological sites eligible under Criterion D for the ability to yield important information about the past.

There are instances where archaeological sites are buried under dozens of feet of sediment, making identification and eligibility evaluation challenging. UTSHPO recommends that testing occurs in these situations, which generally requires establishing a maximum depth of impact, delineating a buffer, and testing to depth. Digging trenches to depth can help identify depositional context (if in a submerged environment, a Diving Safety Officer is recommended). Testing for cultural resources can be done using an auger at regular intervals of the APE and/or test area. Augured sediments should be screened through ⅛" mesh. If archaeological deposits are discovered, estimated site boundaries and areas of avoidance should be delineated to avoid undertaking impacts to the buried site(s). If deep testing is not possible, UTSHPO recommends a cultural resource monitor onsite during undertaking work activities. Standard discovery protocols should be carried out for an inadvertent discovery while referencing the Eligibility section herein to properly evaluate eligibility of the previously submerged archaeological site.

Undertaking Effects

Several underwater activities have the potential to adversely affect eligible underwater archaeological sites. Dredging is the most impactful to archaeological sites, particularly those prehistoric in nature with sensitive artifacts or feature intact spatial patterning. Areas where a vessel is planned to be anchored (staging area), particularly vessels containing dredge material, should be included in a delineation of the APE. Other activities that may cause effects to underwater resources and should be included in an APE definition include power lines and pipelines alignments with an appropriate buffer (at least 15m on either side) in addition to moorings areas for marinas and docks, which all have the potential to destroy underwater sites. Mitigation measures will be undertaken if avoidance is not feasible for underwater historic properties ("Adverse Effect" determination), usually through the execution of a Memorandum of Agreement or Programmatic Agreement (per §36CFR800.6) and a Historic Properties Treatment Plan.

Mitigation Measures

As with archaeological sites located on land, avoidance of underwater historic properties or high probability areas from work activities is the preferred alternative for an undertaking. If avoidance is not possible, mitigation should be carried out by a qualified marine archaeologist who has experience in submerged archaeological data recovery and is able to obtain a PLPCO PI Permit for Excavation. Mitigation for shipwreck sites usually encompasses intensive level HABS/HAER-style documentation before implementation of the undertaking (HABS/HAER documentation itself is not required, but intensive level detail such as scaled drawings and detailed photographs should be completed). For prehistoric sites, data recovery through collection or excavation is a common mitigation measure. Core sampling is a form of excavation that can be the equivalent of terrestrial excavations. Fifty, 10cm cores taken within a submerged archaeological site is the equivalent of a 50cm x 50cm unit on the surface (Joy 2022). Underwater survey collection of artifacts using a grid system may also be implemented as a form of data recovery mitigation. All archaeological materials collected from federal jurisdiction must be curated in a federally approved repository per §36CFR79. Archaeological materials deriving from state or privately-owned lands shall be curated in appropriate and accredited facilities. In addition to onsite documentation or excavation mitigation measures, offsite mitigation measures are also recommended to supplement primary onsite mitigation, such as National Register Nominations, public interpretation, or the development of historic contexts.

For additional information and specifications on qualifications, methods, documentation, and reporting standards not included here, please reference the BOEM Guidelines and the NHHC Methods and Guidelines.

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Chapter 5: Unique Site Types Guidance (Recreational Facilities, Dams, Historic Trails & Routes, and Arborglyphs)

With the increasing focus on historic recreational and water control sites through the Great America Outdoors Act and the Infrastructure Act, respectively, the UTSHPO is issuing guidance for recreational facilities, dams, and historic trails and routes. This is not new guidance, merely a more formal expression of documentation expectations for certain property types to aid in timely and thorough reviews. Key is the expectation that 106 Historic Site Short Form (HSF or Historic Building Form) to accompany certain Utah Archaeological Site Forms (UASFs) are already included in previous versions of this guidance and the Bureau of Land Management State Protocol. Architectural historians are best-qualified to assess the significance and integrity of architectural features such as designed dams and support structures, as well as comfort stations and associated structures within recreational facilities. The UTSHPO understands that most agencies do not have access to architectural historians, as defined in the Secretary of Interior's Standards, so archaeologists have to fill the gap of expertise. Thus, the request of using architectural documentation forms is a middle-ground so that SHPO's architectural staff have the proper information to do their statutory reviews. Archaeological site forms, on their own, are ungainly tools for documentation of architectural features.

Many historic water retention features and recreational facilities/infrastructure have potential to meet National Register of Historic Places (NRHP) eligibility requirements, and the requested information below assists in the assessment of these properties to both the agency and the UTSHPO. As a reminder, assessment of NRHP eligibility should be analyzed at not just a national level, but a statewide and local level. Some dams constructed to generate power or protect a rural community could have local significance, though not rise to a major statewide or national level. Same applies to recreational facilities that perhaps were a major gathering area for local residents or communities, though on federally-administered lands. Integrity, as always, is critical in determining the eligibility of a resource. What was changed/altered/added/removed in a property and when, is a major part of assessing integrity. Just because a 1930s campground was upgraded in the 1960s, does not automatically make the resource not eligible, but should be analyzed in the appropriate context of that new development and the national/state/local event and/or trends. In general, it is also important to remember that recreational and other sites may be listed individually or as part of a district, but they are also ideally suited for multiple property listings. While each may only contain a few buildings/structures/objects, when viewed as a whole, the group of sites may clearly illustrate a historical theme.

General Guidance

- The UTSHPO Historic Site Form and other Buildings Guidelines are located here.
- Historic Site Short Form is considered an addendum to the Utah Archaeological Site Form (UASF), and should be provided as one single PDF/a upon delivery. Use continuation sheets to enter information about properties if more than one structure exists on the site.
- Smithsonian Trinomial for the overall site should be also placed onto the HSF in the 106 Project Name field or the Address line field (if there is no formal Street Address).

- The Utah Archaeological Site Form should at least contain a list and brief description of all architectural features, though does not need to be as in-depth as the HSF.
- Features numbers/names should be consistent between the HSF and the Utah Archaeological Site Form.
- Integrity needs to be adequately addressed when establishing eligibility determinations.

Historic Recreational Facilities Guidance

- Recreational Facilities and their directly associated features should be recorded under one Smithsonian Trinomial. If there are unique circumstances, please contact UTSHPO staff.
- Recreational Facilities structural elements such as comfort stations/bathrooms, contact/visitor stations, bridges (pedestrian/vehicle), and other standing architecture should be recorded as a whole on a UASF, with a HSF addenda for those architectural elements.
- It is acceptable to have one HSF to cover all architectural features at a site. Though, in some cases it might be appropriate to break unique features (Guard Stations, Contact Stations) into individual forms.
- Recreational facilities consisting only of picnic tables and fire rings, and no bathrooms or contact stations can skip the requirement of a HSF.
- There should be at least one photograph of each architectural element described, or if there are dozens of redundant and identical features then a representative photograph is sufficient.

Historic Recreational Trails and Routes (including Climbing Routes)

- These types of cultural resources should be recorded under a Smithsonian Trinomial and on a UASF, as they meet the definition of a “Site” in the NRHP Bulletin #15. It is important to note that a site does not need to have physical remnants in order to be documented and assessed for the National Register, as NRB #15 states: “A site need not be marked by physical remains if it is the location of a prehistoric or historic event or pattern of events and if no buildings, structures, or objects marked it at the time of the events. However, when the location of a prehistoric or historic event cannot be conclusively determined because no other cultural materials were present or survive, documentation must be carefully evaluated to determine whether the traditionally recognized or identified site is accurate.” (p. 5). To this point, SHPO understands that some climbing routes might lack much physical constructions unlike other recreational facilities but NRHP guidance allows for places without physical expression to be assessed if there are documented histories associated.
- Routes need to be recorded and assessed under NRHP themes of Transportation, Recreation, etc.
- It is highly unlikely that any structures would be associated with Trails or Climbing Routes, with the exception of culverts, retaining walls, and other smaller features which can be appropriately captured on a UASF (no HSF)
- Climbing routes do create some questions on boundaries, but research usually indicates areas of routes that could be combined into one site or split into multiple sites based on the historic use and the physical spacing.

- There is a possibility for historic climbing routes to have inconspicuous cultural features that are either original to a route or have evolved through ongoing use during a period of significance. These may include staging areas, access or descent use trails, piton scars, mechanical anchors, natural anchors, rock discoloration from repeated use, and cleared vegetation and loose rock from the route itself. These features should be documented as non-architectural features on the UASF as appropriate.
- Trailheads and entrances to officially designated trails should be captured in documentation in addition to at least 400 feet of trail extending outside of an undertaking's APE. However, if possible, SHPO encourages obtaining GIS shapefiles from administrative offices or digitizing via aerial imagery in order to capture the entirety of the trail's length. While the entirety of a trail's length may not need to be surveyed, the trail's overall significance shall be considered when conducting eligibility assessments. The original purpose of the trail shall also be considered during the documentation and evaluation process (as many trails were originally constructed for mine access, etc.). Integrity shall be assessed on the ground for the portions of the trail within the APE and up to 400 ft outside of the APE. In discussions with the managing agency, it is also important to assess if there are any physical attributes (retaining walls, stone steps, arborglyphs, blazes, etc.) that are also historic and need to be noted as features on the site documentation if feasible.
    - It is important to note that administrative units such as National Forests may hold more historical information internally on recreational trails than might be publicly available, therefore information from administrative units is encouraged to be obtained in order to make a proper eligibility assessment.
    - Trails that are user created or not officially designated can be recorded as Isolated Finds.
- If there are previously documented segments of a trail, they should be consolidated into one recording under one Smithsonian Trinomial. If there is a type of trail/route not specified in this guidance that is encountered, and is not covered in UPAC Linear Site Guidelines, you can either contact the Agency or SHPO for clarification or just treat that resource as it falls under this section.

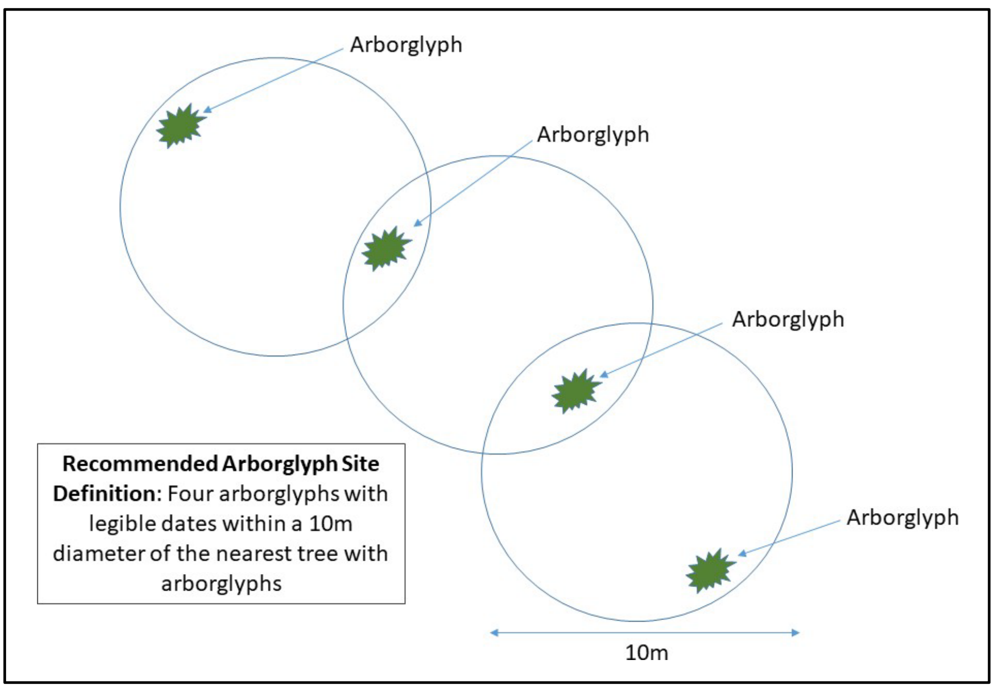
Historic Water Retention Features (Dams)

- Dams and their directly associated features should be recorded under one Smithsonian Trinomial. If there are unique circumstances, please contact UTSHPO staff.
- Dams with structural elements such as spillways, dam tender houses, pump stations, and other standing architecture should be recorded as a whole on a UASF, with a HSF addenda for those architectural elements.
- It is acceptable to have one HSF (as the UASF addendum) to cover all architectural features at a site. Though, in some cases it might be appropriate to break unique features (houses, dams themselves) into individual forms.
- Earthen dams with no structural elements, stock dams, debris basins, and other such low architecture water retention sites do not require a HSF and shall only be documented on a UASF.

- Due to the sensitive nature of water infrastructure, this information will be furthermore protected within the archaeological site records collections.
- There should be at least one photograph of each architectural element described included in the HSF addenda.

Recommended Guidance for Arborglyphs

Arborglyphs are an increasingly recorded archaeological resource. Currently, no guidance exists on the site documentation threshold for arborglyph sites. A rubric was developed in partnership with the United States Forest Service, and as such the UTSHPO generally defines an arborglyph archaeological site to include *a minimum of 4 trees with legible dates within a 10m diameter of the nearest tree*. Below is a sample graphic to further explain this recommended site definition. Arborglyphs that do not meet the threshold should be documented as Isolated Find which are reflected in the cultural resource report. Of course, if there are arborglyphs that are unique or interesting but fall below the threshold, the consultant can still record them as a site using professional judgment. Arborglyphs located adjacent to and historically associated with historic roads shall be documented as features of the historic road.



Chapter 6: Historic Buildings & Structures Guidance

The two primary documents required for architectural (buildings and structures) submissions are the 106 Historic Site Short Form and the Agency Letter. You may also upload project reports, engineering reports, architectural studies, maps, etc. All records should be 'born digital', meaning the records are originally created and later submitted in a digital format without being printed and rescanned. Digital creation without rescanning assures accurate digital text recognition. Any building record being submitted that is not born digital, and was scanned, requires Optical Character Recognition (OCR) processing by the submitter. OCR allows full text searching of the record within our content management system. The document format should be PDF, preferably PDF/A, when submitting through the e106 system. The PDF format can be obtained with current Microsoft Word and Adobe Acrobat Pro products. Methods for generating a PDF/A using your chosen document software should be readily accessible in an internet search. If you have more than one file document, please submit within a zip file.

As noted above, the two documents required for all Section 106 submissions for historic buildings and structures include a 106 Historic Site Short Form and an Agency Letter, unless an alternative form of submission is pre-approved with the Utah SHPO.

106 Historic Site Short Form

Each 106 Historic Site Short Form (a fillable PDF) will be constituted of one single file, with photographs embedded. Please provide clear and current photographs only (i.e., do not upload Google Street View images). One 106 Historic Site Short Form is required for each property within the project's area of potential effect (APE). If you have multiple property forms, please include them in a zipped file (the project name will be the file name), then submit. If you have an undertaking that involves many properties (more than 12 buildings) that requires a Reconnaissance Level Survey, please follow the SHPO basic guidelines for completing an RLS. The 106 Historic Site Short Form is for 106 and other compliance determination of eligibility evaluation calls only; for mitigation-related projects or other more intensive surveys, please use the basic Intensive Level Survey/Utah Historic Site Form (although the basic form is acceptable, but as noted not required, for DOE evaluations too).

Agency Letter

Please provide the following in the letter (submit letter in PDF format):

- Identification of the applicant and the agency/program involved, along with the applicant signature;
- A detailed project description that specifies all project components;
- Project's location: specific address, a written description of the project's Area of Potential Effect (the APE is the geographic area within which an undertaking may directly or indirectly cause alterations to historic buildings or structures), and a map (optional) highlighting project area and properties within;
- Determination of Eligibility (DOE): Determine whether any properties in the APE are listed or are eligible for listing on the National Register of Historic Places. Properties already listed on the National Register are, of course, "eligible" and properties not listed may be eligible if they meet the following basic criteria: 1) are 50 years old or older and 2) retains integrity–retain most of their original appearance without major alterations;
- Finding of Effect (FOE): Written determination of the project's effect on historic properties. Effect refers to the impact the work being funded will have on the structure. Three common effects are: <u>No Historic Properties Affected</u>: No historic properties are present within the APE, or only minor changes are being proposed that will not impact the character or architectural integrity of the building (minor repairs, painting, plumbing, electrical, etc.). <u>No Adverse Effect</u>:

More substantial work is being proposed (replacing windows or porches, changing walls, building additions, etc.), but the work meets the Secretary of the Interior's Standards for Rehabilitation. Adverse Effect: Work is being proposed that will damage or diminish the historic integrity of the historic structure (work that does not meet the Standards—including the application of synthetic siding, incompatible additions, inappropriate door or window replacement, demolition, etc.).

If you have additional documents (such as an architectural study, maps, engineering report, etc.) to submit as part of your consultation package, please submit in a PDF format, and if there are multiple documents submitted within a zip file.

For access to site forms, data submission standards for RLS's, guidelines, and additional information, please visit our shared Google drive at:
https://drive.google.com/drive/folders/1SIvzUV7fXq1yOpd4BEL0CYBt0pJad4it

Chapter 7: e106

As of November 27th, 2017, the UTSHPO has required all consultations be submitted via the internet. Agency representatives may use our Salesforce-based system to submit consultation under §36 CFR 800, U.C.A. 9-8-404, and even non-compliance submissions (such as Section 110 surveys/documentation, projects occurring without official compliance, or materials under Ute THPO authority or for private land surveys without a compliance component). Online consultation has many benefits for both the UTSHPO and the submitting agency, including but not limited to: reduced turn-around time for final consultation, cost savings from reduced print and mailing costs, handling time efficiencies, and greater public transparency. A Public Viewer of all current and past consultations may be found on the e106 homepage at https://cce.my.site.com/e106/s/. The e106 system has completely replaced paper/mail-in consultations. **We no longer accept paper/mail-in consultations**. UTSHPO may not receive or review mailed paper consultations. At a minimum, agencies must email digital copies of their consultations (only accepted in unique cases), otherwise all agencies are expected to use the e106 system. UTSHPO only considers a submission received, and the 30-day review clock started, if the submission is submitted electronically via email or the e106 system.

e106 Account Creation

All agency officials and agency archaeological staff are eligible to receive free online access to Utah's e106 system. If you are unsure whether you currently have an account, or are eligible to receive an account, please contact the UTSHPO Compliance Archaeologist.

To create an account use your web browser to navigate to https://cce.my.site.com/e106/s/. Fill in the required fields and indicate whether you are a consultant. Some agencies require independent contractors/consultants to submit official documentation on their behalf. If you are a contractor and are unsure whether you should submit materials directly to UTSHPO, please call or email us first. If you are a contractor submitting a consultation on behalf of a federal agency, please input your associated organization in the account details and not the federal agency, even if you plan to submit consultations on their behalf. After you have filled out the required fields you may hit "Submit." You will receive an automatically generated email message letting you know your request has been received.

The system does not automatically create user accounts, UTSHPO staff manually generate accounts to ensure that duplicates are not created and that appropriate users receive accounts. Once your account is created you will receive a second email with instructions to (re)set your password.

Some notes about account access:

- UTSHPO staff do not have your password on file and will never ask for your password. If you have lost or forgotten a password please contact us and we will reset your password for you
- Accounts are linked directly to a person and are not shared among agency colleagues.
- If you need access to a colleague's consultation case you must request access from UTSHPO directly.
- If you change agencies you must provide your new position and employer and we'll make the necessary changes to your account.

e106 Consultation Process

Once you have an e106 account you are immediately able to submit consultation to the UTSHPO. The full text of the instructions to submit a case via the e106 system may be found in Appendix G of this document or at https://cce.my.site.com/e106/s/CaseSubmissionInstructions.

When an agency representative first logs a new case it generates a Case Number and may be found by UTSHPO staff on Salesforce. Each new consultation packet is referred to as a "case" and will receive a "case number" (*NN-NNNN* format). This Case Number is the primary identifier that the UTSHPO will use to track your consultation. When the consultation packet is completely filled out online and the appropriate documents uploaded (see Appendix G), the user may submit the case for UTSHPO consultation. The user will receive an email that confirms receipt of the consultation by the UTSHPO and notifies them that the 30-day clock has begun.

UTSHPO staff may communicate with the user about their project to ask questions and clarification. Usually this is done via email sent from the e106 system. UTSHPO assumes that the person who submitted the e106 case is the primary case contact. If the e106 case submitter is not the primary case contact, please indicate the correct case contact in the "Applicant Comments" section of the case details. Upon completion of the UTSHPO review an automated email will be sent to the user with an attached PDF copy of official UTSHPO correspondence. It is the policy of the UTSHPO to send only emailed PDFs and not hard copies of UTSHPO correspondence, unless requested with special circumstances.

Required File Names and Extensions for e106 Materials

To enable speedy UTSHPO consultation and ingestion into UTSHPO Records, please use the following filename conventions. If your project's files do not fit neatly into the following categories, please contact your friendly UTSHPO representative for assistance.

- Agency Request Letter (transmittal letter, *required for all cases*)
  Agency_ConsultationRequest.pdf (e.g. SITLA_ConsultationRequest.pdf)

- Agency Signature Page
  Agency_SHPOsignature.pdf (e.g. BLM_SHPOsignature.pdf)
- GIS Data
  (zipped file) report number_GIS.zip (e.g. U17XX1234_GIS.zip)
    - One file for survey data.
        - pREPORTNUMBER (e.g. pU17XX1234)
    - one file for *all* site data
        - sREPORTNUMBER (e.g. sU17XX1234)
    - one file for all IF data
        - iREPORTNUMBER (e.g. iU17XX1234)
- Site forms
    - One PDF/A file for the entire UASF form *and* photos (photos are to be included as part of PDF)
    - Site number with uppercase letters, no leading zeros (e.g. 42DA123.pdf not 42DA00123.pdf)
    - If more than one site form is being submitted, please put all site form pdfs in a single zip file
        - reportnumber_SiteForms (e.g. U17XX1234_Siteforms.zip)
- Archaeology report
    - One PDF/A file for the entire report: UTSHPO Cover Letter, all appendices, photos, maps, etc should be included
        - Antiquities report number with uppercase letters (e.g. U17XX1234.pdf)
- UASF tabular data
    - Excel spreadsheet, one sheet should have all the project's sites on it
        - reportnumber _tabular (e.g. U17XX1234_tabular.xlsx)
- Historic buildings forms
    - Complete one pdf file, the 106 Historic Site Form Fillable.pdf, per property for historic building submissions.
        - AddressStreetNumber_AddressStreetName_City.pdf (e.g. 123East_45thStreet_Ogden.pdf)

Chapter 8: Conclusion

Guidance documents are organic in nature, and the material will be periodically updated and clarified. Major changes to this document will result in a mass communication to all agency partners and the PLPCO permit list. If you see any issues or errors in this document, please contact UTSHPO with comments or request for clarifications. It is important to remember that the point of cultural resource compliance is not merely meeting the minimum requirements but taking into account the effects of projects on the irreplaceable pieces of Utah's past. Living and past peoples have possessed an intrinsic affiliation with the Utah landscape and left indelible marks upon the landscape, and this is oftentimes what archaeologists encounter. All practitioners need to remember that for most archaeological sites encountered, this is the only time they will be seen by a trained professional that cares about the information and story left behind in debitage, pottery, cans and bottles. The highest standards of ethical archaeology is not only expected, but required.

Appendix A: Historic Research Resources

Sites and artifacts are worth only as much as the context in which they are found and their relations to other artifacts, features, and landscapes. A better understanding of human history is the real goal of archaeology, and to accomplish this lofty goal, we must place our findings in adequate context. A group of blasting cans, liquor bottles, and ironstone might be an expected pattern in a mining community, but what if it is found on the fringes of a heavily religious community? That simple change of context can lead us to completely new frames of reference in our understanding. To build a context, the archaeologist must understand the past historic and prehistoric uses of the landscape, and thankfully historical documents can provide some data in this respect. Historical documents alone, though, do not tell the entire story, which is why artifacts provide that unbiased reflection of personal and collective human action. Listed below are repositories of historical information that are largely freely available on the internet and can add to the history of humans in Utah and beyond.

Utah-Specific Online Primary Resources

- Utah Digital Newspapers
  http://digitalnewspapers.org/
- GLO Survey Plats
  http://www.ut.blm.gov/LandRecords/search_plats.cfm
- GLO Homestead Patents
  http://www.glorecords.blm.gov/
- Utah Water Rights Online Database
  http://www.waterrights.utah.gov/wrinfo/query.asp
- Sanborn Fire Insurance Maps
  http://content.lib.utah.edu/cdm/landingpage/collection/sanborn-jp2
- Historic Utah Topographic Maps
  http://www.lib.utexas.edu/maps/topo/utah/
- Historic Utah Maps
  http://www.davidrumsey.com/
- Historic Panoramic Maps (Brigham City, Ogden, Salt Lake City)
  http://www.loc.gov/collection/panoramic-maps/
- Utah State History Online Research Catalog
  https://utah.polarislibrary.com/Search/default.aspx?ctx=18.1033.0.0.5
- Utah State History Online Photo Database

https://collections.lib.utah.edu/search?facet_setname_s=dha_*

- Utah Cemeteries and Burials Database
  https://history.utah.gov/cemeteries/

- Utah Death Certificates (1905-1961)
  http://www.archives.utah.gov/research/indexes/20842.htm

- Utah Birth Certificates (1905-1917)
  http://www.archives.utah.gov/digital/81443.htm

- Utah Animal Brand Books (Possible Use in Identifying Arborglyphs or Historic Rock Art)
  http://www.archives.utah.gov/digital/540.htm

- Trails of Hope: Overland Diaries and Letters
  http://overlandtrails.lib.byu.edu/

- Utah Rails.net
  http://utahrails.net/

- Utah American Indian Digital Archive
  http://utahindians.org/archives/

National Online Primary Source Databases

- National Register of Historic Places Database & Research
  http://www.nps.gov/nr/research/

- HABS/HAER Database
  http://memory.loc.gov/ammem/collections/habs_haer/placeU.html

- Clearinghouse for Free and Subscription Genealogy Resources
  http://www.accessgenealogy.com/utah/

- USGenWeb Archives
  http://usgwarchives.net/ut/utfiles.htm

- Freely Accessible U.S. Federal Census Records (1790-1930)
  http://archive.org/details/us_census

- Indian Population Schedules (1885-1940)
  http://archive.org/details/us_census

- Google Books (many primary/secondary Utah historic resources are digitized)
  http://books.google.com/

- Archive.org (many free digitized historic volumes)
  http://archive.org/details/texts

Secondary Resources

- Utah Historical Quarterly Online Database
  http://utahhistory.sdlhost.com/

- Utah Architecture Guide
  https://issuu.com/utah10/docs/architectural_guide_booklet

- National Register Bulletins and Publications
  https://www.nps.gov/subjects/nationalregister/publications.htm

- Vernacular Architecture Online Bibliography
  http://resources.umwhisp.org/vafbib.htm

Utah Institutions with Online Digital Archives

- Mountain West Digital Library
  http://mwdl.org/
  **This resource also searches Utah State History, and the digital collections of USU and BYU

- Utah State University Digital Collections
  http://digital.lib.usu.edu/

- Weber State University Digital Collections
  http://dc.weber.edu/

- University of Utah Digital Collections
  https://collections.lib.utah.edu/

- Brigham Young University Digital Collections
  http://lib.byu.edu/digital/

- Utah Valley University Digital Archives
  http://contentdm.uvu.edu/index.php

- Southern Utah University Digital Archives
  http://www.li.suu.edu/page/special-digital-collections-digital-archives

Appendix B: Fee Schedule for UTSHPO Records

Procedures and Charges for Using the Archaeological Records at the UTSHPO
(Effective 7/1/18)

The Utah State Legislature has set fees for the use of the archaeological records at the UTSHPO. Fees collected are used to maintain and upgrade the filing system to improve ease of use and quality of data for the consultants and agencies that rely on the files. Fees and access restrictions are made in accordance with State of Utah Government Records Access and Management Act (GRAMA).

The archaeological records at UTSHPO are available for use by all State of Utah PLPCO PI permit holders, staff working directly with such permit holders, and for qualified individuals working for land management agencies with UTSHPO data sharing agreements. All users must complete our current user agreement.

All file searches are done digitally through our applications Sego and UDAM. Requests to access the data can be sent to archrecords@utah.gov. Any data discrepancies can also be reported to this email address.

Results from file searches fall into two categories. GIS file search and GIS data cut. Please allow 1-2 working days for results to be returned.

GIS File Search

Upon request, UTSHPO staff can complete a GIS file search based upon your project area (please provide legal description, shapefile, or map based upon a USGS 24k topographic map). A GIS search will provide you with a basic list of sites and projects within your specified area.

GIS file search:	$15.00 per 15 minutes (typical time is 15 minutes)

GIS Data Cuts

With changes in policy, starting July 1, 2016, UTSHPO will now offer data cuts from the Sego geospatial dataset. Cuts will be made by intersecting sections with the client provided GIS file, map or provided PLSS. Any buffers which need to be added must be specified before the cut is made for billing and accuracy. All data cuts will carry a restricted use license and all end users must fill out the User Agreement Form, this is to ensure the protection of digital cultural resource data. SHPO is not able to negotiate on cost for large data cuts.

GIS Data Cut:	$15.00 per section

Sego (previously Preservation Pro):

Our online literature search application, Sego, is available to PLPCO PI Permit holders and qualified individuals working for land managing agencies with UTSHPOs data sharing agreements. Subscriptions and access are managed on an individual user level, restricting access to those with the proper qualifications. Sharing of passwords for an organization is strictly prohibited and is further outlined in the User Agreement Form. Associated fees are collected and managed by our parent agency, the Utah Department of Cultural and Community Engagement. Subscription are for one calendar year. For access information please contact archrecords@utah.gov.

1-2 users:	$200
3 users:	$300
4 users:	$400
Unlimited users:	$500

UDAM Mass Digital Scan Download

All of SHPO's digital reports and forms are hosted at the Marriott Library on an application we call UDAM. Access to UDAM is also restricted, but is paired with the Sego subscription, so no additional fee is applied for UDAM credentials.

Due to complications and our own access of UDAM, we cannot offer bulk downloading of sites and reports.

Appendix C: Linear Sites Effects Guidance

I. Introduction

Linear sites are perhaps some of the most commonly encountered cultural resources in Utah due to not only their ubiquity but also their length. Linear sites can include a wide variety of types that are joined by a common theme. They are longer than wide and can include roads, railroads, canals, ditches, trails, power lines, telephone, and telegraph lines. Given the significance of water conveyance, transportation, and communication infrastructure to the settlement of the American West, with Utah being no exception, many of these sites (historic properties) are listed on, or determined eligible, for the National Register of Historic Places. These sites present a unique suite of issues when encountered during inventory, but the Utah Professional Archaeological Council's (2008) Linear Sites Recording Guidance helps to formalize a professionally sanctioned and standardized means of recordation. While the Linear Sites Guidance helps to standardize the recordation efforts by consultants and agencies, determining effects to this site type under 36CFR800 remains a moving target, with difficult and sometimes varying interpretations.

In hopes of providing federal and state agencies with some guidance for determining effects for undertakings involving linear sites, this document attempts to outline some of the most commonly seen types of activities affecting linear sites as seen by the UTSHPO through the federal Section 106 process of the National Historic Preservation Act, or its state equivalent codified in Utah Title 9, Chapter 8, Section 404 (or more commonly known as Utah Code 9-8-404).

UTSHPO does not possess an in-house rubric for determining adverse effects, with each case viewed contextually. This document is not the end of consultation, but is provided to merely outline some of the more common effects with thoughts on how to adequately determine if the proposed action will have an Adverse Effect (36CFR800.5) to a historic property. UTSHPO urges agencies and consultants to converse with its staff before submitting formal consultation to help determine if an undertaking will have an adverse effect on a historic property. Many times the UTSHPO will have more information on a linear feature and may help agencies to work through other options for their undertakings.

II. Determination of Effect for Linear Site

As stipulated in 36CFR800.5(a)(1), an adverse effect is considered "when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property…in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling or association." Types of adverse effects, as outlined in 36CFR800.5(a)(2), include physical destruction, alteration inconsistent with the Secretary of the Interior's Standards, moving of property from its original location, change of the character of the property's use contributing to significance, introduction of visual effects, neglect, or transfer out of public ownership or control. Most of these criteria of adverse effect apply to linear sites, except the movement of a historic property from its historic location, unless discussing a feature within a historic property.

Most linear sites are eligible or listed for the NRHP under Criteria A or C, sometimes B, and rarely D. As such, the determination of effect needs to focus on the proposed undertaking's effect on the integrity criteria most relevant for its significance. National Register Bulletin 15 (1991:44) outlines the seven aspects of integrity for a historic property, including location, design, setting, materials, workmanship, feeling, and association. Further, for a historic property to retain integrity it "will always possess several, and usually most, of the aspects," but for each property type there is likely different criteria focus. The most important Integrity for linear features, which are commonly eligible under A and C, should be location, design, materials, and association.

In order to adequately gauge the most important integrity criteria, the proponent must identify the essential physical features of the property, whether these features are visible, is the site comparable to others of the same type, and which aspects of integrity are the most important (National Register Bulletin 1991:45). Modifications to these essential physical features that comprise the integrity of the linear site is potentially an adverse effect, dependent on the magnitude of such alterations to the overall system. Perhaps the most critical integrity issue is the visibility of the essential physical features for properties eligible or listed under Criteria A, B, or C. As noted by the NRHP, "the features must be visible enough to convey their significance. This means that even if a property is physically intact, its integrity is questionable if its significant features are concealed…" (National Register Bulletin 15:46).

In the case of a historic home, defining and assessing all of the essential physical features is relatively easy in both a spatial and logistical sense. Linear sites, due to their unique nature, preclude the easy ability of assessing the entire system, especially when an undertaking may intersect only a small portion of a multi-mile long property. It is still possible to define the essential physical features of a linear site from 1) previous recordings (if any exist), 2) historical documentation, and 3) visual inspection within and outside the Area of Potential Effects. While undertakings generally only provide a snapshot of an entire linear site, it is important to think about, and assess for, the entire system with all due diligence. Generally, most linear features have been at least partially recorded in the State of Utah, and these recordings should contain some information to allow agencies informed decisions on the overall system.

The one unifying aspect of linear sites is that they allowed the transmission or passage of something, whether water, electricity, communications, or humans. Thus, the most essential physical features of these sites would be how each site type allowed transit of the associated use. Each linear site type (road, railroad, canal, ditch, telephone/telegraph line, power line, trails, etc.) will have essential characteristics different from the other site types (head gates in a canal system versus trestles for a railroad) and need to be viewed contextually. Within each site type, there will be further differentiation on a specific property's defining characteristics. For instance, the Willard Canal, a 1950s construction in the Weber Basin will have differing physical characteristics than the 1860s New Harmony canal system in southern Utah. These characteristics will be reflective of the temporal period of significance through the technology and engineering used, and available, at the time of construction. Identifying these essential physical features is of paramount concern. Making this assessment difficult is the fact that the linear feature itself is perhaps the most visible feature, whether it be an open-faced earthen canal, a raised railroad berm, or trail ruts and swales.

As all historic properties are actively constructed cultural manifestations, many have been altered over the course of its history, in both minor and major ways. This is why it is such an important step to define the property's period of significance and its essential physical characteristics before determination of effect. For instance, if the historic dirt road connecting the mines of Mammoth and Eureka in Juab County is considered for eligibility, the first question is whether it retains its period of significance (in this case example 1865-1930s). Inspection of historic maps, newspaper articles and photographs illustrates that the road does retain its original course (integrity of location) and still connects to the active and inactive mine workings of both communities (integrity of association). But as it has been widened and paved in the 1970s (loss of integrity of materials and design), the site is likely not eligible for the NRHP. However, if the road had been re-graded and slightly widened in the 1920s to accommodate automobile traffic, but still retained integrity under location, setting, feeling, and association, with only minor changes to integrity of workmanship, materials, and design, then the property would still likely be eligible to the NRHP as the modifications were within the period of significance and did not significantly alter the site's integrity.

Defining the period of significance and essential physical features is particularly important when assessing proposals to modify or maintain historic linear site properties. For instance, dredging of a historic earthen canal for routine maintenance is likely not an adverse effect, as this would have occurred during the historic period (as long as the modern technology employed to complete the dredging does not alter the physical characteristics beyond historic integrity). Another example could be the re-paving of a historic segment of the Victory Highway. In-use sections of the Victory Highway have likely been re-paved dozens of times during the period of significance and further paving might not have an adverse effect. However, if the proposed paving also widens the road significantly, then there could be an adverse effect to the essential physical characteristics.

Perhaps one of the most common means of agencies and proponents to avoid an adverse effect determination is the use of "contributing" versus "non-contributing" segments of a linear site. These terms are brought, whether properly or improperly, over from guidance regarding National Register Historic Districts. In this context, nominators identify those buildings, sites, structures or objects, within a historic district that add to the historical significance of an area (contributing) or those features that do not (non-contributing). In principle, this concept can be applied though the mechanisms are not as clearly outlined given that most linear sites are recorded as sites, not as official districts. For instance, some agencies contend that a 300’ swath of a historic earthen canal that has been lined with concrete and structural elements removed or replaced outside the period of significance does not retain integrity, and thus this segment does not contribute to the overall integrity of the property. Use of contributing and non-contributing language presents several difficulties beyond the bureaucratic use in historic districts, but also how many non-contributing sections of a linear site is actually evidence of an overall lack of integrity for the entire system. Further, given the nature of most undertakings intersecting only small portions of large linear sites, it is nearly impossible to adequately determine whether the contributing/non-contributing argument has merit in relation to the whole system.

Overall, when assessing the effect of a proposed undertaking on a linear site, it is first necessary to define the areas of significance (Criteria A, B, C, or D), the period of significance, and identification of the essential physical features. If the proposed undertaking will affect even a small portion of the essential physical features, then there is likely a need to discuss the potential for adverse effects. There is no rubric for how much of a linear site needs to be affected to be considered an adverse effect; it’s purely a contextual discussion based on the above-referenced integrity and significance issues in opposition to the proposed action. The following is a breakdown of common linear site issues by site type for further specific guidance.

III. Resource-Specific Effects

a. Canals/Ditches

Piping:

1) Subterranean Pipeline: Installation of a subterranean pipeline within an earthen canal/ditch, without permanently altering the shape, form, and design of said canal is generally accepted as a “No Adverse Effect” determination. While a piped earthen canal may not flow water in the same manner as historically, an analogy could be the eligibility of a house that is abandoned. While the primary function of the house was for sheltering human occupants, the abandonment of the home does not constitute a change in its eligibility. In the same way, canals served as a water delivery method to satisfy agricultural and residential needs, but abandonment (either through alteration of water conveyance method (piping versus free-flowing) or through disuse in general) does not automatically preclude its eligibility. More specifically, a new subterranean pipeline continues this historic process of water delivery within the canal/ditch corridor, thus continuing that historic use. A “No

Adverse Effect" determination applies ONLY if the feature is not significantly modified in physical appearance by installation of a pipeline.

The widening/narrowing/filling of a feature beyond its historical scope to accommodate a small/large diameter pipe could be considered an adverse effect. In cases of a concrete-lined canal, the disturbance of the lining for installation of a subterranean pipeline is likely an adverse effect.

2) Surface (insert or lay-down) Pipeline: In many cases, proponents and agencies install pipe within the earthen or concrete canal/ditch as a means of avoiding of adverse effect. This discussion only covers pipe that is placed within the canal/ditch without any significant ground disturbance or the introduction of fill to cover said pipe. Installation of a pipeline within the linear feature, in cases where it does not physically alter the shape, form, and design of canal has generally been accepted as a "No Adverse Effect". In addition, a surface pipeline has the added ability to be removed and restore the feature to its original condition. A surface pipeline installation does have the potential to adversely affect the feature's visual qualities, particularly the integrity considerations of feeling, setting, and design. Care must be taken to assess the potential for effects for each individual historic property.

Piping Illustrations

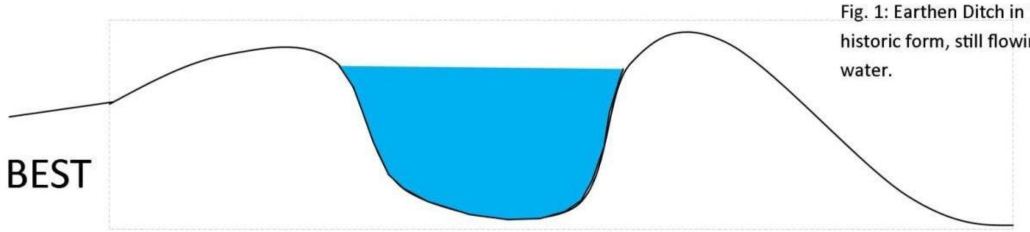


Fig. 1: Earthen Ditch in its historic form, still flowing water.

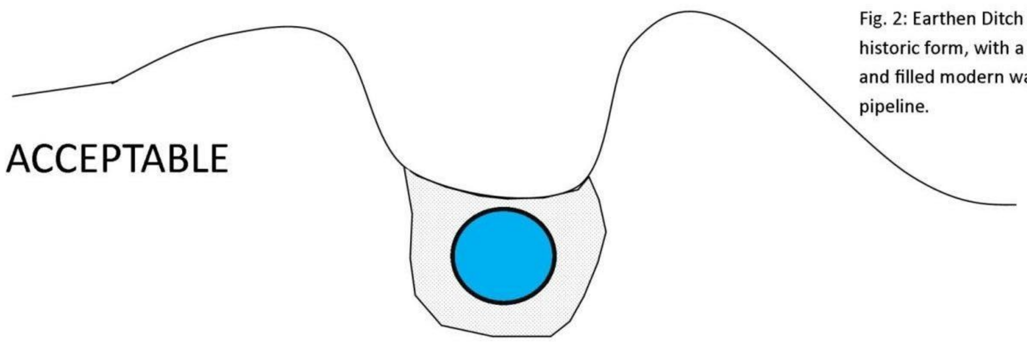


Fig. 2: Earthen Ditch in its historic form, with a buried and filled modern water pipeline.

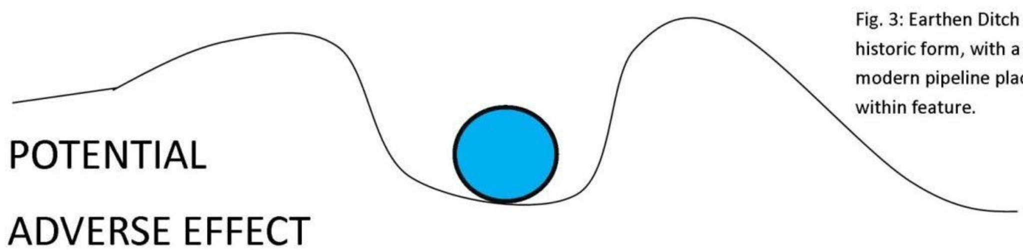


Fig. 3: Earthen Ditch in its historic form, with a modern pipeline placed within feature.

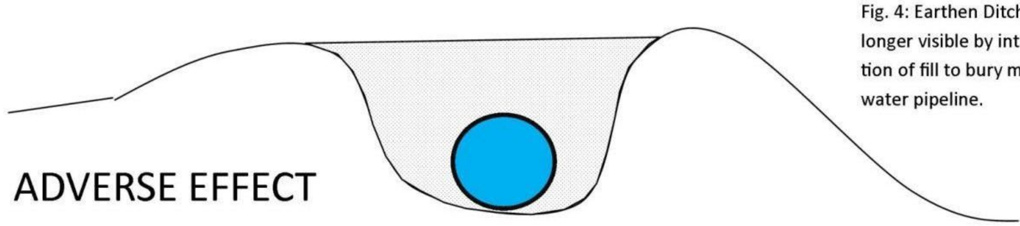


Fig. 4: Earthen Ditch no longer visible by introduction of fill to bury modern water pipeline.

Lining:

1) Replacement: In the instances where an existing historic lining, whether concrete or plastic is being replaced in-kind, the undertaking likely reflects a “No Adverse Effect” determination. It is important to consult with the UTSHPO to determine what actually constitutes an ‘in-kind’ replacement of historic lining. For instance, the technology employed for pouring and forming during the original installation, and the resultant visual appearance of historic concrete is potentially significantly different than modern applications.

   Historic lining should be as closely mimicked as possible to avoid altering the historic properties’ physical appearance, thus the integrity considerations of design and feeling. Connected actions to a re-lining undertaking such as the removal of contributing canal/ditch features (e.g. head gates, diversions, take-outs, bridges, culverts, etc.) could be considered an “Adverse Effect”; thus it is important to analyze all aspects of the proposed action.

2) New Installation: Installation of a concrete lining into a contributing portion of a previously earthen canal/ditch historic property should almost always result in an “Adverse Effect” determination. Lining of a previously earthen feature adversely affects the integrity of materials and design, and potentially affects its feeling, workmanship, and association. Use of different lining material, such as heavy duty plastics should also likely result in an “Adverse Effect” determination. Only one exception could be made for an “Adverse Effect” determination for new lining, and relates to the extension/expansion of a pre-existing lining.

   In many cases, road crossings resulted in the installation of linings associated with culverts or abutments before advent of the National Historic Preservation Act and Section 106 Review Process. In addition, private individuals and organizations such as a Water Conservation District, which are not responsible under Section 106 might have installed a lining without consultation. If an undertaking is proposing to expand a pre-existing lining, and the new disturbance is small in scope, there is a potential to avoid an “Adverse Effect” determination. However, it is likely necessary to assess the overall integrity of the linear system to adequately determine the cumulative effects of this action.

Utah State History photograph collection, Utah Writer's Project, Photo Number 3394.

Some canals and ditches were constructed with concrete lining, while others had a concrete lining added during the historic period. The photo on the left, for example, is the construction of the Brigham Canal in 1935 with a concrete lining. Understanding the historic context of the canal, its construction design and modification will help with effects determinations.

Filling:

1) New Filling: New proposals to fill in lengths of linear canals/ditches should likely always result in an "Adverse Effect" determination, as the undertaking will significantly alter the physical appearance of the historic property. The filling of a water conveyance feature will adversely affect several aspects of integrity most prominently the design, feeling, association, and workmanship. Most importantly, filling will effectively erase this historic feature and has the potential to affect the integrity of an entire historic landscape and associated properties. There is no current rubric for how much filling activity will adversely affect the integrity of a historic property either in a linear foot or a percentage of the overall system, thus proponents need to consult with the UTSHPO to discuss their undertaking and potential to effect.

2) Expansion of Pre-Existing Filling: Only one exception could be made for an "Adverse Effect" determination for the filling of a historic canal/ditch, and relates to the extension/expansion of a pre-existing disturbance. In many cases, road crossings or building constructions resulted in the filling of portions of a canal/ditch before advent of the National Historic Preservation Act and Section 106 Review Process. In addition, private individuals and organizations such as a Water Conservation District that are not responsible under the Section 106, might have filled in these features without consultation. If an undertaking is proposing to expand a pre-existing filled portion of a canal/ditch, and the new disturbance is small in scope, there is a potential to avoid an "Adverse Effect" determination. However, it is likely necessary to assess the overall integrity of the linear system to adequately determine the cumulative effects of this action. If the expansion of fill is small in scope, does not tip the scale of a cumulative effect determination, and does not result in any burying of contributing historic features (e.g. head gates, culverts, etc.), then perhaps a "No Adverse Effect" determination is appropriate.

Cross-Cutting:

1) Under: Perhaps one of the most common means of running pipeline past a historic linear feature, whether a canal/ditch, road/railroad, or historic trail, is the use of boring technology. In this instance, heavy equipment directionally bore the pipeline/conduit underneath a pre-existing feature without ever disturbing any portion of the historic property. This is the most UTSHPO supported form of avoiding adverse effects for installation of pipelines or conduits, and should be the first option weighed by project proponents. Boring underneath historic linear features should almost always be determined a “No Adverse Effect” or perhaps even “No Historic Properties Affected”.

2) Over: A common undertaking that involves historic canals/ditches is the crossing over of these features by a variety of different methods including pipelines, bridges, roads, and power lines. Generally, if the proposed undertaking does not physically affect any portion of the linear feature, it is likely a “No Adverse Effect” determination. For most canals/ditches the historical setting and purposes included bridge and road crossings and other forms of development associated with opening up a new area for settlement through irrigation. However, this should always be analyzed for overall and cumulative effects to the ability of the feature to convey its historical significance. Another question for the proponent and agency is what other types of crossings (modern or historic) currently exist for the canal/ditch? Undertakings that cover a significant portion of a ditch/canal with bridges, roads, or other disturbances is visually obscuring the feature as much as filling in with soil and would lead potentially to an “Adverse Effect” determination. Effort should be focused on constructing crossings that are at least compatible with the historical setting, or designing a non-permanent solution (something that can be removed without affecting the canal/ditch at a later date). Generally, power lines, cell phone towers, or other undertakings with a potential adverse visual effect to historic properties should not affect canals/ditches.

3) Through: Perhaps the least common method for running pipeline or conduit through linear features is cutting directly through a ditch/canal through its side-walls and berms and burying beneath the historic bottom of feature. This should be the last option vetted for such an undertaking, and might lead to an “Adverse Effect” undertaking if care is not given to the preservation of the historic properties integrity. Trenching heavy equipment might cut a swath several feet wide through a canal/ditch in order to lay a pipeline/conduit. While boring under the feature would be the preferred option, UTSHPO understands that this could be a cost-prohibitive process for some undertakings.

Cutting through an historic earthen canal poses some relatively easy repairs to avoid an “Adverse Effect” determination. If the proponent re-contours the side walls and berm of the earthen canal/ditch after trenching without permanently affecting its form, design, or shape, then “No Adverse Effect” seems an appropriate determination. However, if the trenching is to disturb contributing historic lining or features than a different assessment will need to be made in regards to effects. Any proposed bridges or other types of crossings that will require construction of abutments, wing-walls, or stanchions within the side wall or berm of the canal, thus directly affecting the feature’s integrity, likely should be an “Adverse Effect” determination, as the disturbance is permanently altering several aspects of integrity. Again, these types of disturbances are contextual and will require the proponent and the responsible agency to determine if the disturbance is an adverse effect given the size of the canal/ditch, any associated features that might be affected, if the segment is contributing to the overall eligibility, or other factors.

Feature Replacement and/or Installation

1) Replacement: Canals and ditches are a mixture replacement of features within a historic property needs to first be analyzed through a lens of contributing, non-contributing, and out-of-period, similar to buildings in a historic neighborhood. The eligibility determination of the historic property should delineate the period of significance, of which all further discussions should follow. Contributing features would be those head gates, diversions, pump stations, or other structural elements that were constructed within the period of significance and retain integrity. Non-contributing elements could be those features that were constructed during the period of significance but have been significantly altered, or were not critical to the operation of the linear feature. Finally, out-of-period features are those elements of a canal/ditch that were constructed, generally after, the period of significance.

   Removal or replacement of non-contributing or out-of-period structural elements of a canal/ditch should likely yield a “No Adverse Effect” determination. On the other hand, replacement, removal, or modification of contributing elements might be an “Adverse Effect”, if the undertaking changes the ability of the canal/ditch and features to convey overall significance. Thus, replacement of a single head gate might not be an “Adverse Effect” by itself, but if there are only a handful of other remaining contributing head gates and the undertaking would further remove these examples, then it is likely a cumulative “Adverse Effect”.

2) Installation: Installation of new features, without replacement, does not necessarily reflect an automatic adverse effect determination. In many instances the installation of new features compatible with the site’s original usage might actually enhance, or continue, the aspects of historical integrity that make the site

significance. For instance, constructing a new culvert under a historic road to prevent damage through flooding and blow-outs could be a positive effect for the long-term integrity of the historic property. This is dependent, of course, if the new construction is in-keeping with the historic nature of the site and meets the Secretary of Interior Standards. For example, efforts to install new culverts on a historic dirt road with existing stone culverts could avoid an adverse effect determination by use of a stone façade similar to the historic example to cover the modern steel culvert installation under the road bed. Similar to most other linear sites issues, installation of new features warrants careful consideration and discussions with UTSHPO staff.

Maintenance

1) Dredging: Both earthen and concrete-lined canals/ditches require periodic removal of organic and non-organic material that flows or is intentionally dumped into the linear feature. In the case of concrete-lined canals, there is rarely an issue with this type of routine maintenance. Similarly, the use of a dredging operation in an earthen canal is in keeping with the historic maintenance activities of that feature, as long as the activity does not significantly alter the historic nature of the property. For instance, if dredging activity, with modern technology, significantly alters the width of the feature beyond its design during the period of significance, than there might be a need for determination of adverse effect. Regardless, most dredging activity will not adversely affect the essential physical characteristics of a canal or ditch. Beyond dredging and breaches, canals and ditches require routine maintenance to remove debris captured in spillways, take-outs, and debris captures. General cleaning of this material without directly affecting any physical features is not normally considered an adverse effect.

2) Blow-Outs/Breaches: In cases where there is a breach of an earthen canal, an adverse effect has already occurred by its nature. Stabilization of a breached berm, and subsequent reconstruction, if accomplished in a historically compatible fashion in keeping with the Secretary of Interior Standards, should not be commonly determined an adverse effect. If the breached berm, after repair, was repaired with the same materials, maintaining the same shape, form, and design, then the segment will likely retain integrity. In opposition, however, if an earthen berm is breached and repaired with poured concrete (which would not be advisable given the potential side-effects of such installation to the overall structural integrity of a system), then the essential physical features of the site (an earthen berm) will have been significantly affected by this undertaking.

3) Repairs: Canals/ditches will always require repairs of many of the physical features of the linear site in addition to the routine cleaning/dredging activity or the

emergency repair of breaches. Repair activity could include maintenance of head gates and apparatus, take-outs, diversions, and any bridge or pipeline abutments that intersect the linear site. Repair of physical features that date to the period of significance should be carefully vetted for determinations of effect. While replacement of screws, bolts or application of grease to a 1870s head gate are necessary, care must be taken not to adversely affect the integrity by introducing components that are not compatible with the historic nature of the feature. Generally, routine repairs of historic features of a canal or ditch will not be an adverse effect unless the proposed action alters the integrity of the feature and its ability to convey the period of significance.

Utah State History, Salt Lake City Engineers Photographic Collection, Mss C 601, Photo number 00004.

Periodic dredging of canals is a facet of the historical maintenance of all ditches and canals, and should rarely be considered an adverse effect, and should not be considered an activity that destroyed integrity historically. Dredging is a necessary part of canal and ditch maintenance, such as this 1916 barge and steam shovel work on the Surplus Canal in Salt Lake County.

Appendix D: Historic Building Forms

The 106 Historic Site Short Form and the Utah SHPO basic Intensive Level Survey/Historic Site Form, along with other information is available here: https://ushpo.utah.gov/shpo/building-resources/

HISTORIC SITE SHORT FORM

(03/20)

UTAH OFFICE OF HISTORIC PRESERVATION
For Section 106 Review Only
(For Standing Structures & Buildings/Architecture)

1 IDENTIFICATION

Historic Property Name (if known): *106 Project Title:*
Address: *Lat/Long (optional):*
City, County: *Geographical Data (optional):*

2 EVALUATION

Evaluation (select one)

☐ *The property is considered* **Eligible** *at this time because it is already listed in the National Register of Historic Places,* or

- is at least 50 years old **and** retains its historic integrity (minimal alterations to key features), and has potential significance under National Register criteria.

☐ *The property is considered* **Not Eligible** *for listing on the National Register at this time because it:*

- is less than 50 years old, or is 50 years or older but there have been major alterations to key features.

3 DOCUMENTATION

(check all that apply):

☐ *two current photographs (required)*
☐ *site sketch map (optional)*
☐ *other:*

Research Sources (optional, check all sources consulted, whether useful or not)

☐ *abstract of title*
☐ *building permit*
☐ *Sanborn Maps*
☐ *tax card & photo*
☐ *other:*

4 ARCHITECTURAL DESCRIPTION

Date of Construction: *No. of Stories:* *Use*
Building Type: Select One *Building Style:* Select One *Original Use:* Select One
Foundation Material: *Wall Material:* Select One *Current Use:* Select One
Additions: ☐ *none* ☐ *minor* ☐ *major (describe below)* *Alterations:* ☐ *none* ☐ *minor* ☐ *major (describe below)*
No. of contributing outbuildings and/or structures: *No. of non-contributing outbuildings and/or structures:*

Briefly describe the original building, any major additions or alterations and their dates, and associated outbuildings and structures. Also provide a brief history of the building's construction and use (if known). Note the Architect/Builder (if known). Use continuation sheets as necessary for additional photos and text.

5 HISTORY & SIGNIFICANCE

Write a brief history of the property, if known, focusing primarily on the original or principal owners & any significant events or other people (besides owners) associated with it. Use continuation sheets as necessary.

Form completed by: *Date (mo/yr):*

6 PHOTO UPLOAD

Upload your images. Please upload at least one current and clear image.

If you have additional documents, such as a site sketch map or project area map (a map for each individual property is not required if the project features multiple properties; just submit one map highlighting all properties in the project area), please submit those as a separate pdf or attach as part of the agency letter.

HISTORIC SITE FORM

(10-91)

UTAH STATE HISTORIC PRESERVATION OFFICE

1 IDENTIFICATION

Name of Property:

Address: *Twnshp:* *Range:* *Section:*

City, County: *Lat/Long(degr dec.):*

Current Owner Name: *USGS Map Name & Date:*

Current Owner Address:

Tax Number:

Legal Description (include acreage):

2 STATUS/USE

Property Category
- ☐ *building(s)*
- ☐ *structure*
- ☐ *site*
- ☐ *object*

Evaluation
- ☐ *eligible/contributing*
- ☐ *ineligible/non-contributing*
- ☐ *out-of-period*

Use
- *Original Use:*
- *Current Use:*

3 DOCUMENTATION

Photos: Dates
- ☐ *digital:*
- ☐ *prints:*
- ☐ *historic:*

Drawings and Plans
- ☐ *measured floor plans*
- ☐ *site sketch map*
- ☐ *Historic American Bldg. Survey*
- ☐ *original plans available at:*
- ☐ *other:*

Research Sources (check all sources consulted, whether useful or not)
- ☐ *abstract of title*
- ☐ *tax card & photo*
- ☐ *building permit*
- ☐ *sewer permit*
- ☐ *Sanborn Maps*
- ☐ *obituary index*
- ☐ *city directories/gazetteers*
- ☐ *census records*
- ☐ *biographical encyclopedias*
- ☐ *newspapers*
- ☐ *city/county histories*
- ☐ *personal interviews*
- ☐ *USHS History Research Center*
- ☐ *USHS Preservation Files*
- ☐ *USHS Architects File*
- ☐ *LDS Family History Library*
- ☐ *local library:*
- ☐ *university library(ies):*

Bibliographical References (books, articles, interviews, etc.)

Attach copies of all research notes, title searches, obituaries, and so forth.

Researcher/Organization: ______________________ *Date:* __________

4 ARCHITECTURAL DESCRIPTION

Building Style/Type: ______ *No. Stories:* ______

Foundation Material: ______ *Wall Material(s):* ______

Additions: ☐ *one* ☐ *minor* ☐ *major (describe below)* *Alterations:* ☐ *one* ☐ *minor* ☐ *major (describe below)*

Number of associated outbuildings ____ *and/or structures* ____.

Briefly describe the principal building, additions or alterations and their dates, and associated outbuildings and structures. Use continuation sheets as necessary.

5 HISTORY

Architect/Builder: ______ *Date of Construction:* ______

Historic Themes: Mark themes related to this property with "S" or "C" (S = significant, C = contributing). (see instructions for details)

☐ *Agriculture*	☐ *Economics*	☐ *Industry*	☐ *Politics/ Government*
☐ *Architecture*	☐ *Education*	☐ *Invention*	☐ *Religion*
☐ *Archeology*	☐ *Engineering*	☐ *Landscape Architecture*	☐ *Science*
☐ *Art*	☐ *Entertainment/ Recreation*	☐ *Law*	☐ *Social History*
☐ *Commerce*	☐ *Ethnic Heritage*	☐ *Literature*	☐ *Transportation*
☐ *Communications*	☐ *Exploration/ Settlement*	☐ *Maritime History*	☐ *Other*
☐ *Community Planning & Development*	☐ *Health/Medicine*	☐ *Military*	
☐ *Conservation*		☐ *Performing Arts*	

Write a chronological history of the property, focusing primarily on the original or principal owners & significant events. Explain and justify any significant themes marked above. Use continuation sheets as necessary.

6 PHOTO UPLOAD

Upload your images. Please upload at least one current and clear image.

If you have additional documents, such as a site sketch map or project area map (a map for each individual property is not required if the project features multiple properties; just submit one map highlighting all properties in the project area), please submit those as a separate pdf or attach as part of the agency letter.

Appendix E: Short Cultural Resources Inventory Report Form

Utah SHPO

Short Cultural Resources Inventory Report Form

State Project Number: Click here to enter text.

Report Title: Click here to enter text.

Report Date: Click here to enter text. **Report Author(s):** Click here to enter text.

Principal Investigator: Click here to enter text.

Person-Days for Survey: Click here to enter text.

Acreage: APE: Click here to enter text.
Intensive: Click here to enter text.
Recon/Intuitive: Click here to enter text.

Project Background:
Click here to enter text.
Area of Potential Effect Definition:
Click here to enter text.
Identification Strategies (*archaeological, historical, and ethnographic*):
Click here to enter text.

Location(s) and Date(s) of Pre-Field Records Search:

1. Utah Division of State History/SHPO/Sego: Click here to enter text.
2. Federal/State Office: Click here to enter text.
3. Historic Records/Maps: Click here to enter text.
4. Other: Click here to enter text.

Results of Pre-Field Records Search (*sites & projects within agency-defined APE buffer and/or site leads from research*):
Click here to enter text.

Date(s) of Survey: Click here to enter text.

Description of Findings: Click here to enter text.

Conclusion & Management Recommendations: Click here to enter text.

Required Materials:
☐7.5' Quadrangle Base map(s) for Project Area
☐7.5' Quadrangle Base map (s) for Surveyed Area (if different than #1)

Short Cultural Resources Report Form Instructions

The UTSHPO is pleased to provide a fillable PDFreport form to be used by agencies and archaeological consultants to streamline report submission for Class II – Reconnaissance level Field Survey and Class III - Intensive Pedestrian Survey. Over the last several years it was clear that much of the text included in reports submitted to UTSHPO was unnecessary or redundant, and provided little or no value to compliance with Section 106 of the National Historic Preservation Act or Utah Code 9-8-404. The provided form focuses consultants and agencies to provide clear and concise information on project background, definition of Area of Potential Effects (APE), identification strategies, and findings. Removed from this form are lengthy cultural or historical contexts and backgrounds that are not necessary for negative reports and without a research design rarely provide any usefulness to the review or management of cultural resources. These instructions are provided to assist in the accurate and consistent completion of the Negative Report Form.

State Project No.: This is a number received from UTSHPOstaff upon request from a State Permitted archaeologist, only. The number will appear as a string of numbers and letters, such as “U13UD0233”, and include the suffix codes for landownership, (ex. s=state, b=blm, t=tribal, p=private, etc.)

Report Title: While this may be different than the name of project provided to SHPO to receive a State Project Number, this should be as accurate and unique as possible and include the County or Counties.

Report Date: Date of completion for the report, in the following format mm/dd/yyyy.

Report Author(s): List all authors of the port, preferred format is “First Name Last Name”

Principal Investigator: Provide the name of the Utah State Permit holder overseeing the project.

Survey Crew: Provide the number of individuals involved in survey, by person-days.

Project Background: Provide a summary of the project including, but not limited to, the proponent, purpose and need, type of activity, land ownership, and any other pertinent information.

Area of Potential Effect (APE) Definition: Per both state and federal cultural resource regulations, agencies must provide a definition of the APE which is defined in 36CFR800.16(d) as “geographic area or areas within which an area may directly or indirectly cause alterations to historic properties….and may be different for different kinds of effects caused by the undertaking”. For example, a water pipeline may be limited to the ground disturbance as APE, while a proposed campground may include a larger APE to cover additional ground disturbance and potential indirect effects.

Identification Strategies (archaeological, historical, and ethnographic): Pursuant to 36CFR800.4, the first step in identification strategies is to complete a review of existing information for the APE. You will detail the results of this pre-field literature review in the following section, but mention those efforts here including not only archaeological records, but tribal consultation, ethnographic studies, historical societies, informants, pertinent articles, books, theses, dissertations, websites or other publicly available research that are either relevant to the proposed project area or relevant to known resources within the area.

The next part of the identification strategy will be the actual field survey. Provide detail on the nature of the inventory, how many individuals; transect spacing, discussions of exempted areas and rationale for exemption, ground visibility, and all another other factors affecting the identification strategies. In Utah, most archaeological identification strategy for in-field survey follows the Bureau of Land Management 8110 Handbook for Identifying Cultural Resources. Alteration of these standardized methods should be discussed through consultation between the federal or state agency and the UTSHPO.

Location(s) and Date(s) of Pre-field Search:

1. **UTSHPO:** List the date(s) you completed a literature review of records held by the UTSHPO Archaeological Records Office and/or Sego 2.0
2. **Federal/State Office:** Identify any additional literature reviews completed at agency offices, providing specific locations and dates.
3. **Historic Records/Maps:** Provide detail on review of historic maps, Master Title Plats, texts, or oral histories to help identify historic properties. Provide specific details on the year of map, etc.
4. **Other:** If there are any other pre-field records search not included above, detail that information in this location.

Results of Pre-Field Records Search: Provide a list of cultural resources sites and inventories within .5 mile of the APE (unless instructed otherwise by the agency), and a list of any site leads yielded from pre-field prehistoric and historic map or literature reviews.

Date(s) of Survey: Provide the dates of survey for the project.

Description of Findings: In narrative format provide a description of the negative findings as they relate to the literature search and expectations. If isolated finds are found please provide a summary of the findings, including description of artifacts with number and area extent, UTMs, and photos.

Conclusion & Management Recommendations: Provide a summary of the project, the results of identification. Formal determinations of eligibility and effect are not included in this section; those are found in the letter from the Agency Official.

Required Materials

1. **UTSHPO Cover Page**
2. **7.5’ Quadrangle Base Map(s) for Project Area**
   Map should depict the extent of the Area of Potential Effects, regardless of type of inventory conducted.
3. **7.5’ Quadrangle Base Map (s) for Survey Area (if different than #1)**
   Map should depict exact areas of Class II and/or Class III inventories, and for Class II it is suggested to display location of survey transects.

Appendix F: Linear Sites Guidelines

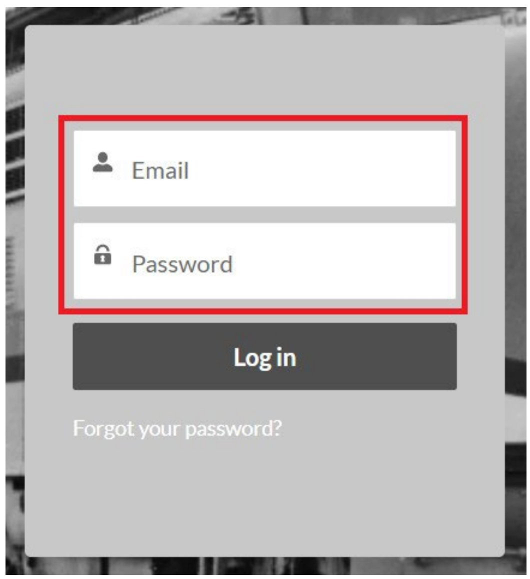
Please find these guidelines at the following link:

https://82f96c66-8d2b-4bed-939b-344cbc2ba706.usrfiles.com/ugd/82f96c_c901a7a7da6d4242ad7083a2392dc393.pdf

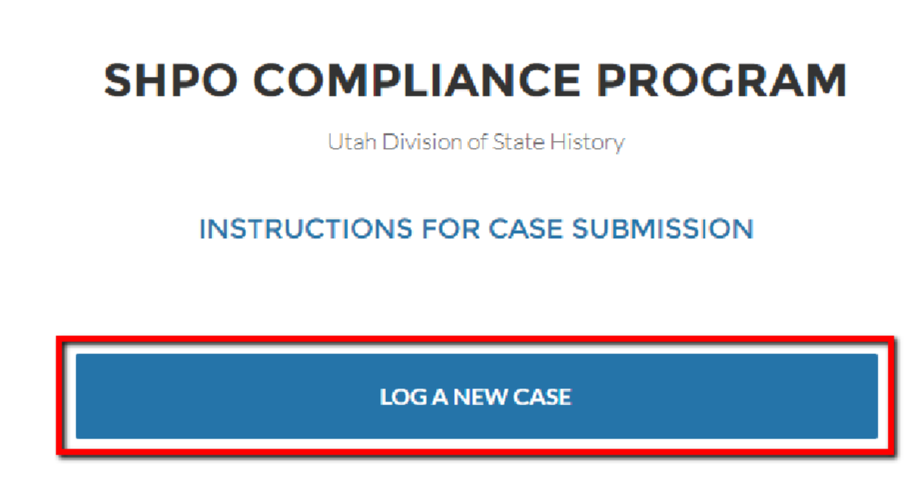
Appendix G: e106 Consultation Submission Instructions

1. Go to https://cce.my.site.com/e106/s/ and click "LOGIN"

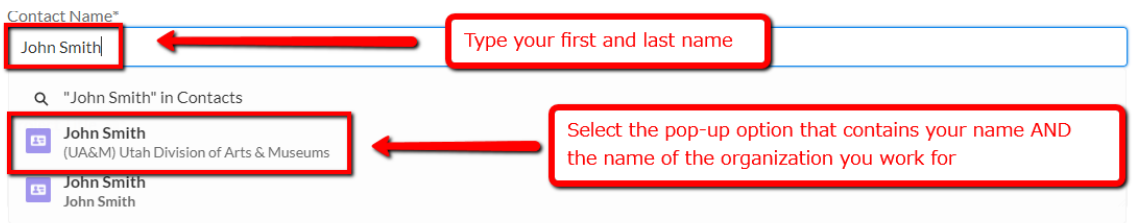
2. Enter the username and password that you have been emailed and click Log in



3. Click "LOG A NEW CASE"

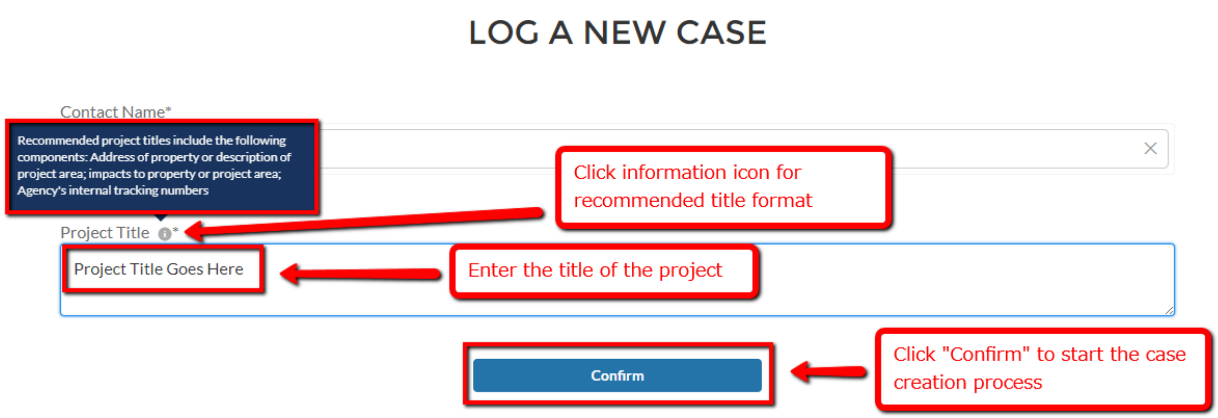


4. Type your first and last name in the Contact Name field and select your name from the drop-down. You will know that it's you by the name of the organization/company/agency underneath your name.

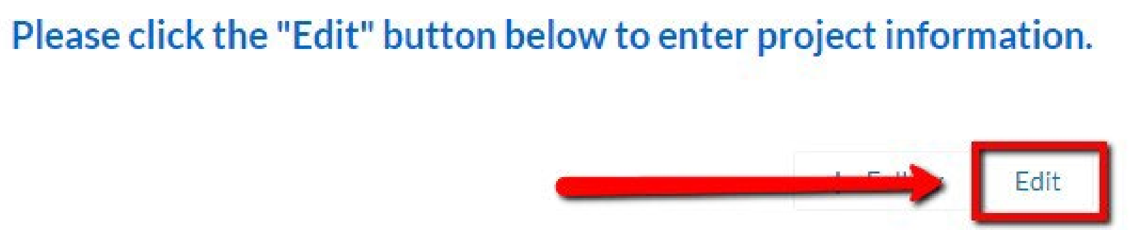


5. Select the option with your name and organization. Once you click on it, your name will be populated in the Contact Name field. The organization name won't be visible at this point, and that's the way it should be.

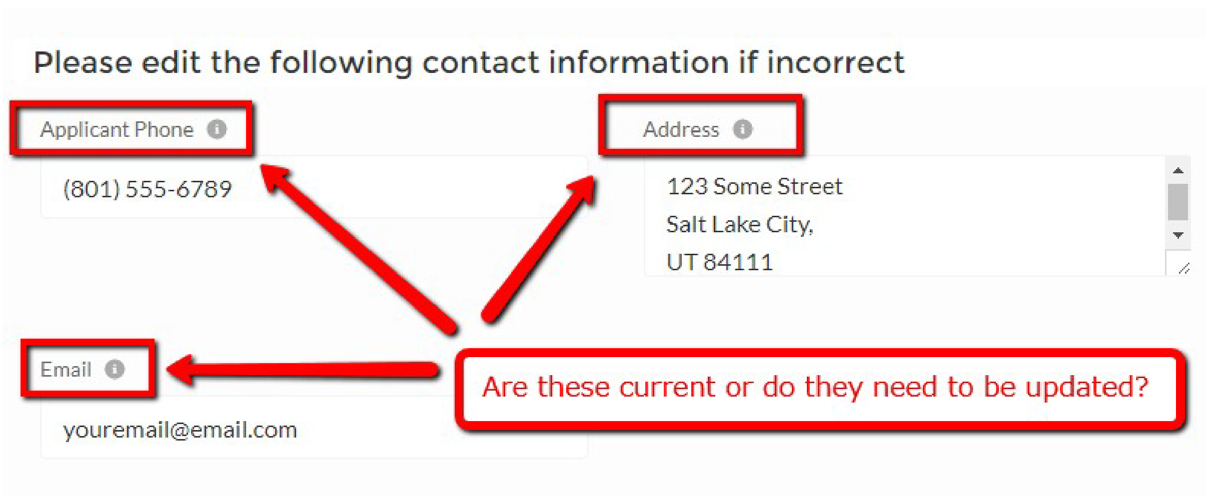
6. Enter your project's title in the Project Title field. Hover over the information icon (represented by a white letter "i" in a gray circle) to see the recommended project title format. Click "Confirm." You will be taken to the case detail page



7. Enter the rest of the project's details by following the instructions below:
a. Click "Edit"



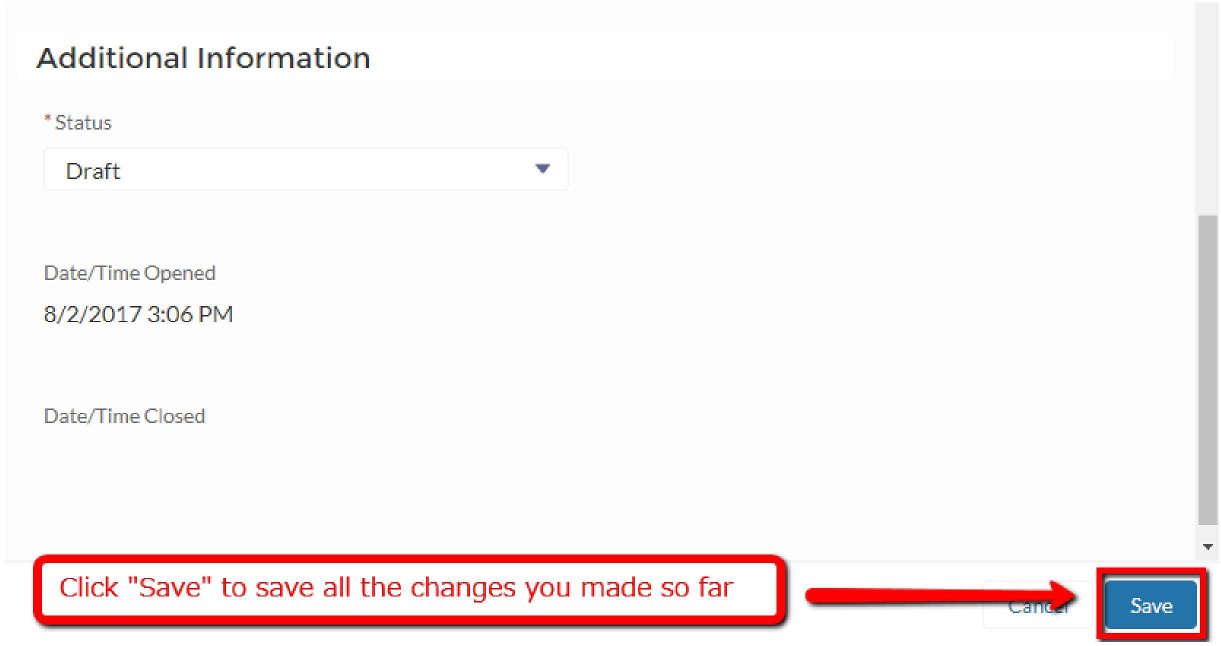
b. Verify your contact information in the section entitled "Please edit the following contact information if incorrect." If any of the information (Applicant Phone, Address, or Email) is wrong, overwrite it with the most up-to-date version



c. Fill out all the required fields you find on the case page

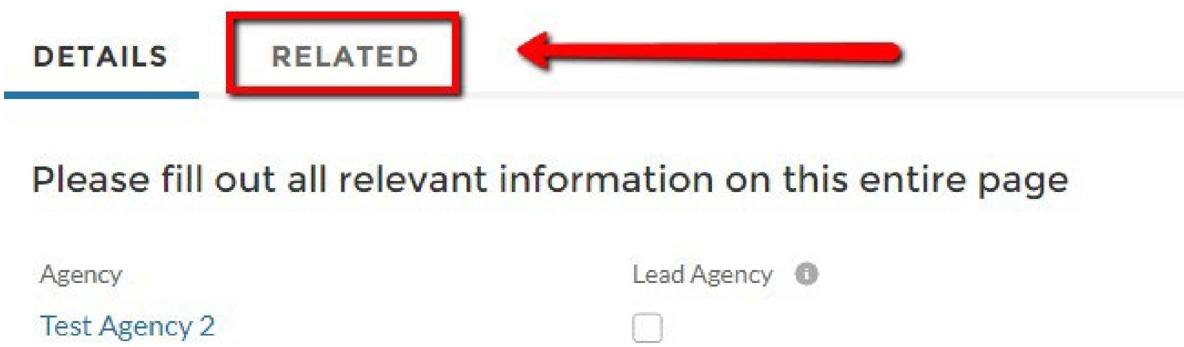
d. Do not edit the "Status" field at this time.

e. Click Save

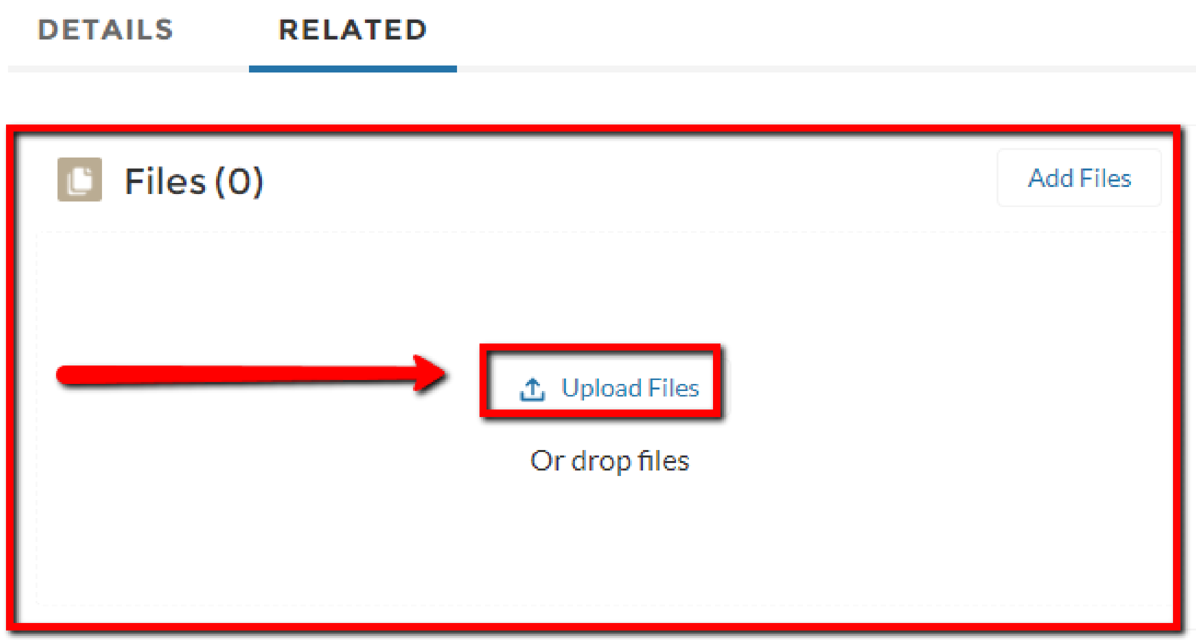


8. Add attachments by following the instructions below:

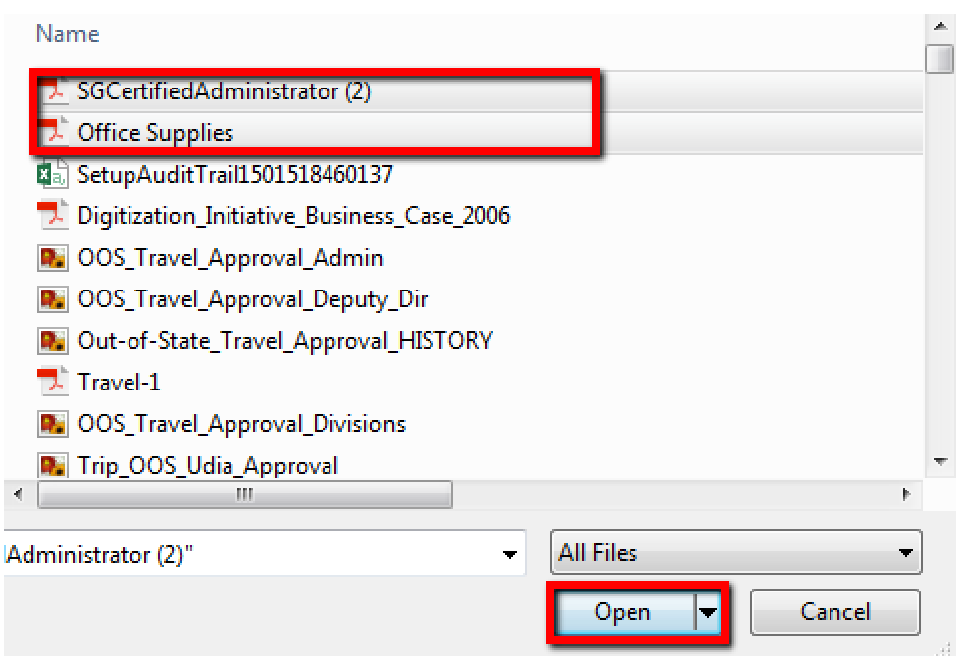
a. Click the tab called "Related" (to the right of the tab called "Details")



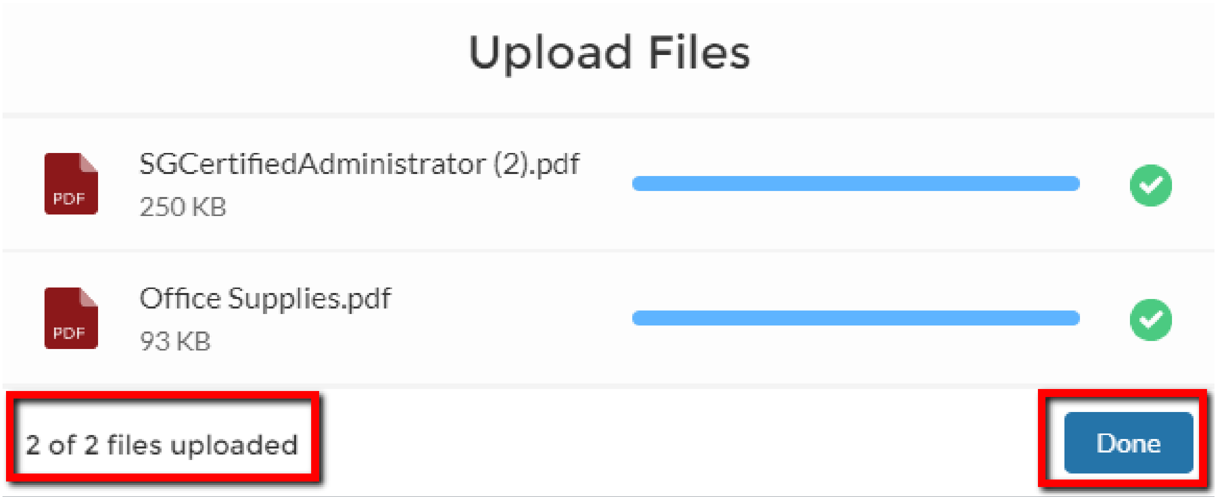
b. Locate the section called "Files" and click "Upload Files."



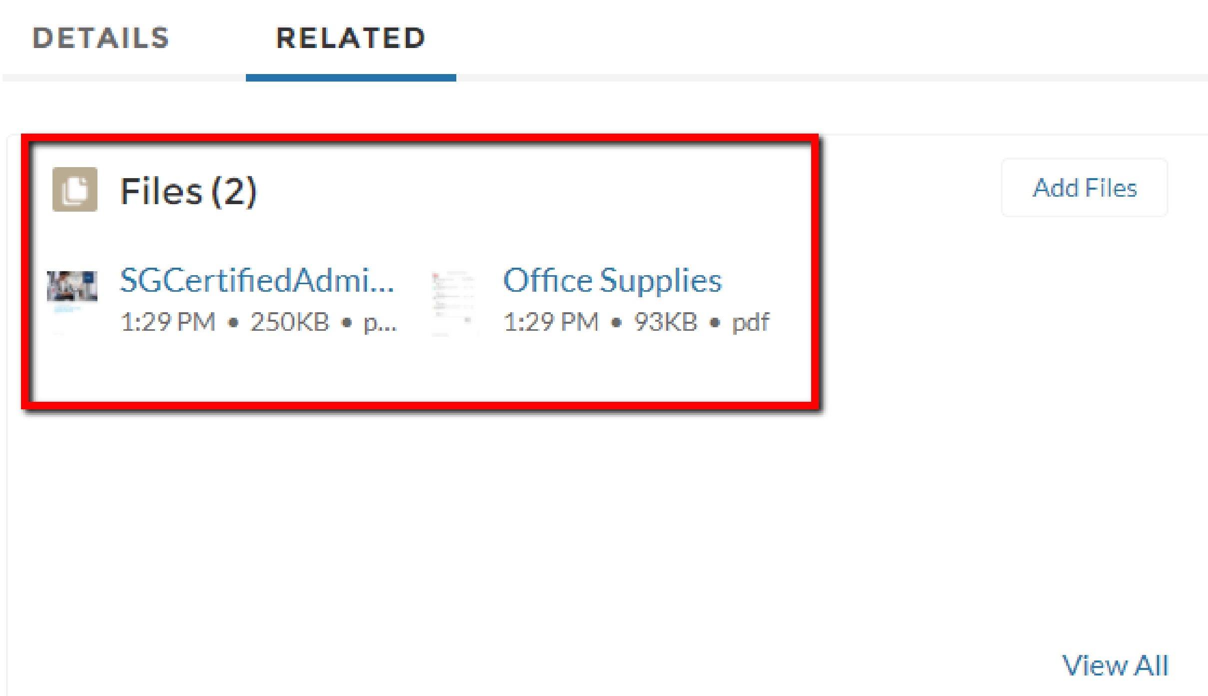
c. Select the file(s) you want to upload by clicking on them. To select multiple files, click the first file's name, hold the "Shift" key, then click the last file's name. This will select the first and last file, and all the files in between. You can also select several non-consecutive files by holding the Ctrl key and clicking the files you want to select. (Alternatively, you can drag and drop your files into this area). Only PDF, XLSX, and ZIP files are supported. After you make the file selection, click "Open."



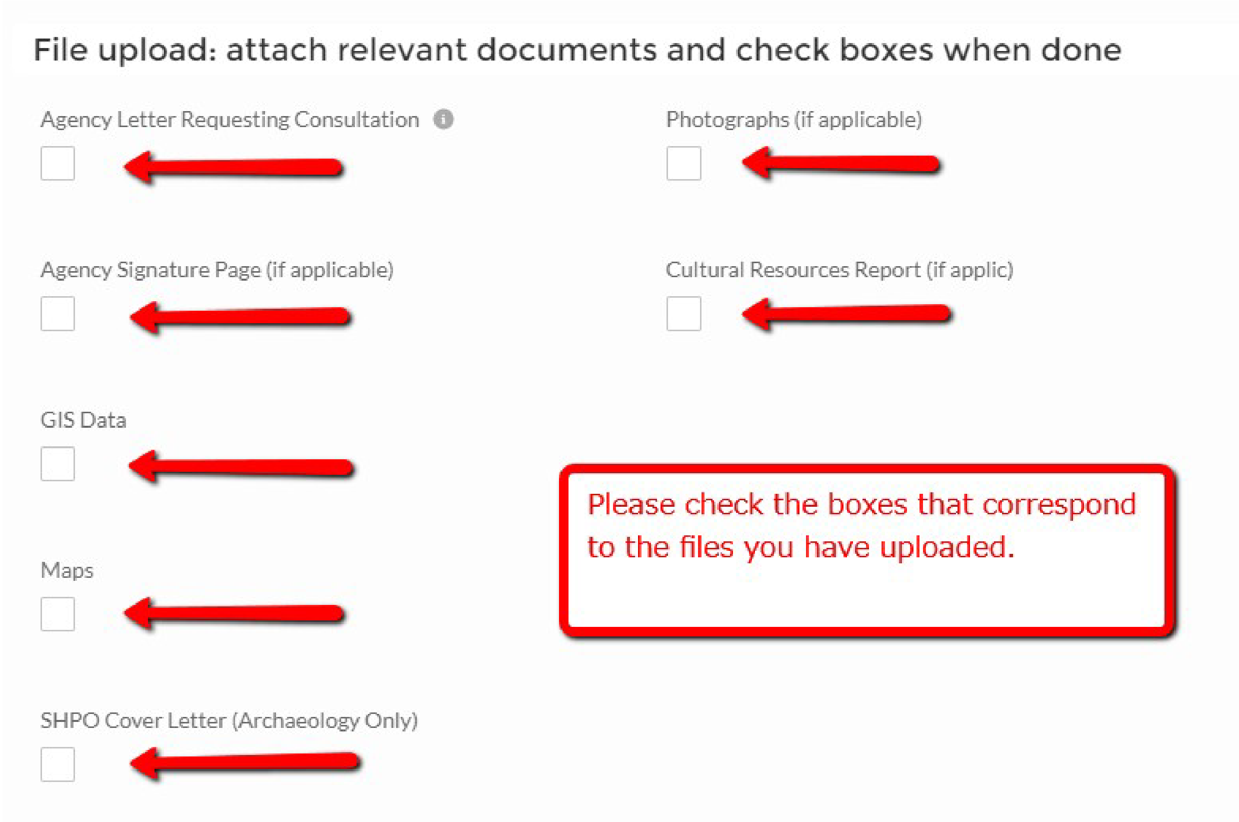
d. Wait for files to upload and click "Done"



e. Check the "Attachments" section to make sure all the files are there

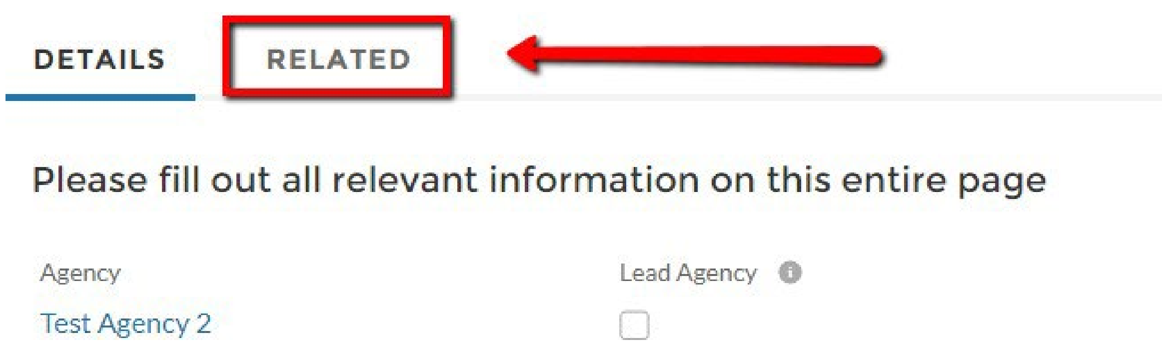


9. Click the "Edit" button again and scroll down to the section called "File upload: attach relevant documents and check boxes when done." Check boxes that correspond to the files you have uploaded.

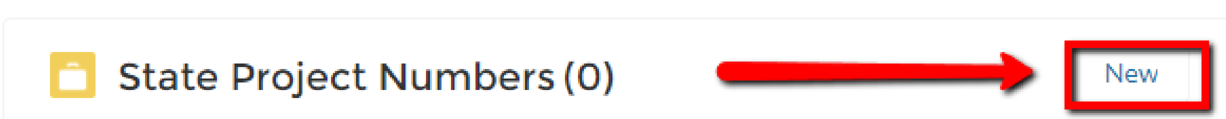


10. Add state project numbers by following the instructions below (STATE PROJECT NUMBERS NOT NEEDED FOR BUILDINGS SUBMISSIONS, ONLY FOR PROJECTS INVOLVING ARCHAEOLOGY):

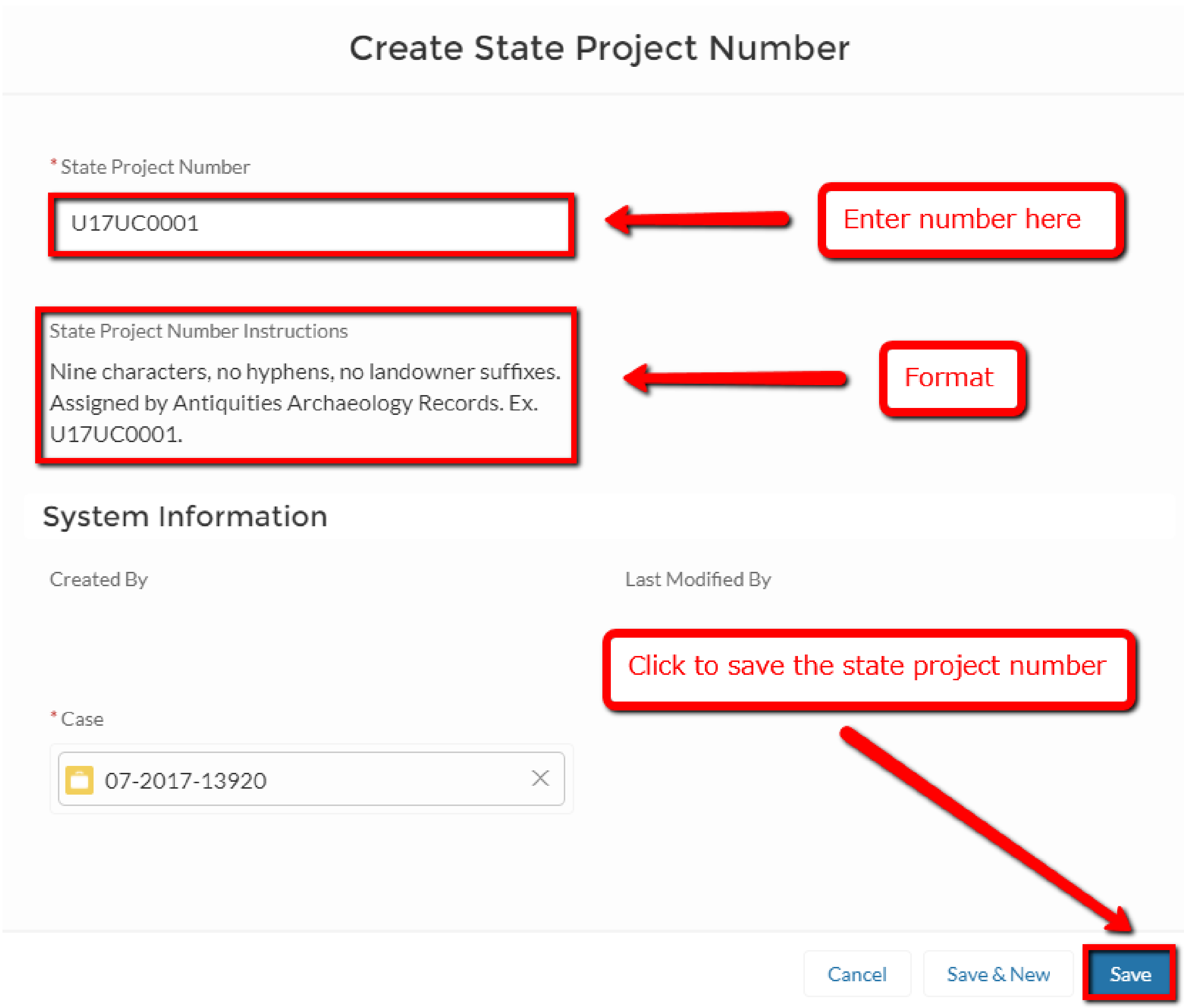
a. Click the tab called "Related" (to the right of the tab called "Details")



b. Locate the section called "State Project Numbers" and click "New."



c. Fill out the State Project Number field following the format outlined in the instructions and click "Save"

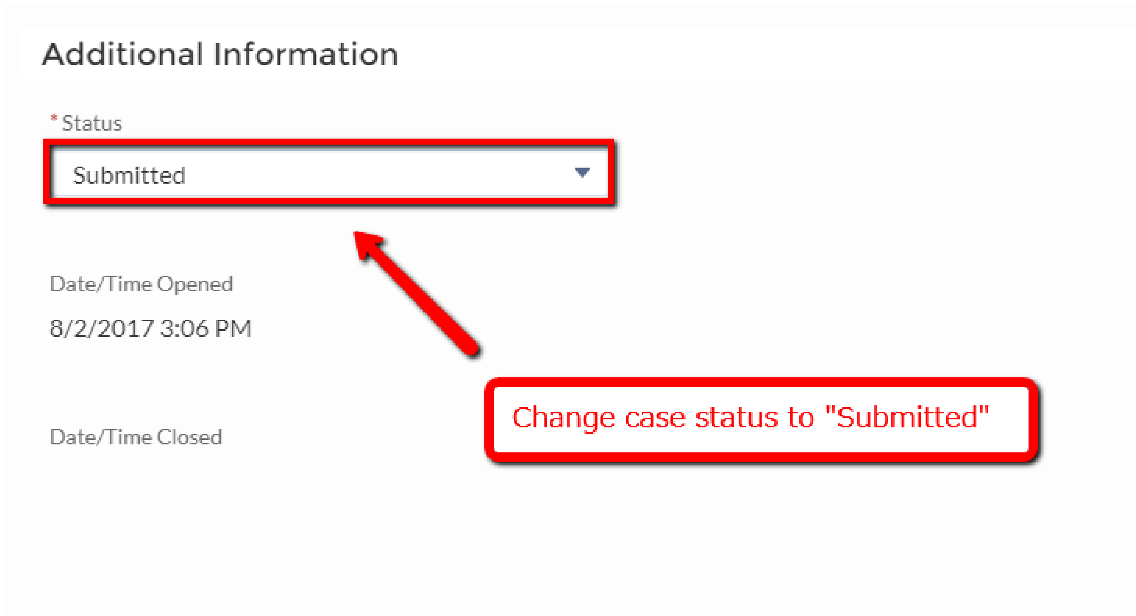


d. To enter another number, repeat steps 10 a-c

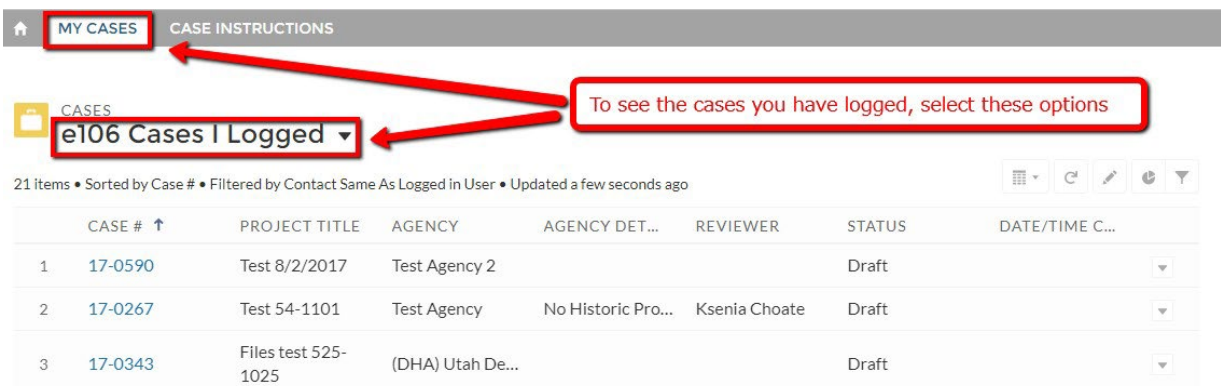
11. Double-check to make sure you have provided all the necessary information

12. Still on the case edit page, find the section called "Additional Information" and locate the "Status" field.

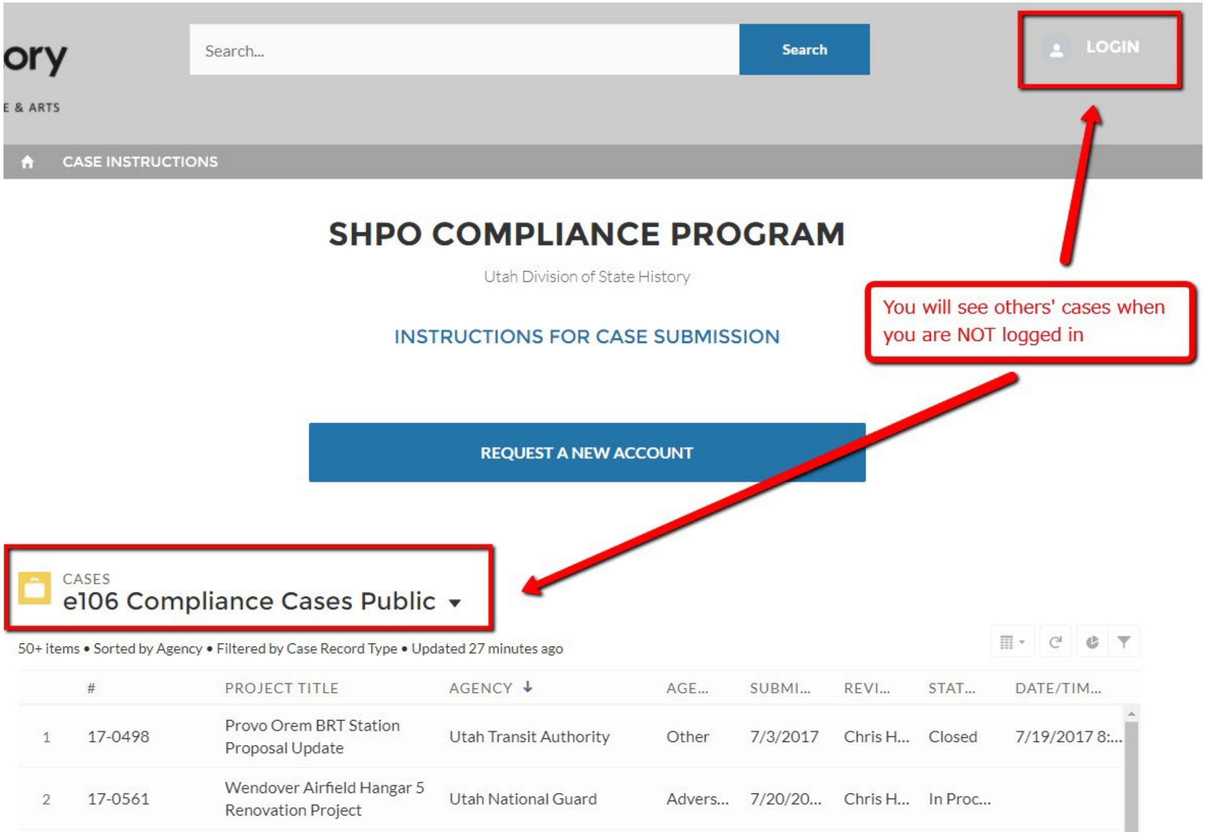
13. Change the Status field from "Draft" to "Submitted." This will send an email to members of the e106 team. Shortly thereafter, they will transfer the case ownership to one of the team members. After that, you won't be able to edit the case, so make sure to change the status to "Submitted" only when you are certain that you have provided all the necessary information. You will still be able to see the case after an e106 team member take ownership of it.



14. To see all of the cases you have logged, click “MY CASES.” Select "e106 Cases I Logged" in the drop-down if it's not already selected.



15. To see cases logged by other applicants, log out. On Home page, select "e106 Compliance Cases Public" in the drop-down if it's not already selected.


ory
E & ARTS
Search...
Search
LOGIN
CASE INSTRUCTIONS
SHPO COMPLIANCE PROGRAM
Utah Division of State History
INSTRUCTIONS FOR CASE SUBMISSION
You will see others' cases when you are NOT logged in
REQUEST A NEW ACCOUNT
CASES
e106 Compliance Cases Public
50+ items • Sorted by Agency • Filtered by Case Record Type • Updated 27 minutes ago
PROJECT TITLE AGENCY AGE... SUBMI... REVI... STAT... DATE/TIM...
1 17-0498 Provo Orem BRT Station Proposal Update Utah Transit Authority Other 7/3/2017 Chris H... Closed 7/19/2017 8:...
2 17-0561 Wendover Airfield Hangar 5 Renovation Project Utah National Guard Advers... 7/20/20... Chris H... In Proc...

Appendix H: Digital Standards

Utah SHPO has made huge strides in the last decade to move from a paper environment to fully digital, with advancements and updates continually being made to create submissions more streamlined for agencies and consultants working in Utah. As always, contact archrecords@utah.gov or the current SHPO e106 Compliance Officer with questions.

Delivery

Submissions to UTSHPO will only be accepted in the digital formats specified below. Records delivery will be via e106.

Minimum Digital Standards (Reports & Site Forms)

Born Digital: All records should be 'born digital,' meaning the records are originally created and later submitted in a digital format (i.e. in Adobe Acrobat, Microsoft Word, or other digital form generator) without being printed and re-scanned. Any record being submitted that is not born digital, and was scanned, requires Optical Character Recognition (OCR) processing by the submitter. OCR allows full text searching of the record within our content management system.

Format: PDF/A. The PDF/A format requirement for optimal digital archiving is easily obtained with current Microsoft Word (see figure 1) and Adobe Acrobat Pro products. Please note that *regular PDF files are not PDF/A files*. Fillable PDF formats need to be remedied by the consultant or agency because this takes an extra step on behalf of SHPO to ingest the documents to the applications.

Methods for generating a PDF/A using your chosen document software should be readily accessible in an internet search (see also Figure 1). If help is needed, please feel free to contact a UTSHPO records staff member (archrecords@utah.gov). Among other means, confirmation of PDF/A format can be attained by opening a PDF in either Adobe Acrobat or Adobe Reader and looking for a 'warning' ribbon at the top of the document stating the file claims compliance with the PDF/A standard (see figure 2).

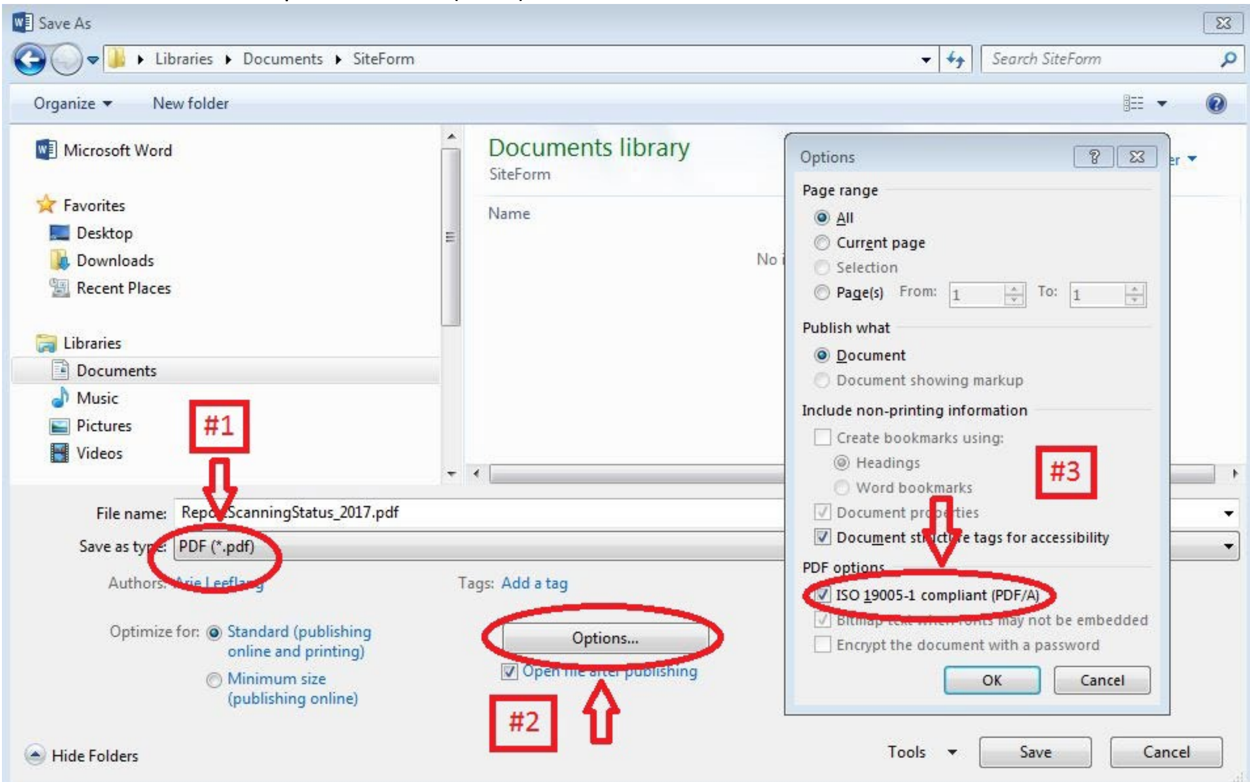


Figure 1: the basic steps to reach PDF/A compliance in Microsoft Word when saving a document.

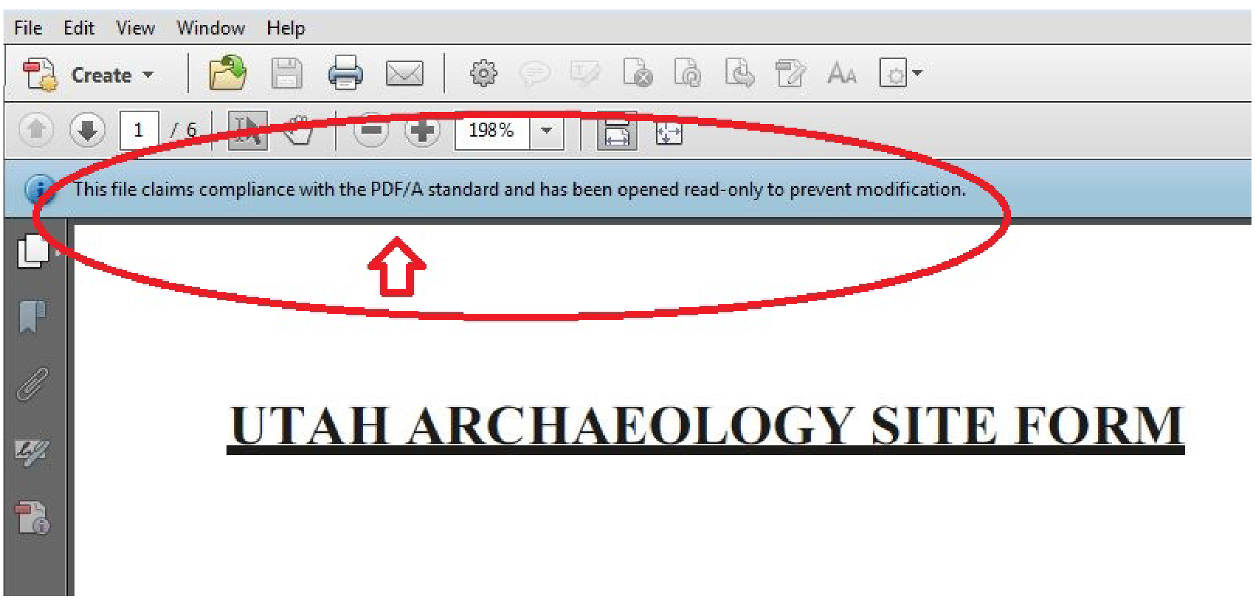


Figure 2: the warning (circled with arrow) displayed by Adobe Acrobat and Reader confirming a PDF is in the PDF/A format. If this warning is *missing* the PDF is likely not in PDF/A format.

Package Resolution: Submitted PDF/A documents will have a minimum 300 PPI resolution

Photos: 3000 x 2000 pixels or larger, at 300 PPI. It is recommended that digital images be saved in 8-bit (or larger) color format, which provides maximum detail even when printed in black-and-white. There is no preference between black and white or color photos.

Archaeological Report Submissions

As specified above, archaeological reports *must be* submitted in a PDF/A format to facilitate long-term digital preservation. With rare exceptions, each report will constitute a single PDF/A file and includes the UTSHPO Cover Sheet as its first page. Rare exceptions may include multi-volume reports where file size may pose certain challenges. Please contact UTSHPO records staff for guidance if your report requires multiple files.

The single PDF/A report file must be named by the SHPO report number without hyphens or landowner-denoted suffixes (e.g. U16UA0001 *not* U-16-UA-0001b). Associated project archaeological site forms should *not* be wrapped into the report PDF/A file, but delivered separately (see below).

Digital maps must be formatted to allow for printing on a sheet of paper no larger than 11x17 for standard printing purposes. If your project area is large and the associated report map will cover an area larger than adequately represented on an 11x17 sheet, please consider breaking your map into multiple maps.

Report maps should appropriately depict the actual survey area if different from the APE. Maps must clearly denote areas of survey, including variability in survey intensity (intensive versus reconnaissance). Submitted project shapefiles must be a polygon of accurate dimensions for the corridor.

Report photos should be a minimum 3000 x 2000 pixels or larger, at 300 PPI. It is recommended that digital images be saved in 8-bit (or larger) color format, which provides maximum detail even when printed in black-and-white. There is no preference between black and white or color photos. If you have other files that do not readily fit into a PDF/A document, but you feel are appropriate for UTSHPO retention, please contact records for the appropriate submission avenue.

Archaeological Site Form Submissions

Archaeological site forms, meeting the requirements set forth in this document, must be provided for any new archaeological site documented or for any existing archaeological site updated during the course of a project. The USAF site form or short form must be used for submitting to UTSHPO.

Archaeological site forms aren't required to be in PDF/A format because they will receive a watermark or stamp after the consultation process. Forms in the fillable format will be returned – they need to be in a static, non-fillable form, otherwise this takes extra time for SHPO to ingest into the applications. Each site form will be constituted of one single file, with all components of the form included (e.g. photos, site sketch, etc.). These single PDF filenames will be the Smithsonian Trinomial with no leading zeros (e.g. 42SA2000 not 42SA02000). All photos must be embedded, with photo captions, within the PDF document.

Archaeological Site Tabular Data Submissions

A spreadsheet (.xlsx or .tsv format) containing key tabular data corresponding with each site form submitted must also be submitted. This spreadsheet contains 21 data points across 37 fields. The spreadsheet's structure *must* match the template provided by UTSHPO here. More information and specifications on the required spreadsheet can be found at that same location.

For each project with recorded sites we require a single electronic spreadsheet for the entire project. Each site will be represented as one row in the spreadsheet (versus one spreadsheet per site). Format will be .xlsx, .xls, .csv, or .tsv. Given the prevalent use of site form generators it is expected that any newly built generator will produce such a spreadsheet according to UTSHPO specifications as part of the records generating process. If such a spreadsheet is *not* produced by the generator, the user or organization will be required to create such a spreadsheet for submission, external from the generator, according to UTSHPO specifications.

Paper or PDF submissions of the spreadsheet data (i.e. an 'encoding form') are not accepted. UTSHPO submissions received without the required spreadsheet will be returned to the submitter for revision.

GIS Data Submissions

Except under certain pre-negotiated situations all UTSHPO records submissions must include spatial data (shapefiles or geodatabase) for project survey area and archaeological site boundaries. Project shapefiles should only include the area surveyed, *not the APE* (unless it has been completely intensively surveyed as part of this project). Spatial data submissions streamline spatial data intake and ensure the most accurate spatial data is being stored by UTSHPO. Spatial data must match UTSHPO templates and meet the following specifications:

- GIS Data: Sites
    - Per the 2011 BLM Data Standard the shapefile or feature class/dataset filename(s) will be the state project number prefixed with a 's'. E.g. sU15UC0001.shp, sU15UC0001.dbf, etc.).
    - All file components are zipped into one file titled as above (e.g. sU15UC0001.zip) per each project and site.
    - One single shapefile or geodatabase should contain all project site boundaries (versus one shapefile per site).
    - Include a field named "Smith_Tri" where the site number is stored without leading zeros (e.g. 42SL100 not 42SL00100).
    - NAD 83 datum required.
    - File Geodatabase preferred.
    - Polygons required. Please denote actual site boundaries.
    - A new plot should be provided for any new site recording or updated site submitted with an updated site form. For these later sites, at a minimum a duplication of the previous site boundary will be submitted if no boundary has changed. Sites revisited, but not updated, will not be included in the submitted spatial data. In short, any submitted site form (new recording, update, or otherwise) will have a corresponding spatial record (shapefile or geodatabase) submitted.

- GIS Data: Projects
    - Per the 2011 BLM Data Standard the shapefile or feature class/dataset filename(s) will be the state project number prefixed with a 'p'. E.g. pU15UC0001.shp.
    - All file components zipped into one single file titled as above (e.g. pU15UC0001.zip).
    - Include a field named "StateProj" where the state project number is stored with no hyphens/dashes or landowner suffixes.
    - NAD 83 datum required.
    - File Geodatabase preferred.
    - Polygons required.
    - We will provide a template (pending) for use by those interested.
    - Different survey intensity should be clearly denoted with different record attributing.

- Accurate and clear representation of *surveyed area*.

- GIS Data: Isolated Finds
  - Utah SHPO is requesting Isolated Finds be sent to SHPO as a part of the GIS package through e106. This is not a substitute for the Ioslated Finds summary in the report, but should be viewed as a snapshot of the summary which can be viewed in GIS.
  - The shapefile or feature class/dataset filename(s) will be the state project number prefixed with a 'i'. E.g. iU15UC0001.shp.
  - Use the template provided by SHPO here, and populate the required fields; Date Recorded, Temp Number (ie, the IO numbering sequence used in the report), Class, Description, Measurements, Estimated Age, and SHPO Report Number.
  - Data should be stored as a polygon, not a point or line. Buffer points and lines by 5 meters, or more if appropriate.
  - All file components zipped into one single file titled as above (e.g. iU15UC0001.zip).

If there are any questions concerning any of these UTSHPO standards please contact Records staff at archrecords@utah.gov. If there are any issues with submitting these files through the UTSHPO e106 system please contact the current Compliance Officer.

Digital Submissions Checklist

"Born Digital" Report in PDF/A format

- SHPO Cover sheet
- File name is Utah Antiquities Number with no formatting
- One PDF/A file for the entire report

"Born Digital" Site forms in PDF format

- UASF form with embedded maps and photos
- File name is Smithsonian site number
- Photo requirements
  - Size and quality

Archaeological Site Tabular Data

- Single spreadsheet for each project
- Follows UTSHPO template

GIS data

- Zipped polygon shapefile or geodatabase of survey (if different from APE) or other activity area with required field names and variable intensity denoted.
- Zipped polygon shapefile or geodatabase of site boundaries with the required field name.
- Zipped polygon shapefile or geodatabase of isolated finds with the required field name.

Filename Conventions

To enable speedy SHPO consultation and ingestion into Antiquities Records, please use the following filename conventions. If your project's files do not fit neatly into the following categories, please contact your friendly SHPO representative for assistance.

*Please note: PDF-A format is required for all PDF documents, please note that the file extension will appear as .pdf. Files not submitted in PDF-A will result in your undertaking being returned to you for editing and may delay consultation.

- Agency Request Letter (transmittal letter)
  Agency_ConsultationRequest.pdf (e.g. SITLA_ConsultationRequest.pdf)
- Agency Signature Page
  Agency_SHPOsignature.pdf (e.g. BLM_SHPOsignature.pdf)
- GIS Data
  (zipped file) project number_GIS.zip (e.g. U17XX1234_GIS.zip)
  - One file for survey data.
    - pPROJECTNUMBER (e.g. pU17XX1234)
  - one file for *all* site data
    - sPROJECTNUMBER (e.g. sU17XX1234)
- Site forms
  - One PDF file for the entire UASF form *and* photos (photos are to be included as part of PDF)
  - Site number with uppercase letters, no leading zeros (e.g. 42DA123.pdf not 42DA00123.pdf)
  - If more than one site form is being submitted, please put all site form pdfs in a single zip file
    - projectnumber_SiteForms (e.g. U17XX1234_Siteforms.zip)
- Archaeology report
  - One PDF/A file for the entire report: SHPO Cover Letter, all appendices, photos, maps, etc should be included
    - Antiquities project number with uppercase letters (e.g. U17XX1234.pdf)
- UASF tabular data
  - Excel spreadsheet, one sheet should have all the project's sites on it
    - Antiquities project number _tabular (e.g. U17XX1234_tabular.xlsx)
- Historic buildings forms
  - Complete one pdf file, the 106 Historic Site Form Fillable.pdf, per property for historic building submissions.
    - AddressStreetNumber_AddressStreetName_City.pdf (e.g. 123East_45thStreet_Ogden.pdf)