

**WYOMING STATE PROTOCOL
APPENDIX J
SHPO REPORTING STANDARDS**

**WYOMING STATE HISTORIC PRESERVATION OFFICE
FORMAT, GUIDELINES, and STANDARDS for CLASS II and III REPORTS
9/17/2012**

Reports must be prepared for all Class II and III inventories (these report standards may also be used for Section 110 planning surveys, Certified Local Government survey and inventory projects, etc.). Reports should be commensurate with the undertaking/project size and the quantity and significance of cultural resources present. Discussion of items below may be as simple as a short sentence or passage, or lengthy and complex. Reports should include the following sections in this order:

- I. Survey Report Cover Page/Resource Summary Table (required)**
- II. Title Page (required)**
- III. Abstract (as appropriate)**
- IV. Table of Contents (as appropriate)**
- V. Undertaking/Project Description (required)**
- VI. Environmental Setting (required)**
- VII. Present Built Environmental Setting (required)**
- VIII. Background Research (required)**
- IX. Survey Methodology (required)**
- X. Inventory Results (required)**
- XI. Conclusions/Summary (required)**
- XII. References Cited (as appropriate)**
- XIII. Attachments (as appropriate)**
- IVX. Appendices (as appropriate)**

The standard "Survey Report Cover Page" and "Resource Summary Table," as well as all other forms and guidelines, are available on the Wyoming SHPO web site at <http://wyoshpo.state.wy.us>. CRMtracker generates standard "Survey Report Cover Page" and "Resource Summary Table." Either the paper or the CRMtracker version can be provided. The CRMtracker version with a DBI number is required for all BLM undertakings; other agencies may also use CRMtracker, confirm this use with the lead agency prior to submitting the report. Please provide one or the other, but not both. For CRMtracker account information, see the SHPO website.

- I. Survey Report Cover Page/Resource Summary Table (required)**
 - a. Consultant Project Number (optional)
 - b. Agency Number (for agency use)
 - c. Review and Compliance Number (for SHPO R&C use)

- d. Cultural Records Office Number (enter WYCRO ID# if applicable) and File Search Number
- e. Author(s)
- f. Report Title - The title should reflect the name and type of undertaking/project. It should be the same as what is listed on the cover letter provided by the lead agency and how the agency refers to the undertaking/project.
- g. Date of Report
- h. Lead Agency (e.g. BLM Rawlins, BLM Buffalo, WYDOT, DEQ, Medicine Bow National Forest ... SHPO is NEVER a lead agency)
- i. State the name of the cultural resource consulting company, if any.
- j. Brief Description of Undertaking/Project - Briefly describe the type of action.
- k. Federal Permit Number and expiration date if applicable.
- l. Survey Methods- Check the transect width (in meters) and check or enter the width of linear corridor (in feet)
- m. County or counties
- n. USGS Quad Maps - Provide the names and dates of all the maps used.
- o. Landowner/Federal Land Managing Agency - Identify the owner(s) of land involved in the undertaking.
- p. Legal Description of the Survey Area - Please provide township, range, and section(s) with $\frac{1}{4}$ location descriptions of the survey area. The $\frac{1}{4}$ locations should describe the area covered by the inventory. General $\frac{1}{4}$ locations are acceptable for undertakings/projects such as transmission lines, seismic lines, or pipelines. Note template corner and/or section line used. In general, WYCRO uses the section corner closest to the undertaking/project or cultural resource regardless of section shape. Universal Transverse Mercator (UTM) coordinates should be used where there is no cadastral survey e.g. Yellowstone National Park.
- q. Acreage - The acreage numbers should be calculated for the federal/non-federal and block and linear inventory. Total acreage should report the entire acreage involved in the survey. Please report total acreage per landowner/land manager if applicable (e.g. BLM 25 acres, State 14 acres, private 7 acres, total = 46 acres). Please also include a breakdown for each BLM Field Office, Forest, etc. if applicable.
- r. File Search Date – File searches should be conducted no more than 60 days prior to your beginning fieldwork date.

- s. Fieldwork Date - Indicate beginning and ending fieldwork dates.
- t. Field Personnel - List the crew chief/field supervisor and all field personnel.
- u. Survey Results - Please indicate whether cultural material was found on the survey. Put the total number of isolated finds/isolated resources and number of sites in the Area of Potential Effect (APE) (i.e. located during the literature/files search as well as on-the-ground survey) in the spaces (not just a check mark).
- v. Resource Summary Table - The report preparer is required to fill out the resource summary table for all resources identified within the APE for the current survey.

II. Title Page

III. Abstract

- a. Type of Undertaking/Project to Include the Proponent and Land Owner/Manager.
- b. Type of Investigation (Class II or III), Include survey acreage and survey type (i.e. block, linear, etc.).
- c. General Undertaking/Project Location for rural undertakings/projects (Drainage Basin, Major Geographic Area).
- d. Urban inventories should include a short description of the built environment.
- e. Summary of Results, including in brief the number and types of resources, resource significance, and potential undertaking/project effects on significant resources, and management recommendations.

IV. Table of Contents (Appropriate for large undertakings/projects.)

V. Undertaking/Project Description

- a. Describe the type of undertaking/project (e.g. well pad, pipeline, aggregate pit, coal mine, etc.) and the elements of the undertaking/project (e.g. four wells, three miles of access road, and one mile of buried pipeline.) Include the total acres involved; specify the length and width of linear undertaking/projects, providing the actual undertaking/project dimensions and not the inventory dimensions. Also include a description of the visible characteristics of the constructed undertaking (e.g. height, mass, color), and any auditory or atmospheric issues created by the undertaking. For example:
 - i. *“ABC Oil, Inc proposes the construction of a well pad and access road. A Class III inventory was conducted of a 10 acre area centered on the well pad and an*

access road 1 mile in length and 50 feet wide on either side of the centerline for a total 100 foot corridor. After completion of drilling, the well will stand 20 feet tall...”

- b. Describe the area and nature of the anticipated disturbance if any or if known (e.g. drill pads, surface blading, lay-down and staging areas, trenching, recontouring, open pit mining.)
- c. Define the area of potential effect (APE) as determined by the lead federal agency including any considerations for **indirect effects** such as visual, auditory, or atmospheric. This description should include how the APE was defined by the lead agency; consultants should contact the lead agency for this information. [Note: The agency shall consider that the APE is influenced by the scale and nature of the undertaking. Potential direct and indirect effects shall be considered when identifying the area of potential effects (36 CFR 800.16(d)). The agency shall define a single APE; areas within the APE may be contiguous or noncontiguous and may be related to direct effects, indirect effects, or both. Since multiple scales of effects are possible within a single APE, the agency should consider not only potential direct effects but also potential indirect effects (e.g. visual, auditory, or atmospheric) when defining the APE.] In some situations, such as a Section 110 inventory or a planning survey, there may not be an APE. If this is the case, state the reason that no APE is defined in the report.
- d. Provide general overview photograph(s) of the proposed undertaking/project area. All photographs, whether in the text or attached, shall be at least 3.5 inches by 5 inches in size. (Digital photos are acceptable. See “Wyoming SHPO Photographic, Archival, and Digital Submission Standards for Reports and WYCPFs” (<http://wyoshpo.state.wy.us/pdf/PhotographicStandards.pdf>) for detailed information and instructions.)
- e. Provide a high quality copy of a 1:24,000 scale standard 7.5’ USGS topographic map for the undertaking. **Do not enlarge or reduce** the 1:24,000 scale map(s). The 1:24,000 scale map(s) should illustrate: the geographical extent of the undertaking (i.e., undertaking/project footprint), the APE (direct and indirect) as defined by the lead agency, the field inventoried area, and locations of resources in the APE (newly identified and previously recorded). Ensure that each map is labeled with legal coordinates and legends as appropriate. Include highlighted areas as needed to help illustrate undertaking/project and cultural resource locations. Topographic lines should be visible. Maps should not be cropped to an individual section but should expansively show the area around the inventory area to the extent possible. The map(s) should have enough detail so it can be geo-referenced. Supplemental maps which are enlarged or reduced are often necessary to enhance the illustration of the undertaking/project or resource locations and, if not already submitted, will be requested by SHPO, when necessary.

VI. Environmental Setting (of the APE) – * for undertakings in urban areas, this section is not necessary *.

- a. Present Environment

- i. Describe the general physiographic area (reference the Wyoming Geographic Landforms Map <http://wyoshpo.state.wy.us/Images/geomap.jpg>).
- ii. Undertaking/Project Area Description (include specific reference to the APE when appropriate).
 1. Geology: Formations (see Love and Christiansen, 1985; Lageson and Spearing) exposed at the surface and their influence on local topography and landforms.
 2. Hydrology: Primary trunk, local drainage patterns, and surface water sources.
 3. Depositional Settings
 - a. Nature of surface deposits (i.e. alluvial, colluvial, aeolian, etc.) and their distribution on the landscape.
 - b. Potential for buried cultural materials.
 4. Vegetation
 - a. General plant communities (see Knight 1994); indicate specific plants if relevant to interpreting environmental history or site function.
 - b. General surface visibility.

VII. Present Built Environmental Setting

- a. What is visible from the undertaking/project? What is visible within the APE? Generally describe the surroundings and visible manmade features (e.g., these might include roads, fences, windmills, buildings, structures, modern oil field development, highways, etc.).
- b. As appropriate, include a representative photograph(s) of the surrounding landscape (if applicable, the undertaking/project overview photograph may be used).

VIII. Background Research

- a. Background research shall be conducted for the entire APE and must include a formal file search from the Wyoming SHPO's Cultural Records Office (WYCRO), GLOs (access the GLOs at <http://www.wy.blm.gov/cadastral/surveydocs.htm>) and appropriate responsible agency(ies) records. It is not necessary to include the printed WYCRO file search in the Class II or III report.
- b. Identify and summarize the type and nature of previous inventories that have occurred in the APE. In general, an undertaking/project-by-project description of the previous inventories is neither necessary nor desired. Indicate if portions of the APE have been previously inventoried. Provide rationale if any areas of the APE were re-inventoried. For example:

- i. *The WYCRO file search (#00001 on 3/10/12) lists seven surveys; three are well pads totaling 30 acres, located in the north half and south half of the SW ¼ of the section ??, Township ?? North, Range ?? West, and four are linear undertakings/projects of which two are located in the SE 1/4 of Section ?? crossing the current APE. A portion of the NW ¼ of the APE was previously inventoried in 1978. This inventory does not meet current professional standards. No resources have been previously recorded in the APE. Three previously recorded resources are reported on the file search. Resources 48XY#### and 48XY#### are located more than one half mile to the west of the current APE and are previously evaluated, with SHPO concurrence as not eligible for inclusion to the NRHP. They are both small prehistoric lithic scatters. Resource 48 XY#### is a contributing segment of the Oregon-California-Mormon Pioneer National Historic Trail. It is one third mile from the eastern border of the APE. This segment of trail has been recorded and evaluated on two separate field visits in 1988 and 1999. Further discussion of undertaking/project effect to this resource can be found in the Inventory Results section of this report.*
- ii. The file search should be broad enough to include an APE for indirect effects (again, the indirect APE is determined by the lead agency through consultation with SHPO and other interested parties) note: files search for the indirect APE can be done on-line for no fee.
- c. Identify and describe cultural resources (eligible and not eligible properties) previously recorded in the APE. The file search should help identify possible landscapes in the indirect APE such as ranches, historic trails, mining districts, traditional cultural properties (TCPs), sites of potential religious and cultural significance (e.g. rock art, cairns) to Indian Tribes, and known burial sites.
- d. Discuss additional sources of information consulted (please cite as appropriate in the references cited section of report). These might include aerial photographs, other land records, archival sources, planning documents, and other sources suggested or required by the responsible agency(ies).
- e. For archaeological resources, provide a context relative to resources that may be anticipated in the undertaking/project area. Please reference and review available contexts on the WYSHPO website at <http://wyoshpo.state.wy.us/HC/Available.aspx>.
 - i. Discuss known resource density.
 - ii. Discuss cultural affiliation/historical themes of known resources. Address these factors to the degree they are applicable and necessary to support evaluations and recommendations.
 - iii. Discuss the chronological placement and environmental setting of resources. Address these factors to the degree they are known or to the degree necessary to support evaluations and recommendations (e.g., Late Archaic resources in this area tend to be located in sand dunes.).

- iv. For known cultural resources, discuss, based on cultural affiliation/historical themes and placement, whether or not these resources should be evaluated as a district and/or landscape.
- f. For the historic period built environment, provide historical contextual information relative to resources that may be anticipated in the undertaking/project area. This discussion should be scaled to the undertaking and the resources encountered. Refer to *National Register Bulletin: How to Complete the National Register Registration Form*, page 4 and *National Register Bulletin: How to Apply the National Register Criteria for Evaluation*, pages 7-10 for guidance on historic contexts relative to specific properties. Please reference and review available contexts on the WYSHPO website at <http://wyoshpo.state.wy.us/HC/Available.aspx>.
- i. Discuss history of undertaking/project area relative to resources that may be anticipated in the undertaking/project area. This is necessary to understanding a historic property's significance and to determining a period of significance.
 - ii. Discuss the property types (e.g. contextual information for homesteads, etc.).
- g. Discuss appropriate historic research conducted prior to field work. Properties eligible under criteria A, B, and/or C generally require additional research (these include homesteads, ranches, trails, roads, canals, etc.). Typical sources include county records, county libraries, local museums, Wyoming State Archives, and the American Heritage Center at the University of Wyoming. To complete this section, please see *National Register Bulletin: Researching a Historic Property*.
- i. Discuss types of historical records reviewed and where they are stored.
 - ii. Provide names and addresses of individuals contacted if applicable.
 - 1. It may be necessary to contact the landowner regarding the history of resources for undertakings where these resources occur on private land.
 - iii. Provide appropriate citations of references used.
 - iv. Discuss the limitations, accuracy, and biases of the archival research.

Note: If VIII.g.i-iv.is not addressed in the report, SHPO will assume the research has not been done and will request that it be completed.

IX. Survey Methodology

- a. Describe the total acres field inventoried. Describe the sizes of survey elements, such as well pad blocks and linear surveys. Describe relationship of survey area to the APE and

any special inventory strategies to aid in assessing indirect effects to identified historic properties.

- b. Extent of Survey Coverage
 - i. Pedestrian Coverage.
 - 1. Transect width (if non-standard, description and justification should include authorization from federal agency, if applicable).
 - 2. Describe other types of coverage (examined cut banks, rodent burrows, road cuts, animal trails, etc.).
 - ii. Supplemental coverage.
 - 1. Remote Sensing.
 - 2. Airplanes or helicopters (In general, this is used for historic trails).
 - 3. Describe any other type of additional identification methods used.
- c. If applicable, describe the collection strategy. Specific artifact and sample collection policies are determined by the responsible lead agency. Check with the lead agency to determine collection policies prior to fieldwork.
 - i. State the disposition of artifacts, photographs, notes, specimen samples, etc. Name the curation facility used. Name where other field notes, photos, and documents can be obtained and accessed. State if the private surface owner has requested artifacts be returned or if the artifacts will be or have been donated to a curation facility.
 - ii. If no collection is made, please state here.
- d. Discuss resource mapping methodology (techniques, equipment).
- e. Discuss testing strategy, if applicable (provide rationale for testing).
 - i. Shovel testing.
 - ii. Auger testing.
 - iii. Backhoe trenching (if approved by agency).
- f. Provide a brief discussion of weather and ground conditions at the time of the survey (e.g., if overcast and foggy with 10 percent snow cover).
 - i. To what extent did field conditions alter methods?

- ii. To what extent might field conditions have biased results?

X. Inventory Results (this includes all cultural resources within the APE, including those found during the background research as well as field survey)

- a. Summarize Cultural Resource Findings (e.g. 23 resources were recorded, 19 prehistoric and four historic; nine IRs were recorded, eight prehistoric and one historic. Two prehistoric resources were re-evaluated and one previously recorded prehistoric site could not be relocated.)
- b. Cultural Resource Descriptions (Each individual resource should be discussed separately using the following format. Include the Smithsonian Trinomial Number. **Discuss properties in alphanumeric order.** Repeat X.b.i – ix. **as necessary** for each resource.)
 - i. General topographic location.
 - ii. Landownership (e.g. BLM, private, split-estate).
 - iii. Size (length, width, total area).
 - iv. Physical remains.
 - v. Cultural affiliation/period of use/manufacture (if known).
 - vi. Condition (i.e. physical condition. Aspects of integrity should be discussed under section X.d.v.).
 - vii. Testing.
 - viii. Assessment of potential threats to the resource (i.e. erosion, etc. not threats from the undertaking/project).
 - ix. Sketch map - illustrate the following as appropriate:
 - 1. Areas tested.
 - 2. Resource boundaries.
 - 3. North arrow.
 - 4. General artifact distribution.
 - 5. Features and/or concentrations of artifacts.
 - 6. Diagnostic artifacts.
 - 7. Collected artifact locations.
 - 8. Datum (note if the mapping of the resource datum is a physical datum or a datum point with no physical datum on site).
 - 9. Pertinent physiographic features (i.e., schematic topographic lines, drainages, depressions, outcrops, modern features, and disturbances).
 - 10. Map key (label all symbols used).
 - 11. Smithsonian Trinomial number.
 - 12. Scale.
 - 13. Relationship to APE (If applicable show the APE boundary on the sketch map).
- c. Resource photographs (see standards at <http://wyoshpo.state.wy.us/pdf/PhotographicStandards.pdf>)
 - i. Resource overview photographs. For large undertakings/projects, a sample set of photographs may be provided in the report as appropriate to illustrate representative types of resources found on the undertaking/project inventory.

- ii. Representative feature photographs, overview, plan and cross-section as appropriate, with scale.
 - iii. Photographs of diagnostic artifacts, as appropriate, with a standard, graduated scale (i.e. no pennies, pens, pencils, trowels, etc., used for scale). Line illustrations are optional.
 - iv. If setting is an important consideration for determining resource eligibility, appropriate setting photographs should be used to support the eligibility determination.
 - 1. Photos are necessary to justify a determination of compromised or altered integrity that causes the cultural resource to be considered not eligible or non-contributing. **Provide photos illustrating the loss/diminishment of integrity of setting, as appropriate.**
 - v. Updated photos must be provided for historic above-ground properties that have not been recorded within the last five years, for properties whose eligibility is in question due to integrity issues, and/or for those that were poorly recorded previously.
- d. National Register of Historic Places Evaluation - All unevaluated resources found within the APE must be evaluated for NRHP eligibility under **all four criteria**. This must include a reasonable rationale and justification under NRHP criteria (36CFR60.4). For guidance refer to *National Register Bulletins: How to Apply the National Register Criteria for Evaluation [Bulletin 15]*, *How to Complete the National Register Registration Form [Bulletin 16A]*, *How to Complete the National Register Multiple Property Documentation Form [Bulletin 16B]*, *Researching a Historic Property [Bulletin 39]* (<http://www.nps.gov/nr/publications/index.htm>), and applicable historic contexts (<http://wyoshpo.state.wy.us/HC/Available.aspx>).
- i. Categorize the resource. A resource must be classified as a district, site, building, structure, or object. A landscape or a traditional cultural property should be classified as a site or a district.
 - ii. Determine which prehistoric or historic context(s) the resource represents. A resource must possess significance in American history, architecture, archaeology, engineering, or culture when evaluated within the historic context of a relevant geographic region.
 - 1. Refer to *National Register Bulletin: How to Complete the National Register Registration Form*, page 4 and *National Register Bulletin: How to Apply the National Register Criteria for Evaluation*, pages 7-10 for guidance on historic contexts relative to specific properties. Contexts available for Wyoming are on the WYSHPO website at <http://wyoshpo.state.wy.us/HC/Available.aspx>.

- iii. Evaluate whether the resource is significant under the NRHP criteria. This is done by identifying the links to important events or persons, design or construction features, or information potential that make the property important.
 - 1. Determine the Area of Significance for the resource.
 - a. Area of Significance is the aspect of historic development in which a property made contributions for which it meets the NRHP criteria. Please use the Areas of Significance provided in the *How to Complete the National Register Registration Form*, pages 40-41.
 - 2. Determine the Period(s) of Significance for the resource.
 - a. Period(s) of Significance is the span of time in which a property attained the significance for which it meets the NRHP criteria. The period of significance should not be taken from the Wyoming Cultural Property Form defined periods of significance as these are broad eras in Wyoming history.
- iv. Determine if the property represents a type usually excluded from the NRHP. If so, determine if it meets any of the Criteria Considerations.
- v. Determine whether the property retains integrity. Discuss the aspects of integrity (location, setting, feeling, materials, workmanship, association, design) as appropriate – not all aspects may apply.
 - 1. The applicable aspects of integrity can be different based on the criteria for which the property is significant. Discuss each aspect of integrity based on the end of the period of significance. Remember that integrity is “sometimes a subjective judgment, but it must always be grounded in an understanding of a property’s physical features and how they relate to its significance. To retain historic integrity a property will always possess several, and usually most, of the aspects.” See *How to Apply the National Register Criteria for Evaluation*. Discuss integrity of the property type (site, building, structure, object, and district with consideration given to landscapes and traditional cultural properties) as it relates to the evaluation and eligibility of the property.
- e. Previously Adequately Evaluated Resources
 - i. For cultural resources that have been previously adequately evaluated, please state when the cultural resource was evaluated and why it was found eligible or not eligible for the NRHP.
- f. Evaluation of Effect

- i. For those resources identified within the APE, provide a discussion of the effect of the proposed action on each resource, regardless of resource eligibility (e.g. “Because the site is not eligible for the NRHP, the undertaking/project will have no effect. Pipeline construction is likely to destroy the site completely.”). Effects discussion should include direct and indirect effects, as applicable. For example, if it was determined that properties identified through the file search or on the USGS topographic map will not be affected by indirect effects, please state why this is the case (e.g. “The undertaking will not be visible from the historic ranch due to topography.”)
 - ii. Address whether the proposed undertaking/project may introduce visual, atmospheric, or audible elements which could have an effect on newly recorded and/or previously recorded historic properties. In general, this pertains only to resources which are, or may be, eligible under criterion A, B, or C.
 - iii. In cases when the effect to historic properties is unknown or there is no effect, such as planning inventories or Section 110 activities, state this in this section of the report.
- g. Recommendations
 - i. Provide recommended alternatives for avoiding or reducing potential adverse effects to eligible resources that may result from implementation of the undertaking.
 - ii. Describe any methods of treatment which could mitigate direct and/or indirect adverse effects on NRHP-eligible properties.
 - iii. Recommend a finding of effect for the undertaking.
- h. Isolated Find/Isolated Resource Descriptions – Provide brief description of each isolate/isolated resource(s) (include how the determination was made that the resource is not part of a buried site); photographs of isolated resource(s) and setting are required.

XI. Conclusions/Summary

- a. Evaluation of Findings and Recommendations for Additional Work.
 - i. Compare expected results to actual results.
 - ii. Provide a discussion of the confidence in meeting the objectives of the inventory and the possibility or potential of buried cultural resources not revealed during the survey of the undertaking/project area. It is just as important to discuss the level of confidence for there being no potential for buried resources as it is for there being a high potential for buried resources.
 - iii. Discuss whether or not further work, such as open trench inspection, monitoring, etc., would be productive and appropriate.

- iv. Make recommendations as to whether or not data recovery is appropriate or necessary as a potential mitigation measure for this undertaking and provide rationale.
 - b. Resource Synthesis - Commensurate with the scale of the undertaking/project, discuss findings in relationship to previous or ongoing work within the region, the contribution to regional research orientations, or inferences to area cultural history or culture process. Use existing contexts as appropriate.
- XII. References Cited** - Use the American Antiquity Style Guide or the Chicago Manual of Style.
- XIII. Appendices** - Attach any applicable appendices. Historical studies, geoarchaeological reports, historic maps, etc. (Please do not attach WYCRO file search results). Copies of radiocarbon lab reports should be included as an individual appendix.
- XIV. Attachments** - Attach Wyoming Cultural Properties Forms (WYCPF) and Isolated Resource Forms (<http://wyoshpo.state.wy.us/Section106/PropertiesForms.aspx>). **Please do not bind these in the report.** Note that prior to the submission of the report, previously recorded resources that are proposed to be divided into smaller resources or combined into larger resources should be discussed with the appropriate agency and the WYCRO. Previously recorded resources that require changes in boundaries, description, or eligibility status require updated WYCPFs. These changes will be included and reflected in the WYCRO database. Provide a discussion of these changes in the Inventory Results section of the report for each resource.
- a. Complete WYCPF and Wyoming Isolated Resource Forms (WYIRF).
 - i. Provide resource legal location and evaluation of all identified cultural resources, including previously recorded resources, within the APE on the WYCPF.
 - ii. For newly recorded resources, complete a WYCPF.
 - iii. For previously recorded resources, a WYCPF update may need to be completed if conditions, integrity, or cultural resource characteristics have changed since the original recording.
 - 1. For example, for historic above-ground resources that have not been recorded within the last five years and/or will be affected by the undertaking, for properties in which contributing/noncontributing determinations are being made for the first time, for properties whose eligibility is in question due to integrity issues, for those whose condition and/or boundaries have changed, and for those that were poorly recorded previously.
 - iv. If an artifact(s) is located meeting the Wyoming SHPO definition of isolated resource, a WYIRF must be completed.

- v. Each WYCPF and WYIRF must have attached a legible standard 7.5 minute USGS map at the 1:24,000 scale with the resource and/or isolated resource clearly plotted. **Do not reduce or enlarge the primary map.** Supplemental maps which are enlarged or reduced may be included to enhance the illustration of the resource areas. Include appropriate resource photograph(s).
- vi. Other Supporting Documentation.
 - 1. Include any other supporting documentation as appropriate. (e.g. radiocarbon lab reports, lithic or faunal analyses, etc.)

END NOTE: The inventory report is a legal document provided for compliance with the National Historic Preservation Act. The inventory report will be reviewed by the SHPO and retained as a permanent state record. It serves as part of the statewide inventory of cultural resources and is not considered a public document. Any document owner (e.g., a responsible federal agency) intending to distribute or otherwise use the inventory report as a public document are responsible for removing or deleting all legal descriptions and resource-specific location maps and information prior to public distribution.

For archaeological resources on federal lands, pursuant to the Archaeological Resources Protection Act of 1979 (16 U.S.C. 470ii) and Section 7.18 of the implementing regulations at 43 CFR Part 7, these reports shall not be made available to the public under subchapter II of Chapter 5 of Title 5 of the United States Code. If this report is prepared under the authority of a federal permit issued in accordance with Section 7.8 of the regulations it shall signify that the permittee has accepted the terms and conditions of the permit and has submitted the report as a legal document for compliance with Section 106 of the National Historic Preservation Act of 1966 as amended (16 U.S.C. 470). Any falsification of information deliberately entered in or withheld from this report shall be considered a violation of those permit requirements, and may result in suspension or revocation of the permit by the issuing federal agency, or may result in penalties pursuant to 18 U.S.C. 1001.

WYOMING SHPO PHOTOGRAPHIC, ARCHIVAL, AND DIGITAL SUBMISSION STANDARDS FOR REPORTS AND CULTURAL PROPERTY FORMS

Revised 10/1/2012

Introduction

The use of digital images in reports has become the preferred medium by the majority of agencies and contractors in Wyoming. The following provides an explanation of photographic and archival standards for reports and site forms to be submitted to the Wyoming State Historic Preservation Office (WYSHPO). These standards pertain to photographs, physical paper documents, and the submission of GIS data and reports in pdf format, not to the content of the report.

PHOTOGRAPHS AND ARCHIVAL CONSIDERATIONS

Photo Quality Standard

Photographic documentation is an integral part of site and project recording. Photos serve to supplement the site plan map by documenting aspects of site location, structure, and condition that cannot be easily drawn. Project photos are important in documenting current conditions of the landscape, visual intrusions, vegetation, setting, and similar aspects of site situation as well as providing photographic documentation of changes through time. Photos are a required part of site and project documentation. Photos and digital images must be clear, crisp, and focused. Digital images should not be visibly pixilated. Color or high quality grayscale is preferred for digital images. Slides may be submitted, but are optional, and are supplemental to photographic prints or digital images. Photographs on Polaroid-style print paper will not be accepted.

Digital Imaging Equipment (Digital Cameras)

Digital images must be taken using a camera having at least **six** megapixels of resolution. Camera phones, disposable digital cameras, and digital cameras with fewer than six megapixels of resolution are not acceptable. Software solutions are applicable and permissible for further correcting and improving the quality of the final printed image. It is advisable to upgrade camera and software technology as with any other computer or digital equipment. WYSHPO reserves the right to update its standards at anytime, including in response to improvements in readily available technology. A state-of-the-art system is not necessary. It is anticipated that WYSHPO may review available technology every three to five years.

It is very important that all camera equipment of any type or manufacture be adjusted to appropriate settings or modes to use in certain situations. Of special note should be the proper use of the "macro" or "close-up" mode on a digital camera. User manuals will specify the focal range of the camera when it is in macro mode. After taking a close-up shot it is often beneficial to review the photo immediately on the camera display, and then zoom in to make sure that the focus is sharp. Additionally, cameras should be set to take photographs of the highest quality, for the equipment to operate properly within the required six megapixel resolution capability. Also, be aware that some software programs, including MSWord and conversions to Acrobat pdf, may "resize" photographs inserted into documents (automatically or as a user option), lowering the resolution and the print quality below WYSHPO standards.

Photographic Format

Photographic prints and digital images converted to prints must be submitted in a 3.5 x 5 inch format or larger (with the exception of feature and artifact photos, which may be smaller). Each photo or image

must be properly labeled. At a minimum, the label must indicate the following items as appropriate: subject identification, Smithsonian number, description of image, direction of view, photographer's name, date, and whether or not the image has been modified. Photographic documentation must be checked in the "Records Inventory" section of the core Wyoming Cultural Properties Form. Original prints or original printed digital images of the general project area and other documentary photos or images must be included in the report. Each Wyoming Cultural Properties form must include a general site overview photo; feature and diagnostic artifact photos should be included as appropriate. Photocopies of photographs or images will not be accepted. All images must be printed on acid-free paper.

Different types of inkjet or laser printers used to print digital images vary greatly in quality and longevity. Those with better quality inks and longevity are preferred. Photos must be printed using a printer with a minimum print quality of 300 dpi. Colorfast and waterproof inks are preferred.

If the original master image is modified or edited using software, a separate file should be saved of the edited version. The master image should be saved unedited. Indicate whether or not the image has been modified or kept in the original form in the image label. Over enlarging of images must be avoided to maintain image quality. Photos must be printed at a minimum of 300 dpi.

Required Photographs or Images (adapted from the National Register Photo Policy Factsheet):

The number and kind of photos taken depend on the size and complexity of the site, basic photographic documentation commonly includes the following types of shots:

Buildings, structures, and objects:

Submit 3.5 x 5 inch photographs showing the principal facades and the setting in which the property is located.

Additions, alterations, intrusions, and dependencies should appear in the photographs.

Include 3.5 x 5 inch photographic views of interiors (if applicable), outbuildings, landscaping, or unusual features if they contribute to the significance of the property.

Historic and archeological sites:

Overview photos (3.5 x 5 inch) showing the site area in relation to major topographic and cultural features. A photo of such large scale may require several frames and necessitate taking photos at some distance from the site. It is useful to have a person or some object (e.g. a vehicle) in these shots for scale. If possible, **include the site datum (made highly visible) in the center of the photo so it can be related to the site sketch map.**

Feature photos showing some overt site detail (e.g., exposures showing deposit depth, evidence of vandalism or other disturbance, excavation units) or site features (e.g., hearths, stone circles, cairns, surface depressions). Again, it is required to have a scale in the field of view, a person or recognizable object in this case is acceptable. Please also relate the photo to the site map. Feature photographs are **not** required to be 3.5 x 5 inches in size; however, they should be of a size that allows for sufficient detail to be easily recognizable. Show photo points on the sketch

map or include a separate map with photo points plotted, as appropriate. Photos of significant features must be keyed to the site sketch map and site form.

Artifact photos showing the size and material of artifacts present, particularly diagnostics, can be an important part of evaluating site significance. A scale must be included in this type of photograph and **significant** items must be keyed to the sketch map. Artifact photographs are **not** required to be 3.5 x 5 inches in size; however, they should be of a size that allows for sufficient detail to be easily recognizable. Macro settings may be appropriate to use when taking artifact photos.

Architectural and Historic Districts (key all photographs to the sketch map for the district):

Submit 3.5 x 5 inch photographs showing major building types and styles, pivotal buildings and structures, and representative noncontributing resources.

Streetscapes and landscapes are recommended. Aerial views may also be useful. Views of significant topographic features and spatial elements should also be submitted.

Views of individual buildings are not necessary if streetscape views clearly illustrate the significant historical and architectural qualities of the district.

Archeological Districts:

Submit 3.5 x 5 inch photographs of the principal sites and site types within the district following the guidelines for archaeological sites (see above).

ARCHIVAL CONSIDERATIONS

The long-term survival of paper and photographic records is a critical issue. When submitting records to WYSHPO, please adhere to the following standards:

Paper and Forms

Acid-free paper must be used for all records simply because it lasts longer. Acid-free paper is readily available from common retail supply sources for office paper.

All reports and forms, including photo labels, must be in typographic font of appropriate size and readability, and not hand written.

Durability and Archival Standard

All imagery submitted must have been created with a process having an image life of at least 20 years. WYCRO may test occasional photographic or digitally produced imagery in appropriate ways to ensure durability of records in the archive. Records that are not sufficiently durable may be rejected as a group.

Mounted Photos

Although the mounting of photographic prints in reports has become quite rare, it is necessary to provide the following information should this photo production method be used. Almost all mounting methods cause deterioration of the print with time and eventually lose their adhesive power, resulting

in the loss of the print from the page. This cannot be avoided completely, but heat-sensitive adhesive sheets are less destructive and last longer than other methods. In any event acid-free adhesives are to be used. The best method of including photos in a report is to include archivally sound sleeves in the report such as chemically inert polypropylene photo pages. Note that the stiff plastic sleeves known as PVC, or polyvinyl chloride, must not be used; this material contains gases harmful to just about everything. In all cases, photos must be marked (pencil or permanent ink only -- no ball-point or water-based pens) on the backside for association with the correct figure numbers and captions in the report if they become separated from the report or sleeve. Note that the word "archival", often found on plastic sleeves, does not always refer to archival quality materials; it may refer to the archival company. Care must be taken when purchasing plastic materials, because not all plastics are sound for preservation. Only clear, inert, polypropylene or polyethylene slide and negative pages should be used for negative and slide storage.

Magnetic Computer Media

Submission in electronic format is supplemental to the other photo and report requirements. Images should be submitted on CD-ROM or DVD.

Archiving computer data on magnetic media has two major problems. First, the magnetic media used by most PCs will not reliably store data for extended periods of time. Second, the format that applications use for storing data changes as new versions of the application are released. At some point in time the old format becomes unreadable by the current technology. As with all electronic information, digital images are very volatile which places historical images at risk. The major concerns are: storage media may only last 5 years or less; the hardware and software will become obsolete and place the information at risk; once an image is no longer being accessed for viewing on a regular basis, there is a risk of bit degradation that will not be identified; and the cost of migration of non-accessed information is extremely expensive and may also result in a degradation of the image. Consequently, at this time, the WYSHPO cannot guarantee the long-term survival of any information submitted on magnetic media.

DIGITAL DATA SUBMISSION

CRM Reports for Publication on SHPO Data Transfer Site

The Wyoming Cultural Records Office is providing secure access to CRM reports through the WYCRO Online Database and Internet Map Service. Submission of digital files is voluntary. PDFs converted from original digital format (such as a word processing document) is the preferred process to create a digital file.

- ✓ At least two original paper copies must be submitted to the lead agency
- ✓ Final reports should be submitted to SHPO Data Transfer Site **after** they have been approved by the lead agency.
- ✓ Digital reports should be submitted (by the federal agency) in pdf via CD-ROM, dvd or to the SHPO data transfer site (see instructions below).
- ✓ Submitted pdf files are intended for access through Internet connections and file sizes should be relatively small (~ less than 50 megabytes). Software capable of producing pdf files (such as

Microsoft Word) generally has a quality setting that includes a Web setting. From the file menu use: File, Save as pdf and choose the “Minimum size (publish online)” setting.

- ✓ Very large reports can be broken into sections.
- ✓ Label the file with the WYCRO ID that is assigned to the project. – (e.g. “64399.pdf” if it is in multiple volumes label it “64399_2.pdf, 64399_3.pdf, etc.)

Submitting GIS Files

GIS data files for cultural resources and projects may be submitted to WYSHPO.

- ✓ GIS data should be submitted in a file geodatabase (gdb). WYSHPO is providing a template geodatabase as well as instructions on a WYSHPO web page or by request.
- ✓ Project shapes and site shapes must be separate layers
- ✓ Linear sites and projects should be polyline shapes. Other sites and project shapes should be polygons.
- ✓ Projects and sites should be limited to boundaries or extents. SHPO will not process files containing artifact or feature point plots.
- ✓ Sites should be combined in one polygon and/or line layer as appropriate.
- ✓ Site attributes should contain the site number, consultant project number and CRMTracker DBI number (if applicable)
- ✓ Project attributes should include the CRMTracker DBI number (if applicable), and consultant project number.

Submitting Files to the WYSHPO Data Transfer Site

WYSHPO has established a data transfer site at <https://pepperjackshpo.uwyo.edu>. The user login is ‘shpouploads’ and the password is ‘public’. To upload files to the WYSHPO server, click the Pick Files button in the upper left corner of the browser window, navigate to and select the file on the user’s computer and click the Open button. The name of the file will appear above the Pick Files button. Click the Upload button below the Pick Files button to complete the transfer. Uploaded files are secure and are not available for viewing or downloading from the upload portion of the web site. WYSHPO will move files to appropriate locations for viewing from individual accounts (such as the WYCRO Online Database and WYSHPO Map service).

To obtain technical assistance with digital data submission, please contact the WYCRO office at 307-766-5336.

WYOMING RESOURCE DEFINITIONS AND RECORDING GUIDELINES

WYOMING PREHISTORIC AND HISTORIC SITE DEFINITION

A prehistoric site is 15 or more spatially associated artifacts within a 30 meter diameter area (site may be much larger than 30 meters in diameter). A feature is a site (e.g. hearth, cairn, stone circle).

A historic site is 50 or more spatially associated artifacts within a 30 meter diameter area (site may be much larger than 30 meters in diameter).

WYOMING ISOLATE/ISOLATE RESOURCE DEFINITION

A prehistoric isolate is defined as 14 or fewer spatially associated artifacts where no buried cultural materials or features are thought to exist.

A historic isolate is defined as 49 or fewer spatially associated artifacts where no buried cultural material or features are thought to exist.

DEFINED NON-SITES AND PROPERTY TYPES REQUIRING NO FORMAL DOCUMENTATION

The appropriate lead agency cultural resource specialists must review and approve any deviation from this list. In most cases, formal documentation of the property types listed below is not required.

Existence of these defined non-sites and property types within the survey area, and justification for their exclusion, must be discussed in the project report. If any of these property types exhibit significant architectural or engineering features, or are associated with a National Register-eligible site or district (either within the boundary, or clearly related to the significance of a NRHP-eligible site or district), they should be recorded on a Wyoming Cultural Properties Form. Professional judgment and common sense should be applied. In general, Smithsonian numbers will not be assigned to the following property types:

1. Utility lines (i.e., power lines, towers, telephone lines, fiber optic cable, etc.)
2. Pipelines (i.e., water, gas, etc. This does not include early wooden pipelines.)
3. Isolated stock dams, troughs, spring boxes, and associated windmills.
4. Elevation, bench, and section markers (i.e. all survey or cadastral markers).
5. Car banks (i.e., the use of abandoned cars, farm machinery, appliances, etc. to stabilize riverbanks, stream banks, or drainages).
6. Rip-rap (i.e., the use of cobbles, rock, or wood to stabilize riverbanks, stream banks, or drainages)
7. Isolated abandoned motorized vehicles, appliances, and mobile homes.
8. Fences and enclosures (i.e., barbed wire, chain link, buck-and-pole, or other types of pasture fence.) This does not include corrals, roundup or load-out facilities.

9. Unnamed two-track roads (i.e., ranch roads, seismic roads, etc.). This will require standard historic research to determine if the roads are named. Named roads need to be formally recorded; generally, unnamed roads do not need to be recorded. Discuss in the report the historic research conducted (i.e. GLO check, county records, historic maps, etc.)
10. Recent trash (i.e., highway trash, etc.)
11. Producing oil/gas wells and dry hole markers.
12. Water control channels, laterals, spreaders, canals, and ditches that are not designated by name on the USGS Topographic maps. (Water records can be found on the SEO's website at <https://seoweb.wyo.gov/e-Permit/> or in the "tabulation of Adjudicated Surface Water Rights of the State of Wyoming: Water Division Numbers One-Four.")
13. Samples of defined lithic landscapes. Approval from the lead agency cultural resource specialist must be obtained for the cultural resource permittee to apply this exclusion.
14. Short-term camps associated with stockgrazing and recreation that provide no significant information.
15. Temporary sawmill sites, slash piles, and isolated woodpiles.
16. Prospect pits associated with mineral exploration or mining with no associated features, cribbing, and/or less than 50 associated historic artifacts.
17. Roads that have been reconstructed within the last 50 years do not need to be recorded. Abandoned segments that are not associated with an eligible road do not need to be recorded.