

COOPERATIVE PURCHASE CONTRACT

Contract No. _____

The Cooperative Purchase Contract ("Contract") by and between the City of Flagstaff, Arizona, a political subdivision of the State of Arizona ("City") and EnviroSystems Management, Inc., an Arizona corporation ("Contractor") shall be effective as of the date of the last signature below.

RECITALS:

- A. Contractor is a fully authorized provider of Cultural Resources Surveys, Site Visits, Recording/Updates, Evaluations of NRHP Eligibility and NRM Data Entry who is recognized as a General Services Administration (GSA) Advantage Contractor under **GSA Contract Number 47QRAA22D005M** ("Agency Contract"); and
- B. The City has authority to enter into a cooperative purchase contract with Contractor utilizing the Agency Contract.

AGREEMENT:

NOW THEREFORE, in consideration for the mutual promises contained herein, the Parties agree as follows:

1. Materials and/or Services Purchased: Contractor shall provide to the City the materials and/or services, as specified in the Scope of Work attached as Exhibit A, and the Proposal attached as Exhibit B in accordance with the Agency Contract. A general description of materials and/or services being purchased is:

**Cultural Resources Surveys, Site Visits,
Recording/Updates, Evaluations of NRHP Eligibility
and NRM Data Entry**

2. Terms and Conditions of Agency Contract Apply: All provisions of **GSA Contract Number 47QRAA22D005M**, including any amendments, are incorporated in and shall apply to The Contract as though fully set forth herein. Contractor is responsible for promptly notifying City in writing of any changes to the Agency Contract related to price for materials and/or services.
3. Grant Provisions: Payment to Contractor shall include grant funds derived from the U.S. Department of Agriculture, United States Forest Service, and Coconino National Forest. The provisions of the Four Forest Initiative Heritage Support – Grant Number 23-PA-11030400-261 shall apply to the terms and conditions of The Contract.
4. Payment:
 - 4.1. Payment to Contractor for the materials and/or services not to exceed **eight hundred eighty-two thousand, six hundred sixty-four dollars and eighteen cents (\$882,664.18)**; made in accordance with the price list and terms set forth in the Agency Contract.
 - 4.2. Any adjustment to the Payment amount must be approved by mutual written consent of the parties through a formal amendment. The City Manager or his/her designee may approve an amendment if the amendment price increase is less than \$100,000; otherwise, City Council approval is required.

5. Certificates of Insurance: All insurance provisions of the Agency Contract shall apply, including any requirement to name the City as an additional insured. If requested, Contractor shall furnish City with a copy of the current Certificate of Insurance required by the Agency Contract.
6. Term and Renewal: The Contract shall commence upon execution by the Parties and shall continue for a period of three (3) years with an option for two (2), one (1)- year renewal periods.
7. Notice: Any formal notice required under the Contract shall be in writing and sent by mail and email as follows:

To the City:
 Neil Chapman
 Wildland Fire Captain
 City of Flagstaff
 211 W. Aspen Ave.
 Flagstaff, AZ 86001
 Email: neil.chapman@flagstaffaz.gov

To Contractor:
 David R. Hart
 Vice President
 EnviroSystems Management, Inc.
 23 E. Fine Avenue
 Flagstaff, AZ 86001
 Email: dhart@esmaz.com

To the City:
 Lauren Clementino
 Senior Planner
 City of Flagstaff
 211 W. Aspen Ave.
 Flagstaff, AZ 86001
 Email: lclementino@flagstaffaz.gov

With a copy to:
 Joshua Linam
 Sr. Procurement Specialist
 City of Flagstaff
 211 W. Aspen Ave.
 Flagstaff, AZ 86001
 Email: Joshua.linam@flagstaffaz.gov

8. List of Exhibits

- Exhibit A – Scope of Work
- Exhibit B – Proposal
- Exhibit C – Grant Provisions

9. Authority: Each Party warrants that it has authority to enter into the Contract and perform its obligations hereunder, and that it has taken all actions necessary to enter into the Contract.

(Remainder of Page Intentionally Blank)

IN WITNESS WHEREOF, the City and Contractor, by their duly authorized representatives, have executed The Contract as of the date written above.

City of Flagstaff

Contractor

By: _____
City Manager

By: _____

Title: _____

Dated: _____

Dated: _____

Attest:

Approved as to form:

City Clerk

City Attorney

EXHIBIT A - SCOPE OF WORK

CITY NEEDS: The City of Flagstaff Fire Department is seeking a proposal from a professional firm to provide cultural surveys, site revisits and re-recordings/site updates, evaluations of sites for their eligibility to the National Register of Historic Places, reporting, data entry and management of Natural Resource Manager (NRM) cultural resource database of record, and other cultural resources work as needed across the Flagstaff and Mogollon Rim Ranger Districts of the Coconino National Forest.

All submissions must be electronic.

PROJECT SPECIFICATIONS

This agreement provides for cultural surveys, site revisits, re-recordings/site updates, evaluations of sites for their eligibility to the National Register of Historic Places, reporting, data entry and management of Natural Resource Manager (NRM) cultural resource database of record, and other cultural resources work as needed. Cultural survey project efforts will be documented for submission to the Coconino National Forest and the Arizona State Historic Preservation Office for concurrence, as needed. Project work will include heritage inventory and management in support of ecosystem restoration, hazardous fuels reduction work, and more.

This project requires two reports, including one each for heritage work on the Flagstaff and Mogollon Rim Ranger Districts. Project work listed below will be separated into the two different reporting efforts specific to those districts.

All project work undertaken in this agreement will occur on National Forest System (NFS) lands. With regard to the City's contributed labor, the City is responsible for the daily administration and supervision of its employees, contractors, and/or volunteers; the U.S. Forest Service is responsible for the oversight of the City's fulfillment of agreement tasks outlined in this agreement. The Coconino National Forest and the City will work as collaborators in the management and oversight of contracts.

The Contractor shall furnish all personnel, facilities, equipment, materials, supplies and services and otherwise do all things necessary for heritage resources field inventory, site updates, and other associated activities located on the National Forest lands within Region 3 of the U.S.D.A. Forest Service in Arizona, hereinafter referred to as 'the Forest Service'. The scope of this project will include intensive and sample archaeological pedestrian survey and site updates as described below and in task orders to be issued under this contract.

For numerous widely scattered spot surveys of small areas (for example site inspections/re-recording for numerous previously recorded archaeological sites scattered across a forest unit) details of specific projects will be provided to the contract awardees for pricing these tasks. Pricing for these scattered units will be project specific and will be separate from the block survey acres.

TASKS

Unless otherwise specified in the individual task projects, the contractor will be required to meet the following schedule for each task order issued:

A. Fieldwork – Progress reports shall be delivered to the designated City of Flagstaff Representative at the time schedule identified in the task order. Within five (5) business days of the completion of fieldwork, the contractor shall deliver to the copies of all draft site forms, IO forms, sketch maps, topographic maps showing site locations and geospatial data.

B. Draft Report – One electronic copy of the draft report with all forms, photographs, electronic data/files, digital images, and maps will be completed and delivered to the COR, postmarked no later than 40 business days after the completion of the fieldwork.

C. All site recording, site update data, and geospatial data collected by the contractor, as specified in this package, will be done so through the NRM Heritage Mobile application. A draft version of the data package will be submitted after the contractor has received comments on their draft report comments. This will be reviewed by the COR and then the contractor will make all final edits and it will be submitted with the final deliverables package.

D. City of Flagstaff Representative Review – Will be completed with comments and suggested changes (if necessary) delivered to the contractor, postmarked no later than 45 business days after the receipt of the draft report.

E. Final Report – One paper copy of the final reports and one electronic copy of the final reports with all forms, photographs, electronic data/files, digital images, maps, along with final geospatial data must be completed and delivered to the COR, postmarked no later than 20 business days after the receipt of the COR Draft Report Review.

Flagstaff Ranger District Project:

Timber/Rx Sample Survey (total acres)	914
Low site density	914
High site density	0

Revisits outside of survey units (see Table 1, below)	10
Revisits within survey units	0
Data Entry (up to)	30

Table 1 includes information on site revisits for sites within the overall restoration units that are having sample survey completed therein. There are ten sites to be updated and some may occur in the pedestrian survey units. See information below on the level of update needed.

Table 1. Site updates within the overall restoration units.

RESOURCE #	Resource Name	NRHP Status	Updated in ESM Contract?
3040500102		Eligible	Yes, full update
3040500125			Yes, full update
3040500276	MORMON LAKE GUARD STATION	Eligible	Yes, only validate, full updates 2017-2019
3040500332		Eligible	Yes, partial and/or validate update since last update was 2014
3040500333	SALAS HOMESTEAD	Unevaluated	Yes, partial and/or validate update since last update was 2016. Do need NRHP eval
3040500393		Not Eligible	No, Determined Not Eligible
3040500413		Not Eligible	No, Determined Not Eligible
3040500457			Yes, full update
3040500458			Yes, full update
3040500491			No, updated in 22PA110304-174
3040500552		Eligible	No, updated in 22PA110304-174 and full update in 2019
3040500553			No, site has been declassified. Will remove from project
3040500570	SCOTT SPRING CABIN		Yes, full update
3040500571			No, updated in 22PA110304-174
3040500572			No, updated in 22PA110304-174
3040500583			No, updated in 22PA110304-174
3040500587			Yes, full update

3040500590	Clark Valley RR	Not Eligible	No, Determined Not Eligible
3040500592	Clark Valley-Howard Mountain RR	Not Eligible	No, Determined Not Eligible
3040500594	Mormon Mountain RR	Not Eligible	No, Determined Not Eligible
3040500594	Mormon Mountain RR	Not Eligible	No, Determined Not Eligible
3040500704	OLD LAKE MARY ROAD	Eligible	No, validate portions in survey blocks, not overall restoration blocks. Possible you will find new segments.
3040500793		Not Eligible	No, Determined Not Eligible
3040500810	Tempe Camp		No, Option C. If Option C not awarded then will leave unevaluated with a quick validate.
3040500850		Unevaluated	Yes, partial and/or validate update since last updates in 2016 and 2017. Do need NRHP eval
3040500856		Not Eligible	No, Determined Not Eligible
3040500857		Not Eligible	No, Determined Not Eligible

If budget allows:

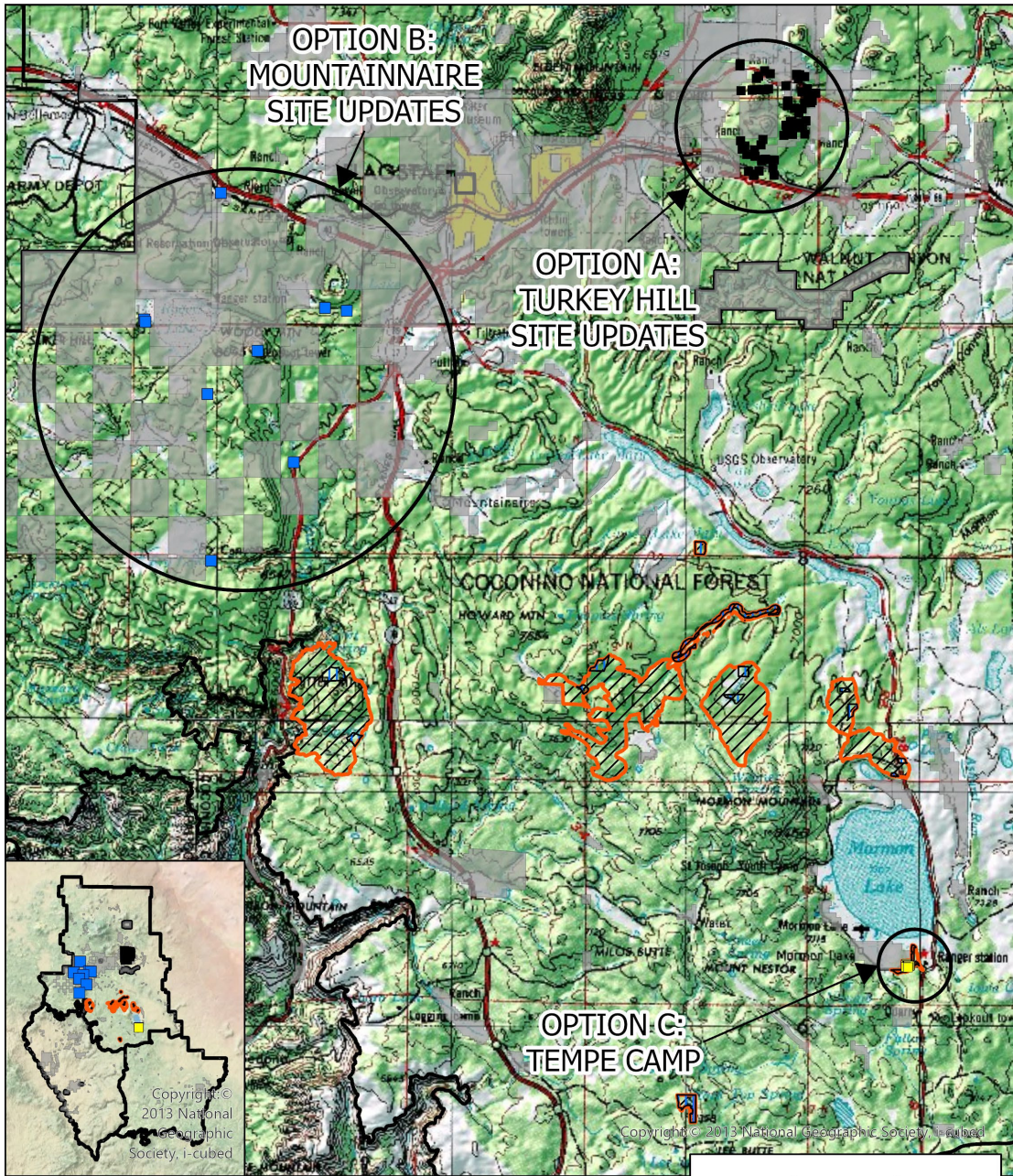
Option A	
Turkey Hill Area Site Visits- sites include artifact scatters, field houses, small pueblos, larger pueblos, pit houses and pit house village	66
Data Entry	66

Option B	
Woody Area Site Visits	9
Data Entry	9

Option C	
Tempe Camp Recreation Residence Site Recording (Record one site with multiple cabins/exterior only. Historical documentation required including elevation photos)	10
Data Entry	1

We can share geospatial files via an external share folder upon request.

Flagstaff Ranger District Project Maps

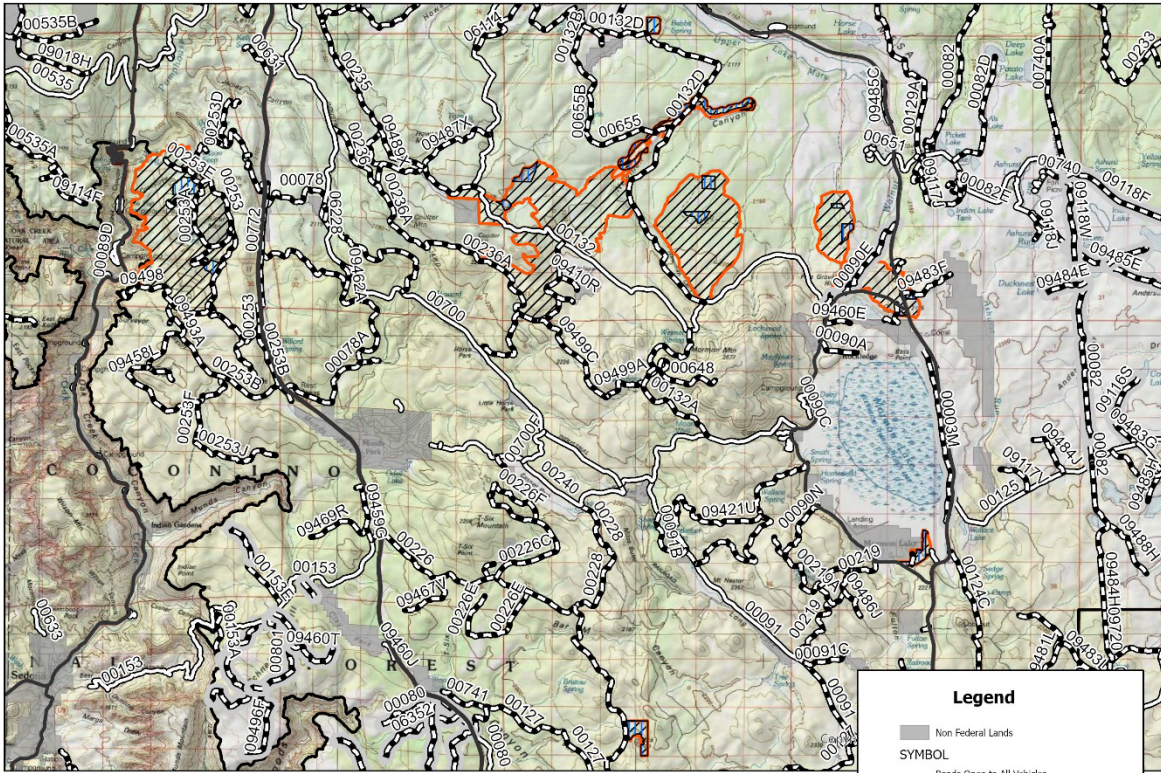


Restoration Survey and Site Updates
 Flagstaff Ranger District
 Coconino National Forest



Legend

- Non Federal Lands
- Woody Site Updates
- Tempe Camp Cabins
- Turkey Hill Site Updates
- Restoration Units



Restoration Areas and Heritage Survey
 Flagstaff Ranger District
 Coconino National Forest

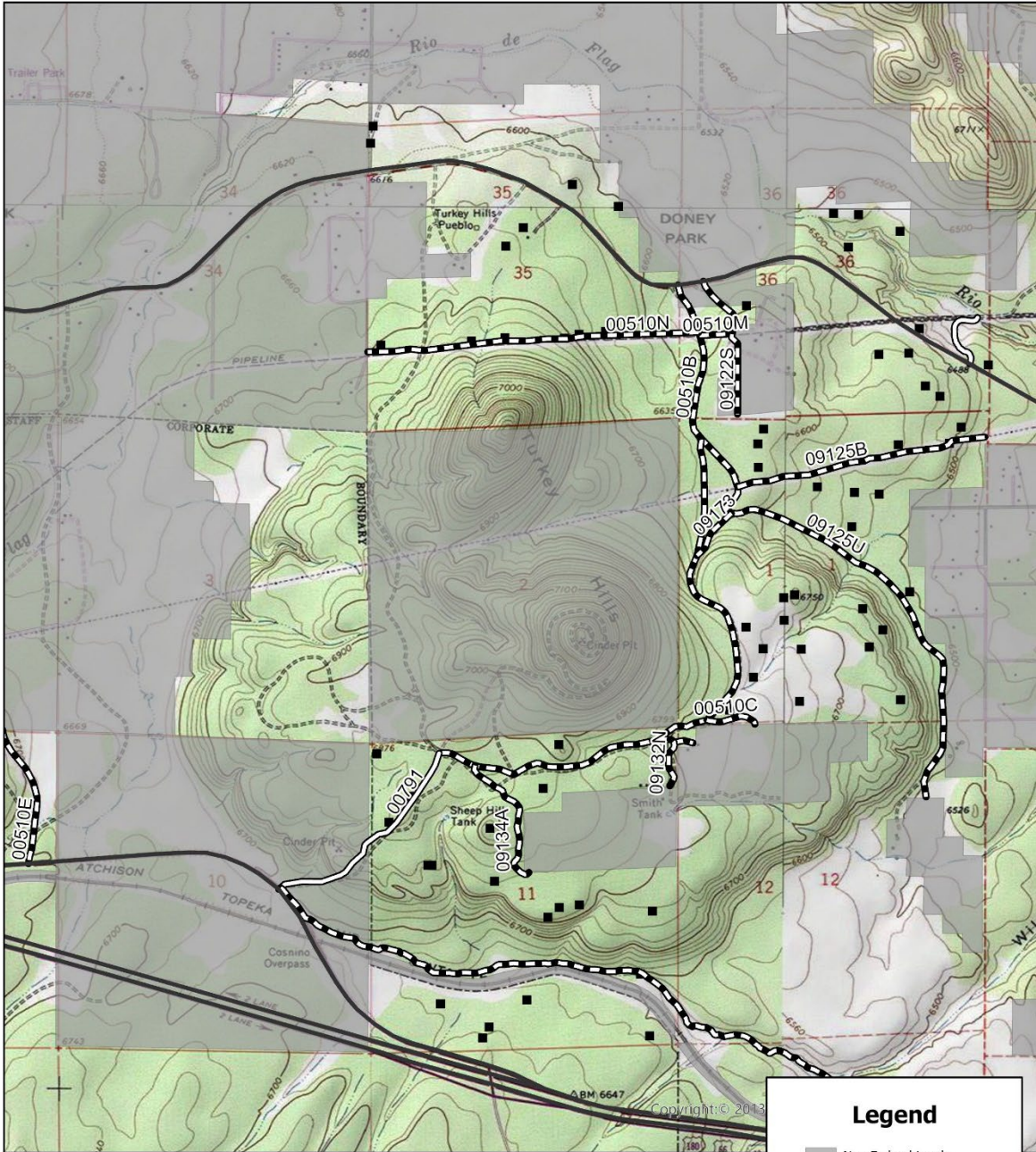


Legend

Non Federal Lands

SYMBOL

- Roads Open to All Vehicles, Yearlong
- Roads Open to All Vehicles, Seasonal
- Roads Open to Highway Legal Vehicles Only, Yearlong
- Pedestrian Survey
- Restoration Units

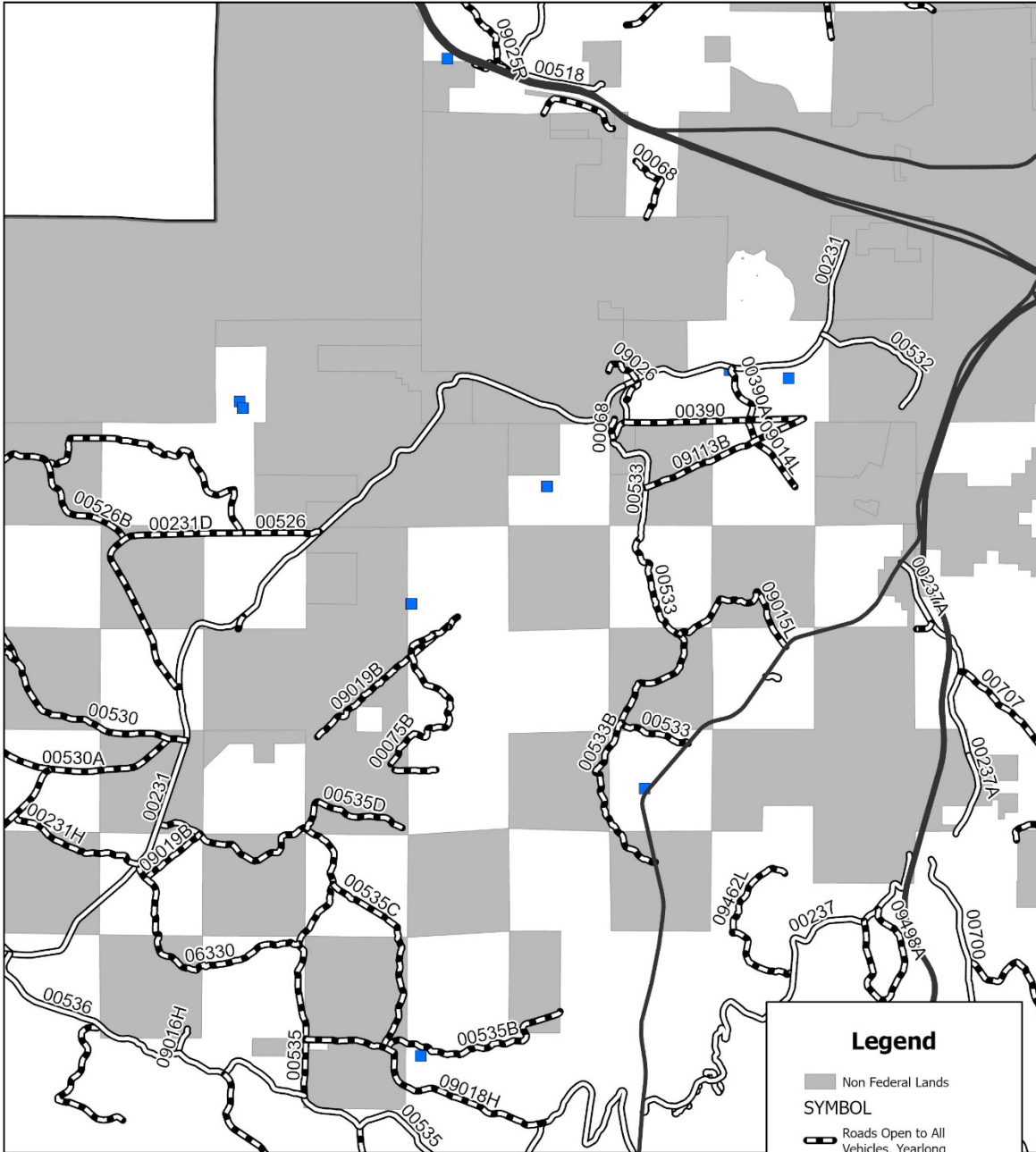


OPTION A Turkey Hill Site Updates
Flagstaff Ranger District
Coconino National Forest



Legend

- Non Federal Lands
- SYMBOL**
- Roads Open to All Vehicles, Yearlong
- Roads Open to Highway Legal Vehicles Only, Yearlong
- Turkey Hill Site Updates



OPTION B Woody Site Updates
Flagstaff Ranger District
Coconino National Forest

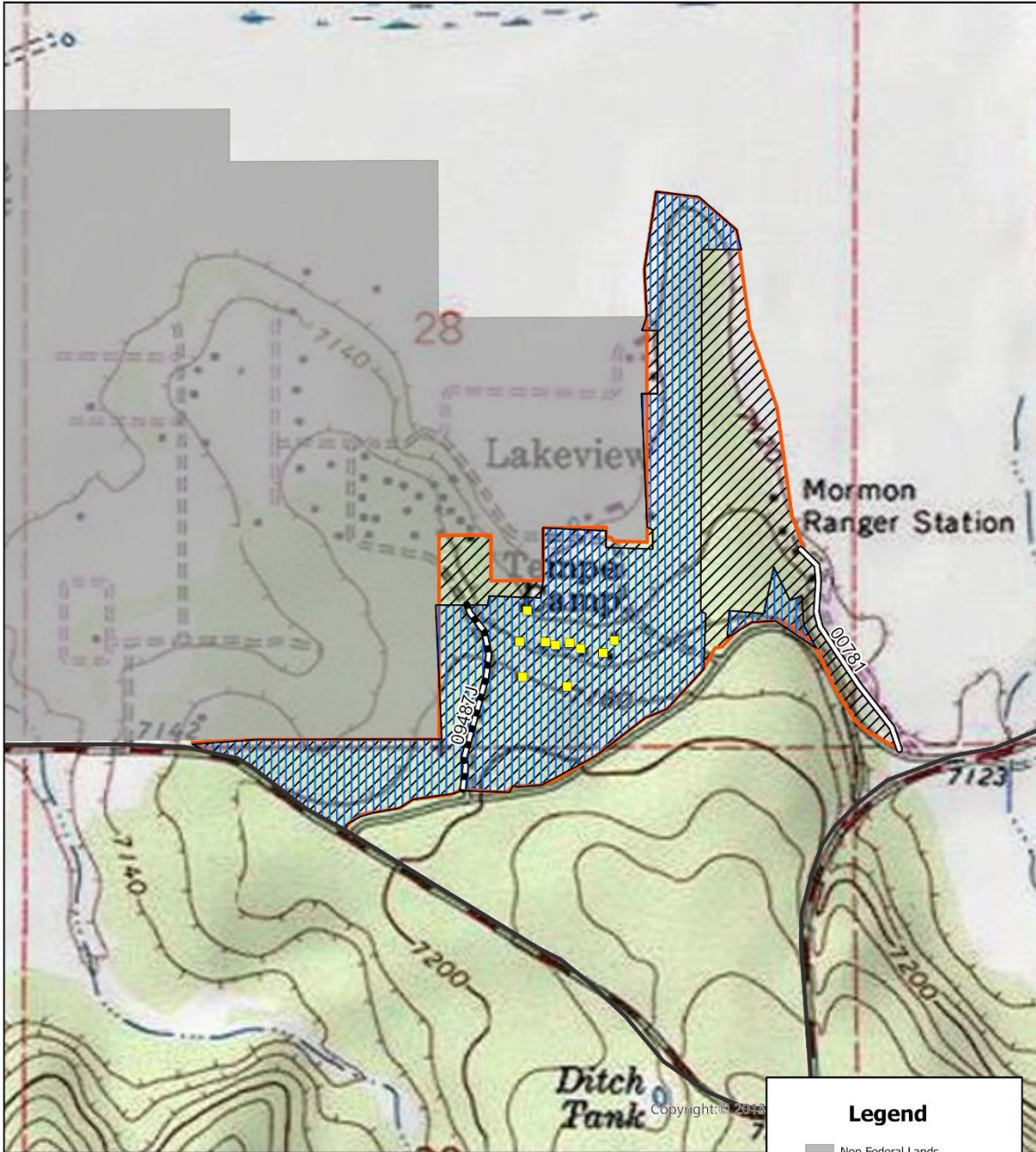


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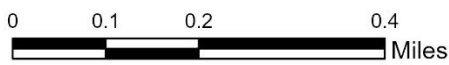
- Non Federal Lands

SYMBOL

- Roads Open to All Vehicles, Yearlong
- Roads Open to Highway Legal Vehicles Only, Yearlong
- Woody Site Updates



OPTION C Tempe Camp Recreation Residences
 Flagstaff Ranger District
 Coconino National Forest



Legend

- Non Federal Lands
- SYMBOL**
- Roads Open to All Vehicles, Yearlong
- Roads Open to Highway Legal Vehicles Only, Yearlong
- - - Pedestrian Survey
- Tempe Camp Cabins
- ▨ Restoration Units

Mogollon Rim Ranger District Projects:

The Mogollon Rim Ranger District tasks consist of survey and/or site recording for up to four task orders that are planned to be ordered as funding allows. All of these tasks are related to timber and vegetation management projects within the Coconino National Forest.

The Moqui Task Order base unit would involve approximately 325 acres of survey and revisits and updates to 61 previously documented sites. Approximately 4 sites are predicted to be located within the survey area due to the low predicted site density. The resulting report would also need to incorporate previously unreported survey completed by the Forest Service (The vast majority of the 61 sites to be revisited are located within this previously unreported survey area).

The Moqui Task Order optional unit would revisit and update up to 73 additional sites in the vicinity of the Moqui base unit: No new survey is necessary for this task, but the resulting report would similarly incorporate previously unreported survey completed by the Forest Service.

The Southeast MRRD Task Order would involve approximately 2377.4 acres of survey and revisits and updates to 23 previously documented sites. Around 11 sites are predicted to be located within the survey area due to the low and very low predicted site density.

The Mahan Task Order would involve approximately 1300 acres of survey and revisits and updates to 9 previously documented sites. Around 13 sites are predicted to be located within the survey area due to the low predicted site density.

Project Details	Moqui Base Task Order	Moqui Optional Site Revisits	Southeast MRRD Task Order	Mahan Task Order
Total Survey Acres	325	0	2702.7	1300
Survey Acres of Low Site Density ($\leq 10/\text{Mi}^2$)	325	0	2702.7	1300
Survey Acres of High Site Density ($11 \leq /\text{Mi}^2$)	0	0	0	0
Site Revisits/Updates Outside Survey Units	56	68-73	10	0
Site Revisits/Updates within Survey	5	0	13	9

Units				
NRM Site Data Entry (Estimated)	65	68-73	34	22

Project shapefiles and documentation related to previous surveys and previously-recorded sites with the project area would be shared on request prior to contract execution, and following contract execution would be shared in an online share folder through Box/Pinyon, for the purpose of exchanging information between the contractor and the Forest Service.

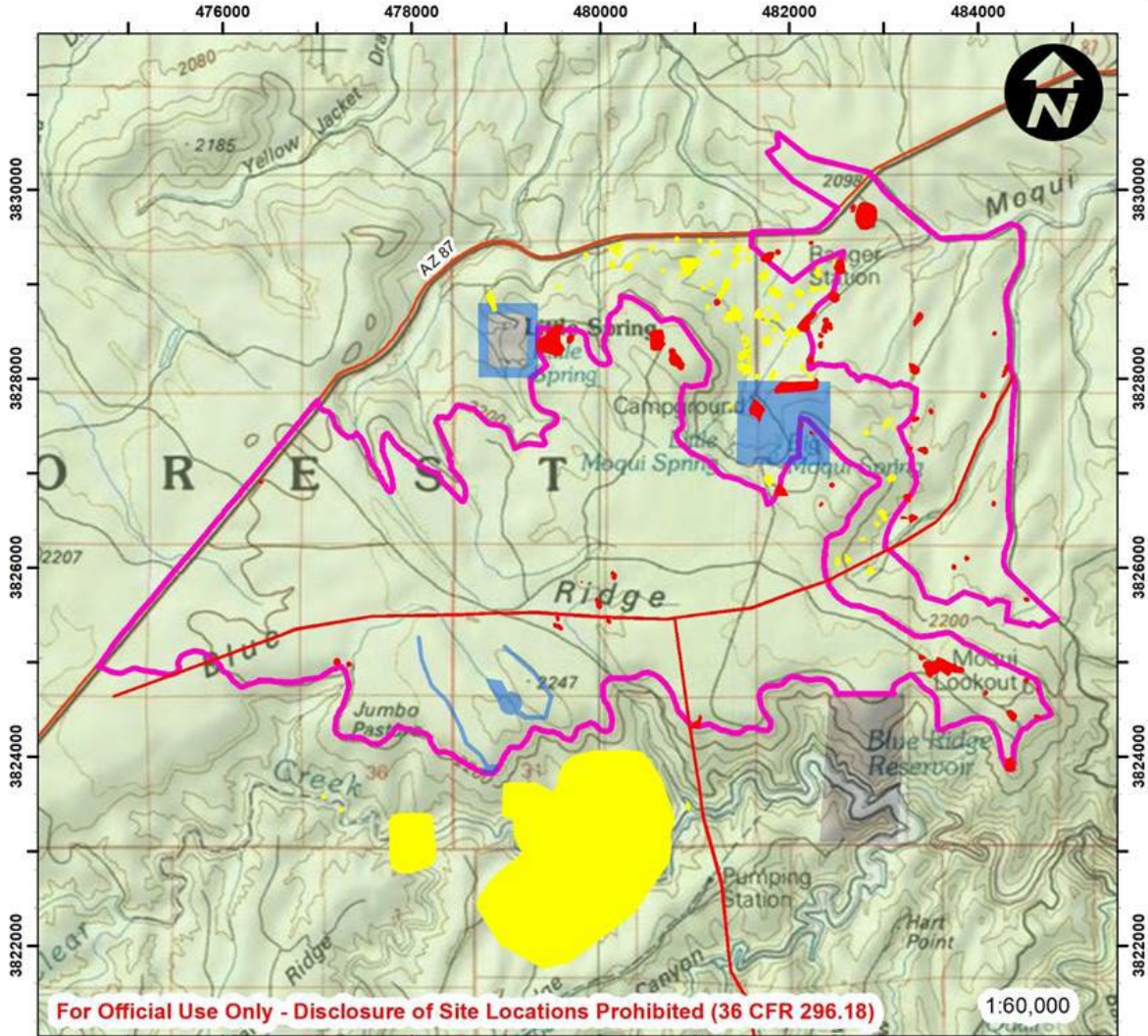
Mogollon Rim Ranger District Project Maps



Forest Service
U.S. DEPARTMENT OF AGRICULTURE

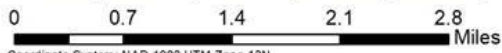
Moqui Task Order Base and Optional Tasks

Southwestern Region | Coconino National Forest



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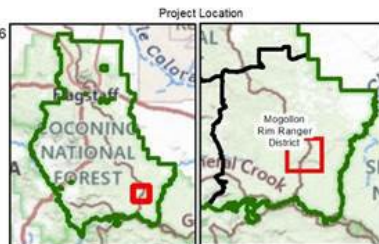
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Coordinate System: NAD 1983 UTM Zone 12N

Legend	
■	Base Site Revisits/Updates
■	Optional Site Revisits/Updates
■	Moqui Base Unit Survey Area
	Moqui Cutting Units
—	Highways
	FOREST SERVICE
	PRIVATE

Date: 2/10/2026



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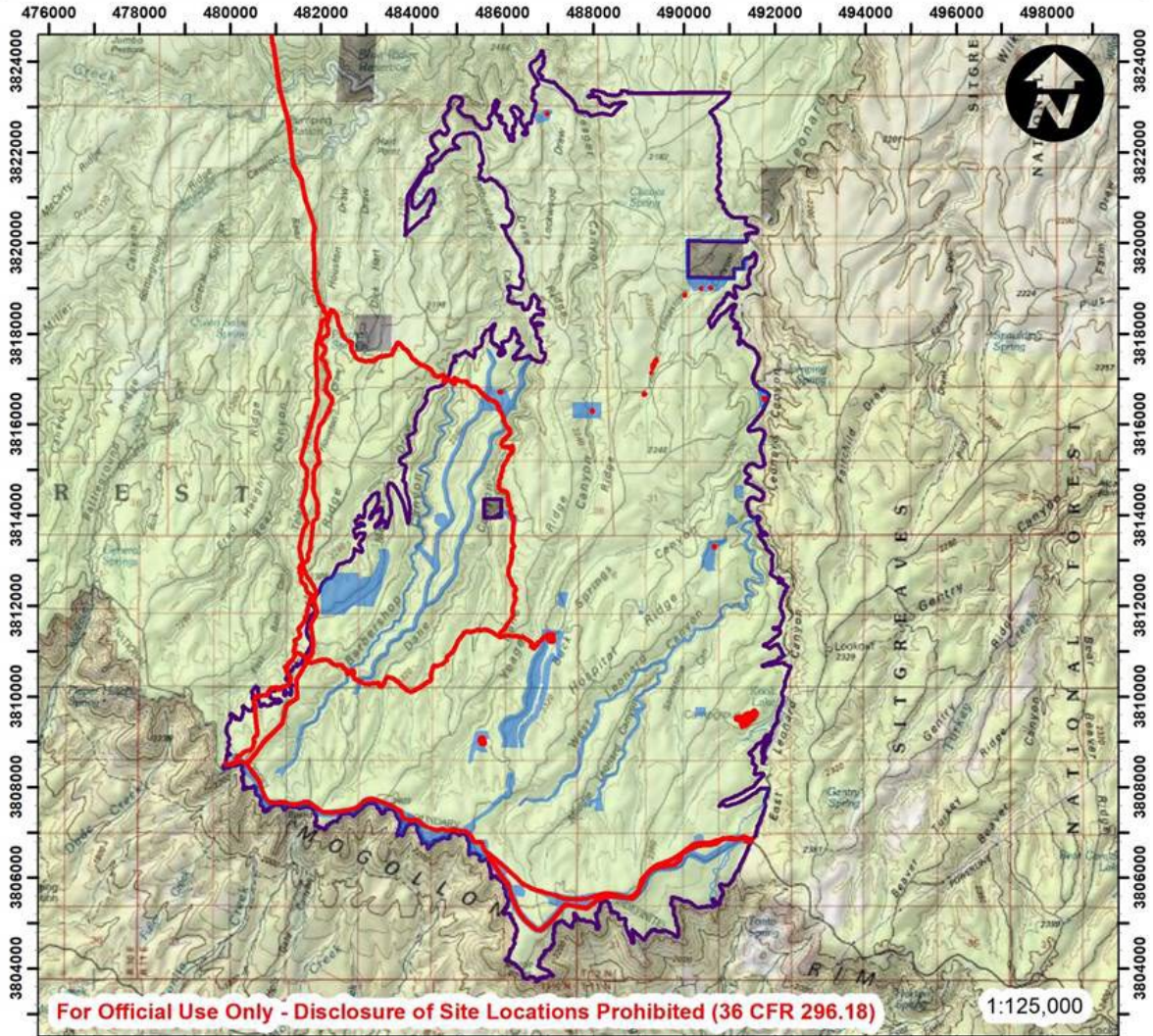
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Forest Service
U.S. DEPARTMENT OF AGRICULTURE

Southeast MRRD Contract Task Order

Southwestern Region | Coconino National Forest



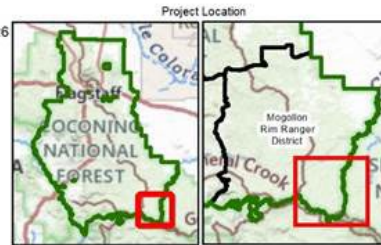
For Official Use Only - Disclosure of Site Locations Prohibited (36 CFR 296.18)

1:125,000

0 1.5 3 4.5 6 Miles
Coordinate System: NAD 1983 UTM Zone 12N



Date: 2/10/2026



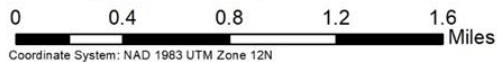
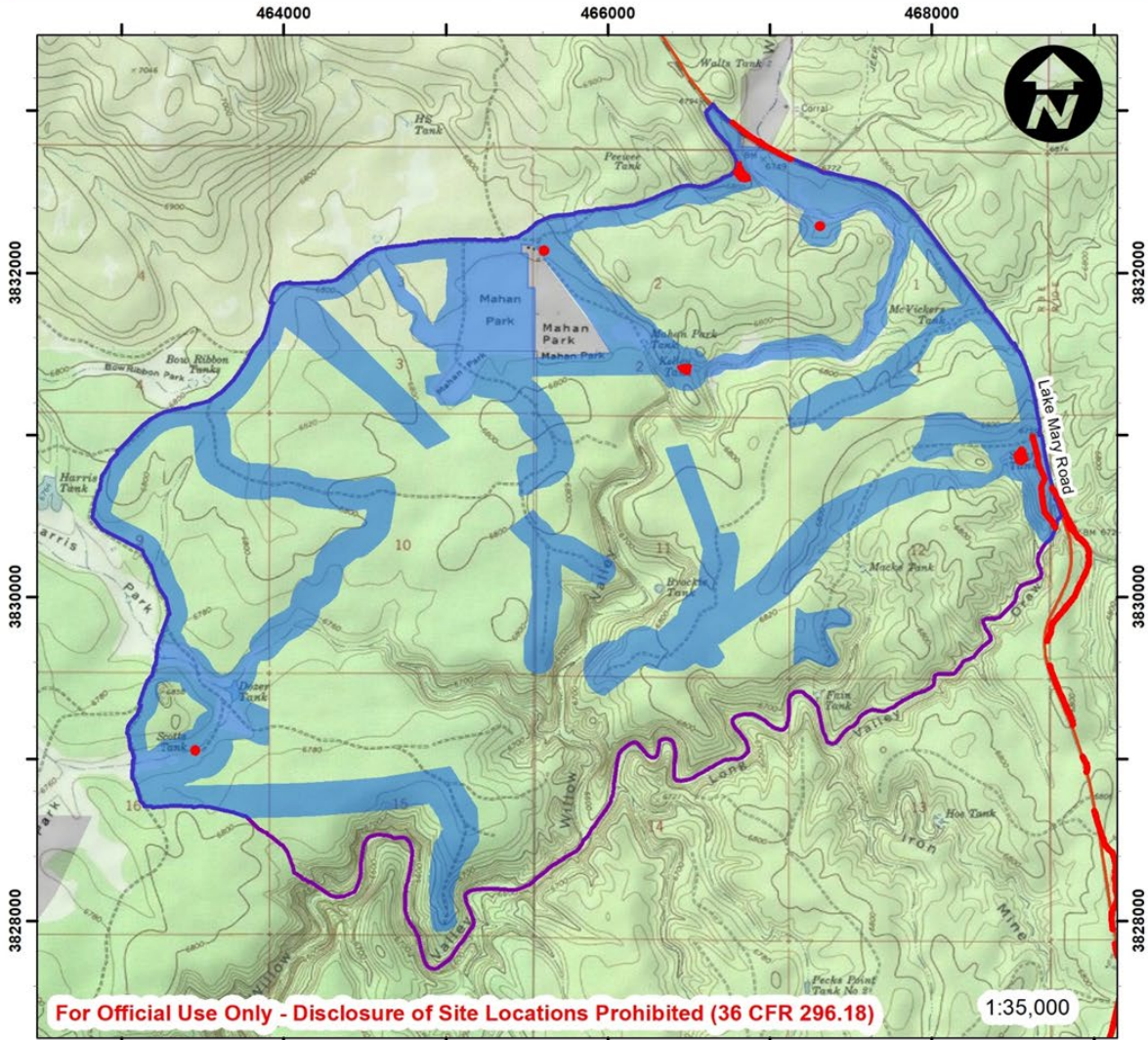
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Mahan MRRD Contract Task Order

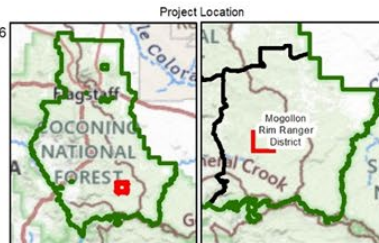
Southwestern Region | Coconino National Forest



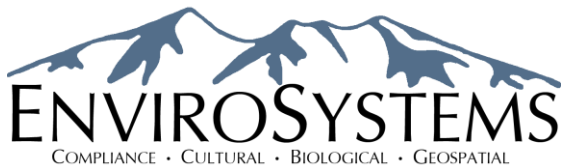
Coordinate System: NAD 1983 UTM Zone 12N

Legend	
■	Previously Recorded Site
■	Mahan Proposed Survey
■	Mahan Admin Boundary
■	Highways
Surface Ownership	
■	FOREST SERVICE
■	PRIVATE

Date: 2/10/2026



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23 East Fine Avenue
Flagstaff, Arizona 86001
www.esmaz.com
Ph: 928.226.0236
800.370.6060
Fax: 928.226.0237

March 20, 2026

Mr. Neil Chapman
Wildland Fire Captain
Flagstaff Fire Department
211 W. Aspen Avenue
Flagstaff, AZ 86001
Direct: (925) 606-9840
Office: (928) 213-2512
Email: Hunterh@wecomfiber.com

RE: Cooperative Agreement Between the City of Flagstaff Fire Department and the Flagstaff and Mogollon Rim Ranger Districts of the Coconino National Forest for Cultural Resources Surveys, Site Revisits, Recording / Updates, Evaluations of NRHP Eligibility and NRM Data Entry.

Dear Mr. Chapman:

EnviroSystems Management, Inc. (EnviroSystems) is pleased to provide a brief scope and fee estimate for the above-referenced project. The project involves survey of approximately 5,241.7 acres, revisiting and updating 256 to 261 known cultural resource sites, an estimated 48 new archaeological sites, National Register of Historic Places (NRHP) eligibility evaluations, management recommendations, and Natural Resources Management (NRM) data Entry.

EnviroSystems Management, Inc. (EnviroSystems) is a woman-owned small business (WOSB) located in Flagstaff, Arizona. EnviroSystems provides environmental and cultural resources consulting services associated with National Historic Preservation Act (NHPA), National Environmental Policy Act (NEPA), Endangered Species Act (ESA), Migratory Bird Treaty Act (MBTA), Clean Water Act (CWA), Native American Graves Protection and Repatriation Act (NAGPRA), Archaeological Resources Protection Act (ARPA), and other natural and cultural resources management laws. In addition, we provide environmental permitting, Geographic Information Systems (GIS) mapping and analysis, and noxious weed management in the four corners region of Arizona, New Mexico, Utah, Colorado, as well as Nevada, Idaho, and throughout the Intermountain West.

EnviroSystems Cultural Resources Program continues to adapt and make progressive changes that result in positive-minded staff that are focused on conducting superior work, *meeting deliverable deadlines in a timely manner*, and resolving problems to the satisfaction of our clients and involved compliance agencies with as little stress as possible. EnviroSystems' current cultural resources staff is permitted and/or approved to work on Coconino National Forest (CNF) lands in Arizona under CNF Permit Number COC0615. Additionally, EnviroSystems holds an Arizona Antiquities Act Blanket Permit (Number 2026-019bl) through the Arizona State Museum. EnviroSystems cultural resources staff members have extensive archaeological experience in northern Arizona including numerous cultural resources inventories, data recovery excavations, and archaeological monitoring of ground-disturbing construction projects. All current staff members have worked on past projects EnviroSystems has conducted on CNF lands.

Company Certifications

- Classified as a WOSB with the Small Business Administration
- General Services Administration (GSA) Advantage Contractor – 47QRAA22D005M
- Small Business in the System of Awards Management (SAM.gov)
- Unique Entity Identifier: EHG9DNG7MTD5
-

Cost Estimates by Ranger District and Task/Option

Flagstaff Ranger District (FRD)			
Task	Acres	Sites (Previous/New)	Costs
Base: Timber/Rx Sample Survey	914	10 Revisit / 20 new estimated	\$93,763.21
Option A: Turkey Hills Area Site Visits	0	66 Revisits / 0 new estimated	\$128,480.75
Option B: Woody Area Site Visits	0	9 Revisits / 0 new estimated	\$24,278.06
Option C: Tempe Camp Rec Res	0	1 Site-10 cabins / 0 new est.	\$30,360.40
FRD Cost Estimate Subtotal	914	~95 Prev / 20 new	\$276,888.42
Mogollon Rim Ranger District (MRRD)			
Task	Acres	Sites (Previous/New)	Costs
Base: Moqui	325	61 Revisits / 4 new estimated	\$176,460.04
Option: Moqui Site Revisits	0	68-73 Revisits / 0 new est.	\$157,706.63
Southeast MRRD Task Order	2702.7	23 Revisits / 11 new est.	\$176,864.58
Mahan Task Order	1300	9 Revisits / 13 new estimated	\$94,750.51
MRRD Cost Estimate Subtotal	4,327.7	161-166 Revisits / 28 new est.	\$605,781.76
TOTAL COSTS	5,241.7	256-261 Revisits / 48 new	\$882,664.18

The total cost for the proposed project is **\$882,664.18**. This cost is inclusive of all labor, other direct costs associated with the successful completion of the project. If you have any questions at all, please contact me at dhart@esmaz.com or via cell phone at (928) 266-6651

Sincerely,



David R. Hart
Vice President
Cultural Resources Division Director

EXHIBIT C - GRANT PROVISIONS



GRANT PROVISIONS

Sponsor: City of Flagstaff

Funding Agency: U.S. Department Agriculture,
Forest Service, Coconino National
Forest

Grant Project Title: Four Forest Initiative Heritage
Support

Grant Number: 23-PA-11030400-261

This content is from the eCFR and is authoritative but unofficial.



Displaying title 2, up to date as of 4/08/2026. Title 2 was last amended 2/26/2026. [?](#)

Title 2 – Federal Financial Assistance

Subtitle A – Office of Management and Budget Guidance for Federal Financial Assistance

Chapter II – Office of Management and Budget Guidance

Part 200 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards

Appendix II to Part 200—Contract Provisions for Non-Federal Entity Contracts Under Federal Awards

In addition to other provisions required by the Federal agency or non-Federal entity, all contracts made by the non-Federal entity under the Federal award must contain provisions covering the following, as applicable.

- (A) Contracts for more than the simplified acquisition threshold, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.
- (B) All contracts in excess of \$10,000 must address termination for cause and for convenience by the non-Federal entity including the manner by which it will be effected and the basis for settlement.
- (C) Equal Employment Opportunity. Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of “federally assisted construction contract” in 41 CFR Part 60-1.3 must include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, “Equal Employment Opportunity” (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, “Amending Executive Order 11246 Relating to Equal Employment Opportunity,” and implementing regulations at 41 CFR part 60, “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor.”
- (D) Davis-Bacon Act, as amended (40 U.S.C. 3141-3148). When required by Federal program legislation, all prime construction contracts in excess of \$2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, “Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction”). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency. The contracts must also include a provision for compliance with the Copeland “Anti-Kickback” Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States”). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.
- (E) Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708). Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.
- (F) Rights to Inventions Made Under a Contract or Agreement. If the Federal award meets the definition of “funding agreement” under 37 CFR § 401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or

FEDERAL STANDARD GRANT PROVISIONS

The Contractor and its Subcontractor shall comply with the following grant provisions.

Applicable Laws

Compliance with all applicable Federal, State, and Local laws and regulations.

Awards to debarred and suspended parties

The City will not make any award or permit any award (subgrant or contract) at any tier to any party which is debarred or suspended or is otherwise excluded from or ineligible for participation in Federal assistance programs under Executive Orders 12549 and 12689, ``Debarment and Suspension."

Contracting with small and minority firms, women's business enterprise and labor surplus area firms.

(a) The Contractor will take all necessary affirmative steps to assure that minority firms, women's business enterprises, and labor surplus area firms are used when possible.

(b) Affirmative steps shall include:

(1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

(2) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;

(3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority business, and women's business enterprises;

(4) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority business, and women's business enterprises;

(5) Using the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the Department of Commerce; and

(6) The Prime Contractor, if subcontracts are to be let, take affirmative steps listed in paragraph (b)(1) through (5) of this section.

Domestic preferences for procurements.

(a) As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award.

(b) For purposes of this section:

(1) "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

(2) "Manufactured products" means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

Procurement of recovered materials.

A non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

Equal Employment Opportunity

Compliance with Executive Order 11246 of September 24, 1965, entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967, and as supplemented in Department of Labor regulations (41 CFR chapter 60). (All construction contracts awarded in excess of \$10,000 by grantees and their contractors or subgrantees)

Clean Water and Air Act

Compliance with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1857(h)), section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR part 15). (Contracts, subcontracts, and subgrants of amounts in excess of \$100,000)

Energy Policy and Conservation Act

Mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L. 94-163, 89 Stat. 871).

Resource Conservation and Recovery Act

Compliance with the Resource Conservation and Recovery Act (RCRA) requires federal agencies to assess the impact that debris, debris removal, hazardous wastes, and hazardous waste clean-up projects will have on air and water quality and take actions to prevent degradation. RCRA gives EPA the authority to control hazardous waste from the "cradle-to-grave" to facilities that generate hazardous materials and sets forth a framework for the management of non-hazardous waste (42 USC, 6901).

Conflicts of Interest

The City (grantee) and Contractor (subgrantees) will maintain a written code of standards of conduct governing the performance of their employees engaged in the award and administration of contracts. No employee, officer or agent of the grantee or subgrantee shall participate in selection, or in the award or administration of a contract supported by Federal funds if a conflict of interest, real or apparent, would be involved. Such a conflict would arise when:

- (i) The employee, officer or agent,
- (ii) Any member of his immediate family,
- (iii) His or her partner, or
- (iv) An organization which employs, or is about to employ, any of the above, has a financial or other interest in the firm selected for award. The grantee's or subgrantee's officers, employees or agents will neither solicit nor accept gratuities, favors or anything of monetary value from contractors, potential contractors, or parties to subagreements. Grantee and subgrantees may set minimum rules where the financial interest is not substantial or the gift is an unsolicited item of nominal intrinsic value. To the extent permitted by State or local law or regulations, such standards or conduct will provide for

penalties, sanctions, or other disciplinary actions for violations of such standards by the grantee's and subgrantee's officers, employees, or agents, or by contractors or their agents. The awarding agency may in regulation provide additional prohibitions relative to real, apparent, or potential conflicts of interest.

Copyrights

Reports, maps or other documents produced in whole or in part are works for hire and shall not be the subject of any application for copyright by or on behalf of the Contractor or its Subcontractor. The Contractor shall advise the City or its designee at the time of delivery of any copyrighted or copyrightable work furnished under this Agreement, or any adversely held copyrighted or copyrightable material incorporated in any such work and of any invasion of the right of privacy therein contained.

Patent Fees and Royalties

Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device that is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in Funding Agency Contracting Provisions for Construction Projects the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by the Owner in the Contract Documents.

Responsible Contractors

The City will make awards only to responsible contractors possessing the ability to perform successfully under the terms and conditions of the proposed procurement. Consideration will be given to such matters as contractor integrity, compliance with public policy, record of past performance, and financial and technical resources.

Access and Retention of Records

Access by the grantee, the subgrantee, the Federal grantor agency, the Comptroller General of the United States, or any of their duly authorized representatives to any books, documents, papers, and records of the contractor which are directly pertinent to that specific contract for the purpose of making audit, examination, excerpts, and transcriptions. Retention of all required records for three years after grantees or subgrantees make final payments and all other pending matters are closed.

research work under that “funding agreement,” the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.

- (G) Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended— Contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).
- (H) Debarment and Suspension (Executive Orders 12549 and 12689)—A contract award (see 2 CFR 180.220) must not be made to parties listed on the governmentwide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), “Debarment and Suspension.” SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.
- (I) Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)—Contractors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.
- (J) See § 200.323.
- (K) See § 200.216.
- (L) See § 200.322.

[78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75888, Dec. 19, 2014; 85 FR 49577, Aug. 13, 2020]

**APPENDIX D
GENERAL REQUIREMENTS FOR CONDUCTING
ARCHAEOLOGICAL SURVEY ON
THE COCONINO NATIONAL FOREST**

(March 12, 2010)

Principal Investigator, project supervisors and crew leaders must have the following minimum qualifications:

1. A graduate degree in anthropology, specializing in archaeology, or equivalent archaeological experience.
2. At least 16 months of professional experience and/or specialized training in archaeological field work, artifact analysis, and administration.
3. At least three months experience in archaeological survey or excavation on the Coconino National Forest.
4. Demonstrated competence in collecting, handling, analyzing, evaluating, and reporting archaeological data.
5. A demonstrated ability to plan, equip, staff, organize, and supervise a cultural resources survey.
6. The demonstrated ability to accurately locate archaeological sites on U.S.G.S. 1:24,000 maps, aerial photographs, in addition to demonstrated ability in the use of GPS units.
7. Demonstrated competence in identifying the prehistoric ceramics found within the Coconino National Forest, using the type names defined in the Museum of Northern Arizona Ceramic Series publications and as additionally described in the references listed below.

Each crew member must have the following minimum qualifications:

1. At least 12 semester hours of credit in archaeology, anthropology, and/or history courses. Courses must include information on the conduct and theory of archaeological survey and excavation.
2. At least three months field experience in archaeological survey.
3. Crew members not meeting these requirements must work under the direct field supervision of a crew leader or project supervisor.

COORDINATION WITH ARCHAEOLOGICAL PERMIT REQUIREMENTS

All individuals proposed to work as principal investigators, project directors, or in other supervisory capacities must be approved by the Forest Archaeologist before that person may direct archaeological work.

Individuals, institutions, groups, and agencies applying for an archaeological permit will submit the *Vitae* of all persons who may work under the permit to the Forest Archaeologist. If additional individuals are recruited to work under the permit after its issuance, *Vitae* of these additional individuals must also be submitted to the Forest Archaeologist. Information in the *Vitae* will be used to verify that individuals meet the requirements listed above.

FIELD EXAMINATION IN LIEU OF EDUCATION/EXPERIENCE REQUIREMENTS

Individuals who do not meet the requirements listed above may demonstrate their competency in those areas by successfully surveying, documenting, and reporting a 40-acre test plot as per the requirements of this document.

Upon request, the Forest Archaeologist will assign a 40 acre test plot and will determine the adequacy of the survey and reporting results. Upon successful completion of the test, individuals will be approved by the Forest Archaeologist to survey under the conditions of an archaeological permit.

GENERAL SURVEY STANDARDS

1. Before beginning work, the District Archaeologist and/or Forest archaeologist are to be consulted regarding the 1. Forest Geospatial databases for previous site and survey data; 2. Infra database for site record and eligibility information; 3. Hard copy or digital records to determine the extent of previous survey work and recorded sites are known or reported in the survey area.

2. **Minimum Survey Sizes:** To maximize meaningful survey results, economy of effort, and minimize reporting error, the minimum acceptable survey unit size is **3 acres**, centered on the project location.

For roads and other linear projects that are 30 ft. or less in width, surveyors shall survey a minimum of 132 ft. (66ft on either side of the center line) along the center line of the project. For linear projects with widths greater than 33 ft., the right-of-way plus 66 ft. on both sides of the right-of-way shall be surveyed. Having standard survey widths makes survey record checks more efficient to do, maximizes field survey efficiency, and provides a buffer that can accommodate most ancillary project activities and minor realignments.

3. Each crew must be directly supervised in the field by a crew leader who meets the supervisory requirements listed above. Individual survey crews may be no larger than five people.

4. In order to ensure complete, intensive coverage of survey areas, surveyors should be spaced no more than 20 meters (66 ft) apart. Spacing should be reduced as needed by vegetation and ground cover to ensure complete, intensive coverage. Map, compass, aerial photographs, and GPS units shall be used as needed to ensure systematic, even coverage of survey areas.

5. For areas other than linear projects, survey beginning and end points shall be easily relocatable on the ground – such as washes, roads, meadow edges, timber sale boundaries, etc.

6. All work conducted under permit is subject to inspection and approval by the District and/or Forest Archaeologist. Geospatial extent of survey should be captured using GPS equipment.

ASSIGNMENT AND USE OF FOREST SERVICE SITE NUMBERS

Because of land exchange programs, Congressional and administratively determined land-management authorizations, and federal responsibilities for sites on non-federal lands when they are part of a federally authorized or assisted project (as per 36 CFR 800.16(y), all sites within the boundaries of the Coconino National Forest may be assigned a Forest site number.

Archaeological permittees will request Forest site number and site tags from District or Forest archaeologists.

Forest site number will be used as the *primary* site reference number in reports, forms, correspondence, records, and other documentation resulting from the project. The Forest site number must appear in reports each time a site is referenced.

DEFINITION OF “SITE” AND “ISOLATED OCCURRENCES”

Site

All cultural resources sites encountered are to be identified and recorded. For general purposes, a cultural resource site is defined as a locus of prehistoric or pre-1960**historic human activity at a level of intensity normally involving evidence of purposeful behavior beyond the level of one or a few (less than 25) accidentally deposited artifacts.

**Concern regarding unassociated trash dumps...

Bottom line....when do we call a trash dump a property/site inversely when it is an IO.

-Down in the Dumps other context documents

-Previous SHPO consultation (meetings and recent reports)

-FS/CNF Perspective....

-Time depth.....

-These are being documented (as IOs) in the CNF geospatial database.

Minimal site identification criteria include at least one of the following:

- (a) One or more features,
- (b) One formal tool if associated with other cultural material or more than one formal tool,
- (c) an occurrence of three or more types of artifacts or materials,
- (d) two types of artifacts or material in a density of at least ten items per square meter
- (e) a single type of artifact or material in a density of at least 25 artifacts.

Add in document: - For any questions or clarification on site/IO definition please contact the District and/or Forest Archaeologist.

Isolated Occurrences

Occurrences of artifacts at less than the above shall be classified as “Isolated Occurrences”. Three classes of Isolated Occurrences are recognized – Features, Scatters, and Isolated Artifacts:

A “Feature” is a construction that due to its recent nature or lack of association is not designated as a “site”. Examples would be an abandoned road, old fence line, or a recent campfire ring. Isolated trash

dumps in excess of +25 artifacts may be called a feature.... Features may or may not be recommended for protection from project activities. Isolated prehistoric features, such as grinding slicks, pecked hand and toeholds, or bedrock mortars, will normally be recorded as a site.

Trash Dumps

Isolated historic period trash dumps *without a known source or context*, particularly post-1940, will generally be considered to be “Features” rather than “sites”, regardless of artifact density and diversity. (**See Down in the Dumps**) When reporting historic period trash scatters and dumps, descriptions should include the size of the dump or trash concentration, estimate the numbers of different types of trash items present, a possible date for the trash, and suggest the activity(ies) the trash represents. Also, discuss implications for age, gender, and ethnicity suggested by the trash.

“Scatters” (less than 25 artifacts). However, a “pot bust” is considered to be a scatter, even if it contains more than 25 sherds.

“Isolated Artifacts” (an occurrence of ONE single item)

GENERAL SITE LOCATION AND RECORDING STANDARDS

1. All cultural resource features, sites, scatters, and isolated artifacts encountered are to be identified and recorded.

2. Each site discovered shall be plotted and identified with its Forest site number at the time it is recorded on USGS topographic maps. The use of a Global Positioning System (GPS) unit to delineate survey areas and site locations is required. Reports and site cards will identify the GPS unit model used to plot project and site areas. At a minimum, the location of the site tag (datum), preferably near the center of the site or by the most obvious feature, must be taken. In addition, site boundaries must be captured using GPS. Locations will be reported using Universal Transverse Mercator (UTM) coordinates, North American Datum (NAD) 1983.

Geospatial data shall be submitted in an NRM Heritage Mobile format, consistent with CNF standards. A blank geodatabase template may be provided for collection of data for input into the NRM Heritage Mobile application.

3. From 1975 until about 2000, before reliable, inexpensive Global Positioning units were available, aerial photographs and acetate overlays were routinely used to plot the locations of archaeological sites. These aerial photographs and acetates are often invaluable for re-locating sites recorded before 2000. They may be borrowed from the Forest to assist in locating survey and site areas as well as a backup method, other than GPS, for locating sites and survey areas.

4. Digital Photos Digital Standards: Minimum 1600 x 1200 at 5 megapixel
Digital photographs will be provided on a CD or another electronic transfer device as part of the project electronic documentation submitted with the final report. Alternative formats for electronic data submission should be agreed upon with the District or Forest archaeologists before field work begins.

Photographs should show site features, diagnostic pottery, projectile points, and other artifacts, as well as identifying site characteristics and important landmarks for relocating the site. The use of a mug board with the site identification number clearly visible in the photograph is desirable. File

Photographs will use the following digital naming format: District prefix followed by site number followed by a number, and descriptive information. For example 02-2491.01.site overview.north.date.jpg OR include a photo log (provided by CNF) to detail photo information. Photo logs are required for 'detailed' projects such as data recovery. Photo logs are to be provided in the same data folder as the digital photos when provided to the CNF. Other photos, such as scenic, project, etc, titled as descriptive.

5. Each newly discovered site shall be entered into the USFS NRM electronic site recording system by the contractor/researcher or any other permittee through the NRM Heritage Mobile application, available for Windows or Android. Final site forms are exported from the NRM database. Information and downloads of the requisite formats can be obtained from the District and/or the Forest Archaeologist. In addition, hard copy site forms covering information listed on the Coconino National Forest site form must also be provided. In some special cases, with the permission of the Forest Archaeologist, another form may be used in an electronic MS WORD format (available from the Forest Archaeologist on request). Except for site plans and locational maps, hand written cards will not be accepted. Information contained on the site form is to be consistent with the "Instructions for Completing Site Inventory Forms" in the Coconino National Forest's Archaeological Procedural Manual (Attachment

Other instructional site forms may be acceptable for certain specific projects. The Forest Archaeologist should be consulted if it is desired to use other site forms. Both hard copies, as well as electronic copies, of site forms will be provided to the District or Forest Archaeologist upon completion of the project.

6. Isolated Occurrences: There are three types of Isolated Occurrences- Features, Artifact Scatters, and Isolated Artifacts. They shall be plotted through use of GPS and included on report maps. Each Feature, Scatter or Isolated artifact is to be described using the format provided in the geodatabase template that will be provided. This table should be included in the final report.- e.g. Scatter 1, 2, 3, etc.: Isolated Artifact 1, 2, 3, etc. that includes a description of the feature or artifacts and the UTM coordinates for their location. When possible, isolated occurrence descriptions will include associated dates, cultural affiliation, material type, ceramic type, and other information relating to the context of the isolated occurrence to be described in the Comments field.

ARTIFACT COLLECTION AND ANALYSIS

Collections may not be made under the authority of Non-disturbing Permits. Collections may only be made under Disturbing Permits, when working under a direct contract to the Forest (prime contractors only, not sub-contractors), or unless arrangements are worked out in advance with the Forest Archaeologist.

When artifact collection is allowed:

1. Collections may be made by the archaeologist in the field at the direction of the District and/or Forest. Instances would include rare finds, such as whole or nearly whole vessels, jewelry, diagnostic projectile points, etc., will be collected. Any artifact collected must first be located using a GPS unit. Collections remain the property of the U.S. Government and will be submitted to the Smithsonian Approved Repository listed in the permit or to the Forest Archaeologist upon completion of the project unless otherwise agreed to.

If found on a site, such rare finds are to be plotted on the site sketch with UTM's listed. If within a scatter or an isolated artifact, they are to be GPS plotted and included on a USGS topographic map in the report. UTM coordinates and related information will be provided to the Forest and listed in the report. The report will also specifically state when individual artifacts are collected.

2. Ceramic Analysis: Archaeologists should expect to encounter ceramic types in the Alameda Brown Ware, Tusayan White Ware, Tusayan Gray Ware, Tsegi Orange Ware, Little Colorado White Ware, Little Colorado Gray Ware, San Francisco Mountain Gray Ware, and Mogollon Brown series. Other types may also be present in small numbers. Sherds shall be identified to the type level according to the standard type descriptions in Carlson (1970), Hays-Gilpin and van Hartesveldt (1998), Henderson (1979), and the *Museum of Northern Arizona Ceramic series* (Abel 1955, Colton 1955, 1956, 1958; Colton and Hargrave 1937) unless otherwise agreed to with the Forest Archaeologist.

3. Lithic Analysis: Archaeologists should expect to encounter artifacts manufactured from sandstone, quartzite, rhyolite, obsidian, chert, petrified wood, and other siliceous and igneous materials. The typology used in classifying lithic artifacts shall be explained in the final report and the lithic material type identified for each artifact or class of artifacts observed or collected. At a minimum manos should be identified by material and whether they are "one-hand" ("basin") or "two-hand" ("trough") in size, and whether they are unifacially or bifacially worked. Metates should be identified as being a grinding slick, a basin metate, or a trough metate. (See Adams 1996, Haury 1950, Woodbury 1954)

SITE TAGS

All sites found during the project must be marked with the Forest's aluminum site tags, unless other arrangements have been agreed to by Forest Archaeologist. Before beginning field work, the archaeological permittee should obtain a supply of aluminum site tags from the District or Forest Archaeologist which will be used to mark all sites recorded. Tags that are not used shall be returned to the District or Forest Archaeologist at the end of the project.

The aluminum site tag will be nailed on the south side of a tree near the center of the site, no more than 6 in. above the ground. If no tree is available, the site tag will be attached to the end of a metal wire or stake, driven into the ground at the center of the site, and a small rock cairn erected around the wire or stake. Suggested cairn height is 1 ft.

SITE MARKING STANDARDS

When sites must be marked for avoidance from project activities, they shall be marked on the ground in the following manner:

(A) The perimeter of the site will be marked by spraying a white horizontal band, at least two inches wide, at a height of approximately 6 ft. above the ground, around trees that circle the site. In addition, a spot above 6 in. in diameter will be painted at the base of each tree so banded with the spot facing into the site.

(B) The perimeter of the site will be additionally marked by tying pink fluorescent flagging tape at chest height on the painted trees with the knot and a trailing strand of flagging tape on the outside of the tree, facing away from the center of the site.

(C) Both painted bands and flagging tape must be inter-visible and not obstructed by branches or foliage. White painted stakes, posts, or lathe that are clearly visible may be used to identify site

boundaries when tree trunks are difficult to mark, there are no trees to paint, or there are no shrubs or rocks present to which the flagging tape can be attached.

GENERAL SURVEY REPORT STANDARDS

As a minimum, reports resulting from the project shall provide the following information:

- (A) Legal location of the project area, identified by reference to a USGS map and the Township(s) Range (s), and Section (s) examined by the project.
- (B) Identify the Ranger District (s) on which the survey was done by District name(s).
- (C) Provide the dates during which the survey was done.
- (D) Identify by name and position the people who performed the survey and who directed or otherwise had administrative responsibility for the project and survey work..
- (E) Describe the manner in which the survey was conducted and the spacing between surveyors or survey transects.
- (f) State any factors influencing survey type or ground visibility.
- (G) If less than 10 acres, state approximate dimensions of survey area in feet and provide total acreage surveyed for each survey unit as well as total area surveyed.
- (H) Provide summary information of number of sites, Isolated Occurrences (sub-divided under the headings of Features, Scatters, and Isolated Artifacts) that were identified. All maps will include a north arrow (indicating true north) and must accurately depict areas surveyed and locations of sites and Isolated Occurrences. For the report, 1:24,000 scale maps shall be cut, printed, or otherwise reproduced onto 8 ½ x 11-inch paper to facilitate making future copies of the report. If sites are shown on the maps, the map must contain the statement “For Official Use Only. Disclosure of Site Locations is Prohibited (36-CFR-296.18)”.
- (J) All typing and illustrations used in the report must be of suitable quality to provide a clear, legible copy when used on a monochrome duplicating machine. Alternatively, report copies in an electronic format may be submitted.
- (K) When sites have multiple site numbers, the Forest site number will be the primary reference used in the report. Other site numbers will be listed following the Forest site number or, if more than five sites are contained within the project, a concordance table listing all site numbers will also be included in the report.
- (L) Culture History and Environmental sections should be kept minimal, unless such information is vital to later sections of the report, or if this information is specifically addressed in later sections. Referencing existing reports and sources providing such overview information is preferred.
- (M) Only discuss sites that are within or immediately adjacent to the project area.. Do not reference sites outside the project area. For overview sections of reports, or for reporting previous surveys and sites in the vicinity of the project. DO NOT provide any GPS information or precise

site plots on maps. Site numbers may be printed in their general vicinity, but precise plots or locational information for sites outside of project areas are not allowed unless prior arrangements have been made with the Forest Archaeologist.

Exhibit 4 provides an outline of the minimal information required for all reports.

DOCUMENTS TO BE PROVIDED TO THE FOREST ARCHAEOLOGIST

One original of all reports prepared from data originating from the survey, completed original site inventory forms, completed computerized site cards, photographs (if used in the report), site digital photographs, and USGS maps, as above, showing all sites and Isolated Occurrences.

Unused tags shall be returned to the District or Forest Archaeologist upon completion of the project or submission of the final report. The report will be reviewed by the District and/or Forest Archaeologist and, if needed, returned with comments and suggestions for revision. Revisions will be made within a mutually agreed upon time frame, and the final report submitted to the Forest Archaeologist.

Copies of site records for sites not on Forest land, but located within the boundaries of the Forest, will also be provided as above.

FUTURE USE OF DATA COLLECTED UNDER PERMIT

The permittee may use archaeological data resulting from this survey for future research purposes. However, as per conditions of Forest Service archaeological permits, the permittee agrees to provide three copies of any manuscripts, reports, and publications pertaining to the survey data to the Forest Supervisor within one month of its completion and/or publication. Manuscripts prepared for possible publication will be submitted once they have been completed in addition to any published versions that may be produced at a later date.

CONDITIONS OF USE OF DATA PROVIDED BY CNF

Disclosure of site locations is prohibited by 36-CFR-800-296.18. These files and scans are the property of the USFS and are being loaned to you solely for official use for this project. They may not be duplicated to anyone outside your organization without written permission, and the precise locations of these sites are not to be disclosed in reports unless they are within the area of direct project impacts (the area identified in the project permit application.) Upon completion of the project, you agree to destroy all copies and versions of this information and will notify The Forest and/or District Archaeologist when this has been done.

Included in Exhibit 5 are the specifics regarding the sharing and disposition of geospatial data.

By accessing these files you are acknowledging your acceptance of these conditions.

STANDARDS FOR ACCEPTANCE OF WORK

Pre-field and field research, laboratory analysis, and reports are to meet professional archaeological standards determined through review by the Forest Archaeologist.

Pre-field research should be adequate to identify previously known or suspected locations of prehistoric and historic archaeological sites. At a minimum, this includes the permittee's inspection of the Forest Archaeological Atlas, Historic Maps, and Logging Railroad Maps.

Field research should be adequate to identify and properly located 95% of all sites, and 75% of all Isolated Occurrences in the survey transects.

Laboratory analyses must correctly identify 75% of artifacts encountered, including ceramic types, artifact types, and the material from which artifacts were made. If artifact nomenclature is different from standard terminology (e.g. Adams 1996; Haury 1950; Gillio, Levine, and Scott 1980; Rock 1980; Sliva 1997) this is to be defined and explained in the final report.

Reports must contain the information mentioned above and must be written in a style that is clear, concise, and, most importantly, well organized and easy to use. Poor writing, organization, production, etc. are grounds for rejection of the report. There should be no more than three errors in spelling, grammar, punctuation, and typing per page of the report. Legal descriptions in the report must agree with those shown in maps and figures. All sites, scatters, isolated artifacts and features mentioned in the report must be shown on the report maps and vice versa.

All site information is to be on the site card, or a site card addendum, if needed. Reports should not contain any information about a site that is not also included on the site form. If information is found in the report that is not on the site cards, the report and site cards will be returned for revision.

Appropriate knowledge of the prehistory and history of the Forest must be demonstrated by use of correct terminology, dating, and citations of primary references (e.g. Colton 1946), as well as the most recent publications pertinent to the cultural resources of the Forest.

Additional standards and requirements may be established for specific projects and will be discussed by the Forest Archaeologist and permittee at the time the permit is issued or prior to beginning fieldwork for a specific project.

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GENERAL REQUIREMENTS FOR CONDUCTING ARCHAEOLOGICAL SURVEY ON THE COCONINO NATIONAL FOREST

(Revised May 25, 2023)

Principal Investigator, project supervisors and crew leaders must have the following minimum qualifications:

1. A graduate degree in anthropology, specializing in archaeology, or equivalent archaeological experience.

2. At least 16 months of professional experience and/or specialized training in archaeological field work, artifact analysis, and administration.

3. At least three months experience in archaeological survey or excavation on the Coconino National Forest.

4. Demonstrated competence in collecting, handling, analyzing, evaluating, and reporting archaeological data.

5. A demonstrated ability to plan, equip, staff, organize, and supervise a cultural resources survey.

6. The demonstrated ability to accurately locate archaeological sites on U.S.G.S. 1:24,000 maps, aerial photographs, in addition to demonstrated ability in the use of GPS units.

7. Demonstrated competence in identifying the prehistoric ceramics found within the Coconino National Forest, using the type names defined in the Museum of Northern Arizona Ceramic Series publications and as additionally described in the references listed below.

Each crew member must have the following minimum qualifications:

1. At least 12 semester hours of credit in archaeology, anthropology, and/or history courses. Courses must include information on the conduct and theory of archaeological survey and excavation.

2. At least three months field experience in archaeological survey.

3. Crew members not meeting these requirements must work under the direct field supervision of a crew leader or project supervisor.

COORDINATION WITH ARCHAEOLOGICAL PERMIT REQUIREMENTS

All individuals proposed to work as principal investigators, project directors, or in other supervisory capacities must be approved by the Forest Archaeologist before that person may direct archaeological work.

Individuals, institutions, groups, and agencies applying for an archaeological permit will submit the *Vitae* of all persons who may work under the permit to the Forest Archaeologist. If additional individuals are recruited to work under the permit after its issuance, *Vitae* of these additional individuals must also be submitted to the Forest Archaeologist. Information in the *Vitae* will be used to verify that individuals meet the requirements listed above.

FIELD EXAMINATION IN LIEU OF EDUCATION/EXPERIENCE REQUIREMENTS

Individuals who do not meet the requirements listed above may demonstrate their competency in those areas by successfully surveying, documenting, and reporting a 40-acre test plot as per the requirements of this document.

Upon request, the Forest Archaeologist will assign a 40-acre test plot and will determine the adequacy of the survey and reporting results. Upon successful completion of the test, individuals will be approved by the Forest Archaeologist to survey under the conditions of an archaeological permit.

GENERAL SURVEY STANDARDS

1. Before beginning work, the Forest and District Archaeologists are to be notified and consulted to determine the extent of previous survey work and whether sites are known or reported in the survey area. This data may be provided electronically upon request.

2. **Minimum Survey Sizes:** To maximize meaningful survey results, economy of effort, and minimize reporting error, the minimum acceptable survey unit size is 3 acres, centered on the project location.

For roads and other linear projects that are 30 ft. or less in width, surveyors shall survey a minimum of 120 ft. along the center line of the project. For linear projects with widths greater than 30 ft., the right-of-way plus 66 ft. on both sides of the right-of-way shall be surveyed. Having standard survey widths makes survey record checks more efficient to do, maximizes field survey efficiency, and provides a buffer that can accommodate most ancillary project activities and minor realignments.

3. Each crew must be directly supervised in the field by a crew leader who meets the supervisory requirements listed above. Individual survey crews may be no larger than five people.

4. In order to ensure complete, intensive coverage of survey areas, surveyors should be spaced no more than 20 m. (66 ft) apart. Spacing should be reduced as needed by vegetation and ground cover to ensure complete, intensive coverage. Map, compass, aerial photographs, and GPS units shall be used as needed to ensure systematic, even coverage of survey areas.

5. For areas other than linear projects, survey beginning, and end points shall be easily relocatable on the ground – such as washes, roads, meadow edges, timber sale boundaries, etc.

6. All work conducted under permit is subject to inspection and approval by the District and/or Forest Archaeologist.

ASSIGNMENT AND USE OF FOREST SERVICE SITE NUMBERS

Because of land exchange programs, Congressional and administratively determined land-management authorizations, and federal responsibilities for sites on non-federal lands when they are part of a federally authorized or assisted project (as per 36 CFR 800.16(y), all sites within the boundaries of the Coconino National Forest may be assigned a Forest site number.

Archaeological permittees will request Forest site number assignments and site tags from District or Forest archaeologists.

Forest site numbers will be used as the primary site reference number in reports, forms, correspondence, records, and other documentation resulting from the project. The Forest site number must appear in reports each time a site is referenced. Other site numbers should be indicated parenthetically.

DEFINITION OF “SITE” AND “ISOLATED OCCURRENCES”

Site

All cultural resources sites encountered are to be identified and recorded. For general purposes, a cultural resource site is defined as a locus of prehistoric or pre-1940 historic human activity at a level of intensity normally involving evidence of purposeful behavior beyond the level of one or a few (less than 25) accidentally deposited artifacts.

Minimal site identification criteria include at least two of the following:

- (a) at least 25 artifacts within a definable area
- (b) a density of at least five artifacts per square meter,
- (c) three or more types of artifacts or materials,
- (d) One or more features,
- (e) One or more formal tools associated with other cultural material

Isolated Occurrences

Occurrences of artifacts at less than the above shall be classified as “Isolated Occurrences”. Three classes of Isolated Occurrences are recognized – Features, Scatters, and Isolated Artifacts:

A “Feature” is a construction that due to its recent nature or lack of association is not designated as a “site”. Examples would be an isolated trash dump, abandoned road, old fence line, or a recent campfire ring. Features may or may not be recommended for protection from project activities. Isolated prehistoric features, such as petroglyphs, pictographs, grinding slicks, pecked hand and toeholds, or bedrock mortars, will normally be recorded as a site. Consult the Forest Archaeologist if there is a question about whether such remains should be recorded as an Isolated Occurrence or a site.

Trash Dumps

Isolated historic period trash dumps without a known source or context, particularly post-1940, will generally be considered to be “Features” rather than “sites”, regardless of artifact density and diversity. When reporting historic period trash scatters and dumps, descriptions should include the size of the dump or trash concentration, estimate the numbers of different types of trash items

present, a possible date for the trash, and suggest the activity(ies) the trash represents. Also, discuss implications for age, gender, and ethnicity suggested by the trash.

“Scatters” (less than 25 artifacts). However, a “pot bust” is considered to be a scatter, even if it contains more than 25 sherds.

“Isolated Artifacts” (an occurrence of ONE single item)

GENERAL SITE LOCATION AND RECORDING STANDARDS

1. All cultural resource features, sites, scatters, and isolated artifacts encountered during the course of a project are to be identified and recorded. General information on completing the Forest’s site form is provided in Exhibit 1.

2. Each site discovered shall be plotted and identified with its Forest site number at the time it is recorded on USGS topographic maps. The use of a Global Positioning System (GPS) unit to delineate survey areas and site locations is required. Reports and site forms will identify the GPS unit model and the UTM Datum used (NAD 1983 is the Forest standard) to plot project and site areas. At a minimum, the location of the site tag, near the center of the site, must be taken. In the case of irregularly shaped sites, perimeter plots are desirable. Shape files and other GPS data for each project, locating project areas, sites, site perimeters, Isolated Occurrences, etc. will be provided electronically or on a CD with the final report.

3. From 1975 until about 2000, before reliable, inexpensive Global Positioning units were available, aerial photographs and acetate overlays were routinely used to plot the locations of archaeological sites. These aerial photographs and acetates are often invaluable for re-locating sites recorded before 2000. They may be borrowed from the Forest to assist in locating survey and site areas as well as a backup method, other than GPS, for locating sites and survey areas.

4. At least two digital photographs (minimum 1600 x 1200 at 5 megapixels), taken from different directions, will be taken of each site and feature, and submitted as part of the final project and site documentation package.

Photographs will be catalogued according to the examples in Exhibit 2. Camera digital image numbers will not be used as the final photograph identification number. Photographs from each site will be separated and assigned sequential numbers following the site number so that each has its own series of catalogued photographs beginning with “1”, e.g., “05-1435.0001”. For resurvey and site inspections, contact Forest or District Archaeologist for next available image numbers to be used for cataloguing.

5. Each newly discovered site shall be recorded using the USFS NRM electronic site recording system. Information and downloads of the requisite formats can be obtained from the Forest or District Archaeologist. In addition, hard copy site forms covering information listed on the Coconino National Forest site form must also be provided. Except for site plans, handwritten forms will not be accepted. Information contained on the site form is to be consistent with the instructions in Exhibit 1. Both hard copies, as well as electronic copies, of site forms will be provided to the Forest or District archaeologist, periodically or upon completion of the project, as determined at initial project orientation meeting.

6. Isolated Occurrences: There are three types of Isolated Occurrences- Features, Scatters, and Isolated Artifacts. They shall be plotted on USGS maps and with UTM coordinates. Each Feature, Scatter or Isolated artifact is to be identified on a separate numerical list – e.g., Feature 1, 2, 3, etc.,

Scatter 1, 2, 3, etc.: Isolated Artifact 1, 2, 3, etc. that includes a description of the feature or artifacts and the UTM coordinates for their location. When possible, isolated occurrence descriptions will include associated dates, cultural affiliation, material type, ceramic type, and other information relating to the context of the isolated occurrence.

ARTIFACT COLLECTION AND ANALYSIS

Collections may not be made under the authority of Non-disturbing Permits. Collections may only be made under Disturbing Permits, when working under a direct contract to the Forest (prime contractors only, not sub-contractors), or unless other arrangements have been made in advance with the Forest Archaeologist. This should be determined at initial project orientation meeting.

When artifact collection is allowed:

1. Collections may be made at the discretion of the archaeologist in the field, when authorized by the Forest Archaeologist. This pertains to rare finds, such as whole or nearly whole vessels, jewelry, diagnostic projectile points, etc. Any artifact collected must be located using a GPS unit. Collections remain the property of the U.S. Government and will be submitted to the federal repository listed in the permit or to the Forest Archaeologist upon completion of the project unless otherwise agreed to.

If found on a site, such rare finds are to be photographed and plotted on the site sketch. If they are an isolated artifact, or within a scatter, they are to be plotted on USGS topographic maps and GPS plots determined for each. UTM coordinates and related information will be provided to the Forest in electronic form and listed in the report. The report will also specifically state when individual artifacts are, or are not, collected.

2. Ceramic Analysis: Archaeologists should expect to encounter ceramic types in the Alameda Brown Ware, Tusayan White Ware, Tusayan Gray Ware, Tsegi Orange Ware, Little Colorado White Ware, Little Colorado Gray Ware, San Francisco Mountain Gray Ware, and Mogollon Brown Ware series. Other types may also be present in small numbers. Sherds shall be identified according to the standard type descriptions in Carlson (1970), Hays-Gilpin and van Hartesveldt (1998), Henderson (1979), and the *Museum of Northern Arizona Ceramic Series* (Abel 1955, Colton 1955, 1956, 1958; Colton and Hargrave 1937) unless otherwise agreed to with the Forest Archaeologist.

3. Lithic Analysis: Archaeologists should expect to encounter artifacts manufactured from sandstone, quartzite, rhyolite, obsidian, chert, petrified wood, and other siliceous and igneous materials. The typology used in classifying lithic artifacts shall be explained in the final report and the lithic material type identified for each artifact or class of artifacts observed or collected. At a minimum, manos should be identified by material and whether they are “one-hand” or “two-hand” in size, and whether they are unifacially or bifacially worked. Similarly, nether stones must be identified as to type, such as bedrock grinding slicks, mortars, grinding slabs, basin metates, trough metates, etc.

4. Artifact Density:

SITE TAGS

All sites found during the project must be marked with the Forest’s aluminum site tags unless other arrangements have been agreed to by Forest Archaeologist. Before beginning field work, the archaeological permittee should obtain a supply of aluminum site tags from the District or Forest

Archaeologist which will be used to mark all sites recorded. Tags that are not used shall be returned to the District or Forest Archaeologist at the end of the project.

The aluminum site tag will be nailed on the south side of a tree near the center of the site, no more than 6 in. above the ground. If no tree is available, the site tag will be attached to the end of a metal wire or stake, driven into the ground at the center of the site, and a small rock cairn (at least 20 cm. high) erected around the wire or stake.

SITE MARKING STANDARDS

When sites must be marked for avoidance from project activities, they shall be marked on the ground in the following manner:

(A) The perimeter of the site will be marked by spraying a white horizontal band, at least two inches wide, at a height of approximately 5 ft. above the ground, around trees that circle the site. In addition, a spot above 6 in. in diameter will be painted at the base of each tree so banded with the spot facing into the site.

(B) The perimeter of the site will be additionally marked by tying pink, fluorescent flagging tape at chest or face height on the painted trees with the knot and a trailing strand of flagging tape on the outside of the tree, facing into the center of the site.

(C) Both painted bands and flagging tape must be inter-visible and not obstructed by branches or foliage. Lathes, stakes, or posts that are clearly visible may be used to identify site boundaries when tree trunks are difficult to mark, there are no trees to paint, or there are no shrubs or rocks present to which the flagging tape can be attached.

GENERAL SURVEY REPORT STANDARDS

Exhibit 4 provides the report format that should be used. If anything more than the information in this report format is needed, this should be discussed in advance with the District or Forest archaeologist. Specific information that should be included in this report format is:

(A) Legal location of the project area, identified by reference to a USGS map and the Township(s) Range (s), and Section (s) examined by the project.

(B) Identify the Ranger District (s) on which the survey was done by District name(s).

(C) Provide the dates during which the survey was done.

(D) Identify by name and position the people who performed the survey and who directed or otherwise had administrative responsibility for the project and survey work. Use full names, not initials e.g. "Tom Jones", not "TJ" or "T. Jones".

(E) Describe the manner in which the survey was conducted and the spacing between surveyors or survey transects.

- (F) If a previously recorded site cannot be relocated, describe the distance and extent of area surveyed from the reported location in an attempt to relocate the site.
- (G) State any factors influencing survey type or ground visibility.
- (H) If less than 10 acres, state approximate dimensions of survey area in feet and provide total acreage surveyed for each survey unit as well as total area surveyed.
- (I) Provide summary information of number of sites, Isolated Occurrences (sub-divided under the headings of Features, Scatters, and Isolated Artifacts) that were identified. All maps will include a north arrow (indicating true north) and must accurately depict areas surveyed and locations of sites and Isolated Occurrences. For the report, maps at a 1:24,000 scale, and larger scale maps, if necessary, will be prepared on 8 ½ x 11 or 11x 17 -inch paper. If sites are shown on the maps, the map must contain the statement “For Official Use Only. Disclosure of Site Locations is Prohibited (36-CFR-296.18)”.
- (J) Reports and records will be submitted in electronic format with two print copies. If photographs, prints, or illustrations are used, they must be of suitable quality to provide a clear, legible copy.
- (K) When sites have multiple site numbers, the Forest site number will be the primary reference used in the report. Other site numbers will be listed following the Forest site number or, if more than five sites are contained within the project, a concordance table listing all site numbers will also be included in the report.
- (L) Do not include Culture History and Environmental sections, unless such information is vital to later sections of the report and is specifically addressed in later sections. Overall general, summary statements of culture history and environment in report introductory sections is adequate. Avoid on-site descriptions of vegetation, soil type, soil color, etc. unless such information helps locate features or is germane to understanding site use, e.g. location of a roasting pit to nearest agave concentration, or unusual on-or near concentration of possible of cultivar plants. Simply reference existing reports and sources providing such overview information.(Cf Downum 1988, 1990, 1992; Elson 2011; Fish and Fish 1977; Pilles 1978, 1987, 1996, 2014; Powers and Pearson 2008; Wilson 1969).
- (M) In clearance reports, only discuss and locate sites that are within or immediately adjacent to the project area, unless describing or postulating land use or settlement patterns. Do not reference sites outside the project area (the APE). When reporting previous sites in the vicinity of a project. DO NOT provide any GPS information or precise site plots on maps. Site numbers may be printed in the general vicinity of a site’s location, but precise plots or locational information for sites outside of project areas are not allowed unless prior arrangements have been made with the Forest Archaeologist.

DOCUMENTATION TO BE PROVIDED TO THE FOREST ARCHAEOLOGIST

Two original printed reports, an electronic copy of the report, printed and electronic copies of data originating from the survey including site inventory forms artifact analyses, and survey locational data. NRM data should be provided to the CNF Heritage NRM Steward, currently the Special Uses Archaeologist in the Supervisor’s Office.

Unused tags shall be returned to the District or Forest Archaeologist upon completion of the project or submission of the final report. The report will be reviewed by the District and/or Forest Archaeologist and, if needed, returned with comments and suggestions for revision. Revisions will be made within a mutually agreed upon time frame, and the final report submitted to the Forest Archaeologist.

Copies of site records for sites not on Forest land, but located within the boundaries of the Forest, will also be provided as above.

FUTURE USE OF DATA COLLECTED UNDER PERMIT

The permittee may use archaeological data resulting from this survey for future research purposes. However, per conditions of Forest Service archaeological permits, the permittee agrees to provide three copies of any manuscripts, reports, and publications pertaining to the survey data to the Forest Archaeologist, acting on behalf of the Forest Supervisor, within one month of its completion and/or publication. Manuscripts prepared for possible publication will be submitted once they have been completed in addition to any published versions that may be produced at a later date.

CONDITIONS OF USE OF DATA PROVIDED BY CNF

Information needed by a permittee regarding previous survey areas and archaeological sites provided by the Forest can be provided but must be used solely for the purpose of the permitted project, unless otherwise agreed to by the Forest Archaeologist. Such information, when provided will be accompanied by the following confidentiality agreement:

“Here is the electronic data (shape files/ site data/ site forms/ whatever) you requested for your project _____ - Please note the conditions, below, under which these files and scans are being provided for your use.

Disclosure of site locations is prohibited by 36-CFR-800-296.18. These files and scans are the property of the USFS and are being loaned to you solely for official use for this project. They may not be duplicated to anyone outside _____ without written permission, and the precise locations of these sites are not to be disclosed in reports unless they are within the area of direct project impacts (the area identified in the project permit application.) Upon completion of the project, you agree to destroy all copies and versions of this information and will notify _____ when this has been done.

By accessing these files (through this e-mail/ or at our office) you are acknowledging your acceptance of these conditions.”

STANDARDS FOR ACCEPTANCE OF WORK

Pre-field and field research, laboratory analysis, and reports are to meet professional archaeological standards determined through review by the Forest Archaeologist.

Pre-field research should be adequate to identify previously known or suspected locations of prehistoric and historic archaeological sites. At a minimum, this includes the permittee's inspection of the Forest's NRM and paper archaeological records, historic maps, and reports.

Field research should be adequate to identify and properly located 95% of all sites, and 75% of all Isolated Occurrences in the survey transects.

Laboratory analyses must correctly identify 75% of artifacts encountered, including ceramic types, artifact types, and the material from which artifacts were made. If artifact nomenclature is different from standard terminology (e.g., Adams 1997; Haury 1950; Gillio, Levine, and Scott 1980; Rock 1980; Sliva 2015; Loendorf and Rice 2005; Lyndon 2005) this is to be defined and explained in the final report.

Reports must contain the information mentioned above and must be written in a style that is clear, concise, and, most importantly, well organized, and easy to use. Poor writing, organization, production, etc. are grounds for rejection of the report. There should be no more than three errors in spelling, grammar, punctuation, and typing per page of the report. Legal descriptions in the report must agree with those shown in maps and figures. All sites, scatters, isolated artifacts, and features mentioned in the report must be shown on the report maps and vice versa.

All site information is to be on the site form with additional pages, if needed. Reports should not contain any information about a site that is not also included on the site form. If information is found in the report that is not on the site forms, the report and site forms will be returned for revision.

Appropriate knowledge of the prehistory and history of the Forest must be demonstrated by use of correct terminology, dating, and citations of primary references (e.g., Colton 1946), as well as the most recent publications pertinent to the cultural resources of the Forest.

Additional standards and requirements may be established for specific projects and will be discussed by the Forest Archaeologist and permittee at the time the permit is issued or prior to beginning fieldwork for a specific project.

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- 2008 Western Archeological and Conservation Center, Intermountain Region, National Park Service, Tucson. [www: core.Tdar.org/document/4367](http://www.core.tdar.org/document/4367)

Rock, Jim

- 1987 A Brief Commentary on Cans. Ms. Klamath National Forest, Cultural Resource Management Division.

Sliva, Jane

- 2015 Projectile Points of the Early Agricultural Southwest: Typology, Migration, and Social Dynamics from the Sonoran Desert to the Colorado Plateau. *Archaeology Southwest/Desert Archaeology*, Tucson.

Stein, Pat H.

- 1993a logging Railroad Resource of the Coconino and Kaibab National Forests Multiple Property Documentation Form. Ms. on file, Coconino National Forest Supervisor's Office, Flagstaff.
- 1993b Logging Railroads of the Coconino and Kaibab National Forests: Supplemental Report To a National Register of Historic Places Multiple Property Documentation Form. SWCA, Inc. Flagstaff.

Wilson, John P.

- 1969 The Sinagua and their Neighbors. PhD Dissertation, Department of Anthropology. Harvard University. Cambridge.

Exhibit 1

Instructions for Completing Coconino National Forest NRM Site Forms

FS Site Number: Obtain site number from Ranger District (RD) or Supervisor's Office (SO) or will be assigned by CNF upon submission of site form.

NA Site Number, if used: Will be assigned by the Museum of Northern Arizona

ASM Quad Number, if used: Will be assigned by Arizona State Museum, if needed

Project Name: Be sure name used is the same as name used in CNF project records

Project No.: Get project number from District or Forest Archaeologist before starting field work

Site Recording Date: Write out completely as "Sept. 15, 2007". Do not use numerical dates like "9/15/07"

I. General Site Information

Site Description: Be brief and concise. Do not include or repeat information that is going to be provided in another section of the site form, such as locational information or artifact details.

Site Condition: Use the following terms ONLY: Excellent, Good, Fair, Poor, Critical (site mostly destroyed). These correspond with the condition rank numbers, 0-5, used prior to 2008.

Site Dimensions: Give length, width, and total area in square meters. Indicate how dimensions were determined – visual estimate, paced, measured by tape, GPS unit, etc. Indicate orientation of site – "Site is 100 m. northeast-southwest by 35 m. northwest-southeast". Estimated depth of soil is 50 cm. – 1 m.

Maintenance Condition Rating: See below or obtain current List of Values (LOV's)

Condition Narrative: Elaborate, if needed, upon site condition and identify the nature and extent of any damage present. Be specific. Don't just say "grazing" or "erosion". See below

Disturbances: See below or get current LOV's

Management Recommendations: The default recommendation "Scientific Study", not "Preservation" but Stabilization, Interpretation, Maintenance, or Monitor are also acceptable

II. Locational Information

Land Status: Will usually be "Coconino National Forest, _____ Ranger District". Otherwise indicate details of land status under "**Other Ownership**".

Map Quad: Provide complete USGS map name, scale, and date of map. e.g. Sunset Crater West 1:24,000, 1966.

State: Will always be Arizona. **County:** Will be either Coconino or Yavapai. **Township & Range:** Will always be ___ North and ___ East. **Section ¼:** Provide down to nearest ¼, ¼, ¼, ¼, starting with the smallest ¼. Think of the words "of the", between each ¼ to help keep this in mind.

This is the SW ¼ “OF THE” SE ¼ of the NW ¼ of the SE ¼:

GPS Datum: USFS standard references is NAD 83, but always indicate the datum used. Survey crew members should always double check their settings to be sure they are all consistent.

UTM Source: Provide the GPS unit’s manufacturer’s name and model.

Additional GPS information: Add anything else regarding the precise location of the reading or adverse weather conditions that might affect the reading., e.g. “GPS reading taken 20 ft. west of site, in center of East Clear Creek, outside of site overhang.”

Elevation: Elevations from GPS units are often incorrect. Verify elevation reading with USGS map plot.

Site Tag Location: Describe where the tag is located or if no tag was used. Forest protocol for site tags is to nail them to the south side of a tree, preferably 5-6 in., but no more than 1 ft. above the ground, as close to the center of the site as possible. If no tree is present, wire tag to a bush by the center of the site or affix site tag to a pin flag and build a small rock cairn around it.

III. Legal Status

National Register Status: This is a formal designation that requires consultation between the Forest and the State Historic Preservation Office and must be made by a professional archaeologist. The only acceptable terms are “Unevaluated”, “Listed on the National Register”, “determined Eligible under Criterion ____”, “Not eligible”, or “Non-contributing”.

National Register Status Justification: Discuss what’s typical, or unique and unusual, about the site. How does it fit in the local/regional settlement pattern? Add what Criterion the site is eligible under. Be specific on WHY a site is eligible. Generic justifications such as “can contribute important information about the past”, “information about past life ways” should be avoided. Relate significance to specific research questions, needs, or topics as identified in current literature of the area. Unless making a formal National Register nomination, don’t discuss aspects of integrity unless they specifically support a site’s eligibility criteria. e.g. Do not state that a site does or does not have integrity of design, feeling, location, the work of a master craftsman, etc. if it is only considered eligible under Criterion D.

IV: Site Component Information

Temporal Affiliation: Is either **P** (prehistoric), **H** (historic), or **U** (unknown)

Culture, Phase, and Date: See List of Values. Provide site-specific date, based on ceramics, or general phase dates. “B.C.”, is placed before the date, “A.D.” is placed after the date – e.g. “3,000-5,000 B.C.”, “A.D. 1150-1250”

Basis for Cultural Affiliation, Phase, and Dates: What is the basis for your evaluation? e.g., “geographic location,” “regional pattern”, for general statements, or “Dominance of Verde Brown and Walnut B/w” for more specific assessments.

Theme: This relates to historic themes used by the National Register, State Historic Preservation Office, and National Park Service. See List of Values.

Function/Activity : this field should represent the predominate feature of the site, equivalent to ‘Site Type’. Use the same List of Values as Feature Type.

Feature Types: See List of Values (below) for terminology. Give each feature a number, e.g. “Feature 1 - Pueblo, two rooms. Start with architectural units (pueblos, pit houses, kiva, etc.), then features (hearths, rock pile, cleared area, agricultural features, etc. and end with artifact categories

Description/Construction Technique: When masonry structures are present, describe wall construction technique, number of courses wide, wall fill material, stone type. How high are walls now, and how high might they have been originally, based on amount of wall fall. Provide size of each room/pit house, specifying interior dimensions. Give size of wall fall in addition to interior dimensions, when possible.

Artifacts: Artifact ID is the discrete artifact or group of artifacts being described – such as projectile point 1, Tusayan White Ware, ground stone, etc. Essentially, if the artifact is identified individually on a site map or site description, then it should be described individually in this matrix.

Provide information about quantity and location of artifacts. Most sites will have “sheet trash” – an overall scatter of artifacts. But are there also areas of artifact concentration? Estimate densities using the terms sparse, moderate, and abundant, as well as estimates of density by numbers (tens, hundreds, thousands).

V. Site Associations: Site recorders, company, publications, any other relevant person, or institution.

ADDITIONAL INFORMATION FOR COMPLETING SITE FORMS

LOCATION DATA: Add any additional information that will assist someone return to the site with a minimum of effort. **Always state distance and direction** and use compass bearings when appropriate. Use prominent terrain features that will help an individual return to the site. Do not use general references that are not directly useful to relocating the site – e.g., do **NOT** state “Mormon Mountain 2 mi. to northeast”. Use only features in the immediate vicinity – e.g., “Prominent spike-top clump of dead ponderosa 200 m. NE

Do not assume such detailed information is superfluous because you are using a GPS unit. Document terrain reference points in your sketch map to help guide a person to the site, using traditional map navigating skills. .

SITE TYPE: this provides the Forest’s list of standardized site “types” than can be used for initial computer sorting. The full NRM LOV for site types uses many terms to identify the same site type. This list attempts to reduce those terms to provide long-term consistency for site types on the Forest. Use the “Site Type” term below that best characterizes the site. Trash is considered a by-product of human activity and as such should not be used to identify the primary site type when other features are present. Hence, a site type would not be “an artifact scatter with a structure” but rather “a “field house with a [sparse/moderate or /abundant] artifact scatter.” See published summaries of the archaeology of the area reconstructions of these past systems (Baldwin and Bremer 1986; Fish and Fish 1977; Fish, Pilles, and Fish 1980; Pilles 1978, 1979, 1981; Wilcox 1996, 1987.)

Rock shelter. A shallow overhang –usually not high enough to stand upright. (no structures)

Cave. A deep overhang – deeper than it is wide – in which one can usually stand upright. No structures.

Cavate. Sides of the cave have been modified or carved out by humans. Typically, with a wall built across the mouth of the cave.

Community Room: An unusually large pit house or room, typically 2-4 times larger than a “typical” pit house or room. Functionally, they are probably equivalent to a “Great Kiva”, but do not have traditional Great Kiva features.

Lithic Scatter: Flaked and ground stone. No pottery.

Sherd Scatter: Sherds only.

Artifact Scatter: Sherds, flakes, and ground stone present.

Pit House Site, 1-2 depressions present: Depressions are evident, or density and diversity of trash suggests pit houses are present.

Pit House Site, 3-4 depressions evident

Pit House Site, 5-8 depressions evident

Pit House Site, 9-12 depressions evident

Pit House Site, 13-20 depressions evident

Pit House Site, 20+ depressions evident

Field House: A structure utilized seasonally, typically during planting , harvesting, or for other temporary uses. Characterized by low walls with insufficient rock fall to provide full-height walls. Sparse artifacts, few decorated/trade ware sherds, no exotic materials such as jewelry, points rare, few artifacts other than ground stone tools or fragments.

Pueblo, 1-2 Room Habitation: Distinguished from a field house by having sufficient wall fall to have had full height walls, diverse artifact assemblage, moderate number of decorated/intrusive pottery, variety of lithic material, etc.)

Pueblo, 3-4 Rooms

Pueblo, 5-8 Rooms

Pueblo, 9-12 Rooms

Pueblo, 13-20 Rooms

Pueblo, over 20 Rooms

Agricultural Site: Evidence of agricultural features only, such as rock piles, linear borders, or grid borders. If a field house is also present, it has precedence over an “agricultural site” site type identification.

Historic Site (specify type of historic site present. There is not currently a standardized historic site typology).

Rock Art Site: (Specify if petroglyphs, pictographs, intaglios, terraforms, dendroglyphs, etc. are present).

Roasting Pit

Ball Court

Other

Multi-property terms, such as “fort” or “cliff dwelling” may also be used as a secondary level of “site type”.

Multiple site types may be present on a single site; however, determine the most appropriate primary site type designation. Except for “scatters”, a secondary site type may also be added, e.g., “Pueblo, 9-12 rooms / agricultural”, “field house/agricultural”. Artifacts are usually present on most sites so the presence of features takes precedence identifying a site type. i.e. the primary site type term for a field house with artifacts should be “Field House”, not “Artifact Scatter with a field house”; or “Pithouse” not “Artifact scatter with pit house”.

CONSTRUCTION TECHNIQUE: When masonry sites are present, describe the wall construction method, if this can be determined. Watch for differences between basal courses and upper courses. – e.g., “Double coursed wall, filled with fist-sized rocks. Basal course of upright slabs, upper courses are evenly spaced. No shaping. All limestone”.

The following observations have been found useful for distinguishing seasonally used field houses from permanent habitation pueblos. All are “best guess” estimates.

RUBBLE HEIGHT NOW: How high (metric) is the mounded wall fall now?

ESTIMATED ORIGINAL HEIGHT: How high (in meters) could the wall have stood originally?

STONE: Identify stones used and, if multiple stone types present, indicate which is dominant.

TRAILS: Indicate evidence for human-made trails, not modern game trails.

ROCK ART: If rock art is present, specify if petroglyphs or pictographs, approximate number of panels, approximate number of elements. Indicate what pecking techniques are present (Direct Percussion, Indirect Percussion, Sharpened Hammerstone, Scratched, Incised, Abraded, etc.) and colors present in pictographs.

TRASH/ARTIFACT DENSITY: Indicate the number of sherds, lithics, and ground stone artifacts by type that are present at the entire site by either counting the total number of each, if site is small, or by using 1 m. sample units, if site is larger. The terms sparse, moderate, and abundant may be used, but each must be quantified, e.g., “sparse(< 1 artifacts/sq. m.), “moderate” (2-5 artifacts/ sq. m.), or “abundant” (> 5 artifacts /sq. m.). Do **NOT** use combinations like “Sparse to Moderate”. Provide a general overall site density estimate by counting a few random 1 m. sq. areas and averaging them to state an average site density of “general density of X sites/sq. m.”.

ADDITIONAL SITE DATA: Describe anything else you can about the site. Give details on structure sizes, masonry techniques, similarity, or differences of this site to others in the area, etc.

DISTURBANCE: If the site has been damaged, indicate the nature and severity of disturbance. Actions such as cattle grazing, tree growth, weathering, and erosion are considered to be natural processes and are not usually considered “damage”. Only indicate these if they have caused damage beyond that which would normally be expected, like if a tree is growing inside a pit house, an arroyo has cut through the site, or a major cattle drive has impacted the site. In any case, be specific about the location, extent, and severity of damage, rather than general terms such as “cattle grazing”, “erosion”, “recreational use” etc. Be specific as to **WHAT** damage has such activities caused and **WHERE** is it?

SITE SIZE: Give the size of the site according to its short and long axes in meters and indicate the direction of these dimensions – e.g., “25 m. N-S x 45 m. E-W”.

HOW DETERMINED? Do not visually estimate distances. Either pace these dimensions or measure them with a tape or GPS unit.

TOTAL AREA: Multiply the length by the width of the site to compute the site’s total area in square meters or determine with a GPS unit.

DISCUSS SITE RE: LOCAL/REGIONAL SETTLEMENT: From spending time in an area and recording its various sites, you should have formed some impressions about the archaeological settlement and land use pattern of the area. Summarize and interpret these impressions here. This section should discuss the site as it relates to other archaeological sites in the area. Try to relate this site to broader settlement and land use patterns and discuss its potential significance to regional archaeology. Indicate how typical or unique it is compared to other sites in the area. Infer site function.

SITE TESTED/EXCAVATED/DOCUMENTED: If the site has been professionally investigated, indicate the level of work that has been done. “Testing” would include the digging of test squares or trenching to examine sub-surface remains and the site extent. “Excavation” would involve the excavation of 50% or more of the site. **“Documented” does not mean a site form has been prepared;** rather, it means documentation beyond a basic recording level, such as would be done for mitigation from project impacts, or for research purposes. Examples would be documenting a historic structure by making measured drawings or taking extensive photographs. Or, in the case of a petroglyph site, when detailed descriptions, sketches, measurements, and photographs have been made of each element.

CHRONOMETRIC DATES: If available, indicate if tree-ring, archaeomagnetic, obsidian hydration, or other dating techniques have been used on the site and provide those dates.

REFERENCE/PUBLICATION: If there is additional information about the site beyond the site form and photographs, indicate what and where it is. If the site appears in a report or manuscript, give the reference. For example, “See site file”, “Part of Winona Village. McGregor 1937:45.”, “Colton 1946:146.” Do not state “see site file” unless there IS a site file that contains additional information.

TAG LOCATION: Indicate where on the site a site tag has been placed – e.g., “Tag tree is an alligator juniper, 36 in. dbh, at NW corner of pueblo”. The tag should be placed near the center of the site, on the south side of a tree, no more than 1 ft. above the ground. If a tree is not available, tag can be tied to a sturdy bush or place beneath a small cairn of rocks in the center of the site. Also, be sure to identify the location of the tag in your site sketch.

RECORDED BY: Enter full first and last names of people. **DO NOT USE INITIALS ALONE.** This should include all members of the crew who recorded the site with the main site recorder’s name appearing first. .

DATE: Enter the date the site was recorded listing the month, date, and year, in that order. **DO NOT** use military or European style for citing dates. If the site was previously recorded, enter the earlier recorders’ names and the dates the site was first recorded, then the names and dates for the current recording of the site.

IDENTIFY ARTIFACTS: Identify ceramic and artifact types collected or observed in the field. This information should be extensive and complete so that the site can be assigned to a cultural and temporal placement. If a site is small, the total collection analysis should be listed. Ceramics are to be identified to the type level following the Colton/Hargrave typology. If sherd or painted design is too small to identify to type, identify it to the Ware level and identify as such. e.g. simply “ 4 Tusayan White Ware sherds”, not “4 unassigned/ unidentified/ undifferentiated Tusayan White Ware sherds”.

IDENTIFICATION/COLLECTION TECHNIQUE: Indicate how the artifacts were recognized for identification or collection purposes, if authorized. For example, “Total site id”, “Grab”, “Grab with emphasis on decorated sherds”, “100% id in every other meter square through N-S axis of site”, “Four 1 sq. m. units collected” etc,

SITE MAP: This is a detailed sketch of the site, local topography, features, location of diagnostic artifacts, structures, structure numbers, size of structures, site tag location, etc. If a GPS map is not made, a compass and pace map of the site is acceptable.

Exhibit 1 – Site Form

NA _____ Ariz. : : ____ (ASM)

AR-03-04- - .

Site Name/Other Site Numbers: _____

Project Name: _____ CNF Project No.: _____

Location Information

Land Status: Coconino National Forest _____ Ranger District

Other Ownership : _____

USGS Map Quad.: _____ State: Arizona County: Yavapai____ or Coconino ____
T N, R E , Sec. , ¼ ¼ ¼ ¼ Elev.: _____ ft

UTM: Zone 12 East: _____ North: _____ Datum: NAD 1983

GPS Unit: _____ GPS Comments: _____

Site Tag Location:

Directions to Site: (Describe route from major highway & milepost. Give landmarks, references, etc.):

Site Type: (See LOV's) _____

General Site Information

Site Description (add additional information on back):

Cultural Affiliation(s):

P,H,U	Culture	Phase(s)	Date (of phase)	Date (Based on Artifacts)

Basis for Affiliation, Phase, and Dates (Be specific! Sherd types, point forms, bottle/can types, assemblages, etc.)

Theme (see LOVs): _____

Function/Activity (see Feature Type LOVs, pick predominate feature of site):

Features:

No	Feature Type (see LOVs)	Material/ Stone type	Describe (Construction technique, courses wide/high,	Wall hgt now	Wall hgt originally
1					
2					
3					

Site Condition

Disturbance (Circle): Rank: 0 (undisturbed), 1 (Good), 2 (Fair), 3 (Poor), 4 (Critical), 5 (Destroyed)

Describe source and specifics of disturbance:

Vandalism (?) (Circle): Yes / No **Pot hunted (?)** (Circle): Yes / No

Describe:

Site Dimensions: Length _____ m. Width _____ m. Area _____ m²

How determined?: Visual estimate _____ Paced _____ Taped _____ GPS _____

Ground Visibility: Overall, what percent of the ground surface is visible? _____

Mangmt. Recommend (see LOVs or choose 1): Research _____ (preferred default for all sites)

Interpretation _____ Preservation _____

Management Recommendation Narrative:

Management Condition (see LOVs):

National Register Recommendation: Unevaluated _____, Eligible _____, Not Eligible _____,

Criteria (A,B,C,D): _____ **Basis for Eligibility:** R-3 PA _____ and/or **Other** _____

Why ? (Discuss site re: local/regional settlement. Specific research potential. What's typical or unique?)

Status: Unevaluated _____, Eligible _____, Not Eligible _____, Listed _____

Site Recorded By:

Name	Agency/Organization	Date

Artifacts:

Density: ± artifacts/m² _____. (**S**parse, **M**oderate, **A**bundant): Ceramics: _____ Lithics: _____ Ground Stone: _____

Sample Type: Grab _____ Controlled _____ Grab & Controlled _____

(Use separate sheets for controlled sample information)

Artifact FS No.	Class (see LOVs)	Type (see LOVs)	Count	Collected	Cat No.

Photographs:

No.	Subject:	Facing:	Photographer:	Date:

Site Associations

Previous Projects/Events and Report No(s):

References/Publications:

**Add any additional information on back of form or on continuation sheet.
Attach Site sketch, Map(s), and illustrations.**

Exhibit 2

Photo Log

Digital photographs should be identified on a photo log, as per the following example. .

Example of completed photo log:

<u>Date of latest revision: Aug. 11, 2006</u>		<u>By: Peter J. Pilles, Jr.</u>		
Coconino National Forest - DIGITAL Photo Identification Sheet				
Site AR-03-04- 06-273 Devil's Dining Room				
Photo cat. no.:	Description. (<i>Identify people by name. Describe what you are trying to show by taking this photo.</i>)	Direction: Facing	Photographer's Name (<u>Not</u> <i>initials</i>)	Date
NOTE: These are photo catalogue numbers, not camera image numbers. Rename your images with a cat. number.				
06-273. DIGITAL.				
	Looking over site and Forest Road 179-F. Vehicle is in parking area adjacent to Devil's Dining Room.	SSW	Peter J. Pilles, Jr.	Aug. 10, 2006
.0001				Aug. 10, 2006
.0002	Looking over site and Forest Road 179-F	N	Peter J. Pilles, Jr.	Aug. 10, 2006
.0003	Looking S. over FR 179-F that cuts through site	S	Peter J. Pilles, Jr.	Aug. 10, 2006
.0004	Detail of artifact density on W. side of road	SE	Peter J. Pilles, Jr.	Aug. 10, 2006

Exhibit 3

Logging Railroad Grade Evaluation Criteria

Obtain current information from District or Forest Archaeologist.

For background information on the Forest logging railroad system, see Pat Stein, 1993, *Logging Railroads of the Coconino and Kaibab National Forests*. SWCA Archaeology Report No. 92-26. USDA Forest Service, Southwestern Region, Report No. 19, 2006. Copies may be obtained from the Coconino National Forest.

Exhibit 4

Standard Report Format

NOTE: Edit header to include project number & page number on all pages

An Archaeological Survey and Cultural Resources Clearance Report for ** Coconino National Forest, Arizona

Note: SHPO has asked that the titles of reports clearly indicate when a new survey is involved, if it is just a clearance based on previous work, or a combination. So, use appropriate title to indicate this.

By

* District Archaeologist *(or whatever author's position is)*

, 2013

Table of Contents, List of Figures: Only use one when it is a complex, lengthy report where a table of contents, figures, tables are needed to find necessary information

ABSTRACT

This should be a short, concise summary of what project activities are involved, how many sites were found, sites determined eligible, not-eligible, undetermined, project acres, new acres surveyed, percent of project area sampled. This should be suitable for cutting and pasting into the IS&A form.

Project Acres:

New Acres Surveyed:

Acres Re-surveyed:

Previously Surveyed Acres: *Previously surveyed that are used to provide clearance.*

Project Location and USGS Quadrangle:

Names of Surveyors:

Dates of Field Survey:

Total Sites in Project Area:

Newly Recorded Sites: Eligible: Not Eligible: Unevaluated:

Previously Recorded Sites: Eligible: Not Eligible: Unevaluated:
(This will be detailed by individual site numbers in the National Register Eligibility Table attachment to the IS&A.)

Isolated Occurrences: Features: Scatters: Isolated Artifacts:
Clearance Recommendations: *If recommend monitoring, always include requirement for a report. Can be as simple as e-mail or a complex report.* **None: Avoid:**
Flag sites for avoidance: Monitor: Other:
Determination of Effect: *Delete those that do not apply. No. refers to coding no.* 1) No Effect: 2) No Adverse Effect: 3) Adverse Effect: 4) Not an Undertaking: 5) Beneficial Effect: 6) No Sites Present:

INTRODUCTION

Project activities will consist of ****** *(list all activities associated with the project including ancillary support components, such as access roads. Include direct, indirect, and cumulative effects, as needed.)* An archaeological survey was performed to determine if cultural resources were present that might be affected by the proposed ******. The project is located in T*N, R*E, Sec. * on the ****** Ranger District of the Coconino National Forest, Arizona (Figure 1). *When a project is being done under the provisions of the R-3 PA, such as staged, modified survey strategy, sample surveys, etc., refer to the specific provision in the PA under which work was done, or reference date of consultation with SHPO.*

PREVIOUS SURVEYS AND RECORDS SEARCHES

The Forest's INFRA database, Geospatial Data Bases, and Archaeological Atlas have been reviewed to locate previously surveyed areas, recorded sites, and sites for which locations are uncertain.

Author and Date	CNF Project No.	Project Name	Comments
<i>Example: Kuehn, David 1977</i>	1978-8-D	Stumpwood Sale: Anderson Mesa	No report prepared

A total of ******* projects have been conducted in the proposed project area, covering ******* acres. These projects are considered to meet current survey standards. *If this is not the case, explain.*

The Forest's Historic Maps Atlas has been reviewed to identify historic properties that have not yet been recorded. *Depending on the size of the project, the intent is to locate historic locations that may have remains that fit the CNF definition of "site". This is not an index of all places and features shown on all historic maps. Do not include infrastructure such as roads, telephone lines, power lines, gas lines, etc. If found in the field, these will usually be considered features. Known historically significant routes, such as the Beale Road, General Crook Road, etc. may be identified, but if previously recorded, describe under "Sites". If uncertain, consult the Forest Archaeologist.*

Reference any other sources consulted as well, citing author, date, place of publication or other necessary reference citations.

The Coconino National Forest Site Density Prediction Model ¹(Barrett 2010) (*T:\FS\NFS\Coconino\Program\2300Recreation\2360HeritageRestricted\GIS\Site_Density_Model*) indicates that the project area is Class *** with a predicted site density of *** sites per square mile. *Modify this as needed for large projects that may include areas of different predicted site densities.*

Buffer Zones: Buffer zones are not usually included, other than sites that have not been precisely plotted with GPS and that may be in close proximity to the project area. If buffers are necessary, 200 m. is considered adequate, otherwise consult with the Forest Archaeologist. If such sites are identified on maps, do not use a point locator, only the USFS site number in the vicinity of the actual site location.

Environment and Culture History: These will not be in reports unless they are directly relevant to determinations of significance. Consult with the Forest Archaeologist before including such sections.

THE SURVEY

Survey Strategy

This is only needed when less than 100% survey is conducted. If less than 100% survey is done, indicate the type of sample employed (judgmental, random, stratified, etc.). Discuss how sample areas were selected, why, and where. Consider ground visibility, slope, elevation, land ownership, etc. when areas are omitted from survey. Indicate when the Forest Archaeologist, SHPO, tribal representatives, etc. were consulted or provided input into sample strategy.

Survey Methods

The survey was conducted on ** by **, **, by walking a series of parallel transects spaced 66 ft. apart over the entire project area. The project area measures ** by ** ft. (* acres). The survey area measures * by * ft. (* acres). A total of * acres were surveyed. *If the project, or any part of it, has previously been surveyed, provide separate figures for “newly surveyed acres” and “resurveyed acres”.*

Survey Results

* sites * features, * scatters and * isolated artifacts were found. Definitions of “site”, “isolated Occurrences”, “feature”, “scatter”, “isolated artifact” are contained in FSH 2309.24 and the “General Requirements for Conducting Archaeological Surveys on the Coconino National Forest”. References for dating of ceramics, projectile points, and historic artifacts are *** or “those referenced in the Coconino National Forest “Guidelines”.

¹ Site density ii predicted on number of sites/sq. mile based on 134 environmental units in the USFS Terrestrial Ecosystem Soil Survey. Class 1 = Very low, 0 sites/sq. mi; Class 2 = Low, 1-10 sites/sq. mi; Class 3 = Moderate 11-20 sites/sq. mi; Class 4 = High, 21-30 sites/sq. mi; and Class 5 = Very High 30+ sites/sq. mi.

Indicate how survey results do or do not support the CNF predictive model. If different from prediction, state how results differ and possible explanations why.

THE SITES

Do not include photographs or site plans unless there is something very unusual about a site or if there is a need to convey certain information about the site or its setting that is relevant to its eligibility or protection or when actions are proposed within a site. DO, however, include plans and photographs for sites that are being determined not eligible, as per the SHPO's request.

AR-03-04-_____ **UTM Coordinates:** _ _ _ _ _ **E.,** _ _ _ _ _ **N.**
Cultural Affiliations: **Phases:** **Dates:**

State the basis for assigning culture and phase determinations. Be specific. Don't say "based on decorated sherds", cite the specific types that indicate the dates. For projectile points, identify the type of projectile point, as per Krug ****, or describe the point.

Site Description:

Artifact Types and Density: Artifact density refers to the overall site, not variable densities within the site, although loci with densities greater than the overall general site density should be identified and plotted on the site plan. Only one overall density term for the site as a whole is to be used. DO NOT USE TERMS LIKE "SPARSE-MODERATE" or "MODERATE TO DENSE". If a small site, give a total site artifact count by artifact class. If the site is too large for this, sample the entire site area by appropriately sized metric units and provide artifact densities in terms of artifacts per square meter. When describing artifact density give numerical ranges. The terms "low", "medium", and "abundant" may be used, but the approximate count ranges for each rating must be defined, e.g., "low density = 3-10 artifacts per sq. m., moderate density = 10-30 per sq. m." whatever is appropriate for the part of the Forest in which the survey is being done. Do not use "more-than" counts, e.g., "200+".

Although collection of artifacts is not usually authorized, identify specific artifacts that were collected and include the phrase "with the authorization of the [District or Forest] Archaeologist."

Determination of Eligibility: This should be no longer than necessary to demonstrate a site is eligible under one or more of the Criteria. Any additional information not needed to demonstrate minimal eligibility should not be in a clearance report, but a more appropriate document such as a Forest Heritage management plan, District overview, National Register nomination, archaeological property evaluation, property type thematic evaluation, professional publication, or similar document. Identify the specific criteria for which a site is eligible (i.e., A, B, C, and/or D) and be sure to discuss its integrity. Aspects of integrity include location, design, setting, materials, workmanship, feeling, and association as they relate to the significant qualities of the

site (see National Register Bulletin 15). Give specific reasons WHY a site is eligible or not eligible. Statements like “important information for land uses” are not acceptable. Reference potential for contributing to specific research questions for the Southwest and/or for the prehistoric, protohistoric, and historic groups represented on the Forest. Reference existing overviews, thematic National Register documents, and SHPO context documents. As professional archaeologists, part of our legal responsibilities is to make knowledgeable, objective determinations of eligibility – not to save every site we find. Unless there is clear potential for significant information, the site should be left unevaluated or, more likely, not eligible. For example, if a site is an artifact scatter, with no features, no diagnostics, and little potential for subsurface deposits, it should probably be determined not eligible.

If the report covers a large number of sites, a table should be included as an appendix. See Appendix A.

THE ISOLATED OCCURRENCES

Features

Ftr. No.	Description	± No. of Items	Extent (m. NS x m EW)	Approx. Date	UTM-E Easting	UTM-N Northing
Ftr 1:						
Ftr 2:						

Artifact Scatters

Scat 1:*						
Scat 2:*						

Isolated Artifacts

IA 1:*						
IA 2:*						

* = Artifact collected Use asterisk if artifact(s) collected. Delete asterisk if not collected.

TRIBAL CONSULTATION **(IF NEEDED. IF NOT, DELETE)**

The following Native American Indian groups were notified of the project in the Coconino National Forest Annual Consultation letter dated _____, **confirm project is listed there** as well as the Forest’s Schedule of Proposed Actions and quarterly updates: Dine’ Medicine Man’s Association, Fort McDowell Yavapai Nation, Hopi Tribe, Hualapai Tribe, Havasupai Tribe, Navajo Nation, Pueblo of Acoma **(**Only for projects**

on S.F. Peaks) , Pueblo of Zuni, San Carlos Apache Tribe, San Juan Southern Paiute Tribe, Tonto Apache Tribe, Yavapai-Apache Nation, Yavapai-Prescott Tribe, and White Mountain Apache Tribe. No replies about tribal concerns about this project were received. No areas of traditional cultural importance or areas of specific tribal concern are known for this part of the Forest, based on previous consultations and Forest research into tribal uses of the Forest.

Only include this if you are making a DOE: The Hopi Tribe, the Yavapai-Apache Nation, and the Yavapai Prescott Tribe concur with the recommendations of eligibility as per a Memorandum of Agreement signed Jan. 9, 2003, and other agreements of January 24 and February 4, 2002, respectively.

CLEARANCE RECOMMENDATIONS

The latest Forest Service listings for the National Register of Historic Places have been consulted, and no sites on or nominated to the Register are known to be in the project area. Sites ** are considered eligible for nomination to the National Register of Historic Places under Criterion D of 36-CFR-60.4. *or additional criteria if appropriate.*

Sites _____ are determined eligible under Criterion D and will be protected. Sites _____ are unevaluated but will be protected pursuant to FSM 2361.1(2) and FSM R-3 2361.21(2) until testing or additional information is available that would allow conclusive determinations of eligibility to be made (Programmatic Agreement V.D.3). *See Programmatic Agreement Appendix B List of Properties that May be Considered Eligible without further consultation)*

The isolated occurrences are not considered significant and require no further protection, as per the First Amended U.S.D.A., Forest Service, Region 3 Programmatic Agreement Regarding Cultural Property Protection and Responsibilities, dated December 24, 2003.

The _____ Ranger District is responsible for notifying the Zone or Forest Archaeologist before initiating any activities as part of this project, to ensure the proposed activities have cultural resources clearance and that project personnel are aware of the conditions of this clearance.

Should any additional prehistoric or historic archaeological sites be encountered during the course of the project, they are to be avoided and reported to the District or Forest Archaeologist.

Consider using a monitoring requirement:

The _____ District _____ (Title) will periodically monitor the sites during the time the project is active to ensure sites are being avoided and the conditions of this clearance are being met. Should any site damage be noted, work in the vicinity of that

site will stop and the District or Forest Archaeologist contacted to determine an appropriate course of action.

DETERMINATION OF EFFECT

This section must make a statement as to whether or not the proposed undertaking will have an effect upon the significant qualities of the archaeological sites/historic properties within the Area of Potential Effect of the project. The only determinations that may be used are "No historic properties effected", "No effect", "No Adverse Effect", or "Adverse Effect". Note that there can only be one determination of effect and that relates to the entire undertaking, not one aspect of the undertaking, not individual portions of the undertaking, and not individual sites. You do not make determinations of effect on individual sites. If one property is affected by an undertaking, ALL are effected by that undertaking. Effects are measured against the specific qualities of significance of individual properties. Effect to visual, auditory, or atmospheric qualities are only present if they are contributing qualities to the National Register significance of a property.

If these recommendations are followed, there will be _____ Effect to cultural resources by the proposed project.

This report is submitted in compliance with the provisions of the National Historic Preservation Act of 1966, as amended, and the First Amended Programmatic Agreement between the Arizona State Historic Preservation Officer [and other R-3 SHPO's], the Advisory Council on Historic Preservation, and the USDA Forest Service, Region 3 (Dec. 24, 2003).

Cultural Resources Clearance for the ** Project is recommended, contingent upon the above recommendations.

REFERENCES CITED

(NOTE: Unless otherwise noted, all reports are manuscripts on file at the Coconino National Forest Supervisor's Office, Flagstaff, Arizona. Previous project references listed in Table ___ need not be repeated here.

Barrett, Chris

2010 Coconino National Forest Site Density Predictive Model. Geospatial data layer at Coconino National Forest Supervisor's Office, Flagstaff.

Authors' names

19 An Archaeological Survey and Clearance Report for _____ (CNF Project _____).

Coconino National Forest

2013 General Requirements for Conducting Archaeological Surveys on the Coconino National Forest.

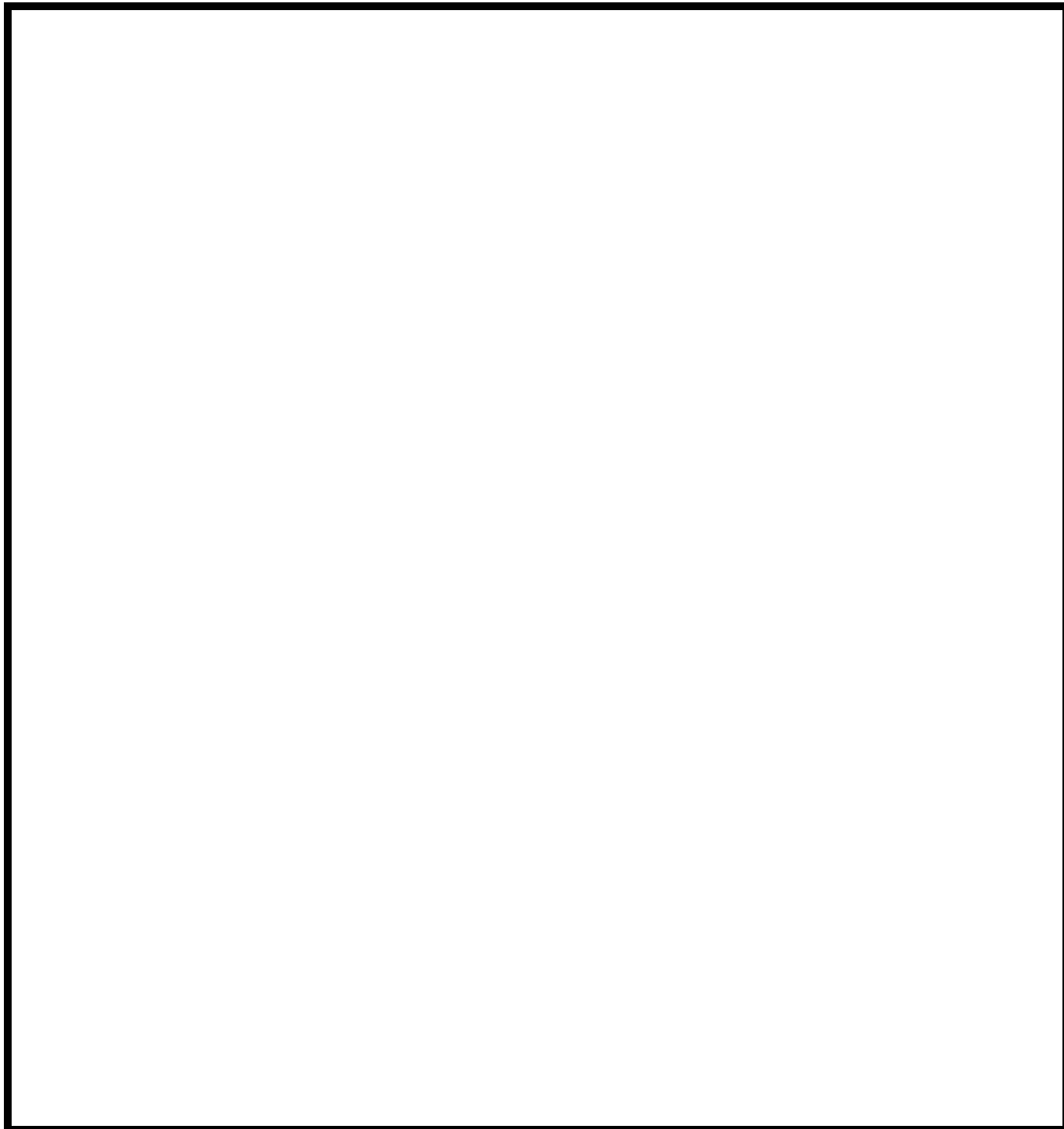


Figure 1. Area Surveyed for **, (Project No.**), located in T*N, R*E, Section * . Base map is *, Ariz., U.S.G.S., 7.5' quadrangle.

Appendix A: Table of National Register Status of Historic Properties

Site No. & Name	Site Type	Culture	Phase & Dates	Eligibility Criteria	Easting (NAD 83)	Northing (NAD 83)	Comments

NOTE: Land status is Coconino National Forest, and property type is "Site" unless otherwise noted under comments.

Move following section into the Revised Guidelines for Working on CNF

Consider citing an appropriate historic context document and/or state how site contributes to a specific research topic pertinent to the prehistory or history within the Coconino National Forest.

Within the historic thematic contexts reports produced by the State Historic Preservation Office as components of the Arizona Historic Preservation Plan, the following sites are most appropriately considered under the following context report(s):

Site	Context Report	By
02-1234	Rock Art in Arizona	J. Homer Thiel
02-1234	Prehistoric Water Utilization Technology in Arizona	Michael S. Foster, M. Kyle Woodson, & Gary Huckleberry
02-1234	Prehistoric Non-Irrigated Agriculture in Arizona	David E. Doyel
02-1234	Prehistoric Irrigation in Arizona	Allen Dart
02-1234	Making and Using Stone Artifacts: Lithic Sites in Arizona	Jane Sliva
02-1234	Transcontinental Railroading in Arizona, 1878-1940	Janus Associates
02-1234	Homesteading in Arizona, 1862-1940	Pat H. Stein
02-1234	The Basques in Arizona from Spanish Colonial Times to the Present	Pat H. Stein
02-1234	Historic Trails in Arizona from Coronado to 1940	Pat H. Stein
02-1234	The Chinese in Arizona, 1870-1950	M.Keane, A.E. Rogge, B. Luckingham
02-1234	Gold & Silver Mining in Arizona, 1848-1945	Melissa Keane & A.E. Rogge
02-1234	The United States Military in Arizona, 1846-1945	W.S. Collins, M. Sturgeon, R. Carriker

Site	NRHP Multiple Property Nomination Form	By
02-1234	Warfare Between Indians and Americans in Arizona, 1846-1886	Don W. Ryden & Doug Kupel
02-1234	Logging Railroads of the Coconino and Kaibab National Forests	Pat H. Stein

Site	Other	By
02-1234	The Civilian Conservation Corps in Arizona: A Context for Erosion-Control Features <i>The Kiva</i> , 63(4)359-377	Gregory R. Seymour