Cade Mountain Vegetation Management Project, Class III Cultural Resource Survey, San Juan National Forest, Archuleta and Mineral Counties, Colorado

Proposed Project and Statement of Work

The San Juan National Forest (SJNF) is planning a vegetation management project within 7,050 acres of forest land on the Pagosa Ranger District (PRD), approximately 6 miles northwest of Pagosa Springs, CO. A variety of vegetation thinning undertakings, road work and prescribed fire may occur within this area of potential effect (APE). A Class III intensive pedestrian cultural resource survey on approximately 7,050 acres will be required on all Forest land with slopes less than 35% – private and non-FS lands and areas with slopes greater than 35% will be excluded from the survey area.

The contractor is responsible for:

- Class I pre-field literature review of the APE including reports on file at the SJNF and History Colorado, Office of Archaeology & Historic Preservation (HC-OAHP). Detailed (topographic) maps, site location shapefiles, site forms for previously recorded resources are available through HC-OAHP and/or with the SJNF point of contact that will be listed in the contract. This will also be reviewed by the selected contractor at the pre-work meeting and/or as part of their Class I literature review.
- Class III intensive field survey of the APE, including cultural resource site and isolated find (IF) recordation.
- Re-locate and re-record 4 cultural resources to determine if the following resources are National Register of Historic Places (NRHP) eligible:
    - 5AA.1730 – culturally modified peeled ponderosa pine tree
    - 5AA.971 – unevaluated precontact lithic scatter
    - 5ML.93 – unevaluated precontact lithic scatter
    - 1 previously undocumented segment of 5AA.2678 – Fourmile Stock Driveway
- Preliminary Findings Report with GIS information after completion of fieldwork.
- Draft Cultural Resource Inventory Report for the survey and findings that meets HC-OAHP and Forest Service guidelines.
- Final Cultural Resource Inventory Report wherein all site/IF forms, map products, and GIS data meet HC-OAHP and SJNF requirements for submittal.
- As a condition of final approval and invoicing, attain official SHPO concurrence on the APE, determination of site eligibility, finding of project effects on cultural resources and management recommendations.

The selected contractor shall provide qualified personnel, transportation, supplies, equipment, and facilities to conduct a Class I literature review, a Class III intensive field survey, new site/IF recordation and site re-assessments.

Work Conditions

The contract period is based on weather conditions, access, and ground visibility (remaining snow load) within the project area. The area must be 90% snow-free and reasonably dry before the commencement of fieldwork.

Description and Location

The project area is in Archuleta and Mineral Counties approximately 6 miles northwest of Pagosa Springs. The project area, as shown on the Pagosa Springs and Pagosa Peak, Colorado 7.5 Quadrangles, is in Township 36 North, Range 2 West, Sections 2-5, 8-11, 14-17, 20-22, 28-29, and Township 37

North, Range 2 West, Sections 23, 26-27, 33-35, New Mexico Principal Meridian. The project area is also within the 1873 Brunot Treaty Area.

The topography contains sloped/rugged terrain alternating between forested and riverine environs with elevations ranging from approximately 7,700 to 9,800 feet above mean sea level (amsl).

Furnished Property
The SJNF point of contact will provide the contractor with relevant project information for the corresponding survey work, including but not limited to cultural resource reports and forms, relevant historic documents/files, GIS shapefiles (site locations, roads, trails, LiDAR/hillshades) of the general project area. The SJNF point of contact will schedule a pre-work meeting after the contract is awarded. A Forest Service gate key (Yale) or combination lock code(s) may be provided to the contactor to access FS roads behind seasonally closed gates (if needed).

Property Furnished by Contractor
The contractor will furnish all other supplies and equipment needed to accomplish the fieldwork and site form documentation according to the specifications of this contract. This includes GPS equipment, computer programs and apps, compasses, cameras, and appropriate vehicles.

Contractor Qualifications
The Principal Investigator for the project must hold a valid Region 2 (R2) Forest Service Cultural Resource Use Permit for the SJNF and meet Secretary of Interior Standards (SOI).

The Crew Chief of each survey crew must have the following minimum qualifications:

- A degree in anthropology, specializing in archaeology, or equivalent archaeological experience.
- Must be listed as a crew chief on the Principal Investigator's valid Cultural Resource Special Use Permit.
- At least 16 months of professional experience and/or specialized training in archaeological fieldwork, artifact analysis, and administration.
- At least 6 months experience in archaeological survey or excavation within the Rocky Mountain region of Colorado - experience in the Four Corners area is desirable.
- Demonstrated competence in collecting, handling, analyzing, evaluating, and reporting archaeological data.
- Demonstrated ability to plan, equip, staff, organize, and supervise a cultural resource survey.
- The demonstrated ability to accurately plot archaeological site locations on topographic maps and to map sites using GPS.

Each crew member must have the following minimum qualifications:

- At least 18 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.
- At least 3 months field experience in archaeological survey. Crew members must work under the direct field supervision of a certified crew leader or project supervisor.

All individuals proposed to work as principal investigators, project directors, or in other supervisory capacities must notify the SJNF point of contact and discuss any special conditions that may apply to this project before beginning fieldwork.

Any issues or concerns encountered during fieldwork or in production of report, site forms, and GIS data that would result in a delay for unusual circumstances must be brought to the attention of the SJNF point of contact prior to the completion of the project.

Technical Specifications

Survey Techniques

The contractor shall commence work by coordinating with the SJNF point of contact to schedule an appointment to conduct a record search at the SJNF-PRD office. **Survey areas must be 90% snow-free and reasonably dry**. Fieldwork will commence as soon as ground visibility allows, and specific deadlines will be negotiated depending on the scope and scale of accepted bid items for that respective calendar year. Provisions for extension on fieldwork dates will only be made for unusual or prolonged weather delays.

The project area can be accessed by standard-sized motor vehicles along two (2) seasonally open (May-Dec.) National Forest Service Roads (NFSR 634 and 645). From downtown Pagosa Springs, take Four Mile Road (CTY-400) approximately 13 miles north to NFSR 645 (Fourmile Road). NFSR 645 travels the entire length of the eastern side of the project area, ending at the Fourmile Trailhead and parking area. NFSR 645 connects with NFSR 634 (Plumtaw Road) that travels through the southern and western sides of the project area. Smaller segments off NFSRs 634 and 645 access areas farther north and south of the main arterial roads. Field personnel will be required to keep all motorized vehicles on existing roads, pullouts, dispersed camps and parking areas. Limits of the survey areas are not marked in the field. Overall, survey areas will require accurate location (from spatial data), orientation, and assessment of field conditions prior to inventory.

As a minimum, the contractor shall perform the following:

- Incorporate previous work and evaluated sites from the completed Class I survey into the proposed areas/methods for survey before commencement of fieldwork. Class III pedestrian survey is required on all Forest land with slopes less than 35% – private and non-FS lands and areas with slopes greater than 35% will be excluded from the survey area.
- Conduct Class III pedestrian surveys of the project area. The maximum transect width per surveyor will not exceed 15 m. (49 ft.) when conducting Class III surveys. Spacing may be increased as needed by slope, vegetation, and ground cover on some steeper units. Map and compass or GPS shall be used to ensure systematic, even coverage of the survey areas. A GPS shapefile of the transect tracks will be submitted to the SJNF's point of contact with the Preliminary Findings Report.
- Each crew must be directly supervised by a crew leader who meets Section 106 requirements for crew leader.

Site and Isolated Find Definition (for this contract)

A Prehistoric Site is defined as 15 or more prehistoric artifacts within 30 meters of each other; or any feature or structure regardless of the number of artifacts or surface cultural manifestation that contains less than 15 artifacts but has two or more artifact classes (e.g., flaked stone, ground stone, pottery, etc.), more than one diagnostic Paleoindian/Archaic projectile point, and/or is thought to represent a surface expression (e.g., nonlocal lithic material) that is unique for the area and/or representative of a larger buried site or buried component(s).

A Historic Site is defined as 50 or more historic period artifacts within 30 meters of each other; or any feature or structure regardless of the number of artifacts. All Protohistoric/Historic Native American features such as one or more culturally modified or "peeled" trees, with or without artifacts, is a site. For Historic linear sites, consult the Colorado SHPO guidance at https://www.historycolorado.org/sites/default/files/media/document/2021/Colorado_Linear_Paper_Final.pdf.

Isolated Finds: An Isolated Find (IF) has been defined as 14 or fewer prehistoric and 49 or fewer historic period artifacts unassociated with a cultural feature. Also, IF describes isolated historic period features with no associated artifacts and little to no research potential such as portable sawmill sites, logging-related loading or skidding platforms, aspen carvings, and/or mineral prospect pits. For historic features such as aspen carvings/prospect pits, we call anything with five (5) or fewer features an isolate as opposed to a site.

Exclusions: Certain constructions (modern fence lines, recreational and hunter camps, and modern campfire rings, logging roads, skid trails, modern isolated trash dumps, and modern abandoned roads) may be excluded as sites due to their recent nature, lack of association, and minimal scientific importance.

Site/IF Specific Documentation Requirements:

- Each newly discovered site and IF shall be recorded on the appropriate standard (HC-OAHP) forms. Information contained on the forms shall be consistent with the instructions listed on the OAHP website https://sites.google.com/state.co.us/oahp-resource-center/forms-guidance/inventory-forms. Location and access information will also be detailed in writing for each resource on the form.
- Sites and IFs shall be plotted, described, and designated by a Smithsonian number. The contractor is responsible for attaining Smithsonian numbers from the HC-OAHP website for all newly discovered sites and IFs. All linear sites will need to be evaluated using OAHP's "Walking the Line" (11/1/2021) available at OAHP's website (https://www.historycolorado.org/sites/default/files/media/document/2021/Colorado_Linear_Paper_Final.pdf) or provided to the contractor during the pre-work meeting.
- Previously recorded unevaluated sites within the survey area shall be relocated (if possible) and re-evaluated on official OAHP re-evaluation forms with maps and photographs. ***If the existing site forms for these sites are older than 10 years, the sites must be recorded on current/new applicable site forms.***
- National Register of Historic Places (NRHP) eligibility statements of significance under any Criteria (A-D) must be accompanied by statements of integrity in location, design, setting, materials, workmanship, feeling and/or association.
- ***Need data and unevaluated sites, both previously recorded and newly discovered, within the project areas*** will be evaluated as NRHP eligible or not eligible. No sites will be evaluated as needing data or unevaluated. If a site's NRHP eligibility cannot be determined from its surface expression and the site is likely to be impacted by project undertakings, recreational practices or natural processes, limited shovel, trowel, or auger testing may be required. If the site size exceeds 1-acre and/or more than three (3) shovel tests are needed, a shovel testing plan must be submitted and reviewed by the SJNF project contacts prior to implementation.
- At least two photographs (digital) taken from different bearings, for each site and at least one photograph (digital) for each IF. Photographs should show identifying site/IF characteristics and

important landmarks for relocating the resource. Photographs, including the provenience information shall be included with the HC-OAHP forms. Photographs may be embedded in the report and forms, but a digital copy of all images labeled by site and accompanied with a photo record (excel spreadsheet, word doc, pdf) will be provided to the SJNF point of contact.

- Linear features, such as historic trails or ditches, will be documented as completely as possible per the boundaries of the survey area. Associated features such as sheepherder arborglyphs along a stock driveway, will be recorded as sub-features of the historic trail, as appropriate.
- The contractor shall cease work upon discovering any human remains and associated funerary objects and shall immediately notify the authorized officer and/or SJNF point of contact. Work in the vicinity of the discovery may not resume until the authorized officer has given permission.

Additional Documentation Provisions:

Each site and IF discovered shall be plotted with a GPS unit and transferred to 1:24,000 scale U.S.G.S. topographic maps, and identified with its Smithsonian number and with a Forest Service site number. The FS site number(s) will be assigned by the SJNF point of contact during the review/revision of all draft documents. Original copies of the maps with sites and IFs will be provided by the contractor to enable the SJNF point of contact to inspect the results of the survey. Property furnished by the Government will be made available at the pre-work meeting and uploaded to the U.S. Forest Service external Pinyon/Box folder (https://usfs.app.box.com); the specific folder will be shared with the contractor. This includes:

1. GIS shapefiles of the survey area/APE, previously recorded site locations and relevant/project specific locational/topographic features such as roads, trails, LiDAR/hill shades
2. Empty polygon shapefile templates for submission of any revisions to the site boundary GIS data.
3. HC-OAHP/SJNF site and IF forms.
4. Documentation/reports within the project area (if in digital format, hard copy only files may need to be viewed at a SJNF office).

All file names will be compatible with the Colorado MoveIt system of file transfers.

All locational information will be provided as GIS shapefiles and digital maps to the SJNF point of contact after the completion of field work.

GPS locations are required at site datum points. Site boundaries of sites are greater than 0.1 acre in size shall be recorded with a GPS unit. Sites will not require a physical in-field marker (tag, flag, paint) but shall be identified with a digital site boundary polygon and submitted as a shapefile to the SJNF. All GPS data gathered will meet the following accuracy standards:

- GPS Standard: NAD83, reported in UTM coordinates
- Locational point/polygon accuracy of 3 meters or less
- Submission of GPS data in two formats: hard copy 1:24,000 USGS topo maps and shapefiles (or feature classes) in a projected coordinate system compatible with ArcPro
- Attribute data will include Smithsonian numbers and meet HC-OAHP standards

Artifact Collection and Analysis

At a minimum, the Contractor shall perform the following:

- The Contractor shall not collect any artifacts except for exceptional (e.g. Paleo-Indian/Folsom fluted tools, complete ceramic vessels) artifacts that are at risk and cannot be reasonably protected in the field. These exceptional artifacts may include exposed fragile perishable materials at risk of being destroyed or extremely significant diagnostics artifacts that are in immediate danger of being looted. All other analyses shall be done in the field.
- Ceramic Analyses: In-field analysis of ceramic materials will be done using standard regional published typologies to assign cultural affiliation and occupation dates, unless such artifacts are at risk as described above.
- All collected items will be turned over to the SJNF and will be labeled and packaged according to the curation standards for the U.S. Bureau of Land Management, Canyons of the Ancients Museum, Dolores, Colorado.
- Lithic Analysis: The Contractor should expect to encounter artifacts manufactured from sandstone, quartzite, rhyolite, basalt, obsidian, chert, petrified wood, calcedony, and other siliceous and igneous materials. The Contractor shall explain the typology used in classifying the lithic artifacts in the final report. Lithic materials may consist of both ground and chipped stone varieties, and should, at a minimum, be assigned to functional and material categories. For example, manos should be identified by material, shape and whether they are "one-hand" or "two-hand" in size and whether they are unifacially or bifacially worked.

Survey Report

The report will be titled “Cade Mountain Vegetation Management Project, Archuleta and Mineral Counties, Colorado (USFS# R2026021306005)”.

Report Guidelines: Report should follow guidelines as laid out in the HC-OAHP “Colorado Cultural Resource Survey Manual, Guidelines for Identification: History and Archaeology”.

Transmittal of Report

After completion of the fieldwork one copy of the fieldwork summary will be submitted to the SJNF point of contact. The Preliminary Findings Report/Fieldwork report will include:

- HC-OAHP and USFS report numbers;
- the number of sites documented;
- the field assessment of their conditions and eligibility; and
- draft maps and shapefiles of the site locations and transects

One copy of the draft survey report, photographs, forms, maps, etc. shall be submitted to the SJNF point of contact by the agreed upon date. Draft deliverables will be submitted and uploaded to the U.S. Forest Service external Pinyon/Box folder (https://usfs.app.box.com); the specific folder will be shared with the contractor at the pre-work meeting.

Upon submission of draft survey documents the SJNF point of contact will have 20 days to inspect and provide comments on the draft survey documents to the contractor for finalization. The contractor will then have 14 days to make changes and submit the final survey reports and all project records. Digital copies of the final survey report will be submitted, along with all associated maps, photos, site forms, shapefiles, and other documents. Final deliverables will be submitted and uploaded to the U.S. Forest

Service external Pinyon/Box folder (https://usfs.app.box.com); the specific folder will be shared with the contractor at the pre-work meeting.

Future Use of Survey Data

All field notes, maps, electronic data, photographs or digital images, negatives, and artifacts collected or generated from this procurement shall be the property of the United States and will be submitted to the SJNF point of contact with the final inventory report at the conclusion of the project. During the project, reasonable precautions will be taken to avoid the disclosure of site locations to all unauthorized personnel.

Inspection and Acceptance

Field research, artifact analysis (in field only), and report are to meet professional archaeological standards set forth in the Colorado Office of Archaeology and Historic Preservation Guidelines as determined through review by the SJNF point of contact.

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 evaluate. Poor writing, organization, production, insufficient information, and so forth are grounds for rejection of the report. Legal descriptions in the report must agree with those shown on maps and figures.

All inventory locations, sites, scatters, isolated artifacts and features mentioned in the report must be shown on the report and/or site maps and vice versa. All diagnostic artifacts, artifact concentrations, and features must appear on the sketch maps and be discussed with the text of the forms.

Appropriate knowledge of the prehistory and history of the Forest must be demonstrated by use of correct terminology, dating, citation of classic standards as well as the most recent publications pertinent to the cultural resources and historic contexts of the Forest.

Additional standards and requirements may be established at the time the contract is awarded and will be discussed by the SJNF point of contact and the contractor before commencement of fieldwork.

Payment

Payment for the outlined statement of work will be split into three imbursements:

- Thirty percent (30%) of the contract will be paid upon completion of the field work.
- Thirty percent (30%) will be paid once the draft report and site forms are submitted for review.
- The final forty percent (40%) will be paid upon successful completion of Section 106 concurrence with the Colorado State Historic Preservation Office (CO SHPO). The SJNF point of contact is responsible for consultation with the CO SHPO and submission of all final products.