

**Flying V&H Shaded Fuel Break Project  
Statement of Work and Request for Proposals  
Tonto National Forest, Arizona**

**Background and Statement of Work:** The National Forest Foundation (NFF) has partnered with the Tonto National Forest, AZ Game and Fish Department, and Rocky Mountain Elk Foundation to implement forest fuel reduction activities on the Pleasant Valley District of the Tonto National Forest, southeast of Young, Arizona.

As the first phase of larger landscape scale efforts, the 1,753-acre Flying VH Shaded Fuel Break project is designed to restore natural forest structure, reduce the risk of high severity wildfire, protect or enhance wildlife habitat, and improve watershed health. Treatment will contribute to the subsequent safe reintroduction of prescribed fire across more than 57,000 acres (Rim Country EIS and Flying V&H CE) near the communities of Young and Pleasant Valley and the adjacent Fort Apache Indian Reservation.

Treatment objectives include mechanical mastication of juniper, evergreen oak trees and woody brush species to 1. Create a structure that more closely resembles the structure that existed prior to interruption of the historic fire regime (open juniper woodland, large diameter junipers and oaks arranged in “groups”, decreased shrub cover, abundance of native grasses); 2. Maintain ponderosa pine, pinyon pine, and Arizona white oak; 3. Reduce the risk of catastrophic, stand-replacing wildfire by decreasing tree densities, ladder fuels, and crown continuity.

The project is offered in three phases to treat 1,753 acres of overgrown juniper woodlands. Work includes up to 1571 acres of mastication and 182 acres of hand thinning within archeological sites. Areas that cannot be masticated shall be thinned by hand.

### **Information Requested**

If interested in this project, please provide a bid for the above statement of work by providing a description of your proposed approach, past work experience, and project cost. Please also include your capacity for this project and efficiency in mechanical mastication and hand thinning projects in the past, if any.

This is a request for proposals only and quotations furnished are not offers. This request does not commit the National Forest Foundation to pay any costs incurred in the preparation or submission of the quotation or to contract for supplies or services.

### **Site Description**

The cutting units consist of ponderosa pine, pinyon pine, alligator juniper, and Arizona white oak. Emory oak is rare. The units are considered uneven-aged. Tree densities are moderate with mature alligator juniper averaging 17 TPA. Pinyon pine averages about 51 trees per acre with mature pinyon rare. Arizona oak is common with 25 TPA even in distribution with mature trees rare. Total basal areas range from 0-140 ft<sup>2</sup> per acre, with an average of approximately 60 ft<sup>2</sup> per acre. Regeneration of all species combined average 600 TPA. Ponderosa pine is common in drainages and other more mesic sites. Units on hill and ridge tops contain a high canopy cover of manzanita, deer brush, silk

tassel, mountain mahogany, snakeweed, blue grama, catclaw, and shrub live oak within openings. Elevation ranges from 5,200 ft. to 5,800 ft. Aspect is all. Topography is rolling plains and hill slopes. Numerous livestock fences transect the unit. A powerline runs through the eastern portion of the unit.

## **Description of Work**

This Request for Proposals is for restoration services related to mechanical mastication and hand thinning of up to 1,753 acres of the Flying V&H Fuels Reduction Project to be accomplished in three phases. Treatment includes up to 1,571 acres of mastication treatment and at least 182 acres of hand thinning within archeological sites. All areas deemed inoperable for mastication machinery shall be hand thinned. Work shall follow the general description below and specifications found in the Appendices.

Well-formed trees of various size classes will be retained in groups of 5-8 trees spaced out every 150-200 feet as generally described below and detailed in Appendix B. This approach to fuels management mimics once natural low-intensity wildfire to reduce densities and opening the forest canopy to reduce competition for sunlight, nutrients and water to reinvigorate herbaceous growth while reducing wildfire risk to the forest and adjacent communities. Areas within archeological site buffers and all other areas that cannot be masticated due to terrain or other operational limitations shall be treated by hand and utilizing lop & scatter slash disposal.

### **Silvicultural Treatment**

Pinyon-Juniper Savannah Restoration (free thin)

### **Stocking Guidelines**

1. Leave all riparian tree and shrub species (sycamore, walnut, chokecherry, etc.), regardless of size.
2. Leave all pinyon pine, regardless of size.
3. Leave all ponderosa pine and Arizona Cypress, regardless of size.
4. Leave all Gambel oak, regardless of size.
5. Leave all live Arizona white oak and Emory oak  $\geq$  14 inches DRC. All live Arizona white oak and Emory oak  $<$  14 inches DRC will be masticated.
6. Leave all dead Arizona white oak and Emory oak  $\geq$  6 inches DRC for wildlife habitat.
7. Leave all juniper  $>$  18 inches DRC.
8. In addition to the above leave trees, leave "groups" of trees spaced out every 150 - 200 feet. These groups of trees will vary in species, shape, size, and number of trees. Leave tree groups will contain from 5 to 8 trees per group.
  - a. Form groups where possible around leave trees.
  - b. Incorporate arch site tree groups where available within spacing scheme.
  - c. Favor retention of groups of trees currently being used for shade and cover by wildlife and livestock.
  - d. Leave the largest trees available, preferably larger than 8 inches DRC.

- e. Leave the best available trees with the best tree form, health, and vigor, relative to other adjacent trees.
- f. Within groups, spacing of trees will be variable. The distance from one tree to the next tree may range from 5 to 15 feet (measures drip line to drip line).
- g. Do not leave groups of trees within 20 feet of ponderosa pine greater than 5 inches DBH (measured drip line to drip line)

All other juniper > 1 foot in height and ≤ 18 inches DRC will be masticated.

9. All brush species associated with the chaparral vegetation type will be masticated (manzanita, shrub live oak, catclaw).

### ***Operational Guidelines***

1. Do not masticate juniper if it will cause damage to a leave tree.
2. Protect pinyon pine regeneration and Gambel oak from damage during mastication operations when possible.
3. No machinery may enter into/pass through designated archeological sites. These sites shall be hand thinned with lop and scatter debris disposal.
4. Portions of the units may contain steep and/or rocky slopes. Mastication will need to be deferred within these areas and treated through hand thinning with lop and scatter debris disposal.

### ***Slash Treatment***

Depth of masticated material shall be no more than 2 inches deep. Slash produced through hand thinning shall be lopped and scattered to a depth less than 2 feet deep.

### ***Project Location***

The Flying V&H Shaded Fuel Break project is located southeast of Young, AZ. Best access is from FR 455 located off the FR 202 approximately 8 miles south of the junction with the Young-Heber Highway 10.5 miles east of Young.

### ***Work Schedule***

1. Phase 1. Work is expected to begin in Fall 2021. Completion is expected by May 20, 2022.
2. Phase 2. Work is expected to begin in Fall 2022. Completion is expected by May 19, 2023.
3. Phase 3. Work is expected to begin in Fall 2022. Completion is expected by May 19, 2023.
4. Work may begin immediately pending a signed project contract and pre-work conference.
5. Seasonal fire restrictions and/or closures may be expected spring/summer
6. With agreement between NFF and the Contractor, the proposed timeline may increase acreage and accelerate the above timeline as future funding allows.

## Equipment

Tracked, excavator style carriages with boom mounted mastication heads are the preferred equipment type to most effectively meet project specifications and achieve desired future conditions in this uneven, rocky terrain.

## Pricing Schedule

Contractor shall price work according to the schedule below.

| Description   | Unit | Unit Cost | Quantity | Total Cost |
|---|------|-----------|----------|------------|
| <b>Phase 1 – 697 ac</b><br><b>Mastication – 576 ac</b><br><b>Hand Thin – 121 ac</b> | acre |           | 697      |            |
| <b>Phase 2 – 562 ac</b><br><b>Mastication – 508 ac</b><br><b>Hand Thin – 54 ac</b>  | acre |           | 562      |            |
| <b>Phase 3 – 487 ac</b><br><b>Mastication – 487</b><br><b>Hand Thinning – 7</b>     | acre |           | 487      |            |

*\*Acreage may be adjusted to meet budget constraints. NFF may request treatment of fewer or more acres as available funding allows.*

## Other Project Requirements and Specifications

- (a) Utilities – There are no sanitation, water, electrical or housing services available. The Contractor shall make its own arrangements for temporary facilities if needed. Camping on forest is recommended and allowable following standard FS rules and regulations.
- (b) Specifications – Project work shall be accomplished in accordance with the following:
  - Mastication and hand thinning shall follow all the prescription and specifications as described in the Prescription and Treatment Guidelines in Appendix B.
  - Contractors shall adhere to specifications in Appendix C Equipment and Services.
  - The Tonto National Forest's Industrial Fire Plan in Appendix D shall be followed.
  - Equipment must follow specification in Appendix D and all local, state or federal regulations as applicable.

## Contractor Qualifications

- (a) References – Please provide three references familiar with your work.
- (b) Past Experience – Please provide a brief explanation of previous mastication work and experience with land management agencies.

## **Insurance Requirements**

Upon selection of the winning bid, chosen contractor will be asked to affirm that it has and shall maintain State minimum workers' compensation insurance coverage for its employees, if any. The selected contractor shall also maintain broad form general liability, property damage, and automotive liability insurance in the minimum amount of \$1,000,000 for bodily injury, death, or damage to property of any person and \$2,000,000 for bodily injury, death, or damage to property of more than one person. The Contractor shall name NFF an Additional Named Insured and provide NFF with documentation evidencing such coverages.

## **Performance Security**

Chosen contractor shall post cash, a letter of credit, bond, or other financial security that is easily convertible into cash in a form acceptable to the NFF in its sole determination in the amount of 5% of the amount due to contractor, not to exceed \$50,000 dollars, to assure completion of the work required under this Agreement and payment of all amounts lawfully due to all persons supplying or furnishing to the Contractor or Contractor's subcontractors with labor, laborers, materials, rental machinery, tools or equipment used or to perform the work. As work is completed in integrated component parts, inspected, approved and, if applicable, conveyed to NFF, the Performance Security shall be released in a proportional amount, unless a lesser amount of release is necessary to maintain 5% Performance Security.

## **Pre-Bid Site Visit**

An site visit for interested bidders is scheduled to occur on Friday September 3<sup>rd</sup> 2021 at 09:30 AM (weather and conditions permitting). We will meet at the Tonto National Forest's Payson Ranger District office located at 1009 E. Hwy 260 in Payson, AZ. Click [HERE](#) for Google Map directions. If you plan to attend the site visit, please contact Mark Brehl by phone or email (928-853-7578 or [mbrehl@nationalforests.org](mailto:mbrehl@nationalforests.org)) to RSVP and confirm your attendance.

## **Bid Submission**

Submit bids via email to Mark Brehl ([mbrehl@nationalforests.org](mailto:mbrehl@nationalforests.org)) by close of business on September 10<sup>th</sup>, 2021.

## **Contractor Selection Process**

The NFF will use the Evaluation Factors below to review each submitted bid. Based on the outcomes of that selection process, the NFF will notify successful and unsuccessful bidders by September 24<sup>th</sup>, 2021 and will prepare a separate contract document.

## **Point of Contact**

For questions about the details of producing the bid, please contact:

Mark Brehl  
National Forest Foundation, Arizona Program Forestry Supervisor  
[mbrehl@nationalforests.org](mailto:mbrehl@nationalforests.org)  
928.853.7578

## Evaluation Factors and Relative Importance

### Level 3 Criteria

- Price / cost
- Equipment and contractor capability
- Timing of when contractor can begin and/or finish the project
- Past performance, references, and USFS feedback

### Level 2 Criteria

- Technical proposal / proposed approach to project
- Overall strategic benefits to meeting NFF goals and grant needs, requirements, and timelines

### Level 1 Criteria

- Benefits to the local community
- Relationship to local community

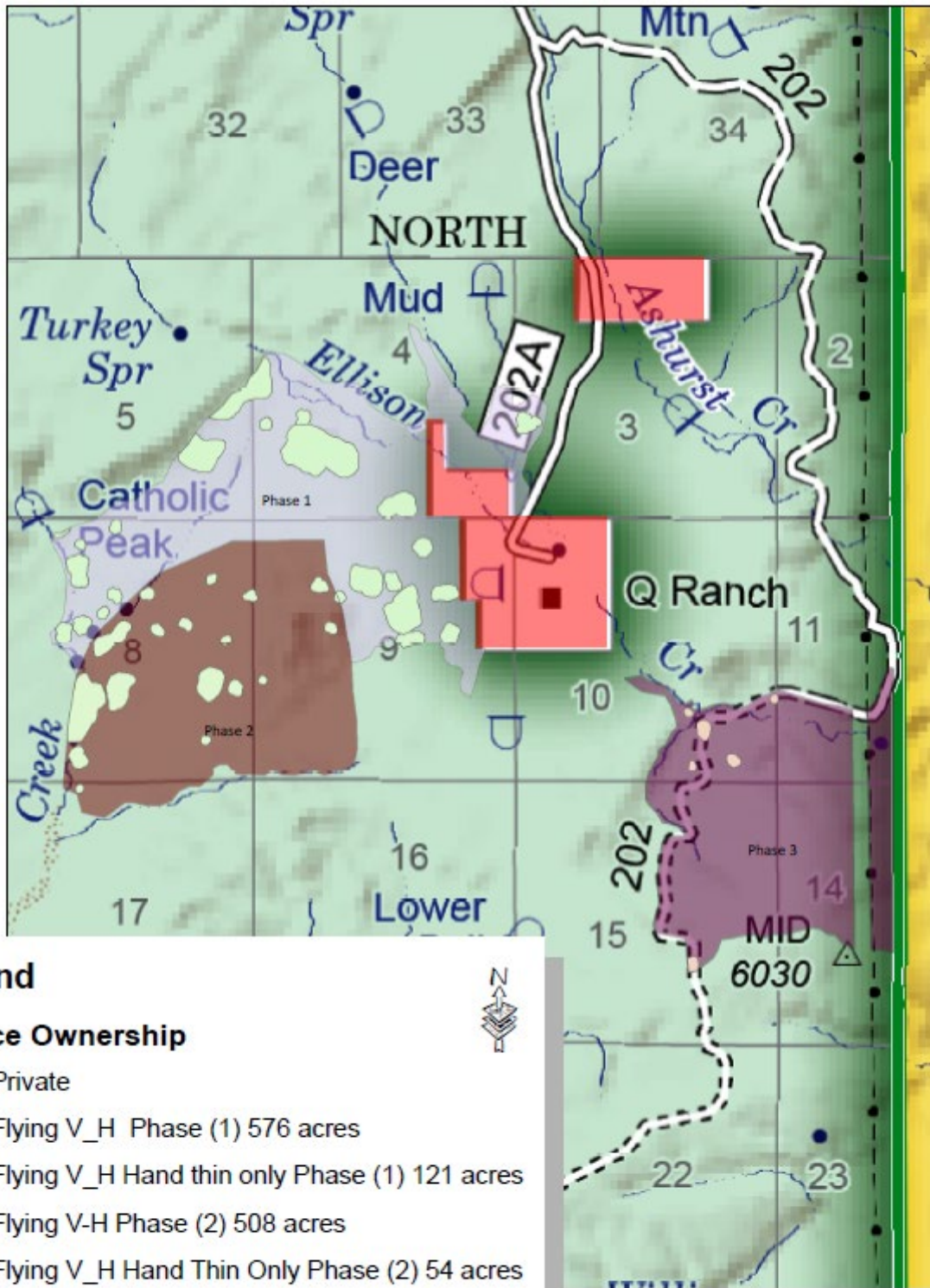
## Equal Opportunity Provider

In accordance with Federal law and U.S. Department of Agriculture policy, the National Forest Foundation is prohibited from discriminating on the basis of race, color, national origin, sex, age, religion, political beliefs, or disability.

## Vicinity Map - Flying V&H Shaded Fuel Break



Project Area Map - Flying VH Shaded Fuel Break 2021



**Legend**

**Surface Ownership**

- Private
- Flying V\_H Phase (1) 576 acres
- Flying V\_H Hand thin only Phase (1) 121 acres
- Flying V-H Phase (2) 508 acres
- Flying V\_H Hand Thin Only Phase (2) 54 acres
- Flying V\_H phase (3) 487 acres
- Flying V\_H Hand Thin Only Phase(3) 7 acres



## APPENDIX B. Prescription and Treatment Guidelines

### **Existing/Desired Future Conditions:**

These cutting units consists of ponderosa pine, pinyon pine, alligator juniper, and Arizona white oak. Emory oak is rare. The units are considered uneven-aged. Tree densities are moderate with mature alligator juniper averaging 17 TPA. Pinyon pine averages about 51 trees per acre with mature pinyon rare. Arizona oak is common with 25 TPA even in distribution with mature trees rare. Total basal areas range from 0-140 ft<sup>2</sup> per acre, with an average of approximately 60 ft<sup>2</sup> per acre. Regeneration of all species combined average 600 TPA. Ponderosa pine is common in drainages and other more mesic sites. Units on hill and ridge tops contain a high canopy cover of manzanita, deer brush, silk tassel, mountain mahogany, snakeweed, blue grama, catclaw, and shrub live oak within openings. Elevation ranges from 5,200 ft. to 5,800 ft. Topography is rolling plains and hill slopes. Numerous livestock fences transect the unit. A powerline runs through the eastern portion of the unit.

The desired future condition for pinyon-juniper is an open pinyon-juniper woodland, dominated by large diameter juniper, pinyon pine, large diameter evergreen oaks, and native grasses. Residual stocking of juniper and other tree species will be less than 50 trees per acre. The unit will resemble the historic structure of pinyon-juniper woodlands. The unit will be “low” to “moderate” fire hazard, with conditions conducive to the reintroduction of low to moderate severity fire. Stocking guidelines will be designed to retain large diameter juniper and oak, and all pinyon pine. There will be a decrease in shrub cover and an increase in productivity of native grasses. Retain ponderosa pine within mesic sites.

### **Treatment Objectives:**

1. Create a structure that more closely resembles the structure that existed prior to interruption of the historic fire regime (open juniper woodland, large diameter junipers and oaks arranged in “groups”, decreased shrub cover, abundance of native grasses).
2. Maintain ponderosa pine, pinyon pine, and Arizona white oak.
3. Reduce the risk of catastrophic, stand-replacing wildfire by decreasing tree densities, ladder fuels, and crown continuity. Create conditions conducive to the reintroduction of low to moderate severity fire.

**Silvicultural Treatment:** Pinyon-Juniper Savannah Restoration (free thin)

### **Stocking Guidelines:**

1. Leave all riparian tree and shrub species (sycamore, walnut, chokecherry, etc.), regardless of size.
2. Leave all pinyon pine, regardless of size.
3. Leave all ponderosa pine and Arizona Cypress, regardless of size.
4. Leave all Gambel oak, regardless of size.
5. Leave all live Arizona white oak and Emory oak  $\geq$  14 inches DRC. All live Arizona white oak and Emory oak  $<$  14 inches DRC will be masticated.
6. Leave all dead Arizona white oak and Emory oak  $\geq$  6 inches DRC for wildlife habitat.
7. Leave all juniper  $>$  18 inches DRC.

8. In addition to the above leave trees, leave “groups” of trees spaced out every 150 - 200 feet. These groups of trees will vary in species, shape, size, and number of trees. Leave tree groups will contain from 5 to 8 trees per group.
  - a. Form groups where possible around leave trees.
  - b. Incorporate arch site tree groups where available within spacing scheme.
  - c. Favor retention of groups of trees currently being used for shade and cover by wildlife and livestock.
  - d. Leave the largest trees available, preferably larger than 8 inches DRC.
  - e. Leave the best available trees with the best tree form, health, and vigor, relative to other adjacent trees.
  - f. Within groups, spacing of trees will be variable. The distance from one tree to the next tree may range from 5 to 15 feet (measures drip line to drip line).
  - g. Do not leave groups of trees within 20 feet of ponderosa pine greater than 5 inches DBH (measured drip line to drip line)

All other juniper > 1 foot in height and ≤ 18 inches DRC will be masticated.

9. All brush species associated with the chaparral vegetation type will be masticated (manzanita, shrub live oak, catclaw).

### **Special Considerations within Unit:**

#### **Boundaries**

Outer project boundaries are flagged with orange ribbon flagging. Boundaries between units are not physically delineated on the ground and will utilize virtual boundaries via the Avenza PDF or other digital mapping application. Protected archeological sites to be hand thinned are designated with pink and white ribbon flagging. No machinery may enter within these protected areas.

#### **Harvesting Operations**

Protect pinyon and ponderosa pine regeneration from damage during mastication operations.

Leave trees are NOT marked. Leave trees are designated by diameter and description.

#### **Slash Treatment**

Depth of masticated material shall be no more than 2 inches deep. Slash produced through hand thinning shall be lopped and scattered to a depth less than 2 feet deep.

#### **Wildlife**

No threatened, endangered, or sensitive species are located within this unit. There will be no timing restrictions for wildlife.

Leave all dead Arizona white oak and Emory oak ≥ 6 inches DRC for wildlife habitat.

#### **Soils**

Follow Best Management Practices to prevent soil compaction and displacement (FSH 2509.24.13). Limit operations to periods when soils are dry.

***Non-Native and Invasive Weeds***

Use Best Management Practices to prevent the spread of noxious or invasive weeds. Contractors shall clean their equipment of all mud and plant debris prior to entering National Forest System Lands. Provide training to Forest Service and contract personnel on identification of weeds and procedures for using equipment in infested areas (e.g. wash equipment thoroughly before moving from one area to another).

***Protected Sites***

Protected Sites are flagged with pink and white flagging. Archaeological sites will not be treated/masticated. Ground disturbing activities are prohibited within archaeological sites. Vehicles and mechanized equipment are not permitted within archaeological sites.

***Recreation***

For public safety, camping will be prohibited within active mastication and burning areas. Mastication activities should be avoided on the following holiday weekends: Memorial Day, Fourth of July, and Labor Day.

***Directions to Unit***

The unit is located southeast of Young, AZ and south of the Q Ranch. From Payson, AZ: Travel east on Hwy 260 for approximately 33 miles and turn right onto to FR512 (Young Hwy). Travel south for 15 miles and turn left onto FR 202 and travel south 6 miles before entering the project are. Other routes available for access are FR202A and unmarked two tracks. See Maps in Appendix A.

## **APPENDIX C – Equipment and Services**

For this project activity, there will be no Government-furnished property or material. A contractor will be responsible for the following:

The Contractor shall provide dependable, safe equipment and protective gear that meets all applicable state and federal laws and regulations relating to motor vehicles and equipment. The Government reserves the right to conduct inspections at any time.

### Powersaws

Any fueling or refueling of a powersaw shall only be done in an area which has first been cleared or is free of all material capable of carrying fire; powersaw shall be moved at least 10 feet from place of fueling before starting.

### Spark Arrestors

The NFF/third-party contractor shall not operate any internal combustion engine on any timber, brush or grass covered land, including trails or roads without a spark arrestor maintained in effective working order and meeting the guidelines set forth in the National Wildfire Coordinating Group Publication NFES 1363 and 2363.

### Personal Protective Equipment

Personal protective equipment for eyes, face, head, and extremities shall be provided, used, and maintained in a sanitary and reliable condition. The Contractor shall provide to each employee who operates a chain saw, chain saw chaps and assure the chaps are worn during saw operations. These chaps must be approved by Underwriters Laboratory or meet Forest Service specification 6170-47. The chaps shall cover the full length of the thigh to the top of the boot on each leg.

Work may be suspended or modified when the Coronado National Forest personnel identifies conditions that represent an unacceptably high fire risk, such as very dry fuels, high winds, increased incidence of wildfires, erratic fire behavior, or Red Flag conditions.

### Hazardous Materials

Compliance with all applicable State and Federal regulations pertaining to the handling and disposal of hazardous materials. Disposal of hazardous materials is not permitted on site or on federal land. Failure to meet this condition can result in the NFF/third-party contractor being liable for the cost of reclamation, including clean up and disposal of contaminated soil.

Minor, incidental leaks from fittings, seals or ruptured hoses will not subject the NFF/third-party contractor to remedial requirements; however, continued leaks will require repair to eliminate/minimize the impact of hazardous materials. Maintenance and repairs that require the draining of lubricants or other fluids may be conducted on site only if the fluids are captured, containerized, and removed from public lands for proper disposal.

### Personnel

NFF will provide a representative to periodically inspect the project to ensure safety and quality performance.

## APPENDIX D. Tonto NF Fire Plan

The Contractor shall be responsible for the cost of suppressing all fires caused by his operation, and for all damage to any property of the USDA Forest Service or third parties. The USDA Forest Service reserves the right to participate in extinguishing any fires caused by the contractor's operations and the contractor shall reimburse the USDA Forest Service for the cost of all suppression activities ordered or directed by the USDA Forest Service. The following requirements are a part of this solicitation and any resultant contract.

1. *Fire Prevention* - During periods of contract performance, fire requirements shall be met by the contractor.
2. *Execution of Fire Plan*
  - a. Forest Service personnel involved will, in all cases, coordinate through the Contracting Officer's Representative (COR) except in cases of emergency or Forest closure.
  - b. The contractor shall designate a fire plan representative who shall be responsible for executing and carrying out the fire requirements.
  - c. The contractor shall include the fire requirements in all subcontracts.
  - d. The contractor shall assure that all contract employees are informed of the existence and conditions of the fire requirements.
3. *Compliance Inspection*
  - a. Inspection by the Forest Service will be made to ensure compliance with the fire requirements.
  - b. Should any deficiencies appear during the inspection, the contractor will be informed, and the deficiencies shall be corrected within 24 hours. Activities with the potential to start fires shall be halted until the deficiencies are corrected and the corrections approved by the COR.
  - c. The contractor's fire plan representative shall make daily inspections to ensure that the terms of the fire requirements are met at all times.
4. *Fire Pre-suppression Requirements*
  - a. Fire Toolbox -
    - (1) During contract performance, the contractor shall furnish and maintain, at the contractor's expense, one fire toolbox at the campsite or some central location, as long as it is within 1/4 mile of the location where the contractor is currently performing work.
    - (2) The fire toolbox is to be maintained with tools in good condition in the following quantities for each five people in the contractor's work force. The equipment is for the sole purpose of firefighting. Four shovels, two axes, one Pulaski and five each 1-gallon canteens. Where needed, brush hooks and McLeod tools may be substituted for shovels or axes.
    - (3) The fire toolbox shall be replenished by the contractor after each incidence of fire use.
  - b. Work Hours - The contractor shall restrict operations in accordance with the following emergency fire precaution schedule unless the COR waives the requirement in writing.

Each day of operation when there is a predicted change in the fire precaution plan, the Forest Service will inform the contractor between 3 and 6 p.m. MST (4 and 7 p.m. MDT). Notification will be made of the alphabetical industrial fire precaution plan (Exhibit 1) to be followed the next day within the local operating area.

No later than 9 a.m. MST (10 a.m. MDT) the following day, the Forest Service will inform the contractor of any change in the fire precaution schedule.

- c. Blasting - Use of caps and safety fuse detonators for blasting is not permitted during periods when fire precaution plan C or D is in effect. A fire guard shall be required in accordance with the enclosed emergency fire precaution schedule. This individual, when required, shall remain on duty for at least 1 hour after blasting is finished. Minimum equipment shall consist of a round-pointed, size 0 or larger shovel and a 3-to-5-gallon backpack pump filled with water. Blasting hours are restricted under fire precaution plan C, and blasting is prohibited under fire precaution plan D.

- d. Welding - An area commensurate with the amount of welding to be accomplished shall be cleared before welding operations are started. Written permission must be obtained from the COR during fire precaution plan B, C and D. As a minimum, a 3-to-5-gallon backpack pump filled with water is to be available in addition to the vehicle fire extinguisher. The area in the immediate vicinity of the operation shall be wet down before and after operations. The area adjacent to the welding operations shall be thoroughly checked for fires for 1 hour after welding.
- e. Fire Guard - The contractor shall designate at least one representative to train and supervise each work crew in fire prevention, detection, and suppression.

To prevent, detect, and suppress fires, the contractor shall provide a trained fire guard for projects involving internal combustion engines. The fireguard shall perform guard duties during operating hours. The fireguard may perform contract work in conjunction with fire guard duties.

Each fireguard shall report all fires and take suppression action on any fire that starts on the project area. Each fireguard shall be equipped with a vehicle and a fire tool cache consisting of a fire cache box, two size 0 shovels, two Pulaskis, two McLeod tools, and two 4-to-5-gallon backpack pumps filled with water. All equipment and tools shall be maintained in serviceable condition.

#### 5. *Fire Suppression*

- a. The contractor shall take independent action on the suppression of all fires in the work area or vicinity. Vicinity is defined as a 1/4-mile extension from the operations area boundary.
- b. All Forest fires shall be reported to the District Ranger's Office as soon as possible. Even though the fire has been suppressed by the contractor's crew, this report is required. The office and telephone number to which fires shall be reported will be furnished to the contractor prior to start of contract work.

#### 6. *Equipment Requirements*

- a. All gasoline and diesel equipment (except turbocharged) used on the project shall be equipped with spark arresters approved in the Spark Arrester Guide, USDA Forest Service, June 1983.
- b. All internal combustion engines must be inspected before use on the job and periodically thereafter by the Forest Service. Equipment not passing inspection cannot be used until repairs are made.
- c. Serviceable baffled mufflers with standard exhaust tailpipes are considered adequate on trucks, pickups, and sedans.
- d. Equipment service areas and gas and oil storage areas shall be cleared of brush, litter, debris, and grass for a radius of at least 50 feet.
- e. Each piece of motorized equipment not included in item f below shall be equipped with a round-pointed shovel and fire extinguisher.
- f. Fuel trucks, service trucks, and the work camp shall be equipped with a shovel, DB axe, and class ABC pressurized chemical fire extinguisher of not less than 15 pounds capacity by weight.

The shovels and fire extinguishers are in addition to those required for the toolbox (4.a.). These shall be furnished and maintained at the contractor's expense.

- g. All crawler tractors and rubber-tired equipment suitable for fire suppression work shall be prepared for nighttime use by mounting of brackets for portable, self-contained, battery-operated lights, provided by the Forest Service.

h. Power saws shall be kept in a safe, serviceable condition at all times. Each power saw shall be equipped with an approved spark arrester/muffler system meeting the SAE J-335b standard.

(1) The refueling of power saws shall be done on mineral soil and the saw shall be moved at least 10 feet from the point of refueling to another barren spot before being started.

(2) Power saws with warm or hot spark arresters/mufflers (running or not) shall not be placed or rested on sawdust piles, litter duff, stumps or spots that are easily ignited.

(3) Each power saw shall be accompanied by one round pointed shovel in good condition and a metal fuel-safety can. One chemical pressurized fire extinguisher, 8 ounces or larger, is to be always kept with the power saw operator while working on the project. The shovel is to be kept with the fuel supply.

## 7. *Smoking and Fires*

### a. Smoking

(1) No smoking shall be allowed while traveling, except on surfaced highways. A surfaced highway is any road that is oiled, graveled or otherwise paved.

(2) Smoking is not permitted while working. Smoking is only permitted on breaks in areas having a clearing of at least 3 feet in diameter to bare soil.

b. Fires - No warming, burning of debris, or cooking fires shall be permitted during periods of high or above fire danger except in designated places or by written permission.

## 8. *Violations*

a. Violations of the smoking regulations (36 CFR 261.52(a)(c)(d)) and fire requirement will result in criminal action against the violator. The contractor shall advise all employees of this regulation.

b. Violation or deficiencies of fire requirements shall result in immediate suspension of operations until the deficiency or violation is corrected. Repetitive violations will be grounds for default termination.

9. *Historical Data* - The following data on the Forest area involved is to be provided for the contractor's information. The data will be based on records for the past 10 years.

### **Total fire season March 1 to November 15**

Average number of days of Plan A 102

Average number of days of Plan B 12

Average number of days of Plan C 7

Average number of days of Plan D 30

EMERGENCY FIRE PRECAUTION SCHEDULE

|  |   |
|--|---|
| Predicted Manning Class for the Fire Danger Rating Area                | Industrial Fire Precaution Plan   |
| 0,1,2<br>3<br>4<br>5   | A<br>B<br>C<br>D  |
| Area closure proclaimed by the Forest Supervisor or Regional Forester. | D   |
|  |   |
| Fire Precaution Plan   | Description   |
| A  | Normal fire precautions. No Fireguard required.   |
| B  | Designated areas for smoking, warming, and cooking fires require a written permit. Contractor shall provide fireguard unless relieved of this responsibility in writing by the COR.   |
| C  | Shutdown from 12 noon until 8 p.m. MST (1-9 p.m. MDT) of all machine treated slash, blasting, welding, metal cutting, and clearing. No smoking, warming, or cooking fires permitted at any time. Powersaws shall be shut down from 9 a.m. until 8 p.m. MST (10:00 a.m. to 9 p.m. MDT). Operations on mineral soil involving road excavation, watering, grading, surfacing, rock crushing and/or other equipment maintenance may continue. |
| D  | Shut down all operations, except operations on mineral soil involving road excavation, watering, grading, gravel surfacing and rock crushing may continue with a special Forest Service permit.   |