

Attachment A - Work Activity Items

Mandatory Stewardship Project Numbers 001 - 012 Road Decommissioning

The end result is to return the roads to natural conditions, limit erosion and sediment movement to streams, and maintain water quality:

6300140: 0.5 mile (from the junction of Rd 6300000 to m.p.0.5)
6121120: 1.13 miles (from Junction of 6121125 junction 6121000 1.13 miles)
6121127: 0.53 miles (from junction of 6121000 to National Forest Boundary 0.35)
6122210: 0.6 miles (from junction of 612200 0.6 miles entire length)

End results specific requirements:

1. The roadbed is cleared of trees and slash.
2. All drainage devices, including culverts, are removed and disposed of off national forest lands.
3. De-compact to a depth of at least 18 inches, or as otherwise agreed to by the Forest Service, and reshape road surface to provide drainage for sediment storage on-site with minimal subsoil material brought to the surface.
4. Restore natural contour and drainage features.
5. Seed all disturbed areas as directed by the contract administrator.
6. The roadbed is effectively closed as appropriate to site conditions to discourage motor vehicle use.
7. The entrance is effectively closed by berm, large boulders, or obliteration to discourage motor vehicle use.
8. For 6121120 and 6121127 roads, leave a minimum road width of 3 feet for foot path or as ORV trail; do not block access to foot path/ORV trail.

Optional Stewardship Project Number 013 - Tree Marking Designation by Prescription (D x Pre) Specifications

The end result is to retain the *best available trees* to the specified stocking level and/or other *desired condition* as summarized within the Low Pole D x Pre Specifications (see **Attachment B**).

The contractor shall use orange paint approved by the Forest Service to mark designated leave trees. Paint is to be purchased and supplied by the Contractor.

End results specific requirements:

1. Special features to buffer will be tracked by latitude and longitude using a GPS - NAD83 map datum. Government will provide know locations and specifics in comment section of **DxPre Table**.
2. Contractor will provide any additional features or changes made in same format.

Optional Stewardship Project Number 014 - 018 Road Closure/Decommissioning

The end result is to decommission the following roads:

6300137: 0.03 miles (from junction of 6300135 to m.p.03)
6300135: 0.34 miles (from junction of 6305 to m.p. 0.13)
6202135: 0.19 miles (from intersection of 6601 to m.p.0.44)
6202140: 0.32 miles (from junction of 6202 to m.p. 0.36)
6305311: 0.13 miles (from junction of 6305 to m.p.13)

End results specific requirements:

1. The roadbed is cleared of trees and slash.
2. All drainage devices, including culverts, are removed and properly disposed of off national forest lands.
3. De-compact to a depth of at least 18 inches, or as otherwise agreed to by the Forest Service, and reshape road surface to provide drainage for sediment storage on-site with minimal subsoil material brought to the surface.
4. Restore natural contour and drainage features.
5. Seed all disturbed areas as directed by the contract administrator.
6. The roadbed is effectively closed as appropriate to site conditions to discourage motor vehicle use.
7. The entrance is effectively closed by berm, large boulders, or obliteration to discourage motor vehicle use.

Payment will be based on actual number of miles of roads decommissioned and closed as determined by the Forest Service.

GENERAL SPECIFICATIONS FOR ALL PROJECTS

The Contractor may use yarding equipment, mechanical treatments, hand treatments, or other methods to reduce slash.

DEFINITIONS

Basal Area (BA): The cross-sectional (sq. ft) area of trees measured at DBH. Basal Area is typically determined by a wedge prism, angle gauge or relaskop.

Best Available Trees: See 'Desirable Trees' below.

Contract Administrator: The delegated on site inspector. The duties and responsibilities of the CA are defined in the letter of designation issued by the Contracting Officer.

Clumps: 2-8 leave trees with crowns within 5 feet of one another.

Crown ratio or live crown ratio (LCR): is the portion of the tree bole supporting live, healthy foliage and is expressed as a percent of the actual tree height.

Crown class: The description of the relative position of the tree crown with respect to competing vegetation surrounding the tree. The Crown Class for each tree is determined in the context of its immediate environment, trees or shrubs that are competing for sunlight or moisture with the subject tree.

Damage: Defect or deformity of a tree resulting from agents such as wind, snow, animals, insects, disease, and equipment, and evidenced by such things as dead or broken tops or boles, crooks, and deep scars or damage to the bark on more than ¼ of the circumference of the tree.

DBH (Diameter at Breast Height): A point on the bole of a tree 4.5 feet above the ground measured on the uphill side.

Desired Condition: Includes any applicable direction within the marking plan.

DWD or CWD: Down Woody Debris/Course woody debris consisting chiefly of dead and down material prior to operations.

Hawksworth Mistletoe Rating: Divide the crown of the tree into 6 sections. Rate each section for presence of mistletoe. The sum of the sections equals the Hawksworth Mistletoe Rating.

Height to Diameter Ratio: The relationship between dbh and height. Trees that are overly tall for their diameter size generally have a poor height to diameter ratio. These trees usually bend over once nearby trees have been removed. A 50' height and 6" dbh is 100:1 ratio.

Ladder Fuel Reduction: Cutting and/or removal of small diameter (<5.0 DBH) trees growing under other more desirable trees to reduce risk of fire moving from the ground to the tree crowns.

Leave Trees: Trees not designated for removal or other prescribed treatment.

Overstory Removal (HOR): Removal of the overstory trees with the intent of managing the understory.

Quality Control: Those actions taken by a Contractor to control the production of outputs to ensure that they conform to the contract specifications and requirements.

Shelterwood Harvest (HSH): Silvicultural method designed to retain 16-20+ overstory trees/acre, sufficient to produce a new stand of desirable trees.

Slash (created): Boles, branches and limbs produced by the Contractor's operations.

Selection Harvest (HSL): Selection of individual trees or small groups of trees designed to retain a stand with high forest cover while simultaneously providing for an orderly development of trees with a range of ages and/or size classes.

Severe insect or disease problems: Trees with **mistletoe** in more than half the crown. Brooms, cankers, and swellings on stems and branches are indicators of mistletoe. Mistletoe is common in Douglas-fir. Trees showing symptoms of **root disease** should be removed. Frequently these trees are Douglas fir near a root disease centers (an area of dead broken off trees). Indicators of root disease include a white fungus growing between the bark and the wood, resin flow at the base of the tree and or a lighter color crown with fewer needles, when compared to other Douglas fir in the area. Fading crowns and/or sap flow from the bole of Douglas-fir and grand fir. **Blister Rust** is common in western white pine. Symptoms of blister rust include heavy resin flow on the stem from a diamond shaped wound, dead branches and/or a dead top. Grand fir with **scolytus** scars on both sides of the tree. Numerous pitch tubes where **beetles** have bored into tree (usually lodgepole or Douglas-fir). Symptoms of mountain pine beetles are small red to yellowish pitch tubes (less than one-fourth inch) and boring dust in bark crevices and round the base of the tree. Symptoms of Ips beetles are dead tops and group killings without pitch tubes.

Severe mechanical defects: heavy leans, v-shaped forks, sharp crooks, bear damage or bird peck girdling the tree, broken trees with few live branches remaining.

Streamcourse: The area along a stream with riparian vegetation and other riparian characteristics. Stream courses are noted on the Contract Area Map. Protection of streamcourses is outlined in the IRTC.

Thinning (HTH): Selection of individual trees designed to retain a stand with high forest cover. Leave trees are generally those with 'desirable' characteristics and meet the prescribed spacing and/or BA retention requirements.

Trees not expected to live for 10 years: Trees with red needles, few live branches or other indicators of recent or expected tree mortality.

Trees per acre (TPA): A method of determining stocking level. The number of live trees >4" dbh per acre.

Vegetative Screen: Available vegetation such as shrubs, seedlings, saplings, full crown and/or wolfy trees. When designated, available vegetation is to be retained at a level sufficient to screen at least 90% of a large animal at 200 feet.

Vigor/Growth: Relative health and growth of forest trees. Leave-tree preference shall favor trees possessing relatively high vigor/growth, free of disease and defect over trees with relatively poor vigor and growth, regardless of specie preference. For example, a PP with a relatively healthy crown will be favored over and a similarly-sized DF with a faded crown. If the two trees possessed similar vigor/growth characteristics, the PP shall be the preferred leave-tree.

Wildlife tree and snags: Live or dead trees retained for wildlife.