Attachment A – Work Activity Items

Introduction: The objective of this project is to manage stocking and species composition to lessen susceptibility to insect and disease outbreaks; reduce the risk of high severity wildfire by reducing surface, ladder and crown fuels; increase tree growth and vigor; diversify species age and composition; improve riparian habitat conditions; and decrease point source sedimentation impacts from existing roads.

Stewardship Project Number 001 – Marking of DxPre Units

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

Within their technical proposal, the contractor shall specify how they will meet the specified stocking level for each DxPre unit. Units can be grouped by end result basal area per acre. The contractor shall mark the entire subdivision. Partial marking of subdivisions shall not be permitted. The contractor shall use non-tracer orange paint purchased by the contractor and approved by the Forest Service to mark designated leave trees. Subdivisions 49, 125, 126, 128, 129, 130, 131, 138, 140, 144, 145, 146, 147, 148, and 149 are DxPre units.

Mandatory Stewardship Project Number 002 – Road Construction

Construct approx. 500 feet of (native) road to a 14' width, out-sloped 2%-4% starting at Road 4347535 and ending at the USFS/Private Property boundary as flagged (see Delaney Stewardship CAM, Page 2). This road provides access to the Kaufman Property Inholding.

Mandatory Stewardship Project Number 003 – Road Obliteration

The end result is to obliterate, re-contour, and make undrivable the following 2 roads:

1) Approximately 0.2 mile of the existing non-system road within Subdivision 108 - From the junction of the Middle Fork Calispell Road (C-2022) to the end of road;
2) Approximately 0.4 mile of the non-system road (T113) within Subdivisions 112 and 113 - From the junction of Road 3530001 to the end of the road.

Remove culvert(s), de-compact the running surface to a minimum depth of 16 inches and re-contour (post-harvest) with available fill material, logging slash, boulders and/or other means appropriate for site conditions. Grass seed all disturbed areas. Grass seed to be provided by the government.

Mandatory Stewardship Project Number 004 – Road Decommissioning

The end result is to decommission the following 9 roads:

3500175 (Subdivision 106): 0.2 mile (from the junction of C-2022 to the end of the road).
3540510 (Subdivision 120): 0.2 mile (from the junction of Rd 3540400 to the end of the road).
3540520 (Subdivision 129): 0.6 mile (from the junction of Rd 3540000 to the end of the road).
4347505 - 0.4 mile from the junction of Rd 4347000 to the junction of Rd 4347510; remove culverts from the project area. Remove fill material from stream channels and adjacent riparian areas and deposit this material onto the running surface or other approved location. Recontour stream crossing sites.
4347510 - 0.3 mile from the junction of Rd 4347510 to the end of the road; remove culverts from the project area. Remove fill material from stream channels and adjacent riparian areas and deposit this material onto the running surface or other approved location. Recontour stream crossing sites.
Non-system Road (NE S16 T32NR42E): Remove log culvert from stream crossing site. Remove fill material from stream channel and deposit this material onto the running surface or other approved location. Recontour stream crossing site.
Non-system Road (Subdivision 105): 0.3 mile (from the junction of Rd 3500210 to the end of the road).
Non-system Road (Subdivision 110): 0.2 mile (from the junction of C-2022 to the end of the road).
Non-system Road (Subdivision 128): 0.2 mile (from the junction of Rd 3540000 to the end of the road).

Remove road fill and deposit this material onto the running surface. Leave loosened material in clumps to minimize erosion potential. Within road segments lacking fill material to adequately cover the running surface to a depth of at least 4 inches (e.g. low angled side slopes), scarify the running surface to a depth of at least 4 inches. Add available slash, earthen berms, boulders and/or other debris to further discourage motor vehicle use. Install drainage features and grass seed all disturbed areas.

Decommissioning the Ninebark non-system roads and Roads 4347505 and 4347510 will require coordination with the USFS and Purchaser for the Ninebark Timber Sale.

Mandatory Stewardship Project Number 005 – Road Entrance Closures

The end result is to close the following 6 roads to motorized access:

3500210 (Subdivision 305) – Close road at north boundary of Subdivision 305.
3540400 (Subdivision 120) – Close road at the junction of Rd 3540000.
3540519 (Subdivision 129) – Close road at the junction of Rd 3540000.
3540521 (Subdivision 131) – Close road at the junction of Rd 3540000.
3540600 (Subdivision 144) - Close road at the junction of Rd 3540000.
4347535 (Subdivision 149) - Close road at the junction of Rd 4347000. Remove gate and deliver to the Colville Supervisor's Office, or as otherwise agreed to.

Close roads using a combination of earthen berms, boulders and/or available logging slash and debris. Some road work may need to be completed outside the specified operation Normal Operating Season and will be addressed on a site-by-site basis. Grass seed all disturbed areas.

Mandatory Stewardship Project Number 006 – Tree Planting

The end result is to re-vegetate with conifer seedlings the entrances of the following (closed) roads:

3500175 (Subdivision 106)
3500210 (Subdivision 305)
3540400 (Subdivision 120)
3540519 (Subdivision 129)
3540520 (Subdivision 129)
3540521 (Subdivision 131)
3540600 (Subdivision 144)
4347535 (Subdivision 149)
5 Non-system (temp) Roads in Subdivisions 105, 108, 110, 112, 128.

The running surface at each location shall be ripped prior to planting to a minimum depth of 16 inches for 100 linear feet. Each road entrance site shall be planted with approximately 80 trees at a spacing of 6'X6' (see ***Attachment C***). Planting stock will be provided by the government. Due to a 2-yr process for propagation of conifer planting stock the contractor will be required to work closely with the USFS for successful completion of this project. Unless otherwise agreed to, trees would need to be planted no later than May 2019.

Mandatory Stewardship Project Number 007 – Noxious Weed Treatment

The end result is to spray herbicide on up to **200** acres of designated roads and right-of-ways, trails, landing sites and meadows for the purpose of reducing the spread of noxious weeds. All weed control measures shall comply with all herbicide labels and the applicable laws and regulations of the State of Washington as well as the Colville National Forest 1998 Environmental Assessment for Integrated Noxious Weed Treatment as amended by the Region 6 Invasive Plant Program--Preventing and Managing Invasive Plants EIS and ROD signed 10/11/05. Weeds must be sprayed when they are at the proper physiological stage of maturity, as recommended on the herbicide label.

A Daily Spray Report which includes the "Pesticide Application Record" form along with map of application areas shall be completed daily by the Contractor. It shall be available for inspection by the Contracting Administer at any time and at a minimum submitted weekly. The Contractor shall provide other Washington State applicator requirement forms. In addition, the Contractor shall keep the contract administrator informed of their progress on a daily basis.

The Contractor shall perform spraying by using an articulated boom spray truck equipped with a computerized injection system for all roadsides. ATV may be required for some items.

Tordon 22K – *Picloram* - shall be applied at the rate of 1 quart per acre. The Contractor shall mix the Tordon 22K at a rate of 32 ounces concentrate in not less than 20, and not more than 80, gallons of mix per acre. The use of a spreader activator may be required depending on weather conditions and species of weed being targeted.

Escort – *Metsulfuron* – shall be applied at a rate of 2 oz. per acre and mixed with a crop oil or silicone-based surfactant such as Sylgard.

Transline – *Clopyralid* – shall be applied at a rate of 6-10 oz. per acre and mixed with a crop oil or silicone-based surfactant such as Sylgard.

Specific Weed Treatments:

Common tansy (*Tanacetum vulgare*) is to be treated with metsulfuron (brand names Escort, Ally, etc.) at the rate of 2 ounces per acre mixed with a crop oil or silicone-based surfactant such as Sylgard, etc. at the rate of 1 pint (16 ounces) per 100 gallons of spray solution.
Dalmatian Toadflax (*Linaria dalmatica*) is to be treated with a mixture of picloram (brand name Tordon 22K) at the rate of 2 pints (32 ounces) per acre, and 0.5 ounces of metsulfuron (Escort) per acre, mixed with a crop oil or silicone-based surfactant such as Sylgard, etc. at the rate of 1 pint (16 ounces) per acre.
All other weed species are to be treated with clopyralid (brand name Transline) at the rate of 1 pint (16 ounces) per acre mixed with a crop oil or silicone-based surfactant such as Sylgard, etc. at the rate of 1 pint (16 ounces) per 100 gallons of spray solution.

The application environments are Forest Service roads and designated meadows, landing areas and public parking areas, right-of-ways and ditch lines. Areas designated by the Forest Service may be accessible by motorized vehicles, highway or ATV's. All riparian areas are excluded from this requirement. Designated areas may be treated two or more times.

ATV accessible roads and trails -To include all single or double track trails, 4 feet to either side of the trail unless otherwise designated. Distance shall be measured from the edge of the tread of the trail.

Bid rate to be based on the following treatment applications:
1) Approx. 20% (40 acres) of the treated area accessible by ATV's only;
2) Approx. 80% (160 acres) of the treated area accessible by highway vehicles.

Payment will be based on acres treated.

Mandatory Stewardship Project Number 008 – Snag Creation

The end result is to create **10** snags within the project area.

Project location: Snags are to be created within **Subdivisions 120 and 135** (20 acres).
Minimum tree diameter and size: 12 inches DBH, 20 feet in height.
Tree preference: 1) Western larch (preferably with mistletoe) or Douglas-fir; 2) Grand fir, Engelmann spruce or lodgepole pine; 3) Ponderosa pine or subalpine fir; 4) Avoid healthy, dominant and/or full-crowned trees; 5) Avoid trees with broken or dead tops, broom rusts and/or fading crowns.
Tree location: Select trees on unit edges, in leave-tree patches, or standing alone in the unit. Select trees greater than 200' from open roads to prevent their loss to firewood cutters.
Tree spacing: Select individual trees or clumps of trees (particularly lodgepole pine)
Maximum number of trees/unit: Create an average of 1 snag per 2 acres.
Marking method: Mark with contractor-supplied orange paint a "W" on each tree above DBH, clearly visible at 100 feet from all directions. Mark a 6" spot on the tree at ground level. Use galvanized nails to affix a metal wildlife tree tag (to be supplied by the govn't) to the tree at DBH and below the orange "W". Leave approximately 1" of each nail showing (not pounded into tree). Using a nail, scratch in a unique, individual tree number in lower right corner of each metal tag.
Treatment method: Top trees as high as safe operations allow.

Treatment timing: Tree selection and marking shall occur prior to harvest. Tree topping should occur at time of harvest.
Closed Road Access: A road use permit to access units located behind gated roads may be issued by the USFS Wildlife Biologist located at the Sullivan Lake Ranger Station (509-446-7500).
Tracking method: Record each tree's latitude and longitude using a GPS - NAD83 map datum. Create a paper map of trees for each harvest unit that includes locations of each tree with their unique tree numbers.

Mandatory Stewardship Project Number 009 – Mechanical Piling

The end result is to treat areas where residual slash exceeds 6 tons/acre for 0-3" diameter material and 6 tons/acre for 3-6" diameter material. 'Slash' is as defined in K-G.7.4.2#.

a. Slash may be piled in small openings, on landings, or in locations as approved prior to operations. Removal of additional live trees to provide burn bays will be approved prior to operations. Piles shall be located at least 20 feet from standing live trees.
b. Piles shall be located within the contract boundaries.
c. Piles shall not be located on the road prism of system roads, within 150 feet of a stream, or within 60 feet of a Genetic Reserve Tree.
d. Piles shall not be located next to existing snags. A snag is any standing bole greater than 20 feet in height and 10 inches at DBH.
e. Except when used to close roads and skid trials all piles shall be compact and free of dirt. Machines used for piling shall be equipped with an excavator-mounted brush blade, rake or grapple. Equipment used for piling shall also not exceed 7 psi ground pressure.
f. Piles should be less than 10 feet in height, and 20 feet in length and width or as otherwise approved.

Subdivisions: 49,105,125; Up to 90 acres.

Mandatory Stewardship Project Number 010 – Pre-commercial Thinning

The end result is to use hand tree felling to reduce ladder fuels and increase the vigor of shade intolerant and fire resistant species. Average conifer leave-tree spacing: 14'X14'. Spacing may vary by 25% to select the best leave tree. Designated cut trees shall be from 1 foot in height to a maximum size of 6.9 inches DBH. Preferred species will be determined as per unit prescription (*see* ***Attachment D***).

Units: ***See Pg 2 of 2 CAM*** (Up to 590 acres).

Optional Stewardship Project Number 011 – Slashing (Whipfelling)

The end result is to reduce ladder fuels, increase the vigor of shade intolerant and fire resistant species, and to remove diseased and/or damaged sub-merchantable conifer species. Cut all diseased and/or damaged trees <4.0" DBH. Healthy, un-damaged conifer species may be retained as per unit prescription. Whip-felled slash depth shall be 2 feet or less. Leave a 15' uncut buffer along all roads open to public use.

Subdivisions: 105,119,128,130,131,144,145,148; Up to 300 acres.

Optional Stewardship Project Number 012 – Mastication

The end result is to reduce ladder fuels and residual slash. Masticated ladder fuels and slash shall be reduced to a depth of 12" or less. Results of treatment shall be small debris (limbs, sticks, needles, chips) with a maximum debris size of 4 inches in diameter and 4 feet in length on over 90% of the treatment area. Areas excluded from mastication include the pine marten travel corridors, SMA's, and big game screening cover strips along open roads.

Subdivisions: 110,112,129; Up to 80 acres.

Payment will be based on number of acres masticated.

Optional Stewardship Project Number 013 – Machine Fuelbreak and Fireline Construction

The end result is to provide a fireline and fuel break on the boundary of proposed prescribed burn units. Locations are to be determined post-harvest. Fuelbreak: Remove brush and slash greater than 2" diameter and 6' length for a width of 15' to 20'. Fireline: From the outside edge of the fuelbreak construct an 18"-24" wide line to mineral soil.

Subdivisions: 106,111,112,115,120,122,124,135 at the USFS property line; Up to 2.0 miles.

Payment will be based on miles of fuelbreak/fireline constructed.

Optional Stewardship Project Number 014 – Mechanical Piling

The end result is to treat areas where residual slash exceeds 6 tons/acre for 0-3" diameter material and 6 tons/acre for 3-6" diameter material. 'Slash' is as defined in K-G.7.4.2#.

a. Slash may be piled in small openings, on landings, or in locations as approved prior to operations. Removal of additional live trees to provide burn bays will be approved prior to operations. Piles shall be located at least 20 feet from standing live trees.
b. Piles shall be located within the contract boundaries.
c. Piles shall not be located on the road prism of system roads, within 150 feet of a stream, or within 60 feet of a Genetic Reserve Tree.
d. Piles shall not be located next to existing snags. A snag is any standing bole greater than 20 feet in height and 10 inches at DBH.
e. Except when used to close roads and skid trials all piles shall be compact and free of dirt. Machines used for piling shall be equipped with an excavator-mounted brush blade, rake or grapple. Equipment used for piling shall also not exceed 7 psi ground pressure.
f. Piles should be less than 10 feet in height, and 20 feet in length and width or as otherwise approved.

Subdivisions: 106,107,109,113,115,119,120,122,124,138,140,145,146,147,162; Up to 306 acres.

Payment will be based on acres piled.

Optional Stewardship Project Number 015 – Pre-commercial Thinning

The end result is to use hand tree felling to reduce ladder fuels and increase the vigor of shade intolerant and fire resistant species. Average conifer leave-tree spacing: 14'X14'. Spacing may vary by 25% to select the best leave tree. Designated cut trees shall be from 1 foot in height to a maximum size of 6.9 inches DBH. Preferred species will be determined post-harvest.

Subdivisions: 109,119,128,130,131,144,145,148; Up to 180 acres.

Payment will be based on acres thinned.

Optional Stewardship Project Number 016 – Fuelwood Reduction

The end result is to remove large woody fuels in excess of Forest Plan standards for down woody fuels from sub-divisions and skid and deck to designated landing sites. Subdivisions and landing sites to be determined post-harvest.

Bid rate to be based on an average skid distance of 1,200' to a maximum of 100 cords skidded and decked.

Payment will be based on number of cords skidded and decked.

Optional Stewardship Project Number 017 – Delaney Meadow Fence Repair and Shrub Planting

The end result is to reconstruct the existing fence enclosures at Delaney Meadows and plant riparian shrubs within 2 enclosures (See Attachment E).

Fence Repair: Reconstruct the existing Delaney fence enclosures to the following specifications:

1) Take apart the existing log worm fences and substitute log "spacers" for every other log course. Spacers should be 12 to 18-inch log rounds drilled and attached at the ends with 0.5" by 5' metal rebar. Use full length logs for an entire fence course, separated from the next full length log course with spacer blocks. The intent is to increase the fence height to 4.5 to 5 feet and to reconstruct and/or replace all damaged and/or decayed structures.
2) Replace all <0.5 inch diameter rebar with 0.5 inch diameter, 5 foot long metal stock.
3) Wrap smooth wire around the overlapping logs at each corner in the top log course to discourage firewood cutting. Use fence staple to secure the wire to the logs.
4) Re-build or repair barbed wire sections of the fence enclosures. Install 5 to 6-inch diameter treated wood at every 5th post. Replace or reconstruct all damage/decayed wooden braces and tighten all metal wires. Install small diameter wood stays and staple the stays to the wires.
5) Replace or reconstruct all damaged/decayed bucks and rails on the MF Calispell spring fence.

Enclosure	Habitat Protected	Legal description	Acres	Perimeter (feet)	comments
MF Calispell #1	streamside	T.32N, R.43E, Section 30	**5**	**3,200**	2 stock crossings, log worm fence on road side,

MF Calispell #2	riparian	T.32N, R.42E, Section 36	**9**	**4,900**	barbed wire on back side
MF Calispell Spring	spring, wetland	T.32N, R.42E, Section 36		**640**	buck and rail
MF Calispell Aspen	aspen, wetland	T.32N, R.42E, Section 35		**1,000**	worm fence / wire fence
3540 Road Aspen	aspen	T.32N, R.42E, Section 25, 26		**380**	log worm fence
Total				**10,120**	

Riparian Shrub Planting: Within the MF Calispell #1 and #2 enclosures (14 acres) plant approximately 1,000 riparian shrubs (Douglas hawthorn, alder, red-osier dogwood, willow, and cottonwood) to a spacing of 6X6 feet, spacing off existing shrubs. Planting stock to be provided by the Government.

Optional Stewardship Project Number 018 - Miscellaneous Road/Trail Decommissioning

The end result is to decommission up to 1 mile of designated roads and/or unauthorized ATV trails. Locations are to be determined post-harvest. Remove road fill and deposit this material onto the running surface. Leave loosened material in clumps to minimize erosion potential. Within road segments lacking fill material to adequately cover the running surface to a depth of at least 4 inches (e.g. low angled side slopes) scarify the running surface to a depth of at least 4 inches or as otherwise agreed to by the contracting administrator and contractor. Add available slash, boulders and/or other debris to further discourage motor vehicle use. Install drainage features and grass seed all disturbed areas as directed by the contract administrator.

Payment will be based on of miles of roads/trails decommissioned.

Optional Stewardship Project Number 019 – Miscellaneous Road/Trail Ripping

The end result is to de-compact up to 1 mile of designated roads and ATV trails. Locations are to be determined post-harvest. As flagged, excavate and/or rip the roadbed to a minimum depth of 16". Leave loosened material in clumps to avoid erosion. Grass seed disturbed sites as directed by the contract administer.

Payment will be based on miles of road/trail ripped.

Optional Stewardship Project Number 020 – Miscellaneous Road Entrance Closures

The end result is close up to 6 designated roads and/or ATV trails to motorized access. Locations to be determined post-harvest.

Close roads using a combination of earthen berms, boulders and/or available logging slash and debris. Some road work may need to be completed outside the specified operation season and will be addressed on a site-by-site basis. Grass seed all disturbed areas as directed by the contract administrator.

Payment will be based on number of road closure sites.

Optional Stewardship Project Number 021 – Miscellaneous Barrier Rock Placement

The end result is to close designated roads and/or unauthorized ATV trails with barrier rock. Locations are to be determined post-harvest.

Purchase and haul 3'-4' diameter boulders to be installed at up to 4 sites (3-4 boulders per site) as directed by the Contracting Administer.

Payment will be based on number of sites closed with barrier rock.

GENERAL SPECIFICATIONS FOR ALL PROJECTS

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

DEFINITIONS

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

Best Available Trees: The best available tree is one with the best vigor, health and/or growth. Given a choice between two trees with equal vigor/health/growth the best available tree is the preferred specie.

Calendar Days: Every day shown on the calendar, Saturdays, Sundays and holidays.

Chipping and Grinding: Use of mechanized equipment to reduce slash and non-merchantable material to a size which will meet local mill utilization standards.

Clumps: 3-4 leave trees with crowns within 5' of one another.

Mastication: Use of mechanized equipment to reduce the size and height of the residual slash and ladder fuels to facilitate decomposition.

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.

Contract Time: See Period of Performance.

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.

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.

IRTC: Integrated Resource Timber Sale Contract

Ladder Fuel Reduction: Cutting and/or removal of small diameter (generally <4.0 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.

Live (green) Snags: Trees that have broken or missing tops >10" diameter at the point of breakage and yet have live limbs remaining on the stem.

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

Period of Performance: (also Performance Period or Contract Time). The number of calendar days allowed in the contract for completion of contract work.

Piling: Use of mechanized equipment to concentrate slash for fall/winter burning.

Quality Assurance: The actions taken by the Government to assess the results to determine that they meet contract requirements. The methods for quality assurance are described in the Quality Assurance Surveillance Plan (QASP).

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

Shelterwood Harvest (HSH): Silvicultural method designed to retain 16-20+ overstory trees/acre, sufficient to produce a new age class 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 western larch.
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. 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.

Stream course: 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: A method of measuring 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 WH 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 DF shall be the preferred leave-tree.

CONTRACTOR WORK REQUIREMENTS AND STANDARDS

Locked gates: In cases where units are behind locked gates, the Contractor shall close and lock gates after entering or exiting each gate and will be subject to all other restrictions of administrative use. The Contractor shall be permitted to drive from the locked gate to the unit with only the minimum number of vehicles necessary for efficient transport of the crew and equipment as well as product removal. All entrances into closed areas shall be clearly signed "For Logging Use Only" during periods of active operations.

Leave trees: 1) all snags that do not pose a hazard to operations as defined by the Washington State Labor and Industry standards, or are not identified for removal in the fireline construction end products specifications shall be considered leave trees and left uncut. 2) All designated leave trees both in the treatment units and in the Optional Units shall be left uncut and undamaged. Operations shall be conducted in such a manner so as to minimize damage to any leave trees during operations. See the IRTC for details related to damage and/or cutting of commercial timber within the project area.

Unless otherwise approved by the Contracting Officer, green biomass trees removed under the Mandatory and Optional work items shall be completely severed below the lowest live limb and within six (6) inches of the ground at an angle parallel to the slope, except when prevented by natural obstacles. A live limb is a limb of any size that has green needles attached. Cut trees shall be secured so they do not roll down hill and shall not be hung up on other trees or vegetation.

Slash Treatment: Treatments of slash is to include slashing, bucking, dispersion, commercial off-site removal, chipping, or piling. Slash created and/or trees dropped by the Contractor's operations outside the unit boundaries will be pulled back onto Forest Service property unless agreed to in writing by the Forest Service.

Resource Protection: The Contractor shall exercise extreme care to prevent damage to existing facilities, developments, and resources in all aspects of the contract work.