

**K-F.3.1# – ROAD MAINTENANCE REQUIREMENTS. (9/04) Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:**

**Contract Road Maintenance Requirements Summary**

- A. Design, equip, and operate application equipment for spreading dust palliatives so that the material is uniformly applied at the rate and traveled way widths shown in the Road Listing.
- B. For bituminous palliatives provide equipment that heats and applies the bituminous material. Provide a bituminous distributor that is self-powered and mounted on pneumatic tires and equipped with a pump and circulating spray bar, a tachometer, pressure gauges, accurate volume measuring devices such as visual volume dial or gauge calibrated to the tank, and a thermometer. Provide equipment which is a standard commercial type of proven performance.
- C. Accomplish dilution of dust palliatives within the application vehicle with the water source protected from contamination. Circulate the resulting mixture at least five (5) minutes to ensure uniform mixing prior to application.

**812.05 Maintenance Requirements**

- A. Limit water applications to abatement for hauling vehicles and provide at a frequency and rate which controls dust such that vehicle tail lights and turn signals remain visible. Vary rates of application as needed but remain low enough to avoid forming rivulets. Accomplish the abatement by sufficient frequency of application without saturating and softening the traveled way. Compacted or glazed road surface or wheel tracks may be loosened as needed for water penetration.
- B. Apply all other dust palliatives at the rates and times agreeable to the Contracting Officer. The Road Listing shows the expected average application rate and may be varied to meet field conditions. Lignin Sulfonate, Magnesium Chloride, and Calcium Chloride Brine are listed as gallons per square foot of the undiluted product at fifty (50), thirty-three (33), and thirty-eight (38) percent respectively. Calcium Chloride Flake is listed in pounds per square foot at seventy-seven (77) percent concentration.
- C. Apply bituminous dust palliatives only when the surface to be treated contains sufficient moisture to obtain uniform distribution of the dust palliative unless noted differently in the SUPPLEMENTAL SPECIFICATIONS.
- D. Prior to initial application, when needed, the road will be bladed and shaped under Section T-811, Blading.
- E. Required subsequent applications may be applied to the existing road surface without blading.
- F. Dust palliatives will not be applied in a manner that spatters or mars adjacent structures or trees, or placed on or across cattle guards or bridges. Discharge dust abatement material only on roads approved by the Contracting Officer.

**K-F.3.1# – ROAD MAINTENANCE REQUIREMENTS. (9/04) Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:  
Contract Road Maintenance Requirements Summary**

**T-813 SURFACING (10/07)**

**813.01 Description**

This work consists of Placing surface aggregate as DESIGNATED ON THE GROUND, or as ordered by the Contracting Officer. It includes Preparing the area, furnishing, hauling, and Placing all necessary materials and other work necessary to blend with the adjacent road cross section.

**813.02 Materials**

- A. Materials will be Government-furnished when stated in the supplemental specifications.
- B. Materials furnished by the Contractor shall conform to the gradation and quality requirements of Section 703 of the "Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects FP-03 U.S. Customary Units" and FS supplements to the FP-03.
- C. *All materials transported onto National Forest System land shall be free of invasive species of concern. Written documentation of methods used to determine the invasive species of concern free status of any and all materials furnished by the Contractor shall be submitted to the Contracting Officer before transport of any materials onto National Forest System land.*

*The Contracting Officer shall have 5 days, excluding weekends and Federal holidays, to review the methods and inspect the materials after the required written documentation is provided by the Purchaser. After satisfactory review and inspection or after such 5 day period, the Contractor may transport the material onto National Forest System land.*

*Material or methods appropriate for establishing invasive species of concern free status for the particular invasive species of concern are listed below.*

*Invasive Species of Concern and Acceptable Methods specific to this Project:*

<i>Invasive Species of Concern</i>	<i>Acceptable Methods</i>
<b>REFER TO:</b>	<b>Fremont-Winema National Forests Invasive Species Prevention Practices December 2005</b>

**K-F.3.1# – ROAD MAINTENANCE REQUIREMENTS. (9/04) Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:  
Contract Road Maintenance Requirements Summary**

**813.03 Maintenance Requirements**

**A. Thoroughly loosen the area to be surfaced to a minimum depth of 1 inch Prior to Placement of aggregate.**

**B. Mixing and Placing**

When scheduled coincidentally with work under Section T-811, and included in the SUPPLEMENTAL SPECIFICATIONS, mix surfacing and existing aggregate with water until a uniform mixture is obtained Prior to final shaping and compaction.

Otherwise, spread the material on the Prepared area in layers no more than 4 inches in depth. When more than one (1) layer is required, shape and compact each layer before the succeeding layer is Placed. UPON completion, the surfacing shall reasonably conform to the adjacent cross section and Provide smooth transitions in the road Profile.

**C. Compaction Methods**

Compaction Method A: Breaking track while operating equipment on the traveled way.

Compaction Method B: 7-10 ton Pneumatic, steel, or equivalent vibratory roller, operated to cover the full width two (2) times.

Either Method A or B may be used unless Method B is designated in the ROAD LISTING.

**K-F.3.1# – ROAD MAINTENANCE REQUIREMENTS. (9/04) Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:  
Contract Road Maintenance Requirements Summary**

**T-831 DITCH MAINTENANCE (10/07)**

**831.01 Description**

This Section Provides for routine maintenance of various types of ditches to Provide a waterway which is unobstructed, as shown on the ROAD LISTING or DESIGNATED ON THE GROUND.

**831.02 Maintenance Requirements**

- A. Maintain ditches by removing rock, soil, wood, and other materials. Maintained ditches shall function to meet the intent of the original design.
- B. Undercutting backslopes during removal operations is not Permitted.
- C. Suitable material up to 4 inches in greatest dimension removed from the ditches may be blended into existing native road surface and shoulder or Placed in designated berm.
- D. Do not blend material from ditch cleaning operations into aggregate surfaced roads. Do not blade material across aggregate or bituminous surfaced roads, unless approved in writing by the Contracting Officer.
- E. Haul material in excess of 831.02 D or subject to 831.02 E to a designated waste area under Section T-832. Remove excess materials temporarily stored on the ditch slope or edge of the shoulder daily.
- F. Remove limbs and wood chunks in excess of 12 inches in length or 3 inches in diameter from ditches and Place outside the roadway.
- G. Clean Paved surfaces of all materials resulting from ditch maintenance work.
- H. Shape lead-off ditches to drain away from the traveled way.
- I. Where DESIGNATED ON THE GROUND, included in the ROAD LISTING, SHOWN ON THE DRAWINGS or as ordered by the Contracting Officer invasive species of concern Prevention Practices shall be followed as listed below.

**Invasive Species of Concern Prevention Practices**

**Conduct road blading, brushing and ditch cleaning in areas with high concentrations of invasive Plants in consultation with District or Forest-level invasive Plant specialists, incorporate invasive Plant Prevention Practices as appropriate (Pacific Northwest Region Invasive Plant Program Preventing and Managing Invasive Plants Record of Decision, 2005, Pg 18).**

**K-F.3.1# – ROAD MAINTENANCE REQUIREMENTS. (9/04)** Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:  
**Contract Road Maintenance Requirements Summary**

**T-834 DRAINAGE STRUCTURE MAINTENANCE (10/07)**

**834.01 Description**

This work consists of cleaning and reconditioning culverts and other drainage structures.

**834.02 Maintenance Requirements**

- A. Clean drainage structures, inlet structures, culverts, catch basins, and outlet channels specified in the SUPPLEMENTAL SPECIFICATIONS. Clean catch basins by removing the material within the area SHOWN ON THE DRAWINGS.
- B. Clean the transition from the ditch line to the catch basin a distance of 10 feet from the catch basin. Clean outlet channels and lead-off ditches a distance of 6 feet. Remove and Place debris and vegetation so as to not enter the channel or ditch, or obstruct traffic. **Haul debris and vegetation to a designated disposal area or sidecast as agreed to by Forest Service.**
- C. Hydraulic flushing of drainage structures is not allowed unless Provided for in the SUPPLEMENTAL SPECIFICATIONS.
- D. Cleaning and reconditioning are limited to the first 3 feet of inlet and outlet, determined along the toP of the structure. Recondition culvert inlet and outlet by field methods such as jacking out or cutting away damaged metal which obstructs flow. Treat cut edges with a zinc rich coating, in accordance with AASHTO M 36M and ASTM A 849. **Only those culverts with greater than 30% blockage of culvert circumference are required to be cleaned.**
- E. Where DESIGNATED ON THE GROUND, included in the ROAD LISTING, SHOWN ON THE DRAWINGS or as ordered by the Contracting Officer invasive species of concern Prevention Practices shall be followed as listed below.
- F.

**Comment [F1]:** what about other types of pipe? plastic, etc?  
**Comment [F2]:**

<b>Invasive Species of Concern Prevention Practices</b>
<b>Conduct road blading, brushing and ditch cleaning in areas with high concentrations of invasive Plants in consultation with District or Forest-level invasive Plant specialists, incorporate invasive Plant Prevention Practices as appropriate (Pacific Northwest Region Invasive Plant Program Preventing and Managing Invasive Plants Record of Decision, 2005, Pg 18).</b>

**K-F.3.1# – ROAD MAINTENANCE REQUIREMENTS. (9/04) Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:**  
**Contract Road Maintenance Requirements Summary**

**T-835 ROADWAY DRAINAGE MAINTENANCE (05/07)**

**835.01 Description**

This work consists of Providing Post haul drainage on roads.

**835.02 Maintenance Requirements**

**A. Drainage**

1. UPon completion of work, shaPe the roadway to Provide for the removal of surface water. The roadway need not be Passable to vehicles. RePair and reinstall water bars, barriers or berms existing Prior to the Purchaser's oPeration. Areas where water is Poned by existing centerline Profile sags in through cuts may be left untreated.
2. Continuous blade shaPing of the roadbed is not required under this sPecification.
3. Work to be done at staked locations shall be as indicated on the stake and/or stated in SUPPLEMENTAL SPECIFICATIONS:
4. Any of the following methods are accePtable for use at eroded or rutted locations:
  - Method A: OutsloPing the roadbed at not less than ½ inch Per yard of width.
  - Method B: InsloPing the roadbed at not less than ½ inch Per yard of width.
  - Method C: Water bar roadbed at locations staked on the ground and construct as SHOWN ON THE DRAWINGS or as included in SUPPLEMENTAL SPECIFICATIONS.
5. Drainage structures located in through fills and natural watercourses shall be fully functional without obstructions, including inlet and outlet channel within 20 feet of the structure.
6. Either clean culverts and other fabricated structures to Provide drainage from road ditches and make the ditch functional or Provide water bar(s) across the roadbed. Removed structures shall become Purchaser's ProPerty to be removed from National Forest System land. Remove and rePlace any Purchaser-installed temPorary drainage structures with a water bar.

**B. Slides, SlumPs and Slough**

1. Slides and slough may be left in Place, Provided they do not Potentially imPound water or divert water from watercourses. As necessary, reshaPe the various surfaces to Provide drainage.
2. Provide drainage to effectively decrease or eliminate the entry of surface water into slides, slumPs, and roadbed surface cracks. Place berms, waterbars or ditches as needed to intercePt and remove runoff water from the roadbed. Surface seal cracks by covering over with native soil materials to Prevent additional water entry and compAct with equipMent tires.

**C. Entrance Devices**

UPon completion of work, rePlace entrance devices to effectively eliminate access by motorized vehicles having four (4) wheels and a width in excess of 50 inches.

**K-F.3.1# – ROAD MAINTENANCE REQUIREMENTS. (9/04) Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:**  
**Contract Road Maintenance Requirements Summary**

**D. Seeding**

Seed and fertilize all disturbed areas in accordance with requirements set forth in Section T-841.

**K-F.3.1# – ROAD MAINTENANCE REQUIREMENTS. (9/04) Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:**

**Contract Road Maintenance Requirements Summary**

**T-838 MAINTENANCE FOR HIGH CLEARANCE VEHICLE USE (05/07)**

**838.01 Description**

This work consists of making limited use roads Passable for Project use by Contractor and Providing drainage from the traveled way and roadbed.

**838.02 Maintenance Requirements**

**A. Traveled Way**

Contractor may smooth or fill existing cross ditches and water bars and as aPProved by the Contracting Officer modify existing road junctions to enable vehicle access. The Contractor may Perform the following work Prior to beginning haul and resumption of haul after an extended stopPage:

1. Remove brush, fallen trees, rocks, and other debris from traveled way, including turnouts, turnarounds, and other locations that interfere with needed maintenance as follows:
  - a. No object extending over 4 inches above the road surface shall remain within the 12 feet usable traveled way. Center the usable width on the roadbed or Position away from the fill sloPe.
  - b. Cut and remove standing or down trees, logs, brush, and limbs from within the area described in 1(a). Remove all encroaching limbs to a height of 14 feet above the traveled way surface. Scatter material not meeting utilization standards outside and below the roadbed on the fill side. Limb and remove timber that meets utilization standards or deck at locations aPProved by the Contracting Officer.
  - c. Place all removed materials away from drainages.
  - d. During use, maintain drainage structures including diPs, ditches and culverts in a usable condition. **Only those culverts with greater than 30% blockage of culvert circumference are required to be cleaned.**
2. Clean and recondition drainage facilities in accordance with Section T-831 and T-834.

**B. Slough and Slides**

1. Slough and slides may be left in Place, Provided surface drainage is Provided and at least 12 feet of width is available for vehicle Passage.
2. Contractor may rePosition or ramP over slides and slough when the traveled way width is less than 12 feet Providing the material is caPable of suPPorting vehicles. Limit out sloPe to no more than six Percent.
3. RePosition slough or slide materials, which are not caPable of suPPorting a vehicle, on the roadbed to Provide the 12 feet width. When directed by the Contracting Officer, slough or slide material will be removed under Section T-832.

**C. SlumPs and Washouts**

1. Drain the roadbed immediately uPgrade of slumPs and longitudinal cracks to Prevent water from entering slumP area.

**K-F.3.1# – ROAD MAINTENANCE REQUIREMENTS. (9/04) Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:**

**Contract Road Maintenance Requirements Summary**

2. Slumps and longitudinal cracks at the edge of the roadbed shall not be considered a Part of the usable width. Usable width may be reduced to 10 feet in the area of the slump.
3. Unless the Contracting Officer approves material being Placed on slumps, ramp the slumps on both ends into undisturbed roadbed to Provide at least 10 feet usable width. Use removed materials to guide vehicles to the ramp location or to aid in draining the area.
4. Washouts may be filled with suitable material.

**D. Post haul**

At the end of hauling or Prior to entering into seasonal shutdowns or a Period of extended inactivity:

1. Shape the traveled way and disturbed roadbed to Provide functional drainage.
2. Reinstall removed cross ditches and water bars and Provide any additional drainage structures necessary to offset changes caused through use and maintenance.
3. Leave roads useable for high clearance vehicles. Remove or reshape Contractor modifications at road junctions to leave the entrance as it was before use, or as agreed at the time of improvement.

**K-F.3.1# – ROAD MAINTENANCE REQUIREMENTS. (9/04)** Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:

**Contract Road Maintenance Requirements Summary**

**T-839 MAINTENANCE FOR PROJECT USE (05/07)**

**839.01 Description**

Work consists of Providing minimum access required for Contractor's Operations and associated Forest Service contract administration and Preventing unacceptable resource or road damage.

**839.02 Maintenance Requirements**

A. Contractor is authorized to Perform the following maintenance to Provide vehicle Passage and drainage:

1. Removing log, earth, and rock barriers and/or improving existing road junctions to enable vehicle access as mutually agreed.
2. Smoothing or filling existing cross ditches and water bars.
3. Installing Contractor-furnished culverts or other temporary drainage structures for shallow stream crossings as approved by the Contracting Officer.
4. Removing brush, fallen trees, rocks, and other materials from the traveled way and other locations that interfere with needed maintenance:
  - a. Place all removed materials away from drainages.
  - b. Limb and remove timber which meets utilization standards or deck at locations approved by the Contracting Officer. Scatter other woody materials, including limbs, off of and below the roadbed without creating concentrations.
5. Clean and recondition drainage structures in accordance with Section T-831 and Section T-834.
6. Reposition or ramp over slough and slides to Provide adequate width of traveled way material.
7. Provide traveled way drainage above slumps and seal cracks in slump area. Ramp the slumps on both ends into undisturbed roadbed to Provide usable width unless otherwise ordered by the Contracting Officer.

B. During use, the traveled way shall not channel water along the road. Prior to seasonal Periods of anticipated rains and runoff, Perform the following work:

1. Shape the traveled way and roadbed to drain.
2. Reinstall removed cross ditches and water bars and Provide any additional drainage structures necessary to offset changes through use and maintenance.
3. Perform work outlined in 839.02 A (5), (6), and (7).
4. During Periods of non use, replace original barrier or Provide and maintain standard MUTCD, Type 3, barricades unless alternate type barriers are approved by the Contracting Officer.

**K-F.3.1# – ROAD MAINTENANCE REQUIREMENTS. (9/04) Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:**

**Contract Road Maintenance Requirements Summary**

**839.03 Post Haul Requirements**

A. UPon completion of Project use Perform such work as needed to reasonably conform to the character of the existing road Prior to Contractor's maintenance for Project use, unless otherwise Provided in the SUPPLEMENTAL SPECIFICATIONS or the Road Listing. Work shall be in addition to requirements of 839.02 B and in accordance with 839.03 B and C.

B. Roads designated in the Road Listing to be blocked shall conform to the requirements of Section T-835. Unless otherwise aPproved by the Contracting Officer, remove Contractor-installed temporary structures from National Forest System land. Associated commercially-obtained materials shall remain the ProPerty of the Contractor.

C. Remove or reshaPe Contractor imProvements at road junctions, as aPproved by the Contracting Officer at the time of imProvement.

**K-F.3.1# – ROAD MAINTENANCE REQUIREMENTS. (9/04) Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:**

**Contract Road Maintenance Requirements Summary**

**T-842 CUTTING ROADWAY VEGETATION (10/07)**

**842.01 Description**

This work consists of cutting all vegetative growth, including trees and other vegetation less than 4 inches in diameter measured 6 inches above the ground, on roadway surfaces and roadsides.

**842.02 Maintenance Requirements**

**A. General**

1. Cut brush, trees, and other vegetation within each area treated to a maximum height of 6 inches above the ground surface or obstruction such as rocks or existing stumps. When work is Performed under this Section, remove all limbs which extend into the treated area, or over the roadbed, to a height of 14 feet above the traveled way surface elevation.
2. Items to remain will be DESIGNATED ON THE GROUND.
3. Work may be Performed either by hand or mechanically unless sPecifically shown in the Road Listing. Self-Propelled equipment is not allowed on cut and fill slopes or in ditches.
4. Correct damage to trunks of standing trees caused by Purchaser's oPeration either by treatment with a commercial nursery sealer or by removing the tree as directed by the Contracting Officer.
5. Limb trees within the cutting limits which are over 4 inches -measured at 6 inches above the ground in lieu of cutting.
6. When trees are limbed, cut limbs within 4 inches of the trunk.

**B. Cutting Side Vegetation**

1. Show the width of vegetation to be removed in the Road Listing.
2. Unless otherwise included in the SUPPLEMENTAL SPECIFICATIONS or DESIGNATED ON THE GROUND:
  - a. Commence work at the edge of the traveled way and Proceed away from the road centerline.
  - b. Roads without a defined traveled way: The starting Point for cutting will be marked on the ground or defined in the SUPPLEMENTAL SPECIFICATIONS.
3. The Points for establishing cutting limits are as follows:
  - a. Fill and daylighted (wide roadbed) section cutting commences at the edge of the traveled way and Proceeds away from the road center line.
  - b. Drainage ditched section cutting commences at the bottom of the existing ditch and Proceeds away from the road center line. Cutting on ditch foreslopes is not required.
  - c. Unditched cut section cutting commences at the intersection of the cutbank and the roadbed and Proceeds away from center line.

**K-F.3.1# – ROAD MAINTENANCE REQUIREMENTS. (9/04) Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:**  
**Contract Road Maintenance Requirements Summary**

4. Provide transitions between differing increments of cutting width. Accomplish transitions in a taper length of not less than 50 feet nor more than 70 feet.

**K-F.3.1# – ROAD MAINTENANCE REQUIREMENTS.** (9/04) Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:

**Contract Road Maintenance Requirements Summary**

**C. Debris**

1. Materials resulting from the cutting operation in excess of 12 inches in length or 3 inches in diameter is not allowed to remain on roadway slopes within the treated area, in ditches, or within water courses.
2. Remove limbs and chunks in excess of 3 inches in any dimension from the traveled way and shoulders.
3. Materials may be scattered down slope from the roadbed; outside of the work area and drainages unless otherwise listed in D. Invasive Species of Concern.

**D. Invasive Species of Concern**

Where DESIGNATED ON THE GROUND, included in the ROAD LISTING, SHOWN ON THE DRAWINGS or as ordered by the Contracting Officer invasive species of concern Prevention Practices shall be followed as listed below.

<b>Invasive Species of Concern Prevention Practices</b>
<b>Conduct road blading, brushing and ditch cleaning in areas with high concentrations of invasive Plants in consultation with District or Forest-level invasive Plant specialists, incorporate invasive Plant Prevention Practices as appropriate (Pacific Northwest Region Invasive Plant Program Preventing and Managing Invasive Plants Record of Decision, 2005, Pg 18).</b>

**K-F.3.1# – ROAD MAINTENANCE REQUIREMENTS. (9/04)** Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:

**Contract Road Maintenance Requirements Summary**

**T-854 – TREATMENT AND DISPOSAL OF DANGER TREES (5/07)**  
**(Revision – 04/09/2010)**

**854.01 Description**

This work consists of felling and disposal of designated live or dead danger trees sufficiently tall to reach roads used by the Contractor. Any removal of logs is subject to Prior agreement between the Contractor Officer and the Contractor.

**854.02 Requirements**

**A. Designation of danger trees.**

The Contractor shall be responsible for identifying and falling all danger trees. Contractor shall notify the Contracting Officer of any bearing tree identified as a danger tree. A bearing tree is a marked tree used as a corner accessory. These trees are identified by Prescribed marks cut into their trunks and may also contain a metal Placard containing information related to the survey monument nearby.

Danger trees that the Contracting Officer and Contractor agree to be removed and that equal or exceed the utilization standards as listed in Appendix B, A.2 shall be marked.

**B. Falling, bucking and treatment for disposal.**

Use controlled felling to ensure the direction of fall and prevent damage to Property, structures, roadway, residual trees, and traffic. Stump heights, measured on the side adjacent to the highest ground, must not exceed 12 inches or 1/3 of the stump diameter, whichever is greater. Higher stump heights are Permitted when necessary for safety.

Felled snags and trees, which are not Marked for removal, will be left in a stable condition such that they will not roll or slide. Position logs away from standing trees so they will not roll, are not on top of one another, and are located out of roadway and drainage structures.

Fell, limb and, remove trees, which are Marked for removal, that equal or exceed the utilization standards as listed in the Timber Sale contract or SUPPLEMENTAL SPECIFICATIONS. Dispose of merchantable timber designated for removal in accordance with B/BT2.32 Construction Clearing, of the Timber Sale Contract, or as described in SUPPLEMENTAL SPECIFICATIONS.

**C. Slash treatment.**

Within the roadway, remove limbs, chunks, and debris in excess of 12 inches in length and 3 inches in diameter, and concentrations that may Plug ditches or culverts, and water courses.

Dispose of slash by scattering outside the roadway limits without damaging trees, or improvements.

Large accumulations of slash may be ordered hauled under T-832.

**K-F.3.1# – ROAD MAINTENANCE REQUIREMENTS. (9/04) Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:**

**Contract Road Maintenance Requirements Summary**

**SUPPLEMENTAL PROJECT SPECIFICATION T-891-02F**  
**WATER SUPPLY AND WATERING (03/08)**

**891.01 Description**

This work consists of Providing facilities to furnish an adequate water supply, hauling and applying water.

**891.02 Materials**

If the Contractor elects to Provide water from other than designated sources, the Contractor is responsible to obtain the right to use the water, including any cost for royalties involved.

Suitable and adequate water sources designated available for Contractor's use under this contract are as follows:

NAME	LOCATION	USE RESTRICTIONS
Silver Creek	T30S, R13E, SEC.13, SW NE	Availability and use of water sources is governed by the "Fremont-Winema National Forests Water Use and Drought Plan" (2006)

**ADDITIONAL RESTRICTIONS**

Pumping, damming or other activities that dewater any streams will not be allowed.

Maintain the following discharge rates on all streams:

- A. Do not reduce flows to less than 50% of the flow occurring at the time of withdrawal; in no case will flows be reduced to less than 1.0 CFS (about 7.5 gallons/second).
- B. The designated water sources may require some work Prior to their use. Such work may include cleaning Poned areas, installing temporary weirs or sandbags, Pipe repair, Pump installation, or other items appropriate to the Contractor's operations. Flowing streams may be temporarily sandbagged or a weir Placed to Pond water, Provided a minimum flow of 1.0 cu. ft/sec is maintained. Obtain approval on improvements for sandbags or weirs Prior to Placement

**891.03 Equipment**

- A. The Contractor shall utilize (1) one of the following methods of screening on draft hoses used to withdraw water from any live flowing stream.
  - (1) Perforated Plate:  
Screen openings shall not exceed 3/32 or 0.0938-inches (2.38-mm).
  - (2) Profile Bar Screen:  
The narrowest dimension in the screen openings shall not exceed 0.0689-inches (1.75-mm) in the narrowest direction.
  - (3) Woven Wire Screen:

**K-F.3.1# – ROAD MAINTENANCE REQUIREMENTS. (9/04) Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary;**  
**Contract Road Maintenance Requirements Summary**

Screen openings shall not exceed 3/32 or 0.0938-inches (2.38-mm) in the narrow direction.

All methods shall be cleaned frequently with wire brushing, flushing, or any other acceptable method.

- B. An air gap or Positive anti-siphon device shall be Provided between the water source and the vehicle being loaded if the vehicle has been used for other than water haul, if the source is a domestic Potable water supply, or the water is used for tank mixing with any other materials.
- C. Positive control of water application is required. Equipment shall Provide uniform application of water without Ponding or washing.

**891.04 Records and Reports**

- A. For each water source utilized, maintain a record of water use.
- B. Each month, submit a report to the Forest Service documenting water use for each source. The report shall include the following information:

Timber Sale Name and Contract Number  
Reporting Period  
Water Source  
Total Gallons Withdrawn

**K-F.3.1# – ROAD MAINTENANCE REQUIREMENTS. (9/04)** Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:

**Contract Road Maintenance Requirements Summary**

**K-F.3.2# – ROAD MAINTENANCE DEPOSIT SCHEDULE. (9/04)** Other Provisions herein notwithstanding, when Forest Service requests Payment in lieu of Contractor's Performance of road maintenance, Contractor shall make Required DePosits (16 USC 537) for current and/or deferred road maintenance. Such dePosits are based on the estimated volume and distance hauled and Contractor's commensurate use of each road listed in the Road Maintenance Plan in K-F.3.1#.

Contractor and Forest Service may agree in writing on adjustment of such rates. If Contractor uses roads under jurisdiction of Forest Service other than those listed in the Road Maintenance Plan, Forest Service shall establish rates commensurate with Contractor's use of such roads.

The Required DePosits for Forest Service work in lieu of Contractor Performance and for deferred maintenance is:  
**\$2.00 Per CCF .**

The following table lists Party that Contractor will make dePosits for road maintenance to, and the rate Per unit of measure of the dePosit. The Road Maintenance Agreement is available for insPection at the Forest SuPervisor's Office.

	<b>DePosit Made To</b>	<b>Rate</b>	<b>Unit of Measure</b>
2/	N/A		

Contract Name: Fawn Stewardship

K-F.3.2# - ROAD MAINTENANCE DEPOSIT SCHEDULE (09/2004)

Other provisions herein notwithstanding, when Forest Service requests payment in lieu of Contractor's performance of road maintenance, Contractor shall make Required Deposits (16 USC 537) for current and/or deferred road maintenance. Such deposits are based on the estimated volume and distance hauled and Contractor's commensurate use of each road listed in the Road Maintenance Plan in K-F.3.1#.

Contractor and Forest Service may agree in writing on adjustment of such rates. If Contractor uses roads under jurisdiction of Forest Service other than those listed in the Road Maintenance Plan, Forest Service shall establish rates commensurate with Contractor's use of such roads.

The Required Deposits for Forest Service work in lieu of Contractor performance and for deferred maintenance is: \$ \$ .58 per Ton.

The following table lists who Contractor will make deposits for road maintenance to, and the rate per unit of measure of the deposit. The Road Maintenance Agreement is available for inspection at the Forest Supervisor's Office.

Deposit Made To	Rate	Unit of Measure
N/A		

K-G.2.4# - SITE SPECIFIC SPECIAL PROTECTION MEASURES (09/2004)

Special protection measures needed to protect known areas identified on Sale Area Map or on the ground include:

Cultural Resource Protection Measures: All trees will be felled away from sites if found.

Wildlife and Botanical Protection Measures: No activities, except haul, from April 15 through June 30th, adjacent to riparian areas, in portions of units 2,4,9,12,15,16,19,24,25,26,28,30,31, and 32.

Cave Resource Protection Measures: N/A

K-G.3.1.5# - PROJECT OPERATION SCHEDULE (05/2005)

Unless otherwise agreed to between Contractor and Forest Service, Contractor's Operations shall be performed in accordance with the following schedule.

See attached schedule.

SCHEDULE PURSUANT TO K-G.3.1.5# - Project OPERATION SCHEDULE (05/2005)

Subdivision	Operation Conditions	Purpose
2,4,9,12,15,16, 19,24,25,26,28, 30,31,32	No activities, except haul, from April 15 through June 30, in portions of these units adjacent to riparian areas	Avoid disturbance to fawning habitat

Contract Name: Fawn Stewardship

K-G.3.2# - PROTECTION OF RESERVE TREES (09/2004)

Contractor's damage or destruction of reserve trees described in K-C.3# will cause serious and substantial silvicultural or other damage to the National Forest. It will be difficult if not impossible to determine the amount of such damage. Therefore, Contractor shall pay as fixed, agreed, and liquidated damages \$ 50.00 for each genetic reserve tree and \$ N/A for each N/A reserve tree damaged or destroyed by Contractor's Operations, in addition to amounts payable under D.4.5 and D.4.6.

Damage, as used herein, includes any injury to the living crown, bole, or roots of reserve trees. If areas are marked on the ground around such reserve trees, operation of heavy equipment or skidding of products within the area shall be considered to be damage to the tree.

K-G.4.0.5 - ALTERNATE REMOVAL OF INCLUDED TIMBER (05/2005)

Contractor and Forest Service may agree to alternate removal requirements of Included Timber contained in A.2. Alternate removal requirements are to be set forth in an agreement signed by both Contractor and Contracting Officer. The terms of the agreement binds both parties and becomes part of the stewardship contract.

The development and execution of the agreement is based upon the determination by the Contracting Officer that removal of Included Timber is economically impractical if Contractor has no ready market for such logs in the tributary area. A tributary area is defined as the area in which the Contractor and competitors regularly deliver saw logs, or 200 miles from the Contract Area, whichever distance is greater.

The agreement for alternate removal requirements shall be executed prior to removing any timber from the Subdivisions included in the agreement. Alternate removal requirements shall apply only to whole units and not to portions of units. All material meeting alternate removal specifications shall be cut and removed to locations designated in the agreement.

Volumes of material with alternate removal requirements will be determined from the National Cruise report for the project. Contractor will be charged for the following:

- a) stumpage value at current contract rates of the alternatively removed timber;
- b) plus the cost of other work required by the Forest Service to dispose of alternatively removed material;
- c) plus the difference between the appraised transportation cost of the Sawtimber and/or Nonsawtimber material involved and the appraised transportation cost of the alternative;
- d) minus any work required to be completed by the Contractor associated with alternate removal requirements.

Charges will be debited to the Contractor's Integrated Resource Account.

Upon acceptance of the alternate removal requirements, the Subdivision will be removed from the Contract Area under G.3.6.

Title to material included in the alternate removal agreement shall remain with the Forest Service.

Contract Name: Fawn Stewardship

K-G.4.1# - SPECIFIC REQUIREMENTS (05/2005)

Notwithstanding G.4.1, G.4.1.1, G.5 and G.6.1, felling objectives shall be accomplished by the type of felling methods and equipment listed herein. Methods or equipment other than those specified may be approved. For Subdivisions shown in the following table, Contractor shall submit a cutting plan for Forest Service acceptance, prior to the start of felling operations.

See attached Table.

**K-G.4.1# - SPECIFIC REQUIREMENTS. (5/05)** Notwithstanding G.4.1 and G.4.1.1, felling objectives shall be accomplished by the type of felling methods and equipment listed herein. Methods or equipment other than those specified may be approved. For Subdivisions shown in the following table, Contractor shall submit a cutting plan for Forest Service acceptance, prior to the start of felling operations.

**TABLE PURSUANT TO K-G.4.1#- SPECIFIC REQUIREMENTS (5/05)**

FELLING METHODS	SUBDIVISIONS
<p>Felling equipment is restricted to designated landings, skidtrails/roads, and cutting lanes unless winter logging conditions described below are present. Cutting lanes shall be established and average no less than 40 feet apart.</p>	<p>ALL</p>
<p>Trees will be directionally felled away from designated streamcourses, springs and meadows. No ground based logging equipment may be operated in meadows and scab flats.</p>	<p>ALL</p>
<p>An average skid trail spacing of at least 100 feet is expected except when using existing trails or when logging over firm snow of 18 inches or greater, or ground IS frozen a minimum of 6 inches below the surface. Firm snow is defined as snow that compacts to create a mat over the soil during skidding or mechanical cutting operations. The objective of these requirements is to prevent tires and/or tracks from breaking through the snow pack or frozen ground to the unprotected soil beneath, resulting in detrimental compaction, puddling or displacement. If these detrimental impacts are observed (except for occasional isolated situations) dispersed skidding shall cease, regardless of snow or ice depth (T-13).<sup>1/</sup></p>	<p>ALL</p>
<p>Soil moistures shall be measured at 8 inches below the surface of the mineral soil. The moisture values are to be measured as % dry weight. Moisture shall be measured when operations would occur outside the period July 15 through October 31. It is not required that moisture be measured during the period July 15 through October 31, to use approved cutting lanes.</p>	<p>ALL</p>
<p>Feller-buncher equipment with PSI ratings of approximately 7.5 PSI or less may operate off main skid trails only during the dry period of the year (July 1 through October 31). Outside of this period, soil moisture must be less than 15 percent to operate off of the main skid trails or winter conditions noted above must be present. Go-to machines, i.e., those feller-bunchers that drive up to each individual tree, are prohibited unless the soil is frozen.</p>	<p>ALL</p>

Contract Name: Fawn Stewardship

K-G.4.2# - YARDING/SKIDDING REQUIREMENTS (05/2005)

Contractor shall submit for Forest Service approval a Yarding/Skidding Plan prior to the start of felling operations. Requirements other than those specified in the following table may be approved. When appropriate, such approval shall include adjustments in Current Contract Rates and revision of the Contract Area Map. In no such case shall the adjustments result in Current Contract Rates less than Base Rates.

Location of all skid roads and trails, tractor roads, skyline corridors, mechanized harvester trails, forwarder roads, and other log skidding facilities, shall be approved prior to their use or construction.

See attached table for requirements.

**K-G.4.2# - YARDING/SKIDDING REQUIREMENTS. (5/05)** Contractor shall submit for Forest Service approval a Yarding/Skidding Plan prior to the start of felling operations. Requirements other than those specified in the following table may be approved. When appropriate, such approval shall include adjustments in Current Contract Rates and revision of the Contract Area Map. In no such case shall the adjustments result in Current Contract Rates less than Base Rates.

Location of all skid roads and trails, tractor roads, skyline corridors, mechanized harvester trails, forwarder roads, and other log skidding facilities, shall be approved prior to their use or construction.

**TABLE PURSUANT TO K-G.4.2#- YARDING/SKIDDING REQUIREMENTS (5/05)**

YARDING/SKIDDING REQUIREMENTS	Subdivisions
All trees will be whole tree yarded to the landing with limbs and top attached. All bucking, limbing, long-butting, etc., must be done on the landing and decking areas. Trees longer than 70 feet may be bucked prior to skidding, however, the top shall be attached.	ALL
Skid trails will be 14 feet or less in width.	ALL
Skidding equipment is restricted to designated skid trails/roads, mechanical feller/bunchers are restricted to designated cutting lanes and shall not have a PSI (pounds per square inch) rating greater than 7.5. Equipment weight in pounds per square inch (PSI) shall be based on an unloaded and static condition.	ALL
An average skid trail spacing of at least 100 feet is expected except when using existing trails or when logging over firm snow of 18 inches or greater, or ground frozen a minimum of 4 inches. Firm snow is defined as snow that compacts to create a mat over the soil during skidding or mechanical cutting operations. The objective of these requirements is to prevent tires and/or tracks from breaking through the snow pack or frozen ground to the unprotected soil beneath, resulting in detrimental compaction, puddling or displacement. If these detrimental impacts are observed (except for occasional isolated situations) dispersed skidding shall cease, regardless of snow or ice depth. Soil moistures shall be measured at 8 inches below the surface of the mineral soil. The moisture values are to be measured as % dry weight. Moisture shall be measured when operations would occur outside the period July 15 through October 31. It is not required that moisture be measured during the period July 15 through October 31, to use approved cutting lanes.	ALL
No skidding or logging equipment is permitted within riparian buffers, except that Forest Service may approve designated crossings.	ALL
In so far as practicable, all logs shall be skidded with at least one end suspended.	ALL

Contract Name: Fawn Stewardship

K-G.6.0# - EROSION CONTROL AND SOIL TREATMENT BY CONTRACTOR (07/2008)

Erosion prevention and control work required by G.6, shall be completed within 15 calendar days after yarding/skidding operations related to each landing are substantially completed or after Forest Service designation on the ground of work where such designation is required hereunder. Said time limit shall be exclusive of full days lost in Contractor's Operations due to causes beyond Contractor's control. Such on the ground designation shall be done as promptly as feasible unless it is agreed that the location of such work can be established without marking on the ground. After September 15, and as long thereafter as operations continue, the work shall be done as promptly as practicable. Damage resulting from Contractor's Operations due to failure to perform required work shall be repaired by Contractor.

On slopes greater than 35 percent, erosion control measures will be done with methods other than mechanized equipment, unless otherwise agreed.

Where soil has been disturbed or displaced on Contract Area by Contractor's Operations and where measures described in G.6 will not result in satisfactory erosion control or where subsoiling is shown on Contract Area Map, the following shall be performed. If applicable, timing of the work shall be coordinated with required scarification or subsoiling.

(a) Where staked or otherwise marked on the ground by Forest Service, seed, fertilizer, and mulch will be applied as indicated in the attached seeding, fertilizing, and mulching schedule. All applications shall be current and done during the period from N/A to N/A unless otherwise agreed to. Applications shall be done only during favorable conditions. If Contractor and Forest Service agree, seed can be applied and covered within 10 days of ground disturbance, and may be done outside the required periods.

(b) Where shown on Contract Area Map, landings, Temporary Roads and/or skidtrails/roads shall be scarified to a depth of N/A inches to provide a seedbed for grass seed, fertilizer, and mulch. Seed, fertilizer, and mulch shall be spread evenly at the rates shown in the table. When the seed, fertilizer, and mulch are applied in separate operations, the second or third operations shall be within 10 days of the first or second.

(c) Where shown on Contract Area Map, landings, Temporary Roads, and skid trails/roads used by Contractor shall be subsoiled to a minimum depth of N/A inches, except that Forest Service may agree to lesser depths. Each subsoiler shank shall be equipped with a shoe and wings which has a total width of at least 18 inches. The design of the shank and wings will be such that the treated, compacted soil is slightly lifted and well-fractured rather than plowed, mixed, or displaced. The distance between subsoiler shank passes shall not exceed 36 inches. Treated areas shall span the total width of compaction. Subsoiling shall be kept reasonably current and shall be done during Normal Operating Season unless otherwise agreed.

(d) When agreed to, Contractor may use alternate methods of erosion control.

Seed shall meet current Forest Service requirements, with the additional requirement that no seed containing any noxious weed seed in excess of established state limitations as listed in the current "State Noxious Weed Requirements Recognized in the Administration of the Federal Seed Act" publication will be used (commonly referred to as the "all states" noxious weed seed list). Seed shall be furnished separately or in mixture in standard containers clearly marked with: (1) seed name; (2) lot number; (3) net weight; (4) percentages of purity and of germination (in case of legumes, percentage of germination to include hard seed); (5) percentage of weed seed content; and (6) certification that no noxious weed seeds in excess of established state standards are present. The contractor shall furnish the Government duplicate signed copies of a certificate, signed by a Registered Seed Technologist or Seed Analyst (certified through either the Association of Official Seed Analysis or the Society of Commercial Seed Technologists), certifying that each lot of seed has been tested in accordance with the Association of Official Seed Analysts Standards within 12 months prior to date of application. This certificate shall include (1) name and address of laboratory, (2) date of test, (3) lot number for each kind of seed, (4) name of seed, (5) percentage of

Contract Name: Fawn Stewardship

germination, (6) percentage of purity, (7) percentage of weed seed content, and (8) certification that no noxious weed seeds in excess of established state limitations are present in any kind of seed.

Legume seed shall be inoculated with approved cultures in accordance with the instructions of the manufacturer.

No seed may be applied without prior written approval by the government.

See attached application schedule.

Project Name:

Page 61

APPLICATION SCHEDULE PURSUANT TO K-G.6.0# - EROSION CONTROL AND SOIL TREATMENT BY CONTRACTOR (07/2008)

SUBDIVISION OR UNIT NUMBER	AREAS	SEED		FERTILIZER		MULCH	
	A) SKID TRAILS B) FIRELINES C) TEMP. ROADS D) LANDINGS E) OTHER	APPLICATION		APPLICATION		APPLICATION	
		SPECIES <u>1/</u> MIXTURE	LBS/AC	TYPE <u>2/</u>	LBS/AC	TYPE <u>3/</u>	LBS/AC

1/ For projects in Oregon, the seed shall meet the State certification specifications. Seed must be packaged in containers carrying official certification labels sewn in, glued to, or printed upon the container, with the following information:

1. Variety (if certified as to variety) and kind.
2. Quantity of seed (pounds or bushels).
3. Class of certified seed (blue tags for certified seed).
4. Inspection or lot number traceable to the certifying agency's records.

For projects in Washington, the seed shall be labeled as "Prohibited and Restricted Noxious Weed Free for the State of Washington." The Contractor shall furnish a copy of the seed analysis.

For state of California lands in Region 6, seed must be certified by the state of California, or by an independent agency or company that is approved by the state of California for "prohibited and restricted noxious weed free for the state of California."

For mixtures of seed, each ingredient in excess of 5 percent must be listed with its percentage by weight and its germination percentage.

Legumes must be inoculated with nitrogen fixing bacteria before planting. The label must show the expiration date of the inoculant.

All seed treated with a fungicide or pesticide must be labeled that it is "treated" giving the name of the chemical used, and an appropriate warning or a caution statement.

2/ Fertilizer shall be a standard commercial fertilizer with guaranteed analysis of contents clearly marked on containers.

3/ Mulch shall meet the appropriate State's certification specifications, with evidence of its certification traceable to the certifying agency's records.

Contract Name: Fawn Stewardship

K-G.7 - SLASH DISPOSAL (06/2008)

As used in the following Subsections, the term "slash" is vegetative debris including, but not limited to, cull logs, blasted or pushed-out stumps, chunks, broken tops, limbs, branches, rotten wood, damaged brush, damaged or destroyed reproduction, saplings or poles, resulting from Contractor's Operations, including construction of roads or other improvements under this contract. Slash resulting from the construction of Specified Roads shall be disposed of as provided for in Section 201 of the Standard and Special Specifications and as shown in Drawings.

Any burning of slash or refuse by Contractor is subject to K-H.2.0.1.

Forest Service may enter into a written agreement with Contractor for the Contractor to remove slash from landings, subject to D.4.1. Brush disposal deposits paid by the Contractor for the Forest Service to burn landing piles will be credited to the Contractor's integrated resource account in the amount shown in the brush disposal plan, less the amount needed by the Forest Service for final cleanup of the landings following removal of the landing slash piles by the Contractor. The credit will be made following the final removal of all Included Timber, and slash piles, from the Contract Area.

K-G.7.4.2# - SLASH TREATMENT REQUIREMENTS (OPTION 2) (06/2008)

Contractor shall pile, burn, yard, construct firelines or otherwise treat slash defined in K-G.7, within designated areas. Work required of Contractor shall be in accordance with the following slash plan and specifications, and the Contract Area Map.

Unless otherwise agreed, or shown in the attached slash plan or specifications, when Included Timber is removed during Normal Operating Season, required slash work shall be completed within 30 days of removal of approximately three-quarters of the volume in the unit. When Included Timber is removed outside Normal Operating Season, required work will be completed within 30 days of the beginning of the next Normal Operating Season.

See following specifications.

SPECIFICATIONS PURSUANT TO K-G.7.4.2# - SLASH TREATMENT REQUIREMENTS (OPTION 2)  
(06/2008)

**I. GENERAL SPECIFICATIONS**

**A. Specifications for Piling**

**Location of Piles:** The Forest Service and the Contractor will agree on the location of all slash piling sites prior to their use. Piles shall not be closer than 30 feet from the edge of decked material left on the landing. Piles shall not be closer than 30 feet from the base or drip line of residual trees, whichever distance is furthest. Roll out of slash is required where dirt and slash are mixed. Only dry soil that may adhere to pieces of slash will be acceptable in piles, and piles shall be compact to facilitate burning.

**Fireline Construction:** A fireline to mineral soil will be constructed around piles with an overabundance of flammable material left on the landing that would allow fire to creep. The minimum width to mineral soil is three feet. The maximum width of 8 feet, or the length of a dozer blade.

**B. Scheduling Slash Disposal Activities**

Slash work shall be kept current with product removal. Slash not treated prior to end of Purchaser's operations each year should be treated prior to start of logging the next year, and will be included in the revised schedule.

**II. SPECIFIC SPECIFICATIONS**

**A. Landing and Decking Area Slash**

Pile all slash that is at least three inches diameter on the large end and at least three feet long, or over ten feet long regardless of diameter, that is on the cleared landing, or any slash pushed up along the edge or off the landing during skidding and decking operations.

All other slash that is on the landing or has been pushed off the landing during skidding and decking operations will be piled.

Unless agreed otherwise, decks and piles shall not be closer than two hundred (200) feet from recreational sites and facilities.

**B. Roadway Slash**

All slash from Contractor's operations will be removed from road surfaces, ditch lines, culverts and other drainage structures. Slash is to be scattered outside the clearing limits of roadways or beyond the top of cut banks, unless agreed otherwise.

Contract Name: Fawn Stewardship

K-G.8.1.5 - THIRD PARTY SCALING SERVICES (09/2004)

Notwithstanding the requirement for Forest Service or parties under contract to Forest Service to provide Scaling services under G.8.1, Scaling designated in A.10 shall be conducted by a third party Scaling organization approved by Forest Service. Scaling shall be done in accordance with A.9 and Contractor shall bear costs for Scaling service.

In the event third party Scaling service is suspended for causes such as strikes, termination of third party's approval to Scale National Forest logs by Forest Service, or Contractor's failure to pay third party Scaling costs, hauling operations shall be suspended until agreed alternate Scaling services are provided or service by third party is resumed.

When an approved alternate Scaling location pursuant to G.8.1.1 does not have an approved third party scaling organization as a commonly used Scaling services provider, Forest Service or parties under contract to Forest Service shall provide Scaling services at the approved alternate location. In such an event, the cost of waived third party Scaling listed in A.10 shall be charged to Integrated Resource Account.

If Forest Service and Contractor agree in writing that another party under contract to Forest Service will perform Scaling, the contract will be modified to include K-G.8.1.6 and Integrated Resource Account will be charged for such Scaling.

K-G.8.4 - USE OF PAINT BY CONTRACTOR (OPTION 1) (06/2006)

Notwithstanding G.8.4.2, use of paint by the Contractor within the Contract Area in the same color(s) used by the Forest Service in the preparation and administration of the contract will be by written approval of the Forest Service.

K-G.9# - STEWARDSHIP PROJECTS (09/2004)

Performance of stewardship projects shall be in accordance with the following specifications.

**Stewardship Projects**

K-G.9# - STEWARDSHIP PROJECTS. (9/04)

Project 001 Mandatory - Subdivisions 1- 1-19,21-35	Fall, Skid and Deck 4"-6.9" DBH Material
Project 002 Optional - Subdivisions 1-19,21-35	Stocking Level Control

**SPECIFICATION PURSUANT TO K-G.9#****GENERAL SPECIFICATIONS FOR****PROJECT 001** Fall, Skid and Deck 4"-6.99" DBH Material**PROJECT 002** Stocking Level Control**Description**

These two projects include pre-commercial thinning in commercial thinning units.

**Desired Outcome**

The objective of this project is to increase forest health by reducing stocking levels in the under-story and to restore ponderosa pine dominated stands that are more resistant to wildfire.

**Selection of Leave Trees**

1. Focus residual tree selection on individuals most likely developing into Late and Old Structure (LOS) ponderosa pine
2. Retain the healthier and more vigorous individuals
3. Select residual trees with a preference towards larger size (with positive health/vigor)
4. Live crown ratio of at least 30 percent (with viable needle retention)
5. Relative leader growth is greater than neighboring trees
6. Desirable phenotype (undesirable characteristics include forking, epicormic branching, crooks, sweeps, fire scars, decay)
7. Evidence of viable cone production
8. Insect/disease-free
9. Limited evidence of bole damage or barking (damage no greater than one-quarter of bole circumference)
10. Avoid retaining white firs with spike tops, rounded tops, fire scars, visible rot, frost seams, fading crowns, or live crown ratios of less than 50 percent
11. Avoid retaining individual lodgepole pines or white firs with conks

**Residual-Tree Species (In Preferential Order):**

1. Ponderosa Pine (PP)
2. Incense Cedar (IC)
3. White Fir (WF)
4. Lodgepole Pine (LP)

**PROJECT 001 (Mandatory) All Subdivisions except 20**  
Fall, Skid and Deck 3-6.9" Material

**End Results Objectives to be achieved:**

Reduce ladder fuels, increase forest health by stocking level control, and restore ponderosa pine dominated stands that are more resistant to wildfire.

All Subdivisions except unit 20

**Specifications:**

- 1) All trees 4" thru 6.9" DBH are to be felled, whole tree skid and decked seperately on approved landings, **unless** needed to meet the stocking Objectives described in K-C.3.5.7. If trees less than 7" DBH are needed for stocking. Thin to residual stocking of approximately 70 trees per acre (25 foot spacing), with acceptable range of 20 to 30 feet.
- 2) Cut all trees 4" < 6.9 DBH below the lowest live limb except when prevented by natural obstacles. Cut trees completely from the stump. Do not exceed a 6 inch stump height above ground level or 4 inches above natural obstacles. Do not leave hang-up trees.
- 3) Remove all western junipers not displaying old growth characteristics. Western juniper will be felled and left in place. It will not be brought to the landing.

**PROJECT 002 (Optional)**  
Stocking Level Control

**End Results Objectives to be achieved:**

Reduce ladder fuels, increase forest health by stocking level control, and restore ponderosa pine dominated stands that are more resistant to wildfire.

All Subdivisions except unit 20

**Specifications:**

- 1) Cut all live coniferous trees between 2 feet in height and 3.9" DBH.
- 2) Remove all western junipers not displaying old growth characteristics.
- 3) Pull back into unit boundaries and disperse all cut slash that is in or within 5 feet of the following: roads (whether open or blocked), cut banks, private boundaries, established trails, stock driveways, fence lines, established land corners, and stream courses.

Lop and scatter all slash remaining in units from Stewardship operations to a height of no greater than 18 inches from the ground to the top of the slash. Buck all slash pieces into lengths no greater than 6 feet.

Contract Name: Fawn Stewardship

K-H.1 - PLANS (05/2005)

The plan shall state how Contractor's representative or alternates will be contacted in a fire emergency, both during periods of operation and at other times such as evenings or weekends. Contractor shall certify compliance with specific fire precautionary measures included as Subsections under K-H.2 - Specific Fire Precautions, before beginning operations during Fire Precautionary Period (closed season) and shall update such certification when operations change.

If helicopter yarding is required, the plan shall include a schedule of rates mutually agreed to for computing Contractor costs incurred toward meeting Contractor's obligations under A.14, or for paying for helicopters controlled by Contractor and used under Forest Service direction for suppressing Operations Fires or other fires on Contract Area, excluding Negligent Fires.

K-H.2 - SPECIFIC FIRE PRECAUTIONS (05/2005)

When the industrial fire precaution level is I or higher, unless waiver is granted under K-H.2.2, specific required fire precautionary measures are as follows:

## A. Fire Security.

Contractor shall designate in writing a person or persons who shall perform fire security services listed below on Contract Area and vicinity. The designated person will be capable of operating Contractor's communications and fire fighting equipment specified in the contract, excluding helicopters, and of directing the activities of Contractor's personnel on Forest fires. Such person must report any fire detected to Forest Service within 15 minutes of detection. In lieu of having the designated person perform the required supervisory duties, Contractor may provide another person meeting the qualifications stated above to direct the activities of Contractor's personnel and equipment during all fire fighting activities.

Services described shall be for at least 1 hour from the time Contractor's Operations are shut down. For the purposes of this provision, personnel servicing equipment, and their vehicles, who are not engaged in cutting or welding metal are excluded.

Fire security services shall consist of moving throughout the operation area or areas constantly looking, reporting, and taking suppression action on any fires detected. Where possible, the designated person shall observe inaccessible portions of helicopter operating areas from vantage points within or adjacent to Contract Area.

Contractor shall furnish fire security services based on the predicted industrial precaution level, obtained by Contractor from the appropriate Ranger District Headquarters. If predictions made after 6:00 p.m. local time, are significantly different than originally estimated, Forest Service will inform Contractor when changes in fire security services are indicated.

## B. Fire Extinguisher and Equipment (on Trucks, Tractors, Power Saws, etc.).

(a) Each yarder or loader equipped with an internal combustion engine or other spark emitting source shall be equipped with a readily accessible fire extinguisher, with an Underwriter's Laboratory (UL) Rating of at least 5 B,C.

(b) All power-driven equipment operated by Contractor on National Forest land, except portable fire pumps, shall be equipped with one fire extinguisher having a UL rating of at least 5 B,C and one "D" handled or long handled round point shovel, size 0 or larger. In addition, each motor patrol, truck and passenger-carrying vehicle shall be equipped with a double-bit axe or Pulaski, 3-1/2 pounds or larger.

(c) Equipment required in (a) and (b) shall be kept in a serviceable condition and shall be readily available.

(d) Each gasoline power saw operator shall be equipped with a pressurized chemical fire extinguisher of not less than 8-ounce capacity by weight, and one long handled round point shovel, size 0 or larger, except at a landing where a suitable fire extinguisher and shovel are immediately available. The extinguisher will be kept in possession of the saw operator at all times. The shovel shall be accessible to the operator within 1 minute.

(e) Each helicopter shall be equipped with one fire extinguisher having a UL rating of at least 5 B,C mounted inside the aircraft within reach of the pilot's operating position.

(f) One refill for each type or one extra extinguisher sufficient to replace each size extinguisher required on equipment shall be safely stored in the fire tool box or other agreed upon place on Contract Area that is protected and readily available.

Contract Name: Fawn Stewardship

(g) At each area where helicopters are being serviced or supplied, a carbon dioxide fire extinguisher with a UL rating of at least 20 B,C will be provided on the site and placed where it is available for immediate use.

C. Spark arresters and mufflers.

Each internal combustion engine shall be equipped with a spark arrester qualified and rated under USDA Forest Service Standard 5100-1a as shown in the National Wildfire Coordination Group Spark Arrester Guide, unless it is:

(a) Equipped with a turbine-driven exhaust supercharger such as the turbocharger. There shall be no exhaust bypass.

(b) A multi-position engine, such as on power saws which must meet the performance levels set forth in the Society of Automotive Engineers (SAE) "multi-positioned small engine exhaust fire ignition standard, SAE recommended practice J335B" as now or hereafter amended.

(c) A passenger carrying vehicle or light truck, or medium truck up to 40,000 GVW, used on roads and equipped with a factory designed muffler complete with baffles and an exhaust system in good working condition.

(d) A heavy duty truck, such as a dump or log truck, or other vehicle used for commercial hauling, used only on roads and equipped with a factory designed muffler and with a vertical stack exhaust system extending above the cab.

Exhaust equipment described in this Subsection, including spark arresters and mufflers, shall be properly installed and constantly maintained in serviceable condition.

D. Fire Tools.

Contractor shall furnish serviceable fire fighting tools in a readily accessible fire tool box or compartment of sound construction with a hinged lid and hasp so arranged that the box can be secured or sealed. The box shall be red and marked "Fire Tools" in letters at least 1 inch high. It shall contain a minimum of:

(a) Two axes or Pulaskis with a 32 inch handle.

(b) Three adze eye hoes. One Pulaski may be substituted for one adze eye hoe.

(c) Three long handled, round point shovels, size 0 or larger.

E. Tank Truck.

Contractor shall provide a tank truck or trailer, containing not less than 300 gallons of water, during yarding, skidding, loading, land clearing, right-of-way clearing, mechanical falling, and mechanical treatment of slash. Such tank truck or trailer shall be maintained in a serviceable condition and located within 10 minutes, round trip, from each operating side during Fire Precautionary Period (closed season), except as provided under H.2.1.

The tank truck or trailer shall be equipped with a pump capable of discharging 20 gallons of water per minute, using a 1/4 inch nozzle tip, through a 50 foot length of poly or rubber lined hose. In addition, 500 feet of serviceable hard rubber poly or rubber lined or FJRL hose of not less than 1 inch outside diameter, fitted with a nozzle capable of discharging a straight stream of 1/4 inch diameter and a spray pattern shall be immediately available for use. The tank, pump, nozzle and at least 250 feet, of the total 500 feet of hose, shall be connected and ready for use at all times. Synthetic hose may be used by

Contract Name: Fawn Stewardship

agreement.

If a trailer is used, it shall be equipped with a hitch to facilitate prompt movement. A serviceable tow vehicle shall be immediately available for attachment to the trailer and must meet the time requirements stated above. Such truck or trailer shall be equipped to operate for a minimum of 8 hours.

Where designated on Contract Area Map, Contractor shall provide a tank trailer or water source and pumping equipment, including accessories, which can be lifted and transported by the yarding system. The component parts shall meet all specifications above. The tank trailer or water supply and pumping accessories shall be deliverable to a fire, in area of operations, within 15 minutes of detection.

In lieu of the above tank trailer or water supply for helicopter operations, Contractor may provide a suitable helicopter water bucket with a 300 gallon capacity. When Contractor provides a water bucket, a water source shall be provided within 5 minutes round trip flight time from operating side.

#### F. Communications.

During Contractor's Operations, excluding powersaw falling and bucking, Contractor shall provide adequate two-way communication facilities to report a fire to Forest Service within 15 minutes of detection. Citizen Band radios (CB's) are not considered adequate two-way communications because FCC Regulations prohibit commercial use.

#### G. Smoking and Open Fire Restrictions.

Smoking and fires shall be permitted only at the option of Contractor. Contractor shall not permit open fires on Contract Area without advance permission in writing from Forest Service.

#### H. Blasting.

Blasting shall be permitted only for road construction purposes unless advance permission is obtained from Forest Service.

Whenever the Industrial Fire Precaution Level is II or greater, a fire security person equipped with a long handled round point No. 0 or larger shovel and a 5 gallon backpack pump can filled with water, will stay at location of blast for 1 hour after blasting is done. Blasting may be suspended by Forest Service, in areas of high rate of spread and resistance to control.

Fuses shall not be used for blasting. Explosive cords shall not be used without permission of Forest Service, which may specify conditions under which such explosives may be used and precautions to be taken.

#### I. Compliance with State Fire Laws.

Listing of specific fire precautionary measures in the foregoing Subsections is not intended to relieve Contractor in any way from compliance with State fire laws covering fire prevention and suppression equipment, applicable to Contractor's Operations.

#### J. Aircraft Communications.

Every aircraft used in conjunction with Contractor's Operations shall be equipped with an operable radio system. The radio system shall be capable of transmitting and receiving on VHF frequency 122.85 Megahertz (MHz) with a minimum output of 5 watts at the transmitter. The system shall be located and installed so that the pilot can operate it while flying. A shielded all-weather broad-band antenna shall be part of the system. Radio and antenna shall be properly installed and maintained.

Upon discovery or notification of a fire on Contract Area, all aircraft pilots controlled by Contractor

Contract Name: Fawn Stewardship

shall monitor VHF frequency 122.85 MHz when within 5 miles of a fire and broadcast their intentions.

K. Logging Block Equipment.

Contractor shall provide a serviceable 5 gallon backpack pump full of water, one axe, and one long handled round point shovel, size 0 or larger, at each haulback block through which a running line passes.

The area below such blocks must be kept clear of all flammable debris under 4 inches in diameter for a distance of 6 feet in all directions. Material larger than 4 inches that poses a fire risk, such as punky logs, must also be removed.

Contractor shall avoid line-rub on rocks or woody material which may result in sparks or sufficient heat to cause ignition of fire.

K-H.2.0.1 - BURNING BY CONTRACTOR (06/2006)

Notwithstanding the Fire Precautionary Period limitation of H.2, Contractor is required to obtain written permission from Forest Service prior to any burning on the National Forest Lands.

K-H.2.2 - EMERGENCY FIRE PRECAUTIONS (05/2005)

Contractor shall restrict operations in accordance with the Industrial Fire Precaution Levels attached. Forest Service may change the Industrial Fire Precaution Levels to other values upon revision of the National Fire Danger Rating System and may change the specific Industrial Fire Precaution Levels when such changes are necessary for the protection of the National Forest. When sent to Contractor, the revised Industrial Fire Precaution Levels will supersede the attached levels.

## INDUSTRIAL FIRE PRECAUTIONS SCHEDULE

## LEVEL INDUSTRIAL FIRE PRECAUTION

I. Closed Season - Fire precaution requirements are in effect. A Fire Watch/Fire Security is required at this and all higher levels unless otherwise waived.

II. Partial Hootowl - The following may operate only between the hours of 8 p.m. and 1 p.m. local time:

power saws, except at loading sites;  
cable yarding;  
blasting;  
welding or cutting of metal.

III. Partial shutdown - The following are prohibited:

cable yarding - except that gravity operated logging systems employing non-motorized carriages may be operated between the hours of 8 p.m. and 1 p.m. local time when all blocks and moving lines are 10 feet or more above the ground, excluding the line between the carriage and the choker.

power saws - except at loading sites and on tractor/skidder operations between the hours of 8 p.m. and 1 p.m. local time.

In addition, the following are permitted between the hours of 8 p.m. and 1 p.m. local time:

tractor, skidder, feller-buncher, forwarder, or shovel logging operations where tractors, skidders or other equipment with a blade capable of constructing fireline are immediately available to quickly reach and effectively attack a fire start;  
mechanized loading and hauling;  
blasting;  
welding or cutting of metal;  
any other spark-emitting operation not specifically mentioned.

IV. General shutdown - All operations are prohibited.

The following definitions shall apply to these Industrial Fire Precaution Levels:

Cable yarding systems: A yarding system employing cables and winches in a fixed position.

Closed Season (Fire Precautionary Period): That time period each year when a fire hazard exists and as described in A.12.

Hauling: Where hauling involves transit through more than one shutdown zone/regulated use area, the precaution level at the woods site shall govern the level of haul restrictions, unless prohibited by other than the Industrial Fire Precaution Level system.

Loading sites/woods site: A place where any product or material (including but not limited to logs,

Contract Name: Fawn Stewardship

firewood, slash, soil, rock, poles, posts, etc.) is placed in or upon a truck or other vehicle.

Advance written waiver of the above precautions may be issued by the Contracting Officer or Forest Service Representative.

Such waiver, or substitute precautions under H.2.1, shall prescribe measures to be taken by Contractor to reduce the risk of ignition, and/or the spread of fire. The Contracting Officer or Forest Service Representative shall consider site specific weather factors, fuel conditions, and specific operations that result in less risk of fire ignition and/or spread than contemplated when precaution level was predicted. Consideration shall also be given to measures that reduce the precaution levels above. Contractor shall assure that all conditions of such waivers or substitute precautions are met.

Contractor shall obtain the predicted Industrial Fire Precaution Level from the appropriate Ranger District headquarters. If predictions made after 6:00 p.m., local time, are significantly different than originally estimated, Forest Service will inform Contractor when changes in restrictions or industrial precautions are indicated.

K-H.3.1 - ADDITIONAL AREA OF FIRE RESPONSIBILITY (05/2005)

The area within 200 feet slope distance of the center line of any road constructed or reconstructed under this contract on National Forest lands outside of Contract Area shall be considered as a part of Contract Area in connection with responsibilities under H.3 and H.4 until the road has been accepted in writing by Forest Service.

K-I.1.0 - DISCLAIMER OF EXPRESSED OR IMPLIED WARRANTY (05/2005)

Contractor and Forest Service hereby agree, acknowledge, and accept that there is no expressed or implied warranty provided by the Forest Service that guarantees the Contractor will be allowed to complete the removal of products sold under the terms of the contract. Upon execution of the contract, Contractor hereby acknowledges the acceptance of the risk that this contract is subject to interruption or termination as a result of litigation associated with the environmental analysis process used by the Forest Service in the planning of this project. If such interruption or termination occurs due to litigation, Contractor agrees to accept as full compensation for such interruption remedies pursuant to I.3.3, or for termination remedies pursuant to I.3.4.

Contract Name: Fawn Stewardship

K-I.2.1.2 - MARKET-RELATED CONTRACT TERM ADDITION (11/2008)

The term of this contract may be adjusted when a drastic reduction in wood product prices has occurred in accordance with 36 CFR 223.52. The Producer Price Index used to determine when a drastic reduction in price has occurred is stated in A.20. Contractor will be notified whenever the Chief determines that a drastic reduction in wood product prices has occurred. If the drastic reduction criteria specified in 36 CFR 223.52 are met for 2 consecutive calendar quarters, after contract award date, Contracting Officer will add 1 year to the contract term, upon Contractor's written request. For each additional consecutive quarter such a drastic reduction occurs, Contracting Officer will, upon written request, add an additional 3 months to the term during Normal Operating Season, except that no single 3-month addition shall extend the term of the contract by more than one year. Contracting Officer must receive Contractor's written request for a market-related contract term addition before the expiration of this contract.

No more than 3 years shall be added to a contract's term by market-related contract term addition unless the following conditions are met:

(i) The contract was awarded after December 31, 2006; and

(ii) A drastic reduction in wood product prices occurred in at least ten of twelve consecutive quarters during the contract term, but not including the quarter in which the contract was awarded.

For each qualifying quarter meeting the criteria in paragraphs (i) and (ii) of this provision, the Forest Service will, upon the Contractor's written request, add an additional 3 months during the normal operating season to the contract, except no single 3-month addition shall extend the term of a contract by more than 1 year.

In no event shall a revised contract term exceed 10 years as a result of market-related contract term addition.

Additional contract time may not be granted for those portions of the contract that have a required completion date or for those portions of the contract where Contracting Officer determines that the timber is in need of urgent removal or that timber deterioration or resource damage may result from delay.

K-I.3.1# - CONTRACT CHANGES (OPTION 1) (05/2005)

Contract changes involving volumes and/or values will use a weight ratio of 3.4770 to convert net CCF cruise volumes to Tons.

Contract Name: Fawn Stewardship

K-I.6.8# (Option 1) - USE OF TIMBER (09/2004)

(a) This contract is subject to the Forest Resources Conservation and Shortage Relief Act of 1990, as amended (16 USC 620, et seq.).

(b) Except for None determined pursuant to public hearing to be surplus, unprocessed Included Timber shall not be exported from the United States nor used in direct or indirect substitution for unprocessed timber exported from private lands by Contractor or any person as defined in the Act (16 USC 620e).

(c) Timber in the following form will be considered unprocessed:

(i) Trees or portions of trees or other roundwood not processed to standards and specifications suitable for end product use;

(ii) Lumber, construction timbers, or cants intended for remanufacturing not meeting standards defined in the Act (16 USC 620e); and

(iii) Aspen or other pulpwood bolts exceeding 100 inches in length.

(d) Unless otherwise agreed in writing, unprocessed Included Timber shall be delivered to a domestic processing facility and shall not be mixed with logs intended for export.

(e) Prior to award, during the life of this contract, and for a period of 3 years from Termination Date, Contractor shall furnish to Forest Service, upon request, records showing the volume and geographic origin of unprocessed timber from private lands exported or sold for export by Contractor or affiliates.

(f) Prior to delivering unprocessed Included Timber to another party, Contractor shall require each buyer, exchangee, or recipient to execute an acceptable agreement that will:

(i) Identify the Federal origin of the timber;

(ii) Specify domestic processing for the timber involved;

(iii) Require the execution of such agreements between the parties to any subsequent transactions involving the timber;

(iv) Require that all hammer brands and/or yellow paint must remain on logs until they are either legally exported or domestically processed, whichever is applicable; and

(v) Otherwise comply with the requirements of the Act (16 USC 620d).

(g) No later than 10 days following the execution of any such agreement between Contractor and another party, Contractor shall furnish to Forest Service a copy of each such agreement. Contractor shall retain, for 3 years from Termination Date, the records of all sales, exchanges, or dispositions of all Included Timber.

(h) Upon request, all records dealing with origin and disposition of Included Timber shall be made available to Contracting Officer.

(i) For breach of this Section, Forest Service may terminate this contract and take such other action as may be provided by statute or regulation, including the imposition of penalties. When terminated by Forest Service under this Section, Forest Service will not be liable for any Claim submitted by Contractor relating to the termination.