

Sale Name: Lucky U 52

TRAFFIC CONTROL PLAN AND SPECIFICATIONS PURSUANT TO BT6.33 SAFETY

Unless otherwise agreed, the following measures are required to provide adequate warning of hazards for users of roads and trails adjacent to Purchaser's Operations.

Part I. Signing and Other Warning Methods:

(a) Signs. The following signs are required when Purchaser's Operations are in progress adjacent to or on Forest Service controlled roads and trails:

<u>MINIMUM LETTER SIZE AND LEGEND</u>	<u>MINIMUM SIZE AND SHAPE</u>	<u>WHEN AND WHERE REQUIRED</u>
1. LOGGING OPERATIONS NEXT _____ MILES (4" letters)	24" (rectangle) 36"	Min. 100 ft. outside of any continuous work areas, on roads listed in CT5.31# and trails listed in Part II.
2. LOGGING OPERATIONS (3" letters)	24" (diamond) 24"	To be used in conjunction with "Logging Operations Next _____ Miles" and where work area is not continuous.
3. FOR LOGGING USE ONLY (3" letters)	24" (diamond) 24"	Required where roads listed in CT5.31# and temporary roads intersect with CT5.31# roads. Install a cross ditch to discourage use when sign is covered or removed for extended periods.
4. TRUCKS (4" letters)	24" (diamond) 24"	At critical intersections on roads listed in CT5.31# when traffic is heavy or otherwise exceeds volumes stated in Part II below. Remove or cover when the sign is not applicable.
5. END LOGGING OPERATIONS (4" letters)	24" (rectangle) 36"	Use in conjunction with "Logging Operations Next _____ Miles" and "Logging Operations."
6. TREE FELLING AHEAD (3" letters)	24" (diamond) 24"	Required 200 feet in advance of danger area where timber is being felled adjacent to all roads, including temporary roads, and trails.
7. ROAD MACHINERY AHEAD (3" letters)	24" (diamond) 24"	Required at least 200 feet in advance of Purchaser road maintenance operations on roads listed in Schedule CT5.31#.

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TRAFFIC CONTROL PLAN AND SPECIFICATIONS - BT6.33 Safety (continued)

All signs shall meet requirements as specified in Parts I and VI of the Manual of Uniform Traffic Control Devices (MUTCD).

Sign borders and lettering shall be black. Borders are 1/2 inch wide, inset 1/2 inch from outside edge of sign. All sign backgrounds shall be orange, except signs #1 and 5 which shall be reflectorized orange.

Signs shall be installed on posts, with a 5 foot minimum ground clearance, or on temporary supports complying with MUTCD standards.

All signs are to be removed or covered when operations are interrupted for seasonal nonuse or other extended periods.

Purchaser shall furnish flag personnel and advance warning signs when cable or helicopter logging above roads or trails, felling adjacent to roads or trails, where logs being bucked may roll into roads or trails, and in areas where fallout from blasting may occur. On roads listed in CT5.31# and temporary roads, Purchaser may temporarily block the road in lieu of furnishing flag personnel.

(b) Barricades. On roads listed in CT5.31#, if Purchaser's Operations cause the traveled way or road shoulders to be constricted overnight, or longer, by such obstructions as decked logs, parked equipment, or piled slash, Purchaser shall place barricades on both sides of the encroaching obstruction to safely channel traffic around such obstructions. Barricades shall remain in place until the obstruction is removed.

Barricades shall be Type II and meet specifications in MUTCD, Part VI. Barricades must be at least 3 feet high. Rails must be at least 2 feet long. Striping shall be alternating orange and white, sloping at a 45 degree angle, and reflectorized. For rails 2 feet to 3 feet long, striping shall be 4 inches wide. For rails longer than 3 feet, striping shall be 6 inches wide. Two rails, 8-12 inches in width, must face each direction.

Barricades shall be equipped with warning lights which shall be Type A low intensity flashing and shall be maintained so as to be capable of being visible on a clear night from a distance of 3,000 feet.

(c) Other Traffic Control Methods. The posting of CB channel signs may be authorized.

On roads listed in CT5.31#, Purchaser may be authorized to install temporary gates, barricades (except cables), or natural barriers. The devices must be installed with the necessary hazard markers, be reasonably passable by Forest Service, and be removed prior to acceptance of the subdivision being served by the road.

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TRAFFIC CONTROL PLAN AND SPECIFICATIONS - BT6.33 Safety (continued)

Part II. Specific Requirements:

Purchaser and Forest Service agree to the above stated requirements of the Traffic Control Plan:

_____	_____
Name	Name
_____	_____
Title	Title
_____	_____
Date	Date

TABLE PURSUANT TO CT5.11# - LAND USE AGREEMENTS (07/2001)

<u>Type of Agreement</u>	<u>Grantor</u>	<u>Purpose</u>
Road-use agreement	Edelweiss Maintenance Commission	Use of private road

TABLE A PURSUANT TO 10# - USE OF ROADS BY PURCHASER (06/1999)

Table A - Restricted Road List

<i>Road Number</i>	Road Name	Termini		<i>Map Legend</i>	<i>Description of Restrictions</i>
		<i>From</i>	<i>To</i>		
Private roads shown on sale area map				KO	Use authorized per CT5.11#,Land Use Agreement. All other private road use prohibited

CONTRACT ROAD MAINTENANCE REQUIREMENTS SUMMARY TABLE PURSUANT TO
CT5.31# - ROAD MAINTENANCE REQUIREMENTS (07/2001)

Contract Road Maintenance Requirements Summary

Road	Termini		Miles	Applicable Pre-haul Road Maintenance Specifications													
	From	To		T-811	T-812	T-831	T-834	T-891									
5217100	Jct. Cnty. Rd. 1163	Jct. Pvt. Rd.	0.68	P		P	P	P									
Pvt. Rd.	Jct.5217100	Unit 5	0.38	P		P	P	P									

P = Purchaser Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

Road	Termini		Miles	Applicable During-haul Road Maintenance Specifications													
	From	To		T-811	T-812	T-831	T-834	T-891									
5217100	Jct. Cnty. Rd. 1163	Jct. Pvt. Rd.	0.68	P	P	P	P	P									
Pvt. Rd.	Jct.5217100	Unit 5	0.38	P	P	P	P	P									

P = Purchaser Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

Road	Termini		Miles	Applicable Post-haul Road Maintenance Specifications													
	From	To		T-811	T-812	T-831	T-834	T-891									
5217100	Jct. Cnty. Rd. 1163	Jct. Pvt. Rd.	0.68	P		P	P	P									
Pvt. Rd.	Jct.5217100	Unit 5	0.38	P		P	P	P									

P = Purchaser Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

Description of work required by the above listed T-specs is shown in the following ROAD MAINTENANCE REQUIREMENTS SPECIFICATION table, and included in the timber sale contract.

ROAD MAINTENANCE REQUIREMENTS SPECIFICATION TABLE
PURSUANT TO CT5.31# - ROAD MAINTENANCE REQUIREMENTS (07/2001)

1		2	3			4	5	6			7	8	9		
Road No.	Termini From	Termini To	Special Project Specification	Travel Way			Brushing And Log Out	Surfac-ing	Dust Abatement			Seasonal Maintenance	Snow Removal	Post Haul	
				Width	X Slope	Comp			Product	Applic. Rate	Width			Block	Treat
5217100	Jct. Cnty. Rd. 1163	Jct. Pvt. Rd.		EX	AI	A			H2O		EX				PR
Pvt. Rd.	Jct.5217100	Unit 52		EX	AI	A			H2O		EX				PR

ROAD MAINTENANCE REQUIREMENTS SPECIFICATION CODES TABLE PURSUANT TO
CT5.31# - ROAD MAINTENANCE REQUIREMENTS (07/2001)

Column No.	Heading	Entry	Explanation
	Any	Blank	Except as otherwise described, no entry indicates Purchaser is not authorized or required to perform the work item(s).
	Any	RC	This work requirement applies only when haul of sale related construction materials occurs.
2	Special Project Specification	Number	Entry indicates Special Project Specification which applies.
3	Travel Way	EX	Purchaser shall maintain the traveled way to the width existing upon entry, or at the completion of Specified Road work.
		Numbers	Purchaser shall maintain the traveled way to the standard width indicated by the entry, plus curve widening, in accordance with Section T-811. If required, the road template shall be shaped to this width and to the designated cross slope before haul and during recurring maintenance.
		IS, C, OS, F, or AI	Cross slopes are designated as: IS (Inslope), C (Crown), OS (Outslope), F (Flat), AI (As Is).
		A or B	If compaction is required.
4	Brush and Log Out	Numeric & R and or L	Purchaser shall remove brush for specified width on either or both the right (R) side or left (L) side of road.
		As Staked	Limits of brushing are as staked or marked in the field.
		OPT	Purchaser may use hand or mechanical means of brushing.
		H	Only hand brushing may be used.

ROAD MAINTENANCE REQUIREMENTS SPECIFICATION CODES TABLE PURSUANT TO
CT5.31# - ROAD MAINTENANCE REQUIREMENTS (07/2001)

Column No.	Heading	Entry	Explanation
5	Surfacing	Aggregate Grading	Purchaser shall place surfacing on roads listed according to the grading indicated.
		D	Purchaser is to make deposits for listed road maintenance, including surface rock replacement.
6	Dust abatement	OPT	Product selection is Purchaser's choice from those listed in Section T-812.
		Product Abbr.	Unless otherwise agreed, Purchaser is restricted to product listed corresponding to the abbreviation shown in Section T-812; (i.e., LigS = Lignon Sulfonate) Application rates are estimated amounts.
		EX	Purchaser shall abate dust on the existing width
		Numbers	Purchaser shall abate dust to the width indicated by entry.
7	Seasonal Maintenance	W	Waterbars and/or crossditching shall be required prior to expected seasonal precipitation.
		B	Entrance barriers shall be installed by Purchaser prior to nonuse periods.
8	Snow Removal	TS	Snowplowing authorized for Purchaser's Operations without recreation access being provided per Section T-803 requirements.
		JU	Snowplowing authorized, but must provide for recreation joint use per Section T-803 requirements.
		Blank	Snowplowing is not authorized. Forest Service may authorize plowing by permit when not in conflict with other uses.
9	Post Haul	PR	PR denotes that work is Purchaser's Responsibility to perform.

SCHEDULE PURSUANT TO CT6.315# - SALE OPERATION SCHEDULE (04/2003)

<u>Payment Unit</u>	<u>Operating Conditions</u>	<u>Purpose</u>
52	Log haul prohibited On weekends and federal Holidays (From 4:00 PM Friday to 3:00 AM Monday).	Reduce conflicts with recreational (tourism) Traffic and provide Additional public safety During peak vacation Periods.

TABLE PURSUANT TO CT6.41# - SPECIFIC REQUIREMENTS (04/2003)

FELLING METHODS

PAYMENT UNITS

Directional fall away from private property
And improvements (outhouse)

52

Leave tops attached when yarding to the
landing. No limbs or tops can be severed in
the unit.

FELLING EQUIPMENT

PAYMENT UNITS

N/A

N/A

TABLE PURSUANT TO CT6.42# - YARDING/SKIDDING REQUIREMENTS (04/2003)

<u>YARDING/SKIDDING REQUIREMENTS</u>	<u>CUTTING UNITS</u>
<p><u>GENERAL:</u></p> <p>Skid trails will be located on old skid trails wherever possible.</p> <p>Adequate rub trees will be used to protect the residual stand and are to be left until after other included timber has been skidded.</p> <p>No machinery, including skidding and felling equipment will be permitted off designated skid trails.</p> <p>Skid trail width shall not exceed 12 feet.</p> <p>Landings will be located a minimum of 500 feet from all private boundaries.</p>	<p>Unit 52</p>

<u>YARDING/SKIDDING REQUIREMENTS</u>	<u>CUTTING UNITS</u>
<p><u>HAND FELLING AND WINCHLINE SKIDDING:</u></p> <p>Tracked or rubber-tired skidding (multiple pass) equipment is allowed with multiple pass trails spaced at a minimum of 100 feet apart except where they converge at a landing.</p> <p>Winchline skidders will be equipped with an integral arch or other means to suspend one end of all logs. A winching (line-pulling) capability is necessary if logs are winched to the skid trails. Grapple skidders are allowed if logs are first placed along skid trails.</p> <p>One end of all logs will be suspended during skidding (not winchline pulling) operations.</p>	<p>Unit 52</p>

**APPLICATION SCHEDULE PURSUANT TO CT6.6# -
EROSION CONTROL AND SOIL TREATMENT BY PURCHASER (04/2003)**

PAYMENT UNIT OR UNIT NUMBER	AREAS A) SKID TRAILS B) FIRELINES C) TEMP. ROADS D) LANDINGS E) OTHER	SEED		FERTILIZER		MULCH	
		APPLICATION		APPLICATION		APPLICATION	
		<u>1/</u> SPECIES MIXTURE	LBS/AC	<u>2/</u> TYPE	LBS/AC	<u>3/</u> TYPE	LBS/AC
52	A,C,D	Idaho Fescue	3	N/A	N/A	N/A	N/A
52	A,C,D	Big Bluegrass	2	N/A	N/A	N/A	N/A
52	A,C,D	Slender Wheatgrass (Pryor)	8	N/A	N/A	N/A	N/A

1/ For sales 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 sales in Washington, the seed shall be labeled as "Prohibited and Restricted Noxious Weed Free for the State of Washington." The purchaser 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.

Water-bars or other erosion control devices removed to facilitate piling operations shall be reconstructed as soon as piling has been completed in the area.

Earth berms > 12" high created by short radius turns shall be returned to the contour of the surrounding area.

All refueling, repairs and maintenance shall be performed on existing landings. Fuel and repair vehicles are not permitted to operate off system roads shown on the project map without the written consent of the Administrative or Technical Representatives.

Leave approximately 2 to 3 tons of slash piled at each landing so that this material is available to scatter on the burn pile areas following burning to provide additional organic material for site recovery. Preferred slash pieces are 2 to 6 inches in diameter and 4 to 8 feet in length, but slash down to 1 inch diameter and up to 8 inches diameter and down to 2 feet in length and up to 10 feet in length are acceptable. Approximately 25 to 30 pieces will be needed to have 2 to 3 tons of slash for a landing 1/4 acre in size. If landing is larger than 1/4 acre, provide the additional pieces as needed.

This scattered slash material should not be left in close proximity to the landing pile(s) so as to avoid ignition when the landing pile(s) is burned. Purchaser is not required to cut pieces to desired lengths nor to pull slash material from the unit in order to have the desired amounts.

Soil restoration shall be kept reasonably current and shall be done during Normal Operating Season unless otherwise agreed.

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.

SPECIFICATIONS PURSUANT TO CT6.74# -
SLASH TREATMENT REQUIREMENTS (04/2003)

Yarding of Tree Crowns

In all cutting units, tree crowns of included timber, including tops and branches, shall be brought to landings for piling so as to reduce the amount of logging slash left in the unit. The tree crowns may be left attached to the tree during felling and skidding operations and brought to landings as part of harvest operations. If the tree crowns are bucked or purposefully detached from the included timber as part of harvesting operations, the detached tree crowns shall be brought to landings using other methods approved by the Forest Service.

Landing Area Slash

During landing slash piling operations, Purchaser shall keep slash free of dirt.

Leave approximately 2 to 3 tons of slash unplied at each landing as per CT6.6#.

Slash Piling Specifications:

- A. Created slash shall be machine-piled as noted below:
 - 1. Pile 80% of 1-3" diameter debris
 - 2. Pile 50% of 3.1 - 6" diameter debris
 - 3. Sound wood logs as well as partially decomposed logs greater than 6 inches in diameter shall not be piled.
- B. Piling Operations
 - 1. No machine piles will be created within 30 feet of snags or live trees greater than or equal to 20" DBH.
 - 2. Piling equipment shall operate on slash wherever possible; in areas where there is insufficient slash on which to operate, the excavator shall stay on existing skid trails or trails at generally 40' spacing.
 - 3. All piles shall be constructed as compactly as possible and must be outside of the drip line of leave trees. Piles shall be at least 4 feet high, but not more than 12 feet high and shall not exceed 15 feet in diameter where overstory trees are tightly spaced. In areas where there are large openings, piles may be as large as 15' X 20' as long as they are at least 15 ft. from the drip line of leave trees. No dirt other than that which adheres to the bark of piled material shall be included in the piles. All material placed into a pile shall be contained within the general contour of that pile.
 - 4. Piles not meeting all of the above specifications shall be re-piled at no increase in price or contract time allowed. Extreme caution must be exercised at all times during the piling operation in order to minimize damage to leave trees.

T-811 - BLADING (10/07)

811.01 Description

This work consists of surface blading the traveled way to a condition that facilitates traffic and provides proper drainage. Blading includes shaping the crown or slope of travel way, berms, and drainage dips in accordance with this specification. Compaction is required when shown on the ROAD LISTING.

811.02 Maintenance Requirements

- A. Timing - Perform surface blading during the contract period as often as needed to provide conditions stated for the maintenance level of the road.
- B. General
 - 1. Blade and shape the existing traveled way and shoulders, including turnouts, to produce a surface which is uniform, consistent to grade, and crowned or cross-sloped as indicated by the character of the existing surface, unless otherwise shown in the ROAD LISTING, to at least 1/2 inch per 1 foot of width, but not more than 3/4 inch per 1 foot of width. Thoroughly loosen surfacing material to no less than 2 inches depth or the depth of potholes or corrugations. Scarification to facilitate cutting to the full depth of potholes or corrugations may be elected, but will be considered incidental to blading. Do not scarify to a depth that will cause contamination of the surfacing.
 - 2. Apply water during blading when sufficient moisture is not present to prevent segregation. Supply, haul, and apply water in accordance with Section T-891.
 - 3. Shape existing native rock or aggregate surfaced drainage dips to divert surface runoff to existing outlet devices, ditches, or discharge locations.
 - 4. Establish a blading pattern which provides a uniform driving surface, retains the surfacing on the roadbed, and provides a thorough mixing of the materials within the completed surface width. Upon final blading, no disturbed rock shall protrude more than 2 inches above the adjacent surface unless otherwise provided in the contract. Remove and place outside the roadbed, material not meeting this dimension so as not to obstruct drainage ways or structures. This material may be scattered off the roadbed if there is free drainage.

- 5. 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
<i>Road blading, brushing and ditch cleaning in areas with high concentrations of invasive species of concern will be done in consultation with the Sale Administrator, incorporating invasive plant prevention practices recommended by the District and Forest-level Invasive Plant Specialists.</i>

C. Routine Blading

- 1. Conform to the dimensions SHOWN ON THE DRAWINGS or designated in the SUPPLEMENTAL SPECIFICATIONS upon completion of blading.
- 2. Shape roadbed width in excess of the dimensions shown only as needed to provide drainage away from the traveled way. Do not remove established grasses and other vegetation from the excess width except as incidental to providing drainage or unless otherwise provided in the contract.

D. Compaction

Roads requiring compaction will be included in the ROAD LISTING. Unless Compaction Method B is designated in the ROAD LISTING, all traveled ways requiring compaction may be compacted by Method A. Compaction shall commence immediately following blading.

Compaction methods are:

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.

E. Undercutting - Undercutting roadway back slope is not permitted.

F. Intersections

1. At intersections, blade the roadbeds of side roads which are not closed or restricted from vehicular use to ensure smooth transitions.
2. Signing, cross ditching in the road surface (traveled way), earth berms, or other devices placed to discourage or eliminate use by passenger cars, are field evidence of road closure or restriction. Roads listed for work under Sections T-835, T-836, T-838, or T-839 are considered restricted.
3. Side roads listed for work under this Section are not restricted.

G. Cleaning of Structures - Do not allow materials resulting from work under this Section to remain on or in structures, such as bridges, culverts, cattle guards, or drainage dips.

H. Berms - Maintain existing berms to the condition of adjacent segments. Do not create new berms.

I. Smooth Blading - Smooth blading may be used as an interim measure to remove loose surfacing material from the wheel paths, and store removed materials in a recoverable windrow, until blade processing as described in this section is feasible. Watering will not be required for smooth blading. Accomplish smooth blading without distorting the existing cross-slope or crown of the traveled way.

Move and store loose surfacing materials on the high side of super-elevated curves and sections with uniform inslope or outslope. In crowned sections, store the material on either or both sides as elected. Windrow and place stored materials to provide not less than 12 feet of smooth traveled way on one-lane segments, or 20 feet of smooth traveled way on two-lane segments, or segments with turnouts. Cut holes through windrows, which may collect water on the road, for drainage at least every 500 feet.

T-812 - DUST ABATEMENT (05/09)

812.01 Description

This work consists of applying dust palliatives on roads shown in the Road Listing.

812.02 Materials

The dust palliative materials are shown in the Road Listing, unless shown as Optional for Purchaser's election. If Optional is shown then the Purchaser may use any of the products listed below. Dust palliative materials shall meet the following requirements:

- A. Water (H2O) will be obtained from sources SHOWN ON THE DRAWINGS or listed in the SUPPLEMENTAL SPECIFICATIONS to Section T-891 Water Supply, unless otherwise approved by the Contracting Officer.
- B. Lignin Sulfonate (LIG S) Provide certification that the material meets the requirements of Subsection 725.20 of the "Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects (FP-03)" and the Forest Service Supplemental Specification 725.20.
- C. Magnesium Chloride (MG CL2) Provide certification that that the material meets the requirements of Subsection 725.02 of the "Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects (FP03) " and the Forest Service Supplemental Specification 725.02.
- D. Calcium Chloride Brine (CA CL2B). Provide certification that the material meets the requirements of Subsection 725.02 of the " Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects (FP03) " and the Forest Service Supplemental Specification 725.02.
- E. Calcium Chloride Flake (CA CL2F). Provide certification that that the material meets the requirements of Subsection 725.02 of the "Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects (FP03) " and the Forest Service Supplemental Specification 725.02.
- F. Bituminous dust palliatives. Manufacture materials specifically for dust abatement purposes which conform to the requirements of Section T-892 for each listed road in the Road Listing.

812.03 Methods

As shown in the SUPPLEMENTAL SPECIFICATIONS, Purchaser may utilize a variety of methods to decrease or eliminate the need for dust abatement

812.04 Equipment

- 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 cattleguards or bridges. Discharge dust abatement material only on roads approved by the Contracting Officer.

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
<i>Road blading, brushing and ditch cleaning in areas with high concentrations of invasive species of concern will be done in consultation with the Sale Administrator, incorporating invasive plant prevention practices recommended by the District and Forest-level Invasive Plant Specialists.</i>

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 in accordance with Section T-832.
- 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.
- 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.

Invasive Species of Concern Prevention Practices
<i>Road blading, brushing and ditch cleaning in areas with high concentrations of invasive species of concern will be done in consultation with the Sale Administrator, incorporating invasive plant prevention practices recommended by the District and Forest level Invasive Plant Specialists.</i>

T-891 - WATER SUPPLY AND WATERING (05/07)

891.01 Description

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

891.02 Materials

If the Purchaser elects to provide water from other than designated sources, the Purchaser is responsible to obtain the right to use the water, including any cost for royalties involved. Suitable and adequate water sources available for Purchaser's use under this contract are designated as follows:

Map Key No.	Location		Use Restrictions
	Road	Milepost	
Goat Creek	5200000	MP 1.2	Use 3/32 in. screen on draft hose intake

891.03 Equipment

- A. Positive control of water application is required. Equipment shall provide uniform application of water without ponding or washing.
- 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. The designated water sources may require some work prior to their use. Such work may include cleaning ponded areas, installing temporary weirs or sandbags, pipe repair, pump installation, or other items appropriate to the Purchaser's operations. Flowing streams may be temporarily sandbagged or a weir placed to pond water, provided a minimum flow of 5 cu. ft/sec is maintained. Obtain approval from the Contracting Officer on improvements for sandbags or weirs prior to placement.