Contract Name: Norton Stewardship

SAMPLE CONTRACT

KT-CT.3.5.2# - DESIGNATION BY SPECIES AND DIAMETER *(09/2004)*

Trees that meet Utilization Standards are designated for cutting, as shown on the Tree Designation Table and Sale Area Map, except trees Marked with Orange paint or described to be left uncut.

See Tree Designation Table.

Additional trees to be cut, if any, are Marked with Blue paint slash at eye level with stumpmarks paint.

All NA shall be left as leave trees, unless Marked with NA paint. Leave NA trees of the designated cut species, NA inches stump diameter or greater, to avoid leave tree spacing greater than NA feet. Cutting unit boundaries and other trees that shall be left uncut are Marked with Orange (See Tree Designation Table) paint.

Distances are measured horizontal distance, outside bark stump height to outside bark stump height. Stump diameter is measured outside bark at stump height in a horizontal and is the average of a measurement across the short axis through the true center of the stump and a second measurement at right angles to the short axis.

Contractor and Forest Service shall agree to skid trail location under BT6.422. Skid trails shall be no greater than NA feet wide with a NA foot spacing. Quantities of trees located in skid trails are not Included Timber under AT2.

SAMPLE CONTRACT

FS-2400-13T (9/04)

WO-KT-CT.3.5.2# – DESIGNATION BY SPECIES AND DIAMETER. (09/04)

Tree Designation Table

Payment Unit(s) or Cutting Unit(s)	Designated Species 1/	More Than Stump Diameter (inches) 2/	Less Than Stump Diameter (inches) 2/
10, 11 & 18	All Aspen, Balsam Fir, Spruce and Mixed Hardwood Except Oak and Elm.	>=6.0"	

Contract Name: Norton Stewardship

SAMPLE CONTRACT

KT-CT.3.5.5# - INDIVIDUAL TREES, CUT TREE MARKING *(06/2009)*

Individual trees to be cut are Marked with indicated color above and below stump height in all or parts of the following Payment Units. Areas of Cut Tree Marking are shown on the Contract Area Map with the symbol "CTM."

PAYMENT UNIT(S)	PAINT COLOR

SAMPLE CONTRACT

R9-KT-CT.3.5.5# - INDIVIDUAL TREES. (11/2007)

Cut Tree Marking Table

Payment Units	Paint Color
01, 02, 03, 05, 06, 07, 08, 09 & 12	Blue
16(ROW)	Yellow

[Note: there is no Orange-Painted payment unit boundary associated with Payment Unit 16 (ROW)]

SAMPLE CONTRACT

KT-ET.4 - PAYMENTS NOT RECEIVED *(08/2012)*

(a) Payments are due and payable on the date of issue indicated on the bill for collection. When a payment for timber cut and other charges is not received at the location designated by Forest Service by the date specified in the bill for collection, Contracting Officer will suspend all or any part of Contractor's Operations until payment or acceptable payment guarantee is received. Other charges include, but are not limited to:

(i) Slash disposal and road maintenance deposits;

(ii) Cooperative work at rates established by specific agreement under ET.2.1.8;

(iii) Damages pursuant to JT.4;

(iv) Road use fees;

(v) Restoration of downpayment pursuant to ET.2.2;

(vi) Periodic payments pursuant to ET.2.1.3;

(vii) Extension Deposits pursuant to ET.2.1.7; and

(viii) Other mandatory deposits.

(b) Failure to pay amounts due by the date specified in the bill for collection shall be considered a breach under JT.3. The 30-day notice period prescribed therein shall begin to run as of the end of business on the date specified for receipt of payments. If the performance or payment is guaranteed by surety bond, the surety will receive a copy of the written notification of breach. Demand will be made on the surety or other institution providing the guarantee or bond instrument for immediate payment 10 days after issuance of written notification of the breach.

(c) Pursuant to the Debt Collection Improvement Act of 1996, as amended, if payment is not received by Forest Service within 15 days after the date of issue indicated on the bill for collection:

(i) Simple interest shall be assessed at the Current Value of Funds Rate as established by the Secretary of the Treasury. Interest will begin to accrue as of the date of issue indicated on the initial bill for collection.

(ii) Debtors will be assessed administrative charges, in addition to the delinquent amount due. Administrative charges are those additional costs incurred by the Government in processing, handling, and collecting delinquent debts.

(iii) A penalty charge of six (6) percent per annum will be assessed on any portion of a debt delinquent more than 90 days. This penalty charge is in addition to interest and administrative charges under paragraphs (c)(i) and (c)(ii). The penalty charge shall accrue from the date of issue indicated on the bill for collection and shall be assessed on all outstanding amounts, including interest and administrative costs assessed under paragraphs (c)(i) and (c)(ii).

(iv) Payments will be credited on the date received by the Federal Depository or Collection Officer designated on the bill for collection.

(d) Forest Service remedies for Contractor's failure to make payment for timber cut and other charges when due, except for accrual of interest, suspension of all or any part of Contractor's Operations, and administrative offset, shall be stayed for so long as:

(i) A bona fide dispute exists as to Contractor's obligation to make such payment and

(ii) Contractor files and prosecutes a timely Claim.

SAMPLE CONTRACT

KT-FT.1.2# - USE OF ROADS BY CONTRACTOR *(09/2004)*

Contractor's use of existing roads identified on Contract Area Map by the following codes is prohibited or subject to restrictive limitations, unless agreed otherwise:

Code	Use Limitations
X	Hauling prohibited
R	Hauling restricted
U	Unsuitable for hauling prior to completion of agreed reconstruction
P	Use prohibited
A	Public use restriction
W	Regulation waiver

Roads coded A will be signed by the Forest Service to inform the public of use restrictions. Contractor's use of roads coded R, A, or W shall be in accordance with the following restrictions:

See Restricted Road List Table.

SAMPLE CONTRACT

FS-2400-13T (94/04)

WO-KT-FT.1.2# – USE OF ROADS BY CONTRACTOR. (09/04)

Restricted Road List

Road Number	Road Name	Termini		Map Legend	Description of Restrictions
		From	To		
8100	8100	Intersection with 8120	East	R	Use Restricted for the Hauling of Gravel from the Blue Jay Lake Pit.
8100	8100	Intersection with 8135	South	P	Use Prohibited (due to weight restriction on bridge across the S. Branch of the Presque Isle River, this includes empty log trucks).
8120	8120	MP 0.45	South	P	Use Prohibited
8143	8143	MP 1.09	End	X	Hauling Prohibited
8143-A	8143-A	MP 0.48	End	X	Hauling Prohibited
8143-A1	8143-A1	MP 0.32	End	X	Hauling Prohibited
8143-C	8143-C	MP 0.06	End	X	Hauling Prohibited
8120-R	8120-R	MP 0.31	End	X	Hauling Prohibited
8129	8129	Temp Intersection	Boat Landing	P	Use Prohibited
8135	8135			R	Gate shall be closed and locked when operations are not in progress
All Unidentified Roads Marked with "P"				P	Use Prohibited
All Unidentified Roads Marked with "X"				X	Hauling Prohibited, Use for skidding must be approved prior to use.

SAMPLE CONTRACT

KT-FT.2.2.1# - MATERIAL SOURCES *(09/2004)*

Sources of local materials are designated on Plans and Contract Area Map. Forest Service assumes responsibility for the quality and quantity of material in designated sources. Contractor shall determine the equipment and work required to produce the specified product, including the selection of acceptable material that is reasonably available in the source that meets specifications. The designation of source includes the rights of Contractor to use certain area(s) for plant site, stockpiles, and haul roads.

Should the designated source, due to causes beyond the control of Contractor, contain insufficient acceptable material, Forest Service will provide another source with adjustment in accordance with FT.2.5.3.

When Contractor elects not to use designated sources, Contractor shall furnish the specified product with no adjustment in unit rates. Quality testing shall be the responsibility of Contractor. Test results shall be furnished to Forest Service.

When Contractor elects not to use designated sources and Schedule of Items lists pit development separately, cost allowance will be reduced under FT.2.5.3 when Forest Service determines the work will not be required.

When materials are subject to a weight measurement, the specific gravity or weight/volume relationship used as a basis for determination of estimated quantities shall be:

Source I NA , Source II NA , and Source III NA .

Contractor may, when agreed in writing, use on the project such suitable stone, gravel, and sand, or other material found in the excavation, and will earn a cost allowance for the excavation of such materials at the corresponding contract unit price and for the pay items for which the excavated material is used. Contractor shall replace, without additional cost allowance, sufficient suitable materials to complete the portion of the work, which was originally contemplated to be constructed with such material. Contractor shall not excavate or remove any material, except that which is within the excavation limits, without written authorization from Forest Service.

When material is appraised from non-National Forest designated sources, owner charges for the material in terms of unit cost for royalties, purchase of raw materials, or finished products shall be as follows until NA :

See Material Source Table.

Should quantity vary from that estimated, payment to owners shall be for units actually obtained. Contractor shall make arrangements with owner(s) for measurement and payment for royalties, purchase of raw materials, or finished products, as shown above.

Materials produced or processed from National Forest lands in excess of the quantities required for performance of this contract are the property of Forest Service, unless prior written agreement has been obtained to use excess material on other National Forest contracts. Forest Service is not obligated to reimburse Contractor for the cost of their production.

Materials shall be stored to assure the preservation of their quality and fitness for the work. Stored materials shall be located to facilitate their prompt inspection. Sites on Forest Service administered land, approved by Forest Service, may be used for storage purposes and for the placing of Contractor's plant equipment. All storage sites provided by Forest Service shall be restored at Contractor's expense.

SAMPLE CONTRACT

Contractor shall be responsible for making arrangements for storage on other than Forest Service administered lands.

When the construction of the portion of the project for which Temporary Roads used for hauling materials is completed, all such Temporary Roads shall be restored as nearly as practicable to their original ground profile, unless otherwise agreed in writing.

SAMPLE CONTRACT

FS-2400-13T (09/04)

WO-KT-FT.2.2.1# – MATERIAL SOURCES. (09/04)

Material	Type of Purchase	Owner(s)	Unit of Measure	Unit Price	Estimated Quantity	Total
Pitrun	N/A	USFS – Blue Jay Pit	CY	N/A	240 (312 Loose)	240

SAMPLE CONTRACT

KT-FT.3.1# - ROAD MAINTENANCE REQUIREMENTS *(09/2004)*

Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:

See Contract Road Maintenance Requirements Summary Table.

SAMPLE CONTRACT

FS-2400-13T (9/04)

WO-KT-FT.3.1# – ROAD MAINTENANCE REQUIREMENTS. (09/04)

Contract Road Maintenance Requirements Summary

Road	Termini		Miles	Applicable Prehaul Road Maintenance Specifications									
	From	To		T-8030	T-8130	T-8310	T-8340	T-8350	T-8360	T-8620			
8143	0.0	1.09	1.09		P	P	P		P	P			
8143-A	0.0	0.48	0.48		P	P	P		P				
8143-A1	0.0	0.32	0.32		P	P	P		P				
8143-C	0.0	0.06	0.06		P	P	P		P				
8120-R	0.0	0.31	0.31		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-8030	T-8110	T-8130	T-8310	T-8340	T-8350	T-8360	T-8420	T-8620			
8100	0.0	5.10	5.10	P	D		D	D			D				
8120	0.0	0.45	0.45	P	D		D	D			D				
8135	Gate											P			
8143	0.0	1.09	1.09	P		P	P	P		P					
8143-A	0.0	0.48	0.48	P			P	P		P					
8143-A1	0.0	0.32	0.32	P			P	P		P					
8143-C	0.0	0.06	0.06				P	P		P					
8120-R	0.0	0.31	0.31	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-8030	T-8110	T-8130	T-8310	T-8340	T-8350	T-8360	T-8420	T-8620			
8100	0.0	5.10	5.10		D		D	D			D				
8120	0.0	0.45	0.45		D		D	D			D				
8143	0.0	1.09	1.09				P	P	P	P		P			
8143-A	0.0	0.48	0.48				P	P	P	P					
8143-A1	0.0	0.32	0.32				P	P	P	P					
8143-C	0.0	0.06	0.06				P	P	P	P					
8120-R	0.0	0.31	0.31				P	P	P	P					

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

SAMPLE CONTRACT

KT-FT.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 KT-FT.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: $4.23 per CCF .

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		

KT-FT.3.3# - SNOW REMOVAL *(06/2009)*

Snow removal shall be done in a manner that will preserve and protect roads, provide for safe and efficient transport of timber, and prevent erosion damage to streams and adjacent lands. In performing snow removal, Contractor shall adhere to the following performance standards, unless otherwise agreed:

Blade will be equipped with skid shoes to prevent loss of surfacing and damage to the road bed. On gravel and native surface roads, a minimum 4 -inch depth compacted snow mat shall be maintained on the roadbed during blading.

Snow shall be removed from the entire road width, including turnouts.

Snow berms shall be reduced at road intersections where plowed road segements join unplowed road segments. Reduce the piled snow in the roadway to create a smooth transition from plowed road to normal snow depth.

Openings shall be created in snow berms as needed for proper drainage. Remove snow, ice, and debris from culverts and other drainage structures as needed to ensure efficient flow of water.

Tracked or cleated vehicles shall not be used for snow removal without prior written approval of Forest Service Representative.

SAMPLE CONTRACT

KT-GT.3.1.4# - OPERATING RESTRICTIONS *(06/2009)*

Within Contract Area, unless changed by written agreement, the following operating requirements apply:

Restricted operations/activities:
Within Payment Units 03 and 06 - Harvest Operations are restricted during the period of 3/16 through 7/14 (due to soils and protection of residual trees) and during the period of 10/1 through 12/14 (due to soils).

Within Payment Units 05, 07, 08, 12 and 18 - Harvest Operations are restricted during the period of 3/16 through 7/31 and during the period of 10/1 through 12/14 (due to soils).

Within Payments Units 01, 02, 09, 10 and 11 - Harvest Operations are restricted during the period of 3/16 through 12/14 (due to soils).

Within the Sale Area, decked pine and other conifer material must be removed from the Sale Area within 30 days of cutting to minimize the potential breeding areas for pine beetles during the period of May 1 thru September 30.
Prohibited operations/activities:
NA

Pit Restoration in the Blue Jay pit will be completed no later than the end of each Operating Season.

KT-GT.4.1.2 - STUMP MARKS *(06/2009)*

Trees designated for cutting under CT.3.5 have been marked with paint at breast height and below stump height. Trees shall be felled so as to leave paint on stump.

KT-GT.6.2# - SITE SPECIFIC WETLANDS PROTECTION MEASURES *(09/2004)*

Measures needed to protect wetlands identified on the Sale Area Map or on the ground include:

All logging slash, equipment, and vehicles are prohibited within these areas. Any slash resulting from the Purchaser's Operations shall be removed immediately or treated as directed by the Forest Service.

KT-GT.6.3# - TEMPORARY ROAD CLOSURE *(06/2009)*

In addition to GT.6.3, measures to effectively block temporary roads to normal vehicular traffic shall consist of the following:

The berm will be placed at an angle of 30 to 45 degrees, relative to the road. Dig a trench, 12 to 18 inches below the surface of the road or trail, and extend it to both sidesof the road to prevent runoff from bypassing the berm/waterbar. The uphill end should extend beyond the side ditch of the road and into the earth berm to intercept any ditchflows. The outflow end is to be fully open and extended far enough beyond the edge of the road or trail to safely disperse runoff onto the undisturbed forest floor. When placement of the closure device does not require the berm to function as a waterbar for drainage, the trench will not be required. Height of the berm will be approximately 4 feet. Rocks/boulders, logging slash, cull logs, and stumps may be incorporated into the ridge of earth during construction as long as proper drainage is maintained and the road is completely blocked; unless otherwise agreed in writing. (See Typical Drawing)

KT-GT.7# - SLASH DISPOSAL MEASURES *(06/2009)*

Slash resulting from Contractor's operations shall be removed from lakes, ponds, private land, right-of-way clearings for telephone lines, power lines, pipelines and other authorized facilities, and landings to be seeded under KT-GT.6#.

The tops of trees shall not be left hanging in standing trees. All trees cut for landing and other construction clearings shall be completely severed and not left leaning. Slash resulting from construction clearing shall be treated concurrent with harvest operations.

Other specific slash disposal requirements are as follows:

SDZ - Slash resulting from construction clearing (such as from landings and right-of-way clearing associated with pre-haul maintenance requirements listed in Special Provision KT-FT.3.1#), Specified Road Construction and Specified Road Reconstruction, shall be lopped and scattered to lie within 3 feet of the ground. All root wads shall be severed from the stem and righted on the ground or otherwise disposed of as directed by the Forest Service, concurrent with operations.

SDZ(2) - as shown on the Contract Area Map in Payment Units 03, 05, 07, 08 and 18, within a strip 50 feet in width, measured from the forested edge of the road along FR 8100, FR 8120 and 8143, all slash resulting from the Purchaser's operations shall be removed; within an adjacent strip 25 feet in width, all slash shall be lopped and scattered to lie within 3 feet of the ground. SDZ(2) shall be performed concurrent with operations.

Material described above used in the construction of closure berms is excluded from this requirement.

Slash Disposal treatment zones are shown on the Contract Area Map with symbol "SDZ."

SAMPLE
CONTRACT

KT-GT.9# - STEWARDSHIP PROJECTS *(09/2004)*

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

Stewardship Projects

SAMPLE CONTRACT

KT-GT.9# - STEWARDSHIP PROJECTS. (09/2004)

Stewardship Projects

Mandatory Stewardship Projects		
Project Number	**Project Description**	**Specification Pages**
01-01	Wildlife Habitat - Tree Felling	SP-02
01-02	Wildlife Habitat - Tree Felling	SP-02
02-10	Wildlife Habitat - Brushpiles	SP-03
02-11	Wildlife Habitat - Brushpiles	SP-03
03-01	Slash Closure - Road Decommissioning	SP-04 thru SP-05
03-02	Slash Closure - Road Decommissioning	SP-04 thru SP-05
03-03	Slash Closure - Road Decommissioning	SP-04 thru SP-05
03-04	Slash Closure - Road Decommissioning	SP-04 thru SP-05

Optional Stewardship Projects		
Project Number	**Project Description**	**Specification Pages**
04-10	Aspen Site Preparation	SP-06 thru SP-07
04-11	Aspen Site Preparation	SP-06 thru SP-07
04-18	Aspen Site Preparation	SP-06 thru SP-07
05-07	Uneven-aged Upland Hardwood Gap Cleaning	SP-08 thru SP-09
05-08	Uneven-aged Upland Hardwood Gap Cleaning	SP-08 thru SP-09
05-12	Uneven-aged Upland Hardwood Gap Cleaning	SP-08 thru SP-09

SAMPLE CONTRACT

KT-HT.2 - FIRE PRECAUTIONS *(06/2009)*

Unless otherwise agreed in writing between the Contractor and the Contracting Officer, the following are specific precautionary measures applicable during Contractor's Operations in Fire Precautionary Period as indicated in AT.9:

1. Contractor shall maintain Forest Service-approved spark arresting devices on any piece of equipment operated by an internal combustion motor. In addition, each piece of motorized equipment shall be equipped with a serviceable round-pointed shovel and an operational fire extinguisher of at least five-pound rating suitable for the equipment being used. All chainsaw operators will have a serviceable round-pointed shovel and one-pound multipurpose fire extinguisher readily available.

2. Contractor shall require that smoking and the building of lunch or warming fires by Contractor's employees, contractors, or subcontractors be confined to designated safe places where flammable debris has been cleared away and where, at the option of the Contractor, smoking or the building of lunch or warming fires may be permitted.

3. Adequate spark arresters shall be maintained on chimneys or stovepipes where wood or coal is being burned in an enclosed device.

4. Contractor shall furnish serviceable firefighting tools. Location, numbers, and types of tools shall be specified in the Fire Prevention and Control Plan in accordance with HT.1.

KT-IT.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 AT.17. 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.

NORTON STEWARDSHIP ROAD MAINTENANCE REQUIREMENTS

FS-2400-13T Contracts (09/04)
WO-KT-FT.3.1# Special Provisions

SAMPLE CONTRACT

SECTION 1. GENERAL

Purchaser's main Road Maintenance responsibility begins: (1) after Purchaser performs Prehaul Maintenance on a road listed in the Road Maintenance Requirements Schedule; or (2) for all other roads, when Purchaser begins to use the road. Occasional travel by Purchaser's light vehicles, prior to beginning of construction clearing or logging operations in the area accessed by the road, does not constitute beginning of use. Purchaser is not required to perform routine maintenance during periods of inactivity. During periods of inactivity, Forest Service will perform maintenance only as required to meet its needs.

The Purchaser shall maintain roads, commensurate with the Purchaser's use, in accordance with the Road Maintenance Requirements Summary and Road Maintenance Specifications. Performance of road maintenance work by the Purchaser may be required prior to, during, or after each period of use. The timing of work accomplishment shall be based on the Purchaser's operating schedule under Standard Provision **GT.3.1**.

If the Purchaser elects to use different roads than those listed in the Road Maintenance Requirements Summary, the Contracting Officer (CO) or designee shall determine the Purchaser's commensurate share of road maintenance and/or revise road maintenance deposits.

Unless the CO or designee agrees in writing, all Prehaul Maintenance requirements shall be completed on any portion of road prior to hauling on that portion.

The Forest Service shall prepare a revised Road Maintenance Requirements Schedule to reflect changes in the original haul routes when needed.

Any work or materials that are determined to no longer be needed and are waived shall have the estimated cost charged to the Timber Sale Account as described in **IT.3.3**.

SAMPLE CONTRACT

SECTION 2. ROAD MAINTENANCE DEFINITIONS

Wherever the following terms are used in the Road Maintenance Specifications, the meaning shall be:

Base Course. Material placed on the Subgrade to distribute concentrated wheel loads.

Borrow. Select Material taken from designated borrow sites.

Crown, Inslope, and Outslope. The cross slope of the Traveled Way to aid in drainage and traffic maneuverability.

Culverts. A conduit or passageway under a road, trail, or other obstruction. A culvert differs from a bridge in that it is usually entirely below the elevation of the Traveled Way.

Drainage Dip. A dip in the Traveled Way which intercepts surface runoff and diverts the water off the Traveled Way. A Drainage Dip does not block the movement of traffic.

Drainage Structures. Manufactured structures which control the runoff of water from the Roadway including Inslope, overside drains, aprons, flumes, downdrains and downpipes.

During Haul Maintenance. Road maintenance work to be accomplished during the period of timber removal.

Geotextile. A group of construction fabrics with varying attributes designed for different purposes.

Lead-off Ditches. A ditch used to transmit water from a Culvert, Drainage Structure or Drainage Dip outlet to the natural drainage area.

Maintenance Activitiy. Items of work leading to the restoration and upkeep of a road and necessary to sustain the road's anticipated traffic.

Material. Any substance specified for use in the performance of the work.

Post Haul Maintenance. Road maintenance work to be accomplished after timber removal is completed.

Prehaul Maintenance. Road maintenance work to be accomplished prior to the roads use. Roads receiving prehaul maintenance shall be shown on the Sale Area Map.

Road Maintenance Cost. An estimate of the cost to perform road maintenance activities; as determined by the Forest Service. Estimates may include any or all of the work activities listed in Section 4, Road Maintenance Activity Specifications.

Roadbed. The portion of a road between the intersection of Subgrade and sideslopes, excluding that portion of the ditch below Subgrade.

Roadside. A general term denoting the area adjoining the outer edge of the Roadway.

Roadway. The portion of a road within the limits of excavation and embankment.

SAMPLE CONTRACT

Sand Hole. A hole that develops in the running surface of the road which is quite soft and dangerous in nature. Usually found in very sandy soils.

Shoulder. That portion of Roadway contiguous with Traveled Way for accommodation of stopped vehicles, for emergency use, and lateral support of Base and Surface Course, if any.

Slide. A concentrated deposit of materials from above or on backslope extending onto the Traveled Way or Shoulders, whether caused by mass land movements or accumulated ravelling.

Slough. Material eroded from the backslope which partially or completely blocks the ditch, but does not encroach on the Traveled Way so as to block passage of traffic.

Slump. A localized portion of the Roadbed which has slipped or otherwise become lower than that of the adjacent Roadbed and constitutes a hazard to traffic.

Subgrade. Top surface of Roadbed upon which Base Course or Surface Course is constructed. For roads without Base Course or Surface Course, that portion of Roadbed prepared as the finished wearing surface.

Surface Course. The Material placed on the Base Course or Subgrade to enhance traction, distribute concentrated wheel loads and resist abrasion and the effects of climate. Surface Course may be referred to as surfacing.

Traveled Way. That portion of Roadway, excluding Shoulders, used for the movement of vehicles.

Turnouts. That portion of the Traveled Way constructed as additional width on single lane roads to allow for safe passing of vehicles.

SECTION 3. ROAD MAINTENANCE REQUIREMENTS SCHEDULE

See **WO-KT-FT.3.1#** Summary Table, Page 54

SECTION 4. ROAD MAINTENANCE SPECIFICATIONS

INCLUDED SPECIFICATIONS

Specification No.	Specification Title
T-8030	Snow Removal
T-8110	Maintenance Blading/Grading
T-8130	Spot Surface Course Placement/Replenishment
T-8310	Ditch Cleaning
T-8340	Drainage Structure Maintenance
T-8350	Roadway Drainage Maintenance
T-8360	Composite High Clearance Road Maintenance
T-8420	Cutting Roadway Vegetation
T-8620	Miscellaneous Maintenance

SAMPLE CONTRACT

T-8030 Snow Removal

DESCRIPTION

1.1 This Section provides for removal of snow from roads to facilitate logging operations and safe use. Remove snow from all or part of the traveled way, including sufficient turnouts for safe and efficient use for timber transportation and to protect the road. Remove intruding windfalls, debris or slough and slide material and dispose of only as necessary to provide passage for timber transportation. Removed materials may be deposited off the traveled way or outside the traveled way at locations designated by the Forest Service Representative (FSR). Snow may also be compacted as needed to freeze down soft areas or wet areas. This work is considered part of this specification. Equipment used for this work shall be in accordance with this specification and approved in advance by the FSR.

EQUIPMENT

2.1 Purchaser may use any type of equipment to remove snow, providing:

a. Type or use of equipment is not restricted in **KT-FT.1.2#** or Schedule document.
b. Equipment is of the size and type commonly used to remove snow and will not cause damage to the road. Tracked or cleated vehicles shall not be used unless approved in writing by the FSR.
c. The Blade will be equipped with skid shoes to prevent loss of surfacing and damage to the road bed. On gravel and native surface roads, a minimum 4 -inch depth compacted snow mat will be maintained on the roadbed during blading.

REQUIREMENTS

3.1 Erect signs required by the Sign Plan in the SUPPLEMENTAL SPECIFICATIONS or as shown on the Section 3. Road Maintenance Requirements Schedule. Perform work in a manner to preserve and protect roads and appurtenances, and prevent erosion damage to roads, streams, and other forest values.

3.2 Space, construct, and maintain drainage holes in the dike of snow or berm caused by snow removal operations. Place drain holes to obtain surface drainage without discharging on erodible fills.

3.3 Upon seasonal completion of Purchaser's Operations, effectively block the road by a snow barricade, unless otherwise approved by the Contracting Officer.

3.4 Ice control may be performed by Purchaser when approved by the FSR in writing. Such approval will include ice control materials, application rates, and any specific requirements of use.

3.5 Snow berms will be reduced at road intersections where plowed road segments join unplowed road segments. Reduce the piled snow in the roadway to create a smooth transition from plowed road to normal snow depth.

SAMPLE CONTRACT

T-8110 Maintenance Blading/Grading

DESCRIPTION

1.1 Maintenance Blading/Grading is keeping an aggregate surfaced Roadbed in a condition to facilitate traffic and provide proper drainage. It includes maintaining the Crown, Inslope or Outslope of the Traveled Way, Turnouts, and Shoulder; repairing Berms; blending approach road intersections; and cleaning Drainage Dips and Lead-off Ditches.

EQUIPMENT

2.1 The equipment required to shape, spread, and compact surfacing is listed below.

Road Number	Road Termini - From	Road Termini - To	Equipment Description
8100	5.10 miles	Gogebic Co Dunham Road	Motor-grader (or equivalent)
8120	0.45 miles	8100	Motor-grader (or equivalent)

REQUIREMENTS

3.1 Maintenance Blading/Grading shall be performed to facilitate traffic and proper drainage before, during, or after Purchaser's use as required by Section 3. Road Maintenance Requirements Schedule.

3.2 The surface blading shall preserve the existing cross-section. Surface irregularities shall be eliminated and the surface left in a smooth, free-draining state needed to facilitate traffic. Surface Course Material which has been displaced to the Shoulders or Turnouts shall be returned to the Traveled Way. The blading operation shall be conducted to conserve Surface Material and to provide for a thorough mixing of the Material being worked.

3.3 On aggregate surfaced roads Material generated from back slope Sloughing and ditch cleaning shall not be blended with Surface or Base Course Material unless agreed otherwise

3.4 Roadway back slopes shall not be undercut.

3.5 Drainage Dips and Lead-off Ditches shall be cleaned and maintained to retain the existing line, grade, and cross-section.

3.6 Intersecting roads shall be bladed for a distance of 50 feet to assure blending of the surfaces.

3.7 Rocks or other Material remaining on the Traveled Way after the final pass that are 4 inches in diameter or larger shall be removed. The unsuitable Material shall be disposed of by side casting unless agreed otherwise. Side casting into streams, lakes, or water courses will not be permitted.

3.8 Material resulting from this activity shall not remain on or in structures, such as Culverts, cattle guards, ditches, bridges, and Drainage Dips.

SAMPLE CONTRACT

3.9 Material resulting from this activity, plus any accumulated debris, shall be removed from roadway structures, such as concrete low-water crossings or fords.

T-8130 Spot Surface Course Placement/Replenishment

DESCRIPTION

1.1 Spot Surface Course Placement/Replenishment includes Subgrade preparation, furnishing, hauling, spreading and shaping materials in accordance with the requirements.

MATERIALS

2.1 Surface Course Material will be in accordance with the subsection 3.2 of these specifications. Only commercial sources of aggregate will be accepted, except surfacing material may also be purchased from the government, where available, by filling out a form 2600, paying the required fees, and obtaining a permit.

REQUIREMENTS

3.1 Subgrade Preparation. Prepare Subgrade to receive Surface Course Material at locations as designated on-the-ground by the Forest Service on roads listed below. Prepare the Subgrade by shaping the Roadbed to approximately the original cross-section and consistent with adjacent sections.

3.2 Furnish, haul and spread Material at locations designated on the ground by the Forest Service (FS). Compact the aggregate by operating spreading and hauling equipment over the full width of each layer of the aggregate, or by other methods as specified below.

Road Number	Type Material	Finished Compacted Thickness Specified	Total Quantity (Tons or cu.yds.)	Compaction Method
8143 (MP 0.05 – 0.06)	Pit Run Gravel[1/]	As Directed by Forest Service	30 CY (39 CY)[2/]	See 3.2 Above
8143 (MP 0.10 – 0.11)	Pit Run Gravel[1/]	As Directed by Forest Service	30 CY (39 CY)[2/]	See 3.2 Above
8143 (MP 0.38)	Pit Run Gravel[1/]	See Typical Drawing	30 CY (39 CY)[2/]	See 3.2 Above
8143 (MP 0.0 – 0.62)	Pit Run Gravel[1/]	**To Be Placed as Directed by USFS (Prehaul/Recurring Road Maintenance).**	60 CY (78 CY)[2/]	See 3.2 Above
8143-A1 (MP 0.06)	Local Borrow	As Directed by Forest Service	20 CY (26 CY)[2/]	See 3.2 Above
8143-C (MP 0.00)	Pit Run Gravel[1/]	As Directed by Forest Service	30 CY (39 CY)[2/]	See 3.2 Above
8120-R (MP 0.00 – 0.01)	Crushed Aggregate	As Directed by Forest Service	15 CY (19.5 CY)[3/]	See 3.2 Above
8120-R (MP 0.31)	Local Borrow	As Directed by Forest Service	170 CY (221 CY)[2/]	See 3.2 Above

[1/] **Blue Jay Pit (as shown on Contract Area Map).**

[2/] **Quantity of material in ( ) is the approximate loose volume.**

[3/] **Furnish, Haul, Place. Must meet M-DOT Designation 22A.**

SAMPLE CONTRACT

3.3 Variations. The Purchaser will be required to furnish weight tickets to the FS for each load of commercially obtained crushed aggregate prior to the final inspection. For aggregate purchased from the government, a count of truck loads will be required in addition to finished depth checks for the placed and compacted aggregate. Widths and lengths will be as staked or from schedule. When it is mutually agreed that all or part of the Surface Course Material is not needed, the estimated cost of surfacing not placed shall be charged to the Timber Sale Account in accordance with IT.3.3.

T-8310 Ditch Cleaning

DESCRIPTION

1.1 Ditch cleaning is the removal and disposal of all accumulated organic and Slough Material from Roadway ditches to provide a positive draining waterway of uniform width, depth, and grade.

REQUIREMENTS

3.1 Ditch cleaning shall be repeated during sale operations as often as necessary to facilitate proper drainage.

3.2 All Slough Material or other debris which might obstruct water flow in the Roadway ditch shall be removed. Material removed from ditches that are not suitable for blending into the existing surface course shall be disposed of in places agreed to in writing by the FSR.

3.3 Roadway back slopes shall not be undercut.

T-8340 Drainage Structure Maintenance

DESCRIPTION

1.1 This work consists of maintaining and/or installation/removal of Drainage Structures and related items such as: inlet and outlet channels, existing riprap, trash racks, necessary geotextiles, pipes, and drop-inlets.

MATERIALS

2.1 All Materials used in the maintenance and/or installation/removal of Drainage Structures shall conform by type and specification to the Material in the structure being maintained or as indicated in the subsection 3.3 below.

SAMPLE CONTRACT

REQUIREMENTS

3.1 Drainage Structures and related items shall be cleared of all foreign Material deposited above the bottom of the structure and all vegetative growth which interferes with the water flow. Material removed that cannot be incorporated into maintenance work shall be uniformly placed on fill slopes unless agreed otherwise.

3.2 Perform maintenance to insure the proper functioning of the head walls, aprons, inlet assemblies, riprap, trash racks and other facilities related to the Drainage Structure.

3.3 Install/remove ditches, drainage dips, rock crossings and/or culverts as shown below, and as marked on the ground. Installation of structures shall not begin without the presence of a FSR unless agreed to in writing by the FSR.

Road Number	Location	Remove/Install	Type of Structure	Size	Quantity
8143	MP 0.38	Install	Outlet Ditch, Right	As Directed	One

3.4 Installation shall be in accordance with construction industry standards and practices.

3.5 Culverts designated for removal/disposal shall become the property of the Purchaser and shall be disposed of properly.

3.6 Temporary culverts provided by the USFS shall remain the property of the government.

3.7 Bridges. Any miscellaneous parts needing repair or replacement during normal use of any bridge during haul shall be considered maintenance. This includes minor items such as object markers, running planks that have loosened or cracked deck boards, or drainage structures which may become plugged. Bridge decks that are dirt and dust covered shall be cleaned to allow for proper drainage and for safety of the user.

NORTON STEWARDSHIP ROAD MAINTENANCE REQUIREMENTS

FS-2400-13T Contracts (09/04)

WO-KT-FT.3.1# Special Provisions

T-8350 Roadway Drainage Maintenance

SAMPLE CONTRACT

DESCRIPTION

1.1 This work consists of providing Post Haul drainage on roads.

MATERIALS

2.1 All Materials used in the maintenance and/or installation/removal of Drainage Structures shall conform by type and specification to the Material in the structure being maintained, or as indicated in subsection 3.3.

REQUIREMENTS

3.1 Upon completion of work, shape the roadway to provide for the removal of surface water. The roadway need not be passable to vehicles (ML-1 roads). Repair and reinstall waterbars, barriers or berms existing prior to the Purchaser's operation. Areas where water is ponded by existing centerline profile sags in through cuts may be left untreated.

3.2 Any of the following methods are acceptable for use at eroded or rutted locations:

(a) Method A: Outsloping the roadbed at not less than ½ inch per yard of width.

(b) Method B: Insloping the roadbed at not less than ½ inch per yard of width.

(c) Method C: Water bar roadbed at locations staked on the ground and construct as shown on the enclosed detail.

(d) Method D: Crown the roadbed as shown in the attached detail as the typical section for that length of road.

3.3 Drainage structures located in roadbed through fills and natural watercourses shall be fully functional without obstructions, including inlet and outlet channel within 20 feet of the structure. **(All structures within termini indicated in WO-KT-FT.3.1# Summary Table).**

3.4 Entrance Devices. Upon completion of work, replace entrance devices to effectively eliminate access by motorized vehicles (ML-1).

3.5 Seed and fertilize all disturbed areas in accordance with requirements set forth in T-8410 Vegetation Establishment.

NORTON STEWARDSHIP ROAD MAINTENANCE REQUIREMENTS

FS-2400-13T Contracts (09/04)

WO-KT-FT.3.1# Special Provisions

T-8360 Composite High Clearance Road Maintenance

SAMPLE CONTRACT

DESCRIPTION

1.1 This work consists of making limited use roads passable for project use by Purchaser and providing drainage from the traveled way and roadbed.

MATERIALS

2.1 Required materials are listed in subsection 3.2.

REQUIREMENTS

3.1 Traveled Way

A. Purchaser may smooth or fill existing cross ditches and waterbars and, by agreement, modify existing road junction to enable vehicle access. 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. No object extending over 4 inches above the road surface shall remain within the 12 feet usable traveled way.
2. Center the usable width of the roadbed or position away from the fill slope.
3. Cut and remove standing or down trees, logs, brush, and limbs from within the 12 feet usable traveled way. Remove 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 designated timber which meets utilization standards or deck at agreed locations.
4. Place all removed material away from drainages and in locations previously agreed to in writing by the FSR.
5. During use, maintain drainage structures including dips, ditches and culverts in a usable condition and surface in a flat, Insloped or Outsloped, or Crowned usable condition, **per Typical Drawing.**

3.2 Drainage Facilities. Clean and recondition drainage facilities in accordance with T-8310 Ditch Cleaning and T-8340 Drainage Structure Maintenance. **See Table in T-8340 for new structures; maintain all other structures per 3.1, Item 5 above within termini indicated in WO-KT-FT.3.1# Summary Table.**

3.3 Slough and Slides

1. Slough and Slides may be left in place provided surface drainage is adequately provided and at least 12 feet of width is available for vehicle passage.
2. Purchaser may reposition or ramp over Slides and Slough when the Traveled Way is less than 12 feet providing the material is capable of supporting vehicles. Limit Outslope to no more than six percent.

SAMPLE COPY

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 Forest Service, Slough or Slide material will be removed under Section T-8320 Slide, Slump, and Erosion Repair.

3.4 Slumps, Eroded areas, and Washouts

1. Drain the roadbed immediately upgrade of Slumps and longitudinal cracks to prevent water from entering Slump area.
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 ten feet in the area of the Slump.
3. Unless Forest Service agrees to material being placed on Slumps, ramp the Slumps on both ends into undisturbed roadbed to provide at least ten feet usable width. Use removed materials to guide vehicles to the ramp location or to aid in draining the area.

4. Eroded areas/washouts may be filled with suitable material and compacted by operating equipment over the fill area.

3.5 Posthaul

A. 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 waterbars 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 Purchaser modifications at road junctions to leave the entrance as it was before use, or as agreed at the time of improvement.
4. Close all roads which were closed prieviously, using prior existing methodology.

T-8420 Cutting Roadway Vegetation

DESCRIPTION

1.1 This work includes removal of brush, trees and other vegetative growth from within the clearing limits. This may include brush mowing of shoulders to prevent larger growth which would inhibit travel in the future.

EQUIPMENT

2.2 Equipment use may include farm tractor mounted mowing or brushing equipment. If brushing equipment is required it must be of a size and power to cut off and masticate stems up to four inches in diameter. Larger growth may require hand clearing with a chainsaw or mechanized equipment able to handle larger trees.

SAMPLE CONTRACT

REQUIREMENTS

3.1 Vegetative matter within the Roadway which impedes vehicular travel, and/or interferes with road maintenance operations, such as surface blading and ditch and culvert cleaning shall be removed. Downed timber meeting utilization standards shall be cut in appropriate lengths and decked in locations where agreed upon and the Traveled Way or sight distances will not be impaired.

3.2 Vegetative matter removed from the clearing limits shall be scattered outside the clearing limits at least 3 (and lopped to within 3 feet of ground) feet perpendicular to the road surface.

3.3 Trim tree branches that extend over the road surface and shoulders to attain a clear height of 14 feet. Trim branches flush with the tree or as close as possible without causing damage or scarring to the bole. Area shall be left neatly trimmed.

3.4 Any stump removed shall be placed in an upright position out of the clearing limits.

3.5 Area shall not be left in an unsightly condition. The FSR shall have the final say over how the area is left.

T-8620 Miscellaneous Maintenance

DESCRIPTION

1.1 Maintenance of miscellaneous structures includes cattle guards, gates (this includes all types of closure devices such as logs, rocks, dirt berms, dirt and slash berms, metal gates, etc), signs, and other similar structures that have been previously installed to insure safe and efficient operation of the road.

MATERIALS

2.1 Any Materials needed in the maintenance of miscellaneous structures shall be similar in type and quality to the Material in the structure being maintained.

REQUIREMENTS

3.1 Cattle guards. Loose rails shall be welded or bolted back in place.
Excess Material carried into the cattle guard shall be removed when drainage is blocked or when it reaches six inches from the bottom of the cattle guard frame. Drainage into and from the cattle guard shall be kept open.

3.2 Gates (and other closure devices). Gates shall be kept in good repair and made to swing easily. Hinges or latches shall be repaired if not operating properly. Brush and debris shall be removed from within the swinging radius. Weathered berms or wood piles shall be reconstructed to a height which discourages use and blocks the road.

NORTON STEWARDSHIP ROAD MAINTENANCE REQUIREMENTS

FS-2400-13T Contracts (09/04)

WO-KT-FT.3.1# Special Provisions

3.3 Signs. Any signs needing repair or replacement shall be installed per sign placement detail or MUTCD direction. All roads shall have legible sign numbers. ML 3-5 roads shall have horizontal numbering and ML 1-2 roads shall have vertical numbers. The material used shall be as directed by the Forest Service Representative. All new signs must meet retroreflectivity requirements.

Road Number	Road Name	Location	Remove/Install	Type of Item	Size	Quantity
8135	8135	1/	Maintain	Gate	3' x 20'	1
8143	8143	2/	Remove/Install	Berm	3/	1

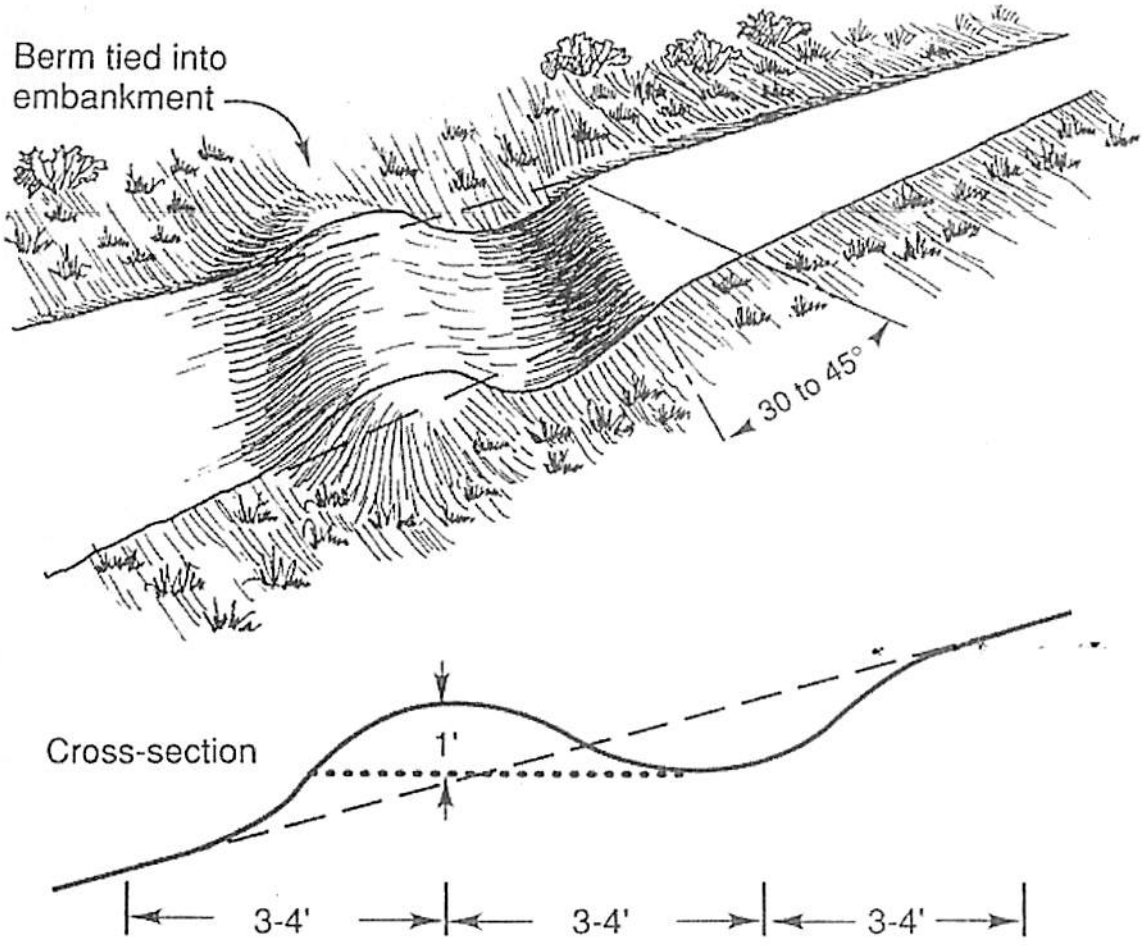
1/ **Shown on Contract Area Map**

2/ **At Location Designated by Forest Service**

3/ **Per Typical Drawing – Earthen Berms/Road Closure Devices**

SAMPLE CONTRACT

Earthen Berms/Road Closure Devices (Typical Drawing)

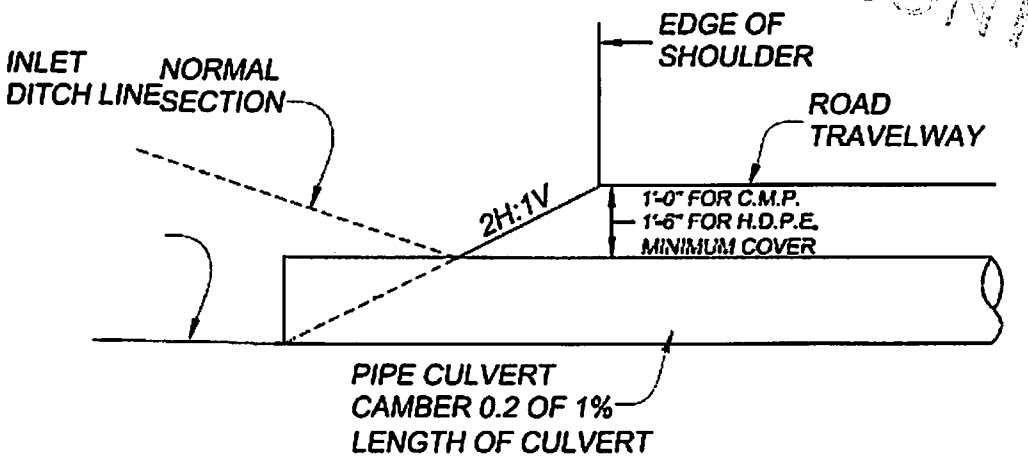


Earth berm/water bars are narrow, earthen ridges built across roads or trails. They divert water off and away from roads or trails into vegetated areas before it causes erosion. When properly built, they prevent exposed soil from moving, protecting the area until grass vegetation is firmly established.

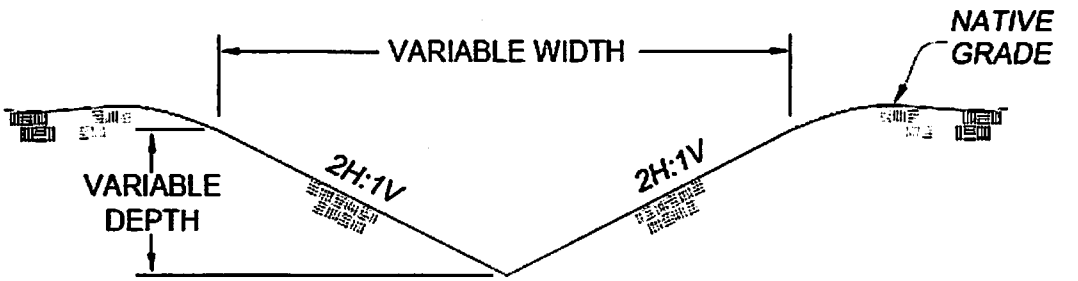
As shown in the above drawing, the berm/water bar should be placed at an angle of 30 to 45 degrees, relative to the road, to allow for runoff to drain from the inlet, through the trench, and into the adjacent forest floor or vegetation.

Dig a trench, 12 to 18 inches below the surface of the road or trail, and extend it beyond both sides of the road or trail to prevent runoff from bypassing the water bar. The uphill end of the water bar should extend beyond the side ditch of the road and into an earth-berm to fully intercept any ditch flows. The outflow end of the water bar is to be fully open and extended far enough beyond the edge of the road or trail to safely disperse runoff water onto the undisturbed forest floor. When placement of the closure device does not require the berm to also function as a water bar for drainage, the trench will not be required.

Height of the berm will be approximately 4 feet. Rocks/boulders, logging slash, cull logs, and stumps may be incorporated into the ridge of earth during construction of the berm as long as proper drainage will be maintained and the road is completely blocked, unless otherwise agreed in writing.



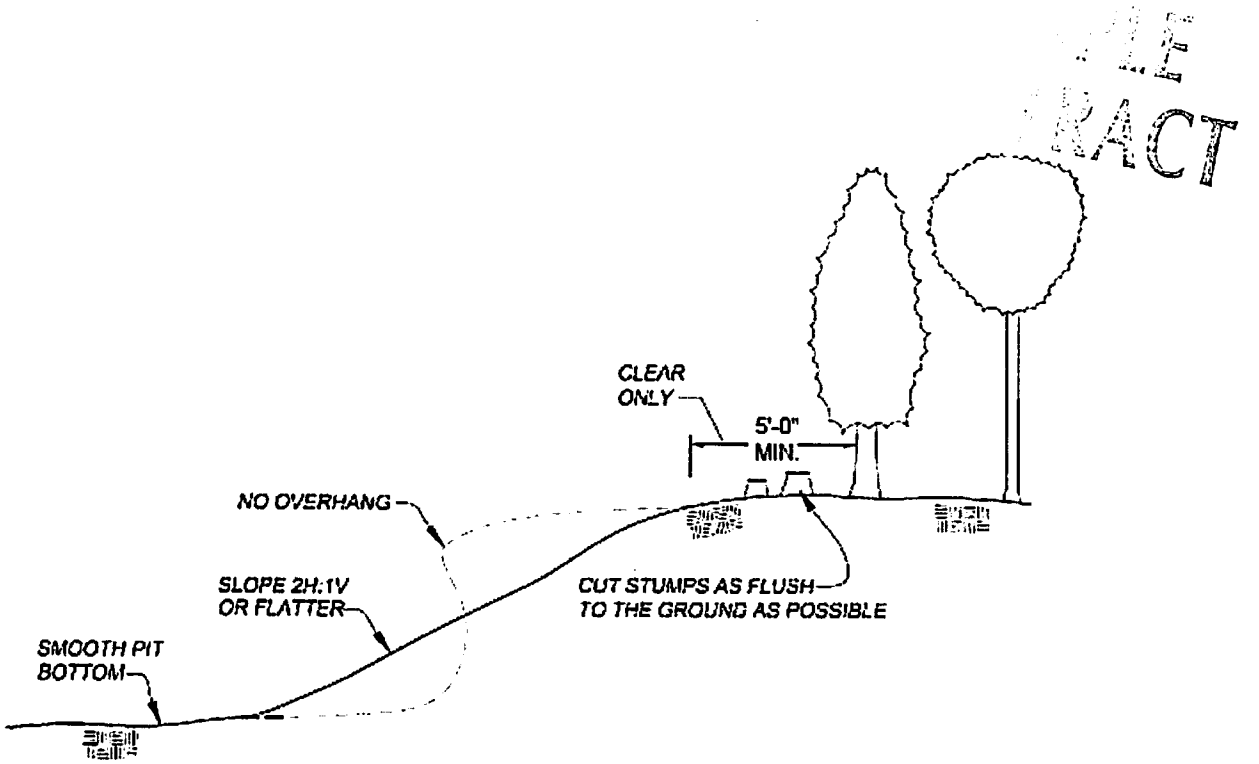
TYPICAL DITCH SECTION AT CULVERT INLET
NOT TO SCALE



TYPICAL INLET AND OUTLET DITCH SECTION
NOT TO SCALE

TYPICAL HARDENED DIP

NOTE: HARDENED DIPS WILL BE EXCAVATED 12" DEEP AND BACKFILLED WITH 8" PIT RUN. GEOTEXTILE SHALL BE PLACED UNDER ALL PIT RUN MATERIAL.



NOTE: TOPS, STUMPS AND TRUNKS SHALL BE DISPOSED OF AS DIRECTED BY THE ENGINEER. STUMPS SHALL BE SEVERED FROM ALL TREES. ALL TIMBER SHALL REMAIN PROPERTY OF THE GOVERNMENT. OVERSIZED ROCK SHALL BE DISPOSED OF IN EXISTING PILES OR AS DIRECTED BY THE ENGINEER. SMOOTH PIT BOTTOM TO REDUCE THE COLLECTION OF WATER. HAUL ROADS SHALL BE MADE SMOOTH AND REPAIRED OF DAMAGE CAUSED BY THE CONTRACTORS HAULING OPERATION OR EQUIPMENT.

BORROW PIT CLEAN UP

NORTON STEWARDSHIP SALE

Supplemental Specifications to Special Provision KT-GT.9# - Stewardship Projects

PLE
RACT

PROJECT SPECIFICATIONS INDEX:

Project Name	Page #
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01-02 Wildlife Habitat - Tree Felling	SP-02
02-10 Wildlife Habitat - Brushpiles	SP-03
02-11 Wildlife Habitat - Brushpiles	SP-03
03-01 Slash Closure - Road Decommissioning	SP-04 thru SP-05
03-02 Slash Closure - Road Decommissioning	SP-04 thru SP-05
03-03 Slash Closure - Road Decommissioning	SP-04 thru SP-05
03-04 Slash Closure - Road Decommissioning	SP-04 thru SP-05
04-10 Aspen Site Preparation	SP-06 thru SP-07
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04-18 Aspen Site Preparation	SP-06 thru SP-07
05-07 Uneven-aged Upland Hardwood Gap Cleaning	SP-08 thru SP-09
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NORTON STEWARDSHIP SALE

SAMPLE CONTRACT

Supplemental Specifications to Special Provision KT-GT.9# - Stewardship Projects

Wildlife Habitat Project – Tree Felling

Project Number[1]	Item	Unit of Measure	Quantity	Felling Location	Mandatory/Optional
01-01	Fell Tree	Trees	**27 trees**	All trees are located within Payment Unit (PU) 1. PU 1 is East of FR 8100 and South-East of W. Branch Presque Isle River.	Mandatory
01-02	Fell Tree	Trees	**171 trees**	Directly North of PU 1 in a Non-Harvest area of approximately 25 acres that surrounds a small pond and is SE of the river- see Wildlife Tree Felling Map page 03 of 04.	Mandatory

[1]/ **GPS coordinates of individual trees available. Payment Unit 1:** Trees to fell average 11" inch dbh (range 6" - 20" dbh); the majority of trees are maple, with a few basswood. **North non-harvest area:** Trees to fell average 10 inch dbh (range 6" – 12" dbh) and include maple, with a few yellow birch. Contractor is responsible for assessing tree size and felling direction for cost determination.

Payment Unit 1 Objective: To improve wildlife habitat by creating Coarse Woody Debris (CWD).
Non-harvest Area Objective: To fell or girdle trees to release long-lived conifer trees (hemlock, cedar) from competition thereby promoting hemlock and cedar growth and survival as a seed source to propagate other conifers.

Specifications:

1. Trees designated to fall or girdle are located: within the boundary of PU 1; and in a Non-Harvest Area, located directly north of PU 1 in an area of approximately 25 acres (around 0.15 mi x 0.0.32 mi in dimension). The GPS coordinate file will be provided for the specific locations of all trees to be felled.
2. **Trees to be felled within the northern Non-Harvest area shall be felled or girdled with hand-tools only (including chainsaw).**
3. **Within the Payment Unit 1 boundary:** trees may be mechanically-felled or girdled.
4. All trees to be felled are banded with a **Single-banded PINK paint** mark at eye level. All trees to be felled within Payment Unit 1 have a PINK stump mark in addition to the eye level mark: all Stump heights in PU 1 must leave evidence of paint mark below stump height.
5. Trees to be felled may need to be limbed and/or bucked so the bole of tree lies in a horizontal resting position where all portions of the bole lie within two feet of the ground.
6. Trees will be felled away (where possible) from long-lived conifer trees (hemlock, cedar), which may be located adjacent to the felled tree.
7. Felling will be done in a manner to avoid unnecessary damage to live or dead standing trees >= 5.0 inches DBH and to comply with **Contract Provision GT.3.2 – Protection of Residual Trees**. If drop-zones are needed to safely fell the tree, additional cut trees must be agreed to by the COR prior to cutting. Additional cut trees may be flagged by contractor for review by the COR. Sub-merchantable sized trees (<5.0" DBH) or cull trees (>=5.0" DBH) may be felled in drop zones in order to safely fell the marked tree. Unnecessary felling is not permitted. Contractor will earn additional Credits for any additional authorized tree felling (trees >=5" DBH).
8. Contractor may decide to girdle and not fell certain trees if there is high potential for damage to residual or for safety: girdling is defined as 2 parallel horizontal cuts (chainsaw kerf width, can use an axe) a minimum of 2" apart completely around the bole of the tree, with depth of cuts defined as through the bark and cambium only (so as not to weaken the bole).). COR needs to be informed of the number of trees girdled.

NORTON STEWARDSHIP SALE

Supplemental Specifications to Special Provision KT-GT.9# - Stewardship Projects

Wildlife Project- Brushpile Construction

SAMPLE CONTRACT

Payment Unit	#Piles Within Payment Unit	PU Acres	Mandatory/Optional
02- 10	4	23	Mandatory
02- 11	3	16	Mandatory

*2nd number = Payment Unit # where the brush piles are to be constructed.

Objective: Brushpiles provide potential denning sites for black bear and hiding cover and habitat for numerous herpetiles, small mammals, and birds.

Specifications:

1. Location may be flagged by COR: locate piles near the edge of the Payment Unit (as far away from roads as possible and still within PU), preferably near conifer trees or a wooded wetland/swamp if present; all piles must be placed on dry ground and not in a wetland.
2. Pile size must be 5-6 feet high and 10-12 feet in diameter at the base.
3. Piles must be placed by criss-crossing material in order to create voids within the pile and to avoid a neatly stacked "woodpile" appearance.
4. Logging slash used in the construction must be from cut trees leftover from harvesting within the specified Payment Units. Any tree species available may be used, including a mix of conifer and deciduous.
5. When available, use freshly uprooted stumps as a base for the pile.
6. Do not construct piles adjacent to standing trees >4.0" in diameter, unless approved by Forest Service.
7. Minimize soil placed within the pile if you are pushing the slash material or stumps with a dozer or other type of equipment with a blade.

NORTON STEWARDSHIP SALE

SAMPLE CONTRACT

Supplemental Specifications to Special Provision KT-GT.9# - Stewardship Projects

Slash Closure - Road Decommissioning

Project Number	Road #	Location of Slash Closure Work	Unit of Measure	Estimated Quantity	Mandatory/Optional
03-01	02206121	Intersection with FR 8143. Approximately 0.91 miles unauthorized road intersects to Southeast	Each	1	Mandatory
03-02	02206123	Near the end of FR 8143C (second unauthorized road heads west)	Each	1	Mandatory
03-03	02206122	First unauthorized road off of FR 8143C (Road heads northwest then turns northeast)	Each	1	Mandatory
03-04	02206124	South end off of FR 8143A1 (road heads South/ unauthorized road segment)	Each	1	Mandatory

Material and Placement Requirements

- Debris material including stumps, trees, logging slash, rocks, and brush should be used to obstruct the travel way on the four (4) road sections designated by Forest Service for decommissioning, as listed in the above table. This material may have to be hauled or moved from locations agreed to with Forest Service and placed on designated road segments.
- Material must be scattered across travel way with a minimum of 100% of the road surface covered with material for a distance of 150 feet and an average depth of 36 inches on each road section.
- Material shall be placed parallel, diagonal, and perpendicular to motorized travel direction.

NORTON STEWARDSHIP SALE

SAMPLE CONTRACT

Norton Road Decommisioning

SCHEDULE OF WORK

02/04/2015

Unauthorized Road Number	Mile Post	Mile Post	Item No.	Work Description
02206121	0.00	0.03	650	Haul and place stumps, slash, tops and debris in roadbed for the first 150' from FR 8143 Southeast
02206122	0.00	0.03	650	Haul and place stumps, slash, tops and debris in roadbed for the first 150' from FR 8143C West
02206123	0.00	0.03	650	Haul and place stumps, slash, tops and debris in roadbed for the first 150' from FR 8143C North
02206124	0.00	0.03	650	Haul and place stumps, slash, tops and debris in roadbed for the first 150' from the end of the system FR 8143A1 South

NORTON STEWARDSHIP SALE

SAMPLE CONTRACT

Supplemental Specifications to Special Provision KT-GT.9# - Stewardship Projects

Aspen Regeneration Site Preparation

Project #	Payment Unit	Acres	Mandatory/Optional
04-10	10	16	Optional
04-11	11	18	Optional
04-18	18	6	Optional

A. **Site Preparation for Aspen Natural Regeneration**

1) Cut all tree species over 4 feet tall and less than 5 inches DBH, except do not cut any aspen less than 2 inches DBH OR any black spruce or white spruce less than 5 inches DBH, and do not cut any RED PINE, WHITE PINE, HEMLOCK, CEDAR, RED OAK, ELM, or SERVICEBERRY (Amelanchier spp.).

2) When available, retain two to three small clumps per acre of dense conifer saplings with live limbs within one foot of the ground (approximately 100 to 1000 square feet in size). Clumps selected for retention should be those with no, or minimal, logging related damage, i.e. broken and damaged crowns, de-barked stems.

3) Leave good quality spruce, removing damaged trees (leaning, logging-scarred, etc.) and trees with less than 20% crowns.

4) Shrubs, such as alder, are not required to be cut unless specified in the supplemental specifications.

5) Annuals such as grasses, sedges, ferns, etc. are not required to be cut.

6) Do not cut dead trees.

B. **Felling Specifications**

1) All trees required to be cut shall be cut below the lowest live limb except when prevented by rocks, existing downed logs, or other existing obstacles to felling.

2) Trees required to be cut shall be completely severed from the stump and lie flush to the ground. No tops shall be left hanging in standing trees.

3) The stump height of cut trees shall not exceed 6 inches above the ground level on the high side of the stump, or 4 inches above rocks, existing downed logs, or other existing obstacles to felling.

4) The cut angle of such stumps shall not exceed 20 degrees measured from a horizontal plane extending from the stump at ground level.

5) No boundary trees or Reserve Trees shall be cut or damaged. Boundary trees (KT-CT.3) are defined by 3 ORANGE paint slashes at eye level, with stump mark, for exterior boundaries or 2 ORANGE paint slashes at eye level, with stump mark, for interior boundaries. Reserve Trees (KT-CT.3#) are ringed with a single band of ORANGE paint at eye level, with stump mark.

6) All snags shall not be cut.

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C. **Equipment Requirements.**

1) The Contractor will provide cutting tools and equipment that are suitable for the job.

2) All power tools shall be equipped with Forest Service approved spark arrestors and in good working condition.

3) Heavy equipment (such as processors used in logging) is permitted to do this work when ground conditions support the equipment. Site preparation work may be performed concurrent with logging operations. (Reference Special Provision KT-GT.3.1.4# for operating restrictions)

D. **Road Use and Maintenance.**

1) All roads, excepting temporary roads, leading into each project area are to be kept open and free of any debris that may occur as a result of the work.

2) All roads used by the Contractor will comply with Special Provisions KT-FT.1.2# - Use of Roads by Contractor and KT-FT.3.1# - Road Maintenance Requirements of this Contract.

E. **Slash Treatment.**

1) All slash/felled stems that fall outside of the boundary for Contractor's site preparation slash shall be pulled back into the unit.

2) Contractor shall treat all slash from site preparation activities which lies within a designated Slash Disposal Zone (SDZ), with the same removal or slash height requirements which apply to slash produced by timber harvest activities.

3) In addition, all slash resulting from the Contractor's site preparation activities shall be removed from the cleared edge of any numbered Forest Service System Road, any road authorizing use under a special use permit, or any road maintained by another ownership or governmental unit other than the Forest Service.

4) All slash shall be removed from all road ditches, leadout ditches or any other drainage structures.

NORTON STEWARDSHIP SALE

SAMPLE CONTRACT

Supplemental Specifications to Special Provision KT-GT.9# - Stewardship Projects

Uneven-aged Upland Hardwood Gap Cleaning

Objective: To release suitable "Crop Trees" or create a growing space to regenerate future "Crop Trees" within Canopy Gaps created with the removal of Included Timber in this Stewardship Contract

Project #	Payment Unit	Unit of Measure	# of Acres	Mandatory/Optional
05-07	07	Acres	59	Optional
05-08	08	Acres	54	Optional
05-12	12	Acres	18	Optional

Stewardship Credits Earned: Will be based on the acres of the Payment Unit(s) listed below.
Definitions:

1.1 Canopy Gap – A space greater than 30 x 30 feet in diameter created by the logging operation with the removal of one or more trees that are Included Timber (trees marked for cutting defined in the Timber Specifications in this Contract) creating a hole in the canopy. Such gaps are measured from edge to edge from the crowns. Throughout the treatment area, it is intended that **10-15%** of the acres are converted to gaps. The number of gaps for each unit will vary and is typically dependent on the number of larger sawtimber-sized trees which are harvested.

1.2 Seedling – Young tree or shrub species generally less than 1 (one) inch in diameter measured at 4.5 feet from the ground.

1.3 Sapling – Young tree or shrub species generally considered greater than 1 (one) inch in diameter but less than 5 (five) inches in diameter measured at 4.5 feet from the ground.

1.4 Cleaning – Release treatment done to an age class not past the sapling stage to free the favored (Crop Trees) from low quality trees of the same age class (or size class) that overtop them or are likely to do so.

1.5 Low Quality Seedling or Sapling – Tree or shrub that lacks the potential to grow straight and tall which do not have one central stem or leader, or stems which are not healthy and will not grow to become a potential Crop Tree with a minimum of 17 feet of clear, defect free bole. Seedlings or saplings damaged during felling of Included Timber would be included in this category.

1.6 Potential Crop Tree – A seedling or sapling which has the potential of growing straight and tall developing a limb-free and defect-free bole of at least 17 feet in height from the ground.

SAMPLE CONTRACT

Technical Specifications for the Treatment:

2.1 Identify Canopy Gaps created by logging Included Timber in this Contract. Clean such Canopy Gap by cutting or flattening with equipment low quality seedlings and saplings which are greater than 1 (one) inch but less than 5 (five) inches in diameter. Work may be done concurrent with logging operations.

2.2 Cleaning shall "treat" all low quality seedlings and saplings within the Canopy Gap, including the area up to the boles of trees whose crowns create the perimeter of the Canopy Gap, unless damage will result to those residual trees 5 (inches) or greater in diameter.

2.3 Stump heights of cut stems shall be no higher than 6 (six) inches (measured from the high side of the stump or other obstructions such as rocks or larger stumps). If a Canopy Gap is Cleaned by running over the Low Quality stems with equipment, the main bole (not limbs) shall lie within 2 (two) feet of the ground.

2.4 No treated stems shall be left on roads, trails, or within drainage ditches that are currently in use or maintained with this Contract.

2.5 No treated stems shall be left laying on top of or otherwise impede the growth or form of the Potential Crop Tree seedlings/saplings being released, unless agreed otherwise with Forest Service.

2.6 Any Reserve Trees, other trees identified for protection, or Protected Areas, identified in the Timber Specifications of this Contract shall also be protected during the Cleaning activities.

2.7 Forest Service will work with the Contractor at the beginning of this Stewardship Project Item to flag out representative canopy gaps and identify Potential Crop trees and Low Quality trees/shrubs to treat.

2.8 Contractor shall hang ribbon at each canopy gap that is treated for inspection purposes.