SAMPLE CONTRACT

KT-CT.3# - RESERVE TREES *(09/2004)*

Notwithstanding the designations for cutting under CT.3.1, CT.3.2, CT.3.3, or CT.3.4, live or dead Wildlife reserve trees or groups of reserve trees within such cutting units or clearings shall be left uncut. Such Reserve trees are identified by an Orange paint-band and letter "R" at eye level, and stumpmark and shall be protected in accordance with KT-GT.3.2#. Units with reserve trees are shown on Contract Area Map.

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-band at eye level with stumpmarks paint or described to be left uncut.

See Tree Designation Table.

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

All N/A shall be left as leave trees, unless Marked with N/A paint. Leave N/A trees of the designated cut species, N/A inches stump diameter or greater, to avoid leave tree spacing greater than N/A 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 N/A feet wide with a N/A foot spacing. Quantities of trees located in skid trails are not Included Timber under AT2.

FS-2400-13T (9/04)

SAMPLE CONTRACT

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/
6	All trees that meet minimum merchantability specifications in AT.2 EXCEPT Red Pine, White Pine, Hemlock, Cedar, Oak and Elm or SINGLE ORANGE PAINT-BANDED LEAVE TREES. Additional trees to be cut are identified with opposing green paint slash at eye level with stump marks.	>=6.0"	
8	All trees that meet minimum merchantability specifications in AT.2 EXCEPT Red Pine, White Pine, Hemlock, Cedar, Oak and Elm. Additional trees to be cut are identified with opposing blue paint slash at eye level with stump marks.	>=6.0"	

Payment Unit boundaries: Exterior boundaries are marked with 3 ORANGE paint slashes above stump height; interior boundaries are marked with 2 ORANGE paint slashes above stump height on each side of the boundary. Boundary trees are also marked below stump height. Paint marks face to the INSIDE of the Payment Unit. BOUNDARY TREES ARE NOT TO BE CUT.

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
1, 2, 3, 4, 5, 9, 10, 11	Blue
7 (ROW)	Yellow

[Note: there is no Orange-Painted payment unit boundary associated with Payment Unit 7 (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.

Contract Name: Lorax Stewardship

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		
5172	FR 5172	MP 0.83	MP 1.14	U	Unsuitable prior to Required Reconstruction
5172-A	FR 5172-A	MP 0.20	End	X	Hauling Prohibited
5172-A1	FR 5172-A1	MP 0.11	MP 0.34	U	Unsuitable prior to Required Reconstruction
5172-A1	FR 5172-A1	MP 0.34	End	X	Hauling Prohibited
County Line Lake Pit Rd FR 5134	Gate			R	Gate shall be closed and locked when operations are not in progress
All Unidentified Roads Marked with "X"				X	Hauling Prohibited, Use for skidding must be approved prior to use.
All Unidentified Roads Marked with "P"				P	All Use Prohibited

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 N/A , Source II N/A , and Source III N/A .

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 N/A :

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

Contract Name: Lorax Stewardship

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
Pit Run	N/A	USFS	CY	N/A	345 (448.5 Loose)	345

NOTE: Pit restoration (per specifications) in the County Line Lake Pit shall be accomplished no later than the end of each operating season.

Contract Name: Lorax Stewardship

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

WO-KT-FT.3.1# Road Maintenance Requirements (06/2006)

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			
5172	0.00	0.83	0.83		P	P	P		P				
5172	1.14	2.00	0.86		P	P	P		P				
5172-A	0.00	0.20	0.20				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-8130	T-8310	T-8340	T-8350	T-8360	T-8620			
5134*										P			
5172	0.00	2.00	2.00	P	P	P	P		P				
5172-A	0.00	0.20	0.20	P		P	P		P				
5172-A1	0.00	0.34	0.34	P		P	P		P				

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

*County Line Lake Pit

Road	Termini		Miles	Applicable Post Haul Road Maintenance Specifications									
	From	To		T-8030	T-8130	T-8310	T-8340	T-8350	T-8360	T-8620			
5172	0.00	2.00	2.00			P	P	P	P	P			
5172-A	0.00	0.20	0.20			P	P	P	P	P			
5172-A1	0.00	0.34	0.34			P	P	P	P				

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

Contract Name: Lorax Stewardship

SAMPLE CONTRACT

KT-GT.2.4# - SITE SPECIFIC SPECIAL PROTECTION MEASURES *(09/2004)*

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

Cultural Resource Protection Measures: None known at this time.
Wildlife and Botanical Protection Measures: None known at this time.
Cave Resource Protection Measures: None known at this time.

KT-GT.3.1.3# - CUTTING SCHEDULE *(06/2009)*

Unless changed by written agreement, only N/A Payment Units may be released for operations at one time, and the sequence of cutting Payment Units shall be : Payment Units 4 and 5 must be harvested prior to, or concurrent with the harvest of either Payment Unit 6 or Payment Unit 11 .

Unless there is agreement in writing to postpone specific requirements, all contractual requirements on a Payment Unit shall be accepted by Forest Service prior to the release of an additional Payment Unit.

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 6 and 8 - Harvest Operations are restricted during the period of 3/16 through 12/14 (due to soils and aspen regeneration requirements).

Within Payment Units 3 and 9 - Harvest Operations are restricted during the period of 3/16 through 7/31 (due to soils) and during the period of 10/1 through 12/14 (due to soils).

Within Payment Units 1, 2, 4, 5, 10 and 11 - Harvest Operations are restricted during the period of 3/16 through 7/15 (due to soils and protection of residual stems) and during the period of 10/1 through 12/14 (due to soils).

Prohibited operations/activities:
N/A

SAMPLE CONTRACT

KT-GT.3.2# - PROTECTION OF RESERVE TREES *(09/2004)*

Contractor¿s damage or destruction of reserve trees described in KT-CT.3# will cause serious and substantial silvicultural or other damage to the National Forest. It will be difficult if not impossible to determine the amount of such damage. Therefore, Contractor shall pay as fixed, agreed, and liquidated damages $ 100 for each Wildlife reserve tree and $ N/A for each N/A reserve tree damaged or destroyed by Contractor's Operations, in addition to amounts payable under DT.4.4 and DT.4.5.

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

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.4.2# - SKIDDING AND YARDING REQUIREMENTS *(06/2009)*

As used in this provision, skidding equipment includes rubber-tire and track-mounted skidders, forwarders, bunchers, processors, and any other mechanized equipment that is used off of landings and roads.

Within Payment Unit(s), as shown on Contract Area Map with symbol "SYR": 6 and 11

SYR(1): All Included Timber shall be skidded/forwarded out of Payment Unit 6 through Payment Units 4 and 5 to a landing location designated by the Forest Service.

SYR(2): All Included Timber shall be skidded/forwarded out of Payment Unit 11 through Payment Units 4 and 5 to a landing location designated by the Forest Service.

Within portions of Payment Unit(s), as shown on Contract Area Map with symbol "SYR" and cross-hatching: N/A

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.

SAMPLE CONTRACT

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 rights-of-way clearing associated with pre-haul maintenance requirements listed in Special Provision KT-FT.3.1#, and Specified Road construction), 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(1) - Within a strip 25 feet in width measured from the forested edge along Gogebic County Road 206 (Payment Unit 1) as shown on the Sale Area Map, all slash resulting from the Purchaser's operations shall be lopped and scattered to lie within 2 feet of the ground, concurrent with operations.

SDZ(2) - Within the Sale Area, except as noted elsewhere in this contract, all debris/slash resulting from the use of slashers/processors or other similar equipment will be removed from landings and roadsides and scattered to lie within 2 feet of the ground or otherwise disposed of as directed by the Forest Service, concurrent with operations.

Logging slash and stumps used in the construction of road closure berms are excluded from the above requirements.

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

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**
1-006	Wildlife Habitat – Brushpile Construction	SP-2
1-008	Wildlife Habitat – Brushpile Construction	SP-2

Optional Stewardship Projects		
Project Number	**Project Description**	**Specification Pages**
2-006	Aspen Site Preparation	SP-3 thru SP-4
2-008	Aspen Site Preparation	SP-3 thru SP-4
3-001	Alder/Aspen Regeneration Patch Clearing	SP-5 thru SP-6

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.

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.

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.

SAMPLE CONTRACT

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-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-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-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.

LORAX STEWARDSHIP ROAD MAINTENANCE REQUIREMENTS

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

WO-KT-FT.3.1# Special Provisions

SAMPLE CONTRACT

Road Number	Type Material	Finished Compacted Thickness Specified	Total Quantity (Tons or cu.yds.)	Compaction Method
5172 (MP 0.00 – 0.02)	Pit Run Gravel[1/]	100'L x 12'W x 8"D	30 CY (39 CY)[2/]	See 3.2 Above
5172 (MP 0.00 – 0.02)	Crushed Aggregate[3/]	As Directed by Forest Service	15 CY (19.5 CY)[2/]	See 3.2 Above
5172 (MP 0.26 – 0.30)	Pit Run Gravel[1/]	200'L x 12'W x 8"D	60 CY (78 CY)[2/]	See 3.2 Above
5172 (MP 0.38 – 0.40)	Local Borrow	Excavate Left. Incorporate into low area in travelway.	20 CY	See 3.2 Above
5172 (MP 0.38 – 0.40)	Pit Run Gravel[1/]	100'L x 12'W x 8"D	30 CY (39 CY)[2/]	See 3.2 Above
5172 (MP 0.47 – 0.49)	Pit Run Gravel[1/]	100'L x 12'W x 8"D	30 CY (39 CY)[2/]	See 3.2 Above
5172 (MP 0.65)	Local Borrow	Excavate Left. Place over culvert after installation.	40 CY	See 3.2 Above
5172 (MP 0.62 – 0.64)	Pit Run Gravel[1/]	100'L x 12'W x 8"D	30 CY (39 CY)[2/]	See 3.2 Above
5172 (MP 0.75 – 0.78)	Pit Run Gravel[1/]	See Hardened Dip Typical. 150'L x 12'W x 8"D	45 CY (58.5 CY)[2/]	See 3.2 Above
5172 (MP 1.20 – 1.23)	Pit Run Gravel[1/]	150'L x 12'W x 8"D	45 CY (58.5 CY)[2/]	See 3.2 Above
5172 (MP 1.23)	Local Borrow	Excavate Right. Place over culvert after installation.	75 CY	See 3.2 Above
5172 (MP 0.00 – 0.83)	Pit Run Gravel[1/]	**To Be Placed as Directed by USFS (Prehaul/Recurring Road Maintenance).**	75 CY (97.5 CY)[2/]	See 3.2 Above

1/ County Line Lake 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.

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.**

SAMPLE CONTRACT

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.

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.

SAMPLE CONTRACT

Road Number	Location	Remove/Install	Type of Structure	Size	Quantity
5172	MP's 0.00 – 0.02	Install	Radius Ditch, Right	As Directed [2/]	One
5172	MP's 0.26 – 0.30	Install	Radius Ditch, Left	[2/]	One
5172	MP 0.28	Install	Culvert[1/]	18" x 30'	One
5172	MP's 0.38 – 0.40	Install	Off Take Ditch, Right	[2/]	One
5172	MP's 0.46 – 0.50	Remove/Dispose	Wooden Culvert	Existing	One
5172	"	Install	Ditches, Left & Right	[2/]	Two
5172	MP 0.48	Install	Culvert[1/]	30" x 30'	One
5172	MP's 0.62 – 0.64	Restore	Ditches, Left & Right	[2/]	Two
5172	MP 0.63	Install	Culvert[1/]	15" x 24'	One
5172	MP's 0.75 – 0.78	Install	Off Take Ditch, Left	[2/]	One
5172	"	Install	Hardened Dip[2/]	12'W x 30'L	One
5172	"	Install	Geotextile Fabric[3/]	15'W x 30'L	50 Sq. Yds.
5172	MP's 1.20 – 1.23	Install	Ditches, Left & Right	[2/]	Two
5172	"	Install	Culvert[1/], Skewed Left Hand Forward	18" x 30'	One

[1/] **High Density Smooth Lined Double Walled Polyethylene Drainage Culvert**

[2/] **Per Typical Drawing**

[3/] **Equal to or greater than US 205 Nonwoven 8 oz**

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.

T-8350 Roadway Drainage Maintenance

DESCRIPTION

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

SAMPLE CONTRACT

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.

T-8360 Composite High Clearance Road Maintenance

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.

SAMPLE CONTRACT

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.
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.

SAMPLE CONTRACT

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-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.

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.

LORAX STEWARDSHIP ROAD MAINTENANCE REQUIREMENTS

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

WO-KT-FT.3.1# Special Provisions

SAMPLE CONTRACT

Road Number	Road Name	Location	Remove/Install	Type of Item	Size	Quantity
5134	5134	1/	Maintain	Gate	3' x 20'	1
5172	5172	2/	Install	Berm	3/	1
5172-A	5172-A	2/	Install	Berm	3/	1

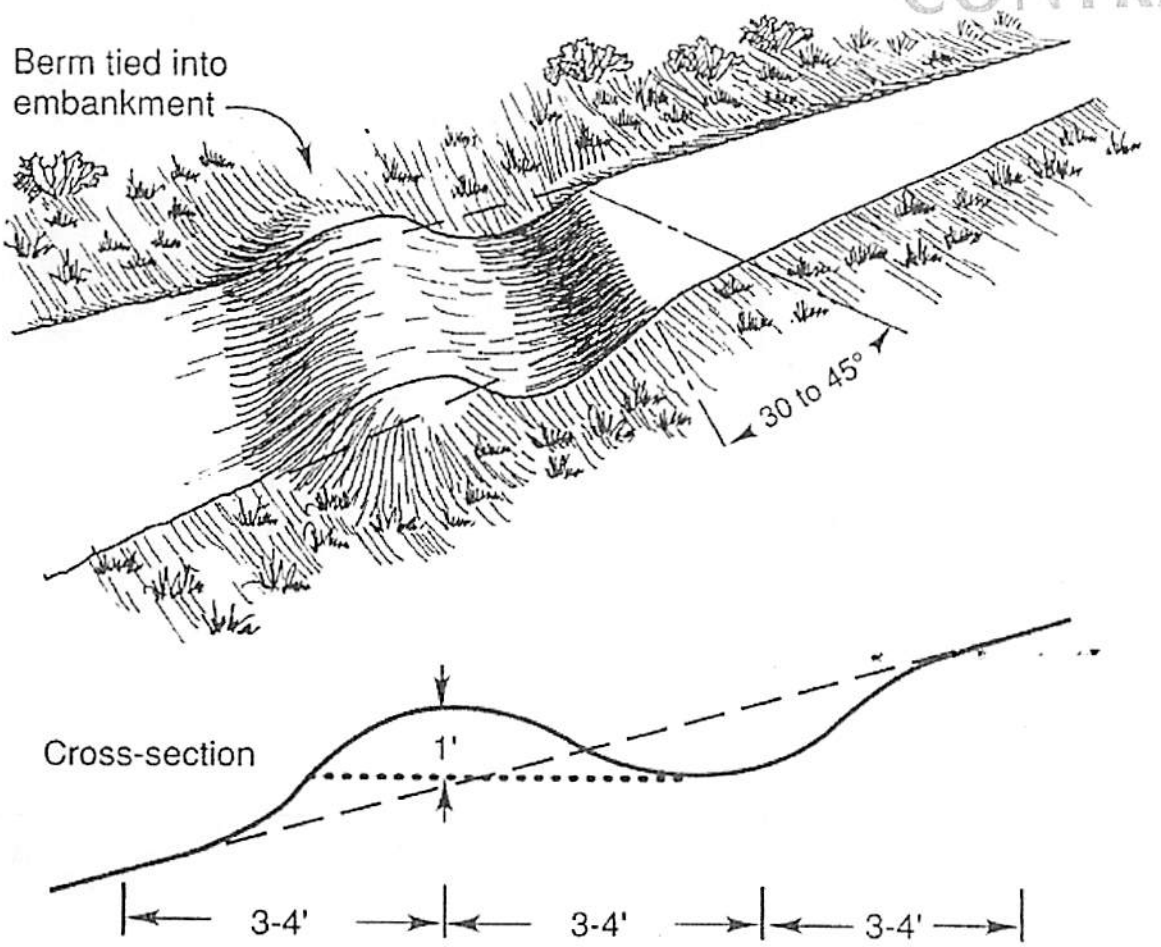
1/ **Shown on Contract Area Map**

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)



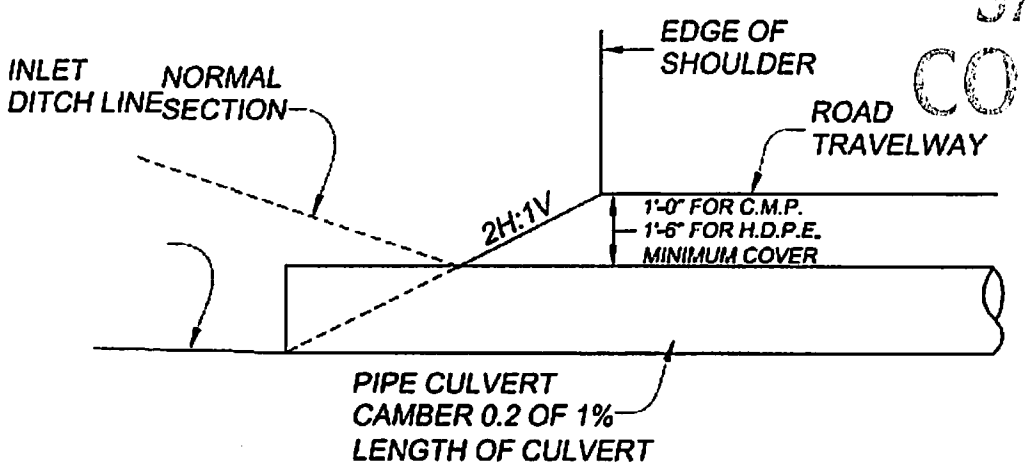
Earth berm/water bars are narrow, earthen ridges built across roads or trails. They divert water off and away from roads or trails into vegetated areas before it causes erosion. When properly built, they prevent exposed soil from moving, protecting the area until grass vegetation is firmly established.

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.

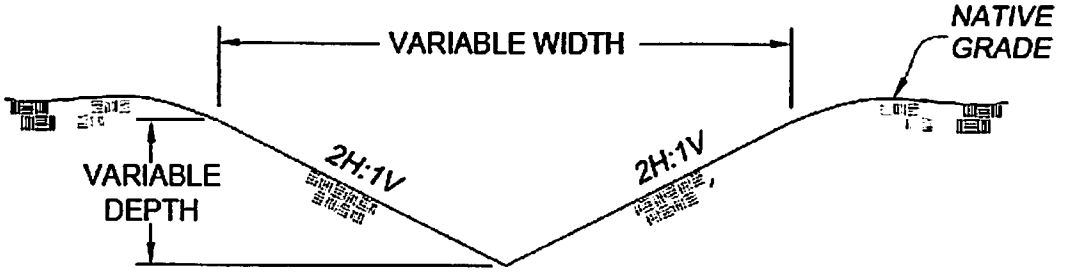
Dig a trench, 12 to 18 inches below the surface of the road or trail, and extend it beyond both sides of the road or trail to prevent runoff from bypassing the water bar. The uphill end of the water bar should extend beyond the side ditch of the road and into an earth-berm to fully intercept any ditch 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.

SAMPLE CONTRACT



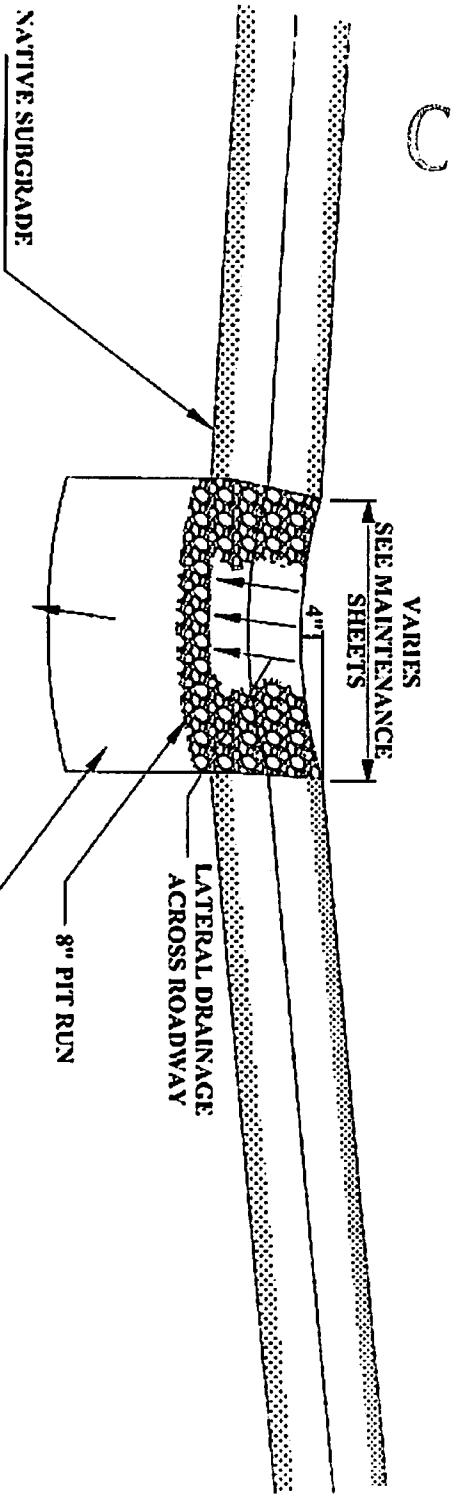
TYPICAL DITCH SECTION AT CULVERT INLET
NOT TO SCALE



TYPICAL INLET AND OUTLET DITCH SECTION
NOT TO SCALE

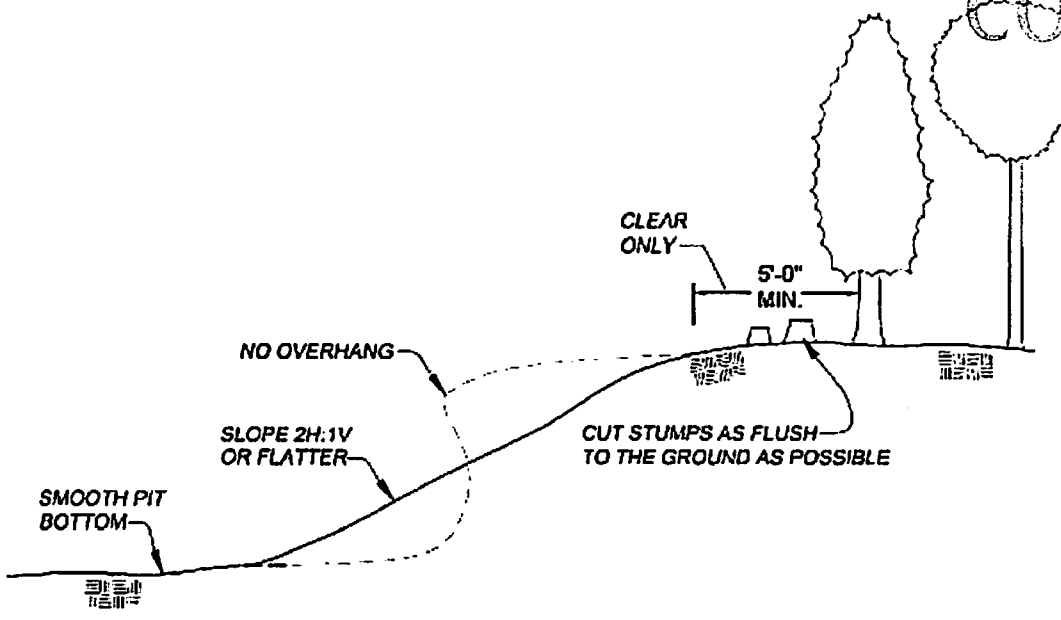
SAMPLE CONTRACT

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.

SAMPLE
CONTRACT



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

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

SAMPLE CONTRACT

PROJECT SPECIFICATIONS INDEX:

Project Name	Page #
1-006 & 1-008 Wildlife Habitat Improvement-Denning Brushpile Construction	SP-2
2-006 & 2-008 Aspen Site Preparation	SP-3 thru SP-4
3-001 Wildlife Habitat Improvement-Alder/Aspen Regeneration Patch Clearing	SP-5 thru SP-6

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

Wildlife Project- Brushpile Construction

SAMPLE CONTRACT

Project #	#Piles Within Payment Unit	PU Acres	Mandatory/Optional
1-006*	5	50	Mandatory
1-008*	2	21	Mandatory

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

Objective: Brushpiles provide potential denning sites for Canada Lynx and 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 edge of 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.

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

SAMPLE CONTRACT

Aspen Site Preparation

Project #	Payment Unit	Acres	Mandatory/Optional
2-006	6	50	Optional
2-008	8	21	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, SERVICEBERRY (Amelanchier spp.) or ORANGE PAINT-BANDED TREES.

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.

SAMPLE CONTRACT

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.

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

Wildlife Project- Alder/Aspen Regeneration Patch Clearing

SAMPLE CONTRACT

Project #	Item	Unit of Measure	Quantity	Mandatory/Optional
3-001	Tree and Shrub Felling	Each	15 patches, approximately 13 acres total	Optional

Habitat Objective: Cut existing woody vegetation to facilitate regeneration of alder, aspen and wildlife shrubs such as hawthorn, high-bush cranberry and cherry.

Specifications

1. **Time Restrictions:** No cutting is allowed from May 1- July 15 to protect nesting birds. Work can be done before, during, or after commercial timber harvesting in adjacent payment units.

2. **Prework:** Prior to beginning work, Contractor shall schedule and conduct pre-work meeting with Wildlife staff person (COR) to review contract specifications, obtain maps, and to answer any questions Contractor might have.

3. **Transportation:** Transportation by highway legal or off-highway vehicles is only allowed on designated roads as shown on sale maps.

4. **Location:** The patches are south and southwest of the western portion of Payment Unit 6. Each patch is between 100 to 350 feet away from the boundary of Payment Unit 6. GPS file of coordinates (decimal degrees) of each patch center are provided in a table below.

5. **Identification:** The center point for each alder cutting patch has been painted with a PINK NUMBER on a tree, each number represents the identifier (#s 2 thru 16) and PINK-FLAGGING.

6. **Clearing Dimensions:** Patches shall be cut with a 110-foot radius around the marked plot center. Note: 110-foot radius circle is slightly less than 0.9 acre (approximately 40,000 square feet). Cut areas may be circular or square (200 feet by 200 feet) in shape around the center point. As long as the cut area is about 40,000 square feet.

7. **"Widow-makers":** No tops shall be left hanging in other standing trees or shrubs. Contractor will flag with "killer tree" flagging and leave standing any trees which are unsafe to fell or unsafe for workers and inspectors.

8. **Shrubs and Trees to Cut:** All trees and shrubs taller than 3 feet in height shall be completely severed from the stump. **Except:** To the extent practical, hawthorn (crab apples) and high-bush cranberry bushes should be reserved from cutting, and live or dead nesting/cavity trees (see #9).

SAMPLE CONTRACT

9. **Live or Dead Nesting/Cavity Trees:** Retain all standing live or dead nesting/cavity trees (trees with cavities, crevices, trees that show signs of mortality, such as obvious dead branches, or older trees with exfoliating bark that maybe used for wildlife denning or roosting). These may be felled if contractor considers them to be unsafe.

10. **Equipment Restrictions:** Heavy equipment or vehicles are not allowed for the tree and shrub cutting, or for transportation to or between these patches, in order to protect soil and water resources. **Hand tools only must be used for all tree and shrub cutting.** This may include (but is not limited to) chainsaws, brush saws, hand saws, etc.

11. **Stumps:** Maximum stump height shall be 12" and cut angle of stumps shall not exceed 20 degrees from horizontal.

12. **Slash:** Cut material (felled trees and slash) can be left scattered within the cutting area, or be felled on top of other felled trees and shrubs, either for ease of operation or to form large brush piles for wildlife denning. If brushpiles are created, the total amount of brushpiles must not cover more than a 20% of the newly created opening.

Performance Assessment Methods

Minimum Acceptable Level: 90% on each patch, on all listed specifications

Method of Performance Assessment: Contractor's records and COR's reports, and field verification by Wildlife COR or designated Inspector.

GPS Coordinate Table

Patch ID Number*	Latitude	Longitude
2	46.34053	-89.40664
3	46.34075	-89.40694
4	46.34072	-89.40754
5	46.34068	-89.40805
6	46.34052	-89.40855
7	46.34051	-89.40951
8	46.34037	-89.41000
9	46.33935	-89.41182
10	46.33969	-89.41276
11	46.33956	-89.41333
12	46.33989	-89.41347
13	46.34016	-89.41282
14	46.34058	-89.41291
15	46.34108	-89.40774
16	46.34128	-89.40726

*The patch number GIS ID # 1 does not exist; the 15 total patches begin with # 2.
Note: Map Datum for GPS coordinates is NAD83, Zone 16N.

SAMPLE CONTRACT

LORAX STEWARDSHIP PROJECT

SPECIFIED ROAD NOTES

NOTE: All finished roadbeds shall be 12' as shown in the typical details for crowned roads with no ditches, 1' ditches and out sloped roads.

NOTE: In the narrative compacted and loose volumes are noted with loose volumes in parenthesis.

NOTE: There may be underground utility lines in unknown locations on this project. **Call MISS DIG** THREE full working days before any work begins. Phone 1-800-482-7171

NOTE: Reconstructed roads have areas that need shaping to allow for cross drainage. When working in locations with high rock content shaping may have to be reduced due to lack of available soil/surface conditions.

NOTE: Winter standard typical roads shall be built to minimize soil disturbance and potential erosion, and allow for proper cross drainage.

NOTE: During clear and grub operations all slash resulting from purchasers operation shall be treated as per **KT-GT.7#.**

LORAX STEWARDSHIP PROJECT
SPECIFIED ROAD SCHEDULE OF ITEMS

Item Number	Item Description & Milepost	C or R[1]	Unit & M of M[2]	Quantity	Road Std. (W,D,S)[3]	Unit Allowance	Estimated Allowance
	FR 5172	**R**					
	M.P. 0.83 - 1.14				**W**		
249 (02)	Composite Road Construction. Reconstruct road to crown or outslope to match winter typical drawing to allow for cross drainage. Widen curve radius right.		DQ Mile	0.31		3800	$ 1,178.00
	FR 5172 Specified Road Total						**$ 1,178.00**
	FR 5172-A1				**W**		
	M.P. 0.00 - 0.11	**C**					
249 (02)	Composite Road Construction. Construct new road to crown or outslope to match winter typical drawing to allow for cross drainage.		DQ Mile	0.11		7000	$ 770.00
	M.P. 0.11 - 0.34	**R**					
249 (02)	Composite Road Construction.Reconstruct road to crown or outslope to match winter typical drawing to allow for cross drainage.		DQ Mile	0.23		3800	$ 874.00
	FR 5172-A1 Specified Road Total						**$ 1,644.00**
	GRAND TOTAL Lorax Specified Road Schedule of Items						**$ 2,822.00**

SAMPLE
CONFIRM

[1]C = Construction, R = Reconstruction
[2]Method of Measure
[3]W = Winter, D = Dry Summer, S = Summer

Prepared by Alan Pekkala 5-22-2014
Civil Engineering Technician

SUPPLEMENTAL SPECIFICATIONS

SAMPLE CONTRACT

Section 101-109 General Requirements

Section 249 Composite Road Construction

Specification List

SAMPLE CONTRACT

Project Name: **Lorax Stewardship**

Date Prepared: **5/22/2014**

Road Number: **FR 5172** **FR 5172-A1**			**5172**	**5172-A1**	
Road Name:		Termini.....	Miles	Miles	
		Const.		0.11	
		Reconstruction	0.31	0.23	
Spec. No.	**Title**				Latest Revised Edition
101 thru 109	General Requirements		X	X	2003

NOTE: The Forest Service, US Department of Agriculture has adopted FP-03 for construction of National Forest System Roads.

SUPPLEMENTAL SPECIFICATION

SAMPLE CONTRACT

PREFACE

Delete all but the first paragraph and add the following:

The Forest Service, US Department of Agriculture has adopted FP-03 for construction of National Forest System Roads.

SAMPLE CONTRACT

SUPPLEMENTAL SPECIFICATION

Section 101 – TERMS, FORMAT, AND DEFINITIONS

101.01 Meaning of Terms.

Add the following:

Delete all references in FP-03 to Transportation Acquisition Regulations (TAR). For Timber Sales, delete all references in FP-03 to Federal Acquisition Regulations (FAR).

101.03 Abbreviations.

Add the following to (a) Acronyms:

AFPA	American Forest and Paper Association
MSHA	Mine Safety and Health Administration
NIST	National Institute of Standards and Technology
NESC	National Electrical Safety Code
WCLIB	West Coast Lumber Inspection Bureau

Add the following to (b) SI Symbols:

mp	Milepost
ppm	Part Per Million

101.04 Definitions.

Delete the following definitions and substitute the following:

Bid Schedule--The Schedule of Items.

Bridge--No definition.

Contractor--The individual or legal entity contracting with the Government for performance of prescribed work. In a timber sale contract, the contractor is the "purchaser".

Culvert--No definition.

SAMPLE CONTRACT

Right-of-Way--A general term denoting (1) the privilege to pass over land in some particular line (including easement, lease, permit, or license to occupy, use, or traverse public or private lands), or (2) Real property necessary for the project, including roadway, buffer areas, access, and drainage areas.

Add the following:

Adjustment in Contract Price--"Equitable adjustment," as used in the Federal Acquisition Regulations, or "construction cost adjustment," as used in the Timber Sale Contract, as applicable.

Change--"Change" means "change order" as used in the Federal Acquisition Regulations, or "design change" as used in the Timber Sale Contract.

Design Quantity-- "Design quantity" is a Forest Service method of measurement from the FS-96 *Forest Service Specifications for the Construction of Roads and Bridges.* Under these FP specifications this term is replaced by the term "Contract Quantities".

Forest Service--The United States of America, acting through the Forest Service, U.S. Department of Agriculture.

Neat Line--A line defining the proposed or specified limits of an excavation or structure.

Pioneer Road--Temporary construction access built along the route of the project.

Purchaser--The individual, partnership, joint venture, or corporation contracting with the Government under the terms of a Timber Sale Contract and acting independently or through agents, employees, or subcontractors.

Protected Stream course--A drainage shown on the plans or timber sale area map that requires designated mitigation measures.

Road Order--An order affecting and controlling traffic on roads under Forest Service jurisdiction. Road Orders are issued by a designated Forest Officer under the authorities of 36 CFR, part 260.

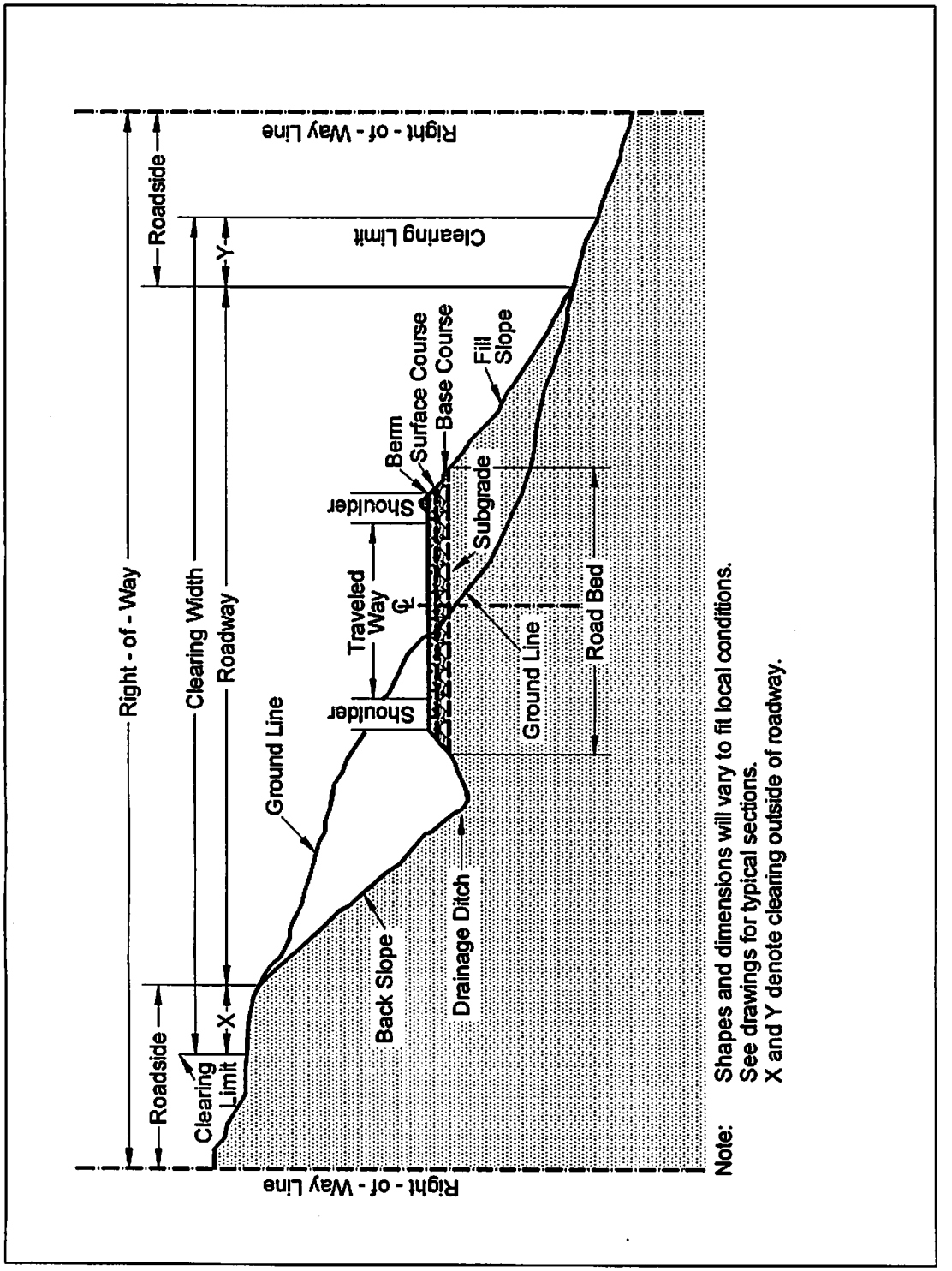
Schedule of Items--A schedule in the contract that contains a listing and description of construction items, quantities, units of measure, unit price, and amount.

Utilization Standards--The minimum size and percent soundness of trees described in the specifications to determine merchantable timber.

Add Figure 101-1—Illustration of road structure terms:

SAMPLE
CONTRACT

Figure 101-1—Illustration of road structure terms.



CONTRACT

SUPPLEMENTAL SPECIFICATION

Section 102 – BID, AWARD, AND EXECUTION OF CONTRACT

102 Delete

Delete Section 102 in its entirety.

SUPPLEMENTAL SPECIFICATION

Section 103 – SCOPE OF WORK

103 Delete

Delete all but subsection 103.01 Intent of Contract.

SUPPLEMENTAL SPECIFICATION

Section 105- CONTROL OF MATERIAL

105.02 Material Sources.

105.02(a) Government Provided Sources.

Add the following:

Comply with the requirements of 30 CFR 56, subparts B and H. Use all suitable material for aggregate regardless of size unless otherwise designated. When required, re-establish vegetation in disturbed areas according to section 625.

Government-provided optional sources for this project are identified as follows:

Material is available for use as (Borrow/pitrun surfacing material) as needed for the project from County Line Lake Pit, T45N, R40W, Sec2.

There is no charge for material taken from these pits for use on this project.

SAMPLE CONTRACT

105.05 Use of Material Found in the Work.

Delete 105.05 (a) and (b) and the last sentence of the second paragraph and substitute the following:

Materials produced or processed from Government lands in excess of the quantities required for performance of this contract are the property of the Government. The Government is not obligated to make reimbursement for the cost of producing these materials.

SUPPLEMENTAL SPECIFICATION

Section 106- ACCEPTANCE OF WORK

106.07 Partial and Final Acceptance.

Delete subsection 106.07

SUPPLEMENTAL SPECIFICATION

Section 107- LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

107.05 Responsibility for Damage Claims.

Delete the entire subsection.

107.09 Legal Relationship of the Parties.

Delete the entire subsection.

SUPPLEMENTAL SPECIFICATION

Section 108- PROSECUTION AND PROGRESS

Delete Section 108 in its entirety.

SAMPLE
CONTRA

SUPPLEMENTAL SPECIFICATION

Section 109- MEASUREMENT AND PAYMENT

109.02 Measurement Terms and Definitions

Add: One of the following methods of measurement for determining final payment is DESIGNATED on the SCHEDULE OF ITEMS for each pay item:

(a) Designated Quantities (DQ). These quantities denote the final number or units to be paid for under the terms of the contract. They are based upon the original design data available prior to advertising the project. Original design data include the preliminary survey information, design assumptions, calculations, drawings, and the presentation in the contract. Changes in the number of units SHOWN in the SCHEDULE OF ITEMS may be authorized under any of the following conditions:

(1) As a result of changes in the work authorized by the Contracting Officer.

(2) As a result of the Contracting Officer determining that errors exist in the original design that cause a pay item quantity to change by 15 percent or more.

(3) As a result of the contractor submitting to the Contracting Officer a written request showing evidence of errors in the original design that cause a pay item quantity to change by 15 percent or more. The evidence must be verifiable and consist of calculations, drawings, or other data that show how the designated quantity is believed to be in error.

(b) Staked Quantities (SQ). These quantities are determined from staked measurements prior to construction.

(c) Actual Quantities (AQ). These quantities are determined from measurements of completed work.

(d) Vehicle Quantities (VQ). These quantities are measured or weighed in hauling vehicles.

(e) Lump Sum Quantities (LSQ). These quantities denote one complete unit of work as required by or described in the contract, including necessary materials, equipment, and labor to complete the job. They will not be measured.

SAMPLE CONTRACT

Quantity Measurements. The Forest Service shall make all measurements for computation of quantities for all work items except those specified for payment by Design Quantity (DQ). The Engineer shall compute the quantities for periodic payments and for final payment.

The Contractor shall certify in writing at the completion of contract work, that the quality of construction conforms to the drawings, specifications, and requirements of the Contract.

109 Deletions

Delete the following entire subsections:

109.06 Pricing of Adjustments.
109.07 Eliminated Work.
109.08 Progress Payments.
109.09 Final Payment.

SUPPLEMENTAL SPECIFICATION

Section 249. – COMPOSITE ROAD CONSTRUCTION

Description

249.01 This work consists of clearing and grubbing, excavation and embankment, and removal of all construction slash including all trees designated for removal. Excavation and embankment includes on site borrow excavation; drainage excavation; placing all excavated material; and shaping the roadway; including approaches, turnarounds, ditches and drainage dips. Construct the roadway in conformance with the dimensions "shown on the plans" or as staked on the ground.

Construction Requirements

249.02 Clearing & Disposal

Protect construction stakes and construction control markers. Remove or treat all trees, snags, downed timber, brush, and stumps within the clearing limits according to the following specifications.

(a) Merchantable Timber. Treat according to the Utilization Standards of the Timber Sale Contract.

SAMPLE CONTRACT

(b) Unmerchantable Timber. Treat according to Subsection 249.02 Method A.

(c) Large Construction Slash. Treat construction slash larger than 3 inches in diameter and longer than 3 feet by one or more of the following methods.

(1) Method A. Construction slash shall be scattered outside the clearing limits without damaging trees outside the clearing area. Logs shall be placed away from trees, positioned so that they will not roll, not placed on top of one another or left leaning on other trees. Scattered stumps shall be placed in an upright position.

(2) Method B. Stumps, roots, rocks, topsoil and other grubbing debris shall be concentrated in stump dump areas. Stump dump areas shall be located by the Engineer, be a maximum of 300 feet apart along the road centerline, and generally be located in natural depressions or tucked away behind denser vegetation or ground rises. Stump dumps will vary in size depending on each site, but shall not be closer than 10 feet outside of the clearing limits. Stump dump material shall be matted down as much as possible and shall not obstruct natural drainages.

(d) Small Construction Slash. Construction slash less than 3 inches in diameter and less than 3 feet in length may be incorporated into embankments so long as the material is distributed so that it does not result in concentrations or matting.

Immediately remove slash deposited in stream courses.

249.03 Pioneering.

Do not undercut the final back slope during pioneer operations. Deposite material inside the roadway limits. Do not restrict drainages.

249.04 Grubbing.

Grub within the specified limits. Stumps outside the grubbing limits remain if cut no higher than 1 foot or one-third of the stump diameter, whichever is greater, above the original ground, measured on the uphill side, unless otherwise designated. Grub all stumps from the Roadway, or stumps that have less than 1 foot of cover, in the Fill slopes, providing they do not interfere with the placement or compaction of embankments.

249.05 Excavation and Embankment.

Construct the roadway to conform to the typical sections shown on the plans.

SAMPLE CONTRACT

Protect backslopes from being undercut. Embankment shall be placed in layers no more than 12 inches thick.

Locate and use borrow material, and remove and treat unsuitable excess material, as designated.

Place rocks that are too large to be incorporated in the embankment outside the traveled way on the downhill side such that they will not roll, obstruct drainage, or hinder roadbed use and maintenance.

Shape and finish the roadbed to the condition ordinarily accomplished by a crawler tractor with dozer blade to provide drainage of surface water. Do not permit individual rocks to protrude more than 4 inches above the subgrade of the roadbed. A motor grader finish is not required.

Observe a width tolerance of (+) 18 inches max. for the roadbed.

Where shown on the drawings or designated on the ground, offtake ditches shall be constructed to drain water away from the roadbed.

249.06 Erosion Control.

Perform erosin control measures, where shown on the drawings, or staked on the ground.

Measurement

249.07 Method.

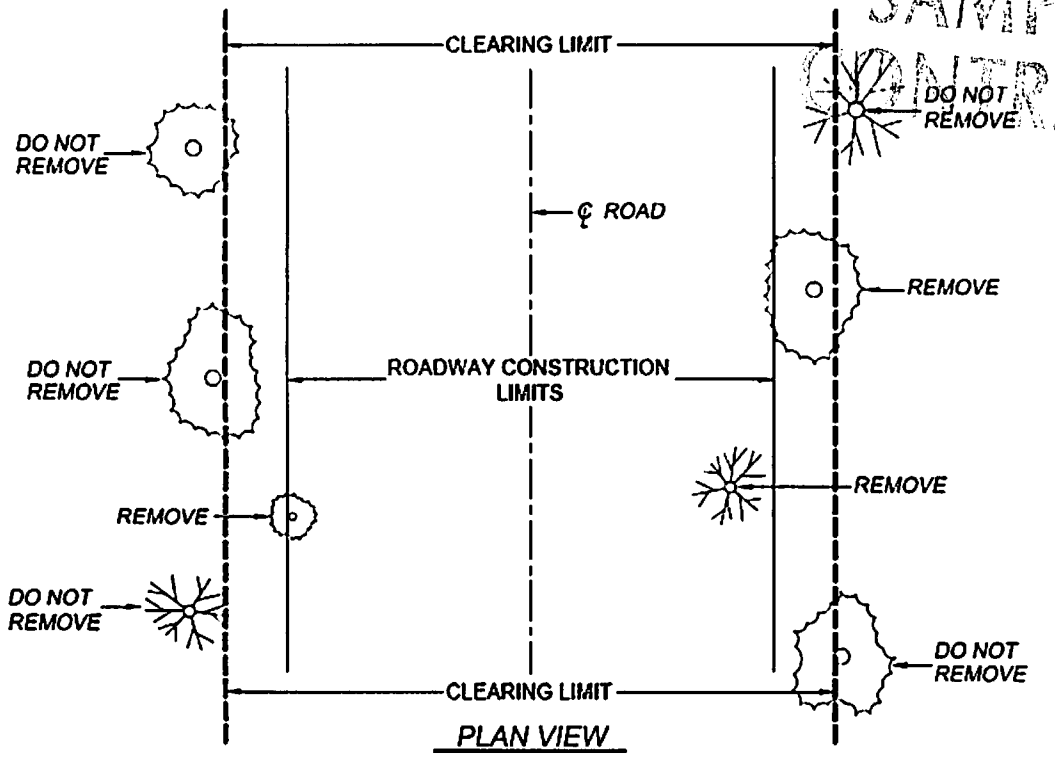
Measure the section 249 items listed in the schedule of items according to subsection 109.02

Payment

249.08 Basis.

The accepted quantities will be paid at the contract price per unit of measurement for Section 249 pay items listed in the Bid Schedule. Payment will be full compensation for the work prescribed in this section. See Subsection 109.05

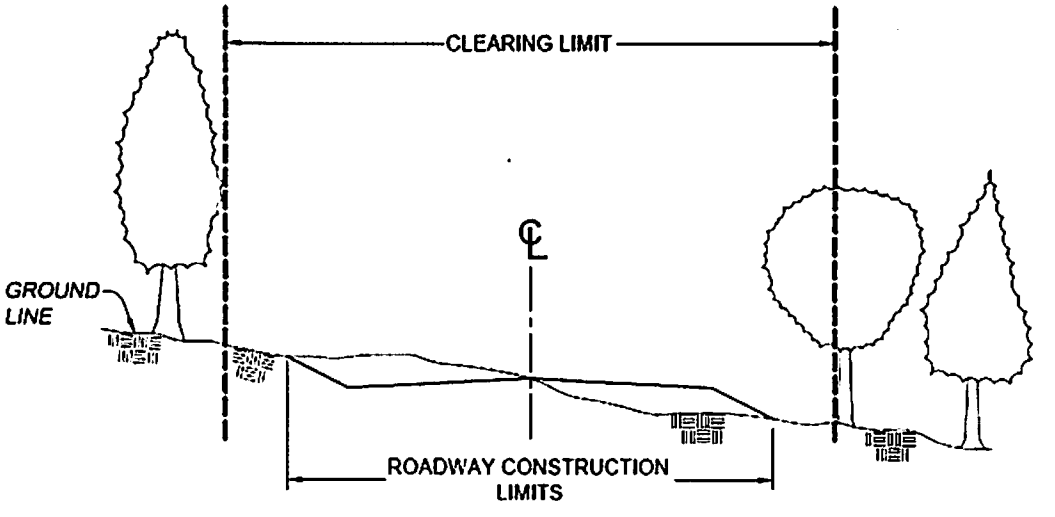
SAMPLE CONTRACT



PLAN VIEW

NOTE: TREES ON THE CLEARING LIMIT LINE ARE TO REMAIN UNLESS OTHERWISE DESIGNATED BY THE ENGINEER.

NOTE: YELLOW PAINT INDICATES TREES TO BE REMOVED.

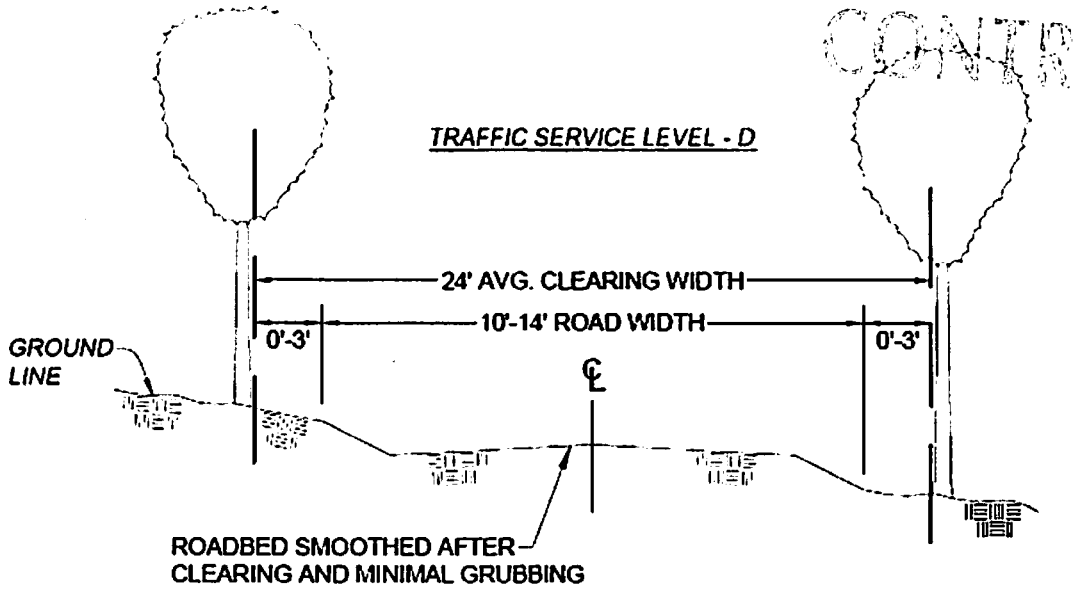


CROSS SECTION VIEW

CONSTRUCTION STAKING

NOT TO SCALE

SAMPLE
CONTRACT

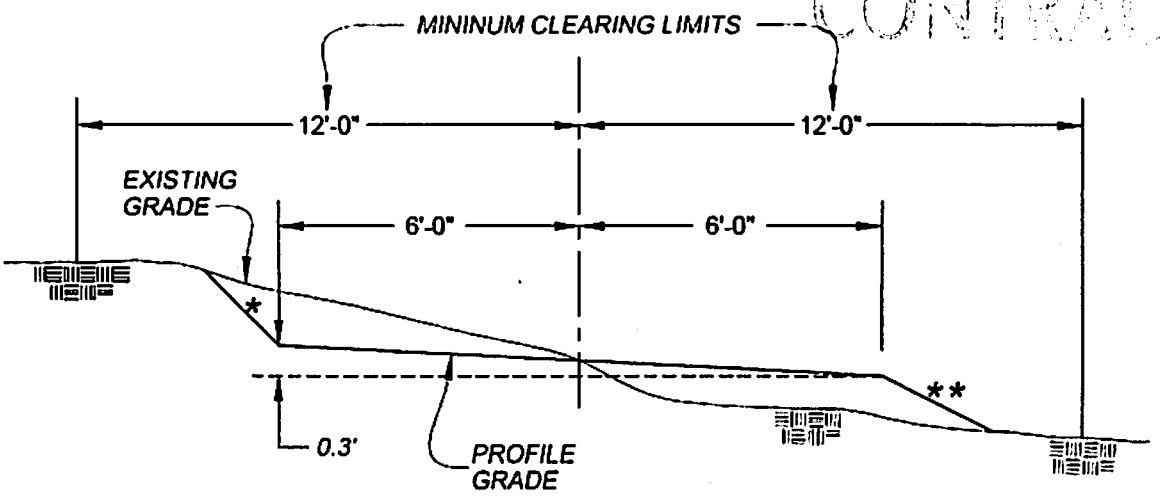


CROSS SECTION VIEW

WINTER ONLY ROAD STANDARD

NOT TO SCALE

SAMPLE
CONTRACT



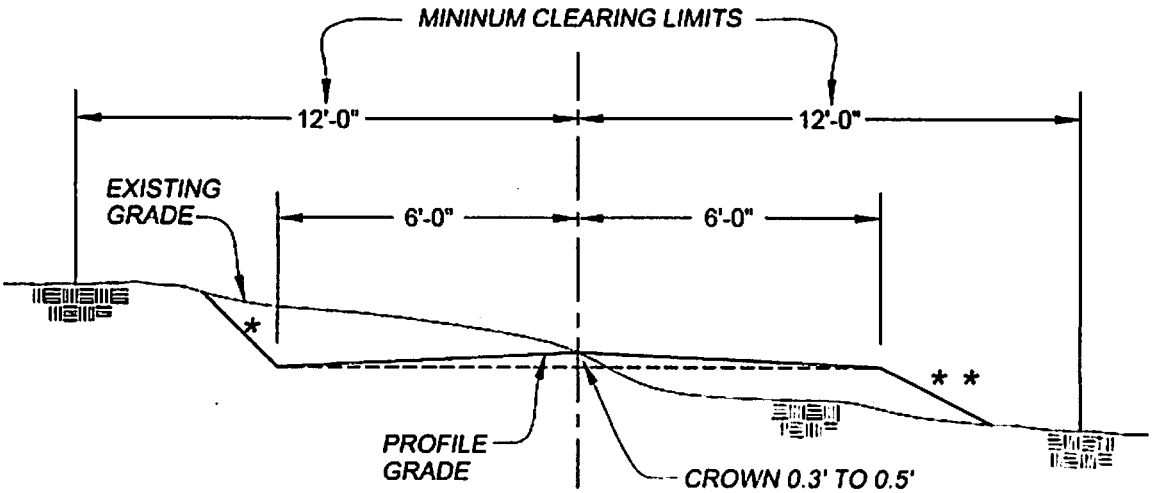
CUT SECTION FILL SECTION

TYPICAL OUTSLOPE DETAIL

NOT TO SCALE

*BACKSLOPE AND DITCH SLOPES MAY VARY FROM 1H:1V TO 2H:1V WHEN CUTS ARE UNDER 2 FT. CUTS OVER 2 FT. SHALL HAVE SLOPES OF 2H:1V

**FILL SLOPES MAY VARY FROM 1-1/2H:1V TO 3H:1V

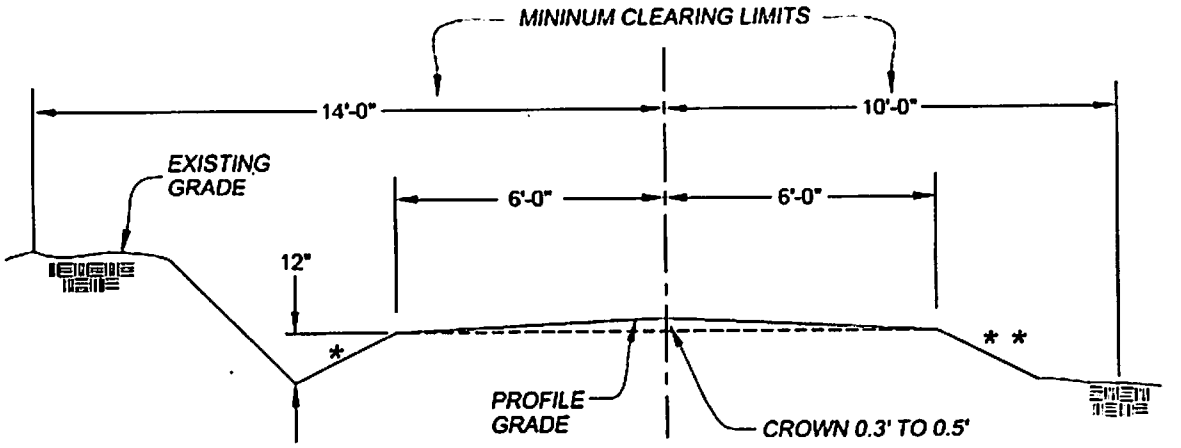


CUT SECTION FILL SECTION

TYPICAL CROSS SECTION CROWN NO DITCHES

NOT TO SCALE

SAMPLE
CONTRACT



DITCH SECTION FILL SECTION

*BACKSLOPE AND DITCH SLOPES MAY VARY FROM 1H:1V TO 2H:1V WHEN CUTS ARE UNDER 2 FT. CUTS OVER 2 FT. SHALL HAVE SLOPES OF 2H:1V

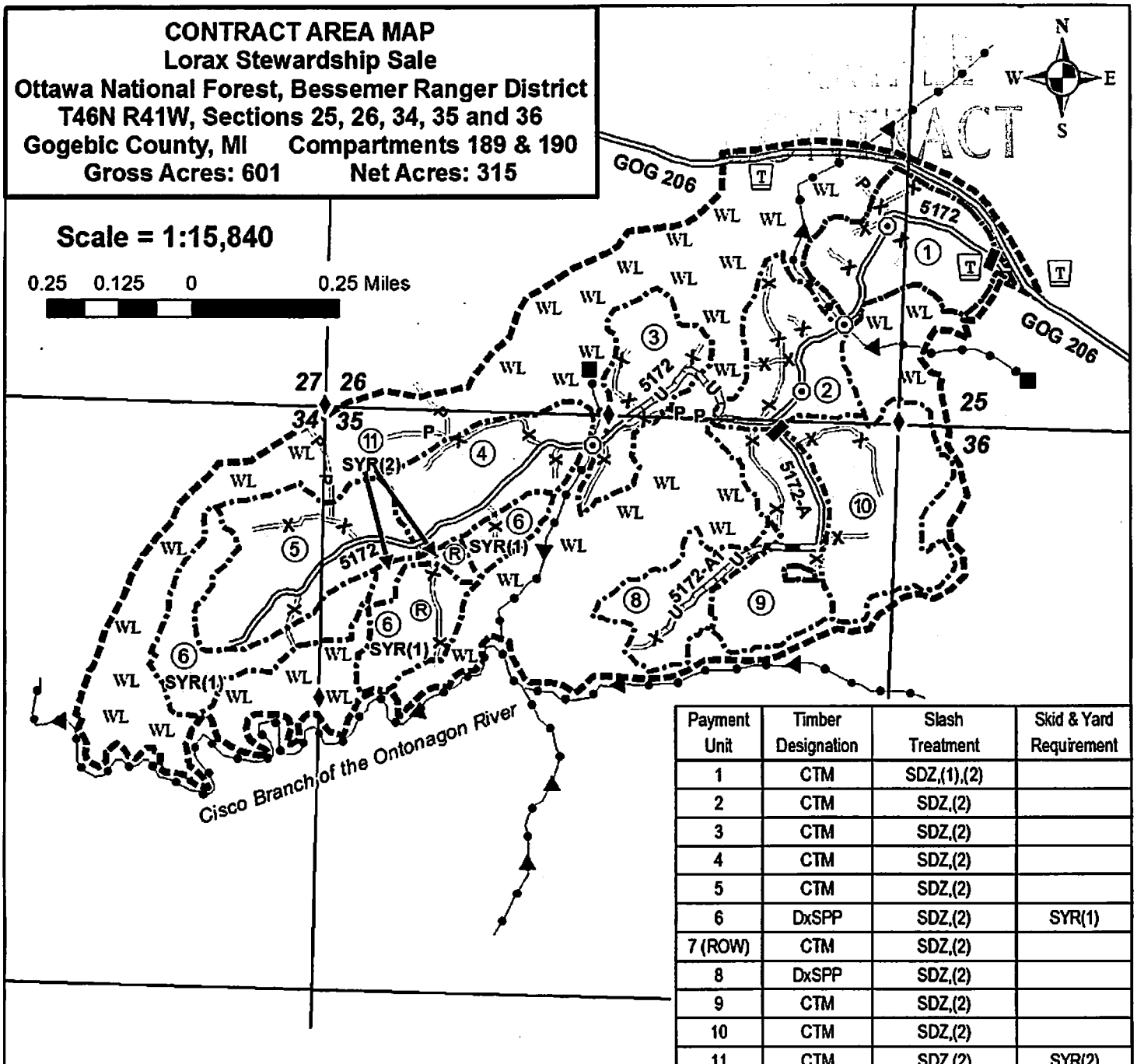
**FILL SLOPES MAY VARY FROM 1-1/2H:1V TO 3H:1V

(SEE NARRATIVE FOR LOCATION)

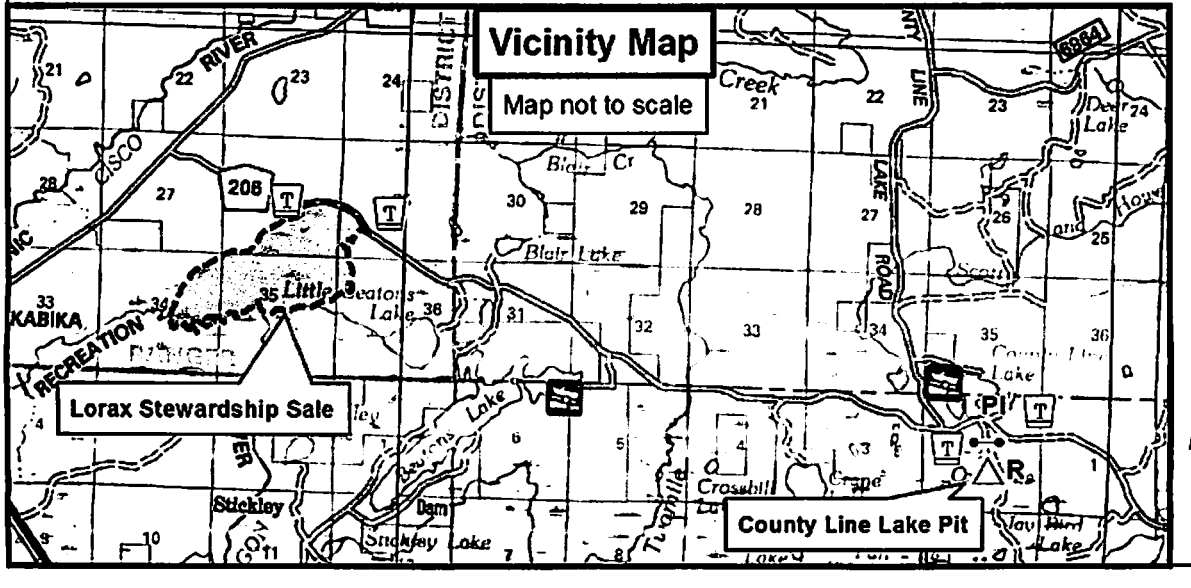
TYPICAL CROSS SECTION WITH 1 FOOT DITCH

NOT TO SCALE

CONTRACT AREA MAP
Lorax Stewardship Sale
Ottawa National Forest, Bessemer Ranger District
T46N R41W, Sections 25, 26, 34, 35 and 36
Gogebic County, MI Compartments 189 & 190
Gross Acres: 601 Net Acres: 315



Payment Unit	Timber Designation	Slash Treatment	Skid & Yard Requirement
1	CTM	SDZ,(1),(2)	
2	CTM	SDZ,(2)	
3	CTM	SDZ,(2)	
4	CTM	SDZ,(2)	
5	CTM	SDZ,(2)	
6	DxSPP	SDZ,(2)	SYR(1)
7 (ROW)	CTM	SDZ,(2)	
8	DxSPP	SDZ,(2)	
9	CTM	SDZ,(2)	
10	CTM	SDZ,(2)	
11	CTM	SDZ,(2)	SYR(2)



R C Powell 6/18/2014

Lorax Stewardship Contract Map

SAMPLE CONTRACT

Legend

— — —	Sale Area Boundary, BT.1
—·—·—	Payment Unit Boundary, BT.1
(1)	Payment Unit Number, BT.1
DxSPP	Designation by Species and Diameter, KT-CT.3.5.2#
CTM	Cut Tree Marked Prior to Advertisement, CT.3.5, KT-CT.3.5.5#, GT.4.1.2
═══	Existing Transportation System Road, FT.1
-P-P-P-	Existing Road, Hauling Prohibited, FT.1.2, KT-FT.1.2#
-X-X-X-	Existing Road, Use Prohibited, FT.1.2, KT-FT.1.2#
-R-R-R-	Existing Road, Use Restricted, FT.1.2, KT-FT.1.2#
-U-U-U-	Existing Road, Unsuitable for hauling prior to agreed reconstruction, FT.1.2, KT-FT.1.2#
	Specified Road Construction, AT.7, AT.8, FT.2, GT.2.2, GT.2.2.2, GT.3.6.1, Schedule of Items
	Specified Road Reconstruction, AT.7, AT.8, FT.2, GT.2.2, GT.2.2.2, GT.3.6.1, Schedule of Items
⊙	Maintenance Drainage Structure, Purchaser Install Culverts (4), FR 5172, KT-FT.3.1#, T-8340
	Contractor Install Berms FRs 5172 and 5172-A, FT.3, KT-FT.3.1#, T-8620
-PI-	Protect Improvement (Gate – FR 5134, County Line Lake Pit Road), GT.2.2, KT-FT.1.2#
®	Reserve Trees, GT.3.2, KT-GT.2.3#
	Streamcourse Protection, Block Marks Upper Limit, Arrow Indicates Flow Direction, GT.5
SYR(1)	Skidding and Yarding Requirements, Payment Unit 6, KT-GT.4.2#
SYR(2)	Skidding and Yarding Requirements, Payment Unit 11, KT-GT.4.2#
WL	Wetland Protection, GT.6.2, KT-GT.6.2#
SDZ	Slash Disposal, GT.7, KT-GT.7#
SDZ(1)	Slash Disposal Area, GT.7, KT-GT.7#
SDZ(2)	Slash Disposal Area, GT.7, KT-GT.7#
T	Safety– Purchaser to Provide and Maintain Traffic Control Signs, GT.3.3
♦	Protect Known Survey Monuments, GT.2.3
△	Material Source, Pit-Run Gravel, KT-FT.2.2.1#, (County Line Lake Pit, T45N-R40W, Section 2)

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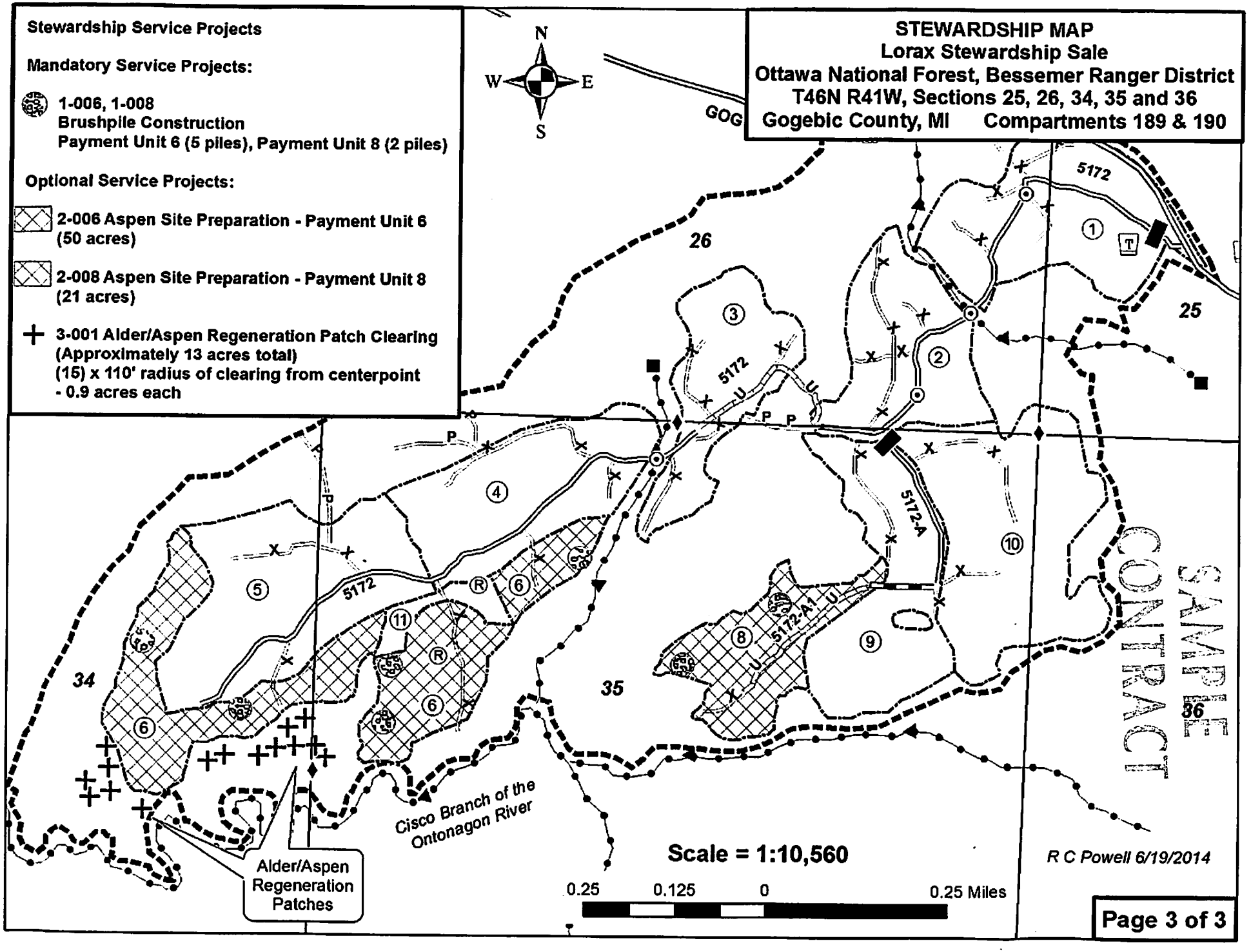
Stewardship Service Projects
Mandatory Service Projects:
1-006, 1-008
Brushpile Construction
Payment Unit 6 (5 piles), Payment Unit 8 (2 piles)
Optional Service Projects:
2-006 Aspen Site Preparation - Payment Unit 6 (50 acres)
2-008 Aspen Site Preparation - Payment Unit 8 (21 acres)
3-001 Alder/Aspen Regeneration Patch Clearing (Approximately 13 acres total) (15) x 110' radius of clearing from centerpoint - 0.9 acres each
STEWARDSHIP MAP
Lorax Stewardship Sale
Ottawa National Forest, Bessemer Ranger District
T46N R41W, Sections 25, 26, 34, 35 and 36
Gogebic County, MI Compartments 189 & 190
N
W
E
S
GOG
26
25
34
35
36
5172
5172-A
5172-A-1
Cisco Branch of the Ontonagon River
Alder/Aspen Regeneration Patches
Scale = 1:10,560
0.25 0.125 0 0.25 Miles
R C Powell 6/19/2014
Page 3 of 3