



MICHIGAN DEPARTMENT OF NATURAL RESOURCES
FOREST, MINERAL AND FIRE MANAGEMENT

TIMBER SALE PRESCRIPTION

GENERAL

Date May 16, 2008	Forest Management Unit Roscommon
Timber Sale Number (if applicable) 71-035-08-01	Sale Name (or prescription name) 193 Oak

LOCAL CONTACT

Telephone Number (989) 275 - 4622	FAX Number (989) 275 - 6203
Name Steve Anderson	Email Address Anderssl@michigan.gov

Map of Project Area Attached

LEGAL DESCRIPTION

T23N R 2E Section(s) 32 & 33 Description SW of the NE of Sec 32 and W1/2 of the SE of the NW of Sec. 33

Year of Entry: 2008 Compartment(s): 193 Stand Number(s): 151 and 164

THIS TIMBER SALE CONTRACT IS BASED ON THE FOLLOWING ACREAGE

Estimated Acres: 43 Source: OI GPS Other _____

Payment will be made on the basis of these estimated acres.

TREATMENT & OBJECTIVE

STAND #	COVER TYPE	ACRES	BA	TREATMENT	MANAGEMENT OBJECTIVE
151	09	35	140	Selection	Oak
164	08	8	140	Selection	Oak

PRESCRIPTION

1. Stand 151 and 164: Mark oak to cut with orange paint. Target residual basal area of Stand 151 is 90 BA. Target residual of Stand 164 is 80 BA. Residual should be composed of healthy crop trees, with the intention of developing larger diameter on those red oak of the highest quality on the site. Cruise all red maple, aspen and those oak marked to remove

Access:

DNR PREPARATION WORK TO BE DONE PRIOR TO CONTRACT WORK	ESTIMATED DATE
Private Boundaries	6/1/08

CONTRACT WORK CAN BEGIN:
 Immediately

CONTRACT WORK MUST BE COMPLETED BY: Date 12/15/2008

PAINT LINE WORK

This is included in the bid This is not included in the bid

Paint line work to be performed: (See attached map for locations)

TYPE OF LINE	WORK TO BE DONE	NOT APPLICABLE	PAINT COLOR	
Private boundary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Blue	<input type="checkbox"/> Other:
Sale boundary	x	<input type="checkbox"/>	x Red	<input type="checkbox"/> Other:
Sale cutting unit	x	<input type="checkbox"/>	x Yellow	<input type="checkbox"/> Other:
Stand type line	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other:

Exclusions to mark and why:

Standards for marking lines against private land:

AREA CALCULATION

This is included in the bid This is not included in the bid

UNIT	METHOD	STANDARD
Sale	<input checked="" type="checkbox"/> GPS <input type="checkbox"/> String Chain <input type="checkbox"/> Other	
Payment Unit	<input checked="" type="checkbox"/> GPS <input type="checkbox"/> String Chain <input type="checkbox"/> Other	
Stand	<input type="checkbox"/> GPS <input type="checkbox"/> String Chain <input type="checkbox"/> Other	

Special Instructions:

TIMBER CRUISING SPECIFICATIONS

This is included in the bid This is not included in the bid

Required Basal Area Factor: 10 20 Other:

Cruise Line Directions: N/S

CRUISING UNITS	1 point per acre	SPACING (CHAINS)
Std 151 (PU 1,2)	1	3 X 3
Std 164(PU 3)	1	3 X 3
		X
		X
TOTAL NUMBER OF CRUISE POINTS	43	

Cruise Special Instructions:

Cruise all species separately, unless otherwise noted at on site meeting with Roscommon Staff
 Residual BA by species should also be recorded at each point
 Cruise data should be separated per Payment Unit with in a particular stand, however-cruise point
 density shown is based on stand acreage, not PU acreage.(prevents over-sampling)

TIMBER MARKING SPECIFICATIONS

This is included in the bid This is not included in the bid

Precise specifications to be delineated at pre-work meeting with DNR staff

Total Residual BA (Basal Area): Std 151=90 (Min 80 to Max 100), Std 164=80 (Min 70 to Max 90)

TREATMENT		NUMBER	SIZE
Regeneration Gaps Per Acre			
Girdled Trees Per Acre		none	
PRODUCT	MARKING SYMBOL	MINIMUM DBH	TOP DIB
Sawlogs	Dot both sides and stump mark	10.0"	9.0"
Pulpwood	Slash both sides and	4.6"	4.0"

TYPE OF WORK	WORK TO BE DONE	NOT APPLICABLE	PAIN T COLOR
Trees marked to leave	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> Green
Trees marked to cut	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Orange <input type="checkbox"/> Other

TALLY INTENSITIES

SPECIES / PRODUCT	
All species / Sawlogs	1 : 1
	1 :
	1 :
	1 :

SPECIES TO FAVOR: Red Oak Maple
SPECIES TO REDUCE: Aspen, Red Maple, and poor formed, high risk oak
SPECIAL MARKING INSTRUCTIONS:
 Mark using "Crop Tree Release" method (see *The Compleat Marker* for more info).
 Retain 1-2 wildlife den trees per acre, when present.
 Retain 1-2 trees of declining vigor for future snag production.
 Regeneration gaps should be placed in areas containing poor quality trees (if possible).

Unless otherwise specified, the tally sheets used must be those provided by the Forest, Mineral and Fire Management Unit.

RESTRICTIONS:

PAINT:

1. Call Dale Ekdorn at (989) 275 - 4622 ext 2741, to make arrangements for paint.
2. Paint will be supplied from Roscommon Field Office.
3. Contractor's work schedule must coincide with the DNR work schedule for paint supply.
4. The DNR will not be available on weekends or evenings.

DELIVERABLES:

1. A list of names that marked or cruised each payment unit, including a Map of this info.
2. A summary of paint used in quarts.
3. Tally summaries for each payment unit (one summary regardless of the number of markers) and all of the original tally sheets.
4. GPS files for any GPS work.

ROSCOMMON MANAGEMENT UNIT
MARKING BOUNDARIES AND AREA

1. The attached type map delineates the contract marking area.
2. Marking must be done in dry weather and when tree surfaces are not wet.
3. Paint the boundary line in such a way that it can be seen both from the inside of the sale area and when walking along the line from either direction (two sides).
4. The Roscommon Management Unit does not contract the marking of private lines on any of our timber sales. Management Unit personnel will mark private lines with blue paint and the contractor will mark remaining stand(s) with red paint so as to obtain complete closure of all stands designated for cutting.
5. If sale is to be divided into cutting units, line location will be as shown on attached map of sale. Cutting lines will be marked with yellow paint on four sides of trees.
6. Place Marks approximately six feet above the base of the tree.
7. The contractor will keep track of total quarts of paint used per-sale by color.
8. Contractor must use GPS to determine acreage.
9. Position Mode must be set so that GPS receiver collects data from a minimum of four satellites and 3D.
10. GPS receiver must log PDOP, SNR, number of satellites, and mode of collection (Manual/GPS).
11. PDOP mask must not exceed 7. This can be modified if approved by the Unit Manager.
12. GPS data must be differentially correct and provided in either ESRI .SHP or Trimble .COR format. Files will contain PDOP(HDOP at the discretion of the Unit Manager), SNR, number of satellites, and mode of collection (Manual/GPS) for each point collected. In addition, supply a disk of traverse file along with hard copy of the corrected traverse file.

ROSCOMMON MANAGEMENT UNIT
TIMBER CRUISING SPECIFICATIONS

1. Cruise at a rate specified in the Timber Sale Preparation Prescription.
2. Use a 10-factor prism for all plots. Plots shall be evenly distributed throughout sale area.
3. Use the product standards to determine products and heights of products. See appendix D of product summary in the "The Compleat Marker: A Guide to Managing Northern Hardwoods on Michigan State Forests".
4. Mark location of plots on the map, using the plot number.
5. Unless otherwise agreed to by the contract administrator and the contractor, plot center will be marked by a stake or stick firmly inserted in the ground (not snow) with ribbon attached to it at a height of not less than two feet above the ground, and labeled with the plot number. In addition, ribbon at least 12 inches long must be attached to a tree closest to plot center.
6. All cruise sheets must have compartment number, stand number, unit number, prism factor, date, individual tree species, and the cruiser's name.
7. A copy of the POSALE program will be provided to the successful bidder for cruise data entry. Original cruise sheets and a disk containing the cruise data exported from POSALE must be delivered upon the completion of the sale. **Note: At the cruise data entry screen in POSALE, when prompted to enter the stand acres, enter your actual GPS acres for that stand—NOT the contract's estimated inventory-based acreage.**

ROSCOMMON MANAGEMENT UNIT
LEAVE TREE MARKING SPECIFICATIONS

1. Leave Trees must be marked at breast height and also stump marked with green paint.
2. Paint on leave trees must be able to be seen from all sides of the tree.
3. Den trees and good mast trees, if found, must be marked to leave for wildlife.