

TIMBER SALE PRESCRIPTION

Date				GENERAL Forest Mineral a	nd Fire Management Unit				
4/19/08		ind the Management Onit							
Timber Sale Nur	mher (if applicabl	e)	rescription name)						
61-038-08-01	meer (ii applicasi	O)			Sale Name (or prescription name) Compartment 15 RPP				
LOCAL CONTACT									
Name Telephone									
Tim Webb									
Email Address									
webbtl@michiga	an dov	3							
Webbulleringe	gov	,							
			LE	GAL DESCRIPTION					
T26N R14W Sec	ction(s) 36 Descr	iption W1/2							
Year of Entry: 2004 Compartment(s):015 Stand Number(s): 33									
	THIS T	TIMBER S	ALE CONTRA	CT IS BASED ON THE FO	OLLOWING ACREAGE				
Cationated Asses									
Estimated Acres	5: 42 Source: [2	4 OI 🗆	GPS U Oth	er					
Payment will be	e made on the b	asis of the	ese estimated	acres.					
			TREA	TMENT & OBJECTIVE					
STAND#	COVER TYPE	ACRES	BA	TREATMENT	MANAGEMENT OBJECTIVE				
33	R6	42	160	Final harvest	Red pine				
- 00	110	72	100	i iliai ilai vest	red pille				
				PRESCRIPTION					
 Stand 33 – Final harvest 3. 4. 6. 7. 8. Access From Benzonia go east on Homestead Rd. 7 miles to S. Haze Road. Turn south, go ¾ mile. 									
	REPARATION W								
Private Boundar	У	5/1/2008							
CONTRACT WORK CAN BEGIN									
☑ Immediately ☐ Date:									
CONTRACT WO	CONTRACT WORK MUST BE COMPLETED BY Date: December 15, 2008								

		PAINT LINE V	<i>I</i> ORK					
☐ 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		\boxtimes	Blue	Other:	Other:			
Sale boundary	\boxtimes		⊠ Red	☐ Other:				
Sale cutting unit	\boxtimes			Other:				
Retention		\boxtimes	Green	☐ Other:				
Exclusions to mark and why								
acres) concentrated along the Haz marked with red paint facing out in		atches of deciduo	us trees within the	pine plantation. These Island	is should be			
Standards for marking lines	against private la	and						
N/A								
		AREA CALCUL	ATION					
☑ This is included in the bid	☐ This is not	included in the	bid					
UNIT METHO	OD			STANDARD				
Sale 🛛 GP	S String Cha	in 🗌 Other						
Payment Unit 🛛 GP	S String Cha	in 🗌 Other						
Retention 🖂 GP	S String Cha	in □Other						
Special Instructions: GPS files must provide acreage for the total sale area and for each stand, payment unit and retention island. Unit lines must be recorded as line features. Retention islands must be recorded as area features.								
See APPENDIX A								
	TIMBE	R CRUISING SP	ECIFICATIONS					
⊠ This is included in the bid	I ☐ This is not	included in the	e bid					
Required Basal Area Factor:	☑ 10 □ 20	Other:						
Cruise Line Directions E/W								
Cruise Line Directions Live								
CRUISING UNITS		NUMBER OF PL	OTS PER ACRE	SPACING (CHAIN	VS)			
Stand 33		0.9		3.1 X 3.25				
				X				
				X				
TOTAL NUMBER OF CRUIS	SE POINTS	41						
Cruise Special Instructions: Cruise all species separately. Separate cruise data by stand.								
FMFM Product Standards will be used as the cruising standards.								
See APPENDIX B for other information.								
Unless otherwise specified, the tally sheets used must be those supplied by the Forest. Mineral and Fire Management Unit								

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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 Merchantable Residual BA (Basal Area): (Minimum to Maximum)								
TREAT	ΓΜΕΝΤ	NUMBER	SIZE					
Regeneration Gaps Per Acre Girdled Trees Per Acre	•							
PRODUCT	MARKING SYMBOL	MINIMUM DBH	TOP DIB					
Sawlogs								
Sawbolts								
Pulpwood								
TYPE OF WORK	WORK TO BE DONE	NOT APPLICABLE	PAINT COLOR					
Trees marked to leave			☐ Green ☐ Other					
Trees marked to cut			☐ Orange ☐ Other					
		TENSITIES						
SPECIES /	PRODUCT	RATIO						
		1:						
		1:						
		1:						
SPECIAL MARKING INSTRUCTIONS None								
Unless otherwise specified, the tally sheets used must be those provided by the Forest, Mineral and Fire Management Unit. RESTRICTIONS 1. Forest, Mineral and Fire Management Division must to be able to identify who did what on the timber sale. 2. The contractor may not have more than two markers in one payment unit without prior approval. 3. Each marker should have an assigned area to mark (not strips). PAINT								
 Call Tim Webb at (231) 922 - 5280, to make arrangements for paint. Paint will be supplied from DNR Traverse City Field Office. Contractor's work schedule must coincide with the DNR work schedule for paint supply. The DNR will not be available on weekends or evenings. 								

DELIVERABLES

- A list of names that marked or cruised each payment unit.
 A summary of paint used (in quarts).
 All of the original cruise sheets.
 GPS files for any GPS work.

TRAVERSE CITY MANAGEMENT UNIT MARKING BOUNDARIES AND AREA

- 1. The attached type map delineates the contract marking area.
- 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). Each boundary line tree must be stump-marked at the base of the stump (one side) between the roots extending all the way to the ground.
- 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.
- 5. Place Marks approximately six feet above the base of the tree.
- The contractor will keep track of total quarts of paint used per-sale by color.
- 7. Contractor must use GPS to determine acreage.
- Position Mode must be set so that GPS receiver collects data from a minimum of four satellites and
 3D.
- 9. GPS receiver must log PDOP, SNR, number of satellites, and mode of collection (Manual/GPS).
- 10. PDOP mask must not exceed 7. SNR setting must be greater than or equal to 4. This can be modified if approved by the Unit Manager.
- 11. 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.
- 12. Sale boundaries are to be recorded as an area feature, not a line. Isolated stands must each be recorded as separate area features.
- 13. Payment Unit line must be recorded as a line feature bisecting the sale.

TRAVERSE CITY 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.
- 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".
- Record residual BA of trees where applicable. Record any mark-to-girdle trees separately. Do not count mark-to-girdle trees toward the specified residual BA target.
- 5. Mark location of plots on the map, using the plot number.
- 6. 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.
- All cruise sheets must have compartment number, stand number, unit number, prism factor, date, individual tree species, and the cruiser's name.
- 8. 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.

Appendix C

TRAVERSE CITY MANAGEMENT UNIT LEAVE TREE MARKING SPECIFICATIONS

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