



MICHIGAN DEPARTMENT OF NATURAL RESOURCES
FOREST, MINERAL AND FIRE MANAGEMENT

TIMBER SALE PRESCRIPTION

GENERAL					
Date 8-28-2009			Forest, Mineral and Fire Management Unit Crystal Falls Forest Management Unit		
Timber Sale Number (if applicable)			Sale Name (or prescription name) Wolf Den Contract		
LOCAL CONTACT					
Telephone Number (906) 875 - 6622			FAX Number (906) 875 - 3336		
Name Linda Lindberg			Email Address lindberl@michigan.gov.		
<input checked="" type="checkbox"/> Map of Project Area Attached					
LEGAL DESCRIPTION					
T44 R28 Section(s) 21, 22, 27, 28 Description					
Year of Entry: 2010 Compartment(s):34 Stand Number(s): 18, 19, 29,					
THIS TIMBER SALE CONTRACT IS BASED ON THE FOLLOWING ACREAGE					
Estimated Acres: 252 Source: <input type="checkbox"/> OI <input checked="" type="checkbox"/> GPS <input type="checkbox"/> Other _____					
Payment will be made on the basis of these estimated acres.					
TREATMENT & OBJECTIVE					
STAND #	COVER TYPE	ACRES	BA	TREATMENT	MANAGEMENT OBJECTIVE
19	M6	29	120*	Thinning	M6
18	M6	106	110*	Thinning	M6
29	M6	117	120*	Thinning	M6
PRESCRIPTION					
1. See Attached					
2. *Basal Areas are estimated from limited plots during Operations Inventory and are variable.					
3.					
4.					
5.					
6.					
Access:					
DNR PREPARATION WORK TO BE DONE PRIOR TO CONTRACT WORK				ESTIMATED DATE	
Stands GPSed and lines painted in all stands.				09/01/2009	
CONTRACT WORK CAN BEGIN:					
<input type="checkbox"/> Immediately <input checked="" type="checkbox"/> Date: 10/1/09					
CONTRACT WORK MUST BE COMPLETED BY: Date 08/15/2010					

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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Red	<input type="checkbox"/> Other:
Sale cutting unit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 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 type="checkbox"/> GPS <input type="checkbox"/> String Chain <input type="checkbox"/> Other	
Payment Unit	<input 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:

CRUISING UNITS	NUMBER OF PLOTS PER ACRE	SPACING (CHAINS)
A1, A2, A3	1	2 X 5
B1, B2	1	2 X 5
C	1	2 X 5
		X
TOTAL NUMBER OF CRUISE POINTS		

Cruise Special Instructions:

You can cruise whatever direction makes sense as long as you get 1 plot per acre. Please cruise and identify one unit at a time. For example A1 should be cruised separately from A2 and so on.

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

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): 80 (Minimum 70 to Maximum 90)

TREATMENT		NUMBER	SIZE
Regeneration Gaps Per Acre		3	30 ft.
Girdled Trees Per Acre			
PRODUCT	MARKING SYMBOL	MINIMUM DBH	TOP DIB
Sawlogs	dot per log with slash	11	10
Sawbolts			
Pulpwood	dot or slash	5	4
TYPE OF WORK	WORK TO BE DONE	NOT APPLICABLE	PAINT COLOR
Trees marked to leave	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> Green <input type="checkbox"/> Other
Trees marked to cut	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Orange <input type="checkbox"/> Other

TALLY INTENSITIES

SPECIES / PRODUCT	RATIO
sawlog	1 : 1
large pulp should be tallied with the sawlogs	1 : 1
	1 :
	1 :

SPECIES TO FAVOR:

best tree in place in all categories.

SPECIES TO FAVOR:

Do not cut oak or elm & take good ash logs if there are some but leave larger mature ash for seed

SPECIAL MARKING INSTRUCTIONS:

see attached

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:

1. Call Linda at (906) 875 - 6622, to make arrangements for paint.
2. Paint will be supplied from the Crystal Falls 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.
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.

Wolf Den Contract

These are all fairly good hardwood stands with considerable variability in the stands. Where there are more logs, it should be a select cut and marked from above. Concentrate on choosing crop trees and thinning around them, taking out the two most competitors if the crop tree is over 8 inches and thinning around smaller diameter crop trees to 7 feet or so all the way around. Mark these stands, thinking about the best tree in place and try not to cut trees that are not overly abundant in the stand. There are not many cherry trees in any of the stands; any found should be kept if they are healthy. No oak, hemlock cedar or elm cut should be cut. There is some ash in some of the stands. The good ash logs should be taken. Poor quality logs should be left for seed. If there are no logs, they can be marked accordingly. No marking should take place in the vernal ponds. Where there are some oak, thin around them enough to get new regeneration. There should be two den trees left per acre if they are present and two aspen left per acre if they are present. If there is a pocket of aspen, you can either take them all or leave some and take some. Some spruce and balsam can be left in the stands if present, harvest the mature spruce/balsam and leave the younger ones. If there is a slope, skid trails should be fashioned perpendicular to the slope so machinery can get up and down the hills. The goal in these stands is to leave 53 crop trees per acre if they are present and/or leave a Basal Area of 80 to 90 square feet. Clumps of trees which are all growing out of the same stump should either all be cut or all left. Basswood clumps may be thinned on the side a processor can best access. The basic goal is to thin the stand and leave the best tree in place to grow taller and larger in diameter. The goal is to accomplish this by taking the high risk trees that will not make it to the next thinning and to then thin what is left. There is at least one corner in these stands that should be avoided ...including the bearing trees. When found this corner should be painted with Blue paint on the bearing trees. If blue paint is needed the DNR will supply. No line trees should be marked.

Wolf Den Contract TIMBER SALE PRESCRIPTION APPENDIX

When establishing paint lines:

- The attached type map delineates the contract marking area.
-

When Registered Corners or Witness Trees are discovered:

- Any wooden posts encountered at corners must also be painted/protected.
- Bearing and/or witness trees discovered during the course of sale preparation must be protected. This can be accomplished by painting a ring completely around the tree at 4-6 feet above ground level with either red paint (corner surrounded by state lands) or blue paint (corner on private property boundary line). In addition, tying ribbon on these trees helps alert loggers to their presence. Do not mark any trees for harvest if cutting them is likely to result in damage to corner monuments and/or bearing trees.
- Please report the condition of all corners, posts and bearing trees to the Contract Administrator (CA).

When Cruising:

- Data must be recorded so volume can be determined by stand. If a stand is split into 2 or more payment units, each unit must be recorded separately. In addition, all data must be summarized by species or species grouping by payment unit.
- All saw logs must be 100% tallied by species and diameter.
- Within all marked stands, cruise all marked pulpwood tree species that will yield one or more 100" pulpwood sticks with a minimum top diameter of four (4) inches DIB. Contact the Contract Administrator to see what grouping of pulpwood is acceptable.
- Within all marked stands, residual basal area (merchantable sized trees by species) at each plot must also be recorded on the cruise sheets. Plot centers must be marked according to contract specifications and correspond to a legible 1:15840 scale cruise map. Cruise specifications may be altered as necessary by the Contract Administrator.

When marking, prioritize selection of trees to be cut in the following order:

1. Release suitable crop trees. (Refer to The Compleat Marker for crop tree specifications.)
2. When appropriate, try to increase the number of lesser occurring species such as beech in areas of high bear use. The Contract Administrator can provide an explanation of this priority.
3. Remove high-risk, poor quality and trees with poor crowns.
4. Maintain target basal area.
5. Maintain all species diversity.

Reserved Species:

- Do not mark within 100' of any raptor nest trees. Report these to the Contract Administrator as soon as possible and directions will be given at that time.
- Marking of infrequently occurring species should be avoided. Consult the Contract Administrator for clarification.