



TIMBER SALE PRESCRIPTION

GENERAL

Date 11/20/2012	Forest Resources Division Management Unit Roscommon
Timber Sale Number (if applicable) 710081301	Sale Name (or prescription name) Compartment 188 Marking

LOCAL CONTACT

Name Jason Lewicki	Telephone (989) 275 -5151 ext. 2743
Email Address lewickij@michigan.gov	FAX (989) 275 - 6203

Map of Project Area Attached

LEGAL DESCRIPTION

T22N R01E Sec. 2 NWNW;E/2SE;SENE: T23N R01E Sec.34 SWSE, Sec.35 W/2SE (see map)

Year of Entry: 2013 Compartment(s):188 Stand Number(s): 39, 48, 49, 79

THIS TIMBER SALE CONTRACT IS BASED ON THE FOLLOWING ACREAGE

Estimated Acres: 206 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
39	Pine& Decid	41	110-140	Low Thinning	Mixed pine and mixed deciduous
48	Red Pine	39	140-170	Low Thinning	Red Pine
49	Red Pine	69	110-140	Low Thinning	Red Pine
79	Mixed Decid	57	110-140	Low Thinning	Mixed upland deciduous with conifer

PRESCRIPTION

Stand 39: Thin stand to a residual basal area of 90. Remove suppressed and unhealthy trees using a combination of low thinning and selection to promote a mixed upland condition. Leave healthy and good formed trees. Remove some of the oak and aspen to induce sprouting by creating small regeneration gaps one chain in diameter at density of not more than one per two acres. These gaps will be dependent on the aspen and oak distribution.

Stand 48: Thin from below to a residual basal area of 100. Leave super canopy oak and red pine. Do not cut single stem red maple. Leave well formed healthy maple and oak.

Stand 49: Thin from below to residual basal area of 80, leave large dominant healthy trees.

Stand 79: Thin from below to a residual basal area of 90. Promote mixed upland by leaving the best formed, healthy dominant and co-dominant trees. Leave super canopy white pine. Try to leave the quality single stem red maple. Leave between one and three aspen per acre depending on distribution.

DNR PREPARATION WORK TO BE DONE PRIOR TO CONTRACT WORK	ESTIMATED DATE
Stand boundary lines delineated and GPS'd	11/01/2012

CONTRACT WORK CAN BEGIN

Immediately Date:

CONTRACT WORK MUST BE COMPLETED BY Date: 3/31/2014

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: X10 20 Other:

Cruise Line Directions: East/West or North/South

CRUISING UNITS	NUMBER OF PLOTS PER ACRE	SPACING (CHAINS)
Stands 39 & 48	1	3 X 3
Stand 49	1	3 X 3
Stand 79	1	3 X 3
TOTAL NUMBER OF CRUISE POINTS		

Cruise Special Instructions:

Cruise all orange marked trees by species.
Cruise sawtimber and pulpwood.
Cruise residual BA for all stands.
Refer to contract and attached appendix for detailed cruise instructions.

Unless otherwise specified, the tally sheets used must be those supplied by the Forest Resources Division 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 Merchantable Residual BA (Basal Area):

- Stand 39 – 90 (Minimum 80 to Maximum 100)
- Stand 48 – 100 (Minimum 90 to Maximum 110)
- Stand 49 – 80 (Minimum 70 to Maximum 90)
- Stand 79 – 90 (Minimum 80 to Maximum 100)

TREATMENT		NUMBER	SIZE
Regeneration Gaps Per Acre:			
Girdled Trees Per Acre:			
PRODUCT	MARKING SYMBOL	MINIMUM DBH	TOP DIB
Sawlogs	Slash	10"	8"
Sawbolts	NA		
Pulpwood	Slash	4.6"	4"

TYPE OF WORK	WORK TO BE DONE	NOT APPLICABLE	PAINT COLOR
Trees marked to leave	<input type="checkbox"/>	<input 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
NA	1 :
	1 :
	1 :
	1 :

SPECIAL MARKING INSTRUCTIONS:

Trees shall be marked so that the marks are visible from all directions.
Do not mark single stems from multi stemmed trees; either mark all of them or none of them.
Do not cut trees along the ORV trail unless they are hazard trees.

Unless otherwise specified, the tally sheets used must be those provided by the Forest Resources Division Management Unit.

RESTRICTIONS

1. Forest Resources 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 Jason Lewicki at (989) 275 - 4622, 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.
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.

Compartment 35 Hardwood Contract APPENDIX 1, TIMBER SALE PRESCRIPTION

When Registered Corners or Witness Trees are discovered:

- 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. 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.

When Cruising:

- Contractor must follow the cruising guidelines in the Michigan DNR's "Product Standards and Cruising Manual"
- Data must be recorded so volume can be determined by stand.
- Cruise all marked units using the V-Bar Cruise Method.
- Cruise all ash and beech trees along with all marked trees to cut by species that will yield one or more 100" sticks with a minimum top diameter of four (4) inches DIB for pulpwood and eight (8) inches DIB for sawlogs.
- Limiting distance for borderline trees should be measured for all trees designated to be cut.
- Within all marked stands, residual basal area (merchantable sized trees) 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 LCA.
- Plot locations must be submitted in a .shp or .way file format
- Cruise data must be submitted in a TSale compatible electronic format (microsoft excel, or a .crl file created by a program such as TSale or T-Cruise, or other electronic format approved by the LCA)
- If data is collected on paper then entered electronically, a copy of the original cruise sheets must also be submitted.

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

1. Marking must comply with The Compleat Marker, The Complete Marker Addendum, and Within Stand Retention Guidelines (IC4110.)
2. Of the residual trees in the marked stands retain the following when possible:
 - Under-represented species.
 - Mast trees - at least 3 trees/acre when available.
 - Leave all super-canopy trees or "Legacy Trees" – remnants of the historical stands.
 - Live cavity trees and snags.
3. Mark all stems including non-merchantable stems within the regeneration gaps.
4. Release 50 potential crop trees per acre.
 - Manage for best tree in place.
 - For trees less than 8" DBH, release all sides of the crown. For trees greater than 8" DBH remove the two most significant crown competitors. (Refer to The Compleat Marker for crop tree specifications.)
 - Be certain that marked trees can be felled using modern logging equipment.
5. Remove high risk and cull trees.
6. Thin from below until stocking is reached.
7. All marking must be done in dry weather and on dry bark surfaces.
8. Stump marks are required, winter marking is allowed providing snow depths are low enough to achieve proper stump marks. Check with the LCA if winter work is possible.

Reserved Species: Do not mark within 100' of any raptor nest trees. Report these to the LCA as soon as possible and directions will be given at that time.