

Timber Sale Preparation Prescription General

Date: 09/10/2002

Forest Management Unit: Grayling

Timber Sale Number: Sale Name: **Compartment 17 Oak Aspen**

Local Contact: Patrick Potter Ext: 7441 TX (989) 348-6371 FAX: (989) 348-8825

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Map of Project Area Attached

Legal Description: T28N R2E Section(s) 22 Descriptions: Section 22 (W1/2NE, NWSE, and SENW)

Year of Entry: 2003 Compartment(s): 17. Stand Number(s): 30, 33, 41, 49, and 53

This timber sale preparation contract is based on the following acreage:

Estimated Acres: 72 source OI GPS Other The contractor will use a GPS unit to determine enclosed acreage to the nearest one-tenth acre, unless an alternative method is approved prior by the Unit Manager. Payment will be based on actual acres rounded to the nearest whole acre.

Treatment & Objectives: Final Harvest & Thinning

Stand nbr	Cover Type	Acres	BA / Acre	Treatment	Management Objective
30	O6	20	90	Final harvest	Aspen
33	A6	3	70	Final harvest	Aspen
41	O9	20	150	Thinning	Oak
49	O6	12	120	Final harvest	Oak
53	O9	17	130	Thinning	Oak

prior

Prescription:

1. Stands # 30 33 and 49 are a Final Harvest. Harvest all trees 4" and larger.
2. Stands # 41 and 53 are Thinning. Harvest all aspen and red maple and mark rest of stand to harvest using orange paint. Mark to a residual BA of 70.

Access: Centerline Road, and Oak lake Road

DNR preparation work to be done prior to contract work:

Estimated date:

None	

Contract work can begin:

- Immediately
 Date: 10/01/02

Contract work must be completed by: Date 06/30/03

All paperwork must be submitted to the timber sale administrator at least 10 days prior to contract completion date to allow for inspections.

Paint Line Work

- This is bid item
 This is not a bid item

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 checked="" type="checkbox"/>	<input type="checkbox"/> Blue	Other:
Sale boundary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Red	Other:
Sale cutting unit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Yellow	Other:
Stand type line	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Other:
Trees marked to leave	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Green	Other:
Trees marked to cut	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Orange	Other:

Exclusions to mark and why: None

Special Instruction: Stand 30 leave scattered Shelterwood patches along road, mark to leave using green paint to a residual of 30 BA.

1. Scattered Shelterwood patches consist of a two chain wide strip running parallel weaving in and out with the road.
2. Stand 33's inside boundary line will need to be marked with yellow paint. See attached map.

Standards for marking lines against private land: None

Area calculation:

Unit	Method	Standard	
Sale	GPS	Appendix A	
Payment unit	GPS	Appendix A	
Stand			

Special Instruction: See attached Appendix A

Written permission from the Unit Manager must be obtained prior to bidding and must be submitted with bid if a method other than GPS is used for area calculation.

Timber Cruising Specifications

- This is a bid item
 This is not a bid item

Required Basal Area Factor: 10 20 Other:

Cruise Line Direction: North/ South

Cruising Units	Number of plots per acre	Spacing (chains)
All Stands	One plot per acre	3 X 3.5
		X
		X
Total Number of Cruise Points	81	

Cruise Special Instructions: See attachment **Appendix B**

Unless otherwise specified, the tally sheets use must be those supplied by the Management Unit.

Timber Marking Specifications

- This a bid item
- This is not a bid item
- Precise specifications to be delineated at pre-work meeting with DNR staff.

Total Residual BA (Basal Area): 70 BA

Treatment	Number	Size
Regeneration gaps per acre	N/A	
Girdled Trees per acre	N/A	

	Marking symbol	Minimum DBH	Top DIB
Sawlogs	Appendix D	9 inches	8 Inches
Sawbolts	Appendix D	9 inches	8 Inches
Pulpwood	Appendix D	4.5 inches	4 inches

Tally intensities
Species / product

	Ratio:
	1 :
	1 :
	1 :
	1 :

Species to favor: White Pine
Species to reduce: Red Maple

Special Marking Instructions See attachment Appendix D

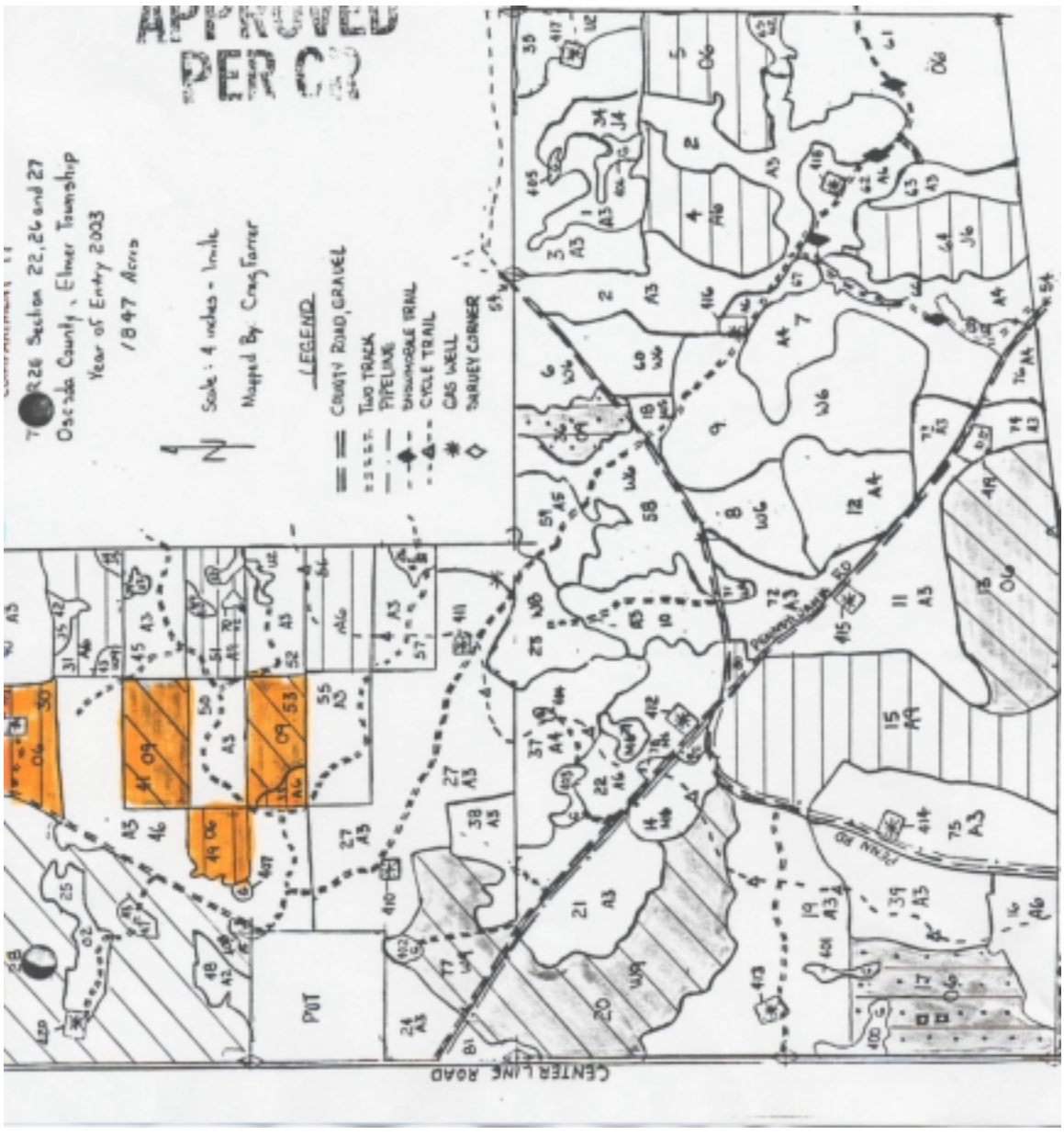
Unless otherwise specified, the tally sheets used must be those provided by the Management Unit.

Restrictions: We wish to be able to identify who did what on our sales. You may not have more than two markers in one payment unit without approval. Each marker should have an assigned area to mark (not strips).

Paint: Call (989) 348-6371 Ex: 7441 or 7442 to make arrangements for all paint pick up. Paint will be supplied from Grayling Field Office. Contractors work schedule must coincide with the DNR work schedule for paint supply. The DNR will not be available on weekends or evenings.

Deliverables:

1. A list of who marked (cruised) each payment unit (names)
 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 done.
 5. A hardcopy of the traverse must be supplied to the timber sale administrator prior to the administrator performing a check cruise on the stand.
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Grayling 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*). 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.
 4. Paint in a unit line which will constitute the payment unit boundary, dividing the sale into payment units, as shown on the attached map.
 5. Place marks approximately six feet above the base of the tree.
 6. The contractor will keep track of total quarts of paint used per-sale by color.
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7. The contractor will use a GPS unit to determine enclosed acreage to the nearest one-tenth acre, unless an alternative method is approved prior by Unit Management.
 8. Position Mode must be set so that GPS receiver collects data from a minimum of four satellites, and positions deliver ODS (over determine system) data. 2D position will not be acceptable.
 9. Must log PDOP.
 10. PDOP mask less than or equal to 8.
 11. GPS units used must be compatible with Pathfinder Office 2.01 and/or capable of producing a Trimble .COR file format. In addition supply a disk of traverse file along with hard copy of the corrected traverse file.

Grayling Management Unit **Timber Cruising Specifications**

1. Cruise at a rate specified in the Timber Sale Preparation Prescription.
2. Use a 10-factor prism.
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. Determine residual BA of trees by species where applicable.
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 a 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.
7. All cruise sheets must have compartment #, stand #, unit #, prism factor, date, individual tree species, and the cruiser's name.
8. The Grayling Management Unit Office will provide cruise sheets.
9. Estimate the volume in MBF and cords by individual tree species to be harvested using the point sampling cruising method.

Grayling Management Unit

Marking Individual Prescription

1. Select crop trees.
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2. Crop trees are defined as trees, which have the potential of making a grade one sawlog when they are mature. A grade one sawlog is any tree capable of producing 16 feet of clear lumber. A crop tree can be ANY species of tree. It is important to manage for the best tree in place at all times.
 3. Locate 70 to 80 crop trees per acre spaced approximately 25 - 27 feet apart. In areas of this stand where 6" to 9" DBH trees predominate, the crop tree release will consist of creating a seven-foot opening around the crown of the tree. This means that adjoining lesser quality dominants, codominants and intermediates will have to be marked for removal. In areas where trees greater than 9" DBH predominate, the crop tree release will consist of removing the two nearest lesser quality crown competitors from the dominant, codominants and intermediate size classes.
 4. After the crop tree has been chosen and properly released, additional trees may have to be removed to reduce the basal area to the desired target. First remove high-risk trees (Eutypella canker) from the stand followed by commercial subcanopy trees beneath the crop tree. (Commercial trees will be defined as any trees that contain at least one 100" sawlog or pulp sticks.) Lastly, remove any other lesser quality intermediate and codominants tree from the stand to reduce basal area to the desired goal.
 5. Regeneration holes may have to be created in this stand in order to hasten its development toward a more varied structure. Establish five 30-foot regeneration holes per acre. It is important to note that the 30-foot regeneration hole refers to the size of the opening to be created among the crowns of the trees, and not stems on the ground. It is also essential that all trees greater than 1" DBH be marked within the 30-foot regeneration hole.
 6. Over the rest of the unit, at least two den trees per acre will be left. Trees that have a "platform" crotch structure for raptor nest support, located beneath the foliage canopy, shall be marked with green paint.
 7. The contractor will keep track of total quarts of paint used per-sale by color.
 8. The attached type map delineates the contract marking area.
 9. Marking must be done in dry weather and when tree surfaces are not wet.
 10. Place marks approximately six feet above the base of the tree.

11. Mark the trees on two opposite sides. Each marked tree must be stump-marked, at the base of the stump (one side) between the roots extending all the way to the ground.

12. Paint must be applied on moss free areas.