



TIMBER SALE PRESCRIPTION

GENERAL

Date 8/31/2010	Forest, Mineral and Fire Management Unit Grayling FMU
Timber Sale Number (if applicable) 72-001-11-01	Sale Name (or prescription name) Comp 11 Red Pine

LOCAL CONTACT

Name Joan Charlebois	Telephone (989) 348 - 6371 x 7443
Email Address Charleboisj@michigan.gov	FAX (989) 348 - 8825

Map of Project Area Attached

LEGAL DESCRIPTION

T27N R2E Section(s) 4 & 5 Description Sec 4: W1/2SW & Sec 5: SESE, & T28N R2E Sec 33: NE & N1/2SE

Year of Entry: 2011 Compartment(s):11 Stand Number(s): 27 and 37

THIS TIMBER SALE CONTRACT IS BASED ON THE FOLLOWING ACREAGE

Estimated Acres: 91 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
27	R9	32	120	Thinning	Red Pine
37	R9	59	130	Shelterwood-Seed	Red Pine

PRESCRIPTION

- Stand 27 - Thinning - Mark to cut down to 90 square feet of residual BA. Also leave 10 square feet of oak scattered throughout the stand. Jack pine & aspen are designated cut species and therefore do not need to be marked.
- Stand 37 - Shelterwood - Mark to leave an average of 40 square feet of residual BA, favoring Red Pine to retain, but also leaving White Pine as needed to maintain the minimum residual. All other species are designated to be cut. Leave 20 additional square feet of residual BA immediately along both edges of the ORV trail.

Access Stand 27: CR 608 (W. Miller Road), north on Centerline Road to Noodles Lake Road.
Stand 37: Centerline Road north of Nancy Brown Road.

DNR PREPARATION WORK TO BE DONE PRIOR TO CONTRACT WORK	ESTIMATED DATE
none	

CONTRACT WORK CAN BEGIN

Immediately Date: _____

CONTRACT WORK MUST BE COMPLETED BY: 05/30/2011

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 stand line locations & Appendix A for unit line 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	<input type="checkbox"/> Other:
Sale boundary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Red	<input type="checkbox"/> Other:
Sale cutting unit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Yellow	<input type="checkbox"/> Other:
Stand type line	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other:

Exclusions to mark and why

None

Standards for marking lines against private land

N/A

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:

See attached Appendix A

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)
TOTAL NUMBER OF CRUISE POINTS		

Cruise Special Instructions:

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 Merchantable Residual BA (Basal Area) Stand 27: 90 (Minimum 80 to Maximum 100)

Total Merchantable Residual BA (Basal Area) Stand 37: 40 (Minimum 30 to Maximum 50)

TREATMENT		NUMBER	SIZE
PRODUCT	MARKING SYMBOL	MINIMUM DBH	TOP DIB
Sawlogs	Single slash on two opposite sides	9.1 inches	8.0 inches
Sawbolts	NA		
Pulpwood	Single slash on two opposite sides	4.6 inches	4.0 inches

TYPE OF WORK	WORK TO BE DONE	NOT APPLICABLE	PAINT COLOR
Trees marked to leave	<input checked="" type="checkbox"/> stand 37	<input type="checkbox"/>	<input checked="" type="checkbox"/> Green <input type="checkbox"/> Other
Trees marked to cut	<input checked="" type="checkbox"/> stand 27	<input type="checkbox"/>	<input checked="" type="checkbox"/> Orange <input type="checkbox"/> Other

TALLY INTENSITIES	
SPECIES / PRODUCT	RATIO
	1 :
	1 :
	1 :
	1 :

SPECIAL MARKING INSTRUCTIONS

For stand 27, see attached Appendix F.
 For stand 37, see Attached Appendix C and mark approximately 20 additional square feet of residual basal area immediately along both edges of the ORV trail; details will be discussed at the pre-work meeting.

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

RESTRICTIONS

1. Forest 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 Joan at (989) 348 - 6371 x 7443, to make arrangements for paint.
2. Paint will be supplied from Grayling 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. Names of those who marked each payment unit.
2. A summary of paint used (in quarts).
3. GPS files for any GPS work.

Grayling Management Unit **Boundary Marking and Area Calculation**

1. The attached type map shows the contract marking area (stands 27 & 37).
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 from both 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 unit lines that will constitute payment unit boundaries. Split each stand into two payment units of approximately equal acreage. Stand 27 should have an east-west unit line. Stand 37 should have a north-south unit line.
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.
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. GPS units used must be compatible with Pathfinder Office (2.01 or later) or be capable of producing an ArcView-compatible shapefile. Supply electronic and paper copies of the corrected and edited (outlier/erroneous points cleaned up) GPS file.
9. Position Mode must be set so that the GPS receiver collects data from a minimum of four satellites. This must be recorded in the position properties window after downloading.
10. The GPS receiver must log PDOP or HDOP. This log must be recorded in the position properties window after downloading.
11. PDOP/HDOP mask must be less than or equal to 8.
12. SNR setting must be greater than or equal to 4.
13. Sale boundaries are to be recorded as an area feature, not a line. Isolated stands must each be recorded as separate area features.
14. Payment Unit lines must be recorded as line features bisecting the stand. Area calculation is not needed for the Payment Units.

Grayling Management Unit
Shelterwood Sale Preparation
Individual Leave Tree Marking

Appendix C

1. Select leave trees that will be wind-firm and good seed producers.
2. Remove high risk and suppressed trees.
3. Where possible, mark-to-leave two den trees per acre.
4. The Grayling Management Unit Office will provide paint.
5. The contractor will keep track of total quarts of paint used per-sale by color.
6. Marking must be done in dry weather and when tree surfaces are not wet.
7. Place marks approximately six feet above the base of the tree.
8. 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.
9. Paint must be applied on moss free areas.

Grayling Management Unit
Red Pine Thinning Sale Preparation
Individual Tree Marking

Appendix F

1. Target for removal high-risk, damaged, declining, poor-form and suppressed red pine trees.
2. Favor potential utility-pole stems.
3. Remove economically mature red pine where BA allows (more detailed instruction to be given at on-site meeting with the contract administrator).
4. The Grayling Management Unit Office will provide paint.
5. The contractor will keep track of total quarts of paint used per sale by color.
6. Marking must be done in dry weather and when tree surfaces are not wet.
7. Mark the trees on two opposite sides. Place marks approximately six feet above the base of the tree.
8. Each marked tree must be stump-marked, at the base of the stump (one side), between the roots and extending all the way to the ground.
9. Paint must be applied on moss-free areas.