



# TIMBER SALE PRESCRIPTION

## GENERAL

|  |   |
|--|---|
| Date<br>10/15/08                                   | Forest, Mineral and Fire Management Unit<br>Roscommon   |
| Timber Sale Number (if applicable)<br>71-005-09-01 | Sale Name (or prescription name)<br>Well Site North RPP |

## LOCAL CONTACT

|                                       |                                     |
|---------------------------------------|-------------------------------------|
| Name<br>Patrick Potter                | Telephone<br>(989) 348 - 6371 x7441 |
| Email Address<br>potterp@michigan.gov | FAX<br>(989) 348 - 8825             |

Map of Project Area Attached

## LEGAL DESCRIPTION

T21N R03W Section(s) 19 Description S1/2NW;N1/2SW

Year of Entry: 2004 Compartment(s): 161 Stand Number(s): 8

## THIS TIMBER SALE CONTRACT IS BASED ON THE FOLLOWING ACREAGE

Estimated Acres: 54 Source:  OI  GPS  Other GIS

Payment will be made on the basis of these estimated acres.

## TREATMENT & OBJECTIVE

| STAND # | COVER TYPE | ACRES | BA | TREATMENT | MANAGEMENT OBJECTIVE |
|---------|------------|-------|----|-----------|----------------------|
| 8       | R8         | 54    | 60 | Seed Tree | Red Pine             |
|         |            |       |    |           |                      |
|         |            |       |    |           |                      |
|         |            |       |    |           |                      |
|         |            |       |    |           |                      |
|         |            |       |    |           |                      |
|         |            |       |    |           |                      |

## PRESCRIPTION

- Stand #8 - Mark well crowned red pine to leave in clumps of 3-5 trees every 100 feet using green paint and manage for a mix of hardwood and pine.
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**Access** Grass Lake Road west of Reserve OR Grass Lake Road east of Old 27

| DNR PREPARATION WORK TO BE DONE PRIOR TO CONTRACT WORK | ESTIMATED DATE |
|--|----------------|
|  |                |
|  |                |
|  |                |

## CONTRACT WORK CAN BEGIN

Immediately  Date: \_\_\_\_\_

**CONTRACT WORK MUST BE COMPLETED BY** Date 7/30/09

**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 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:                |
| Retention         | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> Green             | <input checked="" type="checkbox"/> Other: Red |

**Exclusions to mark and why**

Meet on-site with DNR personnel prior to commencement of fieldwork for instructions on leaving retention areas and other pertinent information related to linework. Leave four (4) one-half (1/2) acre retention islands scattered equally throughout the stand. Also see Appendix A

**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 |          |
| Retention    | <input checked="" type="checkbox"/> GPS <input type="checkbox"/> String Chain <input type="checkbox"/> Other |          |

**Special Instructions:** GPS each retention island separately as well as the whole sale. GPS each clump location. Sale and retention islands must be recorded as area features. Payment unit lines must be recorded as line features and marked clumps locations must be recorded as point features.

**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** north and south

| CRUISING UNITS                       | NUMBER OF PLOTS PER ACRE | SPACING (CHAINS) |
|--------------------------------------|--------------------------|------------------|
| Stand #8                             | 1                        | 3 X 3            |
|                                      |                          | X                |
|                                      |                          | X                |
|                                      |                          | X                |
| <b>TOTAL NUMBER OF CRUISE POINTS</b> | 54                       |                  |

**Cruise Special Instructions:**

Cruise all species separately. Determine and record residual basal area of red pine leave trees for each plot. Also see Appendix B

**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):** 20 (Minimum 10 to Maximum 30)

| TREATMENT                  |                | 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 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> Green<br><input type="checkbox"/> Other |
| Trees marked to cut   | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> Orange<br><input type="checkbox"/> Other           |

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

**SPECIAL MARKING INSTRUCTIONS**

Mark good red pine seed trees in clumps of 3-5 trees every 100 feet using green paint so the clumps are well distributed throughout the stand, mark at least 1 wildlife den tree and/or well crowned oak tree for wildlife mast per acre (if present) with a single green paint line that encircles the trees. Also see Appendix C

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 Patrick Potter at (989) 348 - 6371 x7441, 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. 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.

ROSCOMMON 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).
4. The Roscommon Management Unit does not contract the marking of private lines on any of our timber sales. Management Unit personnel will mark private lines with blue paint and the contractor will mark remaining stand(s) with red paint so as to obtain complete closure of all stands designated for cutting.
5. 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.
6. Place Marks approximately six feet above the base of the tree.
7. The contractor will keep track of total quarts of paint used per-sale by color.
8. Contractor must use GPS to determine acreage.
9. Position Mode must be set so that GPS receiver collects data from a minimum of four satellites and 3D.
10. GPS receiver must log PDOP, SNR, number of satellites, and mode of collection (Manual/GPS).
11. PDOP mask must not exceed 7. This can be modified if approved by the Unit Manager.
12. 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.
13. GPS units used must be compatible with Pathfinder Office (2.01) or later or be capable of producing Arcview-compatible shapefiles. Contractor will supply electronic and hardcopies of the corrected and edited (outlier/erroneous points cleaned up) GPS files.

Appendix B

ROSCOMMON 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.
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. 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.
6. All cruise sheets must have compartment number, stand number, unit number, prism factor, date, individual tree species, and the cruiser’s name.
7. 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

ROSCOMMON MANAGEMENT UNIT  
LEAVE TREE MARKING SPECIFICATIONS

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