



TIMBER SALE PRESCRIPTION

GENERAL

Date 10/18/2009	Forest, Mineral and Fire Management Unit Gladwin Management Unit
Timber Sale Number (if applicable) 73-004-10-01	Sale Name (or prescription name) Half Moon Harvest

LOCAL CONTACT

Name Mike Hanley	Telephone (517) 243-2028
Email Address hanleym@michigan.gov	FAX (989) 426-1454

Map of Project Area Attached

LEGAL DESCRIPTION

N ½ Sec 34 of T20N R04W

Year of Entry: 2010 Compartment(s): 3 Stand Number(s): 109, 112, 115, 130, 131, & 132

THIS TIMBER SALE CONTRACT IS BASED ON THE FOLLOWING ACREAGE

Estimated Acres: 119 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
109	R6	22	200	Thinning	Red Pine
112	M9	20	100	Selection	Northern Hardwoods
115	M9	27	110	Selection	Northern Hardwoods
130	R6	14	170	Thinning	Red Pine
131	R9	8	190	Thinning	Red Pine
132	M6	28	120	Selection	Northern Hardwoods

PRESCRIPTION

- **Stand 109, 130 & 131:** Mark to cut Red Pine with orange paint, retaining 90 BA/AC. Retain all Hardwoods in stand.
- **Stand 112, 115 & 132:**
 - a) Mark to cut with Orange paint retaining 70 BA/AC.
 - b) Favor the best crop tree in place. Refer to the "Complete Marker" for instructions.
 - c) Favor the removal of Red Maple, Aspen and trees with DBH greater than 20 inches.
 - d) Mark stand to improve maneuverability within the stand for logging operations to occur.
- **Access:** Via North Clare Avenue, Forest Road and various state two tracks.

DNR PREPARATION WORK TO BE DONE PRIOR TO CONTRACT WORK	ESTIMATED DATE
Stand 111 sale boundary which borders stands 112 & 115 will be painted by DNR staff	4/1/10

CONTRACT WORK CAN BEGIN

Immediately for stands 109, 130, 131, and 132 Date: 4/1/10 for 112 and 115

CONTRACT WORK MUST BE COMPLETED BY Date 07/31/2010

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 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:

Special Instructions for paint line work: Yellow marks for cutting units shall be visible from all sides of the trees. See attached map for locations and colors of lines to be marked. DNR staff will paint stand 111 boundary prior to contractor.

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	HDOP ≤ 3
Payment Unit	<input checked="" type="checkbox"/> GPS <input type="checkbox"/> String Chain <input type="checkbox"/> Other	HDOP ≤ 3
Stand	<input type="checkbox"/> GPS <input type="checkbox"/> String Chain <input type="checkbox"/> Other	

Special Instructions:

Contractor must GPS all stands, payment units, and/or retention island separately. Contractor must also provide a GPS file and hard copy of each stand printed at a scale of 1:15840. See map for location and color of lines to be GPS'd.

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-South or East-West

CRUISING UNITS	NUMBER OF PLOTS PER ACRE	SPACING (CHAINS)
Stands 109, 112, 115, 130, 131 & 132	1	Evenly Spaced
TOTAL NUMBER OF CRUISE POINTS	119 (approximately)	

Cruise Special Instructions:

- Total number of cruise points is estimate, based on estimated acres. Actual number should be based on 1 plot per acre, for acreage determined by GPS.
- **ALL CRUISE POINTS MUST SHOW RESIDUAL BA.**
- Contractor **MUST** show plot locations for each stand on their GPS stand boundary map. Plot locations do **NOT** need to be GPS'd.
- Plot center locations must be marked on the ground and at eye level with brightly colored ribbon.
- Imagery and shapefile information for Solo as well as TCruise cruising template must be made available upon request.

It is preferred that contractor use DNR tally sheets. Contractor may use their own tally sheets, with approval by Gladwin Forest Management Unit.

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 109, 130 & 131: $\frac{90}{100}$ (Minimum $\frac{80}{100}$ to Maximum $\frac{100}{100}$)

Stand 112, 115 & 132: $\frac{70}{100}$ (Minimum $\frac{60}{100}$ to Maximum $\frac{80}{100}$)

TREATMENT		NUMBER	SIZE
Regeneration Gaps Per Acre			
Girdled Trees Per Acre			
PRODUCT	MARKING SYMBOL	MINIMUM DBH	TOP DIB
Sawlogs	Slash visible from all sides	9.1" Diameter Class	8" Diameter Class
Sawbolts			
Pulpwood	Slash visible from all sides	4.6" Diameter Class	4" Diameter Class

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
N/A	1 :
	1 :
	1 :
	1 :

SPECIAL MARKING INSTRUCTIONS

See individual stand prescriptions for retention details. Contractor must GPS leave islands if applicable. Implementation of the retention guidelines will be discussed on a stand by stand basis 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, 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 Mike Hanley at (517) 243 - 2028, to make arrangements for paint.
2. Paint will be supplied from Gladwin 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.