



**DEPARTMENT OF NATURAL RESOURCES  
STATE OF MICHIGAN**

**TIMBER SALE PROSPECTUS #6992**

SCHEDULED SALE DATE AND TIME: **9:00 a.m. (local time) on January 24, 2022.**

LOCATION: **GRAYLING MGMT UNIT, 1955 HARTWICK PINES ROAD, GRAYLING, MI 49738.**

CONTACT NAME: Thomas Barnes

PHONE NUMBER: (989) 348-6371

PROSPECTUS NOTE: The bidder is advised to inspect the sale area and review the location, estimated volumes, operating costs and contract terms of proposed sales. Please be aware that some landowners may request 60 days or more notice for access across their land.

Notice is hereby given that bids will be received by the Unit Manager, GRAYLING MANAGEMENT UNIT, for certain timber on the following described lands:

Crop Circle Oak (72-640-21) / T27N, R02W, SEC. 6 , NENE.

T28N, R02W, SEC. 31, SENE,SE.

T28N, R02W, SEC. 32, NWNW,NWSW.

Crawford County, Advertised Price \$47,356.05, 132.0 Acres, Hardwood, Red Pine.

SALE NOTE: All units of volume listed for this sale were estimated using the Inventory Manager computer program and the new Michigan taper model.

- Sale is on non-certified land see spec 7.10.1 for more information.
- See sale spec 5.2.3.7 for restriction on military land.
- See Sale spec 5.2.3.4 for restriction due to oak wilt.

A recreation site such as a trail, pathway, or campground is within the sale area or the vicinity. Certain restrictions/specifications may be applicable including time restrictions.

# TIMBER SALE INFORMATION

## Crop Circle Oak (72-640-21)

T27N, R02W, SEC. 6; T28N, R02W, SEC. 31; T28N, R02W, SEC. 32.  
Crawford County (Advertised Price \$47,356.05)

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A timber sale contract for this lump sum, sealed bid timber sale will be awarded to the responsible bidder offering the highest sealed bid price. All units of volume listed below were estimated using the Inventory Manager computer program and the new Michigan taper model. Bids must be at or above the following advertised price for each product and species:

<u>PRODUCTS &amp; SPECIES</u>	<u>ESTIMATED UNITS*</u>	<u>ADVERTISED PRICE</u>
Sawtimber		
Mixed Oak	90.4 MBF	\$ 109.00 / MBF
Red Pine	23.1 MBF	\$ 95.00 / MBF
White Oak	86.9 MBF	\$ 80.00 / MBF
Pulpwood		
B. T. Aspen	92 Cords	\$ 23.60 / Cord
Jack Pine	28 Cords	\$ 16.00 / Cord
Misc. Species 1	124 Cords	\$ 5.50 / Cord
Mixed Oak	907 Cords	\$ 23.35 / Cord
Red Maple	48 Cords	\$ 24.50 / Cord
Red Pine	79 Cords	\$ 31.80 / Cord
White Pine	11 Cords	\$ 17.10 / Cord

\* The total volume is statistically estimated within plus (+) or minus (-) 7.15 percent. There are an estimated 1,799 cords on this timber sale, plus or minus 129 cords at the 95% confidence level. The estimated units are final and not subject to adjustment. Prospective bidders are urged to examine this timber and to make their own estimates of quantity and quality.

### **BOND AND PAYMENT SCHEDULE:**

1. A bond in the amount of \$2,367.80 to insure faithful performance of the conditions of the contract will be deposited by the successful bidder within 21 days of the sale award.
2. Cutting in any sale or unit without the required advance payment would be considered a trespass.
3. Total payment must be paid in advance or according to the following schedule :
  - (a) Ten percent (10%) of the sale value must be paid within 21 days of the sale award.
  - (b) The 10% down payment will be credited towards the first unit cut.
  - (c) Payment for each of the following units must be made before cutting begins in that unit:

PAYMENT UNIT NUMBER	PERCENT OF TOTAL SALE VALUE
01	30.0%
02	23.4%
03	23.2%
04	23.4%

4. If no cutting takes place, the 10% down payment will not be refunded.
5. Operations on the contract issued will terminate on 03/31/2025.

### **SALE STATISTICS**

Volumes were calculated in cubic feet using the Michigan taper model. Cubic foot volume includes all wood inside bark for the product indicated. For display purposes, cubic feet were converted to cords and MBF using a simple conversion factor, e.g. 79 cubic feet per cord and 185 cubic feet per MBF. The cubic foot volumes are precise; the cords and MBF volumes are not. Cubic foot volume cannot be directly converted to cords or boards with precision.

## SALE VOLUMES

The total estimated sale volume may not equal the sum of the species/products due to the nature of statistical calculations associated with double sampling methodology.

VOLUME			STATISTICAL RANGE IN CORDS	
TOTAL CUBIC FEET	TOTAL CORDS	PERCENT ERROR	MINIMUM	MAXIMUM
142,125	1,799	7.15%	1,670	1,928

## VDU VOLUMES

A VDU is a Volume Determination Unit. Volumes and their associated statistics are calculated at the VDU level and summarized to the sale level. There is often a one to one relationship between a VDU and a Payment Unit, but not always, depending on the cruise design. Refer to the VDU TO PAYMENT UNIT table.

	VOLUME			RANGE IN CORDS	
VDU	TOTAL CUBIC FEET	TOTAL CORDS	PERCENT ERROR	MINIMUM	MAXIMUM
16	94,375	1,195	8.74%	1,090	1,299
30	10,043	127	21.92%	99	155
32	20,884	264	18.61%	215	314
130	8,036	102	19.63%	82	122
<b>TOTAL:</b>	<b>133,338</b>	<b>1,688</b>		<b>1,486</b>	<b>1,889</b>

## VDU TO PAYMENT UNIT

When a VDU is associated with more than one Payment Unit (PU), the VDU volumes are assigned to the PU based on acres of the VDU within the PU.

VDU	VDU ACRES	PU	PU ACRES
16	93.4	1	0.7
		2	31.0
		3	30.7
		4	31.0
30	9.7	1	9.7
32	23.5	1	23.5
130	5.4	1	5.4
<b>TOTAL:</b>	<b>132.0</b>		<b>132.0</b>

**DESCRIPTION OF TIMBER BY PU (PU)**

PU	MARKET GROUP	PRODUCT	QUANTITY	UNIT	ACRES	ADVERTISE PRICE
1	Mixed Oak	Sawtimber	23.2	MBF	39.3	\$14,213.10
	<i>B.I./R/Hybrid Oak</i>		22.7	<i>MBF</i>		
	<i>Red Oak</i>		0.5	<i>MBF</i>		
	Red Pine		11.2	MBF		
	White Oak		19.5	MBF		
	B. T. Aspen	Pulpwood	86	Cords		
	<i>B. T. Aspen</i>	<i>Sawtimber</i>	8.9	<i>MBF</i>		
	<i>B. T. Aspen</i>	<i>Pulpwood</i>	68	<i>Cords</i>		
	Jack Pine		28	Cords		
	<i>Jack Pine</i>	<i>Sawtimber</i>	0.5	<i>MBF</i>		
	<i>Jack Pine</i>	<i>Pulpwood</i>	27	<i>Cords</i>		
	Misc. Species 1		18	Cords		
	<i>Misc. Species 1</i>	<i>Sawtimber</i>	6.5	<i>MBF</i>		
	<i>Misc. Species 1</i>	<i>Pulpwood</i>	5	<i>Cords</i>		
	Mixed Oak		184	Cords		
	<i>B.I./R/Hybrid Oak</i>		74	<i>Cords</i>		
	<i>Red Oak</i>		5	<i>Cords</i>		
	<i>White Oak</i>		105	<i>Cords</i>		
	Red Maple		18	Cords		
	Red Pine		49	Cords		
White Pine		11	Cords			
2	Mixed Oak	Sawtimber	22.4	MBF	31.0	\$11,059.65
	<i>Red Oak</i>		22.4	<i>MBF</i>		
	Red Pine		4.0	MBF		
	White Oak		22.6	MBF		
	B. T. Aspen	Pulpwood	2	Cords		
	<i>B. T. Aspen</i>		2	<i>Cords</i>		
	Misc. Species 1		35	Cords		
	<i>Misc. Species 1</i>	<i>Sawtimber</i>	3.8	<i>MBF</i>		
	<i>Misc. Species 1</i>	<i>Pulpwood</i>	27	<i>Cords</i>		
	Mixed Oak		241	Cords		
	<i>Red Oak</i>		119	<i>Cords</i>		
	<i>White Oak</i>		122	<i>Cords</i>		
	Red Maple		10	Cords		
Red Pine		10	Cords			
3	Mixed Oak	Sawtimber	22.3	MBF	30.7	\$10,991.90
	<i>Red Oak</i>		22.3	<i>MBF</i>		
	Red Pine		3.9	MBF		
	White Oak		22.3	MBF		
	B. T. Aspen	Pulpwood	2	Cords		
	<i>B. T. Aspen</i>		2	<i>Cords</i>		
	Misc. Species 1		35	Cords		
	<i>Misc. Species 1</i>	<i>Sawtimber</i>	3.7	<i>MBF</i>		
	<i>Misc. Species 1</i>	<i>Pulpwood</i>	28	<i>Cords</i>		
	Mixed Oak		240	Cords		
	<i>Red Oak</i>		119	<i>Cords</i>		
	<i>White Oak</i>		121	<i>Cords</i>		
	Red Maple		10	Cords		
Red Pine		10	Cords			
4	Mixed Oak	Sawtimber	22.5	MBF	31.0	\$11,091.40
	<i>Red Oak</i>		22.5	<i>MBF</i>		
	Red Pine		4.0	MBF		
	White Oak		22.5	MBF		
	B. T. Aspen	Pulpwood	2	Cords		
	<i>B. T. Aspen</i>		2	<i>Cords</i>		

**DESCRIPTION OF TIMBER BY PU (PU), CON'T**

PU	MARKET GROUP	PRODUCT	QUANTITY	UNIT	ACRES	ADVERTISE PRICE
4 con't	Misc. Species 1	Pulpwood	36	Cords		
	<i>Misc. Species 1</i>	<i>Sawtimber</i>	3.8	<i>MBF</i>		
	<i>Misc. Species 1</i>	<i>Pulpwood</i>	28	<i>Cords</i>		
	Mixed Oak		242	Cords		
	<i>Red Oak</i>		120	<i>Cords</i>		
	<i>White Oak</i>		122	<i>Cords</i>		
	Red Maple		10	Cords		
	Red Pine		10	Cords		
TOTAL:			200.4	MBF		
TOTAL:			1,289	Cords		

## Sale Specific Conditions & Requirements

Sale Name: Crop Circle Oak

Sale Number: 72-640-21 Seq#: 2

### 1 - Sale Area

#### 1.2 - Boundaries

##### 1.2.1 - Painted boundaries (9/19)

The sale boundary and Payment Unit boundaries are marked and identified by red and yellow paint or are unmarked and identified by existing roads. Exterior sale boundary lines against state are marked with red paint except the north boundary of Payment Unit 1 and is identified by County Road 612. Interior Payment Unit boundaries are marked with yellow paint except between Payment Units 3 and 4 is unmarked and identified by the unnamed forest road. Retention patches are marked with red paint; no harvesting activities may occur within these areas. The painted boundary line trees are not Included Timber and are to be protected. Yellow painted trees designating an interior Payment Unit boundary are only to be cut when all surrounding Payment Units have been paid.

### 2 - Timber Specifications

#### 2.1 - Included Timber

##### 2.1.2 - Clearcut unit(s) w/o unmerchantable trees (8/11)

Within Payment Unit(s) 1-4, cut all trees which meet minimum piece specifications in 2.2 Utilization, except do not cut trees marked with green paint.

##### 2.1.11 - Description of timber note (2/04)

Note that Misc. Species 1 = dead oak.

#### 2.2 - Utilization

##### 2.2.2 - Chipping required (2/18)

This area must be chip harvested to meet National Guard requirements. However, the chipping requirement could be waived with military approval if chip markets are depressed. The Purchaser has the option to produce sawlogs or pulpwood bolts, but the remaining portion of the trees must be chipped and hauled. The requirement to retain approximately 1/6 to 1/3 of tree tops and limbs less than four inches in diameter does not apply (G. C. & R. 2.2). This is because this is military land.

##### 2.2.3 - Stump heights (4/07)

Stump heights within the Sale Area shall not exceed 6 inches for all trees. This is to facilitate military requirements. A written waiver of this requirement may be obtained if wet summer weather makes winter logging necessary.

### 3 - Payments

#### 3.3 - Pre-measured Sales

##### 3.3.4 - Dividing payment units (7/14)

Payment Unit(s) may be divided at the request of the Purchaser and upon approval of the Unit Manager. Dividing Payment Units is a contract modification which requires a Timber Sale Contract Amendment.

#### 3.4 - Damaged Timber

##### 3.4.1 - Damaged timber (7/16)

General Condition and Requirement 3.4 Damaged Timber, defines liquidated damages for undesignated live merchantable trees which are cut or injured. In addition, extreme care should be taken to avoid damage to tree seedlings and saplings. Within the Sale Area, if more than 30% of the tree seedlings or saplings (1/4" to 4.5" DBH) within a specified portion of the Sale Area are damaged, liquidated damages will be assessed at \$300 per acre for all acreage within that specified portion of the Sale Area that was damaged. Saplings cut cleanly in skid trails will not be counted as damage. Within the Sale Area, if more than 5% of trees (> 4.5" DBH) within a specified area of the sale are damaged, liquidated damages will be assessed for all trees damaged. Rates will be in accordance with General Condition and Requirement 3.4 Damaged Timber.

## 4 - Transportation

### 4.1 - Construction

#### 4.1.6 - Road construction (1/09)

Construction of new roads or improvements of existing roads shall be done in such a way as to minimize the environmental and visual impacts. Merchantable trees shall be cut and utilized unless otherwise directed. Non-merchantable trees shall be severed and laid flat on the ground. Slash shall be scattered, and not left in windrows and kept a minimum of 10 feet back from the road edge. Stumps shall be set upright, not left on edge, and be moved at least 10 feet away from the road edge. Disturbed soil shall be feathered into the woods and not left in berms or windrows.

#### 4.1.7 - Road closure (10/11)

All new roads built into the sale must be blocked to vehicle traffic upon completion of the sale. Overgrown roads that are reopened shall be considered new roads. In general, this will require constructing a four (4') foot high berm of stumps and logs covered with earth. Stumps and brush must be placed along the remainder of the trail. These roads must be rendered impassable to cars and trucks. All stumps from road building and landing construction must be reserved to block any newly constructed roads upon completion of the sale. These stumps must be scattered along the road system to prohibit vehicular movement. Contact the sale administrator for specific details of design and placement.

#### 4.1.11 - Permits (2/12)

The Purchaser will secure any necessary permits that may be required.

## 5 - Operations

### 5.1 - Notification

#### 5.1.5 - National Guard notification (2/15)

This sale is upon lands utilized for training by the Michigan National Guard - Camp Grayling. A minimum of five (5) business days prior to opening this sale, the producer must request that the sale administrator contact the military for information regarding training plans that may impact sale operations.

### 5.2 - Conduct of Operations

#### 5.2.2 - Hazard Trees/Snags

##### 5.2.2.1 - Den trees (10/16)

Obvious hollow and/or den trees shall be protected and left standing unless they are a safety hazard.

#### 5.2.3 - Operating Restrictions

##### 5.2.3.4 - Oak wilt restriction, no exceptions (1/18)

Within Payment Unit(s) 1-4, cutting and skidding within the sale and brushing of access roads to the sale are not permitted during the period of April 15 to July 15. No exceptions will be granted. Hauling may be permitted if brushing of access roads into the Sale Area has been completed prior to restrictions coming on. This is necessary to reduce the spread of oak wilt.

##### 5.2.3.7 - National Guard training restriction (1/09)

Operations on this contract may not be allowed during National Guard training operations. Typically, the restricted period is from May 1 to October 31. The contractor must check with the Unit Manager who will coordinate the cutting schedule with the Military.

#### 5.2.29 - Shrub protection (1/20)

Reasonable care should be taken to avoid cutting or damaging hawthorn or junberry. These woody-shrub plants are highly beneficial to various wildlife species.

#### 5.2.32 - Decking/landing restoration (9/13)

All decking and landing areas must have the surface area restored to a condition equal to or better than before. This is to ensure the proper regeneration of the stand. Wood debris, chips, and "cookies" from trimmings must be removed or scattered away from landing and loading areas and may not be windrowed on the edge.

#### 5.2.38 - No decking against live trees (2/04)

Cut products may not be decked against unmarked or designated leave trees.

#### 5.2.41 - Snowmobile trail protection (9/11)

The trail LP47 is a snowmobile trail and is shown on the Timber Sale Map. The trail may be rerouted through Payment Units 3 and 4 before or during the logging operations. Do not cut or damage posts with orange trail markers or traffic control signs. If the trail is used, it must be maintained and restored to a condition equal to or better than before the sale. The road maintenance/restoration must be done prior to December 1. If the trail is used for hauling, it must be graded to the satisfaction of the Unit Manager or his/her representative prior to December 1. If the trail road is to be used for hauling during the snowmobile season, then a snow-covered base must be left on the trail. The snowmobile trail may not be used for any timber sale operations from December 1 to March 31 without Unit Manager approval. The snowmobile trail may only be crossed at right angles. Maintain a 20-foot-wide slash, debris, and rut free zone daily using the snowmobile trail as the centerline. No decking of forest products will be permitted along the snowmobile trail. All stumps within 5 feet of the snowmobile trail must be cut at ground level.

### 5.4 - Soil Protection

#### 5.4.2 - Skid trails (2/04)

Skid trails up and down slopes should be avoided. If however this is unavoidable, these trails will be left in a non-erodible condition using water bars, logs, and slash. Placing of slash on these skid trails while logging is ongoing may alleviate need for any further action. At the direction of the sale administrator, seed, fertilizer, and mulch may also be required.

## 6 - Safety and Fire Prevention

### 6.2 - Signing

#### 6.2.1 - Road posting (10/20)

The Purchaser is responsible for posting and maintaining caution signs on haul roads prior to beginning operations. The road must be posted at appropriate distances from the Sale Area to warn of logging activity and truck traffic. Signs must be removed when harvest operations are suspended or completed. The Purchaser will provide these signs.

#### 6.2.2 - Snowmobile trail posting (10/20)

The Purchaser is responsible for posting and maintaining caution signs on the snowmobile trail prior to beginning operations during the snowmobile season (approximately December 1 to March 31). The trail must be posted at appropriate distances from the Sale Area to warn of logging activity and truck traffic. Signs must be removed when harvest operations are suspended or completed. The Purchaser will provide these signs.

SKIP

#### 6.4 - Unexploded ordinance (7/15)

Be aware that the sale area could contain UXO (unexploded ordinances). Do not touch, or drive over any metal objects. If any objects are found, please flag the area and notify the Unit Manager or his/her representative, so that they can make arrangements with the Military.

## 7 - Other Conditions

### 7.10 - Certified Timber

#### 7.10.1 - Non-certified timber (2/16)

The area encompassed by this timber sale is not certified to the standards of the Forest Stewardship Council (FSC) or the Sustainable Forestry Initiative (SFI). Forest products from this sale may not be delivered to the mill as "FSC and / or SFI certified". The lands within this sale are managed for military training.



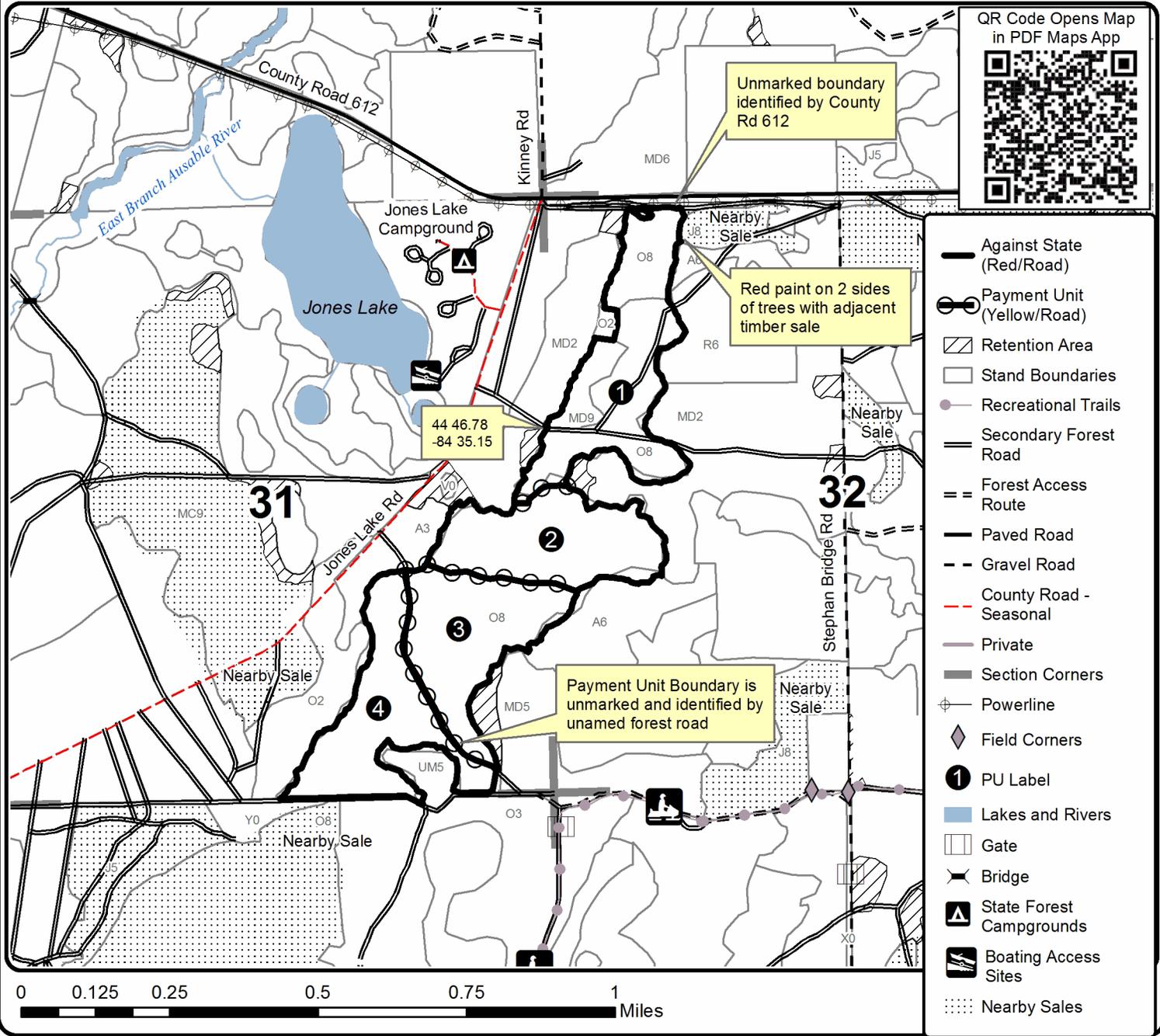
# TIMBER SALE MAP

This information provided by authority of Part 525, 1994 PA 451, as amended.

Forest Management Unit Grayling		County Crawford	Mapped By Scott McClarren/Money bros	Date 10/12/2021	Page 1	of 1
Township 28N 27N	Range 02W 02W	Section(s) and Subdivision(s) Sec. 6: NENE Sec. 31: SENE,SE, Sec. 32: NWNW,NWSW		Scale 1:15,840		

Cover Type				Density			
A = Aspen	H = Hemlock	N = Marsh	U = Upland Brush	0 = Non Stocked	5 = Pole Timber Medium		
B = Paper Birch	J = Jack Pine	O = Oak	UM = Upland Mixed	1 = Seedling Sapling Poor	6 = Pole Timber Well		
C = Cedar	L = Lowland Brush	P = Lowland Poplar	V = Bog or Marsh	2 = Seedling Sapling Medium	7 = Saw Timber Poor		
D = Treed Bog	LM = Lowland Mixed	Q = Mixed Swamp Conifer	W = White Pine	3 = Seedling Sapling Well	8 = Saw Timber Medium		
E = Swamp Hdwoods	M = Mpl, Bch, Brch	R = Red Pine	X = Non Stocked	4 = Pole Timber Poor	9 = Saw Timber Well		
F = Spruce Fir	MC = Mixed Conifer	S = Black Spruce	Z = Water				
G = Grass	MD = Mixed Deciduous	T = Tamarack					

PU	Acres	PU	Acres	<b>Crop Circle Oak</b>	
1	39.3	4	31	<b>Compartment 251</b>	
2	31			<b>132 Acres</b>	
3	30.7				



- Against State (Red/Road)
- Payment Unit (Yellow/Road)
- Retention Area
- Stand Boundaries
- Recreational Trails
- Secondary Forest Road
- Forest Access Route
- Paved Road
- Gravel Road
- County Road - Seasonal
- Private
- Section Corners
- Powerline
- Field Corners
- PU Label
- Lakes and Rivers
- Gate
- Bridge
- State Forest Campgrounds
- Boating Access Sites
- Nearby Sales