

Massachusetts Department of Conservation and Recreation
Division of Water Supply Protection, Office of Watershed Management
Forest Management Project Summary

Project Title: Old Worcester Rd

DWSP Harvest Permit Number: 4396
DCR Forest Cutting Plan File Number: 021-9283-18

Site Information

Watershed: Ware River Watershed	Town(s): Barre
Acres: 13.1	Nearest Road: Old Worcester Rd
Natural Heritage Atlas overlap?: No	Public Drinking Water Supply Watershed?: Yes
Forest Types: Red Pine, Spruce, White Pine/Hardwood	ACEC?: No
Soils: 254C Merrimac fine sandy/loam, 253E Hinckley loamy sand, 910C Woodbridge-Paxton association	
Wetland Resources: A stream and associated wetlands are located to the west of the harvest area, Ware River is to the south.	
Vernal Pools present or within 200 feet of harvest : No	

Harvest Information

Harvest Start Date: 8/8/18	Harvest End Date: 9/6/18
Number of Wetland Crossings: None	Number of Stream Crossings: None

Best Management Practices Applied

Stream Crossings	There are no stream crossings.
Filter Strips	There is harvesting in a filter strip.
Wetland Crossings	There are no wetland crossings.
Harvesting in Wetlands	There is no harvesting in wetlands.

DWSP Forester supervising this harvest
Name: Ken Canfield
Forester License # 431
Phone #: 508-882-3636 X 1603
Email: kenneth.canfield@state.ma.us

NARRATIVE

General Description/Forest Composition/History:

The harvest area is located north of Rt 122 and south of Old Worcester Rd in Barre. Most of this area was fields in the 1930's. The stand adjacent to Old Worcester Rd was planted to Red Pine. The stand has been thinned twice and only scattered overstory red pine remain. The thick regeneration underneath is dominated by pole size white pine. Pole and sapling size red and white oak, black birch, and red maple are also present. The area closer to Rt 122 was planted with a mixture of Norway spruce, eastern white pine, and some European larch. This stand has never been thinned, so there is almost no sunlight reaching the forest floor. This has led to almost no regeneration being present in the stand. Areas that were allowed to regenerate naturally are dominated by low quality eastern white pine with some oak and hardwoods. Diverse natural regeneration is abundant in these areas.

Tree species present are eastern white pine, Norway spruce, white, red, and black oak, red maple, red pine, European larch, hemlock, black cherry, pitch pine, and quaking aspen.

Invasive shrubs, particularly glossy buckthorn, are present. Some invasive shrubs were hand-pulled during the marking of this lot. Harvesting trees in patches puts enough sunlight on the ground to create conditions that will help native tree species out-compete invasive shrubs over time.

The soil is well drained.

Site Selection:

The primary goal of the watershed forest management program is to create and maintain a forest that provides high quality drinking water to current users and future generations. A healthy and resilient forest is comprised of diverse native tree and shrub species and multiple age classes of trees.

This area was chosen because of the mixture of plantations of non-native species and large patches of low quality old field white pine. Plantations are by definition even-aged and low in overstory species diversity. Red pine is also vulnerable to an invasive insect that kills healthy trees very quickly. The old field white pine stands also lack species diversity and are dominated by a single age class.

Silvicultural Objectives:

Within the red pine stand, overstory red pine trees will be harvested. The more diverse native species in the understory will be protected and released. Within the spruce/white pine/larch plantation, the non-native spruce and larch and the lowest quality white pine will be removed. The best quality overstory white pines will be retained as seed trees for the next crop of trees to be established. The old field white pine stands will be harvested in groups.

Cultural Resources:

This land has been determined to not be culturally or archeologically sensitive based on a review by the DCR Archaeologist. Standard practice dictates that every effort is made to avoid disturbing stone walls and other cultural resources. One stonewall will have to be breached to establish a landing.

Wildlife/Rare or Endangered Species:

No known vernal pools are present within the lot.

FIGURES

Figure 1 Final Forest Cutting Plan

Figure 1 Forest Cutting Plan

Forest Cutting Plan

and Notice of Intent under M.G.L.

Chapter 132 – The Forest Cutting

Practices Act, 304 CMR 11.00

(Effective Date: 3/15/16)

FEB 16 2018

For DCR Use Only:

File Number 01-9283-18 Case No. _____
 Date Rec'd 3/16/18 Nat. Hert. No
 Earliest Start 3/16/18 Pub. Dr. Wat. Y WARE RIVER
 River Basin CHEROKEE ACEC No
 Gen. Obj. LT NAT HER IMPACT NO

Site Information

Location

Town Barre
 Road Old Worcester Rd
 Acres 13.1 Proposed Start Date 3/16
 Vol. MBF 54.5 Vol. Cds. 15 Vol. Tons 560

Plan Preparer

Name Kenneth W. Canfield
 Address 578 Old Turnpike Rd

Town, State, Zip Oakham, MA 01068
 Phone (508) 882-3636

Type of Preparer LF

*Mass. Forester License # 431

*Required for land under Ch61, Ch61A or Forest Stewardship

Landowner

Name DCR Division of Water Supply Protection
 Mailing Address 485 Ware Rd

Town, State, Zip Belchertown, MA 01007

Phone (413) 323-6921

Ch61 ☐ 61A ☐ 61B ☐ Stew ☐ *Case #

FSC ☐ CR ☐ CR Holder

Licensed Timber Harvester**

Name _____

Address _____

Town, State, Zip _____

Phone _____

Mass. Lic. Harvester # _____

**This information may be supplied after the plan is approved, but before work begins.

Best Management Practices

Stream Crossings

Indicate location on map	SC-1	SC-2	SC-3	SC-4
Type of Crossing				
Existing Structure				
Type of Bottom				
Bank Height (ft)				
Stabilization				

Wetland Crossings

Indicate location on map	WC-1	WC-2	WC-3	WC-4
Length of Crossing				
Mitigation				
Stabilization				

Filter Strips

Indicate location on map	FS-1	FS-2	FS-3	FS-4
Width (50', 100', or VA)	VA			

Harvesting in Wetlands

Indicate location on map	HW-1	HW-2	HW-3	HW-4
Forest Type (see pg 2)				
Acres to be Harvested				
Resid. Basal Area (>50%)				

Service Forester Comments

* NOTIFY DCR SERVICE FORESTER
 WHEN WORK BEGINS

Codes

Type of Preparer	Type of Crossing	Stabilization	Mitigation	Type of Bottom
LP Mass. Lic. For.	CU Culvert	SE Seed	FR Frozen	LE Ledge
TH Lic. Tim. Har	BR Bridge	MU Mulch	DR Dry	ST Stony
TB Timber Buyer	PO Ford	CO Corduroy	OT Other	MU Mud
LO Landowner	PO Piled	ST Stone		GR Gravel
OT Other	OT Other	HB Hay Bales		OT Other
		OT Other		

Note:
 Applicant must provide DCR with all relevant information before plan may be approved and cutting may begin.
 Some forestry activities, such as prescribed burning and pesticide or fertilizer application may require additional permits. Consult MA Forestry BMP Manual for further information.

If Other (OT) is used in any category an explanation must be given on an attached narrative page

Products to be Harvested*

Species	Mbf/Cds		Mbf/Cds
White Pine	29.3 Mbf	Red Maple	
Red Pine	11.0 Mbf	Sugar Maple	
Pitch Pine		Red Oak	0.4 Mbf
Hemlock		Black Oak	
Spruce	13.3 Mbf	White Oak	
Other Sftwd.	0.4 Mbf	Other Hdwd.	
White Ash		Total Mbf	54.4 Mbf
Beech		Cordwood (Cds)	15
White Birch		SW Pulp (Tons)	
B & Y Birch.		HW Pulp (Tons)	
Black Cherry		Chips (Tons)	560

*Note: Volumes indicated in the Plan are as reported by the plan preparer and have not been independently verified by the service forester upon approval. Mbf = thousand board feet.

Cutting Standards

Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	RP	SR	WP	
Acres	5.6	3.7	3.8	
Landowner Objective	LT	LT	LT	
Designation of Trees	CT	CT	CT	
Type of Cut	SH	ST	SH	
Source of Regeneration	AD	SE	SE	

Landowner Signature

The most important information on a cutting plan is the Landowner's objective, as this will determine which trees will be harvested and which will remain; this decision will also determine the future condition of the forest for decades to come. After having read the Massachusetts Forest Cutting Plan Information Sheet on page one, indicate your objective by checking the appropriate box below.



LT - Long-term Forest Management

Planned management of the forest to achieve one or more of the following objectives: produce immediate and maximize long-term income, enhance wildlife habitat, improve recreational opportunities, protect soil and water quality, or produce forest specialty products.



ST - Short-term Harvest

Harvest of trees with the main intention of producing short-term income with minimal consideration given to improving the future forest condition, which often results in a forest dominated by poor quality and low value species.

I (we) have read the Massachusetts Cutting Plan Information Sheet, and am aware of my (our) management options.

I (we) hereby certify that I (we) have the legal authority to carry out the operation described above.

I (we) certify that I (we) have notified the Conservation Commission in the town in which the operation is to take place and the abutters of record within two hundred feet of the area to be harvested.

I (we) understand that the volumes in this plan have not been independently verified by the service forester upon approval and will report final values and volumes to the Director or his/her agent if the final figures differ from those reported.



Signature of landowner(s)

Date

8-13-18

Determination and Status

Approved ☒ Disapproved ☐ Expires 2/16/20

Cutting Plan Philip Lopez 3/7/18

Signature of Service Forester/Director's Agent Date


SITE VISIT w/ D.H. 3/6/18

Extension 1 ☐ 2 ☐ Expires Ser. For. Ints.

Amendment App 1 ☐ Dis 1 ☐ App 2 ☐ Dis 2 ☐

Final Report and Comments

I hereby certify that the afore described Forest Cutting Plan and all relevant statutes have been substantially complied with.



Signature of Service Forester/Director's Agent

8/28/18

Date

Forest Types				Designation of Trees	Type of Cut	Source of Regeneration
WP White Pine	HK Hemlock	OM Mixed Oak	CT Cut Tree	SH Shelterwood	Intermediate Harvester:	AD Advanced
WK WP/Hem	HH Hem/Hdwd	RM Red Maple	LT Leave Tree	ST Seed Tree	CT Commercial Thin	SE Natural Seed
WH WP/Hdwd	BC Black Cherry	BE Beech	SB Stand Boundary	CC Clear Cut	NT Non Com Thin	PL Plant
WO WP/Oak	BB Bee/Bir/Map	SF Spruce/Fir	OT Other	SE Selection	Non-Standard Systems:	CO Coppice
RP Red Pine	OH Oak/Hdwd	SM Sugar Maple	Landowner Objective	SA Salvage	HG Highgrade*	DS Direct Seed
SR Red Spruce	OR N Red Oak	PP Pitch Pine	LT Long-term Mgt.	SN Sanitation	DL Diameter Limit*	OT Other
			ST Short-term Har.		OT Other*	

*If Other (OT) or a non-standard system is used an explanation must be given on attached narrative page

pg 4 of 5

Forest Cutting Plan

Narrative Page (Effective Date: 3/15/16)

Use this page to provide further explanation or if Other (OT) was used in any category on pages 3 or 4.

Landowner DCR - DWSP

Town Barre

File Number 021-9283-18

BMPs

Use this Section to provide further explanation or if Other (OT) was used in any category in the Best Management Practices Section on Page 3.

Stand 1 is a 5.6 acre red pine stand that was seed tree harvested in 1992. That harvest left scattered overstory red pine trees. The stand has regenerated well underneath with white pine, black birch, and red and white oak seedlings/poles. The remaining overstory red pine trees will be harvested. The skid trails will be spaced so that enough existing regeneration will remain so that the stand is still stocked after harvest. Stand 2 is a 3.7 acre spruce, larch, and white pine plantation that was planted in the 1930's. The spruce, larch, and worst quality and vigor white pine will be removed. The best quality and most vigorous white pine trees will be retained as seed trees. Stand 3 is a group shelterwood comprised of three separate groups of old field white pine. The groups are 0.5, 1.4, and 1.9 acres in size. Approximately 5 square feet of basal area per acre of the most vigorous red and white oak, white pine, and pitch pine will be retained for aesthetics.

Designation of Trees

Use this Section to describe the types of trees to be harvested and/or retained if Other (OT) was used for "Designation of Trees" in the Stand Treatment Section on page 4. Additional narrative description may be added on a separate page.

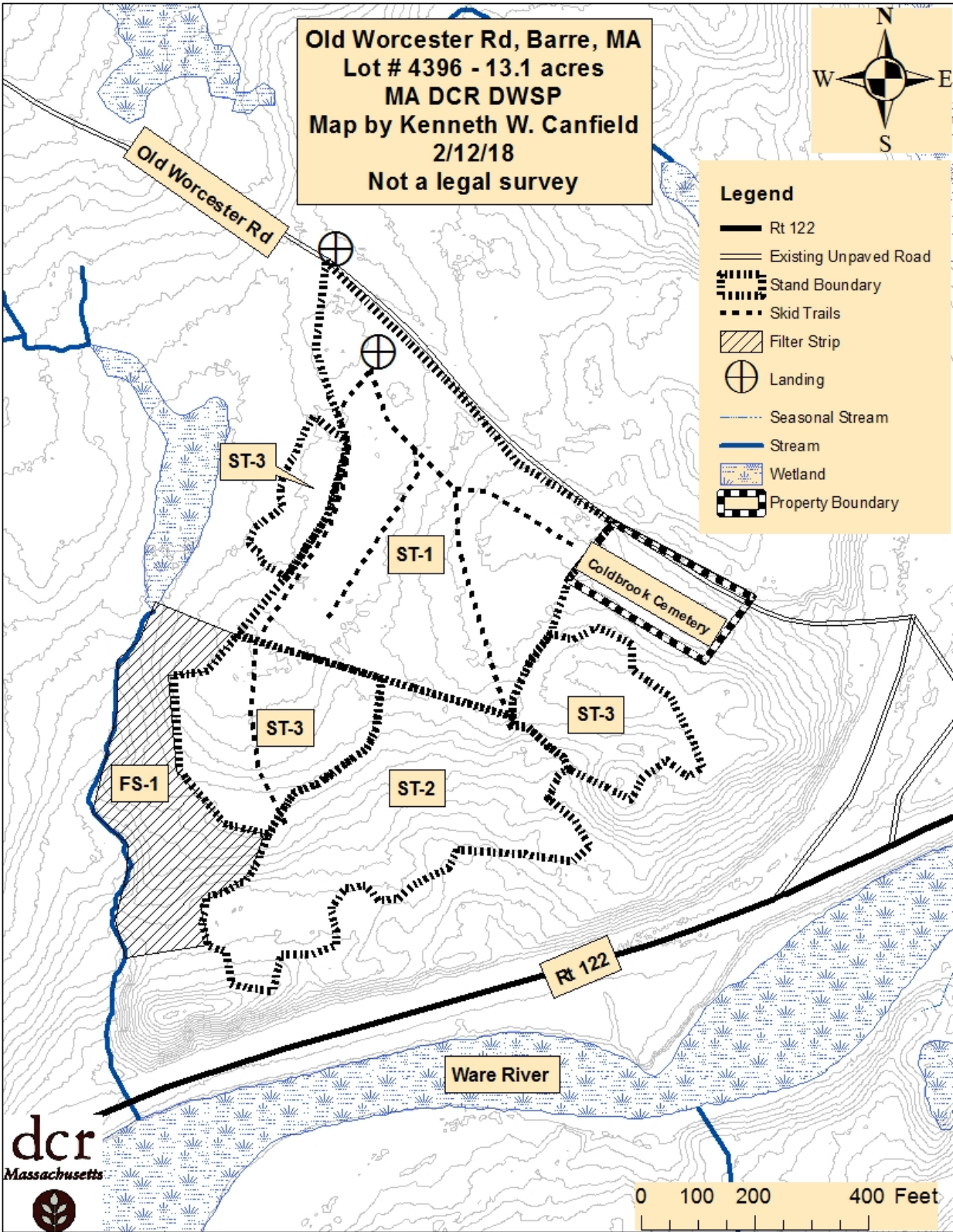
Stand No.	Describe Trees to be Cut			Describe Trees to be Left			% BA/AC	
	Species	Size	Quality	Species	Size	Quality	Cut	Left

Regeneration & Future Condition

Use this Section to describe how Chapter 132 requirements will be met if a non standard system (HG, DL, or OT) was used for the "Type of Cut" in the Cutting Standards Section on page 4.

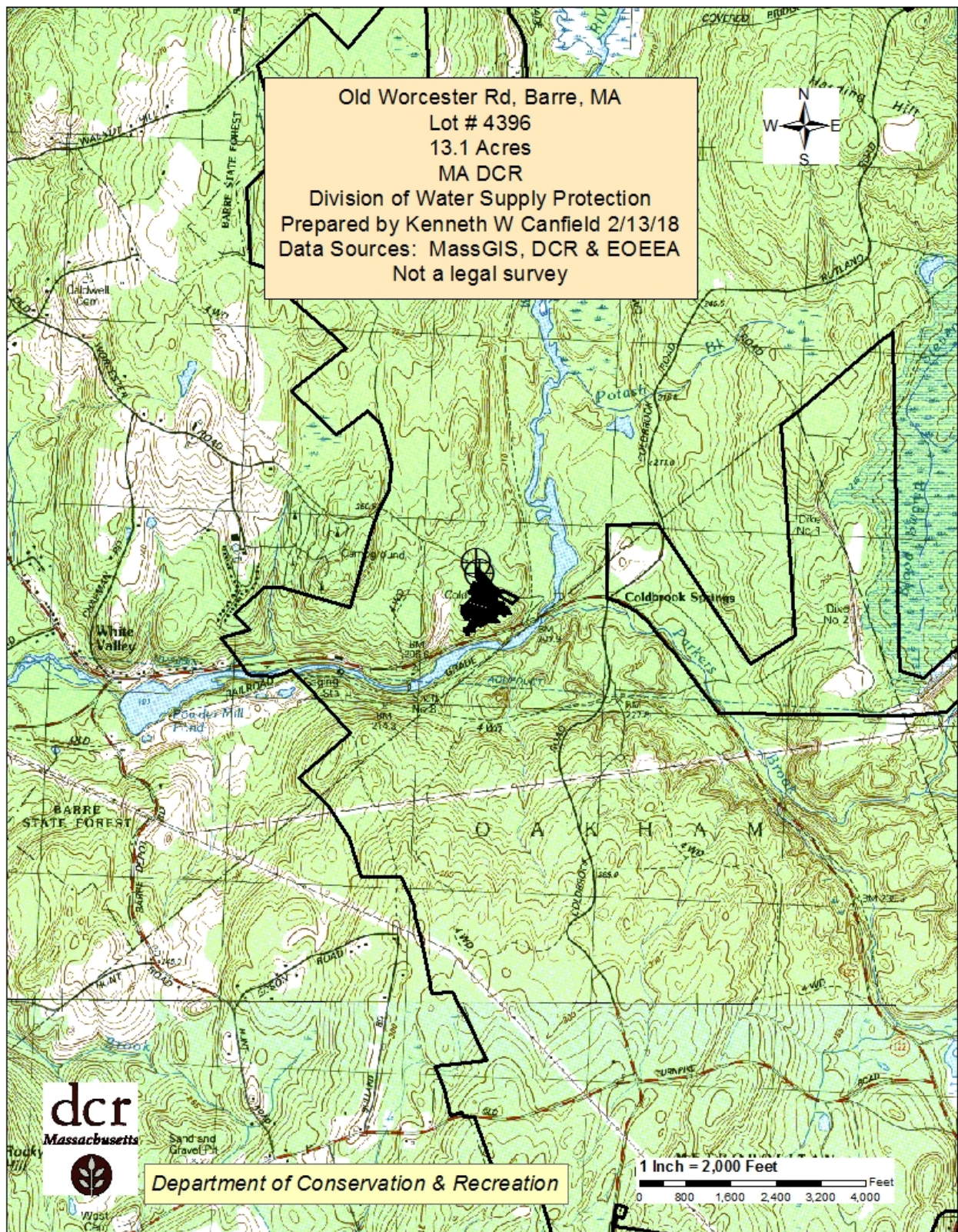
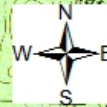
Stand No.	Source of Regeneration (ex. AD, SE)	How will Regeneration be obtained/protected? If using AD - Describe the species present and how the regeneration will be protected If using SE - Describe the source of the seed and the number of seed trees/acre
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Stand No.	Desired Future Condition Describe what the stand is expected to look like five years from the harvest, including the condition of the overstory & understory
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Old Worcester Rd, Barre, MA
Lot # 4396
13.1 Acres
MA DCR

Division of Water Supply Protection
Prepared by Kenneth W Canfield 2/13/18
Data Sources: MassGIS, DCR & EOEEA
Not a legal survey



Department of Conservation & Recreation

1 Inch = 2,000 Feet
0 800 1,600 2,400 3,200 4,000 Feet

dc



COMMONWEALTH OF MASSACHUSETTS
Department of Conservation and Recreation
Division of State Parks and Recreation

FILE # 021-9283-18

FOREST CUTTING PLAN CERTIFICATE



Post this in a conspicuous place within the area in which the harvesting operation is to take place.

This certifies that DCR - DWSP 485 WARE RD
(Name of Owner) BECHERTOWN, MA 01007 in accordance with the
(Address)

provision of M.G.L. Chapter 132, Section 40-46, filed in CLINTON with the Dept. of Conservation
and Recreation, Division of State Parks and Recreation, a Notice of Intent to cut forest products upon the
BARRE lot. (OLD WORCESTER RD)

Approval Date 3/7/18

Director's Agent CHRIS CAPONE

DCR Phone No. (978) 368-0126 ext. 136

ISSUED BY:

Priscilla E. Geigis, Director
Division of State Parks and Recreation