

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

Project Title: Gate 37 pine

DWSP Harvest Permit Number: 3177

DWSP Proposal ID: PT-23-10

DCR Forest Cutting Plan File Number: 234-42992-25

Location Information

Watershed: Quabbin

Town(s): Petersham

Acres: 43.0

Nearest Road: Monson Turnpike

Natural Heritage Atlas overlap?: no

Public Drinking Water Supply Watershed?: Yes

Area of Critical Environmental Concern (ACEC)?: no

Site Information

Forest Types: white pine-hemlock, white pine, oak-hardwood

Soils: Montauk-Canton association, extremely stony, 15 to 35% slopes, well drained; Montauk-Scituate-Canton association, extremely stony, 3 to 15% slopes, well drained; Hinckley loamy sand, 3 to 8% slopes, excessively drained

Wetland Resources: An intermittent stream with bordering vegetated wetlands flows east to west through the northern half of the proposal area, under the DCR access road through an established culvert (SC-1), and then to the Quabbin Reservoir about 400 feet away.

Vernal Pools: Three verified vernal pools are located outside but within 100 feet of the harvest boundary, and will be protected as required under the [2017 DWSP Land Management Plan](#) by maintaining 100 foot shade zones and minimizing ground disturbance within 200 feet.

Harvest Information

Harvest Start Date: October 31, 2024

Harvest End Date: May 5, 2025

Number of Wetland Crossings: none (the one on the cutting plan was not used)

Number of Stream Crossings: one (existing culvert crossing in the Quabbin road system)

Best Management Practices Applied

Stream Crossings: culvert

Filter Strips: variable width based on slope

Wetland Crossings: n/a

Harvesting in Wetlands: n/a

DWSP Forester supervising this harvest

Name: Helen Johnson

Forester License number: 383

Phone number: (617) 733-2937

Email: Helen.Johnson@mass.gov

Narrative

General Description/Forest Composition/History

Lot 3177 is located on 43 acres of predominantly south- and west-facing slopes near Quabbin Gate 37, just north of Rattlesnake Hill in Petersham. White pine is the dominant overstory species, mixed with hemlock to the north, and gradually overtaken by oaks, hickory, and other hardwoods on the upper slopes to the southeast. The midstory is diverse, with white pine, red maple, sugar maple, white ash, hickory, hemlock, black, yellow and paper birch, and red, black, and white oak. As in the overstory, oak is more common in the midstory as one moves upslope. Vigorous regeneration is present through much of the harvest area, especially in the southwest where it includes an unusually high proportion of oaks. North of the stream, where hemlock is densest in the overstory, the understory is more open.

Past harvests include S12NQ, which removed oaks that had died due to spongy moth at the southern edge of the harvest area in 2020 and single tree selection in the eastern half of the area in 1987 (Lot 511). About two thirds of the area has never been harvested by DWSP.

Site Selection

The primary goal of harvesting on the watershed is to create and maintain a forest that is resilient to and can quickly recover from small and large scale disturbances, including diseases, insect infestations, ice storms, microbursts, and hurricanes. The ideal way to achieve such resiliency is to foster a forest of diverse species at various stages of development (seedlings through large legacy trees) that are actively growing and regenerating. This combination of structural and species diversity builds resistance and resilience into the forest.

The site for this harvest was chosen because of its diverse advance regeneration in need of release, and because of overstory dominance of white pine, which is particularly vulnerable to uprooting or snapping in strong winds.

Silvicultural Objectives

To help achieve the DWSP goal of promoting forest resiliency, the primary silvicultural goal for this lot is to increase overstory health and diversity, and provide patches of full sun to enable the regeneration to thrive, by removing the lowest quality white pine in patches of up to two acres. Healthy oaks and hickories within the openings have been retained to provide seed and to further increase vertical and horizontal heterogeneity.

Cultural Resources

A shallow well is present near the southeast corner of the harvest area, and degraded stone walls are present along the DCR access road. Any currently unknown cultural resources found during the harvest will be flagged and protected, and the DCR archaeologist will be notified.

Rare or Endangered Species

None known.

Forest Cutting Plan

Forest Cutting Plan page 1 of 6

RECEIVED OCT 10 2024

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) *Final (7/25)*

For DCR Use Only:

File Number	<u>234-42992-25</u>	Case No.	<u>-</u>
Date Rec'd	<u>10/10/24</u>	Nat. Hert.	<u>N</u>
Earliest Start	<u>10/28/24</u>	Pub. Dr. Wat.	<u>Y</u>
River Basin	<u>Chicopee</u>	ACEC	<u>N</u>
Gen. Obj.	<u>LT</u>		

Site Information

Location

Town Petersham QUABBIN LOT 3177
Road Monson Turnpike
Acres 43.0 Proposed Start Date _____
Vol. MBF 171.9 Vol. Cds. 54 Vol. Tons 76

Plan Preparer

Name Helen Johnson
Address DCR-DWSP, Quabbin Section
485 Ware Road
Town, State, Zip Belchertown, MA 01007
Phone (617) 733-2937
Type of Preparer LF
*Mass. Forester License # 383
*Required for land under Ch61, Ch61A or Forest Stewardship

Landowner

Name DCR-DWSP Quabbin Section, ATTN: Forestry
Mailing Address 485 Ware Road
Town, State, Zip Belchertown, MA 01007
Phone (413) 213-7903
Ch61 61A 61B Stew *Case # _____
FSC CR CR Holder

Licensed Timber Harvester**

Name John S. Conkey & Sons Logging
Address 1166 Munsel St
Town, State, Zip Belchertown, MA 01007
Phone _____
Mass. Lic. Harvester # VARIOUS
**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	CU			
Existing Structure	YES			
Type of Bottom	MU			
Bank Height (ft)	1-2' <input type="checkbox"/>			
Stabilization	SE			

Wetland Crossings

Indicate location on map	WC-1	WC-2	WC-3	WC-4
Length of Crossing	25			
Mitigation	FR/DR			
Stabilization	CO			

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

Codes

Type of Preparer	Type of Crossing	Stabilization	Mitigation	Type of Bottom
LF 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	FO Ford	CO Corduroy	OT Other	MU Mud
LO Landowner	PO Poled	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.

Forest Products

Products to be Harvested*

Species	Mbf/Cds		Mbf/Cds
White Pine	157.8	Red Maple	1.7
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	2.8
Hemlock	9.3	Black Oak	0.3
Spruce		White Oak	
Other Sftwd.		Other Hdwd.	
White Ash		Total Mbf	171.9
Beech		Cordwood (Cds)	54
White Birch		SW Pulp (Tons)	76
B & Y Birch		HW Pulp (Tons)	
Black Cherry		Chips (Tons)	

*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.

Stand Treatment

Cutting Standards

Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	WK <input type="checkbox"/>	WP <input type="checkbox"/>	OH <input type="checkbox"/>	
Acres	10.1	19.7	13.2	
Landowner Objective	LT	LT	LT	
Designation of Trees	CT <input type="checkbox"/>	CT <input type="checkbox"/>	CT <input type="checkbox"/>	
Type of Cut	SE <input type="checkbox"/>	SE <input type="checkbox"/>	SE <input type="checkbox"/>	
Source of Regeneration	SE <input type="checkbox"/>	AD <input type="checkbox"/>	AD <input type="checkbox"/>	

Landowner

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.

9/29/2024

Signature of landowner(s)

Date

Service Forester

Determination and Status

Approved Disapproved Expires 10.10.26

10.25.24
Signature of Service Forester/Director's Agent Date

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.

7.30.25

Signature of Service Forester/Director's Agent

Date

Codes

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 Harvests:	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	Blck 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

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 Quabbin

Town Petersham

File Number _____

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. WC-1 and the two landings north of SC-1 make it possible for the lot to be operated with a skidder (no skidding is allowed on Quabbin access roads). Landing to west of access road is a skidder landing only for the few trees that will need to be dropped across the road. Harvest boundary was drawn to exclude NHESP Priority and Estimated Habitat. Silviculture is group selection, with groups up to 2 acres totalling 8.8 acres and 5-15 ft²/ac of green retention in groups 1/2 acre or larger.

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.

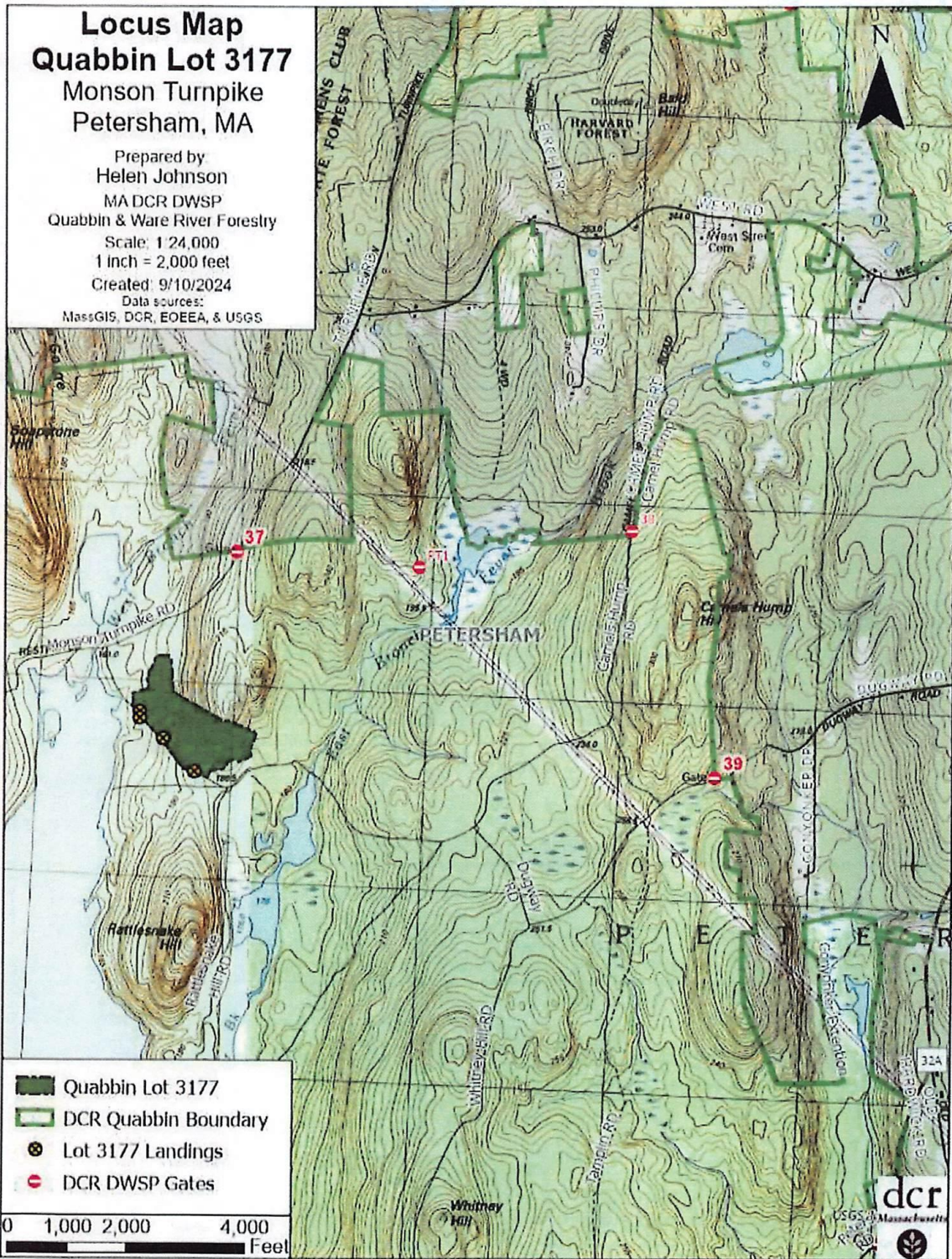
Stand No.	Describe Trees to be Cut			Describe Trees to be Left			% BA/AC	
	Species	Size	Quality	Species	Size	Quality	Cut	Left

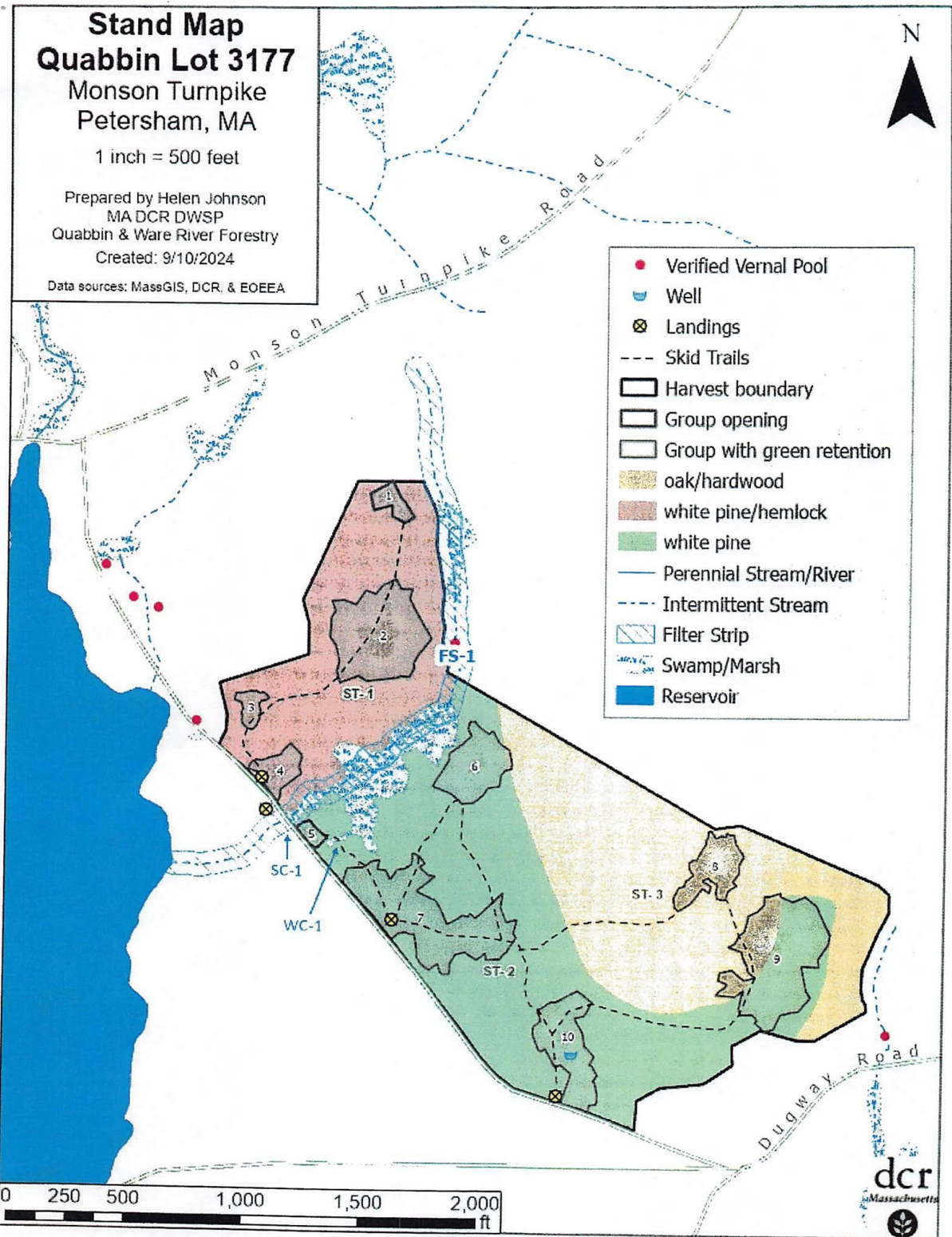
Regeneration & Future Condition

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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dcr



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

FILE # 234-42992-25

W

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, Belchertown, in accordance with the
(Name of Owner) (Address) MA 01007

provision of M.G.L. Chapter 132, Section 40-46, filed in Amherst F.O. with the Dept. of Conservation
and Recreation, Division of State Parks and Recreation, a Notice of Intent to cut forest products upon the

Quabbin 3177 lot, Petersham
(Monson Tpk)

Approval Date 10/25/24

Director's Agent Andrew Rawcliffe

DCR Phone No. (617) 549-1677

ISSUED BY:

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