

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

Project Title: Powerline Pine

DWSP Harvest Permit Number: 3171
DWSP Proposal ID: NS-21-17
DCR Forest Cutting Plan File Number: 214-33810-22

Site Information

Watershed: Quabbin	Town(s): New Salem
Acres: 67	Nearest Road: Daniel Shays Highway (Route 202)
Natural Heritage Atlas overlap?: Yes	Public Drinking Water Supply Watershed?: Yes
Forest Types: White Pine/Oak, White Pine, Red Pine	ACEC?:
Soils: Chatfield-Hollis complex, Canton-Chatfield-Hollis complex, Canton fine sandy loam, and Montauk fine sandy loam. All are well drained and either rocky or very stony.	
Wetland Resources: There western boundary of the lot has been drawn to exclude an adjacent stream (Manning Brook), beaver pond, and bordering vegetated wetlands. Harvesting has also been excluded from a small unregulated wetland within the lot boundary.	
Vernal Pools: none	

Harvest Information

Harvest Start Date:	Harvest End Date:
Number of Wetland Crossings:	Number of Stream Crossings:

Best Management Practices Applied

Stream Crossings	none
Filter Strips	Variable width filter strip on the stream to the west of the lot (Manning Brook).
Wetland Crossings	Used when dry and frozen, and armored with corduroy.
Harvesting in Wetlands	none

DWSP Forester supervising this harvest
Name: Helen Johnson Richard MacLean
Forester License #: 383 (Johnson) 467 (MacLean)
Phone #: 617-733-2937 (Johnson) 857-263-0211 (MacLean)
Email: helen.johnson@mass.gov richard.maclea@mass.gov

NARRATIVE

General Description/Forest Composition/History:

Lot 3171 is located on western facing slopes to the east of Manning Brook in New Salem, and accessed via Quabbin Gate 29. The lot covers 67 acres on both sides of a high tension power line.

North of the power line there's a 17 acre even aged white pine-oak stand with a heterogenous mix of white pine and oak with standing dead red and white oak from the 2017-2019 spongy moth outbreak. After this area was proposed for harvest and before lot preparation, this area experienced a microburst that blew down ½ acre of forest.

South of the power line there's a 27 acre white pine stand, a 20 acre white pine-oak stand, and a 3 acre red pine stand. The white pine stand covers the lower slopes to the west, near Manning Brook. Eastern white pine is the overwhelming majority of the canopy, with northern red oak a distant second. Red maple, black cherry, and eastern hop hornbeam are also present in small amounts. The white pine-oak stand is on the higher slopes near the power line and has a mix of even aged northern red, black, and white oak. The small red pine stand at the southern tip of the lot is in rapid decline due to red pine scale, with most of the canopy dominant red pine already dead prior to the harvest.

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 even aged structure and large, low diversity eastern white pine stand. Eastern white pine is particularly vulnerable to uprooting or snapping in strong winds, and this stand currently has little advance regeneration to secure the soil in the event of loss of a large portion of the overstory. The other stands have greater species diversity but similarly even-aged structures, and their resiliency will also benefit from fostering a new age class of tree regeneration.

Silvicultural Objectives:

To help achieve the DWSP goal of promoting forest resiliency, the primary silvicultural goal for this lot is to increase the age and species diversity of the white pine, and oak hardwoods stands. Eastern white pine is dominant through much of the lot, and focusing regeneration openings in these stands will make a large contribution towards diversifying both age classes and species composition. Preferred species for retention on the edges and interior of regeneration openings are northern red oak, black cherry, red maple and large diameter, well-formed white pine. Eastern hop hornbeam stems were evaluated for health and form, and retained if in good health or cut to encourage resprouting if not. In the eastern hardwood stands preferred trees for retention strongly favor oaks and other hardwood species. Existing skid trails were reused as much as possible. Areas that are sensitive due to steep slopes or wetness were avoided.

Cultural Resources:

South of the power line this lot contains several stone walls, as well as a foundation and well in the southernmost tip of the lot. All known cultural resources have been flagged and protected. Any unmapped or currently unknown cultural resources found during the harvest will be flagged and protected, and the DCR archaeologist will be notified.

Rare or Endangered Species:

NHESP has determined that certain state-listed sensitive species or habitats may exist within the harvest area. To protect them from unnecessary disturbance, detailed information regarding affected species and their locations is not included here. DWSP has coordinated with NHESP to gather recommendations to protect these species during the harvest. NHESP has reviewed the Forest Cutting Plan for this lot and determine that “based on details in the Plan and information in our database, the Division [of Fisheries and Wildlife] does not expect activities proposed in the Plan to negatively impact Estimated Habitat or result in Take (as defined in 321 CMR 10.02) of plant or animal species protected under the Massachusetts Endangered Species Act”.

FIGURES

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)

For DCR Use Only:

File Number 204-33810-22 Case No. NA
Date Rec'd 3/10/22 Nat. Hert. yes
Earliest Start 3/25/22 Pub. Dr. Wat. yes
River Basin Chicopee ACEC No
Gen. Obj. LT

Site Information

Location

Town New Salem QUABBIN LOT 3171
Road Millington Rd (via Quabbin Gate 29)
Acres 67 Proposed Start Date April 2022
Vol. MBF 120.4 Vol. Cds. 48 Vol. Tons 156

Plan Preparer

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

Landowner

Name DCR-DWSP, Quabbin & Ware River Region
Mailing Address 485 Wrae Road
Town, State, Zip Belchertown, MA 01007
Phone 617-733-2937
Ch61 ☐ 61A ☐ 61B ☐ Stew ☐ *Case #
FSC ☐ CR ☐ CR Holder

Licensed Timber Harvester**

Name TBD
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	30'			
Mitigation	FR/DR			
Stabilization	CO/MU			

Filter Strips

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

* Heritage - No Impact - See Attached - AR

Codes

Type of Preparer	Type of Crossing	Stabilization	Mitigation	Type of Bottom	Note
LF Mass. Lic. For	CU Culvert	SE Seed	FR Frozen	LE Ledge	Applicant must provide DCR with all relevant information before plan may be approved and cutting may begin.
TH Lic. Tim. Har	BR Bridge	MU Mulch	DR Dry	ST Stony	Some forestry activities, such as prescribed burning and pesticide or fertilizer application may require additional permits.
TB Timber Buyer	FO Ford	CO Corduroy	OT Other	MU Mud	Consult MA Forestry BMP Manual for further information.
LO Landowner	PO Poled	ST Stone		GR Gravel	
OT Other	OT Other	HB Hay Bales		OT Other	
		OT Other			

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

Figure 1a: Forest Cutting Plan (continued).

Products to be Harvested*			
Species	Mbf/Cds		Mbf/Cds
White Pine	116.300	Red Maple	
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	
Hemlock		Black Oak	3.000
Spruce		White Oak	
Other Sftwd.		Other Hdwd.	1.000
White Ash		Total Mbf	120.300
Beech		Cordwood (Cds)	48.000
White Birch		SW Pulp (Tons)	156.000
B & Y Birch		HW Pulp (Tons)	
Black Cherry		Chips (Tons)	0.000

*Note: Volumes and values 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	WP	WO	WO	RP
Acres	27.000	20.000	17.000	3.000
Landowner Objective	LT	LT	LT	LT
Designation of Trees	CT	CT	CT	CT
Type of Cut	SE	SE	SE	SA
Source of Regeneration	SE	SE	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 and values (Ch61 only) 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.

3-10-22
(Fred Swan)
Signature of landowner(s) _____ Date (next pg) _____

Determination and Status

Approved ☒ Disapproved ☐ Expires 03/10/2024

Cutting Plan ☒ ☐ 03/10/2024

Signature of Service Forester/Director's Agent _____ Date 03/24/2022

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 _____ 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 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

Figure 1b: Forest Cutting Plan (continued).

Products to be Harvested*			
Species	Mbf/Cds		Mbf/Cds
White Pine	116.3	Red Maple	
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	
Hemlock		Black Oak	3
Spruce		White Oak	
Other Sftwd.		Other Hdwd.	1
White Ash		Total Mbf	120.4
Beech		Cordwood (Cds)	48
White Birch		SW Pulp (Tons)	156
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.

Cutting Standards				
Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	WP	WO	WO	RP
Acres	27	20	17	3
Landowner Objective	LT	LT	LT	
Designation of Trees	CT	CT	CT	CT
Type of Cut	SE	SE	SE	SA
Source of Regeneration	SE	SE	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.

Dan Clark
 Digitally signed by Dan Clark
 Date: 2022.03.10 12:13:24 -05'00'

Signature of landowner(s) _____ Date _____

Determination and Status

Approved ☐ Disapproved ☐ Expires _____

Cutting Plan ☐ _____

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.

Signature of Service Forester/Director's Agent _____ 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 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	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

Figure 1c: Forest Cutting Plan (continued).



MASSWILDLIFE

**DIVISION OF
FISHERIES & WILDLIFE**

1 Rabbit Hill Road, Westborough, MA 01581
p: (508) 389-6300 | f: (508) 389-7890
MASS.GOV/MASSWILDLIFE

Andrew Rawcliffe
Department of Conservation and Recreation
P. O. Box 484
40 Cold Storage Drive
Amherst, MA 01004

Cutting Plan No.	204.33810.22
NHESP Tracking No.	22-40922
Town	New Salem
Road	Millington
Landowner	DCR DWSP
Preparer	Helen Johnson
Date	March 24, 2022

Dear Andrew,

The Natural Heritage and Endangered Species Program (NHESP) of the Massachusetts Division of Fisheries and Wildlife ("the Division") has reviewed the above-referenced Forest Cutting Plan ("the Plan") pursuant to the special approval procedures of the Forest Cutting Practices Regulations (304 CMR 11.04(6)). Based on details of the Plan and information in our database, the Division does not expect activities proposed in the Plan to negatively impact Estimated Habitat or result in **Take** (as defined in 321 CMR 10.02) of plant or animal species protected under the Massachusetts Endangered Species Act (MESA) (M.G.L. c. 131A) and its implementing regulations (321 CMR 10.00). Therefore, the Division does not require that the Plan be modified at this time.

Please copy the Division on any proposed amendment, extension and on the approved Plan for the site. If you have any questions about this letter, please contact David Paulson at (508) 389-6366 or David.Paulson@mass.gov.

Sincerely,

Everose Schlüter, Ph.D.
Assistant Director

Cc: New Salem Conservation Commission

MASSWILDLIFE

Figure 1d: Forest Cutting Plan (continued).

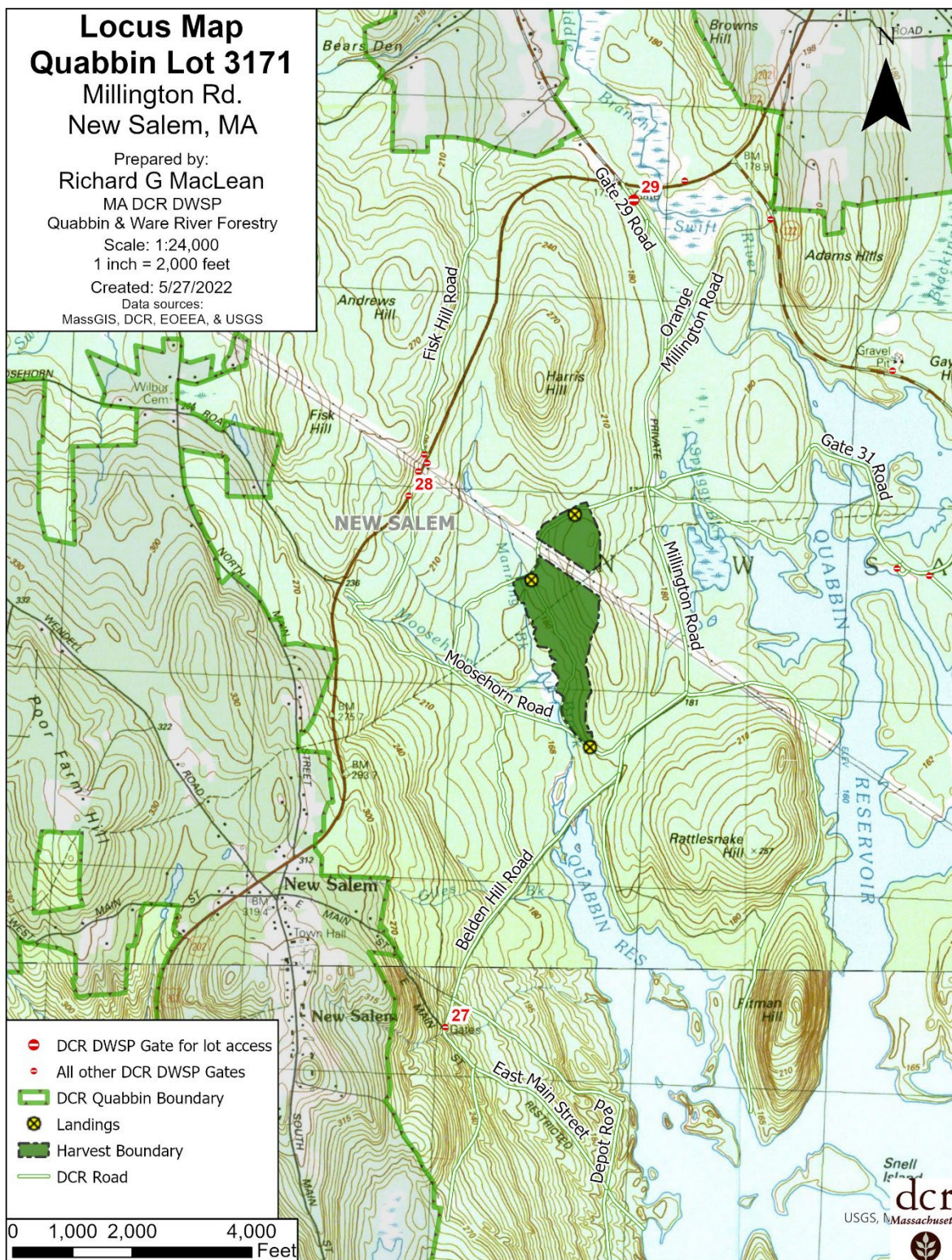


Figure 1c: Forest Cutting Plan (continued).

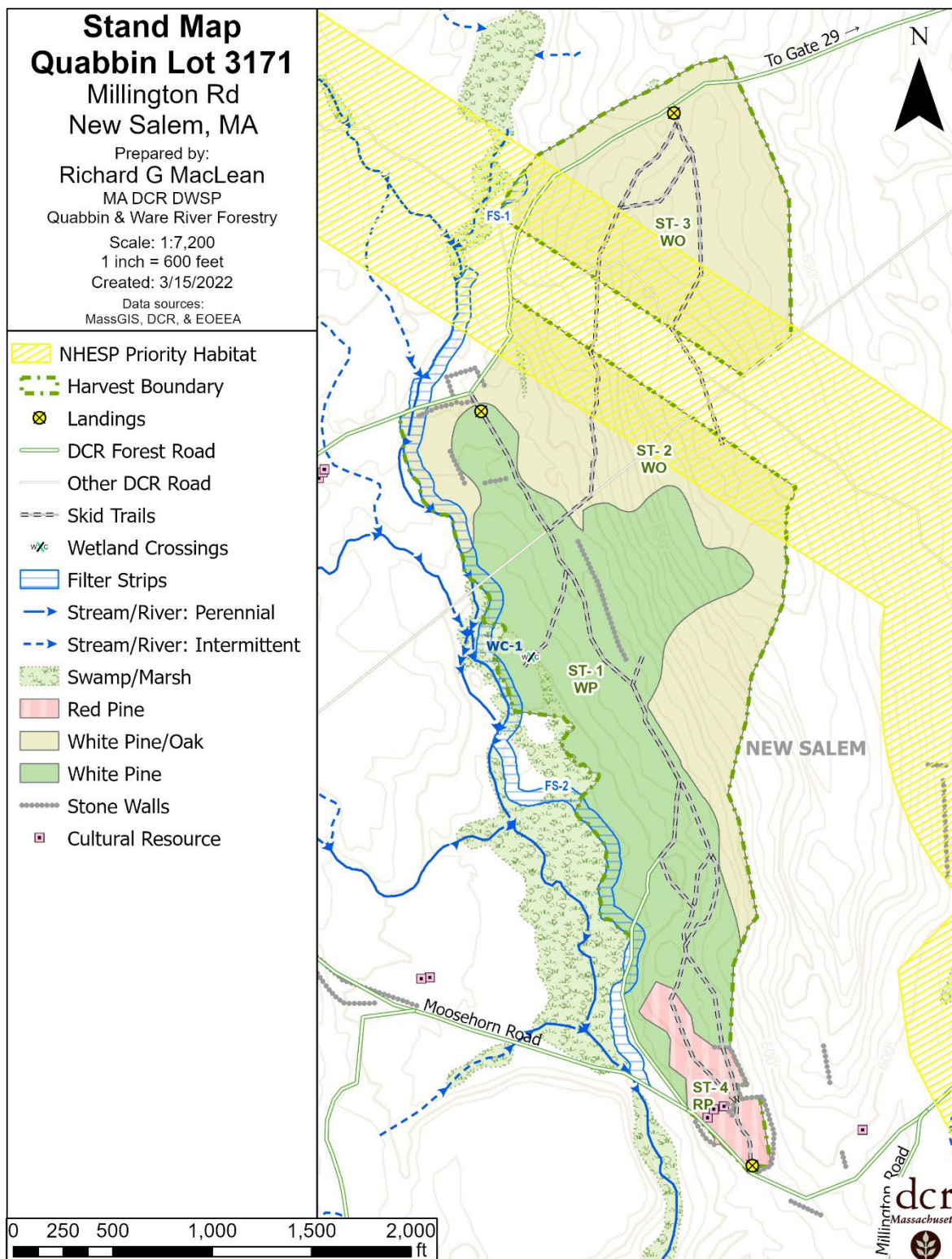


Figure 1f: Forest Cutting Plan (continued).



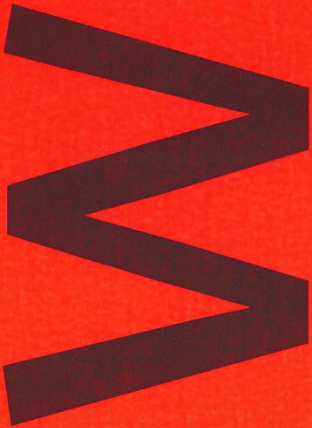

		COMMONWEALTH OF MASSACHUSETTS		FILE # <u>204-33810-22</u>
		Department of Conservation and Recreation		
		Division of State Parks and Recreation		
<h2 style="text-align: center;">FOREST CUTTING PLAN CERTIFICATE</h2>				
				
Post this in a conspicuous place within the area in which the harvesting operation is to take place.				
<u>Quabbin/Ware River Region</u>		<u>485 Ware Rd, Belchertown, MA</u>		
This certifies that <u>DCR-DWSP</u>		(Name of Owner)	(Address)	in accordance with the
			<u>01007</u>	
provision of M.G.L. Chapter 132, Section 40-46, filed in <u>Amherst F.O.</u> with the Dept. of Conservation				
and Recreation, Division of State Parks and Recreation, a Notice of Intent to cut forest products upon the				
<u>"3171" lot, New Salem</u>				
<u>(Millington Rd/Gate 29)</u>				
Approval Date <u>3/24/22</u>		ISSUED BY: 		
Director's Agent <u>Andrew Rawcliffe</u>		Priscilla E. Geigis, Director		
DCR Phone No. <u>617-599-1677</u>		Division of State Parks and Recreation		

Figure 2: Photo Point 1, immediately before and after harvest

Before harvest (November 2022)



Immediately after-harvest (December 2022)



Figure 3: Photo Point 2, immediately before and after harvest

Before harvest (November 2022)



Immediately after-harvest (December 2022)



Figure 4: Photo Point 3, immediately before and after harvest

Before harvest (November 2022)



Immediately after-harvest (December 2022)

