

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

Project Title:

DWSP Harvest Permit Number: 2047
DCR Forest Cutting Plan File Number: 230-7538-15

Site Information

Watershed: Quabbin	Town(s): Pelham
Acres: 46	Nearest Road: Gate 8/ Packardville Rd.
Natural Heritage Atlas overlap?: No	Public Drinking Water Supply Watershed?: Yes
Forest Types: white pine, pine-hardwood and red oak.	ACEC?: No
Soils: Gloucester and Scituate fine sandy loams.	
Wetland Resources: abuts 2 streams and a wetland-beaver pond complex.	
Vernal Pools: None on lot.	

Harvest Information

Harvest Start Date: Has not started	Harvest End Date:
Number of Wetland Crossings: None	Number of Stream Crossings: None

Best Management Practices Applied

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

DWSP Forester supervising this harvest
Name: Steven Wood
Forester License #: 257
Phone #: 413-323-6921 ext. 156
Email: Steven.Wood@state.ma.us

NARRATIVES

General Description/Forest Composition/History:

The area to be harvested is in the town of Pelham just north of Packardville Road, a short ways inside of Gate 8. The terrain is rolling with mostly well drained upland soils. Parallel to the road there is an interesting little valley that is bordered by two ledges.

The northwestern edge of the lot ties into an old beaver pond and associated wetland and a stream. The stream drains southwesterly and eventually joins Cadwell Creek. The northeastern edge of the harvest area is Cadwell Creek which flows southeasterly into a wetland and then back out again as a stream. A powerline runs southeasterly a short ways past this edge. The southern edge is an area of hardwoods on poorly drained soils which transitions back into an upland area that was planted to red pine and harvested in 2001. Following this edge brings you back to Packardville Rd. All the streams and wetlands have variable width filter strips and very little if anything was cut in these areas.

The numerous stone walls on this lot attest to its history of clearing for agriculture, most likely for pasture and some field crops. The lack of surface stone is further evidence that some of these areas were tilled. When the farmland was abandoned, probably in the late 19th or early 20th century, it reverted to forest. There are no cellar holes or other evidence of structures being located here in the past but there are some just south of the lot. There are a couple of upright stones that were markers of some kind, maybe old property corners. These stones, along with the stone walls, will be protected during the harvest.

The primary tree species present are white pine and mixed oaks (predominately red oak). Other hardwoods include black and paper birch, red maple, aspen, ash, and hickories. There are some scattered red pine and two small mixed stands with red pine which will be cut. The red pine was planted and most in this area is infected with red pine scale, an exotic pest that kills red pine in a very short time. Most of the stands are about 100 years old but there is some evidence of tipping, probably from the 1938 hurricane, and some of the trees got their start then.

The soils on this lot are primarily fairly deep well drained Gloucester fine sandy loams changing to moderately well drained Scituate fine sandy loams on the lower slopes. The water table is high near the powerline and the soils here are wet most of the year. Soils are shallower near the ledges that parallel Packardville Rd.

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. In order to achieve this, DWSP has determined that the forest should contain a diversity of species in various stages of development (seedlings through large legacy trees). In addition, the forest should be vigorous; actively growing and regenerating. A forest in this condition is resilient to and can quickly recover from small and large scale disturbances such as diseases, insect infestations, ice storms and hurricanes.

Silvicultural Objectives:

Guided by the principles stated above, the primary purpose of this harvest is the establishment of a new age class by harvesting part of the overstory in small groups, up to ½ acre in size, in order to

foster regeneration. Groups were placed according to our guidelines. Areas where there were clusters of trees that were declining or had weak stem form, often due to insects, diseases, or storm damage, were specifically targeted. These vulnerable trees will be replaced with vigorous new seedlings, or with saplings where there is existing regeneration to be released.

Wherever possible wildlife habitat features were maintained and protected, such as snags (dead trees) and trees with cavities or nests.

Cultural Resources:

Stone walls are numerous throughout this area. There are many breaks and barways in these walls and they can easily be used to avoid and protect the stone walls during the upcoming harvest. This is in keeping with DWSP's standard practice, which dictates that every effort is made to keep existing stone walls intact. Otherwise, this area has been determined not to be culturally or archeologically sensitive based on a review by the DCR Archaeologist.

Wildlife/Rare or Endangered Species:

The lot contains no critical habitats or known rare or endangered species, and no vernal pools. The uplands are home to a variety of wildlife including deer, turkey, owls, coyote and moose.

FIGURES

Figure 1. Forest Cutting Plan

Figure 2. Pre-Harvest Photographs, A-C

Forest Cutting Plan

and Notice of Intent under M.G.L.
Chapter 132 – The Forest Cutting
Practices Act, 304 CMR 11.00
(Effective Date: 1/1/04)

For DCR Use Only:

File Number 230-7538-15 Case No. _____
Date Rec'd 3.24.15 Nat. Hert. N
Earliest Start 4.6.15 Nat. Hert. Imp. N
River Basin CHICOFFE Pub. Dr. Wat. QUABBIN
Gen. Obj. LT ACEC N

DH

Site Information

Location lot # 2047

Town Pelham, Lot # 2047
Road Packardville Rd. (Gate 8)
Acres 46 Proposed Start Date 4/14/15
Vol. MBF 126.2 Vol. Cds. 227 Vol. Tons 350

Plan Preparer

Name Steven J. Wood
Address DCR, Division of Water Supply Protection
485 Ware Rd.
Town, State, Zip Belchertown, MA 01007
Phone (413) 323-6921 ext. 156
Type of Preparer Mass. Licensed Forester
*Mass. Forester License # 257
*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 Ch61A Stew *Case # _____
Est. Stumpage Value \$15,000

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	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	16.9 M	Red Maple	
Red Pine	8.7 M	Sugar Maple	
Pitch Pine		Red Oak	28.1 M
Hemlock		Black Oak	6.4 M
Spruce		White Oak	2.2 M
Other Sftwd.		Other Hdwd.	5.2 M
White Ash		Total Mbf	126.2
Beech		Cordwood (Cds)	227
White Birch		SW Pulp (Tons)	350
B & Y Birch		HW Pulp (Tons)	
Black Cherry		Chips (Tons)	

*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.

Stand Treatment

Cutting Standards

Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	WP4	WH4	OR4	
Acres	20.5	12	13.5	
Landowner Objective	LT	LT	LT	
Designation of Trees	CT	CT	CT	
Type of Cut	SE	SE	SE	
Source of Regeneration	AD/SE	AD/SE	AD/SE	

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 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.

[Signature] 3-24-15
 Signature of landowner(s)

3-24-15
 Date

Service Forester

Determination and Status 230-7538-15

Approved Disapproved Expires 3-24-2017

Cutting Plan 3/31/15

[Signature]
 Signature of Service Forester/Director's Agent Date

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

Amendment App 1 Dis 1 App 2 Dis 2 1

Final Report and Comments

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

[Signature] 3/31/15
 Signature of Service Forester/Director's Agent Date

Codes

Forest Types	Designation of Trees	Type of Cut	Source of Regeneration
WP White Pine	CT Cut Tree	SH Shelterwood	AD Advanced
WK WP/Hem	LT Leave Tree	ST Seed Tree	SE Natural Seed
WH WP/Hdwd	SB Stand Boundary	CC Clear Cut	PL Plant
WO WP/Oak	OT Other	SE Selection	CO Coppice
RP Red Pine	Landowner Objective	SA Salvage	DS Direct Seed
SR Red Spruce	LT Long-term Mgt	SN Sanitation	OT Other
	ST Short-term Har.	DL Diameter Limit*	
		OT Other*	

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

Forest Cutting Plan

Landowner DCR, DWSP

Narrative Page (Effective Date: 1/1/04)

Town Pelham

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

File Number 230-2538-15

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.

Filter strips are Variable width along the streams and are also being maintained along the wetland areas and B-pond area.

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.

Stand No.	Species to be Cut	Size of Trees to be Cut	Quality of Trees to be Cut	% BA/Acre Removed

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.

Regeneration & Future Condition

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

Stand No.	Source of Regeneration (ex. AD, SE)	How will Regeneration be obtained/protected?

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.
 Some of the advance regeneration retained will have been released, Seeding of oaks may take a while but hopefully will be established at time of future entry.

All	Some of the advance regeneration retained will have been released, Seeding of oaks may take a while but hopefully will be established at time of future entry.



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

FILE # 230-1538-15

FOREST CUTTING PLAN CERTIFICATE

W

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

This certifies that DCR-DWSP Ware Road Bellevue in accordance with the
 (Name of Owner) (Address)

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

Gate 8, Pack Meadow Rd, (Gate 8) Plot # 2047

Approval Date 3.31.2015

Director's Agent Amesley Hutcherson

DCR Phone No. (413) 545-7020

(413) 545-5152

ISSUED BY:

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

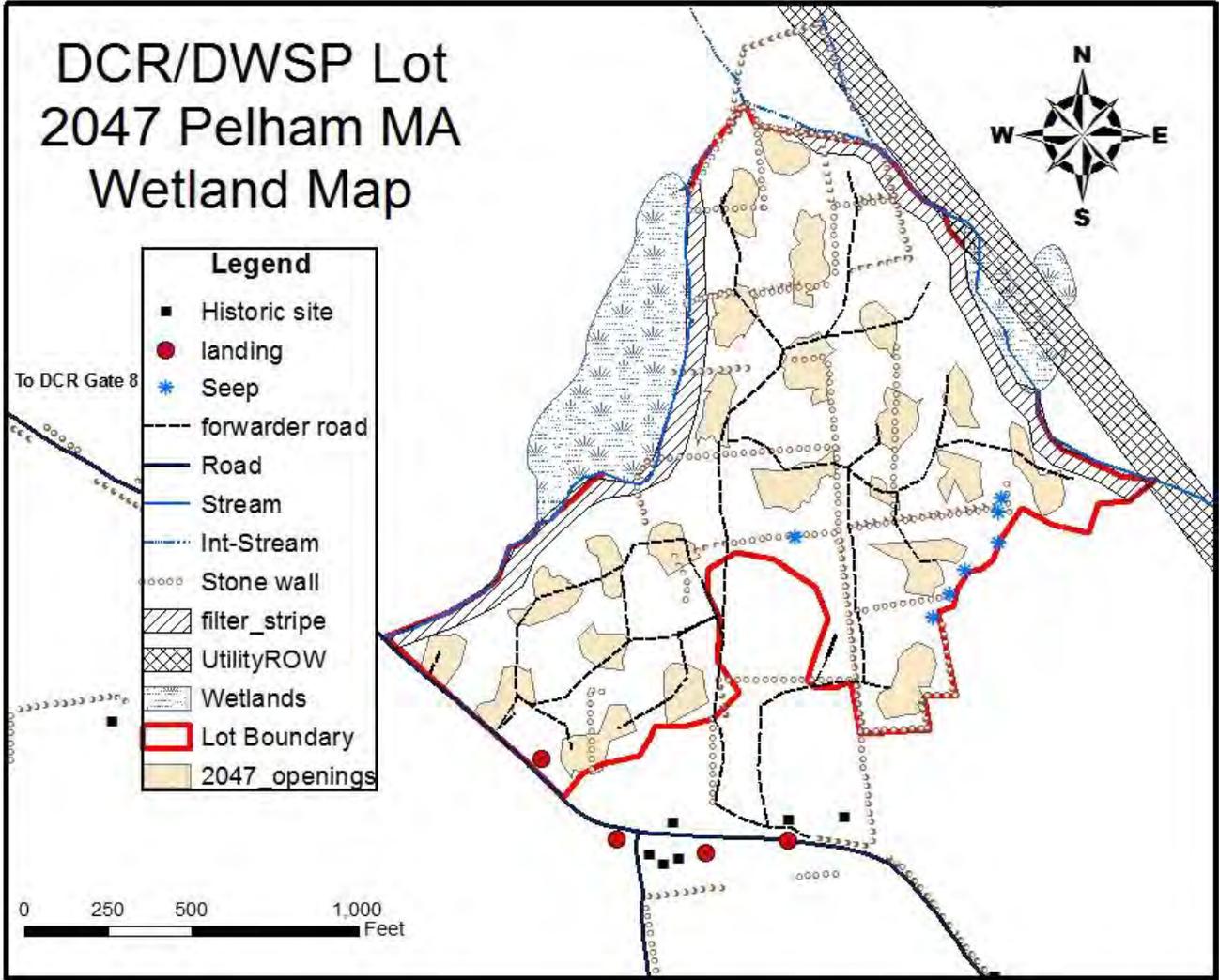
DCR/DWSP Lot 2047 Pelham MA Wetland Map



Legend	
■	Historic site
●	landing
*	Seep
- - -	forwarder road
—	Road
—	Stream
— · · ·	Int-Stream
○ ○ ○ ○	Stone wall
▨	filter_stripe
▩	UtilityROW
▨	Wetlands
▭	Lot Boundary
■	2047 openings

To DCR Gate 8

0 250 500 1,000 Feet



DCR/DWSP Lot 2047 Pelham MA Stand Map



Legend

- * pelham_seeps
- QRWS_Roads5k
- pelham_regulated_streams
- pelham_intermittant_streams
- QRL_StoneWalls
- ++++ standbound
- XXXX QRWS_UtilityROWs
- 2047wetclip
- Lot Boundary
- 2047_openings

0 250 500 1,000 Feet

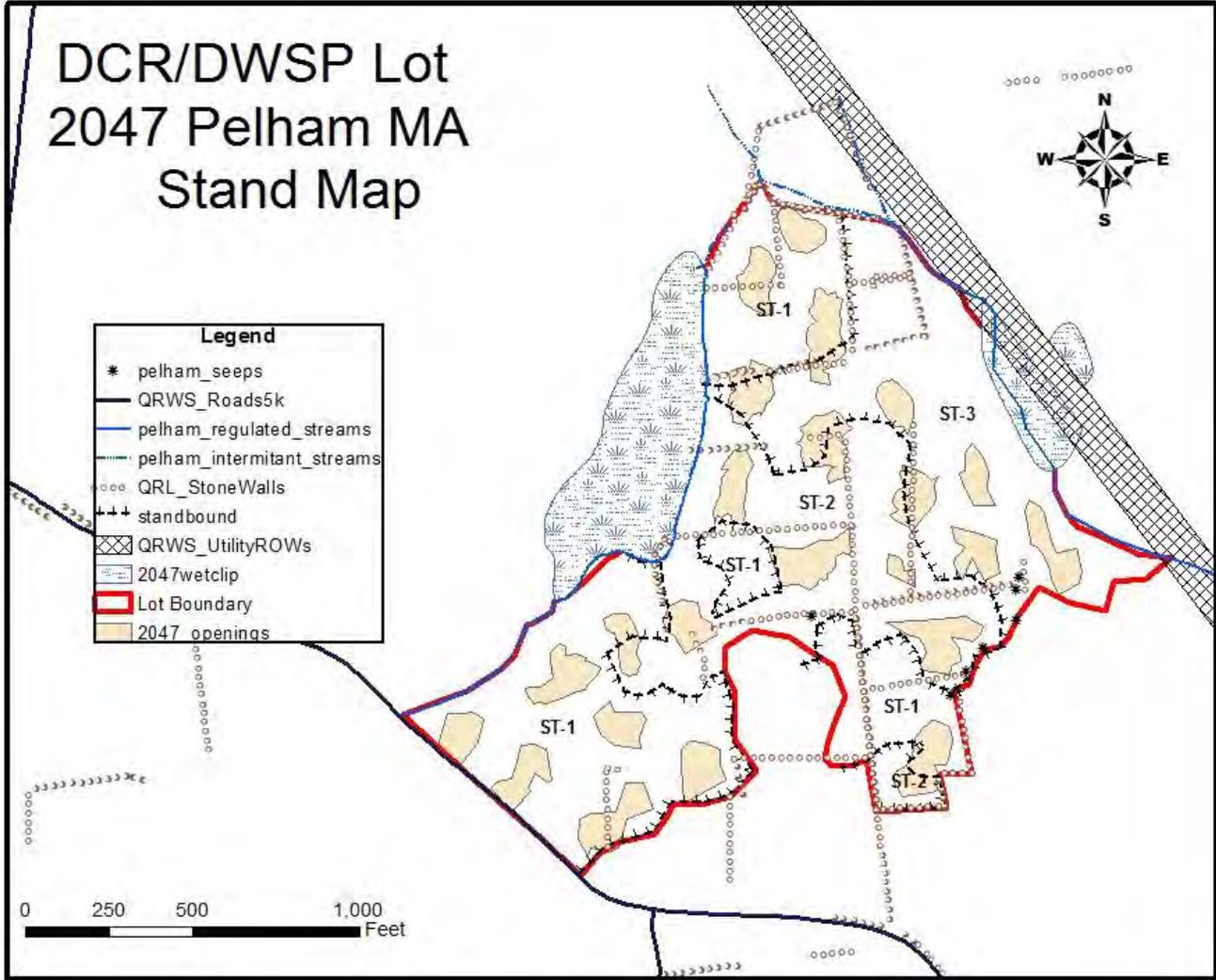


Figure 2: Pre-Harvest Photographs A, B & C

A.



Stone walls and oak-hardwood stand typical of the eastern portion of lot.

B.



Barway in stone wall with an upright stone marker. An opening is to be marked on the right side of wall.

C.



Rock ledge with Common Polypody *Polypodium virginianum* and lichens just east of gate 8 road.