

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: 3140
DCR Forest Cutting Plan File Number: 234-7820-16

Site Information

Watershed: Quabbin	Town(s): Petersham
Acres: 37	Nearest Road: Route 32A a.k.a Hardwick Road
Natural Heritage Atlas overlap?: No	Public Drinking Water Supply Watershed?: Yes
Forest Types: Red Oak	ACEC?: No
Soils: Granite and Gneiss derived well drained tills	
Wetland Resources: None	
Vernal Pools:	

Harvest Information

Harvest Start Date: December 15, 2015	Harvest End Date: December 1, 2017
Number of Wetland Crossings: None	Number of Stream Crossings: None

Best Management Practices Applied

Stream Crossings	
Filter Strips	Two 50 ft. filter strips
Wetland Crossings	
Harvesting in Wetlands	

DWSP Forester supervising this harvest
Name: Derek Beard
Forester License #: 14
Phone #: 978-544-6343

NARRATIVES

General Description/Forest Composition/History

This project is situated on the lower east slope of Whitney Hill on the east side of Mary Tamplin Road. Forest cover consists of red oak sawtimber, mid canopy of mixed hardwood poles (red maple and birch) and scattered understory of mainly black birch saplings. The mid section of the project is home to a two acre inclusion of white pine sawtimber. The scattered sapling/pole understory was triggered by a mid 1980s shelterwood harvest.

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. Forest in this condition is ideally suited to be resilient to and quickly recover from small and large scale disturbances such as disease, insect infestation, ice storms and hurricanes.

The area has an over abundance of high canopy large diameter trees and an under representation of young forest. Regeneration harvesting should rebalance species diversity and forest structure.

Objectives

Diversification of species and forest size class structure is the primary objective of this timber harvesting project. This will be accomplished by making a series of small forest openings randomly spaced through the area. Specifically, there are 14 openings covering 6 of the 37 acres with an average opening size of 0.4 acres. The well drained till soils are suited for hardwood regeneration. However, white pine is a possibility if the harvest is completed during a seed year.

Cultural Resources

The project is home to myriad stone walls associated with an old home site/farmstead located in the north central part of the area. The farmstead includes a cellar hole, fieldstone well and barn foundation. The area is also home to a long term permanent forest inventory plot also know as a continuous forest inventory plot (CFI).

Wildlife Resources

The project does not overlap with any rare and/or endangered species habitat. No unusual wildlife was observed during the planning or set up process for the project.

Figure 1. Approved and final report forest cutting plan

Figure2. Pre harvest photographs A-C

Figure 3. Post harvest photographs A-C

Figure 4. After one growing season photographs A-C

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: 1/1/04)

For DCR Use Only:

File Number 234-7820-16 Case No. _____
 Date Rec'd 10-1-2015 Nat. Hert. No
 Earliest Start 10-14-2015 Nat. Hert. Imp. N/A
 River Basin Chicopee Pub. Dr. Wat. Quabbin
 Gen. Obj. LT ACEC No

FINAL

10-01-15 P12:48 TN

Site Information

Location TIMBER LOT 3140

Town Petersham
 Road Tamplin (Gate 39)
 Acres 37 Proposed Start Date _____
 Vol. MBF 44.4 Vol. Cds. 157 Vol. Tons 11

Plan Preparer

Name Derek Beard
 Address DCR – Div. of Water Supply Protection
21 Elm St.
 Town, State, Zip New Salem, MA 01355
 Phone 978-544-6343
 Type of Preparer LF
 *Mass. Forester License # 14
 *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 412-323-6921
 Ch61 61A 61B Stew *Case # _____
 CR CR Holder _____

Licensed Timber Harvester**

Name Allard Brothers Logging
 Address _____
 Town, State, Zip Hadley MA
 Phone 413-320-2158
 Mass. Lic. Harvester # 1513, 1590
 **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)	50'	50'		

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	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. Some forestry activities, such as prescribed burning and pesticide or fertilizer application may require additional permits. Consult MA Forestry BMP Manual for further information.
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			

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

pg 3 of 5

Forest Products

Products to be Harvested*

Table with 4 columns: Species, Mbf/Cds, and two empty columns. Rows include White Pine, Red Pine, Pitch Pine, Hemlock, Spruce, Other Sftwd., White Ash, Beech, White Birch, B & Y Birch, and Black Cherry.

TIMBER LOT 3140

*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

Table with 5 columns: Indicate location on map, ST-1, ST-2, ST-3, ST-4. Rows include Forest Type, Acres, Landowner Objective, Designation of Trees, Type of Cut, and Source of Regeneration.

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.

[X] 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.

Signature of landowner(s) [Signature] Date 9-29-15

Service Forester

Determination and Status 234-7820-16

Approved [X] Disapproved [] Expires 10/14/2017. Signature of Service Forester/Director's Agent [Signature] Date 10/14/15

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 [Signature] Date 5/4/16

Codes

Table with 4 columns: Forest Types, Designation of Trees, Type of Cut, and Source of Regeneration. Lists various codes and their corresponding tree types or methods.

*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: 1/1/04)

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

TIMBER LOT 3140

Landowner DCR-DWSP-Quab

Town Petersham

File Number 234-7820-16

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.

This harvest is an aggregation of 14 canopy openings (patches) spread across 37 acres. Opening size ranges from 0.2 to 0.5 acres with an average of 0.4 of an acre. The 14 openings cover a total of 5.7 acres. Wildlife trees in openings have been identified (flagged) for retention.

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

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.

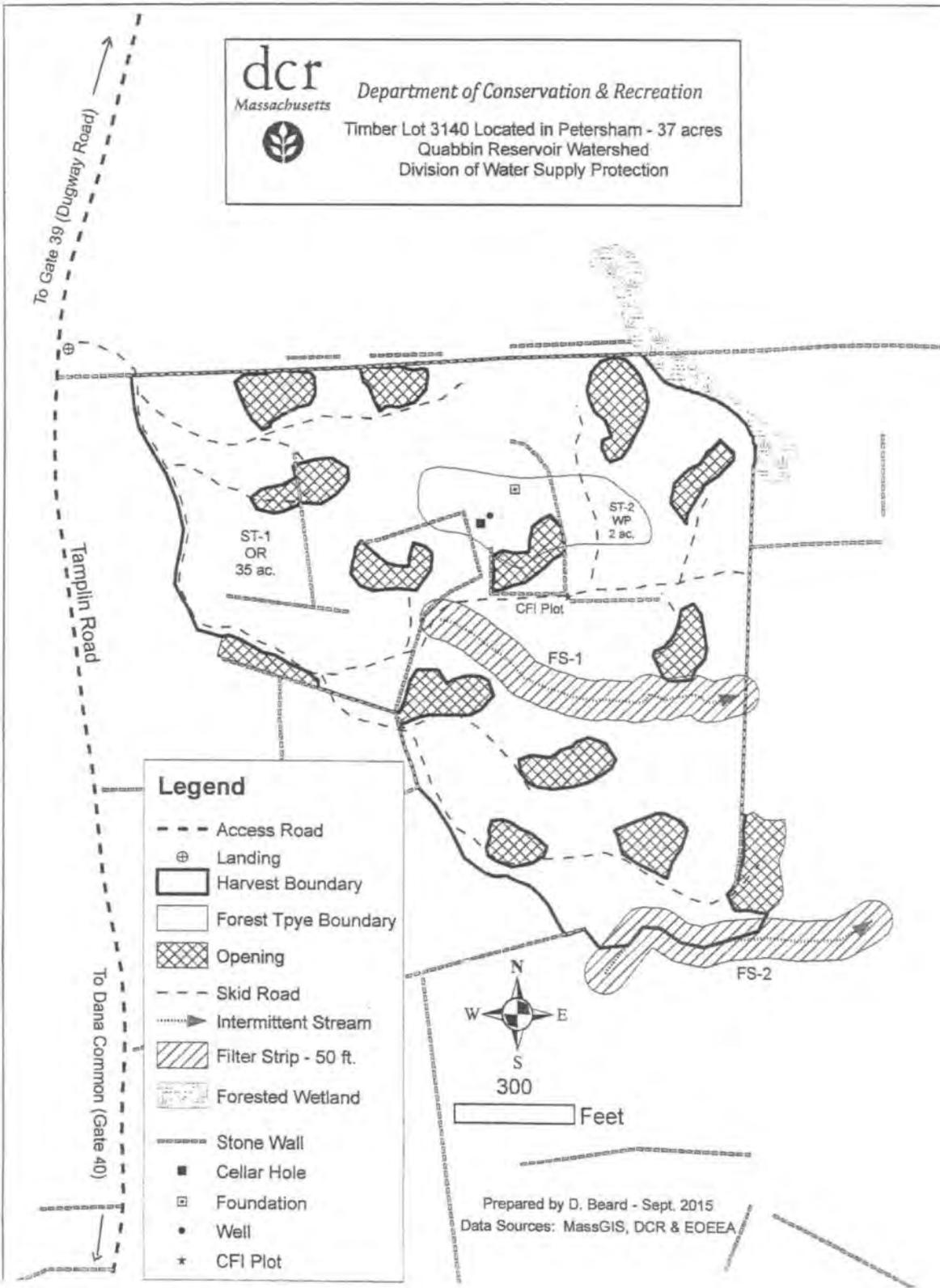
Stand No.	Source of Regeneration (ex. AD, SE)	How will Regeneration be obtained/protected? If using AD - Describe the species present and how the regeneration will be protected If using SE - Describe the source of the seed and the number of seed trees/acre

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



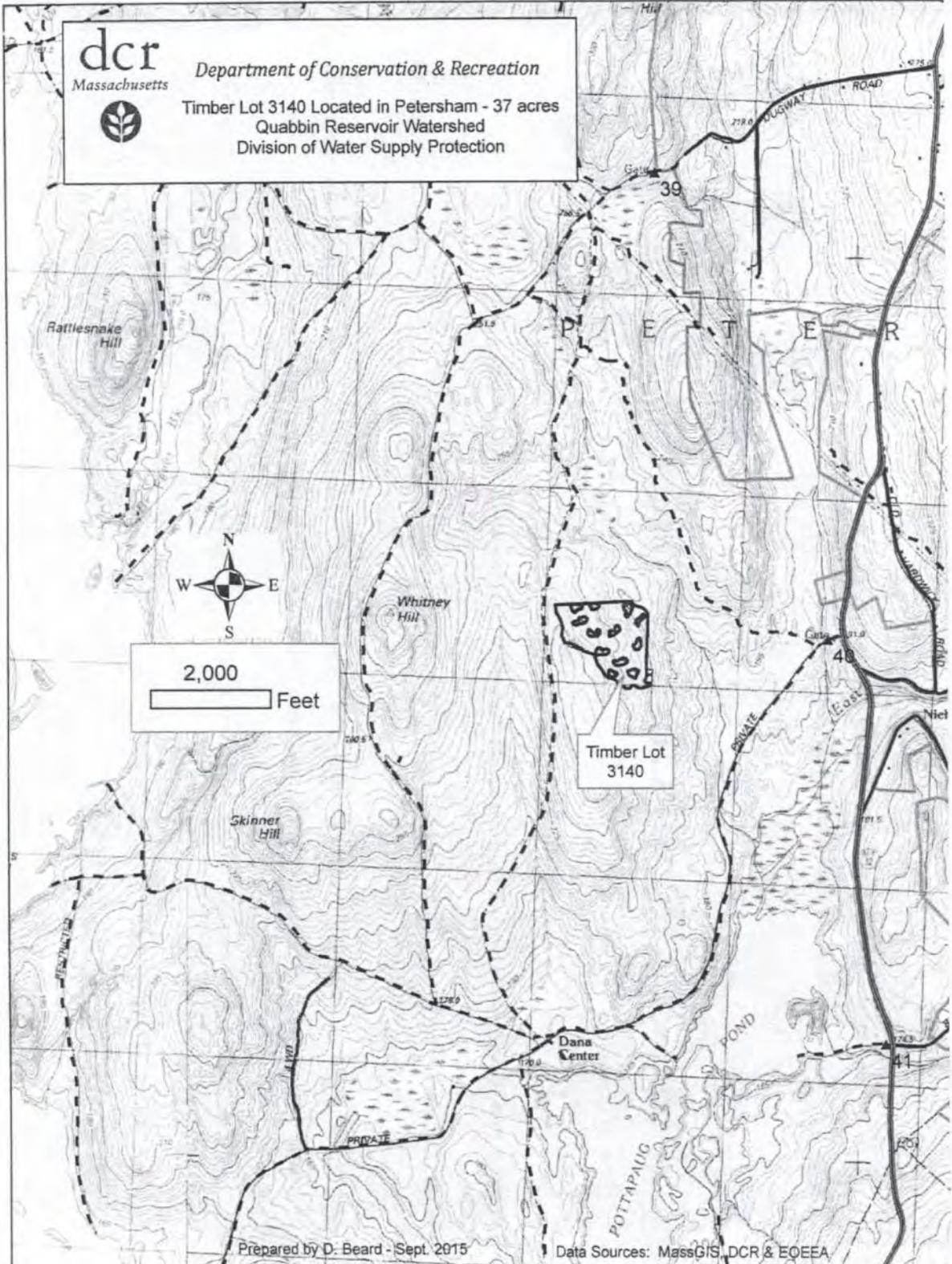
Department of Conservation & Recreation

Timber Lot 3140 Located in Petersham - 37 acres
Quabbin Reservoir Watershed
Division of Water Supply Protection





Department of Conservation & Recreation
Timber Lot 3140 Located in Petersham - 37 acres
Quabbin Reservoir Watershed
Division of Water Supply Protection

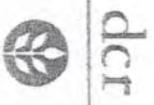


2,000 Feet

Timber Lot 3140

Prepared by D. Beard - Sept. 2015

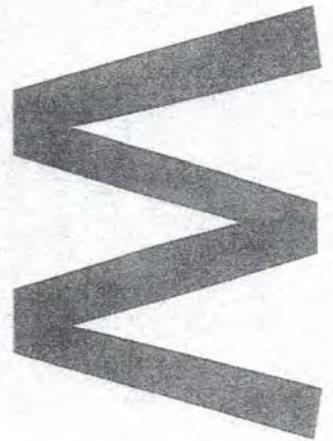
Data Sources: MassGIS, DCR & EOEEA



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

FILE # 234-7820-16

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 - DUSP 485 Shore Rd Galderhous MA 01007 in accordance with the
 (Name of Owner) (Address)

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

340 lot GATE 39

Approval Date 10/14/15

Director's Agent Fletcher Clark

DCR Phone No. 413-262-2367

ISSUED BY:

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

Figure 2: Pre Harvest Photographs, A-C (December 2015)



A. Planned canopy opening in northwest part of project



B. Planned canopy opening in central part of project

Figure 2: Pre Harvest Photographs Continued, A-C (December 2015)



C. Planned canopy opening in southeastern part of project

Figure 3. Post harvest photographs A-C (March 2016)



A. Completed opening with live snag white pine (right background) and white pine large pole stock (tree with pink flagging).

Figure 3. Post harvest photographs A-C (March 2016) Continued



B. Completed opening framed by an excellent red oak tree (center background) and a rotten log section of a harvested white pine (left middle ground) that is now become coarse woody debris and wildlife habitat.



C. Completed opening with retained red oak (left foreground) that has a large scar on its base likely from a forest fire that burned through the area in the early to mid 1900s.

Figure 4. After one growing season photographs A-C (July 2016)



A. Greening up of the opening with new herbaceous and woody growth.



B. Opening is greening up with new herbaceous and woody growth.

Figure 4. After one growing season photographs A-C (July 2016) Continued



C. New herbaceous and woody growth beginning to colonize the forest opening.