

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

**Project Title:**

<b>DWSP Harvest Permit Number: 3137</b>
<b>DCR Forest Cutting Plan File Number: 234-7509-15</b>

**Site Information**

<b>Watershed:</b> Quabbin	<b>Town(s):</b> Petersham
<b>Acres:</b> 52	<b>Nearest Road:</b> Dugway
<b>Natural Heritage Atlas overlap?:</b> Yes	<b>Public Drinking Water Supply Watershed?:</b> Yes
<b>Forest Types:</b> Red Oak	<b>ACEC?:</b> No
<b>Soils:</b> Well drained very stony Charlton-Chesterfield	
<b>Wetland Resources:</b> One	
<b>Vernal Pools:</b> One	

**Harvest Information**

<b>Harvest Start Date:</b> April 14, 2015	<b>Harvest End Date:</b> June 30, 2017
<b>Number of Wetland Crossings:</b> None	<b>Number of Stream Crossings:</b> One

**Best Management Practices Applied**

<b>Stream Crossings</b>	temporary bridge if flowing
<b>Filter Strips</b>	One 50 feet either side of intermittent brook
<b>Wetland Crossings</b>	
<b>Harvesting in Wetlands</b>	

**DWSP Forester supervising this harvest**

<b>Name:</b> Derek Beard
<b>Forester License #:</b> 14
<b>Phone #:</b> 978-544-6343

## NARRATIVES

### **General Description/Forest Composition/History**

The project area is located one mile northwest of gate 39 (Dugway Road) in what is known as the Camels Hump section of Petersham. The area was used as semi improved pasture prior to state ownership. The south end of the project area is home to two field stone town bounds marking the boundary between Petersham and the now unincorporated town of Dana.

Forest overstory is composed mainly of red oak with a scattered intermediate layer of black birch and red maple. Understory composition ranges from witch-hazel, fern, huckleberry, blue berry and black birch saplings. The sapling layer was triggered by a thinning harvest in the mid 1980s. Scattered white pine inclusions account for a few acres of the project area. The NRCS soil survey indicates that the project area is covered by a well drained very stony Charlton-Chesterfield loamy till.

### **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.

This site was selected to increase the structural diversity of the forest in this area. Most of this area is covered by older forest which is more susceptible to wind events. Oak regeneration has been lacking so far here, and some scarification and some additional light in these small groups should start to stimulate some of that response.

### **Objectives**

Diversifying the area's forest structure is the primary objective of the project. This will be accomplished by making a series of small forest openings randomly spaced through the area. Specifically, there are 19 openings covering 6.7 of the 52 acres with an average opening size of 1/3 acre. 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**

In addition to the old town bounds mentioned above, there is a dug spring located in the south central part of the project area. The spring was likely used to water livestock.

### **Wildlife Resources**

The project area just barely overlaps with a priority habitat bubble to the east, as compiled by MA Fish & Wildlife's Natural Heritage & Endangered Species program. Mid way down along the western boundary

(Camels Hump Road) is a vernal pool. Maintenance of habitat mainly in the form of partially alive and dead standing trees, known as *snags*, will be a priority.

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)

FEB 25 2015  
MAR 25 2015

### For DCR Use Only:

File Number 234-9509-15 Case No. \_\_\_\_\_  
Date Rec'd 2-25-15 Nat. Hert. Yes 1  
Earliest Start 3-14-15 Nat. Hert. Imp. NO  
River Basin Quabbin Pub. Dr. Wat. NO  
Gen. Obj. LT ACEC NO

*Chico Pene*

Site Information

**Location** TIMBER LOT 3137

Town Petersham  
Road Dugway Road (Gate 39)  
Acres 52 Proposed Start Date \_\_\_\_\_  
Vol. MBF 41.9 Vol. Cds. 139 Vol. Tons 23

### 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 \_\_\_\_\_  
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	Fo/po			
Existing Structure	n			
Type of Bottom	St/mu			
Bank Height (ft)	<1'			
Stabilization	co			

### 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'			

### 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

*\*Field inspection under snow conditions*

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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	2.1	Red Maple	
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	33.9
Hemlock		Black Oak	2.2
Spruce		White Oak	0.4
Other Sftwd.		Other Hdwd.	0.8
White Ash	0.8	<b>Total Mbf</b>	41.9
Beech		<b>Cordwood (Cds)</b>	139
White Birch		<b>SW Pulp (Tons)</b>	23
B & Y Birch	1.3	<b>HW Pulp (Tons)</b>	
Black Cherry	0.4	<b>Chips (Tons)</b>	

TIMBER LOT 3137

\*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	OR			
Acres	52			
Landowner Objective	LT			
Designation of Trees	CT			
Type of Cut	SE			
Source of Regeneration	SE/AD			

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.

*[Handwritten Signature]*  
Signature of landowner(s)

2/20/15  
Date

Service Forester

**Determination and Status**

Approved  Disapproved  Expires 3/14/17

Cutting Plan

*[Handwritten Signature]* 3/19/15  
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 of Service Forester/Director's Agent Date

Codes

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

\*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: 1/1/04)

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

Landowner DCR-DWSP-Quab

Town Petersham

File Number 234-1509-15

TIMBER LOT 3137

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 group selection (small patch cuts) timber harvesting project consists of 19 canopy openings spread across 52 acres. Opening size ranges from a quarter acre to half an acre with an average of one third of an acre. The 19 openings cover a total of 6.7 acres.

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



# Division of Fisheries & Wildlife

Jack Buckley, *Acting Director*

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

Cutting Plan No. 234-7509-15  
NHESP Tracking No. 15-34217  
Town Petersham  
Road Dugway Road  
Landowner DCR – Water Supply Protection  
Preparer Derek Beard  
Date March 19, 2015

Dear Fletcher,

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 (hereinafter "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 the NHESP 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 Brent Powers at (508) 389-6354.

Sincerely,

Thomas W. French, Ph.D.  
Assistant Director

Cc: Petersham Conservation Commission

[www.mass.gov/nhesp](http://www.mass.gov/nhesp)



**Natural Heritage & Endangered Species Program**

North Drive, Route 135, Westborough, MA 01581 Tel: (508) 389-6360 Fax: (508) 389-7891

dc  
Massachusetts

Department of Conservation & Recreation



Timber Lot 3137 Located in Petersham - 52 acres  
Quabbin Reservoir Watershed  
Division of Water Supply Protection  
350

350 Feet

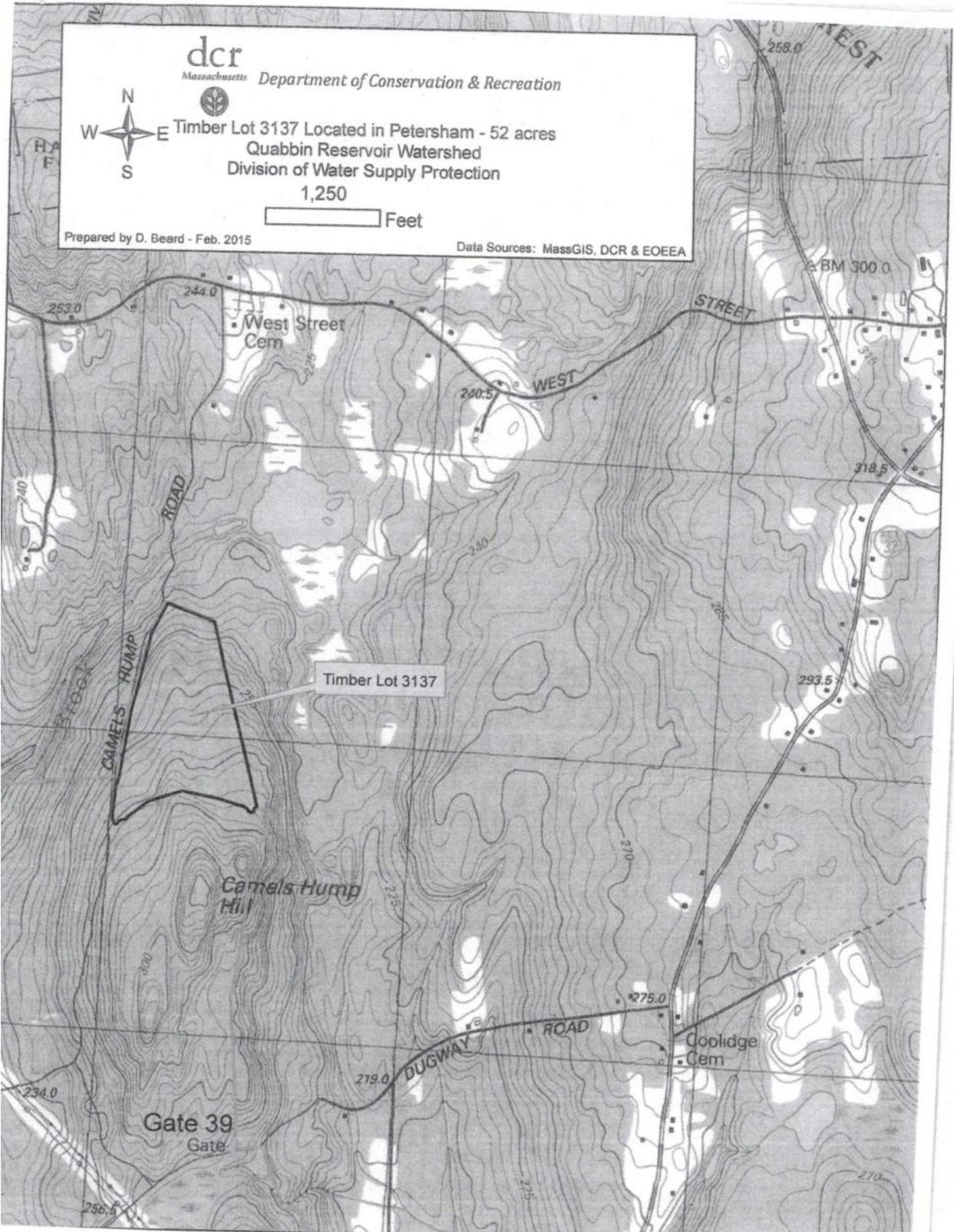
### Legend

- - - Access Road
- - - Skid Road
- Property Boundary
- Harvest Boundary
- ⊕ Landing
- ▨ Opening
- ▨ Forested Wetland
- ▶ Intermittent Brook
- ▨ Filter Strip
- Stream Crossing
- ☆ Vernal Pool
- ⊕ Spring
- ⊕ Old Town Bound
- Stone Wall



Prepared by D. Beard - Feb. 2015

Data Sources: MassGIS, DCR & EOEEA



**dcr**  
Massachusetts Department of Conservation & Recreation

Timber Lot 3137 Located in Petersham - 52 acres  
Quabbin Reservoir Watershed  
Division of Water Supply Protection

1,250 Feet

Prepared by D. Beard - Feb. 2015

Data Sources: MassGIS, DCR & EOEEA

Figure2: Pre Harvest Photographs



A: Planned canopy opening on west side of project area.



B: Planned canopy opening on west side of project area.



C: Planned canopy opening on south side of project area.