

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

**Project Title: Mellon Road**

DWSP Harvest Permit Number: 1045

DWSP Proposal ID: HA-15-14

DCR Forest Cutting Plan File Number: 124-7622-15

***Location Information***

Watershed: Quabbin

Town(s): Hardwick

Acres: 46

Nearest Road: Mellon Road

Natural Heritage Atlas overlap?: Yes

Public Drinking Water Supply Watershed?: Yes

Area of Critical Environmental Concern (ACEC)?: No

***Site Information***

Forest Types: white pine-oak

Soils: Woodbridge-Paxton and Charlton-Paxton associations, extremely stony

Wetland Resources: Muddy Brook runs parallel to the harvest area on the east side

Vernal Pools: none

***Harvest Information***

Harvest Start Date: December 13, 2016

Harvest End Date: January 6, 2017

Number of Wetland Crossings: none

Number of Stream Crossings: none

***Best Management Practices Applied***

Stream Crossings: not applicable

Filter Strips: variable width filter strip along Muddy Brook

Wetland Crossings: not applicable

Harvesting in Wetlands: not applicable

***DWSP Forester supervising this harvest***

Name: Steven Wood

Forester License number: 383

Phone number: (617) 733-2937

Email: Helen.Johnson@mass.gov

## **Narrative**

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

The area to be harvested is in the town of Hardwick, and is bounded by Greenwich Road to the south and Mellon Road to the west. Muddy Brook runs parallel to the east boundary of the lot, about 100 feet away. Another harvest is planned for the area immediately to the north up to Fleming Road, also bounded by Mellon Road to the west and Muddy Brook to the east.

The stone walls on this lot attest to its history of clearing for agriculture, mostly for pasture. When the farmland was abandoned, probably in the late 19th or early 20th century, it reverted to forest. This lot was part of a privately owned parcel that was given to the Nature Conservancy in 1978, which then donated it to DCR (then called the Metropolitan District Commission) in 1980.

The primary tree species are white pine and mixed oaks, particularly red oak. Other hardwoods include black and paper birch, red maple, poplar, ash, and hickory. Hemlock occurs in small groves, particularly near Mellon Road. A harvest in 1990 resulted in extensive regeneration, some of which was damaged and/or partially released by recent winter storms.

The soils on this lot are primarily Woodbridge-Paxton and Charlton-Paxton associations, extremely stony. These are glacial till soils derived from granite and gneiss, composed mostly of fine sandy loams. They range from moderately well drained (Woodbridge) to well drained (Charlton and Paxton). There is some exposed bedrock at the high points.

### ***Site Selection***

The primary goal of this harvest is to create and maintain a forest that is resilient to and can quickly recover from small and large scale disturbances such as diseases, insect infestations, ice storms and hurricanes, all of which are becoming increasingly common. The ideal way to achieve this is to have a diversity of species in various stages of development (seedlings through large legacy trees) that are actively growing and regenerating.

On this parcel the work of diversifying the forest was begun in 1990. The current harvest will build on the success the earlier harvest by continuing the process of establishing new tree seedlings and providing space for existing regeneration to expand and grow. The full diversity of native species is being maintained and promoted in all age classes. This combination of structural and species diversity builds resistance and resilience into the forest.

### ***Silvicultural Objectives***

The main treatment at this time is the removal of the overstory in small groups, up to ½ acre in size, in order to foster regeneration. Groups were placed where there were clusters of trees that were declining or had weak stem form, often due to insects, diseases, or storm damage. These vulnerable trees will be replaced with vigorous new seedlings, or with saplings where there is existing regeneration to be released. In some places on the slope leading to the stream the areas between groups were thinned to improve the vigor of the remaining overstory trees.

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

### ***Cultural Resources***

Stone walls are present along parts of Mellon Road, and there a few walls in the interior of this lot. These walls are discontinuous, and thus can easily be avoided and protected during the upcoming harvest. This is in keeping with DWSP's standard practice, which dictates that every effort be 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.

### ***Rare or Endangered Species***

The Natural Heritage and Endangered Species Program (NHESP) of the Division of Fisheries and Wildlife has determined that 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. In order to prevent a Take, NHESP issued restrictions on this project that are incorporated into the Forest Cutting Plan and have been implemented on this harvest from its earliest planning stages.

**Forest Cutting Plan**

Forest Cutting Plan page 1 of 6

**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 124-7622-15 Case No. \_\_\_\_\_  
 Date Rec'd 5-20-15 Nat. Hert. Yes /  
 Earliest Start 6-10-15 Nat. Hert. Imp. Yes  
 River Basin Chicopee Pub. Dr. Wat. No  
 Gen. Obj. LT ACEC No

Site Information

**Location**

Town Hardwick  
 Road Mellon & Greenwich Roads  
 Acres 46 Proposed Start Date June 2015  
 Vol. MBF 104 Vol. Cds. 103 Vol. Tons 65

**Plan Preparer**

Name Helen Johnson  
 Address DCR-DWSP Quabbin Section  
485 Ware Road  
 Town, State, Zip Belchertown, MA 01007  
 Phone 978-544-6343  
 Type of Preparer Mass. Licensed Forester  
 \*Mass. Forester License # 383  
 \*Required for land under Ch61, Ch61A or Forest Stewardship

*original*  
 - Final -

**Landowner**

Name DCR-DWSP Quabbin Section  
 Mailing Address 485 Ware Road  
 Town, State, Zip Belchertown, MA 01007  
 Phone 413-323-6921 ext. 553 / 978-544-6343  
 Ch61  61A  61B  Stew  \*Case # \_\_\_\_\_  
 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** No 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				

**Harvesting in Wetlands** None

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%?)				

**Wetland Crossings** No Crossings

Indicate location on map	WC-1	WC-2	WC-3	WC-4
Length of Crossing				
Mitigation				
Stabilization				

**Service Forester Comments**

- Please see attached  
NHESP review  
\* The 300' buffer has been  
flagged

**Filter Strips**

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

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.

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

Products to be Harvested*			
Species	Mbf/Cds		Mbf/Cds
White Pine	56.5	Red Maple	
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	25.3
Hemlock		Black Oak	12.1
Spruce		White Oak	9.0
Other Sftwd.		Other Hdwd.	1.3
White Ash		<b>Total Mbf</b>	104.2
Beech		<b>Cordwood (Cds)</b>	103
White Birch		<b>SW Pulp (Tons)</b>	65
B & Y Birch		<b>HW Pulp (Tons)</b>	
Black Cherry		<b>Chips (Tons)</b>	

\*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	WO			
Acres	46			
Landowner Objective	LT			
Designation of Trees	CT			
Type of Cut	SE*			
Source of Regeneration	AD/SE			

\* Small group and single tree selection, with groups up to 1/2 acre.

**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.

*William E. Cadon*  
 Signature of landowner(s)

5-20-15  
 Date

Determination and Status				Final Report and Comments		
Approved	Disapproved	Expires		I hereby certify that the afore described Forest Cutting Plan and all relevant statutes have been substantially complied with.		
Cutting Plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5/20/2017			
Signature of Service Forester/Director's Agent	<i>[Signature]</i>		6/25/2015	Signature of Service Forester/Director's Agent	<i>[Signature]</i>	
Extension	1 <input type="checkbox"/>	2 <input type="checkbox"/>	Expires	Ser. For. Ints.		
Amendment	App 1 <input type="checkbox"/>	Dis 1 <input type="checkbox"/>	App 2 <input type="checkbox"/>	Dis 2 <input type="checkbox"/>		

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

# 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 Quabbin

Town Hardwick

File Number 124-7622-15

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.

- Small group and single tree selection, with groups up to 1/2 acre.
- There will be no harvesting within 100 feet of the streams.
- Some roadside trees will be cut at the request of the Hardwick Tree Warden and Highway Department.
- Due to protected wood turtle habitat, harvesting within 300 foot of the streams will be limited to the winter. Exact dates and other details will be provided in a determination letter from NHESP.

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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

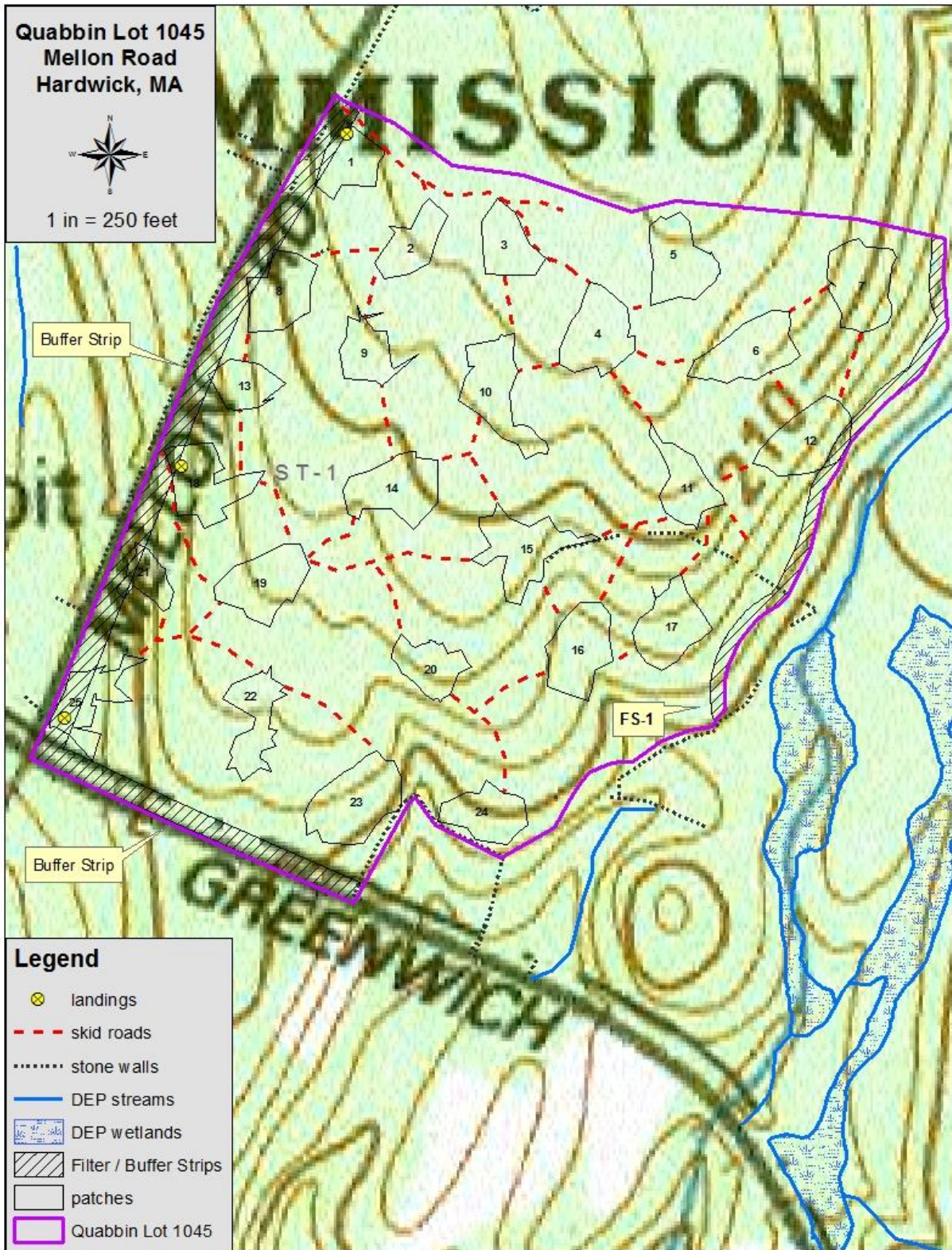
Regeneration & Future Condition

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



dcr



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

FILE # 124-7622-15

# 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 Belcherdown in accordance with the  
(Name of Owner) (Address) MA 01007

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

Mellen t lot.  
Greenwich RD

Approval Date 6/25/2015  
Director's Agent Kate Marquis  
DCR Phone No. (413) 992-8734

ISSUED BY: 

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

**Photo Series**

***Photo Point 1, looking north***

**Before harvest (June 2015)**



**One growing season after harvest (August 2017)**



*Photo Point 1, looking west*

**Before harvest (June 2015)**



**One growing season after harvest (August 2017)**

