

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

**Project Title: Gate 39 Powerline South**

DWSP Harvest Permit Number: 3161a

DWSP Proposal ID: PT-19-05\_09

DCR Forest Cutting Plan File Number: 204-11096-19

***Location Information***

Watershed: Quabbin

Town(s): Petersham

Acres: 42.8

Nearest Road: Dugway Road

Natural Heritage Atlas overlap?: No

Public Drinking Water Supply Watershed?: Yes

Area of Critical Environmental Concern (ACEC)?: No

***Site Information***

Forest Types: oak-hardwood, white pine-hardwood, hemlock-hardwood

Soils: Montauk-Scituate-Canton association, extremely stony, 3-15% slopes; Charlton-Chatfield association, extremely stony, 3-15% slopes; Charlton-Chatfield-Hollis association, very rocky, 15-45% slopes; and Ridgebury-Whitman association, extremely stony, 0-8% slopes.

Wetland Resources: There are wooded wetlands with associated intermittent streams outside the harvest boundaries to the south, east and west.

Vernal Pools: none

***Harvest Information***

Harvest Start Date: November 1, 2019

Harvest End Date: January 15, 2020

Number of Wetland Crossings: none

Number of Stream Crossings: none

***Best Management Practices Applied***

Stream Crossings: n/a

Filter Strips: Variable width filter strip on an intermittent stream connecting two wetlands outside the harvest boundary.

Wetland Crossings: n/a

Harvesting in Wetlands: n/a

***DWSP Forester supervising this harvest***

Name: Helen Johnson

Forester License number: 383

Phone number: (617) 733-2937

Email: Helen.Johnson@mass.gov

## **Narrative**

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

Lot 3161A inside Quabbin Gate 39 at the intersection of Dugway Road and Mary Tamplin Road, and is bordered by a high tension powerline right of way to the north, and by an unnamed DCR access road and wetlands to the south.

The eastern portion of the harvest is a triangle enclosed between the three roads, with a hill in the center that is not being harvested due to its steep slopes. The remainder of the lot is west of Dugway Road and is irregularly shaped in order to avoid the numerous wetlands and intermittent streams in this area.

The eastern triangle is dominated by red, black and white oak, with diverse associates including red maple, sugar maple, black birch, paper birch, black cherry, white ash, American beech, hickory, hemlock, white pine, and scattered red pine. The species mix to the west is similar, but with a lower proportion of oaks, a higher proportion hemlock, maples, and other hardwoods, and red spruce rather than red pine. Large diameter white pine is common along the powerline, and large, coarse hardwoods are common along the roads. Tree regeneration is spotty and sparse, with black birch and white pine most prevalent; other species from the overstory are present but uncommon, as are striped maple and American chestnut stump sprouts. Understory species include huckleberry, low bush blueberry, partridgeberry, wintergreen, clubmoss, woodfern, and limited hay scented fern, as well as cinnamon fern and goldthread in transition zones near wetlands.

Forest health on this site is generally fair. The most serious health issue is red pine scale, which has already begun to attack the red pine and is likely to cause 100% mortality within a few years; however red pine is only a small component of the stand. Most of the other species are living with low-grade damage and depletion from endemic insects and diseases, such as white pine weevil, spongy moth, beech bark disease, sugar maple borer, hemlock woolly adelgid, and hemlock elongate scale. In addition, shade intolerant species (black cherry, paper birch, white ash) are declining in part because they're gradually being shaded out as the forest matures, resulting in a decline in forest diversity.

### ***Site Selection***

This site was chosen for a regeneration harvest because of its low age class diversity. Vigorous young trees have the ability to secure the soil and retain site integrity if a large portion of the overstory is lost in a major windstorm (tornado, hurricane, microburst, etc.) or other natural disturbance.

### ***Silvicultural Objectives***

The primary objective is to create a new age class of vigorous young trees of all species through small group selection, with openings up to two acres. Openings will be irregular in shape, and will be located where there are clusters of trees that are diseased, declining, or have unstable

stem structure. Five to ten square feet per acre of basal area of sawlog- and pole-sized trees will be retained in openings greater than or equal to a half-acre.

In addition, all red pine will be removed in anticipation of mortality due to red pine scale. The healthiest trees of all species other than red pine will be retained.

### ***Cultural Resources***

There are stone walls in the southeastern corner of the lot, as well as along Mary Tamplin Road; they will be flagged, avoided and protected. There are no other known cultural features in the project area.

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

NHESP has not identified any rare or endangered species in the project area.

# Forest Cutting Plan

## Forest Cutting Plan page 1 of 7

Received 2/26/19

# 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)

Final (3/20)

Amendment 1

### For DCR Use Only:

File Number 234-11096-19 Case No. -  
Date Rec'd 6-5-19 Nat. Hert. No  
Earliest Start 6-20-19 Nat. Hert. Imp. No  
River Basin Chicopee Pub. Dr. Wat. No  
Gen. Obj. LT ACEC No

Site Information

### Location

Town Petersham **Quabbin Lot 3161A**  
Road Dugway Road (Quabbin Gate 39)  
Acres 42.8 Proposed Start Date Sept. 2019  
Vol. MBF 121.4 Vol. Cds. 121 Vol. Tons 274

### Plan Preparer

Name Helen Johnson  
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  
\*Required for land under Ch61, Ch61A or Forest Stewardship

### Landowner

Name DCR-DWSP Quabbin Forestry  
Mailing Address 485 Ware Road  
Helen.Johnson@mass.gov  
Town, State, Zip Belchertown, MA 01007  
Phone 617-733-2937  
Ch61 ☐ 61A ☐ 61B ☐ Stew ☐ \*Case #  
CR ☐ CR Holder

### Licensed Timber Harvester\*\*

Name Conkey and Sons Logging  
Address 621 Daniel Shays Highway  
Town, State, Zip Belchertown, MA 01007  
Phone 413-883-2931  
Mass. Lic. Harvester # 2620-039  
\*\*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				

### Wetland Crossings No 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			

### 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%?)				

### Service Forester Comments

\*Amend 1 - Change Lot Name to 3161A -  
- Increase Acreage - Increase total volume -  
- Add skid Road - change Landings Location -  
- Change 'Type of Cut' to SA - Adjust field  
work to reflect changes - MR  
\*Corrected Town to Petersham - originally Fitch  
for New Salem - MR

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

pg 3 of 5

Forest Products

**Products to be Harvested\***Quabbin Lot 3161A  
(FCP Amendment 1)

Species	Mbf/Cds		Mbf/Cds
White Pine	71.8	Red Maple	6.3
Red Pine	8.7	Sugar Maple	
Pitch Pine		Red Oak	7.2
Hemlock	8.6	Black Oak	8.9
Spruce	6.9	White Oak	
Other Sftwd.		Other Hdwd.	1.9
White Ash		<b>Total Mbf</b>	121.4
Beech		<b>Cordwood (Cds)</b>	112
White Birch		<b>SW Pulp (Tons)</b>	274
B & Y Birch		<b>HW Pulp (Tons)</b>	
Black Cherry	1.1	<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.

Stand Treatment

**Cutting Standards**

Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	WH	HH		
Acres	34.5	8.3		
Landowner Objective	LT	LT		
Designation of Trees	CT	CT		
Type of Cut	SE & SA	SE & SA		
Source of Regeneration	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.



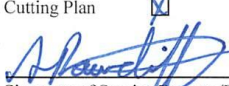

Signature of landowner(s)

Date

8-26-19

Service Forester

**Determination and Status**

Approved	Disapproved	Expires
Cutting Plan <input checked="" type="checkbox"/>	<input type="checkbox"/>	6-5-21
Signature of Service Forester/Director's Agent		Date
		6-25-19
Extension	1 <input type="checkbox"/> 2 <input type="checkbox"/>	Expires / /
Amendment	App 1 <input checked="" type="checkbox"/> Dis 1 <input type="checkbox"/> App 2 <input type="checkbox"/> Dis 2 <input type="checkbox"/>	

**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

3-2-20

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
WK WP/Hem	HH Hem/Hdwd	RM Red Maple		LT Leave Tree	ST Seed Tree	NT Non Com Thin	SE Natural Seed
WH WP/Hdwd	BC Blck Cherry	BE Beech		SB Stand Boundary	CC Clear Cut		PL Plant
WO WP/Oak	BB Bee/Bir/Map	SF Spruce/Fir		OT Other	SE Selection	<b>Non-Standard Systems*:</b>	CO Coppice
RP Red Pine	OH Oak/Hdwd	SM Sugar Maple		<b>Landowner Objective</b>	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

# 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 Petersham

File Number 234-11096-19

**Quabbin Lot 3161A (FCP Amendment 1)**

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.

OBJECTIVES: salvage dead and dying trees (oak d/t gypsy moth, red pine d/t RP scale, hemlock d/t various insects) and badly weevililled white pine;

remove trees at risk of falling on roads and power lines; create openings of various sizes to provide habitat and regenerate a diverse mix of species.

This was accomplished by selection of groups up to 2 ac. where trees of poor health/form are concentrated, and gypsy moth salvage between groups.

CHANGES IN AMENDMENT 1: added acreage, volume, landings, and skid roads; added SA to type of cut; additional explanation of objectives

(above) and paint and flagging symbology (moved to separate page); changed DWSP lot name from 3161 to Lot 3161A.

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. Additional narrative description may be added on a separate page.

Stand No.	Describe Trees to be Cut			Describe Trees to be Left			% BA/AC	
	Species	Size	Quality	Species	Size	Quality	Cut	Left

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.

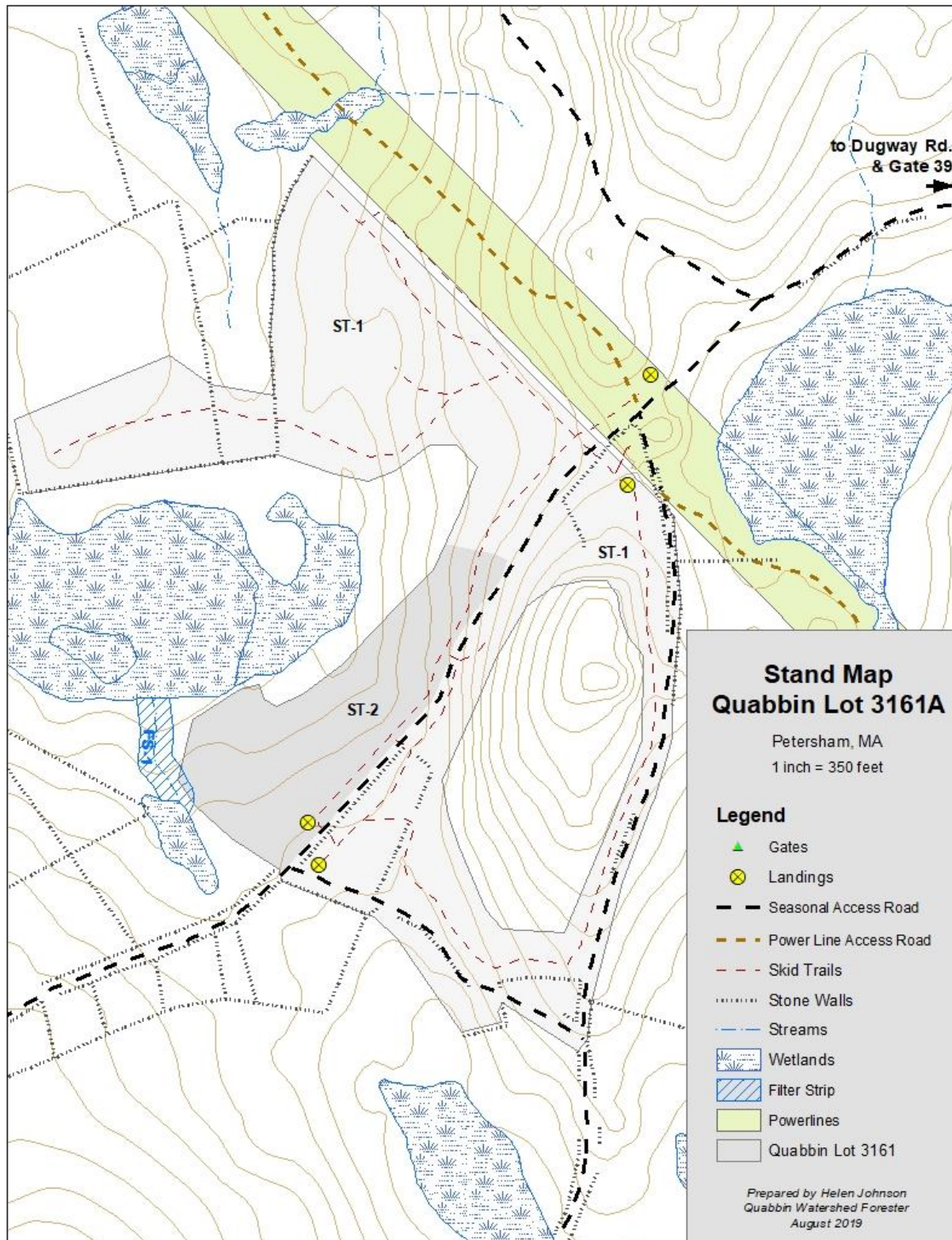
Desired Future Condition

Describe what the stand is expected to look like five years from the harvest, including the condition of the overstory & understory







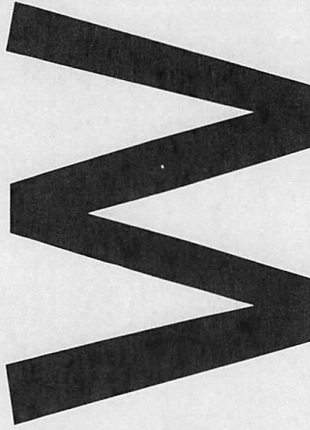


dcf



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

FILE # 234.11096.19



## 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, B'town, MA 01007 in accordance with the  
(Name of Owner) (Address)

provision of M.G.L. Chapter 132, Section 40-46, filed in Amherst F.O. with the Dept. of Conservation  
and Recreation, Division of State Parks and Recreation, a Notice of Intent to cut forest products upon the  
Quabbin 361A lot.

Approval Date 6/25/19

Director's Agent Andrew Rawcliffe

DCR Phone No. 617.549.1677

ISSUED BY:

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