

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

Project Title: Juckett Hill Spongy Moth Salvage

DWSP Harvest Permit Number: S11SQ

DWSP Proposal ID: N/A

DCR Forest Cutting Plan File Number: 024-29973-21

Site Information

Watershed: Quabbin

Town(s): Belchertown

Acres: 162

Nearest Road: Juckett Hill Road

Natural Heritage Atlas overlap: No

Public Drinking Water Supply Watershed: Yes

Forest Types: Oak-hardwoods, Northern Red oak, White pine-hardwoods, Spruce-Fir

Area of Critical Environmental Concern (ACEC): N

Soils: Fine, sandy loam and rock outcrop

Wetland Resources: Streams

Vernal Pools: None

Harvest Information

Harvest Start Date: 10/1/2020

Harvest End Date: 3/9/2021

Number of Wetland Crossings: 0

Number of Stream Crossings: 4

Best Management Practices Applied

Stream Crossings: Stabilized with corduroy and seed

Filter Strips: Variable width filter strips left uncut

Wetland Crossings: N/A

Harvesting in Wetlands: N/A

DWSP Forester supervising this harvest

Name: Steven J. Wood

Forester License number: 257

Phone number: (413) 323-6921

Email: steven.wood@mass.gov

Narrative

General Description/Forest Composition/History

The forest surrounding Juckett Hill is generally a closed canopy, even aged forest. The soils are well to moderately well-drained fine, sandy loams along with an area of outcrop soils found to the southeast and downhill from the height of land, 1,070 feet. The most prevalent canopy species are red, black, scarlet and white oak, along with white pine. Red maple, hickory, black and white birch, and hemlock are also present, as is a small Norway Spruce plantation. Topography is mostly mild with occasional steep sections which will be worked conservatively or avoided depending on severity. Previous timber harvests were conducted in 1988, 1990, and 1991.

Site Selection

Historical impacts by spongy moth highlight the need to diversify the vertical structure and species composition that is currently present. Recent disturbance events have begun that process and provide an opportunity to augment and guide that process. The area was most recently impacted by a Spongy Moth outbreak from 2015-2020. The result was heavy mortality of canopy oaks. Emerald ash borer, (*Agrilus planipennis*) arrived at the end of 2019 and many ash trees were showing decline by the fall of 2020. Stagnant growth of canopy white pine has been observed due to white pine needle cast disease, which hinders photosynthetic capacity. Stagnant growth and mortality of white pine regeneration has also occurred, most likely from several fungi and a canker. Droughts in 2015-2016, and fall of 2020, further reduced growth in all species of trees, both in the canopy, the midstory, and the seedling and sapling layer.

Silvicultural Objectives

Oak and pine are the two keystone species in the watershed forest surrounding the Quabbin Reservoir. The primary silvicultural objective is to encourage establishment and growth of a more diverse suite of trees, woody shrubs, and herbaceous plants. Where soil and moisture conditions are better suited to tree growth, small group selection will be used (openings 0.5 to 2.0 acres in size) with thinning between those openings. In the rocky outcrop where soil conditions are poorer, Spongy Moth killed oak trees will be salvaged.

Cultural Resources

Numerous foundations and stone walls are present. A well is likely nearby but is yet to be identified.

Rare or Endangered Species

There are no NHESP habitats in the treatment area. Moose and deer browsing is evident. Bear, turkey, grouse, and coyote are also known to use this area.

Figures

Figure 1. Final 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: SEP 14 2020

File Number 024-29973-21 Case No. _____

Date Rec'd 9-14-20 Nat. Hert. 1 N

Earliest Start 9-29-30 Nat. Hert. Imp. N

River Basin CHICOPSE Pub. Dr. Wat. QUABBIN N

Gen. Obj. LT ACEC _____

FINAL (3/1/21)

Site Information

Location AMENDMENT #1 12/20
AMENDMENT #2 12/20

Town Belchertown Quabbin Lot SITSO

Road Jucket Hill Rd. access through gate 8 or 6

Acres 146 (+16) ysa Proposed Start Date 9/15/20

Vol. MBF 250.7 Vol. Cds. 532 Vol. Tons 612

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 _____

Plan Preparer

Name Steven J. Wood

Address DCR, Division of Water Supply Protection
485 Ware Rd.

Town, State, Zip Belchertown, MA 01007

Phone (413) 213-7944

Type of Preparer Mass. Licensed Forester

*Mass. Forester License # 257

*Required for land under Ch61, Ch61A or Forest Stewardship

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

Indicate location on map	SC-1	SC-2	SC-3	SC-4
Type of Crossing	BR	CU	BR	BR
Existing Structure	no	yes	no	NO
Type of Bottom	ST	ST	ST	ST
Bank Height (ft)	1	0.5	1	1
Stabilization	CO/SE	CO/SE	CO/SE	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	50	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

SJW-Additional volume to be marked to E and SE,
no wetland resource areas present. Silviculture will
be the same, small openings on northern end, salvage
to the SE.

AMENDMENT #1 ADDED SC-4
AND AREA #1 - 10 ACRES AMENDMENT
#2 - ADDED AREA #2 - 6 ACRES AND
FS-3 ADDITIONAL VOLUME TBD.

Codes

Type of Preparer LF Mass. Lic. For. TH Lic. Tim. Har TB Timber Buyer LO Landowner OT Other	Type of Crossing CU Culvert BR Bridge FO Ford PO Piled OT Other	Stabilization SE Seed MU Mulch CO Corduroy ST Stone HB Hay Bales OT Other	Mitigation FR Frozen DR Dry OT Other	Type of Bottom LE Ledge ST Stony MU Mud GR Gravel 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.
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If Other (OT) is used in any category an explanation must be given on an attached narrative page

Forest Products

Products to be Harvested*

Species	Mbf/Cds		Mbf/Cds
White Pine	133.5	Red Maple	9.5
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	70.8
Hemlock		Black Oak	25.4
Spruce		White Oak	3.1
Other Sftwd.		Other Hdwd.	8.5
White Ash		Total Mbf	
Beech		Cordwood (Cds)	532
White Birch		SW Pulp (Tons)	612
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	OH	OR	WH	SF
Acres	72.2	31.8	33.0	9.0
Landowner Objective	LT	LT	LT	LT
Designation of Trees	CT	CT	CT	CT
Type of Cut	SA/SE	SA/SE	SE	SH
Source of Regeneration	AD/SE	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 of landowner(s)

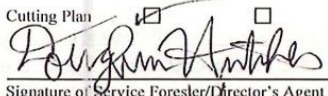
Date

8-27-2020

Service Forester

Determination and Status

Approved ☒ Disapproved ☐ Expires 9-14-22

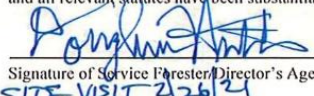
Cutting Plan ☒  9/17/20
Signature of Service Forester/Director's Agent Date

Extension ☐ 1 ☐ 2 ☐ Ser. For. Ints. 1

Amendment App 1 ☒ Dis 1 ☐ App 2 ☒ Dis 2 ☐ DSH 12/15/20

Final Report and Comments

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

 3/9/21
Signature of Service Forester/Director's Agent Date

Codes

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

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

pg 2 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

Town Belchertown

File Number 024.29973.21

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.

Cut trees marked with blue paint, edge of sale marked with double orange (save) or blue (cut), edge of openings marked with orange stripe and dot.

S and SE portion is mainly an oak salvage of gypsy moth killed trees from 2015-2019 outbreak. Most of the rest of lot is group selection with thinning

in between openings. Groups are between 0.5 -2.0 acres with retention of 5-10 ft BA. Regeneration throughout but a lot is weeviled or otherwise

damaged WP and poorly formed RM saplings/poles. TSI is marked and laurel and witchhazel are going to be cut or pulled. It is expected site will

regenerate quickly to a mix of pine and hardwoods. Quite a bit of oak regeneration present and there is a couple acres of pitch pine in ST-3.

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

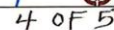
Regeneration & Future Condition

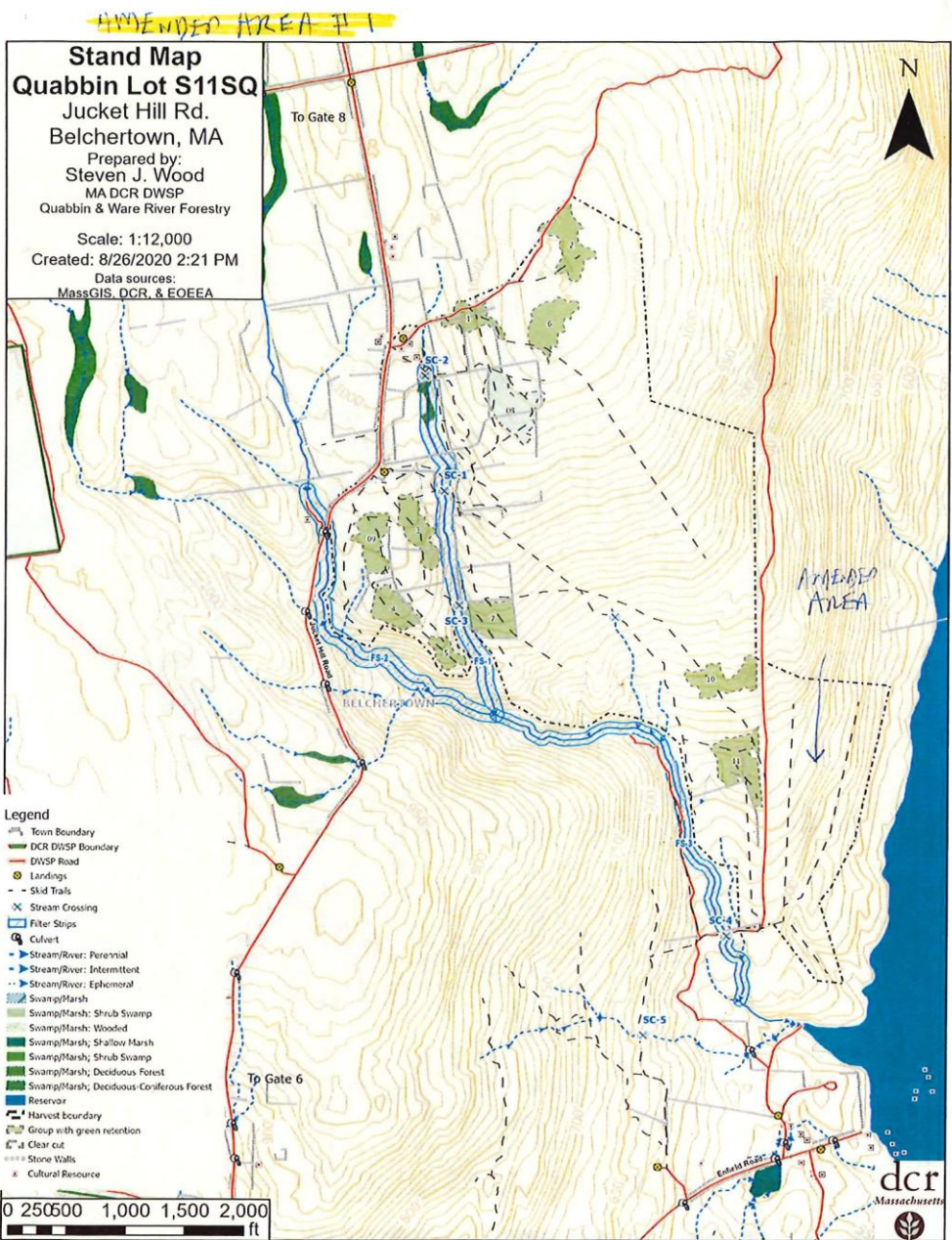
Use this Section to describe how Chapter 132 requirements will be met if a non standard system (HG, DL, or OT) was used for the "Type of Cut" in the Cutting Standards Section on page 4.

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

Scale: 1:7,200
Created: 8/26/2020 2:13 PM
Data sources:
MassGIS, DCR, & EOEEA





AMENDED AREA #2 DAY 27710-21 Right of Powerline, Restriker

Stand Map Quabbin Lot S11SQ

Jucket Hill Rd.
Belchertown, MA

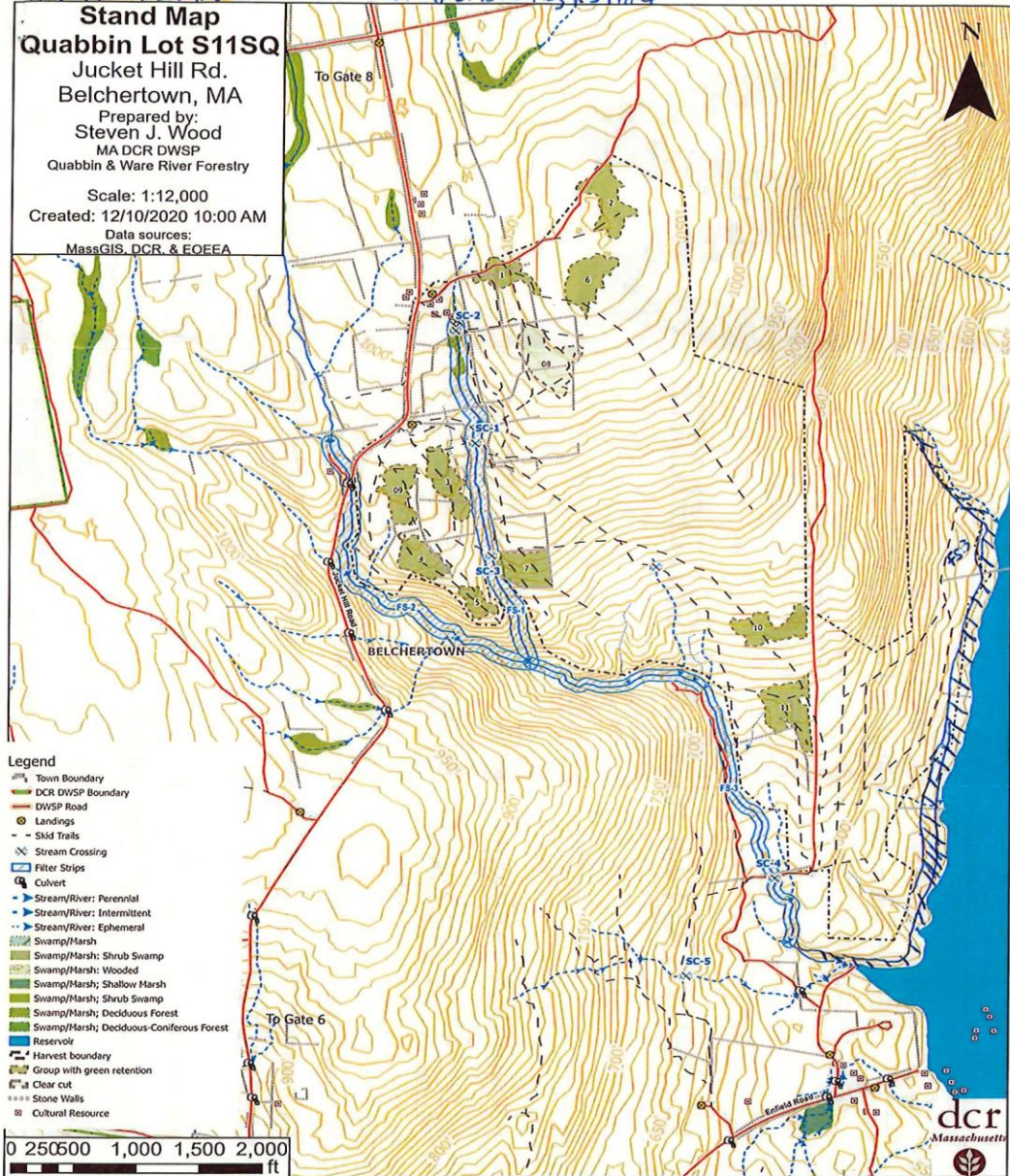
Prepared by:
Steven J. Wood
MA DCR DWSP
Quabbin & Ware River Forestry

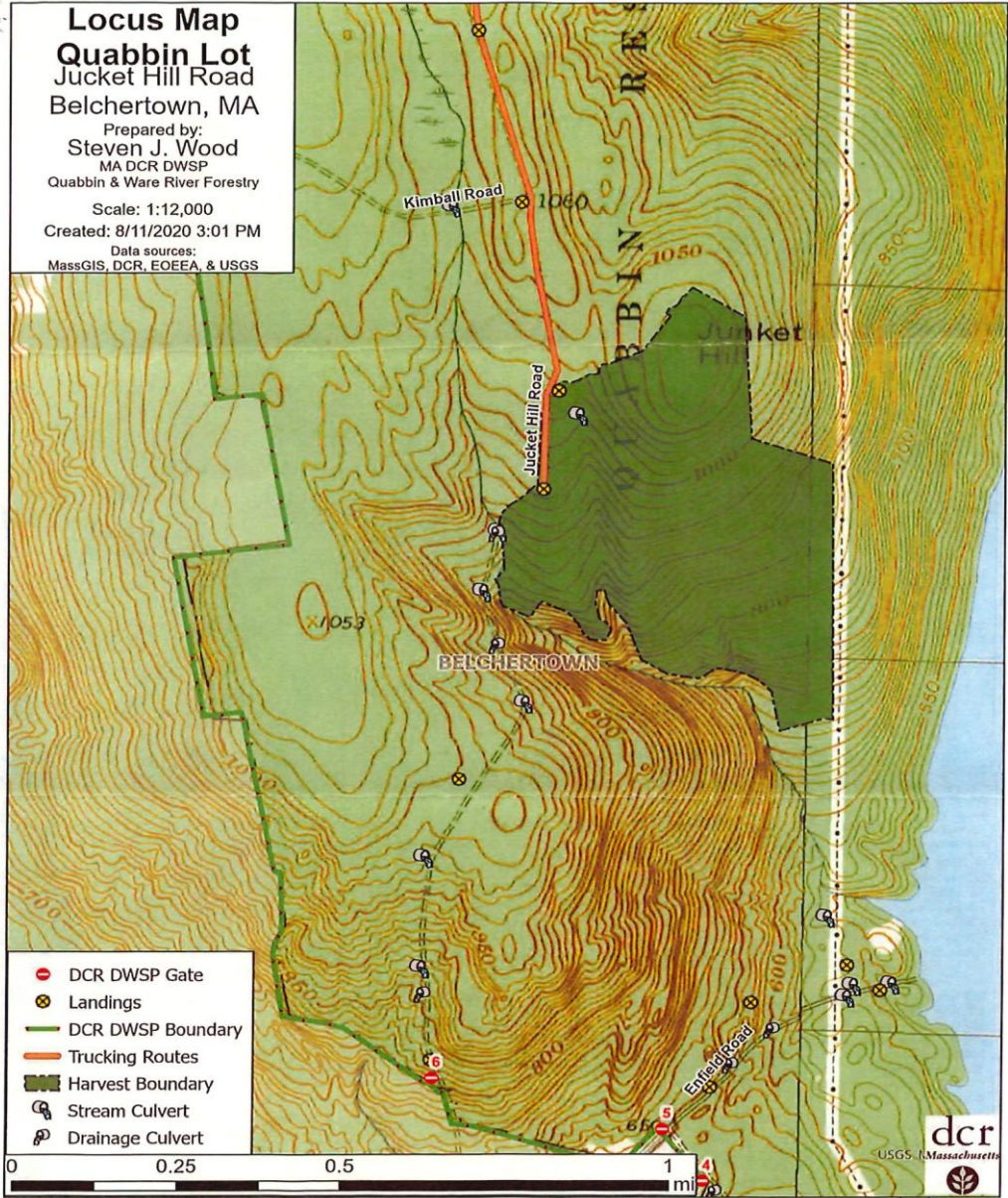
Scale: 1:12,000
Created: 12/10/2020 10:00 AM
Data sources:
MassGIS, DCR, & EOEEA

Legend

- Town Boundary
- DCR DWSP Boundary
- DWSP Road
- Landings
- Skid Trails
- Stream Crossing
- Filter Strips
- Culvert
- Stream/River: Perennial
- Stream/River: Intermittent
- Stream/River: Ephemeral
- Swamp/Marsh
- Swamp/Marsh: Shrub Swamp
- Swamp/Marsh: Wooded
- Swamp/Marsh: Shallow Marsh
- Swamp/Marsh: Shrub Swamp
- Swamp/Marsh: Deciduous Forest
- Swamp/Marsh: Deciduous-Coniferous Forest
- Reservoir
- Harvest boundary
- Group with green retention
- Clear cut
- Stone Walls
- Cultural Resource

0 250 500 1,000 1,500 2,000
ft





dcr



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

FILE # 024.29973.21

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 Rd, Belchertown, MA 01207 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 S11SQ lot.

Approval Date 9/17/20

Director's Agent Douglas Hutcherson

DCR Phone No. 413-237-9713

ISSUED BY:

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