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: Lot 5271
DCR Forest Cutting Plan File Number: 134-9072-18

Site Information

Watershed: Wachusett	**Town(s)**: Holden
Acres: 25	**Nearest Road:**
Natural Heritage Atlas overlap?: Yes	**Public Drinking Water Supply Watershed?:** Yes
Forest Types: White pine/Oak, Mixed Oak	**ACEC?: No**
Soils: Hinckley fine sandy loam	
Wetland Resources: The Quinapoxet River forms the eastern boundary of this sale area. There is a narrow wetland in the middle of the portion of this sale on the east side of Mill Street and there is a small wetland at the base of the hill on the portion on the west side of Mill Street.	
Vernal Pools: There are no vernal pools.	

Harvest Information

DWSP Permit Start Date: 11/29/17	**DWSP Permit End Date:** 12/06/19
Number of Wetland Crossings: None	**Number of Stream Crossings:** None

Best Management Practices Applied

Stream Crossings	There are no stream crossings.
Filter Strips	No trees are marked in any of the filter strips.
Wetland Crossings	There are no wetland crossings.
Harvesting in Wetlands	There is no harvesting in wetlands.

DWSP Forester supervising this harvest
Name: Greg Buzzell
Forester License #: 025
Phone #: 508-792-7806 x317

NARRATIVES

General Description/Forest Composition/History:

The white pines on the west side of Mill St. were planted in 1938. A strip shelterwood was performed in 1995 which resulted in excellent regeneration becoming established. There is also good advance regeneration under the mixed oak stand nearer to the old railroad bed which has not previously received treatment. The 1995 timber sale also treated the white pine/oak stand on the east side of Mill St. and this also resulted in excellent regeneration. The regeneration on both sides of the road is comprised of white pine, white oak and red oak along with red maple, hemlock and sugar maple.

Site Selection:

The ideal watershed protection forest is one which best serves the function of the land as a producer of high quality drinking water in both short- and long-term. This forest must be vigorous and diverse in tree species and ages, be actively accumulating biomass and actively regenerating. Such a forest will be ideally suited to be resilient to and quickly recover from small- and large-scale disturbances such as diseases, insect infestations, ice storms and hurricanes.

This area was chosen due to the lack of age diversity both in these 25 acres as well as the 2,423 acres of DCR-owned land that flows into the Quinapoxet River.

Silvicultural Objectives:

Given the excellent advance regeneration present, portions of the overstory will be removed in order to release these young trees. There are already about 5 acres of young forest, now 23 years old, resulting from the strip cuts in 1995. This operation will give result in a third age class in this forest by creating 9 openings ranging from 0.5 to 1.7 acres with an average of 0.9 acres. These openings are well distributed throughout the sale area taking advantage of where the regeneration is most numerous and diverse.

Cultural Resources:

There are multiple known and significant historic and archaeological resources associated with the Quinapoxet Manufacturing Site and any features located before or during the harvest operation must be protected according to guidelines set forth in the Comprehensive Land Management Plan. However, no features have to date been identified in the areas where trees are being cut as part of this operation.

Wildlife/Rare or Endangered Species:

NHESP has determined that certain state-listed sensitive species or habitats may exist within the lot proposal area. To protect them from unnecessary disturbance, detailed information regarding affected species and their locations is not included in this report. DWSP will coordinate with NHESP and follow recommendations to protect these species during the proposed activity. DWSP's Conservation Management Practices regarding vernal pools are being followed.

FIGURES

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	134-9092-15	Case No.	
Date Rec'd	10-25-2017	Nat. Hert.	YES /
Earliest Start	11-9-2017	Nat. Hert. Imp.	YES
River Basin	NASHUA	Pub. Dr. Wat.	YES - WACHUSETT
Gen. Obj.	CT	ACEC	NO

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Site Information

Location

Town Holden Lot 5271
Road Mill Street
Acres 25 Proposed Start Date 12/1/17
Vol. MBF 80.1 Vol. Cds. 53 Vol. Tons 138

Plan Preparer

Name Russell Wilmot
Address 180 Beaman St.
Town, State, Zip West Boyslton, MA, 01583
Phone 508-792-7806 Ext 318
Type of Preparer Mass. Licensed Forester
*Mass. Forester License # 426
*Required for land under Ch61, Ch61A or Forest Stewardship

Landowner

Name DCR/DWSP/OWM Wachusett/Sudbury
Mailing Address 180 Beaman St.
Town, State, Zip West Boylston, MA 01583
Phone 608-792-7806
Ch61 ☐ Ch61A ☐ Stew ☐ *Case #
Est. Stumpage Value

Licensed Timber Harvester**

Name To be supplied when known.
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				
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)	VA	VA	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

*ALL SKID TRAILS/LANDINGS ARE EXISTING.
*PLEASE CONSIDER MONITORING STILT GRASS.
*SEE NHESP REQUIREMENTS (ATTACHED)

*OPERATION OF MOTORIZED VEHICLES SITE WIDE SHALL OCCUR ONLY OCTOBER 15 TO APRIL 15

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

Forest Products

Products to be Harvested*

Species	Mbf/Cds		Mbf/Cds
White Pine	69.9	Red Maple	
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	7.1
Hemlock		Black Oak	1.8
Spruce		White Oak	1.3
Other Sftwd.		Other Hdwd.	
White Ash		**Total Mbf**	80.1
Beech		**Cordwood (Cds)**	53
White Birch		**SW Pulp (Tons)**	138
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	WO	MO	WP	RM
Acres	19	9.0	5	2
Landowner Objective	LT	LT	LT	LT
Designation of Trees	CT	CT	CT	NA
Type of Cut	SH	SH	SH	NA
Source of Regeneration	AD/SE	AD/SE	AD/SE	NA

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: 6/25/17

Service Forester

Determination and Status

	Approved	Disapproved	Expires
Cutting Plan	☒	☐	10-25-2019

Signature of Service Forester/Director's Agent — Date: 11-6-2017

Extension 1☐ 2☐ — Expires: / — Ser. For. Ints.: /

Amendment — App 1 ☐ Dis 1 ☐ App 2 ☐ Dis 2 ☐ — /

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
WP White Pine; WK WP/Hem; WH WP/Hdwd; WO WP/Oak; RP Red Pine; SR Red Spruce; HK Hemlock; HH Hem/Hdwd; BC Blck Cherry; BB Bee/Bit/Map; OH Oak/Hdwd; OR N Red Oak; OM Mixed Oak; RM Red Maple; BE Beech; SF Spruce/Fir; SM Sugar Maple; PP Pitch Pine

Designation of Trees
CT Cut Tree; LT Leave Tree; SB Stand Boundary; OT Other

Landowner Objective
LT Long-term Mgt.; ST Short-term Har.

Type of Cut
SH Shelterwood; ST Seed Tree; CC Clear Cut; SE Selection; SA Salvage; SN Sanitation

Intermediate Harvests:
CT Commercial Thin; NT Non Com Thin

Non-Standard Systems:*
HG Highgrade*; DL Diameter Limit*; OT Other*

Source of Regeneration
AD Advanced; SE Natural Seed; PL Plant; CO Coppice; DS Direct Seed; OT Other

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

Forest Cutting Plan

Narrative Page

Use only if further explanation is required of information on pages one or two or if "other" was used in any category.

Landowner: DCR-DWSP/DWSM

Town: Holden

File Number: 134-9072-18

BMPs	No trees are marked within FS-1, 2, or 3. No Stream/wetland crossings will be needed on this site. On the east side of mill street heading north from the landing towards the second opening the haul road runs down the hillside across a narrow low spot that has some signs of being seasonally wet. This area will be protected with poles and tops. There are two landings opposite each other off of Mill Street.
Silviculture	In order to release advance regeneration, 9 openings in the overstory are being created, covering 7.8 acres. These openings range from 0.5 to 1.7 acres in size with an average of .9 acres. They are well distributed throughout the area taking advantage of the advance regeneration comprised of red maple, white pine, hickory, black cherry, red oak and other hardwoods. Several strips of white pine plantation will be removed on the west side of Mill Street. There is a 30 year old stand of hardwoods fully established that will be protected that was the result of a previous strip cut.
Objectives	The main objective of this operation is to diversify the age structure of the forest by removing the overstory in patches thereby releasing the advance regeneration. The current age structure is limited with an insufficient component of young forest. A secondary objective is to remove the white pine plantations where they occur.
Other	About 200 feet of road frontage white pine plantation will be removed in the operation. The stand is on the west side of Mill Street south of the landing. The stand is in varying stages of decline and poses a hazard to the public. Please find the attached email from the Town of Holden Tree Warden who has fully inspected the stand in question.

Buzzell, Greg (DCR)

From: dgriffin@holdenma.gov
Sent: Tuesday, October 10, 2017 7:51 AM
To: Buzzell, Greg (DCR)
Subject: Mill St Pines

Good morning Greg,

As per our discusion on 10/6/2017 regarding the stand of White Pines located in the area of 120 Mill St.,I have reviewed the area and the trees in question and feel that in the best interest of public safety and further improve the safe distance for line clearance and long term protection of the HMLD grid ,you have the full support of the office of the Tree Warden.

Town of Holden Tree Warden
Dennis Griffin

dcr

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

FILE # 134-9072-18

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/DLASP/OWM (Name of Owner) W. Boylston (Address) in accordance with the 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 MILL lot.
LOT 5271

Approval Date 11-6-2017

Director's Agent MICHAEL DOWNEY

DCR Phone No. 978-368-0126

ISSUED BY:

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

Figure 2. Map of harvest area showing approximate boundary, proposed openings and other features

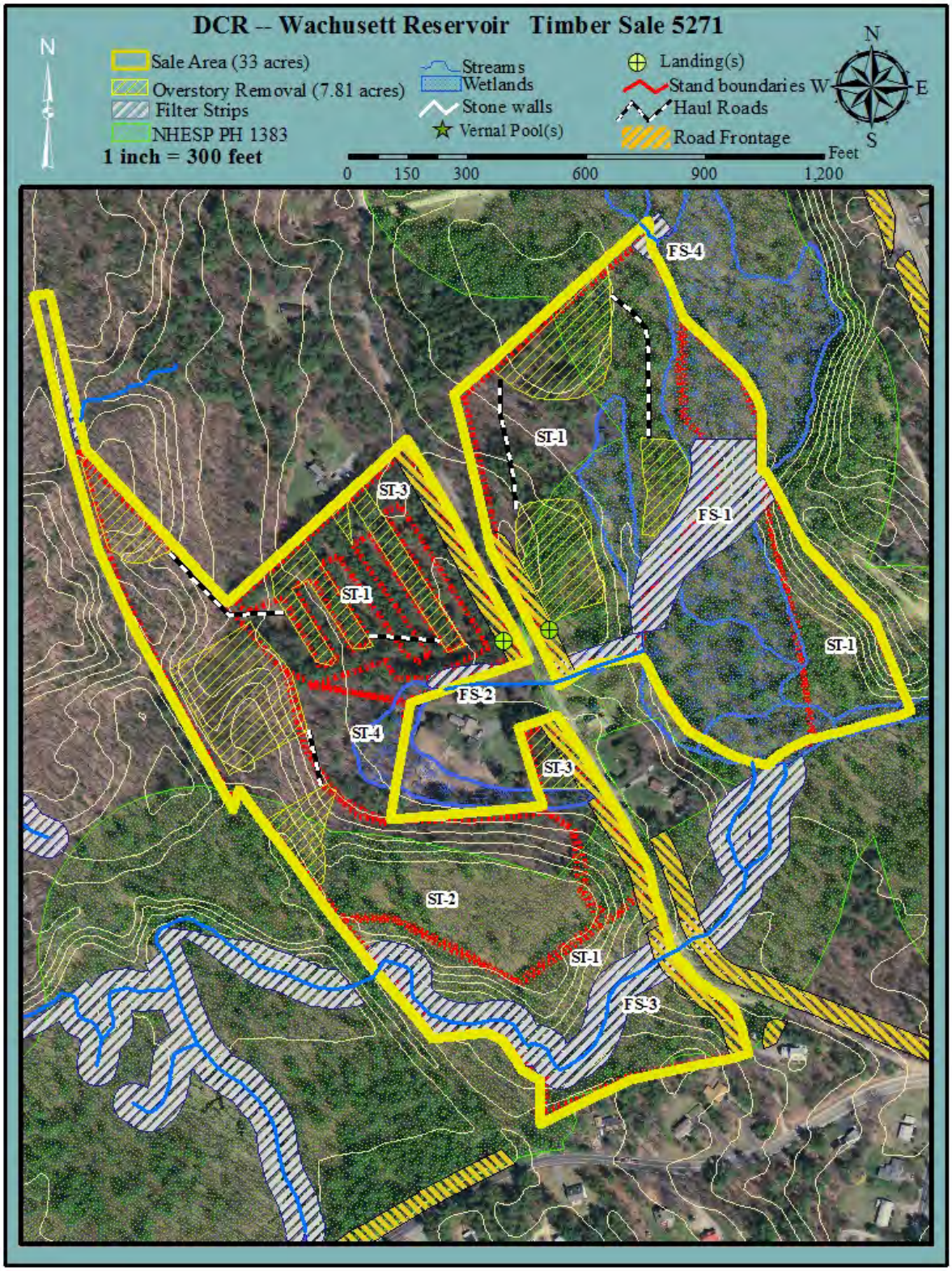

Figure 3. General locus map showing the location of the proposed timber harvest

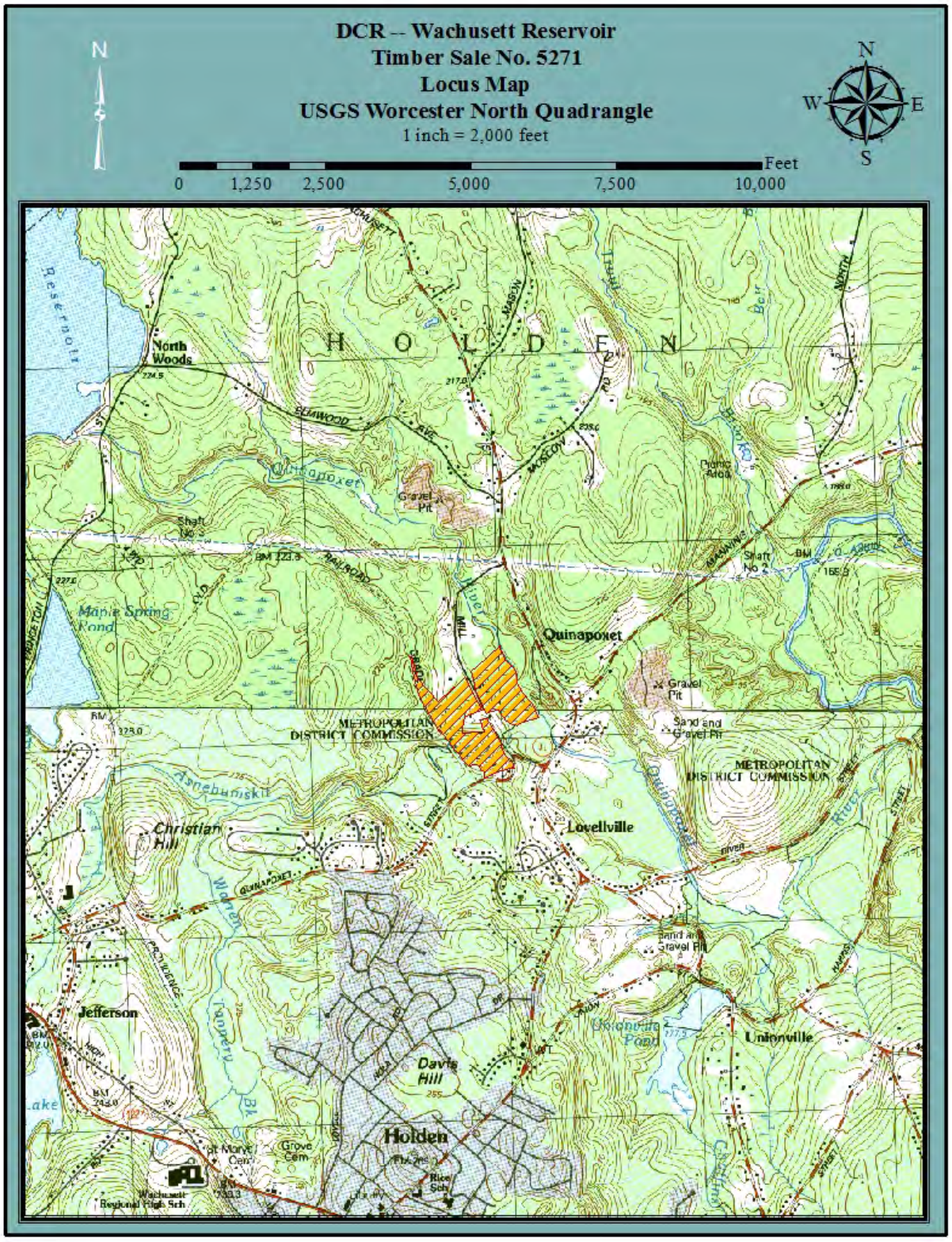

Figure 4. Pre-Harvest Photographs, A-C

A. There will be a landing on each side of Mill Street in this area.

B. One of the areas where the overstory trees are being removed in order to release this excellent understory of diverse hardwood species.

C. The white oak tree in the foreground is being retained in this overstory removal area to provide more structural diversity to this site.

5. Post-Harvest Photographs A-C.

A. Overstory removed with hardwood regeneration released.

B. Overstory removed, diverse regeneration released.

C. White pine plantation strip removed with young mixed stands on either side retained and hardwood regeneration sprouting.