

Applicant:  
Gary Tallaksen  
#30 Sunrise Road  
Boxford MA 01921

**JOB FILE**  
Project File: BOX-0213

# Notice of Intent Application

**Proposed Addition  
#30 Sunrise Road  
Boxford, Massachusetts**

**September 2017**



603 Salem Street  
Wakefield, MA 01880  
Tel: (781) 246-2800  
Fax: (781) 246-7596

Nantucket, MA 02554  
Tel: (508) 228-7909

**Boxford Conservation Commission**  
**Application Checklist-Notice of Intent (NOI)**

*This checklist is designed to assist the applicant in preparing a complete Notice of Intent application. One completed copy of the checklist should be submitted with the application. One (1) original and (7) copies of the NOI forms, plans and appurtenant data listed below are required to be submitted for a complete application*

**The following are required as part of a complete NOI application and are attached:**

- Attached** Completed Notice of Intent form (available from the Conservation Office or at <http://www.mass.gov/dep/appkits/wpaform3.pdf>). (Note: A copy of a complete NOI must also be mailed to the MassDEP NERO, 205B Lowell Street, Wilmington, MA 01887.)
- Attached** Site Plan. See next page for required elements of plan.
- Attached** List of abutters within 250' of the project parcel(s) (and all pond abutters if applicable), prepared and certified by the Town Assessor's Office. (Note: A notice of public hearing will be prepared by the Conservation office and provided to the applicant when the application is submitted. At the public hearing, the applicant must provide evidence that the notice was mailed to each of the persons on the certified abutters list.)
- Attached** A copy of a check made out in the correct amount to the Department of Environmental Protection and a copy of a completed State Wetlands Fee Transmittal Form. (Note: the applicant is responsible for mailing this check along with a completed State Wetlands Fee Transmittal Form to the DEP "Lockbox" at Box 4062, Boston MA 02211.)
- Attached** A check for local filing fees made out in the correct amount to the "Town of Boxford".
- Attached**  **N/A** Proof of mailing or proof of hand delivery to the Natural Heritage and Endangered Species Program, if applicable.
- Attached**  **N/A** Evidence that all other Boxford Bylaw permit applications relevant to the project have been filed, if applicable (e.g., Board of Health, Zoning Board of Appeals). Please list all other Bylaw permit filings: *Building Permit*  
*Septic Permit*

**The following must be shown on the site plan attached to the application:**

- Shown** All appropriate plan requirements listed in Section 375-5(A)(1)(b) of the Town of Boxford Wetland Protection Bylaw Regulations.
- Shown** The signature and stamp of a Registered Professional Land Surveyor, Registered Sanitarian, or Registered Professional Engineer, and the identity of the firm/person that delineated the wetland resource area..
- Shown** Boundaries of all wetland resource areas (e.g., bordering vegetated wetland, bordering land subject to flooding). All demarcation flags must be located by survey in the field and shown on the plan.
- Shown** All wetland resource area setback lines (e.g., 100' Limit of Jurisdiction, 200' Riverfront, 25' No Disturb, 75' No Build).
- Shown** Existing contour information and proposed grading.
- Shown** Existing site conditions and proposed changes including structures, pavement, landscaping, underground utilities and building overhangs. (Note: it may be necessary to show areas outside of the limits of jurisdictional wetland area in order to provide adequate information for the Commission to properly review the project.)
- Shown** All erosion / sedimentation control measures.
- Shown** Pre- and post-development overstory tree line within jurisdictional area, and a calculation of the percent removal of overstory trees within the "discretionary cutting area" (see Section 375-4(A) and Section 375-98(D)(2) of the Boxford Wetlands Protection Regulations).

2/A **Applications subject to the DEP Stormwater Management Policy must include the following:** *(The plan and supporting documentation must also be mailed to the DEP Northeast Office and the Boxford DPW)*

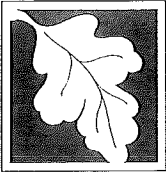
- Attached** Completed DEP Stormwater Management Form.
- Attached** Stormwater & flood calculations using the Cornell Atlas rainfall estimates, prepared by a Professional Engineer.
- Attached** Operations and Maintenance Plan.
- Attached** A stormwater management plan showing stormwater management features highlighted in separate colors, per section 375-5(A)(1)(d) of the Boxford Wetlands Protection Bylaw Regulations.

**CONTENTS  
NOTICE OF INTENT  
#30 SUNRISE ROAD  
BOXFORD, MASSACHUSETTS**

August 22, 2017

LIST OF PLANS AND DOCUMENTS

<u>Identifying Number / Letter</u>	<u>Title / Date</u>
<b>DOCUMENT A</b>	WPA Form 3 – Notice of Intent and NOI Wetland Fee Transmittal Form for Proposed Addition, #30 Sunrise Road, Boxford, with attachments: USGS Locus Map, and List of Abutters (July 2017).
<b>DOCUMENT B</b>	Project Narrative, Proposed Addition, #30 Sunrise Road, Boxford, MA; August 22, 2017.
<b>DOCUMENT C</b>	Erosion and Sedimentation Control, #30 Sunrise Road, Boxford, MA; August 22, 2017.
<b>PLANS</b>	Plan to Accompany Notice of Intent, #30 Sunrise Road, Boxford, Mass.; Scale: 1"=20' and As Noted'; Hayes Engineering, Inc., Date: June 20, 2017  Architectural Drawings titled "Tallaksen, #30 Sunrise Road", Scale: 1/4" = 1' (7 pages)



# WPA Form 3 - Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

AND BOXFORD WETLAND PROTECTION BYLAW

MassDEP File Number

Document Transaction Number

Boxford

City/Town

**Important:**  
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



**Note:**  
Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

## A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

30 Sunrise Road

a. Street Address

Boxford

b. City/Town

01921

c. Zip Code

Latitude and Longitude:

25-6-16

f. Assessors Map/Plat Number

d. Latitude

e. Longitude

g. Parcel /Lot Number

2. Applicant:

Gary

a. First Name

Tallaksen

b. Last Name

c. Organization

30 Sunrise Road

d. Street Address

Boxford

e. City/Town

MA

f. State

01921

g. Zip Code

(978)833-1776

h. Phone Number

i. Fax Number

tallaksenbuilders@yahoo.com

j. Email Address

3. Property owner (required if different from applicant):  Check if more than one owner

Same as applicant & Tucker and Danielle

a. First Name

Tallaksen

b. Last Name

c. Organization

66 Campmeeting Rd

d. Street Address

Topsfield

e. City/Town

MA

f. State

01983

g. Zip Code

Contact through applicant.

i. Fax Number

j. Email address

4. Representative (if any):

Elizabeth

a. First Name

Wallis

b. Last Name

Hayes Engineering, Inc., Inc

c. Company

603 Salem Street

d. Street Address

Wakefield

e. City/Town

MA

f. State

01880

g. Zip Code

(781)246-2800

h. Phone Number

(781)246-7596

i. Fax Number

lwallis@hayeseng.com

j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

\$110.00

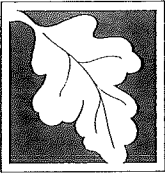
a. Total Fee Paid

\$42.50

b. State Fee Paid

\$67.50

c. City/Town Fee Paid



WPA Form 3 - Notice of Intent

MassDEP File Number

Document Transaction Number

Boxford

City/Town

A. General Information (continued)

6. General Project Description:

The applicant proposes to construct an addition to the existing house as shown on the accompanying plan and as described in the attached project narrative.

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

- 1. [X] Single Family Home
2. [ ] Residential Subdivision
3. [ ] Commercial/Industrial
4. [ ] Dock/Pier
5. [ ] Utilities
6. [ ] Coastal engineering Structure
7. [ ] Agriculture (e.g., cranberries, forestry)
8. [ ] Transportation
9. [ ] Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

- 1. [ ] Yes [X] No If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR 10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

Essex south

a. County

35581

c. Book

b. Certificate # (if registered land)

141

d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

- 1. [X] Buffer Zone Only - Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. [ ] Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.



# WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

MassDEP File Number \_\_\_\_\_

Document Transaction Number \_\_\_\_\_

Boxford \_\_\_\_\_

City/Town \_\_\_\_\_

## B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. <input type="checkbox"/> Bank	1. linear feet _____	2. linear feet _____
b. <input type="checkbox"/> Bordering Vegetated Wetland	1. square feet _____	2. square feet _____
c. <input type="checkbox"/> Land Under Waterbodies and Waterways	1. square feet _____	2. square feet _____
	3. cubic yards dredged _____	

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. <input type="checkbox"/> Bordering Land Subject to Flooding	1. square feet _____	2. square feet _____
	3. cubic feet of flood storage lost _____	4. cubic feet replaced _____
e. <input type="checkbox"/> Isolated Land Subject to Flooding	1. square feet _____	
	2. cubic feet of flood storage lost _____	3. cubic feet replaced _____
f. <input type="checkbox"/> Riverfront Area	1. Name of Waterway (if available) - specify coastal or inland _____	

2. Width of Riverfront Area (check one):

- 25 ft. - Designated Densely Developed Areas only
- 100 ft. - New agricultural projects only
- 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: \_\_\_\_\_ square feet

4. Proposed alteration of the Riverfront Area:

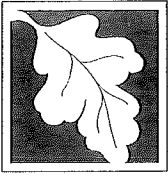
a. total square feet _____	b. square feet within 100 ft. _____	c. square feet between 100 ft. and 200 ft. _____
----------------------------	-------------------------------------	--

5. Has an alternatives analysis been done and is it attached to this NOI?  Yes  No

6. Was the lot where the activity is proposed created prior to August 1, 1996?  Yes  No

3.  Coastal Resource Areas: (See 310 CMR 10.25-10.35)

**Note:** for coastal riverfront areas, please complete **Section B.2.f.** above.



WPA Form 3 - Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

MassDEP File Number

Document Transaction Number

Boxford

City/Town

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Table with 3 columns: Resource Area, Size of Proposed Alteration, Proposed Replacement (if any). Rows include Designated Port Areas, Land Under the Ocean, Barrier Beach, Coastal Beaches, Coastal Dunes.

Table with 3 columns: Resource Area, Size of Proposed Alteration, Proposed Replacement (if any). Rows include Coastal Banks, Rocky Intertidal Shores, Salt Marshes, Land Under Salt Ponds, Land Containing Shellfish, Fish Runs, Land Subject to Coastal Storm Flowage.

4. Restoration/Enhancement. If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

a. square feet of BVW

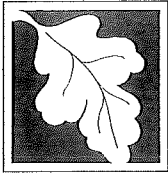
b. square feet of Salt Marsh

5. Project Involves Stream Crossings

a. number of new stream crossings

b. number of replacement stream crossings





# WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

MassDEP File Number \_\_\_\_\_

Document Transaction Number \_\_\_\_\_

Boxford \_\_\_\_\_

City/Town \_\_\_\_\_

## C. Other Applicable Standards and Requirements

- This is a proposal for an Ecological Restoration Limited Project. Skip Section C and complete Appendix A: Ecological Restoration Limited Project Checklists – Required Actions (310 CMR 10.11).

### Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to [http://maps.massgis.state.ma.us/PRI\\_EST\\_HAB/viewer.htm](http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm).

a.  Yes  No **If yes, include proof of mailing or hand delivery of NOI to:**

MassGIS NHESP  
online mapping \_\_\_\_\_

Natural Heritage and Endangered Species Program  
Division of Fisheries and Wildlife  
1 Rabbit Hill Road  
Westborough, MA 01581

If yes, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.c, and include requested materials with this Notice of Intent (NOI); OR complete Section C.2.f, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

c. Submit Supplemental Information for Endangered Species Review\*

1.  Percentage/acreage of property to be altered:

(a) within wetland Resource Area \_\_\_\_\_

percentage/acreage

(b) outside Resource Area \_\_\_\_\_

percentage/acreage

2.  Assessor's Map or right-of-way plan of site

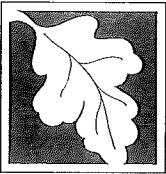
2.  Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work \*\*

(a)  Project description (including description of impacts outside of wetland resource area & buffer zone)

(b)  Photographs representative of the site

\* Some projects not in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see <http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/>). Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

\*\* MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.



WPA Form 3 – Notice of Intent

MassDEP File Number

Document Transaction Number

Boxford

City/Town

C. Other Applicable Standards and Requirements (cont'd)

(c) [ ] MESA filing fee (fee information available at http://www.mass.gov/dfwele/dfw/nhosp/regulatory\_review/ mesa/ mesa\_fee\_schedule.htm). Make check payable to "Commonwealth of Massachusetts - NHESP" and mail to NHESP at above address

Projects altering 10 or more acres of land, also submit:

(d) [ ] Vegetation cover type map of site

(e) [ ] Project plans showing Priority & Estimated Habitat boundaries

(f) OR Check One of the Following

1. [ ] Project is exempt from MESA review. Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, http://www.mass.gov/dfwele/dfw/nhosp/regulatory\_review/ mesa/ mesa\_exemptions.htm; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

2. [ ] Separate MESA review ongoing. a. NHESP Tracking # b. Date submitted to NHESP

3. [ ] Separate MESA review completed. Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

a. [x] Not applicable – project is in inland resource area only b. [ ] Yes [ ] No

If yes, include proof of mailing, hand delivery, or electronic delivery of NOI to either:

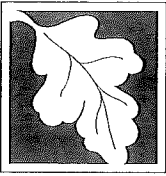
South Shore - Cohasset to Rhode Island border, and the Cape & Islands:

North Shore - Hull to New Hampshire border:

Division of Marine Fisheries - Southeast Marine Fisheries Station Attn: Environmental Reviewer 1213 Purchase Street – 3rd Floor New Bedford, MA 02740-6694 Email: DMF.EnvReview-South@state.ma.us

Division of Marine Fisheries - North Shore Office Attn: Environmental Reviewer 30 Emerson Avenue Gloucester, MA 01930 Email: DMF.EnvReview-North@state.ma.us

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.



WPA Form 3 – Notice of Intent

MassDEP File Number

Document Transaction Number

Boxford

City/Town

C. Other Applicable Standards and Requirements (cont'd)

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

- 4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?
a. Yes No
b. ACEC
5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?
a. Yes No
6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?
a. Yes No
7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?
a. Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:
1. Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)
2. A portion of the site constitutes redevelopment
3. Proprietary BMPs are included in the Stormwater Management System.
b. No. Check why the project is exempt:
1. Single-family house
2. Emergency road repair
3. Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

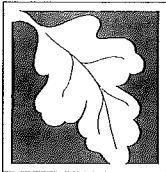
D. Additional Information

- This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

- USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)
Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.



# WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

MassDEP File Number

Document Transaction Number

Boxford

City/Town

## D. Additional Information (cont'd)

3.  Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4.  List the titles and dates for all plans and other materials submitted with this NOI.

Refer to the document "Contents / List of Plans and Documents" for titles and dates of submitted materials.

Hayes Engineering, Inc.

b. Prepared By

Peter J. Ogren, P.E.

c. Signed and Stamped by

d. Final Revision Date

e. Scale

f. Additional Plan or Document Title

g. Date

5.  If there is more than one property owner, please attach a list of these property owners not listed on this form.

6.  Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7.  Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8.  Attach NOI Wetland Fee Transmittal Form

9.  Attach Stormwater Report, if needed.

## E. Fees

1.  Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

\* 1520 + \* 1521  
2. Municipal Check Number

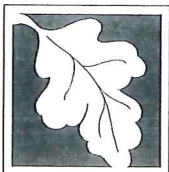
8/28/17  
3. Check date

\* 1519  
4. State Check Number

8/28/17  
5. Check date

TALLAKSEN BUILDERS, LLC  
6. Payor name on check: First Name

7. Payor name on check: Last Name



# WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

MassDEP File Number

Document Transaction Number

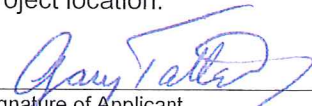
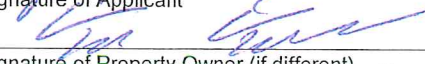

Boxford

City/Town

## F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

1. Signature of Applicant		2. Date	8/28/17
3. Signature of Property Owner (if different)		4. Date	8/28/17
5. Signature of Representative (if any)	 Elizabeth Wallis Hayes Engineering, Inc.	6. Date	8/28/17

### For Conservation Commission:

Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

### For MassDEP:

One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

### Other:

If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

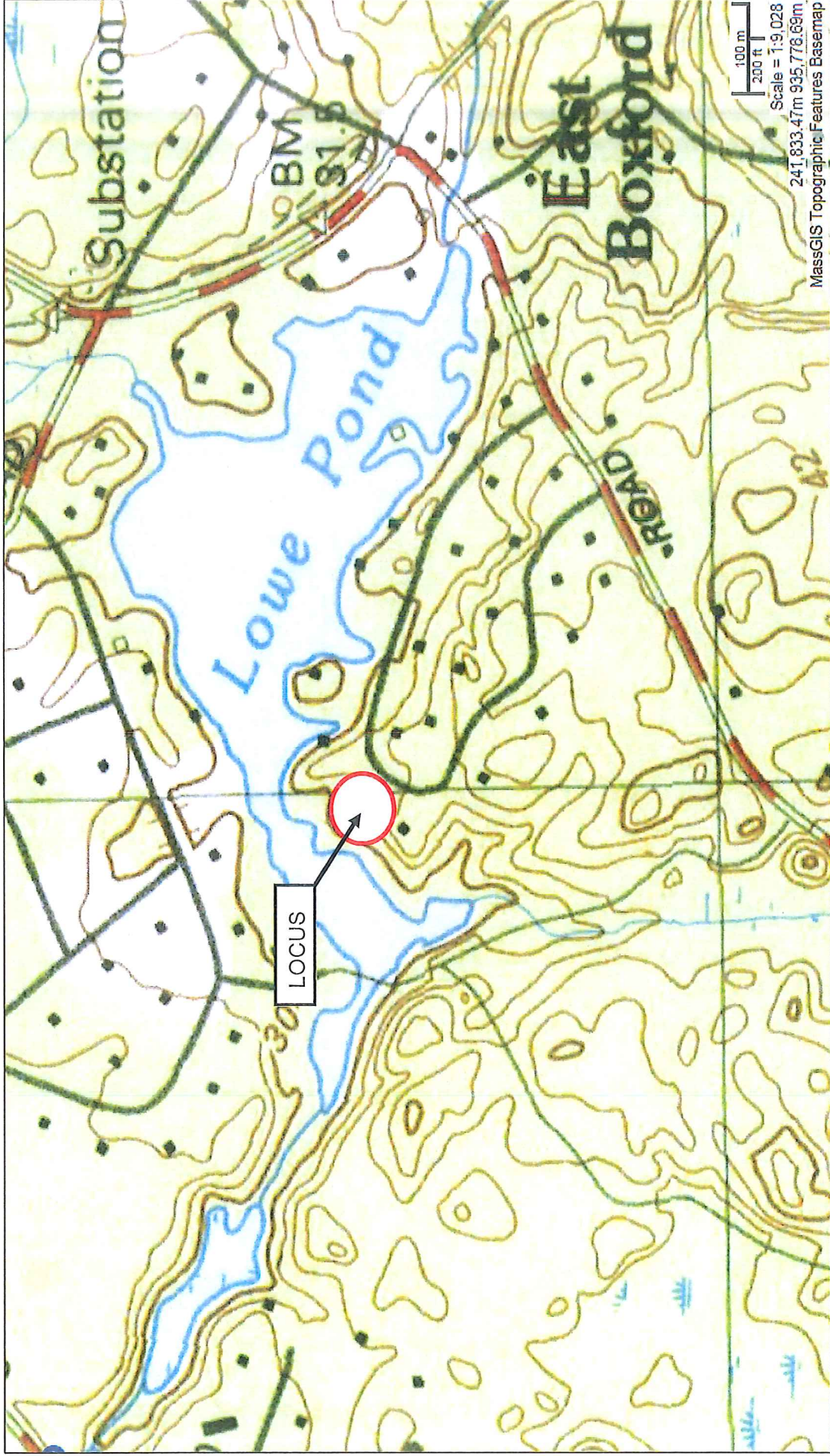
The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.





HAYES ENGINEERING, INC.  
CIVIL ENGINEERING &  
LAND SURVEYORS

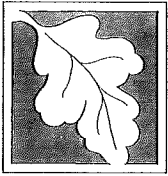
603 SALEM STREET  
WAKEFIELD, MA 01880  
(781) 246-2800



UNITED STATES GEOLOGICAL SURVEY MAP  
25K MASSGIS QUADRANGLE  
("Oliver")

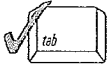
LOCUS MAP  
#30 SUNRISE ROAD  
BOXFORD, MASSACHUSETTS

N  
↑



**Massachusetts Department of Environmental Protection**  
 Bureau of Resource Protection - Wetlands  
**NOI Wetland Fee Transmittal Form**  
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



**A. Applicant Information**

1. Location of Project:

30 Sunrise Road Boxford  
 a. Street Address b. City/Town  
 \_\_\_\_\_  
 c. Check number d. Fee amount

2. Applicant Mailing Address:

Gary Tallaksen  
 a. First Name b. Last Name  
 \_\_\_\_\_  
 c. Organization  
 30 Sunrise Road  
 d. Mailing Address  
Boxford MA 01921  
 e. City/Town f. State g. Zip Code  
(978)833-1776 tallaksenbuilders@yahoo.com  
 h. Phone Number i. Fax Number j. Email Address

3. Property Owner (if different):

\_\_\_\_\_ MA 01983  
 a. First Name b. Last Name f. State g. Zip Code  
 \_\_\_\_\_  
 c. Organization  
 66 Campmeeting Rd  
 d. Mailing Address  
Topsfield MA 01983  
 e. City/Town f. State g. Zip Code  
 Contact through applicant. \_\_\_\_\_  
 i. Fax Number j. Email Address

**B. Fees**

Fee should be calculated using the following process & worksheet. *Please see Instructions before filling out worksheet.*

**Step 1/Type of Activity:** Describe each type of activity that will occur in wetland resource area and buffer zone.

**Step 2/Number of Activities:** Identify the number of each type of activity.

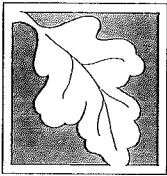
**Step 3/Individual Activity Fee:** Identify each activity fee from the six project categories listed in the instructions.

**Step 4/Subtotal Activity Fee:** Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

**Step 5/Total Project Fee:** Determine the total project fee by adding the subtotal amounts from Step 4.

**Step 6/Fee Payments:** To calculate the state share of the fee, divide the total fee in half and subtract \$12.50. To calculate the city/town share of the fee, divide the total fee in half and add \$12.50.

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).



Massachusetts Department of Environmental Protection  
 Bureau of Resource Protection - Wetlands  
**NOI Wetland Fee Transmittal Form**  
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

**B. Fees** (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Addition	1	\$110.00	\$110.00

**Step 5/Total Project Fee:** \$110.00

**Step 6/Fee Payments:**

Total Project Fee:	\$110.00
State share of filing Fee:	\$42.50
City/Town share of filing Fee:	\$67.50
	a. Total Fee from Step 5
	b. 1/2 Total Fee less \$12.50
	c. 1/2 Total Fee plus \$12.50

**C. Submittal Requirements**

- a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection  
 Box 4062  
 Boston, MA 02211


- b.) To the Conservation Commission: Send the Notice of Intent or Abbreviated Notice of Intent; a copy of this form; and the city/town fee payment.

To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a copy of this form; and a copy of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)



TALLAKSEN BUILDERS, LLC  
179 WASHINGTON STREET  
TOPSFIELD, MA 01983  
(978) 887-3386

1519

 Check Fraud  
Protection for Business  
51-7218/2211

8/28/17


DATE

PAY  
TO THE  
ORDER OF

Comm. of Mass.

\$ 42.<sup>50</sup>

Forty two & 50/100

DOLLARS  Security Features  
Included  
Details on Back

People's United  
Bank

FOR


*Jay Tallak*

MP

⑈001519⑈ ⑆221172186⑆ 6500243965⑈

TALLAKSEN BUILDERS, LLC  
179 WASHINGTON STREET  
TOPSFIELD, MA 01983  
(978) 887-3386

1520

 Check Fraud  
Protection for Business  
51-7218/2211

8/28/17


DATE

PAY  
TO THE  
ORDER OF

Town of Boxford

\$ 67.<sup>50</sup>

Sixty seven & 50/100

DOLLARS  Security Features  
Included  
Details on Back

People's United  
Bank

FOR


*Jay Tallak*

MP

⑈001520⑈ ⑆221172186⑆ 6500243965⑈

TALLAKSEN BUILDERS, LLC  
179 WASHINGTON STREET  
TOPSFIELD, MA 01983  
(978) 887-3386

1521

 Check Fraud  
Protection for Business  
51-7218/2211

8/28/17

DATE

PAY  
TO THE  
ORDER OF

Town of Boxford

\$ 200.<sup>00</sup>

Two hundred

DOLLARS  Security Features  
Included  
Details on Back

People's United  
Bank

FOR

*Jay Tallak*

MP

⑈001521⑈ ⑆221172186⑆ 6500243965⑈

AFFIDAVIT OF SERVICE

Under the Massachusetts Wetlands Protection Act

(to be submitted to the Massachusetts Department of  
Environmental Protection and the Conservation Commission  
when filing a Notice of Intent)

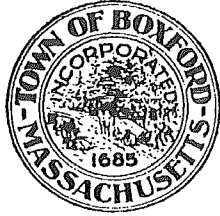
I, Diane Benoit, hereby certify under the pains  
and penalties of perjury that on 9/7/17 I gave notification to  
abutters in compliance with the second paragraph of Massachusetts General Laws,  
Chapter 131, Section 40, and the **DEP Guide to Abutter Notification** dated April 8,  
1994, in connection with the following matter: Addition Construction.

A Notice of Intent filed under the Massachusetts Wetlands Protection Act by Gary  
Tallaksen, with the Boxford Conservation Commission on 9/6/17 for property  
located at #30 Sunrise Road, Boxford, MA, (Assessor Map 25, Block 06, Lot 16).

The form of the notification, and a list of the abutters to whom it was given and  
their addresses are attached to this Affidavit of Service.

Diane Benoit  
Name

9/6/17  
Date



**TOWN OF BOXFORD**  
MASSACHUSETTS  
01921

**BOXFORD CONSERVATION COMMISSION**

**NOTICE OF PUBLIC HEARING**

You are hereby notified that a **Public Hearing** will be held at the Town Hall, 7A Spofford Road on **September 21, 2017** at 7:30 or such other time when posted to consider the

**Notice of Intent**

By Applicant: **Gary Tallaksen**  
for the property located at: **30 Sunrise Road, Map 25, Block 6, Lot 16**

**To construct an addition to the existing house and associated site improvements within 100-feet of Lowe Pond and a Bordering Vegetated Wetland.**

This is a joint hearing under the requirements of MGL Ch. 131, Sec. 40, as amended, and Boxford's Wetlands Protection Bylaw and Regulations. Plans are available at the Commission's office at 7A Spofford Road from 9am-1pm Mon.-Thur. For accommodations call (978) 887-6000, ext. 506.

For the Commission,  
Ross Povenmire, Conservation Director

**PROJECT NARRATIVE  
PROPOSED ADDITION  
#30 SUNRISE ROAD  
BOXFORD, MASSACHUSETTS**

August 22, 2017

Existing Conditions

The subject property is a residential lot containing a single family house with paved driveway, grassed yards, and pool. Remaining portions of the property are forested. This lot abuts Lowe Pond and contains inland bank resource area as well as buffer zones associated with that water body. Additionally, there is a portion of Bordering Land subject to Flooding resource area where the floodplain exceeds the pond bank located downgradient of the pool (edge of floodplain as defined by "Zone/A" line along the pond as shown on the July 2012 FEMA map Panel 261, #250078). Existing features are shown on the accompanying June 2017 plan titled "Plan to accompany Notice of Intent, #30 Sunrise Road, Boxford, Mass."

Proposed Project

The proposed project consists of adding a 1,975± s.f. two-story addition ("in-law" suite with garage) to the northern side of the house as shown on the above-referenced plan and on in the attached architectural drawings. Addition construction activities will be conducted at least 70 feet away from the pond bank and consist of erosion control barrier installation; removing vegetation and house siding; excavating; foundation installation; grading; building construction; deck and stairway construction; and loaming and seeding or other landscaping. Erosion control procedures will be implemented as outlined in the attached document titled "Erosion and Sedimentation Control" to protect adjacent buffer zone and resource areas from sediments that may be generated by the project activities. It should be noted that the existing septic system will be replaced and upgraded in conjunction with the proposed addition; however that work will be conducted outside of the 100-foot buffer zone.

Regulations

This work is subject to regulation under both the Massachusetts Wetlands Protection Act (M.G.L. Chapter 131, section 40 and 310 CMR 10.00) and the Town of Boxford Wetlands Protection Bylaw (General Bylaws Chapter 192 and Chapter 375). A description of how the project meets the regulatory performance standards is provided below.

Massachusetts Wetlands Protection Act (M.G. L. Ch 131, Sec. 40)

Portions of the 100-foot buffer zone will be altered as a result of addition construction as described above. Temporary disturbances may also occur due to the need for an equipment and materials staging area and machine and personnel work space. The construction area will be accessed from the existing driveway to minimize extent of disturbance. An erosion control barrier will be installed along the work area as shown on the Notice of Intent plan to protect adjacent buffer zone and resource areas and to provide a visible limit of work. As noted in the existing conditions description above, there is bordering land subject to flooding resource area which extends slightly beyond the pond bank; however, addition construction will not intrude into

that resource area. A review of the MassGIS online NHESP mapping revealed that the project is not located within either of Estimated Habitat or Priority Habitat of Endangered Species.

Boxford Wetland Protection Bylaw (Town of Boxford Ch. 192, Sec. 375)

Building Setback

Boxford Wetlands Protection Bylaw and associated regulations establish the 100-foot buffer zone as a resource area and more specifically require minimum setbacks for work within that resource area as shown in the Chart provided at §375-98 (B)(5). For this site, the building is required to be at least 75 feet from resource areas. Building construction will occur at least 76 feet from the bank and so meets that performance standard. Minor excavation for stair and deck post installation will be conducted within 70 feet of the resource area. All construction will be located within areas of existing lawn.

25-foot No Disturb Zone

No work will be conducted within 25 feet of the bank resource area and so the project meets this performance standard.

Tree Overstory

The majority of work will occur in open areas of lawn. A tree canopy does extend into the lot at the eastern property line and it is anticipated that a single pine will need to be removed near or within the proposed garage to accommodate structure construction. Tree removal would be located outside of the buffer zone.

Other Permits

Other Permits required for this project include Disposal System Construction and Building Permit, both of which have been obtained.

**EROSION AND SEDIMENTATION CONTROL  
#30 SUNRISE ROAD  
BOXFORD, MASSACHUSETTS**

August 22, 2017

**PART I - GENERAL**

**QUALITY ASSURANCE**

- A. The applicant and all site contractors shall be responsible for reviewing, and taking steps to meet, all requirements contained in the Order of Conditions issued by the Conservation Commission for this project.
- B. Follow siltation control methods as outlined below, shown on the plan and as directed by Engineer.
- C. Operations will be restricted to areas of work indicated on drawings (and clearly marked on site) and area which must be entered for construction of temporary or permanent facilities.
- D. Conservation Commission has authority to limit surface area of erodible earth material exposed by clearing and grubbing, excavation, borrow and fill operations, and to direct immediate permanent or temporary pollution control measures to prevent contamination of wetlands, including construction of temporary berms, sediment basins, sediment traps, slope drains and use of temporary mulches, mats or other control devices or methods as necessary to control erosion.
- E. Temporary stockpiles of soil shall be located in an upland area (not to exceed the limit of construction as demarcated by siltation fencing shown on the plan) and be surrounded with an erosion control barrier to prevent sediments from encroaching upon adjacent resource areas.

**PART 2 – EROSION CONTROL BARRIERS**

Erosion barriers shall be installed along wetland boundaries as shown on the Notice of Intent Plan prior to commencement of any site work. Barriers specified on the plan shall be installed as specified below. Alternative types of barriers (i.e straw, coir or Filtrex<sup>TM</sup> type logs) may be used with the approval of the Conservation Commission and Project Engineer, and be installed per manufacturer's instructions. The approved alternative barrier must be designed and sized specifically for conditions on this site. After initial barrier installation, site personnel shall perform weekly inspections of, and maintain, the siltation control barrier during construction. Inspections of the siltation control barrier shall also be performed prior to and immediately following major (>1") rainfall event. After all construction activities are completed, and the areas of bare soil are vegetated and or stabilized, the siltation control barriers may be removed upon approval of the Conservation Commission. It is important that the disturbed areas previously occupied by the siltation control barriers, as well as adjacent areas, be repaired and vegetated immediately after removal of the barriers.

## A. MATERIALS

### Staked Haybale Barrier

1. Hay or straw bales, enough to accomplish length specified on plan and 10 to be reserved for replacement or barrier re-enforcement use, as needed.
2. 2-inch by 2-inch by 3.5-foot wooden stakes for hay bales, two stakes per bale.

### Filter Fences

1. Synthetic Filter Fabric
  - a. Synthetic filter fabric (i.e Marafi or other brand of siltation control filter fabric) shall consist of a pervious sheet of propylene, nylon, polyester or ethylene filaments. Standard or extra –strength filter fabric may be installed.
  - b. Certified by manufacturer or supplier as conforming to the following requirements:

#### Physical Property

#### Minimum Requirements

Filtering Efficiency	75 percent
Tensile Strength at 20% (maximum) Elongation	Extra Strength: 50 lbs./ linear inch Standard Strength: 30 lbs./ linear inch
Flow Rate	.3 gal./ sq.ft.

2. Non-synthetic Filter Fabric
  - a. Shall consist of burlap fabric weighing 10 ounces per square yard.
3. Filter Fabric Support
  - a. Posts or stakes for filter fences shall be of sufficient size and strength to support the fabric. Steel posts shall have projections for fastening wire to them.
  - b. When standard strength filter fabric fencing is used on a sloped location, the fabric shall be reinforced by wire mesh fence. Wire fence reinforcement for filter fences shall be a minimum of 36 inches in height, a minimum of 14 gauge and a maximum mesh spacing of 6 inches.

## B. INSTALLATION

### Location

Install erosion controls prior to commencement of construction activities along limits of work area as specified on plan, surrounding bases of all deposits of stored fill material outside of disturbed area, and where directed by the Conservation Commission.

### Barrier Installation

#### 1. Hay Bales

Hay bales, if specified, will be embedded in the soil a minimum of 4 inches. Hold bales in place with two 2-inch by 2-inch by 3.5-foot stakes so that each bale is butted tightly against adjoining bale, thereby precluding short-circuiting of erosion check. The first stake in each bale shall be driven toward the previously-laid bale to push the bales together.

#### 2. Filter Fences (If required)

- a. Excavate trench along post line 6 inches wide and 6 inches deep on the upslope side of the barrier.
- b. Space posts a maximum of 10 feet apart and drive them a minimum of 12 inches into the ground. The posts should not be greater than 36 inches above the ground.
- c. Staple, wire or tie the standard or extra- strength filter fabric to the posts. The fabric shall extend 8 inches into the trench and shall not extend more than 36 inches above the ground. Do not staple filter fabric to existing trees.
- d. Backfill trench and compact soil over filter fabric.
- e. When extra-strength filter fabric or burlap and closer post spacing (6 ' max.) is used for projects on slopes, wire mesh support may be eliminated, in which case the filter fabric is stapled, wired or tied directly to the posts with all other provisions of item 4 applying.

### **PART 3 – POLLUTION CONTROL MEASURES**

- A. Discharge silt-laden water from excavations onto filter fabric mat and/or baled hay or straw sediment traps to ensure that only sediment-free water is returned to wetland areas. Sediment traps, if needed, should be constructed by standard methods.
- B. Do not place soil backfill material adjacent to resource areas without proper siltation controls or otherwise preventing the soil from washing away by high water or runoff.
- C. Do not dump any materials into any streams, wetlands, surface waters or unspecified locations.
- D. Do not dispose of trees, brush, debris, paints, chemicals, asphalt products, concrete curing compounds, fuels, lubricants, insecticides, washwater from concrete trucks or hydroseeders, or any other pollutant into any streams, wetlands, surface waters or natural or man-made channels leading thereto, or unspecified locations.



- E. No disturbance or alteration of any kind allowed between the specified limit of work and the wetlands.
- F. Prevent any operation of equipment outside the designated limit of work (erosion control barrier).
- G. Prevent indiscriminate, arbitrary or capricious operation of equipment in surface waters.

#### **PART 4 – EQUIPMENT STORAGE AND REFUELING**

- A. All equipment refueling shall take place as far away as possible from wetlands as possible.
- B. All equipment shall be parked as far away as possible from the on-site wetland boundary or removed from the site at the end of the workday.
- C. No permanent or temporary storage of fuel and / or lubricants allowed on the site.

#### **PART 5 – STABILIZATION TECHNIQUES**

##### **A. Protecting and Minimizing Exposed Areas**

Steps shall be taken to minimize area of bare soil exposure by preserving existing vegetation and providing soil stabilization. Equipment and trucks shall be routed only over the existing pavement or areas of proposed work, and workers shall minimize foot traffic in vegetated areas adjacent to the work area as much as possible. During site work, utilization of stabilization techniques is necessary for controlling erosion on exposed areas, including grading, seeding and otherwise stabilizing the areas.

##### **B. Sediment And Erosion Control / Soil Stabilization**

1. Prior to any construction occurring adjacent to identified resource areas (shown on the plan and/or marked in the field, proper erosion and siltation barriers will be installed so that throughout and until completion of construction, those areas will be afforded maximum protection. Temporary stockpiles of soil shall be surrounded with an erosion control barrier to prevent sediments from exiting the subject property. All erosion control barriers are to be Maintained and periodically inspected until areas of bare soil are stabilized to ensure that they are in functioning condition. Any accumulations of sediments present along erosion control barriers shall be removed as soon as possible after deposition in order to ensure the effectiveness of all sedimentation controls.
2. On sites where grading or other work will occur on moderately steep slopes (3:1 and greater) located immediately upgradient of wetlands, the contractor shall work on one portion of the slope at a time, ensuring the stability of the disturbed soil by immediately loaming and seeding the slope, or otherwise vegetating the slope as desired, and installing erosion control mats (straw or cocoanut fiber designed for the slope steepness). If work is interrupted and the slope is to be left bare or otherwise

unstabilized for duration of a day or more, a series of erosion control fences oriented parallel to the slope contours shall be installed along the length of slope.

### C. Vegetational Covers

#### 1. Temporary Vegetational Cover

Any area proposed for removal of vegetation where soil will be exposed for more than 10 days shall be mulched or otherwise treated to prevent erosion. On sediment-producing areas in the buffer zone, where the period of exposure will be more than 30 days, the following procedures should be followed for a cover of annual rye. When bare soils are not completely graded and vegetated by September 30 of any year, winter rye shall be planted as specified in table and mulched with three (3) inches of hay or straw.

- a. Install needed surface water control measures.
- b. Perform all cultural operations at right angles to the slope.
- c. Establish grass or other ground cover species as recommended in the attached excerpt (pgs 144 -146) from Massachusetts Erosion and Sedimentation Guidelines for Urban and Suburban Areas, 2003.

#### 2. Permanent Vegetational Cover

To reduce damages from the potential incidence of sedimentation and runoff to other properties, and to avoid erosion on the site itself, a permanent type cover shall be established in disturbed areas located adjacent to resource areas immediately upon completion of grading. Seeding herbaceous cover is usually the most economical and practical way to stabilize any large area. For this site, all disturbed areas where lawns are desired will be seeded in Fall during the period of August 1 to October 1; or in spring by May 15 with a commercial lawn mixture utilizing standard landscape methods and as recommended by the seed manufacturer. Grass sod or landscape plantings may be used instead of seed, if preferred.

In upland/ buffer zone areas, outside of lawn locations, where an erosion control - wildlife seed mixture is desired, prepare soil and use one of grass seed mixes #1 through #6 as recommended in the attached excerpts (pgs 136 -139) from Massachusetts Erosion and Sedimentation Guidelines for Urban and Suburban Areas 2003, to establish a stable, permanent cover.

### REFERENCES

Department of Environmental Protection, Bureau of Resource Protection and U.S. Environmental Protection Agency, Massachusetts Erosion and Sedimentation Guidelines for Urban and Suburban Areas: A Guide for Planners, Designers and Municipal Officials. Massachusetts Executive Office of Environmental Affairs, Boston, Massachusetts, Reprint: May 2003.

Use low-maintenance native species wherever possible.

Planting should be timed to minimize the need for irrigation.

Sheet erosion, caused by the impact of rain on bare soil, is the source of most fine particles in sediment. To reduce this sediment load in runoff, the soil surface itself should be protected. The most efficient and economical means of controlling sheet and rill erosion is to establish vegetative cover. Annual plants which sprout rapidly and survive for only one growing season are suitable for establishing temporary vegetative cover. Temporary seeding is effective when combined with construction phasing so bare areas of the site are minimized at all times.

Temporary seeding may prevent costly maintenance operations on other erosion control systems. For example, sediment basin clean-outs will be reduced if the drainage area of the basin is seeded where grading and construction are not taking place. Perimeter dikes will be more effective if not choked with sediment.

Proper seedbed preparation and the use of quality seed are important in this practice just as in permanent seeding. Failure to carefully follow sound agronomic recommendations will often result in an inadequate stand of vegetation that provides little or no erosion control.

Soil that has been compacted by heavy traffic or machinery may need to be loosened. Successful growth usually requires that the soil be tilled before the seed is applied. Topsoiling is not necessary for temporary seeding; however, it may improve the chances of establishing temporary vegetation in an area.

## **Planting Procedures**

### **Time of Planting**

Planting should preferably be done between April 1 and June 30, and September 1 through September 30. If planting is done in the months of July and August, irrigation may be required. If planting is done between October 1 and March 31, mulching should be applied immediately after planting. If seeding is done during the summer months, irrigation of some sort will probably be necessary.

### **Site Preparation**

Before seeding, install needed surface runoff control measures such as gradient terraces, interceptor dike/swales, level spreaders, and sediment basins.

### **Seedbed Preparation**

The seedbed should be firm with a fairly fine surface.

Perform all cultural operations across or at right angles to the slope. See **Topsoiling** and **Surface Roughening** for more information on seedbed preparation. A minimum of 2 to 4 inches of tilled topsoil is required.

*Annual ryegrass used for temporary seeding*

Ryegrass reseeds itself and makes it difficult to establish a good cover of permanent vegetation.

*Seed not broadcast evenly or rate too low*

Results in patchy growth and erosion.

### **Maintenance**

Inspect within 6 weeks of planting to see if stands are adequate. Check for damage after heavy rains. Stands should be uniform and dense. Fertilize, reseed, and mulch damaged and sparse areas immediately. Tack or tie down mulch as necessary.

Seeds should be supplied with adequate moisture. Furnish water as needed, especially in abnormally hot or dry weather or on adverse sites. Water application rates should be controlled to prevent runoff.

### **References**

Massachusetts Department of Environmental Protection, Office of Watershed Management, Nonpoint Source Program, Massachusetts *Nonpoint Source Management Manual*, Boston, Massachusetts, June, 1993.

North Carolina Department of Environment, Health, and Natural Resources, *Erosion and Sediment Control Field Manual*, Raleigh, NC, February 1991.

U.S. Environmental Protection Agency, *Storm Water Management For Construction Activities*, EPA-832-R-92-005, Washington, DC, September, 1992.

Washington State Department of Ecology, *Stormwater Management Manual for the Puget Sound Basin*, Olympia, WA, February, 1992.

### **Silt Curtain**

A temporary sediment barrier installed parallel to the bank of a stream or lake. Used to contain the sediment produced by construction operations on the bank of a stream or lake and allow for its removal.

### **Where Practice Applies**

The silt curtain is used along the banks of streams or lakes where sediment could pollute or degrade the stream or lake.

### Seeding Dates

Seeding operations should be performed as an early spring seeding (April 1-May 15) with the use of cold treated seed. A late fall early winter dormant seeding (November 1 - December 15) can also be made, however the seeding rate will need to be increased by 50%.

### Seeding Methods

Seeding should be performed by one of the following methods:

- ☞ Drill seedings (de-awned or de-bearded seed should be used unless the drill is equipped with special features to accept awned seed).
- ☞ Broadcast seeding with subsequent rolling, cultipacking or tracking the seeding with small track construction equipment. Tracking should be oriented up and down the slope.
- ☞ Hydroseeding with subsequent tracking. If wood fiber mulch is used, it should be applied as a separate operation after seeding and tracking to assure good seed to soil contact.

### Mulch

Mulch the seedings with straw applied at the rate of ½ tons per acre. Anchor the mulch with erosion control netting or fabric on sloping areas.

### Seed Mixtures for Permanent Cover

Recommended mixtures for permanent seeding are provided on the following pages. Select plant species which are suited to the site conditions and planned use. Soil moisture conditions, often the major limiting site factor, are usually classified as follows:

**Dry** - Sands and gravels to sandy loams. No effective moisture supply from seepage or a high water table.

**Moist** - Well drained to moderately well drained sandy loams, loams, and finer; or coarser textured material with moderate influence on root zone from seepage or a high water table.

**Wet** - All textures with a water table at or very near the soil surface, or with enduring seepage.

When other factors strongly influence site conditions, the plants selected must also be tolerant of these conditions.