

HANCOCK ASSOCIATES

Surveyors | Engineers | Scientists

26464

December 19, 2023

Reading Conservation Commission
Attention: Charles Tirone
52 Louanis Drive
Reading, MA 01867

**RE: Request for Certificate of Compliance (“RCOC”)
52 Louanis Drive, Reading, MA 01867
MassDEP File No. 270-0765**

Dear Members of the Commission,

This letter is written in support of the attached Request for a complete Certificate of Compliance (“COC”) on behalf of Susan Schellenbach, (Applicant). Hancock Associates hereby certifies that the property is in substantial compliance with the open Order of Conditions (“OOC”) associated with MassDEP File No. 270-0765. The original OOC was approved for the construction of an in-ground pool, putting green, pool shed, deck replacement/expansion and landscaping within the 100-ft buffer zone to jurisdictional wetland resource areas on the subject property. This OOC was issued on March 2, 2023, and recorded in Middlesex South registry of deeds as (Book 78273, Page 439).

The Reading Conservation Commission approved $\pm 1,900$ square feet (“sf”) of native restoration plantings. The approved native restoration plantings include sixteen (16) trees and thirty-two (32) shrubs within a 25-ft zone of Natural Vegetation and that area be monumented by three (3) permanent visible stone bounds. The area was to be seeded with a 1:1 ratio of New England erosion control/restoration mix and New England conservation/wildlife mix.

Hancock Associates wetland staff scientists conducted two (2) Site visits to review the 25-ft Zone of Natural Vegetation area. Once after installation of the approved plantings on July 21, 2023. During that Site visit it was noted that some of the herbaceous and shrub species were being eaten by select deer and rabbits. It was recommended to maintain the area to the most practicable extent as possible and use natural methods such as, spreading coyote urine into the area, which the applicant and current homeowners did on two (2) separate occasions to deter the animals from eating the plants. On November 28, 2023, a Hancock wetland staff scientist conducted another Site visit and noted that all erosion controls were stable, monuments were installed as approved, but the growth conditions of the regraded and planted areas were not robust. There was also a significant amount of leaf cover, so dominant herbaceous vegetation was not noted. This may be due to the ongoing issue of deer and rabbit grazing on the naturalized area, die back or observation of dormancy due to seasonal conditions.

HANCOCK ASSOCIATES

Surveyors | Engineers | Scientists

Recommendations:

1. Hancock Associates recommends that the Reading Conservation Commission visit the Site in the Spring of 2024, when robust growth of all planted and seeded areas can be observed and issue a complete COC for all work associated with the approved Project.

Conclusion

Hancock Associates prepared the attached as-built plan showing existing conditions as Attachment F, which demonstrates the structures of the Project, and the landscaped areas were completed in sufficient compliance with the approved plan.

To schedule a site visit at the convenience of the commission please contact Devon Morse at Hancock Associates at 978-777-3050, ext. 732.

Thank you for your attention to this matter.



Respectfully Submitted,
Matthew T. Connors, PE
Regional Engineering Manager

Attachments:

- A – WPA 8 Form
- B – Order of Conditions
- C – Filing Fee
- D – Site Photographs
- E – Receipt of Plantings
- F – Sheets C1 prepared by Hancock Associates dated January 10, 2023, and revised on February 14, 2023
- G – As-Built Plan prepared by Hancock Associates dated November 29, 2023, and stamped by Matthew Connors on December 19, 2023

Attachment A WPA Form 8



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
WPA Form 8A – Request for Certificate of Compliance
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

DEP File Number:

270-0765
 Provided by DEP

A. Project Information

Important:

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



Upon completion of the work authorized in an Order of Conditions, the property owner must request a Certificate of Compliance from the issuing authority stating that the work or portion of the work has been satisfactorily completed.

1. This request is being made by:

Susan Schellenbach
 Name
52 Louanis Drive
 Mailing Address
Reading MA 01867
 City/Town State Zip Code
781-910-1202
 Phone Number

2. This request is in reference to work regulated by a final Order of Conditions issued to:

Susan Schellenbach
 Applicant
03/02/2023 270-0765
 Dated DEP File Number

3. The project site is located at:

52 Louanis Drive Reading
 Street Address City/Town
Map 6 Lot 163
 Assessors Map/Plat Number Parcel/Lot Number

4. The final Order of Conditions was recorded at the Registry of Deeds for:

Property Owner (if different)
Middlesex South 81333 223
 County Book Page
 Certificate (if registered land)

5. This request is for certification that (check one):

- the work regulated by the above-referenced Order of Conditions has been satisfactorily completed.
 the following portions of the work regulated by the above-referenced Order of Conditions have been satisfactorily completed (use additional paper if necessary).

- the above-referenced Order of Conditions has lapsed and is therefore no longer valid, and the work regulated by it was never started.



WPA Form 8A – Request for Certificate of Compliance

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

A. Project Information (cont.)

6. Did the Order of Conditions for this project, or the portion of the project subject to this request, contain an approval of any plans stamped by a registered professional engineer, architect, landscape architect, or land surveyor?

Yes

If yes, attach a written statement by such a professional certifying substantial compliance with the plans and describing what deviation, if any, exists from the plans approved in the Order.

No

B. Submittal Requirements

Requests for Certificates of Compliance should be directed to the issuing authority that issued the final Order of Conditions (OOC). If the project received an OOC from the Conservation Commission, submit this request to that Commission. If the project was issued a Superseding Order of Conditions or was the subject of an Adjudicatory Hearing Final Decision, submit this request to the appropriate DEP Regional Office (see <http://www.mass.gov/eea/agencies/massdep/about/contacts/find-the-massdep-regional-office-for-your-city-or-town.html>).

Attachment B OOC

Middlesex South Registry of Deeds
Electronically Recorded Document

This is the first page of the document - Do not remove

Recording Information

Document Number	: 26075
Document Type	: ORD
Recorded Date	: March 16, 2023
Recorded Time	: 11:08:25 AM
Recorded Book and Page	: 81333 / 223
Number of Pages(including cover sheet)	: 21
Receipt Number	: 2896923
Recording Fee	: \$105.00

Middlesex South Registry of Deeds
Maria C. Curtatone, Register
208 Cambridge Street
Cambridge, MA 02141
617-679-6300
www.middlesexsouthregistry.com



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
& READING WETLAND PROTECTION BYLAWS SECTION 7.1

Pr270-vided by
MassDEP:
270-0765
MassDEP File #

eDEP Transaction #
Reading
City/Town

A. General Information (cont.)

6. Property recorded at the Registry of Deeds for (attach additional information if more than one parcel):

Middlesex South Registry of Deeds

a. County

78273

c. Book

b. Certificate Number (if registered land)

439

d. Page

7. Dates: January 25, 2023 February 22, 2023 March 2, 2023
a. Date Notice of Intent Filed b. Date Public Hearing Closed c. Date of Issuance

8. Final Approved Plans and Other Documents (attach additional plan or document references as needed):

#52 Louanis Drive Street Reading Ma 01867

a. Plan Title

Hancock Associates

b. Prepared By

February 14, 2023

d. Final Revision Date

(see page 14 list of documents)

f. Additional Plan or Document Title

Matthew T. Connors, P.E. 45177

c. Signed and Stamped by

1"=20'

e. Scale

g. Date

B. Findings

1. Findings pursuant to the Massachusetts Wetlands Protection Act:

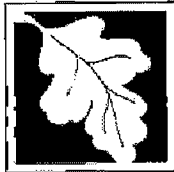
Following the review of the above-referenced Notice of Intent and based on the information provided in this application and presented at the public hearing, this Commission finds that the areas in which work is proposed is significant to the following interests of the Wetlands Protection Act (the Act). Check all that apply:

- a. Public Water Supply b. Land Containing Shellfish c. Prevention of Pollution
d. Private Water Supply e. Fisheries f. Protection of Wildlife Habitat
g. Groundwater Supply h. Storm Damage Prevention i. Flood Control

2. This Commission hereby finds the project, as proposed, is: (check one of the following boxes)

Approved subject to:

- a. the following conditions which are necessary in accordance with the performance standards set forth in the wetlands regulations. This Commission orders that all work shall be performed in accordance with the Notice of Intent referenced above, the following General Conditions, and any other special conditions attached to this Order. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, these conditions shall control.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
& READING WETLAND PROTECTION BYLAWS SECTION 7.1

Pr270-ovided by

MassDEP:

270-0765

MassDEP File #

eDEP Transaction #

Reading

City/Town

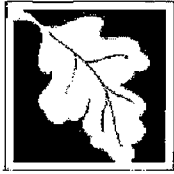
B. Findings (cont.)

Denied because:

- b. the proposed work cannot be conditioned to meet the performance standards set forth in the wetland regulations. Therefore, work on this project may not go forward unless and until a new Notice of Intent is submitted which provides measures which are adequate to protect the interests of the Act, and a final Order of Conditions is issued. **A description of the performance standards which the proposed work cannot meet is attached to this Order.**
- c. the information submitted by the applicant is not sufficient to describe the site, the work, or the effect of the work on the interests identified in the Wetlands Protection Act. Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides sufficient information and includes measures which are adequate to protect the Act's interests, and a final Order of Conditions is issued. **A description of the specific information which is lacking and why it is necessary is attached to this Order as per 310 CMR 10.05(6)(c).**
- 3. Buffer Zone Impacts: Shortest distance between limit of project disturbance and the wetland resource area specified in 310 CMR 10.02(1)(a) 50 a. linear feet

Inland Resource Area Impacts: Check all that apply below. (For Approvals Only)

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
4. <input type="checkbox"/> Bank	a. linear feet	b. linear feet	c. linear feet	d. linear feet
5. <input type="checkbox"/> Bordering Vegetated Wetland	a. square feet	b. square feet	c. square feet	d. square feet
6. <input type="checkbox"/> Land Under Waterbodies and Waterways	a. square feet	b. square feet	c. square feet	d. square feet
	e. c/y dredged	f. c/y dredged		
7. <input type="checkbox"/> Bordering Land Subject to Flooding	a. square feet	b. square feet	c. square feet	d. square feet
Cubic Feet Flood Storage	e. cubic feet	f. cubic feet	g. cubic feet	h. cubic feet
8. <input type="checkbox"/> Isolated Land Subject to Flooding	a. square feet	b. square feet		
Cubic Feet Flood Storage	c. cubic feet	d. cubic feet	e. cubic feet	f. cubic feet
9. <input type="checkbox"/> Riverfront Area	a. total sq. feet	b. total sq. feet		
Sq ft within 100 ft	c. square feet	d. square feet	e. square feet	f. square feet



**Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands**

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
& READING WETLAND PROTECTION BYLAWS SECTION 7.1

Pr270-ovided by
MassDEP:
270-0765
MassDEP File #

eDEP Transaction #

Reading
City/Town

Sq ft between 100-
200 ft

g. square feet

h. square feet

i. square feet

j. square feet

B. Findings (cont.)

Coastal Resource Area Impacts: Check all that apply below. (For Approvals Only)

- | | Proposed
Alteration | Permitted
Alteration | Proposed
Replacement | Permitted
Replacement |
|--|---|-------------------------|-------------------------|--------------------------|
| 10. <input type="checkbox"/> Designated Port Areas | Indicate size under Land Under the Ocean, below | | | |
| 11. <input type="checkbox"/> Land Under the Ocean | a. square feet | b. square feet | | |
| | c. c/y dredged | d. c/y dredged | | |
| 12. <input type="checkbox"/> Barrier Beaches | Indicate size under Coastal Beaches and/or Coastal Dunes below | | | |
| 13. <input type="checkbox"/> Coastal Beaches | a. square feet | b. square feet | c. nourishment
cu yd | d. nourishment
cu yd |
| 14. <input type="checkbox"/> Coastal Dunes | a. square feet | b. square feet | c. nourishment
cu yd | d. nourishment
cu yd |
| 15. <input type="checkbox"/> Coastal Banks | a. linear feet | b. linear feet | | |
| 16. <input type="checkbox"/> Rocky Intertidal Shores | a. square feet | b. square feet | | |
| 17. <input type="checkbox"/> Salt Marshes | a. square feet | b. square feet | c. square feet | d. square feet |
| 18. <input type="checkbox"/> Land Under Salt Ponds | a. square feet | b. square feet | | |
| | c. c/y dredged | d. c/y dredged | | |
| 19. <input type="checkbox"/> Land Containing Shellfish | a. square feet | b. square feet | c. square feet | d. square feet |
| 20. <input type="checkbox"/> Fish Runs | Indicate size under Coastal Banks, Inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above | | | |
| | a. c/y dredged | b. c/y dredged | | |
| 21. <input type="checkbox"/> Land Subject to Coastal Storm Flowage | a. square feet | b. square feet | | |
| 22. <input type="checkbox"/> Riverfront Area | a. total sq. feet | b. total sq. feet | | |
| Sq ft within 100 ft | c. square feet | d. square feet | e. square feet | f. square feet |



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
& READING WETLAND PROTECTION BYLAWS SECTION 7.1

Pr270-ovided by
MassDEP:
270-0765
MassDEP File #

eDEP Transaction #
Reading
City/Town

Sq ft between 100-
200 ft

g. square feet

h. square feet

i. square feet

j. square feet

B. Findings (cont.)

* #23. 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.5.c (BVW) or B.17.c (Salt Marsh) above, please enter the additional amount here.

23. Restoration/Enhancement *:

a. square feet of BVW

b. square feet of salt marsh

24. Stream Crossing(s):

a. number of new stream crossings

b. number of replacement stream crossings

C. General Conditions Under Massachusetts Wetlands Protection Act

The following conditions are only applicable to Approved projects.

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.
2. The Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.
4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
 - a. The work is a maintenance dredging project as provided for in the Act; or
 - b. The time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance. If this Order is intended to be valid for more than three years, the extension date and the special circumstances warranting the extended time period are set forth as a special condition in this Order.
 - c. If the work is for a Test Project, this Order of Conditions shall be valid for no more than one year.
5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order. An Order of Conditions for a Test Project may be extended for one additional year only upon written application by the applicant, subject to the provisions of 310 CMR 10.05(11)(f).
6. If this Order constitutes an Amended Order of Conditions, this Amended Order of Conditions does not extend the issuance date of the original Final Order of Conditions and the Order will expire on _____ unless extended in writing by the Department.
7. Any fill used in connection with this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
 & READING WETLAND PROTECTION BYLAWS SECTION 7.1

Pr270-vided by
 MassDEP:
 270-0765
 MassDEP File #

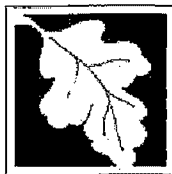
eDEP Transaction #

Reading
 City/Town

C. General Conditions Under Massachusetts Wetlands Protection Act

8. This Order is not final until all administrative appeal periods from this Order have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed.
9. No work shall be undertaken until the Order has become final and then has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of the registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done. The recording information shall be submitted to the Conservation Commission on the form at the end of this Order, which form must be stamped by the Registry of Deeds, prior to the commencement of work.
10. A sign shall be displayed at the site not less than two square feet or more than three square feet in size bearing the words,

"Massachusetts Department of Environmental Protection" [or, "MassDEP"]
 "File Number 270-0765 "
11. Where the Department of Environmental Protection is requested to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before MassDEP.
12. Upon completion of the work described herein, the applicant shall submit a Request for Certificate of Compliance (WPA Form 8A) to the Conservation Commission.
13. The work shall conform to the plans and special conditions referenced in this order.
14. Any change to the plans identified in Condition #13 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.
15. The Agent or members of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Order at reasonable hours to evaluate compliance with the conditions stated in this Order, and may require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.
16. This Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this Order and to any contractor or other person performing work conditioned by this Order.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
& READING WETLAND PROTECTION BYLAWS SECTION 7.1

Pr270-ovided by
MassDEP:
270-0765
MassDEP File #

eDEP Transaction #

Reading

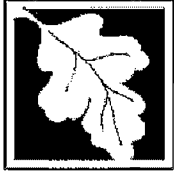
City/Town

C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

17. Prior to the start of work, and if the project involves work adjacent to a Bordering Vegetated Wetland, the boundary of the wetland in the vicinity of the proposed work area shall be marked by wooden stakes or flagging. Once in place, the wetland boundary markers shall be maintained until a Certificate of Compliance has been issued by the Conservation Commission.
18. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the Conservation Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Order.
19. The work associated with this Order (the "Project")
- (1) is subject to the Massachusetts Stormwater Standards
- (2) is NOT subject to the Massachusetts Stormwater Standards

If the work is subject to the Stormwater Standards, then the project is subject to the following conditions:

- a) All work, including site preparation, land disturbance, construction and redevelopment, shall be implemented in accordance with the construction period pollution prevention and erosion and sedimentation control plan and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Construction General Permit as required by Stormwater Condition 8. Construction period erosion, sedimentation and pollution control measures and best management practices (BMPs) shall remain in place until the site is fully stabilized.
- b) No stormwater runoff may be discharged to the post-construction stormwater BMPs unless and until a Registered Professional Engineer provides a Certification that:
- i. all construction period BMPs have been removed or will be removed by a date certain specified in the Certification. For any construction period BMPs intended to be converted to post construction operation for stormwater attenuation, recharge, and/or treatment, the conversion is allowed by the MassDEP Stormwater Handbook BMP specifications and that the BMP has been properly cleaned or prepared for post construction operation, including removal of all construction period sediment trapped in inlet and outlet control structures;
 - ii. as-built final construction BMP plans are included, signed and stamped by a Registered Professional Engineer, certifying the site is fully stabilized;
 - iii. any illicit discharges to the stormwater management system have been removed, as per the requirements of Stormwater Standard 10;



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
& READING WETLAND PROTECTION BYLAWS SECTION 7.1

Pr270-vided by
MassDEP:
270-0765
MassDEP File #

eDEP Transaction #
Reading
City/Town

C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

iv. all post-construction stormwater BMPs are installed in accordance with the plans (including all planting plans) approved by the issuing authority, and have been inspected to ensure that they are not damaged and that they are in proper working condition;

v. any vegetation associated with post-construction BMPs is suitably established to withstand erosion.

c) The landowner is responsible for BMP maintenance until the issuing authority is notified that another party has legally assumed responsibility for BMP maintenance. Prior to requesting a Certificate of Compliance, or Partial Certificate of Compliance, the responsible party (defined in General Condition 18(e)) shall execute and submit to the issuing authority an Operation and Maintenance Compliance Statement ("O&M Statement") for the Stormwater BMPs identifying the party responsible for implementing the stormwater BMP Operation and Maintenance Plan ("O&M Plan") and certifying the following:

i.) the O&M Plan is complete and will be implemented upon receipt of the Certificate of Compliance, and

ii.) the future responsible parties shall be notified in writing of their ongoing legal responsibility to operate and maintain the stormwater management BMPs and implement the Stormwater Pollution Prevention Plan.

d) Post-construction pollution prevention and source control shall be implemented in accordance with the long-term pollution prevention plan section of the approved Stormwater Report and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Multi-Sector General Permit.

e) Unless and until another party accepts responsibility, the landowner, or owner of any drainage easement, assumes responsibility for maintaining each BMP. To overcome this presumption, the landowner of the property must submit to the issuing authority a legally binding agreement of record, acceptable to the issuing authority, evidencing that another entity has accepted responsibility for maintaining the BMP, and that the proposed responsible party shall be treated as a permittee for purposes of implementing the requirements of Conditions 18(f) through 18(k) with respect to that BMP. Any failure of the proposed responsible party to implement the requirements of Conditions 18(f) through 18(k) with respect to that BMP shall be a violation of the Order of Conditions or Certificate of Compliance. In the case of stormwater BMPs that are serving more than one lot, the legally binding agreement shall also identify the lots that will be serviced by the stormwater BMPs. A plan and easement deed that grants the responsible party access to perform the required operation and maintenance must be submitted along with the legally binding agreement.

f) The responsible party shall operate and maintain all stormwater BMPs in accordance with the design plans, the O&M Plan, and the requirements of the Massachusetts Stormwater Handbook.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
& READING WETLAND PROTECTION BYLAWS SECTION 7.1

Pr270-ovided by
MassDEP:
270-0765
MassDEP File #

eDEP Transaction #
Reading
City/Town

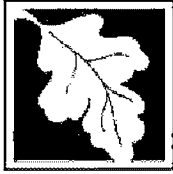
C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

- g) The responsible party shall:
1. Maintain an operation and maintenance log for the last three (3) consecutive calendar years of inspections, repairs, maintenance and/or replacement of the stormwater management system or any part thereof, and disposal (for disposal the log shall indicate the type of material and the disposal location);
 2. Make the maintenance log available to MassDEP and the Conservation Commission ("Commission") upon request; and
 3. Allow members and agents of the MassDEP and the Commission to enter and inspect the site to evaluate and ensure that the responsible party is in compliance with the requirements for each BMP established in the O&M Plan approved by the issuing authority.
- h) All sediment or other contaminants removed from stormwater BMPs shall be disposed of in accordance with all applicable federal, state, and local laws and regulations.
- i) Illicit discharges to the stormwater management system as defined in 310 CMR 10.04 are prohibited.
- j) The stormwater management system approved in the Order of Conditions shall not be changed without the prior written approval of the issuing authority.
- k) Areas designated as qualifying pervious areas for the purpose of the Low Impact Site Design Credit (as defined in the MassDEP Stormwater Handbook, Volume 3, Chapter 1, Low Impact Development Site Design Credits) shall not be altered without the prior written approval of the issuing authority.
- l) Access for maintenance, repair, and/or replacement of BMPs shall not be withheld. Any fencing constructed around stormwater BMPs shall include access gates and shall be at least six inches above grade to allow for wildlife passage.

Special Conditions (if you need more space for additional conditions, please attach a text document):

See attached

20. For Test Projects subject to 310 CMR 10.05(11), the applicant shall also implement the monitoring plan and the restoration plan submitted with the Notice of Intent. If the conservation commission or Department determines that the Test Project threatens the public health, safety or the environment, the applicant shall implement the removal plan submitted with the Notice of Intent or modify the project as directed by the conservation commission or the Department.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
& READING WETLAND PROTECTION BYLAWS SECTION 7.1

Pr270-ovided by
MassDEP:
270-0765
MassDEP File #

eDEP Transaction #
Reading
City/Town

D. Findings Under Municipal Wetlands Bylaw or Ordinance

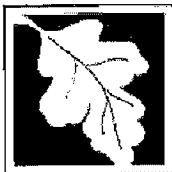
1. Is a municipal wetlands bylaw or ordinance applicable? Yes No
2. The Reading Conservation Commission hereby finds (check one that applies):
Conservation Commission
 - a. that the proposed work cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw, specifically:

<u>Reading Wetland Protection Bylaw</u>	<u>7.1</u>
1. Municipal Ordinance or Bylaw	2. Citation

Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides measures which are adequate to meet these standards, and a final Order of Conditions is issued.
 - b. that the following additional conditions are necessary to comply with a municipal ordinance or bylaw: See Attached

<u>READING WETLAND PROTECTION BYLAWS SECTION 7.1 See Attached</u>	
1. Municipal Ordinance or Bylaw	2. Citation
3. The Commission orders that all work shall be performed in accordance with the following conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, the conditions shall control.
The special conditions relating to municipal ordinance or bylaw are as follows (if you need more space for additional conditions, attach a text document):

See Attached



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
 & READING WETLAND PROTECTION BYLAWS SECTION 7.1

Pr270-ovided by
 MassDEP:
 270 0765
 MassDEP File #

eDEP Transaction #
 Reading
 City/Town

E. Signatures

This Order is valid for three years, unless otherwise specified as a special condition pursuant to General Conditions #4, from the date of issuance.
 Please indicate the number of members who will sign this form.
 This Order must be signed by a majority of the Conservation Commission.
 The Order must be mailed by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate Department of Environmental Protection Regional Office, if not filing electronically, and the property owner, if different from applicant.

March 2, 2023
 1. Date of Issuance
 4
 2. Number of Signers

Martha E Moore
 Signature

Martha E Moore
 Printed Name

Brian P. Bowe
 Signature

Brian P. Bowe
 Printed Name

Andrew K. Drbin
 Signature

ANDREW K. DRBIN
 Printed Name

John Sullivan
 Signature

John Sullivan
 Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

by hand delivery on

by certified mail, return receipt requested, on

Date

March 2, 2023
 Date



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
 & READING WETLAND PROTECTION BYLAWS SECTION 7.1

Pr270-ovided by
 MassDEP:
 270-0765

 MassDEP File #

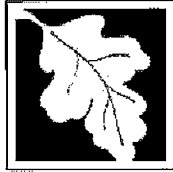
_____ eDEP Transaction #
 _____ Reading
 _____ City/Town

F. Appeals

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate MassDEP Regional Office to issue a Superseding Order of Conditions. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request for Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

Any appellants seeking to appeal the Department's Superseding Order associated with this appeal will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order, or providing written information to the Department prior to issuance of a Superseding Order.

The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act (M.G.L. c. 131, § 40), and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal ordinance or bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
 & READING WETLAND PROTECTION BYLAWS SECTION 7.1

Pr270-ovided by
 MassDEP:
 270-0767
 MassDEP File #

eDEP Transaction #
 Reading
 City/Town

G. Recording Information

Prior to commencement of work, this Order of Conditions must be recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land subject to the Order. In the case of registered land, this Order shall also be noted on the Land Court Certificate of Title of the owner of the land subject to the Order of Conditions. The recording information on this page shall be submitted to the Conservation Commission listed below.

Reading
 Conservation Commission

Detach on dotted line, have stamped by the Registry of Deeds and submit to the Conservation Commission.

To:

Reading
 Conservation Commission

Please be advised that the Order of Conditions for the Project at:

29 Given Cir.
 Project Location

270-0767
 MassDEP File Number

Has been recorded at the Registry of Deeds of:

County	Book	Page
--------	------	------

for: Property Owner

and has been noted in the chain of title of the affected property in:

Book	Page
------	------

In accordance with the Order of Conditions issued on:

Date

If recorded land, the instrument number identifying this transaction is:

Instrument Number

If registered land, the document number identifying this transaction is:

Document Number

**Attachment to Order of Conditions
Susan Schellenbach 52 Louanis Drive
DEP# 270-0765**

14

DOCUMENTS: The following documents are hereby incorporated into this Order. To the extent that the provisions and conditions in this Order differ from those in these documents, this Order shall control:

1. Notice of Intent for work at 52 Louanis Drive, Assessor's Map 6, Lot153, submitted on January 25, 2022 with attachments, by Susan Schellenbach, Applicant
2. Site Plan entitled #52 Louanis Drive Street Reading Ma 01867, prepared by Hancock Associated, dated January 10, 2023 last revised February 14, 2023, stamped and signed by Matthew T. Connors. P.E. 45177
3. Conceptual Site Plan by Brookwood, dated November 13, 2023
4. Response to Comments for Notice of Intent dated February 23, 2023
5. Description of Work, 52 Louanis Drive, Reading, Massachusetts, by Kristan Farr.
6. Site visit notes February 9, 2023
7. FEMA Flood Insurance Rate Map, Town of Reading, Massachusetts, Community Panel Number 25017C0313E, effective June 4, 2010;
8. Estimated Habitats of Rare Wildlife and Certified Vernal Pools Map, dated October 1, 2008, by MA Natural Heritage and Endangered Species Program; and
9. Figure 2, Town of Reading, MA, Zone II and Zone III Areas, dated July 8, 1996, by Weston and Sampson, showing Aquifer Protection District

FINDINGS:

1. The property at 52 Louanis Drive consists of a single-family home, with a paved driveway back deck, and landscaping. The site is located within a developed neighborhood, off of an existing right of way. There is a system of Bordering Vegetated Wetlands located in the backyard north of the house the BVW runs from east to west along the property line. Portions of the wetland resource area extend into an established yard/lawn area.
2. The site is not located within the NHESP mapping of estimated and/or priority habitat and there are no certified or potential vernal pools located on the property. The site is not in the Reading Aquifer Protection District.

Attachment to Order of Conditions
Susan Schellenbach 52 Louanis Drive
DEP# 270-0765

15

3. The applicant is proposing the construction of an in-ground pool (approximately 14-ft by 34-ft), replacement and expansion of an existing deck attached to the house, a 10-ft by 16-ft pool house and attached covered patio lounge (12-ft by 16-ft), a putting green (approximately 27-ft by 17-ft), and a safety fence around the backyard and landscaping of a new detached garage (with dimensions of approximately 24' by 25') on the lot. The closest structure will be located approximately 50 feet from the edge of the Bordering Vegetated Wetlands. Only mitigation is proposed within fifty feet of wetlands. As mitigation for the work, the applicant will re-establish the 25-foot Zone of Natural Vegetation, remove invasive multi-flora-rose, plant 4 medium size native shrubs and monitor for other invasive plants that can be removed. The proposed work will be located in the Buffer Zone more than 50 feet from the wetland, and thus meets the setback under Section 3.D of the Reading Wetlands Protection Regulations.
4. This Order applies to all areas and work that are in, wetland resource areas or the 100-foot Buffer Zone or that add storm drainage to a discharge point in said resource area or Buffer Zone.
5. The proposed work can be conditioned to protect the interests of the Wetlands Protection Act, c.131, s.40 ("the Act"). The Reading Conservation Commission ("the Commission") approves the proposed project subject to the following additional conditions.

LIST OF SPECIAL CONDITIONS - M.G.L. c.131, s.40:

1. A copy of this Order, as well as construction plans, shall be on-site at the start of and during any site work for contractors to use as a reference. The property owner and any successor in title shall inform all contractors and subcontractors of the conditions and provisions of this Order concerning their work. This document shall be included in all construction contracts and subcontracts dealing with the work and shall supersede other contract requirements.
2. Prior to commencing any work on the site, the applicant shall obtain all other permits, variances, and approvals required by Federal, State, or Town laws and regulations and shall submit proof of such approval to the Commission.
3. Prior to commencing any activity at the site, the names, addresses, and day and night telephone numbers of the site supervisor and an alternate who will be responsible for ensuring on-site compliance with this Order shall be submitted to the Commission. During construction, the applicant shall notify the Commission of any change in this information.
4. Prior to commencing any activity at the site, a pre-construction meeting shall take place between the contracting agent and the Conservation Administrator or Commission for the purpose of reviewing the requirements of the Order of Conditions and establishing a general construction schedule.

Attachment to Order of Conditions
Susan Schellenbach 52 Louanis Drive
DEP# 270-0765

5. Prior to any other activity on the site, a row of 12-inch Mulch Sock shall be properly installed along the lower edge of the existing disturbed area or as shown on the approved plan. The proposed edge of grading shall also be visibly marked, and construction vehicles shall not be operated on the existing lawn beyond this limit. The erosion barriers and visible markers shall be the limit-of-work line, shall be labeled as the limit-of-work line, and shall be maintained in place until all work is completed to the satisfaction of the Commission.
6. All existing trees and shrubs near the work areas and near the construction entrance shall be protected from damage to branches, trunks and roots; All trees within the construction zone must be protected from damage by installing tree protection zone fencing and tree protection zone signage or burlap and timber trunk protection, with the review and approval of the conservation administrator. The Conservation Administrator/Commission shall be called to inspect the site preparations upon installation, and no other work shall commence until the inspection has taken place.
7. No activity shall occur beyond the limit-of-work lines, on any Land Subject to Flooding, or within twenty-five feet of any other resource area without the express written authorization of the Commission.
8. The work shall not result in placement of fill beyond the limit of work and as shown on the approved plan.
9. If any unforeseen problems occur during construction that could affect any of the interests of the Act or the Reading General Bylaws, upon discovery, the owner shall notify the Commission. An immediate meeting shall be held between the Commission, the applicant, the engineer, the contractor, and other concerned parties to determine the corrective measures to be employed. The applicant shall then act to correct the problems using the corrective measures agreed upon.
10. Any departures from or changes to the plans, specifications, or data approved in this Order shall not be acted on until approved in writing by the Commission. Where the Commission deems that a change is major or substantial, a new public hearing to amend the Order or a new Notice of Intent may be required. Any errors in the plans or information submitted by the applicant will be considered changes and the above procedure shall be followed.
11. The owner shall immediately correct any erosion problems that occur on the site. If any additional erosion and sedimentation controls are found to be necessary by the owner, the Commission, or the Conservation Administrator, the applicant shall install additional sediment controls.
12. Vegetated slopes shall have a finished grade no steeper than three horizontal feet to one vertical foot (3:1).

Attachment to Order of Conditions
Susan Schellenbach 52 Louanis Drive
DEP# 270-0765

17

13. As soon as possible, all disturbed upland areas shall be brought to final grade, and shall be permanently stabilized by loam and seeding or other measures acceptable to the Commission. Where necessary, the loam and seeding shall be held in place with jute netting. Bare ground and disturbed areas that can not be permanently revegetated within thirty 30 days after disturbance shall be temporarily stabilized by a method approved by the Commission. Temporary stabilization methods may include, but not be limited to, hydro-seeding, straw mats, jute netting, sod, or other Commission approved method.
14. Any dewatering activities associated with the project shall make use of a stilling basin or similar device to remove sediment before the water is released. The stilling basin shall not be closer than 50' from bordering vegetated wetlands and shall consist of at least haybales, filter fence, and crushed stone. The Commission shall approve the stilling basin specifications prior to commencing any dewatering.
15. All stockpiled materials shall be located at least 50' from the wetland flags. Excess earth shall be removed from the site and properly disposed of within 20 days after excavation.
16. Man-made debris shall be removed from the imported fill material before loam and seed is applied. Construction refuse and debris shall be contained within a dumpster and shall be disposed of promptly and properly. The Commission may require that the applicant provide documentation of such proper disposal. The construction site shall be maintained in a clean condition at all times.
17. Equipment, materials, and fuel storage and refueling operations shall be situated in an upland area at a horizontal distance greater than 100-feet from the Resource Area.
18. The owner(s) shall take all reasonable precautions to prevent the release of pollutants by ignorance, accident, or vandalism during and after work on this project. In the event that there is a discharge or spillage of fuel, oil, or other pollutants into any part of the site governed by this Order, the owner shall immediately notify the Commission and shall take all necessary actions to contain and remove the pollutants from the site. This condition shall remain in perpetuity and shall not expire with the issuance of the Certificate of Compliance.
19. The owner and all future owners cannot cut healthy native trees with a DBH greater than 4 inches between the footprint of the new structure and the wetland resource area, including inside the 25-foot Zone of Natural Vegetation or its 10-foot Buffer Zone. This restriction shall survive the issuance of any Certificate of Compliance. The deed of conveyance from the grantor to the grantee of 52 Louanis Drive shall contain this restriction and it shall be expressed in covenants in all deeds to succeeding owners. Upon any conveyance, a copy of the deed containing this restriction shall forthwith be submitted by the grantor to the Reading Conservation Commission.

**Attachment to Order of Conditions
Susan Schellenbach 52 Louanis Drive
DEP# 270-0765**

18

20. This Order shall apply to all successors in interest, successors in control, and successors in title ["the owner"]. In conjunction with the transfer of interest, control, or title of any part of the site, the applicant shall provide the new owner a copy of this Order. The new owner shall sign a written acknowledgment that he or she has received the Order and agrees to comply with the Conditions. The applicant and/or the new owner shall submit the acknowledgment to the Commission, along with the name, address, phone number, and other contact information of the new owner.
21. The Commission designates the Conservation Administrator as its administrative agent with full powers to act on its behalf in administering and enforcing this Order, except the Administrator shall not approve Plan Changes or Certificates of Compliance. In addition, the Administrator may sign off on any Certificate of Occupancy after a site inspection has taken place and any erosion control issues are addressed.
22. The request for a Certificate of Compliance required by General Condition 11 shall require a 21-day notice to the Commission. Accompanying the request for a Certificate of Compliance shall be the following:
- a. A written statement by a registered professional civil engineer or qualified professional certifying compliance with this Order of Conditions and its approved referenced plans and setting forth what deviations, if any, exist.
 - b. Two prints of as-built plans (1" = 40' or 1" = 20' scale) stamped by a registered professional civil engineer showing all structures, buildings, impervious surfaces, drainage structures, topography, trees, and any details or distances the Commission may specify to ensure compliance with this Order.
 - c. The Registry of Deeds Book and Page number(s) of the recorded Order of Conditions, if not already submitted.

NARRATIVE FOR READING GENERAL BYLAWS, SECTION 7.1

The Reading Conservation Commission has conducted an on-site inspection, reviewed the Notice of Intent, the submitted information and the public hearing testimony, and determined that the area in which the work is proposed is significant to the following values of the Reading General Bylaws, Section 7.1:

Flood control	Water Pollution	Groundwater
Storm Damage Prevention	Erosion Control	Wildlife
Public or Private Water Supply		

Pursuant to Reading General Bylaws, Section 7.1, all work shall conform to paragraphs 1, 2, 3, 4, 5, 6, 8, 11, 12, 13, 14, 15, 16, and 17 under the General Conditions on pages 4 and 5 of this Order and all Documents, Findings and Special Conditions on pages 12 through 18 of this Order. Work shall also conform to the following Additional Conditions:

**Attachment to Order of Conditions
Susan Schellenbach 52 Louanis Drive
DEP# 270-0765**

19

LIST OF ADDITIONAL CONDITIONS - R.G.B. Section 7.1:

A-1 Prior to issuance of a Certificate of Compliance, permanent visible stone or concrete bounds shall be set at least two feet into the ground at turning points along a line 25 feet west of Bordering Vegetated Wetlands Flags. These bounds mark the Zone of Natural Vegetation and shall be maintained in perpetuity. This Condition shall be stated in any deed or other Registry of Deeds document conveying any ownership or interest in this property. If said document cites a plan, the plan shall identify the markers "Conservation Zone of Natural Vegetation and limit-of-work line markers".

A-3 52 Louanis Drive Street, as shown on the referenced plan (Document #3 cited herein), is and shall remain subject to the following perpetual deed restriction:
"Quitclaim Deed: [Grantor's identification information] ... grant to [Grantee's identification information] ... land with the buildings thereon ..., subject to the following deed restriction: All owners of the conveyed premises, and their heirs, successors and assigns, agree to preserve and maintain in perpetuity in a natural forested condition: ... the 25 foot zone of natural vegetation and the stone or concrete bounds marking the 25 foot zone of natural vegetation, or the addition 10 foot No Structure Zone... agree to preserve and maintain the concrete bounds marking the 25 foot zone of natural vegetation, as required under the Order of Conditions recorded with the Middlesex South District Registry of Deeds in Book _____, Page _____. This restriction shall survive the issuance of any Certificate of Compliance. The deed of conveyance from the grantor to the grantee of 52 Louanis Drive shall contain this restriction and it shall be expressed in covenants in all deeds to succeeding owners. Upon any conveyance, a copy of the deed containing this restriction shall forthwith be submitted by the grantor to the Reading Conservation Commission.

Attachment C Filing Fee

Attachment D Site Photographs



Photo #1: General view of wetland parameter located at the back of the property. Photo taken on November 2, 2022, by Hancock Associates wetland scientist.



Photo #2: General view of wetland parameter located at the back of the property. Photo taken on November 2, 2022, by Hancock Associates wetland scientist.



Photo #3: General view of wooded edge of the property. Photo taken on November 2, 2022, by Hancock Associates wetland scientist.



Photo #4: General view of back of house pre-construction. Photo taken on November 18, 2022, by Hancock Associates field crew.



Photo #5: General view of backyard pre-construction. Photo taken on November 18, 2022, by Hancock Associates field crew.



Photo #6: General view of backyard pre-construction. Photo taken on November 18, 2022, by Hancock Associates field crew.



Photo #7: General view of fence installation during construction. Photo taken by landscape field crew.



Photo #8: General view of plant installation during construction showing trees and proper erosion control measures. Photo taken by landscape field crew.



Photo #9: General view of tree and shrub plantings. Photo taken by landscape field crew.



Photo #10: General view of tree and shrub plantings with filter sock in place. Photo taken by landscape field crew.



Photo #11: General view within new fence post-construction. Photo taken on November 28, 2023, by Hancock Associates staff scientist.



Photo #12: General view within new fence post-construction. Photo taken on November 28, 2023, by Hancock Associates staff scientist.



Photo #13: General view outside of newly constructed fence post-construction. Photo taken on November 28, 2023, by Hancock Associates staff scientist.



Photo #14: General view of restoration area containing red maple trees. Photo taken on November 28, 2023, by Hancock Associates staff scientist.



**Photo #15: Photo of monumentation on edge of Zone of Natural Vegetation.
Photo taken on November 28, 2023, by Hancock Associates staff scientist.**



**Photo #16: Photo of monumentation on edge of Zone of Natural Vegetation.
Photo taken on November 28, 2023, by Hancock Associates staff scientist.**



Photo #17: General view beyond fence with restoration area and erosion control post construction. Photo taken on November 28, 2023, by Hancock Associates staff scientist.



Photo #18: General view beyond fence with restoration area and erosion control post construction. Photo taken on November 28, 2023, by Hancock Associates staff scientist.

Attachment E Nursery Receipt



24 Buzzel Road, Biddeford, ME 04005
 (207)499.2994 (207)282.7235 Fax (207)499.2912
 sales@piersonnurseries.com www.piersonnurseries.com

file copy *picked up 6/16/23*

QUOTATION

Page # 1 of 1
 Order # 49358
 Order Date: 15 JUN 2023
 Exp Ship Date:
 Date Revised: 15 JUN 2023

SOLD TO:
 BROOKWOOD LANDSCAPE & STONEMAN
 24 BROOKWOOD LANE
 DANVERS, MA 01923

Bus: (855) 893-7625
 Fax: (978) 774-3098
 Cell: (978) 777-0400

SHIP TO:
 BROOKWOOD LANDSCAPE & STONEMAN
 24 BROOKWOOD LANE
 DANVERS, MA 01923

inquiries@brookwoodlandsc...

Bus: (855) 893-7625
 Fax: (978) 774-3098
 Cell: (978) 777-0400

Ordered By
 JASON

Ship Via
 Pick Up

Customer PO #

Terms
 COD

Ln	Description	Quantity	Unit Price	Total
1)	QUERCUS BICOLOR 4-5' #1B spring potted will be lightly rooted	8		
2)	ACER RUBRUM RED SUNSET 7-8' #5 other option for maple	8		
3)	ARONIA MELANOCARPA 6-9" #1B	10		
4)	CLETHRA ALNIFOLIA 12-15" #1B	10		
5)	AMELANCHIER CANADENSIS 6-9" #1B	6		
6)	VIBURNUM DENTATUM 9-12" #2B	6		
7)	ILEX VERTICILLATA 12-15" #1B	6		

Sub-Total

MA

Total

OK

*pd ✓ #1208
6.15.23*

Total Pieces: 54

All Orders Are Shipped FOB Origin

Date Printed: 15.JUN.2023

NEW ENGLAND WETLAND PLANTS, INC

820 WEST STREET, AMHERST, MA 01002

PHONE: 413-548-8000 FAX 413-549-4000

EMAIL: INFO@NEWP.COM WEB ADDRESS: WWW.NEWP.COM

New England Erosion Control/Restoration Mix For Detention Basins and Moist Sites

Botanical Name	Common Name	Indicator
<i>Elymus riparius</i>	Riverbank Wild Rye	FACW
<i>Schizachyrium scoparium</i>	Little Bluestem	FACU
<i>Festuca rubra</i>	Red Fescue	FACU
<i>Andropogon gerardii</i>	Big Bluestem	FAC
<i>Panicum virgatum</i>	Switch Grass	FAC
<i>Vernonia noveboracensis</i>	New York Ironweed	FACW+
<i>Agrostis perennans</i>	Upland Bentgrass	FACU
<i>Bidens frondosa</i>	Beggar Ticks	FACW
<i>Eupatorium maculatum (Eutrochium maculatum)</i>	Spotted Joe Pye Weed	OBL
<i>Eupatorium perfoliatum</i>	Boneset	FACW
<i>Aster novae-angliae (Symphyotrichum novae-anglia)</i>	New England Aster	FACW-
<i>Scirpus cyperinus</i>	Wool Grass	FACW
<i>Juncus effusus</i>	Soft Rush	FACW+

PRICE PER LB. \$37.00 MIN. QUANTITY 3 LBS. TOTAL: \$111.00

APPLY: 35 LBS/ACRE :1250 sq ft/lb

The New England Erosion Control/Restoration Mix for Detention Basins and Moist Sites contains a selection of native grasses and wildflowers designed to colonize generally moist, recently disturbed sites where quick growth of vegetation is desired to stabilize the soil surface. It is an appropriate seed mix for ecologically sensitive restorations that require stabilization as well as long-term establishment of native vegetation. This mix is particularly appropriate for detention basins that do not hold standing water. Many of the plants in this mix can tolerate infrequent inundation, but not constant flooding. The mix may be applied by hand, by mechanical spreader, or by hydro-seeder. After sowing, lightly rake, roll or cultipack to insure good seed-to-soil contact. Best results are obtained with a Spring or late Summer seeding. Late Fall and Winter dormant seeding requires an increase in the application rate. A light mulching of clean, weed-free straw is recommended.

New England Wetland Plants, Inc. may modify seed mixes at any time depending upon seed availability. The design criteria and ecological function of the mix will remain unchanged. Price is \$/bulk pound, FOB warehouse, Plus SH and applicable taxes.

Attachment F Approved Site Plan

Attachment G As-Built Plan

