



NORSE ENVIRONMENTAL SERVICES, INC.

92 Middlesex Road, Unit 4

Tyngsboro, MA 01879

TEL. (978) 649-9932 • FAX (978) 649-7582

Website: www.norseenvironmental.com

NOTICE OF INTENT
FOR
SMALL LANE ROADWAY EXTENSION
& DRAINAGE

18 SMALL LANE
ASSESSORS MAP 40 LOT 153

&

22 SMALL LANE
ASSESSORS MAP 40 LOT 155

&

OFF CHARLES STREET
ASSESSORS MAP 41 LOT 29

READING, MA

APPLICANT: DEL REY R.T.

JUNE 2021

PROJECT: SMALL LANE ROADWAY EXTENSION & DRAINAGE

APPLICANT: DEL REY R.T.

TABLE OF CONTENTS

- PROPERTY OWNERS
- NOTICE OF INTENT
- WETLAND FEE TRANSMITTAL FORM
- NOTIFICATION TO ABUTTERS
- ABUTTERS LIST
- AFFIDAVIT OF SERVICE
- NOTICE OF INTENT REPORT
- ORDER OF RESOURCE AREA DELINEATION
- WETLAND REPLICATION REPORT
- LOCUS MAP
- ASSESSORS MAP
- MASSGIS WETLAND MAP
- USGS TOPOGRAPHIC MAP
- SOILS MAP
- FEMA MAP
- 2021 NHESP MAP
- DRAINAGE DESIGN
- SMALL LANE EXTENSION DEFINITIVE SUBDIVISION PLAN

Property Owners

Map 40 Lot 153

Eric Hughes
Beth Hughes
18 Small Lane
Reading, MA 01867
Book: 50276 Page: 0514

Map 40 Lot 155

22 Small Lane
Reading, MA 01867
Book: 72760 Page: 394

Owner:

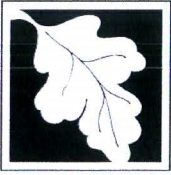
Wendy Dymment
P.O.A. Amy Dymment
2 Vista Drive
Pelham, NH 03070

Map 41 Lot 29

Off Charles Street
Reading, MA 01867
Book: 1021 Page: 0185

Owner:

Joan M. Perry
81 Webber Road
Georgetown, ME 04548



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

Provided by MassDEP:

WPA Form 3 – Notice of Intent

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

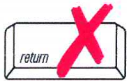
MassDEP File Number

Document Transaction Number

Reading

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):

<u>18 & 22 Small Lane & Off Charles Street</u>	<u>Reading</u>	<u>01867</u>
a. Street Address	b. City/Town	c. Zip Code
<u>Latitude and Longitude:</u>	<u>42 54310 N</u>	<u>71.09248 W</u>
	d. Latitude	e. Longitude
<u>Map 40 & Map 41</u>	<u>Lots 153, 155 & 29</u>	
f. Assessors Map/Plat Number	g. Parcel /Lot Number	

2. Applicant:

<u>Meagan</u>	<u>Johnson</u>	
a. First Name	b. Last Name	
<u>Del Rey R.T.</u>		
c. Organization		
<u>29472 Vista Plaza Drive</u>		
d. Street Address		
<u>Laguna Niguel</u>	<u>CA</u>	<u>92677</u>
e. City/Town	f. State	g. Zip Code
<u>(619) 366-8469</u>		
h. Phone Number	i. Fax Number	j. Email Address

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

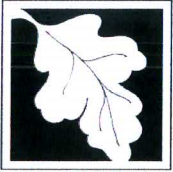
<u>See attached paper</u>		
a. First Name	b. Last Name	
<u></u>		
c. Organization		
<u></u>		
d. Street Address		
<u></u>	<u></u>	<u></u>
e. City/Town	f. State	g. Zip Code
<u></u>	<u></u>	<u></u>
h. Phone Number	i. Fax Number	j. Email address

4. Representative (if any):

<u>Maureen</u>	<u>Herald</u>	
a. First Name	b. Last Name	
<u>Norse Environmental Services, Inc.</u>		
c. Company		
<u>92 Middlesex Road - Suite 4</u>		
d. Street Address		
<u>Tyngsboro</u>	<u>MA</u>	<u>01879</u>
e. City/Town	f. State	g. Zip Code
<u>(978) 649-9932</u>	<u>norseenvironmental@verizon.net</u>	
h. Phone Number	i. Fax Number	j. Email address

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

<u>\$1450.00</u>	<u>\$712.50</u>	<u>\$737.50</u>
a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid



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A. General Information (continued)

6. General Project Description:

The applicant is proposing a limited project roadway crossing, retaining walls, wetland alteration, wetland replication, drainage, grading and associated utilities only under the WPA: 310 CMR 10.00.

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

- | | |
|---|--|
| 1. <input type="checkbox"/> Single Family Home | 2. <input checked="" type="checkbox"/> Residential Subdivision |
| 3. <input type="checkbox"/> Commercial/Industrial | 4. <input type="checkbox"/> Dock/Pier |
| 5. <input type="checkbox"/> Utilities | 6. <input type="checkbox"/> Coastal engineering Structure |
| 7. <input type="checkbox"/> Agriculture (e.g., cranberries, forestry) | 8. <input type="checkbox"/> Transportation |
| 9. <input type="checkbox"/> 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 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)
- 310 CMR 10.53(3)(e) "construction of a new roadway of minimal legal & practical width..."

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:

M.S.R.D.

a. County _____

b. Certificate # (if registered land) _____

See Property Owners Sheet _____

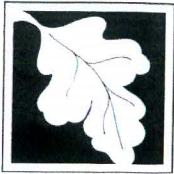
c. Book _____

d. Page Number _____

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

- 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.
- 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.



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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 checked="" type="checkbox"/> Bank	21 ft. 1. linear feet	46 ft. 2. linear feet
b. <input checked="" type="checkbox"/> Bordering Vegetated Wetland	1787 s.f. 1. square feet	3580 s.f. 2. square feet
c. <input type="checkbox"/> Land Under Waterbodies and Waterways	_____ 1. square feet _____ 3. cubic yards dredged	_____ 2. square feet

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. <input type="checkbox"/> Bordering Land Subject to Flooding	_____ 1. square feet _____ 3. cubic feet of flood storage lost	_____ 2. square feet _____ 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

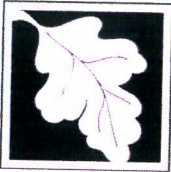
- f. Riverfront Area
1. Name of Waterway (if available) - **specify coastal or inland** _____
2. Width of Riverfront Area (check one):
- 25 ft. - Designated Densely Developed Areas only
 - 100 ft. - New agricultural projects only
 - 200 ft. - All other projects
3. Total area of Riverfront Area on the 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.



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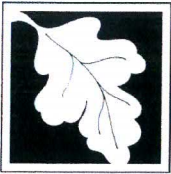
City/Town _____

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.

<u>Resource Area</u>	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
a. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. <input type="checkbox"/> Land Under the Ocean	1. square feet _____	
	2. cubic yards dredged _____	
c. <input type="checkbox"/> Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. <input type="checkbox"/> Coastal Beaches	1. square feet _____	2. cubic yards beach nourishment _____
e. <input type="checkbox"/> Coastal Dunes	1. square feet _____	2. cubic yards dune nourishment _____
	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
f. <input type="checkbox"/> Coastal Banks	1. linear feet _____	
g. <input type="checkbox"/> Rocky Intertidal Shores	1. square feet _____	
h. <input type="checkbox"/> Salt Marshes	1. square feet _____	
i. <input type="checkbox"/> Land Under Salt Ponds	1. square feet _____	2. sq ft restoration, rehab., creation _____
	2. cubic yards dredged _____	
j. <input type="checkbox"/> Land Containing Shellfish	1. square feet _____	
k. <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	
	1. cubic yards dredged _____	
l. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	1. square feet _____	
4. <input type="checkbox"/> 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. <input checked="" type="checkbox"/> Project Involves Stream Crossings		
	a. number of new stream crossings _____	b. number of replacement stream crossings _____
		1 _____



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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.

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

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

- June 2021 _____
b. Date of map

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).*

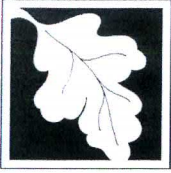
- c. Submit Supplemental Information for Endangered Species Review*
 1. Percentage/acreage of property to be altered:

(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 <https://www.mass.gov/endangered-species-act-mesa-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.



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MassDEP File Number _____

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

- (c) MESA filing fee (fee information available at <https://www.mass.gov/how-to/how-to-file-for-a-mesa-project-review>).

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, <https://www.mass.gov/service-details/exemptions-from-review-for-projectsactivities-in-priority-habitat>; 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. 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:

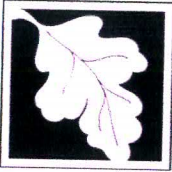
Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 South Rodney French Blvd.
New Bedford, MA 02744
Email: dmf.envreview-south@mass.gov

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: dmf.envreview-north@mass.gov

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.

- c. Is this an aquaculture project? d. Yes No

If yes, include a copy of the Division of Marine Fisheries Certification Letter (M.G.L. c. 130, § 57).



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Bureau of Resource Protection - Wetlands

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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 If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.
- 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.

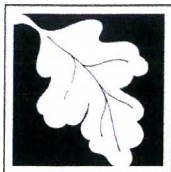
D. Additional Information

- 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.

1. 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.)
2. 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.


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Bureau of Resource Protection - Wetlands

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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.

Small Lane Extension Definitive Subdivision Plan

a. Plan Title

Sullivan Engineering Group, LLC

John D. Sullivan III P.E.

b. Prepared By

c. Signed and Stamped by

12-1-20

1" = 40'

d. Final Revision Date

e. Scale

Small Lane Extension Reading, Drainage Design

1-28-21

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:

Town of Reading - Check No.1041

6-9-21

2. Municipal Check Number

3. Check date

Commonwealth of Mass - Check No.1040

6-9-21

4. State Check Number

5. Check date

Meagan

Johnson

6. Payor name on check: First Name

7. Payor name on check: Last Name



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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.

x	<i>Meagan Johnson</i>	1/5/21
	1. Signature of Applicant	2. Date
	3. Signature of Property Owner (if different)	4. Date
	<i>James Herald</i>	6-29-21
	5. Signature of Representative (if any)	6. Date

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.



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1. Signature of Applicant

[Handwritten signature]

2. Date _____

3. Signature of Property Owner (if different)

[Handwritten signature]

4. Date _____

5. Signature of Representative (if any)

6. Date _____

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.

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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

[Handwritten Signature] - POA - JJ Small Jr.

2. Date _____

3. Signature of Property Owner (if different)

4. Date _____

5. Signature of Representative (if any)

6. Date _____

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.

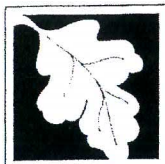
For MassDEP:

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.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

Provided by MassDEP:

WPA Form 3 – Notice of Intent

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

MassDEP File Number _____

Document Transaction Number _____

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 _____

3. Signature of Property Owner (if different) _____

4. Date _____

5. Signature of Representative (if any) _____

6. Date _____

Joan M. Perry
Do Joan M Perry

6/14/21

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.

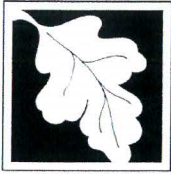
For MassDEP:

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:

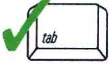
If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

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.



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:

18 & 22 Small Lane & Off Charles Street	Reading
a. Street Address	b. City/Town
Check No.1041	\$737.50
c. Check number	d. Fee amount

2. Applicant Mailing Address:

Meagan	Johnson	
a. First Name	b. Last Name	
Del Rey Realty Trust		
c. Organization		
29472 Vista Plaza Drive		
d. Mailing Address		
Laguna Niguel	CA	92677
e. City/Town	f. State	g. Zip Code
(619) 366-8469		
h. Phone Number	i. Fax Number	j. Email Address

3. Property Owner (if different):

See attached paper		
a. First Name	b. Last Name	
c. Organization		
d. Mailing Address		
e. City/Town	f. State	g. Zip Code
h. Phone Number	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.

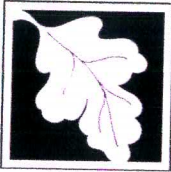
Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

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
Category 4(a)	1	\$1450.00	\$1450.00
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Step 5/Total Project Fee: \$1450.00

Step 6/Fee Payments:

Total Project Fee:	<u>\$1450.00</u>
State share of filing Fee:	<u>\$712.50</u>
City/Town share of filling Fee:	<u>\$737.50</u>
	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.)

**Notification to Abutters Under the
Massachusetts Wetlands Protection Act**

In accordance with the second paragraph of Massachusetts General Laws Chapter 131, Section 40, you are hereby notified of the following.

- A. The name of the applicant is Del Rey R.T.
- B. The applicant has filed a Notice of Intent with the Reading Conservation Commission of the Town of Reading seeking permission to remove, fill, dredge, or alter an area subject to protection under the wetlands protection act (General Laws Chapter 131, Section 40).
- C. The address of the lot where the activity is proposed is 18 & 22 Small Lane & Off Charles Street.
- D. The activity consists of: Small Lane Roadway Extension & Drainage. The applicant is proposing a limited project roadway crossing, retaining walls, wetland alteration, wetland replication, drainage, and associated utilities.
- E. Copies of the filing may be examined at the Conservation Commission office, Town Hall, between the hours of Mon-Thursday 8-5:30 pm, Tuesday 8-7 pm & Friday's closed. For more information, call: 781-942-6616.
- F. Copies of the Notice of Intent may be viewed at Norse Environmental Services, Inc. by calling 978- 649-9932 during the hours of 8:00 a.m. and 6:00 p.m. on the following days of the week: Monday– Thursday/Friday until 12:00 p.m.
- G. Information regarding the date, time, and place of the public hearing may be obtained from the Conservation Commission Office by calling **781-942-6616** during the hours listed above or email Charles Tirone at **ctirone@ci.reading.ma.us**

Note: Notice of the public hearing, including its date, time, and place, will be published at least five (5) days in advance in the **Reading Daily Times Chronicle.**

Note: Notice of the public hearing, including its date, time, and place, will be posted in the City or Town Hall not less than forty-eight (48) hours in advance.

Note: You also may contact the Reading Conservation Commission, 781-942-6616 or the Department of Environmental Protection, Northeast Regional Office, 978-694-3200, for more information about this application or the Wetland Protection Act.



Patriot Properties

Readina

Abutters List

12/29/2020

9:24:21AM

Filter Used: DataProperty.AccountNumber in
(7482,7500,7479,7503,7480,7547,7487,7498,7923,7448,7457,7922,7478,7447,7444,7921,7484,7453,7442,7443,7456,7536,7459,7463,7566,7485,7481,7441,7455,7440,7445,7546..

18 & 22 Small Ln Abutters list

Reading Abutters List

ParcelID	Location	Owner	Co-Owner	Mailing Address	City	State Zip
040.0-0000-0107.0	28 DANA RD	DASILVA KELLEY P TRUSTEE	KELLEY P DASILVA TRUST	28 DANA ROAD	READING	MA 01867
040.0-0000-0108.0	34 DANA RD	DALIUS KARA E	DALIUS MARK W	34 DANA RD	READING	MA 01867
040.0-0000-0109.0	42 DANA RD	CURTIN BRIAN P JR		42 DANA RD	READING	MA 01867
040.0-0000-0110.0	48 DANA RD	LITTLEHALE NANCY A	STEPHANIE SULLIVAN	48 DANA RD	READING	MA 01867
040.0-0000-0111.0	54 DANA RD	VENABLE BRIAN L	EILEEN L VENABLE	54 DANA RD	READING	MA 01867
040.0-0000-0112.0	60 DANA RD	HOWELLS PHILIP E	ELIZABETH M HOWELLS	60 DANA RD	READING	MA 01867
040.0-0000-0113.0	64 DANA RD	COSTELLO PAUL J	JANET M AUSTIN-COSTELLO	64 DANA ROAD	READING	MA 01867
040.0-0000-0114.0	70 DANA RD	CELI STEPHEN A	LAUREN C CELI	70 DANA ROAD	READING	MA 01867
040.0-0000-0115.0	76 DANA RD	TAMAYO ANTHONY MANUEL	PORTER CATHERINE TC	76 DANA ROAD	READING	MA 01867
040.0-0000-0116.0	84 DANA RD	CAMPBELL DANIEL E III	MARY ELLEN CAMPBELL	84 DANA RD	READING	MA 01867
040.0-0000-0120.0	87 DANA RD	COOK JENNIFER	MITCHELL JOSHUA TE	87 DANA ROAD	READING	MA 01867
040.0-0000-0121.0	81 DANA RD	ESPINOLA DUARTE J	MARIA C ESPINOLA	81 DANA RD	READING	MA 01867
040.0-0000-0122.0	75 DANA RD	ANDREWS FRANCIS J TRUSTEE	ANDREWS PATRICIA A TRUJ	75 DANA RD	READING	MA 01867
040.0-0000-0123.0	69 DANA RD	ENCARNACAO JOSEPH	KARSA ENCARNACAO	69 DANA RD	READING	MA 01867
040.0-0000-0124.0	63 DANA RD	SCHERBER WILLIAM M	LISA C SCHERBER	63 DANA RD	READING	MA 01867
040.0-0000-0125.0	59 DANA RD	NISSEN GREGORY D	NISSEN COURTNEY O	59 DANA RD	READING	MA 01867
040.0-0000-0126.0	53 DANA RD	MCNANEY JANICE M TRUSTEE	ROBERT T MCNANEY FAMIL	6 NELSON LN	JEKYLL ISLAND	GA 31527
040.0-0000-0127.0	47 DANA RD	GOVER STEVEN H	ADRIENNE D GOVER	47 DANA RD	READING	MA 01867
040.0-0000-0128.0	41 DANA RD	BANOS CHARLES C	BANOS STACY R	41 DANA ROAD	READING	MA 01867
040.0-0000-0129.0	37 DANA RD	DOHERTY PAUL F	CAROL A DOHERTY	37 DANA RD	READING	MA 01867
040.0-0000-0130.0	27 DANA RD	HARVELL CASEY	BOWERS JASON	27 DANA ROAD	READING	MA 01867
040.0-0000-0131.0	OFF PEARL ST	THE TOWN OF READING		16 LOWELL STREET	READING	MA 01867
040.0-0000-0146.0	106 COLONIAL DR	REID MARILYN G		106 COLONIAL DR	READING	MA 01867
040.0-0000-0147.0	112 COLONIAL DR	MIROGIANNIS EFSTRATIOS P	MIROGIANNIS GEORGIA	112 COLONIAL DRIVE	READING	MA 01867
040.0-0000-0148.0	115 COLONIAL DR	SHEA JOHN T	ELIZABETH A SHEA	115 COLONIAL DR	READING	MA 01867
040.0-0000-0149.0	111 COLONIAL DR	COLLINS DEBORAH F		111 COLONIAL DR	READING	MA 01867
040.0-0000-0150.0	105 COLONIAL DR	BENJAMIN ROY A JR	NANCY S BENJAMIN	105 COLONIAL DRIVE	READING	MA 01867
040.0-0000-0152.0	OFF HAVERHILL ST	THE TOWN OF READING		16 LOWELL STREET	READING	MA 01867
040.0-0000-0153.0	18 SMALL LN	HUGHES ERIC	BETH HUGHES	18 SMALL LN	READING	MA 01867
040.0-0000-0154.0	17 SMALL LN	LADANY TIBOR	JUDITH LADANY	17 SMALL LN	READING	MA 01867
040.0-0000-0155.0	22 SMALL LN	DYMENT WENDY		2 VISTA DR	PELHAM	NH 03070
040.0-0000-0166.0	22 BREWER LN	RIGNEY JAMES F	CATHERINE L RIGNEY	22 BREWER LANE	READING	MA 01867
040.0-0000-0167.0	30 BREWER LN	SYMES THERESA L TRUSTEE	BREWER LANE REALTY TRU	30 BREWER LANE	READING	MA 01867
040.0-0000-0168.0	27 BREWER LN	DANGIO CARL E		27 BREWER LN	READING	MA 01867
040.0-0000-0169.0	21 BREWER LN	DAMODARAN MANOJ K		21 BREWER LN	READING	MA 01867
040.0-0000-0170.0	15 BREWER LN	BOWE BRIAN P	BOWE SUSAN R	15 BREWER LN	READING	MA 01867
040.0-0000-0171.0	9 BREWER LN	KWET DONALD V ETAL	DUGGAN D KEVIN	9 BREWER LN	READING	MA 01867
040.0-0000-0204.0	55 GREY COACH RD	ARNOLD JAMES E	MACARI KRISTA MARIE	55 GREY COACH RD	READING	MA 01867
040.0-0000-0205.0	61 GREY COACH RD	BRAMANTE SALVATORE ETAL TR	BRAMANTE FAMILY REV TR	61 GREY COACH LN	READING	MA 01867
041.0-0000-0009.0	21 DANA RD	SLAWSKI BENJAMIN	KARIGER KAITLYN M	21 DANA ROAD	READING	MA 01867
041.0-0000-0010.0	15 DANA RD	MORRIS THEODORE A	KAREN A MORRIS	15 DANA RD	READING	MA 01867
041.0-0000-0029.0	OFF CHARLES ST	PERRY JOAN M		81 WEBBER RD	GEORGETOWN	ME 04548
046.0-0000-0046.0	25 GREY COACH RD	NATALE THOMAS S JR ETAL TRST	NATALE NOMINEE TRUST	25 GREY COACH LN	READING	MA 01867
046.0-0000-0047.0	33 GREY COACH RD	CARROLL DAVID J TRUSTEE	33 GREY COACH TRUST	33 GREY COACH LN	READING	MA 01867

12/29/2020

9:24:21AM

Reading Abutters List

ParcelID	Location	Owner	Co-Owner	Mailing Address	City	State	Zip
046.0-0000-0048.0	41 GREY COACH RD	NIVENS SCOTT J	NIVENS MICHELE R TE	41 GREY COACH RD	READING	MA	01867

End of Report



Patriot Properties

Readina

01/12/2021

Abutters List

8:28:12AM

Filter Used: DataProperty.AccountNumber in (7564,7572,7569,7570,7561,7547,7549,7487,7567,7583,7588,7560,7571,7548,7566,7485,7562,7563,7546,7537,7586,7461,7565,7568,7462,7486)

Off Charles St Abutters list

Reading Abutters List

ParcelID	Location	Owner	Co-Owner	Mailing Address	City	State	Zip
040.0-0000-0129.0	37 DANA RD	DOHERTY PAUL F	CAROL A DOHERTY	37 DANA RD	READING	MA	01867
040.0-0000-0130.0	27 DANA RD	HARVELL CASEY	BOWERS JASON	27 DANA ROAD	READING	MA	01867
040.0-0000-0153.0	18 SMALL LN	HUGHES ERIC	BETH HUGHES	18 SMALL LN	READING	MA	01867
040.0-0000-0154.0	17 SMALL LN	LADANY TIBOR	JUDITH LADANY	17 SMALL LN	READING	MA	01867
040.0-0000-0155.0	22 SMALL LN	DYMENT WENDY		2 VISTA DR	PELHAM	NH	03070
040.0-0000-0205.0	61 GREY COACH RD	BRAMANTE SALVATORE ETAL TR	BRAMANTE FAMILY REV TR	61 GREY COACH LN	READING	MA	01867
041.0-0000-0009.0	21 DANA RD	SLAWSKI BENJAMIN	KARIGER KAITLYN M	21 DANA ROAD	READING	MA	01867
041.0-0000-0010.0	15 DANA RD	MORRIS THEODORE A	KAREN A MORRIS	15 DANA RD	READING	MA	01867
041.0-0000-0011.0	352 CHARLES ST	TANNIAN JOSEPH M ETAL TRUST	TANNIAN ESTATE PLANNING	352 CHARLES STREET	READING	MA	01867
041.0-0000-0012.0	358 CHARLES ST	TUTON MICHAEL C	TUTON MELISSA TE	358 CHARLES ST	READING	MA	01867
041.0-0000-0023.0	372 HAVERHILL ST	BHARDWAJ MAHESH K ETAL TRS	BHARDWAJ FAMILY TRUST	372 HAVERHILL ST	READING	MA	01867
041.0-0000-0024.0	361 CHARLES ST	ATWOOD JOHN		361 CHARLES ST	READING	MA	01867
041.0-0000-0025.0	353 CHARLES ST	TELLO JOSEPH W ETAL TRUSTEE	JLT CHARLES STREET NOM	353 CHARLES STREET	READING	MA	01867
041.0-0000-0026.0	347 CHARLES ST	STELLA LAURA A	MICHAEL K HOLMES	347 CHARLES ST	READING	MA	01867
041.0-0000-0027.0	CHARLES & HAVEN	TOWN OF READING		16 LOWELL ST	READING	MA	01867
041.0-0000-0028.0	420 HAVERHILL ST	WEATHERBEE DIANE L	EDWARD C WEATHERBEE	420 HAVERHILL ST	READING	MA	01867
041.0-0000-0029.0	OFF CHARLES ST	PERRY JOAN M		81 WEBBER RD	GEORGETOWN	ME	04548
041.0-0000-0030.0	374 CHARLES ST	CURRAN STEPHEN	MAY CURRAN	374 CHARLES ST	READING	MA	01867
041.0-0000-0031.0	366 CHARLES ST	HANNAFIN SHAUN	HANNAFIN LAUREN Z	366 CHARLES STREET	READING	MA	01867
041.0-0000-0032.0	382 CHARLES ST	BERTOLINI MICHELE	BERTOLINI KRYSTA M TE	382 CHARLES ST	READING	MA	01867
041.0-0000-0033.0	392 HAVERHILL ST	DENTREMENT KEITH	LUANN DENTREMENT	392 HAVERHILL ST	READING	MA	01867
041.0-0000-0034.0	398 HAVERHILL ST	DENTREMENT ROGER	DENTREMENT NOREEN T T	398 HAVERHILL ST	READING	MA	01867
041.0-0000-0035.0	406 HAVERHILL ST	BRAMANTE SALVATORE	HEATHER BRAMANTE	406 HAVERHILL ST	READING	MA	01867
041.0-0000-0047.0	385 HAVERHILL ST	GOSSELIN MICHAEL E	RUTH E GOSSELIN	385 HAVERHILL ST	READING	MA	01867
041.0-0000-0050.0	389 HAVERHILL ST	GOSSELIN RUTH E	GRACE FAMILT IRREVOCAB	389 HAVERHILL ST	READING	MA	01867
041.0-0000-0052.0	379 HAVERHILL ST	CHANG WOOSOEK	YOON NA	379 HAVERHILL ST	READING	MA	01867

End of Report

MAP 10 LOT 234	SITE ADDRESS	OWNER	MAILING ADDRESS	CITY	ST	ZIP
			NEIGHBORING TOWNS ALSO NEED TO BE NOTIFIED:			
		STONEHAM PLANNING BOARD	35 CENTRAL ST	STONEHAM	MA	02180
		WAKEFIELD PLANNING BOARD	1 LAFAYETTE STREET	WAKEFIELD	MA	01880
		LYNNFIELD PLANNING BOARD	55 SUMMER STREET	LYNNFIELD	MA	01940
		MASS DEPT OF HOUSING & COM. DEV.	100 CAMBRIDGE STREET, SUITE 300	BOSTON	MA	02114
		WILMINGTON PLANNING BOARD	121 GLEN ROAD	WILMINGTON	MA	01887
		NORTH READING PLANNING BOARD	235 NORTH STREET	NORTH READING	MA	01864
		WOBURN PLANNING BOARD	10 COMMON STREET	WOBURN	MA	01801
		METRO AREA PLANNING COUNCIL	60 TEMPLE PLACE	BOSTON	MA	02111

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 Maureen Herald, hereby certify to the best of my knowledge, under the pains and penalties of perjury that on June 30, 2021 I gave notification to the abutters in compliance with the second paragraph of Massachusetts General Law Chapter 131, Section 40, and the DEP Guide to Abutter Notification dated April 8, 1994, in connection with the following matter:

A Notice of Intent filed under the Massachusetts Wetlands Protection Act by Meagan Johnson with the Reading Conservation Commission on June 30, 2021 for property located at Off Charles Street, 18 & 22 Small Lane - Reading

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.

Maureen Herald
Name

6-30-21
Date



NORSE ENVIRONMENTAL SERVICES, INC.

92 Middlesex Road, Unit 4

Tyngsboro, MA 01879

TEL. (978) 649-9932 • FAX (978) 649-7582

Website: www.norseenvironmental.com

Notice of Intent Report

For

Small Lane Roadway Extension & Drainage Reading, MA

Prepared For

Del Rey R.T.
29472 Vista Plaza Drive
Laguna Niguel, CA 92677

Prepared By

Norse Environmental Services, Inc.
92 Middlesex Road, Unit 4
Tyngsboro, MA 01879

June 2021

Narrative

The applicant is filing a Notice of Intent under the Massachusetts Wetland Protection Act, 310 CMR 10.00, for the Small Lane roadway extension, limited project roadway crossing, retaining walls, wetland alteration, wetland replication, drainage, grading and associated utilities. The applicant is proposing to extend the Small Lane roadway by 624 ft. into a cul-de-sac to access two new single-family house lots. The two single family house lots will be filed under separate Notice of Intents. Municipal sewer and water will service the site. Erosion controls will be set and maintained for the duration of the project.

Site Description

The project combines three lots consisting of 14.81 +/- acres of land located at the end of Small Lane in Reading, MA. 18 Small Lane consists of 10.42 +/- acres of land with a single-family dwelling and associated appurtenances. The property wraps around and abuts the landlocked 3.85 acres located at the off Charles Street property. 22 Small Lane consists of .54 acres of land with a single-family dwelling, deck, and driveway. Please see the attached tax map of the three properties.

The Small Lane roadway abruptly ends at a “hammerhead” configuration with a sewer pump station located at the end of the road. Access to these parcels is located at the end of Small Lane, just past the sewer pump station, to an existing trail. The bordering vegetated wetlands surrounds the usable upland area. An existing 12” clogged culvert is located beneath the trail and connects the bordering vegetated wetland.

The Reading Conservation Commission issued an Order of Resource Area Delineation (ORAD) on 8-29-19. Please see the attached ORAD verifying and confirming the resource areas on site.

Resource Areas

The mapping was reviewed for any other resource areas associated with the properties. The most current USGS Topographic Map shows no perennial streams on or near the property. The FEMA Mapping shows no 100-year flood plain or Bordering Land Subject to Flooding. The parcels are not located within Natural Heritage & Endangered Species Estimated and/or Priority Habitat. In addition, there are no certified vernal pools associated with the properties.

Soils

The Web Soil Survey Middlesex County maps the site as Merrimac-Urban land complex and Swansea muck. Merrimac-Urban Land Complex consists of nearly level to undulating, deep, somewhat excessively drained Merrimac soils and areas of urban land. Although urban development has altered the soils and landscapes on these areas, the soil can be identified at widely separated points, and the general nature of the area can be

determined. Broad delineations are made on the map. This map unit consists of about 75 percent Merrimac and similar soils and at least 25 percent urban land and other disturbed areas. Urban land consists of streets, parking lots, buildings, and other structures.

Swansea series consist of nearly level, deep (5+ ft.), very poorly drained organic soils in depressions and low flat areas of upland and glacial outwash plains and terraces. They formed in 16 to 51 inches of black, highly decomposed organic material (muck) with moderate or moderately rapid permeability, over sandy mineral material with very rapid permeability. They have a water table that is at or near the surface most of the year. Major limitations are related to wetness and low strength.

Proposed Work

The applicant is filing a Notice of Intent, under the Wetland Protection Act, for a limited project roadway crossing, retaining walls, wetland alteration, wetland replication, drainage, grading and associated utilities. The applicant is proposing to alter 1787 s.f. of wetland and provide 3580 s.f. of wetland replication. Municipal sewer and water will service the site.

310 CMR 10.53(3) Limited Projects states:

(3) Notwithstanding the provisions of 310 CMR 10.54 through 10.58 and 10.60, the Issuing Authority may issue an Order of Conditions and impose such conditions as will contribute to the interests identified in M.G.L. c. 131, § 40 permitting the following limited projects (although no such project may be permitted which will have any adverse effect on specified habitat sites of Rare Species, as identified by procedures established under 310 CMR 10.59). In determining whether to exercise its discretion to approve the limited projects listed in 310 CMR 10.53(3), the Issuing Authority shall consider the following factors: the magnitude of the alteration and the significance of the project site to the interests identified in M.G.L. c. 131, § 40, the availability of reasonable alternatives to the proposed activity, the extent to which adverse impacts are minimized, and the extent to which mitigation measures, including replication or restoration, are provided to contribute to the protection of the interests identified in M.G.L. c. 131, § 40.

(e) The **construction and maintenance of a new roadway or driveway of minimum legal and practical width acceptable to the planning board, where reasonable alternative means of access from a public way to an upland area of the same owner is unavailable.** Such roadway or driveway shall be constructed in a manner which does not restrict the flow of water. Reasonable alternative means of access may include any previously or currently available alternatives such as realignment or reconfiguration of the project to conform to 310 CMR 10.54 through 10.58 or to otherwise minimize adverse impacts on resource areas. The issuing authority may require the applicant to utilize access over an adjacent parcel of land currently or formerly owned by the applicant, or in which the applicant has, or can obtain, an ownership interest. The applicant shall design the roadway or driveway according to the minimum length and width acceptable to the Planning Board and shall present reasonable alternative means of access to the Board. The applicant shall provide replication of bordering vegetated wetlands and compensatory flood storage to the

extent practicable. In the Certificate of Compliance, the issuing authority may continue a condition imposed in the Order of Conditions to prohibit further activities under 310 CMR 10.53(3)(e).

The 24 ft. wide roadway is the minimum acceptable width allowed by the Reading Community Planning and Development Commission (CPDC). The applicant filed a preliminary subdivision plan with CPDC to discuss the project. The original roadway proposal was 22 ft. wide to minimize impact to the resource areas and buffer zone. CPDC discouraged the 22 ft. wide roadway and cited safety and emergency vehicle access concerns. As a result, the applicant increased the roadway width to 24 ft. wide.

The roadway crossing is proposed within a disturbed area, over an existing trail and wetland crossing. The applicant is proposing to remove the clogged 12" culvert and install a 46 ft. long open bottom box culvert. This culvert is designed to maintain the existing hydrologic connection and meet the Massachusetts Stream Crossing Standards.

Limited Project - Alternative Analysis

1. The first alternative is to reduce the width of the roadway, impact to resource areas and buffer zones. As mentioned above, the 22 ft. wide roadway alternative was presented to CPDC last fall, and the board did not approve the roadway width due to safety and emergency vehicle access concerns.
2. The second alternative is to eliminate the roadway and construct a common driveway to access the two single family house lots. Unfortunately, common driveways are not allowed in the Town of Reading and therefore this alternative is not possible.
3. The third alternative is to access the upland through an alternative location or property. Unfortunately, this is not a feasible alternative because the entire upland is surround by bordering vegetated wetland. The two single family house lots are proposed on an upland island. The bordering vegetated wetlands extend to the adjacent properties. If access could be obtained from the adjacent properties, there would be substantially more wetland and buffer zone impact. Please see the attached MassGIS wetland mapping of the area.

The desired alternative is the one proposed in this Notice of Intent filing. The applicant is proposing the minimum acceptable roadway width and incorporates retaining walls to reduce impact to the resource areas. The project proposes to alter 1787 s.f. of wetland and provide 2:1 replication or 3580 s.f. Please see the attached Wetland Replication Report.

310 CMR 10.55: Bordering Vegetated Wetlands

(4) General Performance Standards.

- (a) Where the presumption set forth in 310 CMR 10.55(3) is not overcome, any proposed work in a Bordering Vegetated Wetland shall not destroy or otherwise impair any portion of said area.
- (b) Notwithstanding the provisions of 310 CMR 10.55(4)(a), the issuing authority may issue an Order of Conditions permitting work which results in the loss of up to 5000 square feet of Bordering Vegetated Wetland when said area is replaced in accordance with the following general conditions and any additional, specific conditions the issuing authority deems necessary to ensure that the replacement area will function in a manner similar to the area that will be lost:
1. the surface of the replacement area to be created ("the replacement area") shall be equal to that of the area that will be lost ("the lost area");

The applicant is providing a 2:1 ratio of replacement to lost area. The project proposes to alter 1780 s.f. of wetland and provide 3580 s.f. of wetland replication.

2. the ground water and surface elevation of the replacement area shall be approximately equal to that of the lost area;

The ground water and surface elevation of the replacement area are approximately equal to the lost area.

3. The overall horizontal configuration and location of the replacement area with respect to the bank shall be similar to that of the lost area;

The overall horizontal configuration and location of the replacement area with respect to the bank is similar to the lost area. The applicant is improving the overall site conditions by replacing a 12" culvert with an open bottom box culvert.

4. the replacement area shall have an unrestricted hydraulic connection to the same water body or waterway associated with the lost area;

The proposed open bottom box culvert will provide an unrestricted hydraulic connection.

5. the replacement area shall be located within the same general area of the water body or reach of the waterway as the lost area;

The replacement area is located within the same general area of the water body.

6. at least 75% of the surface of the replacement area shall be reestablished with indigenous wetland plant species within two growing seasons, and prior to said vegetative reestablishment any exposed soil in the replacement area shall be

temporarily stabilized to prevent erosion in accordance with standard U.S. Soil Conservation Service methods; and

The replacement area will be at least 75% revegetated with indigenous wetland plants within two growing seasons. Please see the attached Wetland Replication Report.

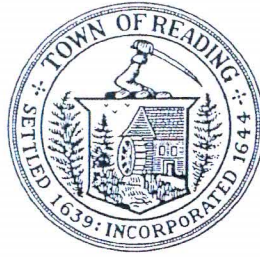
7. the replacement area shall be provided in a manner which is consistent with all other General Performance Standards for each resource area in Part III of 310 CMR 10.00.

The replacement area is provided in a manner which is consistent with all the other General Performance Standards for each resource area.

Stormwater Management Standards

The Massachusetts Stormwater Management Standards does not apply to the site because the project is less than four single family dwellings and there are no stormwater discharges that affect a critical area. However, the project has been designed to provide some treatment and drainage.

The project utilizes low impact stormwater design that incorporates some roadway curbing to direct runoff into a grass shoulder and stone infiltration trench. The grass shoulder and stone infiltration trench is proposed on both sides of the roadway. The 3 ft. wide grass shoulder will provide pre-treatment before entering a crushed stone infiltration trench. Please see the attached Sullivan Engineering Group, LLC, Drainage Design, dated 1-28-21.



TOWN OF READING
MASSACHUSETTS
01867

OFFICE OF THE CONSERVATION COMMISSION

September 4, 2019

KCJ Del Rey Realty LLC.
C/o Maureen Herald
Norse Environmental Services, Inc.
92 Middlesex Road - Unit 4
Tyngsboro, Ma 01879

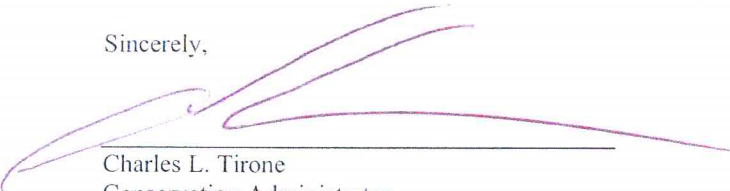
RE: Order of Resource Area Delineation, Off Charles Street, 18 & 22 Small Street, File #270-0721

Dear KCJ Del Rey Realty LLC:

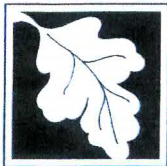
Enclosed is the original Orders Resource Area Delineation for the above referenced project, under the State Wetland Protection Act, M.G.L. Ch. 131, s. 40, and the Town of Reading's Wetlands Protection Bylaw, Town Code Section 7.1

If you have any questions regarding the enclosed wetlands permits, please call the Conservation Office for clarification or further information. Please distribute this cover letter with all copies of the Order.

Sincerely,



Charles L. Tirone
Conservation Administrator



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

Provided by MassDEP:

270-0721

MassDEP File Number

WPA Form 4B – Order of Resource Area Delineation

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40 &
Reading Wetlands Protection Bylaw, Town Code 7.1

eDEP Transaction Number

Reading

City/Town

A. General Information

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.

From: Reading
1. Conservation Commission

2. This Issuance is for (check one):

- a. Order of Resource Area Delineation
- b. Amended Order of Resource Area Delineation

3. Applicant:

a. First Name KCJ Del Rey Realty LLC. b. Last Name _____
 c. Organization 29472 Vista Plaza Drive
 d. Mailing Address Laguna Niguel f. State CA g. Zip Code 92677
 e. City/Town _____

4. Property Owner (if different from applicant):

Same
 a. First Name _____ b. Last Name _____
 c. Organization _____
 d. Mailing Address _____
 e. City/Town _____ f. State _____ g. Zip Code _____

5. Project Location:

Off Charles St, 18 & 22 Small Lane Reading MA
 a. Street Address b. City/Town c. Zip Code
Map 41 & 40 Lot 29, 153, & 155
 d. Assessors Map/Plat Number e. Parcel/Lot Number

Latitude and Longitude 42.323570 m -
 (in degrees, minutes, seconds): s 71052954w m

6. Dates: July 10, 2019 August 28, 2019 August 29, 2019
 a. Date ANRAD filed b. Date Public Hearing Closed c. Date of Issuance

7. Title and Date (or Revised Date if applicable) of Final Plans and Other Documents:

Land off of Charles Street/Small Lane plan", No address, dated June 9, June 9, 2019
 2019, signed and stamped by John D. Sullivan, III, RPE #41586 b. Date

a. Title _____
 c. Title _____ d. Date _____



B. Order of Delineation

1. The Conservation Commission has determined the following (check whichever is applicable):

a. **Accurate:** The boundaries described on the referenced plan(s) above and in the Abbreviated Notice of Resource Area Delineation are accurately drawn for the following resource area(s):

- 1. Bordering Vegetated Wetlands
- 2. Other resource area(s), specifically:
 - a.

b. **Modified:** The boundaries described on the plan(s) referenced above, as modified by the Conservation Commission from the plans contained in the Abbreviated Notice of Resource Area Delineation, are accurately drawn from the following resource area(s):

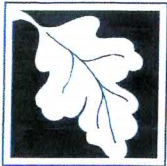
- 1. Bordering Vegetated Wetlands
- 2. Other resource area(s), specifically:

a. Only the following are approved under this Order: Bordering Vegetated Wetland flags numbered 1B through 43B and 1C to 2C to 2C1 (deleting 3C) connecting 2C1 to 4C, Additional Resource Area boundaries exist on the subject property and adjacent properties outside the limits of the delineation shown on the approved plan.

c. **Inaccurate:** The boundaries described on the referenced plan(s) and in the Abbreviated Notice of Resource Area Delineation were found to be inaccurate and cannot be confirmed for the following resource area(s):

- 1. Bordering Vegetated Wetlands
- 2. Other resource area(s), specifically:

3. The boundaries were determined to be inaccurate because:



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 4B – Order of Resource Area Delineation
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40 &
Reading Wetlands Protection Bylaw, Town Code 7.1

Provided by MassDEP:

270-0721

MassDEP File Number

eDEP Transaction Number

Reading

City/Town

C. Findings

This Order of Resource Area Delineation determines that the boundaries of those resource areas noted above, have been delineated and approved by the Commission and are binding as to all decisions rendered pursuant to the Massachusetts Wetlands Protection Act (M.G.L. c. 131, § 40) and its regulations (310 CMR 10.00). This Order does not, however, determine the boundaries of any resource area or Buffer Zone to any resource area not specifically noted above, regardless of whether such boundaries are contained on the plans attached to this Order or to the Abbreviated Notice of Resource Area Delineation.

This Order must be signed by a majority of the Conservation Commission. The Order must be sent 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 DEP Regional Office (see <http://www.mass.gov/dep/about/region/findyour.htm>).

D. 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 DEP Regional Office to issue a Superseding Order of Resource Area Delineation. When requested to issue a Superseding Order of Resource Area Delineation, the Department's review is limited to the objections to the resource area delineation(s) stated in the appeal request. 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 of Resource Area Delineation 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 Determination, or providing written information to the Department prior to issuance of a Superseding Order or Determination.

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 bylaw or ordinance, and not on the Massachusetts Wetlands Protection Act or regulations, the Department of Environmental Protection has no appellate jurisdiction.



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands

Provided by MassDEP:
 270-0721
 MassDEP File Number

WPA Form 4B – Order of Resource Area Delineation
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40 &
 Reading Wetlands Protection Bylaw, Town Code 7.1

eDEP Transaction Number
 Reading
 City/Town

E. Signatures

August 29, 2019
 Date of Issuance

Please indicate the number of members who will sign this form.

Six
 1. Number of Signers

[Handwritten Signature]
 Signature of Conservation Commission Member
[Handwritten Signature]
 Signature of Conservation Commission Member
[Handwritten Signature]
 Signature of Conservation Commission Member
[Handwritten Signature]
 Signature of Conservation Commission Member

[Handwritten Signature]
 Signature of Conservation Commission Member
[Handwritten Signature]
 Signature of Conservation Commission Member
 Signature of Conservation Commission Member

This Order is valid for three years from the date of issuance.

If this Order constitutes an Amended Order of Resource Area Delineation, this Order does not extend the issuance date of the original Final Order, which expires on _____ unless extended in writing by the issuing authority.

This Order is issued to the applicant and the property owner (if different) as follows:

2. By hand delivery on

3. By certified mail, return receipt requested on

a. Date _____

[Handwritten Date: September 4, 2019]
 a. Date _____

ATTACHMENT
ORDER OF RESOURCE AREA DELINEATION
KCJ Del Rey Realty LLC, 18 & 22 Small Lane
DEP 270-0721

5

DOCUMENTS: The following documents are hereby incorporated into this Order, except that the findings and provisions on the following pages shall control where the terms differ from these documents:

1. Abbreviated Notice of Resource Area Delineation, 18 & 22 Small Lane, Reading, Massachusetts, dated July 10, 2019 with attachments, submitted by KCJ Del Rey Realty LLC, Applicant
2. One-sheet site plan entitled "Land off of Charles Street/Small Lane plan", No address, dated June 9, 2019, signed and stamped by John D. Sullivan, III, RPE #41586
3. Norse Environmental Services Inc, Wetland Delineation Field Data Forms dated December, 2018 by Maureen Harald, Norse Environmental Services Inc,
4. FEMA Flood Insurance Rate Map, Reading, Massachusetts, Community Panel #25017C0312E, effective date June 4, 2010
5. Map entitled "Figure 2, Town of Reading, Massachusetts, Zone II and Zone III Areas" prepared by Weston & Sampson, Engineers, dated July 8, 1996
6. Site Visit Report dated August 13, 2019 by Reading Conservation Commission.

FINDINGS: The Conservation Commission hereby determines the following:

1. The three lots consist of 14.81+/- or acres of land located easterly of Charles Street and northerly of Small Lane in Reading MA. Access to the parcel is located at the end of Small Lane there is an upland island surrounded by bordering vegetated wetland connected by an existing 12-inch culvert. The bordering vegetated wetlands are flagged in the field with blue ribbon and aluminum tags labeled 1B-43B and 1C to 2C to 2C1 to 4C (eliminating flag 3C). The wetland is a red maple swamp consisting of white pine and red maple in the overstory. The understory consists of glossy buckthorn, sweet pepper bush, highbush blueberry and speckled alder. The herbaceous layer consists of canadian mayflower, cinnamon fern, sensitive fern and skunk cabbage. The parcels are not located within Natural Heritage and Endangered Species estimated and/or Priority Habitat. In addition, there are no certified vernal pools associated with his property.
2. The site plan (Document #2, hereinafter "Land off of Charles Street/Small Lane plan") depicts the Bordering Vegetated Wetland Boundary around the subject property. The Commission confirms as accurate the "Hydric Soil Boundary" marked by Maureen Harald, Norse Environmental Services Inc. by flags numbered 1B through 43B and 1C through 4C.

ATTACHMENT
ORDER OF RESOURCE AREA DELINEATION
KCJ Del Rey Realty LLC, 18 & 22 Small Lane
DEP 270-0721

6

3. The ANRAD “Land off of Charles Street/Small Lane plan” plan depicts the 100-foot Buffer Zone throughout the subject property.

4. According to the FEMA Flood Insurance Rate Map, the wetland contains no classification.

5. The site is not the Aquifer Protection District.

END OF FINDINGS



NORSE ENVIRONMENTAL SERVICES, INC.

92 Middlesex Road, Unit 4

Tyngsboro, MA 01879

TEL. (978) 649-9932 • FAX (978) 649-7582

Website: www.norseenvironmental.com

Wetland Replication Report

For

Small Lane Roadway Extension Reading, MA

Prepared For

Del Rey R.T.
29472 Vista Plaza Drive
Laguna Nigel, CA 92677

Prepared By

Norse Environmental Services, Inc.
92 Middlesex Road ~ Suite 4
Tyngsboro, MA 01879

June 2021

Narrative

The applicant is filing a Notice of Intent under the Massachusetts Wetland Protection Act, 310 CMR 10.00, for the Small Lane roadway extension, limited project roadway crossing, retaining walls, wetland alteration, wetland replication, drainage, grading and associated utilities. The applicant is proposing to extend the Small Lane roadway by 624 ft. into a cul-de-sac bulb to access two new single-family house lots. Municipal sewer and water will service the site. Erosion controls will be set and maintained for the duration of the project.

The limited project roadway crossing proposes to alter 1787 s.f. of bordering vegetated wetland between wetland flags 1B-3B, 5.5B-8B & 38.5B-43.5B. The applicant is proposing to replicate the wetland at a 2:1 ratio and provide 3580 s.f. of wetland replication. The replication area is proposed north of the roadway between wetland flags 31B-38B.

Wetland Replication Requirements

Projects that impact bordering vegetated wetlands (BVW) require replication under 310 CMR 10.55(4)(b). The performance standards for BVW impacts include the requirement of wetland replication if a BVW is destroyed or otherwise impaired. The general conditions governing the replication of up to 5000 square feet of BVW set forth in 310 CMR 10.55(4)(b) is summarized as follows:

- Surface area must be equal to the lost area;
- The replication area must have similar ground water and surface elevation as the lost area;
- The replication area must have a similar location relative to the bank as the lost area;
- The replication area must have an unrestricted hydraulic connection to the same water body or waterway as the lost area;
- The location of the replication area must be in the same general area as the lost wetland;
- The replication area must have at least 75% cover of native wetland plants within two growing seasons, and there must be temporary stabilization of exposed soil to avoid erosion.

Evaluation of Existing Conditions and Functions

The wetland regulations presume that Bordering Vegetated Wetlands serve the following public interests identified in the WPA: public or private water supply, ground water supply, flood control, storm damage prevention, prevention of pollution, fisheries, and wildlife habitat (land containing shellfish pertains to coastal wetlands only).

Existing Conditions

The applicant is proposing the roadway crossing within the existing disturb or trail/wetland crossing. An existing 12" clogged culvert is located beneath the existing trail that connects the bordering vegetated wetland. The upland area is wooded with typical New England species including oaks, maples and pines.

The limited project roadway crossing proposes to alter 1787 s.f. of bordering vegetated wetland between wetland flags 1B-3B, 5.5B-8B & 38.5B-43.5B. The wetland is a red maple swamp consisting of white pine (*Pinus strobus*) and red maple (*Acer rubrum*) in the overstory. The understory consists of glossy buckthorn (*Rhamnus frangula*), sweet pepperbush (*Clethra alnifolia*), highbush blueberry (*Vaccinium corymbosum*) and speckled alder (*Alnus rugosa*). The herbaceous layer consists of Canadian mayflower (*Maianthemum canadense*), cinnamon fern (*Osmunda cinnamomea*), sensitive fern (*Oncolea sensibilis*) and skunk cabbage (*Symplocarpus foetidus*).

The Reading Conservation Commission issued an Order of Resource Area Delineation (ORAD) on 8-29-19 verifying the resource areas on site.

Soils

The Web Soil Survey Middlesex County maps the site as Merrimac-Urban land complex and Swansea muck. Merrimac-Urban Land Complex consists of nearly level to undulating, deep, somewhat excessively drained Merrimac soils and areas of urban land. Although urban development has altered the soils and landscapes on these areas, the soil can be identified at widely separated points, and the general nature of the area can be determined. Broad delineations are made on the map. This map unit consists of about 75 percent Merrimac and similar soils and at least 25 percent urban land and other disturbed areas. Urban land consists of streets, parking lots, buildings, and other structures.

Swansea series consist of nearly level, deep (5+ ft.), very poorly drained organic soils in depressions and low flat areas of upland and glacial outwash plains and terraces. They formed in 16 to 51 inches of black, highly decomposed organic material (muck) with moderate or moderately rapid permeability, over sandy mineral material with very rapid permeability. They have a water table that is at or near the surface most of the year. Major limitations are related to wetness and low strength.

Replication Site Selection

The wetland replication is proposed north of the roadway between flags 31B-38B and consists of 3580 s.f. The applicant is providing a 2:1 ratio of replacement to lost area. The replication area is located near the lost wetland and will readily take because it is adjacent to the main wetland area. In addition, the adjacent natural wetland will aid in revegetation by opportunistic native species.

Hydrology, Soils, and Vegetation

The hydrology at the replication site is critical in controlling the plant community that develops, and many of the ecological functions of the site. There will be unrestricted hydraulic connection between the replicated wetland and water source. The replication area will be excavated to the groundwater elevation and fed by groundwater.

Replication Area Characteristics	Existing	Proposed
Estimated Seasonal High-Water Table	varies 1 ft-2 ft.	At grade
Duration of seasonal saturation	dry	year round
Expected seasonal inundation	dry	spring

These conditions were determined by soil auguring within the proposed wetland replication area and visual examination of the surrounding wetland.

Soil

An important factor in the success of a replication area is the proper use of soils either translocated (i.e. the relocation and reuse of hydric soils from the impacted resource area to the proposed replication area) from the impacted wetland or soil amendments brought from off-site.

Soil Translocation

Soil translocation is the preferred methodology for obtaining replication soils. Soils to be used at the replication site should be used immediately if possible or stockpiled for as little time as possible. While stockpiled, the soils should be kept wet and not be allowed to dry out. Contamination of these soils shall be prevented. They should be transported in vehicles that have been washed so that no exotic/invasive seeds from other sites get mixed in with them.

If additional soils are needed, then soils amendments from off-site may be used. Composted leaf litter will be mixed with soil as an amendment. A wetland scientist will inspect the soils prior to installation into the replication area. Prior to placement of hydric soils, the replication area shall be excavated to the appropriate sub grade elevations. Competent wetland/soil scientists will inspect the excavated area to verify appropriate depth and water table. Soil taken from areas where the invasive species are present shall always be avoided.

The development of hydric soils provides substrate for wetland plants, which in turn supports wildlife habitat. Hydric soil acts as a matrix to treat groundwater, adsorbs and absorbs pollutants, and supports vegetation that slows floodwaters. A minimum of 6-8 inches of topsoil will be required over the replication area.

Soil Amendments

Composted leaf litter is to be mixed with topsoil as an amendment. The objective is to obtain approximately 50% organic material/topsoil. After the soil is managed for proper consistency (e.g. loose to friable), the soil consistency and organic content shall be approved by the wetland scientist prior to placement in the wetland replication area. If proper consistency has not been achieved, further efforts shall be undertaken to achieve proper consistency. Surveying of subgrades and finished elevations should be conducted frequently during construction.

To supplement organic material, course woody debris (e.g. logs) shall be scattered on the replication area in between plantings to add structure and a long-term source of decaying organic material, to cover at least five percent of the area.

Vegetation

In accordance with 310 CMR 10.55, at least 75% of the surface of the replacement area must be reestablished with indigenous wetland plant species within two growing seasons. In order to accomplish this, the hydrology and soils conditions must be appropriate for each type of wetland vegetation (i.e. emergent, shrub, forested etc.) that is proposed in the replication area.

Wetland Replication Planting Plan

The applicant shall plant the following tree and shrub species in the 3580 s.f. wetland replication area between wetland flags 31B – 38B. The trees shall be planted 25 ft. on center and the shrubs 15 ft. on center.

A mixture of all the trees and a minimum of (4) different shrubs shall be planted. Species selection shall be based on cost and availability.

Common Name	Latin Name	Wildlife Benefits Food, Cover & Nesting
Trees:		
Red Maple	<i>Acer rubrum</i>	American robin, prairie warbler, American goldfinch, cardinal, grosbeaks, squirrels, chipmunk.
American Elm	<i>Ulmus americana</i>	Wild turkey, ruffed grouse, pheasant, sparrow, cardinal, American goldfinch, woodpeckers, American robin.
Gray Birch	<i>Betula populifolia</i>	Wild turkey, ruffed grouse, pheasant, chickadee, squirrels, titmouse.

Please see the shrub plantings on the next page.

Common Name	Latin Name	Wildlife Benefits Food, Cover & Nesting
Shrubs:		
Arrow-wood	Viburnum dentatum	Ruffed grouse, brown thrasher, American robin, eastern bluebird & gray catbird.
Sweet Pepperbush	Clethra alnifolia	Songbirds, waterfowl, upland gamebirds, small mammals.
Silky Dogwood	Cornus amomum	Wild turkey, white tailed deer, & gray catbird.
Spicebush	Lindera benzoin	Veery, ruffed grouse, American robin, gray catbird, wild turkey, thrushes, white tailed deer.
High bush blueberry	Vaccinium corymbosum	Blue jay, chickadee, titmouse, thrasher, eastern bluebird, ruffed grouse, American robin, mourning dove.
Common Winterberry	Ilex verticillata	Red-winged blackbird, American crow, American robin, rabbit, squirrel.

These are all perennial species that should adapt to the conditions on site and provide a good basic wetland community. These species were chosen because they're native to the area and shall readily take.

In addition, the applicant shall apply a New England Wetmix to the replication area. The New England Wetmix can be purchased at New England Wetland Plants, Inc. www.newp.com.

Invasive Species

If the following invasive species are found growing in replication areas, measures should be taken to eliminate them as soon as possible by hand weeding. Soils from existing wetlands containing these species should never be used in replication areas.

- Purple Loosestrife (*Lythrum salicaria*);
- Phragmites (*Phragmites australis*);
- Buckthorn, (*Rhamnus Frangula alnus*);
- Honeysuckles (*Lonicera spp.*);
- Garlic Mustard (*Alliaria petiolata*);
- Japanese Knotweed (*Polygonum cuspidatum or Fallopia Japonica*);
- Japanese Stilt Grass (*Microstegium vimineum*);
- Reed Canary Grass (*Phalaris arundinacea*);
- Bittersweet nightshade (*Celastrus Orbiculatus*);
- Black Swallow-wort (*Cynanchum nigrum*);
- Pale Swallow-wort (*Cynanchum rossicum*).

Trucks that have previously been on other sites should be washed prior to introduction to the replication site so that mud/dirt with exotic/invasive seeds is not inadvertently brought to the replication site.

Timing of Plantings

All plantings should occur at the end of the growing season or during dry conditions to minimize impact. Fall plantings should be done before the first frost. Shrubs and trees, however, may be planted up to November 15th, weather permitting.

Within two growing seasons, a viable plant community of indigenous species should be present, this includes some or all the following red maple (*Acer rubrum*) and American elm (*Ulmus americana*), arrowwood (*Viburnum dentatum*), high bush blueberry (*Vaccinium corymbosum*), common winterberry (*Ilex verticillate*) and sensitive fern (*Onoclea sensibilis*). In case of vegetation mortality, the Commission will be informed of plantings of nursery stock.

Wildlife Habitat

Wetland resource areas provide important food, shelter, migratory and over-wintering areas, and breeding areas for many birds, mammals, amphibians, and reptiles. Wetland characteristics that provide wildlife habitat include hydrologic regime, plant and soil composition and structure, topography and water chemistry.

Woody vegetation of varying heights adds structural diversity that is important for wildlife. While it is not immediately feasible to replicate a mature forested swamp complete with large trees and standing snags, replication projects will incorporate shrubs and saplings so that woody components will develop over time, as well as emergent areas and hummocks. It is also beneficial to provide water at varying depths, times and duration.

The wetland replication area should have approximately 5% woody debris consisting of stumps or logs, three to four feet in length and six inches or larger in diameter.

Erosion Control

Erosion controls will be placed along the boundary of the wetland replication area. Upon completion of the replication area, installation of siltation fencing between the replication area and the adjacent upland will be provided to prevent silt from entering the replication area. Prior to permanent establishment of vegetation in the replication area, soils will be temporarily stabilized to prevent impacts from erosion by mulching and seeding with a wetland seed mixture until re-establishment of wetland vegetation occurs. Hydroseeding is a valuable erosion control measure and may discourage colonization by invasive species.

All embankment slopes adjacent to wetland replication areas should have slopes no greater than 2H:1V unless stabilized by structural means. Bioengineering stabilization methods are recommended for slope stabilization.

Once the final grades are established, the area shall be inspected by the wetland scientist and landscaping should be completed as soon as possible to minimize erosion. All exposed soils will be stabilized using seed-free mulch or other appropriate erosion control measures in the event seasonal conditions result in a delay in planting. If the site is excavated to the subgrade in the fall and a delay is inevitable, consideration should be given to stabilizing the site for winter and

conducting final grading in the spring. Use of hydroseeding has been found to stabilize a site quickly and may possibly hinder growth of invasive species. Erosion control measures such as hay bales and silt fences shall be removed as soon as the site is stable to allow for proper hydrologic conditions.

Monitoring Requirements

Monitoring is critical in wetland replication efforts due to the complex issues that can arise when trying to replace the specific ecological conditions of wetlands. Monitoring to ensure that the project is built according to the design specifications will ensure that the most common cause of failure is avoided. A project monitor (preferably a qualified professional with training in wetland science) with a minimum 5 years of experience in the construction of wetland replication areas and general construction practices should be on-site to monitor the excavation, grading, and planting of the replication area (at the end of the first growing season, a professional with less than 5 years experience in wetland replication construction may conduct the monitoring if supervised by a professional with at least 5 years experience). The project supervisor or monitor should be present during the most important tasks in replication construction including:

1. Before excavation or erosion control installation work begins to inspect site flagging;
2. During excavation of the altered area if vegetation is to be translocated to the replication area to ensure survival of the plantings;
3. Before soil translocation or addition into the replication area to inspect excavated elevations and likely post-construction ground water elevations for the replication area;
4. After each stage of grading work is completed to inspect finished elevations;
5. During planting and seeding and after the first month of the growing season to inspect propagation techniques;
6. After one growing season to observe vegetation development and regulatory compliance;
7. After two growing seasons to determine vegetation development and regulatory compliance
8. After subsequent growing seasons, if a greater than 2-year monitoring program is required.

A monitoring report shall be submitted in the late spring and at the end of each of the first two growing seasons. Monitoring will be required until regulatory compliance goals are met. Reports should include recommendations for additional plantings should the replication area appear to be unlikely to meet the 75% reestablishment standard (note that the 75% revegetation may include volunteer hydrophytic species as well as replacement plantings and seeding). Monitoring for invasive species should also be conducted and any invasive handpicked before becoming widespread and established. The final monitoring report should be accompanied by an as-built plan. The final monitoring report should indicate the conditions at the replication site (including stabilization of embankments) and describe in detail how the functions of the impacted wetland have been replaced by the development of the replication site.

1. An as-built plan stamped by a R.L.S. or P.E. should be submitted which documents the construction of the replication area. The size of the replication area should be documented as consistent with the size proposed.

2. A site visit should be conducted prior to issuing a Certificate of Compliance. The replication area should be compared with the design plans and the Order of Conditions to ensure that it has been constructed as proposed and wetland interests have been replicated.
3. At least 75% of the surface area of the replication site should be reestablished with indigenous wetland species within two growing seasons. A qualified wetland professional should certify to the plant species composition of the area and compliance with this condition. The qualified wetland professional should also certify that the plants proposed in the planting plan are those that were planted, in the correct number, and the spacing of the plantings. The Order of Conditions may be extended if it is about to expire but the replication area has not fully established itself through two growing seasons. Each different layer of wetland vegetation (forested, shrub, herbaceous etc.) should be checked to ensure that it is surviving as designed and that the hydrology is appropriate.
4. Vegetation should be checked to ensure that no invasive species are colonized in the replication area. If so, measures should be taken to eliminate the invasive species.
5. All surrounding buffer zone areas should be stabilized. Inspections should be conducted of erosion control devices such as hay bales and silt fences and those devices should be removed once the site is stabilized. A Certificate of Compliance should not be issued until all erosion controls are removed and any soils disturbed by their removal stabilized.

If the developer or landscaper performing work has any questions, please contact Norse Environmental Services Inc.

Small Lane Roadway Extension

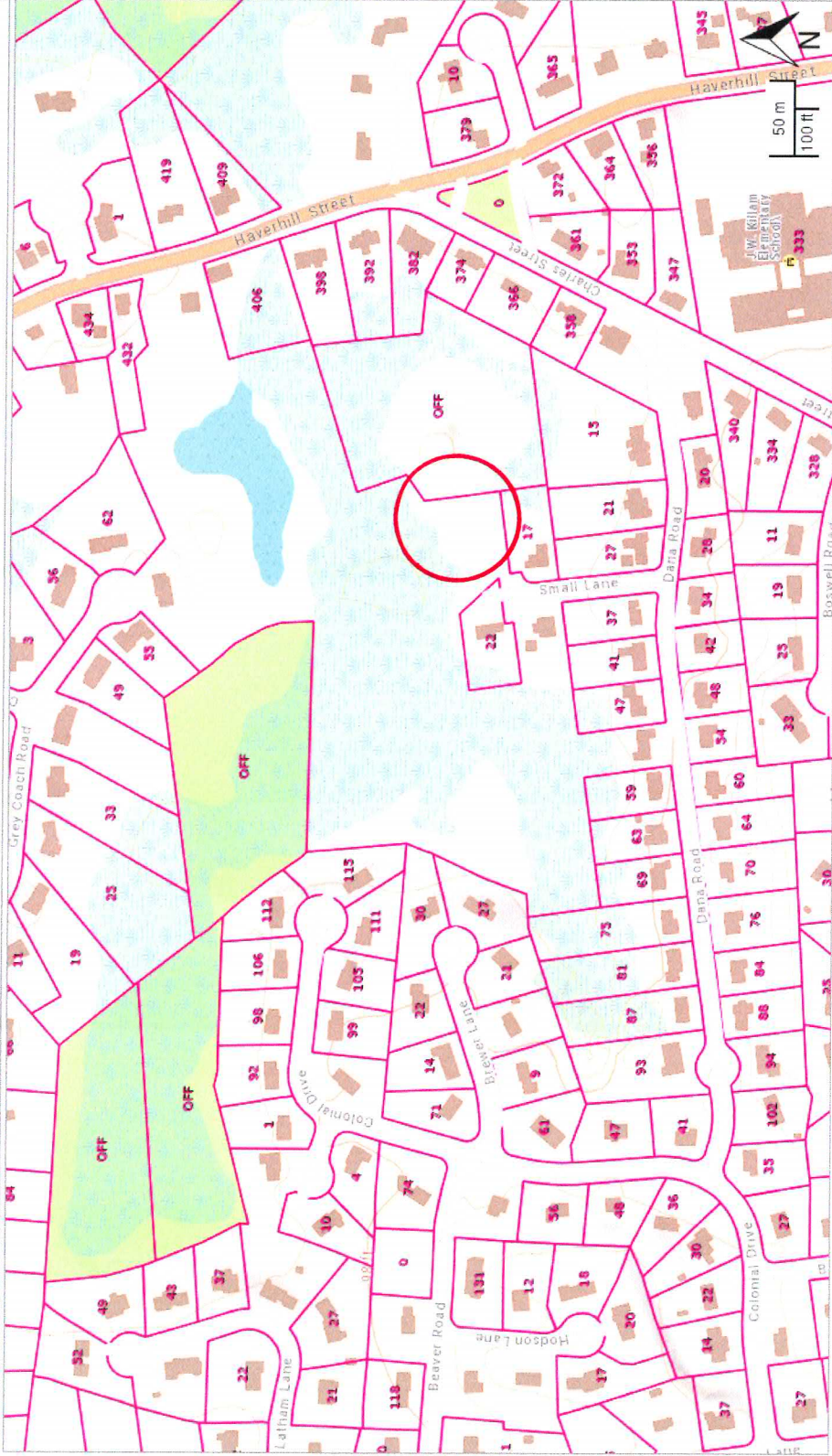


**MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT**

Town of Reading, MA makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 1/1/2018
Data updated 1/1/2018

Small Lane Roadway Extension - Reading, MA



Oliver OLIVER: MassGIS's Online Mapping Tool OLIVER Updates

Search data by text

Available Data Layers

Tiled Layers

- State Facilities
- Census 1990
- Census 2000
- Census 2010
- Coastal and Marine Features
- Conservation / Recreation
- Areas of Critical Environmental
- Community Preservation Act
- Natural Heritage Data
- Biolmap2
- NHESP Ecogreigns
- NHESP Certified Vernal Poo
- NHESP Estimated Habitats

Active Data Layers

Check all Uncheck all

- USGS Topographic Maps
- Tax Parcels for Query
- Detailed Features
- Tax Parcels for Display
- Structures

Legend

Tax Parcels for Query

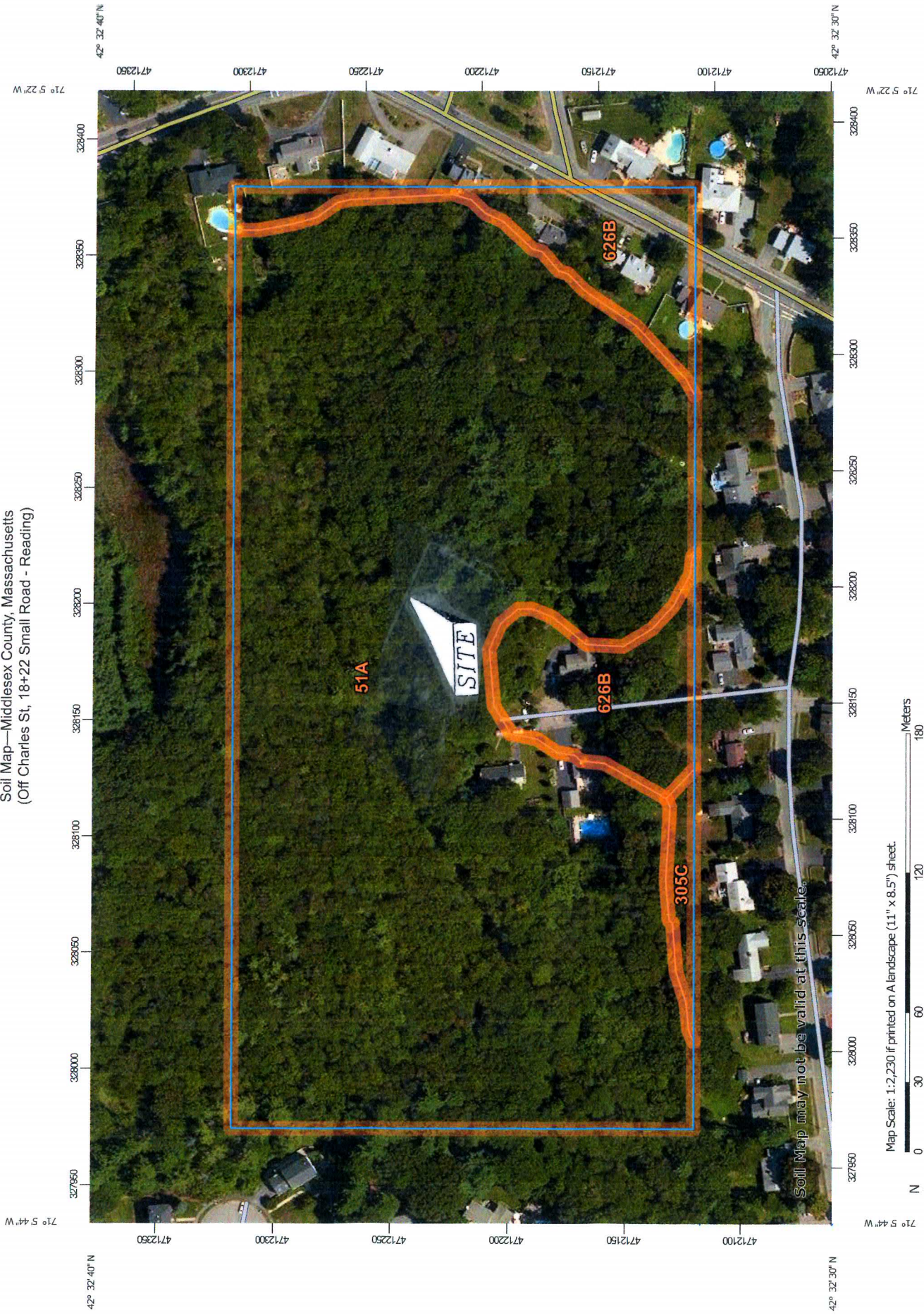
0 50 100 ft

234,083 from 07, 230, 264

MassGIS Topographic Features Basemap


Basemaps

Soil Map—Middlesex County, Massachusetts
(Off Charles St, 18+22 Small Road - Reading)



Soil Map may not be valid at this scale.

MAP LEGEND

-  Area of Interest (AOI)
- Soils**
-  Soil Map Unit Polygons
-  Soil Map Unit Lines
-  Soil Map Unit Points
- Special Point Features**
-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
- Slide or Slip
- Sodic Spot
-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features
- Water Features**
-  Streams and Canals
- Transportation**
-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads
- Background**
-  Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:25,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Middlesex County, Massachusetts
Survey Area Data: Version 18, Sep 7, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 29, 2014—Sep 19, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

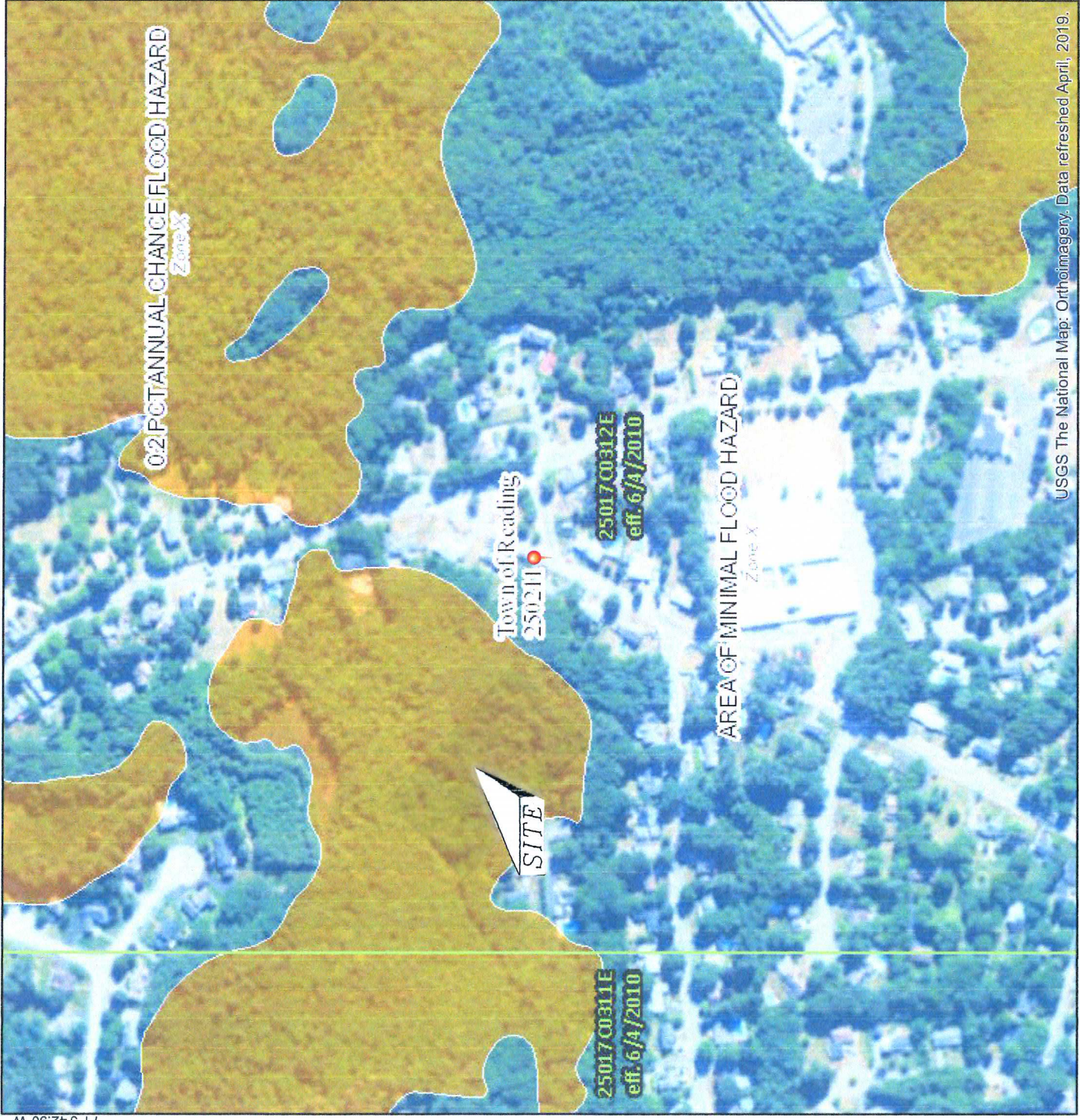
Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
51A	Swansea muck, 0 to 1 percent slopes	17.1	85.9%
305C	Paxton fine sandy loam, 8 to 15 percent slopes	0.2	1.2%
626B	Merrimac-Urban land complex, 0 to 8 percent slopes	2.6	12.9%
Totals for Area of Interest		19.9	100.0%

National Flood Hazard Layer FIRMette



42°32'47.77"N



71°5'5.45"W

USGS The National Map: Orthoimagery. Data refreshed April, 2019.



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- SPECIAL FLOOD HAZARD AREAS**
 - Without Base Flood Elevation (BFE) Zone A, V, A99
 - With BFE or Depth Zone AE, AO, AH, VE, AR
 - Regulatory Floodway
- OTHER AREAS OF FLOOD HAZARD**
 - 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
 - Future Conditions 1% Annual Chance Flood Hazard Zone X
 - Area with Reduced Flood Risk due to Levee. See Notes. Zone X
 - Area with Flood Risk due to Levee Zone D
- OTHER AREAS**
 - Area of Minimal Flood Hazard Zone X
 - Effective LOMRs
 - Area of Undetermined Flood Hazard Zone I
- GENERAL STRUCTURES**
 - Channel, Culvert, or Storm Sewer
 - Levee, Dike, or Floodwall
- OTHER FEATURES**
 - Cross Sections with 1% Annual Chance Water Surface Elevation
 - Coastal Transect
 - Base Flood Elevation Line (BFE)
 - Limit of Study
 - Jurisdiction Boundary
 - Coastal Transect Baseline
 - Profile Baseline
 - Hydrographic Feature
- MAP PANELS**
 - Digital Data Available
 - No Digital Data Available
 - Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/8/2019 at 2:46:23 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

