

Notice of Intent (NOI) Application

Proposed Construction of
a Swimming Pool at a
Single Family Home

65 Boren Lane
Boxford, MA 01921

October 22, 2020

Prepared for:

Joseph & Caroline Reynolds
65 Boren Lane
Boxford, MA 01921

Design Team:

Donohoe Survey Inc.
363 Boston Street, Topsfield, MA 01983

Ulrich Landscape Collaborative
156 Cabot Street Unit 2A, Beverly, MA 01915

DeRosa Environmental Consulting, Inc.
167 Main Street, PO Box 716, Rowley MA 01969



October 22, 2020



BY ELECTRONIC MAIL & HAND DELIVERY

Boxford Conservation Commission
Town Hall
7A Spofford Road
Boxford, MA 01921

167 Main Street
P. O. Box 716
Rowley Massachusetts
USA

978.948.7717 Office

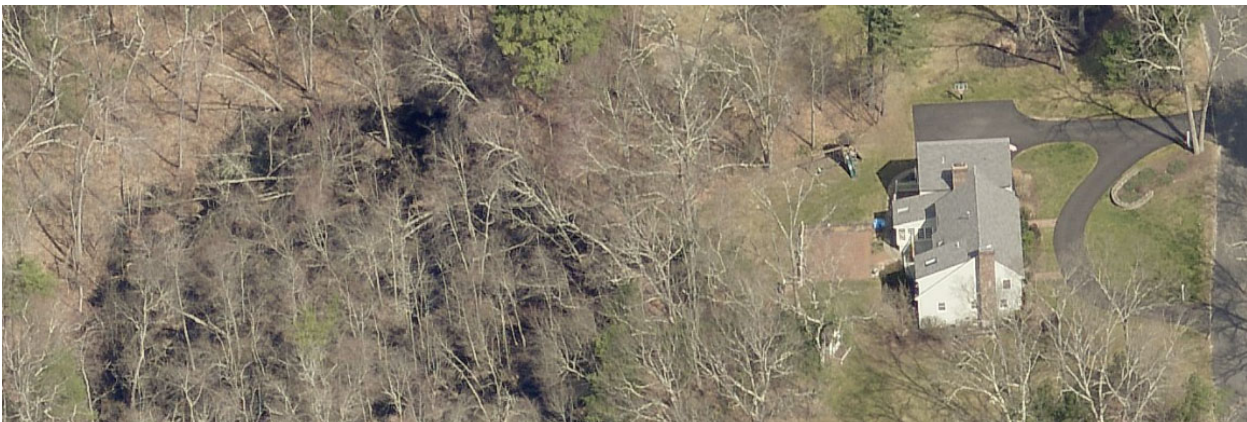
derosaenvironmental.com

Attn: Mr. Ross Povenmire, Conservation Director
(978) 887-6000 ext.181
dircons@town.boxford.ma.us

**RE: Notice of Intent (NOI) Application
Proposed Construction of a Swimming Pool at a
Single Family Home**

**Reynolds Residence
65 Boren Lane | Boxford, Massachusetts**

Dear Mr. Povenmire and Members of the Commission,
Our firm has prepared the following Notice of Intent (NOI) Application to meet the requirements of the Massachusetts Wetlands Protection Act (MGL Ch. 131 Sec. 40) and its Regulations (310 CMR 10.00, et seq) (the "Act") and the Town of Boxford Wetlands Protection Bylaw, Town Code Ch. 192 & 357 (the "Bylaw"). We were authorized to prepare this filing at the request of Joseph and Caroline Reynolds, owners of the property located at 65 Boren Lane in the Town of Boxford, Massachusetts, known as Assessor's Map 29-01, Lot 26. This Notice of Intent (NOI) requests the approval of the Commission for the construction of a swimming pool at a single family home.



Aerial view of the existing dwelling and the Bordering Vegetated Wetland at 65 Boren Lane, Boxford

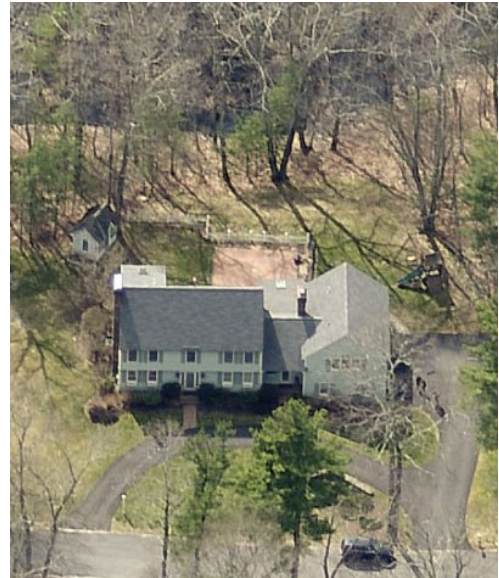
Executive Summary

Site Description

The subject property is located on an approximate 2.002 acre parcel west of Boren Lane built in 1990 (the "Site") (Figure 1). The Site is bordered by private residences to the north, east and south and a bordering vegetated wetland associated with an intermittent stream to the west. Beyond the bordering vegetated wetland are more private residences.

Currently existing on site is a single family dwelling and attached garage, driveway, patio, shed, and fence. The majority of the rest of the site exists as lawn. The project site is limited to previously disturbed areas and lawn.

Portions of the proposed work are located within the 100-foot buffer zone associated with bordering vegetated wetland and within the 75-foot setback under the local Bylaw (Figure 2a). According to the Town of Boxford Regulations for Resource Areas and Buffer Zones (375-98(B)(2)), since the lot was created prior to 1994, the project is limited to lawn and pre-disturbed areas, and mitigation is offered, proposed work within the 75-foot setback is rebuttable and open for discussion.



View of the existing dwelling. The project site is located behind the dwelling.

- (2) This presumption is rebuttable and may be overcome only for the conversion of lawn or other significantly altered land to a structure requiring a building permit when said structure is accessory to an existing single-family dwelling or a structure for seasonal use legally in existence as of May 19, 1994 (the original issue date of these regulations), or when a wetlands permit application was filed for said single-family dwelling or a structure for seasonal use on or before May 19, 1994, provided mitigation would be sufficient to protect resource area values, by a finding by the Commission, supported by a preponderance of the credible evidence, showing that the work proposed within the buffer zone, closer than the tabulated minimum setback distances, will not result in the alteration of any wetlands resource area. The burden for overcoming this presumption is upon the applicant; however, the Commission may include consideration of credible evidence from any source presented at a public meeting or public hearing in weighing the preponderance of the credible evidence. The proposed design shall comply as much as possible with the minimum setback distances specified in the Minimum Setback Distance Chart.

The Boxford Wetlands Protection Bylaw regulates work within 100 feet of inland resource areas. All proposed activities have been designed to avoid, minimize and mitigate impacts to down gradient wetland resource areas according to the provisions of the appropriate regulations.

Project Summary

In brief, the proposed project includes the following elements:

- Construction of a Swimming Pool and Appurtenances
- Tree Removal & Landscape Plan
- Shed Relocation
- Conversion of lawn to native species planting to provide mitigation for proposed work within the restrictive buffer zones

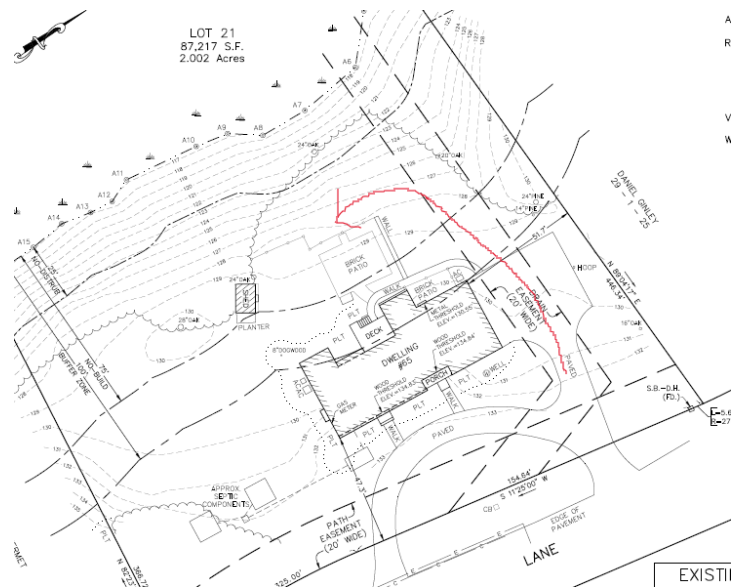
The proposed work is located within previously disturbed areas and lawn areas. No activity is proposed in any naturalized areas. Portions of the proposed work is located within the 100-foot Buffer Zone to bordering vegetated wetland protected under the MA Wetlands Protection Act and the 75-foot Pool Setback, protected under the Town of Boxford Wetlands Protection Bylaw. The proposed project will result in a total increase of impervious area by approximately 1,089 square feet within the 75-foot Pool Setback to bordering vegetated wetland. Impervious surface area is reduced by 28 square feet within the outer 100-foot Buffer Zone. As a result, the total increase of impervious area is approximately 1,061 square feet. Accordingly, approximately 2,178 square feet of mitigation is proposed. Mitigation is proposed in the form of converting lawn to native plantings within the 75-foot Pool Setback and is offered at a 2:1 ratio of plantings to disturbance. The goal of the planting plan is to substantially improve the ecological function and value of the existing site.

The following report provides a detailed description of wetland resource areas within the project area and key project elements.

Access & Stockpile Area

Access to the project area would be from the existing paved driveway north of the dwelling,

Any stockpiled materials will be stored on the existing pavement and driveway, until re-used on site or properly disposed of at a licensed facility.



Sketch of the access route

Project Elements

Construction of Swimming Pool & Appurtenances

The proposed project includes the construction of a swimming pool and appurtenances to a single family home. The improvements are proposed in previously disturbed areas and lawn west of the existing dwelling (Figure 2a & 2b).

Swimming Pool

The proposed swimming pool is a 17-foot by 34-foot in-ground swimming pool located behind the dwelling (Figure 2a). The pool is supported with 2-inch thick bluestone coping and edging. Portions of the swimming pool are within the 75-foot setback and 100-foot buffer zone to bordering vegetated wetland.



Location of the proposed pool and appurtenances. Existing patio to be removed (Figures 2a & 2b)

In addition, a 6-inch drip edge and perforated pipe is proposed to direct pool overflow and runoff to a proposed drywell located in the outer 100-foot buffer zone to bordering vegetated wetland (Figure 2a).

Bluestone Stepping Stones, Brick Terrace, Retaining Wall, Deck, Pea Stone Patio, Fence & Outdoor Shower

The project proposes to install four (4) 2-foot by 2-foot bluestone stepping stone walkways. Two (2) walkways lead from the dwelling to the pool area, one (1) leads from the pool area to the relocated shed and one (1) leads from the side yard, to the pool area and shower. Three (3) of the bluestone stepping stone walkways are located in the outer 100-foot buffer zone to bordering vegetated wetland, and one (1) is located within the 75-foot No-Build Setback.

The proposed pool is to be surrounded by a dry laid brick terrace. The terrace is to be supported by a proposed field stone retaining wall on the downgradient side of the terrace. Portions of the brick terrace are located within the outer 100-foot buffer zone to bordering vegetated wetland and portions are located within the 75-foot No-Build Setback. The proposed retaining wall is also located within the 75-foot No-Build Setback.

The two (2) existing brick patios and walkways are proposed to be removed prior to construction. A new pea stone patio with steel edging is proposed to be installed east of the pool area, adjacent to the western side of the dwelling. The proposed pea stone patio is located within the 100-foot buffer zone to bordering vegetated wetland.

The existing deck is to be removed and replaced with a new larger deck within the footprint of the existing deck and adjacent disturbed area. The deck will also have wood steps and a bluestone landing.

Portions of the proposed deck are located within the 100-foot buffer zone to bordering vegetated wetland.

The project proposes to remove the existing fencing and install a new pool fence that will act as the limit of usable space. In between the fence and the wetland will be the mitigation plantings and newly establish “No-Disturbance Zone” demarcated with a Conservation Monument. Portions of the proposed fence is located within the 100-foot buffer zone to bordering vegetated wetland and portions are located within the 75-foot No-Build Setback.

The project also proposes to install an outdoor shower within the 100-foot buffer zone to bordering vegetated wetland.

Tree Removal & Landscape Plan

The project proposes to remove a stand of three (3) Oak trees within the 75-foot No-Build Setback. The trees have been inspected and reported hazardous by professional arborists at Professional Environmental Services, LLC. The arborists recommended the removal of the trees for their declining health (Appendix C). Four (4) red maples are proposed to be installed to replace the oak trees (Figure 2d). Additionally, the project proposes to install an entire landscape plan that includes a mix of native and ornamental canopy, shrub, and herbaceous plantings within the project area (Figure 2c). Portions of the landscape plan are located within the 100-foot buffer zone to bordering vegetated wetland and portions are within the 75-Foot No-Build setback. The landscape plantings are located on the pool side of the fence and is separate from the mitigation plantings (Figure 2d).

Shed Relocation

A shed currently exists on site completely within the 75-Foot No-Build setback. The project proposes to relocate the shed to better fit with the new brick patio. In this way, the shed will move further from the resource area, leaving only a portion within the 75-Foot No-Build setback (figure 2a & 2b). The footprint of the old shed location will be loamed and seeded to convert into lawn.

Implementation of a Mitigation Planting Plan

To compensate for the proposed activities within the local No-Build Zone to bordering vegetated wetland, the project proposes to implement a Mitigation Planting Plan in the form of converting lawn to native plantings along the slope in the back of the dwelling beyond the proposed pool fence, and adjacent to the existing tree line (Figure 2d). The Mitigation Planting Plan incorporates native tree, shrub and herbaceous plantings within the lawn (Figure 2d). In this way, areas adjacent to the bordering vegetated wetland will transform from providing little to no ecological services, to a naturalized buffer providing food, shelter, nest sites and overwintering habitat for wildlife. The project intends to install and maintain native species to naturalize the area and improve wildlife habitat function and value particularly for song birds as well as pollinators including butterflies and bees.

The proposed mitigation area is located within the 25-foot No Disturb Zone and 75-foot No- Build Zone to bordering vegetated wetland (Figure 2d). Details of the Mitigation Planting Plan are discussed in subsequent sections of this application.



Location of the proposed conversion of lawn to native plantings (Figures 2d)

Existing Wetland Resource Areas

Portions of the proposed work at the Site will occur within the buffer zones to bordering vegetated wetland. Therefore, the project which is the subject of this application is within the jurisdiction of the Boxford Conservation Commission under the Act and the Bylaw and requires pre-construction review by the Commission.

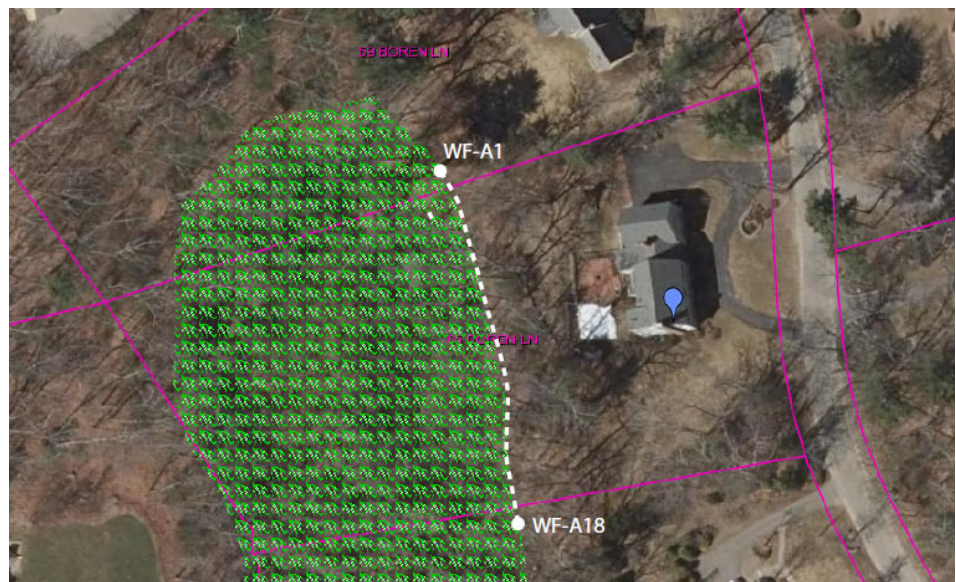
Bordering Vegetated Wetland – 310 CMR 10.55

Bordering vegetated wetland is defined under the Act as freshwater wetland which "...border on creeks, rivers, streams, ponds, and lakes." On July 2, 2020, our firm delineated the boundaries of the existing bordering vegetated wetland in accordance with the methodology described in the Massachusetts Wetlands Protection Act (MGL Ch. 131 Sec. 40) and its Regulations at 310 CMR 10.00, et seq., as well as guidance documents prepared by the MADEP including The Guide to Inland Vegetated Wetlands in Massachusetts, dated March 1988, and Appendix G of Delineating Bordering Vegetated Wetlands Under the Massachusetts Wetlands Protection Act, dated March 1995.

The boundaries of bordering vegetated wetlands were flagged in one (1) consecutive alphanumeric series numbered:

- WF-A1 to WF-A18

Vegetation, soils, hydrology, a clear break in slope along with other indicators were used to determine the boundary of the wetland. In addition, an intermittent stream is associated with the bordering vegetated wetland on the western portion of the property. Accordingly, it is our professional opinion that the boundary of bordering vegetated wetland delineated in the field accurately



represents the definition of Bordering Vegetated Wetland described at 310 CMR 10.55 et seq.

The Act and the Bylaw identify the buffer zone as the jurisdictional area which extends 100-feet from the edge of a wetland boundary. The area of buffer zone that is regulated by the Act and the Bylaw and falls within the limits of work is associated with the delineated bordering vegetated wetland on the western portion of the property. Portions of the proposed work are located within this buffer zone (Figure 2a & 2b).

Additionally, the Bylaw establishes a 75-Foot Pool Setback to bordering vegetated wetland. Accordingly, a Waiver Request has been drafted below requesting that the Commission issue a finding allowing the work to be conducted within the restricted zone established under the local Bylaw.

Bordering Land Subject to Flooding – 310 CMR 10.57

Bordering Land Subject to Flooding is defined under the Massachusetts Wetlands Protection Act as “an area which floods from a rise in a bordering waterway or water body. Such areas are likely to be significant to flood control and storm damage prevention”. Since the Site is not located within the Federal Emergency Management Agency (FEMA) flood zone, Bordering Land Subject to Flooding is not evaluated as part of this application (Figure 6).

NHESP Rare and Endangered Species Estimated Habitat

The project is not located within the boundaries of Priority or Estimated Habitats of Rare Species as determined by the Massachusetts Natural Heritage and Endangered Species Program (NHESP - Figure 5). Therefore, a review of this application is not required by the NHESP and a copy of the application has not been forwarded to them.

Mitigation Planting Plan

Plantings of various species adapted to the local habitat will be installed in the mitigation area (Figure 2d). Specific locations of these plantings will be chosen at the time of installation based on site conditions (Figure 2d). All planted species will be native, tolerant to upland soils and will serve to substantially improve the function and value of the Bordering Vegetated Wetland (BVW). All plantings are to be installed by hand within the existing landscape to maintain soil stability unless otherwise noted. Plantings will be interspersed across the mitigation area and not in a uniform “on-center” planting schedule (Figure 2d). The following is a description of the proposed methodology to install native plant species to substantially improve the function and value of the property.

Proposed Plantings

Native plants installed in this area will include canopy, shrub and herbaceous species to create a diversity, dimension and improved wildlife habitat.

Canopy and Shrub Plantings

Four (4) red maple (*Acer rubrum*) trees will be planted within the buffer zone of the wetland to mitigate for the trees to be removed (Figure 2b & 2d). Gator Bags or equivalent will be placed around the newly planted trees to ensure watering and establishment, if necessary. A shrub layer consisting of grey dogwood (*Cornus racemosa*), highbush blueberry (*Vaccinium corymbosum*), and sweet pepperbush (*Clethra alnifolia*) will be installed as 3-gallon containerized nursery stock.

Herbaceous Plantings

The herbaceous plant community will consist of rough goldenrod (*Solidago rugosa*), purple coneflower (*Echinacea purpurea*), black eyed Susan (*Rudbeckia hirta*), white yarrow (*Achillea millefolium*), and pearl everlasting (*Anaphalis margaritacea*). These native plant species are adapted to upland conditions and will improve the existing landscape. These species will be installed as one-gallon, containerized nursery stock. In addition, creeping red fescue (*Festuca rubra*) seed mix will be used as a lush groundcover. Seeding will occur after plantings have been installed, and the entire mitigation area will be lightly raked to cover the seeds with soil.



Black-eyed Susans (Rudbeckia hirta) are self-seeding, daisy-like flowers that are a larval host for some butterfly species as well as a source of food for birds and butterflies.

This planting plan will improve the area's capacity to provide ecosystem functions including food, cover, and nest sites for wildlife species. All species to be installed are native to this region and are adapted to the surrounding soils and hydrology.

Post Construction Monitoring

Competent wetlands professionals should oversee plant layout and installation and provide follow-up and aftercare services. The planting area will be visited at least once each month for the first 4 months of the growing season to ensure that plants are established and growing. After the first growing season the restoration area will be visited quarterly until the 75% cover performance standard is achieved. It is proposed that the mitigation area be reviewed prior to the issuance of a Certificate of Compliance on or before the two (2) year regulatory provision to ensure that plant material has established itself as required under 310 CMR 10.55(4)(b)(6).

Any plant material that has failed to establish itself and has impaired the restoration area from providing the necessary plant species functions will be replaced in kind or substituted for a species that is establishing more efficiently. These species will be chosen based on the judgment of the restoration professional and the success of other plantings installed in the restoration areas.

Irrigation During Establishment Period

The area will be irrigated, if necessary, by the property owner to ensure that the planted material and seed material is established. All seed material will be hand sown.

Jurisdiction and Procedural Matters

In addition to the Massachusetts Wetlands Protection Act, the project is subject to the rules and regulations outlined in the Town of Boxford Wetlands Protection Bylaw. The Bylaw regulates a “Pool Setback” measured 75 feet horizontally landward from the following resource areas: salt marsh, freshwater wetland, vernal pool, top of coastal bank, and top of bank of any stream or river. Construction or installation of structures within the Setback is not permitted. As previously discussed, portions of the project are located within this restrictive buffer zone. We suggest that the project has been designed in every reasonable way to meet the performance standards set forth in the Bylaw and to minimize and mitigate impacts to the resource areas. In order to demonstrate that this project has been designed to minimize and mitigate impacts, we have drafted an alternatives analysis below and draft language on how the project will have no significant adverse impact on the bordering vegetated wetland and its buffer zone.

No Significant Adverse Impact

The proposed project has been designed to minimize and mitigate impacts to the bordering vegetated wetland on site. The project has been minimized by confining the proposed project to previously disturbed areas and lawn areas. Lawn provides minimal food, nesting sites, shelter, or overwintering areas for wildlife. Species diversity in lawn areas is low and does not contribute to a stable or functioning ecological community. Accordingly, the proposed project will not impede on the site’s capacity to provide ecological services, because the area is lacking important habitat features as it currently exists. As a result, the project will have no adverse effect.

In fact, since the project proposes an extensive Mitigation Planting Plan (2:1 ratio of mitigation to increased impervious surface area) that intends to convert the lawn to a naturalized buffer with native canopy, shrub and herbaceous species, the project will improve the site’s capacity to provide ecological services and improve the function and value of the resource area.

Alternative Analysis

Alternative options for the proposed project were considered while under design. It has been determined that there are no other feasible options for the proposed project that would have less impact to the resource area than the presented project.

1. **Alternative Location-** Constructing the pool in the side yard, outside of the 75-foot No-Build Setback was considered but was deemed impracticable because of the architecture of the house, and because of the existing septic system.

- a. Existing Septic System – the house was built in 1990 with Septic Pits. In order to construct the pool in the side yard, large, heavy trucks carrying gravel would need to cross over the septic pits which would be dangerous to the pits. A statement from Gregory P. Bernard, Registered Sanitarian is included in this application that states he highly recommends not driving over this system (Appendix B). The project has been designed to avoid the septic pits.
 - b. Existing Architecture – The proposed project is designed to be confined to previously disturbed areas and lawn. It has also been designed to flow with the existing house layout. Any other location would diminish the intent of the project, and the homeowners would be less likely to pursue the work.
2. **Alternative Size-** Reducing the size of the pool was explored. This alternative was deemed impracticable because reducing the size of the pool would still keep the project in the 75-foot No Build Setback. Accordingly, this option would have no lesser impact than the preferred option.

Abutter Notification

Abutters within 250 feet of the property line of this parcel (Assessor's Map 29-01, Lot 26) have been notified in writing by Certificate of Mailing in accordance with the Massachusetts Department of Environmental Protection (MADEP) policy regarding such notice, which is in effect for Notice of Intent applications filed after April 13, 1994. Proof of this notice and a copy of the letter sent (typical) accompany this filing, as required (see Appendix A).

Forms and Fees

Fee calculation sheets, fee transmittal forms, and photocopies of payment are attached. A single (1) copy of this application has been forwarded to the MADEP/NERO to await the issuance of a file number. In addition, a copy of the Fee Transmittal Form and the state filing fee has been sent to the MADEP Lock Box in Boston, Massachusetts via Certificate of Mailing.

Stormwater Management

The project proposes activities on a single-family lot. Accordingly, the Stormwater Management Standards (Volume 1, pages 1-3, [MADEP Stormwater Management Policy Handbook](#)) do not apply.

Since there is an increase in impervious area proposed within the No-Build Zone, a drip edge and drywell is proposed to manage any pool runoff (Figure 2a & 2b).

Erosion & Sedimentation Control Plan

Configuration of Siltation Barriers

Prior to any earthwork at the Site, an erosion control barrier consisting of Groundscapes Filtermitt (12 or 18-inch tube) or equal will be installed down gradient of the proposed area of activity to prevent any erosion/sedimentation to the downgradient resource areas (Figure 2a).

These siltation barriers will remain in place during the entire construction process and until all exposed soils are completely re-vegetated and/or the Boxford Conservation Commission or their Agent approve removal of the barriers.



Example of the proposed siltation control barrier consisting of Groundscapes Filtermitt (12 or 18 inch tube) or equal

Limits of Work

The siltation barrier line will serve as the limit of disturbance for this project. Heavy equipment will not be allowed to enter any wetland resource area, and will be stored as far from resource areas as possible.

Request for Issuance of an Order of Conditions

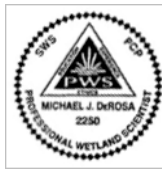
The proposed project has been designed to avoid impacts to existing wetland resource areas as defined under the Massachusetts Wetlands Protection Act (MGL CH. 131 Sec. 40, et seq.) and the Town of Boxford Wetlands Protection Bylaw, Town Code Ch. 192 & 357. Since the interests of the Act and the Bylaw have been addressed as part of this plan, we request that an Order of Conditions be issued so that the Reynolds may commence with the construction of the proposed project.

Should you have any questions, or would like to arrange a site walk to review the project, please don't hesitate to call us at (978) 948-7717.

Respectfully submitted,
DeRosa Environmental Consulting, Inc.



Michael J. DeRosa, Principal
Wetland Ecologist, LSP, LEED AP, PWS



Evin Guvendiren
Natural Resource Economist

cc: MADEP/NERO, Wetlands Division, 205B Lowell Street, Wilmington, MA 01887
Joseph & Caroline Reynolds (by email)
Ulrich Landscape Collaborative (by email)

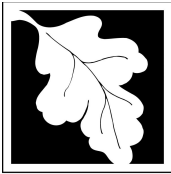
Forms

[Notice of Intent \(NOI\) WPA Form 3](#)

[Wetland Fee Transmittal Form](#)

[Boxford Conservation Commission Fee Schedule](#)

[Copies of Filing Fee Checks](#)



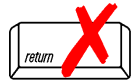
Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
Boxford Wetlands Protection Bylaw, Town Code Ch. 192 & 375

MassDEP File Number
Document Transaction Number
Boxford
City/Town

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



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

A. General Information

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

65 Boren Lane	Boxford	01921
a. Street Address	b. City/Town	c. Zip Code
Latitude and Longitude:	42.67176 N	70.98972 W
29-01	d. Latitude	e. Longitude
f. Assessors Map/Plat Number	26	
	g. Parcel /Lot Number	

2. Applicant:

Joseph & Caroline	Reynolds	
a. First Name	b. Last Name	
c. Organization		
65 Boren Lane		
d. Street Address		
Boxford	MA	01921
e. City/Town	f. State	g. Zip Code
617-571-5176	reynoldsjoseph@gmail.com	
h. Phone Number	i. Fax Number	j. Email Address

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

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

4. Representative (if any):

Michael	DeRosa	
a. First Name	b. Last Name	
DeRosa Environmental Consulting, Inc.		
c. Company		
167 Main Street PO Box 716		
d. Street Address		
Rowley	MA	01969
e. City/Town	f. State	g. Zip Code
978-948-7717	michaelderaj@gmail.com	
h. Phone Number	i. Fax Number	j. Email address

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

\$110	\$42.50	\$67.50
a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid



WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
Boxford Wetlands Protection Bylaw, Town Code Ch. 192 & 375

Provided by MassDEP:	
MassDEP File Number	_____
Document Transaction Number	_____
Boxford	_____
City/Town	_____

A. General Information

(continued)

6. General Project Description:

Proposed construction of a swimming pool

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

- | | |
|---|---|
| 1. <input type="checkbox"/> Single Family Home | 2. <input 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)

2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(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:

Southern Essex	_____	b. Certificate # (if registered land)	_____
a. County		0343	
35129	_____	d. Page Number	_____
c. Book			

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.



WPA Form 3 - Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
Boxford Wetlands Protection Bylaw, Town Code Ch. 192 & 375

Provided by MassDEP:
MassDEP File Number
Document Transaction Number
Boxford
City/Town

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

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

Table with 3 columns: Resource Area, Size of Proposed Alteration, Proposed Replacement (if any). Rows include Bank, Bordering Vegetated Wetland, Land Under Waterbodies and Waterways.

Table with 3 columns: Resource Area, Size of Proposed Alteration, Proposed Replacement (if any). Rows include Bordering Land Subject to Flooding, Isolated Land Subject to Flooding.

- 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.



WPA Form 3 - Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
Boxford Wetlands Protection Bylaw, Town Code Ch. 192 & 375

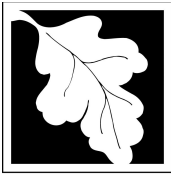
Provided by MassDEP:
MassDEP File Number
Document Transaction Number
Boxford
City/Town

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

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

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

Resource Area, Size of Proposed Alteration, Proposed Replacement (if any)
a. Designated Port Areas
b. Land Under the Ocean
c. Barrier Beach
d. Coastal Beaches
e. Coastal Dunes
f. Coastal Banks
g. Rocky Intertidal Shores
h. Salt Marshes
i. Land Under Salt Ponds
j. Land Containing Shellfish
k. Fish Runs
l. Land Subject to Coastal Storm Flowage
4. Restoration/Enhancement
5. Project Involves Stream Crossings



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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**

August 2017 _____
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 <http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/>). Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

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



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City/Town

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

(c) MESA filing fee (fee information available at http://www.mass.gov/dfwele/dfw/nhosp/regulatory_review/ mesa/ mesa_fee_schedule.htm).
Make check payable to "Commonwealth of Massachusetts - NHESP" and **mail to NHESP** at above address

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

(d) Vegetation cover type map of site

(e) Project plans showing Priority & Estimated Habitat boundaries

(f) OR Check One of the Following

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

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

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

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

a. 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:

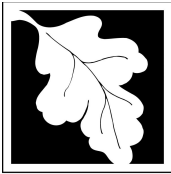
South Shore - Cohasset to Rhode Island border, and the Cape & Islands:

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

North Shore - Hull to New Hampshire border:

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

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



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Boxford
City/Town

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

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

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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Provided by MassDEP:	
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Document Transaction Number	_____
Boxford	_____
City/Town	_____

D. Additional Information (cont'd)

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

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

Proposed Plan

a. Plan Title _____

Donohoe Survey, Inc.

Adam Donohoe

b. Prepared By _____

10/13/2020

c. Signed and Stamped by

1" = 20'

d. Final Revision Date _____

e. Scale _____

Figure 2b. Project Elements Plan, Figure 2c. Planting and Lighting Plan & Figure 2d. Mitigation Planting Plan 10/14/2020

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:

2329 _____

8/31/2020

2. Municipal Check Number

3. Check date

2328 _____

8/31/2020

4. State Check Number

5. Check date

Joseph _____

Reynolds

6. Payor name on check: First Name

7. Payor name on check: Last Name



WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
Boxford Wetlands Protection Bylaw, Town Code Ch. 192 & 375

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.

Joseph D. Reynolds
1. Signature of Applicant

8/31/20
2. Date

3. Signature of Property Owner (if different)

[Signature]
5. Signature of Representative (if any)

4. Date

9/14/2020
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:

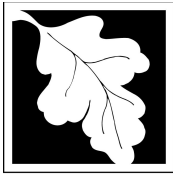
One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

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.

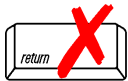
The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF RESOURCE PROTECTION - WETLANDS
100 WATER STREET, SUITE 200
BOSTON, MASSACHUSETTS 02109
TEL: 617-725-3300 FAX: 617-725-3301
WWW.MASSDEP.GOV



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:

65 Boren Lane Boxford
 a. Street Address b. City/Town
\$42.50
 c. Check number d. Fee amount

2. Applicant Mailing Address:

Joseph & Caroline Reynolds
 a. First Name b. Last Name

c. Organization _____

65 Boren Lane
 d. Mailing Address _____

Boxford MA 01921
 e. City/Town f. State g. Zip Code

617-571-5176 reynoldsjoseph@gmail.com
 h. Phone Number i. Fax Number j. Email Address

3. Property Owner (if different):

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).

3/17/2011

Boxford ConsCom fees adopted 3/17/2011

Fee Category	Fee subcategory	Former Fee	Fee adopted 3/17/2011
Request for Determination of Applicability		\$50.00	\$100.00
Notice of Intent			
	Addition/Alteration	\$100.00	\$200.00
	New Single Family House	\$400.00	\$1,000.00
	Each Crossing (road intermittent)	\$400.00	\$1,000.00
	Each Crossing (road perennial)	\$400.00	\$2,000.00
	Each Crossing (driveway perennial)	\$400.00	\$1,000.00
	Each Crossing (driveway intermittent)	\$400.00	\$400.00
	Subdivisions (first 1500' of road, +2\$/lf after)	\$1,500.00	\$3,000.00
	Wetland Resource Alteration	.50 sq ft	.50 sq ft
	Bank Alteration	.50 lin ft	.50 lin ft
	Boundary Verification (\$25/100' after 100')	\$25/100' after	\$50/100' after
ANRAD (\$100 + \$25/100' after 100')		\$100+\$25/	\$200+\$50/
Certificate of Compliance (w/ 1 yr)		\$50.00	\$50.00
Certificate of Compliance (after 1 yr)		\$50.00	\$100.00
Partial Certificate of Compliance		\$50.00	\$50.00
Amended Order of Conditions		\$50.00	\$400.00
Extension Permit		\$100.00	\$150.00
Standard Request for Written Project Status		\$100.00	\$100.00
Expedited Request for Written Project Status		\$200.00	\$200.00
Affidavit		\$100.00	\$200.00
Determination of Negligible Impact		\$50.00	\$50.00
Emergency Certification		\$0.00	\$50.00
Site Visit without Application (non-owner)		\$25.00	\$50.00
Site Visit without Application (owner)		\$25.00	\$25.00
Soil Policy Fee		\$0.00	\$50.00

W:\ConsCom Publications\Bylaw and Regulations\Bylaw-Reg Changes\Fee Changes 3-17-2011\Fee Changes 3-17-2011.xls

JOSEPH G. REYNOLDS
65 BOREN LANE
BOXFORD, MA 01921

54-153/114

2328

DATE 8/31/20

PAY TO THE ORDER OF COMMONWEALTH OF MASSACHUSETTS \$ 42.50

Forty-two dollars and 50/100 DOLLARS

Citizens Bank

MEMO WPA Form FILING FEE STATE SHARES

Joseph G. Reynolds AP

⑆011401533⑆ 3306032125⑈ 2328

JOSEPH G. REYNOLDS
65 BOREN LANE
BOXFORD, MA 01921

54-153/114

2329

DATE 8/31/20

PAY TO THE ORDER OF Town of Boxford \$ 67.50

Sixty-seven dollars and 50/100 DOLLARS

Citizens Bank

MEMO WPA Form FILING FEE TOWN SHARES

Joseph G. Reynolds AP

⑆011401533⑆ 3306032125⑈ 2329

JOSEPH G. REYNOLDS
65 BOREN LANE
BOXFORD, MA 01921

54-153/114

2330

DATE 8/31/20

PAY TO THE ORDER OF Town of Boxford \$ 200

Two hundred dollars and 00/100 DOLLARS

Citizens Bank

MEMO BYLAN FEE

Joseph G. Reynolds AP

⑆011401533⑆ 3306032125⑈ 2330

RECEIVED
CITIZENS BANK

CITIZENS BANK

Figures

Figure 1: USGS Locus Map

Figure 2a: Proposed Plan, Donohoe Survey, Inc.

Figure 2b: Project Elements Plan, DeRosa Environmental Consulting, Inc.

Figure 2c: Landscape Plan L2, Ulrich Landscape Collaborative

Figure 2d: Mitigation Planting Plan, DeRosa Environmental Consulting, Inc.

Figure 3: MassGIS Aerial Map

Figure 4: MassGIS Wetlands Map

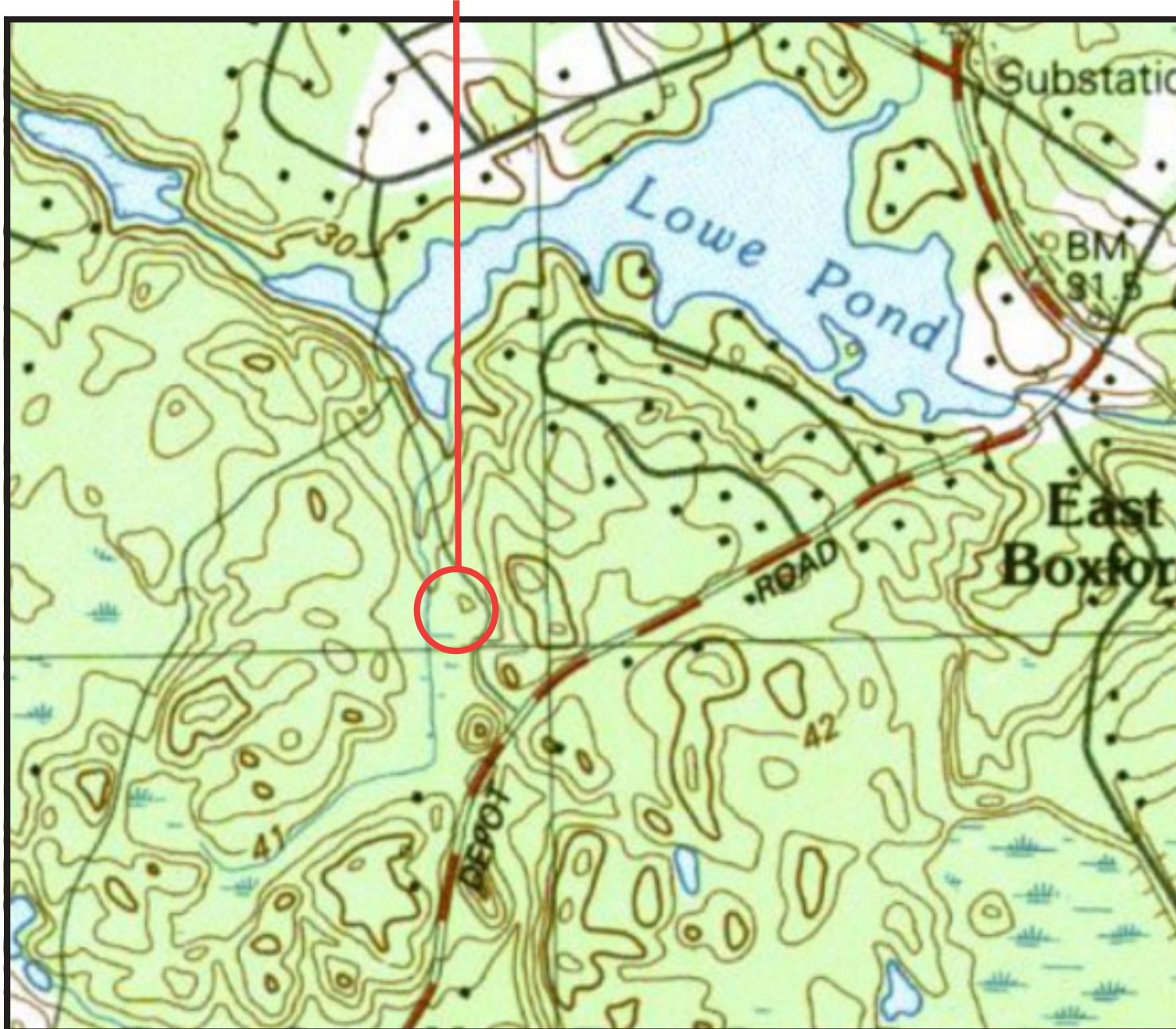
Figure 5: MassGIS NHESP Map

Figure 6: FEMA Firmette Flood Map

Notice of Intent

65 Boren Lane, Boxford, MA

Figure 1. Topographic Map



USGS Topographic Maps



DEROSA
Environmental
CONSULTING, INC. 

167 Main Street, PO Box 716, Rowley Massachusetts 01969 USA
978 948-7717 Office - 978 948-7718 Fax

PERVIOUS SURFACES:			
	EXISTING	PROPOSED	DIFFERENTIAL
NO DISTURB ZONE: 0'-25'	0 S.F.	0 S.F.	0 S.F.
NO BUILD ZONE: 25'-75'	31 S.F.	0 S.F.	-31 S.F.
BUFFER ZONE: 75'-100'	166 S.F.	576 S.F.	+410 S.F.
SUB-TOTAL	197 S.F.	576 S.F.	+379 S.F.
IMPERVIOUS SURFACES:			
	EXISTING	PROPOSED	DIFFERENTIAL
NO DISTURB ZONE: 0'-25'	0 S.F.	0 S.F.	0 S.F.
NO BUILD ZONE: 25'-75'	598 S.F.	1,687 S.F.	+1,089 S.F.
BUFFER ZONE: 75'-100'	777 S.F.	749 S.F.	-28 S.F.
SUB-TOTAL	1,375 S.F.	2,436 S.F.	+1,061 S.F.
TOTAL	1,572 S.F.	3,012 S.F.	+1,440 S.F.

LOT 21
87,217 S.F.
2.002 Acres

ZONING DISTRICT: R-A

ASSESSORS: MAP 29 BLOCK 1 LOT 26

REFERENCES:

DEED - BK. 35129 PG. 343

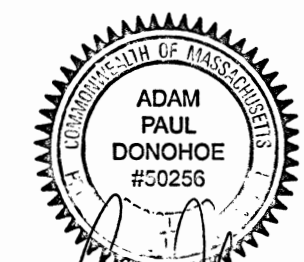
PLANS - PL. BK. 185 PL. 2
PL. BK. 268 PL. 66

VERTICAL DATUM: N.A.V.D. 1988

WETLAND DELINEATION: DEROSA ENVIRONMENTAL CONSULTING, INC. (7/2/20)

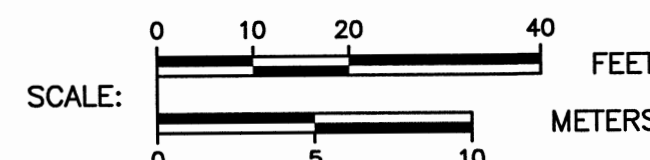
LEGEND & SYMBOLS

S.B.	STONE BOUND
D.H.	DRILL HOLE
ELEV.	ELEVATION
FD.	FOUND
AC	AIR CONDITIONER
PLT	PLANTED/GARDEN
CB	CATCH BASIN
	WOOD FENCE
	COMMUNICATIONS LINE
	ELECTRIC LINE
	TREE LINE



NOTE:

- UNDERGROUND UTILITIES ARE SHOWN AS MARKED OUT BY OTHERS. AN INVESTIGATION OF UNDERGROUND UTILITIES HAS NOT BEEN CONDUCTED BY DONOHOE SURVEY, INC.
- SEPTIC SYSTEM IS SHOWN APPROXIMATELY BASED ON AS-BUILT SKETCH PROVIDED BY THE BOXFORD BOARD OF HEALTH.



PROPOSED PLAN #65 BOREN LANE BOXFORD, MA

PROPERTY OF
CAROLINE & JOSEPH REYNOLDS

SCALE: 1" = 20' OCTOBER 13, 2020

DONOHOE SURVEY, INC.
363 BOSTON ST. TOPSFIELD, MA
(978) 887-6161

PROJ. 3923

PERVIOUS SURFACES:			
	EXISTING	PROPOSED	DIFFERENTIAL
NO DISTURB ZONE: 0'-25'	0 S.F.	0 S.F.	0 S.F.
NO BUILD ZONE: 25'-75'	31 S.F.	0 S.F.	-31 S.F.
BUFFER ZONE: 75'-100'	166 S.F.	576 S.F.	+410 S.F.
SUB-TOTAL	197 S.F.	576 S.F.	+379 S.F.
IMPERVIOUS SURFACES:			
	EXISTING	PROPOSED	DIFFERENTIAL
NO DISTURB ZONE: 0'-25'	0 S.F.	0 S.F.	0 S.F.
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BUFFER ZONE: 75'-100'	777 S.F.	749 S.F.	-28 S.F.
SUB-TOTAL	1,375 S.F.	2,436 S.F.	+1,061 S.F.
TOTAL	1,572 S.F.	3,012 S.F.	+1,440 S.F.

LOT 21
87,217 S.F.
2.002 Acres

Figure 2b. Project Elements Plan

65 Boren Lane | Boxford, MA

ASSESSORS: MAP 29 BLOCK 1 LOT 26

REFERENCES:

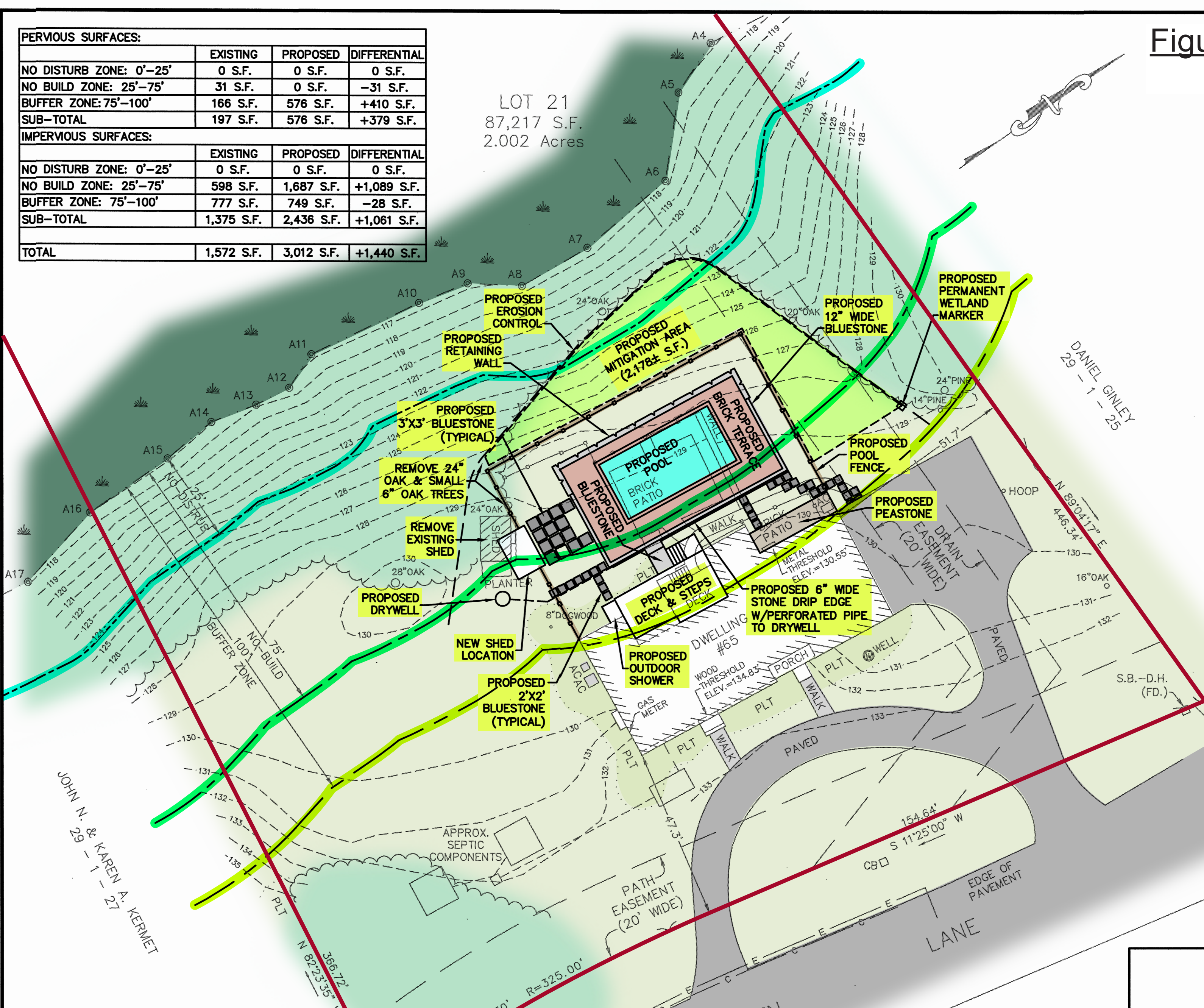
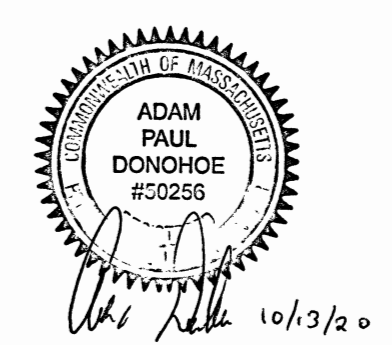
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- PLANS - PL. BK. 185 PL. 2
- PL. BK. 268 PL. 66

VERTICAL DATUM: N.A.V.D. 1988

WETLAND DELINEATION: DEROSA ENVIRONMENTAL CONSULTING, INC. (7/2/20)

LEGEND & SYMBOLS

- S.B. STONE BOUND
- D.H. DRILL HOLE
- ELEV. ELEVATION
- FD. FOUND
- AC AIR CONDITIONER
- PLT PLANTED/GARDEN
- CB CATCH BASIN
- |— WOOD FENCE
- C— COMMUNICATIONS LINE
- E— ELECTRIC LINE
- ~ TREE LINE

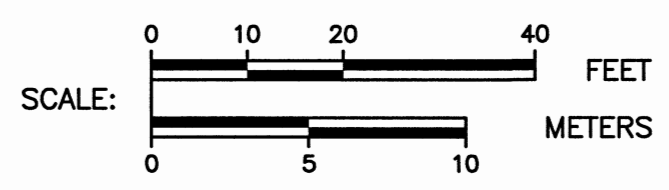


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- SEPTIC SYSTEM IS SHOWN APPROXIMATELY BASED ON AS-BUILT SKETCH PROVIDED BY THE BOXFORD BOARD OF HEALTH.

Michael J. DeRosa
Michael J. DeRosa
PWS No. 2250
MJD/eg/ledr
October 14, 2020

DEROSA Environmental CONSULTING, INC.
167 Main Street
P.O. Box 716
Rowley, Massachusetts USA
978.948.7717 Office
derosaenvironmental.com



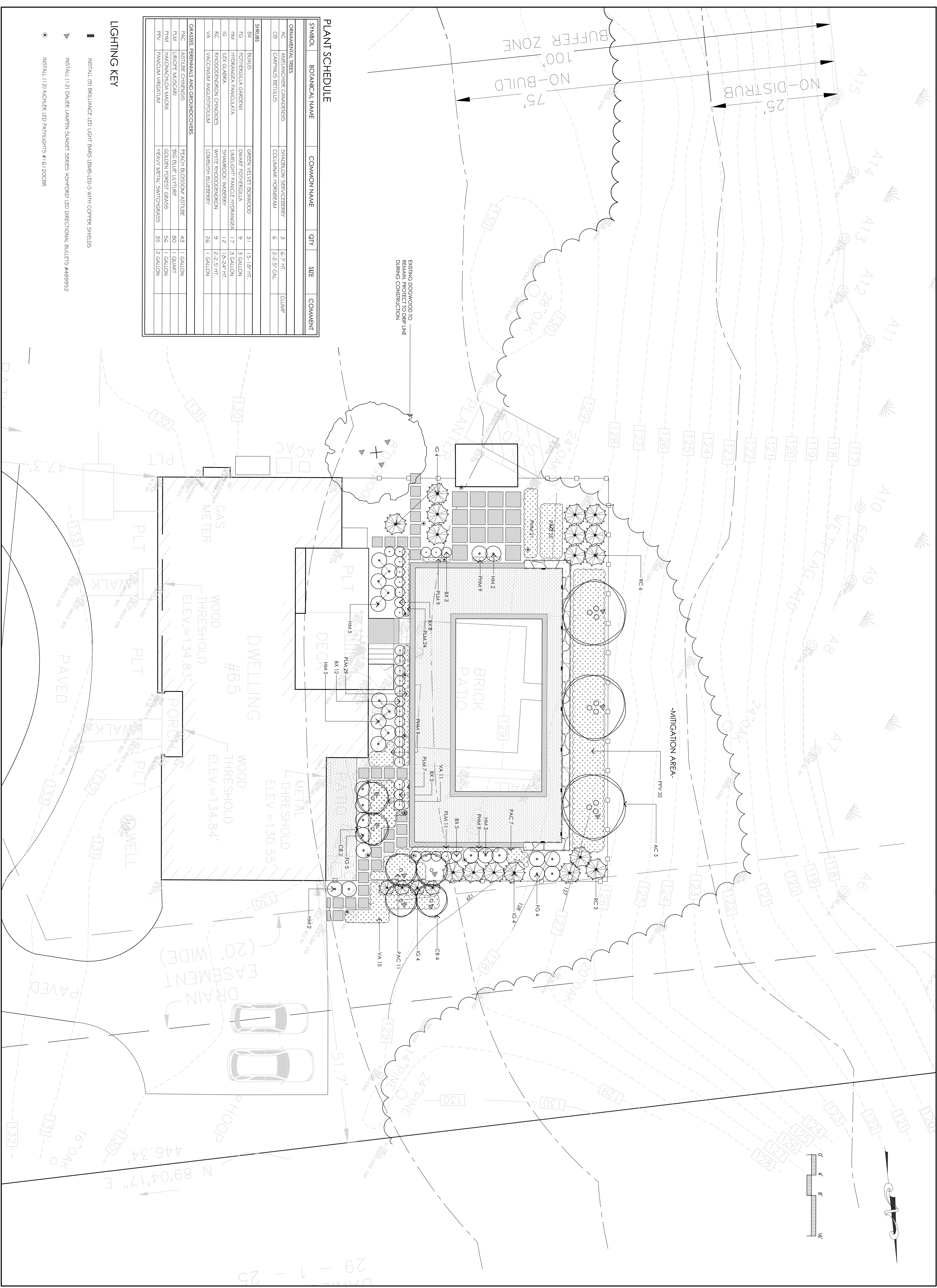
PROPOSED PLAN
#65 BOREN LANE
BOXFORD, MA
PROPERTY OF
CAROLINE & JOSEPH REYNOLDS
SCALE: 1" = 20' OCTOBER 13, 2020
DONOHOE SURVEY, INC.
363 BOSTON ST. TOPSFIELD, MA
(978) 887-6161

PLANT SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	QTY	SIZE	COMMENT
ORNAMENTAL TREES					
AC	JAMELACHIER CANADENSIS	SHADBLOW SERVICEBERRY	3	6-7 HT.	CLUMP
CB	CARPINUS BETULUS	COLUMNAR HORNBURM	6	2-2.5' CAL.	
SHRUBS					
BX	BUXUS	GREEN VELVET BOXWOOD	31	11.5-14.7 HT.	
FG	FOTHEGUILA & GARDENII	DWARF FOTHEGUILA	9	3 GALON	
HM	HYDRANGEA PANICULATA	LIMELIGHT PANICLE HYDRANGEA	17	3 GALON	
IG	ICEX GARDIA	SHIMMICK INGBERTS	12	16-24 HT.	
RC	RHOODOPHORON CHINONES	WHITE RHOODOPHORON	9	2-2.5 HT.	
VA	VACONIDIUM ANGIUSTIPOLIUM	LOWBUSH BLUBERRY	26	1 GALON	
GRASSES, PERENNIALS AND GROUNDCOVERS					
PAC	ASTILBE CHINENSIS	PEACH BLOSSOM ASTILBE	43	1 GALON	
PHM	LIRIOPE MALSICARI	BIG BLUE LIRIYUPE	60	1 QUART	
PHM	HAKONACHLOA MACRA	GOLDEN FOREST GRASS	56	1 GALON	
PPV	PANICUM VIRGATUM	HEAVY METAL SWITCHGRASS	35	2 GALON	

LIGHTING KEY

- INSTALL (9) BRILLIANCE LED LIGHT BARS LAMB-LED-5 WITH COPPER SHIELDS
- ▶ INSTALL (12) DAUER LAMPEN SUNSET SERIES ASYMMETRY LED DIRECTIONAL BULBTS #449952
- INSTALL (12) KICHLER LED PATHLIGHTS #1612008K



REYNOLDS RESIDENCE
 Boxford, Massachusetts

JOE AND CAROLYN REYNOLDS
 65 BOREN LANE



PLANTING AND LIGHTING PLAN

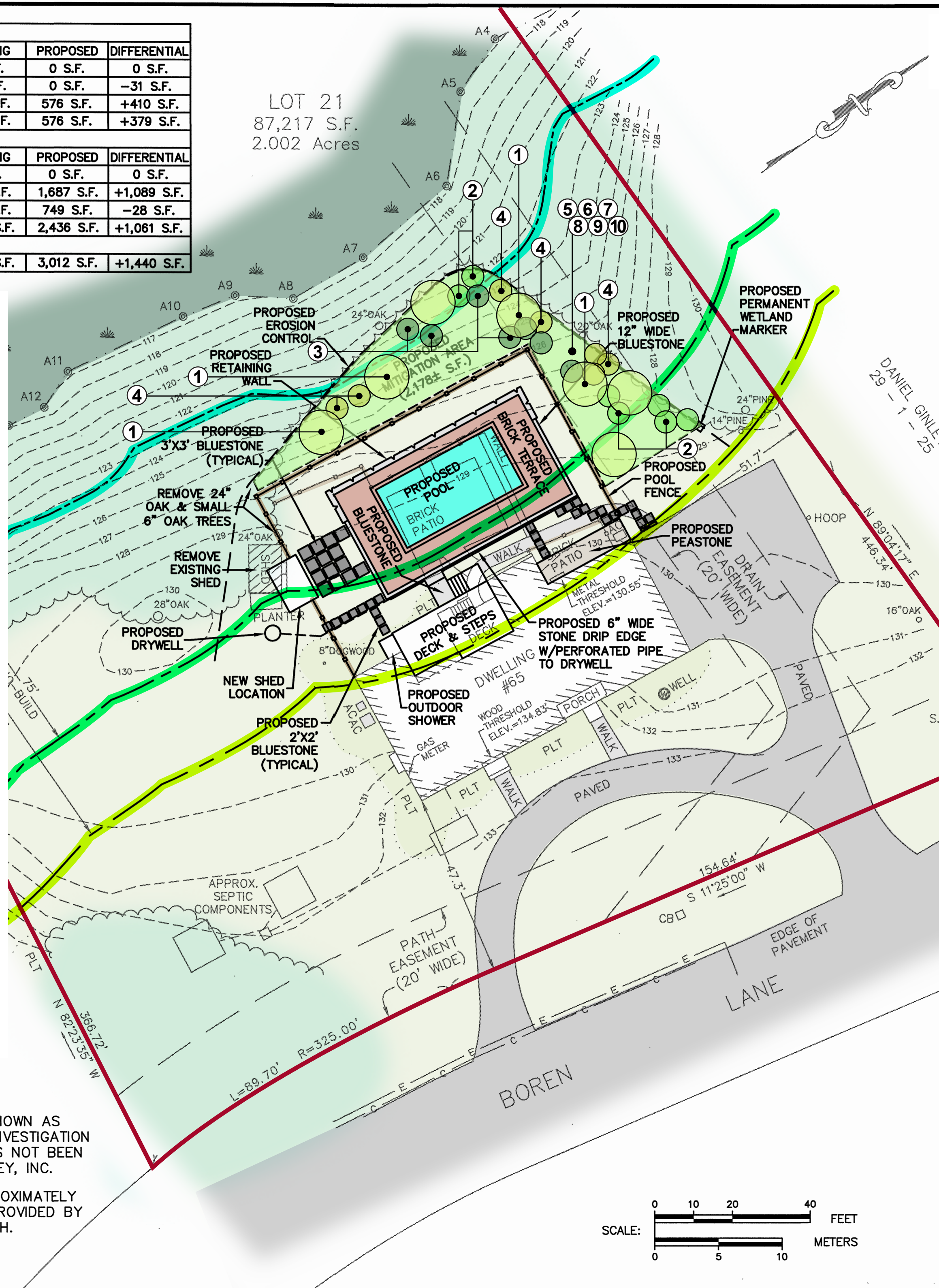
SCALE: 1/8"=1'-0"
 JOB NO.: 2018
 FILE: 2018-landscape.dwg
 DRAWN: MJU
 CHECKED: checker
 SHEET NO.: L2

Figure 2d. Mitigation Planting Plan

65 Boren Lane | Boxford, MA

PERVIOUS SURFACES:			
	EXISTING	PROPOSED	DIFFERENTIAL
NO DISTURB ZONE: 0'-25'	0 S.F.	0 S.F.	0 S.F.
NO BUILD ZONE: 25'-75'	31 S.F.	0 S.F.	-31 S.F.
BUFFER ZONE: 75'-100'	166 S.F.	576 S.F.	+410 S.F.
SUB-TOTAL	197 S.F.	576 S.F.	+379 S.F.
IMPERVIOUS SURFACES:			
	EXISTING	PROPOSED	DIFFERENTIAL
NO DISTURB ZONE: 0'-25'	0 S.F.	0 S.F.	0 S.F.
NO BUILD ZONE: 25'-75'	598 S.F.	1,687 S.F.	+1,089 S.F.
BUFFER ZONE: 75'-100'	777 S.F.	749 S.F.	-28 S.F.
SUB-TOTAL	1,375 S.F.	2,436 S.F.	+1,061 S.F.
TOTAL	1,572 S.F.	3,012 S.F.	+1,440 S.F.

LOT 21
87,217 S.F.
2.002 Acres



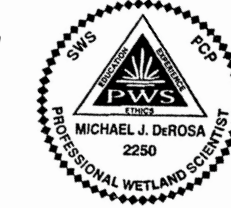
Proposed Planting Plan 65 Boren Lane | Boxford, MA

Key	Common Name	Botanical Name	Size	Quantity
1	Red Maple	<i>Acer rubrum</i>	1" caliper*	7
2	Sweet Pepperbush	<i>Clethra alnifolia</i>	3 gal.	10
3	Gray Dogwood	<i>Cornus racemosa</i>	3 gal.	10
4	Highbush Blueberry	<i>Vaccinium corymbosum</i>	3 gal.	10
5	Goldenrod	<i>Solidago</i>	quart	20
6	Coneflower	<i>Echinacea</i>	quart	20
7	Black-eyed Susan	<i>Rudbeckia hirta</i>	quart	20
8	White Yarrow	<i>Achillea millefolium</i>	quart	20
9	Pearly Everlasting	<i>Anaphalis margaritacea</i>	quart	20
10	Red Fescue	<i>Festuca rubra</i>	seed	10 lbs

*Bare Root

Michael J. DeRosa
Michael J. DeRosa
PWS No. 2250

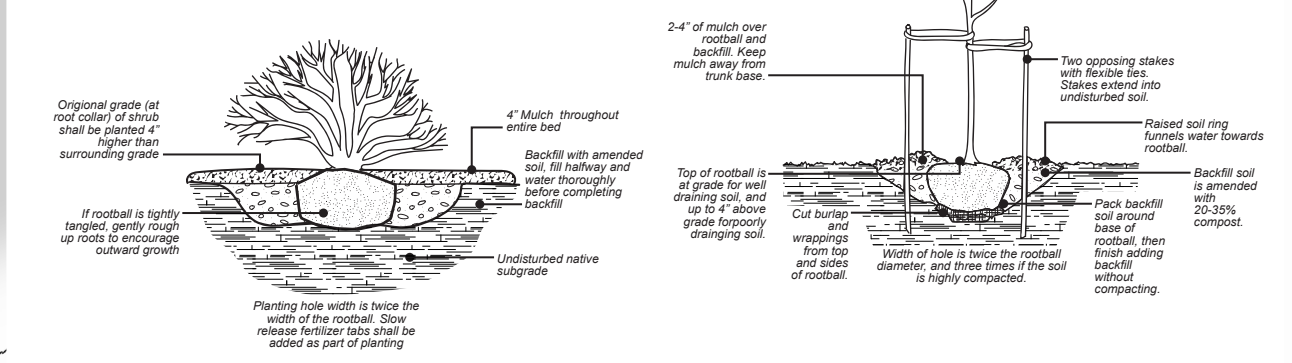
MJD/ldr
October 14, 2020



LEGEND & SYMBOLS

- S.B. STONE BOUND
- D.H. DRILL HOLE
- ELEV. ELEVATION
- FD. FOUND
- AC AIR CONDITIONER
- PLT PLANTED/GARDEN
- CB CATCH BASIN
- WOOD FENCE
- COMMUNICATIONS LINE
- ELECTRIC LINE
- TREE LINE

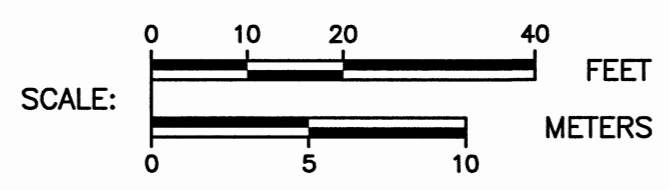
Planting Diagrams



- Planting Notes:**
- Disturbed soils will be planted with our custom wetland and upland seed mixes.
 - The entire planted area is to be covered with salt marsh hay to retain soil moisture and protect against seed predation by birds and small mammals.
 - Plants to be distributed by an ecological restoration specialist. Exact plant locations will be determined in the field based on site-specific planting conditions and micro-topography.
 - The new plantings will be irrigated for one full growing season or until the seed and plant material is established.
 - Monthly inspections will be conducted for the first growing season and treatment/removal of invasive species will be implemented as needed.
 - Care is to be taken in removing invasive plant material to minimize disturbance to existing native plant species.

NOTE:

- UNDERGROUND UTILITIES ARE SHOWN AS MARKED OUT BY OTHERS. AN INVESTIGATION OF UNDERGROUND UTILITIES HAS NOT BEEN CONDUCTED BY DONOHOE SURVEY, INC.
- SEPTIC SYSTEM IS SHOWN APPROXIMATELY BASED ON AS-BUILT SKETCH PROVIDED BY THE BOXFORD BOARD OF HEALTH.



PROPOSED PLAN
#65 BOREN LANE
BOXFORD, MA
PROPERTY OF
CAROLINE & JOSEPH REYNOLDS
SCALE: 1" = 20' OCTOBER 13, 2020
DONOHOE SURVEY, INC.
363 BOSTON ST. TOPSFIELD, MA
(978) 887-6161 PROJ. 3923

Notice of Intent

65 Boren Lane, Boxford, MA

Figure 3. Aerial Photograph



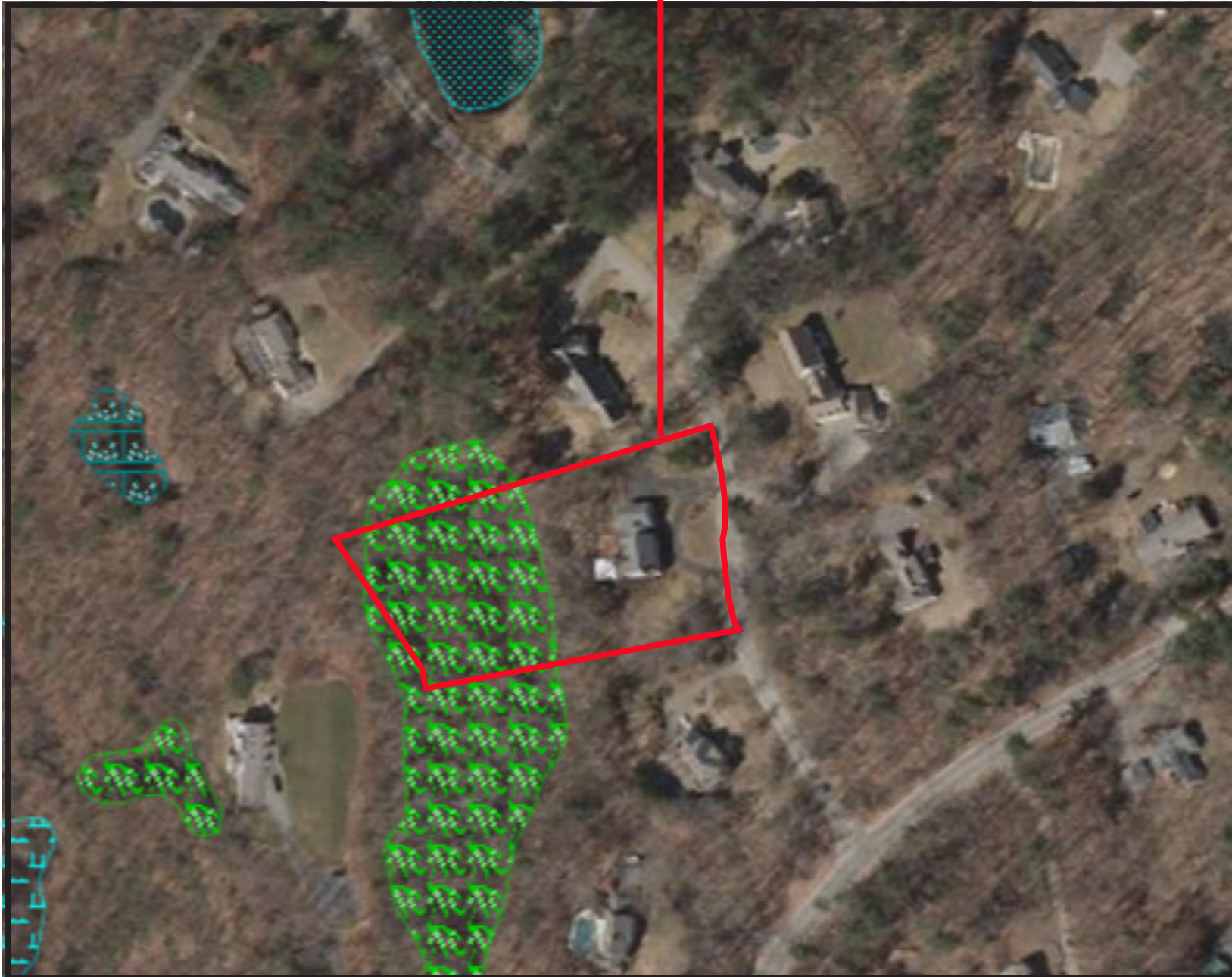
USGS Color Orthos 2019



Notice of Intent Application

65 Boren Lane, Boxford, MA

Figure 4.
Wetlands Map

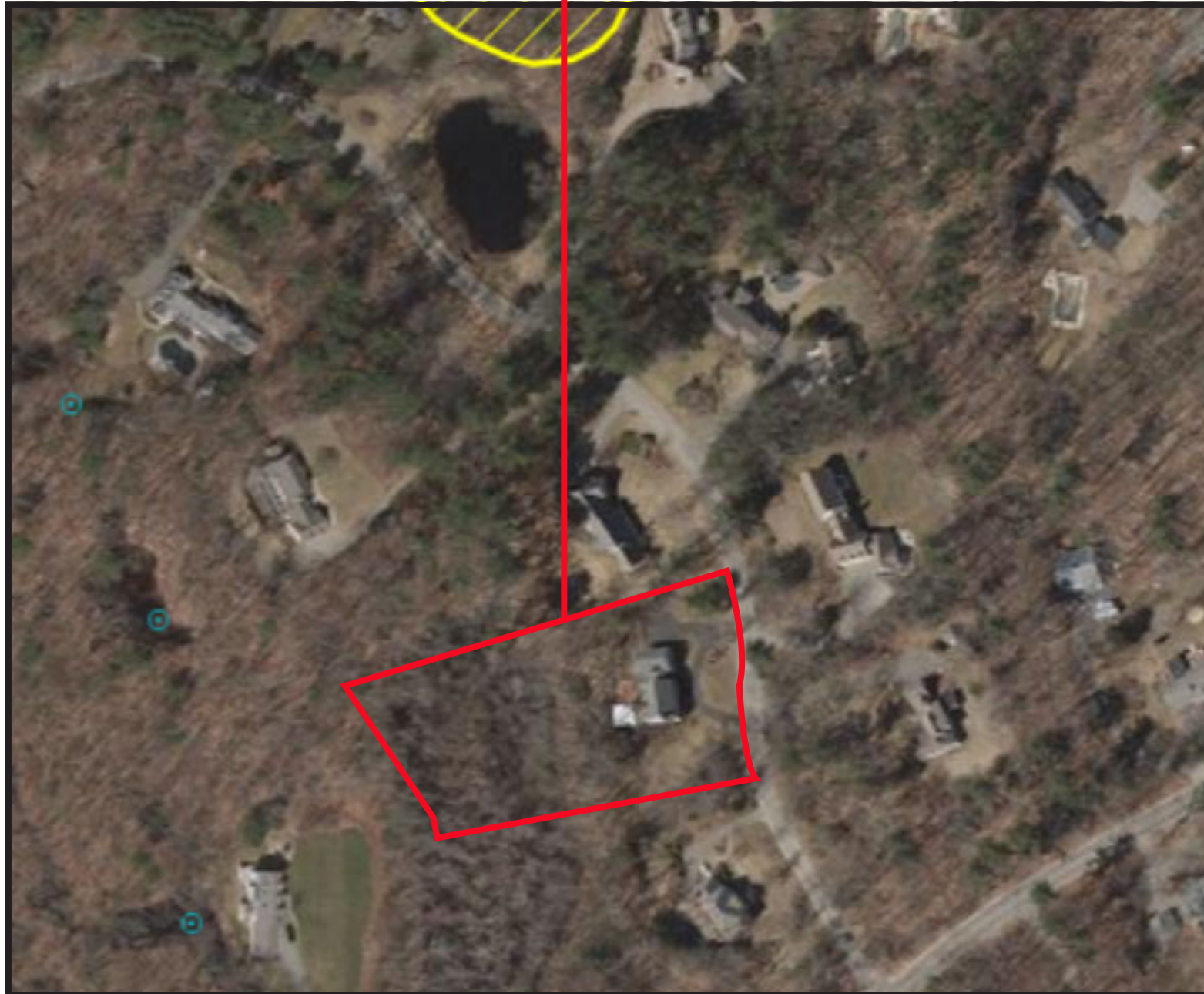


- DEP Wetlands Detailed
- Barrier Beach System
 - Barrier Beach-Deep Marsh
 - Barrier Beach-Wooded Swamp Mixed Trees
 - Barrier Beach-Coastal Beach
 - Barrier Beach-Coastal Dune
 - Barrier Beach-Marsh
 - Barrier Beach-Salt Marsh
 - Barrier Beach-Shrub Swamp
 - Barrier Beach-Wooded Swamp Coniferous
 - Barrier Beach-Wooded Swamp Deciduous
 - Bog
 - Coastal Bank Bluff or Sea Cliff
 - Coastal Beach
 - Coastal Dune
 - Cranberry Bog
 - Deep Marsh
 - Barrier Beach-Open Water
 - Open Water
 - Rocky Intertidal Shore
 - Salt Marsh
 - Shallow Marsh Meadow or Fen
 - Shrub Swamp
 - Tidal Flat
 - Wooded Swamp Coniferous
 - Wooded Swamp Deciduous
 - Wooded Swamp Mixed Trees
- USGS Color Orthos 2019

Notice of Intent Application

65 Boren Lane, Boxford, MA

Figure 5. NHESP Map



Potential Vernal Pools



NHESP Priority Habitats of Rare Species



NHESP Natural Communities



NHESP Estimated Habitats of Rare Wildlife



NHESP Certified Vernal Pools



NHESP Ecoregions



USGS Color Orthos 2019



Notice of Intent Application

65 Boren Lane, Boxford, MA
National Flood Hazard Layer FIRMette

Figure 6. FIRMette Map

70°59'41"W 42°40'32"N



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, AF
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, A of 1% annual chance flood with average depth less than one foot or with drain areas of less than one square mile Zone
		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
OTHER AREAS		Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		Cross Sections with 1% Annual Chance Water Surface Elevation 20.2 17.5
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped

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 9/8/2020 at 11:25 AM 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.



167 Main Street
P. O. Box 716
Rowley Massachusetts
USA

978.948.7717 Office

derosaenvironmental.com

0 250 500 1,000 1,500 2,000 Feet 1:6,000

70°59'41"W 42°40'51"N

Appendix A

Abutter List

Notification to Abutters

29-01-26 - 65 BOREN LN, BOXFORD ABUTTERS LIST
CONSERVATION 250'

Map/Lot	Location	Owner	Owner2	Owner Address	Owner City/Town	Owner State	Owner Zip
25-03-32	60 BOREN LN	SULKOWSKA JUSTINE	ADAMCZYK DARIUSZ	60 BOREN LN	BOXFORD	MA	01921
29-01-10	DEPOT RD OFF	BTA/BOLT INC		P O BOX 95	BOXFORD	MA	01921
29-01-21	66 BOREN LN	BERMAN BARRY S TE	BERMAN CYNTHIA A	66 BOREN LN	BOXFORD	MA	01921
29-01-24	57 BOREN LN	MARTIN HARRY TE	LINDE MARTIN	P O BOX 215	BOXFORD	MA	01921
29-01-25	59 BOREN LN	GINLEY DANIEL		46 CROSS STREET	TOPSFIELD	MA	01983
29-01-26	65 BOREN LN	REYNOLDS CAROLINE	REYNOLDS JOSEPH	65 BOREN LN	BOXFORD	MA	01921
29-01-27	69 BOREN LN	KERMET JOHN N	KERMET KAREN A	69 BOREN LN	BOXFORD	MA	01921
29-01-28	72 DEPOT RD	TANNER CAROLYN CLEGG TE	TANNER JAMES E	72 DEPOT RD	BOXFORD	MA	01921
29-01-29	68 DEPOT RD	LEBLANC CHRISTOPHER R TE	LEBLANC KAREN V	68 DEPOT RD	BOXFORD	MA	01921
29-01-08	68 BOREN LN	GANICK AARON T	GANICK ANNA	68 BOREN LN	BOXFORD	MA	01921

Kristin Hanlon

CERTIFIED COPY
8/31/20

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: Joseoh & Caroline Reynolds.

B. The applicant has filed a:

Notice of Intent: X

Abbreviated Notice of Intent: _____

Request for Amendment: _____

Request for Determination of Applicability: _____

Abbreviated Notice of Resource Area Delineation: _____

with the Conservation Commission for the Town of Essex seeking permission to remove, fill, dredge or alter an area subject to protection under the Wetlands Protection Act (G.L. Chapter 131 section 40) or confirm a wetland delineation.

C. The address of the lot where the activity is proposed is 65 Boren Lane, Map 29-01, Lot 26.

(Address; Map and Lot)

D. The work proposed is: Proposed construction of a swimming pool & appurtenances.

E. Copies of the application may be examined at Boxford Town Hall between the hours of:
8:30am to 2pm, Monday through Thursday

For more information, call the Boxford Conservation Commission: (978) 887-6000 ext.181
or (978) 948- 7717

Check One: This is the applicant _____, applicant's representative X, or other _____
(specify): DeRosa Environmental Consulting, Inc.

F. Copies of the application may be obtained from either the applicant _____, or the applicant's representative X, by calling between the hours of and on the following days of the week: 9-5, M-F

G. Information regarding the date, time, and place of the public hearing may be obtained from either the applicant, or the applicant's representative, or by calling the Conservation Commission between the hours listed above.

Note: Notice of the public hearing, including date, time, and place, will be published at least five business days in advance in the Tri-Town Transcript.

Note: Contact your local Conservation Commission or the nearest Department of Environmental Protection Regional Office for more information about this application or the Wetlands Protection Act. To contact the Conservation Commission call (978) 887-6000 ext.181.

To contact DEP,

Call (978) 694-3200 or write to DEP Northeast Region, 205B Lowell Street, Wilmington, MA 01887

Appendix B

Letter written by Gregory P. Bernard, Registered Sanitarian

Gregory P. Bernard
Registered Sanitarian
Approved Soil Evaluator
Approved Title 5 System Inspector

Danvers Industrial Park
3 Electronics Avenue
Danvers, MA 01923
978-223-3490

September 10, 2020

Boxford Conservation Commission
7A Spofford Road
Boxford, MA 01921

RE: 65 Boren Lane

Dear Conservation Commission,

At the request of Joseph Reynolds, owner of 65 Boren Lane in Boxford, I have been asked to review the feasibility of installing an inground pool and appurtenances in an alternate location left of the existing dwelling.

In my opinion, although the applicant may be able to meet the 75 foot No Build Zone requirement in this alternate location, it would necessitate heavy construction vehicles repeatedly travelling over the existing septic system area and associated septic piping. This would assuredly lead to damage and probable failure of the system.

Kindly take this issue into consideration during your upcoming meeting.

Respectfully



Gregory P. Bernard, RS

Appendix C

Reynolds Property Tree Mitigation Report – Professional
Environmental Services, LLC

**Reynolds Property
65 Boren Lane, Boxford, MA
Tree Mitigation Report**

**For
Joseph & Caroline Reynolds**

Prepared By James M. MacArthur

12/15/2017

James M. MacArthur, Owner & Business Manager

71 Holly Ave., Lynn, MA 01904

Cell: (781) 731-3708

Website: pesllcne.com

E-mail: pesllcne@gmail.com

SITE DESCRIPTION

The property at 65 Boren Lane, Boxford, Massachusetts is owned by Joseph and Caroline Reynolds. The area that was filed under a Request for Determination is to the rear of the property and the rear left side of the property which is identified in a schematic provided by the Reynolds. See EXHIBIT A.

NARRATIVE

On December 14, 2017, James M. MacArthur met with Joseph Reynolds at 65 Boren Lane, Boxford, MA to tour the property, review the Request for Determination, (RDA), proposed landscape design plan. We identified and reviewed the existing vegetation and where it fit into the future property layout plans. Joseph Reynolds has requested Professional Environmental Services, LLC to assess the health of the trees identified in the RDA, develop a mitigation plan for those that should be removed and make recommendations for wildlife friendly plant materials to be planted on the property as the mitigation replacements.

On December, 14, 2017, James M. MacArthur conducted an inspection of the targeted trees to ascertain the health conditions. Eleven trees were identified, numbered, photos were taken and data collected on each tree. The trees are numbered on EXHIBIT A and a description and recommendation by tree appears in FINDINGS section which follows.

FINDINGS

In the following report findings, Professional Environmental Services, LLC will provide some general overall observations and then apply those observations to each individual tree numbered along with individual tree observations and recommendations.

The shrubs located in front of the shed in EXHIBIT A are Hawthorn species, *Crataegus* spp. And have thorns that run along the main stem area. All of these shrubs should be removed due to the presence of the thorns and that they are a low growing shrub in a vicinity where the Reynolds children will be playing. These shrubs present a child welfare safety hazard.

There are three additional trees that were identified on EXHIBIT A with an "X" as additional removals which are generally poor health trees that are in decline. They are two white pines and an American Elm.

TREE # 1

SPECIES: Red Oak, *Quercus rubra*

DIAMETER BREAST HEIGHT (DBH): 15.0 inches

CONDITION: Medium stress, dead limbs, crown decay & evidence of insect presence.

RECOMMENDATION: Removal

MITIGATION MEASURE: Yes



TREE # 2

SPECIES: White Pine, *Pinus strobus*

DIAMETER BREAST HEIGHT (DBH): 6.0 inches

CONDITION: High stress, numerous weeping branch wounds & evidence of trunk decay. Considered to be immature.

RECOMMENDATION: Removal

MITIGATION MEASURE: No, immature tree.



TREE # 3

SPECIES: White Pine, *Pinus strobus*

DIAMETER BREAST HEIGHT (DBH): 9.0 inches

CONDITION: Numerous dead limbs, less than 30% healthy crown and appears to be in decline. Considered to be immature.

RECOMMENDATION: Removal

MITIGATION MEASURE: No, immature tree.



TREE # 4

SPECIES: Red Oak, *Quercus rubra*

DIAMETER BREAST HEIGHT (DBH): 29.0 inches

CONDITION: Tree is in high stress, butt rot, numerous dead limbs and sounding indicates trunk cavity. Tree is a safety concern.

RECOMMENDATION: Removal

MITIGATION MEASURE: None due to a safety removal.



TREE # 5

SPECIES: White Pine, *Pinus strobus*

DIAMETER BREAST HEIGHT (DBH): 10.0 inches

CONDITION: Tree is in moderate stress, numerous dead limbs and considered to be immature.

RECOMMENDATION: Removal

MITIGATION MEASURE: No, immature tree.



TREE # 6

SPECIES: White Pine, *Pinus strobus*

DIAMETER BREAST HEIGHT (DBH): 5.0 inches

CONDITION: Tree is in moderate stress, numerous dead limbs and considered to be immature.

RECOMMENDATION: Removal

MITIGATION MEASURE: No, immature tree.



TREE # 7

SPECIES: White Pine, *Pinus strobus*

DIAMETER BREAST HEIGHT (DBH): 7.5 inches

CONDITION: Tree is in moderate stress, numerous dead limbs and considered to be immature.

RECOMMENDATION: Removal

MITIGATION MEASURE: No, immature tree.



TREE # 8

SPECIES: White Pine, *Pinus strobus*

DIAMETER BREAST HEIGHT (DBH): 5.0 inches

CONDITION: Tree is in moderate stress, numerous dead limbs and considered to be immature.

RECOMMENDATION: Removal

MITIGATION MEASURE: No, immature tree.



TREE # 9

SPECIES: Pignut Hickory, *Carya glabra*

DIAMETER BREAST HEIGHT (DBH): 4.0 inches

CONDITION: Tree is in moderate stress and considered to be immature.

RECOMMENDATION: Removal

MITIGATION MEASURE: No, immature tree.



TREE # 10

SPECIES: Red Oak, *Quercus rubra*

DIAMETER BREAST HEIGHT (DBH): 10.0 inches

CONDITION: Tree is in high stress, numerous dead limbs. Tree is a safety concern.

RECOMMENDATION: Removal

MITIGATION MEASURE: Yes



TREE # 11

SPECIES: Red Oak, *Quercus rubra*

DIAMETER BREAST HEIGHT (DBH): 23.0 inches

CONDITION: Tree is in high stress, butt rot, numerous dead limbs and sounding indicates trunk cavity. Tree is a safety concern.

RECOMMENDATION: Removal

MITIGATION MEASURE: None due to a safety removal.



MITIGATION PLAN

The formula that should be utilized when determining a mitigation value of tree loss is the inch for inch value replacement formula. Under this formula, the tree nursery retail value of each species identified as being in mitigation would be multiplied by the diameter breast height inches lost times the per inch value of a 2' to 3' retail nursery stock tree. Below are the two trees that qualify for mitigation.

<u>TREE</u>	<u>SPECIES</u>	<u>DBH</u>	<u>RETAIL/IN DBH</u>	<u>VALUE LOSS</u>
# 1	Red Oak	15"	\$ 145.00	\$ 2,175.00
# 10	Red Oak	10"	\$ 145.00	\$ 1,450.00
<hr/>				
TOTAL				\$ 3,625.00

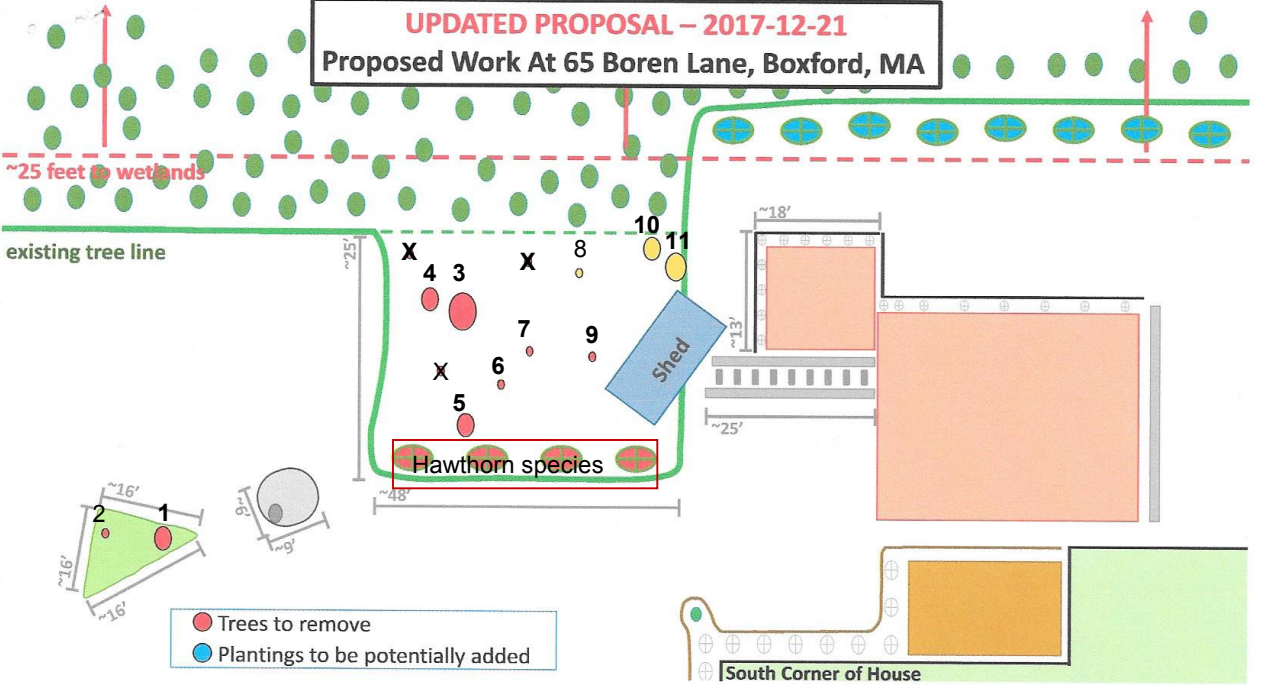
CONCLUSION

It is our professional opinion that the mitigation tree loss of \$ 3,625.00 should be utilized as wildlife compatible planting shrubs in the locations identified in the RDA.

These plants should be a mix of plant species such as viburnum, high bush blueberry and/or sumac.

EXHIBIT A

UPDATED PROPOSAL – 2017-12-21
Proposed Work At 65 Boren Lane, Boxford, MA



REFERENCES

- American Nursery and Landscape Association
- American Society of Landscape Architects
- International Society of Arboriculture
- DIRR'S HARDY TREES AND SHRUBS, AN ILLUSTRATED ENCYCLOPEDIA", Author Michael A. Dirr

Assumptions and Limiting Conditions

1. Any legal description provided to the consultant/appraiser is assumed to be correct. Any titles and ownership to any property are assumed to be good and marketable. No responsibility is assumed for matters legal in character. Any and all property is appraised or evaluated as though free and clear, under responsible ownership and competent management.
2. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant/appraiser can neither guarantee nor be responsible for the accuracy of information provided by others.
3. The consultant/appraiser shall not be required to give testimony or attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in the fee schedule and contract of engagement.
4. Loss or alteration of any part of this report invalidates the entire report.
5. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior expressed written or verbal consent of the consultant/appraiser.
6. Neither all nor any part of the contents of this report, nor copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales or other media, without the prior expressed written or verbal consent of the consultant/appraiser particularly as to value conclusions, identity of the consultant/appraiser, or any reference to any professional society or institute or to any initiated designation conferred upon the consultant/appraiser as stated in his qualification.
7. This report and values expressed herein represent the opinion of the consultant/appraiser, and the consultant's/appraiser's fee in no way contingent upon the reporting of specified value, a stipulated results, the occurrence of a subsequent event, nor upon any finding to be reported.
8. Sketches, diagrams, graphs and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys.
9. Unless expressed otherwise: (1) information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection; and (2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plans or property in question may not arise in the future.

Appendix D

Professional Qualifications

Evin Guvendiren

Michael DeRosa



Evin Guvendiren, BS

Natural Resource Economist

Evin graduated from the University of Massachusetts Amherst with a Bachelor of Science in Natural Resource Economics and minors in Environmental Science, Economics, and Natural Resource Conservation. Her studies focused on sustainability, econometrics, land conservation, environmental policy and natural resource management.

Evin joined DeRosa Environmental Consulting in the Summer of 2017 and is currently holding the position as Environmental Scientist.

During her bachelor's studies, Evin spent a semester abroad with the School for Field Studies in Costa Rica. There, she lived on a sustainable farm and implemented an integrated pest management system. Her classes consisted of field experience and course work on sustainable development, tropical ecology, and resource management in a developing country. She also participated in environmental stewardship and spent one month conducting a Socio-economic directed research project with a national park.

Evin also spent a semester researching the Colony Collapse Disorder as an independent study. She helped a professor with a grant from the USDA to determine consumers' willingness to pay for native bee pollination on cranberries. This research was funded to help find an alternative to commercial honeybee pollination to support the agriculture industry and economy.

Having grown up near beaches and ocean, marshes, rivers, vernal pools, and national parks, Evin has a strong love and passion for the environment. She spends most of her time outdoors and camps, hikes and kayaks whenever she can.

EDUCATION

BS, Natural Resource Economics | 2014
University of Massachusetts, Amherst, MA

PROFESSIONAL EXPERIENCE

Environmental Scientist | 2017 – Present

DeRosa Environmental Consulting Inc

Student Researcher | January – May 2014

University of Massachusetts Amherst-Resource Economics department

Student Researcher | January – May 2013

The SFS Center for Sustainable Development Studies, Atenas, Costa Rica

REPRESENTATIVE PROJECTS

Private Residence | Dune Grass Restoration
Manchester, MA

Private Residence | Dune Grass Restoration
Ipswich, MA

Commercial Property | Wetland Restoration
Rowley, MA

Private Residence | Reconstruction of a Single Family Home
Ipswich, MA

Invasive Plant Management | Restoration Project
Ipswich, MA

Sally's Meadow | Butterfly Meadow Restoration
Ipswich, MA

Town Wide Beach and Road Management Plans
Manchester, MA

Wetland Restoration | MassDEP ACOP
Rockport, MA

Wetland Restoration | MassDEP ACOP
Essex, MA

CERTIFICATION

40 Hour Hazardous Waste Site Worker (OSHA)

Adult and Pediatric First Aid/CPR/AED



Michael J. DeRosa

Principal, LSP, LEED AP BC&D

Michael J. DeRosa, Principal and project manager specializing in habitat restoration and wetland restoration projects. He has more than 24 years experience working with ecological systems focused on restoration and rehabilitation of damaged landscapes. Ecological principles inform his design and restoration practices.

Mike was the principal wetland permitting leader for the Turner Hill Resort Center in Ipswich Massachusetts. He has consulted with the Archdiocese of Boston since 1989 in all environmental areas. His firm is known for their expertise in wetland and wildlife habitat restoration and rehabilitation and invasive species control and management.

Mike incorporated DeRosa Environmental Consulting, Inc., in May 1994 after spending 8 years working in the environmental consulting industry as technical director and project manager. Prior to his consulting career he was a researcher at the Harvard School of Tropical Public Health working with infectious diseases and tick transmitted Lyme disease, in particular.

Mike has been involved with many projects associated with MGL Ch. 21e and Massachusetts Contingency Plan (MCP) projects. He received his Licensed Site Professional (LSP Lic. 3452) registration in 1993. Mike is uniquely credentialed in hazardous waste site assessment and remediation and has over 24 years experience in wetland permitting, habitat restoration and mitigation. Mike has permitted projects with all federal, state and local environmental agencies. Mike is on the Practice Faculty at The Boston Architectural College. His new passion is the incorporation of urban agriculture and food justice initiatives in mixed use community based projects.

EDUCATION

MA, Boston University, 1993

North Carolina State University, 1986

Harvard University, 1985

BA, University of Denver, 1982

REPRESENTATIVE PROJECTS

Ipswich River Watershed Association
Ipswich MA

**Miles River Task Force |
Watershed Restoration**
Beverly Wenham Hamilton Ipswich MA

**Paumier Residence |
Dune Restoration**
Manchester MA

**Matignon High School Athletic Fields |
Landfill Cap Remediation**
Cambridge/Somerville MA

**Turner Hill Golf Course |
Wetland Mitigation & Pond Design**
Ipswich MA

**Saint Aidan's Church |
UST Remediation**
Brookline MA

**Saint Kevin's School |
AST Remediation**
Dorchester MA

**Saint Joseph's School |
UST Remediation**
Salem MA

**Ipswich Country Club |
Wetland Restoration**
Ipswich MA

**Ould Newbury Golf Club |
LID Runoff Design**
Newbury MA

**Ferncroft Country Club |
Pond Restoration**
Topsfield/Middleton MA

PROFESSIONAL EXPERIENCES

Principal, LSP, LEED AP BC&D

DeRosa Environmental Consulting, Inc. | 1994-Present

Technical director, Environmental Engineering Division

Web Engineering Associates, Inc. | 1990-1994

Project manager/Environmental Scientist,

Dennison Environmental, Inc. | 1988-1989

Population Ecologist & Wetlands Specialist,

Lelito Environmental Consultants, LLC | 1987-1988

Research Assistant,

North Carolina State University | 1985-1987

Air Pollution Analyst

Entropy Environmentalists, Inc. | 1985-1987

Senior Research Assistant

Harvard University | 1983-1985

Naturalist

The Trustees of Reservations | 1983-1985

PROFESSIONAL MEMBERSHIPS/AFFILIATIONS

New England Wildflower Society

USGBC | United States Green Building Council

NGWA | National Ground Water Association

AMWS | Association of Massachusetts Wetland Scientists

LSPA | Licensed Site Professional Association

SWS | Society of Wetland Scientists

MACC | Massachusetts Association of Conversation Commissioners

CERTIFICATIONS AND SPECIAL TRAINING

Licensed Site Professional (LSP), Lic. No. 3452

Professional Wetland Scientist (PWS)

LEED Accredited Professional | 10342989

Certified Ecologist, The Ecological Society of America |

June 2002 – May 2007

CERCLA 40 Hour Hazardous Materials Safety Training |

OSHA 29 CFR 1910.120

Confined Space Entry Training | OSHA 29 CFR 1910.146

Management Training Workshop | Dun and Bradstreet

Hazardous Materials Chemistry Seminar | University of Toledo

Unmanned Aircraft License | FAA | Exp. 2/28/2019