

September 8, 2017

Medway Conservation Commission
Medway Town Hall
155 Village Street
Medway, MA 02053

**Re: Notice of Intent (NOI) for Timber Crest Estates
Fairway Lane, Holliston Street, Ohlson Circle, Winthrop Street and Woodland Road**

1. INTRODUCTION AND PROJECT DESCRIPTION

Goddard Consulting, LLC (Goddard) is pleased to submit this Notice of Intent (NOI) on behalf of the applicant, Timber Crest Estates, LLC. This NOI application is for proposed work within Buffer Zone, Bank and Bordering Vegetated Wetlands (BVW) associated with the "Timber Crest Estates" 40B residential development located off Fairway Lane, Holliston Street, Ohlson Circle, Winthrop Street and Woodland Road. This NOI is being filed under the MA Wetlands Protection Act (WPA) only.

The project consists of 192 housing units, including 76 single family homes on the west portion of the site and 116 condominiums (56 duplex buildings and 4 detached single-family units) on the east portion of the site. The site, as designed by Outback Engineering of Middleborough, MA, has a subdivision roadway entrance for the single family house lots off of Winthrop Street, directly opposite from Stephanie Road. The subdivision roadways loop through the western portion of the site, ending in a cul-de-sac with an emergency access provided to Ohlson Circle, across the property located at 13 Ohlson Circle.

This NOI application does not include the construction of any individual houses or duplexes. Separate individual filings will be submitted for the construction of residences. This NOI is for the site preparation, grading, stormwater management structures, utilities, wetland crossings and roadways.

The project design has avoided impacts within 15 feet of wetland resource areas wherever possible and has incorporated two wildlife crossing structures, designed to allow passage of reptiles, amphibians and mammals under roadways in locations near vernal pools.

2. EXISTING WETLAND RESOURCE AREAS

Four separate Orders of Resource Area Delineation (ORADs) confirming the wetland resource area boundaries within the subject properties were issued by the Conservation Commission as follows:

- DEP File #216-821 (ORAD Issued 9/10/14)
- DEP File #216-841 (SORAD Issued 10/20/15)
- DEP File #216-859 (ORAD Issued 12/11/15)
- DEP File #216-878 (ORAD Issued 12/12/16)

This NOI has been filed prior to the expiration of any of the four ORADs, therefore it is presumed by the applicant that all approved resource area boundaries are still valid.

Forty-one new BVW flags were delineated by Goddard Consulting in July of 2017, extending northeast from proposed Road D. Confirmation of the accuracy of the new flags is requested as part of this NOI application. The flags are blue and numbered from #235 through #276. DEP datasheets are attached, documenting upgradient and downgradient conditions at flag #271.

The boundaries of documented vernal pools were reviewed and ultimately approved by the Commission's peer review consultant, EcoTec, in a letter to the Commission dated 5/23/17 (attached). The Bank of stream within the 165 Holliston Street property (Map 9, Parcel 51) was also revised and ultimately approved by EcoTec during May 2017.

A stream shown as "perennial" on the USGS map within the 165 Holliston Street property has been documented to be "intermittent" pursuant to 310 CMR 10.58(2)(a)1.d. A detailed report with documentation of the dry stream conditions is included with this application.

3. PROPOSED RESOURCE AREA IMPACTS

3.1 BUFFER ZONE IMPACTS

The project design has avoided impacts within 15 feet of wetland resource areas wherever possible. The project design has incorporated two wildlife crossing structures, designed to allow passage of reptiles, amphibians and mammals under roadways in locations near vernal pools.

3.2 RESOURCE AREA IMPACTS

The project requires the alteration of BVW and Bank resource areas. The altered BVW will be replicated at a ratio of greater than 1:1, exceeding WPA standards. There will be two temporary alterations of BVW for construction of a water/sewer line, which will be carefully restored to pre-existing conditions. The two stream crossings impacting Bank have been designed in compliance with the MA Stream Crossing Standards.

Impact Area ID	Resource Area Type	Amount Altered
Crossing #1	Bank	78 lf
Crossing #2a	BVW	111 sf
Crossing #2b	BVW	261 sf
Crossing #2c	BVW	4,167 sf
Crossing #3	Bank & BVW	103 lf; 3,163 sf
Water/Sewer A	BVW	*839 sf
Water/Sewer B	BVW	*2,575 sf

* - denotes temporary alteration

4. COMPLIANCE WITH WPA PERFORMANCE STANDARDS

4.1 BUFFER ZONE

The WPA Regulations [310 CMR 10.02(2)(b)] do not contain performance standards for Buffer Zone Alteration. All reasonable efforts to avoid, minimize and mitigate adverse impacts on the Buffer Zone have been considered, but the project design requires that Buffer Zone be altered in order to achieve the desired project design. The project design has avoided impacts within 15 feet of wetland resource areas wherever possible. The altered area of Buffer Zone does not contain slopes greater than 15%, and erosion and sedimentation controls will be installed along the limit of work throughout the project area in order to prevent any siltation into the wetlands during construction.

4.2 LIMITED PROJECT

310 CMR 10.53(3)(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 roadway crossings have been designed with the minimum width acceptable to the Planning Board, and alternative means of access from a public way to the upland areas of the same owner are not available. During the Comprehensive Permit process with the Medway Zoning Board of Appeals (ZBA) it was determined that the eastern portion of the project would need a second means of access/egress in addition to the roadway connecting to Fairway Lane. Plans submitted to the ZBA dated 3/16/2016 (shown below) show that two large wetland crossings would have been required in order to extend the roadway south to Fern Path. In order to avoid these two substantial wetland crossings, the applicant acquired the property at 165 Holliston Street and revised the project to connect to Holliston Street with a single crossing instead of the original two crossings as shown on the 3/16/16 plan. The crossings have been designed so as to not restrict the flow of water. Any BVW alteration will be replicated at a ratio of at least 1:1.



Figure 1 - Outback Engineering Plan, submitted to ZBA, dated 3/16/16.

4.3 BORDERING VEGETATED WETLANDS

310 CMR 10.55(4) is the regulatory jurisdiction under the WPA that applies to BVW alteration and replication. The section reads as follows, with compliance stated in **bold**:

310 CMR 10.55(4)(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.

The proposed BVW alterations will not destroy or otherwise impair any portion of said areas.

310 CMR 10.55(4)(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 surface area of the replacement area is slightly more than 1:1, greater than the lost area.

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

The ground water elevation of the replacement area is expected to be approximately equal to that for 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 shall be similar to that of the lost area;

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

The replacement area shall have an unrestricted hydraulic connection to the same wetland system as the lost area. The replacement area connects to the same delineated BVW as the lost area.

5. *The replacement area shall be located within the same general area of the waterbody or reach of the waterway as the lost area;*

The replacement area is located next to and connected to the lost area.

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 has been designed with native tree, shrub and herbaceous species with the intention of complying with this condition. As described in the monitoring section below, the replacement area will be inspected annually for two growing seasons to ensure that the replacement area meets the 75% coverage within two growing seasons. Any bare soils following construction will have been seeded with New England Wetland Plants Wetmix, so soil stabilization should occur rapidly.

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. In the exercise of this discretion, the issuing authority shall consider the magnitude of the alteration, and the significance of the project site to the interests identified in M.G.L. c. 131, Sec. 40, the extent to which adverse impacts are minimized, and the extent to which mitigation measures, including replication or restoration, area provided to contribute to the protection of the interests identified in M.G.L. c. 131, Sec. 40.*

The replacement area meets the general performance standards for the altered resource area, which is BVW.

In the exercise of its discretion, the Commission should consider that the project has been designed to minimize impacts to BVW to the greatest extent practicable and the BVW will be replicated at a ratio of greater than 1:1.

310 CMR 10.55(4)(c-e)

These sections are not applicable to this project.

4.4 BANK

310 CMR 10.54(4)(a)

Where the presumption set forth in 310 CMR 10.54(3) is not overcome, any proposed work on a Bank shall not impair the following:

- 1. the physical stability of the Bank;*
- 2. the water carrying capacity of the existing channel within the Bank;*
- 3. ground water and surface water quality;*
- 4. the capacity of the Bank to provide breeding habitat, escape cover and food for fisheries;*

The proposed Bank alterations will not impair the physical stability of the Bank, the water carrying capacity of the existing channel within the Bank, ground water and surface water quality of the Bank, nor the capacity of the Bank to provide breeding habitat, escape cover and food for fisheries.

5. the capacity of the Bank to provide important wildlife habitat functions. A project or projects on a single lot, for which Notice(s) of Intent is filed on or after November 1, 1987, that (cumulatively) alter(s) up to 10% or 50 feet (whichever is less) of the length of the bank found to be significant to the protection of wildlife habitat, shall not be deemed to impair its capacity to provide important wildlife habitat functions. In the case of a bank of a river or an intermittent stream, the impact shall be measured on each side of the stream or river. Additional alterations beyond the above threshold may be permitted if they will have no adverse effects on wildlife habitat, as determined by procedures contained in 310 CMR 10.60.

See attached Detailed Wildlife Habitat Evaluation.

6. Work on a stream crossing shall be presumed to meet the performance standard set forth in 310 CMR 10.54(4)(a) provided the work is performed in compliance with the Massachusetts Stream Crossing Standards by consisting of a span or embedded culvert in which, at a minimum, the bottom of a span structure or the upper surface of an embedded culvert is above the elevation of the top of the bank, and the structure spans the channel width by a minimum of 1.2 times the bankfull width. This presumption is rebuttable and may be overcome by the submittal of credible evidence from a competent source. Notwithstanding the requirement of 310 CMR 10.54(4)(a)5., the impact on bank caused by the installation of a stream crossing is exempt from the requirement to perform a habitat evaluation in accordance with the procedures contained in 310 CMR 10.60.

Both stream crossings have been designed in compliance with the MA Stream Crossing Standards.

310 CMR 10.54(4)(b-c)

These sections are not applicable to this project.

4.4 STORMWATER MANAGEMENT

310 CMR 10.05(6)(k) through (q)

The project has been designed to comply with MA Stormwater Management Standards.

5. SUBMITTED MATERIALS

Four hard copies of this application package are enclosed, along with the site plans and stormwater report. A digital copy of the application package will also be submitted. The titles of all documents enclosed are as follows:

- NOI (WPA Form 3) Application form
- Wetland Fee Transmittal Form, Copy of Checks
- Affidavit of Service
- Certified Abutter Lists
- Notification to Abutters
- *USGS Site Locus*, Goddard Consulting, LLC. 8/21/17
- *Orthophoto View of Site*, Goddard Consulting, LLC. 8/21/17
- *Vernal Pool Boundary Review*, Ecotec, 5/23/17
- *MA DEP BVW datasheets*, Goddard Consulting, LLC. 7/21/17
- *Wetland Replication Plan*, Goddard Consulting, LLC. 9/7/17
- *Intermittent Stream Documentation Report*, Goddard Consulting, LLC. 9/7/17
- *Detailed Wildlife Habitat Evaluation Report*, Goddard Consulting, LLC. 9/7/17
- *Conservation Permitting Plans for Timber Crest Estates* (Multiple Sheets), Outback Engineering, Inc., 8/25/17 (signed 9/7/17)
- *Stormwater Report with DEP Checklist*, Outback Engineering, Inc., 9/7/17

Sincerely,

GODDARD CONSULTING, LLC

by

A handwritten signature in black ink, appearing to read "Daniel Wells". The signature is fluid and cursive, with the first name "Daniel" being more prominent than the last name "Wells".

Daniel Wells, M.S.

Senior Wildlife Biologist and Wetland Scientist

CC: Wetlands Division, DEP – CERO, 8 New Bond Street, Worcester, MA 01606
Mounir Tayara, Timber Crest Estates, LLC, 135 Main Street, Medway, MA 02503



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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Medway

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):

Fairway Lane; Holliston Street; Ohlson Circle;
Winthrop Street; Woodland Road

Medway

02053

b. City/Town

c. Zip Code

Latitude and Longitude:

42.171606

-71.413740

d. Latitude

e. Longitude

8; 9; 14; 15

16, 19, 20; 51 & 58; 5, 20, 21; 1 & 19

f. Assessors Map/Plat Number

g. Parcel /Lot Number

2. Applicant:

Mounir

Tayara

a. First Name

b. Last Name

Timber Crest Estates, LLC

c. Organization

135 Main Street, Suite 5

d. Street Address

Medway

MA

02053

e. City/Town

f. State

g. Zip Code

(617) 682-5649

mtayara@grandishomesllc.com

h. Phone Number

i. Fax Number

j. Email Address

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

MULTIPLE (SEE ATTACHED LIST)

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):

Scott

Goddard

a. First Name

b. Last Name

Goddard Consulting, LLC

c. Company

291 Main Street, Suite 8

d. Street Address

Northborough

MA

01532

e. City/Town

f. State

g. Zip Code

508-393-3784

scott@goddardconsultingllc.com

h. Phone Number

i. Fax Number

j. Email address

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

\$ 13,900.00

\$ 6,937.50

\$ 6,962.50

a. Total Fee Paid

b. State Fee Paid

c. City/Town Fee Paid



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City/Town

A. General Information (continued)

6. General Project Description:

Site preparation, three Limited Project roadway crossings, 15 point source discharges and two water/sewer crossings for a residential subdivision.

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

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

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

1. ☒ Yes ☐ 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)

New roadway or driveway [310 CMR 10.53(3)(e)]

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:

SEE ATTACHED LIST

a. County

b. Certificate # (if registered land)

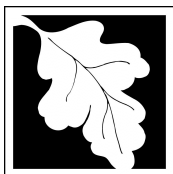
c. Book

d. Page Number

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

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

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



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

Provided by MassDEP:

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Document Transaction Number

Medway

City/Town

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

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

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☒ Bank	181 1. linear feet	2. linear feet
b. ☒ Bordering Vegetated Wetland	7,702 1. square feet	8,210 2. square feet
c. ☐ 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. ☐ Bordering Land Subject to Flooding	1. square feet 3. cubic feet of flood storage lost	2. square feet 4. cubic feet replaced
e. ☐ 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.



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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Medway

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. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. ☐ Land Under the Ocean	1. square feet	
	2. cubic yards dredged	
c. ☐ Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. ☐ Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. ☐ Coastal Dunes	1. square feet	2. cubic yards dune nourishment
	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
f. ☐ Coastal Banks	1. linear feet	
g. ☐ Rocky Intertidal Shores	1. square feet	
h. ☐ Salt Marshes	1. square feet	2. sq ft restoration, rehab., creation
i. ☐ Land Under Salt Ponds	1. square feet	
	2. cubic yards dredged	
j. ☐ Land Containing Shellfish	1. square feet	
k. ☐ 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. ☐ Land Subject to Coastal Storm Flowage	1. square feet	
4. ☐ Restoration/Enhancement	If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.	
	a. square feet of BVW	b. square feet of Salt Marsh
5. ☒ Project Involves Stream Crossings		
	2	
	a. number of new stream crossings	b. number of replacement stream crossings



WPA Form 3 – Notice of Intent

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

Provided by MassDEP:

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Document Transaction Number

Medway

City/Town

C. Other Applicable Standards and Requirements

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

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

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

- 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

8/1/2017

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.



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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Medway

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/meda/meda_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/meda/meda_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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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.



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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Medway

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.

Comprehensive Permit Plans "Timber Crest Estates"

a. Plan Title

Outback Engineering Inc.

James Pavlik

b. Prepared By

c. Signed and Stamped by

9/7/17

variable

d. Final Revision Date

e. Scale

f. Additional Plan or Document Title

g. Date

5. ☒ If there is more than one property owner, please attach a list of these property owners not listed on this form.
6. ☐ Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.
7. ☐ Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.
8. ☒ Attach NOI Wetland Fee Transmittal Form
9. ☒ Attach Stormwater Report, if needed.

E. Fees

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

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

646

2. Municipal Check Number

9/5/17

3. Check date

645

4. State Check Number

9/5/17

5. Check date

Timber Crest LLC

6. Payor name on check: First Name

7. Payor name on check: Last Name



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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Medway

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	<i>[Signature]</i>	2. Date	<i>8-18-2017</i>
3. Signature of Property Owner (if different)	<i>[Signature]</i>	4. Date	<i>8-18-2017</i>
5. Signature of Representative (if any)	<i>[Signature]</i>	6. Date	<i>9/7/17</i>

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

WPA Form 3 – Notice of Intent

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

Provided by MassDEP:

MassDEP File Number

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Medway

City/Town

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1. Signature of Applicant

X *Henry L. Wickett Jr.*

3. Signature of Property Owner (if different)

2. Date

8.28.17

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.

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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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Medway

City/Town

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[Signature]

1. Signature of Applicant

8-18-2017

2. Date

[Signature]

3. Signature of Property Owner (if different)

Wickett Development

8-18-2017

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:

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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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

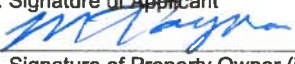
Medway

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.

		8/10/2017
1. Signature of Applicant		2. Date
		8-28-10/17
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.

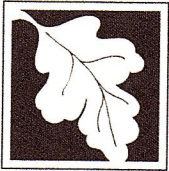
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Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Medway

City/Town

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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

James A. Salih

3. Signature of Property Owner (if different)

5. Signature of Representative (if any)

2. Date

9-1-17

4. Date

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:

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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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Medway

City/Town

F. Signatures and Submittal Requirements

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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

Amy Russell

3. Signature of Property Owner (if different)

2. Date

31 August 2017

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.

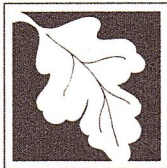
For MassDEP:

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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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Medway

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

Thomas Pawlik

2. Date

9/11/17

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.

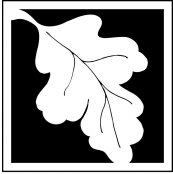
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Other:

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:

Fairway Lane; Holliston Street; Ohlson Circle;
Winthrop Street; Woodland Road
645

c. Check number

Medway

b. City/Town

\$ 6,937.50

d. Fee amount

2. Applicant Mailing Address:

Mounir

a. First Name

Tayara

b. Last Name

Timber Crest Estates, LLC

c. Organization

135 Main Street, Suite 5

d. Mailing Address

Medway

e. City/Town

MA

f. State

02053

g. Zip Code

(617) 682-5649

h. Phone Number

i. Fax Number

mtayara@grandishomesllc.com

j. Email Address

3. Property Owner (if different):

Multiple (SEE ATTACHED LIST)

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.

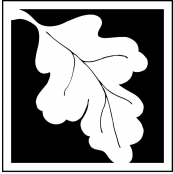
Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

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
2g) Point source discharge	15	\$500	\$7,500
3a) Site preparation	1	\$1,050	\$1,050
4a) Limited project crossing	3	\$1,450	\$4,350
2j) Other activity (water / sewer line)	2	\$500	\$1,000
Step 5/Total Project Fee:			\$13,900

Step 6/Fee Payments:

Total Project Fee:	\$13,900
	a. Total Fee from Step 5
State share of filing Fee:	\$6,937.50
	b. 1/2 Total Fee less \$12.50
City/Town share of filing Fee:	\$6,962.50
	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.)

List of Ownership

Timber Crest Estates NOI

Map #	Lot #	Parcel Address	Owner	Owner Address
8	16	21-R Fairway Lane	Wickett Development Company Inc.	38746 Clinton Avenue Dade City, FL 33525
8	19	0-R Woodland Road	Henry L. Wickett	38746 Clinton Avenue Dade City, FL 33525
8	20	102 Winthrop Street	Henry L. Wickett	38746 Clinton Avenue Dade City, FL 33525
9	51	165 Holliston Street	Timber Crest Estates LLC	135 Main Street, Suite 5 Medway, MA 02053
9	58	11 Woodland Road	Wickett Development Company Inc.	38746 Clinton Avenue Dade City, FL 33525
14	5	0-R Woodland Road	Henry L. Wickett & Henry L. Wickett Jr.	38746 Clinton Avenue Dade City, FL 33525
14	20	13 Ohlson Circle	Novus Homes LLC	135 Main Street, Suite 5 Medway, MA 02053
14	21	11 Ohlson Circle	John C. & Kathleen R. Simcox, Trustees of the Simcox Family Trust	11 Ohlson Circle Medway, MA 02053
15	1	153-R Holliston Street	Timber Crest Estates LLC	135 Main Street, Suite 5 Medway, MA 02053
15	19	143 Holliston Street	Nancy Russell, Thomas and James Pavlik	117 Monroe Street Douglas, MA 01516

List of Ownership

Timber Crest Estates NOI

Map #	Lot #	Parcel Address	Book / Page
8	16	21-R Fairway Lane	Book 13071, Page 203;
8	19	0-R Woodland Road	Book 9742, Page 202
8	20	102 Winthrop Street	Book 32754, Page 363
9	51	165 Holliston Street	Book 34358, Page 264
9	58	11 Woodland Road	Book 22145, Page 113; Book 22145, Page 114
14	5	0-R Woodland Road	Book 6607, Page 537
14	20	13 Ohlson Circle	Book 32449, Page 424
14	21	11 Ohlson Circle	Book 29614, Page 283
15	1	153-R Holliston Street	Book 32841, Page 560
15	19	143 Holliston Street	Book 24701, Page 7

CASH ONLY IF ALL CheckLock™ SECURITY FEATURES LISTED ON BACK INDICATE NO TAMPERING OR COPYING

645

Needham Bank
53-7353/2113

TIMBER CREST LLC
135 MAIN ST SUITE 5
MEDWAY MA 02053
(508) 3210086

9/5/2017

PAY TO THE
ORDER OF Commonwealth of Mass

\$ **6,937.50

Six Thousand Nine Hundred Thirty-Seven and 50/100*****

DOLLARS

PROTECTED AGAINST FRAUD

Commonwealth of Mass



MEMO

Notice of Intent

Mr. Taylor

MP

⑈000645⑈ ⑆211373539⑆ 59⑈0795236⑈

CASH ONLY IF ALL CheckLock™ SECURITY FEATURES LISTED ON BACK INDICATE NO TAMPERING OR COPYING

646

Needham Bank
53-7353/2113

TIMBER CREST LLC
135 MAIN ST SUITE 5
MEDWAY MA 02053
(508) 3210086

9/5/2017

PAY TO THE
ORDER OF Town of Medway

\$ **6,962.50

Six Thousand Nine Hundred Sixty-Two and 50/100*****

DOLLARS

PROTECTED AGAINST FRAUD

Town of Medway
155 Village St
Medway, MA 02053



MEMO

Notice of Intent

Mr. Taylor

MP

⑈000646⑈ ⑆211373539⑆ 59⑈0795236⑈

AFFIDAVIT OF SERVICE

Under the Massachusetts Wetlands Protection Act

I, Dan Wells hereby certify under the pains and penalties of perjury that on September 8, 2017 I gave notification to abutters in Compliance with the second paragraph of Massachusetts General Law Chapter 131, Section 40, and the DEP Guide to Abutter Notification dating April 8, 1994 in connection with the following matter:

A Notice of Intent was filed under the Massachusetts Wetlands Protection Act by Timber Crest Estates, LLC with the Medway Conservation Commission on September 8, 2017 for a property located at Fairway Lane, Holliston Street, Ohlson Circle, Winthrop Street and Woodland Road in Medway, MA.

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



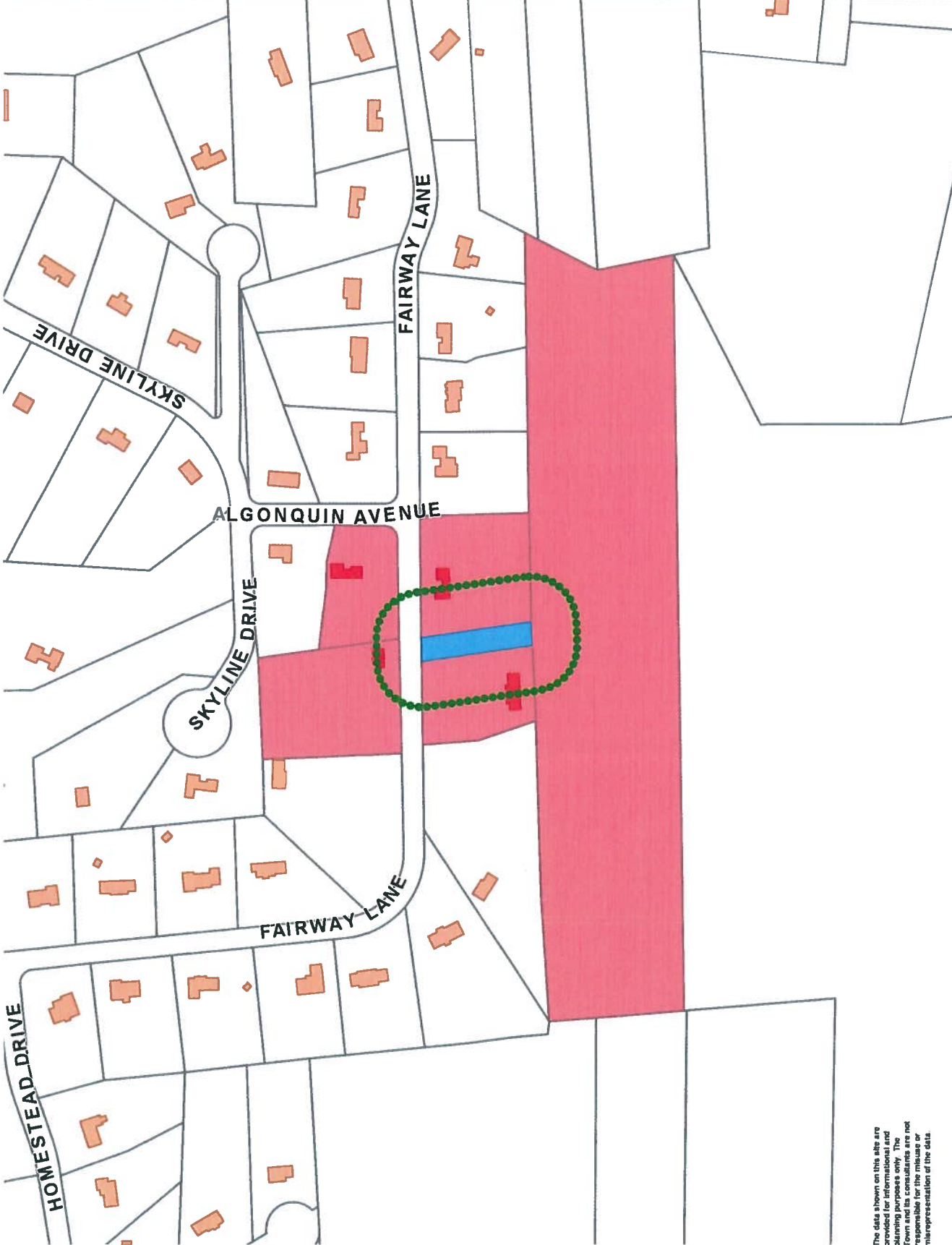
(Name)

September 8, 2017

(Date)



- Fire Stations
- Police Stations
- Hospitals
- Town Hall
- Public Libraries
- Schools
- Ice Rinks
- Community Health Centers
- MBTA Commuter Rail
- Percels
- MA Highways
- US Highway
- Numbered Routes
- Abutting Town names
- Town Boundary
- Buildings MGIS
- Streets



The data shown on this site are provided for informational and planning purposes only. The Town and its consultants are not responsible for the misuse or misrepresentation of the data.

400 800 ft

Printed on 08/14/2017 at 02:02 PM

Town of Medway, MA GIS

1001 08-016

Parcel ID: 08-016
WICKETT DEVELOPMENT CO
38746 CLINTON AVE
DADE CITY, FL 33525

Parcel ID: 08-015
DAHLHEIMER DAVID A
DAHLHEIMER SARAH A
21 FAIRWAY LN.
MEDWAY, MA 02053

Parcel ID: 08-017
SPOZIO CATHERINE L.
19 FAIRWAY LN.
MEDWAY, MA 02053

Parcel ID: 08-019
WICKETT HENRY L.
38746 CLINTON AVE
DADE CITY, FL 33525

Parcel ID: 08-037
DONNELLY THOMAS J
DONNELLY RUTH A
1 ALGONQUIN AVE.
MEDWAY, MA 02053

Parcel ID: 08-038
BARBOSA ADEMILSON P
BARBOSA PAULA M
22 FAIRWAY LN.
MEDWAY, MA 02053



THIS IS A CERTIFIED ABUTTERS LIST FROM THE TOWN OF MEDWAY.
WE CERTIFY THAT AT TIME OF LAST ASSESSMENT, THE NAMES AND
ADDRESSES OF ALL PROPERTY OWNERS, ARE ACCURATE.

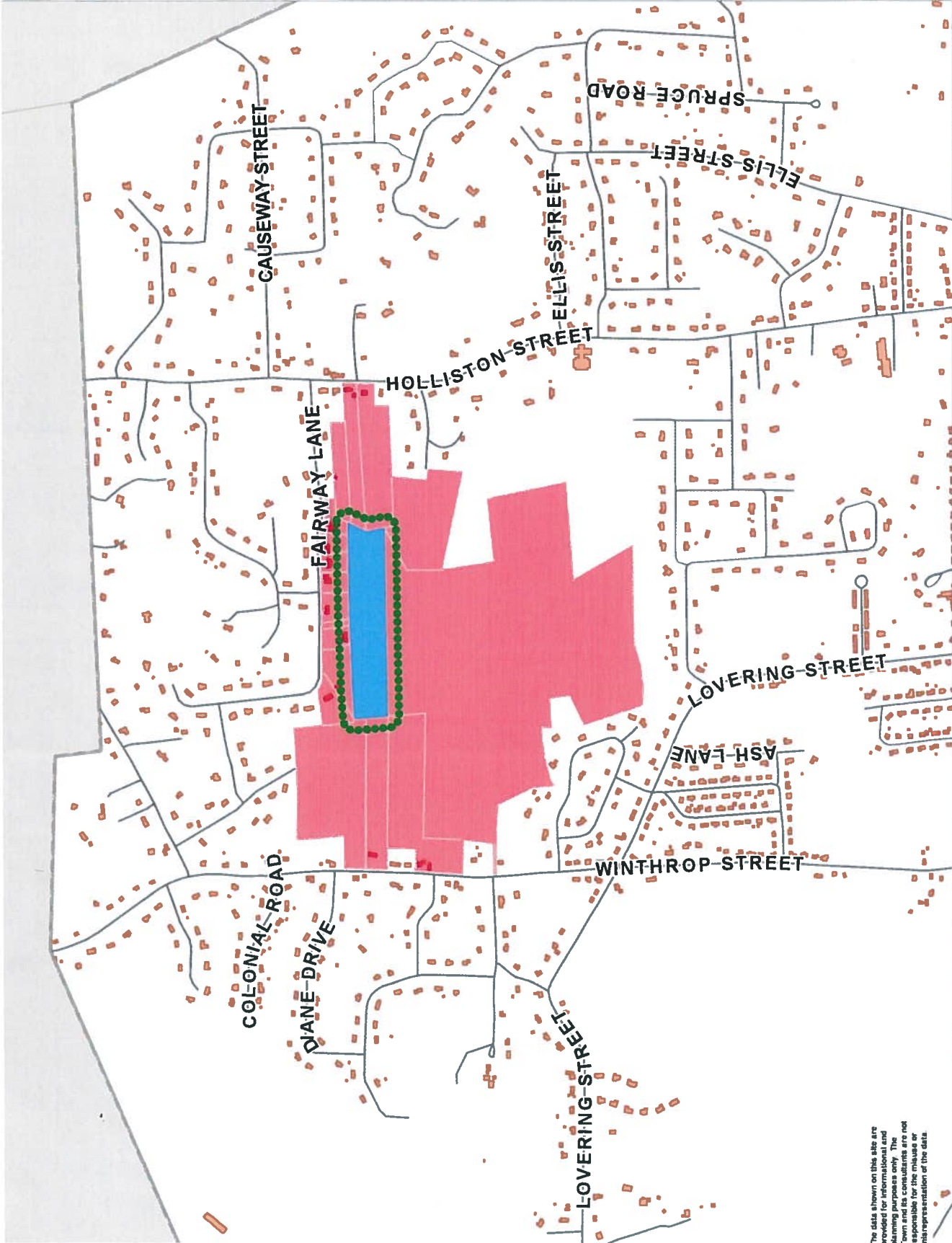
Office of the Board of Assessors

Date

Renee Barbosa 8/14/17



- Fire Stations
- Police Stations
- Hospitals
- Town Hall
- Public Libraries
- Schools
- Ice Rinks
- Community Health Centers
- MBTA Commuter Rail
- Parcels
- MA Highways
- US Highway
- Numbered Routes
- Abutting Town names
- Abutting Towns
- Town Boundary
- Buildings MGIS
- Streets



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Printed on 08/14/2017 at 02:09 PM

1600 3200 ft

Town of Medway, MA GIS

100' 08-019

Parcel ID: 08-019
WICKETT HENRY L.
38746 CLINTON AVE
DADE CITY, FL 33525

Parcel ID: 08-013
CURRUL BRANDON S
23B FAIRWAY LANE
MEDWAY, MA 02053

Parcel ID: 08-014
CHAVES ABRAHAM
CHAVES PRISCILLA
23-A FAIRWAY LN.
MEDWAY, MA 02053

Parcel ID: 08-015
DAHLHEIMER DAVID A
DAHLHEIMER SARAH A
21 FAIRWAY LN.
MEDWAY, MA 02053

Parcel ID: 08-016
WICKETT DEVELOPMENT CO
38746 CLINTON AVE
DADE CITY, FL 33525

Parcel ID: 08-017
SPOZIO CATHERINE L.
19 FAIRWAY LN.
MEDWAY, MA 02053

Parcel ID: 08-018
PRICE WILLIAM C
PRICE MARY JANE
17 FAIRWAY LN.
MEDWAY, MA 02053

Parcel ID: 08-020
WICKETT HENRY
38764 CLINTON AVENUE
DADE CITY, FL 33525-1903

Parcel ID: 08-023
WALSH ROBERT TRUSTEE
WALSH GLORIA TRUSTEE
114 WINTHROP ST.
MEDWAY, MA 02053

Parcel ID: 08-024
HOAG DAVID G, TR.
HOAG GRACE G TR.
116 WINTHROP ST.
MEDWAY, MA 02053

Parcel ID: 09-042
CORBETT SEAN P
CORBETT MARYANN
15 FAIRWAY LN.
MEDWAY, MA 02053

Parcel ID: 09-043
SCHAEFER KURT R.
SCHAEFER ELLEN E.
13 FAIRWAY LN.
MEDWAY, MA 02053

Parcel ID: 09-044
STRACHAN DANIEL T
STRACHAN BARBARA A
11 FAIRWAY LN.
MEDWAY, MA 02053

Parcel ID: 09-049
MEDWAY TOWN OF
155 VILLAGE ST.
MEDWAY, MA 02053

Parcel ID: 09-050
RICHARDS WILLIAM G.
RICHARDS LISA A
167 HOLLISTON ST.
MEDWAY, MA 02053

Parcel ID: 09-051
TIMBER CREST LLC
135 MAIN ST SUITE 5
MEDWAY, MA 02053

Parcel ID: 09-058
WICKETT DEVELOPMENT INC
38746 CLINTON AVENUE
DADE CITY, FL 33525

Parcel ID: 14-005
WICKETT HENRY L. & HENRY
38746 CLINTON AVE
DADE CITY, FL 33525



THIS IS A CERTIFIED ABUTTERS LIST FROM THE TOWN OF MEDWAY.
WE CERTIFY THAT AT TIME OF LAST ASSESSMENT, THE NAMES AND
ADDRESSES OF ALL PROPERTY OWNERS, ARE ACCURATE.

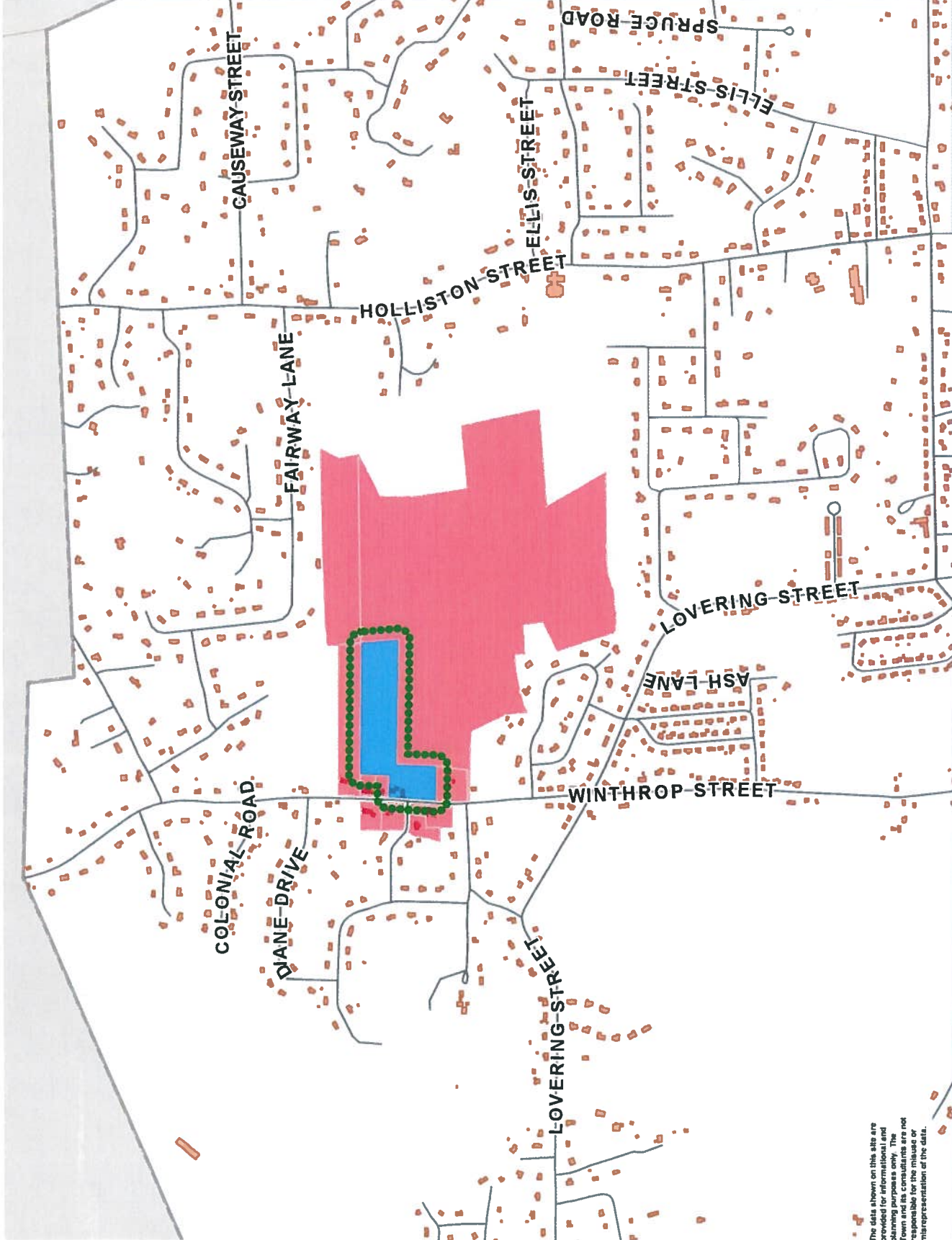
Office of the Board of Assessors

Date

Chris Gallegos 8/4/17



- Fire Stations
- Police Stations
- Hospitals
- Town Hall
- Public Libraries
- Schools
- Ice Rinks
- Community Health Centers
- MBTA Commuter Rail
- Parcels
- MA Highways
- Interstates
- US Highway
- Numbered Routes
- Abutting Town names
- Abutting Towns
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Printed on 08/14/2017 at 02:13 PM

Town of Medway, MA GIS

100' 08-080

Parcel ID: 08-020
WICKETT HENRY
38764 CLINTON AVENUE
DADE CITY, FL 33525-1903

Parcel ID: 08-019
WICKETT HENRY L.
38746 CLINTON AVE
DADE CITY, FL 33525

Parcel ID: 08-021
MCCURLEY-MACKAY LORI F
106 WINTHROP ST.
MEDWAY, MA 02053

Parcel ID: 08-022
CAMPO PATRICIA A LIVING
PATRICIA A CAMPO TRUSTEE
108 WINTHROP ST.
MEDWAY, MA 02053

Parcel ID: 08-023
WALSH ROBERT TRUSTEE
WALSH GLORIA TRUSTEE
114 WINTHROP ST.
MEDWAY, MA 02053

Parcel ID: 08-049
KEEFE JANE E
KEEFE BRIAN A
105 WINTHROP ST.
MEDWAY, MA 02053

Parcel ID: 08-050
MCNEIL MICHAEL A JR
MCNEIL DONNA M
103 WINTHROP ST.
MEDWAY, MA 02053

Parcel ID: 08-052
DESJARDINS ANTHONY M
DESJARDINS TAWNY C
1 STEPHANIE DR.
MEDWAY, MA 02053

Parcel ID: 08-053
STONIONIS BEVERLY A.
101 WINTHROP ST.
MEDWAY, MA 02053

Parcel ID: 14-002
CARR MEGGAN A.
MCNALLY MIRANDA K.
99 WINTHROP ST.
MEDWAY, MA 02053

Parcel ID: 14-004
BRODERICK DENNIS J.
BRODERICK K. DEBRA
98 WINTHROP ST.
MEDWAY, MA 02053

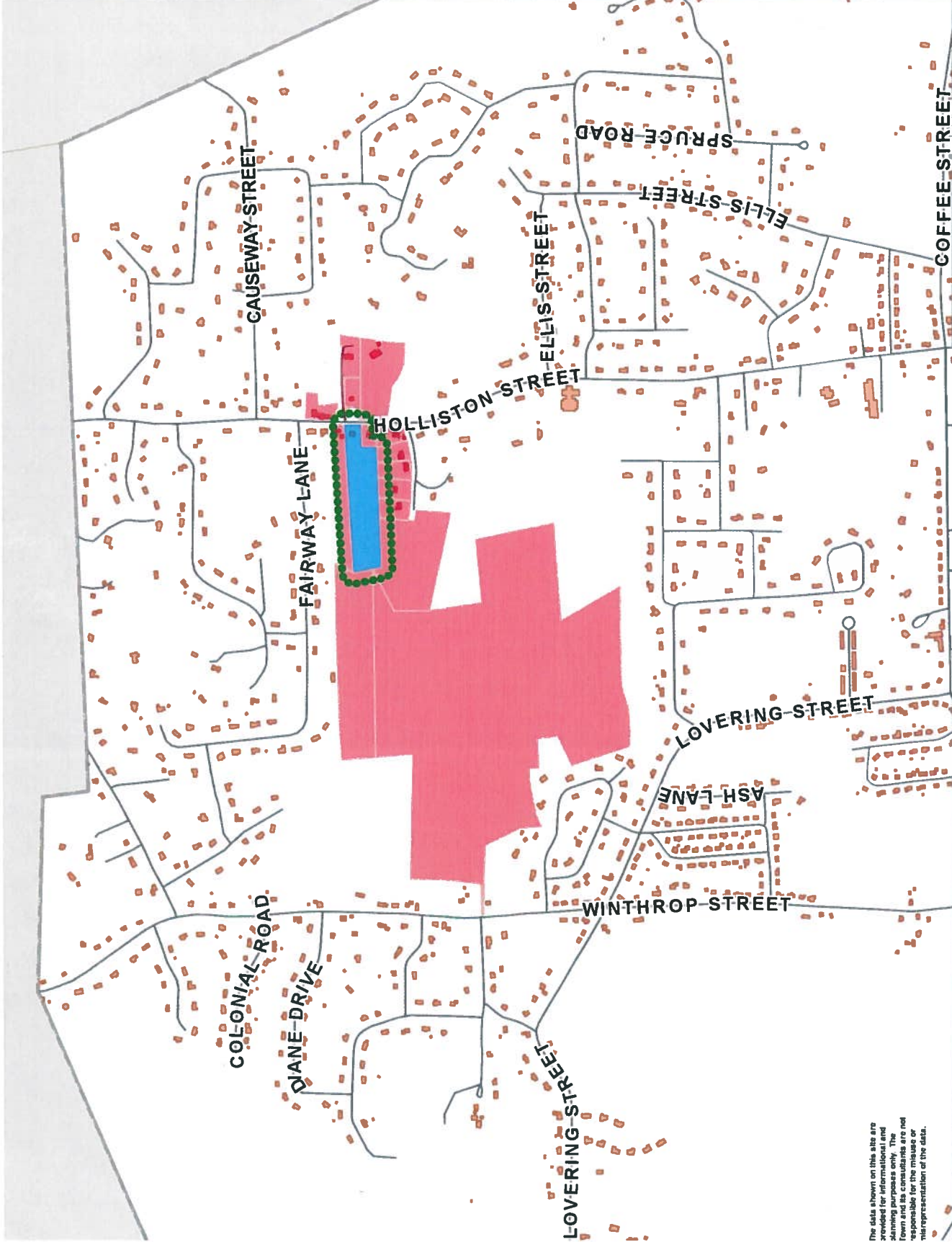
Parcel ID: 14-005
WICKETT HENRY L. & HENRY
38746 CLINTON AVE
DADE CITY, FL 33525



THIS IS A CERTIFIED ABUTTERS LIST FROM THE TOWN OF MEDWAY.
WE CERTIFY THAT AT TIME OF LAST ASSESSMENT, THE NAMES AND
ADDRESSES OF ALL PROPERTY OWNERS, ARE ACCURATE.
[Signature]
Office of the Board of Assessors Date 8/14/17



- Fire Stations
- Police Stations
- Hospitals
- Town Hall
- Public Libraries
- Schools
- Ice Rinks
- Community Health Centers
- MBTA Commuter Rail
- Parks
- MA Highways
- Interstate
- US Highway
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- Abutting Towns
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- Streets



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1600 3200 ft

Printed on 08/14/2017 at 02:17 PM

Town of Medway, MA GIS

1001 09-051

Parcel ID: 09-051
TIMBER CREST LLC
135 MAIN ST SUITE 5
MEDWAY, MA 02053

Parcel ID: 08-019
WICKETT HENRY L.
38746 CLINTON AVE
DADE CITY, FL 33525

Parcel ID: 09-031
NARDUCCI MICHAEL
NARDUCCI MARY
162 HOLLISTON ST.
MEDWAY, MA 02053

Parcel ID: 09-032
CHOATE WILLIAM R.
CHOATE HEATHER L.
166 HOLLISTON ST.
MEDWAY, MA 02053

Parcel ID: 09-033
BRESNAHAN WILLIAM M
BRESNAHAN PATRICIA
166-R HOLLISTON ST.
MEDWAY, MA 02053

Parcel ID: 09-037
WALSH EUGENE V
WALSH KARYL L
168 HOLLISTON ST.
MEDWAY, MA 02053

Parcel ID: 09-050
RICHARDS WILLIAM G.
RICHARDS LISA A
167 HOLLISTON ST.
MEDWAY, MA 02053

Parcel ID: 09-052
JOHNSON DAVID W.
163 HOLLISTON ST.
MEDWAY, MA 02053

Parcel ID: 09-053
LAFFERTY SCOTT D
LAFFERTY CERISSA
2 WOODLAND RD.
MEDWAY, MA 02053

Parcel ID: 09-054
NYLANDER MARY JUNE LIFE
NYLANDER ERIC S
4 WOODLAND RD.
MEDWAY, MA 02053

Parcel ID: 09-055
MAGEE RYAN SINCLAIR
COUGHLAN MAUREEN PATRICIA
6 WOODLAND RD.
MEDWAY, MA 02053

Parcel ID: 09-056
BIREN-THIBODEAU BONNIE L
8 WOODLAND RD.
MEDWAY, MA 02053

Parcel ID: 09-057
YOST PETER R
YOST EMILY J
10 WOODLAND RD.
MEDWAY, MA 02053

Parcel ID: 09-058
WICKETT DEVELOPMENT INC
38746 CLINTON AVENUE
DADE CITY, FL 33525

Parcel ID: 14-005
WICKETT HENRY L. & HENRY
38746 CLINTON AVE
DADE CITY, FL 33525



THIS IS A CERTIFIED ABUTTERS LIST FROM THE TOWN OF MEDWAY.
WE CERTIFY THAT AT TIME OF LAST ASSESSMENT, THE NAMES AND
ADDRESSES OF ALL PROPERTY OWNERS, ARE ACCURATE.

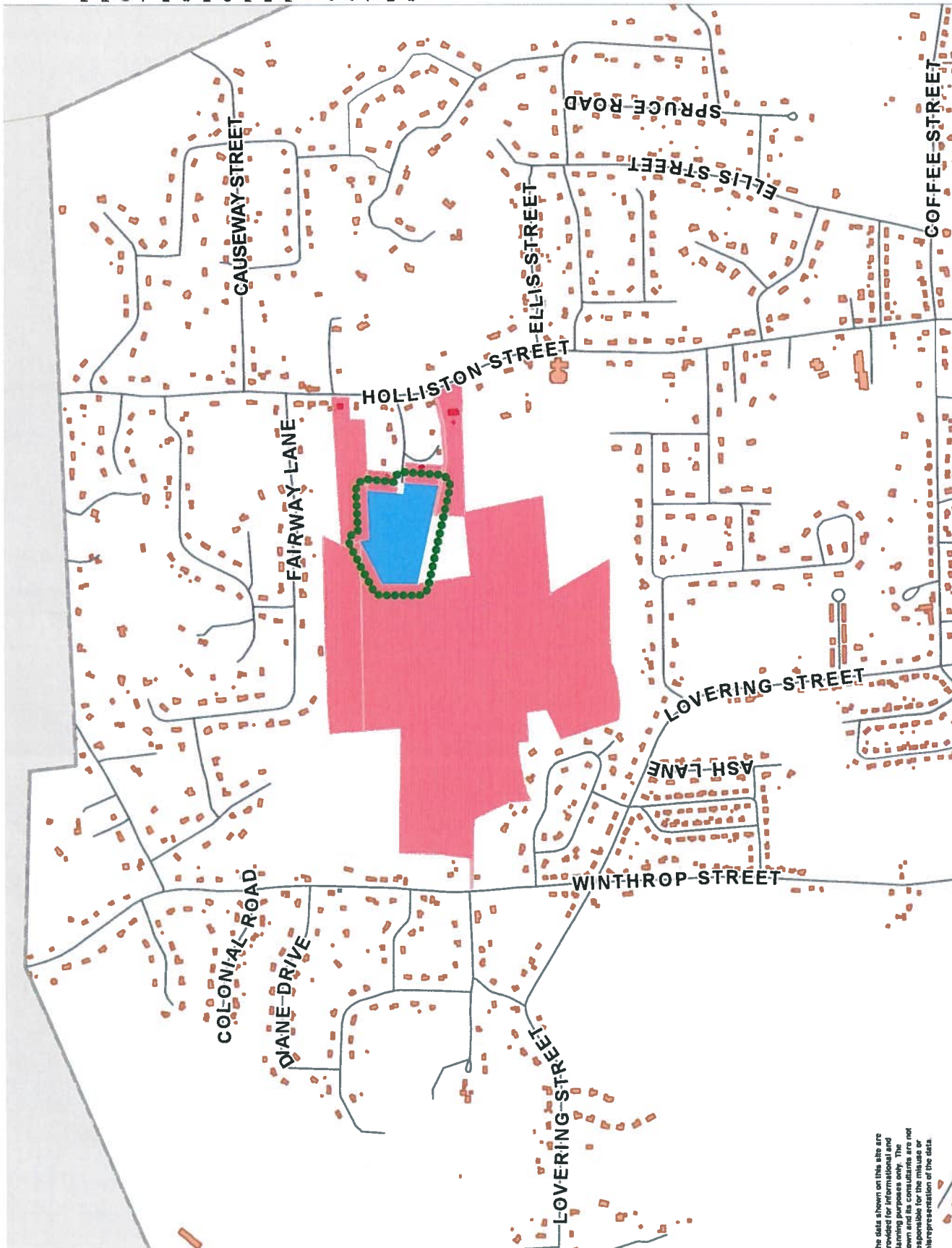
Office of the Board of Assessors

Date

8/4/17



- Fire Stations
- Police Stations
- Hospitals
- Town Hall
- Public Libraries
- Schools
- Ice Rinks
- Community Health Centers
- MBTA Commuter Rail
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- US Highway
- Numbered Routes
- Abutting Town names
- Abutting Towns
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- Streets



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1600 3200 ft

Town of Medway, MA GIS

100' 09-058

Parcel ID: 09-058
WICKETT DEVELOPMENT INC
38746 CLINTON AVENUE
DADE CITY, FL 33525

Parcel ID: 08-019
WICKETT HENRY L.
38746 CLINTON AVE
DADE CITY, FL 33525

Parcel ID: 09-051
TIMBER CREST LLC
135 MAIN ST SUITE 5
MEDWAY, MA 02053

Parcel ID: 09-051
TIMBER CREST LLC
135 MAIN ST SUITE 5
MEDWAY, MA 02053

Parcel ID: 09-057
YOST PETER R
YOST EMILY J
10 WOODLAND RD.
MEDWAY, MA 02053

Parcel ID: 09-059
FIGUEIRAL JOSE N
FIGUEIRAL KYLE S
9 WOODLAND RD.
MEDWAY, MA 02053

Parcel ID: 14-005
WICKETT HENRY L. & HENRY
38746 CLINTON AVE
DADE CITY, FL 33525

Parcel ID: 14-005
WICKETT HENRY L. & HENRY
38746 CLINTON AVE
DADE CITY, FL 33525

Parcel ID: 15-001-0001
BRADY NANCY
153 HOLLISTON ST
MEDWAY, MA 02053

Parcel ID: 15-002
BRADY NANCY
153 HOLLISTON ST.
MEDWAY, MA 02053

Parcel ID: 15-002
BRADY NANCY
153 HOLLISTON ST.
MEDWAY, MA 02053

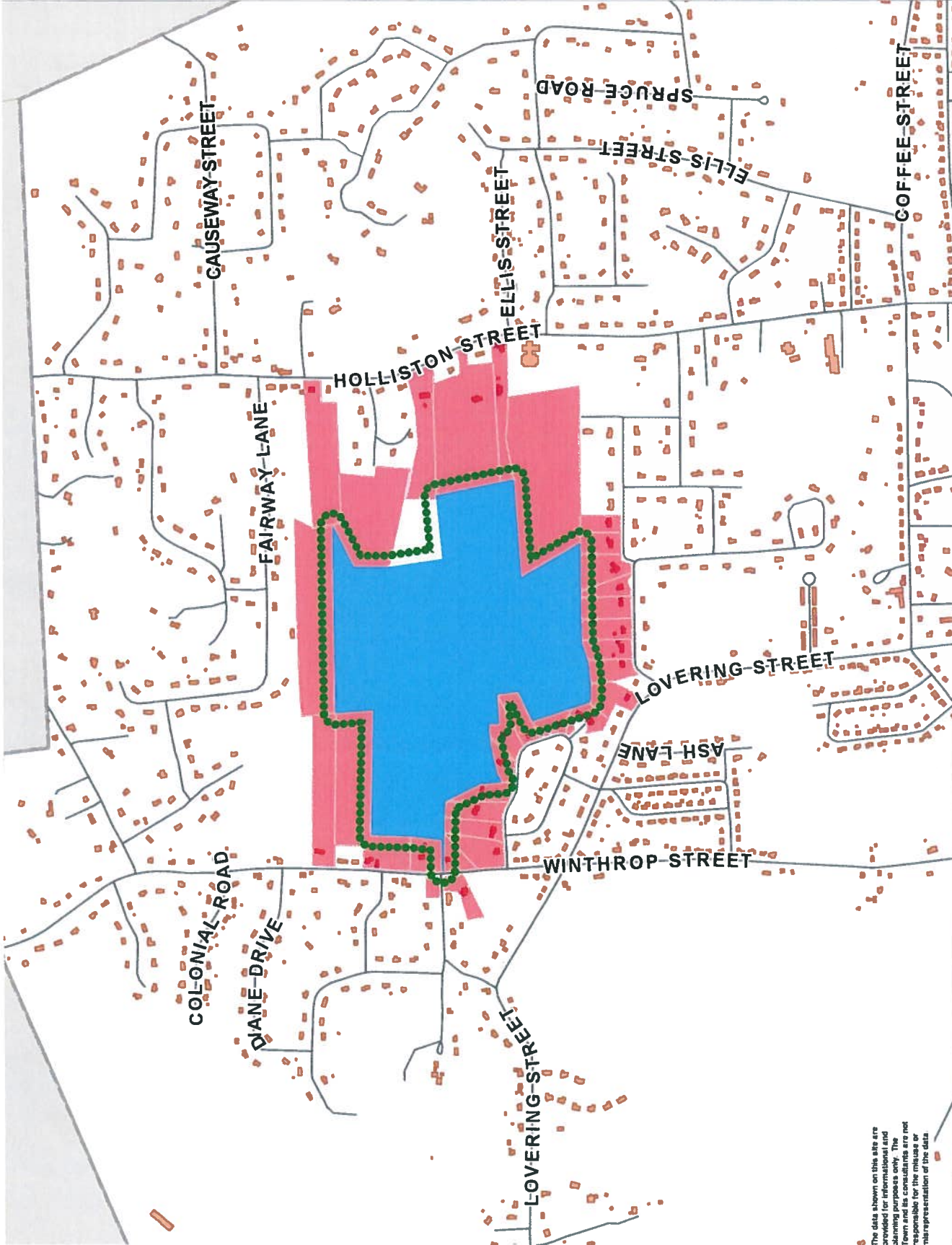


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ADDRESSES OF ALL PROPERTY OWNERS ARE ACCURATE.

John Galibani 8/4/17
Office of the Board of Assessors



- Fire Stations
- Police Stations
- Hospitals
- Town Hall
- Public Libraries
- Schools
- Ice Rinks
- Community Health Centers
- MBTA Commuter Rail
- Parcels
- MA Highways
- US Highways
- Numbered Routes
- Abutting Town names
- Abutting Towns
- Town Boundary
- Building MGIS
- Streets



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1600 3200 ft

Printed on 08/14/2017 at 02:24 PM

Town of Medway, MA GIS

1001 14-005

Parcel ID: 14-005
WICKETT HENRY L. & HENRY
38746 CLINTON AVE
DADE CITY, FL 33525

Parcel ID: 08-019
WICKETT HENRY L.
38746 CLINTON AVE
DADE CITY, FL 33525

Parcel ID: 08-020
WICKETT HENRY
38764 CLINTON AVENUE
DADE CITY, FL 33525-1903

Parcel ID: 08-023
WALSH ROBERT TRUSTEE
WALSH GLORIA TRUSTEE
114 WINTHROP ST.
MEDWAY, MA 02053

Parcel ID: 09-051
TIMBER CREST LLC
135 MAIN ST SUITE 5
MEDWAY, MA 02053

Parcel ID: 09-058
WICKETT DEVELOPMENT INC
38746 CLINTON AVENUE
DADE CITY, FL 33525

Parcel ID: 14-003
MEDWAY TOWN OF
155 VILLAGE ST.
MEDWAY, MA 02053

Parcel ID: 14-004
BRODERICK DENNIS J.
BRODERICK K. DEBRA
98 WINTHROP ST.
MEDWAY, MA 02053

Parcel ID: 14-006
WRONA MICHAEL D
WRONA KAREN M
13 HOWE ST.
MEDWAY, MA 02053

Parcel ID: 14-007
FLANAGAN MICHAEL K
FLANAGAN LAURA A
11 HOWE ST.
MEDWAY, MA 02053

Parcel ID: 14-008
BONARRIGO JOHN R
BONARRIGO STEPHANIE
9 HOWE ST.
MEDWAY, MA 02053

Parcel ID: 14-009
GRADY JR RICHARD M
GRADY MEGAN L
7 HOWE ST.
MEDWAY, MA 02053

Parcel ID: 14-010
YUEN KENNETH P
YUEN KELLY J
5 HOWE ST.
MEDWAY, MA 02053

Parcel ID: 14-017
BROCHU JAMES E
19 OHLSON CIR.
MEDWAY, MA 02053

Parcel ID: 14-018
NEWELL HENRY H. III
NEWELL KATINKA M
17 OHLSON CIR.
MEDWAY, MA 02053

Parcel ID: 14-019
SCHUBERT PETER E
15 OHLSON CIR.
MEDWAY, MA 02053

Parcel ID: 14-020
NOVUS HOMES LLC
190 PINE ST
MEDFIELD, MA 02052

Parcel ID: 14-021
SIMCOX JOHN C
SIMCOX KATHLEEN R
11 OHLSON CIR.
MEDWAY, MA 02053

Parcel ID: 14-022
NEAMTU RODICA
9 OHLSON CIR.
MEDWAY, MA 02053

Parcel ID: 14-023
DEFOYD WES
DEFOYD ERIN
7 OHLSON CIRCLE
MEDWAY, MA 02053

Parcel ID: 14-024
ROCHE MIGUEL
ROCHE KELLEY
5 OHLSON CIR.
MEDWAY, MA 02053

Parcel ID: 14-025
BUSH ANDREW E
BUSH JOY A
3 OHLSON CIR
MEDWAY, MA 02053

Parcel ID: 14-026
SMITH JOSEPH P
SMITH ANN MARIE
1 OHLSON CIR.
MEDWAY, MA 02053

Parcel ID: 14-027
KWOK AMY
BOULEY MICHAEL
96 WINTHROP ST.
MEDWAY, MA 02053

Parcel ID: 14-037-0001
TRUSCOTT CHARLES J III
TRUSCOTT CAROL
3 PATRIDGE ST
MEDWAY, MA 02053

Parcel ID: 15-002
BRADY NANCY
153 HOLLISTON ST.
MEDWAY, MA 02053

Parcel ID: 15-004
RAMOS JR JAINESIO
149 A HOLLISTON ST
MEDWAY, MA 02053

Parcel ID: 15-006
CANTIN ROBERT J
CANTIN MARY P
147 HOLLISTON ST.
MEDWAY, MA 02053

Parcel ID: 15-017
CURRAN PATRICK J
CURRAN MARYBETH H
17 HOWE ST.
MEDWAY, MA 02053

Parcel ID: 15-018
GOLDMAN NANCY
15 HOWE ST.
MEDWAY, MA 02053

Parcel ID: 15-019
PAVLIK
NANCY RUSSELL & THOMAS
117 MONROE ST
DOUGLAS, MA 01516

Parcel ID: 21-083
SNYDER JASON
SNYDER JENNIFER
88 LOVERING ST
MEDWAY, MA 02053

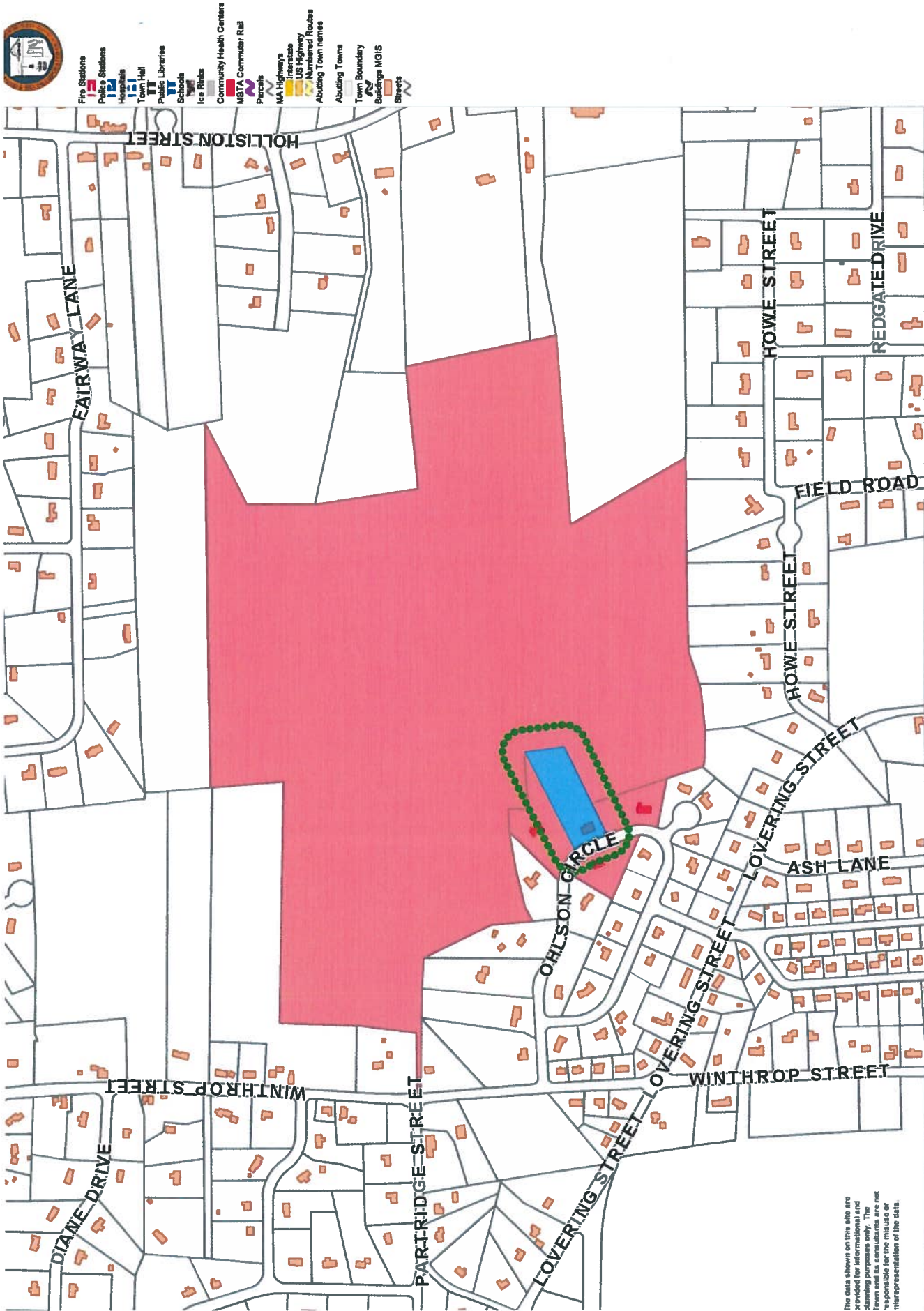
Parcel ID: 21-084
OSBORNE TRUSTEE ALAN E
OSBORNE TRUSTEE JOANN
3 HOWE ST.
MEDWAY, MA 02053



THIS IS A CERTIFIED ABUTTERS LIST FROM THE TOWN OF MEDWAY.
WE CERTIFY THAT AT TIME OF LAST ASSESSMENT, THE NAMES AND
ADDRESSES OF ALL PROPERTY OWNERS, ARE ACCURATE.

Office of the Board of Assessors

Date



- Fire Stations
- Police Stations
- Hospitals
- Town Hall
- Public Libraries
- Schools
- Ice Rinks
- Community Health Centers
- MBTA Commuter Rail
- Parcels
- MA Highways
- Interstates
- US Highway
- Numbered Routes
- Abutting Town names
- Town Boundary
- Buildings MGIS
- Streets

Town of Medway, MA GIS

Printed on 08/14/2017 at 02:28 PM

800 1600 ft

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1001 14-000

Parcel ID: 14-020
NOVUS HOMES LLC
190 PINE ST
MEDFIELD, MA 02052

Parcel ID: 14-005
WICKETT HENRY L. & HENRY
38746 CLINTON AVE
DADE CITY, FL 33525

Parcel ID: 14-019
SCHUBERT PETER E
15 OHLSON CIR.
MEDWAY, MA 02053

Parcel ID: 14-018
SCHUBERT PETER E
15 OHLSON CIR.
MEDWAY, MA 02053

Parcel ID: 14-021
SIMCOX JOHN C
SIMCOX KATHLEEN R
11 OHLSON CIR.
MEDWAY, MA 02053

Parcel ID: 14-059
WHITAKER GARY
WHITAKER MARY LOU
12 OHLSON CIR.
MEDWAY, MA 02053

Parcel ID: 14-017
SCHUBERT PETER E
15 OHLSON CIR.
MEDWAY, MA 02053



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ADDRESSES OF ALL PROPERTY OWNERS, ARE ACCURATE.

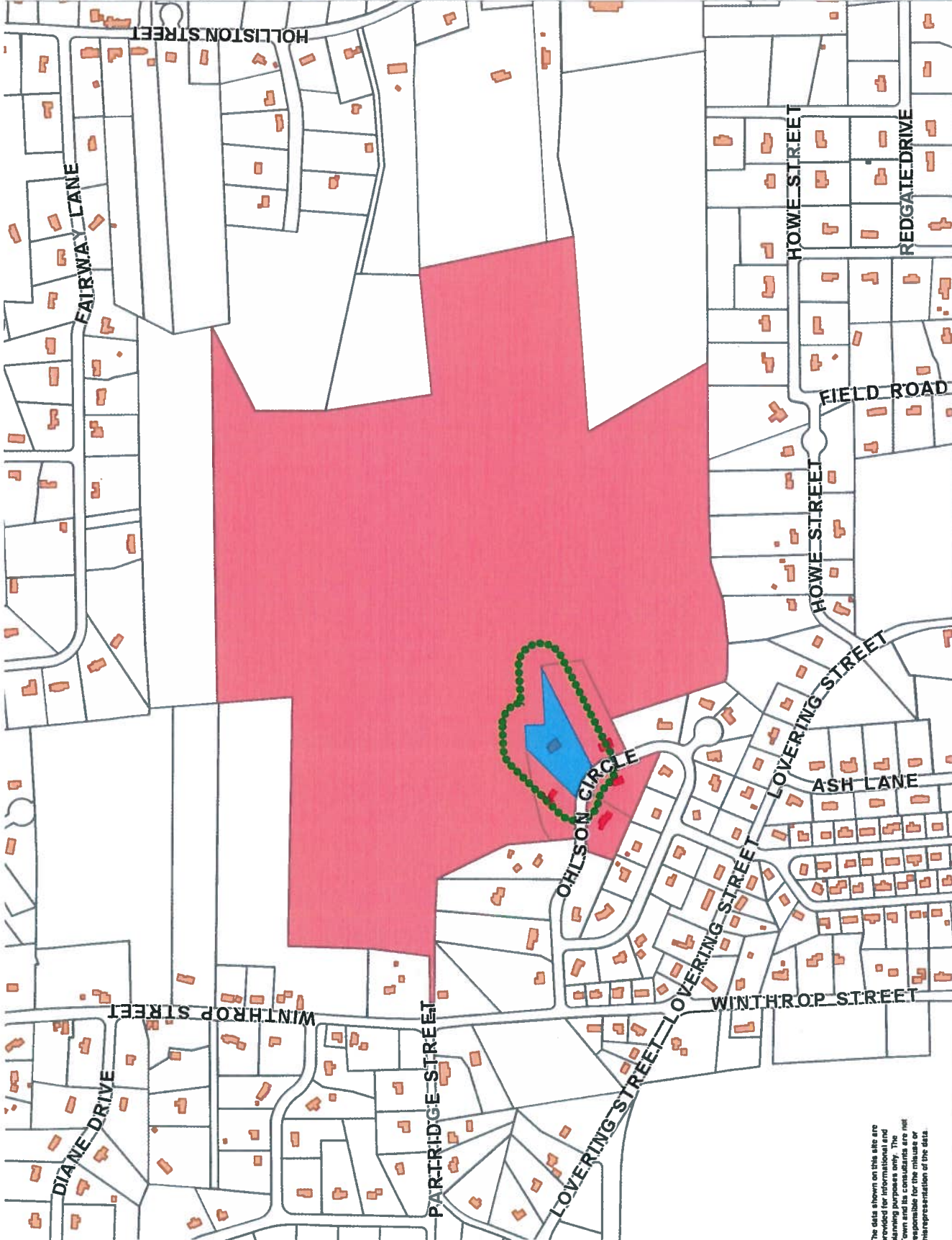
Office of the Board of Assessors

Date

[Handwritten Signature] 7/4/17



- Fire Stations
- Park Stations
- Hospitals
- Town Hall
- Public Libraries
- Schools
- Ice Rinks
- Community Health Centers
- MBTA Commuter Rail
- Parcels
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- Abutting Town names
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800 1800 ft

Printed on 08/14/2017 at 02:43 PM

Town of Medway, MA GIS

1007 14-001

Parcel ID: 14-021
SIMCOX JOHN C
SIMCOX KATHLEEN R
11 OHLSON CIR.
MEDWAY, MA 02053

Parcel ID: 14-005
WICKETT HENRY L. & HENRY
38746 CLINTON AVE
DADE CITY, FL 33525

Parcel ID: 14-020
NOVUS HOMES LLC
190 PINE ST
MEDFIELD, MA 02052

Parcel ID: 14-022
NEAMTU RODICA
9 OHLSON CIR.
MEDWAY, MA 02053

Parcel ID: 14-058
BURKE STEVEN
BURKE SUZANNE V
8 OHLSON CIR.
MEDWAY, MA 02053

Parcel ID: 14-059
WHITAKER GARY
WHITAKER MARY LOU
12 OHLSON CIR.
MEDWAY, MA 02053



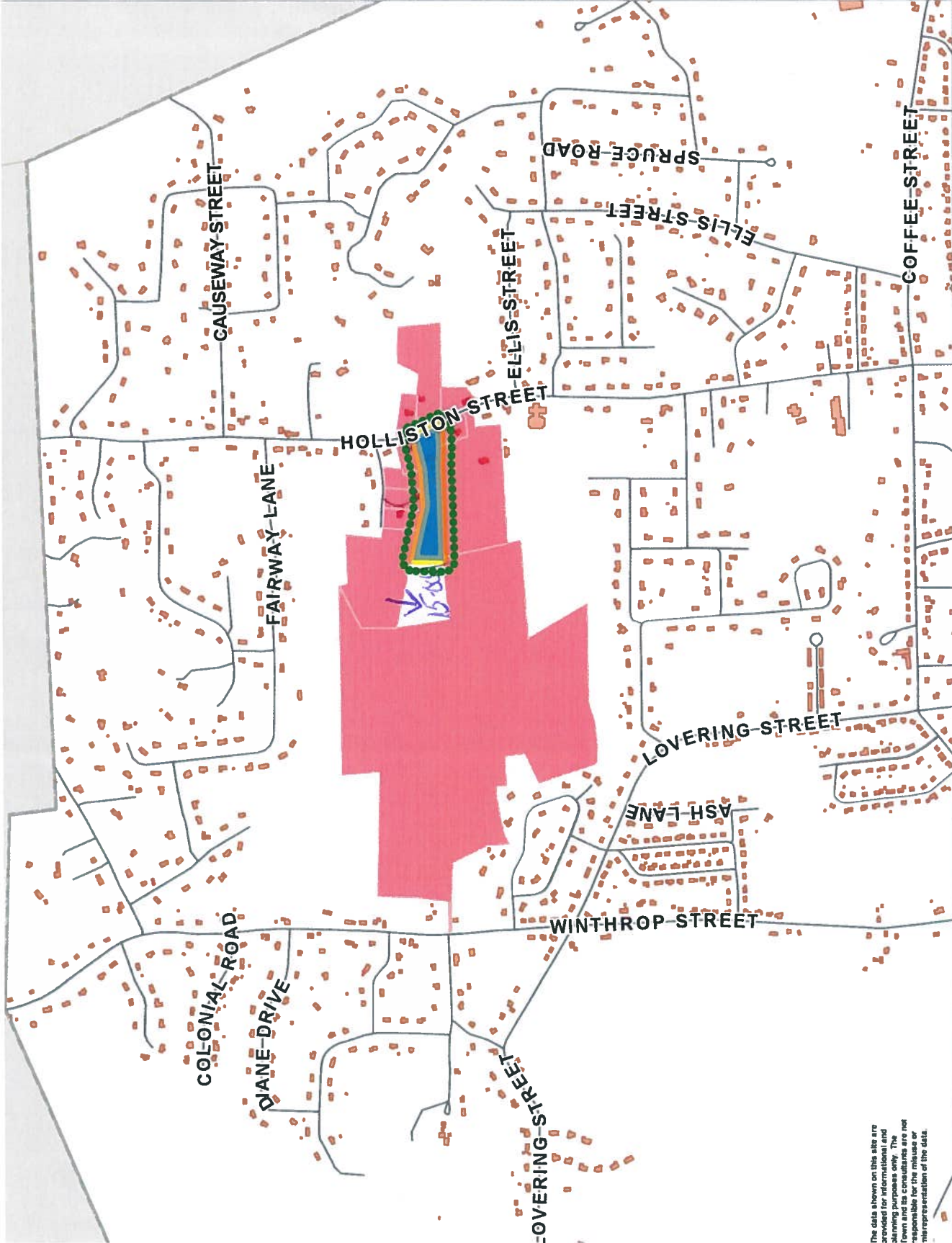
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[Signature]
Office of the Board of Assessors

Date



- Fire Stations
- Police Stations
- Hospitals
- Town Hall
- Public Libraries
- State Buildings
- Ice Rinks
- Community Health Centers
- MBTA Commuter Rail
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- Abutting Towns
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Printed on 08/14/2017 at 02:50 PM

1600 3200 ft

Town of Medway, MA GIS

100' 15-00/

Parcel ID: 15-002
BRADY NANCY
153 HOLLISTON ST.
MEDWAY, MA 02053

Parcel ID: 09-029
PATEL KETAL
PATEL TUSHAR
156 HOLLISTON ST
MEDWAY, MA 02053

Parcel ID: 09-058
WICKETT DEVELOPMENT INC
38746 CLINTON AVENUE
DADE CITY, FL 33525

Parcel ID: 15-001
BRADY NANCY
153 HOLLISTON ST.
MEDWAY, MA 02053

Parcel ID: 09-059
FIGUEIRAL JOSE N
FIGUEIRAL KYLE S
9 WOODLAND RD.
MEDWAY, MA 02053

Parcel ID: 09-060
SHEEHAN CHRISTOPHER J
SHEEHAN SARA J
7 WOODLAND RD.
MEDWAY, MA 02053

Parcel ID: 09-061
GALLERANI MICHAEL
GALLERANI WENDY
5 WOODLAND RD.
MEDWAY, MA 02053

Parcel ID: 15-001-0001
BRADY NANCY
153 HOLLISTON ST
MEDWAY, MA 02053

Parcel ID: 09-063
MIRAGEAS CHRISTOPHER
MIRAGEAS VICTORIA
155 HOLLISTON ST.
MEDWAY, MA 02053

Parcel ID: 14-005
WICKETT HENRY L. & HENRY
38746 CLINTON AVE
DADE CITY, FL 33525

Parcel ID: 15-001-0001
BRADY NANCY
153 HOLLISTON ST
MEDWAY, MA 02053

Parcel ID: 15-003
ALBERTA JOHN A & JULIA A
151 HOLLISTON ST.
MEDWAY, MA 02053

Parcel ID: 15-004
RAMOS JR JAINESIO
149 A HOLLISTON ST
MEDWAY, MA 02053

Parcel ID: 15-020
YANCO PAMELA H
154 HOLLISTON ST.
MEDWAY, MA 02053

Parcel ID: 15-025
SMITH MICHAEL P
RODENHISER SAMANTHA N
150 HOLLISTON ST.
MEDWAY, MA 02053

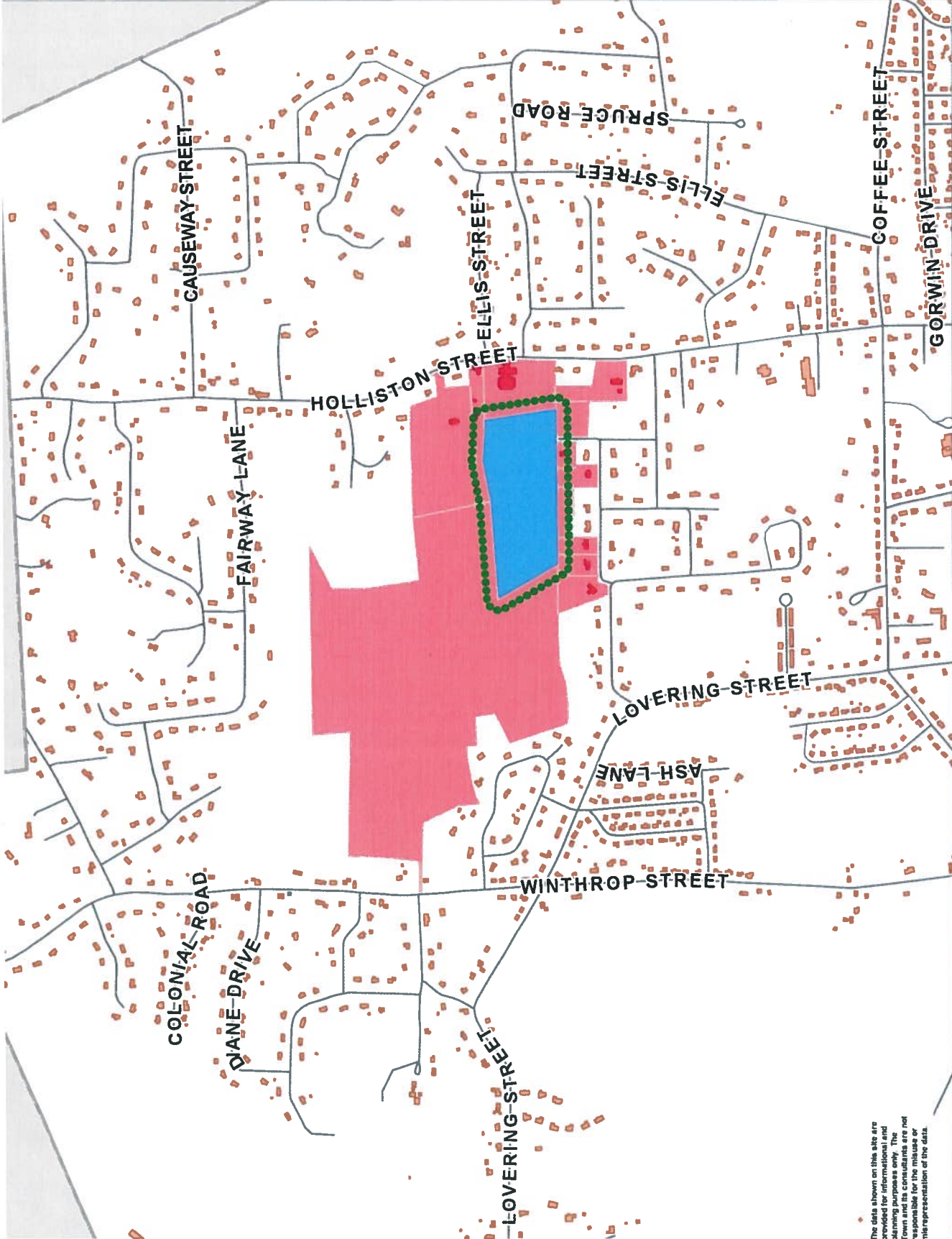


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WE CERTIFY THAT AT TIME OF LAST ASSESSMENT, THE NAMES AND
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Chris Dalabara
Office of the Board of Assessors Date 8/4/17



- Fire Stations
- Parks
- Police Stations
- Hospitals
- Town Hall
- Public Libraries
- Schools
- Ice Rinks
- Community Health Centers
- MBTA Commuter Rail
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- US Highways
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Printed on 08/14/2017 at 02:30 PM

1600 3200 ft

Town of Medway, MA GIS

1001 16-019

Parcel ID: 15-019
PAVLIK
NANCY RUSSELL & THOMAS
117 MONROE ST
DOUGLAS, MA 01516

Parcel ID: 14-005
WICKETT HENRY L. & HENRY
38746 CLINTON AVE
DADE CITY, FL 33525

Parcel ID: 14-006
WRONA MICHAEL D
WRONA KAREN M
13 HOWE ST.
MEDWAY, MA 02053

Parcel ID: 15-004
RAMOS JR JAINESIO
149 A HOLLISTON ST
MEDWAY, MA 02053

Parcel ID: 15-006
CANTIN ROBERT J
CANTIN MARY P
147 HOLLISTON ST.
MEDWAY, MA 02053

Parcel ID: 15-007
ROMAN CATHOLIC
OF BOSTON
2 BARBER ST.
MEDWAY, MA 02053

Parcel ID: 15-010
NARDUCCI CORP. INC.
162 HOLLISTON ST
MEDWAY, MA 02053

Parcel ID: 15-011
NARDUCCI MARK J
5 FERN PATH
MEDWAY, MA 02053

Parcel ID: 15-013
BREWER ANDREW M
BREWER KATHLEEN S
23 HOWE ST.
MEDWAY, MA 02053

Parcel ID: 15-015
NARDUCCI CORP. INC.
162 HOLLISTON ST.
MEDWAY, MA 02053

Parcel ID: 15-017
CURRAN PATRICK J
CURRAN MARYBETH H
17 HOWE ST.
MEDWAY, MA 02053

Parcel ID: 15-018
GOLDMAN NANCY
15 HOWE ST.
MEDWAY, MA 02053

Parcel ID: 22-018
BRADY SCOTT E & LYNNE
135 HOLLISTON ST.
MEDWAY, MA 02053



THIS IS A CERTIFIED ADDRESS LIST FROM THE TOWN OF MEDWAY.
WE CERTIFY THAT AT TIME OF LAST ASSESSMENT, THE NAMES AND
ADDRESSES OF ALL PROPERTY OWNERS ARE ACCURATE.

[Signature]
Office of the Board of Assessors

8/14/17
Date

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: **Mounir Tayara, Timber Crest Estates , LLC**
- B. The applicant has filed a **Notice of Intent (NOI)** with the Conservation Commission for the municipality of **Medway, MA** seeking permission to perform activities within Areas Subject to Protection under the Wetlands Protection Act (General Laws Chapter 131, Section 40).
- C. The project scope is for: **site preparation, three limited project crossings, 15 point source discharges and two water/sewer crossings for a residential subdivision.**
- D. The address of the lot where the activity is proposed is: **21-R Fairway Lane; 143, 153-R and 165 Holliston Street; 11 & 13 Ohlson Circle; 102 Winthrop Street; and 0-R and 11Woodland Road - Medway, MA.**
- E. Copies of the NOI application may be examined at **Medway Town Hall** Mondays, 7:30am-5:30pm, Tuesday-Thursday, 7:30am-4:30pm and Friday, 7:30am-12:30pm or by appointment. For additional information, call **(508) 533-3292**.
- F. Copies of the NOI application may be obtained for a reasonable fee from the applicant's representative, by calling **(508) 393-3784** between the hours of **10 and 3** on the following days of the week: **M, T, W, Th., F.**
- G. Information regarding the date, time, and place of the public hearing may be obtained from **Medway Conservation Commission** by calling **(508) 533-3292**.

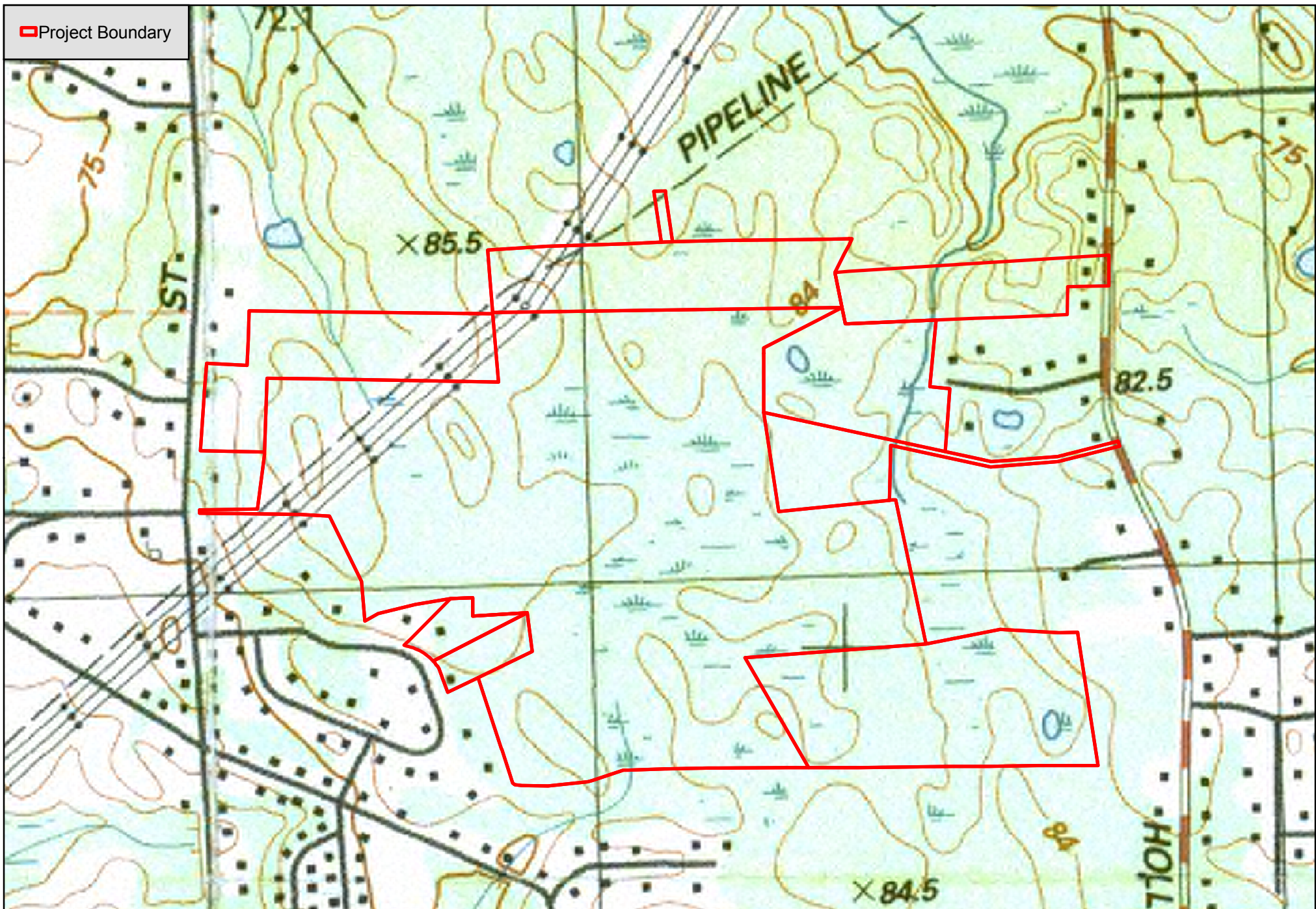
NOTE: Notice of the public hearing, including its date, time, and place, will be published at least five (5) days in advance in a local newspaper publication (**Milford Daily News**).

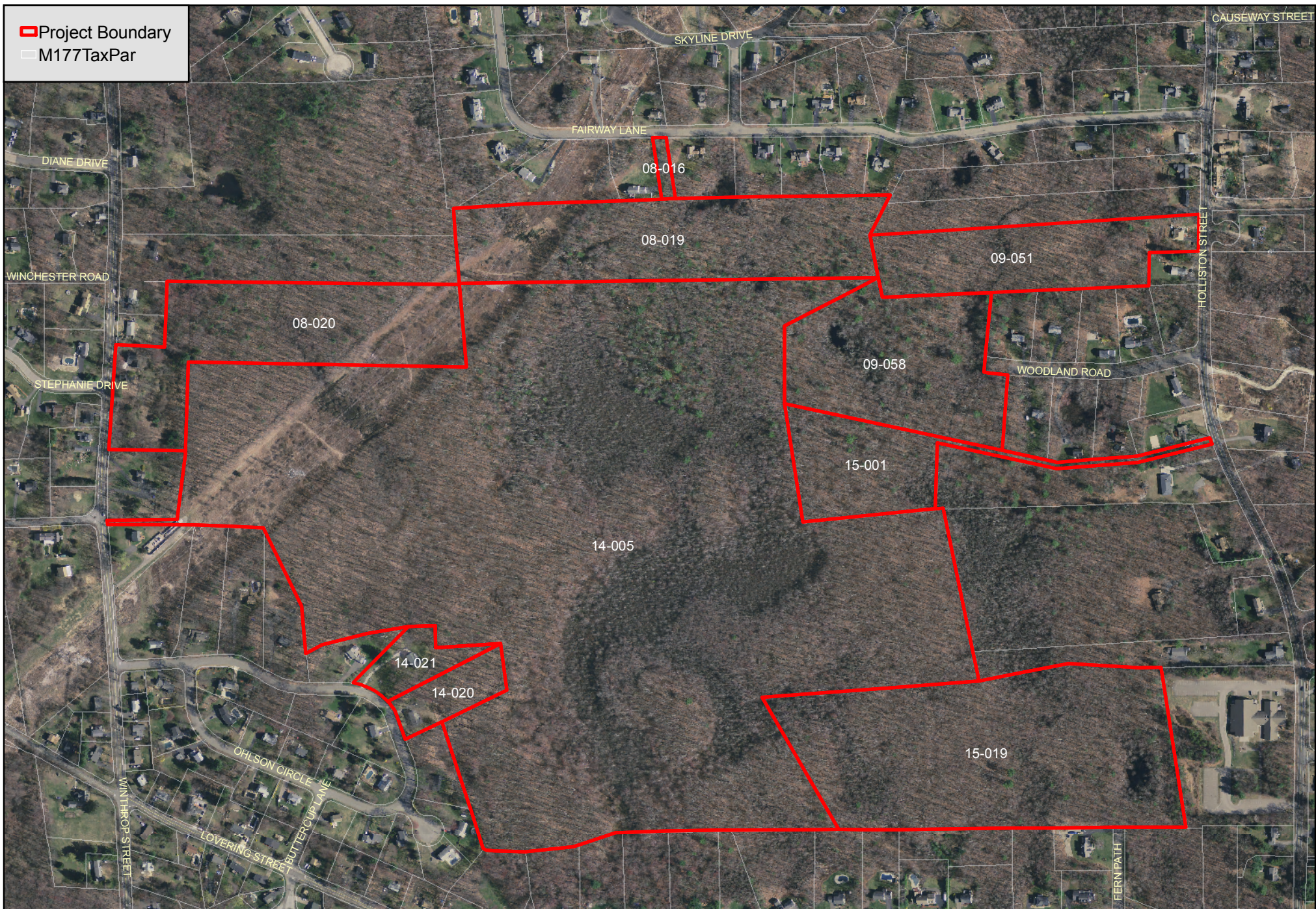
NOTE: Notice of the public hearing, including the date, time, and place, will be posted in the City or Town Hall not less than forty-eight (48) hours in advance.

Note: You also may contact 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 DEP, call:

☒ **Central Region: (508) 792-7650**
☐ **Southeast Region: (508) 946-2700**

☐ **Northeast Region: (978) 694-3200**
☐ **Western Region: (413) 784-1100**





■ Project Boundary
□ M177TaxPar



0 125 250 500
Feet
1 inch = 500 feet
Date: 8/21/2017

GIS Data Source: "Office of Geographic Information
(MassGIS), Commonwealth of Massachusetts Information
Technology Division"

Orthophoto View of Site
Timber Crest Estates - Medway, MA

GODDARD CONSULTING
Strategic Wetland Permitting LLC



EcoTec, Inc.

ENVIRONMENTAL CONSULTING SERVICES

102 Grove Street
Worcester, MA 01605-2629
508-752-9666 / Fax: 508-752-9494

May 23, 2017

Bridget Graziano
Medway Conservation Commission
Town Hall, 155 Village Street
Medway, MA 02053

Re: Timber Crest Estates - Winthrop St., Fairway Ln., Woodland Rd., Medway, MA

Subject: Vernal Pool Boundary Review

Dear Ms. Graziano:

I, Arthur Allen of EcoTec Inc., have reviewed vernal pool boundaries at the above-referenced site in accordance with the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00) and the Medway Wetland Bylaw. As per the Regulations at 310 CMR 10.04; "Vernal Pool Habitat means confined basin depressions which, at least in most years, hold water for a minimum of two continuous months during the spring and/or summer, and which are free of adult fish populations, as well as the area within 100 feet of the mean annual boundaries of such depressions, to the extent that such habitat is within an Area Subject to Protection under M.G.L. c. 131, § 40 as specified in 310 CMR 10.02(1)". The mean annual boundaries of known vernal pools were reviewed and adjusted based on the presence of contiguous standing water, water stained leaves and/or water marks. The boundaries of pools VPA, VPB, VPC, VPD, VPE, VPG and VPJ were adjusted in the field. Vernal pool VPH was approved as delineated in the field.

The above-referenced vernal pool boundaries are accurately depicted on the Potential Vernal Pools plan of land by Colonial Engineering, Inc., revised through May 8, 2017.

Please do not hesitate to contact me if you have questions or comments.

Sincerely,

Arthur Allen
Certified Professional Soil & Wetland Scientist

AA/Monitoring/MedwayTimberCrestVernalPools.doc

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: _____

Prepared by: Goddard Consulting, LLC

Project location: Timber Crest Estates

DEP File #: _____

Check all that apply:

- ☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
☒ Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
☐ Method other than dominance test used (attach additional information)

Section I. Vegetation		Observation Plot Number: 271	Transect Number: Upgradient		Date of Delineation: 21-Jul-17	
Sample Layer and Plant Species	Scientific name	% Cover	% Dominance	Dominant Plant (yes or no)	Wetland Indicator Category*	
<u>Tree Layer</u>						
Red oak	<i>Quercus rubra</i>	35%	100.0%	yes	FACU	
<u>Sapling Layer</u>						
Red maple	<i>Acer rubrum</i>	10%	50.0%	yes	FAC*	
White pine	<i>Pinus strobus</i>	10%	50.0%	yes	FACU	
<u>Shrub Layer</u>						
White pine	<i>Pinus strobus</i>	15%	75.0%	yes	FACU	
Black birch	<i>Betula lenta</i>	5%	25.0%	yes	FACU	
<u>Climbing Woody Vine</u>						
none						
<u>Ground Cover</u>						
Hay-scented fern	<i>Dennstaedtia punctilobula</i>	5%	25.0%	yes	UPL	
Black huckleberry	<i>Gaylussacia baccata</i>	10%	50.0%	yes	FACU	
Black birch	<i>Betula lenta</i>	5%	25.0%	yes	FACU	
Remarks: * An asterisk after common plant name indicates stunted growth; ** indicates extremely stunted growth						
Morphological Adaptations: 0		Description:				
* An asterisk after indicator status denotes wetlands plants: plants listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus Sphagnum; or plants listed as FAC, FACW, or OBL.						
Vegetation conclusion:						
Number of dominant wetland indicator plants: 1			Number of dominant non-wetland indicator plants: 7			
Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? no						

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? ☒ yes ☐ no
title/date: Soil Survey of Norfolk and Suffolk Counties - 1989
map number: _____
soil type mapped: Canton fine sandy loam, 0 to 8 percent slopes, extremely stony
hydric soil inclusions: Swansea

Are field observations consistent with soil survey? ☒ yes ☐ no
Remarks: _____

2. Soil Description

<u>Horizon</u>	<u>Depth (inches)</u>	<u>Matrix Color</u>	<u>Mottles Color or Texture</u>
A	0-4	10YR 2/2	sandy loam
B1	4-5	10YR 3/3	sandy loam
B2	5-12+	10YR 4/4	fine sandy loam

Remarks: _____

3. Other: _____

Conclusion: Is soil hydric? ☐ yes ☒ no

Other Indicators of Hydrology: (check all that apply and describe)

- ☐ Site inundated: _____
- ☐ Depth to free water in observation hole: _____
- ☐ Depth to soil saturation in observation hole: _____
- ☐ Water marks: _____
- ☐ Drift Lines: _____
- ☐ Sediment deposits: _____
- ☐ Drainage patterns in BVW: _____
- ☐ Oxidized rhizospheres: _____
- ☐ Water-stained leaves: _____
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other): _____
- ☐ Other: _____

Vegetation and Hydrology Conclusion for Upgradient of 271		
	<u>yes</u>	<u>no</u>
Number of wetland indicator plants >= number of non-wetland plants		X
Wetland hydrology present:		
hydric soils present		X
other indicators of hydrology present		X
Sample location is in a BVW		X

Submit this form with the Request for Determination of Applicability or Notice of Intent

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: _____ Prepared by: Goddard Consulting, LLC Project location: Timber Crest Estates DEP File #: _____

Check all that apply:

☐	Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
☒	Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
☐	Method other than dominance test used (attach additional information)

Section I. Vegetation		Observation Plot Number: #271	Transect Number: Downgradient		Date of Delineation: 21-Jul-17
Sample Layer and Plant Species	Scientific name	% Cover	% Dominance	Dominant Plant (yes or no)	Wetland Indicator Category*
<u>Tree Layer</u>					
Red maple	<i>Acer rubrum</i>	60%	60.0%	yes	FAC*
<u>Sapling Layer</u>					
none					
<u>Shrub Layer</u>					
Highbush blueberry	<i>Vaccinium corymbosum</i>	20%	100.0%	yes	FACW*
<u>Climbing Woody Vine</u>					
<u>Ground Cover</u>					
Cinnamon fern	<i>Osmundastrum cinnamomeum</i>	20%	50.0%	yes	FACW*
Spinulose wood fern	<i>Dryopteris carthusiana</i>	20%	25.0%	yes	FACW*
Remarks: * An asterisk after common plant name indicates stunted growth; ** indicates extremely stunted growth					
Morphological Adaptations: 0		Description:			
* An asterisk after indicator status denotes wetlands plants: plants listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus Sphagnum; or plants listed as FAC, FACW, or OBL.					
Vegetation conclusion:					
Number of dominant wetland indicator plants: 4			Number of dominant non-wetland indicator plants: 0		
Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? yes					

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? ☒ yes ☐ no
title/date: Soil Survey of Norfolk and Suffolk Counties - 1989
map number: _____
soil type mapped: Swansea muck, 0 to 1 percent slopes
hydric soil inclusions: _____

Are field observations consistent with soil survey? ☒ yes ☐ no
Remarks: _____

2. Soil Description

<u>Horizon</u>	<u>Depth (inches)</u>	<u>Matrix Color</u>	<u>Mottles Color or Texture</u>
O	0-12+	black	loam

Remarks: _____

3. Other: _____

Conclusion: Is soil hydric? ☒ yes ☐ no

Other Indicators of Hydrology: (check all that apply and describe)

☐ Site inundated: _____

☐ Depth to free water in observation hole: _____

☐ Depth to soil saturation in observation hole: _____

☐ Water marks: _____

☐ Drift Lines: _____

☐ Sediment deposits: _____

☒ Drainage patterns in BVW: _____

☐ Oxidized rhizospheres: _____

☐ Water-stained leaves: _____

☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other):

☐ Other: _____

Vegetation and Hydrology Conclusion for Downgradient of 271		
	<u>yes</u>	<u>no</u>
Number of wetland indicator plants >= number of non-wetland plants	X	
Wetland hydrology present:		
hydric soils present	X	
other indicators of hydrology present	X	
Sample location is in a BVW	X	

Submit this form with the Request for Determination of Applicability or Notice of Intent

September 7, 2017

Wetland Replication Plan

Timber Crest Estates Development
Medway, MA

Submitted to:
Medway Conservation Commission

Prepared for:
Timber Crest Estates LLC

1. INTRODUCTION

On behalf of the applicant, Timber Crest Estates LLC, Goddard Consulting, LLC is pleased to submit this Wetland Replication Plan as mitigation for wetland impacts required for the construction of the Timber Crest Estates development in Medway, MA.

Bordering Vegetated Wetland (BVW) alteration is proposed in two locations:

1.1 Wetland Crossing #2

Crossing #2 (three separate alteration areas 2a, 2b and 2c), which is located on "Road I" in the north-central portion of the site. Crossing #2 requires the permanent alteration of 4,539 s.f. of BVW. To mitigate this impact, 5,021 $\pm$ s.f. of BVW will be replicated.

4,539 sf total

2a-111

2b-261

2c-4,167

1.2 Wetland Crossing #3

Crossing #3 is located on "Road F" in the northeast portion of the site. Crossing #3 requires the permanent alteration of 3,163 s.f. of BVW. To mitigate this impact, 3,189 $\pm$ s.f. of BVW will be replicated.

3,163 sf total

2. REPLICATION PLAN SUMMARY

Construction of the BVW replication areas will involve the conversion of existing upland scrub/shrub and forested habitat using native plant species present in the altered BVW or elsewhere on the property, and will have similar topographical, hydrological, vegetative and wildlife characteristics.

The Replication Plan was designed in accordance with the DEP "Massachusetts Inland Wetland Replication Guidelines," dated March 2002. See the attached Figure 1 and Figure 2, for visual representation of the two proposed replication areas.

3. REPLICATION AREA DETAILS

Both replication areas will be created by excavating down to an elevation where redoximorphic features are present, and then filling with at least 12" of organic soils to match that of the adjacent BVW. The vegetation selected will mirror that of the adjacent BVW or that

found in other onsite BVW. The vegetation selected for the replication and restoration area includes species that are native to the site and are also located within the adjacent BVW.

3.1 Replication Area #2

5,021 sf to be replicated

Species and quantity to be planted include:

Trees

- 6 red maple (*Acer rubrum*) (3'-4' height)
- 6 yellow birch (*Betula alleghaniensis*) (3'-4' height)

Shrubs

- 8 winterberry (*Ilex verticillata*) (18-24" height)
- 8 highbush blueberry (*Vaccinium corymbosum*) (18-24" height)
- 8 sweet pepperbush (*Clethra alnifolia*) (18-24" height)

Ground Cover

- 18 cinnamon fern (*Osmunda cinnamomea*) (one gal. pot)
- 18 sensitive fern (*Onoclea sensibilis*) (one gal. pot)

Seed Mix

- 2 lb. New England Wetland Plants WETMIX or equivalent (1lb/2,500 sf)

See Figure 1 for a diagram of the approximate recommended planting locations.

3.2 Replication Area #3

3,189 sf to be replicated

Species and quantity to be planted include:

Trees

- 4 red maple (*Acer rubrum*) (3'-4' height)
- 4 yellow birch (*Betula alleghaniensis*) (3'-4' height)

Shrubs

- 6 winterberry (*Ilex verticillata*) (18-24" height)
- 6 highbush blueberry (*Vaccinium corymbosum*) (18-24" height)
- 6 sweet pepperbush (*Clethra alnifolia*) (18-24" height)

Ground Cover

- 12 cinnamon fern (*Osmunda cinnamomea*) (one gal. pot)
- 12 sensitive fern (*Onoclea sensibilis*) (one gal. pot)

Seed Mix

- 1.5 lb. New England Wetland Plants WETMIX or equivalent (1lb/2,500 sf)

See Figure 2 for a diagram of the approximate recommended planting locations.

4. GENERAL INSTALLATION PROCEDURES (applies to both Replication Area 2 & 3)

Supervision: All work within the replication area shall be supervised by a qualified wetland scientist. The supervisor shall submit monitoring reports to the Conservation Commission as described below. Reports shall contain details of all work performed and photographs of completed conditions.

Timing: Work shall take place ideally when the wetland is completely dry. If the wetland is not dry, a dewatering plan shall be approved by the Conservation Commission and then implemented. The installation of replication area shall be accomplished during the spring or fall growing seasons (between April 16 and May 31 or between September 16 and October 30).

Step 1: Stake Limits of Work & Install ECB. Stake out limits of all work for replication area. Erosion control barriers shall then be installed in the form of staked siltation fence and mulch sock (or similar invasive-free barrier) placed at the limit of work for the replication area. These will remain in place and be maintained until all areas are completely stabilized. Remove trees and vegetation as needed for construction.

Step 2: Remove trees and vegetation. Remove necessary vegetation for installation of replication area. Clear trees, shrubs and grub stumps.

Step 3: Excavation of BVW Fill Areas. An excavator shall remove existing organic soils up to the edge of the staked fill area boundary. Excavated soils shall be stored near the replication area. Care shall be taken to avoid contact with other non-wetland soils that may contain seeds of undesirable plant species.

Step 4: Excavation of new BVW Replication Area. Prior to any soil excavation, a storage area for soil and leaf litter shall be prepared. Topsoil, leaf litter, and subsoil shall be stockpiled separately. An excavator shall remove existing soils up to the edge of the staked BVW replication area boundary, to a depth at which redoximorphic features become visible at the soil surface and one foot below proposed final grade.

Step 5: Final Grading of Replication Area. Upon removal of existing upland soils, organic topsoil with an organic content of 12-20% shall be placed within the replication area to a depth even with the surrounding proposed elevation on design plan, to be determined by the supervising wetland scientist. Final grade shall be confirmed by wetland scientist prior to plantings. The organic soil should be sourced from the soils stockpiled from the impact area. If the transplanted soils do not fill entire replication area, supplement with organic soils from

an offsite source. Supplemental soils must be from an uncontaminated source and have an organic content of between 12-20%.

Step 6: Planting. Precise citing of plants may be determined by the wetland scientist in the field prior to installation. All plants shall be distributed randomly throughout the area; trees spaced at 15-20' on center; shrubs spaced at 6-8' on center and herbaceous species 3' or less on center. Leaf litter shall be spread throughout area. Wetland seed mix shall be scattered evenly by hand throughout the replication area. Once all work is complete an erosion control barrier will be installed to enclose the replication area on the access side of the replication area.

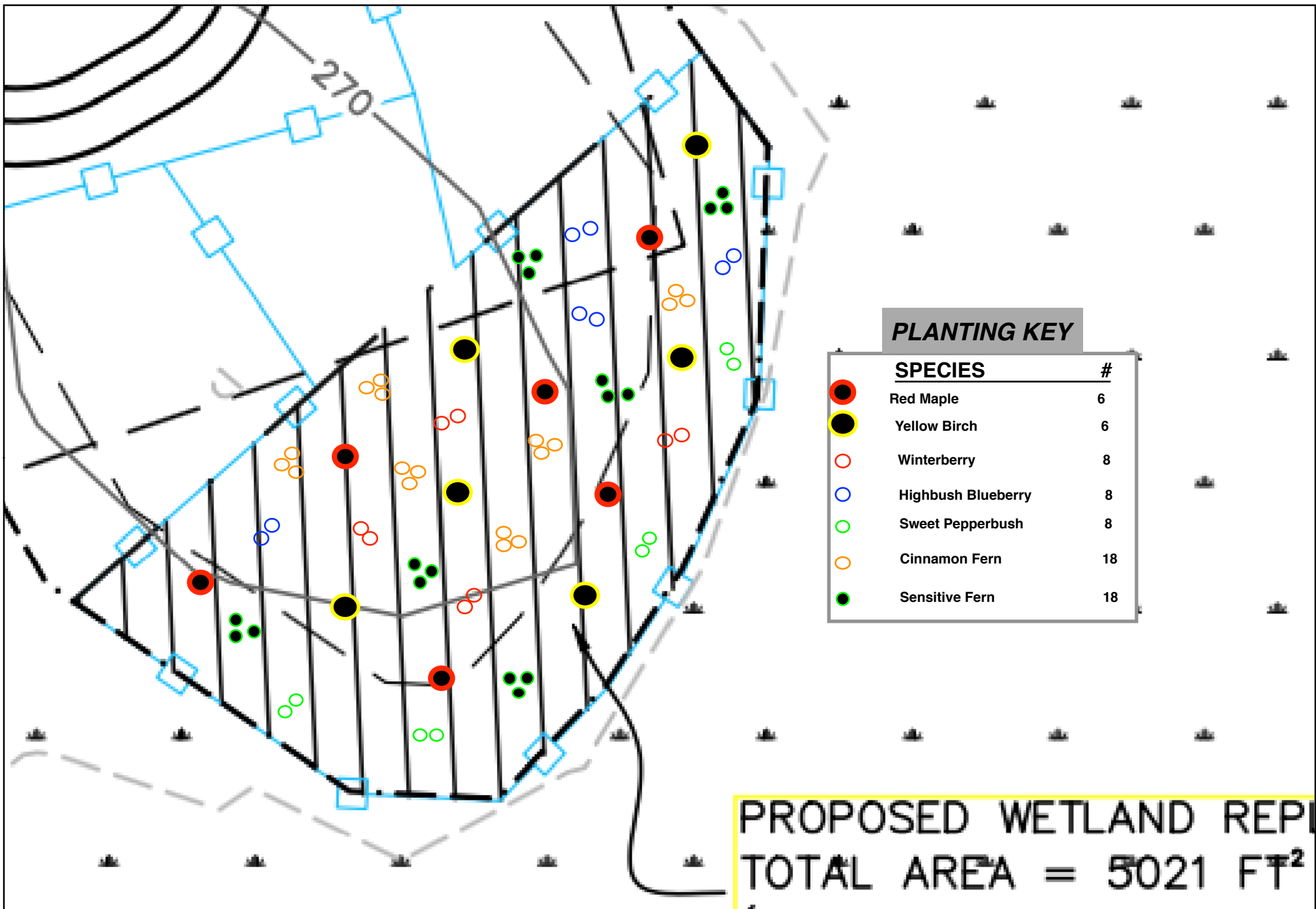
Step 7: Replication Monitoring

a. **Seasonal monitoring reports** shall be prepared for the replication area by a qualified wetland scientist for a period of 2 additional years after installation. This monitoring program will consist of early summer and early fall inspections, and will include photographs and details about the vitality of the replication area. Monitoring reports shall be submitted to the Commission by November 31st of each year. Monitoring reports shall describe, using narratives, plans, and color photographs, the physical characteristics of the replication area with respect to stability, soil characteristics, survival of vegetation and plant mortality, aerial extent and distribution, species diversity and vertical stratification (i.e. herb, shrub and tree layers).

b. **At least 75% of the surface area** of the replication area shall be re-established with indigenous plant species within two growing seasons. If the replication area does not meet the 75% re-vegetation requirement by the end of the second growing season after installation, the Applicant shall submit a remediation plan to the Commission for approval that will achieve, under the supervision of a Wetland Specialist, replication goals. This plan must include an analysis of why the areas have not successfully re-vegetated and how the Applicant intends to resolve the problem.

Step 15: As-built Survey

Upon meeting the criteria for 75% cover of indigenous species after two growing seasons, the replication areas will be surveyed for as-built conditions. The as-built plan will be submitted to the Conservation Commission along with a request for a certificate of compliance.



NOT TO SCALE

Date: 9/7/2017

Figure 1 - Wetland Replication Planting Plan (Area #2)

Timber Crest Estates - Medway, MA

GODDARD CONSULTING
 Strategic Wetland Permitting LLC

A = 3189 FT²
 REPLICATION PLAN
 (CONSULTING)

SILT FENCE
 (TYP.)

PLANTING KEY

SPECIES	#
 Red Maple	4
 Yellow Birch	4
 Winterberry	6
 Highbush Blueberry	6
 Sweet Pepperbush	6
 Cinnamon Fern	12
 Sensitive Fern	12

NOT TO SCALE

Date: 9/7/2017

Figure 2 - Wetland Replication Planting Plan (Area #3)

Timber Crest Estates - Medway, MA

GODDARD CONSULTING
 Strategic Wetland Permitting LLC

September 7, 2017

Medway Conservation Commission
Medway Town Hall
155 Village Street
Medway, MA 02053

***Re: Intermittent Stream Documentation for Timber Crest Estates
165 & 167 Holliston Street (Map 9, Parcels 50 & 51)***

1. Introduction

Goddard Consulting, LLC is pleased to submit the following report describing the documentation of Intermittent Stream conditions within a stream mapped as perennial on the current USGS map for the subject properties. The 165 Holliston Street property is within the limits of the proposed Timber Crest Estates residential development. Permission was obtained from the landowner of 167 Holliston Street to observe the stream and perform necessary dry stream documentation.

2. Methods

Dan Wells, M.S. and Nicole Hayes, PWS of Goddard Consulting performed the dry stream documentation. Mr. Wells and Ms. Hayes have performed numerous similar dry stream documentations in eastern MA, including Medway.

Field observations of the stream were conducted over the course of multiple days in 2017, between August 24 and September 6. The documentation dates include August 24, 25, 28, 29, 31 and September 1 and 6. Nine separate documentation locations were established, including five within the Map 9 Parcel 51 property and four within the Map 9 Parcel 50 property. Documentation locations were given a unique number ranging from "DS1" to "DS9." Photographs were taken on at least four days at each documentation location. An orange flag was tied to a woody stem overhanging each location, and on each observation date the date was written on the flags. On each observation date, the dry stream channel was photographed to document the lack of any flowing surface water in the vicinity of the flag.

3. Results

The stream was observed and documented to be devoid of any surface water flow over the course of at least four observation days between August 24 and September 6, 2017 at all of the nine locations, thereby confirming that the stream is intermittent pursuant to 310 CMR 10.58(2)(a)(1)(d). The observations confirm that "surface water does not flow..."

throughout the year” as required by the WPA. The following photographs show the dry stream conditions for at least four days at each of the nine locations.

STATION #1



Photo 1 - DS#1 on 8/24/17.



Photo 2 - DS#1 on 8/25/17.



Photo 3 - DS#1 on 8/28/17.



Photo 4 - DS#1 on 8/29/17.



Photo 5 - DS#1 on 9/6/17.

STATION #2



Photo 6 - DS#2 on 8/24/17.



Photo 7 - DS#2 on 8/25/17.



Photo 8 - DS#2 on 8/28/17.



Photo 9 - DS#2 on 8/29/17.



Photo 10 - DS#2 on 9/6/17.

STATION #3



Photo 11 - DS#3 on 8/24/17.



Photo 12 - DS#3 on 8/25/17.



Photo 13 - DS#3 on 8/28/17.



Photo 14 - DS#3 on 8/29/17.



Photo 15 - DS#3 on 9/6/17.

STATION #4



Photo 16 - DS#4 on 8/24/17.



Photo 17 - DS#4 on 8/25/17.



Photo 18 - DS#4 on 8/28/17.



Photo 19 - DS#4 on 8/29/17.



Photo 20 - DS#4 on 9/6/17.

STATION #5



Photo 21 - DS#5 on 8/24/17.



Photo 22 - DS#5 on 8/25/17.



Photo 23 - DS#5 on 8/28/17.



Photo 24 - DS#5 on 8/29/17.



Photo 25 - DS#5 on 9/6/17.

STATION #6



Photo 26 - DS#6 on 8/29/17.



Photo 27 - DS#6 on 8/31/17.

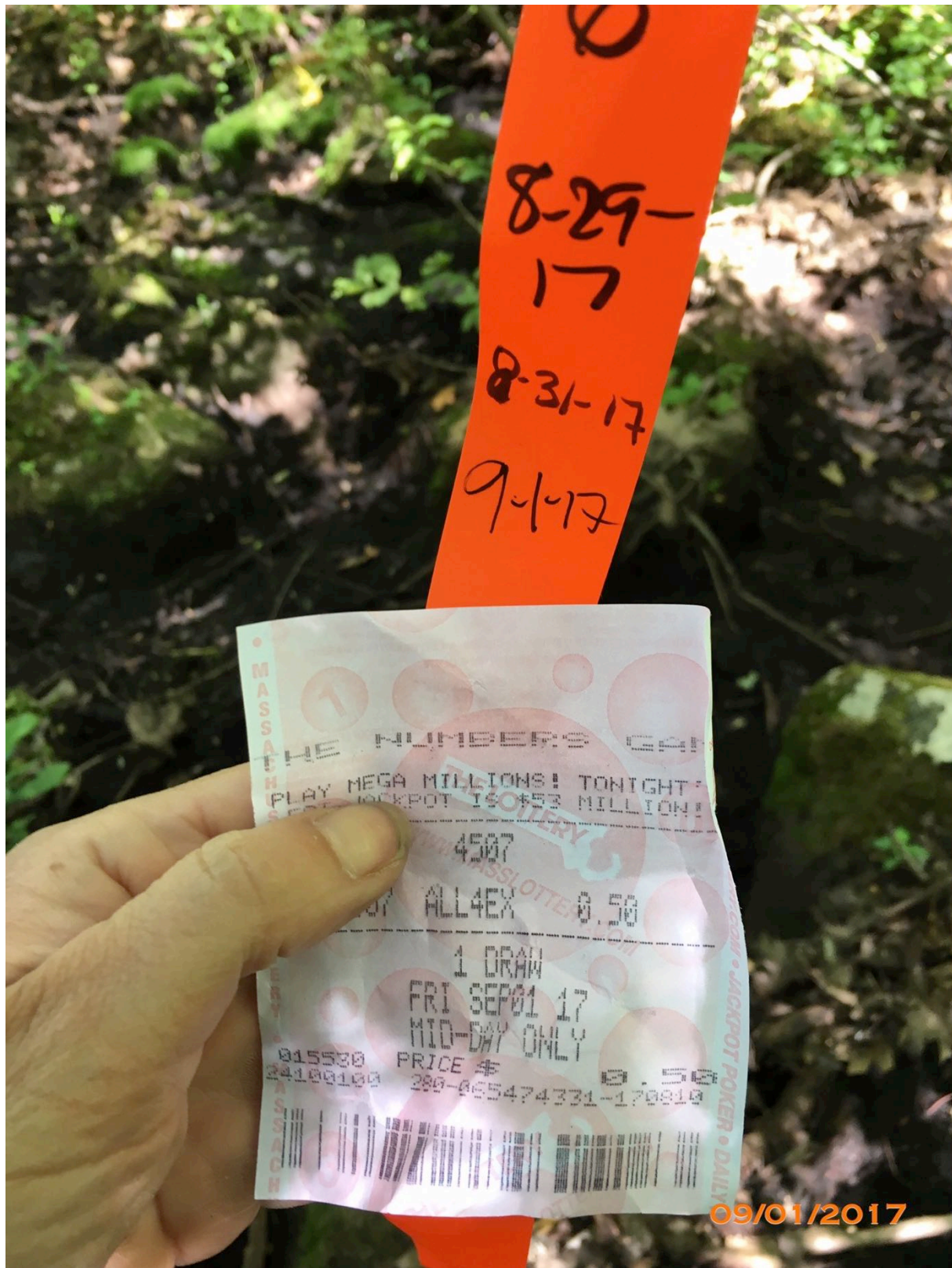


Photo 28 - DS#6 on 9/1/17.



Photo 29 - DS#6 on 9/6/17.

STATION #7



Photo 30 - DS#7 on 8/29/17.



Photo 31 - DS#7 on 8/31/17.



Photo 32 - DS#7 on 9/1/17.



Photo 33 - DS#7 on 9/6/17.

STATION #8



Photo 34 - DS#8 on 8/29/17.



Photo 35 - DS#8 on 8/31/17.



Photo 36 - DS#8 on 9/1/17.



Photo 37 - DS#8 on 9/6/17.

STATION #9



Photo 38 - DS#9 on 8/29/17.

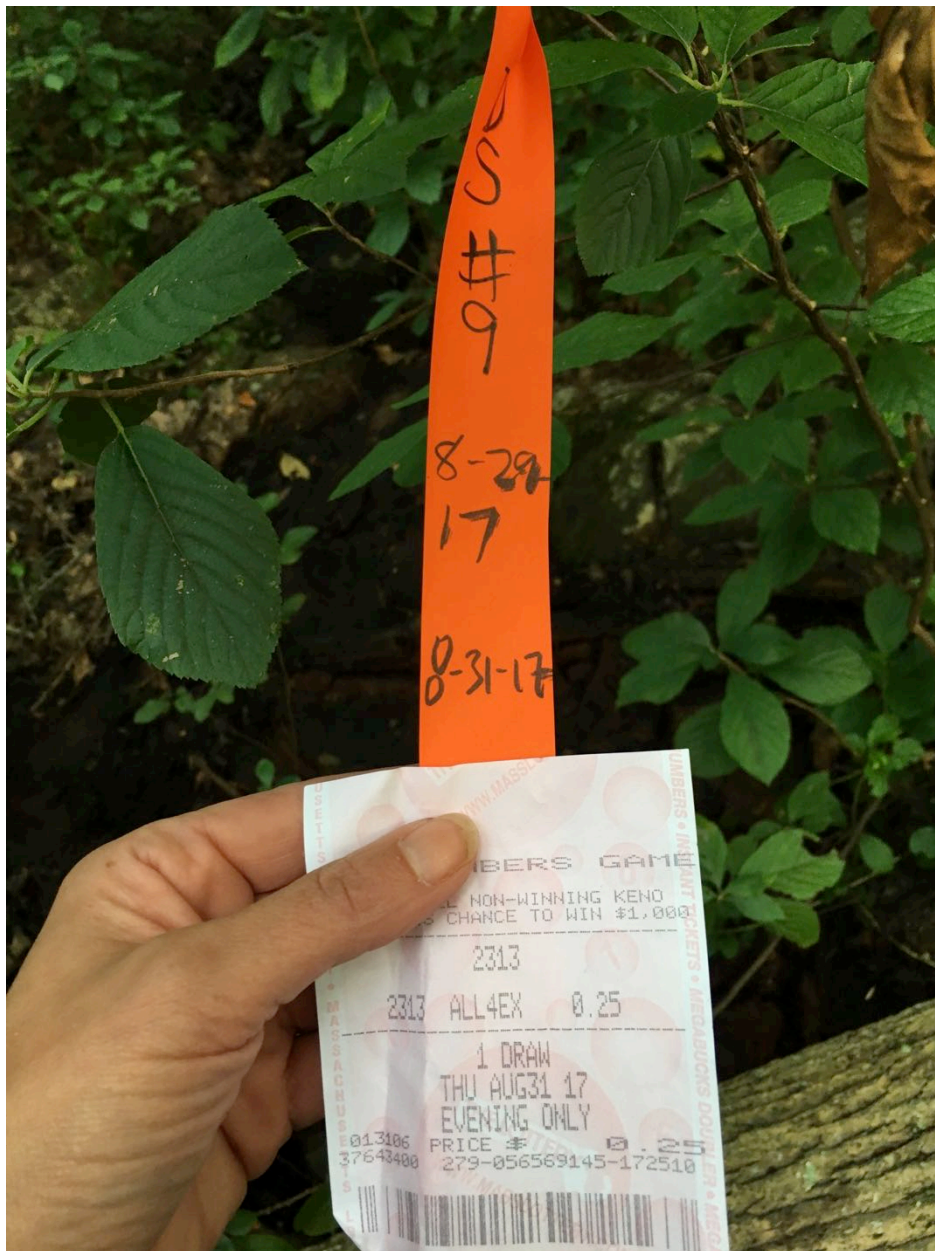


Photo 39 - DS#9 on 8/31/17.

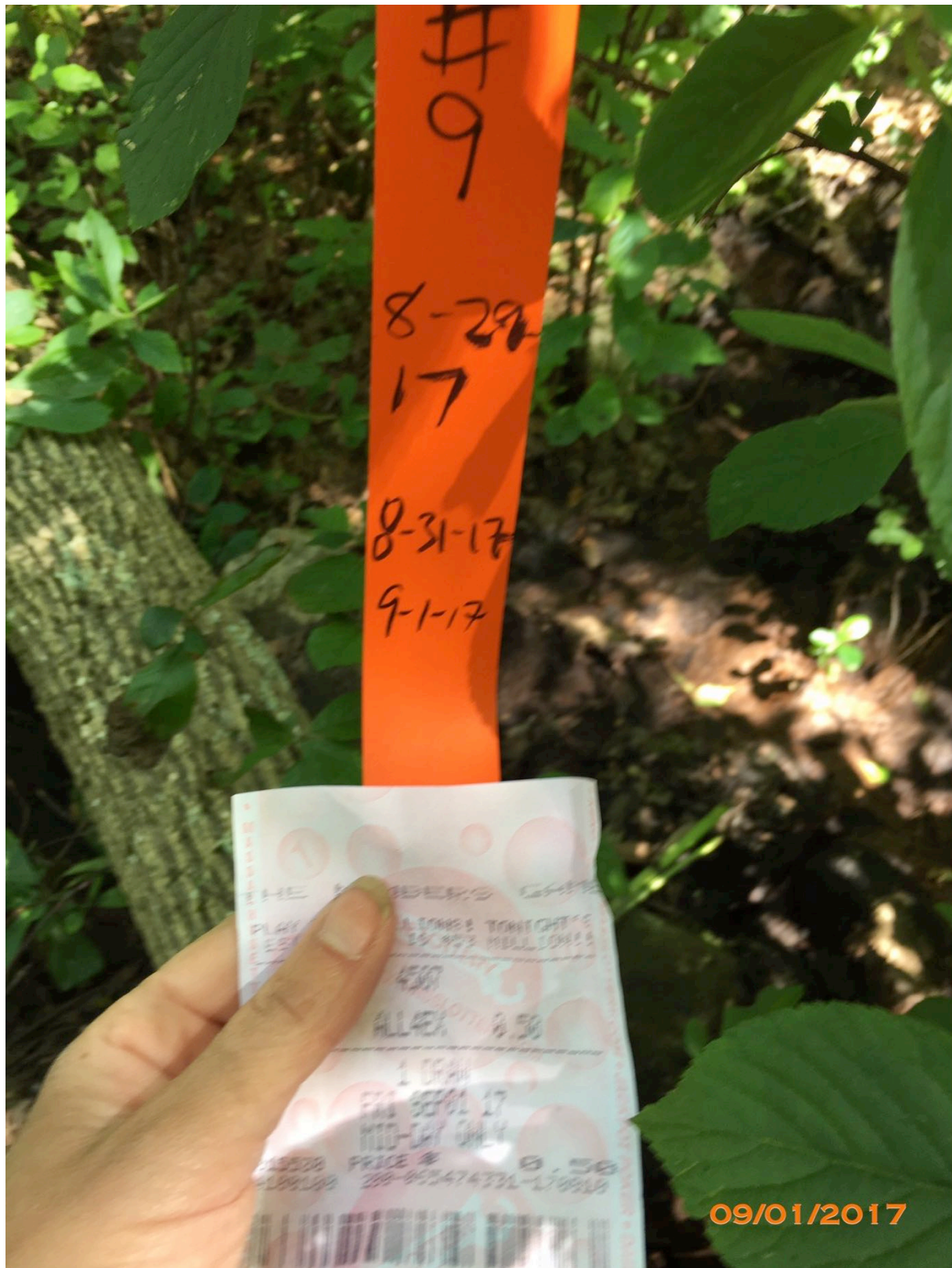


Photo 40 - DS#9 on 9/1/17.



Photo 41 - DS#9 on 9/6/17.

Conclusions

Based on this evidence, I conclude that there the stream is intermittent pursuant to 310 CMR 10.58(2)(a)(1)(d), and therefore there is no Riverfront resource area within either of the two surveyed properties (Map 9, Parcels 50 & 51).

All of the previous photographs of dry stream documentation are accurate and truthful.
Signed under the pains and penalties of perjury this 7th day of September, 2017.

Daniel Wells, M.S.
Senior Wildlife Biologist and Wetland Scientist

Nicole Hayes, PWS
Senior Scientist

4. Regulatory Performance Standards Under the WPA

The intermittent status of the stream was documented in accordance with 310 CMR 10.58(2)(a)1.d as follows:

- “A documented field observation shall be made by a competent source...”

Dan Wells and Nicole Hayes are both a “competent source” with qualifications suitable for the dry stream documentation.

- “an observation made at least once per day, over four days in any consecutive 12 month period...”

The stream was documented to be dry on four calendar days within late August and early September of 2017. The documentation dates include August 24, 25, 28, 29, 31 and September 1 and 6.

- “...during a non-drought period on a stream not significantly affected by drawdown from withdrawals of water supply wells, direct withdrawals, impoundments, or other man-made flow reductions or diversions.”

The Mass. Emergency Management Agency (MEMA) Drought Management Taskforce has not issued any Drought Advisories in 2017, according to the MEMA Website. To our knowledge, the stream is not affected by any drawdown from water supply wells, direct withdrawals, impoundments or other man-made flow reductions or diversions.

- “...field observations made after December 20, 2002 shall be documented by field notes and by dated photographs or video.”

Photographs of individually flagged documentation locations are included. Field notes indicate that the stream was completely dry at each documentation location on each of the documentation dates.

- “...All field observations shall be submitted to the issuing authority with a statement signed under the penalties of perjury attesting to the authenticity and veracity of the field notes, photographs or video and other credible evidence.”

A signed statement is provided above.

- “...Department staff, conservation commissioners, and conservation commission staff are competent sources; issuing authorities may consider evidence from other sources that are determined to be competent.”

We request that the Medway Conservation Commission consider the above evidence to be satisfactory in properly documenting the intermittent status of the stream located within Map 9 Parcels 50 & 51. The documented evidence complies with 310 CMR 10.58(2)1.d., and it was documented by two experienced Wetland Scientists – therefore a “competent source.”

If there are any questions concerning this submission, please do not hesitate to contact us.

Sincerely,

GODDARD CONSULTING, LLC

by 

Daniel Wells, M.S.
Senior Wildlife Biologist and Wetland Scientist

September 7, 2017

Detailed Wildlife Habitat Evaluation

Timber Crest Estates
Medway, MA

Submitted to:
Medway Conservation Commission

Prepared for:
Timber Crest Estates, LLC

1. INTRODUCTION

Dan Wells of Goddard Consulting, LLC conducted a Detailed Wildlife Habitat Evaluation (WHE) at the site of the proposed Timber Crest Estates 40B residential development in Medway, MA. The evaluation was conducted in accordance with the "Massachusetts Wildlife Habitat Protection Guidelines for Inland Wetlands" manual produced by Mass Department of Environmental Protection (DEP), hereafter the "DEP manual". This WHE is based on the site plans prepared by Outback Engineering, dated August 25, 2017 and stamped 9/7/17. The project requires the alteration of Bank and BVW resource areas.

2. METHODS

Dan Wells of Goddard Consulting conducted the Wildlife Habitat Evaluation on August 21, 2017. The evaluation consisted of an inspection of the onsite Bank and BVW impact areas. Copies of the DEP manual Appendix B Summary Sheet and Field Data Forms are provided as attachments. Dan has a Master's degree in Wildlife Biology and worked as a wildlife biologist in eastern MA for over 15 years, and therefore meets the criteria for conducting wildlife habitat evaluations listed in the WPA Regulations (310 CMR 10.60 (1)(b)).

3. COMPLIANCE WITH WPA "NO ADVERSE EFFECT ON WILDLIFE HABITAT" PERFORMANCE STANDARD

The proposed alteration of the Bank and BVW Impact Areas will not substantially reduce the site's capacity to provide important wildlife habitat functions. The majority of the existing important habitat features identified under the Appendix B evaluation are abundant elsewhere within the site's wetland and upland resource areas, so the loss will be negligible. Stream crossings have been designed in compliance with MA Stream Crossing Standards, and two wildlife crossing culverts (one in wetlands and one in buffer zone) will allow safe movement between onsite wetland complexes. All BVW alteration will be replicated.

I therefore conclude that the proposed project avoids, minimizes and mitigates adverse effects on wildlife habitat, and that it will not, following two growing seasons of project completion and thereafter, substantially reduce the site's capacity to provide important wildlife habitat functions.

Sincerely,

Goddard Consulting, LLC

by



Dan Wells, M.S.
Senior Wildlife Biologist & Wetland Scientist



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

Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 1. Summary Sheet

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



Timber Crest Estates

Project Name

Medway

Location

~11,478 s.f.

Size of Area Being Impacted

9/5/17

Date

Impact Areas (linear feet, square feet, or acres for each of the impact areas within the site)

Name	Waterbody/ Waterway	Wetland	Upland*	Total Area
1. Crossing #1		78 lf		78 lf
2. Crossing #2a		111 sf		111 sf
3. Crossing #2b		261 sf		261 sf
4. Crossing #2c		4,167 sf		4,167 sf
5. Crossing #3		103 lf; 3,163 sf		103 lf; 3,163 sf
6. Water/Sewer Line A		839 sf		839 sf
7. Water/Sewer Line B		2,575 sf		2,575 sf

*Riverfront Area/BLSF

Attach Sketch map and/or photos of the Impact Areas

Narrative Description of Site (attach separate page if necessary)

See attached narratives

Certification

I hereby certify that this project has been designed to avoid, minimize, and mitigate adverse effects on wildlife habitat, and that it will not, following two growing seasons of project completion and thereafter, substantially reduce its capacity to provide important wildlife habitat functions.


Signature of Wildlife Specialist (per 310 CMR 19.60 (1) (b))

Dan Wells

Typed or Printed Name



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

Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (for each wetland or non-wetland resource area)

I. General Information

Fairway Lane; Holliston Street; Ohlson Circle; Winthrop Street; Woodland Road

Project Location (from NOI page 1)

Crossing #1

Impact Area (number/name)

8/17/17

Date(s) of Site Visit(s) and Data Collection

Sunny, 80 degrees F

Weather Conditions During Site Visit (if snow cover, include depth)

Dan Wells

8/21/17

Person completing form per 310 CMR 10.60(1)(b)

Date this form was completed

The information on this data sheet is based on my observations unless otherwise indicated

Signature

II. Site Description (complete A or B under Classification - see instructions for full description)

A. Classification

1. For Wetland Resource Areas, complete the following:

System: Riverine

Subsystem: Intermittent

Class: Rocky Shore

Subclass: Rubble

Hydrology/Water Regime

☐ Permanently flooded

☐ Saturated

☐ Intermittently exposed

☐ Temporarily flooded

☐ Semi-permanently flooded

☒ Intermittently flooded

☐ Seasonally flooded

☐ Artificially flooded

2. For Riverfront or Bordering Land Subject to Flooding Resource Areas, complete the following.

Use a terrestrial classification system such as one of the two listed below:

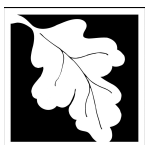
a. "Classification of the Natural Communities of Massachusetts (Draft)" by Patricia C. Swain and Jennifer B. Kearsley, MA DFW NHESP, Westborough, MA. July 2000. ([Department of Fish & Game Website](#))

b. "New England Wildlife: Habitat, Natural History, and Distribution" by Richard M. DeGraaf and Deborah D. Rudis, USDA Forest Service, Northeastern Forest Experiment Station. General Technical Report NE-108. August 1992. 491 pages.

Community Name

Vegetation Description

Physical Description



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

B. Inventory (Plant community)

% Cover: 0 Trees (> 20') 10 Shrubs (< 20') 0 Woody vines 0 Mosses 20 Herbaceous

Plant Lists (species that comprise 10% or more of the vegetative cover in each strata; "*" designates a dominant plant species for the strata):

Strata	Plant Species	Strata	Plant Species
SH	Glossy buckthorn		
SH	Northern arrowwood		
SH	Multiflora rose		
H	Goldenrod sp.		
H	Poison ivy		

C. Inventory (Soils)

N/A
Soil Survey Unit _____ Drainage Class _____
Texture (upper part) _____ Depth _____
Depth to Water Table _____

III. Important Habitat Features (complete for all resource areas)

If the following habitat characteristics are present, describe & quantify them on a separate sheet & attach.

Wildlife Food

Important Wetland/Aquatic Food Plants (smartweeds, pondweeds, wild rice, bulrush, wild celery)

☐ Abundant ☐ Present ☒ Absent

Important Upland/Wetland Food Plants (hard mast and fruit/berry producers)

☐ Abundant ☐ Present ☒ Absent

Shrub thickets or streambeds with abundant earthworms (American woodcock)

☐ Present ☒ Absent

Shrub and/or herbaceous vegetation suitable for veery nesting

☐ Present ☒ Absent



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Number of trees (live or dead) > 30" DBH: 0

Number (or density) of Standing Dead Trees (potential for cavities and perches):

<u> </u> 6-12" dbh	<u> </u> 12-18" dbh	<u> </u> 18-24" dbh	<u> </u> > 24" dbh
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Number of Tree Cavities in trunks or limbs of:

0
6-12" diameter (e.g., tree swallow, saw whet owl, screech owl, bluebird, other songbirds)

0
12-18" diameter (e.g., hooded merganser, wood duck, common goldeneye, mink)

0
>18" diameter (e.g., hooded merganser, wood duck, common goldeneye, common merganser, barred owl, mink, raccoon, fisher)

Small mammal burrows

☐ Abundant ☐ Present ☒ Absent

Cover/Perches/Basking/Denning/Nesting Habitat

☒ Dense herbaceous cover (voles, small mammals, amphibians & reptiles)

☐ Large woody debris on the ground (small mammals, mink, amphibians & reptiles)

☐ Rocks, crevices, logs, tree roots or hummocks under water's surface (turtles, snakes, frogs)

☒ Rocks, crevices, fallen logs, overhanging branches or hummocks at, or within 1m above the water's surface (turtles, snakes, frogs, wading birds, wood duck, mink, raccoon)

☐ Rock piles, crevices, or hollow logs suitable for:

☐ otter ☐ mink ☐ porcupine ☐ bear ☐ bobcat ☐ turkey vulture

☐ Live or dead standing vegetation overhanging water or offering good visibility of open water (e.g., osprey, kingfisher, flycatchers, cedar waxwings)

Depressions that may serve as seasonal (vernal/autumnal) pools

☐ Present ☒ Absent

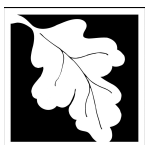
Standing water present at least part of the growing season, suitable for use by

☐ Breeding amphibians ☒ Non-breeding amphibians (foraging, re-hydration)

☒ Turtles ☐ Foraging waterfowl

Sphagnum hummocks or mats, moss-covered logs or saturated logs, overhanging or directly adjacent to pools of standing water in spring (four-toed salamander)

☐ Present ☒ Absent



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Important habitat characteristics (if present, describe and quantify them on a separate sheet)

Medium to large (> 6"), flat rocks within a stream (cover for stream salamanders and nesting habitat for spring & two-lined salamanders)

☐ Present ☒ Absent

Flat rocks and logs on banks or within exposed portions of streambeds (cover for stream salamanders and nesting habitat for dusky salamanders)

☐ Present ☒ Absent

Underwater banks of fine silt and/or clay (beaver, muskrat, otter)

☐ Present ☒ Absent

Undercut or overhanging banks (small mammals, mink, weasels)

☐ Present ☒ Absent

Vertical sandy banks (bank swallow, kingfisher)

☐ Present ☒ Absent

Areas of ice-free open water in winter

☐ Present ☒ Absent

Mud flats

☐ Present ☒ Absent

Exposed areas of well-drained, sandy soil suitable for turtle nesting

☐ Present ☒ Absent

Wildlife dens/nests (if present, describe & quantify them on the back of this sheet)

Turtle nesting sites

☐ Present ☒ Absent

Bank swallow colony

☐ Present ☒ Absent

Nest(s) present of

☐ Bald Eagle

☐ Osprey

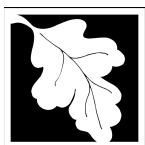
☐ Great Blue Heron

Den(s) present of

☐ Otter

☐ Mink

☐ Beaver



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Project area is within:

- ☐ 100' of beaver, mink or otter den, bank swallow colony or turtle nesting area
- ☐ 200' of Great Blue Heron or osprey nest(s)
- ☐ 1400' of a Bald Eagle nest¹

Emergent Wetlands (if present, describe & quantify them on a separate sheet)

Emergent wetland vegetation at least seasonally flooded during the growing season (wood duck, green heron, black-crowned night heron, king rail, Virginia rail, coot, etc.)

Flooded > 5 cm ☐ Present ☒ Absent

Flooded > 25 cm (pied-billed grebe) ☐ Present ☒ Absent

Persistent emergent wetland vegetation at least seasonally flooded during the growing season (mallard, American bittern, sora, common snipe, red-winged blackbird, swamp sparrow, marsh wren)

Flooded > 5 cm ☐ Present ☒ Absent

Flooded > 25 cm (least bittern, common moorhen) ☐ Present ☒ Absent

Cattail emergent wetland vegetation at least seasonally flooded during the growing season

Flooded > 5 cm (marsh wren) ☐ Present ☒ Absent

Flooded > 25 cm (least bittern, common moorhen) ☐ Present ☒ Absent

Fine-leaved emergent vegetation (grasses and sedges) at least seasonally flooded during the growing season (common snipe, spotted sandpiper, sedge wren)

Flooded > 5 cm ☐ Present ☒ Absent

Flooded > 25 cm (least bittern, common moorhen) ☐ Present ☒ Absent

IV. Landscape Context

A. **Habitat Continuity** (if present, describe the landscape context on a separate sheet and its importance for area-sensitive species)

Is the impact area part of an emergent marsh at least	1.0 acre in size?	☐ Yes	☒ No
(marsh and waterbirds)	2.0 acres in size?	☐ Yes	☒ No
	5.0 acres in size?	☐ Yes	☒ No
	10.0 acres in size?	☐ Yes	☒ No

¹ 1400 feet is the distance used by NHESP for evaluating potential disturbance impacts on eagle nests under MESA. Keep in mind, however, that this doesn't give jurisdiction within 1400' of an eagle's nest; it only identifies it on the checklist so that adverse effects can be avoided if work in a resource area is within 1400 feet.



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Is the impact area part of a wetland complex at least	2.5 acres in size?	☐ Yes	☒ No
(turtles, frogs, waterfowl, mammals)	5.0 acres in size?	☐ Yes	☒ No
	10.0 acres in size?	☐ Yes	☒ No
	25.0 acres in size?	☐ Yes	☒ No
For upland resource areas is the impact area part of contiguous forested habitat at least			
(forest interior nesting birds)	50 acres in size?	☐ Yes	☒ No
	100 acres in size?	☐ Yes	☒ No
	250 acres in size?	☐ Yes	☒ No
	500 acres in size?	☐ Yes	☒ No
(grassland nesting birds)	> 1.0 acre in size?	☐ Yes	☒ No
(special habitat such as gallery floodplain forest, alder thicket, etc.)	> 1.0 acre in size?	☐ Yes	☒ No

B. Connectivity with adjoining natural habitats

- ☐ No direct connections to adjacent areas of wildlife habitat (little connectivity function)
- ☐ Connectors numerous or impact area is embedded in a large area of natural habitat (limited connectivity function)
- ☒ Impact area contributes to a limited number of connectors to adjacent areas of habitat (somewhat important for connectivity function)
- ☐ Impact area serves as *part of* a sole connector to adjacent areas of habitat (important for connectivity function)
- ☐ Impact area serves as *only* connector to adjacent areas of habitat (very important for connectivity function)

V. Habitat Degradation (describe degradation and wildlife impacts on the back of the sheet)

- ☐ Evidence of significant chemical contamination
- ☐ Evidence of significant levels of dumping
- ☐ Evidence of significant erosion or sedimentation problems
- ☒ Significant invasion of exotic plants (e.g., purple loosestrife, *Phragmites*, glossy buckthorn)
- ☐ Disturbance from roads or highways
- ☐ Other human disturbance
- ☐ Is the site the only resource area in the vicinity of an otherwise developed area

Note: These are not the only important habitat features that may be observed on a site. If the wildlife specialist identifies other features they should be noted in the application.

September 7, 2017

Wildlife Habitat Evaluation

Timber Crest Estates - Medway, MA

Impact Area: Crossing #1

1. IMPACT AREA DESCRIPTION

This impact area consists of a narrow intermittent stream (completely dry on the survey date), with no BVW beyond the Banks. Shrub species present along the banks include glossy buckthorn, multiflora rose and northern arrow-wood. Grape vines and poison ivy also are present in some areas, and goldenrod grows in the dry stream channel. In some portions of the impact area, the stream is as little as one foot wide. The stream appears to flood to approximately 6-8 inches deep. 78 linear feet of Bank will be altered by the crossing. This impact area is located within the 13 Ohlson Circle property, to the east of the existing residence.

2. EXISTING CONDITIONS / WILDLIFE HABITAT FEATURES WITHIN IMPACT AREA



Photo 1 – Existing foot bridge within Crossing #1, facing west toward yard of #13 Ohlson Circle.



Photo 2 - Existing dense shrub vegetation along portions of Bank of Crossing #1.



Photo 3 - Narrow stream channel in northern portion of impact area, facing northeast.

Existing Wildlife Habitat

Wildlife habitat is limited in extent along the banks of this stream. Upon completion of Appendix B of the DEP manual, "Important Habitat Features" observed within the Impact Area include:

- a few large boulders that may provide cover for snakes and frogs;
- dense herbaceous cover within the dry stream bed that may provide cover and food sources for small mammals, amphibians and reptiles;
- one dying red maple tree within or along the edge of the impact area (Photo 4) that may provide shelter for woodpeckers or small mammals.
- When flooded, the stream may provide cover for small turtles and non-breeding amphibians such as green frogs.



Photo 4 - Dying red maple along edge of impact area.

3. EVALUATION OF IMPACTS TO WILDLIFE HABITAT

3.1 Impacts

The Crossing #1 portion of the project will alter 78 lf of Bank. All of the existing important habitat features identified under the Appendix B evaluation are abundant elsewhere within the site's wetland and upland resource areas, so the loss will be negligible.

3.2 Mitigation

A box culvert, designed to comply with MA Stream Crossing Guidelines, will span the stream. This will allow free passage of water and migration of wildlife through the crossing.



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

Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (for each wetland or non-wetland resource area)

I. General Information

Fairway Lane; Holliston Street; Ohlson Circle; Winthrop Street; Woodland Road

Project Location (from NOI page 1)

Crossing #2a

Impact Area (number/name)

8/17/17

Date(s) of Site Visit(s) and Data Collection

Sunny, 80 degrees F

Weather Conditions During Site Visit (if snow cover, include depth)

Dan Wells

8/21/17

Person completing form per 310 CMR 10.60(1)(b)

Date this form was completed

The information on this data sheet is based on my observations unless otherwise indicated

Signature

II. Site Description (complete A or B under Classification - see instructions for full description)

A. Classification

1. For Wetland Resource Areas, complete the following:

System: Palustrine

Subsystem:

Class: Scrub-Shrub

Subclass: Deciduous

Hydrology/Water Regime

☐ Permanently flooded

☐ Saturated

☐ Intermittently exposed

☒ Temporarily flooded

☐ Semi-permanently flooded

☐ Intermittently flooded

☐ Seasonally flooded

☐ Artificially flooded

2. For Riverfront or Bordering Land Subject to Flooding Resource Areas, complete the following.

Use a terrestrial classification system such as one of the two listed below:

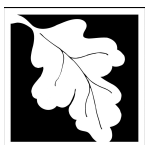
a. "Classification of the Natural Communities of Massachusetts (Draft)" by Patricia C. Swain and Jennifer B. Kearsley, MA DFW NHESP, Westborough, MA. July 2000. ([Department of Fish & Game Website](#))

b. "New England Wildlife: Habitat, Natural History, and Distribution" by Richard M. DeGraaf and Deborah D. Rudis, USDA Forest Service, Northeastern Forest Experiment Station. General Technical Report NE-108. August 1992. 491 pages.

Community Name

Vegetation Description

Physical Description



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

B. Inventory (Plant community)

% Cover: 0 15 0 3 40
 Trees (> 20') Shrubs (< 20') Woody vines Mosses Herbaceous

Plant Lists (species that comprise 10% or more of the vegetative cover in each strata; "*" designates a dominant plant species for the strata):

Strata	Plant Species	Strata	Plant Species
SH	Black huckleberry		
H	Spinulose woodfern		
H	Cinnamon fern		
H	Pennsylvania sedge		

C. Inventory (Soils)

N/A
Soil Survey Unit Drainage Class

Texture (upper part) Depth

Depth to Water Table

III. Important Habitat Features (complete for all resource areas)

If the following habitat characteristics are present, describe & quantify them on a separate sheet & attach.

Wildlife Food

Important Wetland/Aquatic Food Plants (smartweeds, pondweeds, wild rice, bulrush, wild celery)

☐ Abundant ☐ Present ☒ Absent

Important Upland/Wetland Food Plants (hard mast and fruit/berry producers)

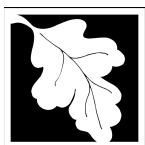
☐ Abundant ☒ Present ☐ Absent

Shrub thickets or streambeds with abundant earthworms (American woodcock)

☐ Present ☒ Absent

Shrub and/or herbaceous vegetation suitable for veery nesting

☐ Present ☒ Absent



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Number of trees (live or dead) > 30" DBH: 0

Number (or density) of Standing Dead Trees (potential for cavities and perches):

<u> </u> 6-12" dbh	<u> </u> 12-18" dbh	<u> </u> 18-24" dbh	<u> </u> > 24" dbh
---------------------------	----------------------------	----------------------------	---------------------------

Number of Tree Cavities in trunks or limbs of:

0
6-12" diameter (e.g., tree swallow, saw whet owl, screech owl, bluebird, other songbirds)

0
12-18" diameter (e.g., hooded merganser, wood duck, common goldeneye, mink)

0
>18" diameter (e.g., hooded merganser, wood duck, common goldeneye, common merganser, barred owl, mink, raccoon, fisher)

Small mammal burrows

☐ Abundant ☒ Present ☐ Absent

Cover/Perches/Basking/Denning/Nesting Habitat

☒ Dense herbaceous cover (voles, small mammals, amphibians & reptiles)

☐ Large woody debris on the ground (small mammals, mink, amphibians & reptiles)

☐ Rocks, crevices, logs, tree roots or hummocks under water's surface (turtles, snakes, frogs)

☒ Rocks, crevices, fallen logs, overhanging branches or hummocks at, or within 1m above the water's surface (turtles, snakes, frogs, wading birds, wood duck, mink, raccoon)

☐ Rock piles, crevices, or hollow logs suitable for:

☐ otter ☐ mink ☐ porcupine ☐ bear ☐ bobcat ☐ turkey vulture

☐ Live or dead standing vegetation overhanging water or offering good visibility of open water (e.g., osprey, kingfisher, flycatchers, cedar waxwings)

Depressions that may serve as seasonal (vernal/autumnal) pools

☐ Present ☒ Absent

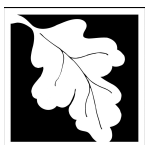
Standing water present at least part of the growing season, suitable for use by

☐ Breeding amphibians ☐ Non-breeding amphibians (foraging, re-hydration)

☐ Turtles ☐ Foraging waterfowl

Sphagnum hummocks or mats, moss-covered logs or saturated logs, overhanging or directly adjacent to pools of standing water in spring (four-toed salamander)

☐ Present ☒ Absent



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Important habitat characteristics (if present, describe and quantify them on a separate sheet)

Medium to large (> 6"), flat rocks within a stream (cover for stream salamanders and nesting habitat for spring & two-lined salamanders)

☐ Present ☒ Absent

Flat rocks and logs on banks or within exposed portions of streambeds (cover for stream salamanders and nesting habitat for dusky salamanders)

☐ Present ☒ Absent

Underwater banks of fine silt and/or clay (beaver, muskrat, otter)

☐ Present ☒ Absent

Undercut or overhanging banks (small mammals, mink, weasels)

☐ Present ☒ Absent

Vertical sandy banks (bank swallow, kingfisher)

☐ Present ☒ Absent

Areas of ice-free open water in winter

☐ Present ☒ Absent

Mud flats

☐ Present ☒ Absent

Exposed areas of well-drained, sandy soil suitable for turtle nesting

☐ Present ☒ Absent

Wildlife dens/nests (if present, describe & quantify them on the back of this sheet)

Turtle nesting sites

☐ Present ☒ Absent

Bank swallow colony

☐ Present ☒ Absent

Nest(s) present of

☐ Bald Eagle

☐ Osprey

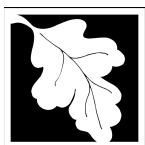
☐ Great Blue Heron

Den(s) present of

☐ Otter

☐ Mink

☐ Beaver



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Project area is within:

- ☐ 100' of beaver, mink or otter den, bank swallow colony or turtle nesting area
- ☐ 200' of Great Blue Heron or osprey nest(s)
- ☐ 1400' of a Bald Eagle nest¹

Emergent Wetlands (if present, describe & quantify them on a separate sheet)

Emergent wetland vegetation at least seasonally flooded during the growing season (wood duck, green heron, black-crowned night heron, king rail, Virginia rail, coot, etc.)

Flooded > 5 cm ☐ Present ☒ Absent

Flooded > 25 cm (pied-billed grebe) ☐ Present ☒ Absent

Persistent emergent wetland vegetation at least seasonally flooded during the growing season (mallard, American bittern, sora, common snipe, red-winged blackbird, swamp sparrow, marsh wren)

Flooded > 5 cm ☐ Present ☒ Absent

Flooded > 25 cm (least bittern, common moorhen) ☐ Present ☒ Absent

Cattail emergent wetland vegetation at least seasonally flooded during the growing season

Flooded > 5 cm (marsh wren) ☐ Present ☒ Absent

Flooded > 25 cm (least bittern, common moorhen) ☐ Present ☒ Absent

Fine-leaved emergent vegetation (grasses and sedges) at least seasonally flooded during the growing season (common snipe, spotted sandpiper, sedge wren)

Flooded > 5 cm ☐ Present ☒ Absent

Flooded > 25 cm (least bittern, common moorhen) ☐ Present ☒ Absent

IV. Landscape Context

A. **Habitat Continuity** (if present, describe the landscape context on a separate sheet and its importance for area-sensitive species)

Is the impact area part of an emergent marsh at least	1.0 acre in size?	☐ Yes	☒ No
(marsh and waterbirds)	2.0 acres in size?	☐ Yes	☒ No
	5.0 acres in size?	☐ Yes	☒ No
	10.0 acres in size?	☐ Yes	☒ No

¹ 1400 feet is the distance used by NHESP for evaluating potential disturbance impacts on eagle nests under MESA. Keep in mind, however, that this doesn't give jurisdiction within 1400' of an eagle's nest; it only identifies it on the checklist so that adverse effects can be avoided if work in a resource area is within 1400 feet.



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Is the impact area part of a wetland complex at least	2.5 acres in size?	☐ Yes	☒ No
(turtles, frogs, waterfowl, mammals)	5.0 acres in size?	☐ Yes	☒ No
	10.0 acres in size?	☒ Yes	☐ No
	25.0 acres in size?	☐ Yes	☒ No
For upland resource areas is the impact area part of contiguous forested habitat at least			
(forest interior nesting birds)	50 acres in size?	☐ Yes	☒ No
	100 acres in size?	☐ Yes	☒ No
	250 acres in size?	☐ Yes	☒ No
	500 acres in size?	☐ Yes	☒ No
(grassland nesting birds)	> 1.0 acre in size?	☐ Yes	☒ No
(special habitat such as gallery floodplain forest, alder thicket, etc.)	> 1.0 acre in size?	☐ Yes	☒ No

B. Connectivity with adjoining natural habitats

- ☐ No direct connections to adjacent areas of wildlife habitat (little connectivity function)
- ☒ Connectors numerous or impact area is embedded in a large area of natural habitat (limited connectivity function)
- ☐ Impact area contributes to a limited number of connectors to adjacent areas of habitat (somewhat important for connectivity function)
- ☐ Impact area serves as *part of* a sole connector to adjacent areas of habitat (important for connectivity function)
- ☐ Impact area serves as *only* connector to adjacent areas of habitat (very important for connectivity function)

V. Habitat Degradation (describe degradation and wildlife impacts on the back of the sheet)

- ☐ Evidence of significant chemical contamination
- ☐ Evidence of significant levels of dumping
- ☐ Evidence of significant erosion or sedimentation problems
- ☐ Significant invasion of exotic plants (e.g., purple loosestrife, *Phragmites*, glossy buckthorn)
- ☐ Disturbance from roads or highways ☐ Other human disturbance
- ☐ Is the site the only resource area in the vicinity of an otherwise developed area

Note: These are not the only important habitat features that may be observed on a site. If the wildlife specialist identifies other features they should be noted in the application.

September 7, 2017

Wildlife Habitat Evaluation

Timber Crest Estates - Medway, MA

Impact Area: Crossing #2a

1. IMPACT AREA DESCRIPTION

This impact area is located at the westernmost end of “Crossing #2” on proposed “Road I.” It is small in extent (111 sf) and is BVW resource area. It consists of scrub-shrub habitat that may flood temporarily during severe rain events but is likely to be primarily devoid of standing water. Black huckleberry is the only dominant shrub species present. Dense herbaceous cover exists from spinulose wood-fern, cinnamon fern, Pennsylvania sedge and poison ivy. A small patch of sphagnum moss is also present.

2. EXISTING CONDITIONS / WILDLIFE HABITAT FEATURES WITHIN IMPACT AREA



Photo 1 - Impact Area Crossing #2a, facing southwest.



Photo 2 - Crossing #2a, facing northeast.

Existing Wildlife Habitat

Upon completion of Appendix B of the DEP manual, “Important Habitat Features” observed within the Impact Area include:

- Important Upland/Wetland Food Plants (black huckleberry).
- Small mammal burrows (presumed present).
- Dense herbaceous cover (small mammals, amphibians & reptiles).
- Rocks, crevices at or within 1m above the water’s surface (cover for small mammals, snakes and frogs)

3. EVALUATION OF IMPACTS TO WILDLIFE HABITAT

3.1 Impacts

The Crossing #2a portion of the project will alter 111 s.f. of BVW. All of the existing important habitat features identified under the Appendix B evaluation are abundant elsewhere within the site’s wetland and upland resource areas, so the loss will be negligible.

3.2 Mitigation

The altered BVW will be replicated within Replication Area #2 as described in the Wetland Replication Plan submitted with the NOI.



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

Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (for each wetland or non-wetland resource area)

I. General Information

Fairway Lane; Holliston Street; Ohlson Circle; Winthrop Street; Woodland Road

Project Location (from NOI page 1)

Crossing #2b

Impact Area (number/name)

8/17/17

Date(s) of Site Visit(s) and Data Collection

Sunny, 80 degrees F

Weather Conditions During Site Visit (if snow cover, include depth)

Dan Wells

8/21/17

Person completing form per 310 CMR 10.60(1)(b)

Date this form was completed

The information on this data sheet is based on my observations unless otherwise indicated

Signature

II. Site Description (complete A or B under Classification - see instructions for full description)

A. Classification

1. For Wetland Resource Areas, complete the following:

System: Paulstrine

Subsystem: _____

Class: Forested

Subclass: Deciduous

Hydrology/Water Regime

☐ Permanently flooded

☐ Saturated

☐ Intermittently exposed

☒ Temporarily flooded

☐ Semi-permanently flooded

☐ Intermittently flooded

☐ Seasonally flooded

☐ Artificially flooded

2. For Riverfront or Bordering Land Subject to Flooding Resource Areas, complete the following.

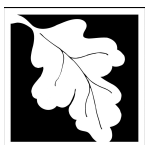
Use a terrestrial classification system such as one of the two listed below:

- "Classification of the Natural Communities of Massachusetts (Draft)" by Patricia C. Swain and Jennifer B. Kearsley, MA DFW NHESP, Westborough, MA. July 2000. ([Department of Fish & Game Website](#))
- "New England Wildlife: Habitat, Natural History, and Distribution" by Richard M. DeGraaf and Deborah D. Rudis, USDA Forest Service, Northeastern Forest Experiment Station. General Technical Report NE-108. August 1992. 491 pages.

Community Name

Vegetation Description

Physical Description



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

B. Inventory (Plant community)

% Cover: 80 5 0 5 20
Trees (> 20') Shrubs (< 20') Woody vines Mosses Herbaceous

Plant Lists (species that comprise 10% or more of the vegetative cover in each strata; "*" designates a dominant plant species for the strata):

Strata	Plant Species	Strata	Plant Species
T	Red Oak		
SAP	American chestnut		
H	Cinnamon fern		

C. Inventory (Soils)

N/A
Soil Survey Unit _____ Drainage Class _____
Texture (upper part) _____ Depth _____
Depth to Water Table _____

III. Important Habitat Features (complete for all resource areas)

If the following habitat characteristics are present, describe & quantify them on a separate sheet & attach.

Wildlife Food

Important Wetland/Aquatic Food Plants (smartweeds, pondweeds, wild rice, bulrush, wild celery)

☐ Abundant ☐ Present ☒ Absent

Important Upland/Wetland Food Plants (hard mast and fruit/berry producers)

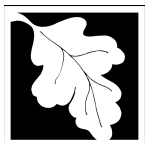
☐ Abundant ☒ Present ☐ Absent

Shrub thickets or streambeds with abundant earthworms (American woodcock)

☐ Present ☒ Absent

Shrub and/or herbaceous vegetation suitable for veery nesting

☐ Present ☒ Absent



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Number of trees (live or dead) > 30" DBH: 0

Number (or density) of Standing Dead Trees (potential for cavities and perches):

 6-12" dbh

 12-18" dbh

 18-24" dbh

 > 24" dbh

Number of Tree Cavities in trunks or limbs of:

0

6-12" diameter (e.g., tree swallow, saw whet owl, screech owl, bluebird, other songbirds)

0

12-18" diameter (e.g., hooded merganser, wood duck, common goldeneye, mink)

0

>18" diameter (e.g., hooded merganser, wood duck, common goldeneye, common merganser, barred owl, mink, raccoon, fisher)

Small mammal burrows

☐ Abundant

☒ Present

☐ Absent

Cover/Perches/Basking/Denning/Nesting Habitat

☒ Dense herbaceous cover (voles, small mammals, amphibians & reptiles)

☐ Large woody debris on the ground (small mammals, mink, amphibians & reptiles)

☐ Rocks, crevices, logs, tree roots or hummocks under water's surface (turtles, snakes, frogs)

☒ Rocks, crevices, fallen logs, overhanging branches or hummocks at, or within 1m above the water's surface (turtles, snakes, frogs, wading birds, wood duck, mink, raccoon)

☐ Rock piles, crevices, or hollow logs suitable for:

☐ otter

☐ mink

☐ porcupine

☐ bear

☐ bobcat

☐ turkey vulture

☐ Live or dead standing vegetation overhanging water or offering good visibility of open water (e.g., osprey, kingfisher, flycatchers, cedar waxwings)

Depressions that may serve as seasonal (vernal/autumnal) pools

☐ Present

☒ Absent

Standing water present at least part of the growing season, suitable for use by

☐ Breeding amphibians

☐ Non-breeding amphibians (foraging, re-hydration)

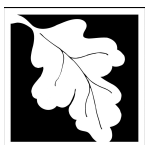
☐ Turtles

☐ Foraging waterfowl

Sphagnum hummocks or mats, moss-covered logs or saturated logs, overhanging or directly adjacent to pools of standing water in spring (four-toed salamander)

☐ Present

☒ Absent



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Important habitat characteristics (if present, describe and quantify them on a separate sheet)

Medium to large (> 6"), flat rocks within a stream (cover for stream salamanders and nesting habitat for spring & two-lined salamanders)

☐ Present ☒ Absent

Flat rocks and logs on banks or within exposed portions of streambeds (cover for stream salamanders and nesting habitat for dusky salamanders)

☐ Present ☒ Absent

Underwater banks of fine silt and/or clay (beaver, muskrat, otter)

☐ Present ☒ Absent

Undercut or overhanging banks (small mammals, mink, weasels)

☐ Present ☒ Absent

Vertical sandy banks (bank swallow, kingfisher)

☐ Present ☒ Absent

Areas of ice-free open water in winter

☐ Present ☒ Absent

Mud flats

☐ Present ☒ Absent

Exposed areas of well-drained, sandy soil suitable for turtle nesting

☐ Present ☒ Absent

Wildlife dens/nests (if present, describe & quantify them on the back of this sheet)

Turtle nesting sites

☐ Present ☒ Absent

Bank swallow colony

☐ Present ☒ Absent

Nest(s) present of

☐ Bald Eagle

☐ Osprey

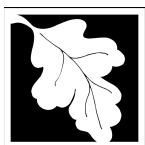
☐ Great Blue Heron

Den(s) present of

☐ Otter

☐ Mink

☐ Beaver



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Project area is within:

- ☐ 100' of beaver, mink or otter den, bank swallow colony or turtle nesting area
- ☐ 200' of Great Blue Heron or osprey nest(s)
- ☐ 1400' of a Bald Eagle nest¹

Emergent Wetlands (if present, describe & quantify them on a separate sheet)

Emergent wetland vegetation at least seasonally flooded during the growing season (wood duck, green heron, black-crowned night heron, king rail, Virginia rail, coot, etc.)

Flooded > 5 cm ☐ Present ☒ Absent

Flooded > 25 cm (pied-billed grebe) ☐ Present ☒ Absent

Persistent emergent wetland vegetation at least seasonally flooded during the growing season (mallard, American bittern, sora, common snipe, red-winged blackbird, swamp sparrow, marsh wren)

Flooded > 5 cm ☐ Present ☒ Absent

Flooded > 25 cm (least bittern, common moorhen) ☐ Present ☒ Absent

Cattail emergent wetland vegetation at least seasonally flooded during the growing season

Flooded > 5 cm (marsh wren) ☐ Present ☒ Absent

Flooded > 25 cm (least bittern, common moorhen) ☐ Present ☒ Absent

Fine-leaved emergent vegetation (grasses and sedges) at least seasonally flooded during the growing season (common snipe, spotted sandpiper, sedge wren)

Flooded > 5 cm ☐ Present ☒ Absent

Flooded > 25 cm (least bittern, common moorhen) ☐ Present ☒ Absent

IV. Landscape Context

A. **Habitat Continuity** (if present, describe the landscape context on a separate sheet and its importance for area-sensitive species)

Is the impact area part of an emergent marsh at least	1.0 acre in size?	☐ Yes	☒ No
(marsh and waterbirds)	2.0 acres in size?	☐ Yes	☒ No
	5.0 acres in size?	☐ Yes	☒ No
	10.0 acres in size?	☐ Yes	☒ No

¹ 1400 feet is the distance used by NHESP for evaluating potential disturbance impacts on eagle nests under MESA. Keep in mind, however, that this doesn't give jurisdiction within 1400' of an eagle's nest; it only identifies it on the checklist so that adverse effects can be avoided if work in a resource area is within 1400 feet.



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Is the impact area part of a wetland complex at least	2.5 acres in size?	☒ Yes	☐ No
(turtles, frogs, waterfowl, mammals)	5.0 acres in size?	☐ Yes	☒ No
	10.0 acres in size?	☐ Yes	☒ No
	25.0 acres in size?	☐ Yes	☒ No
For upland resource areas is the impact area part of contiguous forested habitat at least			
(forest interior nesting birds)	50 acres in size?	☐ Yes	☒ No
	100 acres in size?	☐ Yes	☒ No
	250 acres in size?	☐ Yes	☒ No
	500 acres in size?	☐ Yes	☒ No
(grassland nesting birds)	> 1.0 acre in size?	☐ Yes	☒ No
(special habitat such as gallery floodplain forest, alder thicket, etc.)	> 1.0 acre in size?	☐ Yes	☒ No

B. Connectivity with adjoining natural habitats

- ☐ No direct connections to adjacent areas of wildlife habitat (little connectivity function)
- ☒ Connectors numerous or impact area is embedded in a large area of natural habitat (limited connectivity function)
- ☐ Impact area contributes to a limited number of connectors to adjacent areas of habitat (somewhat important for connectivity function)
- ☐ Impact area serves as *part of* a sole connector to adjacent areas of habitat (important for connectivity function)
- ☐ Impact area serves as *only* connector to adjacent areas of habitat (very important for connectivity function)

V. Habitat Degradation (describe degradation and wildlife impacts on the back of the sheet)

- ☐ Evidence of significant chemical contamination
- ☐ Evidence of significant levels of dumping
- ☐ Evidence of significant erosion or sedimentation problems
- ☐ Significant invasion of exotic plants (e.g., purple loosestrife, *Phragmites*, glossy buckthorn)
- ☐ Disturbance from roads or highways ☐ Other human disturbance
- ☐ Is the site the only resource area in the vicinity of an otherwise developed area

Note: These are not the only important habitat features that may be observed on a site. If the wildlife specialist identifies other features they should be noted in the application.

September 7, 2017

Wildlife Habitat Evaluation

Timber Crest Estates - Medway, MA

Impact Area: Crossing #2b

1. IMPACT AREA DESCRIPTION

This impact area is located on proposed "Road I" west of the main Crossing #2c impact area, and slightly northeast of Area #2a. It consists of a 261 sf area of BVW resource area. It contains a mature red oak tree, American chestnut sapling, a sparse shrub cover of highbush blueberry and black huckleberry, and a dense herbaceous cover of cinnamon, New York and spinulose wood ferns. Numerous boulders form a sort of natural rock pile in the center of the area. A large rotting log is also present.

2. EXISTING CONDITIONS / WILDLIFE HABITAT FEATURES WITHIN IMPACT AREA



Photo 1 - Impact Area #2b, facing west.



Photo 2 - Large rocks present within Impact Area 2b.



Photo 3 - Crevices under large rocks within Impact Area 2b.

Existing Wildlife Habitat

The impacted BLSF contains none of the important habitat features listed on Appendix A: Simplified Wildlife Habitat Evaluation. Upon completion of Appendix B of the DEP manual, "Important Habitat Features" observed within the Impact Area include:

- Important Upland/Wetland Food Plants (hard mast and fruit/berry producers – red oak and black huckleberry).
- Small mammal burrows (presumed present).
- Dense herbaceous cover (small mammals, amphibians & reptiles).
- Rocks, crevices fallen logs at or within 1m above the water's surface (snakes, frogs, small and medium-sized mammals)

3. EVALUATION OF IMPACTS TO WILDLIFE HABITAT

3.1 Impacts

The Crossing #2b portion of the project will alter 261 s.f. of BVW. Most of the existing important habitat features identified under the Appendix B evaluation are abundant elsewhere within the site's wetland and upland resource areas, so the loss will be negligible. The large rocks and rotting log will be relocated to nearby BVW or buffer zone as directed by a wetland scientist or wildlife biologist.

3.2 Mitigation

The 261 sf of BVW impacted will be replicated within Replication Area #2 as described in the Wetland Replication Plan submitted with the NOI. The large rocks and rotting log will be relocated to nearby BVW or buffer zone as directed by a wetland scientist or wildlife biologist.



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

Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (for each wetland or non-wetland resource area)

I. General Information

Fairway Lane; Holliston Street; Ohlson Circle; Winthrop Street; Woodland Road

Project Location (from NOI page 1)

Crossing 2c

Impact Area (number/name)

8/17/17

Date(s) of Site Visit(s) and Data Collection

Sunny, 80 degrees F

Weather Conditions During Site Visit (if snow cover, include depth)

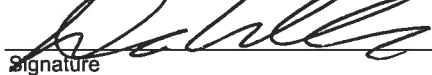
Dan Wells

8/21/17

Person completing form per 310 CMR 10.60(1)(b)

Date this form was completed

The information on this data sheet is based on my observations unless otherwise indicated


Signature

II. Site Description (complete A or B under Classification - see instructions for full description)

A. Classification

1. For Wetland Resource Areas, complete the following:

System: Paulstrine Subsystem: _____

Class: forest Subclass: deciduous

Hydrology/Water Regime

☐ Permanently flooded

☐ Saturated

☐ Intermittently exposed

☐ Temporarily flooded

☐ Semi-permanently flooded

☒ Intermittently flooded

☐ Seasonally flooded

☐ Artificially flooded

2. For Riverfront or Bordering Land Subject to Flooding Resource Areas, complete the following.

Use a terrestrial classification system such as one of the two listed below:

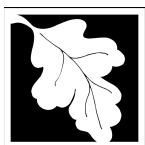
a. "Classification of the Natural Communities of Massachusetts (Draft)" by Patricia C. Swain and Jennifer B. Kearsley, MA DFW NHESP, Westborough, MA. July 2000. ([Department of Fish & Game Website](#))

b. "New England Wildlife: Habitat, Natural History, and Distribution" by Richard M. DeGraaf and Deborah D. Rudis, USDA Forest Service, Northeastern Forest Experiment Station. General Technical Report NE-108. August 1992. 491 pages.

Community Name

Vegetation Description

Physical Description



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

B. Inventory (Plant community)

% Cover: 80 25 0 0 15
Trees (> 20') Shrubs (< 20') Woody vines Mosses Herbaceous

Plant Lists (species that comprise 10% or more of the vegetative cover in each strata; "*" designates a dominant plant species for the strata):

Strata	Plant Species	Strata	Plant Species
T	Red Maple		
T	Red Oak		
SH	Highbush blueberry		
SH	Sweet pepperbush		
H	Cinnamon fern		

C. Inventory (Soils)

N/A
Soil Survey Unit _____ Drainage Class _____
Texture (upper part) _____ Depth _____
Depth to Water Table _____

III. Important Habitat Features (complete for all resource areas)

If the following habitat characteristics are present, describe & quantify them on a separate sheet & attach.

Wildlife Food

Important Wetland/Aquatic Food Plants (smartweeds, pondweeds, wild rice, bulrush, wild celery)

☐ Abundant ☐ Present ☒ Absent

Important Upland/Wetland Food Plants (hard mast and fruit/berry producers)

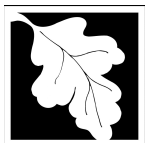
☐ Abundant ☒ Present ☐ Absent

Shrub thickets or streambeds with abundant earthworms (American woodcock)

☒ Present ☐ Absent

Shrub and/or herbaceous vegetation suitable for veery nesting

☐ Present ☒ Absent



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Number of trees (live or dead) > 30" DBH: 1

Number (or density) of Standing Dead Trees (potential for cavities and perches):

 6-12" dbh

 12-18" dbh

 18-24" dbh

 > 24" dbh

Number of Tree Cavities in trunks or limbs of:

0

6-12" diameter (e.g., tree swallow, saw whet owl, screech owl, bluebird, other songbirds)

0

12-18" diameter (e.g., hooded merganser, wood duck, common goldeneye, mink)

0

>18" diameter (e.g., hooded merganser, wood duck, common goldeneye, common merganser, barred owl, mink, raccoon, fisher)

Small mammal burrows

☐ Abundant

☒ Present

☐ Absent

Cover/Perches/Basking/Denning/Nesting Habitat

☒ Dense herbaceous cover (voles, small mammals, amphibians & reptiles)

☒ Large woody debris on the ground (small mammals, mink, amphibians & reptiles)

☐ Rocks, crevices, logs, tree roots or hummocks under water's surface (turtles, snakes, frogs)

☒ Rocks, crevices, fallen logs, overhanging branches or hummocks at, or within 1m above the water's surface (turtles, snakes, frogs, wading birds, wood duck, mink, raccoon)

☐ Rock piles, crevices, or hollow logs suitable for:

☐ otter

☐ mink

☐ porcupine

☐ bear

☐ bobcat

☐ turkey vulture

☐ Live or dead standing vegetation overhanging water or offering good visibility of open water (e.g., osprey, kingfisher, flycatchers, cedar waxwings)

Depressions that may serve as seasonal (vernal/autumnal) pools

☐ Present

☒ Absent

Standing water present at least part of the growing season, suitable for use by

☐ Breeding amphibians

☐ Non-breeding amphibians (foraging, re-hydration)

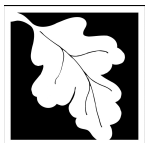
☐ Turtles

☐ Foraging waterfowl

Sphagnum hummocks or mats, moss-covered logs or saturated logs, overhanging or directly adjacent to pools of standing water in spring (four-toed salamander)

☐ Present

☒ Absent



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Important habitat characteristics (if present, describe and quantify them on a separate sheet)

Medium to large (> 6"), flat rocks within a stream (cover for stream salamanders and nesting habitat for spring & two-lined salamanders)

☐ Present ☒ Absent

Flat rocks and logs on banks or within exposed portions of streambeds (cover for stream salamanders and nesting habitat for dusky salamanders)

☐ Present ☒ Absent

Underwater banks of fine silt and/or clay (beaver, muskrat, otter)

☐ Present ☒ Absent

Undercut or overhanging banks (small mammals, mink, weasels)

☐ Present ☒ Absent

Vertical sandy banks (bank swallow, kingfisher)

☐ Present ☒ Absent

Areas of ice-free open water in winter

☐ Present ☒ Absent

Mud flats

☐ Present ☒ Absent

Exposed areas of well-drained, sandy soil suitable for turtle nesting

☐ Present ☒ Absent

Wildlife dens/nests (if present, describe & quantify them on the back of this sheet)

Turtle nesting sites

☐ Present ☒ Absent

Bank swallow colony

☐ Present ☒ Absent

Nest(s) present of

☐ Bald Eagle

☐ Osprey

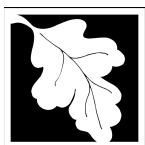
☐ Great Blue Heron

Den(s) present of

☐ Otter

☐ Mink

☐ Beaver



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Project area is within:

- ☐ 100' of beaver, mink or otter den, bank swallow colony or turtle nesting area
- ☐ 200' of Great Blue Heron or osprey nest(s)
- ☐ 1400' of a Bald Eagle nest¹

Emergent Wetlands (if present, describe & quantify them on a separate sheet)

Emergent wetland vegetation at least seasonally flooded during the growing season (wood duck, green heron, black-crowned night heron, king rail, Virginia rail, coot, etc.)

Flooded > 5 cm ☐ Present ☒ Absent

Flooded > 25 cm (pied-billed grebe) ☐ Present ☒ Absent

Persistent emergent wetland vegetation at least seasonally flooded during the growing season (mallard, American bittern, sora, common snipe, red-winged blackbird, swamp sparrow, marsh wren)

Flooded > 5 cm ☐ Present ☒ Absent

Flooded > 25 cm (least bittern, common moorhen) ☐ Present ☒ Absent

Cattail emergent wetland vegetation at least seasonally flooded during the growing season

Flooded > 5 cm (marsh wren) ☐ Present ☒ Absent

Flooded > 25 cm (least bittern, common moorhen) ☐ Present ☒ Absent

Fine-leaved emergent vegetation (grasses and sedges) at least seasonally flooded during the growing season (common snipe, spotted sandpiper, sedge wren)

Flooded > 5 cm ☐ Present ☒ Absent

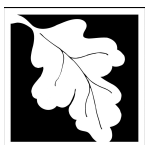
Flooded > 25 cm (least bittern, common moorhen) ☐ Present ☒ Absent

IV. Landscape Context

A. **Habitat Continuity** (if present, describe the landscape context on a separate sheet and its importance for area-sensitive species)

Is the impact area part of an emergent marsh at least	1.0 acre in size?	☐ Yes	☒ No
(marsh and waterbirds)	2.0 acres in size?	☐ Yes	☒ No
	5.0 acres in size?	☐ Yes	☒ No
	10.0 acres in size?	☐ Yes	☒ No

¹ 1400 feet is the distance used by NHESP for evaluating potential disturbance impacts on eagle nests under MESA. Keep in mind, however, that this doesn't give jurisdiction within 1400' of an eagle's nest; it only identifies it on the checklist so that adverse effects can be avoided if work in a resource area is within 1400 feet.



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Is the impact area part of a wetland complex at least	2.5 acres in size?	☒ Yes	☐ No
(turtles, frogs, waterfowl, mammals)	5.0 acres in size?	☐ Yes	☒ No
	10.0 acres in size?	☐ Yes	☒ No
	25.0 acres in size?	☐ Yes	☒ No
For upland resource areas is the impact area part of contiguous forested habitat at least			
(forest interior nesting birds)	50 acres in size?	☐ Yes	☒ No
	100 acres in size?	☐ Yes	☒ No
	250 acres in size?	☐ Yes	☒ No
	500 acres in size?	☐ Yes	☒ No
(grassland nesting birds)	> 1.0 acre in size?	☐ Yes	☒ No
(special habitat such as gallery floodplain forest, alder thicket, etc.)	> 1.0 acre in size?	☐ Yes	☒ No

B. Connectivity with adjoining natural habitats

- ☐ No direct connections to adjacent areas of wildlife habitat (little connectivity function)
- ☐ Connectors numerous or impact area is embedded in a large area of natural habitat (limited connectivity function)
- ☒ Impact area contributes to a limited number of connectors to adjacent areas of habitat (somewhat important for connectivity function)
- ☐ Impact area serves as *part of* a sole connector to adjacent areas of habitat (important for connectivity function)
- ☐ Impact area serves as *only* connector to adjacent areas of habitat (very important for connectivity function)

V. Habitat Degradation (describe degradation and wildlife impacts on the back of the sheet)

- ☐ Evidence of significant chemical contamination
- ☐ Evidence of significant levels of dumping
- ☐ Evidence of significant erosion or sedimentation problems
- ☐ Significant invasion of exotic plants (e.g., purple loosestrife, *Phragmites*, glossy buckthorn)
- ☐ Disturbance from roads or highways ☐ Other human disturbance
- ☐ Is the site the only resource area in the vicinity of an otherwise developed area

Note: These are not the only important habitat features that may be observed on a site. If the wildlife specialist identifies other features they should be noted in the application.

September 7, 2017

Wildlife Habitat Evaluation

Timber Crest Estates - Medway, MA

Impact Area: Crossing #2c

1. IMPACT AREA DESCRIPTION

This impact area is located along proposed "Road I", east of impact areas #2a and 2b. It consists of 4,167 sf of BVW resource area, located within a forested wetland with dense shrub cover. Mature red maples and red oaks dominate the tree canopy, with a few red maple, white pine and American elm saplings. Highbush blueberry and sweet pepperbush dominate the shrub canopy, while cinnamon and royal fern are abundant in the herbaceous layer. There are a few boulders and rotting logs interspersed throughout the impact area. The most notable habitat feature is a large (>30" dbh) red oak tree.

2. EXISTING CONDITIONS / WILDLIFE HABITAT FEATURES WITHIN IMPACT AREA



Photo 1 - Existing habitat near the center of Impact Area 2c at centerline Station D.



Photo 2. – Western portion of Impact Area 2c, along road centerline.



Photo 3 - Area of dense shrub cover within Impact Area #2c.

Existing Wildlife Habitat

Upon completion of Appendix B of the DEP manual, "Important Habitat Features" observed within the Impact Area include:

- Important Upland/Wetland Food Plants (hard mast and fruit/berry producers).
- Shrub thickets with abundant earthworms (presumed present)
- One live tree >30" dbh
- Small mammal burrows (presumed present).
- Dense herbaceous cover (small mammals, amphibians & reptiles).
- Large woody debris on the ground (small mammals, amphibians and reptiles).
- Rocks and fallen logs at or within 1m of water's surface.

3. EVALUATION OF IMPACTS TO WILDLIFE HABITAT

3.1 Impacts

The Crossing #2c portion of the project will alter 4,167 s.f. of BVW. All of the existing important habitat features identified under the Appendix B evaluation, except for the large oak tree, are abundant elsewhere within the site's wetland and upland resource areas, so the loss will be negligible.

3.2 Project Mitigation

The 4,167 sf of BVW alteration will be replicated within Replication Area #2 as described in the Wetland Replication Plan submitted with the NOI. A specially designed amphibian crossing box culvert will allow safe migration of wildlife through the crossing.



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

Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (for each wetland or non-wetland resource area)

I. General Information

Fairway Lane; Holliston Street; Ohlson Circle; Winthrop Street; Woodland Road

Project Location (from NOI page 1)

Crossing #3

Impact Area (number/name)

8/17/17

Date(s) of Site Visit(s) and Data Collection

Sunny, 80 degrees F

Weather Conditions During Site Visit (if snow cover, include depth)

Dan Wells

8/21/17

Person completing form per 310 CMR 10.60(1)(b)

Date this form was completed

The information on this data sheet is based on my observations unless otherwise indicated



Signature

II. Site Description (complete A or B under Classification - see instructions for full description)

A. Classification

1. For Wetland Resource Areas, complete the following:

System: Riverine Subsystem: Intermittent
Class: Rocky Shore Subclass: Rubble

Hydrology/Water Regime

- | | |
|---|--|
| ☐ Permanently flooded | ☐ Saturated |
| ☐ Intermittently exposed | ☐ Temporarily flooded |
| ☐ Semi-permanently flooded | ☒ Intermittently flooded |
| ☐ Seasonally flooded | ☐ Artificially flooded |

2. For Riverfront or Bordering Land Subject to Flooding Resource Areas, complete the following.

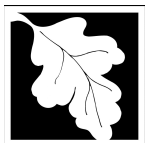
Use a terrestrial classification system such as one of the two listed below:

- "Classification of the Natural Communities of Massachusetts (Draft)" by Patricia C. Swain and Jennifer B. Kearsley, MA DFW NHESP, Westborough, MA. July 2000. ([Department of Fish & Game Website](#))
- "New England Wildlife: Habitat, Natural History, and Distribution" by Richard M. DeGraaf and Deborah D. Rudis, USDA Forest Service, Northeastern Forest Experiment Station. General Technical Report NE-108. August 1992. 491 pages.

Community Name

Vegetation Description

Physical Description



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Number of trees (live or dead) > 30" DBH: 0

Number (or density) of Standing Dead Trees (potential for cavities and perches):

<u> </u>	<u>1</u>	<u>1</u>	<u> </u>
6-12" dbh	12-18" dbh	18-24" dbh	> 24" dbh

Number of Tree Cavities in trunks or limbs of:

0
6-12" diameter (e.g., tree swallow, saw whet owl, screech owl, bluebird, other songbirds)

0
12-18" diameter (e.g., hooded merganser, wood duck, common goldeneye, mink)

0
>18" diameter (e.g., hooded merganser, wood duck, common goldeneye, common merganser, barred owl, mink, raccoon, fisher)

Small mammal burrows

☐ Abundant ☒ Present ☐ Absent

Cover/Perches/Basking/Denning/Nesting Habitat

☒ Dense herbaceous cover (voles, small mammals, amphibians & reptiles)

☒ Large woody debris on the ground (small mammals, mink, amphibians & reptiles)

☐ Rocks, crevices, logs, tree roots or hummocks under water's surface (turtles, snakes, frogs)

☒ Rocks, crevices, fallen logs, overhanging branches or hummocks at, or within 1m above the water's surface (turtles, snakes, frogs, wading birds, wood duck, mink, raccoon)

☐ Rock piles, crevices, or hollow logs suitable for:

☐ otter ☐ mink ☐ porcupine ☐ bear ☐ bobcat ☐ turkey vulture

☐ Live or dead standing vegetation overhanging water or offering good visibility of open water (e.g., osprey, kingfisher, flycatchers, cedar waxwings)

Depressions that may serve as seasonal (vernal/autumnal) pools

☐ Present ☒ Absent

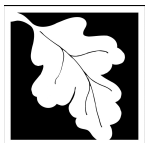
Standing water present at least part of the growing season, suitable for use by

☐ Breeding amphibians ☒ Non-breeding amphibians (foraging, re-hydration)

☒ Turtles ☐ Foraging waterfowl

Sphagnum hummocks or mats, moss-covered logs or saturated logs, overhanging or directly adjacent to pools of standing water in spring (four-toed salamander)

☐ Present ☒ Absent



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Important habitat characteristics (if present, describe and quantify them on a separate sheet)

Medium to large (> 6"), flat rocks within a stream (cover for stream salamanders and nesting habitat for spring & two-lined salamanders)

☐ Present ☒ Absent

Flat rocks and logs on banks or within exposed portions of streambeds (cover for stream salamanders and nesting habitat for dusky salamanders)

☐ Present ☒ Absent

Underwater banks of fine silt and/or clay (beaver, muskrat, otter)

☐ Present ☒ Absent

Undercut or overhanging banks (small mammals, mink, weasels)

☐ Present ☒ Absent

Vertical sandy banks (bank swallow, kingfisher)

☐ Present ☒ Absent

Areas of ice-free open water in winter

☐ Present ☒ Absent

Mud flats

☐ Present ☒ Absent

Exposed areas of well-drained, sandy soil suitable for turtle nesting

☐ Present ☒ Absent

Wildlife dens/nests (if present, describe & quantify them on the back of this sheet)

Turtle nesting sites

☐ Present ☒ Absent

Bank swallow colony

☐ Present ☒ Absent

Nest(s) present of

☐ Bald Eagle

☐ Osprey

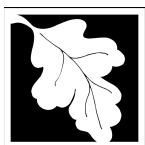
☐ Great Blue Heron

Den(s) present of

☐ Otter

☐ Mink

☐ Beaver



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Project area is within:

- ☐ 100' of beaver, mink or otter den, bank swallow colony or turtle nesting area
- ☐ 200' of Great Blue Heron or osprey nest(s)
- ☐ 1400' of a Bald Eagle nest¹

Emergent Wetlands (if present, describe & quantify them on a separate sheet)

Emergent wetland vegetation at least seasonally flooded during the growing season (wood duck, green heron, black-crowned night heron, king rail, Virginia rail, coot, etc.)

Flooded > 5 cm ☐ Present ☒ Absent

Flooded > 25 cm (pied-billed grebe) ☐ Present ☒ Absent

Persistent emergent wetland vegetation at least seasonally flooded during the growing season (mallard, American bittern, sora, common snipe, red-winged blackbird, swamp sparrow, marsh wren)

Flooded > 5 cm ☐ Present ☒ Absent

Flooded > 25 cm (least bittern, common moorhen) ☐ Present ☒ Absent

Cattail emergent wetland vegetation at least seasonally flooded during the growing season

Flooded > 5 cm (marsh wren) ☐ Present ☒ Absent

Flooded > 25 cm (least bittern, common moorhen) ☐ Present ☒ Absent

Fine-leaved emergent vegetation (grasses and sedges) at least seasonally flooded during the growing season (common snipe, spotted sandpiper, sedge wren)

Flooded > 5 cm ☐ Present ☒ Absent

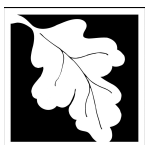
Flooded > 25 cm (least bittern, common moorhen) ☐ Present ☒ Absent

IV. Landscape Context

A. **Habitat Continuity** (if present, describe the landscape context on a separate sheet and its importance for area-sensitive species)

Is the impact area part of an emergent marsh at least	1.0 acre in size?	☐ Yes	☒ No
(marsh and waterbirds)	2.0 acres in size?	☐ Yes	☒ No
	5.0 acres in size?	☐ Yes	☒ No
	10.0 acres in size?	☐ Yes	☒ No

¹ 1400 feet is the distance used by NHESP for evaluating potential disturbance impacts on eagle nests under MESA. Keep in mind, however, that this doesn't give jurisdiction within 1400' of an eagle's nest; it only identifies it on the checklist so that adverse effects can be avoided if work in a resource area is within 1400 feet.



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Is the impact area part of a wetland complex at least	2.5 acres in size?	☐ Yes	☒ No
(turtles, frogs, waterfowl, mammals)	5.0 acres in size?	☐ Yes	☒ No
	10.0 acres in size?	☒ Yes	☐ No
	25.0 acres in size?	☐ Yes	☒ No
For upland resource areas is the impact area part of contiguous forested habitat at least			
(forest interior nesting birds)	50 acres in size?	☐ Yes	☒ No
	100 acres in size?	☐ Yes	☒ No
	250 acres in size?	☐ Yes	☒ No
	500 acres in size?	☐ Yes	☒ No
(grassland nesting birds)	> 1.0 acre in size?	☐ Yes	☒ No
(special habitat such as gallery floodplain forest, alder thicket, etc.)	> 1.0 acre in size?	☐ Yes	☒ No

B. Connectivity with adjoining natural habitats

- ☐ No direct connections to adjacent areas of wildlife habitat (little connectivity function)
- ☒ Connectors numerous or impact area is embedded in a large area of natural habitat (limited connectivity function)
- ☐ Impact area contributes to a limited number of connectors to adjacent areas of habitat (somewhat important for connectivity function)
- ☐ Impact area serves as *part of* a sole connector to adjacent areas of habitat (important for connectivity function)
- ☐ Impact area serves as *only* connector to adjacent areas of habitat (very important for connectivity function)

V. Habitat Degradation (describe degradation and wildlife impacts on the back of the sheet)

- ☐ Evidence of significant chemical contamination
- ☐ Evidence of significant levels of dumping
- ☐ Evidence of significant erosion or sedimentation problems
- ☐ Significant invasion of exotic plants (e.g., purple loosestrife, *Phragmites*, glossy buckthorn)
- ☐ Disturbance from roads or highways
- ☐ Other human disturbance
- ☐ Is the site the only resource area in the vicinity of an otherwise developed area

Note: These are not the only important habitat features that may be observed on a site. If the wildlife specialist identifies other features they should be noted in the application.

September 7, 2017

Wildlife Habitat Evaluation

Timber Crest Estates - Medway, MA

Impact Area: Crossing #3

1. IMPACT AREA DESCRIPTION

This impact area is located within the 165 Holliston Street property, in the northeast portion of the development, on proposed "Road F." It consists of an intermittent stream bordered on both sides by BVW. The impact includes 103 linear feet of Bank and 3,163 sf of BVW resource areas. The stream became completely dry as of late August 2017. At the crossing it is approximately 10-12 feet wide, with a mostly barren mucky substrate. A few cardinal flower plants grow within the dry stream bed, and the banks are lined with sweet pepperbush, winterberry and cinnamon fern. The BVW, wider on the west side of the crossing, contains a forested wetland habitat dominated by red maple trees, sweet pepperbush shrubs and cinnamon ferns. There are two dead standing trees in the impact area, along with numerous rotting logs and a few boulders.

2. EXISTING CONDITIONS / WILDLIFE HABITAT FEATURES WITHIN IMPACT AREA



Photo 1 - Intermittent stream near center of Crossing #3.



Photo 2 - View to the east from within intermittent stream at Crossing #3.



Photo 3 - Large dead tree within Crossing #3 impact area.

Existing Wildlife Habitat

Upon completion of Appendix B of the DEP manual, "Important Habitat Features" observed within the Impact Area include:

- Important Upland/Wetland Food Plants (hard mast and fruit/berry producers).
- Shrub thickets or streambeds with abundant earthworms (presumed present).
- Two standing dead trees: 12-18" and 18-24" dbh
- Small mammal burrows (presumed present).
- Dense herbaceous cover (small mammals, amphibians & reptiles).
- Large woody debris on the ground (small mammals, amphibians and reptiles).
- Rocks, crevices, fallen logs or hummocks at or within 1m of water's surface.
- Standing water present at least part of the growing season, suitable for use by non-breeding amphibians and small turtles

3. EVALUATION OF IMPACTS TO WILDLIFE HABITAT

3.1 Impacts

The Crossing #2 portion of the project will alter 103 lf of Bank and 3,163 sf of BVW resource areas. All of the existing important habitat features identified under the Appendix B evaluation are abundant elsewhere within the site's wetland and upland resource areas, so the loss will be negligible.

3.2 Mitigation

A box culvert, designed to comply with MA Stream Crossing Guidelines, will span the stream. This will allow free passage of water and migration of wildlife through the crossing.

The 3,163 sf of BVW alteration will be replicated within Replication Area #3 as described in the Wetland Replication Plan submitted with the NOI.



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

Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (for each wetland or non-wetland resource area)

I. General Information

Fairway Lane; Holliston Street; Ohlson Circle; Winthrop Street; Woodland Road

Project Location (from NOI page 1)

Water/Sewer Crossing A

Impact Area (number/name)

8/17/17

Date(s) of Site Visit(s) and Data Collection

Sunny, 80 degrees F

Weather Conditions During Site Visit (if snow cover, include depth)

Dan Wells

8/21/17

Person completing form per 310 CMR 10.60(1)(b)

Date this form was completed

The information on this data sheet is based on my observations unless otherwise indicated


Signature

II. Site Description (complete A or B under Classification - see instructions for full description)

A. Classification

1. For Wetland Resource Areas, complete the following:

System: Palustrine Subsystem: _____

Class: Forested Subclass: Deciduous

Hydrology/Water Regime

- | | |
|---|---|
| ☐ Permanently flooded | ☒ Saturated |
| ☐ Intermittently exposed | ☐ Temporarily flooded |
| ☐ Semi-permanently flooded | ☐ Intermittently flooded |
| ☐ Seasonally flooded | ☐ Artificially flooded |

2. For Riverfront or Bordering Land Subject to Flooding Resource Areas, complete the following.

Use a terrestrial classification system such as one of the two listed below:

- "Classification of the Natural Communities of Massachusetts (Draft)" by Patricia C. Swain and Jennifer B. Kearsley, MA DFW NHESP, Westborough, MA. July 2000. ([Department of Fish & Game Website](#))
- "New England Wildlife: Habitat, Natural History, and Distribution" by Richard M. DeGraaf and Deborah D. Rudis, USDA Forest Service, Northeastern Forest Experiment Station. General Technical Report NE-108. August 1992. 491 pages.

Community Name

Vegetation Description

Physical Description



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

B. Inventory (Plant community)

% Cover: 60 5 20
Trees (> 20') Shrubs (< 20') Woody vines Mosses Herbaceous

Plant Lists (species that comprise 10% or more of the vegetative cover in each strata; "*" designates a dominant plant species for the strata):

Strata	Plant Species	Strata	Plant Species
T	Red Maple		
T	Tupelo		
H	Cinnamon fern		

C. Inventory (Soils)

N/A
Soil Survey Unit _____ Drainage Class _____
Texture (upper part) _____ Depth _____
Depth to Water Table _____

III. Important Habitat Features (complete for all resource areas)

If the following habitat characteristics are present, describe & quantify them on a separate sheet & attach.

Wildlife Food

Important Wetland/Aquatic Food Plants (smartweeds, pondweeds, wild rice, bulrush, wild celery)

☐ Abundant ☐ Present ☒ Absent

Important Upland/Wetland Food Plants (hard mast and fruit/berry producers)

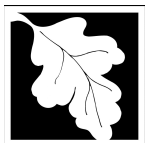
☐ Abundant ☒ Present ☐ Absent

Shrub thickets or streambeds with abundant earthworms (American woodcock)

☐ Present ☒ Absent

Shrub and/or herbaceous vegetation suitable for veery nesting

☐ Present ☒ Absent



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Number of trees (live or dead) > 30" DBH: 0

Number (or density) of Standing Dead Trees (potential for cavities and perches):

 6-12" dbh

 12-18" dbh

 18-24" dbh

 > 24" dbh

Number of Tree Cavities in trunks or limbs of:

0

6-12" diameter (e.g., tree swallow, saw whet owl, screech owl, bluebird, other songbirds)

0

12-18" diameter (e.g., hooded merganser, wood duck, common goldeneye, mink)

0

>18" diameter (e.g., hooded merganser, wood duck, common goldeneye, common merganser, barred owl, mink, raccoon, fisher)

Small mammal burrows

☐ Abundant

☒ Present

☐ Absent

Cover/Perches/Basking/Denning/Nesting Habitat

☒ Dense herbaceous cover (voles, small mammals, amphibians & reptiles)

☐ Large woody debris on the ground (small mammals, mink, amphibians & reptiles)

☐ Rocks, crevices, logs, tree roots or hummocks under water's surface (turtles, snakes, frogs)

☐ Rocks, crevices, fallen logs, overhanging branches or hummocks at, or within 1m above the water's surface (turtles, snakes, frogs, wading birds, wood duck, mink, raccoon)

☐ Rock piles, crevices, or hollow logs suitable for:

☐ otter

☐ mink

☐ porcupine

☐ bear

☐ bobcat

☐ turkey vulture

☐ Live or dead standing vegetation overhanging water or offering good visibility of open water (e.g., osprey, kingfisher, flycatchers, cedar waxwings)

Depressions that may serve as seasonal (vernal/autumnal) pools

☐ Present

☒ Absent

Standing water present at least part of the growing season, suitable for use by

☐ Breeding amphibians

☐ Non-breeding amphibians (foraging, re-hydration)

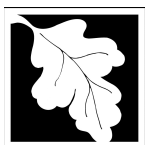
☐ Turtles

☐ Foraging waterfowl

Sphagnum hummocks or mats, moss-covered logs or saturated logs, overhanging or directly adjacent to pools of standing water in spring (four-toed salamander)

☐ Present

☒ Absent



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Important habitat characteristics (if present, describe and quantify them on a separate sheet)

Medium to large (> 6"), flat rocks within a stream (cover for stream salamanders and nesting habitat for spring & two-lined salamanders)

☐ Present ☒ Absent

Flat rocks and logs on banks or within exposed portions of streambeds (cover for stream salamanders and nesting habitat for dusky salamanders)

☐ Present ☒ Absent

Underwater banks of fine silt and/or clay (beaver, muskrat, otter)

☐ Present ☒ Absent

Undercut or overhanging banks (small mammals, mink, weasels)

☐ Present ☒ Absent

Vertical sandy banks (bank swallow, kingfisher)

☐ Present ☒ Absent

Areas of ice-free open water in winter

☐ Present ☒ Absent

Mud flats

☐ Present ☒ Absent

Exposed areas of well-drained, sandy soil suitable for turtle nesting

☐ Present ☒ Absent

Wildlife dens/nests (if present, describe & quantify them on the back of this sheet)

Turtle nesting sites

☐ Present ☒ Absent

Bank swallow colony

☐ Present ☒ Absent

Nest(s) present of

☐ Bald Eagle

☐ Osprey

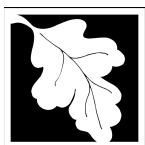
☐ Great Blue Heron

Den(s) present of

☐ Otter

☐ Mink

☐ Beaver



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Project area is within:

- ☐ 100' of beaver, mink or otter den, bank swallow colony or turtle nesting area
- ☐ 200' of Great Blue Heron or osprey nest(s)
- ☐ 1400' of a Bald Eagle nest¹

Emergent Wetlands (if present, describe & quantify them on a separate sheet)

Emergent wetland vegetation at least seasonally flooded during the growing season (wood duck, green heron, black-crowned night heron, king rail, Virginia rail, coot, etc.)

Flooded > 5 cm ☐ Present ☒ Absent

Flooded > 25 cm (pied-billed grebe) ☐ Present ☒ Absent

Persistent emergent wetland vegetation at least seasonally flooded during the growing season (mallard, American bittern, sora, common snipe, red-winged blackbird, swamp sparrow, marsh wren)

Flooded > 5 cm ☐ Present ☒ Absent

Flooded > 25 cm (least bittern, common moorhen) ☐ Present ☒ Absent

Cattail emergent wetland vegetation at least seasonally flooded during the growing season

Flooded > 5 cm (marsh wren) ☐ Present ☒ Absent

Flooded > 25 cm (least bittern, common moorhen) ☐ Present ☒ Absent

Fine-leaved emergent vegetation (grasses and sedges) at least seasonally flooded during the growing season (common snipe, spotted sandpiper, sedge wren)

Flooded > 5 cm ☐ Present ☒ Absent

Flooded > 25 cm (least bittern, common moorhen) ☐ Present ☒ Absent

IV. Landscape Context

A. **Habitat Continuity** (if present, describe the landscape context on a separate sheet and its importance for area-sensitive species)

Is the impact area part of an emergent marsh at least	1.0 acre in size?	☐ Yes	☒ No
(marsh and waterbirds)	2.0 acres in size?	☐ Yes	☒ No
	5.0 acres in size?	☐ Yes	☒ No
	10.0 acres in size?	☐ Yes	☒ No

¹ 1400 feet is the distance used by NHESP for evaluating potential disturbance impacts on eagle nests under MESA. Keep in mind, however, that this doesn't give jurisdiction within 1400' of an eagle's nest; it only identifies it on the checklist so that adverse effects can be avoided if work in a resource area is within 1400 feet.



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Is the impact area part of a wetland complex at least	2.5 acres in size?	☐ Yes	☒ No
(turtles, frogs, waterfowl, mammals)	5.0 acres in size?	☒ Yes	☐ No
	10.0 acres in size?	☐ Yes	☒ No
	25.0 acres in size?	☐ Yes	☒ No
For upland resource areas is the impact area part of contiguous forested habitat at least			
(forest interior nesting birds)	50 acres in size?	☐ Yes	☒ No
	100 acres in size?	☐ Yes	☒ No
	250 acres in size?	☐ Yes	☒ No
	500 acres in size?	☐ Yes	☒ No
(grassland nesting birds)	> 1.0 acre in size?	☐ Yes	☒ No
(special habitat such as gallery floodplain forest, alder thicket, etc.)	> 1.0 acre in size?	☐ Yes	☒ No

B. Connectivity with adjoining natural habitats

- ☐ No direct connections to adjacent areas of wildlife habitat (little connectivity function)
- ☒ Connectors numerous or impact area is embedded in a large area of natural habitat (limited connectivity function)
- ☐ Impact area contributes to a limited number of connectors to adjacent areas of habitat (somewhat important for connectivity function)
- ☐ Impact area serves as *part of* a sole connector to adjacent areas of habitat (important for connectivity function)
- ☐ Impact area serves as *only* connector to adjacent areas of habitat (very important for connectivity function)

V. Habitat Degradation (describe degradation and wildlife impacts on the back of the sheet)

- ☐ Evidence of significant chemical contamination
- ☐ Evidence of significant levels of dumping
- ☐ Evidence of significant erosion or sedimentation problems
- ☐ Significant invasion of exotic plants (e.g., purple loosestrife, *Phragmites*, glossy buckthorn)
- ☐ Disturbance from roads or highways
- ☐ Other human disturbance
- ☐ Is the site the only resource area in the vicinity of an otherwise developed area

Note: These are not the only important habitat features that may be observed on a site. If the wildlife specialist identifies other features they should be noted in the application.

September 7, 2017

Wildlife Habitat Evaluation

Timber Crest Estates - Medway, MA

Impact Area: Water/Sewer A

1. IMPACT AREA DESCRIPTION

This impact area is located just east of the powerlines northeast of proposed "Road D." It consists of a small BVW, 839 sf in extent, that contains forested wetland habitat. Trees present include red maple, with tupelo and white oak saplings. A sparse shrub layer of black huckleberry, swamp azalea and highbush blueberry are located in the area. Cinnamon and royal ferns are also present. There are no rocks, logs or other important wildlife habitat features present.

2. EXISTING CONDITIONS / WILDLIFE HABITAT FEATURES WITHIN IMPACT AREA



Photo 1 - Water/Sewer Crossing A, facing north.



Photo 2 - Water/Sewer Crossing A, facing south.

Existing Wildlife Habitat

Upon completion of Appendix B of the DEP manual, "Important Habitat Features" observed within the Impact Area include:

- Important Upland/Wetland Food Plants (hard mast and fruit/berry producers).
- Small mammal burrows (presumed present).
- Dense herbaceous cover (small mammals, amphibians & reptiles).

3. EVALUATION OF IMPACTS TO WILDLIFE HABITAT

3.1 Impacts

The Water/Sewer Crossing A portion of the project will temporarily impact 839 sf of BVW. All of the existing important habitat features identified under the Appendix B evaluation are abundant elsewhere within the site's wetland and upland resource areas, so the loss will be negligible.

3.2 Project Mitigation

The wetland will be restored to its pre-existing condition following installation of the water and sewer lines.



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

Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (for each wetland or non-wetland resource area)

I. General Information

Fairway Lane; Holliston Street; Ohlson Circle; Winthrop Street; Woodland Road

Project Location (from NOI page 1)

Water/Sewer Crossing B

Impact Area (number/name)

8/17/17

Date(s) of Site Visit(s) and Data Collection

Sunny, 80 degrees F

Weather Conditions During Site Visit (if snow cover, include depth)

Dan Wells

8/21/17

Person completing form per 310 CMR 10.60(1)(b)

Date this form was completed

The information on this data sheet is based on my observations unless otherwise indicated

Signature

II. Site Description (complete A or B under Classification - see instructions for full description)

A. Classification

1. For Wetland Resource Areas, complete the following:

System: Palustrine

Subsystem: _____

Class: Forested

Subclass: Deciduous

Hydrology/Water Regime

☐ Permanently flooded

☐ Saturated

☐ Intermittently exposed

☐ Temporarily flooded

☐ Semi-permanently flooded

☒ Intermittently flooded

☐ Seasonally flooded

☐ Artificially flooded

2. For Riverfront or Bordering Land Subject to Flooding Resource Areas, complete the following.

Use a terrestrial classification system such as one of the two listed below:

a. "Classification of the Natural Communities of Massachusetts (Draft)" by Patricia C. Swain and Jennifer B. Kearsley, MA DFW NHESP, Westborough, MA. July 2000. ([Department of Fish & Game Website](#))

b. "New England Wildlife: Habitat, Natural History, and Distribution" by Richard M. DeGraaf and Deborah D. Rudis, USDA Forest Service, Northeastern Forest Experiment Station. General Technical Report NE-108. August 1992. 491 pages.

Community Name

Vegetation Description

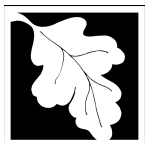
Physical Description



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Number of trees (live or dead) > 30" DBH: 0

Number (or density) of Standing Dead Trees (potential for cavities and perches):

 6-12" dbh

 12-18" dbh

 18-24" dbh

 > 24" dbh

Number of Tree Cavities in trunks or limbs of:

0

6-12" diameter (e.g., tree swallow, saw whet owl, screech owl, bluebird, other songbirds)

0

12-18" diameter (e.g., hooded merganser, wood duck, common goldeneye, mink)

0

>18" diameter (e.g., hooded merganser, wood duck, common goldeneye, common merganser, barred owl, mink, raccoon, fisher)

Small mammal burrows

☐ Abundant

☒ Present

☐ Absent

Cover/Perches/Basking/Denning/Nesting Habitat

☒ Dense herbaceous cover (voles, small mammals, amphibians & reptiles)

☒ Large woody debris on the ground (small mammals, mink, amphibians & reptiles)

☐ Rocks, crevices, logs, tree roots or hummocks under water's surface (turtles, snakes, frogs)

☒ Rocks, crevices, fallen logs, overhanging branches or hummocks at, or within 1m above the water's surface (turtles, snakes, frogs, wading birds, wood duck, mink, raccoon)

☐ Rock piles, crevices, or hollow logs suitable for:

☐ otter

☐ mink

☐ porcupine

☐ bear

☐ bobcat

☐ turkey vulture

☐ Live or dead standing vegetation overhanging water or offering good visibility of open water (e.g., osprey, kingfisher, flycatchers, cedar waxwings)

Depressions that may serve as seasonal (vernal/autumnal) pools

☐ Present

☒ Absent

Standing water present at least part of the growing season, suitable for use by

☐ Breeding amphibians

☒ Non-breeding amphibians (foraging, re-hydration)

☒ Turtles

☐ Foraging waterfowl

Sphagnum hummocks or mats, moss-covered logs or saturated logs, overhanging or directly adjacent to pools of standing water in spring (four-toed salamander)

☐ Present

☒ Absent



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Important habitat characteristics (if present, describe and quantify them on a separate sheet)

Medium to large (> 6"), flat rocks within a stream (cover for stream salamanders and nesting habitat for spring & two-lined salamanders)

☐ Present ☒ Absent

Flat rocks and logs on banks or within exposed portions of streambeds (cover for stream salamanders and nesting habitat for dusky salamanders)

☐ Present ☒ Absent

Underwater banks of fine silt and/or clay (beaver, muskrat, otter)

☐ Present ☒ Absent

Undercut or overhanging banks (small mammals, mink, weasels)

☐ Present ☒ Absent

Vertical sandy banks (bank swallow, kingfisher)

☐ Present ☒ Absent

Areas of ice-free open water in winter

☐ Present ☒ Absent

Mud flats

☐ Present ☒ Absent

Exposed areas of well-drained, sandy soil suitable for turtle nesting

☐ Present ☒ Absent

Wildlife dens/nests (if present, describe & quantify them on the back of this sheet)

Turtle nesting sites

☐ Present ☒ Absent

Bank swallow colony

☐ Present ☒ Absent

Nest(s) present of

☐ Bald Eagle

☐ Osprey

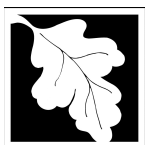
☐ Great Blue Heron

Den(s) present of

☐ Otter

☐ Mink

☐ Beaver



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Project area is within:

- ☐ 100' of beaver, mink or otter den, bank swallow colony or turtle nesting area
- ☐ 200' of Great Blue Heron or osprey nest(s)
- ☐ 1400' of a Bald Eagle nest¹

Emergent Wetlands (if present, describe & quantify them on a separate sheet)

Emergent wetland vegetation at least seasonally flooded during the growing season (wood duck, green heron, black-crowned night heron, king rail, Virginia rail, coot, etc.)

Flooded > 5 cm ☐ Present ☒ Absent

Flooded > 25 cm (pied-billed grebe) ☐ Present ☒ Absent

Persistent emergent wetland vegetation at least seasonally flooded during the growing season (mallard, American bittern, sora, common snipe, red-winged blackbird, swamp sparrow, marsh wren)

Flooded > 5 cm ☐ Present ☒ Absent

Flooded > 25 cm (least bittern, common moorhen) ☐ Present ☒ Absent

Cattail emergent wetland vegetation at least seasonally flooded during the growing season

Flooded > 5 cm (marsh wren) ☐ Present ☒ Absent

Flooded > 25 cm (least bittern, common moorhen) ☐ Present ☒ Absent

Fine-leaved emergent vegetation (grasses and sedges) at least seasonally flooded during the growing season (common snipe, spotted sandpiper, sedge wren)

Flooded > 5 cm ☐ Present ☒ Absent

Flooded > 25 cm (least bittern, common moorhen) ☐ Present ☒ Absent

IV. Landscape Context

A. **Habitat Continuity** (if present, describe the landscape context on a separate sheet and its importance for area-sensitive species)

Is the impact area part of an emergent marsh at least	1.0 acre in size?	☐ Yes	☒ No
(marsh and waterbirds)	2.0 acres in size?	☐ Yes	☒ No
	5.0 acres in size?	☐ Yes	☒ No
	10.0 acres in size?	☐ Yes	☒ No

¹ 1400 feet is the distance used by NHESP for evaluating potential disturbance impacts on eagle nests under MESA. Keep in mind, however, that this doesn't give jurisdiction within 1400' of an eagle's nest; it only identifies it on the checklist so that adverse effects can be avoided if work in a resource area is within 1400 feet.



Wildlife Habitat Protection Guidance

Appendix B: Detailed Wildlife Habitat Evaluation

Part 2. Field Data Form (continued)

Is the impact area part of a wetland complex at least	2.5 acres in size?	☐ Yes	☒ No
(turtles, frogs, waterfowl, mammals)	5.0 acres in size?	☒ Yes	☐ No
	10.0 acres in size?	☐ Yes	☒ No
	25.0 acres in size?	☐ Yes	☒ No
For upland resource areas is the impact area part of contiguous forested habitat at least			
(forest interior nesting birds)	50 acres in size?	☐ Yes	☒ No
	100 acres in size?	☐ Yes	☒ No
	250 acres in size?	☐ Yes	☒ No
	500 acres in size?	☐ Yes	☒ No
(grassland nesting birds)	> 1.0 acre in size?	☐ Yes	☒ No
(special habitat such as gallery floodplain forest, alder thicket, etc.)	> 1.0 acre in size?	☐ Yes	☒ No

B. Connectivity with adjoining natural habitats

- ☐ No direct connections to adjacent areas of wildlife habitat (little connectivity function)
- ☒ Connectors numerous or impact area is embedded in a large area of natural habitat (limited connectivity function)
- ☐ Impact area contributes to a limited number of connectors to adjacent areas of habitat (somewhat important for connectivity function)
- ☐ Impact area serves as *part of* a sole connector to adjacent areas of habitat (important for connectivity function)
- ☐ Impact area serves as *only* connector to adjacent areas of habitat (very important for connectivity function)

V. Habitat Degradation (describe degradation and wildlife impacts on the back of the sheet)

- ☐ Evidence of significant chemical contamination
- ☐ Evidence of significant levels of dumping
- ☐ Evidence of significant erosion or sedimentation problems
- ☐ Significant invasion of exotic plants (e.g., purple loosestrife, *Phragmites*, glossy buckthorn)
- ☐ Disturbance from roads or highways ☐ Other human disturbance
- ☐ Is the site the only resource area in the vicinity of an otherwise developed area

Note: These are not the only important habitat features that may be observed on a site. If the wildlife specialist identifies other features they should be noted in the application.

September 7, 2017

Wildlife Habitat Evaluation

Timber Crest Estates - Medway, MA

Impact Area: Water/Sewer B

1. IMPACT AREA DESCRIPTION

This impact area is located east of the powerlines between proposed "Roads D and I." It consists of BVW, 2,575 sf in extent, that contains forested wetland habitat. Trees present include red maple and American elm, with tupelo saplings. A dense shrub layer of highbush blueberry, sweet pepperbush, winterberry and glossy buckthorn are located in the area. Cinnamon ferns and sphagnum moss are also present. The wetland may flood periodically during wettest times of the year.

2. EXISTING CONDITIONS / WILDLIFE HABITAT FEATURES WITHIN IMPACT AREA



Photo 1 - Typical view of habitat within Impact Area Water/Sewer B.



Photo 2 - Habitat near southern end of impact area.

Existing Wildlife Habitat

Upon completion of Appendix B of the DEP manual, "Important Habitat Features" observed within the Impact Area include:

- Important Upland/Wetland Food Plants (hard mast and fruit/berry producers).
- Shrub thickets with abundant earthworms (presumed present).
- Shrub and/or herbaceous vegetation suitable for veery nesting.
- Small mammal burrows (presumed present).
- Dense herbaceous cover (small mammals, amphibians & reptiles).
- Large woody debris on the ground (small mammals, amphibians and reptiles)
- Rocks, crevices, fallen logs at or within 1m above the water's surface.
- Standing water present at least part of the growing season, suitable for use by non-breeding amphibians and turtles.

3. EVALUATION OF IMPACTS TO WILDLIFE HABITAT

3.1 Impacts

The Water/Sewer Crossing A portion of the project will temporarily impact 2,575 sf of BVW. All of the existing important habitat features identified under the Appendix B evaluation are abundant elsewhere within the site's wetland and upland resource areas, so the loss will be negligible.

3.2 Project Mitigation

The wetland will be restored to its pre-existing condition following installation of the water and sewer lines.