EcoTec, Inc.

ENVIRONMENTAL CONSULTING SERVICES
102 Grove Street
Worcester, MA 01605-2629
508-752-9666 – Fax: 508-752-9494

March 20, 2024

Glenda Williamson
Holden Conservation Commission
1196 Main Street
Holden, MA 01520 via hand delivery and email: gwilliamson@holdenma.gov

RE: Notice of Intent under the Massachusetts Wetlands Protection Act; Proposed Single-Family House Construction; Lot 16, Fisher Road, Holden Massachusetts; Applicant: Wingspan Properties, LLC

To the Commission:

Enclosed please find an original and eight (8) copies of the Notice of Intent filed under the Holden Wetlands Bylaw for the above-referenced property. One full-size plan and eight (8) 11"x17" plans are provided.

Note that the only wetland in the vicinity of the project is an Isolated Vegetated Wetland that is not jurisdictional under the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00). Therefore, there is no state submission or filing fee associated with this proposed project. EcoTec will pay the Legal Advertisement fee promptly upon notification of the cost of the advertisement.

This filing is comprised of:

1. This cover letter;
2. The Notice of Intent Form with all required Appendices and Attachments;
3. The USGS Map with the site indicated;
4. Estimated Habitats of Rare Wetlands Wildlife and Certified Vernal Pools, generated on MassGIS MassMapper 3/15/2024;
5. "Proposed Site Development Plan" prepared by Finlay Engineering Services dated 1/17/2024; and
6. Wetland delineation report by EcoTec.

In accordance with the local bylaw regulations, one copy of this filing will be provided to the Town Clerk and one copy to the Department of Conservation and Recreation.

In compliance with the bylaw, all abutters to the site have been notified of this filing via certificates of mailing. A list of abutters, affidavit of service, and the form by which the abutters were notified are included in the filing.

We look forward to meeting with the Commission regarding this filing. If you have any questions, please feel free to contact me at any time.

Cordially, ECOTEC, INC.

Paul J. McManus, SPWS

Cc: Town Clerk
DCR
Wingspan Properties – Michael George

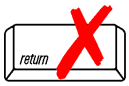
Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

Provided by MassDEP:
MassDEP File Number
Document Transaction Number
Holden
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):

Fisher Rd. - Lot 16 (a. Street Address) | Holden (b. City/Town) | 01520 (c. Zip Code)

Latitude and Longitude: 42.31 (d. Latitude) | 71.86 (e. Longitude)

242 (f. Assessors Map/Plat Number) | 23 + 25 (g. Parcel /Lot Number)

2. Applicant:

Michael (a. First Name) | George (b. Last Name)

Wingspan Properties LLC (c. Organization)

1 Blackwell Lane (d. Street Address)

Worcester (e. City/Town) | MA (f. State) | 01609 (g. Zip Code)

774-314-0108 (h. Phone Number) | (i. Fax Number) | mgeorge123@icloud.com (j. Email Address)

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

same (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):

Paul (a. First Name) | McManus (b. Last Name)

EcoTec Inc. (c. Company)

102 Grove Street - Suite 110 (d. Street Address)

Worcester (e. City/Town) | MA (f. State) | 01605-2629 (g. Zip Code)

508-752-9666 (h. Phone Number) | (i. Fax Number) | pmcmanus@ecotecinc.com (j. Email address)

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

Bylaw only - No fee (a. Total Fee Paid) | (b. State Fee Paid) | (c. City/Town Fee Paid)

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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Holden
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A. General Information (continued)

6. General Project Description:

Single family house with related work including driveway, grading and landscaping.

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)

2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

Worcester South	
a. County	b. Certificate # (if registered land)
69150	310
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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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	1. linear feet	2. linear feet
b. ☐ Bordering Vegetated Wetland	1. square feet	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
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Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

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

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

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

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Designated Port Areas	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

	Size of Proposed Alteration	Proposed Replacement (if any)
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

a. number of new stream crossings

b. number of replacement stream crossings

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

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C. Other Applicable Standards and Requirements

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

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

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

a. ☐ Yes ☒ No

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

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

MassGIS 3/15/2024
b. Date of map

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

c. Submit Supplemental Information for Endangered Species Review*

1. ☐ Percentage/acreage of property to be altered:

(a) within wetland Resource Area _____ percentage/acreage

(b) outside Resource Area _____ percentage/acreage

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

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

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

(b) ☐ Photographs representative of the site

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see https://www.mass.gov/ma-endangered-species-act-mesa-regulatory-review).
Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

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

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

(c) ☐ MESA filing fee (fee information available at https://www.mass.gov/how-to/how-to-file-for-a-mesa-project-review).
Make check payable to "Commonwealth of Massachusetts - NHESP" and ***mail to NHESP*** at above address

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

(d) ☐ Vegetation cover type map of site

(e) ☐ Project plans showing Priority & Estimated Habitat boundaries

(f) OR Check One of the Following

1. ☐ Project is exempt from MESA review.
Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, https://www.mass.gov/service-details/exemptions-from-review-for-projectsactivities-in-priority-habitat; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

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

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

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

a. ☐ Not applicable – project is in inland resource area only b. ☐ Yes ☐ No

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

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

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

North Shore - Plymouth to New Hampshire border:

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

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

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

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

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

Holden
City/Town

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

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

4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

   a. ☐ Yes ☒ No 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

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Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Holden
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.

Propsed Site Development Plan
a. Plan Title

Finlay Engineering
b. Prepared By

John E. Finlay II, PE
c. Signed and Stamped by

1/17/2024
d. Final Revision Date

1" = 30'
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:

Bylaw Only - No Fee
2. Municipal Check Number

3. Check date

4. State Check Number

5. Check date

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

Holden
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.

Michael George pjm	3-20-2024
1. Signature of Applicant	2. Date
3. Signature of Property Owner (if different)	4. Date
	3-20-2024
5. Signature of Representative (if any)	6. Date

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

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

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

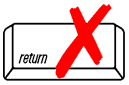
The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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:

Fisher Road Lot 16	Holden
a. Street Address	b. City/Town
Bylaw Only - No Fee	
c. Check number	d. Fee amount

2. Applicant Mailing Address:

Michael	George	
a. First Name	b. Last Name	
Wingspan Properties LLC		
c. Organization		
1 Blackwell Lane		
d. Mailing Address		
Worcester	MA	01609
e. City/Town	f. State	g. Zip Code
774-314-0108		mgeorge123@icloud.com
h. Phone Number	i. Fax Number	j. Email Address

3. Property Owner (if different):

same		
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

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

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.

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
Bylaw Only - No fee			

Step 5/Total Project Fee: _____

Step 6/Fee Payments:

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

C. Submittal Requirements

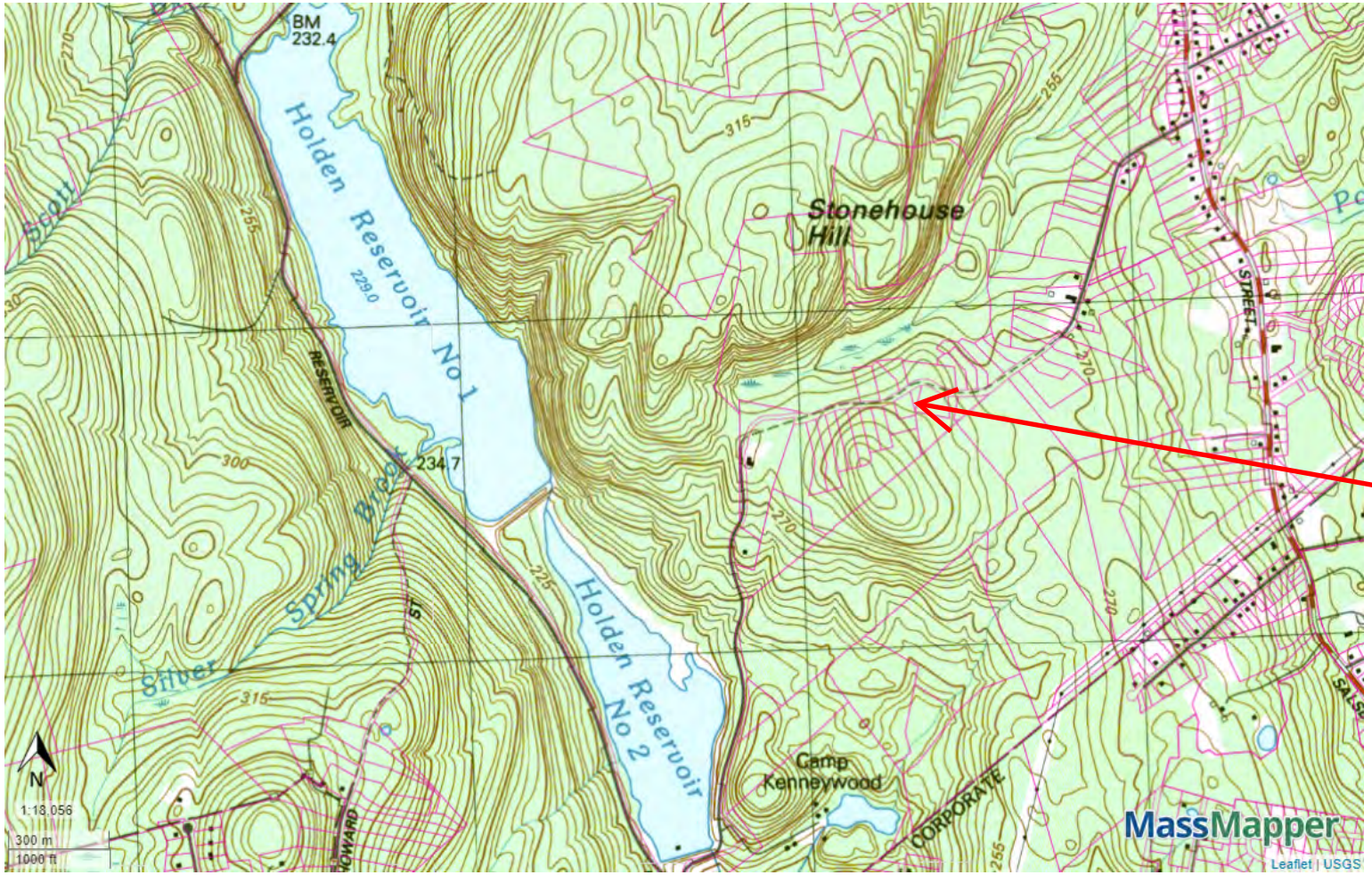
a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
Box 4062
Boston, MA 02211

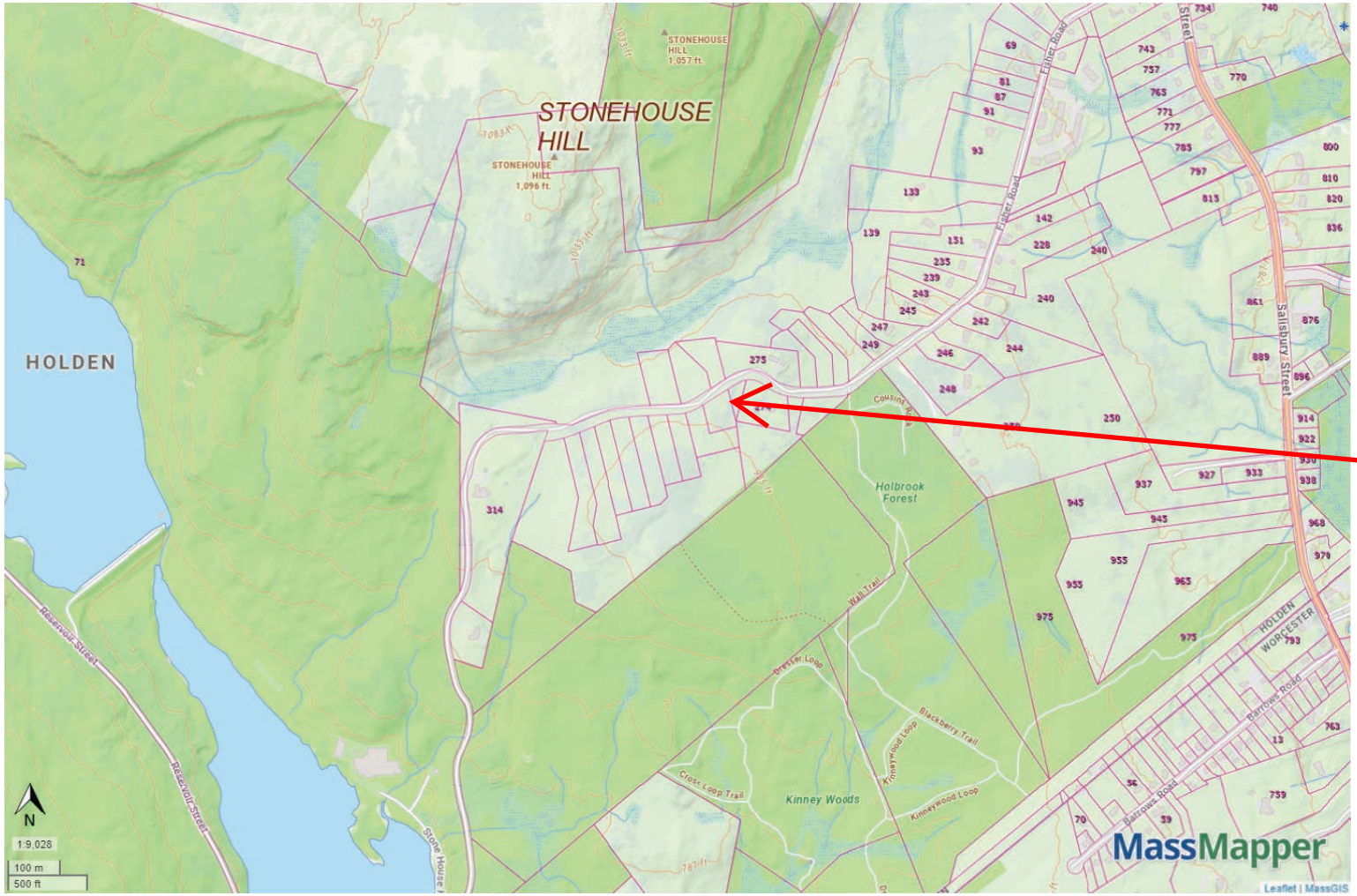
b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

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.)

Locus - Fisher Rd Lot 16



Fisher Rd Lot 16 NHESP Data layers



NHESP Estimated Habitats of Rare Wildlife

NHESP Priority Habitats of Rare Species

NHESP Certified Vernal Pools

Property Tax Parcels

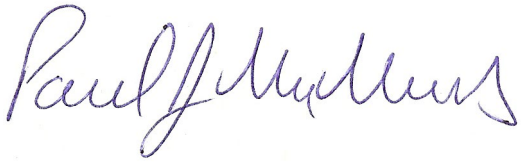
AFFIDAVIT OF SERVICE

Under the Holden Wetlands Protection Bylaw

I, Paul J. McManus, hereby certify under the pains and penalties of perjury that on 3/19/2024 I gave notification to abutters within 300 feet in compliance with the Holden Wetlands Protection Bylaw, in connection with the following matter:

> A Notice of Intent for construction of a single-family house and related work filed by Wingspan Properties with the Holden Conservation Commission for property located at Lot 16, Fisher Road in Holden, Massachusetts.

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



_____ __3/20/2024_____

Name Date

REQUEST FOR CERTIFIED LIST OF ABUTTERS

RECEIVED
2024 MAR 13 P 2:07
BOARD OF ASSESSORS
TOWN OF HOLDEN

PLEASE ALLOW 3-5 BUSINESS DAYS TO PROCESS

FEE: $25

Please print and complete the form below and mail to Board of Assessors, 1204 Main Street, Holden, MA 01520 or fax to 508/829-0227.

PROJECT NAME & STREET LOCATION: _____Fisher Rd., Holden_____
OWNER: _____Wingspan Properties, LLC_____
MAP & PARCEL NUMBERS: _____Map: 242 Parcels: 23 + 25_____
VARIANCE_____ SPECIAL PERMIT_____ PRELIMINARY PLAN_____
DEFINITIVE PLAN_____ OTHER (SPECIFY)___x Conservation Commission_____

PHONE #_____508-752-9666 x228 or kodonnell@ecotecinc.com _____

PLEASE REFER TO EACH BOARD'S REQUIREMENTS

FOR OFFICE USE ONLY

The Board of Assessors makes the following amendments to the above list:

****

This is to certify this is a List of Abutters to Map 242, Parcel 23+25 or as cited above but not necessarily in its entirety.

Date 3/14/24

Board of Assessors

Town of Holden-Board of Assessors-Certified List of Abutters
Wingspan-Map 242/23 & 25
3/14/2024

M/P	Owner 1	Owner 2	Mailing Address	City/Town	State	Zip Code
242-4	GRIGAS, JOHN M	GRIGAS, LINDA J	275 FISHER RD	HOLDEN	MA	01520
242-5	TAYLOR, PATRICK W	TAYLOR, CHELSEA C	274 FISHER RD	HOLDEN	MA	01520
242-11	WINGSPAN PROPERTIES, LLC		ONE BLACKWELL LANE	WORCESTER	MA	01609
242-12	WINGSPAN PROPERTIES, LLC		ONE BLACKWELL LANE	WORCESTER	MA	01609
242-13	WINGSPAN PROPERTIES, LLC		ONE BLACKWELL LANE	WORCESTER	MA	01609
242-14	WINGSPAN PROPERTIES, LLC		ONE BLACKWELL LANE	WORCESTER	MA	01609
242-20	WINGSPAN PROPERTIES, LLC		ONE BLACKWELL LANE	WORCESTER	MA	01609
242-21	WINGSPAN PROPERTIES, LLC		ONE BLACKWELL LANE	WORCESTER	MA	01609
242-22	WINGSPAN PROPERTIES, LLC		ONE BLACKWELL LANE	WORCESTER	MA	01609
242-23	WINGSPAN PROPERTIES, LLC		ONE BLACKWELL LANE	WORCESTER	MA	01609
242-25	WINGSPAN PROPERTIES, LLC		ONE BLACKWELL LANE	WORCESTER	MA	01609
242-26	TAYLOR, PATRICK W	TAYLOR, CHELSEA C	274 FISHER RD	HOLDEN	MA	01520
234-1	WHITE OAK LAND CONSERVATION SOCIETY, INC.		PO BOX 346	HOLDEN	MA	01520

Board of Assessors

Notification to Abutters Under the
Massachusetts Wetlands Protection Act
Holden Wetlands Bylaw

In accordance with the second paragraph of Massachusetts Wetlands Protection Act General Laws Chapter 131, Section 40 and the Holden Wetlands Bylaw, you are hereby notified of the following:

A. The name of the applicant is Wingspan Properties, LLC.

B. The applicant has filed a Notice of Intent with the Conservation Commission for the municipality of Holden seeking permission to construct a single-family house, with associated work including grading, driveway, and landscaping within the wetland Buffer Zone under the Holden Wetlands Bylaw and the Wetlands Protection Act (General Laws Chapter 131, Section 40).

C. The address where the planned activity will take place is Lot 16, Fisher Rd [Assessors Map 242, Parcels 23 + 25] Holden, MA.

D. Copies of the Notice of Intent may be examined and obtained from
Paul McManus
EcoTec Inc.
102 Grove Street
Worcester, MA 01605-2629
508-752-9666 ext 1

E. Information regarding the date, time, and place of the public hearing may be obtained from EcoTec, Inc. by calling this telephone number (508) 752-9666 during regular business hours.

NOTE: Notice of the public hearing, including its date, time, and place, will be published at least five (5) days in advance in the Landmark.

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

NOTE: You also may contact the Holden Conservation Commission at 508- 210-5541 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

EcoTec, Inc.

ENVIRONMENTAL CONSULTING SERVICES
102 Grove Street
Worcester, MA 01605-2629
508-752-9666 – Fax: 508-752-9494

March 8, 2019

Steve Striar
Striar Development Corp.
405 Washington Street
Braintree, MA 02184

RE: Wetland Resource Evaluation, Fisher Road, Holden, Massachusetts

Dear Mr. Striar:

On February 12 & 18, 2019, EcoTec, Inc. inspected the above-referenced property for the presence of wetland resources as defined by: (1) the Massachusetts Wetlands Protection Act (M.G.L. Ch. 131, § 40; the "Act") and its implementing regulations (310 CMR 10.00 *et seq.*; the "Regulations"); (2) the U.S. Clean Water Act (i.e., Section 404 and 401 wetlands); and (3) the Town of Holden Wetlands Protection Bylaw. Scott M. Morrison, PWS conducted the inspection.

The subject site consists of a 30+/-acre parcel located to the north and south of Fisher Road in Holden. A locus plan has been appended to this report. The upland portions of the site consist of undeveloped forest. Plant species observed include northern red oak (*Quercus rubra*), white oak (*Quercus alba*), eastern white pine (*Pinus strobus*), black cherry (*Prunus serotina*), red maple (*Acer rubrum*), sugar maple (*Acer saccharum*), American beech (*Fagus grandifolia*), white ash (*Fraxinus americana*), black birch (*Betula lenta*), and sassafras (*Sassafras albidum*) trees and/or saplings; climbing woody vines; American witch-hazel (*Hamamelis virginiana*), highbush blueberry (*Vaccinium corymbosum*), mountain laurel (*Kalmia latifolia*), black huckleberry (*Gaylussacia baccata*), and maple-leaf viburnum (*Viburnum acerifolium*) shrubs; and lowbush blueberry (*Vaccinium angustifolium*), bracken fern (*Pteridium aquilinum*), hayscented fern (*Dennstaedtia punctilobula*), teaberry (*Gaultheria procumbens*), partridge-berry (*Mitchella repens*), feather false-Solomon's-seal (*Smilacina racemosa*), and wild-lily-of-the-valley (*Maianthemum canadense*) ground cover. The wetland resources observed on the site are described below.

Methodology

The site was inspected, and areas suspected to qualify as wetland resources were identified. The boundary of Bordering Vegetated Wetlands and Bank was delineated in the field in accordance with the definitions set forth in the regulations at 310 CMR 10.55(2)(c) and 310 CMR 10.54(2). Section 10.55(2)(c) states that "The boundary of Bordering Vegetated Wetlands

is the line within which 50% or more of the vegetational community consists of wetland indicator plants and saturated or inundated conditions exist." Section 10.54(2)(c) states that "The upper boundary of Bank is the first observable break in the slope or the mean annual flood level, whichever is lower." The methodology used to delineate Bordering Vegetated Wetlands is further described in: (1) the BVW Policy "*BVW: Bordering Vegetated Wetlands Delineation Criteria and Methodology*," issued March 1, 1995; and (2) "*Delineating Bordering Vegetated Wetlands Under the Massachusetts Wetlands Protection Act: A Handbook*," produced by the Massachusetts Department of Environmental Protection, dated March 1995. The plant taxonomy used in this report is based on the *National List of Plant Species that Occur in Wetlands: Massachusetts* (Fish and Wildlife Service, U.S. Department of the Interior, 1988). Federal wetlands were presumed to have boundaries conterminous with the delineated Bordering Vegetated Wetlands and Bank. One set of DEP Bordering Vegetated Wetland Delineation Field Data Forms completed for observation plots located in the wetlands and uplands near flag A-135 is attached. The table below provides the Flag Numbers, Flag Type, and Wetland Types and Locations for the delineated wetland resources.

Flag Numbers	Flag Type	Wetland Types and Locations
Start A93 to A152 Stop	Blue Flags	Boundary of Bordering Vegetated Wetlands located in the northern portion of the site that is associated with an intermittent stream.
Start S1 to S68 Stop	Red Flags	Bank of the mapped intermittent stream located in the northern portion of the site.
Start SA1 to SA69 Stop	Red Flags	Bank of the mapped intermittent stream located in the northern portion of the site.
Start G12 to G18	Blue Flags	Boundary of Isolated Vegetated Wetland under the Bylaw located in the south-central portion of the site.

Findings

Wetland A (i.e., flags A93 to A152) consists of a forested/shrub swamp located in the northern portion of the site that is associated with an intermittent stream. Plant species observed include red maple (*Acer rubrum*), yellow birch (*Betula alleghaniensis*), swamp white oak (*Quercus bicolor*), gray birch (*Betula populifolia*), swamp tupelo (*Nyssa sylvatica*), and American elm (*Ulmus americana*) trees and/or saplings; poison ivy (*Toxicodendron radicans*) climbing woody vines; highbush blueberry (*Vaccinium corymbosum*), common winterberry (*Ilex verticillata*), arrow-wood (*Viburnum dentatum*), northern spicebush (*Lindera benzoin*), swamp rose (*Rosa palustris*), speckled alder (*Alnus rugosa*), silky dogwood (*Cornus amomum*), sweet pepper-bush (*Clethra alnifolia*), and American elderberry (*Sambucus canadensis*) shrubs; and bristly blackberry (*Rubus hispidus*), cinnamon fern (*Osmunda cinnamomea*), royal fern (*Osmunda regalis*), sensitive fern (*Onoclea sensibilis*), skunk-cabbage (*Symplocarpus foetidus*), spotted touch-me-not (*Impatiens capensis*), shining clubmoss (*Lycopodium lucidulum*), and sphagnum moss (*Sphagnum sp*.) ground cover. Evidence of wetland hydrology, including hydric

soils, high groundwater, saturated soils, evidence of flooding, and drainage patterns, was observed within the delineated wetland. The intermittent stream Bank was delineated with flag S1 to S68 and SA1 to SA69. This was required to determine the extent of jurisdictional areas subject to the Watershed Protection Act. This vegetated wetland borders an intermittent stream; accordingly, the vegetated wetlands would be regulated as Bordering Vegetated Wetlands and the intermittent stream would be regulated as Bank under the Act and Bylaw. A 100-foot Buffer Zone extends horizontally outward from the edge of Bordering Vegetated Wetlands and Bank under the Act and Bylaw.

Wetland G (i.e., flags G12 to G18) consists of an isolated vegetated wetland located to the south of Fisher Road. Plant species observed in this forested swamp include similar species as noted above. Hydric soils and other evidence of wetland hydrology, including high groundwater, and saturated soils, were observed within the delineated wetland. This wetland does not border a creek, stream, river, pond, or lake; accordingly, it would not be regulated as Bordering Vegetated Wetlands under the Act. Section 10.57(2)(b)1. states that "Isolated Land Subject to Flooding is an isolated depression or closed basin without an inlet or an outlet. It is an area that at least once per year confines standing water to a volume of at least ¼ acre-feet and to an average depth of at least six inches." Based upon field observations, the potential ponding area appears to be too small to hold the requisite volume and depth of water to be regulated as Isolated Land Subject to Flooding under the Act. Accordingly, this area would not be subject to jurisdiction under the Act. This would be regulated as a freshwater wetland under the Bylaw with an associated 100-foot Buffer Zone. Depending upon the proximity of this area to a Bordering Vegetated Wetlands, this area may be subject to jurisdiction as a federal wetland. Federal wetlands do not have a Buffer Zone.

Bordering Land Subject to Flooding is an area that floods due to a rise in floodwaters from a bordering waterway or water body. Where flood studies have been completed, the boundary of Bordering Land Subject to Flooding is based upon flood profile data prepared by the National Flood Insurance Program. Section 10.57(2)(a)3. states that "The boundary of Bordering Land Subject to Flooding is the estimated maximum lateral extent of flood water which will theoretically result from the statistical 100-year frequency storm." Based upon a review of the Flood Insurance Rate Map, Worcester County, Massachusetts, Map Number 25027C0611E, Effective Date July 4, 2011, the site is mapped as Other Areas: Zone X, which is defined as areas located outside of the 0.2% annual chance flood (i.e., outside of 500-year floodplain). The project engineer should evaluate the most recent National Flood Insurance Program flood profile data to confirm that Bordering Land Subject to Flooding does not occur on the site. Bordering Land Subject to Flooding would occur in areas where the 100-year flood elevation is located outside of or upgradient of the delineated Bordering Vegetated Wetlands or Bank boundary. Bordering Land Subject to Flooding does not have a Buffer Zone under the Act.

The Massachusetts Rivers Protection Act amended the Act to establish an additional wetland resource area: Riverfront Area. Based upon a review of the current USGS Map (i.e., Worcester

North Quadrangle, dated 1983, attached) and observations made during the site inspection, a stream that is shown as intermittent on the USGS Map is located to the north of Fisher Road. The watershed area for this stream at the site was determined to be 0.41 square miles, which is less than 0.5 square miles (see attached watershed calculations). As such, the stream would be designated intermittent under the Massachusetts Wetlands Protection Act regulations. Furthermore, based upon a review of the current USGS Map and observations made during the site inspection, there are no other mapped or unmapped streams located within 200 feet of the site. Accordingly, Riverfront Area would not occur on the site. Riverfront Area does not have a Buffer Zone under the Act.

The Regulations require that no project may be permitted that will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures set forth at 310 CMR 10.59. Based upon a review of the *Massachusetts Natural Heritage Atlas*, 14th edition, Priority Habitats and Estimated Habitats from the NHESP Interactive Viewer, valid from August 1, 2017, and Certified Vernal Pools from MassGIS, there are no Estimated Habitats [for use with the Act and Regulations (310 CMR 10.00 *et seq*.)], Priority Habitats [for use with Massachusetts Endangered Species Act (M.G.L. Ch. 131A; "MESA") and MESA Regulations (321 CMR 10.00 *et seq*.)], or Certified Vernal Pools on or in the immediate vicinity of the site. A copy of this map is attached.

The reader should be aware that the regulatory authority for determining wetland jurisdiction rests with local, state, and federal authorities. A brief description of my experience and qualifications is attached. If you have any questions, please feel free to contact me at any time.

Cordially,
ECOTEC, INC.

Scott M. Morrison, PWS
Senior Environmental Scientist

Attachments (7, 11 pages)

17/E/HoldFisherRdReport2019.3.8

EcoTec, Inc.

ENVIRONMENTAL CONSULTING SERVICES
102 Grove Street
Worcester, MA 01605-2629
508-752-9666 – Fax: 508-752-9494

Scott M. Morrison, PWS, RPSS, SE
Senior Environmental Scientist

Scott Morrison is a Senior Environmental Scientist with EcoTec, Inc. Since joining EcoTec in 2000, Mr. Morrison's project experience include wetland resource evaluation, delineation, and permitting at the local, state, and federal levels; wildlife habitat evaluation; pond and stream evaluation; vernal pool evaluation, monitoring, and certification; wetland replacement, replication, and restoration area design, construction, and monitoring; soil evaluations to determine infiltration rates and seasonal high groundwater elevations for detention basin construction; environmental sampling and analysis tasks, including soil and groundwater sample collection and handling; and expert testimony preparation. He has conducted rare species habitat assessments for the eastern box turtle, wood turtle, Blanding's turtle, spotted turtle, and marbled salamander. He has participated in rare species studies for rare species including the marbled salamander, piping plover, eastern box turtle, and northern diamondback terrapin and developed mitigation strategies for the marbled salamander, spotted turtle, eastern box turtle and wood turtle. He has participated in visual preconstruction sweeps for the wood turtle and both preconstruction and research projects for the eastern box turtle. He has served as a consultant to municipalities, conservation commissions, engineering and survey firms. He has completed numerous wetland related projects including environmental impact assessments for proposed development, erosion control and environmental monitoring for subdivisions, commercial developments, golf courses and landfills. He has prepared Massachusetts Environmental Policy Act (MEPA) documentation, including Environmental Notification Forms (ENFs), Notice of Project Changes (NPCs), and Draft and Final Environmental Impact Reports (EIRs) including Green House Gas Assessments for various projects including subdivisions, commercial buildings, and dredging projects. Prior to joining EcoTec, Inc. Mr. Morrison worked for the Massachusetts Department of Environmental Management (currently the Department of Conservation and Recreation) where he was involved with the monitoring and protection of endangered species and rare old growth forest. He was an active member of the Spencer Conservation Commission from 1998 to 2000 where he provided oversight of proposed wetland replication projects and review of projects submitted for wetland permitting. His educational background includes courses in forestry, ecology, chemistry, soils, and natural resource policy. His prior research experience includes research on forest succession and field research on nesting piping plovers, an endangered coastal shore bird.

Education:

Graduate Soil Science Certificate Program
University of Massachusetts at Amherst, 2006
Bachelor of Science: Natural Resource Studies
University of Massachusetts at Amherst, 1998
Associate of Science: Business Administration
Quinsigamond Community College, 1996

Professional Affiliations:

Registered Professional Soil Scientist, Society of Soil Scientists of Southern New England (SSSSNE)
Massachusetts Association of Conservation Commissioners
Association of Massachusetts Wetland Scientists
Society of Wetland Scientists

Certifications:

Society of Wetlands Scientists Professional Wetland Scientist, Certification Number 2583
Massachusetts Department of Environmental Protection Soil Evaluator, Certification Number SE 13766
OSHA Health and Safety Training, 40-Hour, 29 CFR 1910.120

DATE	ISSUE	REVISION	DESCRIPTION	APP.

ANR CONCEPT PLAN

PREPARED FOR

STRIAR DEVELOPMENT CORPORATION

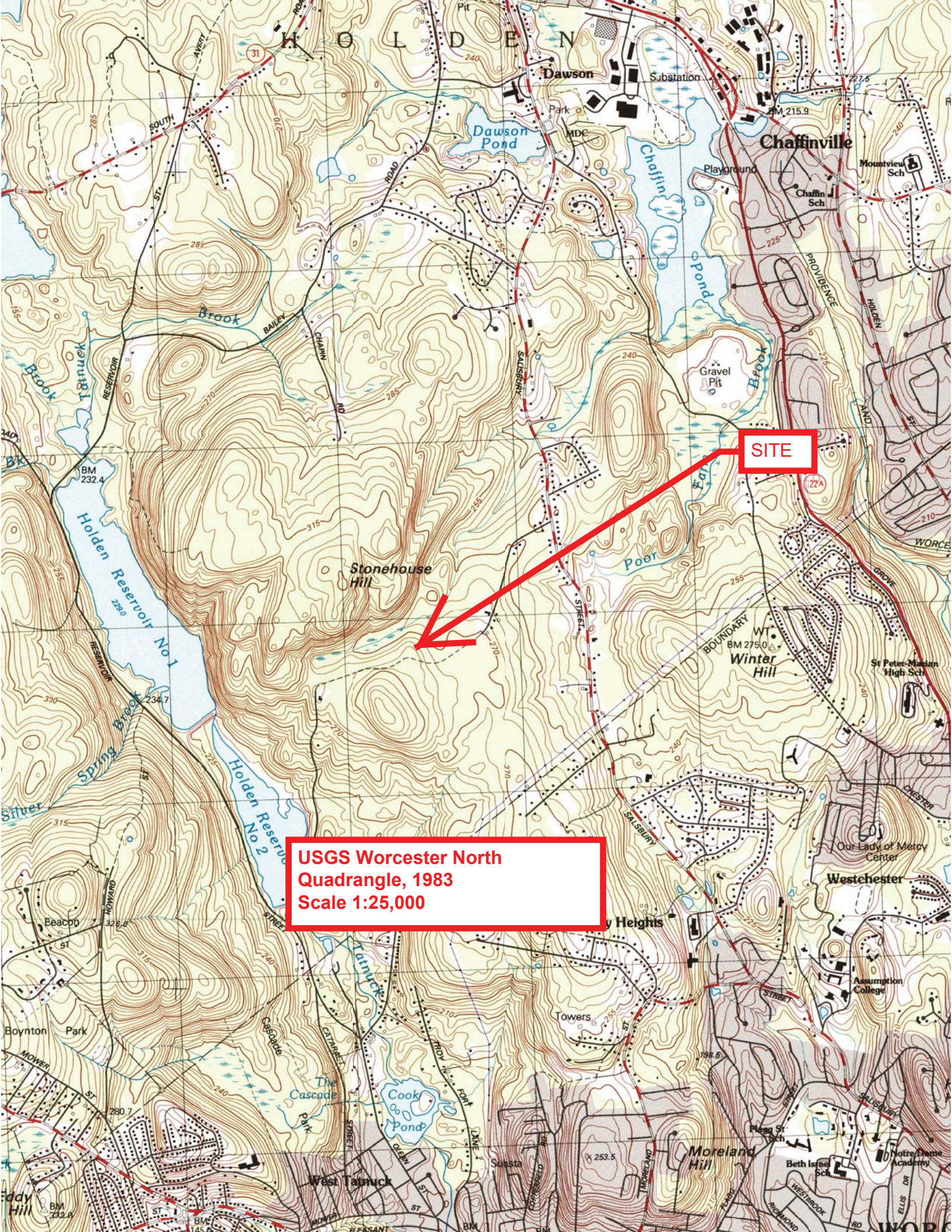
LOCATED AT

FISHER ROAD

HOLDEN, MASSACHUSETTS

FINLAY ENGINEERING SERVICES
625 CHANDLER STREET
WORCESTER , MASSACHUSETTS

DES.: JEF	DWN.: JEF	CHK.: JEF
SCALE: 1"=80'	DATE: 04/12/16	
PLAN NUMBER 180005	SHEET 4 OF 4	


SITE
USGS Worcester North
Quadrangle, 1983
Scale 1:25,000
HOLDEN
Dawson
Substation
Dawson Pond
Chaffinville
Chaffin Pond
Playground
Mountview Sch
Chaffin Sch
Gravel Pit
Brook
Tatnuck Brook
Holden Reservoir No 1
Holden Reservoir No 2
Stonehouse Hill
Poor
Winter Hill
St Peter-Marian High Sch
Our Lady of Mercy Center
Westchester
Assumption College
Towers
Moreland Hill
Beth Israel Sch
Notre Dame Academy
Flagg St Sch
Cook Pond
The Cascade
Cascade Park
Tatnuck
West Tatnuck
Boynton Park
Beacon
Eddy Hill
Silver
Spring Brook
Sussta
Heights
PROVIDENCE
HOLDEN
SALISBURY
BOUNDARY
CHAPIN
BAILEY
AVERY
SOUTH
HOWARD
MOWER
CATARACT
TROY
FORT
LAKE
GLEN
WESTBROOK
RICHMOND
ELLIS
GROVE
CHESTER
WORCE

Fisher Road, Holden

Natural Heritage Atlas Online Data Viewer
February 20, 2019

National Flood Hazard Layer FIRMette

FEMA

42°18'43.26"N

71°51'45.45"W

71°51'18.00"W

42°18'16.66"N

Feet 1:6,000

0 250 500 1,000 1,500 2,000

Legend

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

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS

- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- B 20.2 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- 8 Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

N

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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/20/2019 at 10:10:43 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

USGS

StreamStats Version 3 Beta : Massachusetts

Zoom To:

Select on a tool on the toolbar. If the icon remains depressed, click on the map to perform the desired action.

MA Map Layers

- [x] Streamgages
- [x] Stream Grid from DEM
- [x] Areas of limited functionality
- [x] Massachusetts
- [x] Study Area Bndys

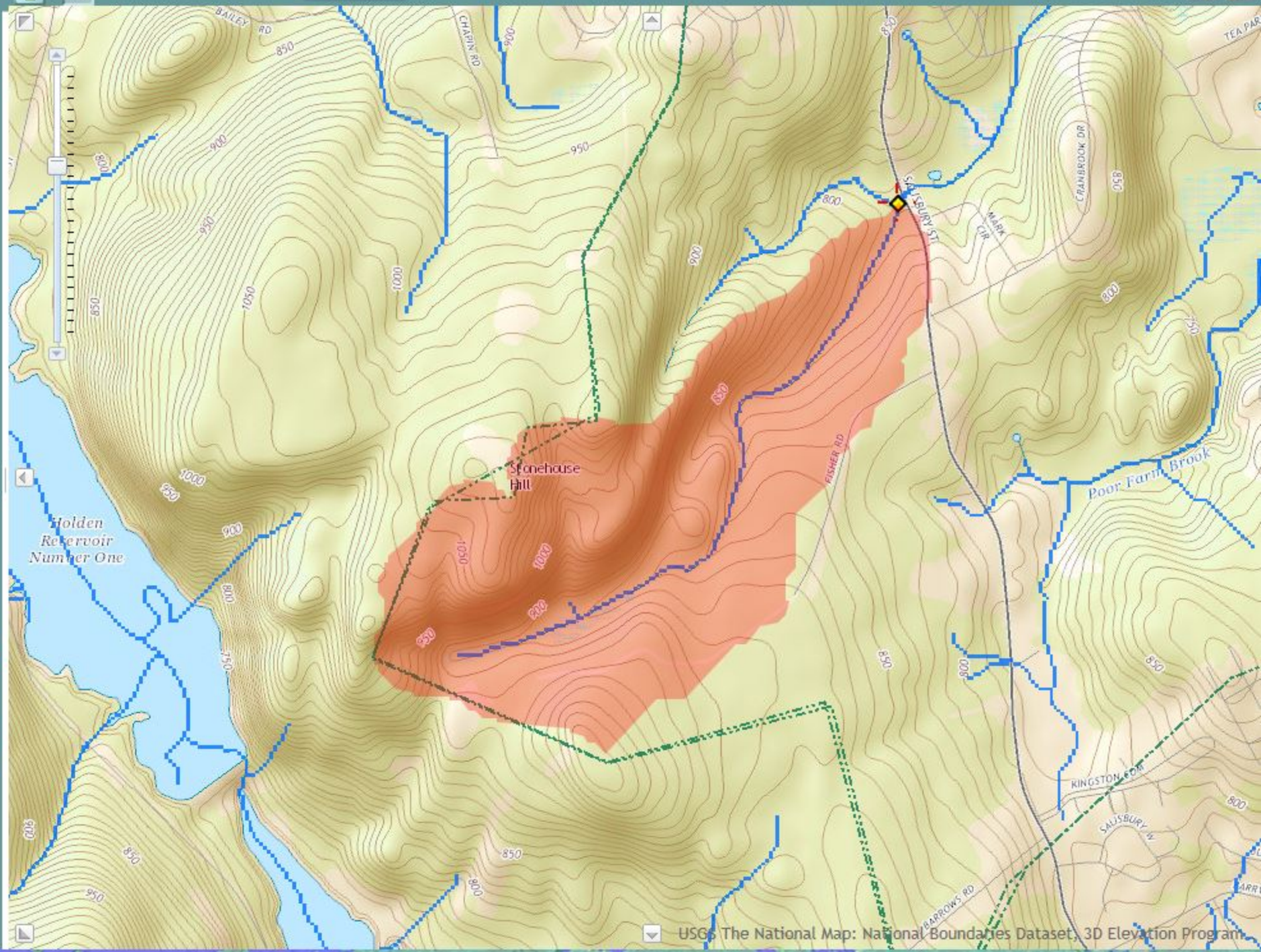
Base Layers

- Imagery
- Street Map
- World Topo
- USA Topo
- Canadian Topo
- TNM Topo

0 0.1 0.2mi

Scale: 1 : 18,056

Latitude: 42.30898
Longitude: -71.87911 SS



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

Applicant | Prepared by: EcoTec, Inc | Project Location: Fisher Road, Holden | DEP File #

Section I. Vegetation | Number: Upland | Transect # A-135 | Date of Delin: 2/18/2019

A. Sample layer and plant species (Enter largest to smallest % cover by layer)			Percent Cover (or basal area)	Percent Dominance	Dominant Plant?	Wetland Indicator Category	
Tree	red maple	Acer rubrum	60	75.0	YES	FAC	*
	black birch	Betula lenta	20	25.0	YES	FACU	
Sapling	None						
Shrub	witch hazel	Hamamelis virginiana	40	100.0	YES	FAC-	
Ground	white pine	Pinus strobus	10	100.0	YES	FACU	
Vine							

Vegetation Conclusions

Number of dominant wetland indicator plants **1** | Number of dominant non-wetland indicator plants **3**

Is the number of dominant wetland plants equal or greater than the number of dominant non-wetland plants? NO

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

Applicant	Prepared by: EcoTec, Inc	Project Location: Fisher Road, Holden	DEP File #
Section II. Indicators of Hydrology	Number: Upland	Transect # A-135	Date of Delin: 2/18/2019

1. Soil Survey

Is there a published soil survey for this site?

title/date

map number

soil type mapped

hydric soil inclusions

Are field observarions consistent with soil survey?

Remarks:

2. Soil Description

Horizon	Depth (inches)	Matrix Color	Mottle Color
A	0-4	10YR 3/2	
Bw	4-12	10YR 4/6	

Remarks stony, fine sandy loam

3. Other

Conclusion: Is the soil hydric? No

Other Indicators of hydrology (check all that apply):

- ☐ 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 BVWs
- ☐ Oxidized rhizospheres
- ☐ Water stained leaves
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other):
- ☐ Other:

Vegetation and Hydrology Conclusion

	Yes	No
Number of wetland indicator plants ≥ number of non-wetland indicator plants	☐	☑
Wetland hydrology present:		
Hydric soil present	☐	☑
Other indicators of hydrology present	☐	☑
Sample Location is in a BVW	☐	☑

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

Applicant | Prepared by: EcoTec, Inc | Project Location: Fisher Rd., Holden | DEP File #

Section I. Vegetation | Number: Wetland | Transect # A-135 | Date of Delin: 2/18/2019

A. Sample layer and plant species (Enter largest to smallest % cover by layer)			Percent Cover (or basal area)	Percent Dominance	Dominant Plant?	Wetland Indicator Category	
Tree	red maple	Acer rubrum	60	75.0	YES	FAC	*
	black birch	Betula lenta	20	25.0	YES	FACU	
Sapling	yellow birch	Betula alleghaniensis	20	100.0	YES	FAC	*
Shrub	witch hazel	Hamamelis virginiana	10	11.1	YES	FAC-	
	red maple	Acer rubrum	20	22.2	YES	FAC	*
	winterberry	Ilex verticillata	60	66.7	YES	FACW+	*
Ground	None						
Vine							

Vegetation Conclusions

Number of dominant wetland indicator plants **4** | Number of dominant non-wetland indicator plants **2**

Is the number of dominant wetland plants equal or greater than the number of dominant non-wetland plants? YES

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

Applicant	Prepared by: EcoTec, Inc	Project Location: Fisher Rd., Holden	DEP File #
Section II. Indicators of Hydrology	Number: Wetland	Transect # A-135	Date of Delin: 2/18/2019

1. Soil Survey

Is there a published soil survey for this site?

title/date

map number

soil type mapped

hydric soil inclusions

Are field observarions consistent with soil survey?

Remarks:

2. Soil Description

Horizon	Depth (inches)	Matrix Color	Mottle Color
O	4-0		
A	0-6	10YR 2/1	
Bg	6-12	10YR 4/2	10% 10YR 5/1

Remarks fine sandy loam

3. Other

Conclusion: Is the soil hydric? Yes

Other Indicators of hydrology (check all that apply):

- ☐ 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 BVWs
- ☐ Oxidized rhizospheres
- ☐ Water stained leaves
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other):
- ☐ Other:

Vegetation and Hydrology Conclusion

	Yes	No
Number of wetland indicator plants ≥ number of non-wetland indicator plants	☑	☐
Wetland hydrology present:		
Hydric soil present	☑	☐
Other indicators of hydrology present	☐	☑
Sample Location is in a BVW	☑	☐

GENERAL NOTES

1.) EXISTING TOPOGRAPHICAL INFORMATION WAS PREPARED BY EASTERN TOPOGRAPHICS. ELEVATIONS REFER TO THE TOWN OF HOLDEN SEWER DATUM.

2.) ALL MATERIALS AND CONSTRUCTION PRACTICES SHALL BE IN CONFORMANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS (MDPW) CONSTRUCTION STANDARDS AND THE MDPW "STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES", UNLESS OTHERWISE SPECIFIED BY LOCAL AUTHORITY OR THE ENGINEER.

3.) THE CONTRACTOR SHALL UTILIZE ALL MEASURES AND MATERIALS NECESSARY TO ENSURE THE SAFETY OF ALL PERSONS AND PROPERTIES AT THE SITE DURING CONSTRUCTION. ALL EXCAVATIONS SHALL CONFORM TO CURRENT OSHA STANDARDS.

4.) UNLESS OTHERWISE NOTED, ALL DISTURBED AREAS SHALL BE DRESSED WITH A MINIMUM OF FOUR INCHES (4") OF LOAM AND SHALL BE SEEDED WITH AN APPROVED GRASS MIX.

5.) THE CONTRACTOR SHALL PROVIDE APPROPRIATE EROSION AND SEDIMENTATION CONTROL MEASURES AT ALL TIMES. DEWATERING OPERATIONS SHALL BE PROVIDED, IF REQUIRED; ALL DISCHARGE SHALL PASS THROUGH SEDIMENTATION CONTROL DEVICES TO PREVENT IMPACTS UPON WATER BODIES, BORDERING VEGETATED WETLANDS, DRAINAGE SYSTEMS AND ABUTTING PROPERTIES.

6.) NO MATERIALS SUBJECT TO EROSION SHALL BE STOCKPILED OVERNIGHT WITHIN 100 FEET OF A WETLAND. ALL MATERIALS STOCKPILED WITHIN 100 FEET OF A WETLAND OR WHICH MAY INDIRECTLY AFFECT A WETLAND, SHALL BE RELOCATED, MULCHED OR OTHERWISE TREATED TO INSURE THAT THE MATERIALS ARE NOT CARRIED TO THE WETLAND.

7.) EQUIPMENT SHALL NOT BE PARKED WITHIN WETLANDS OR BUFFER AREAS EXCEPT DURING ACTUAL OPERATIONS REQUIRING SAID EQUIPMENT.

8.) DISTURBED AREAS SHALL BE STABILIZED BY LOAMING AND SEEDING SOON AFTER THE FINISHED GRADE HAS BEEN MET. IF FINAL GRADING DOES NOT OCCUR DURING THE GROWING SEASON, THESE AREAS SHALL BE MULCHED WITH HAY SECURED BY WEIGHTED SNOW FENCE, CHICKEN WIRE MESH OR JUTE NETTING WITH STAPLES. SEED FOR PERMANENT GRASS COVER SHOULD BE ACCORDING TO SOIL CONSERVATION SERVICE GUIDELINES FOR SOIL AND MOISTURE CONDITIONS FOUND ON THE SITE.

9.) SEDIMENTATION CONTROL FENCE AND/OR HAY BALES SHALL BE MAINTAINED UNTIL ALL SLOPES HAVE BEEN STABILIZED AND THERE IS NO DANGER OF EROSION DIRECTLY INTO THE WETLANDS.

10.) PRIOR TO INITIATING CONSTRUCTION, SEDIMENTATION CONTROL DEVICES SHALL BE INSTALLED AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN THE DEVICES UNTIL ALL WORK IS COMPLETE AND ALL AREAS HAVE BEEN STABILIZED.

11.) ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AS REQUIRED BY THE CONSERVATION COMMISSION OR AS DIRECTED BY THE ENGINEER.

12.) THE FUNCTIONING OF TEMPORARY CULVERTS, DITCHES, SWALES, OR CONSTRUCTION OPERATIONS SHALL NOT CAUSE NOTICEABLE SEDIMENTATION PLUMES. IF PLUMES OCCUR, THE CONTRACTOR SHALL STOP WORK AND INSTALL ADDITIONAL SEDIMENTATION CONTROL DEVICES IMMEDIATELY TO PREVENT FURTHER SEDIMENTATION.

13.) IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE HIS WORK WITH THE APPROPRIATE HIGHWAY AND UTILITY DEPARTMENTS. CONTRACTOR SHALL MAINTAIN ALL EXISTING AND NEWLY INSTALLED UTILITIES IN GOOD WORKING ORDER AND SHALL PROTECT THEM FROM DAMAGE AT ALL TIMES UNTIL THE WORK IN COMPLETED AND ACCEPTED.

14.) THE CONTRACTOR SHALL PROVIDE FOR ALL TRAFFIC CONTROL IN ACCORDANCE WITH THE TOWN OF HOLDEN REQUIREMENTS.

15.) NO TRENCHES SHALL BE ALLOWED TO REMAIN OPEN OVERNIGHT.

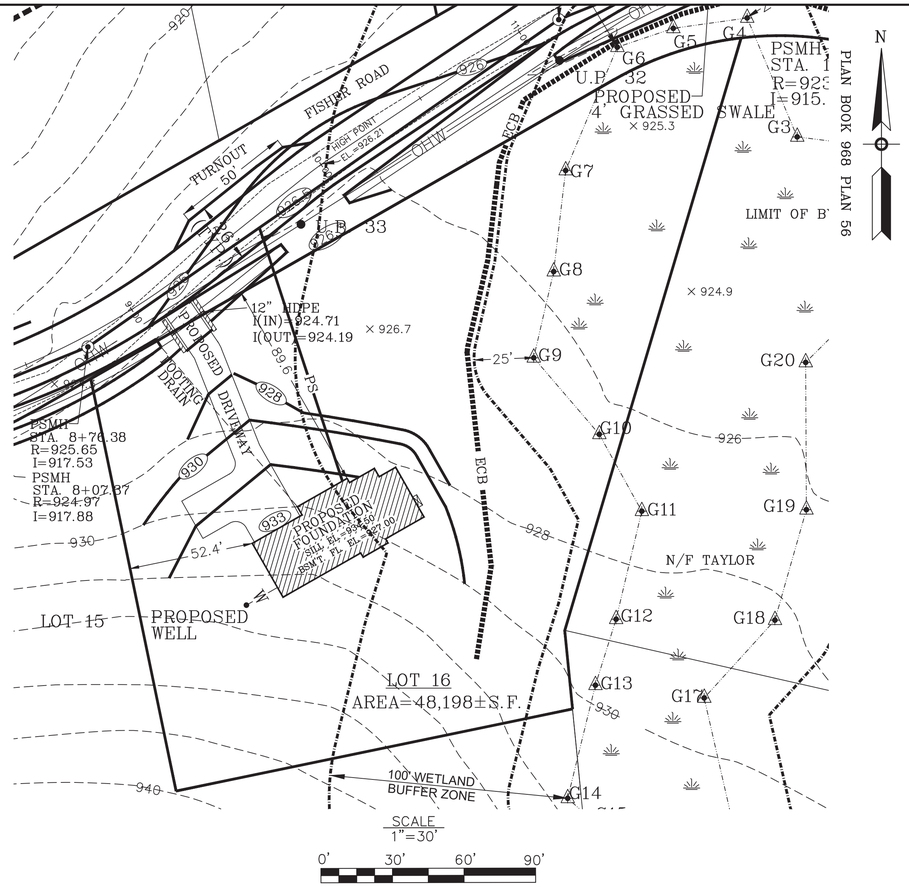
16.) THE SANITARY SEWER SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE TOWN OF HOLDEN CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH APPLICABLE PERMITS (TO BE OBTAINED BY THE CONTRACTOR).

17.) ALL VEHICLES SHALL ENTER AND EXIT THE SITE VIA THE STABILIZED CONSTRUCTION ENTRANCE (TIRE SEDIMENT SCRUBBER). SEE DETAIL.

18.) ALL WORK SHALL BE IN ACCORDANCE WITH THE ORDER OF CONDITIONS ISSUED BY THE TOWN OF HOLDEN CONSERVATION COMMISSION AND THE PROJECT SPECIFICATIONS.

19.) THE CONTRACTOR SHALL INSPECT SEDIMENTATION AND EROSION CONTROLS ON A DAILY BASIS AND IMMEDIATELY AFTER EACH RAINFALL; REPAIRS SHALL BE MADE BY THE END OF THE WORKING DAY. ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR, AS REQUIRED BY THE CONSERVATION COMMISSION OR AS DIRECTED BY THE ENGINEER.

20.) DUST CONTROL MEASURES SHALL BE IMPLEMENTED AND MAINTAINED PROPERLY THROUGHOUT DRY WEATHER PERIODS UNTIL ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED METHODS FOR DUST CONTROL SHALL INCLUDE WATER SPRINKLING AND/OR OTHER METHODS APPROVED BY THE ENGINEER.



General Construction Sequence:
The following is a general construction sequence that will be implemented as part of the construction at the site.

1. **Perimeter Sediment Controls:** Prior to the start of earth–moving activities, a sediment control barrier consisting of properly installed siltation fence (i.e., the bottom few inches of the siltation fence installed in a narrow, trench and the trench filled with soil around the siltation fence), and where proposed, double staked hay bales will be installed along the proposed limit of work as shown on the site plans.

2. **Construction Access:** Construction access points from Fisher Road shall be stabilized with a stabilized construction entrance, anti–tracking pad/berm, as specified in the site plans. Any other bare construction routes or equipment staging areas shall be stabilized with gravel, wood chips, or temporary vegetation (e.g., annual rye grass). Fisher Road shall be inspected and swept daily, as needed, to remove vehicle tracked sediments.

3. **Land clearing and Grading:** Any vegetation for removal shall be cleared and site grading shall commence. All slopes shall be brought to finish grade and final stabilization applied immediately. Slopes in excess of 3H:1V shall be stabilized with rip rap hard–armoring, bonded fiber matrix (BFM) hydroseed, bark mulch, sod, or seed and erosion control blanketing. Install additional run–off control measures as grading progresses, to include temporary sediment ponds, water bars, dikes and swales.

4. **Sediment Barriers and Traps:** Temporary sediment ponds may be constructed, as necessary, to store and infiltrate run–off. The basins shall include a temporary stone and filter fabric, or hay bale bulkhead dam at the outlet structure to provide additional settling. The basin slopes and bottoms shall be stabilized with seed and erosion control matting, or bonded fiber matrix hydroseed, and a stabilized exit spillway shall be constructed with a filter fabric and stone apron. Surface outlet requirements state that when discharging from basins and impoundments, permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. Temporary riser pipes, or skimmers, may be utilized to allow retention and treatment with controlled release of stormwater runoff during construction. The ponds shall be excavated to provide storage for, at a minimum, 3,600 c.f. per disturbed acre of run–off (i.e., 1–inch runoff). Ponds will be inspected weekly, before and after significant rainfall events. Accumulated sediments will be removed once they reach no more than 20% of the sediment capacity.

5. **Run–off Control and Conveyance Systems:** As needed, water bars, diversion swales and/or dikes shall be constructed and stabilized utilizing filter fabric and crushed stone. Where feasible, runoff shall be diverted away from unstabilized areas and slopes. Stone check dams shall be installed along the swales at intervals which will provide toe to crest spacing. The spacing shall be calculated by dividing the height of the check dam (in inches) by the percent slope (decimal form).

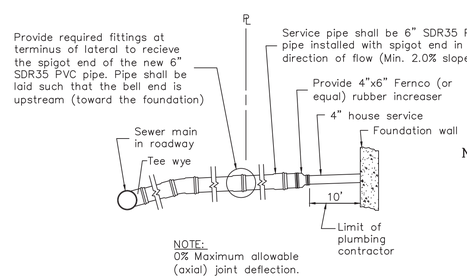
6. **Stockpiling:** Soil stockpiling shall take place outside the 100 foot wetland buffer or as far away from the wetland as possible. Inactive stockpiles must be covered and/or contained with sediment control barriers. Any stockpiling that will remain idle for more than 14 days shall be hydroseeded or covered with poly or tarpaulins.

7. **Surface Stabilization:** Apply temporary or permanent stabilization measures including sod, seed, hydromulch, bark mulch, poly, wood chips, hay/straw or crushed stone, immediately on all disturbed areas where work is completed or delayed greater than 14 days.

8. **Landscaping and Final Stabilization:** After construction is complete in a given area, any exposed soils will be stabilized by loam and seed, hydroseeding and/or landscaping.

Single–Family Building Construction and Final Stabilization Sequence:
The following is a general construction sequence that will be implemented for house construction and final stabilization at the site.

1. Excavate for foundation/slab;
2. Form and pour foundation/slab;
3. Backfill foundation/slab and complete rough grading. Temporarily stabilize exposed soils as necessary with hydromulch (min. 2,200 lbs/acre), wood mulch, hay mulch (2 bales/1,000 sf), or similar;
4. Construct house, including framing, roofing, siding and interior;
5. Connect underground utilities;
6. Complete grading, pave driveway;
7. Conduct final cleanup of wood scraps, building materials, etc.;
8. Loam and seed lawn area. Use sod, seed and erosion control blanket, or bonded fiber matrix hydroseed applied at manufacturer's recommended rate for slopes in excess of 3H:1V. Re–seed as necessary to achieve solid vegetative cover.

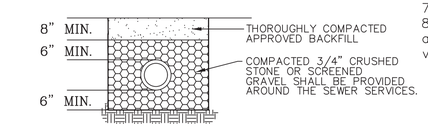


NOTE:
0% Maximum allowable (axial) joint deflection.

NOTE: SEWER STUBS SHALL BE INSTALLED WITHIN 1'± OF THE PROPERTY LINE. CLEANOUTS SHALL BE REQUIRED ON THE SEWER LATERALS WHEN MORE THAN (2) 45° BENDS ARE USED.

SEWER LATERAL CONNECTION DETAIL

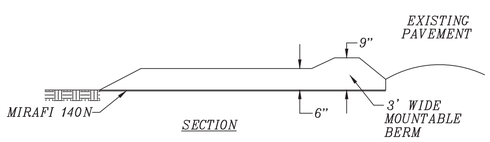
NOT TO SCALE



NOTE: FOUR FEET OF COVER SHALL BE MAINTAINED OVER THE SEWER LATERALS. IF THIS CANNOT BE ACHIEVED THE SEWER LATERAL SHALL BE INSULATED TO PROTECT THE SEWER LATERAL FROM FREEZING.

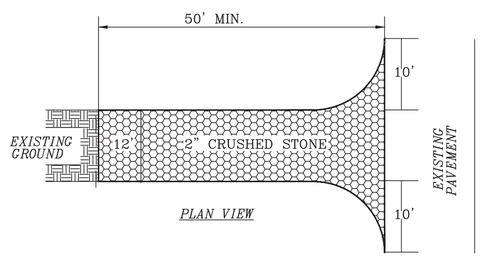
TYPICAL SEWER LATERAL TRENCH DETAIL

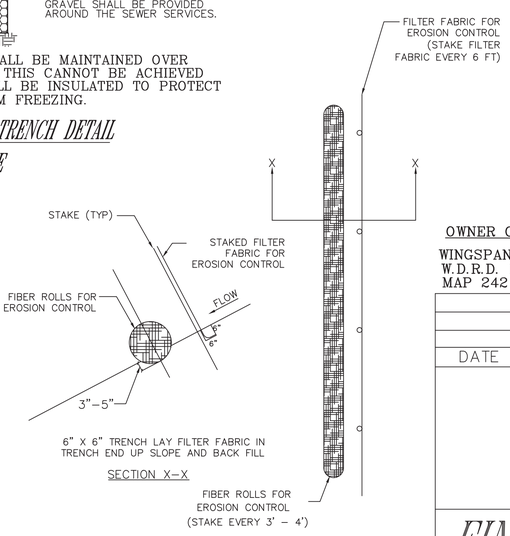
NO SCALE



STABILIZED CONSTRUCTION ENTRANCE

NO SCALE





FIBER ROLLS AND SILT FENCES FOR EROSION CONTROL

NOT TO SCALE

COMMONWEALTH OF MASSACHUSETTS
JOHN E. FINLAY II
CIVIL
No. 34718
REGISTERED PROFESSIONAL ENGINEER

LEGEND

100	EXISTING CONTOUR
100	PROPOSED CONTOUR
PSMH	PROPOSED SEWER MANHOLE
PS	PROPOSED SEWER LINE
ECB	PROPOSED ENVIRONMENTAL CONTROL BARRIER
OHW	EXISTING OVERHEAD WIRE
G11	WETLAND FLAG BY ECOTEC INC.
WS	EXISTING CURB STOP

OWNER OF RECORD:

WINGSPAN PROPERTIES, LLC
W.D.R.D. BK. 70046 PG. 20
MAP 242 PARCEL 23 & 25

DATE	ISSUE	REVISION	DESCRIPTION	APP.

PROPOSED SITE DEVELOPMENT PLAN
PREPARED FOR
WINGSPAN PROPERTIES LLC
LOCATED AT
LOT 16, FISHER ROAD
HOLDEN, MASSACHUSETTS

FINLAY ENGINEERING SERVICES
625 CHANDLER STREET
WORCESTER , MASSACHUSETTS

DES.: JEF	DWN.: JEF	CHK.: JEF
SCALE: 1"=30'	DATE: 01/17/24	
PLAN NUMBER 240001	SHEET 1 OF 1	