

# CONSERVATION COMMISSION AGENDA

Date: February 1, 2018

Time: 7:00 pm

Place: City Hall, Room 204

**NOTE:** Items may be called in any order at the Chair's discretion.

**NOTE:** The Conservation Commission reserves the right to discuss open wetland cases during the public meeting at which they are due to be heard.

## DECISIONS

### I. WETLANDS

1. **NOI (continued) – 56 Farwell Street – DEP File #239-793**
  - Request: Construct six single-family homes & driveways. Construct private road. Increase flood storage capacity. Implement restoration planting plan along river.
  - Owner: Turtle Lane, LLC Applicant: Stephen Vona (Turtle Lane, LLC) Rep.: Brian Nelson (MetroWest Engineering, Inc.)
2. **COC Request – 250 Waltham St – DEP File #239-719**
  - Owner: Fessenden School Applicant: Mike Grossman (Fessenden) Representative: Stantec (Bob Corning, Josh Atkinson, and Seth Foster)
3. **COC Request – 55 Wayne Road – DEP File #239-652**
  - Owner: Mort Fogel Applicant: David Cowell (Hancock Associates) Representative: David Cowell (Hancock Associates)
4. **COC Request – 10 Maynard St – DEP File #239-670**
  - Owner: Francesco Mercuri Applicant: Brian Callahan Co. Representative: Brian Callahan Co.
5. **Discussion of Draft Vernal Pool Ordinance (\_\_\_)**
  - Project: Vernal Pool Ordinance working group has submitted a draft ordinance for the Commission's consideration.

### II. CONSERVATION AREAS – nothing to vote on

### III. ADMINISTRATIVE

6. **Discussion of Commission Roles.**
7. **Minutes of 1/11/18 to be approved.**
  - Documents Presented: draft minutes draft minutes
    - Staff Recommendation: Vote to approve 1/11/18 minutes.

### IV. ISSUES AROUND TOWN – nothing to vote on

## UPDATES

### V. WETLANDS

### VI. CONSERVATION AREAS

### VII. ISSUES AROUND TOWN

### VIII. ADMINISTRATIVE MATTERS

## OTHER TOPICS NOT REASONABLY ANTICIPATED BY THE CHAIR 48 HOURS BEFORE THE MEETING

## ADJOURN



Mayor  
Ruthanne Fuller

Director  
Planning &  
Development  
Barney Heath

Senior  
Environmental  
Planner  
Jennifer Steel

Assistant  
Environmental  
Planner  
Claire Rundelli

Conservation  
Commission  
Members  
Dan Green  
Judy Hepburn  
Susan Lunin  
Norm Richardson  
Ira Wallach  
Jeff Zabel  
Ellen Katz

Conservation  
Commission  
Alternates  
Kathy Cade

1000 Comm. Ave.  
Newton, MA 02459  
T 617/796-1120  
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[www.newtonma.gov](http://www.newtonma.gov)

*The location of this meeting is wheelchair accessible and reasonable accommodations will be provided to persons with disabilities who require assistance. If you need a reasonable accommodation, please contact the city of Newton's ADA/Sec. 504 Coordinator, Jini Fairley, at least two business days in advance of the meeting: [jfairley@newtonma.gov](mailto:jfairley@newtonma.gov) or (617) 796-1253. The city's TTY/TDD direct line is: 617-796-1089. For the Telecommunications Relay Service (TRS), please dial 711.*

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#### 1. NOI (continued) – 56 Farwell Street – DEP File #239-793

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- Owner: Turtle Lane, LLC Applicant: Stephen Vona (Turtle Lane, LLC) Rep.: Brian Nelson (MetroWest Engineering, Inc.)
- Documents Presented: draft peer review, colored plans outstanding requirements for an OOC to be issued
- Jurisdiction: Riverfront Area, Flood Zone, Bordering Vegetated Wetlands
- Performance Standards
  - **10.58(5) RFA: Redevelopment within Previously Developed Riverfront Areas; Restoration & Mitigation**
    - ... work improves existing conditions.
    - Redevelopment means ... reuse of degraded or previously developed areas.
    - A previously developed riverfront area contains areas degraded prior to August 7, 1996....
    - Work to redevelop previously developed riverfront areas shall ...:
      - (a) At a minimum, work shall result in an improvement ...
      - (b) Stormwater management is provided according to standards
      - (c) Proposed work shall not be closer to the river than existing conditions or 100', whichever is less
      - (d) Proposed work...shall be located... away from the river, except in accordance w/ 10.58(5)(f) or (g).
      - (e) ... proposed work shall not exceed ... degraded area ... except in accordance w/ 10.58(5)(f) or (g).
      - (f) despite what it says in 310 CMR 10.58(5)(c), (d), and (e), more alteration at the RFA outer boundary may be allowed if an applicant proposes restoration ... of at least 1:1 ...
      - (g) despite what it says in 310 CMR 10.58(5)(c), (d), or (e), more alteration at the RFA outer boundary may be allowed if an applicant proposes mitigation ... of at least 2:1
      - (h) ... a continuing condition in the COC ... under 10.58(5)(f) or (g) prohibiting further alteration within the restoration or mitigation area....
  - **10.58(4) Riverfront Area**
    - (c) Practicable and Substantially Equivalent Economic Alternatives.
    - (d) No Significant Adverse Impact.
      - 1. Within 200 foot riverfront areas, the issuing authority may allow the alteration of up to 5000 square feet or 10% of the riverfront area within the lot, whichever is greater ..., provided that:
        - a. At a minimum, a 100' wide area of undisturbed vegetation is provided... preserved or extended to the max. extent feasible....
        - b. Stormwater is managed ...



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- c. Proposed work does not impair the capacity of the riverfront area to provide important wildlife habitat functions. ...
  - d. ... incorporating erosion and sedimentation controls and other measures to attenuate nonpoint source pollution.
- **Bordering Land Subject to Flooding (10.57)**
  - 1. Compensatory storage shall be provided for all flood storage volume that will be lost ...
  - 2. Work shall not restrict flows so as to cause an increase in flood stage or velocity.
  - 3. Work in those portions of bordering land subject to flooding found to be significant to the protection of wildlife habitat shall not impair its capacity to provide important wildlife habitat functions.  
 “Compensatory storage shall mean a volume not previously used for flood storage and shall be incrementally equal to the theoretical volume of flood water at each elevation, up to and including the 100-year flood elevation, which would be displaced by the proposed project. Such compensatory volume shall have an unrestricted hydraulic connection to the same waterway or water body.
- **FEMA Crawlspaces Regulations**
  - 1. Crawlspaces that have their floors below BFE must have openings to allow the equalization of flood forces.
  - 2. Recent FEMA guidance now allows crawlspaces to have their floors up to two feet below lowest adjacent grade under certain circumstances although this is discouraged. Below-grade crawlspace foundation walls are exposed to increased forces during flood conditions, such as hydrostatic and saturated soil forces. Guidance on the National Flood Insurance Program (NFIP) minimum requirements for crawlspace construction in the SFHA is given in FIA-TB-11.
  - 3. Buildings that have below-grade crawlspaces will have higher flood insurance premiums than buildings that have the interior elevation of the crawlspace at or above the lowest adjacent exterior grade.”
- **FEMA Basement and Newton Floodplain Regulations**
  - The NFIP Floodplain Management Requirements and the Newton Floodplain Ordinance state that basements must be above the BFE (see below) or flood-proofed.
- **Stormwater Standards 10.05 (6) Orders of Conditions Regulating Work and Orders of Resource Area Delineation (k)**
- Updates – and Staff Notes
  - Staff met with Stephen, Joe, and Engineering on 1/9/18.
  - Applicant developed revised plans, responded to initial peer review memo, and revised narrative documents.
  - Pat Garner developed a first complete peer review memo (dated 1/24/18) based on his assessment of plans and documents submitted on 1/16/18 and will attend the 2/1/18 Con Com meeting.
  - Brief staff assessment of revised materials (see peer review for more complete analysis):
    - Issues that have been addressed
      - Existing “degraded” data layer was corrected.
      - Newton's Board of Survey will wait for Con Com to issue its findings before it issues its decision.
    - Issues that remain to be addressed
      - Extra **test pits** were dug -- but not per the DEP stormwater handbook guidelines).
      - **O&M plan** was received -- but responsible parties were not clear.
      - An **Alternatives Analysis** was submitted -- but is not very complete.
      - **Snow storage** was requested – but it has not been shown on the plans.
      - **7.5' pathway easement** has been shown – but it conflicts with many of the trees in the restoration plan.
      - **Construction Management plan** has been requested – but we need more information on, e.g., phasing, stockpiling, concrete washout, dewatering, etc.)
      - A **SWPPP** will be needed.
      - **Street lighting** may be required and should be shown on the plans.
      - There is still no reference to a **seed mix** on the plans (area, application rate, etc.).

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- Of the ~480' development, there are two **passageways between the houses/retaining walls**: one is 15' wide and one is 20' wide. Otherwise, wildlife and human access from the roadway side to the river is barred by contiguous houses or retaining walls.
  - The restored RFA must be permanently **bounded** and visibly "fenced" (?) to preclude encroachment.
  - **MWRA permission** has not yet been received.
  - **RFA Performance standards** -- Under a combination of 10.58(4) and 10.58(5) too much degraded area/insufficient restoration and mitigation have been proposed to meet these performance standards. Conversion of lawn to woods qualifies as mitigation, but improvement of woods through invasive control and added plantings may not qualify as mitigation. It appears that 6,228 additional sf of degraded area is being proposed; therefore, 12,556 sf of mitigation must be provided. Currently, roughly 4,250 sf of mitigation is being proposed, with an additional 1,000 sf of enhancement. Performance standards that must be met (and clearly documented)
  - **Floodplain Regs** – Compensatory flood storage appears to be provided, but there remain concerns about "restriction of flow" and scour. Piers (rather than walls) would eliminate these concerns.
  - **FEMA/City Basement Regs** – Basement of Lot 6 is ~2 feet below Base Flood Elevation so engineering must prove flood-proofing.
  - **FEMA Crawlspace Regs** – Crawl spaces seem to be allowed, but we need a few minor plan "typos" to be corrected.
  - **Stormwater Regs** – This is not a redevelopment project under SW Standards so it must meet all standards fully. Staff will rely on the peer reviewer for this analysis. There is concern about the locations of the test pits.
  - Staff recommendation: Continue the hearing to March 15, 2018, pending receipt of revised materials.
- 2. COC Request – 250 Waltham St – DEP File #239-719**
- Owner: Fessenden School    Applicant: Mike Grossman (Fessenden)    Representative: Stantec (Bob Corning, Josh Atkinson, and Seth Foster)
  - Documents Presented: Draft COC, site photos
  - Project: Reconstruct 3 fields with 2 artificial turf fields with underdrains and 1 natural grass field, install stormwater improvements and detention basins, enhance vegetative buffer between the fields and the perennial stream with numerous native trees and shrubs.
  - Staff Recommendations: Construction complied with approved plans, planting survived 88% for 2 years, as-built plans and letter from the engineer have been received. Vote to issue a complete COC.
- 3. COC Request – 55 Wayne Road – DEP File #239-652**
- Owner: Mort Fogel    Applicant: David Cowell (Hancock Associates)    Representative: David Cowell (Hancock Associates)
  - Documents Presented: Draft COC, site photos
  - Project: The construction of an addition and deck in 200' RFA associated with Sawmill Brook.
  - Staff Recommendations: Construction complied with approved plans and the plans and letter from the engineer have been received. There are two perpetual conditions regarding fertilizer, herbicide, and pesticide use and the perpetual maintenance for the mitigation area. Vote to issue a complete COC.
- 4. COC Request – 10 Maynard St – DEP File #239-670**
- Owner: Francesco Mercuri    Applicant: Brian Callahan Co.    Representative: Brian Callahan Co.
  - Documents Presented: Draft COC, site photos
  - Project: The demolition of a SFH and the construction of a new SFH within the 200' RFA associated with Cheesecake Brook.
  - Staff Recommendations: Construction complied with approved plans and the plans and letter from the engineer have been received. There are two perpetual conditions regarding the perpetual maintenance for the mitigation area and the permanent demarcation of the mitigation area. Vote to issue a complete COC.
- 5. Discussion of Draft Vernal Pool Ordinance**
- Project: Vernal Pool Ordinance working group has submitted a draft ordinance for the Commission's consideration.
  - Documents Presented: draft ordinance and maps of CVP and PVPs    draft ordinance, flier, illustrations

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- Staff Recommendations: Discuss the ecological underpinnings of the draft, implementation implications, and the process for passage.

## II. CONSERVATION AREAS – nothing to vote on

### III. ADMINISTRATIVE

#### 6. Discussion of Commission Roles.

- All members' terms are current; Dan "expires" 1/2/19. Norm "expires" 7/10/19. Ira, Susan, Judy, Jeff, Ellen, and Kathy all "expire" on 5/31/20.
- Commission Roles: Rules and Regulations of the Conservation Commission (revised Oct 22, 2009): Article 5, Section 1 states that the following roles shall be elected annually: chair, vice-chair, clerk. This reflects practices of good governance, allows members to have a diversity of experiences, and allows members to "train" for other roles with the ConCom or with the City.
- Volunteer liaisons with other Boards/Commissions (e.g., Commonwealth Golf, Farm, CPC ) should not feel obligated to serve indefinitely, so rotating positions or annual "re-upping" should be institutionalized.
- "Ad hoc working groups" should be routinely discussed (e.g., Schools, Deer Park, Vernal Pool Ordinance, etc.)

#### 7. Minutes of 1/11/18 to be approved.

- Documents Presented: draft minutes draft minutes
- Staff Recommendation: Vote to approve 1/11/18 minutes.

## IV. ISSUES AROUND TOWN – nothing to vote on

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### UPDATES

#### V. WETLANDS

- Hammond Brook Culvert Project – the overflow pipe is being removed from the project.

#### VI. CONSERVATION AREAS

- MBTA began tree cutting along the Green Line near Houghton Gardens 1/20 and 1/21/18
- \$75,000 from Kessler Woods development for trail design and installation has been received and deposited.

#### VII. ISSUES AROUND TOWN

- Recreational Trails Grant Application – due to be submitted 2/1/18
- 2017 Two Bridges Recreational Trails Grant– met with project managers to discuss how the project will impact the regional trail system and trail projects that are currently in the works.
- Needham St Area Visioning Group – 1/22/18 meeting on Envi Health and Open Space and 1/29/18 meeting on Transportation went well.
- Webster Woods Executive Committee has been established and application for the Advisory Committee are open.
- MACC AEC Annual Conference is 3/3/18 and registration is now open.

#### VIII. ADMINISTRATIVE MATTERS

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### OTHER TOPICS NOT REASONABLY ANTICIPATED BY THE CHAIR 48 HOURS BEFORE THE MEETING

### ADJOURN

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**NOTES:**

1. SUBJECT PARCEL IS SHOWN AS ACCESSORS SHEET 21, BLOCK 01, LOT 012.  
 RECORD TITLE FROM BOOK 6734E PAGE 302.  
 ALL UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON EXISTING RECORDS AND FIELD OBSERVATIONS. BELOW-GROUND UTILITIES ARE BASED UPON EXISTING RECORDS AND FIELD OBSERVATIONS. ABOVE-GROUND UTILITIES ARE BASED UPON EXISTING RECORDS AND FIELD OBSERVATIONS.  
 MTD ENGINEERING, INC. DOES NOT WARRANT THAT ALL UTILITIES SHOWN IN THIS SURVEY ARE IN THE CORRECT LOCATION OR WITH THE PROPER MATERIAL. MTD ENGINEERING, INC. DOES NOT WARRANT THAT ALL UTILITIES SHOWN IN THIS SURVEY ARE IN THE CORRECT LOCATION OR WITH THE PROPER MATERIAL. MTD ENGINEERING, INC. DOES NOT WARRANT THAT ALL UTILITIES SHOWN IN THIS SURVEY ARE IN THE CORRECT LOCATION OR WITH THE PROPER MATERIAL.  
 CONTRACTOR IS SOLELY RESPONSIBLE FOR ESTABLISHING EXISTING LOCATIONS OF ALL SUB-SURFACE UTILITIES AND MAN-MADE STRUCTURES. CONTRACTOR IS SOLELY RESPONSIBLE FOR ESTABLISHING EXISTING LOCATIONS OF ALL SUB-SURFACE UTILITIES AND MAN-MADE STRUCTURES. CONTRACTOR IS SOLELY RESPONSIBLE FOR ESTABLISHING EXISTING LOCATIONS OF ALL SUB-SURFACE UTILITIES AND MAN-MADE STRUCTURES.  
 MTD ENGINEERING, INC. IS NOT RESPONSIBLE FOR DAMAGE OCCURRING DURING CONSTRUCTION. MTD ENGINEERING, INC. IS NOT RESPONSIBLE FOR DAMAGE OCCURRING DURING CONSTRUCTION. MTD ENGINEERING, INC. IS NOT RESPONSIBLE FOR DAMAGE OCCURRING DURING CONSTRUCTION.  
 THIS SURVEY WAS CONDUCTED IN ACCORDANCE WITH THE MASSACHUSETTS REGISTERED PROFESSIONAL ENGINEER'S LICENSE. THIS SURVEY WAS CONDUCTED IN ACCORDANCE WITH THE MASSACHUSETTS REGISTERED PROFESSIONAL ENGINEER'S LICENSE. THIS SURVEY WAS CONDUCTED IN ACCORDANCE WITH THE MASSACHUSETTS REGISTERED PROFESSIONAL ENGINEER'S LICENSE.  
 DATE: JANUARY 16, 2017  
 PROJECT: MTD-2017-001

**ZONING:**

**SINGLE-RESIDENCE 3 (NEW)**  
 SETBACKS: YARD- 30 FEET  
 SIDE YARD- 10 FEET  
 MINIMUM FRONTAGE- 80 FEET  
 MAXIMUM HEIGHT- 34 FEET (2.5 STORIES)  
 MINIMUM LOT COVERAGE- 30%  
 MINIMUM AMOUNT OF OPEN SPACE- 50%  
 LOT WAS CREATED PRIOR TO 12/07/1953  
 MAX BUILD FACTOR- 20

**GRAPHIC SCALE**



**PROPOSED RIVERFRONT SKETCH PLAN**  
 56 FARWELL STREET  
 IN  
 NEWTON, MASS

PREPARED FOR:  
 TURTLE LAKE, LLC  
 100 OLDHAM ROAD  
 NEPTON, MA 02465

PROPERTY OF:  
 TURTLE LAKE, LLC  
 100 OLDHAM ROAD  
 NEPTON, MA 02465

ENGINEERS & SURVEYORS:  
**MWE** METROPOLITAN ENGINEERING, INC.  
 75 FRANKLIN STREET  
 FRAMINGHAM, MA 01902  
 TEL: 603/88-4065

SHEET 1 OF 1  
 DATE: JANUARY 16, 2017  
 CALD BY: MTD-2017-001  
 DRAWN BY: MTD-2017-001



**PRE-DEVELOPMENT RIVERFRONT AREA CONDITIONS**

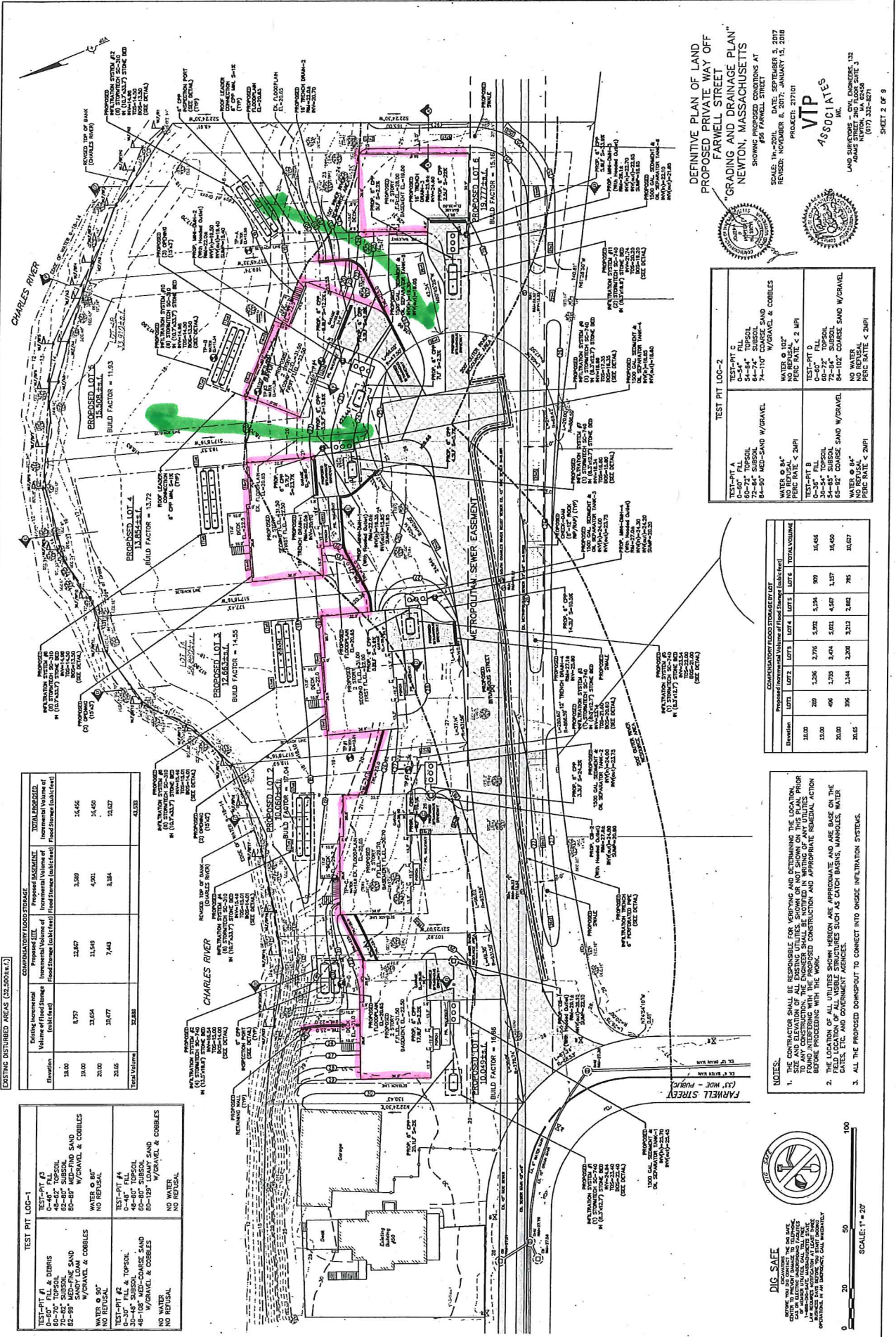
LOT AREA	92,179.0 ± S.F.
TOTAL RIVERFRONT AREA	102,726 ± S.F.
EXISTING PRE-2011 DEGRADED RIVERFRONT AREA	96,871 ± S.F.
EXISTING POST-2011 DEGRADED RIVERFRONT AREA	2,221 ± S.F.
EXISTING TURF LAWN AREA	10,110 ± S.F.
EXISTING WOODED AREA	53,384 ± S.F.
EXISTING NON-DEGRADED RIVERFRONT AREA	12,335 ± S.F.
EXISTING NON-DEGRADED RIVERFRONT AREA	74,690 ± S.F.

**POST-DEVELOPMENT RIVERFRONT AREA CONDITIONS**

NON RIVERFRONT AREA	5,854 S.F.
EXISTING DEGRADED RIVERFRONT AREA TO BECOME UNDEGRADED	15,266 S.F.
EXISTING DEGRADED RIVERFRONT AREA TO REMAIN DEGRADED	8,070 S.F.
EXISTING NON-DEGRADED RIVERFRONT AREA TO BE ALTERED BY PROPOSED CONSTRUCTION	18,290 S.F.
EXISTING NON-DEGRADED RIVERFRONT AREA TO REMAIN	55,245 S.F.
TOTAL PROPOSED DEGRADED AREA	8,070 S.F. + 18,290 S.F. = 26,360 S.F.
TOTAL PROPOSED NON-DEGRADED AREA	15,266 S.F. + 55,245 S.F. = 70,511 S.F.
SUM	96,871 S.F.

10.58(5)(e)  
 TOTAL RFA = 96,871 sf  
 10% exist deg = 9,687 sf (see note)  
 prop. deg = 26,360 sf  
 prop Δ = 6,228 add'l. NEED rest 6,228 OR  
 mt. 12,556  
 prop mt. + 250 — Not enough  
 enhance 1,000



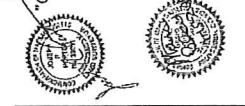


**DEFINITIVE PLAN OF LAND  
PROPOSED PRIVATE WAY OFF  
FARWELL STREET  
"GRADING AND DRAINAGE PLAN"  
NEWTON, MASSACHUSETTS**

SHOWING PROPOSED CONDITIONS AT  
SCALE: 1" = 20' DATE: SEPTEMBER 8, 2017  
PROJECT: 27701

**VTP ASSOCIATES**  
INC.  
LAND SURVEYORS - CIVIL ENGINEERS, L3C  
ADAMS AVENUE, SUITE 200, BOSTON, MA 02116  
(617) 332-8271

SHEET 2 OF 9



**TEST PIT LOG-2**

TEST-PIT A NO REFUSAL 60-72" TOPSOIL 72-84" SUBSOIL 84-96" MED-FINE SAND 96-108" MED-COURSE SAND W/GRAVEL	WATER @ 84" NO REFUSAL PERC RATE < 2 MPI
TEST-PIT B NO REFUSAL 0-35" FILL 35-54" TOPSOIL 54-66" SUBSOIL 66-72" TOPSOIL 72-84" TOPSOIL 84-102" COARSE SAND W/GRAVEL	WATER @ 102" NO REFUSAL PERC RATE < 2 MPI
TEST-PIT C NO REFUSAL 54-84" TOPSOIL 84-96" SUBSOIL 96-108" W/GRAVEL & COBBLES	WATER @ 102" NO REFUSAL PERC RATE < 2 MPI

**COMPLEMENTARY FLOOD STORAGE BY LOT**

Elevation	Proposed Treatment Volume of Flood Storage (cubic feet)				TOTAL VOLUME
	LOT 1	LOT 2	LOT 3	LOT 4	
10.0	280	1,206	2,776	3,792	16,456
15.0	496	1,375	3,041	5,021	16,450
20.0	396	1,144	2,206	3,212	795
25.0					

**EXISTING DISTURBED AREAS (22.0004.1)**

Elevation	Proposed Treatment Volume of Flood Storage (cubic feet)		TOTAL VOLUME
	Volume of Flood Storage	Volume of Flood Storage	
10.0	1,272	3,280	16,456
15.0	1,164	4,901	16,450
20.0	10,477	3,116	10,827
25.0			4,933

**TEST PIT LOG-1**

TEST-PIT #1 0-60" FILL & DEBRIS 60-72" TOPSOIL 72-84" SUBSOIL 84-96" MED-FINE SAND 96-108" MED-COURSE SAND W/GRAVEL & COBBLES WATER @ 90" NO REFUSAL	TEST-PIT #3 0-48" FILL 48-60" TOPSOIL 60-72" SUBSOIL 72-84" MED-FINE SAND 84-96" MED-COURSE SAND W/GRAVEL & COBBLES WATER @ 90" NO REFUSAL
TEST-PIT #2 0-36" FILL & TOPSOIL 36-48" TOPSOIL 48-60" MED-COURSE SAND W/GRAVEL & COBBLES NO WATER NO REFUSAL	TEST-PIT #4 0-48" FILL 48-60" TOPSOIL 60-72" SUBSOIL 72-84" MED-FINE SAND 84-96" MED-COURSE SAND W/GRAVEL & COBBLES NO WATER NO REFUSAL

**NOTES:**

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, PRIOR TO ANY CONSTRUCTION, THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES BEFORE PROCEEDING WITH THE WORKED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION.
- THE LOCATION OF ALL UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED ON THE FIELD LOCATION OF ALL VISIBLE STRUCTURES SUCH AS CATCH BASINS, MANHOLES, WATER TANKS, ETC. AND GOVERNMENT RECORDS.
- ALL THE PROPOSED DOWNSPOUT TO CONNECT INTO INSIDE INFILTRATION SYSTEMS.

**DIG SAFE**

WORK TO BE DONE IN THIS AREA IS SUBJECT TO THE EXISTENCE OF UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION. IF ANY UTILITIES ARE LOCATED IN THIS AREA, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THEM. IF AN UNEXPECTED CALL INDICATES THE PRESENCE OF UTILITIES, THE CONTRACTOR SHALL STOP WORK IMMEDIATELY AND NOTIFY THE ENGINEER.

SCALE: 1" = 20'

CONTINUOUS WALL  
POTENTIAL PASSAGE





le



HYDROLOGY • RIVER ANALYSIS • WETLAND SCIENCE • SOIL EVALUATION • DESIGN & PERMITTING • PEER REVIEW  
109 WHITNEY STREET, NORTHBOROUGH, MA 01532  
☎: 508.393.3200 patrickgarner@me.com www.patrickgarner.com

January 24 2018

Ms. Jennifer Steel, Senior Environmental Planner  
Conservation Commission  
1000 Commonwealth Ave.  
Newton, MA 02459

**Re: Peer review, Notice of Intent, 56 Farwell Street**

Dear Jenn:

This review is submitted following a site visit on December 7 2017, after which I issued an initial memo (dated Dec. 12 2017), noting that the application did not meet a number of basic filing requirements. In response, the applicant revised materials and conducted limited additional site work to supplement data.

My current comments are based on those revisions. Revised plans have been submitted by MWE (dated through Jan 16 2018) and VTP (dated through Jan 15 2018). In addition, with those plans, the applicant included several documents that are unsigned and undated. Comments follow.

**Comments**

1) **Plans** Plans should be collated and numbered as a single set. As submitted, there are multiple, and confusing, plans. For instance, there is a 9-sheet plan set. Then there is a 1-page existing conditions plan. In addition, there is a 1-page "Riverfront Sketch Plan." There is a 1-page cut & fill plan. There is a separate "Proposed Planting Plan," none of which are part of the 9-sheet plan set.

All plans should be submitted together as a cohesive, single plan set.

2) **Contour Accuracy** I noted in my initial memo that the topographical survey accompanying the plans appears to incorrectly represent existing conditions, particularly in the rear of the existing house. The VTP plans indicate a gradual elevation descent toward the river from 20 to 19 to 18 and then lower, whereas visual inspection indicates otherwise. In its revised plans, VTP added approximately six spot elevations to Sheet 2 of 9, several that are outside of the area of concern.

Because accurate elevations are critical to determining Compensatory Flood Storage calculations, additional shots should be furnished. Please see attached sketch

indicating area of concern within which shots should be added.

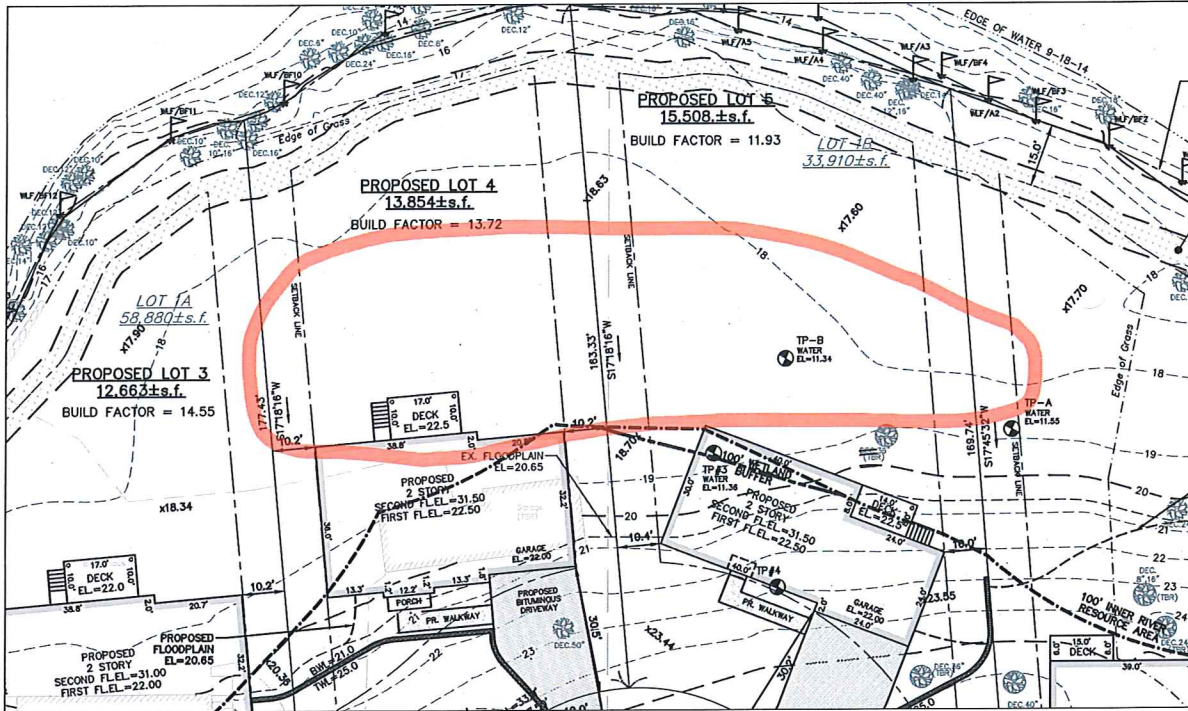


Figure 1. Area of missing spot shots.

3) **Bankfull Location** I adjusted the Bankfull (top of bank) flagging along the river in early December 2017. New flags are numbered #1 through #20. Said flags have been located and all plans amended to indicate new locations. Similarly, the location of the inner and outer riparian zones have been revised on plans to reflect the new Bankfull flag locations.

4) **21E Determination** In my December memo I noted, "Given that portions of the site have been used as a commercial vehicle storage area for years, the possibility of leaked oil and gas in those areas exists. The applicant should either furnish the Commission with a recent 21E determination, or have a qualified firm conduct one to ensure that the overall site is clean." That comment stands.

5) **Insufficient Deep Hole Testing** In my December memo I also noted that insufficient deep holes had been conducted on site to affirm the adequacy of soils in the vicinity of the proposed infiltration areas. Although four additional holes have been conducted in response, that comment stands.

At the time of my initial memo, VTP had conducted only four holes. Four additional holes have been dug on site in the last month for a current total of eight holes to date. Neither the first four holes nor the latter four are dated, nor is the name of the certified soil evaluator provided. Dates and names/qualifications should be provided. Did any qualified person from the City witness the testing? Information should be provided.

I also noted in my December memo that the MassDEP Stormwater Handbook requires actual tests within the envelope proposed for any infiltration area. VTP proposes twelve

(12) separate infiltration areas composed of StormTech infiltration chambers. Six of those infiltration chambers are large, multi-chamber systems. Five of the six larger systems are proposed within the 100-year floodplain, an area of possible high seasonal ground water. Please see Fig. 2 below indicating infiltration areas where soil testing is critical, but has not yet been conducted.

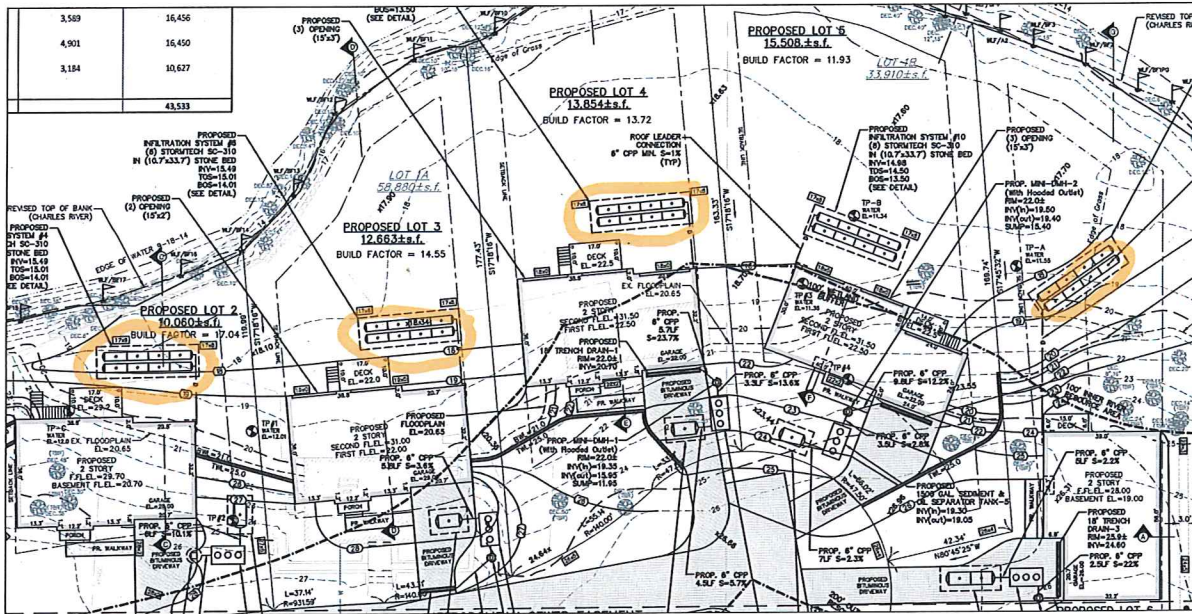


Figure 2. Orange circles indicate areas of missing deep holes.

Deep holes conducted to date occur only within three of the twelve proposed areas, and of those three, only two occur within the systems proposed within the floodplain. VTP assumes that the untested soils are suitable in the remaining areas without having verified site conditions. This assumption is contrary to Stormwater Handbook requirements. For instance, Volume 2, Chapter 2, page 105 of the Stormwater Handbook states,

“... install subsurface structures only in soils having suitable infiltration capacities as determined through field testing. Determine the infiltrative capacity of the underlying native soil through the soil evaluation set forth in Volume 3.”

Volume 3, Chapter 1, page 8, goes on via a flow chart to dictate that a designer should review the NRCS Soil Survey to determine the hydrologic soil group (which VTP has done properly). The flow chart then goes on to indicate that a soils professional should verify soils at the “specific location where recharge” is proposed. As I noted in my initial memo, that has not occurred.

On page 10 of that same chapter, the Stormwater Handbook states,

“Determine Site Conditions at Specific Location Where Recharge is Proposed. The following actions shall be performed to determine soil conditions at actual location on the site where recharge is proposed: a. Conduct tests at the point where recharge is proposed. The tests are a field evaluation conducted in the actual location and soil layer where infiltration is proposed...”

Volume 2, Chapter 2, page 97 of the Stormwater Handbook requires a minimum of two tests per area. Based on state regulation, none of the proposed stormwater infiltration areas comply with MassDEP requirements. Each of the infiltration areas should be individually tested with a minimum of two deep holes. Testing should be witnessed by a qualified third party.

If testing is conducted outside of “high” season (information provided is insufficient to know as testing dates are not provided), the Stormwater Handbook requires a SHGW adjustment identical to that required by Title 5 (see Volume 3, Chapter 1, page 12).

Applicant should address specific Stormwater Handbook requirements as identified above. Sufficient testing is necessary to verify that adequate soils exist in each infiltration location and that variability of SHGW is addressed for each specific system.

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**6) Sufficient Separation From SHGW** Applicant must show through required test holes (and seasonal adjustment, if necessary) that the minimum separation of two-feet is provided between seasonal high groundwater (SHGW ) and bottom of systems. Accurate determination of SHGW in Merrimac soils (which are found on-site) is difficult, and should be conducted only by a highly experienced evaluator.

The information submitted is insufficient to meet that minimum standard (see discussion under item #5 above).

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**7) Infiltration System Function During Flooding** Of the larger infiltration systems, five (5) are within the 100-year floodplain. During prolonged flooding these units may not infiltrate due to soil saturation and/or inundation. The systems lie at roughly elevation 18.5 while peak flood elevation is 20.65. Because flooding from major events may dissipate slowly, these systems may be subject to one to two feet of inundation for lengthy periods, and thus become dysfunctional until soil saturation reverts to normal conditions and high groundwater levels drop to SHGW elevations.

In response to my initial memo, the applicant simply states that “downspouts” will have a “reverse Wye.” There is no further explanation given, and the statement does not address my concerns.

Applicant should address how infiltration will occur in these floodplain systems during and after large storm events. Inundation of the systems during flooding should be assumed to prevent systems from functioning.

Applicant should address all specific issues.

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**8) Degraded Areas Analysis** The October 18 2017 MWE “Proposed Riverfront Sketch Plan” which denoted degraded areas on site has been revised (and adjusted to show the corrected Riverfront Area). The revised plan is dated Jan 16 2018.

The revised plan responds to my earlier comment that the plan should be easily

assessed. Areas as depicted (degraded, non-degraded, non-riverfront) appear to reflect conditions accurately. Quantities as noted on said MWE plan appear accurate.

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9) **Loss of Specimen Trees on Site** In my initial memo I noted that at least 17 specimen Northern red oaks (36-50" DBH) lie to the southeast of the existing residence (and 80-90 feet southwest and upgradient of the Charles River). All are within the Riverfront Area and in excellent condition. With the exception of two trees, all lie outside the floodplain.

I recommended in my memo that the applicant implement specific design strategies to save as many of these trees as feasible. I suggested grading changes, use of inexpensive tree wells and conventional terracing.

None of my suggestions were implemented in the revisions. In lieu of preserving these trees, the applicant proposes new planting along the river.

Although the site is not in an NHESP Estimated Habitat zone, the applicant's wetland expert should assess the habitat value of the existing trees, both as individual trees and cumulatively as a community. Habitat should be defined as found in M.G.L. c. 131, § 40, para. 14, and 310 CMR 10.58(3). *10.58 notes that proposed work cannot not impair the capacity of the riverfront area to provide important wildlife habitat functions.* Said presumption is rebuttable, but applicant has remained silent regarding impacts to habitat, other than noting that the site is not in an NHESP Estimated Habitat area. 10.58 holds Riverfront Area development to a higher standard.

Applicant should address this issue, assessing the values and functions of the red oaks, and compare those to the replacement planting proposed. The assessment of impacts to the overall Riverfront Area should follow the criteria found in 310 CMR 10.60.

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10) **Flow Restriction & Scouring** The information provided to date for flood zone performance standards appears insufficient. Applicant proposes that the basement walls of four of the houses be built with fifteen (15) foot wide openings to allow flood water storage and passage. These basement structures may restrict flows. Applicant has not provided technical information to the Commission to ensure structure will not create restrictions.

Further, although proposed structures are unlikely to cause an increase in flood stage, applicant has provided no technical data or analysis in this regard.

In addition, applicant should examine the potential impacts from scouring on house/ basement structures during major storm events, particularly during the 50 and 100-year storms. The velocity (feet per second) for the river should be provided for these events. Basement walls that lie within the floodplain may function as a restriction. Under high velocities, scouring in and around the basement walls is likely. I find no discussion in the materials regarding how soils beside exposed basement areas will be protected from scouring that may occur during major storm events. Also, see #11 below for a discussion of similar and related issues.

11) **Floodplain & Basement Issues** Plans have been revised as requested in my initial memo to indicate basement floor elevations for all lots within the floodplain. Revisions appear adequate.

Regardless, I noted in my initial memo that,

Applicant proposes that the basement walls of four of the houses be built with fifteen (15) foot wide openings to allow flood water storage and passage. 310 CMR 10.57 requires that, "Work within Bordering Land Subject to Flooding, including that work required to provide the above- specified compensatory storage, **shall not restrict flows so as to cause an increase in flood stage or velocity.**" [Emphasis added.]

These basement structures may restrict flows. Applicant should provide sufficient information to the Commission to ensure that the structures will not cause an increase in flood stage. In addition, applicant should examine the potential effects of scouring on house/basement structures during major storm events, particularly during the 50 and 100-year storms. Please provide the velocity (cubic feet per second) for the river during these events. Basement walls that lie within the floodplain may function as a restriction. Under high velocities, scouring in and around the basement walls is likely. I find no discussion in the materials regarding how soils beside exposed basement areas will be protected from scouring that may occur during major storm events.

Applicant attached a separate sheet (unsigned and undated) as a response. Whoever wrote that response provided no technical information regarding velocities or scouring potential, instead arguing that the issues were insubstantial.

FEMA has issued a bulletin addressing these same issues (see Crawlspace Construction, FEMATB-11). On pages 5 and 6 under a section entitled, Flood Forces on Buildings, FEMA states that "Crawlspace construction is not recommended in A zones with high-velocity floodwaters (greater than 5 feet per second (fps))."

In addition, R408.7(2) of the Massachusetts Residential Code, 9<sup>th</sup> Ed., (see below) requires that flood openings be designed in accordance with Section R322.2.2.

**R408.7 Flood resistance.** For buildings located in flood hazard areas as established in Table R301.2(1):

1. Walls enclosing the under-floor space shall be provided with flood openings in accordance with Section R322.2.2.
2. The finished ground level of the under-floor space shall be equal to or higher than the outside finished ground level on at least one side.

Applicant should provide flood data to confirm velocity in this location is under 5 fps. Applicant should, in addition, confirm that the flood openings conform to Section R322.2.2 of the Massachusetts Residential Code.

Last, the site is subject to the Newton Floodplain Ordinance. The ordinance states, in part, on page 2,

C) The construction, reconstruction or enlargement of any building or structure in the Floodplain/Watershed Protection District shall also be subject to the following provisions:

- (1) **All construction of residential structures shall have the lowest floor (including the basement) at or above the pertinent flood elevation** established within

subsection (g) hereof, and all construction of non-residential structures shall have either the lowest floor (including the basement) at or above the pertinent flood elevation of said subsection (g), or along the attendant utility and sanitary facilities shall be flood-proofed, i.e. designed so that below the established flood elevation the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

- (2) Where watertight flood-proofing of a structure is permitted, a registered professional engineer or architect shall certify that the methods used are adequate to withstand the flood depths, pressures and velocities, impact and uplift forces and other factors associated with the pertinent flood levels.
- (2) Where watertight flood-proofing of a structure is permitted, a registered professional engineer or architect shall certify that the methods used are adequate to withstand the flood depths, pressures and velocities, impact and uplift forces and other factors associated with the pertinent flood levels.

The applicant needs to address the Ordinance requirements of C)(1), as the basements of houses on Lots 3, 4, 5 and 6 are below the Base Flood Elevation. Although the house on Lot 6 is outside the floodplain, its basement is below the Base Flood Elevation (BFE) of 20.65; the Ordinance therefore requires it be flood-proofed.

In addition to conforming to C)(1) and C)(2), the applicant should provide specific FEMA-based velocity data identifying rates of flow during flood events to ensure rates of flow are below 5 fps.

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12) **Alternatives Analysis (AA) Issues** The AA, required under 310 CMR 10.58 has been expanded significantly since the earlier version. Regardless, it does not address the requirements of 310 CMR 10.58.2, which state in part,

b. The area under consideration for practicable alternatives is limited to the lot, the subdivided lots and any adjacent lots formerly or presently owned by the same owner for:

iii. Any activity other than the construction or expansion of a single family house where the applicant owned the lot before August 7, 1996, including the creation of a real estate subdivision but excluding public projects, and the applicant will implement the project purpose... [emphasis added]

The applicant has not addressed this section, which requires analysis of whether potential properties beyond the limits of the subject lot exist on which to create a similar subdivision.

The AA is unsigned and undated and should be revised to provide that information.

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13) **NOI Narrative** The NOI narrative includes two tables, both of which appear to contradict plan data. Table One (page 3) shows existing land use by square footage. Table Two (page 11) shows proposed riparian land uses in square feet. Plans and tables should be correlated to reflect the same quantities.

The NOI narrative is unsigned and undated and should be revised to provide that information.

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14) **Stormwater Analysis** The Stormwater Report, revised through Nov 8 2017, is prepared accurately. Rainfall events correspond with City of Newton requirements. Soil



test pits reflect NRCS data and the design uses the correct hydrologic soil groups (HSG); existing and proposed conditions used as input data appear to be accurate; watershed areas are appropriate; TSS calculations comply with MassDEP requirements; recharge calculations are reasonable based on existing soils; drawdown calculations are appropriate; and pre- and post-development HydroCAD calculations follow standard methodology.

Please note that my comments in this regard are subject to the applicant's response to item #7 above. Stormwater calculations analyzing post-development modulation are predicated on an underlying assumption that the infiltration systems will function at all times as designed. Whether that assumption is accurate during periods of intense flooding appears unlikely--and remains an issue, subject to submission of adequate technical data from the applicant.

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15) **Snow Storage** Plans should indicate areas set aside for snow storage. I find no storage areas on the plans submitted.

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16) **Seed Type for Site Stabilization** Plans do not appear to specify seed mix to be used to minimize erosion. Seed mix in restoration areas along the river should be different than that specified for lawns. Plans should indicate type and quantities.

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17) **Pathway Easement** Sheet 1 of 9 shows a pathway easement along the river. The path itself appears to be mislabeled as a "15' Wide Pathway" -- instead it scales 7 to 8 feet. The easement width and the path width should be clearly identified.

In addition, the path should be integrated with the Proposed Planting Plan (and shown on the Proposed Planting Plan).

Portions of the path may not be buildable as shown--for instance, a retaining wall on Lot 1 ends in the middle of the proposed path. Grading is extremely steep through the same area behind Lot 1. The path may have to be shifted upgradient behind Lot 1.

Applicant should provide a realistic, buildable plan for the path that integrates with both site topography and proposed planting as proposed on Lots 3, 4, 5 and 6.

Please contact me with any questions or comments.

Very truly yours,



Wetland Scientist, PLS

## City of Newton Wetlands Protection Ordinance 4.0

### WETLANDS PROTECTION ORDINANCE

#### I. Purpose

The purpose of this ordinance is to protect the wetlands, water resources, flood prone areas, and adjoining upland areas in the City of Newton by controlling activities deemed by the Conservation Commission likely to have a significant or cumulative effect on resource area values deemed important to the community (collectively, the “resource area values protected by this ordinance”), including but not limited to the following:

- (a) flood control
- (b) storm damage prevention
- (c) ground water supply
- (d) pollution control
- (e) wildlife habitat

This ordinance expands the jurisdiction of the Conservation Commission to protect two specific types of wetlands resource areas: Isolated Flood Prone Areas (IFPA) and Vernal Pools. In addition, this ordinance protects any Critical Terrestrial Habitat associated with a Vernal Pool.

#### II. Authority

This ordinance is intended to utilize the Home Rule authority of this municipality so as to protect the resource areas under the Wetlands Protection Act (G.L. Ch.131 §40; the Act) to a greater degree, to protect additional resource areas beyond the Act recognized by the City as significant, to protect all resource areas for their additional values beyond those recognized in the Act, and to impose in local regulations and permits additional standards and procedures stricter than those of the Act and regulations thereunder (310 CMR 10.00), subject, however, to the rights and benefits accorded to agricultural uses and structures of all kinds under the laws of the Commonwealth and other relevant ordinances of the City of Newton.

#### III. Jurisdiction

Except as permitted by the Conservation Commission no person shall commence to remove, fill, dredge, build upon, degrade, discharge into, or otherwise alter the following resource areas:

- (a) Any Isolated Flood-Prone Area (IFPA)
- (b) Any Vernal Pool (VP)
- (c) Any Critical Terrestrial Habitat (CTH) associated with any Vernal Pool

Said resource areas (collectively the “resource areas protected by this ordinance”) shall be protected whether or not these resource areas border a reservoir, lake, pond, river, stream or creek or other surface waters. Subject to the ordinance resource area definitions, Section X, below, certain resource areas may occur within or overlap another resource area under the ordinance and these regulations. The IFPA and Vernal Pool resource areas both include buffer zones whereas the Critical Terrestrial Habitat resource area does not.

#### IV. Exemptions and Exceptions

The applications and permits required by this ordinance shall not be required for work performed for normal maintenance of existing structures or landscape features, or for improvement of land in agricultural and use as defined by the Wetlands Protection Act regulations at 310 CMR 10.04.

The applications and permits required by this ordinance shall not be required for maintaining, repairing, or replacing, but not substantially changing or enlarging, an existing and lawfully located structure or facility used in the service of the public to provide electric, gas, water, telephone, telegraph, or other telecommunication services, provided that written notice has been given to the

Conservation Commission prior to commencement of work, and provided that the work conforms to any performance standards and design specifications in regulations adopted by the Commission.

The applications and permits required by this ordinance shall not be required for emergency projects necessary for the protection of the health and safety of the public, provided that the work is to be performed by or has been ordered to be performed by an agency of the Commonwealth or a political subdivision thereof; provided that advance notice, oral or written, has been given to the Commission prior to commencement of work or within 24 hours after commencement; provided that the Commission or its agent certifies the work as an emergency project; provided that the work is performed only for the time and place certified by the Commission for the limited purposes necessary to abate the emergency; and provided that within 21 days of commencement of an emergency project a permit application shall be filed with the Commission for review as provided by this ordinance. Upon failure to meet these and other requirements of the Commission, the Commission may, after notice and a public hearing, revoke or modify an emergency project approval and order restoration and mitigation measures.

Other than stated in this ordinance, the exceptions provided in the Wetlands Protection Act (G.L. Ch. 131 §40) and regulations (310 CMR 10.00) shall not apply under this ordinance.

#### **V. Applications and Fees**

Written application shall be filed with the Conservation Commission to perform activities affecting resource areas protected by this ordinance. The permit application shall include such information and plans as are deemed necessary by the Commission to describe proposed activities and their effects on the resource areas protected by this ordinance. No activities shall commence without receiving and complying with a permit issued pursuant to this ordinance.

The Commission in an appropriate case may accept as the application and plans under this ordinance any application and plans filed under the Wetlands Protection Act (G.L. Ch. 131 §40) and regulations (310 CMR 10.00), but the Commission is not obliged to do so.

Any person desiring to know whether or not a proposed activity or an area is subject to this ordinance may in writing request a determination from the Commission. Such a Request for Determination of Applicability (RDA) or Abbreviated Notice of Resource Area Delineation (ANRAD) filed under the Act shall include information and plans as are deemed necessary by the Commission.

The Commission will maintain an inventory of all resource areas as identified in this ordinance and will ensure that this information, along with state certified vernal pools, is updated in the City Geographical Information System (GIS) database on a regular basis.

At the time of an application, the applicant shall pay a filing fee specified in regulations of the Commission. The fee is in addition to that required by the Wetlands Protection Act and regulations. Pursuant to G.L. Ch. 44 §53G and regulations promulgated by the Commission, the Commission may impose reasonable fees upon applicants for the purpose of securing outside consultants including engineers, wetlands scientists, wildlife biologists or other experts in order to aid in the review of proposed projects. Such funds shall be deposited with the City Treasurer, who shall create an account specifically for this purpose. Additional consultant fees may be requested where the requisite review is more expensive than originally calculated or where new information requires additional consultant services.

Only costs relating to consultant work done in connection with a project for which a consultant fee has been collected shall be paid from this account, and expenditures may be made at the sole discretion of the Commission. Any consultant hired under this provision shall be selected by, and report exclusively to, the Commission. The Commission shall provide applicants with written notice of the selection of a consultant, identifying the consultant, the amount of the fee to be charged to the applicant, and a request for payment of that fee. Notice shall be deemed to have been

given on the date it is mailed or delivered. The applicant may withdraw the application or request within five (5) business days of the date notice is given without incurring any costs or expenses.

The entire fee must be received before the initiation of consulting services. Failure by the applicant to pay the requested consultant fee within ten (10) business days of the request for payment shall be cause for the Commission to declare the application administratively incomplete and deny the permit without prejudice, except in the case of an appeal. The Commission shall inform the applicant and Department of Environmental Protection (DEP) of such a decision in writing.

The applicant may appeal the selection of an outside consultant to the City Council, who may disqualify the consultant only on the grounds that the consultant has a conflict of interest or is not properly qualified. The minimum qualifications shall consist of either an educational degree or three or more years of practice in the field at issue, or a related field. The applicant shall make such an appeal in writing, and must be received within ten (10) business days of the date that request for consultant fees was made by the Commission. Such appeal shall extend the applicable time limits for action upon the application.

## **VI. Notice and Hearings**

### **Notice and hearing procedures are the same as those prescribed under the State Wetlands Protection Act.**

Any person filing a permit or other application or Request for Determination of Applicability (RDA), Abbreviated Notice of Resource Area Determination (ANRAD), or Notice of Intent, (NOI) or other request with the Conservation Commission at the same time shall give written notice thereof, by certified mail (return receipt requested) or hand delivered, to all abutters at their mailing addresses shown on the most recent applicable tax list of the assessors, including owners of land directly opposite on any public or private street or way, and abutters to the abutters within 300 feet of the property line of the applicant, including any in another municipality or across a body of water. The notice shall state a brief description of the project or other proposal and the date of any Commission hearing or meeting date if known. The notice to abutters also shall include a copy of the application or request, with plans, or shall state where copies may be examined and obtained by abutters. An affidavit of the person providing such notice, with a copy of the notice mailed or delivered, shall be filed with the Commission. When a person requesting a determination is other than the owner, the request, the notice of the hearing and the determination itself shall be sent by the Commission to the owner as well as to the person making the request.

The Commission shall conduct a public hearing on any permit application, RDA, ANRAD, or NOI with written notice given at the expense of the applicant, at least five business days prior to the hearing, in a newspaper of general circulation in the municipality. The Commission shall commence the public hearing within 21 days from receipt of a completed permit application, RDA, or ANRAD unless an extension is authorized in writing by the applicant. The Commission shall have authority to continue the hearing to a specific date announced at the hearing, for reasons stated at the hearing, which may include the need for additional information from the applicant or others as deemed necessary by the Commission in its discretion, based on comments and recommendations of the boards and officials listed in §VI.

The Commission shall issue its permit, other order or determination in writing within 21 days of the close of the public hearing thereon unless an extension is authorized in writing by the applicant. The Commission in an appropriate case may combine its hearing under this ordinance with the hearing conducted under the Wetlands Protection Act (G.L. Ch.131 §40) and regulations (310 CMR 10.00).

## **VII. Coordination with Other Boards**

Any person filing a permit application, RDA, ANRAD, or NOI with the Conservation Commission shall provide a copy thereof at the same time, by certified mail (return receipt requested) or hand

delivery. A copy shall be provided in the same manner to the Commission of the adjoining municipality, if the application or RDA pertains to property within that municipality. An affidavit of the person providing notice, with a copy of the notice mailed or delivered, shall be filed with the Commission.

### **VIII. Permits and Conditions**

If the Conservation Commission, after a public hearing, determines that the activities which are subject to the permit application, or the land and water uses which will result therefrom, are likely to have a significant individual or cumulative effect on the resource area values protected by this ordinance, the Commission, within 21 days of the close of the hearing, shall issue or deny a permit for the activities requested. The Commission shall take into account the extent to which the applicant has avoided, minimized and mitigated any such effect.

If it issues a permit, the Commission shall impose conditions which the Commission deems necessary or desirable to protect said resource area values, and all activities shall be conducted in accordance with those conditions. Where no conditions are adequate to protect said resource area values, the Commission is empowered to deny a permit for failure to meet the requirements of this ordinance. It may also deny a permit: for failure to submit necessary information and plans requested by the Commission; for failure to comply with the procedures, design specifications, performance standards, and other requirements in regulations of the Commission; or for failure to avoid, minimize or mitigate unacceptable significant or cumulative effects upon the resource area values protected by this ordinance. Due consideration shall be given to any demonstrated hardship on the applicant by reason of denial, as presented at the public hearing. The Commission may waive specifically identified procedures, design specifications, performance standards, or other requirements set forth in its regulations, provided that: the Commission finds in writing after said public hearing that there are no reasonable conditions or alternatives that would allow the proposed activity to proceed in compliance with said regulations; that avoidance, minimization and mitigation have been employed to the maximum extent feasible; and that the waiver is necessary to accommodate an overriding public interest or to avoid a decision that so restricts the use of the property as to constitute an unconstitutional taking without compensation.

In reviewing activities within the buffer zone associated with either IFPA or VP resource areas, the Commission shall presume the buffer zone is important to the protection of the associated resource area because activities undertaken in close proximity have a high likelihood of adverse impact, either immediately, as a consequence of construction, or over time, as a consequence of daily operation or existence of the activities. These adverse impacts can include, without limitation, erosion, siltation, loss of groundwater recharge, poor water quality, and loss of wildlife habitat. The Commission may establish, in its regulations, design specifications, performance standards, and other measures and safeguards, including setbacks, no-disturb areas, no-build areas, and other work limits for protection of lands within the new resource areas and associated buffer zones, including without limitation strips of continuous, undisturbed vegetative cover, unless the applicant convinces the Commission that the area or part of it may be disturbed without harm to the values protected by the ordinance.

To prevent resource area loss, the Commission shall require applicants to avoid alteration wherever feasible; to minimize alteration; and, where alteration is unavoidable and has been minimized, to provide full mitigation. The Commission may authorize or require replication of wetlands as a form of mitigation, but only with specific plans, professional design, proper safeguards, adequate security, and professional monitoring and reporting to assure success, because of the high likelihood of failure of replication.

The Commission may require a wildlife habitat study of the project area, to be paid for by the applicant, whenever it deems appropriate, regardless the type of resource area or the amount or type of alteration proposed. The decision shall be based upon the Commission's estimation of the importance of the habitat area considering (but not limited to) such factors as proximity to other areas suitable for wildlife, importance of wildlife "corridors" in the area, or actual or possible

presence of rare plant or animal species in the area. The wildlife habitat study of Critical Terrestrial Habitat resource areas shall also determine which specific vernal-pool dependent species are, or could reasonably be, present, and identify habitat attributes that are likely critical to their long-term sustainability. The work shall be performed by an individual who at least meets the qualifications set out in the wildlife habitat section of the Wetlands Protection Act regulations (310 CMR 10.60).

A permit, Determination of Applicability (DOA), or Order of Resource Area Delineation (ORAD) shall expire three years from the date of issuance. Notwithstanding the above, the Commission in its discretion may issue a permit expiring five years from the date of issuance for recurring or continuous maintenance work, provided that annual notification of time and location of work is given to the Commission. Any permit may be renewed once for an additional one-year period, provided that a request for a renewal is received in writing by the Commission prior to expiration. Notwithstanding the above, a permit may identify requirements which shall be enforceable for a stated number of years, indefinitely, or until permanent protection is in place, and shall apply to all present and future owners of the land.

For good cause the Commission may revoke any permit, DOA, or ORAD or any other order, determination or other decision issued under this ordinance after notice to the holder, the public, abutters, and City boards, pursuant to §V and §VI, and after a public hearing.

Amendments to permits, DOAs, or ORADs shall be handled in the manner set out in the Wetlands Protection Act regulations and policies thereunder.

The Commission in an appropriate case may combine the decision issued under this ordinance with the permit, DOA, ORAD, or Certificate of Compliance (COC) issued under the Wetlands Protection Act and regulations.

No work proposed in any application shall be undertaken until the permit, or ORAD issued by the Commission with respect to such work has been recorded in the registry of deeds or, if the land affected is registered land, in the registry section of the land court for the district wherein the land lies, and until the holder of the permit certifies in writing to the Commission that the document has been recorded. If the applicant fails to perform such recording, the Commission may record the documents itself and require the Applicant to furnish the recording fee therefore, either at the time of recording or as a condition precedent to the issuance of a COC.

#### **IX. Regulations**

After public notice and public hearing, the Conservation Commission shall promulgate rules and regulations to effectuate the purposes of this ordinance, effective when voted and filed with the City clerk. Failure by the Commission to promulgate such rules and regulations or a legal declaration of their invalidity by a court of law shall not act to suspend or invalidate the effect of this ordinance. At a minimum these regulations shall reiterate the terms defined in this ordinance, define additional terms not inconsistent with the ordinance, and impose filing and consultant fees.

#### **X. Definitions, Critical Characteristics and Boundaries**

Except as otherwise provided in this ordinance or in associated regulations of the Conservation Commission, the definitions of terms and the procedures in this ordinance shall be as set forth in the Wetlands Protection Act (G.L. Ch. 131 §40) and regulations (310 CMR 10.00). Please note, however, that the terms herein defined may be defined differently for the purpose of local, state or federal protection.

The following definitions shall apply in the interpretation and implementation of this ordinance:

##### **(a) Alter**

The term "alter" shall include, without limitation, the following activities when undertaken to, upon, within or affecting resource areas protected by this ordinance:

- (1) Removal, excavation, or dredging of soil, sand, gravel, or aggregate materials of any kind
- (2) Changing of preexisting drainage characteristics, flushing characteristics, salinity distribution, sedimentation patterns, flow patterns, or flood retention characteristics
- (3) Drainage, or other disturbance of water level or water table
- (4) Dumping, discharging, or filling with any material which may degrade water quality
- (5) Placing of fill, or removal of material, which would alter elevation
- (6) Driving of piles, erection, expansion or repair of buildings, or structures of any kind
- (7) Placing of obstructions or objects in water
- (8) Destruction of plant life including cutting or trimming of trees and shrubs
- (9) Changing temperature, biochemical oxygen demand, or other physical, biological, or chemical characteristics of any waters
- (10) Any activities, changes, or work which may cause or tend to contribute to pollution of any body of water or groundwater
- (11) Any activities, changes or work that present an encumbrance to the seasonal dispersal activities of Vernal Pool wildlife species
- (12) Incremental activities which have, or may have, a cumulative adverse impact on the resource areas protected by this ordinance.

**(b) Buffer Zone**

Unless otherwise specified herein, any land whichever is the greatest of the following:

- (1) 100' (one hundred feet) horizontally from the water elevation of Isolated Flood Prone Area
- (2) 100' (one hundred feet) horizontally from the edge of a Vernal Pool

The relationship between resource area and buffer zone is analogous to the relationship between the inner riparian and outer riparian zones as described in the Rivers Protection Act (MGL c. 258) in that stricter requirements may be applied to resource areas than to their associated buffer zones.

**(c) Critical Terrestrial Habitat**

The term "Critical Terrestrial Habitat" (CTH) refers to the upland area that extends 650' (six hundred and fifty feet) laterally from the vernal pool boundary as defined in X(d)(1). The CTH resource area includes the 100' (one hundred foot) buffer zone envelope of the Vernal Pool.

The 650' upland area surrounding the vernal pool is essential habitat to the functioning of the vernal pool. While some species such as the fairy shrimp spend their entire life cycle in the vernal pool, the surrounding uplands, with its areas of coarse woody debris and shade, is where most of the obligate breeding vernal pool species will overwinter and live out most of their adult life cycles. Most of the amphibians breeding in the vernal pool remain near it during their non-breeding cycles, and many return to the same pool where they were born in order to breed. Preservation of both the VP and CTH resource areas is essential to the sustainability of the vernal pool ecosystem. The CTH resource area also supports mammals, reptiles and birds, which may use the area for food, shelter and breeding and the CTH acts to protect water quality in the Vernal Pool. Thus, the critical upland area surrounding vernal pools is particularly susceptible to destruction and fragmentation from proposed development.

A Vernal Pool and Critical Terrestrial Habitat resource area needs not lie within other resource areas subject to Mass. General Laws Chapter 131 Sec.40 (The Wetlands Protection Act) and its regulations (310 CMR 10.00), the Massachusetts Rivers Protection Act, nor within other resource areas subject to this ordinance, to be protectable hereby.

**(d) Isolated Flood Prone Area**

The term "Isolated Flood Prone Area" (IFPA), including inundation by ground or surface water, is an isolated depression or closed basin without an inlet or outlet that at least once a year confines

standing water to an average depth of 6" and an area of at least 1/8 acre-foot (5,445 square feet x 1 foot).

Such areas can be locally significant to flood control and storm damage prevention. These areas allow recharge to groundwater, storm water filtering and provide watering holes for wildlife. The buffer zones surrounding these depressions can provide shade to reduce runoff temperatures, may contain important habitat zones, and may reduce erosion and sedimentation.

(1) Boundary

The boundary of a IFPA is the perimeter of the largest observed or recorded volume of water confined in said area. In the absence of such observations the boundary shall be established as the maximum lateral extent of water retained during the statistical 100-year frequency storm.

This ordinance does not include swimming pools, artificially lined ponds or pools, or constructed wastewater lagoons.

**(e) Isolated Flood Prone Area Resource Area**

The Isolated Flood Prone Area Resource Area includes the IFPA and associated buffer zone.

**(f) Vernal Pool**

Although Vernal Pools are defined by the Act, only those Vernal Pools located within an Area Subject to Protection Under the Act are considered to be under the Act or MassDEP Wetlands Protection Regulations. This ordinance provides an analogous statutory interest to provide protection to Vernal Pools as to other resource areas independent of the location of the Vernal Pool.

The term "vernal pool" is any confined basin or depression that, at least in most years, holds water from snowmelt, spring precipitation and spring high groundwater level for a minimum of two continuous months during the spring and/or summer, is free of adult fish populations, and provides essential breeding and rearing habitat functions for amphibian, reptile or other vernal pool community species, such as wood frogs (*Rana sylvatica*), spotted salamanders (*Ambystoma maculata*), blue-spotted salamanders (*A. laterale*), or fairy shrimp. In general, "most years" shall mean three out of five consecutive years of normal rainfall (at least 75% of the average over 20 years for that period in Newton.) This definition applies whether or not the site has been designated by the Massachusetts Division of Wildlife and Fisheries as a certified vernal pool. However, depressions existing before the adoption of this ordinance occurring in existing lawns, gardens or other landscaped areas, or driveways, are not considered vernal pool habitat and are not covered by this ordinance.

Vernal pools constitute a unique and increasingly rare type of wildlife habitat, essential to a specialized group of amphibians which have evolved to breed and survive in these ephemeral wetlands in the absence of predatory fish. The shallow edges of vernal pools represent one of the most ecologically valuable portions of these habitats, thawing earlier in the spring and providing warmer water temperatures for egg development.

Vernal pools may be associated with a wide variety of wetland types and in association with rivers, streams, creeks, and ponds. They may also be isolated or parts of intermittent streams. Vernal pools can be of any size, some being as small as a few square feet. They may also have inlets and outlets.

(1) Boundary

The boundary of a vernal pool extends to the shallowest reaches of the pool, which if evident can be delineated by leaf staining and other indicators of hydrology outside of peak flow stage. Where there is no distinct and clear topographic break at the edge of a vernal pool, the maximum observed or recorded level at peak-flow in early spring generally shall represent its boundary. *An isolated Vernal Pool found within an SFPA boundary coincides with the SFPA boundary.*



**(g) Vernal Pool Resource Area**

The Vernal Pool Resource Area includes the Vernal Pool and its buffer zone.

**XI. Presumption and rebuttal of resource area**

**a) Vernal Pool Assessment Protocol**

The ordinance presumes vernal pool habitat exists if a wetland's physical characteristics conform to those defined for vernal pools in Section X of the ordinance.

This presumption is rebuttable through any of the following means:

- 1) Proof that the ponded area either supports a year-round population of fish or that the fish breed within the confines of the ponded area.
  
- 2) Demonstration that surface water was present for fewer than 60 consecutive days during the growing season (March 15 through October 15) in most years. As a rule of thumb, the term "most years" shall mean three out of five consecutive years, provided that rainfall during the period of observation was at least 75% of the average over 20 for that period in Newton.
  
- 3) Demonstration, through repeated observation by competent field observers made during the spring months, that vernal pool species do not breed or have not bred in the ponding area for two of three consecutive years of normal rainfall (at least 75% of the average over 20 years for that period in Newton.) For such evidence to be considered sufficient and accurate, a vernal pool observation plan must be approved by the Newton Conservation Commission prior to February 15 of the spring in which the study will be conducted, and staff or agents of the Commission must be granted access to the site as necessary.
  
- 4) Evidence that the ponding area could not be a viable breeding site for vernal pool species due to incompatible physical, chemical, biological, or other persistent conditions at the site in most years. Such evidence could include, without limitation, several months of pH and dissolved oxygen measurements yielding values incompatible with amphibian or reptile breeding.

Timing of Evidence Collection: With regard to XI(a)(3), many of the indicators of vernal pool habitat are seasonal. For example, certain salamander egg clusters are only found between late March and late May. Wood frog chorusing only occurs between late March and May, and then primarily at night. Consequently, failure to find evidence of breeding must be tied explicitly to those periods during which the evidence is most likely to be available. Evidence gathered at inappropriate times shall be considered faulty and invalid and can be grounds for a denial of permit.

A finding that a site is not a vernal pool shall be presumptive under this section for three years but does not indicate that the site is not otherwise a resource area.

**b) Critical Terrestrial Habitat**

CTH is essential for the sustainability of the vernal pool community and its presence can only be rebutted in conjunction with the associated vernal pool habitat. However, only a portion of this resource area may provide essential habitat for vernal pool wildlife. Non-forested areas such as open fields and previously developed areas are not considered significant to the interests identified in this ordinance. In addition, the Commission will consider information (from wildlife habitat assessment and other credible sources) concerning the relative value of forested portions of CTH in providing burrowing and foraging habitat for the adult stages of vernal pool species. In addition, the Commission will consider the potential presence of migratory corridors that provide connectivity between vernal pools and between aquatic and terrestrial habitats for wide-ranging

species in determining the relative significance of different portions of this resource area. Shadier forested areas within the CTH that contain relative damp soils and coarse woody debris, are where many of the vernal pool species are most likely to overwinter and live out most of their adult life cycles.

## **XII. Presumption of Isolated Flood Prone Area**

a) Where Isolated Flood Prone Area, as defined in Section X of the Ordinance, is underlain by pervious material it is presumed to be significant to public or private water supply and to ground water supply. Where such areas are underlain by pervious material covered by a mat of organic peat and muck, they are also presumed to be significant to the prevention of pollution. Small Flood Prone Area is presumed to be significant to the protection of wildlife habitat where many reptiles, birds and mammals may feed, and, where it is also vernal pool habitat, is an essential breeding ground for certain amphibians and invertebrate species.

b) In the event of a conflict of opinion regarding the extent of water confined in an IFPA, an applicant may submit an opinion certified by a registered professional engineer, supported by engineering calculations as to the probable extent of said water. Said calculation shall be prepared upon the total volume (rather than the peak rate) of run-off from the drainage area contribution to the IFPA and shall be further based upon the assumption that there is no infiltration of said run-off into the soil within the IFPA.

## **XIII. Performance Standards**

The following performance standards will apply to all projects that are proposed in resource areas defined in this ordinance.

### **(a) IFPA Resource Area**

A proposed project in a IFPA or associated buffer zone shall not result in the following:

- (1) Flood damage due to filling, which causes lateral displacement of water that would otherwise be confined within said area.
- (2) An adverse effect on public and private water supply or ground water supply, where said area is underlain by pervious material.
- (3) An adverse effect on the capacity of said area to prevent ground water pollution, where the area is underlain by pervious material which in turn is covered by a mat of organic peat and muck.
- (4) The development of driveways, roadways and sidewalks shall not be allowed.

### **(b) Vernal Pool Resource Area**

A proposed project in a Vernal Pool or associated buffer zone shall not result in the following:

- (1) Flood damage due to filling, which causes lateral displacement of water that would otherwise be confined within said area.
- (2) An adverse effect on public and private water supply or ground water supply, where said area is underlain by pervious material.
- (3) An adverse effect on the capacity of said area to prevent ground water pollution, where the area is underlain by pervious material which in turn is covered by a mat of organic peat and muck.
- (4) There shall be no impairment of its capacity to provide wildlife habitat.

### **(c) Critical Terrestrial Habitat**

Vernal pool species need natural corridors through which they travel depending on their life-cycle stage. For example, wood frogs lay their eggs in vernal pools, spend the summer in the moist leaf litter around the pool, then travel upland to hibernate in the forest. These pathways, which connect habitats critical to the different life stages of vernal pool species, are called directional corridors. In addition, directional corridors may be linked to other wild-life habitat, forming a network of connected habitat elements. Therefore, proposed development and disturbance in the VP Buffer Zone and the Critical Upland Habitat must be carefully studied to ensure that the capacity of these resource areas to provide important adult habitat and the directional corridors that connect early life

stage and adult habitat is not impaired. However, proposed projects that result in disturbance within other areas of the CTH, which have been determined to not be critical to the sustainability of vernal pool species, may be permitted. Directional corridors for VP species must be delineated on a site-specific basis by qualified professionals, just as other resource areas in the Act are delineated.

Therefore, in addition to the standards outlined in Section XIII(b), the following restrictions apply to proposed activities within the CTH:

- (1) Generally, development will be limited to 25% or less of any CTH resource area and this restriction will apply to individual parcels as well where the CTH encompasses multiple properties
- (2) Conditioned development may be allowed in areas which are determined to not provide suitable habitat or directional corridors, up to a maximum of 25% of the total CTH area
- (3) Any work allowed shall be timed to minimize disruption of the breeding season of habitat species
- (4) Suitable habitat and directional corridors for VP species will be delineated by qualified professionals
- (5) Once identified, habitat and directional corridors will be undisturbed
- (6) Cape Cod style curbing will be used at any intersection between a new roadway and the habitat or directional corridor so that man-made boundaries do not impede amphibian migration

#### **XIV. Security**

As part of a permit issued under this ordinance, in addition to any security required by any other municipal or state board, agency, or official, the Conservation Commission may require that the performance and observance of the conditions imposed thereunder (including conditions requiring mitigation work) be secured wholly or in part by one or both of the methods described below:

A. By a proper bond, deposit of money or negotiable securities under a written third-party escrow arrangement, or other undertaking of financial responsibility sufficient in the opinion of the Commission, to be released in whole or in part upon issuance of a COC for work performed pursuant to the permit.

B. By accepting a conservation restriction, easement, or other covenant enforceable in a court of law, executed and duly recorded by the owner of record, running with the land to the benefit of this municipality whereby the permit conditions shall be performed and observed before any lot may be conveyed other than by mortgage deed. This method shall be used only with the consent of the applicant.

#### **XV. Enforcement**

No person shall remove, fill, dredge, build upon, degrade, or otherwise alter resource areas protected by this ordinance, or cause, suffer, or allow such activity, or leave in place unauthorized fill, or otherwise fail to restore illegally altered land to its original condition, or fail to comply with a permit or an enforcement order issued pursuant to this ordinance.

The Conservation Commission, its agents, officers, and employees shall have authority to enter upon privately owned land for the purpose of performing their duties under this ordinance and may make or cause to be made such examinations, surveys, or sampling as the Commission deems necessary, subject to the constitutions and laws of the United States and the Commonwealth (see note 9).

The Commission shall have authority to enforce this ordinance, its regulations, and permits issued thereunder by letters, phone calls, electronic communication and other informal methods, violation notices, non-criminal citations under G.L. Ch. 40 §21D, and civil and criminal court actions. Any person who violates provisions of this ordinance may be ordered to restore the property to its

original condition and take other action deemed necessary to remedy such violations, or may be fined, or both.

Upon request of the Commission, the selectboard and City counsel shall take legal action for enforcement under civil law. Upon request of the Commission, the chief of police shall take legal action for enforcement under criminal law.

Municipal boards and officers, including any police officer or other officer having police powers, shall have authority to assist the Commission in enforcement.

Any person who violates any provision of this ordinance, or regulations, permits, or administrative orders issued thereunder, shall be punished by a fine of not more than \$300. Each day or portion thereof during which a violation continues, or unauthorized fill or other alteration remains in place, shall constitute a separate offense, and each provision of the ordinance, regulations, permits, or administrative orders violated shall constitute a separate offense.

As an alternative to criminal prosecution in a specific case, the Commission may issue citations with specific penalties pursuant to the non-criminal disposition procedure set forth in G.L. Ch. 40 §21D, which has been adopted by the City in § [ ] of the general ordinances *(see note 10)*.

**XVI. Burden of Proof**

The applicant for a permit shall have the burden of proving by a preponderance of the credible evidence that the work proposed in the permit application will not have unacceptable significant or cumulative effect upon the resource area values protected by this ordinance. Failure to provide adequate evidence to the Conservation Commission supporting this burden shall be sufficient cause for the Commission to deny a permit or grant a permit with conditions.

**XVII. Appeals**

A decision of the Conservation Commission shall be reviewable in the superior court in accordance with G.L. Ch. 249 §4.

**XVIII. Relation to the Wetlands Protection Act**

This ordinance is adopted under the Home Rule Amendment of the Massachusetts Constitution and the Home Rule statutes, independent of the Wetlands Protection Act (G.L. Ch. 131 §40) and regulations (310 CMR 10.00) thereunder. It is the intention of this ordinance that the purposes, jurisdiction, authority, exemptions, regulations, specifications, standards, and other requirements shall be interpreted and administered as stricter than those under the Wetlands Protection Act and regulations.


**XIX. Severability**


The invalidity of any section or provision of this ordinance shall not invalidate any other section or provision thereof, nor shall it invalidate any permit, approval or determination which previously has been issued.



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 SCALE IS APPROXIMATE

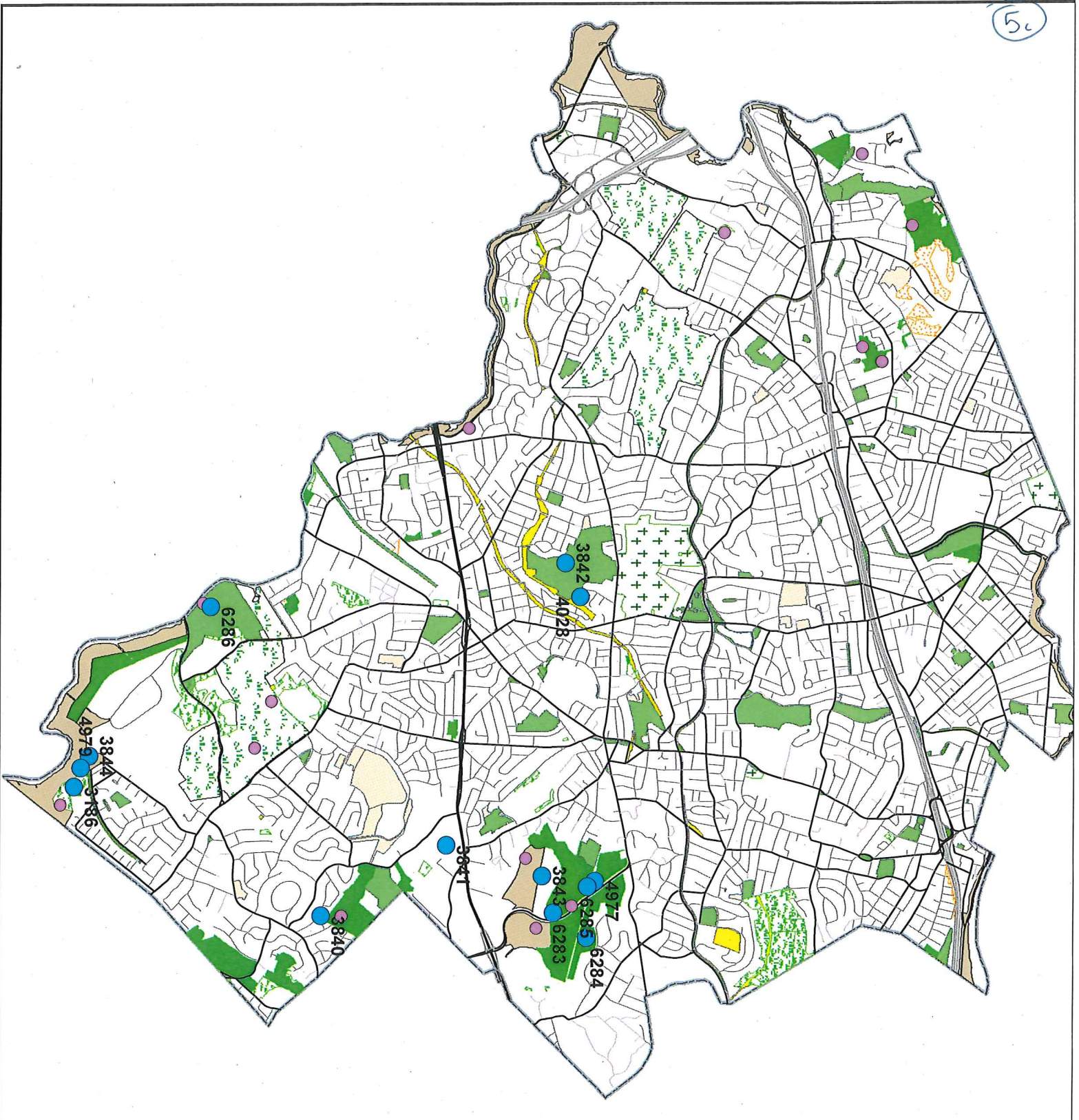
 VERNAL POOL

 100' BUFFER ZONE

 550' CRITICAL TERRESTRIAL HABITAT TO BE PROTECTED

VERNAL POOL  
 ORDINANCE  
 CONCEPT SKETCH

EJK 26 DEC 17



**Certified and Potential  
Vernal Pools**

**Newton, Mass.**

**Map Date: 01-25-2018**



**Legend**

- Certified Vernal Pools
- Potential Vernal Pools

The information on this map is from the Newton Geographic Information System (GIS). The City of Newton cannot guarantee the accuracy of this information. Each user of this map is responsible for determining its suitability for his or her intended purpose. City departments will not necessarily approve applications based solely on GIS data.



CITY OF NEWTON, MASSACHUSETTS  
 Mayor - Ruthanne Fuller  
 GIS Administrator - Douglas Greenfield

# CONSERVATION COMMISSION MINUTES

Date: January 11, 2018  
Time: 7:03 - 9:50 pm  
Place: City Hall, Room 211

**With a quorum present**, the meeting opened at 7:03 with Susan Lunin (Vice Chair) presiding  
**Members Present:** Judy Hepburn, Jeff Zabel, Norm Richardson, Ellen Katz, Kathy Cade (Associate), Dan Green (7:27)  
**Staff Present:** Jennifer Steel and Claire Rundelli  
**Members Absent:** Ira Wallach  
**Members of the Public:** See sign-in sheet

## DECISIONS

### I. WETLANDS

#### 1. RDA – 738 Watertown St. – teardown SFH/rebuild duplex

- **Request:** Demolish existing single family home and garage and construct a new duplex.
- **Owner:** Jian Wang **Applicant:** Jian Wang **Rep.:** None
- **Documents Presented:** site plan photos, draft DOA
- **Jurisdiction:** Riverfront Area
- **Presentation (Jian Wang) and Discussion:**
  - Staff have not made a site visit due to the holidays and heavy snow cover.
  - The only construction activities within RFA are:
    - removal of the 270 sf garage (exempt)
    - installation of 400 sf of pervious patios (exempt)
    - re-grading of existing lawn on one side (185' from Cheesecake Brook)
    - construction of 1.5-2 feet (133 sf) of the house (198' from Cheesecake Brook)
  - There will be a net 137 sf reduction in impervious area within RFA
  - The front half roof runoff will be infiltrated in the front yard, outside of the RFA.
  - There was much discussion of infiltrating the rear half of the roof in drywells, but the applicant noted that significant improvement was being provided by the front yard chamber and that additional chambers were not required by the wetlands regulations or the Engineering Department's policy, and would be too expensive.
- **Vote:** to issue a negative 2 DOA (work is within a jurisdictional area, but will not remove, fill, dredge, or alter). Include the following site-specific conditions. [Motion: Norm Richardson; Second: Ellen Katz; Vote: 4:1:0]
  - Due to a heavy snow cover, the Conservation Agent was unable to conduct a site visit and confirm existing conditions. The pre-construction site visit with the Conservation Agent **must** be scheduled by and attended by the applicant will be used by the Conservation Agent to confirm existing site conditions. If necessary, the Conservation Agent may add/change conditions in this determination to better protect the jurisdictional resource area.
  - The trees (roots, trunk, and branches) along the rear fence line may not be disturbed.
  - Erosion controls (entrenched silt fence) must be installed to protect the existing vegetation along the rear fence line.
  - To improve water quality in the adjacent wetlands and waterways fertilizers shall be limited to slow-release organic fertilizers.

#### 2. NOI – 14 Phillips Lane – DEP File # 239-796 -- addition to a SFH

- **Request:** Construction of an addition on the rear of the house and removal of a concrete staircase
- **Owner:** Louise Dube & Christopher Gunning **Applicant:** Timothy Burke **Rep.:** Timothy Burke
- **Documents Presented:** site plan photos, draft OOC



**Mayor**  
Ruthanne Fuller

**Director  
Planning &  
Development**  
Barney Heath

**Senior  
Environmental  
Planner**  
Jennifer Steel

**Assistant  
Environmental  
Planner**  
Claire Rundelli

**Conservation  
Commission  
Members**  
Dan Green  
Judy Hepburn  
Susan Lunin  
Norm Richardson  
Ira Wallach  
Jeff Zabel  
Ellen Katz

**Conservation  
Commission  
Alternates**  
Kathy Cade

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*The location of this meeting is wheelchair accessible and reasonable accommodations will be provided to persons with disabilities who require assistance. If you need a reasonable accommodation, please contact the city of Newton's ADA/Sec. 504 Coordinator, Jini Fairley, at least two business days in advance of the meeting: [jfairley@newtonma.gov](mailto:jfairley@newtonma.gov) or (617) 796-1253. The city's TTY/TDD direct line is: 617-796-1089. For the Telecommunications Relay Service (TRS), please dial 711.*

- Jurisdiction: Riverfront Area
- Presentation (Timothy Burke) and Discussion:
  - Staff have not made a site visit due to the holidays and heavy snow cover.
  - Applicant is proposing a 117 sf deck/stair (exempt)
  - Applicant is proposing a 66 sf addition
  - Applicant will remove 42 sf of concrete landing/stair
  - All work will be on existing lawn. No woody vegetation will be removed.
  - The applicant's representative hand-delivered all abutter notifications and signed an affidavit to that effect. Signatures were not sought or received. The Commission reviewed the language of the regulations in 310CMR 10.05 and decided to accept the applicant's affidavit and testimony of delivery as proof of notification; but noted for the record that an abutter could contest that notice was given and so put any work undertaken by the applicant at risk.
- Vote: to issue an OOC with the following site-specific condition (since the net increase of impervious area is only 24 sf.) [Motion: Dan Green; Second: Jeff Zabel; Vote: 6:0:0]
  - Due to a heavy snow cover, the Conservation Agent was unable to conduct a site visit and confirm existing conditions. The pre-construction site visit with the Conservation Agent must be scheduled by and attended by the applicant will be used by the Conservation Agent to confirm existing site conditions. If necessary, the Conservation Agent may add/change conditions in this determination to better protect the jurisdictional resource area.

**3. Ex post facto NOI -- 77 Florence Street/Hampton Place Condominiums – DEP File # 239-795 - Emergency culvert repair and dredging of detention pond**

- Request: Cleaning and repair of drain line, maintenance dredging, channel stabilization. *Applicant purports that maintenance is exempt and does not require a filing, and asks that if the Con Com agrees, they accept a request to withdraw this NOI application without prejudice.*
- Owner: Hampton Place Condominium Trust Applicant: Keri Cotter (Hampton Place Condominium Trust)  
Representative: Paul Finger ( Paul Finger Associates)
- Documents Presented: draft O&M draft O&M
- Jurisdiction: Land Under Water, Bank, Buffer Zone
- Presentation (Paul Finger) and Discussion:
  - Applicant briefly reviewed the site history.
  - Applicant noted that they had initiated communications with Newton's Mayor, Engineering Department, and Conservation Commission to address the regional issue of stormwater management and the capital and maintenance improvements needed. The stormdrain pipe is in bad shape, the whole system is undersized, and all component of the full system need routine maintenance to function properly.
  - The draft O&M was summarized. The O&M provides a complete history and detailed description of what activities require notification, what activities are allowed with notification, what activities require filing, and what activities would constitute violations.
  - The applicant suggested, and the Commission agreed, that the O&M should be signed by the property owner and recorded at the Registry of Deeds.
- Vote: to accept the O&M plan as presented with the understanding that it will be signed by the property owner [Motion: Dan Green; Second: Jeff Zabel; Vote: 6:0:0]
- Vote: to accept applicant's request to withdraw NOI #239-795 [Motion: Dan Green; Second: Jeff Zabel; Vote: 6:0:0]

**4. NOI (continued) – 56 Farwell Street – DEP File #239-793**

- Request: Construct six single-family homes & driveways. Construct private road. Increase flood storage capacity. Implement restoration planting plan along river.
- Owner: Turtle Lane, LLC Applicant: Stephen Vona (Turtle Lane, LLC) Rep.: Corey vanWyhe (MetroWest Engineering, Inc.) and Joe Porter (VTP Associates)
- Documents Presented: draft scope for peer review, Alternatives Analysis draft scope for peer review
- Jurisdiction: Riverfront Area 10.58(5) and 10.58(4), Flood Zone (10.57), Bordering Vegetated Wetlands (10.55), Stormwater Standards 10.05(6)
- Presentation (Joe Porter and Corey vanWyhe) and Discussion

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- On December 14, 2017, staff forwarded Pat's Garner's 12/12/17 preliminary memo to the applicant team.
- On Dec. 18, 2017, a site visit occurred with staff and the applicant's team.
- Revised plans will be submitted on 1/16/17 incorporating the following.
  - Pat Graner's revised wetland reflagging
  - The new test pits and results
  - New spot grades
  - The "legally" "prior disturbed" areas (as shown on the as-built submitted at the resolution of the 2010 violations) and corroborated by aerial photography.
  - A viable 7.5' pathway on revised plans.
  - Reduced "sea wall" design (at least within the flood zone – there is still a significant "wall effect" within the Riverfront Area, so wildlife may be adversely affected).
  - More details on cuts and fills in Flood Zone
- Narratives will be submitted on 1/16/17.
  - How every relevant performance standard is being met: Riverfront Area 10.58(5) and 10.58(4), Flood Zone (10.57), Bordering Vegetated Wetlands (10.55), Stormwater Standards 10.05(6)
  - Separate O&M plan identifying who will be responsible for street sweeping, snow removal, and inspection/maintenance of the infiltration systems
  - Alternatives Analysis
  - Written response to Pat Garner's memo
- Additional agreements include the following.
  - The Commission must receive MWRA's response before issuing a permit.
  - The Peer Reviewer will evaluate how well the project "promotes the preservation of wildlife habitat"
  - The applicant need not have Board of Survey approval prior to receiving Con Com approval.
  - It is the applicant's choice to submit one NOI for the whole project, despite the Commission's warning that: (1) the Commission would have to vote to amend the NOI for any site changes, (2) partial releases for individual lots may not be issued if there are outstanding problems anywhere else within the project area, and (3) plantings will have to survive, so final sign off won't occur for at least two years after installation
  - The Peer Reviewer will be asked to have comments in advance of the 2/1/18 meeting and possibly attend the 2/1/18 meeting if it seems appropriate.
- From prior discussions and notes: the Commission will consider the following.
  - Trees to be removed (size and species) vs. trees and shrubs to be planted; the proposed seed mix
  - Snow storage areas
  - Construction Management plan (phasing, site controls, stockpiling, tree protection, concrete washout, dewatering, etc.)
  - A SWPPP will be needed.
  - Street lighting will likely be required and should be shown on the plans.
  - Means of bounding and permanently protecting any restoration areas to preclude encroachment
- Public Comment
  - Mia Jepsen (43 Anthony Rd) – concerned about density, traffic, health of wetlands, floodplain.
  - Paul Malloy (1 Albemarle Rd) – concerned about flooding. Asked what if ConCom doesn't issue a COC?
  - Sylvia Klewsty – noted that flooding has occurred repeatedly and that adjacent home values will decline if views of river are lost.
  - Sonya (31 Anthony Rd) – concerned about loss of tranquility, views, wildlife, open space. Concerned about traffic and excluding the public from the area.
  - Ted Kuklinski (Newton Conservators) – asked for clarification on what the Commission was going to consider with regard to wildlife habitat. [The Peer Reviewer will evaluate how well the project "promotes the preservation of wildlife habitat"]
- Vote: to accept applicant's request to continue to 2/1/18 [Motion: Judy Hepburn; Second: Norm Richardson; Vote: 6:0:0]

## II. CONSERVATION AREAS – nothing to vote on

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### III. ADMINISTRATIVE

#### 5. Minutes of 12/21/17 to be approved.

- Documents Presented: draft minutes draft minutes
- Vote: to accept the minutes with noted typos corrected [Motion: Ellen Katz; Second: Jeff Zabel; Vote: 4:0:2]

### IV. ISSUES AROUND TOWN – nothing to vote on

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### UPDATES

#### V. WETLANDS

#### VI. CONSERVATION AREAS

- \$75,000 from Kessler Woods development for trail design and installation will be forthcoming soon. The Commission will need to discuss how best to design and execute a trail system (quite possibly with bridge(s) and or sections of boardwalk.

#### VII. ISSUES AROUND TOWN

- Needham St Area Visioning Group (23 members) – developing maps/materials for 1/22/18 meeting on Environmental Health and Open Space
- Webster Woods Executive Committee and Advisory Committee being developed by Mayor Fuller to advise in the process.

#### VIII. ADMINISTRATIVE MATTERS

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### OTHER TOPICS NOT REASONABLY ANTICIPATED BY THE CHAIR 48 HOURS BEFORE THE MEETING

- MACC's Annual Conference will be on March 3. Commissioners were encouraged to attend.
  - MACC is offering free webinar training/orientation to new commissioners.
  - The draft Vernal Pool Ordinance will be introduced by the working group at the next meeting.
  - Trails efforts continue: the Two Bridges Recreational Trail Grant has been received. Recreational Trail Grant applications will be put in for: (1) stairs from Greenway to the north and to the south (Conservation Office), (2) improvements to path from Two Bridges to commuter rail line (Ted Chapman and Herb Nolan), and (3) over all connectivity study for the Riverside/Leo J Martin Area (Ted Chapman and Herb Nolan)
  - Mayor Fuller will be promoting completion and implementation of the Climate Change Vulnerability Analysis.
  - Commission roles: With new members, a new staff person, and a new administration it seemed appropriate to discuss Commission roles (chair, vice chair, liaison to CPC, liaison to Farm Commission, liaison to Newton Commonwealth Golf Course, liaison to Environmental Science Program, and member of Nahanton Woods, Inc., and existing or proposed working groups). It was suggested that good governance practice incorporates some aspect of rotating positions, responsibilities, and opportunities for learning and engagement. Staff will develop a proposed schedule of rotation.
  - 100 Suffolk Rd. has for a couple of years (?) been constructing and using a temporary ice rink in their back yard with chillers (and maybe with lights) – the rink is within the 100' buffer zone. A Councilor asked whether the Commission should review this activity under an RDA. After initial review and informal discussion, the Commission concluded that such a rink does not appear to trip any thresholds of the state wetland regulations: it is not "work" (it is not a structure) and it is not altering the buffer zone or the wetland beyond (it is not changing the grading or vegetation of the area).
  - Anticipated absences: Susan Lunin will likely miss the Feb 22 meeting.
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### ADJOURN

- Vote: to adjourn at 9:50 [Motion: Dan Green; Second: Ellen Katz; Vote: 6:0:0]
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*The location of this meeting is wheelchair accessible and reasonable accommodations will be provided to persons with disabilities who require assistance. If you need a reasonable accommodation, please contact the city of Newton's ADA/Sec. 504 Coordinator, Jini Fairley, at least two business days in advance of the meeting: jfairley@newtonma.gov or (617) 796-1253. The city's TTY/TDD direct line is: 617-796-1089. For the Telecommunications Relay Service (TRS), please dial 711.*

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