CONSERVATION COMMISSION AGENDA

Date: Thursday, November 3, 2022

Time: 7:00pm

Place: This meeting will be held as a virtual meeting via Zoom.

The Conservation Commission will hold this meeting as a virtual meeting; no in-person meeting will take place at City Hall.

Zoom access information for the meeting will be posted 48 hours in advance of the meeting at: https://www.newtonma.gov/government/planning/boards-commissions/conservation-commission

Contact <u>jsteel@newtonma.gov</u> or 617-796-1134 with any questions.

NOTE: In addition to the documents presented in the Commission's packet (available on the Commission's website), full application plans and narratives are available on the Commission's website.

NOTE: Times listed are estimates. Items may be taken out of order at the Chair's discretion. Discussion may be limited by the Chair.

DECISIONS

A. WETLANDS DECISIONS

1. 7:00 - 1 Malvern Terrace - OOC extension request - demo/construct SFH -- DEP #239-808

- Owner/Applicant. Mandayam Srinivasan
- Request. Three-year OOC extension.
- <u>Documents in packets.</u> Applicant's request letter dated Oct 14, 2022; approved site plan, approved planting plan, applicant's proposal for additional stone near the house.
- Additional documents presented at meeting. Site photos
- Staff Notes.
 - This project (#239-726) was first permitted in May of 2015. That permit expired in 2018 with only building demo and site clearing completed.
 - This project (#239-808) was re-permitted in August of 2018. The Governor's COVID executive order extended the permit 462 days.
 - o The permit is due to expire on 11/14/22. The applicant is seeking a 3-year extension.
 - o The applicant is contemplating plan modifications to address groundwater & stormwater.
 - o Construction is not complete. Required mitigation plantings have not been installed and will have to prove themselves for 2 growing seasons.

Staff Recommendation.

- Briefly discuss the conceptual changes to water management and determine whether those should be considered/approved administratively or at a hearing with the full Commission.
- o Reassess the mitigation planting area and planting plan distribution of trees and shrubs
- o Require additional mitigation for the death of "26" pine to be retained" (spruce)
- o Consider all options, including issuing a 3-year extension.

2. 7:25 - 2345 Commonwealth Ave - COC - tank relocation at Newton Marriott - DEP #239-869

- Owner/Applicant. Boston Gas
- Request. Issue COC
- Documents in packets. None
- Additional documents presented at meeting. None
- <u>Staff Notes.</u> All necessary paperwork was received for this COC request. A site visit on 10/27/22 confirmed full compliance with the approved plans and conditions and the necessary survival of plants.
- Staff Recommendation. Vote to issue a complete COC.

3. 7:30 – 140 Brandeis Rd – COC – Newton South H.S. tennis courts – DEP #239-735



Mayor Ruthanne Fuller

> Director Planning & Development Barney Heath

Chief Environmental Planner Jennifer Steel

Assistant
Environmental
Planner
Ellen Menounos

Conservation

Commission
Members
Kathy Cade
Dan Green
Judy Hepburn
Ellen Katz
Susan Lunin
Jeff Zabel
Leigh Gilligan

Associate Member Sonya McKnight

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- Owner/Applicant. Lou Taverna, Newton Engineering
- Request. Issue COC.
- Documents in packets. None
- Additional documents presented at meeting. None
- <u>Staff Notes.</u> All necessary paperwork was received for this COC request. Staff site visit on 10/26/22 confirmed full compliance with the approved plans and conditions.
- Staff Recommendation. Vote to issue a complete COC.

B. 7:35 - CONSERVATION AREA DECISIONS

- 4. Possible Eagle Scout project at UF Riverwalk Proposal is to address eroded banks with water bars/steps. Is this appropriate?
- **5. Bike rack locations for Parks and Rec master list** Propose locations for bike racks. Consider: UF Riverwalk, Webster (Hammond Pond Parkway), others?

C. 7:50 – ADMNISTRATIVE DECISIONS

6. Meeting process changes to increase efficiency

- Discuss detailed agenda Propose improvements.
- Review complete application to be displayed at the meeting.
- Review complete permit to be displayed at the meeting.
- <u>Consider the following revised procedure</u>: Chair notes that comments have been provided in the detailed agenda, Chair asks staff to project the highlighted site plan and site photos to introduce the project/refresh memories, Chair asks applicant to fill in any blanks and answer any questions, Chair calls for Commission discussion, Chair asks for draft permit language, Commission reviews and edits the findings and conditions (this is a legal responsibility) and votes.

7. Minutes to be approved

- <u>Documents in packets.</u> Draft 10/13/22 minutes to be edited by Dan Green.
- Staff Recommendation. Vote to approve the 10/13/22 minutes.
- Volunteer. Who will volunteer to review the 11/3/22 minutes?

D. 8:15 - ISSUES AROUND TOWN DECISIONS - none at this time

UPDATES

E. 9:00 – WETLANDS UPDATES

- Review important Commission policies see the <u>documents in the packet.</u>
 - o My Property Has Wetlands What Does That Mean?
 - o Tree replacement guidelines
 - RFA and BZ mitigation planting areas
 - 25 foot naturally vegetated buffer
 - Construction in Flood Zone buildings, fences, compensatory storage
 - Deadline for Receipt of Materials Policy

F. 9:00 – CONSERVATION AREA UPDATES

• Land Management highlights – see the projected photos

G. 9:00 – ADMINISTRATIVE UPDATES

- Meeting date changes Thursday 12/22/22 -> <u>TUESDAY 12/20/22</u>
- Budget
 - Salaries and office City General Fund ~\$140K
 - Capital Grounds Improvements City Capital Account \$25K
 - Grounds Maintenance and Supplies City General Account \$25K
 - o Public Property Repair and Maintenance Commonwealth Golf Course donation \$25K
 - John Menard was \$25K/yr; Mark Neves was \$18K/yr; Essex Horticulture is \$55K/yr (\$21K spent to-date)
 - o Wetlands Filing Fees we maintain a positive balance money for wetlands implementation, training, etc.
- Overview of Office Efforts
 - o Administrative matters (web, GIS, budget, etc.)
 - Wetlands
 - 3 good wetland applications are now posted on the web as models.

- Ellen will be adding graphics to the tree replacement & mitigation planting document.
- The OpenGov on-line system is in place and working fairly well.
- A big batch of enforcement notices went out last week.
- COC requests are rolling in in response to quarterly reminders
- Bound medallions are now available.
- Land Management
 - Completed: see highlights above
 - Pending:
 - o All trail head signs
 - o Kesseler trail easement Jennifer had a site meeting on 10/20/22 with Tim Dolan and Zach Navarro
 - o Norumbega install fence atop slope to protect understory
 - o Webster address Elgin Road erosion
 - o Frank Barney fix erosion at northern trail head
 - Oakdale move stone wall and add some plants
- o Issues Around Town
 - OSRP staff team and OSRP Trails Subcommittee
 - Climate Action Plan staff team meetings
 - Climate Compact/Charles River Flood Model and mitigation projects
 - Pending: Flood Ordinance due 2023
 - Pending: Stream name signs, ...

H. 9:00 – ISSUES AROUND TOWN UPDATES

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

October 14, 2022

To the members of Newton Conservation Commission:

Subject: Request for 3-year extension of Order of Conditions (OOC) for a new home at 1 Malvern Terrace (current OOC is set to expire on November 15, 2022).

Here we are – two seniors, Newton residents for more than 30 years, applying for an extension of OOC to build our forever dream home in our beloved city. This wasn't our plan – neither of us was a senior when we acquired the property more than 8 years ago. Our goal was and continues to be to build a fully accessible, environmentfriendly, and energy-conscious "green" home of high quality within our means and with a lot of sweat equity, and move there as quickly as we can. As Newton embarks on an ambitious plan of being a green city (see the Newton Climate Action Plan and Greennewton.org), we wanted to be among the first to sign on. However, there has been several roadblocks - the pitfalls we suffered and the lessons we learnt could be a case study for others who want to follow. A major issue we have faced has been one of time. It has been a huge time-consuming effort to identify contractors who are willing and able to build such homes and within a reasonable budget. The typical options are: knowledgeable ones who are few and therefore charge a lot and only work with expensive architects, inexperienced ones in the "green" construction methods we require and therefore come in with very high bids to cover the risk of what they don't know, and finally those who are downright shoddy who follow the fastest and cheapest non-green options once the contract is signed. Contractors who are flexible, reasonable, and willing to put in the time to learn and change how they have always done are few and far between. Therefore, if your budget is limited and you want to be one of the first few to build a green home in our area, you pay in terms of time. And that's exactly what has caused this inordinate delay for us.

More specifically, from the time OOC was issued in August 2018, the following have been the obstacles we had to overcome, each of which took several months at a time: (1) While we had architectural drawings at the time OOC was issued, we still needed "green" engineering design to proceed. After a painstaking and long search we found a good engineer who met our needs, but had to endure a delay of several months as he was committed to several other projects before taking on ours. (2) Engineering design and accumulating all the documents for a building permit application took several months after that and it took about 3 months of back and forth to get the permit, which was finally issued more than a year later in Dec 2019. (3) Just then one of us (Srini) had a major health scare which required hospitalization and several months of testing and management (Srini is fine now, thank you!). (4) The contractor we engaged for the foundation work in January 2020 turned out to be shoddy – after he took more than 6 months to excavate and pour concrete, it turned out that the footing was substandard, poured at the wrong level, which then had to be disposed off and we had to engage yet another contractor and start afresh in late 2020. (5) Despite having extensive testing for ground water levels (2 test pits, one in July and one in December), we had lot more water around the footings because the excavation for the foundation prevented surface outflow and increased inflows, which, in turn, delayed by several months the plumbing of drains below the basement slab and also the pouring of the concrete slab (after the slab was poured, the ground water levels are roughly where the test pits indicated). (6) As we all know, COVID then hit, totally disrupting our schedule as it did world over. This caused even more unprecedented difficulties in bringing a team together, having adequate and timely access to labor while allowing only a few construction workers at a time, and following all the safety regulations including social distancing. Both labor and material costs have continued to skyrocket due to supply chain problems, leaving our budget in shambles.

Things are looking up now. We have now completed basement concrete work as well as steel and timber framing. Most of rough plumbing and sheathing for a weather-tight exterior have also been completed. To

minimize energy loss via windows and doors, we have been attempting to get high end German products generally used in passive houses, but because of supply chain and inflation problems as well as the war in Ukraine, it will take a few more months to get them. We have followed every rule and regulation of the city to the letter and beyond and we have passed all the required city inspections.

The point we would like make here is this - the delay so far was not because of our lack of effort or commitment or alacrity, but because of several extenuating factors all of which were beyond our control. Despite every one of the setbacks, we have not given up. Every time, we have regrouped, gone back to the drawing board, learned our lessons and have been systematically overcoming our obstacles. We have made some drastic changes in our lives — Srini has become part time professor, and now taken on basically the role of the general contractor. As problems surface, he has been figuring out how to fix them. He has gotten better in getting good builders to help. However, given that we are working with small groups of workers for each trade tightly supervised by Srini for building "green", any disruption in labor or material availability has caused delays. And a delay in one trade cascades into delays in others that depend on it, causing some of our neighbors to wonder why for a week or two no work is going on at the site. After years of hard work, we are really impatient to get into our new home and we will do everything in our power to complete the project and occupy our new home within a year. However, given our experience the past years, there are myriad things that are not under our control. Therefore, we would like to request a 3-year extension to OOC, which can give us some peace of mind while we build our green home that we can be proud of and contribute to our city's ambitious goals.

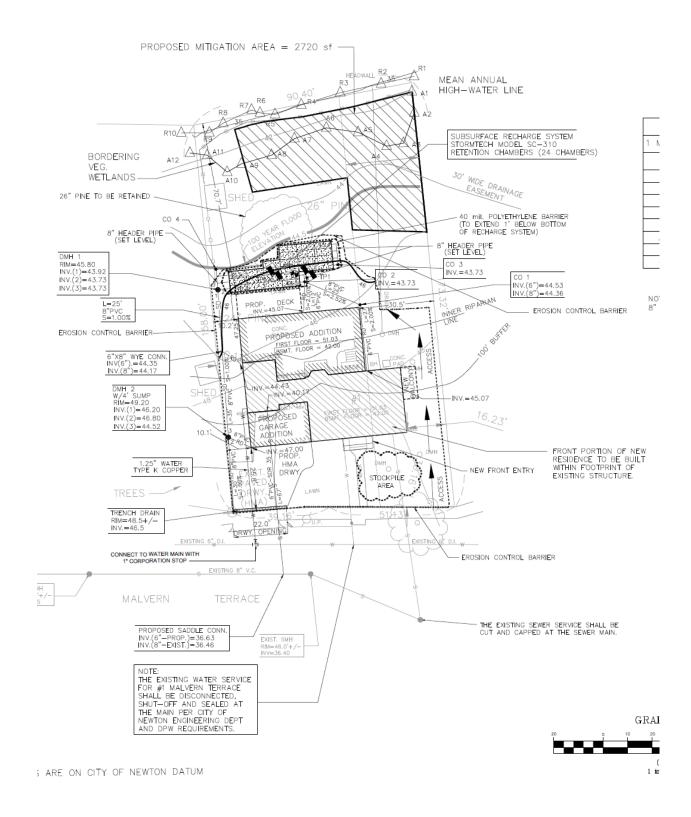
Sincerely,

Anu and Srini

Anuradha Annaswamy and Mandayam Srinivasan

31 Cross Street, Newton MA 02465

1 Malvern Terrace Approved Plan



Mitigation Planting Area Plan

As part of the proposed mitigation for the project, a mitigation planting area totaling 2,720± square feet in size will be established in the existing lawn area proximate to the Charles River in the western portion of the site. Approximately 871± square feet of this planting area is lawn Bordering Vegetated Wetlands and 1,357± square feet of this area is lawn Bordering Land Subject to Flooding. This mitigation planting area receives runoff from a portion of site under existing conditions, and will continue to receive some runoff under proposed conditions. The plantings in this area will serve to further stabilize this area, reduce stormwater runoff, capture pollution, and provide enhance wildlife habitat compared to the existing lawn. The saplings have been proposed to mitigate for the proposed tree removals. This mitigation location is the best to serve to protect the statutory interests as it is located within the inner Riverfront Area as close to the Charles River on the site as possible. The renaturalization of Bordering Vegetated Wetlands and Bordering Land Subject to Flooding within this area serves as an additional significant project benefit. With the exception of an approximately 15- to 20-foot-wide area near the shed near the southern property boundary that has been left open to provide for access to the Charles River, the mitigation planting area will consist of an 'L-shaped' area providing a significant buffer ranging from 27 to 57 feet in thickness between the developed portion of the lot and the Charles River.

As the mitigation planting area currently consists of maintained lawn located within Bordering Vegetated Wetlands, Bordering Land Subject to Flooding, Riverfront Area, and 100-foot Buffer Zone, a moderately dense planting regimen of native shrubs is proposed. The plan will also include several saplings to be located within the planting area near the northern property boundary. Prior to planting the area, the lawn within the area will be mowed very short (almost scalped). The plants will then be spaced under the supervision of a qualified wetland scientist and planted in accordance with current landscaping practices (i.e., hole twice as wide and as deep as the root ball with the area around the root ball backfilled with high quality loamy top soil). The excess soil will be removed from the site. As the woody plant materials will be planted within the existing lawn, an erosion control barrier has not been proposed between the planting area and the Charles River. Following planting, the plants will be watered in well. The area will then be mulched with a 2- to 4-inch thick layer of a 1:1 mixture of decomposed leaf matter and maple/oak leaves. This will aid in keeping the lawn out of the area, will help keep the woody plantings moist, and will provide cover and habitat. The woody materials will be watered regularly for a period of 4 weeks, and will be watered if evidence of stress is observed.

The proposed plantings include species that will provide for a variety of habitat features, including cover and foraging habitat. These plants will also provide a visual landscape for the property owner. The intent of the planting plan is to create a visually striking thicket with 134 shrubs located throughout the area and 5 saplings near the northern edge of the area to mitigate for the limited number of trees removed as part of the project. This plan will significantly augment the value of this multiple resource area portion of the lot, while still maintaining a suitable viewshed and the ability to access the Charles River. The proposed plant species and size for each of the strata proposed to be established is provided in the table below. If a particular species is not available, a substitution will be recommended by the wetland scientist. Again, the saplings should be located along the northern edge of the area; the shrubs, which are specified in two size ranges to increase the vegetational community structure, should be planted in clusters with two or three specimens of the same species with the average on-center spacing of the shrubs at 4.5 feet.

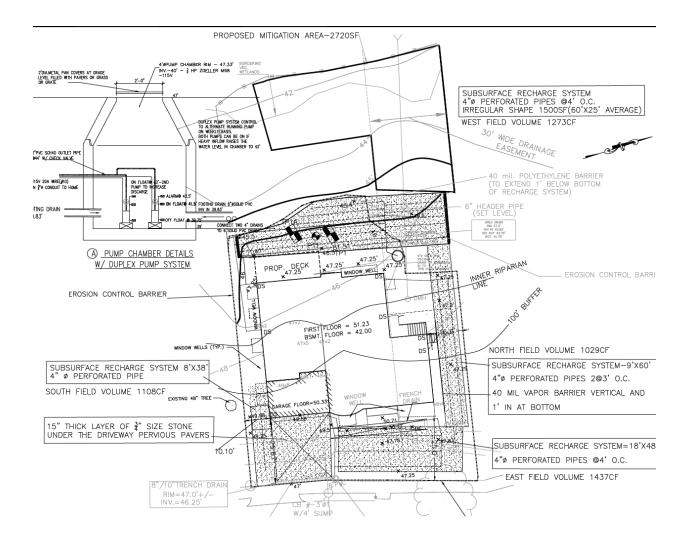
Proposed Mitigation Plantings (2,720± square feet)

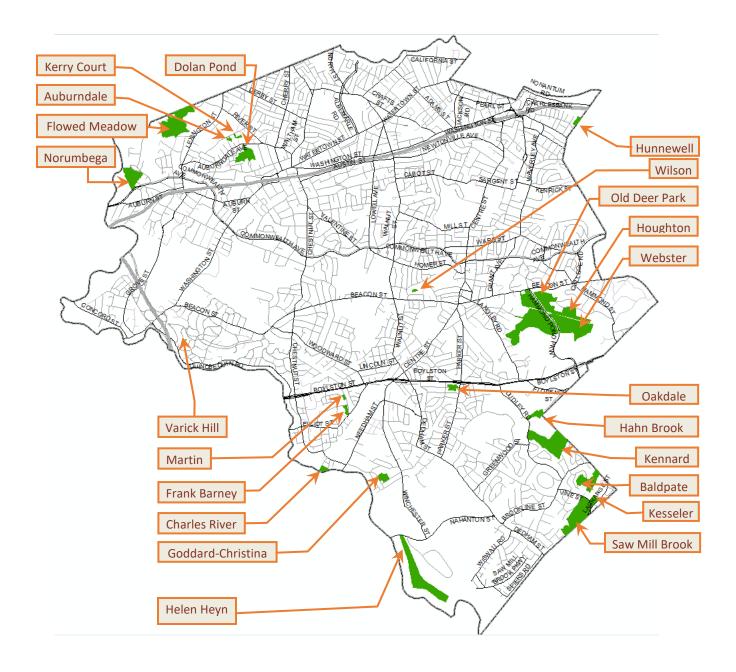
	N			
Plant Species and Size	BVW (871 sf)	BLSF/Upland (1,849)	Total	
Saplings, 1 to 1.5" caliper				
Eastern White Pine (Pinus strobus)	-	1	1	
Northern Red Oak (Quercus rubra)	-	2	2	
Red Maple (Acer rubrum)	2	-	2	
Shrubs, 2 to 3' in height				
Eastern Red Cedar (Juniperus virginiana)	-	10	10	
American Witch-hazel (Hamamelis virginiana)	-	10	10	
American Hazel-nut (Corylus americana)	-	9	9	
Gray Dogwood (Cornus racemosa)	-	8	8	
Black Chokeberry (Photinia melanocarpa)	4	8	12	
Arrow-wood (Viburnum dentatum)	5	5	10	
Highbush Blueberry (Vaccinium corymbosum)	5	5	10	
Red Chokeberry (<i>Photinia pyrifolia</i>)	4	-	4	
Withe-rod (Viburnum cassinoides)	4	-	4	
Silky Dogwood (Cornus amomum)	4	-	4	
Shrubs, 1 to 2' in height				
Common Juniper (Juniperus communis)	-	8	8	
Maple-leaf Viburnum (Viburnum acerifolium)	-	8	8	
Lowbush Blueberry (Vaccinium angustifolium)	-	8	8	
Bearberry (Arctostaphylos uva-ursi)	-	6	6	
New Jersey Tea (Ceanothus americanus)	-	6	6	
Pink Azalea (Rhododendron periclymenoides)	4	-	4	
Common Winterberry (<i>Ilex verticillata</i>)	5	-	5	
Inkberry (<i>Ilex glabra</i>)	4	-	4	
Sweet Pepper-bush (<i>Clethra alnifolia</i>)	4	-	4	

The owner will be made aware that this area is not to be treated as a landscaped area. Bark mulch and/or wood chips shall not be used in the area. Following establishment, the mitigation area shall not be mowed or otherwise maintained except to replace any plant materials that have not survived. Leaf litter, lawn clippings, and other yard waste may not be dumped into the area. Leaf litter may be allowed to naturally accumulate within the area.

Mitigation Planting Area Monitoring: The mitigation planting area will be monitored near the end of the growing season for two years after it is established. During each inspection, which will be conducted by a qualified wetland scientist, the condition of the mitigation planting area and the number and species of saplings and shrubs and their condition will be documented. Photographs of the mitigation planting area shall be taken and representative photographs shall be included in the report. To be considered a success, the plantings shall have a 75% survival rate. The findings of each inspection will be documented in a report that will be submitted in a timely manner to the Commission. Each report will include any necessary recommendations to bring the area into compliance.

1 Malvern Terrace Proposed Revised Plan





Initial draft -Not yet reviewed by Dan

CONSERVATION COMMISSION MINUTES

Date: Thursday, October 13, 2022

Time: 7:00pm - 10:03pm

Place: This meeting was held as a virtual meeting via Zoom.

With a quorum present, the meeting opened at 7:00 pm with Susan Lunin presiding as Chair.

Members Present: Dan Green (Chair) (joined at 7:10), Susan Lunin (Vice-Chair), Kathy Cade, Judy Hepburn,

Jeff Zabel, Leigh Gilligan.

Members Absent: Ellen Katz, Associate Member Sonya McKnight

Staff present: Jennifer Steel, Ellen Menounos

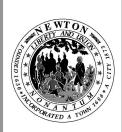
Members of the Public: not recorded due to remote nature of the meeting

DECISIONS

A. WETLANDS DECISIONS

1. 120 Wells Ave - NOI - redevelopment for a day care center - DEP #239-940

- Owner/Applicant. Hartford Properties, LLC for WillowBend-One Twenty Wells Ave, LLC
- <u>Representatives.</u> Timothy Hayes, Kevin Sifuentes from Bohler Engineering; Morgan Hill Konstandinidis from Hartford Properties
- Proposed Project Summary.
- Request. Issue OOC.
- Documents in packets. Locus map, highlighted plans.
- Additional documents presented at meeting. Site photos.
- Jurisdiction. Buffer Zone to BVW
- Presentation (Tim Hayes) and Discussion.
 - The applicant summarized the project
 - Repurpose existing building to become a daycare no change to the building exterior.
 - Cut 4 mature trees (~40" of 3 spruce and 1 basswood) in a landscaped area and do minor grading.
 - Install play area and trike track, altering only 243 sf of buffer zone.
 - Install crushed stone infiltration system under play area.
 - 2674 sf of buffer zone will be affected.
 - A planting plan submitted this day indicated that tree cutting will be mitigated with the planting of 2 red maple trees and 5 native understory trees.
 - o Staff suggested and the applicant agreed to install erosion controls along Wells Ave.
- <u>Vote</u>: To close the hearing and issue an OOC with the state's required conditions, Newton's special conditions, and the following site-specific special conditions. [Motion: Lunin, Second: Green; Roll-call vote: Lunin (aye), Green (aye), Cade (aye), Hepburn (aye); Gilligan (aye); Zabel (aye). Vote: 6:0:0].
 - 24. Properly entrenched silt fence, must be installed along Wells Ave. within the buffer zone.
 - 25. Adequate protection must be installed for the trees that are due to remain on the site within the buffer zone. This may include the addition of orange snow fencing near the drip line, boards tied to the trunk, and/or mulch and plywood placed over the roots.
 - 31. <u>2 native canopy trees and 5 native understory trees must be planted within the buffer zone</u> as per the approved plans to compensate for the removal of mature trees on the site.
 - 32. If any <u>trees intended to be protected within the project area die within 2 years of the start of construction as a result of the construction</u> or have been demonstrably harmed by construction activities, they shall be replaced at a ratio of 2:1 with native canopy saplings (of roughly 2 caliper inches).
 - 34. To protect the water quality of area wetlands, <u>fertilizers shall be of low-nitrogen</u> content and be used in moderation
 - 35. To protect the full suite of benefits of area wetlands, wildlife, and native insects and pollinators, no pesticides shall be used.



Mayor Ruthanne Fuller

> Director Planning & Development Barney Heath

Chief Environmental Planner Jennifer Steel

Assistant Environmental Planner Ellen Menounos

Conservation Commission Members

Kathy Cade Dan Green Judy Hepburn Ellen Katz Susan Lunin Jeff Zabel Leigh Gilligan

Associate Member Sonya McKnight

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36. To protect wetland wildlife, exterior lighting shall be limited to "dark sky", focused lighting. No spotlights or floodlights shall be directed at the wetland across the street.

2. Newton South High School Stadium Turf Field – Informal Discussion -- Greg Mellett (PRC) presentation

- Owner/Applicant. Parks, Recreation & Culture
- Representatives. Greg Mellett, Luis Perez Demorizi, and Nicole Banks of PRC; Mike Dodson, Glen Howard, and Mel Harclerode of CDM Smith.
- Proposed Project Summary.
 - o Replace turf (carpet and in-fill) and replace the rubber surface on the track in stadium field in the summer of 2023.
- Request. Provide preliminary feedback
- Documents in packets. none
- Additional documents presented at meeting. Aerial photos, PowerPoint presentation by applicant team
- Jurisdiction. Buffer Zone
- Presentation (the whole applicant team) and Discussion.
 - Staff notes summarized initial concerns about the installation of artificial turf in 2009. At the time of initial installation of artificial turf there was a great deal of discussion about water quality. The Commission's OOC was appealed by 14 Newton Petitioners; they believed that the Newton Conservation Commission's conditions did not go far enough in ensuring that the leachate from the fields would not harm the wetlands. DEP issued a superseding OOC with testing requirements and "snout" catch basins. The petitioners appealed the S-OOC. A Settlement Agreement recognized the Superseding Order of Conditions as the final permit of record with conditions requiring water quality sampling, catch basin cleaning, trench drain cleaning, vinyl screening, lead testing of the carpet, herbicide and pesticide restrictions, sediment sampling, and irrigation well water testing.
 - o The applicant team presented a PowerPoint slide show, indicating that the 8-10 year life span of the turf and track had been exceeded, and that they were visiting other sites, reviewing in-fill options, and weighing the pros and cons of each.
 - Non-organic: SBR (Crumb Rubber Recycled Tires), EPDM (Post Industrial Recycled Rubber), EPDM (Virgin Rubber), and TPE (Thermo Plastic Elastomer)
 - Organic: Cork and Coconut Mixture, Cork, Southern Pine, Acrylic Coated Sand.
 - o There was a brief discussion of the SAK testing done in roughly 2012, 2013, and 2014. Greg Mellett indicated that no serious contamination was found.
 - Next steps for the applicant team were outlined:
 - Flag the wetland
 - Submit an NOI

43 River Ave – continued NOI – demo single family home/rebuild 2 family home – DEP #239-931

- Owner/Applicant. Dina Onur
- Representatives. John Rockwood, Eco-Tec
- Proposed Project Summary.
 - o Remove existing single-family house, construct a two-family house with 2 one-car garages.
 - o Increase degraded area by 1,859 sf.
 - o Cut 13 trees (247"), many of which are ailing. The Tree Ordinance is requiring mitigation for 4 of them (98").
 - o Install 3,850 sf mitigation planting area: 18 saplings, 110 larger shrubs, 40 small shrubs. That is 132 sf (3%) more than the minimum required by the state.
- Request. Issue OOC
- Documents in packets. Locus map, highlighted plans.
- Additional documents presented at meeting. Site photos.
- Jurisdiction. RFA, BLSF, Buffer Zone
- Presentation (John Rockwood) and Discussion.
 - John Rockwood noted that a new stormwater management system was designed to comply with the City's new stormwater management ordinance.
 - o John Rockwood noted (and staff concurred) that all but one of the staff's comments had been addressed in revised plans; he reiterated all the revisions to the plans.
 - In response to staff concerns about mitigating for the tree cutting, John Rockwood suggested adding 4 native canopy trees to the mitigation area. Commissioners concurred.

- <u>Vote</u>: To close the hearing and issue an OOC with the state's required conditions, Newton's special conditions, and the following site-specific special conditions. [Motion: Cade, Second: Gilligan; Roll-call vote: Lunin (aye), Green (aye), Cade (aye), Hepburn (aye); Gilligan (aye); Zabel (aye). Vote: 6:0:0].
 - 21. No concrete wash water or other wastes may enter the storm drain system.
 - 30. The construction sequence noted on Sheet 2 must be adhered to.
 - 31. The grading and retaining walls along the north and south property lines must be installed as per the plans to ensure that runoff will not be directed to abutting properties.
 - 32. The stormwater infiltration system must be installed as per the approved plans.
 - 33. The <u>City Engineer must inspect the infiltration system</u>. The applicant must submit <u>proof of inspection to the Conservation Office</u>.
 - 34. The following plan notes must be adhered to:
 - a. The stumps located within the limit of work will be removed.
 - b. As noted on Sheet 2, the <u>three stumps in the Mitigation Area near the river will not be removed</u>; they will be cut short and the two Norway maple stumps will be treated to prevent sprouts.
 - c. <u>12" of high-quality loamy topsoil will be added in the upper portion of the Mitigation Area and rototilled</u> in immediately prior to planting.
 - 35. <u>Landscape plantings</u> within Commission jurisdiction must be installed in compliance with the approved plans (desired changes must be approved by the Conservation office in advance) and must:
 - a. Be installed under the direction of a qualified wetland consultant to ensure proper installation, proper placement, and appropriate filling of the entire mitigation area.
 - b. Include 4 additional native canopy saplings within the mitigation planting area in addition to the approved "Revised Planting Schematic for Enhancement Planting Area, 43 River Avenue, Newton" prepared by EcoTec, last revised August 7, 2022"
 - c. Be bounded, as shown on the plans with bounds that: (1) are 4"x4"x36" stone or concrete post, (2) have instructive language regarding the required protection, (3) have at least 6" maintained above grade, and (4) are placed at every boundary corner and never more than 20 feet apart.
 - d. Have a survival rate of 80 % of total number of trees (after 2 growing seasons)
 - e. Have a survival rate of 80 % of total number of shrubs (after 2 growing seasons)
 - f. Stabilize all exposed areas.
 - g. Mulch applications shall diminish over time and eventually cease as shrubs spread.
 - h. Invasives species must be managed and minimized. If herbicides are use, manufacturer's recommended directions must be followed.
 - 36. If any <u>trees intended to be protected within the project area die within 2 years of the start of construction as a result of the construction or have been demonstrably harmed by construction activities, they shall be replaced at a ratio of 2:1 with native canopy saplings (of roughly 2 caliper inches).</u>
 - 38. No Certificate of Occupancy shall be approved by Conservation unless a Certificate of Compliance has been issued or the request receives the written approval of the Chief Environmental Planner.
 - 39. To protect the water quality of area wetlands, fertilizers shall be of low-nitrogen content and be used in moderation
 - 40. To protect the full suite of benefits of area wetlands, wildlife, and native insects and pollinators <u>no pesticides shall be used</u>.
 - 41. To protect wetland wildlife, <u>exterior lighting</u> shall be limited to "dark sky", focused lighting. No spotlights or floodlights shall be directed at Cheesecake Brook.
 - 42. The required Riverfront Area <u>mitigation planting area shall be maintained in perpetuity</u> in its predominantly natural condition as per 310 CMR 10.58 and shall remain bounded with the bounds exposed at least 6 inches.
 - 43. The approved Stormwater Operations and Maintenance Plan is appended hereto and must be adhered to.

4. 71 Harwich – continued NOI – single-family home demo and construction – DEP #239-933

- Owner/Applicant. Vlad Vilkomir, GS Harwich 71 LLC
- Representatives. Debbie Anderson, wetland scientist; Tom Ryder, engineer
- Project Summary.
 - o Remove existing single-family house, driveway, and landscaping, construct new single-family house, driveway, and bounded mitigation planting area.
 - o Cut all trees on the north side of the site.
 - Increase overall impervious area ~451 sf.

- Install a 1,568 sf wetland mitigation planting area. (NOTE: These numbers represent an increase over the applicant's proposal, following Commission discussion.) The planting area will contain: 4 canopy trees, 7 understory trees, 36 shrubs, and 57 groundcover plants.
- o Install a 426 sf pollinator garden strip using a native Meadow Seed Mix.
- Request. Issue OOC
- <u>Documents in packets.</u> Locus map, highlighted plans.
- Additional documents presented at meeting. Site photos.
- Jurisdiction. BVW (for plantings) and BZ (for construction)
- Presentation (Debbie Anderson) and Discussion.
 - Staff noted that revised plans were received that revised (correctly located) the wetland line, revised the tree
 information, reduced the size of the driveway, eliminated the rear deck, and had a wetland mitigation planting area.
 - Staff noted that other staff concerns had been addressed, such as: extended walls to limit runoff to abutting properties, and stairs to access the rear mitigation areas.
 - Staff noted that the erosion control line is still too close to the limit of grading to be practicable, but that the operators will have to work within that limitation.
 - Commissioners noted the need for the mitigation/restoration planting area to fully comply with the Commission's
 mitigation planting guidelines and so recommended at least 2 additional canopy trees and plantings sufficient to fill the
 expanded wetland area, details to be resolved in revised plan approved by staff.
- <u>Vote</u>: To close the hearing and issue an OOC with the state's required conditions, Newton's special conditions, and the following site-specific special conditions. [Motion: Gilligan, Second: Lunin; Roll-call vote: Lunin (aye), Green (aye), Cade (aye), Hepburn (aye); Gilligan (aye); Zabel (aye). Vote: 6:0:0].
 - o There shall be no alteration to existing vegetation beyond the current edge of lawn.
 - To avoid soil compaction, there shall be no vehicular access through or laydown within the wetland or the 10-foot buffer around the wetland.
 - o Concrete washout must occur outside wetland jurisdiction.
 - o Finished grades shall not be increased, even if high groundwater is encountered, without revised plans being reviewed and approved by Conservation in advance.
 - o The stormwater infiltration system must be installed as per the approved plans.
 - o The City Engineer must inspect the infiltration system. The applicant must submit proof of inspection to the Cons. Office.
 - The retaining walls on the side property lines must be and remain elevated 4-6" above the higher grade to capture all overland runoff and keep it on site.
 - o Restorative and mitigation landscape plantings within Commission jurisdiction must be installed in compliance with the approved plans (desired changes must be approved by the Conservation office in advance) and must:
 - Be installed under the direction of a qualified wetland consultant to ensure proper installation, proper placement, and appropriate filling of the entire mitigation area.
 - Be bounded, as shown on the plans, with 6 bounds that: (1) are 4"x4"x36" stone or concrete post, (2) have instructive language regarding the required protection, (3) have at least 6" maintained above grade, and (4) are placed at every boundary corner and never more than 20 apart.
 - Have a survival rate of 100% of total number of trees (after 2 growing seasons)
 - Have a survival rate of 80% of total number of shrubs (after 2 growing seasons)
 - Have a survival rate of 80% aerial coverage of all plants (after 2 growing seasons)
 - Stabilize all exposed areas
 - Mulch applications in the wetland, if any, shall diminish over time and eventually cease as ground cover species and shrubs spread.
 - Invasives species must be managed and minimized. If herbicides are use, manufacturer's recommended directions must be followed.
 - o If any trees intended to be protected within the project area die within 2 years of the start of construction as a result of the construction or have been demonstrably harmed by construction activities, they shall be replaced at a ratio of 2:1 with native canopy saplings (of roughly 2 caliper inches).
 - o No Certificate of Occupancy shall be approved by Conservation unless a Certificate of Compliance has been issued or the request receives the written approval of the Chief Environmental Planner.
 - The retaining walls on the side property lines must be and remain elevated 4-6" above grade to capture all overland runoff and keep it on site.
 - o To protect the water quality of area wetlands, fertilizers shall be of low-nitrogen content and be used in moderation

- To protect the full suite of benefits of area wetlands, wildlife, and native insects and pollinators no pesticides shall be used.
- o To protect wetland wildlife, exterior lighting shall:
 - be "dark sky" compliant -- i.e., shielded to prevent any "up lighting" and "backlighting", focused, and directed so as to not illuminate any part of the wetland.
 - have limited blue content to decrease skyglow and disruption of diurnal animals
 - be switched off when not in active use

5. 27 Cross St - NOI - demo and construction of two-family house -- DEP #239-939

- Owner/Applicant. Gabriel Askarinam
- Representative. Joe Orzel, Lucas Environmental
- Proposed Project Summary.
 - o Demolition of the existing single-family residence, shed, and driveway
 - o Construction of a two-family dwelling on piers, driveway, stormwater infiltration systems, and mitigation planting area.
 - o The proposed project will result in an overall <u>increase in impervious</u> area on the lot of approximately <u>1,762</u> square feet.
 - o The proposed project will result in an increase in the flood storage capacity on the site of approximately 3,041 cubic feet
 - o The applicant proposes to install a 3,600 sf mitigation planting area at the rear of the lot.
- Request. Issue OOC.
- <u>Documents in packets.</u> Locus map, highlighted plans.
- Additional documents presented at meeting. Site photos.
- <u>Jurisdiction.</u> Bank (won't be altered), Land Under Water Bodies and Waterways (won't be altered), RFA, BLSF (39' NAVD88 or 45.5' CNVD)
- Presentation (Joe Orzel) and Discussion.
 - Revised plans were presented showing:
 - reduced impervious area
 - shifted structure entirely outside of the 25-Foot Buffer Zone to Cheesecake Brook
 - expanded, bounded Riverfront mitigation area now 2:1 to proposed new impervious area:

6 Red Maple
 14 American Hazelnut
 6 Red Oak
 14 Maple-leaved Viburnum

6 Yellow Birch
 14 Mountain Laurel
 6 Black Cherry
 14 Black Chokeberry
 Seed Mix
 14 Witchhazel

- Staff noted that the project now meets the minimum Riverfront Area performance standards of 10.58(5) and that the appropriate compensatory flood storage has been provided.
- o Commissioners noted their appreciation for the applicant's team's cooperation and professionalism.
- There was discussion about the challenges caused by Norway maples dominating mitigation planting areas, so the
 Commission noted their inclination to approve a request to cut more of the Norway maples around the mitigation area.
- <u>Vote</u>: To close the hearing and issue an OOC with the state's required conditions, Newton's special conditions, and the following site-specific special conditions. [Motion: Zabel, Second: Cade; Roll-call vote: Lunin (aye), Green (aye), Cade (aye), Hepburn (aye); Gilligan (abstain); Zabel (abstain). Vote: 4:0:2].
 - 22. Grades are not proposed to be changed and shall not be raised.
 - 23. Finished grades may not deviate from the approved plans, even if high groundwater is encountered.
 - 24. No mature trees are proposed to be cut, but <u>if the applicant determines that Norway maples should be cut, he/she may seek a Minor Plan Change</u> from the Commission to allow said cutting and replacement.
 - 32. If dewatering proves necessary, a <u>dewatering plan</u> designed to limit and control any adverse impact on the wetlands resource area(s) must be presented to the Conservation Commission for review and approval.
 - 33. If concrete washout must occur, a <u>concrete washout plan</u> designed to limit and control any adverse on the wetlands resource area(s) must be presented to the Conservation Commission for review and approval.
 - 34. The new duplex <u>structure must be built on piers</u> as per the approved plans.
 - 35. <u>No component of the structure may be enclosed in any way</u> that deviates from the Conservation Commission's guidelines for Construction in Flood Zone
 - 36. Compensatory flood storage must be provided in its entirety as per the plans.
 - 37. The stormwater infiltration system must be installed as per the approved plans.
 - 38. The <u>City Engineer must inspect the infiltration system</u>. The applicant must submit <u>proof of inspection to the Cons.</u>
 Office.

39. The mitigation planting area must:

- a. Be installed under the direction of a qualified wetland consultant to ensure proper installation, proper placement, and appropriate filling of the entire mitigation area.
- b. Be installed in compliance with the approved plans (desired changes must be approved by the Conservation office in advance)
- c. Be installed and maintained in such a manner as to replicate to the maximum extent practical a diverse ecological system, provide habitat for native species, and keep invasive species in check. Mulch applications, if any, shall diminish over time and eventually cease as ground cover species and shrubs spread.
- d. Have a survival rate of 80 % of total number of trees (after 2 growing seasons)
- e. Have a survival rate of 80 % of total number of shrubs (after 2 growing seasons)
- f. Have a survival rate of 80 % aerial coverage of seed mix plants (after 2 growing seasons)
- g. Be bounded, as shown on the plans, with bounds that: (1) are 4"x4"x36" stone or concrete post, (2) have instructive language regarding the required protection, (3) have at least 6" maintained above grade, and (4) are placed at every boundary corner and never more than 20 feet apart.
- h. Stabilize all exposed areas
- Invasives species must be managed and minimized. If herbicides are use, manufacturer's recommended directions must be followed.
- 40. If any <u>trees intended to be protected within the project area die within 2 years of the start of construction as a result of the construction or have been demonstrably harmed by construction activities, they shall be replaced at a ratio of 2:1 with native canopy saplings (of roughly 2 caliper inches).</u>
- 43. To protect the water quality of area wetlands, fertilizers shall be of low-nitrogen content and be used in moderation
- 44. To protect the full suite of benefits of area wetlands, wildlife, and native insects and pollinators, <u>no pesticides shall be</u> used.
- 45. To protect wetland wildlife, <u>exterior lighting</u> shall be limited to "dark sky", focused lighting. No spotlights or floodlights shall be directed at Cheesecake Brook.
- 46. The required bounded Riverfront mitigation area shall be maintained in perpetuity in its predominantly natural condition.
- 47. The approved Operations and Maintenance Plan is appended hereto and must be adhered to.
- 48. To maintain the flood storage capacity of the site, and to uphold DEP requirements for "unrestricted hydraulic connection", there shall be no enclosure of the structure other than the minimal skirting allowed under the Conservation Commission's guidelines for Construction in Flood Zone (approved 10/8/20), i.e., the structure shall not be enclosed with lattice, screen, lath or covering of any sort that:
 - a. covers more than 50% of the area of any opening, and/or
 - b. has openings/holes with any dimension less than 1 inch.

6. 40 Albemarle Rd - informal discussion -- location of mitigation area - DEP #239-880

- Owner/Applicant. Jeremy Osinski
- Representatives. Jeremy Osinski
- Proposed Project Summary.
 - o Replace the larger on-site 1,350 sf mitigation area with an off-site 4,050 sf mitigation area (16' x 250') within the immediate riverfront area of Cheesecake Brook, on City-owned land. The 540 sf mitigation area would remain on-site.
 - Restore what is currently lawn and scattered shrubs along Cheesecake Brook with a robust mitigation planting area to be maintained in perpetuity.
 - A 3.5- to 4-foot-wide strip of lawn would remain along Albemarle Road for snow storage
 - Remove limited invasive shrubs from the planting area
 - Remove several stems of an undesirable plant (i.e., American pokeweed which bears toxic fruit)
 - Remove understory shrubs near ash trees
 - Scalp the existing lawn area before planting
 - Plant native saplings, shrubs, and groundcover following the Commission's guidelines and density best practices;
 - Apply organic leaf litter mulch to control weed growth.
 - Other proposed changes (totaling ~43 sf of increased impervious area onsite) include:
 - Allow the one mature pear tree onsite, originally planned to be removed to remain and adjust the grading around it
 - Level off the slope along Nevada Street with an 18" 30" retaining wall
 - Plant lawn and planting beds in the area of the original mitigation area
 - Remove the originally approved shed

- Reduce the front walkway
- Expand the rear patio on a pervious bed
- Add 128± square feet of wooden egress stairs and AC pads
- Define the gravel paths.
- Request. Would the Commission entertain the proposed changes as an amended Order of Conditions 239-880 and if so, what materials would need to be submitted or developed?
- <u>Documents in packets</u>. Aerials with mitigation areas shown
- Additional documents presented at meeting. Summary information and aerials with plans overlaid.
- Jurisdiction. RFA
- Presentation (Jeremy Osinski) and Discussion.
 - o Jeremy Osinski walked the Commission through his interests/intentions. He noted Parks, Recreation & Culture's support for his proposed planting area on City land.
 - Commissioners noted that consideration of such requests will be considered on a case-by-case basis, not under one umbrella set of guidelines.
 - o Commissioners noted their general support for such a robust renaturalization of the corridor along Cheese Cake Brook.
 - o Commissioners noted that the City's Legal Department would need to consent to the proposal and help develop legal documents to address: (1) rights/obligations for plant installation, (2) rights/obligations for plant maintenance (in the short-term), and (3) the City's perpetual obligations for maintenance that must run with the land.
 - o Commissioners noted that to amend the OOC, the applicant would have to submit appropriate legal documents (whether easement, license, covenant, or other), a revised site plan, and a planting plan.
 - o One Commissioner noted that this case could have implications as a precedent.

7. 401 Albemarle Rd – COC – tear down single-family/construction of new duplex -- DEP #239-835

- Owner/Applicant. John Umina
- Request. Issue COC.
- Documents in packets. None
- Additional documents presented at meeting. None
- <u>Staff Notes.</u> All necessary paperwork was received for this COC request. A site visit on 10/3/22 confirmed almost full compliance with the approved plans and conditions and the necessary survival rate of plants. 2 additional native shrubs were just planted to fill in one "hole".
- <u>Vote</u>: To issue a complete COC (with no additional monitoring requirement for the 2 new shrubs). [Motion: Gilligan, Second: Lunin; Roll-call vote: Lunin (aye), Green (aye), Cade (aye), Hepburn (aye); Gilligan (aye); Zabel (aye). Vote: 6:0:0].

8. 10-12 Cross St – COC – tear down single-family/construction of new duplex – DEP #239-847

- Owner/Applicant. Andrea and Vincent Forsythe
- Request. Issue COC.
- <u>Documents in packets.</u> None
- Additional documents presented at meeting. None
- <u>Staff Notes.</u> All necessary paperwork was received for this COC request. A site visit on 10/3/22 confirmed full compliance with the approved plans and conditions and the necessary survival rate of plants. The site visit also confirmed the importance of having permanent bounds raised above grade, so they do not get covered by mulch.
- <u>Vote</u>: To issue a complete COC. [Motion: Zabel, Second: Hepburn; Roll-call vote: Lunin (aye), Green (aye), Cade (aye), Hepburn (aye); Gilligan (aye); Zabel (aye). Vote: 6:0:0].

9. 53 Wendell Rd – COC – pool installation in rear yard -- DEP #239-852

- Owner/Applicant. Ron and Karin Zalkind.
- Request. Issue COC.
- Documents in packets. None
- Additional documents presented at meeting. None
- <u>Staff Notes.</u> All necessary paperwork was received for this COC request. A site visit on 10/5/22 confirmed full compliance with the approved plans and conditions and the necessary survival rate of plants.
- <u>Vote</u>: To issue a complete COC. [Motion: Cade, Second: Zabel; Roll-call vote: Lunin (aye), Green (aye), Cade (aye), Hepburn (aye); Gilligan (aye); Zabel (aye). Vote: 6:0:0].

B. CONSERVATION AREA DECISIONS

10. Informal Discussion re beekeeping in Old Deer Park -- Mark Lewis

- Documents in packets. The current beekeeping policy
- Presentation (Mark Lewis) and Discussion
 - o Mark Lewis gave a summary "annual report" on his beekeeping activities at the Old Deer Park:
 - Hives: He has 5 ½ hives (3 over wintered and he has 2 more). He expects to have 4 over this coming winter.
 - Science: He has collected pollen for analysis by a Penn State person to determine what his bees feed on. This will help inform discussions about competition with native bees.
 - Compliance: MDAR inspected 2x, he has a sign up now that the Old Deer Park is open to the public, he is working toward becoming a master beekeeper (through Cornell)
 - Education: He works with Classroom Hives (only 3-4 classrooms now because of a complete shutdown during COVID); he led an online course for Boston Are Beekeepers; he is pursuing a connection with John Cheetham through NEC.
 - Stewardship: He conducts clean-ups in the area; he would like to increase native bee habitat by installing "bee hotels".
 - Alan Nogee (native bee supporter) noted a number of studies that show that honeybees compete with native bees for food. He noted that Richard Primack's recent local study showed that honeybees and native bees feed on many of the same plants. He stated that he did not know what density of honeybees created significant competition, but urged the Conservation Commission to be conservative and ban honey bees on Conservation land. Nogee also stated that bee hotels may increase the spread of disease and urged consideration of "sand boxes" instead.
 - Staff noted that the Commission's revised beekeeping policy states that only 2 hives shall be allowed on conservation land, but the Mark Lewis is currently licensed for 6 – "A license for a larger apiary may be granted if there is a public purpose that is ecological, scientific, or educational."
 - o Commissioners thanked Lewis for his contribution of honey for the guests at the dedication of the Ira Wallach Trail.

C. ADMNISTRATIVE DECISIONS

11. Minutes to be approved

- <u>Documents in packets.</u> Draft 9/22/22 minutes as edited by Ellen Katz.
- <u>Vote</u> to approve the 9/22/22 minutes. [Motion: Cade, Second: Lunin; Roll-call vote: Lunin (aye), Green (aye), Cade (aye), Hepburn (aye); Gilligan (aye); Zabel (aye). Vote: 6:0:0]
- Volunteer. Dan Green will volunteer to review the 10/13/22 minutes.

D. ISSUES AROUND TOWN DECISIONS - none

UPDATES

E. WETLANDS UPDATES - none

F. CONSERVATION AREA UPDATES

- **12.** Kathy Cade noted the successful ceremony of dedicating 3 new memorial benches at Norumbega for the Abernathys, Cogginses, and Faulkners this past weekend.
- G. ADMINISTRATIVE UPDATES none
- H. ISSUES AROUND TOWN UPDATES none

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

13. Enforcement Order – 1 Nonantum Road – DCR/Newton Yacht Club – tree cutting and stormwater.

- <u>Staff Comments.</u> Still no response from DCR in response to multiple reminders about the need for mitigation plantings (for the cutting of the row of pines along the fence) and stormwater improvements (agreed to in the MOU with the Yacht Club) on their land.
- <u>Vote</u> to issue an enforcement order. [Motion: Cade, Second: Gilligan; Roll-call vote: Lunin (aye), Green (aye), Cade (aye), Hepburn (aye); Gilligan (aye); Zabel (aye). Vote: 6:0:0]

14. Enforcement Order – Parkway Road – DCR/Abutter – unpermitted cutting, grading, paving

- <u>Staff Comments.</u> Still no response from DCR in response to multiple requests to address the situation on their land. An abutter cleared and graded to create parking on the DCR side of Parkway Road. City DPW staff dumped millings to "pave" the area. The millings have been removed, but the grading, clearing, and parking remain.
- <u>Vote</u> to issue an enforcement order. [Motion: Lunin, Second: Zabel; Roll-call vote: Lunin (aye), Green (aye), Cade (aye), Hepburn (aye); Gilligan (aye); Zabel (aye). Vote: 6:0:0]

15. Request for Minor Plan Change – 135 Selwyn Rd – Laura Chandra – DEP file #239-912

- Staff Comments. The applicant intends to reduce the scope of the project
 - o Interior renovation of the current structure (kitchen, layout, living room, heating system, windows)
 - No second story addition
 - No first-floor addition off the back of the house.
 - No replacing the stairs by the 2nd entrance
 - No change to the deck
 - o Replace siding and roof shing
 - None of the original Riverfront mitigation planting

• Discussion and Consensus

- Since the project has been reduced to interior and siding/roofing work only, the Commission recommends a request for a Certificate of Compliance for "work never initiated". Conservation staff can sign off administratively on the new proposed work.
- The Commission noted that it is still necessary to address the prior unpermitted cutting on the "adjacent City parcel".
 They charged staff with sending a notice of violation and working to develop an appropriate mitigation planting plan In keeping with the Commission's Tree Replacement Guidelines for the Conservation Office to review and approve.

16. 133 Harwich – COC – pool installation in rear yard -- DEP #239-852

- Owner/Applicant. Ron and Karin Zalkind.
- Request. Issue COC.
- <u>Staff Notes.</u> All necessary paperwork was received for this COC request. A site visit on 10/13/22 confirmed full compliance with the approved plans and conditions and the necessary survival rate of plants.
- <u>Vote</u>: To issue a complete COC. [Motion: Lunin, Second: Hepburn; Roll-call vote: Lunin (aye), Green (aye), Cade (aye), Hepburn (aye); Gilligan (aye); Zabel (aye). Vote: 6:0:0].

ADJOURN

• <u>Vote</u> to adjourn at 10:03. [Motion: Cade, Second: Gilligan; Roll-call vote: Lunin (aye), Green (aye), Cade (aye), Hepburn (aye); Gilligan (aye); Zabel (aye). Vote: 6:0:0]

My Property Has Wetlands!! What Does that Mean??

Wetland Regulations

Conservation Commission and its Authority: The Newton Conservation Commission is a 7-member volunteer board responsible for administering the Massachusetts Wetlands Protection Act (WPA) and regulations (310 CMR 10.00).

Regulated Areas and Activities: Property owners must seek permission from the Conservation Commission for any proposed work within 100-feet of a wetland, seasonal stream, pond, etc. or within 200-feet of a perennial (flowing year-round) stream. "Work" includes any land-altering activities such as <u>cutting perennial vegetation</u>, <u>expanding a lawn</u>, <u>grading</u>, and <u>building</u>. Some "minor activities" are specifically exempted by the regulations. [Note: Other permits may be needed, e.g., Building, Engineering, Historical.]

Permittable Activities: Very few activities are allowed in wetlands. Many activities within the 100-foot buffer zone are allowed with a permit, as long as all activity is at least 25-feet away from the edge of the wetland resource area and measures are taken to protect or enhance the wetland. Many activities within the 200-foot riverfront area are allowed with a permit as long as a vegetated buffer is maximized. The state regulations lay out the details of what is permittable.

Wetland Permit Process

Application/Permit Options

- 1. Administrative Approval: Some minor or emergency projects can be approved by the Conservation Agent (call the office).
- 2. Request for Determination of Applicability (RDA): For some smaller projects not likely to adversely impact the wetland.
- 3. Notice of Intent (NOI): For medium and large projects with noticeable disturbance.

Permit Process: To conduct work in a regulated area, you will need to get a permit from the Conservation Commission. It is often necessary (and cost-effective) to work with a team of professionals.

- 1. You may need to hire a <u>wetland scientist</u> to flag the wetlands, streams, ponds, etc. and a <u>surveyor/engineer/landscape</u> <u>architect</u> to create plans showing wetland resource areas and all existing and proposed conditions.
- 2. Those professionals can help you put together a complete wetland application package (see below).
- 3. Go through the public meeting/hearing process (see next page). to the Conservation Office and MassDEP.
- 4. Receive your permit ("Order of Conditions") and abide by all the conditions therein.

Required NOI Application Components	Notes			
State NOI Form: DEP Form 3				
Engineered Plan	Plans must be dated, stamped, 11'x17" if legible at that size			
Narrative	Description of proposed project			
Proof that all relevant perf. standards are met	A narrative that "checks all the boxes"			
Locus map				
Wetland delineation lines (backup material)	Wetland lines and back-up documentation			
Fees ● Fee Transmittal form	Checks and photocopies of checks			
Abutter Notification	Required for all NOI applications Submit proof of delivery to the Conservation Office before the hearing			
Other Possible Required Attachments	Notes			
Planting Plan	A plan showing locations, numbers, species and sizes of plants			
Floodplain analysis	Cut and fill calculations, compensation must be foot-for-foot and 110%			
Stormwater analysis	Use DEP's Stormwater Checklist			
Riverfront Area Alternatives Analysis	Complete Alternatives Analysis and all relevant performance standards			
Restoration or mitigation summary	Included? ☐ Yes ☐ No ☐ Not Applicable			
Phasing/Sequencing plan, O&M plan, etc.	Included? ☐ Yes ☐ No ☐ Not Applicable			

RDA	NOI	Steps in the Wetland Permitting Process								
	1.	Get a certified list of all abutters within 100' of property lines from the Newton Assessor's Office.								
1.	2.	Submit applications by noon of the Tuesday deadline (16 days before the desired hearing) to:								
		a. Newton Conservation Commission: 1000 Comm Ave., Newton, MA 02459 (2 hard copies + 1 pdf)								
		 Complete NOI or RDA application packet. For NOIs use the application checklist to ensure completenes Include: 								
		Application coversheet, state forms, narrative, photocopies of checks, ALL attachments								
		• Plans (11"x17" if legible) stamped by engineer if any aspect of the project requires engineering.								
		Check to City of Newton for city portion of the state filing fee								
		• \$50 check to City of Newton for city filing fee								
		b. Mass DEP Northeast Regional Office: 205B Lowell Street, Wilmington, MA 01887 (1 paper copy)								
		 Complete NOI or RDA application packet Photocopy of the two state filing fee checks 								
		c. <u>DEP Lock Box</u> : Box 4062, Boston MA 02211								
		Check to Commonwealth of Mass. for state portion of the state fee								
		Fee transmittal form								
		The Conservation Agent will determine application completeness and assign a public hearing/meeting date and time .								
	3.	Once you are given the date and time of the hearing, using the City's "Notification to Abutters Form", notify all abutters within 100' of the property line via certified mail, certificate of mailing, or hand delivery with signatures.								
		The Conservation Agent will place a legal ad in the TAB and the Applicant will be billed for the ad.								
	4.	Stake the project. 2 weeks in advance of the public hearing, stake all proposed structures, erosion control barriers, stormwater systems, etc. within Con Com jurisdiction.								
		The Conservation Agent will perform a site visit before the public hearing to confirm existing conditions and proposed work. If you wish to be informed of the time of the visit, please contact the Con Com office.								
		One week prior to the meeting, when the agenda is posted, the Conservation Agent will send all Applicants detailed Conservation staff notes and recommendations (from the Conservation Commission's detailed agenda).								
	5.	Applicants may submit revised materials by the Tuesday prior to the meeting (to be reviewed and discussed at the meeting) or may request a continuation to a future Conservation Commission meeting.								
2.	6.	Attend the public hearing/meeting. The applicant or representative is expected to provide proof of abutter notification, briefly present the project, and answer any questions about possible impacts on wetlands. At the end of the hearing, the Con Com will either:								
		 Issue a <u>Determination of Applicability</u> ("negative" determination means no further permitting is needed), Issue an <u>Order of Conditions</u> (OOC) approving or denying the project, or Approve a continuation of the public hearing, to allow time for additional information to be provided. 								
3.	7.	Receive and read the decision and understand the conditions. Contact the Con Com if you have any questions. Some								
		conditions are temporary (such as maintaining erosion controls), and some are perpetual (such maintaining restoration planting areas or limiting the use of fertilizers and outdoor lighting).								
	8.	Wait-out the 10-Day appeal period. A decision of the Con Com can be appealed to MassDEP by any abutter, applicant, or 10-citizen group within 10 business days of the decision.								
	9.	Record the Order at the Registry of Deeds. Provide proof of recording to the Conservation office.								
	10.	Install MassDEP file number sign and erosion controls.								
	11.	Schedule and attend a pre-construction site visit. Contact the Conservation office to schedule the site visit.								
4.	12.	Execute the project. The project must be completed within 3 years, unless an extension of the permit is issued; extensions must be requested least 30 days prior to the expiration of the permit.								
	13.	Request a Certificate of Compliance (COC). Once the project is complete and all conditions have been satisfied, request a COC from the Conservation office by submitting: (1) DEP Form 8a, (2) a stamped as-built plan, and (3) a letter from the engineer stating that everything is in substantial compliance with the approved plans and OOC.								
		The Con Com will perform a site visit to ensure compliance, and will issue a COC if appropriate.								
	14.	Record the Certificate of Compliance (COC) at the Registry of Deeds to remove the cloud from the title. Provide proof of recording to the Conservation office.								

Work in Buffer Zone

Buffer Zone is the area of land within 100 feet of any Bordering Vegetative Wetland (BVW) and any bank of a pond or stream. Buffer Zone is not a wetland resource area, per se, but provides protection for the wetland and so is regulated under the state Wetlands Protection Act.

1983 Preface to the Regulations -- A. Regulation of Work Within the 100-Foot Buffer Zone

"It has been the Department's experience that any project undertaken in close proximity to a wetlands resource area has a high likelihood of resulting in some alteration of that area, either immediately, as a consequence of daily operation of the completed project. ... Accordingly, the adopted regulations require that any person intending to perform work within 100 feet of a bordering vegetated wetland must submit a Request for a Determination of Applicability to the local conservation commission."

"Ultimately, the buffer zone filing requirement is only a device by which local conservation commissions can be informed of work which in the Department's experience is sufficiently close to vegetated wetlands to pose significant potential for adverse impact. A notice of intent may be required for such work, but only after a determination has been made that the work will alter the neighboring wetland."

310 CMR 10.53(1): General Provisions

"For work in the Buffer Zone subject to review under 310 CMR 10.02(2)(b)3., the Issuing Authority shall impose conditions to protect the interests of the Act identified for the adjacent Resource Area. ... where prior development is extensive, may consider measures such as the restoration of natural vegetation adjacent to a Resource Area to protect the interest of [the Act]. ... The purpose of preconstruction review of work in the Buffer Zone is to ensure that adjacent Resource Areas are not adversely affected during or after completion of the work."

Some activities can be confirmed by the Conservation Office as "minor and exempt" (310 CMR 10.02(2)(b)1), such as:

- Installing fences that don't bar wildlife
- Vista pruning (& pruning of landscaped areas)
- Converting lawn to accessories to a residential structure
- Converting impervious areas or accessories to lawn at a residential structure
- Installing native plantings

Activities in Buffer Zone that do not fall under the exemptions listed in 10.02(2)(b)1 but are <u>unlikely</u> to adversely impact the wetland are required to file an RDA.

Activities in Buffer Zone that <u>will</u> impact the wetland must meet the performance standards for each type of wetland affected. The Conservation Commission must impose conditions to ensure protection of the relevant interests (functions) of the wetlands in question.

Work in Flood Zone – extra analyses are required!

Abide by these guiding tenets and provide documentation that you are meeting them. (see 310 CMR 10.57)

- 1. Avoid alteration
- 2. Minimize alteration
- 3. <u>Mitigate</u> for alteration. <u>Provide 110% compensatory flood storage volume</u> for all new fill in flood plain, foot-for-foot (*Newton ConCom Policy*)
- 4. Maintain unrestricted hydraulic connection
 - a. Construct on pilings. Flood vents do not provide unrestricted hydraulic connection. (DEP interpretation of 310 CMR 10.57 (BLSF))
 - b. Limit "skirting" around structures built on pilings to >50% openness (Newton ConCom Policy)
 - c. Elevate fences 6" off ground and have >50% openness (Newton ConCom Policy)
 - d. Do not restrict flows (310 CMR 10.57 (BLSF) (Newton Water, Sewer, and Drain Ordinance 29-116) (Newton Flood Plain Ordinance 22-22

Wetland Permit Process

First, determine whether your property is in Flood Zone.

- Use FEMA maps, FEMA flood elevations, and FEMA Flood Insurance Study flood profiles
- Use the City's GIS flood plain layer; it displays the FEMA flood elevations onto the City's one-foot LIDAR topography AND the City's additional regulatory flood areas defined in the Newton Floodplain Ordinance.

You may need to have your property surveyed to determine with accuracy:

- the extent of the FEMA 100-year flood elevation on your property,
- the "depth" the flood elevation at different points on your property,
- whether there are City Floodplain resource areas on your property, and
- whether flood insurance may or may not be required and/or advisable.

NOTE: Be sure it is clear with datum all elevations are based on: NAVD88 or City of Newton Vertical Datum; the differ by 6.53 feet

Second, ensure that your proposed project satisfies the requirements of all pertinent regulations, especially:

- applicable requirements in the **state building code** e.g., the requirement that the "lowest floor" must be 1 foot above the Base Flood Elevation and that the use of basements is limited to storage,
- the state Wetlands Protection Act protecting the ability of flood plains to flood naturally,
- the Newton Conservation Commission's policies for construction in Flood Zone, and compensatory flood storage.

<u>Third</u>, submit a complete **Notice of Intent (NOI) application** (i.e., a wetland permit application) to the Newton Conservation Commission. A wetland application information and materials can be found on the Newton Conservation Commission website.

An NOI for work in Flood Zone must include a number of required attachments, such as, but not limited to:

- Clear site plans showing all existing and proposed conditions.
- <u>Cut and fill calculations</u> for all grading and construction with the flood zone and flood elevation.
- A clear illustration of <u>compensatory storage</u> being provided at appropriate <u>elevations</u>.
- Construction design details that prove compliance with:
 - State Wetlands Protection Act requirements for the <u>free flow</u> of flood waters through compensatory storage areas (i.e., that structures be constructed on pilings).
 - Newton Conservation Commission's policies:
 - governing construction and fences within the flood zone/elevation, and
 - requiring the provision of excess compensatory flood storage.
- <u>Mitigation plans</u> which appropriately address the proposed alteration of the flood zone.

Fourth, after receipt of a wetland permit, submit your building permit application.

Work in Riverfront Area – extra analyses are required!

Introduction

The area within 200-feet of any perennial stream is called Riverfront Area (RFA). (Perennial streams are those which flow year-round and are shown as perennial streams on the 1987 USGS Map.) Riverfront Area is considered a Wetland Resource Area and has fairly stringent performance standards in the Massachusetts Wetlands Protection Act and its Regulations.

Permits for Work in Riverfront Area

- 1. For work in **Non-Degraded Riverfront Area** see 310 CMR 10.58(4). **Include in your permit application**:
 - Written Alternatives Analysis demonstrating that there are "no practicable and substantially equivalent economic alternatives to the proposed project with less adverse effects..." See 310 CMR 10.58(4). "The Alternatives Analysis may reduce the scale of the activity..."
 - Proof of "no significant adverse impact"
 - o A plan providing a 100-foot wide area of undisturbed vegetation (to the maximum extent practicable)
 - Stormwater is managed according to the DEP Stormwater Policy/Standards
 - o Proposed work does not impair the riverfront area from providing important wildlife habitat functions
 - Erosion and sedimentation control
- 2. For work in **Degraded areas ("redevelopment projects")** see 310 CMR 10.58(5). **Include in your permit application proof of the following:**
 - <u>"Improvement"</u>
 - Stormwater is managed
 - Proposed work is no closer to the river than existing conditions or 100-feet, whichever is less
 - Proposed work is located outside the riverfront area or away from the river
 - The area of proposed work <u>not exceeding the amount of degraded area</u> ...
 - BUT the proposed work <u>may alter up to 10%</u> if the degraded area is less than 10% of the riverfront area and <u>if there is sufficient restoration and/or mitigation there is some allowance for new degraded areas</u>
 - AND there is a prohibition on further alteration within the restoration or mitigation area
- 3. Include in your permit application a chart showing existing vs. proposed conditions in the RFA as follows.

Riverfront Resource Area Disturbance Table						
	0-100 Foot Riverfront Area			100-200 Foot Riverfront Area		
	Existing	Proposed	Difference	Existing	Proposed	Difference
Degraded – absence of top soil. i.e. roofs, driveways, patios						
Disturbed – lawn, landscaping						
Natural (woods, meadows, etc.)						

Tree Replacement and Mitigation Planting Consolidated Guidelines Fall of 2022

Introduction

These Guidelines have been developed to assist applicants as they develop planting plans as part of a conservation/wetlands filing.

These Guidelines reflect the interests of the Wetlands Protection Act and Regulations, the Newton Conservation Commission's interest in promoting healthy native ecosystems, and best practices for plant installation and maintenance.

What is a mitigation planting area? When is it a restoration planting area? What is tree replacement and when is it required (tree ordinance?)

Every site is unique. Applicants should consider site characteristics and protection of water resources and wildlife as they develop a planting plan.

Mitigation Planting Area Design and Location

- Planting areas should be sited away from buildings and/or roads when possible.
- Planting areas adjacent to other natural areas can help augment those natural areas and/or created connections to them. Mitigation/restoration areas should be sited to optimize connectivity with adjacent natural areas when possible.
- Walls and fences should be avoided when possible

Planting Area Shapes

- Small, isolated planting areas have limited habitat value and should be avoided when possible.
- Narrow strips of planting areas have limited habitat value. Planting beds should be closer to a square circle or shaped to be as "consolidated" (non-linear) as possible.

Plant Layout

- A clear planting plan/map is important. A plan helps create appropriate "clumping" of plant material, identify (and avoid) potential conflicts, and clearly illustrate final/proposed conditions. Plans showing intended layouts should be provided to the Commission.
- Modifications to approved plans may be approved by Conservation staff.

Plant Varieties

- Plants native to central or northeastern North America are preferrable.
- Plants with high habitat value are preferrable.

Plant Density and Sizes at time of installation

- In addition to the species of plants to be included in a mitigation/restoration area, it is important to consider the density and sizes of plants to be installed. Very small plants may struggle to take hold. Very large plants may suffer excessive stress and struggle to establish. Plans should show sizes at the time of installation
- In the chart below are best practices (these happen to be from a King Co. WA publication).

Type of Plant	Planting distance	Planting density		Size at time of installation	
Groundcover	2' on center	25.0 pe	r 100 sf	4"-1 gallon, 10" plugs, or seed mix	
Groundcover w/ shrubs	4' on center	6.3 pe	r 100 sf	4" container, plugs,	
Shrubs	5' on center	4.0 pe	r 100 sf	1'-3' tall = 1 gal.; 2'-4' tall = 2 gal.	
Shrubs w/ trees	6' on center	3.0 pe	r 100 sf	1'-3' tall = 1 gal.; 2'-4' tall = 2 gal.	
Saplings/small trees	10' on center	1.0 pe	r 100 sf	1 caliper inch / 6-8 feet tall	
Canopy trees	15' on center	0.4 pe	r 100 sf	2 caliper inches / 8-10 feet tall	

Planting Area Examples

- The chart below is designed to be used as an aid to visualizing and planning mitigation/restoration areas. Some sites will be best served with more "low" plants such as is shown in the "Combo 1" column; other sites will require a mixture that includes more trees such as is shown in the "Combo 4" column.
- KEY: GC = ground cover, Shr = shrub, UTr = understory tree, CTr = canopy tree

			Combo 1 Low	Combo 2 Low & mid-sized only	Combo 3 Some trees & low & mid-sized	Combo 4 More trees & low & mid-sized
Planting	Square	Narrow	GC/Shr/-/-	GC/Shr/UTr/-	GC/Shr/UTr/CTr	GC/Shr/UTr/CTr
Area	Layout	Layout				
100 sf	10 x 10	n.a.	25/0/0/0	6/4/0/0	6/2/1/0	0/2/0/1
200 sf	14 x 14	10 x 20	50/0/0/0	12/8/0/0	12/6/2/0	10/5/1/1
300 sf	17 x 17	10 x 30	19/12/0/0	100/3/3/0	100/4/1/1	50/3/1/1
400 sf	20 x 20	10 x 40	25 / 16 /0 / 0	25/12/4/0	25/10/2/1	25/8/2/2
500 sf	22 x 22	15 x 33	n.a.	31/15/5/0	31/12/3/1	31/12/2/2
600 sf	25 x 25	15 x 40	n.a.	38/18/6/0	38 / 15 / 4 / 1	37 / 15 / 2 / 2
700 sf	26 x 26	15 x 47	n.a.	44/21/7/0	44/18/4/1	44 / 18 / 3 / 2
800 sf	28 x 28	15 x 53	n.a.	n.a.	50/24/5/1	50/24/3/3
900 sf	30 x 30	20 x 45	n.a.	n.a.	57 / 27 / 5 / 2	57 / 27 / 4 / 3
1000 sf	32 x 32	20 x 50	n.a.	n.a.	63/30/6/3	63 / 30 / 5 / 4

Site Preparation and Correct Planting Practices

- 1. Mix compost or other organic amendments into the back-fill soil to increase water-holding capacity where appropriate.
- 2. Dig planting hole for trees only as deep as measured from the trunk flare to the bottom of the root ball or to the same depth as the container.
- 3. Dig planting hole a minimum of three times the diameter of the root ball.
- 4. Removed all (or at least top third) of burlap and wire baskets from the root ball.
- 5. Stake large trees for stability for one growing season.
- 6. Water all plants thoroughly at the time of planting (15-20 gal. per plant).
- 7. Mulch root zones with 2 inches of mulch.
- 8. No fertilization is necessary at planting time.

Maintenance from Planting through Establishment

- Water: All newly planted areas should receive approximately 1" of water per week during the growing season from April through October. Temporary irrigation may include drip tubing on a timer to be removed after establishment or TreeGators™.
- Mulch: Root zones of newly planted trees and shrubs should be mulched to a depth of 2" to 2 ½" to the drip-line, except for the area directly adjacent to the trunk. Mulching materials may include shredded leaves, aged wood chips, bark mulch, or other conservation commission approved material; or may be a

hydro-seeded mixture of grasses and forbs. If hydro-seeding, a minimum of 4" of topsoil should be put down prior to seeding. On steep slopes, biodegradable erosion fabric may be used. Efforts will be made to prevent erosion and sedimentation in the planted areas.

- **Weeding:** Hand removal of weeds is to be conducted where appropriate.
- **Fertilizer:** No fertilizer should be applied at planting. In subsequent years, slow release fertilizers may be appropriate based on plant growth.
- Removal of invasive species: Consideration shall be given to the removal of those species of plants listed by the Mass. Dept. of Agricultural Resources Division of Regulatory Services.

Newton Conservation Commission

25-Foot Naturally Vegetated Buffer (NVB) Policy

Adopted by the Conservation Commission on June 20, 2019

- GOAL of this POLICY: To fully protect the vital functions and values of Newton's wetland resource areas by
 protecting and/or re-establishing a naturally vegetated buffer around all wetlands, waterbodies, and
 waterways jurisdictional under the State Wetlands Protection Act.
- II. **REASON for this POLICY**: The Newton Conservation Commission recognizes the importance of the buffer zone to wetland resource areas (as defined in the Massachusetts Wetlands Protection Act, G.L. c. 131, § 40 and associated regulations 310 CMR 10.00 et seq.). Buffer zones provide functions vital to the health of their associated wetlands including but not limited to:
 - Shade that moderates water temperature
 - Infiltration and slow release of precipitation
 - Flood water storage
 - Uptake and breakdown of pollutants and excess nutrients
 - Light and sound buffering
 - Upland habitat for wetland-dependent species, including mammals, amphibians, reptiles, birds, and insects.

By providing these functions, buffer zones support environmental health, aid in carbon capture and storage, and provide lifecycle wildlife and pollinator habitat. (Jennifer)

In the Commission's experience, activities undertaken within 25 feet of the edge of a wetland resource area have a high likelihood of having an adverse impact upon the protected resource area, either as a direct consequence of construction activity or the daily use and operation of the completed project.

- III. **REQUIREMENT of this POLICY**: To fully protect Newton's wetland resources, it is the policy of the Newton Conservation Commission to ensure that a 25-foot Naturally Vegetated Buffer (25-foot NVB) of native trees, shrubs, and low-growing vegetation is maintained or established to the maximum extent feasible immediately upgradient of the edge of a resource area subject to protection under the Massachusetts Wetlands Protection Act, G.L. c. 131, § 40.
- IV. **BURDEN OF PROOF**: If an applicant proposes a project that requires an exemption to the 25-foot NVB, the burden shall be upon the applicant to prove that:
 - The proposed project is the only reasonable alternative that complies with the Wetlands Protection Act, or
 - The proposed project will further an overriding public interest, or
 - The proposed project is the only available alternative that does not constitute an unconstitutional taking of private property without just compensation.
- V. **EXEMPTIONS**: If the Commission accepts and allows an exemption to this policy, it may require the applicant to:
 - Restore more natural vegetation elsewhere that will result in a net ecological benefit;
 - Remove or reduce existing disturbances adversely affecting the wetland resource area; and/or
 - Meet other conditions, safeguards, and limitations that the Commission determines will result in improved protection of the wetland resource area.

Compilation of

The Newton Conservation Commission's Guidelines for Construction in Flood Zone under the State Wetlands Protection Regs (310 CMR 10.00) and Compensatory Storage Policy

Approved 10/8/20 and 1/30/20 respectively

Purposes

1. It is the interest of the Newton Conservation Commission to <u>ensure that flood prone areas continue to provide</u> <u>flood storage and wildlife habitat value interests</u> as specified in the state wetland regulations, and in the face of increased rainfall and flooding events due to climate change.

310 CMR 10.57(1)(a)2. Bordering Land Subject to Flooding provides a temporary **storage area** for flood water which has overtopped the bank of the main channel of a creek, river or stream or the basin of a pond or lake.

310 CMR 10.57(1)(a)3. Certain portions of Bordering Land Subject to Flooding are also likely to be significant to the protection of **wildlife habitat**.

2. It is the interest of the Newton Conservation Commission to <u>ensure that compensatory flood storage be effective</u> and <u>permanent</u>.

310 CMR 10.57(4)(a)1. Such compensatory volume shall have an **unrestricted hydraulic connection** to the same waterway or water body.

310 CMR 10.57(4)(a)2. 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.

3. The Commission recognizes that because the precision of grades shown on site plans is often insufficient to determine exact changes in flood storage capacity and that final grading and landscaping can result in unanticipated and unaccounted for increases in fill on a site, excess flood storage capacity must be included in project designs.

Guidelines and Policy Requirements

- Construction Guidelines: Areas developed as compensatory flood storage must have "unrestricted hydraulic connection" to (i.e., be fully open to the flow of water from any and all sides of) the contiguous flood plain.
 [Note: Quoted text below is from email communication from Tom Maguire, Wetland Regional Coordinator,
 MassDEP Wetlands Program, Boston MA, July 2020]
 - a. Structures over compensatory storage areas must be constructed on pilings. "To act as an unrestricted hydraulic connection in Bordering Lands Subject to Flooding, there would have to be an open pile foundation with the lowest floor or lowest horizontal structural member elevated at or above the 100-year flood elevation, so river flow during a flood can flow unimpeded. An open-pile foundation would only require compensatory flood storage for the volume of the piles." Apertures in otherwise solid foundations are not permitted. "Apertures, orifices, or penetrations of any size in a solid foundation act as hydraulic restrictions, when constructed in Bordering Lands Subject to Flooding." "The apertures or orifices in a solid foundation act as hydraulic restrictions when constructed in Bordering Lands Subject to Flooding, so do not meet the 310 CMR 10.57 criteria to provide compensatory flood storage." "The volume enclosed by the solid foundation cannot be credited to serve as compensatory flood storage, regardless of the numbers and size of apertures and orifices."
 - b. Skirting, wire mesh, lattice, or other similar covering over or around pilings or apertures within the flood zone/elevation may be permitted only if those materials are proven to not impede or restrict the flow of flood waters. Any covering that is proposed within the flood zone/elevation must have an even distribution of at

<u>least 50% open air and must not be of a design that is likely to trap debris</u>. All proposals for covering must be submitted to the Conservation Commission for review and approval; submissions must prove that the proposed material meets the requirement of preserving unrestricted hydraulic connection. Some options that may be considered by the Commission for approval include the following:

- Shrubs planted at grade
- Wire cables spaced at least 1" apart
- Wire mesh with large holes, at 1"x4" openings
- Wooden lattice with large holes, at ~2" on a side
- Narrow, vertical lath with large gaps (at least 1") between the slats and total coverage of no more than 50%
- 2. Construction Guidelines: Fences must not restrict hydraulic connection or impede wildlife passage.
 - a. Installing a fence in BLSF is an alteration, so requires the filing of a NOI.
 - BLSF performance standards for storm damage prevention and flood control must be demonstrated to be met.
 - For the wildlife habitat interest, the bottom of the fence must be elevated to provide for wildlife passage, similar to fences constructed in the Riverfront Area.
 - For the storm damage prevention and flood control interests, the fence must comply with 310 CMR 10.57(4)(a)2., work "shall not restrict flows so as to cause an increase in flood stage or velocity." The burden is on the Applicant to make this demonstration.
- 3. Compensatory Storage Policy: Any project proposal which involves fill greater than 2 cubic yards, must supply an additional 10% of compensatory flood storage capacity (i.e., 110% compensation for fill brought into the floodplain elevation). This additional flood storage capacity shall be built into the project application filed with the Commission when proposing work within BLSF or City Floodplain.

EXEMPTIONS: If an applicant seeks an exemption from the requirements of this policy or any provision hereof, the burden shall be upon the applicant to prove that the proposed project:

- Complies with the Wetlands Protection Act and City Flood Plain Ordinance, and
- Is the only reasonable alternative to achieve the stated project purpose, or
- Will further a significant public interest, or
- Is the only available alternative that does not constitute an unconstitutional taking of private property without just compensation.

If the Commission votes to allow an exemption to this policy, it may require the applicant to meet certain conditions that the Commission determines will result in improved protection of the wetland resource area.

Newton Conservation Commission Deadlines for Receipt of Materials Policy

Approved: 10/28/21

To allow placement of legal ads (when necessary) and to facilitate careful review by City staff, all applicants and inquirers under the Wetlands Protection Act must submit (in hard copy and electronic form) complete materials as follows:

New applications

- All materials are due by noon, Tuesday, 16 days prior to the hearing/meeting,
- o i.e., 9 days prior to packet distribution/posting.

• Revised materials for open hearings

- All materials are due by noon, Monday, 10 days prior to the hearing/meeting*,
- o i.e., 3 days prior to packet distribution/posting.
- * NOTE: For complicated sites, cases, or revisions, the Conservation Commission and/or the Chief Environmental Planner may require that materials be submitted up to 16 days prior to the hearing.

Informal discussions

- o All materials are due by noon, Tuesday, 9 days prior to the hearing/meeting,
- o i.e., 2 days prior to packet distribution/posting.

Exceptions to these deadlines will be at the sole discretion of the Chief Environmental Planner.