CONSERVATION COMMISSION AGENDA

Date: Thursday, February 9, 2023
Time: 7:00pm
Place: This meeting will be held as a virtual meeting via Zoom.

The Commission will hold this meeting virtually; 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 jsteel@newtonma.gov 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 – 70 Suffolk Rd – NOI continued – construct pool, garage, site features – DEP #239-946**
   - Owner/Applicant. Frank & Kyra van den Bosch
   - Representatives. Andrea Kendall, LEC Environmental; Peter Stephens, Dan K Gordon Assoc; Brian Nelson, MetroWest Engineering
2. **7:30 – 0 Commonwealth Avenue – NOI – Marty Sender Phase II Path Improvements – DEP #239-947**
   - Owner/Applicant. Luis Perez Demorizi of Newton Parks, Recreation, Culture
   - Representatives. Megan Kearns, Cassie Bethoney, and Farah Dakkak of Weston & Sampson, Inc.
3. **8:00 – 65 Harwich Rd – Notice of Violation resolution – restoration of Buffer Zone planting – DEP #239-743**
   - Owner/Applicant. Chitra and Ravindra Uppaluri
   - Representatives. Nicole Ferrara, Rich Kirby, LEC Environmental
4. **8:15 – 158 Otis St. – Notice of Violation resolution -- Unpermitted tree cutting – DEP #239-801**
   - Owner/Applicant. Gregg Nagel
   - Representatives. John Rockwood of EcoTec
5. **8:30 – 180-210 Needham St – Notice of Violation resolution -- parking lot expansion, mitigation planting, rain garden – DEP #239-730**
   - Owner/Applicant. Kerry McCormack, CrossPoint Associates
   - Representatives. John Rockwood of EcoTec
6. **8:45 – 42 Parsons St – COC – demo SFH/construct duplex – DEP #239-859**
   - Owner/Applicant. Arto Dermovsesian
   - Representatives. John Rockwood of EcoTec
7. **9:00 – 400 Beacon St – COC – Mary Baker Eddy House landscape improvements – DEP #239-843**
   - Owner/Applicant. Sandra Houston, Longyear Foundation
   - Representatives. Bert Corey, DGT Associates
8. **9:05 – Discussion -- Commission's Tree Replacement Policy**

B. CONSERVATION AREA DECISIONS

C. ADMNISTRATIVE DECISIONS

D. ISSUES AROUND TOWN DECISIONS

9. **9:30 – Watertown Dam project letter**

UPDATES

E. WETLANDS UPDATES

F. CONSERVATION AREA UPDATES

G. ADMINISTRATIVE UPDATES

H. ISSUES AROUND TOWN UPDATES

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

ADJOURN

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DECISIONS

A. WETLANDS DECISIONS

1. 7:00 – 70 Suffolk Rd – NOI continued – construct pool, garage, site features – DEP #239-946

- Owner/Applicant. Frank & Kyra van den Bosch
- Representatives. Andrea Kendall, LEC Environmental; Peter Stephens, Dan K Gordon Assoc; Brian Nelson, MetroWest Engineering
- Proposed Project Summary.
  - Within the 100' Buffer Zone, the following changes are proposed:
    - Remove existing hardscape (driveway, retaining walls, steps; a portion of the house).
    - Build a pool, pool house, 1-car garage, terraces and paths; and install 2 underground stormwater infiltration systems. This will add 2,806 sf of impervious area within Commission jurisdiction.
    - Remove 22 live trees over 8" dbh (489" total).
    - Mitigation/Re-Naturalization
      - Plant 42 (37 large native canopy trees, 7 smaller-stature native trees) (207" total)
      - Reduce/renaturalize lawn within the BZ 4,121 sf.
        - Plant 125 native shrubs
        - Create "sun meadow" with 2500 plugs
        - Create "shade meadow" with 500 plugs.
      - Manage invasive species along the slope east of the house and within BVW along the perimeter of the lawn.
  - Within BVW, reduce lawn by 9,325 sf -- plant native trees, shrubs, ferns, sedges, & forbs.
  - Within Bank of the intermittent stream, remove the wooden footbridges by hand and plant the Bank with forbs and/or ferns.
- Request. Issue OOC.
- Documents in packets. Locus map, highlighted plans and photos.
- Additional documents presented at meeting. Site photos.
- Jurisdiction. Bank, BVW to intermittent stream, LUW, Buffer Zone
- Performance Standards.

Buffer Zone 10.53(1): General Provisions: "… the Issuing Authority shall impose conditions to protect the interests of the Act for adjacent Resource Area…" "… ensure that adjacent wetland resource areas are not adversely affected during or after completion ..."

BVW: 10.55(4)

(a) work in a Bordering Vegetated Wetland shall not destroy or otherwise impair any portion of the BVW

(b) ConCom may permit the loss of up to 5000 sf of BVW when said area is replaced IF:

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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1. The area is equal;
2. The ground water and surface elevation are approximately equal;
3. The overall horizontal configuration and location are similar;
4. There is an unrestricted hydraulic connection to the same water body or waterway;
5. It is in the same general area of the water body;
6. At least 75% of the surface of the replacement area shall be reestablished with indigenous wetland plant species within two growing seasons; and
7. The replacement area is provided in a manner which is consistent with all other regs in 310 CMR 10.00.

(c) The ConCom may permit the loss of a portion of BVW when …;

(d) No project may be permitted which will have any adverse effect on specified habitat sites of rare species

(e) No work shall destroy or otherwise impair any Area of Critical Environmental Concern

Bank: 310 CMR 10.54

(a) Work on a Bank shall not impair the following:
1. The physical stability of the Bank;
2. The water carrying capacity of the existing channel within the Bank;
3. Ground water and surface water quality;
4. The capacity of the Bank to provide breeding habitat, escape cover and food for fisheries;
5. The capacity of the Bank to provide important wildlife habitat functions….
6. Work on a stream crossing …

(b) Structures may be permitted in or on a Bank …

(c) No project may be permitted which will have any adverse effect on specified habitat sites of Rare Species.

- Staff Notes.
  - Revised landscape and civil plans have been received.
    - The new plans show a revised wetland line and flood zone elevation.
    - The new plans clarify proposed and existing conditions.
    - Proposed trees are now all native.
  - Important site history. A memo summarizing the wetland permitting history of the site has been received.
    - In 1974 an OOC (239-11) was issued for the installation of fill to create the lawn that exists today.
    - A COC was issued in 1978.
  - One of the trees in the back yard area fell recently.
  - Staff note that under this application, recently flagged BVW is due to be altered with fill (the "nose" of the proposed lawn). The Commission can follow one of two routes:
    (1) The Commission could find that since the BVW that is proposed to be altered is and has been lawn for decades and so the presumption of significance could be overcome. The applicants request that their proposed alteration of ~2000 sf of BVW be allowed since it is now lawn and will remain lawn. The applicants suggest that their proposed restoration of ~7,136 sf of BVW from lawn to native trees, shrubs, and vegetative plants represent an overall ecological improvement.
    (2) The Commission could find that since ~2000 sf BVW is due to be altered, ~2000 sf BVW must be replicated.
  - Staff feel that on balance, the project is a beneficial one: BVW will get enhanced with plantings and be better protected with a clear demarcation of shrubs and a slope.
  - Staff are concerned that:
    - The erosion control line is shown running through an area to have tree cutting and planting.
    - Runoff from the steep slopes beside the pool may adversely affect slope stability and the adjacent parcel.
    - Flow over the level spreader on the eastern side of the property could lead to erosion.
    - Trees are shown being planted over the northern infiltration system.
  - Staff note the following possible improvements/additions to the proposal.
    - Proposed trees and shrubs c/should be planted more in the "tongue" of lawn, not just at the very edges.
    - A CR could be placed on the rear re-naturalized portion of the parcel.
  - The stormwater infiltration systems are being reviewed by Engineering under the City's new Stormwater Ordinance. The project is exempt from Stormwater Standards under the Wetlands Protection Act.
- Staff Recommendation.
  - Once all questions have been answered and appropriate plans received, vote to close the hearing and issue an OOC with the following special conditions.
    - A dewatering plan 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.

- A concrete washout plan designed to limit and control any adverse on the wetlands resource area(s) must be presented to the Conservation Commission for review and approval.
- Individual specimens of non-native invasive species may be removed using best practices. Where removal leaves a "hole" in the cover of the landscape, a suitable native species shall be installed.
- The approved planting plan must be installed in full compliance with the approved plans (desired changes must be approved by the Conservation office in advance).
  a. Including 37 native canopy trees and have a survival rate of 100 % (after 2 growing seasons)
  b. Including 7 native understory trees and have a survival rate of 100% (after 2 growing seasons)
  c. Including 125 native shrubs and have a survival rate of 90% (after 2 growing seasons)
  d. Including the full aerial extent of the sun and shade meadows (after 2 growing seasons)
- Active monitoring and management of the required plantings must continue for 2 years, and annual reports with photos must be submitted to the Conservation Office.
- 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).
- To protect the water quality of the wetlands, fertilizers shall be of low-nitrogen content and be used in moderation.
- To protect the suite of benefits of area wetlands, wildlife, and native insect/pollinators, no pesticides shall be used.
- To protect wetland wildlife, exterior lighting shall:
  a. be "dark sky" compliant – i.e., shielded to prevent any "up lighting" and "backlighting", focused, and directed so a to not illuminate any part of the wetland,
  b. have limited blue content to decrease skyglow and disruption of diurnal animals, and
  c. be switched off when not in active use.

2. 7:30 – 0 Commonwealth Avenue – NOI – Marty Sender Phase II Path Improvements – DEP #239-947

- Owner/Applicant. Luis Perez Demorizi of Newton Parks, Recreation, Culture
- Representatives. Megan Kearns, Cassie Bethoney, and Farah Dakkak of Weston & Sampson, Inc.
- Proposed Project Summary. Regrade/resurface the Marty Sender Path from Islington Road to the pump station.
  - Install new stone dust path above the flood zone elevation.
  - Install an elevated boardwalk on piers over the existing gravel path within the flood elevation.
  - Grade down and install wetland plants in RFA adjacent to BVW in an area that is currently maintained as lawn.
  - Remove invasives in the immediate vicinity of the trail.
  - Close the short connector trail to Lyons Field that is often flooded.
  - Plant: 4 native trees, 89 native shrubs, and 181 native sedges.
- Request. Issue OOC.
- Documents in packets. Locus map, highlighted plans.
- Additional documents presented at meeting. Site photos.
- Jurisdiction. Buffer Zone. BVW, and Flood Zone (BLSF).
- Performance Standards.

  Buffer Zone 10.53(1): General Provisions: "… the Issuing Authority shall impose conditions to protect the interests of the Act for adjacent Resource Area…" "… ensure that adjacent wetland resource areas are not adversely affected during or after completion ..."

  BVW: 10.55(4)

  (a) work in a Bordering Vegetated Wetland shall not destroy or otherwise impair any portion of the BVW
  (b) The ConCom may permit the loss of up to 5000 square feet of BVW when said area is replaced IF: …
  (c) The ConCom may permit the loss of a portion of BVW when …;
  (d) No project may be permitted which will have any adverse effect on specified habitat sites of rare species
  (e) No work shall destroy or otherwise impair any Area of Critical Environmental Concern

  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. ….
- Staff Notes.
  - The project will focus foot traffic within a 10-foot wide pathway, allowing the restoration of long areas of disturbed ground.
  - The project honors the draft FEMA flood maps/elevations.

- The project will utilize suitable piers/foundations based on the currently unknown soil conditions.
- Construction must be completed by June 30, 2023.

- Staff Questions.
  - Notes mention contractor will delineate BVW prior to work. Why?
  - How will the old gravel path that is outside the new boardwalk be treated? Will material be removed before new loam and seed is applied?
  - Notes mention "clearing and grubbing". Where will that occur?
  - How will trees in the area to be graded and planted be protected?
  - There are two symbols for tree protection. What method(s) is anticipated?
  - Where will stockpiling and laydown occur?
  - How will footing holes be dewatered?
  - Where will pedestrians be shunted during construction?
  - The notes call for #3 containers of sedges. Wouldn't plugs be more appropriate and affordable?
- Staff Recommendation.
  - Once all questions have been answered, vote to close the hearing and issue an OOC with the following special conditions.
    - A dewatering plan 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.
    - A concrete washout plan designed to limit and control any adverse on the wetlands resource area(s) must be presented to the Conservation Commission for review and approval.
    - The approved planting plan must be installed in full compliance with the approved plans (desired changes must be approved by the Conservation office in advance).
      a. Including 4 native canopy trees and have a survival rate of 100 % (after 2 growing seasons)
      b. Including 71 native shrubs and have a survival rate of 80% (after 2 growing seasons)
      c. Including the full aerial extent of the sedge meadows (after 2 growing seasons)
    - 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).

3. 8:00 – 65 Harwich Rd – Notice of Violation resolution – restoration of Buffer Zone planting – DEP #239-743

- Owner/Applicant. Chitra and Ravindra Uppaluri
- Representatives. Nicole Ferrara, Rich Kirby, LEC Environmental
- Proposed Project Summary.
  - Restore the natural buffer previously approved by the Con Com as part of the single-family home construction.
  - Remove lawn grass.
  - Plant trees and shrubs
    - Install 3 native sapling trees measuring 4-6' tall and 10 native shrubs 2-3' tall at time of planting;
    - Select at least two different tree species and three different shrub species;
  - Apply Ernst Conservation Seed mix for Mesic to Dry/Native Pollinator Mix after trees and shrubs have been installed.
  - Install 5 bounds.
- Request. Accept the proposed restoration planting plan.
- Documents in packets. Locus map, Resolution Planting Sketch Plan.
- Additional documents presented at meeting. Site photos.
- Jurisdiction. Buffer Zone.
- Performance Standards. **Buffer Zone** 10.53(1): General Provisions: "… the Issuing Authority shall impose conditions to protect the interests of the Act for adjacent Resource Area…" "… ensure that adjacent wetland resource areas are not adversely affected during or after completion ..."
- Staff Notes.
  - The owners received a Notice of Violation that required a plan be submitted (done), approved by the Commission, and implemented on or before May 30, 2022.
  - The owners have been very responsive and the plan submitted seems mostly appropriate.
  - Tree and shrub species list is appropriate.
  - The submitted plan sheet notes both 3 and 4 trees and both 10 and 15 shrubs. The Commission should determine which set of numbers is more appropriate.
  - The area may be too wet for Ernst Conservation Seed mix for Mesic to Dry areas to thrive.

- Staff Recommendation. As "belt and suspenders", vote to issue a "friendly" Enforcement Order citing the restoration plan that has been submitted, requiring that the plan be implemented on or before May 30, 2023, and requiring monitoring and photo-documentation for 2 years.

4. 8:15 – 158 Otis St. – Notice of Violation resolution -- Unpermitted tree cutting – DEP #239-801

- Owner/Applicant. Gregg Nagel
- Representatives. John Rockwood of EcoTec
- Proposed Project Summary. Restore mitigation areas at rear of property on or before June 1, 2023.
  - Retain wood-framed play area
  - Plant 3 white pines, 4 red or pin oak, 4 red or sugar maple, and 4 American beech
  - Plant 6 clusters of 6 native shrubs
  - Spread leaf litter about
  - Monitor the site for 2 years
- Request. Restore mitigation areas at rear of property.
- Documents in packets. Locus map, highlighted plans.
- Additional documents presented at meeting. Site photos.
- Jurisdiction. Buffer Zone.
- Performance Standards. **Buffer Zone** 10.53(1): General Provisions: "… the Issuing Authority shall impose conditions to protect the interests of the Act for adjacent Resource Area…" "… ensure that adjacent wetland resource areas are not adversely affected during or after completion ..."
- Staff Notes.
  - Site History
    - The property was subdivided and built under an OOC.
    - Mitigation plantings were required to offset the impact of new house and driveway.
    - A COC was issued and the required Enhancement Planting Areas were re-naturalizing successfully.
  - In the fall of 2022, Staff received calls from neighbors regarding (unpermitted) tree cutting at the rear of 158 Otis Street and initiated discussions with the owner.
  - Activities that have occurred (without a permit) since the COC was issued:
    - Wood-framed play area installed
    - 1 white ash was cut
    - 5 girdled Norway maples were cut, 1 snapped off at 20 feet
    - 1-2 snags were cut
    - Several saplings and shrubs have damage to their bark
    - Leaf litter was removed
    - NOTE: 8 native saplings were planted in the fall of 2022.
  - The owner retained John Rockwood (the original representative) to develop a plan to bring the site into compliance.
  - John Rockwood noted that the City's permitted work to fix the pipe and drop inlet have removed the "intermittent stream" from the property.
  - John Rockwood noted that the COC had incorrect perpetual conditions (a cut and paste error).
  - John Rockwood noted that the drought of 2022 adversely affected the Enhancement Planting Areas.
- Staff Recommendation.
  - As "belt and suspenders", vote to issue a "friendly" Enforcement Order citing the restoration plan that has been submitted, requiring that the plan be implemented on or before June 1, 2023, and requiring monitoring and photo-documentation for 2 years.
  - Vote to issue a corrected COC for recording.

5. 8:30 – 180-210 Needham St – Notice of Violation resolution -- parking lot expansion, mitigation planting, rain garden – DEP #239-730

- Owner/Applicant. Kerry McCormack, CrossPoint Associates
- Representatives. John Rockwood of EcoTec
- Proposed Project Summary. Site needs to be brought into compliance with an expired OOC with plantings and a rain garden.
- Request. Should the lack of compliance be addressed administratively or with an Enforcement Order?
- Documents in packets. Locus map
- Additional documents presented at meeting. Site photo.
- Jurisdiction. Riverfront Area, Flood Zone, Buffer Zone.

- Staff Notes.
  - A courtesy reminder from staff was too late to allow for a timely extension of the OOC. File review determined that the OOC had expired.
  - A site visit found that the site is not in substantial compliance with the approved plans
  - A Notice of Violation was sent stating that the owner must bring the site into full compliance promptly to avoid an official Enforcement Order and that, due to the season, the full planting plan referenced in 239-730 be installed on or before June 15, 2023.
  - John Rockwood has been retained to develop a plan. He expects to submit a plan addressing vegetation in rain garden, invasive species removal and planting/supplemental planting of the enhancement area that was previously planted under expired order (239-730) and planting of the area that has not yet been planted under the active order (239-841).
- Staff Recommendation. As "belt and suspenders", vote to issue a "friendly" Enforcement Order requiring that a plan be submitted to the Conservation Office for review and approval, and that the plan be implemented on or before June 15, 2023.

6. 8:45 – 42 Parsons St – COC – demo SFH/construct duplex – DEP #239-859

- Owner/Applicant. Arto Dermovsesian
- Representatives. John Rockwood of EcoTec
- Request. Issue COC.
- Documents in packets. Approved planting plan
- Additional documents presented at meeting. Site photos
- Staff Notes.
  - All necessary paperwork was received for this COC request.
  - A site visit on 2/1/2023 found that the site was is substantial compliance with the approved plans but for that fact that it appears that although 4 canopy saplings were required to have been planted outside the bounded mitigation area, only 2 were planted and they are understory tree species (dogwoods).
- Staff Recommendation. Discuss.

7. 9:00 – 400 Beacon St – COC – Mary Baker Eddy House landscape improvements – DEP #239-843

- Owner/Applicant. Sandra Houston, Longyear Foundation
- Representatives. Bert Corey, DGT Associates
- Request. Issue COC.
- Documents in packets. None.
- Additional documents presented at meeting. Site photos.
- Staff Notes.
  - Most necessary paperwork was received for this COC request – tree cutting and pruning information has not been received.
  - A site visit on 2/1/2023 found that site work is incomplete.
    - The garden area is "raw" and unstabilized,
    - The rain garden has not been completed or stabilized, and
    - The inflow channel is not at the low point of the loop road.
- Staff Recommendation. Vote to decline to issue a COC at this point in time.

8. 9:05 – Discussion -- Commission's Tree Replacement Policy

- Staff Notes.
  - At a recent hearing, the Commission noted their interest in revisiting their Tree Replacement Policy as it relates to large/mature trees.
  - The Commission has a Tree Replacement Policy and a Mitigation/Restoration Planting Area Guidelines – attached in the packet individually and in consolidated form.
  - The Commission should determine whether those policies:
    - provide sufficient guidance for situations wherein large trees are proposed to be removed, and
    - address the Commission's interest in preserving mature trees.

B. CONSERVATION AREA DECISIONS

C. ADMNISTRATIVE DECISIONS

9. 9:25 -- Minutes to be approved

- Documents in packets. Draft 1/19/2023 minutes as edited by Ellen Katz.

- Staff Recommendation. Vote to approve the 1/19/2023 minutes as edited by Ellen Katz.
- Volunteer. Who will volunteer to review the 2/9/23 minutes?

D. ISSUES AROUND TOWN DECISIONS

10. 9:30 – Watertown Dam project letter

- Owner/Applicant. Potentially the City of Watertown
- Proposed Project Summary. CRWA is garnering support for the removal of the Watertown Dam
- Request. CRWA has asked the Commission to consider writing a letter advocating for removal of the Watertown dam.
- Documents in packets. Locus map.
- Additional documents presented at meeting. Site photos.
- Jurisdiction. The dam is entirely within Watertown, so removal would occur in Watertown, but the effects of removal would impact Newton.
- Performance Standards. Not relevant at this point in time, but should removal come to pass, the Commission would need to permit the anticipated alterations to Land Under Water, Bank, RFA, BLSF, BVW, and BZ.
- Notes (according to CRWA).
  - The Charles River Watershed Association, the Watertown Conservation Commission, and others have long expressed interest in removing dam and are building grassroots support to convince DCR to remove the dam
  - Pre-1600s indigenous people constructed fish weirs in this area.
  - In 1634 a stone dam was constructed to power grist and paper mills.
    - In the 1700-1800s it was used as active mill power.
    - Into the 1900s it was used for power generation.
  - In 1966 it was rebuilt as a 180-foot long, 8-foot high concrete weir. It is owned by DCR.
  - In 1972 a fish ladder was constructed.
  - In 2015 DMF found that fish were unable to pass.
  - In 2016 inspections report the dam to be in "poor" condition.
  - In 2017 CRWA got the dam listed as a priority project with the State Division of Ecological Restoration (DER)
  - In 2021 DER completed a feasibility study of dam removal that found:
    - The dam does not provide flood control.
    - The dam is in poor condition and is susceptible to failure without costly repairs
    - The dam impedes migratory fish passage, warms the water behind the dam, impedes sediment transport.
    - Removal:
      - is feasible
      - would have little impact on recreation
      - would restore ecological integrity and connectivity
      - would lower flood elevations approximately 6 feet (at the dam)
      - would reduce the floodplain approximately 1⁄2 mile upriver of the dam
      - would not change flooding or flow downriver of the dam
- Staff Notes.
  - CRWA is asking that the Commission consider sending a letter in support of this dam removal.
  - Mass Audubon has written in support of dam removal in Natick.
  - It seems that restoring natural riverine flow and ecosystems would be ecologically beneficial and support the 8 interests of the Act:
    - Protection of public and private water supply
    - Protection of ground water supply
    - Flood control
    - Storm damage prevention
    - Prevention of pollution
    - Protection of land containing shellfish
    - Protection of fisheries
    - Protection of wildlife habitat
- Staff Recommendation.
  - Discuss the anticipated effects (positive and negative) of removal
  - Discuss the anticipated effects (positive and negative) of retention and repair
  - Vote to issue a letter of support.

UPDATES

E. **WETLANDS UPDATES** – none at this time

F. **CONSERVATION AREA UPDATES** – none at this time

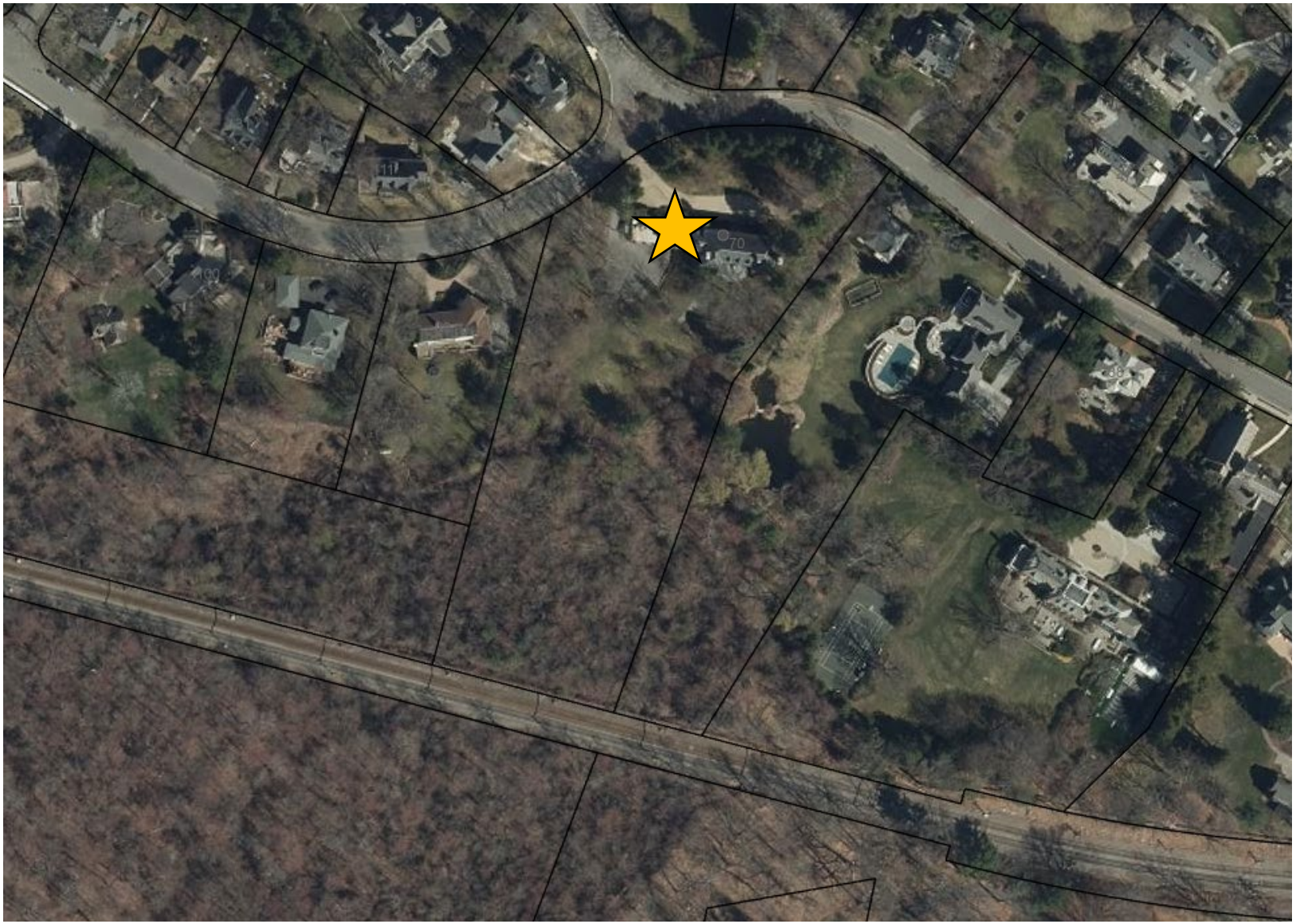
G. **ADMINISTRATIVE UPDATES** – none at this time

H. **ISSUES AROUND TOWN UPDATES** – none at this time

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

ADJOURN

70 Suffolk Rd



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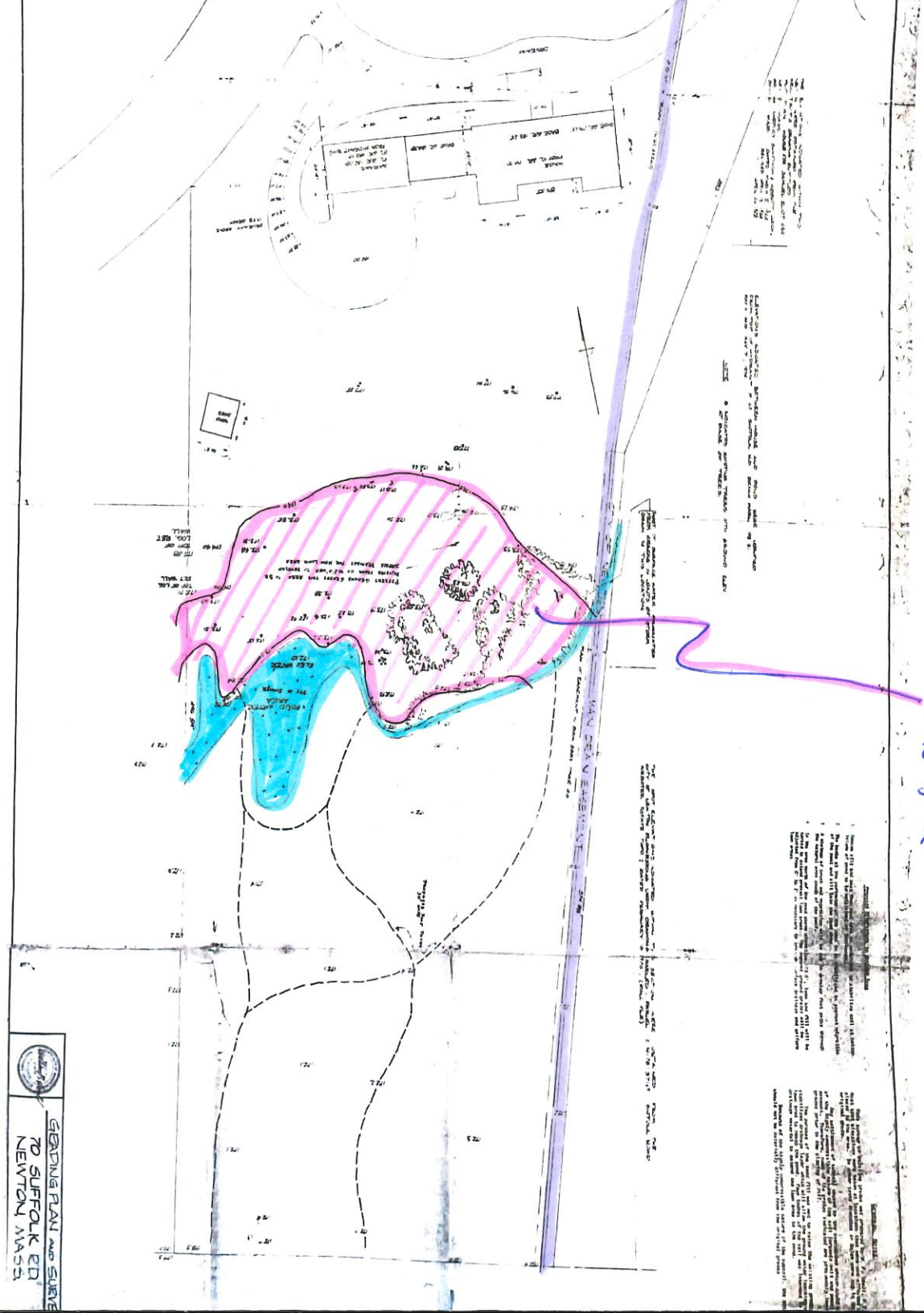
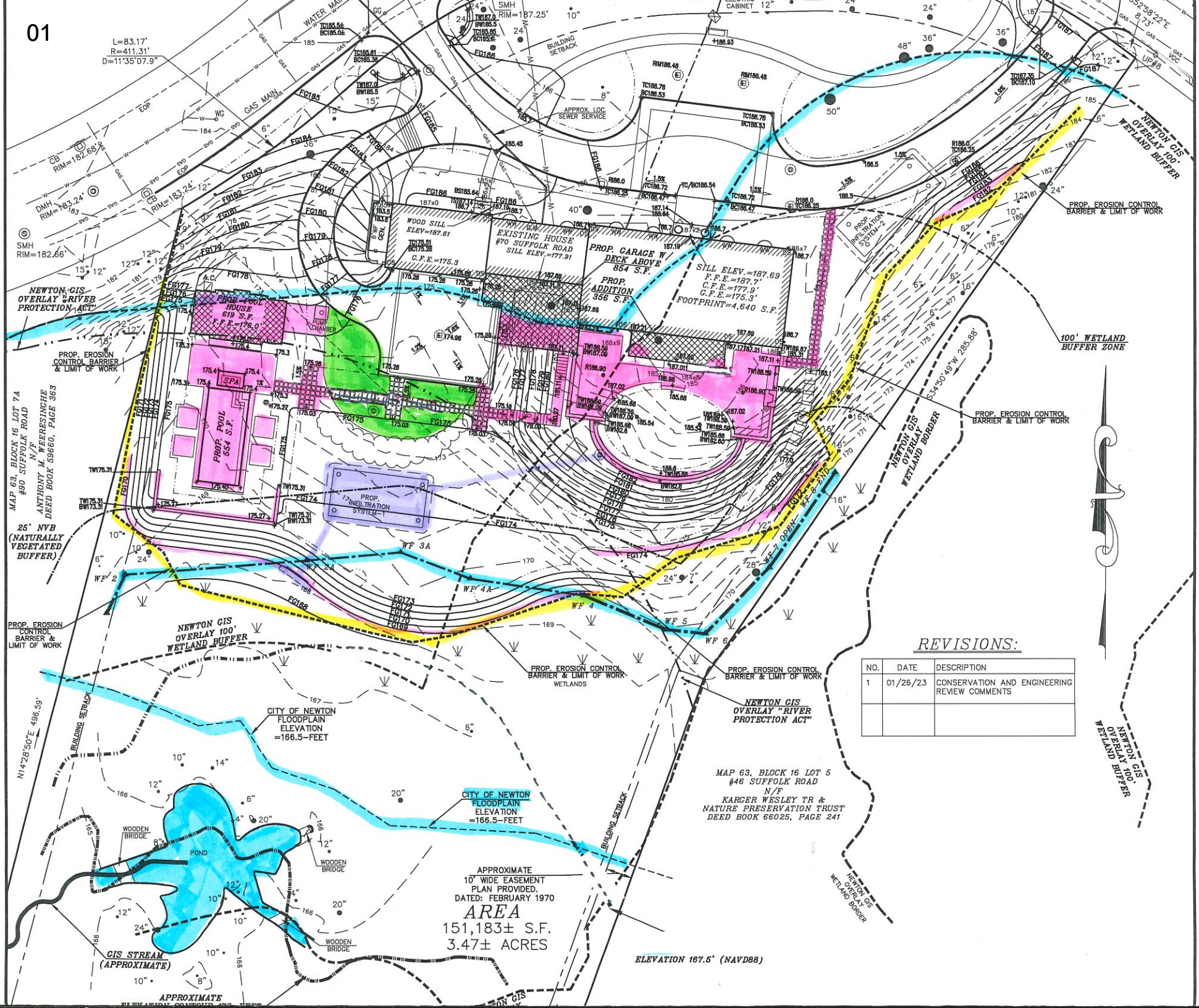
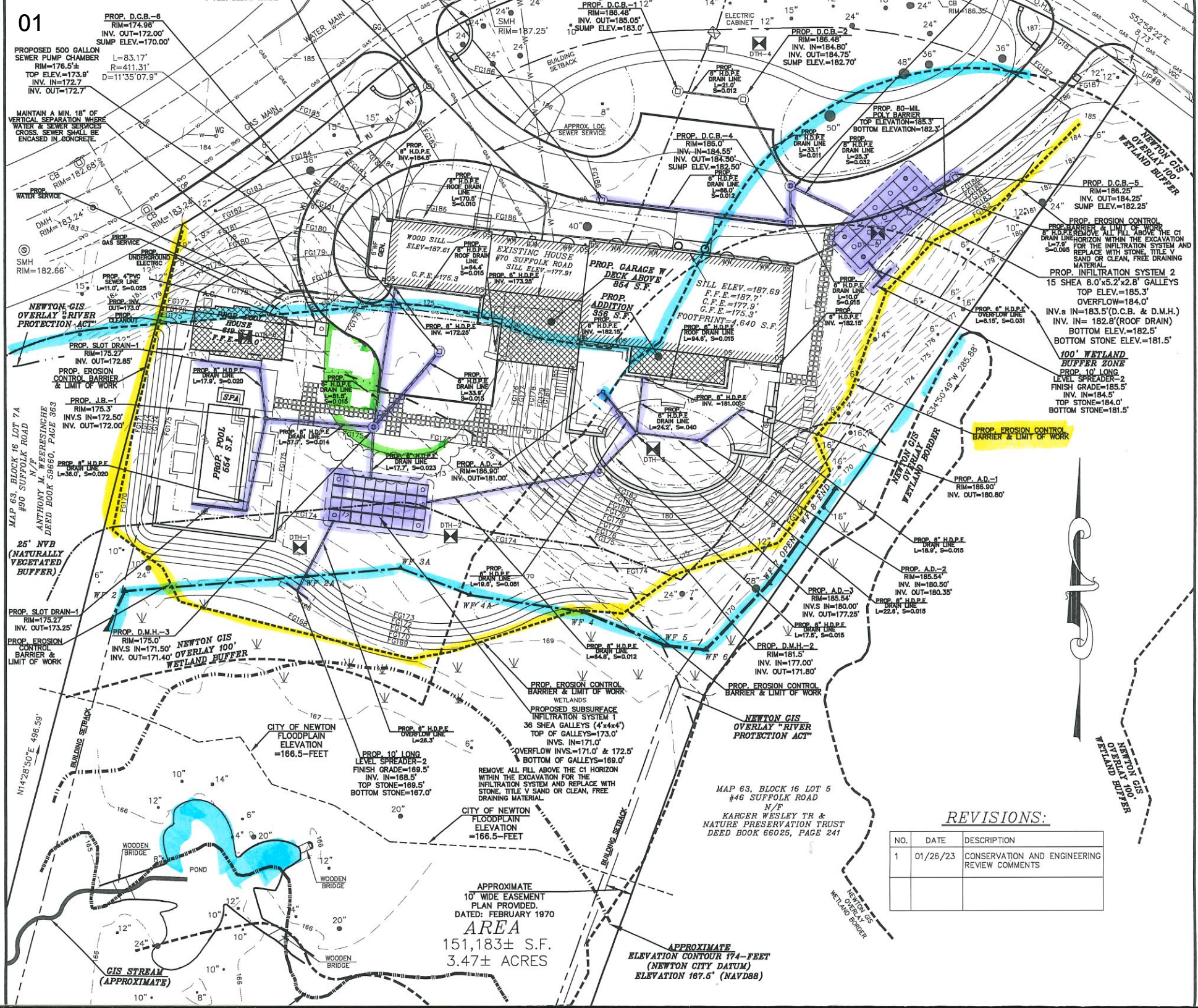
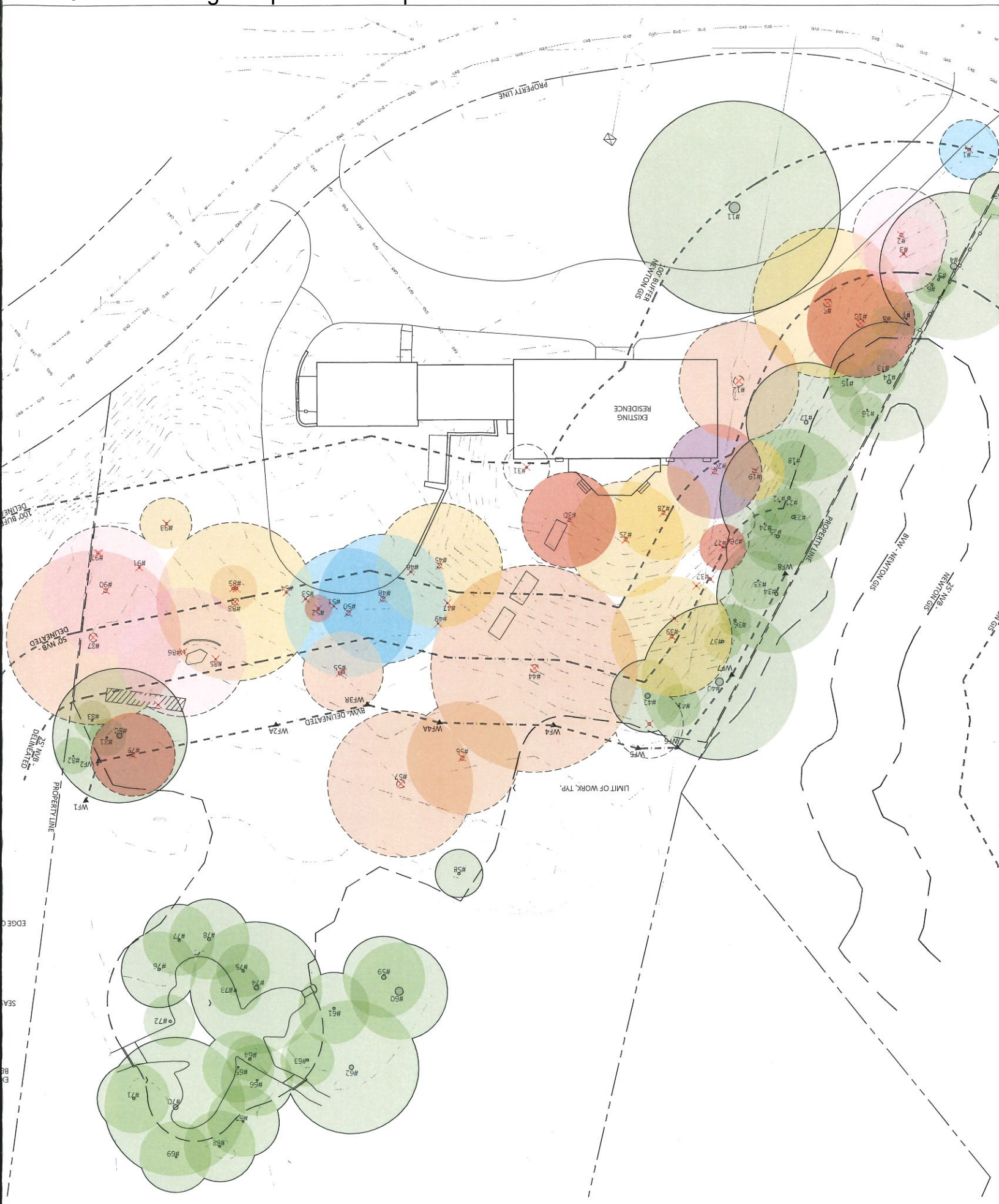

GRADING PLAN AND SURVEY
70 SUFFOLK RD
NEWTON MASS.
1974 DOC.:
AREA TO BE FILLED
0'-2' TO DEVELOP
SURFACE DRAINAGE
FOR NEW LAWN


01
PROP. POOL HOUSE 619 S.F. F.F.E.=176.0'
PROP. POOL 654 S.F.
SPA
PUMP CHAMBER
PROP. INFILTRATION SYSTEM-1
PROP. INFILTRATION SYSTEM-2
PROP. CARAGE W/ DECK ABOVE 854 S.F.
PROP. ADDITION 356 S.F.
EXISTING HOUSE #70 SUFFOLK ROAD SILL ELEV.=177.91
WOOD SILL ELEV.=187.61
SILL ELEV.=187.69 F.F.E.=187.7' C.F.E.=177.9' C.F.E.=175.3' FOOTPRINT=4,640 S.F.
C.F.E.=175.3
NEWTON GIS OVERLAY "RIVER PROTECTION ACT"
NEWTON GIS OVERLAY 100' WETLAND BUFFER
NEWTON GIS OVERLAY WETLAND BORDER
100' WETLAND BUFFER ZONE
PROP. EROSION CONTROL BARRIER & LIMIT OF WORK
PROP. EROSION CONTROL BARRIER & LIMIT OF WORK WETLANDS
25' NVB (NATURALLY VEGETATED BUFFER)
MAP 63, BLOCK 16 LOT 7A #90 SUFFOLK ROAD N/F ANTHONY M. WEERESINGHE DEED BOOK 59660, PAGE 363
MAP 63, BLOCK 16 LOT 5 #46 SUFFOLK ROAD N/F KARGER WESLEY TR & NATURE PRESERVATION TRUST DEED BOOK 66025, PAGE 241
CITY OF NEWTON FLOODPLAIN ELEVATION =166.5-FEET
CITY OF NEWTON FLOODPLAIN ELEVATION =166.5-FEET
POND
WOODEN BRIDGE
WOODEN BRIDGE
WOODEN BRIDGE
GIS STREAM (APPROXIMATE)
APPROXIMATE 10' WIDE EASEMENT PLAN PROVIDED. DATED: FEBRUARY 1970
AREA
151,183± S.F.
3.47± ACRES
ELEVATION 167.5' (NAVD88)
BUILDING SETBACK
APPROX. LOC. SEWER SERVICE
WATER MAIN
GAS MAIN
L=83.17'
R=411.31'
D=11°35'07.9"
N14°28'50"E 496.59'
S34°50'49"W 285.88'
S52°58'22"E 8.73'
REVISIONS:
NO. DATE DESCRIPTION
1 01/26/23 CONSERVATION AND ENGINEERING REVIEW COMMENTS


01
PROP. D.C.B.-6
RIM=174.98'
INV. OUT=172.00'
SUMP ELEV.=170.00'
PROPOSED 500 GALLON SEWER PUMP CHAMBER
RIM=176.5'±
TOP ELEV.=173.9'
INV. IN=172.7
INV. OUT=172.7'
L=83.17'
R=411.31'
D=11°35'07.9"
MAINTAIN A MIN. 18" OF VERTICAL SEPARATION WHERE WATER & SEWER SERVICES CROSS. SEWER SHALL BE ENCASED IN CONCRETE.
PROP. WATER SERVICE
PROP. GAS SERVICE
PROP. UNDERGROUND ELECTRIC
PROP. 4"PVC SEWER LINE L=11.0', S=0.025
PROP. INV. OUT=173.0'
PROP. CLEANOUT
NEWTON GIS OVERLAY "RIVER PROTECTION ACT"
PROP. SLOT DRAIN-1
RIM=175.27'
INV. OUT=172.85'
PROP. EROSION CONTROL BARRIER & LIMIT OF WORK
PROP. J.B.-1
RIM=175.3'
INV.S IN=172.50'
INV. OUT=172.00'
PROP. 8" H.D.P.E DRAIN LINE L=38.0', S=0.020
MAP 63, BLOCK 16 LOT 7A
#90 SUFFOLK ROAD
N/F
ANTHONY M. FERERSINGHE
DEED BOOK 59660, PAGE 363
25' NVB (NATURALLY VEGETATED BUFFER)
PROP. SLOT DRAIN-1
RIM=175.27'
INV. OUT=173.25'
PROP. EROSION CONTROL BARRIER & LIMIT OF WORK
PROP. D.M.H.-3
RIM=175.0'
INV.S IN=171.50'
INV. OUT=171.40'
NEWTON GIS OVERLAY 100' WETLAND BUFFER
N14°28'50"E 496.59'
BUILDING SETBACK
CITY OF NEWTON FLOODPLAIN ELEVATION =166.5-FEET
PROP. 10' LONG LEVEL SPREADER-2
FINISH GRADE=169.5'
INV. IN=166.5'
TOP STONE=169.5'
BOTTOM STONE=167.0'
WOODEN BRIDGE
POND
GIS STREAM (APPROXIMATE)
APPROXIMATE 10' WIDE EASEMENT PLAN PROVIDED. DATED: FEBRUARY 1970
AREA
151,183± S.F.
3.47± ACRES
PROP. D.C.B.-1
RIM=186.48'
INV. OUT=185.05'
SUMP ELEV.=183.0'
PROP. D.C.B.-2
RIM=186.48'
INV. IN=184.80'
INV. OUT=184.75'
SUMP ELEV.=182.70'
PROP. D.C.B.-4
RIM=186.0'
INV. IN=184.55'
INV. OUT=184.50'
SUMP ELEV.=182.50'
PROP. D.C.B.-5
RIM=186.25'
INV. OUT=184.25'
SUMP ELEV.=182.25'
PROP. 80-MIL POLY BARRIER
TOP ELEVATION=185.3'
BOTTOM ELEVATION=182.3'
PROP. EROSION CONTROL BARRIER & LIMIT OF WORK
REMOVE ALL FILL ABOVE THE C1 HORIZON WITHIN THE EXCAVATION FOR THE INFILTRATION SYSTEM AND REPLACE WITH STONE, TITLE V SAND OR CLEAN, FREE DRAINING MATERIAL.
PROP. INFILTRATION SYSTEM 2
15 SHEA 8.0'x5.2'x2.8' GALLEYS
TOP ELEV.=185.3'
OVERFLOW=184.0'
INV.s IN=183.5'(D.C.B. & D.M.H.)
INV. IN= 182.8'(ROOF DRAIN)
BOTTOM ELEV.=182.5'
BOTTOM STONE ELEV.=181.5'
100' WETLAND BUFFER ZONE
PROP. 10' LONG LEVEL SPREADER-2
FINISH GRADE=185.5'
INV. IN=184.5'
TOP STONE=184.0'
BOTTOM STONE=181.5'
PROP. EROSION CONTROL BARRIER & LIMIT OF WORK
PROP. A.D.-1
RIM=186.90'
INV. OUT=180.80'
PROP. A.D.-2
RIM=185.54'
INV. IN=180.50'
INV. OUT=180.35'
PROP. A.D.-3
RIM=185.54'
INV.S IN=180.00'
INV. OUT=177.25'
PROP. D.M.H.-2
RIM=181.5'
INV. IN=177.00'
INV. OUT=171.80'
PROP. EROSION CONTROL BARRIER & LIMIT OF WORK
NEWTON GIS OVERLAY "RIVER PROTECTION ACT"
PROPOSED SUBSURFACE INFILTRATION SYSTEM 1
36 SHEA GALLEYS (4'x4'x4')
TOP OF GALLEYS=173.0'
INVS. IN=171.0'
OVERFLOW INVS.=171.0' & 172.5'
BOTTOM OF GALLEYS=169.0'
REMOVE ALL FILL ABOVE THE C1 HORIZON WITHIN THE EXCAVATION FOR THE INFILTRATION SYSTEM AND REPLACE WITH STONE, TITLE V SAND OR CLEAN, FREE DRAINING MATERIAL.
PROP. EROSION CONTROL BARRIER & LIMIT OF WORK
WETLANDS
MAP 63, BLOCK 16 LOT 5
#46 SUFFOLK ROAD
N/F
KARGER WESLEY TR & NATURE PRESERVATION TRUST
DEED BOOK 66025, PAGE 241
APPROXIMATE ELEVATION CONTOUR 174-FEET (NEWTON CITY DATUM)
ELEVATION 167.5' (NAVD88)
PROP. EROSION CONTROL BARRIER & LIMIT OF WORK
NEWTON GIS OVERLAY WETLAND BORDER
NEWTON GIS OVERLAY 100' WETLAND BUFFER
S34°50'49"W 285.88'
S52°58'22"E 8.73'
PROP. EROSION CONTROL BARRIER & LIMIT OF WORK
PROP. 80-MIL POLY BARRIER
TOP ELEVATION=185.3'
BOTTOM ELEVATION=182.3'
PROP. EROSION CONTROL BARRIER & LIMIT OF WORK
PROP. INFILTRATION SYSTEM 2
15 SHEA 8.0'x5.2'x2.8' GALLEYS
TOP ELEV.=185.3'
OVERFLOW=184.0'
INV.s IN=183.5'(D.C.B. & D.M.H.)
INV. IN= 182.8'(ROOF DRAIN)
BOTTOM ELEV.=182.5'
BOTTOM STONE ELEV.=181.5'
100' WETLAND BUFFER ZONE
PROP. 10' LONG LEVEL SPREADER-2
FINISH GRADE=185.5'
INV. IN=184.5'
TOP STONE=184.0'
BOTTOM STONE=181.5'
PROP. EROSION CONTROL BARRIER & LIMIT OF WORK
NEWTON GIS OVERLAY 100' WETLAND BUFFER
NEWTON GIS OVERLAY "RIVER PROTECTION ACT"
EXISTING HOUSE #70 SUFFOLK ROAD
SILL ELEV.=187.69
F.F.E.=187.7'
C.F.E.=177.9'
G.F.E.=175.3'
FOOTPRINT=3,640 S.F.
PROP. GARAGE W/ DECK ABOVE 864 S.F.
PROP. ADDITION 356 S.F.
PROP. POOL 654 S.F.
PROP. HOUSE #48 F.F.E.=178.0'
SPA
REVISIONS:
NO. | DATE | DESCRIPTION
1 | 01/26/23 | CONSERVATION AND ENGINEERING REVIEW COMMENTS

01 Tree cutting and preservation plan



01 Tree cutting and preservation plan

TREE COMPENSATION TABLE

TREE #	COMMON NAME	COMMENTS	LOCATION	DBH TO REMAIN	DBH TO BE REMOVED	CON COM COMPENSATION
1	Leyland Cypress	Good	100'		10	5.0
2	Norway Maple	Invasive	100'		17	4.3
3	Norway Maple	Invasive	100'		13	3.3
4	Norway Maple	Poor	100'	19		
5	Box Elder Maple	Poor	50'	12		
6	Box Elder Maple	Poor	50'	8		
7	Black Cherry	Good	50'	7		
8	Norway Maple	Invasive	50'	7		
9	White Pine	Fair	50'		27	13.5
10	Unkown	Dead	50'			None
11	European Beech	Fair	100'	50		
12	Hemlock	Poor	100'		47	11.8
13	Norway Maple	Invasive	25'	7		
14	Norway Maple	Invasive	25'	19		
15	Norway Maple	Invasive	25'	6		
16	Norway Maple	Invasive	25'	9		
17	Norway Maple	Invasive	50'	17		
18	Norway Maple	Invasive	50'	7		
19	Eastern Red Cedar	Good	50'		14	7.0
20	Hemlock	Damage House	50'		19	None
21	Red Maple	Good	25'	14		
22	Norway Maple	Invasive	50'	6		
23	Red Maple	Good	25'	18		
24	Norway Maple	Invasive	25'	7		
25	Sweet Birch	Good	25'	18		
26	Sugar Maple	Good	25'		6	None
27	Flowering Dogwood	Dead	50'		8	None
28	Honey Locust	Good	100'		17	8.5
29	Honey Locust	Good	100'		22	11.0
30	Honey Locust	Dead	100'		17	None
31	American Holly	Good	100'		7	None
32	American Elm	Good	25'		7	None
33	White Pine	Good	25'	7		
34	American Elm	Good	25'	12		
35	Sweet Birch	Good	50'		6	None
36	White Pine	Good	25'	7		
37	White Pine	Good	25'	13		
38	Flowering Dogwood	Poor	50'		6	None
39	Sugar Maple	Good	50'		16	8.0
40	Sugar Maple	Good	25'	25		
41	Japanese False Cypress	Good	25'	7		
42	Concolor Fir	Good	25'	21		
43	Crabapple	Poor	25'		13	3.3
44	Red Maple	Poor	25'		33	8.3
45	Red Oak	Good	100'		19	9.5
46	Hinoki Cypress	Good	100'		7	None
47	Japanese Yew	Good	50'		6	None
48	Little Leaf Linden	Good	50'		24	12.0
49	Crabapple	Good	50'		8	None
50	Scotch Pine	Good	50'		19	9.5
51	Eastern Red Cedar	Good	50'		6	None
52	Mugo Pine	Dead	50'		7	None
53	Eastern Red Cedar	Good	50'		7	None
54	Eastern Red Cedar	Good	50'		7	None
55	Red Maple	Poor	25'		30	7.5
56	Red Maple	Poor	BVW		27	6.8
57	Red Maple	Poor	BVW		27	6.8
58	Dawn Redwood	Good	BVW	13		
59	White Pine	Good	BVW	20		
60	Dawn Redwood	Good	BVW	35		
61	Red Maple	Good	BVW	11		
62	White Pine	Good	BVW	21		
63	Red Maple	Good	BVW	11		
64	Red Maple	Good	BVW	12		
65	Red Maple	Good	BVW	13		
66	American Elm	Good	BVW	12		
67	Red Maple	Poor	BVW	10		
68	White Pine	Good	BVW	8		
69	Red Maple	Good	BVW	10		
70	White Pine	Fair	BVW	20		
71	Acer rubrum	Good	BVW	12		
72	Alaskan Cypress	Good	BVW	8		
73	Unkown	Dead	BVW	10		
74	Red Maple	Fair	BVW	33		
75	Red Maple	Good	BVW	6		
76	Red Maple	Good	BVW	13		
77	Dawn Redwood	Good	BVW	11		
78	Red Maple	Good	BVW	15		
79	White Pine	Dead	BVW		12	None
80	American Elm	Good	25'	24		
81	American Elm	Good	25'	10		
82	Norway Maple	Invasive/Good	25'	7		
83	Red Maple	Good	25'	9		
84	Crabapple	Poor	25'		6	None
85	Eastern Red Cedar	Good	50'		6	None
86	Norway Maple	Invasive/Poor	50'		20	5.0
87	Red Maple	Poor	50'		31	7.8
88	Red Oak	Good	50'		21	10.5
89	Norway Maple	Invasive/Poor	100'		28	7.0
90	Norway Maple	Invasive/Poor	100'		17	4.3
91	White Pine	Good	100'		7	None
92	Yellowwood	Poor	100'		4	None
93	White Pine	Good	100'		10	5.0
163	Crabapple	Fair	100'	10		

DANGORDON
LANDSCAPEARCHITECTS
WELLESLEY – EDGARTOWN – DANGORDON.COM

70 SUFFOLK ROAD
CHESTNUT HILL, MA

DAN GORDON
LANDSCAPE ARCHITECTS
267 WASHINGTON ST., STE. 6
WELLESLEY MA, 02481
T: 781 237 5751
17 WINTER STREET, UNIT 27
EDGARTOWN, MA 02539

ISSUED:
FOR PERMITTING

REVISED:
1: JANUARY 17, 2023
2: JANUARY 26, 2023
3:
4:
5:

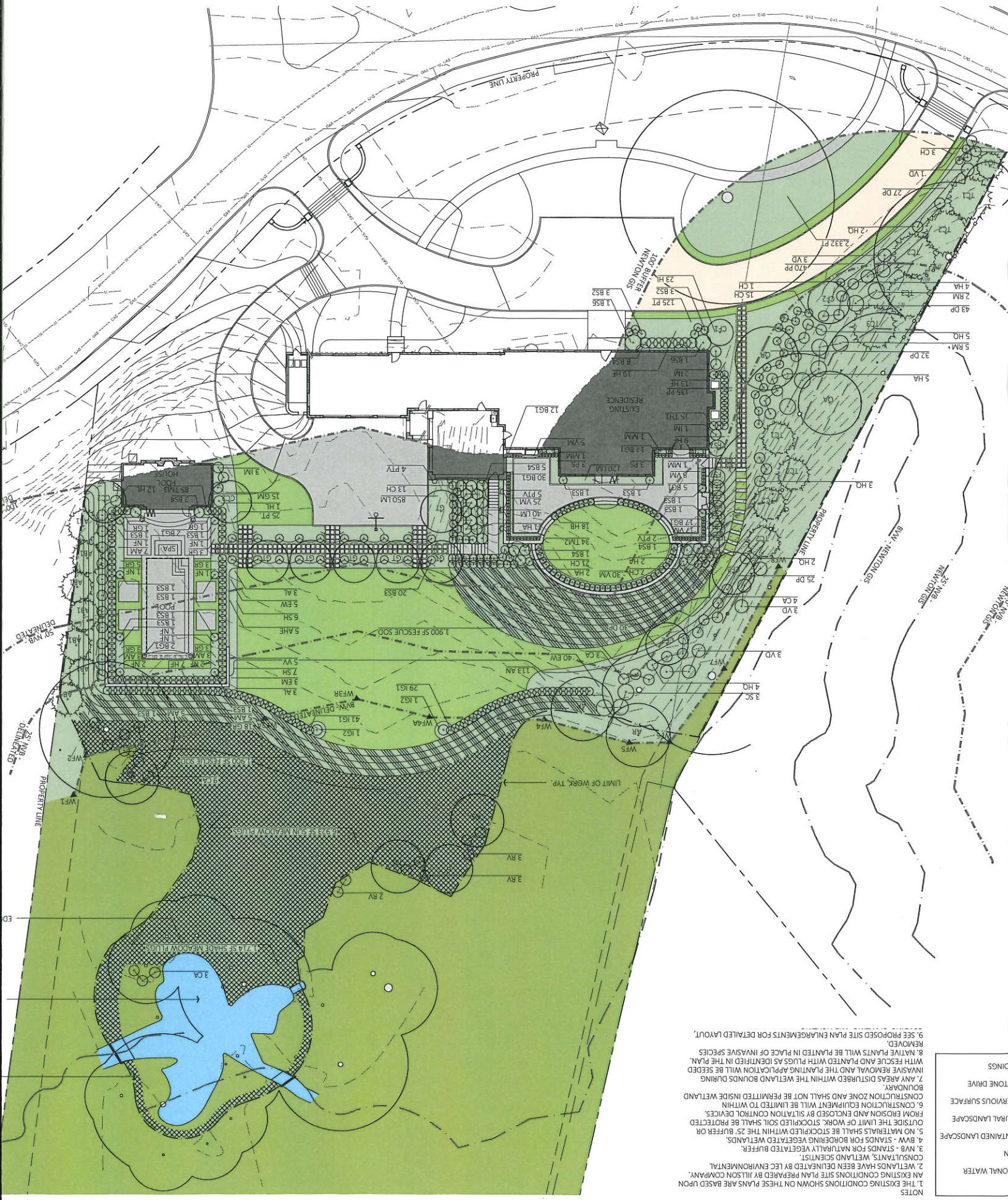
MASSACHUSETTS
DAN K. GORDON
NO. 955
REGISTERED LANDSCAPE ARCHITECT

DATE: JANUARY 3, 2023
DRAWN BY: PS, JM, AS & KS
SCALE: 1" = 20'-0"

TREE REMOVAL PLAN

NOI-11

01 Landscape Plan



NOTES

1. THE EXISTING CONDITIONS SHOWN ON THESE PLANS ARE BASED UPON AN EXISTING CONDITIONS SITE PLAN PREPARED BY JILLSON COMPANY.
2. WETLANDS HAVE BEEN DELINEATED BY LEC ENVIRONMENTAL CONSULTANTS, WETLAND SCIENTIST.
3. WB - STANDS FOR NATURALLY VEGETATED BUFFER.
4. BVW - STANDS FOR BORDERING VEGETATED WETLANDS.
5. NO MATERIALS SHALL BE STOCKPILED WITHIN THE 25' BUFFER OR OUTSIDE THE LIMIT OF WORK. STOCKPILED SOIL SHALL BE PROTECTED FROM EROSION AND ENCLOSED BY SILTATION CONTROL DEVICES.
6. CONSTRUCTION EQUIPMENT WILL BE LIMITED TO WITHIN CONSTRUCTION ZONE AND SHALL NOT BE PERMITTED INSIDE WETLAND BOUNDARY.
7. ANY AREAS DISTURBED WITHIN THE WETLAND BOUNDS DURING INVASIVE REMOVAL AND THE PLANTING APPLICATION WILL BE SEEDED WITH FESCUE AND PLANTED WITH PLUGS AS IDENTIFIED IN THE PLAN.
8. NATIVE PLANTS WILL BE PLANTED IN PLACE OF INVASIVE SPECIES REMOVED.
9. SEE PROPOSED SITE PLAN ENLARGEMENTS FOR DETAILED LAYOUT,

ONAL WATER
N
NTAINED LANDSCAPE
URAL LANDSCAPE
RVIOUS SURFACE
TONE DRIVE
OINGS

01

TREE COMPENSATION TABLE

TREE #	COMMON NAME	COMMENTS	LOCATION	DBH TO REMAIN	DBH TO BE REMOVED	jms CC factor	jms rplcmt	CON COM COMP	
1	Leyland Cypress	Good	100'		10	0.50	5.00	5.0	1
2	Norway Maple	Invasive	100'		17	0.25	4.25	4.3	1
3	Norway Maple	Invasive	100'		13	0.25	3.25	3.3	1
4	Norway Maple	Poor	100'	19			0.00		1
5	Box Elder Maple	Poor	50'	12			0.00		1
6	Box Elder Maple	Poor	50'	8			0.00		1
7	Black Cherry	Good	50'	7			0.00		1
8	Norway Maple	Invasive	50'	7			0.00		1
9	White Pine	Fair	50'		27	0.50	13.50	13.5	1
10	Unkown	Dead	50'			0.00	0.00	None	1
11	European Beech	Fair	100'	50			0.00		1
12	Hemlock	Poor	100'		47	0.25	11.75	11.8	1
13	Norway Maple	Invasive	25'	7			0.00		1
14	Norway Maple	Invasive	25'	19			0.00		1
15	Norway Maple	Invasive	25'	6			0.00		1
16	Norway Maple	Invasive	25'	9			0.00		1
17	Norway Maple	Invasive	50'	17			0.00		1
18	Norway Maple	Invasive	50'	7			0.00		1
19	Eastern Red Cedar	Good	50'		14	0.50	7.00	7.0	1
20	Hemlock	Damage House	50'		19	0.50	9.50	None	1
21	Red Maple	Good	25'	14			0.00		1
22	Norway Maple	Invasive	50'	6			0.00		1
23	Red Maple	Good	25'	18			0.00		1
24	Norway Maple	Invasive	25'	7			0.00		1
25	Sweet Birch	Good	25'	18			0.00		1
26	Sugar Maple	Good	25'		6	0.00	0.00	None	1
27	Flowering Dogwood	Dead	50'		8	0.00	0.00	None	1
28	Honey Locust	Good	100'		17	0.50	8.50	8.5	1
29	Honey Locust	Good	100'		22	0.50	11.00	11.0	1
30	Honey Locust	Dead	100'		17	0.00	0.00	None	1
31	American Holly	Good	100'		7	0.00	0.00	None	1
32	American Elm	Good	25'		7	0.00	0.00	None	1
33	White Pine	Good	25'	7			0.00		1
34	American Elm	Good	25'	12			0.00		1
35	Sweet Birch	Good	50'		6	0.00	0.00	None	1
36	White Pine	Good	25'	7			0.00		1
37	White Pine	Good	25'	13			0.00		1
38	Flowering Dogwood	Poor	50'		6	0.00	0.00	None	1
39	Sugar Maple	Good	50'		16	0.50	8.00	8.0	1
40	Sugar Maple	Good	25'	25			0.00		1
41	Japanese False Cypress	Good	25'	7			0.00		1
42	Concolor Fir	Good	25'	21			0.00		1
43	Crabapple	Poor	25'		13	0.00	0.00	3.3	1
44	Red Maple	Poor	25'		33	0.25	8.25	8.3	1
45	Red Oak	Good	100'		19	0.50	9.50	9.5	1
46	Hinoki Cypress	Good	100'		7	0.00	0.00	None	1
47	Japanese Yew	Good	50'		6	0.00	0.00	None	1
48	Little Leaf Linden	Good	50'		24	0.50	12.00	12.0	1
49	Crabapple	Good	50'		8	0.00	0.00	None	1
50	Scotch Pine	Good	50'		19	0.50	9.50	9.5	1
51	Eastern Red Cedar	Good	50'		6	0.00	0.00	None	1

01

TREE #	COMMON NAME	COMMENTS	LOCATION	DBH TO REMAIN	DBH TO BE REMOVED	jms CC factor	jms rplcmt	CON COM COMP	
52	Mugo Pine	Dead	50'		7	0.00	0.00	None	1
53	Eastern Red Cedar	Good	50'		7	0.00	0.00	None	1
54	Eastern Red Cedar	Good	50'		7	0.00	0.00	None	1
55	Red Maple	Poor	25'		30	0.25	7.50	7.5	1
56	Red Maple	Poor	BVW		27	0.25	6.75	6.8	1
57	Red Maple	Poor	BVW		27	0.25	6.75	6.8	1
58	Dawn Redwood	Good	BVW	13			0.00		1
59	White Pine	Good	BVW	20			0.00		1
60	Dawn Redwood	Good	BVW	35			0.00		1
61	Red Maple	Good	BVW	11			0.00		1
62	White Pine	Good	BVW	21			0.00		1
63	Red Maple	Good	BVW	11			0.00		1
64	Red Maple	Good	BVW	12			0.00		1
65	Red Maple	Good	BVW	13			0.00		1
66	American Elm	Good	BVW	12			0.00		1
67	Red Maple	Poor	BVW	10			0.00		1
68	White Pine	Good	BVW	8			0.00		1
69	Red Maple	Good	BVW	10			0.00		1
70	White Pine	Fair	BVW	20			0.00		1
71	Acer rubrum	Good	BVW	12			0.00		1
72	Alaskan Cypress	Good	BVW	8			0.00		1
73	Unkown	Dead	BVW	10			0.00		1
74	Red Maple	Fair	BVW	33			0.00		1
75	Red Maple	Good	BVW	6			0.00		1
76	Red Maple	Good	BVW	13			0.00		1
77	Dawn Redwood	Good	BVW	11			0.00		1
78	Red Maple	Good	BVW	15			0.00		1
79	White Pine	Dead	BVW		12	0.00	0.00	None	1
80	American Elm	Good	25'	24			0.00		1
81	American Elm	Good	25'	10			0.00		1
82	Norway Maple	Invasive/Good	25'	7			0.00		1
83	Red Maple	Good	25'	9			0.00		1
84	Crabapple	Poor	25'		6	0.00	0.00	None	1
85	Eastern Red Cedar	Good	50'		6	0.00	0.00	None	1
86	Norway Maple	Invasive/Poor	50'		20	0.25	5.00	5.0	1
87	Red Maple	Poor	50'		31	0.25	7.75	7.8	1
88	Red Oak	Good	50'		21	0.50	10.50	10.5	1
89	Norway Maple	Invasive/Poor	100'		28	0.25	7.00	7.0	1
90	Norway Maple	Invasive/Poor	100'		17	0.25	4.25	4.3	1
91	White Pine	Good	100'		7	0.00	0.00	None	1
92	Yellowwood	Poor	100'		4		0.00	None	1
93	White Pine	Good	100'		10	0.50	5.00	5.0	1
163	Crabapple	Fair	100'	10			0.00		1
							181.50	175.25	

01

TREE #	COMMON NAME	COMMENTS	LOCATION	DBH TO REMAIN	DBH TO BE REMOVED	jms CC factor	jms rplcmt	CON COM COMP	

Category	Tree Health	Trees Removed (#)	Removed by category (dbh)	Recom. Comp.
Native	Good	8	146	73
Native	Poor	6	195	48.75
Non Native	Good	3	53	26.5
Invasive		5	95	23.75
			489	172
Dead		4	44	
Under 8" Poor		4	29	
Hazard?		1	19	
Under 8" Good		12	80	
Trees to remain		50	687	
			92	0

Total Recommended Compensation*	172
Total Proposed Compensation	207

* CON COM COMPENSATION is based on formulas provided by Newton Conservation Administrative Staff Comments of:
- 1/2" replacement for every 1" of healthy tree removed,
- 1/4" replacement for every 1" of tree in poor health or invasive,
- 0" replacement for dead, under 6", hazard

01 Plant List

PLANT LIST

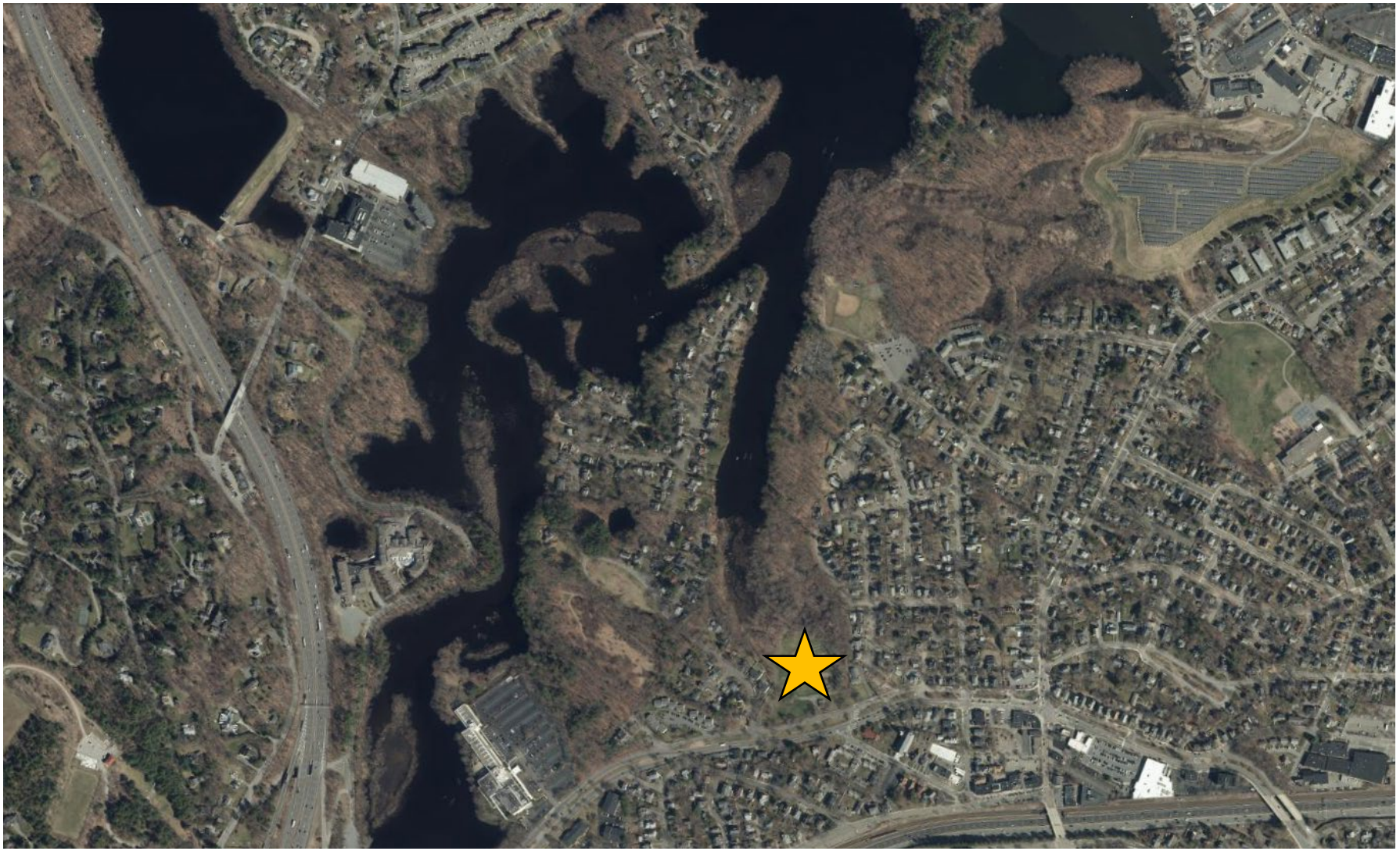
SYM.	BOTANICAL NAME	COMMON NAME	QTY.	MIN. SIZE	NOTES
TREES					
CC2	Cercis canadensis	Eastern Redbud	2	4" cal. & 10-12' ht.	Specimen - Multistem
CF1	Cornus florida 'Cherokee Princess'	White Flowering Dogwood	1	6" cal.	
CF2	Cornus florida 'Cherokee Princess'	White Flowering Dogwood	3	3.5" cal.	
FS7	Fagus grandifolia	American Beech	2	2.5" cal. & 5' ht. & 3-4' spr.	
FS8	Fagus grandifolia	American Beech	1	3" cal. & 6' ht. & 3-4' spr.	
FS9	Fagus grandifolia	American Beech	1	3.5" cal. & 7' ht. & 3-4' spr.	
FS10	Fagus grandifolia	American Beech	1	4" cal. & 8' ht. & 3-4' spr.	
FS11	Fagus grandifolia	American Beech	1	4.5" cal. & 9' ht. & 3-4' spr.	
FS12	Fagus grandifolia	American Beech	1	5" cal. & 10' ht. & 3-4' spr.	37
FS14	Fagus grandifolia	American Beech	1	5.5" cal. & 12' ht. & 3-4' spr.	
GT	Gleditsia triacanthos var.inermis 'Skyline'	Skyline Honeylocust	6	4.5" cal.	7
IO1	Ilex opaca	American Holly	1	4" cal. & 8-10' ht.	
NS	Nyssa sylvatica	Black Tupelo	3	3" cal.	
TC3	Tsuga canadensis	Canadian Hemlock	2	6.5" cal. & 16-18' ht.	
AR	Acer rubrum	Red Maple	2	4" cal.	
AB1	Abies balsamea	Balsam Fir	7	6" cal. & 14-16' ht.	
QA	Quercus alba	White Oak	1	4" cal.	
QR	Quercus rubra	Northern Red Oak	1	4" cal.	
TC1	Tsuga canadensis	Canadian Hemlock	2	5.5" cal. & 12-14' ht.	
TC2	Tsuga canadensis	Canadian Hemlock	5	6" cal. & 14-16' ht.	
SHRUBS & VINES					
BG1	Buxus 'Green Gem'	Green Gem Boxwood	80	1' ht. & spr.	
BS2	Buxus sempervirens	Common Boxwood	6	1.5-2' ht. & 1.5' spr.	
BS3	Buxus sempervirens	Common Boxwood	32	2.5' ht. & spr.	
BS4	Buxus sempervirens	Common Boxwood	17	3.5' ht. & spr.	
BS6	Buxus sempervirens	Common Boxwood	2	5.5' ht. & spr.	
CA	Clethra alnifolia	Sweet Pepperbush	19	1.5-2' ht. & spr.	
CH	Cephalotaxus harringtonii	Japanese Plum Yew	60	3 gal.	
HA	Hydrangea arborescens 'Annabelle'	Annabelle Hydrangea	26	1.5-2' spr. & 5 gal.	
HB	Hydrangea paniculata 'Bobo'	Bobo Hydrangea	18	1.5-2' spr. & 5 gal.	
HL	Hydrangea paniculata 'Limelight'	Limelight Hydrangea	13	5 gal.	
HQ	Hydrangea quercifolia	Oakleaf Hydrangea	16	2.5' spr. & 5 gal.	
IG1	Ilex glabra	Inkberry Holly	70	1.5-2' ht. & 1.5' spr.	
IG2	Ilex glabra	Inkberry Holly	2	2.5' ht. & 3.5' spr.	
IM	Ilex x meserveae 'Blue Princess'	'Blue Princess' Holly	6	3-3.5' ht. & spr.	
MM	Malus domestics 'McIntosh'	McIntosh Apple Espalier	3	1.5" cal. & 3x5' panel	Espalier
PTV	Parthenocissus tricuspidata 'Veitchii'	Boston Ivy	11	1 gal.	
RM	Rhododendron maximum (Super Heavy)	Rosebay Rhododendron	7	3.5-4.5' ht. & 3.5' min. spr.	Super Heavy
RV	Rhododendron viscosum	Swamp Azalea	8	1.5-2' ht. & spr.	
SC	Sambucus canadensis	Elderberry	3	2.5'-3' ht.	Container
TM2	Taxus x media 'Densiformis'	Dense Yew	34	1.5-2' ht. & 1.5' spr.	
TM3	Taxus x media 'Densiformis'	Dense Yew	85	2.5' ht. & 3.5' spr.	
TH1	Taxus x media 'Hicksii'	Hicksii Yew	15	3.5' ht. B & B	
VD	Viburnum dilatatum 'Henneke'	'Cardinal candy' Viburnum	10	3-3.5' spr.	

125

01

PERENNIALS, GROUNDCOVERS, BULBS & GRASSES					
AN	Anemone canadensis	Canada Anemone	113	1 gal.	18" spacing
AHE	Amsonia hubrichtii	Blue Star	5	1 gal.	12" o.c.
AL	Alium lusitanicum 'Millenium'	Allium Millenium	6	1 gal.	18" spacing
AM	Alchemilla mollis 'Thriller'	Thriller Lady's Mantle	23	1 gal.	18" spacing
EW	Echinacea 'White Swan'	White Cone Flower	45	1 gal.	
EM	Eupitorium maculatum 'Snowball'	Dwarf White Joe Pie Weed	3	1 gal.	
DP	Dennstaedtia punctilobula	Hay-scented Fern	157	Sod (sq. ft.)	
GM	Geranium macrorrhizum 'Bevan's Variety'	Bevan's Variety Bigroot Geranium	15	1 gal.	18" spacing
GR	Geranium 'Rozanne'	Rozanne Geranium	37	1 gal.	15" spacing
HF	Hosta 'Francee'	Francee Hosta	48	1 gal.	
HI	Helleborus 'Ivory Prince'	Christmas Rose	23	1 gal.	18" Spacing
LM	Liriope muscari 'Royal Purple'	Royal Purple Lilyturf	1,010	3" pot.	8" spacing
NF	Nepeta x faassenii 'Walker's Low'	'Walker's Low' Catmint	10	1 gallon	30" Spacing
PS	Paeonia lactiflora 'Duchesse de Nemours'	Duchesse de Nemours Peony	6	1 gal.	24" spacing
PP	Pachysandra procumbens	Allegheny Spurge	605	1 gal.	12" o.c.
PT	Pachysandra terminalis 'Green Sheen'	Green Sheen Japanese Pachysandra	2,482	2.5" pot	3 per sq. ft.
SH	Sporobulus heterolepis 'Tara'	Prairie Dropseed	13	1 gal.	18" spacing
VM	Vinca minor 'Bowles'	Bowles' Common Periwinkle	85	2.5" pot	3 per sq. ft.
VV	Veronicastrum virginicum 'Fascination'	Purple Culvers Root	5	1 gal.	4 per sq. ft.
FESCUE SOD					
	COOMBS 100% FINE FESCUE BLEND	1/3 Hard, 1/3 Chewings, 1/3 Creeping Red	3,800	Sod (sq. ft.)	
SUN MEADOW PLUGS					
	Carex stricta	Tussok Sedge	800	Plug	18" o.c.
	Carex vulpinoidea	Fox Sedge	800	Plug	18" o.c.
	Asclepias incarnata	Swamp Milkweed	150	Plug	18" o.c.
	Pycnanthemum tenuifolium	Slender Mountain Mint	150	Plug	18" o.c.
	Iris versicolor	Blue Flag Iris	150	Plug	18" o.c.
	Lobelia siphilitica	Great Blue Lobelia	150	Plug	18" o.c.
	Zizia aurea	Golden Alexander	150	Plug	18" o.c.
	Spirea tomentosa	Steeplebush	150	Plug	18" o.c.
SHADE MEADOW PLUGS					
	Aster prenanthoides	Aster prenanthoides	130	Plug	18" o.c.
	Onoclea sensibilis	Sensitive Fern	80	1 qrt.	24" o.c.
	Osmundastrum Cinnamomeum	Cinnamon Fern	80	1 qrt.	24" o.c.
	Matteuccia struthiopteris	Ostrich Fern	80	1 qrt.	24" o.c.
	Caltha palustris	Marsh Marigold	130	Plug	18" o.c.

0 Commonwealth Avenue/Marty Sender Path Improvements



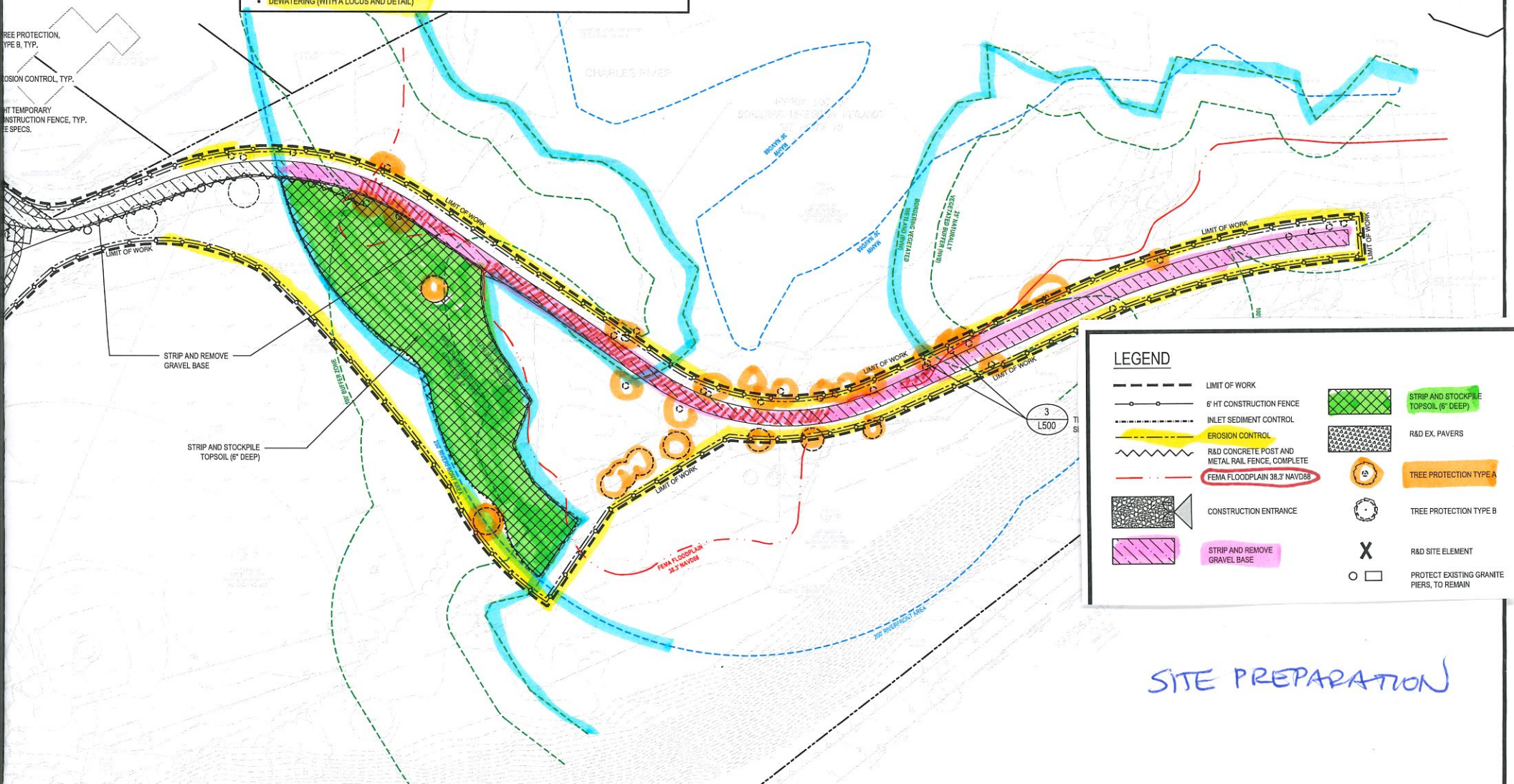
EX.	EXISTING
TYP.	TYPICAL
SPECS.	SPECIFICATIONS
S&S	STRIP & STOCKPILE
R&D	REMOVE & DISPOSE
HT	HEIGHT

SPECIAL NOTES

1. BORDERING VEGETATED WETLAND (BVW) LINE WAS DELINEATED USING VEGETATION BY THE CONSERVATION AGENT.
2. TRAIL IS LIKELY UNDERLAIN BY HYDRIC SOILS AS INDICATED BY THE CONSERVATION AGENT.
3. CONTRACTOR SHALL BE PERMITTED TO PARK CONSTRUCTION VEHICLES ONLY DURING EACH CONSTRUCTION DAY. VEHICLES MAY NOT BE LEFT OVERNIGHT UNLESS APPROVED BY THE OWNER. ONLY 30 ROGERS IS ALLOWED AS A PARKING AREA. SIDE STREETS SHALL NOT BE USED FOR CONSTRUCTION VEHICLE PARKING
4. NO WORK SHALL OCCUR WITHIN THE BORDERING VEGETATED WETLAND (BVW). CONTRACTOR SHALL DELINEATE BVW PRIOR TO COMMENCING WORK.
5. THE CONTRACTOR SHALL NOT CLEAN CONCRETE MIXING EQUIPMENT WITHIN THE BUFFER ZONE OR WITHIN ANY LOCATION THAT COULD DRAIN TO A CATCH BASIN OR WETLAND. CLEARING AND WASHOUT OF CONCRETE EQUIPMENT SHALL BE DONE OFF SITE.
6. ALL WORK PERFORMED WITHIN THE DRIP LINE / CRITICAL ROOT ZONES OF ADJACENT TREES SHALL BE DONE BY HAND AND WITH LIGHT EQUIPMENT (VACUUM AND AIR SPADE). SEE TREE PROTECTION DETAILS ON SHEET L500 AND SPECIFICATIONS FOR MORE DETAILED REQUIREMENTS.
7. THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT A CONSTRUCTION PHASING / SITE MANAGEMENT PLAN THAT ADDRESSES THE FOLLOWING:
   - ANTICIPATED PHASES / MILESTONES WITH DATES
   - EROSION AND SILTATION CONTROLS FOR THE DURATION OF THE PROJECT AND HOW LOCATIONS MAY SHIFT OVER THE COURSE OF THE CONSTRUCTION WORK
   - PARKING AND ACCESS FOR WORKERS' VEHICLES AND CONSTRUCTION EQUIPMENT
   - STAGING FOR CONSTRUCTION MATERIALS AND EQUIPMENT
   - DUST AND SPOIL CONTROL DURING MICROPILE DRILLING
   - DEWATERING (WITH A LOCUS AND DETAIL)

DEMOLITION AND SITE PREPARATION NOTES

1. THE CONTRACTOR SHALL INCLUDE IN THE BID THE COST OF REMOVING ANY EXISTING SITE FEATURES AND APPURTENANCES NECESSARY TO ACCOMPLISH THE CONSTRUCTION OF THE PROPOSED SITE IMPROVEMENTS. THE CONTRACTOR SHALL ALSO INCLUDE IN THE BID THE COST NECESSARY TO RESTORE SUCH ITEMS IF THEY ARE SCHEDULED TO REMAIN AS PART OF THE FINAL SITE IMPROVEMENTS. REFER TO PLANS TO DETERMINE EXCAVATION, DEMOLITION AND TO DETERMINE THE LOCATION OF THE PROPOSED SITE IMPROVEMENTS.
2. THE OWNER RESERVES THE RIGHT TO REVIEW ALL MATERIALS DESIGNATED FOR REMOVAL AND TO RETAIN OWNERSHIP OF SUCH MATERIALS. IF THE OWNER RETAINS ANY MATERIAL THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE OWNER TO HAVE THOSE MATERIALS REMOVED OFF SITE AT NO ADDITIONAL COST.
3. UNLESS SPECIFICALLY NOTED TO BE REMOVED / STOCKPILED OR REMOVE/ RESET, ALL SITE FEATURES CALLED FOR REMOVE/DISPOSE (R&D) SHALL BE REMOVED WITH THEIR FOOTINGS, ATTACHMENTS, BASE MATERIAL, ETC, TRANSPORTED FROM THE SITE TO BE DISPOSED OF IN A LAWFUL MANNER AT AN ACCEPTABLE DISPOSAL SITE AND AT NO ADDITIONAL COST TO THE OWNER.
4. ALL EXISTING SITE FEATURES TO REMAIN SHALL BE PROTECTED THROUGHOUT THE CONSTRUCTION PERIOD. ANY FEATURES DAMAGED DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST.
5. DURING EARTHWORK OPERATIONS, CONTRACTOR SHALL TAKE CARE TO NOT DISTURB EXISTING MATERIALS TO REMAIN, OUTSIDE THE LIMITS OF EXCAVATION AND BACKFILL AND SHALL TAKE WHATEVER MEASURES NECESSARY, AT THE CONTRACTOR'S EXPENSE, TO PREVENT ANY EXCAVATED MATERIAL FROM COLLAPSING. ALL BACKFILL MATERIALS SHALL BE PLACED AND COMPACTED AS SPECIFIED TO THE SUBGRADE REQUIRED FOR THE INSTALLATION OF THE REMAINDER OF THE CONTRACT WORK.
6. IT SHALL BE THE CONTRACTOR'S OPTION, WITH CONCURRENCE OF THE OWNER, TO REUSE EXISTING GRAVEL IF IT MEETS THE REQUIREMENTS OF THE SPECIFICATIONS FOR GRAVEL BORROW.
7. 'CLEAR AND GRUB VEGETATION' SHALL INCLUDE REMOVAL OF GRASS, SHRUBS, AND UNDERBRUSH, REMOVAL OF ROOTS, ROUGH GRADING, INSTALLATION OF LOAM (IF APPLICABLE), FINE GRADING, SEEDING AND TURF ESTABLISHMENT BY THE CONTRACTOR.
8. TREES DESIGNATED FOR REMOVAL SHALL BE TAGGED BY CONTRACTOR AND APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
9. THE STORAGE OF MATERIALS AND EQUIPMENT WILL BE PERMITTED AT LOCATIONS DESIGNATED BY OWNER OR OWNER'S REPRESENTATIVE. PROTECTION OF STORED MATERIALS AND EQUIPMENT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. LOAM / TOP SOIL DESIGNATED FOR REUSE AS GENERAL FILL SHALL BE BLENDED WITH SUITABLE BORROW MATERIAL AS SPECIFIED.
11. THE CONTRACTOR SHALL PROTECT EXISTING TREES TO REMAIN, CONTRACTOR SHALL INSTALL TREE PROTECTION BARRIER AFTER CLEARING UNDERBRUSH AND TAKE DUE CARE TO PREVENT INJURY TO TREES DURING CLEARING OPERATIONS.
12. JUTE NETTING TO BE USED ON ALL SLOPES GREATER THAN 4:1 AS INDICATED ON GRADING PLAN.
13. AT CONTRACTORS' DISCRETION EXISTING FENCING CAN BE USED AS A MEANS OF SECURING THE SITE, UNTIL CONTRACTOR HAS TO REMOVE AND DISPOSE OF IT AS INDICATED ON THE PLAN.



SITE PREPARATION

LEGEND

Symbol	Description
(dashed heavy line)	LIMIT OF WORK
(line with posts)	PLANT PROTECTION FENCE
(red dash-dot line)	FEMA FLOODPLAIN 38.3' NAVD88
(pink hatch)	STABILIZED STONE DUST PAVEMENT
(yellow hatch)	BOARDWALK
(+ pattern)	AQUATIC SEED MIX PLANTING SEE SPECS
(grey stipple)	LOAM AND SEED DISTURBED AREA

EX. EXISTING
TYP. TYPICAL
SPECS. SPECIFICATIONS

PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	NOTES
TREES						
CC	2	CARPINUS CAROLINIANA	IRONWOOD	2"-2.5" CAL.	B&B	
BN	1	BETULA NIGRA	RIVER BIRCH	12-14' HEIGHT	B&B	MULTI-TRUNK
QR	1	QUERCUS RUBRA	RED OAK	2"-2.5" CAL.	B&B	FALL DIG HAZARD
TOTAL	4					
SHRUBS AND VINES						
AM	9	ARONIA MELANOCARPA 'LOW SCAPE MOUND'	BLACK CHOKEBERRY	#3	CONTAINER	
CO	19	CEPHALANTHUS OCCIDENTALIS	BUTTON BUSH	#3	CONTAINER	
CA	8	CLETHRA ALNIFOLIA 'HUMMINGBIRD'	SWEET PEPPERBUSH	#3	CONTAINER	
IG	18	ILEX GLABRA	INKBERRY	#3	CONTAINER	
IVB	20	ILEX VERTICILLATA 'NANA' RED SPRITE	WINTERBERRY HOLLY	#3	CONTAINER	FEMALE CULTIVAR
MG	15	MYRICA GALE	SWEETGALE	#3	CONTAINER	
VA	18	VACCINIUM ANGUSTIFOLIUM	LOWBUSH BLUEBERRY	#2	CONTAINER	
TOTAL	89					
AQUATIC PLANTING						
CCO	55	CAREX COMOSA	BEARDED SEDGE	#3	CONTAINER	SPACE 18" O.C.
CS-A	126	CAREX STRICTA	TUSSOCK SEDGE	#3	CONTAINER	SPACE 12" O.C.
TOTAL	181					

SLOPE STABILIZATION SEEDING NOTES

1. RESTORATION AREAS SHALL BE CHECKED WEEKLY AND AFTER EACH RAINFALL EVENT PRODUCING AT LEAST ONE INCH OF PRECIPITATION TO ENSURE PLANTINGS ARE INTACT AND EROSION AND SEDIMENT STRUCTURES ARE STRUCTURALLY SOUND.
2. RATES AND DEPTHS OF SLICE SEEDING SHALL BE CONSISTENT WITH SEED SUPPLIER'S RECOMMENDATIONS.
3. NEWLY SEEDED AREAS SHALL BE WATERED DAILY FOR A MINIMUM OF THREE WEEKS WHEN RAINFALL DOES NOT OCCUR UNLESS OTHERWISE SPECIFIED BY SUPPLIER.
4. SEED MIX SHALL BE AS SPECIFIED.

PLANTING NOTES

1. THE DEPTH OF TOPSOIL LOAM FOR ALL PROPOSED LAWN AREAS SHALL BE 6" MINIMUM. ALL DISTURBED AREAS SHALL BE RESTORED WITH LOAM AND SEED UNLESS OTHERWISE NOTED.
2. ALL REFERENCES TO LOAM AND SEED (L&S) REFER TO HYDROMULCH SEEDED LAWN. SEE SPECIFICATIONS.

MATERIALS NOTES

1. ALL LAYOUT LINES, OFFSETS, OR REFERENCES TO LOCATING OBJECTS ARE EITHER PARALLEL OR PERPENDICULAR UNLESS OTHERWISE DESIGNATED WITH ANGLE OFFSETS NOTED.
2. ALL PROPOSED SITE FEATURES SHALL BE LAID OUT AND STAKED FOR REVIEW AND APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF INSTALLATION. ANY REQUIRED ADJUSTMENTS TO THE LAYOUT SHALL BE UNDERTAKEN AS DIRECTED, AT NO ADDITIONAL COST TO THE OWNER.
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES ON THE GROUND AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE OWNER'S REPRESENTATIVE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD MEASUREMENT OF ALL PROPOSED SITE IMPROVEMENTS.

SPECIAL NOTES

1. BORDERING VEGETATED WETLAND (BVW) LINE WAS DELINEATED USING VEGETATION BY THE CONSERVATION AGENT.
2. TRAIL IS LIKELY UNDERLAIN BY HYDRIC SOILS AS INDICATED BY THE CONSERVATION AGENT.
3. FOLLOWING AQUATIC PLANT ESTABLISHMENT, THE CONTRACTOR SHALL ERECT TEMPORARY HERBIVORE DETERRENT FENCING TO COMPLETELY SURROUND EACH AQUATIC PLANTING AREA THAT SHALL REMAIN IN PLACE FOR A MINIMUM OF TWO YEARS. THE CONTRACTOR SHALL SUBMIT TO THE OWNER AND OWNER'S REPRESENTATIVE A LAYOUT PLAN INDICATING THE EXTENTS OF THE FENCING AND POST LOCATIONS FOR REVIEW AND APPROVAL, PRIOR TO INSTALLATION OF THE FENCING. SEE HERBIVORE DETERRENT DETAIL AND THE SPECIFICATIONS.

Project:
MARTY SENDER GREENWAY
PHASE 2

NEWTON
Parks, Recreation & Culture

KAPOSIA STREET TO LYONS PARK,
104 W PINE ST
NEWTON, MA 02460

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Consultants:

Revisions:

No.	Date	Description

COA:

Seal:

Issued For:
PERMITTING DOCUMENTS
-NOT FOR CONSTRUCTION-

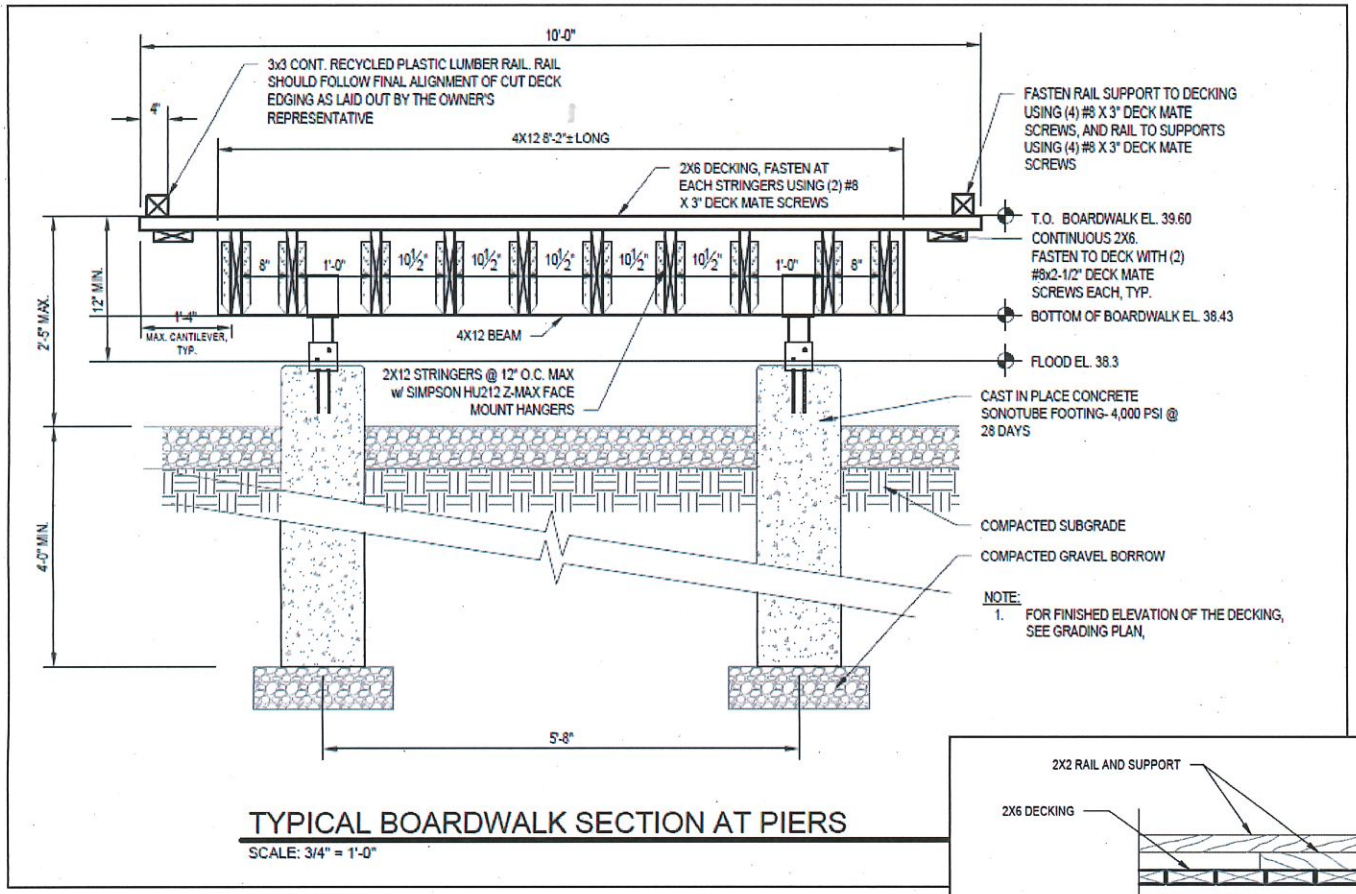
Scale: AS SHOWN

Date:	01/24/2023
Drawn By:	YW, FD
Reviewed By:	CB
Approved By:	BK
W&S Project No.:	ENG22 - 0315
W&S File No.:	

Drawing Title:
MATERIAL AND PLANTING PLAN

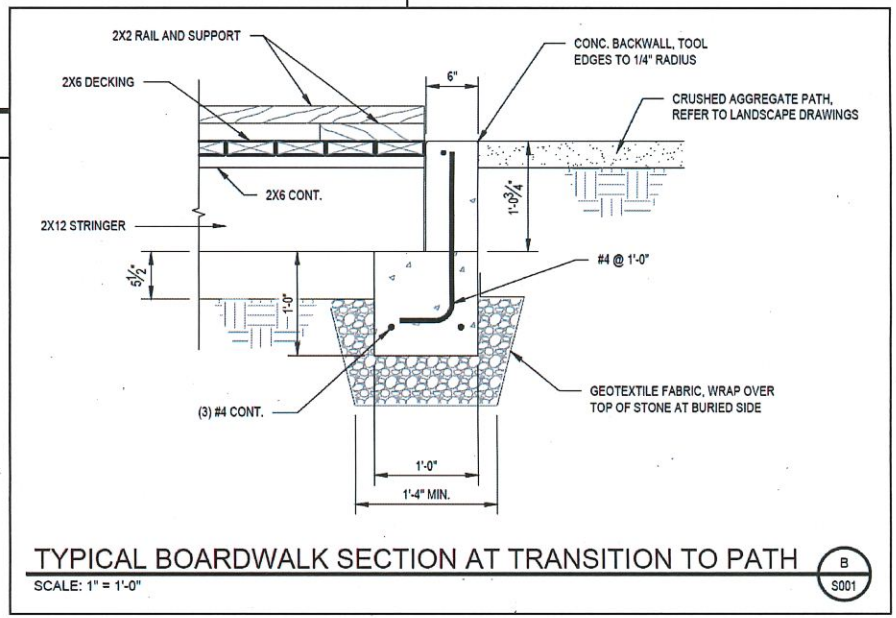
Sheet Number:
L120

02



TYPICAL BOARDWALK SECTION AT PIERS

SCALE: 3/4" = 1'-0"

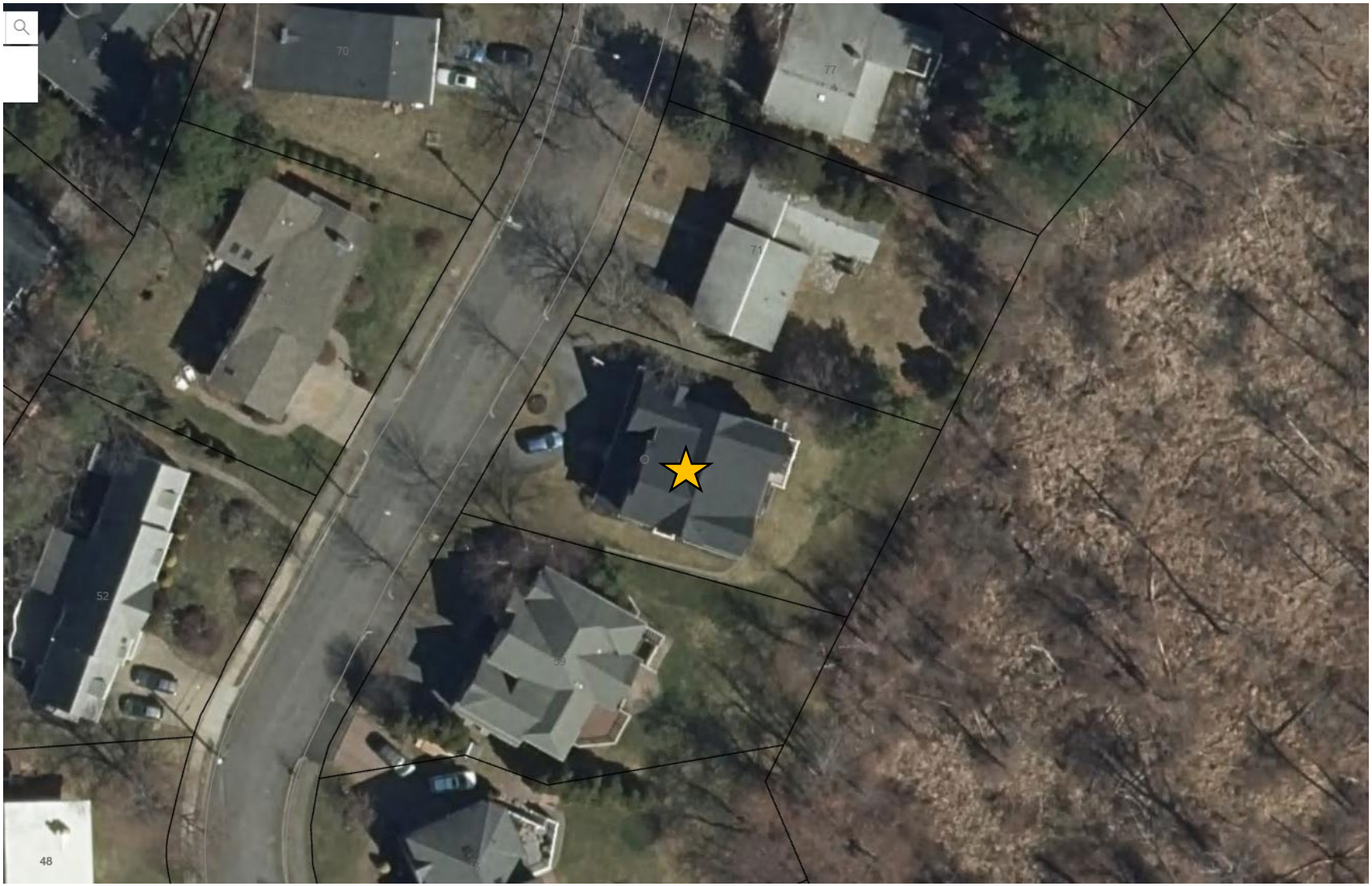


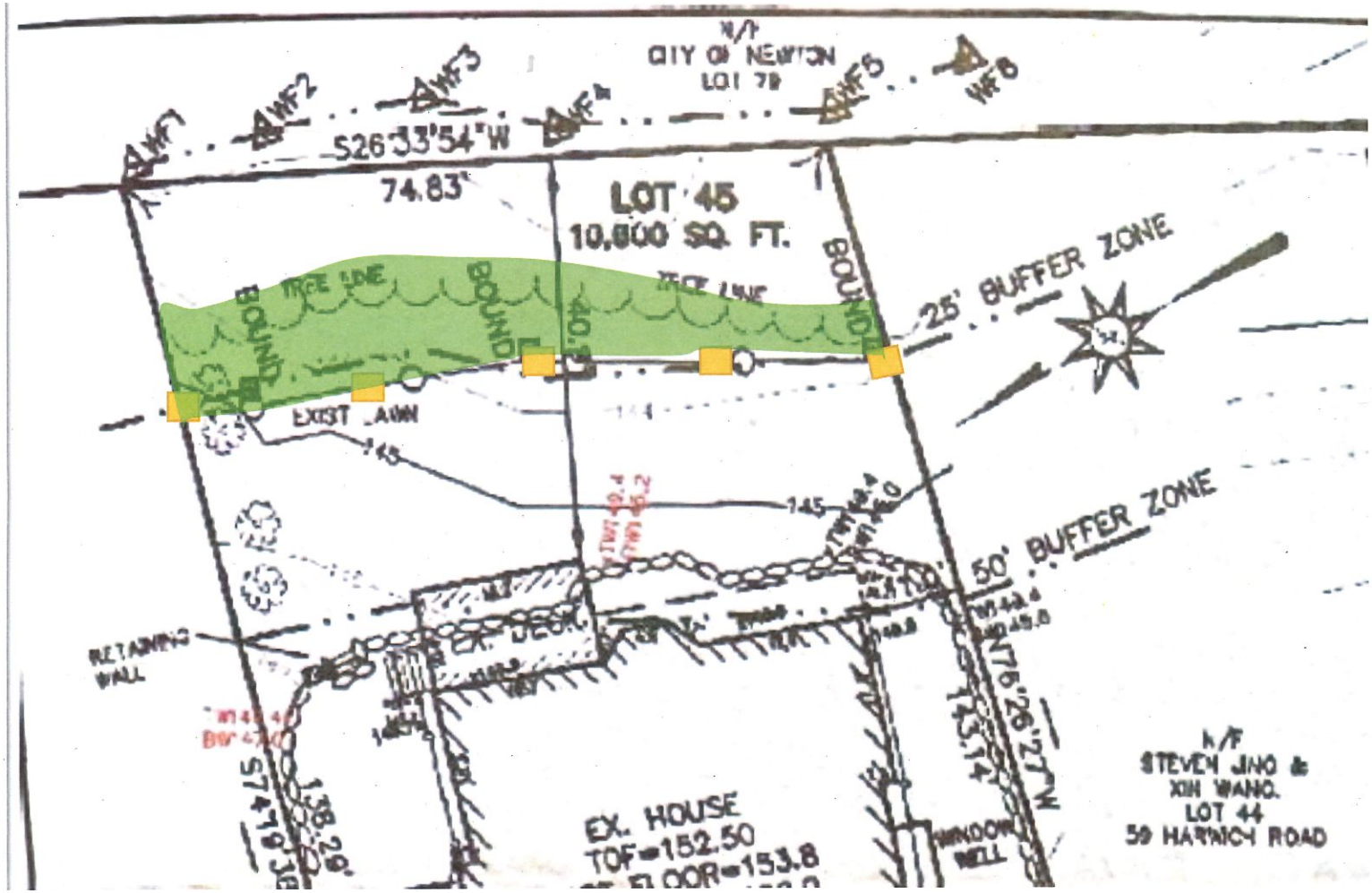
TYPICAL BOARDWALK SECTION AT TRANSITION TO PATH

SCALE: 1" = 1'-0"

B
S001

65 Harwich Rd





Enforcement Order Resolution Sketch Plan

65 Harwich Road Newton, MA 02459 | dated January 25, 2023
Prepared by LEC Environmental Consultants, Inc.

(15) Shrubs should be planted 5 ft apart on center, and (4) tree saplings planted 10 ft apart on-center throughout the area to be revegetated.

5 Stone/Concrete Markers (2 at each property line, 3 evenly spaced in line with bounds) 36" height with at least 6" exposed

Approx Lawn to be Removed and revegetated with native plantings

Native Saplings: 3 plants measuring 4-6' tall, with at least 2 species represented

- Eastern Cottonwood (*Polulus deltoides*)
- Red Maple (*Acer rubrum*)
- River birch (*Betula nigra*)
- Quaking aspen (*Populus tremuloides*)

Native Shrubs: 10 plants measuring 2-3' tall, with at least 3 species represented

- Sweet pepperbush (*Clethra alnifolia*)
- Bayberry (*Morella pensylvanica*)
- Grey dogwood (*Cornus Racemosa*)
- Arrowwood viburnum (*Viburnum dentatum*)
- Red chokeberry (*Aronia arbutifolia*)

Groundcover Seed Mix:

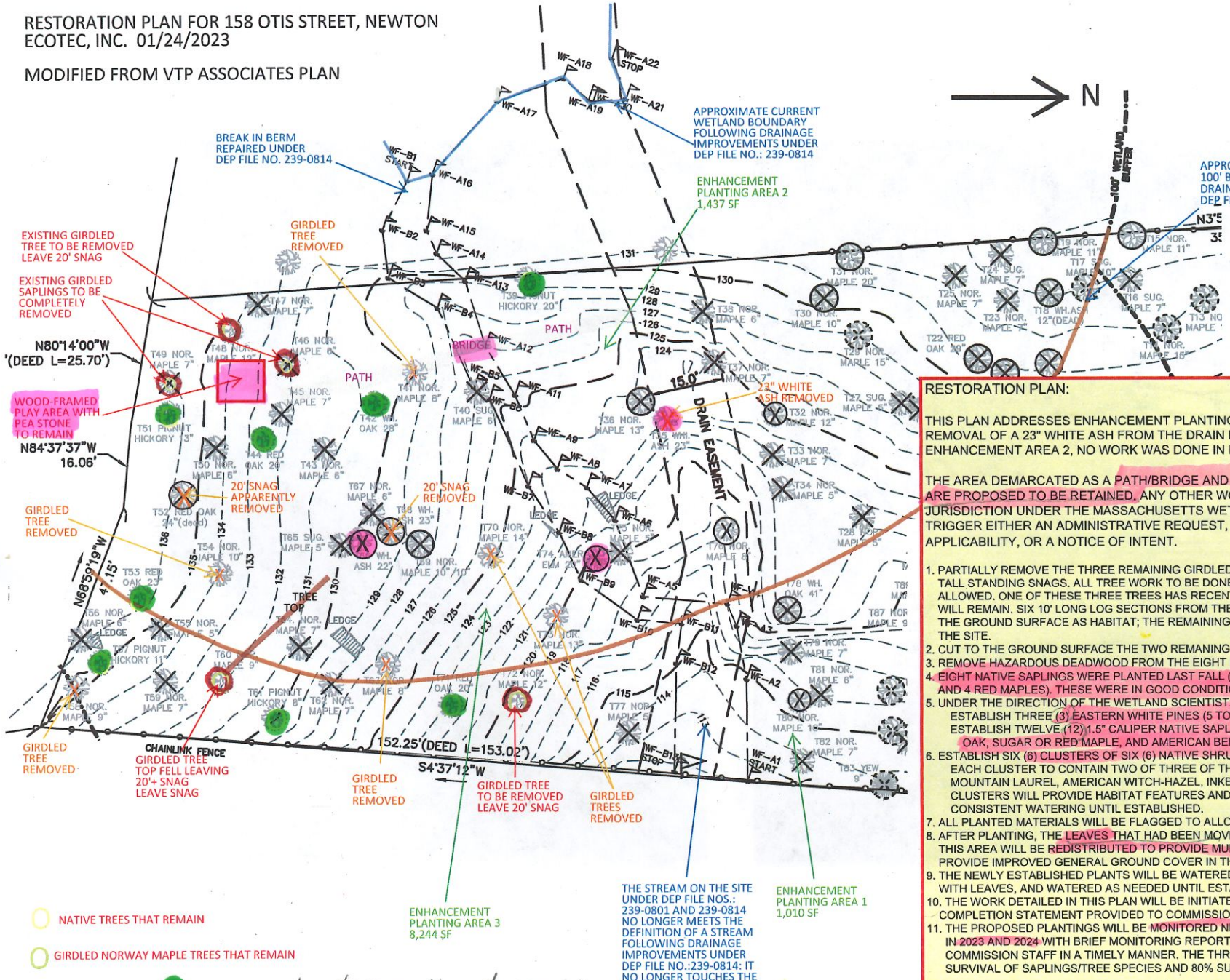
Mesic to Dry Native Pollinator Mix - Ernst Conservation Seeds (ernstseed.com)

Apply a light mulching of straw over the exposed soil once seed has been applied

158 Otis St

RESTORATION PLAN FOR 158 OTIS STREET, NEWTON
ECOTEC, INC. 01/24/2023

MODIFIED FROM VTP ASSOCIATES PLAN



were due to remain + do remain

were not initially due to be removed or built

were due to be killed +/or removed/cut

RESTORATION PLAN:

THIS PLAN ADDRESSES ENHANCEMENT PLANTING AREA 3 ONLY; OTHER THAN THE REMOVAL OF A 23" WHITE ASH FROM THE DRAIN EASEMENT ADJACENT TO ENHANCEMENT AREA 2, NO WORK WAS DONE IN ENHANCEMENT AREAS 1 OR 2.

THE AREA DEMARCATED AS A PATH/BRIDGE AND THE WOOD-FRAMED PLAY AREA ARE PROPOSED TO BE RETAINED. ANY OTHER WORK PROPOSED WITHIN JURISDICTION UNDER THE MASSACHUSETTS WETLANDS PROTECTION ACT WILL TRIGGER EITHER AN ADMINISTRATIVE REQUEST, REQUEST FOR DETERMINATION OF APPLICABILITY, OR A NOTICE OF INTENT.

1. PARTIALLY REMOVE THE THREE REMAINING GIRDLED NORWAY MAPLE TREES LEAVING 20' TALL STANDING SNAGS. ALL TREE WORK TO BE DONE BY CLIMBING; NO HEAVY EQUIPMENT IS ALLOWED. ONE OF THESE THREE TREES HAS RECENTLY FALLEN LEAVING A 20'+ SNAG THAT WILL REMAIN. SIX 10' LONG LOG SECTIONS FROM THESE CUT TREES WILL BE LEFT ON THE GROUND SURFACE AS HABITAT; THE REMAINING CUT MATERIALS WILL REMOVED FROM THE SITE.
2. CUT TO THE GROUND SURFACE THE TWO REMANING GIRDLED NORWAY MAPLE SAPLINGS.
3. REMOVE HAZARDOUS DEADWOOD FROM THE EIGHT EXISTING REMAINING NATIVE TREES.
4. EIGHT NATIVE SAPLINGS WERE PLANTED LAST FALL (2 AMERICAN ELM, 2 MULTISTEM BIRCH, AND 4 RED MAPLES). THESE WERE IN GOOD CONDITION IN NOVEMBER AND DECEMBER.
5. UNDER THE DIRECTION OF THE WETLAND SCIENTIST:
   ESTABLISH THREE (3) EASTERN WHITE PINES (5 TO 6' HEIGHT); AND
   ESTABLISH TWELVE (12) 1.5" CALIPER NATIVE SAPLINGS (4 EACH RED OR PIN OAK, SUGAR OR RED MAPLE, AND AMERICAN BEECH OR EASTERN HOP-HORNBEAM).
6. ESTABLISH SIX (6) CLUSTERS OF SIX (6) NATIVE SHRUBS (36 TOTAL SHRUBS; 3 TO 4' HEIGHT); EACH CLUSTER TO CONTAIN TWO OF THREE OF THE FOLLOWING FOUR SPECIES: MOUNTAIN LAUREL, AMERICAN WITCH-HAZEL, INKBERRY, AND RED CHOKEBERRY. THE CLUSTERS WILL PROVIDE HABITAT FEATURES AND THE CLUSTERS WILL ALLOW FOR MORE CONSISTENT WATERING UNTIL ESTABLISHED.
7. ALL PLANTED MATERIALS WILL BE FLAGGED TO ALLOW FOR PROPOSED MONITORING.
8. AFTER PLANTING, THE LEAVES THAT HAD BEEN MOVED TO THE NORTHWESTERN PART OF THIS AREA WILL BE REDISTRIBUTED TO PROVIDE MULCH FOR THE SHRUB CLUSTERS AND TO PROVIDE IMPROVED GENERAL GROUND COVER IN THE AREA.
9. THE NEWLY ESTABLISHED PLANTS WILL BE WATERED IN WELL AFTER PLANTING, MULCHED WITH LEAVES, AND WATERED AS NEEDED UNTIL ESTABLISHED.
10. THE WORK DETAILED IN THIS PLAN WILL BE INITIATED ON OR BEFORE JUNE 1, 2023 WITH A COMPLETION STATEMENT PROVIDED TO COMMISSION STAFF ON OR BEFORE JULY 1, 2023.
11. THE PROPOSED PLANTINGS WILL BE MONITORED NEAR THE END OF THE GROWING SEASON IN 2023 AND 2024 WITH BRIEF MONITORING REPORTS WITH PHOTOGRAPHS PROVIDED TO COMMISSION STAFF IN A TIMELY MANNER. THE THRESHOLD FOR SUCCESS IS 100% SURVIVAL OF SAPLINGS/TREE SPECIES AND 80% SURVIVAL OF SHRUBS.

15 trees
36 trees

PROPOSED MITIGATION AREA PLANTING PLAN
315+775=1,090±s.f.

SAPLINGS

O	3	NORTHERN RED OAK (QUERCUS RUBRA; 1.5"CALIPER)
SW	2	SOURWOOD (OXYDENDRON ARBOREUM; #5 CONTAINER)
R	2	REDBUD (CERCIS CANADENSIS; 1"CALIPER)
W	2	WHITE SPRUCE (PICEA GLAUCA) OR BALSAM FIR (ABIES BALSAMEA; 5 TO 6' HEIGHT)*

* BASED ON AVAILABILITY

SHRUBS (3 TO 4' HEIGHT; 6' ON CENTER)

S	8	SWEET PEPPER-BUSH (CLETHRA ALNIFOLIA)
B	8	BLACK CHOKEBERRY (PHOTINA MELANOCARPA)
G	8	GRAY DOGWOOD (CORNUS AMOMUM)
N	8	NORTHERN BAYBERRY (MYRICA PENSYLVANICA)

SAPLINGS OUTSIDE MITIGATION AREA

F	2	FLOWERING DOGWOOD (CORNUS RACEMOSA; 1"CALIPER)
M	2	SWEETBAY MAGNOLIA (MAGNOLIA VIRGINIANA; 5 TO 6' HEIGHT)

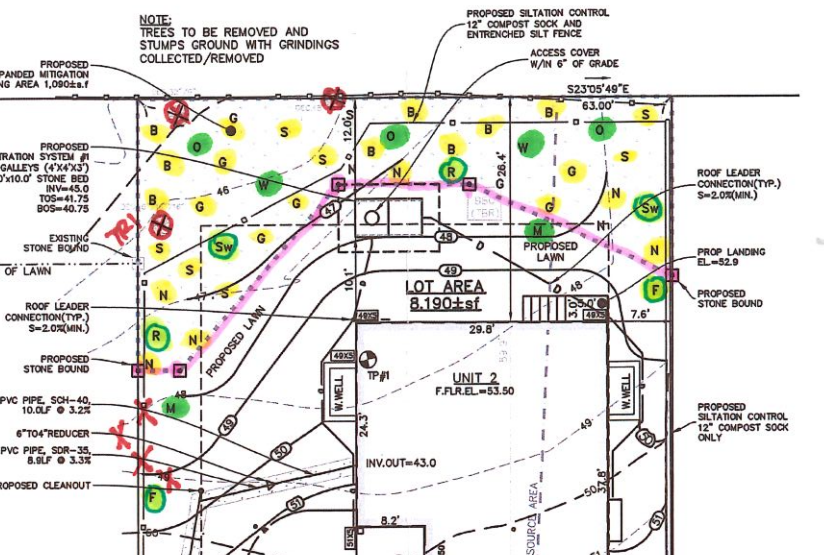
TESTPIT LOG

TESTPIT #1 ELEV=4
0–36" TOP SOIL &
36"–50" SUBSOIL
50"–120" COARSE SAND
COBBLES & STONE

NO WATER
NO REFUSAL
SOIL "A"

TESTPIT #2 ELEV=5
0–12" TOP SOIL
12"–24" SUBSOIL
24"–120" COARSE SAND
COBBLES & STONE

NO WATER
NO REFUSAL
SOIL "A"



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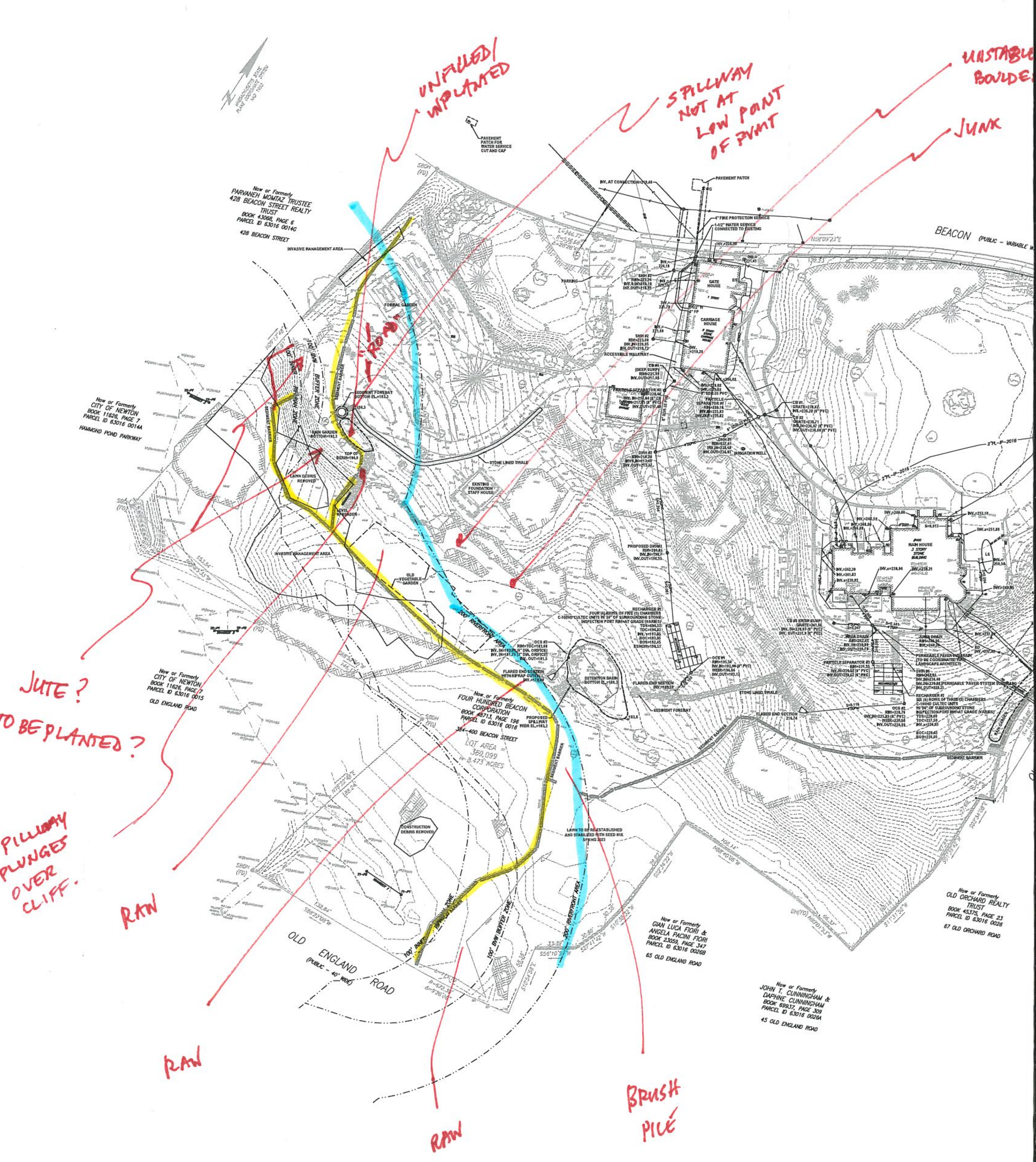

UNFILLED/ UNPLANTED
SPILLWAY NOT AT LOW POINT OF PVMT
UNSTABLE BOULDE
JUNK
PAVEMENT PATCH FOR WATER SERVICE CUT AND CAP
PAVEMENT PATCH
BEACON (PUBLIC - VARIABLE W
Now or Formerly PARVANEH MOMTAZ TRUSTEE 428 BEACON STREET REALTY TRUST BOOK 43068, PAGE 6 PARCEL ID 63016 0014C
428 BEACON STREET
INVASIVE MANAGEMENT AREA
FORMAL GARDEN
GATE HOUSE
CARRIAGE HOUSE
PARKING
ACCESSIBLE WALKWAY
"ROAD"
Now or Formerly CITY OF NEWTON BOOK 11626, PAGE 7 PARCEL ID 63016 0014A
HAMMOND POND PARKWAY
RAIN GARDEN
TOP OF BERM
LAWN DEBRIS REMOVED
STONE LINED SWALE
EXISTING FOUNDATION STAFF HOUSE
IRRIGATION WELL
MAIN HOUSE
OLD VEGETABLE GARDEN
PROPOSED DMH
DETENTION BASIN
SEDIMENT FOREBAY
FLARED END SECTION
SEDIMENT BARRIER
JUTE?
TO BE PLANTED?
Now or Formerly CITY OF NEWTON BOOK 11626, PAGE 7 PARCEL ID 63016 0015
OLD ENGLAND ROAD
Now or Formerly FOUR HUNDRED BEACON CORPORATION BOOK 46713, PAGE 196 PARCEL ID 63016 0016
384-400 BEACON STREET
LOT AREA 369,099 8.473 ACRES
PROPOSED SPILLWAY
CONSTRUCTION DEBRIS REMOVED
LAWN TO BE RE-ESTABLISHED AND STABILIZED WITH SEED MIX SPRING 2023
SPILLWAY PLUNGES OVER CLIFF.
RAW
RAW
RAW
BRUSH PILE
100' BW BUFFER ZONE
200' RIVERFRONT AREA
OLD ENGLAND ROAD (PUBLIC - 40' WIDE)
Now or Formerly GIAN LUCA FIORI & ANGELA PACINI FIORI BOOK 23059, PAGE 347 PARCEL ID 63016 0026B
65 OLD ENGLAND ROAD
Now or Formerly JOHN T. CUNNINGHAM & DAPHNE CUNNINGHAM BOOK 69937, PAGE 309 PARCEL ID 63016 0026A
45 OLD ENGLAND ROAD
Now or Formerly OLD ORCHARD REALTY TRUST BOOK 45375, PAGE 23 PARCEL ID 63016 0026
67 OLD ORCHARD ROAD

Newton Conservation Commission
Tree and Shrub Replacement Guidelines under the State Wetlands Protection Act*

(adopted by the Con Com 6/16/2016)
(Revision Approved 8/27/20)

Purpose: It is the interest of the Newton Conservation Commission to preserve trees and shrubs within its jurisdictional areas. Trees and shrubs provide valuable ecological functions including: nesting and breeding habitat for a variety of wildlife including endangered species, nutrient uptake that improves water quality, and shade. Even dead trees provide valuable habitat and nutrient cycling. These guidelines help define what replacement may be required should a landowner seek permission to remove trees or shrubs from his/her property. Removals without permission (enforcement) are subject to different and more stringent standards.

Jurisdiction/Scope: These guidelines apply to all areas within the Conservation Commission's jurisdiction including: 100-foot Buffer Zones, Bordering Vegetated Wetlands, Banks, Isolated Lands Subject to Flooding, Bordering Lands Subject to Flooding, Land Under Water and Waterways, and Riverfront Areas.

Procedure:

1. All proposed removals of trees or shrubs within Commission jurisdiction must be presented to the Conservation Commission (i.e., the full Commission or an agent of the Conservation Commission) for review and approval under the State Wetlands Protection Act regulations through a Notice of Intent, Request for Determination of Applicability, or a request for Administrative Approval.
2. Trees over 8" in diameter at breast height (dbh) must be identified individually on the proposal. Smaller trees and shrubs in the area must be indicated individually or in aggregate.
3. The owner of the property must submit a proposal for tree and/or shrub mitigation to the Conservation Commission.
4. The Conservation Commission shall decide if the proposal satisfies the tree and shrub replacement guidelines.

Mitigation: Appropriate compensatory mitigation is flexible on a project-by-project basis in order to achieve the most appropriate mitigation for each site-specific situation, however, the starting point for determining replacement is as follows.

In all situations

- Shrubs may be required in addition to or allowed in place of trees to increase ecological diversity and accommodate site constraints.
- Replacement trees and shrubs shall be native species.
- Replacement tree and shrub selections shall optimize the:
    - Likelihood of mitigation planting success,
    - Degree to which lost tree (and shrub) functions are replaced,
    - Value and complexity of the replacement vegetation, and
    - Appropriate density for the site.
- Replacement tree and shrub locations shall optimize wildlife habitat value to the maximum extent possible.
- Replacement trees and shrubs must survive two growing seasons.

Replacement for healthy trees and shrubs

- Size and number of replacement trees and shrubs shall be calculated as follows:
    - For each inch of tree over 8" dbh removed, ½ caliper inch (measured 6 inches off the ground) must be planted. Replacement trees must be at least 1-2 caliper inches.
    - For each shrub over 4' tall or 4' wide removed, two 1-gallon shrubs shall be planted.
- Replacement planting must occur no later than 6 months after completion of removal or end of construction whichever is later.

Special Circumstances: Appropriate compensatory mitigation will vary project-by-project and site-by-site.

- If the trees or shrubs being replaced are invasive, mitigation requirements may be reduced.
- If the trees or shrubs being replaced are hazards, mitigation requirements may be reduced.
- If the trees or shrubs being replaced are on small lots, mitigation requirements may be reduced.
- If the trees or shrubs being replaced are large trees (i.e., over 24" dbh) , mitigation caliper inch requirements may be reduced, but species selection may be limited to large canopy tree(s).
- If the trees or shrubs being replaced are in the inner 50-foot Buffer Zone, mitigation requirements may be increased.
- In enforcement situations, mitigation requirements may be increased.

Mitigation/Restoration Planting Area Guidelines

Approved: 6/3/2021

Introduction

These Guidelines have been developed to assist applicants in developing appropriate plans for mitigation and/or restoration planting areas. 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. Every site is unique; applicants should take site characteristics into consideration in the development of a mitigation and/or restoration planting plan; the Newton Conservation Commission will assess each plan in this context.

Planting Area Site Design

- Walls and fences can diminish the habitat value of mitigation/restoration areas. Walls and fences so should be avoided when possible.
- Buildings and roadways can diminish the habitat value of planting areas. Mitigation/restoration 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.

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. Bed should be shaped to be as "consolidated" (i.e., 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 per 100 sf	4"-1 gallon, 10" plugs, or seed mix
Groundcover w/ shrubs	4' on center	6.3 per 100 sf	4" container, plugs,
Shrubs	5' on center	4.0 per 100 sf	1'-3' tall = 1 gal.; 2'-4' tall = 2 gal.
Shrubs w/ trees	6' on center	3.0 per 100 sf	1'-3' tall = 1 gal.; 2'-4' tall = 2 gal.
Saplings/small trees	10' on center	1.0 per 100 sf	1 caliper inch / 6-8 feet tall
Canopy trees	15' on center	0.4 per 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 Area	**Square Layout**	**Narrow Layout**	**GC/Shr/-/-**	**GC/Shr/UTr/-**	**GC/Shr/UTr/CTr**	**GC/Shr/UTr/CTr**
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's
Tree Replacement and Mitigation/Restoration Planting
Consolidated Guidelines

Feb 1, 2023

Introduction – Developing a Planting Plan

These Guidelines have been developed to assist applicants as they develop planting plans as part of a conservation/wetlands filing. The Guidelines summarized here 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. Every site is unique. Applicants should consider site characteristics, protection of water resources, and wildlife protection as they develop a planting plan. *Note: Modifications to approved plans must be approved by Conservation staff.*

Tree Replacement Guidelines -- A Summary

- Appropriate mitigation will vary project-by-project and site-by-site.
- For each 1 inch of tree over 8" DBH removed, ½ caliper inch (measured 6 inches off the ground) must be planted. Replacement trees must be at least 1-2 caliper inches.
- For each shrub over 4' tall or 4' wide removed, two 1-gallon shrubs shall be planted.
- Replacement trees and shrubs shall be native species.
- Replacement trees and shrubs shall replace lost tree (and shrub) functions and optimize density.
- Location of replacement trees and shrubs shall optimize wildlife habitat value.
- Special Circumstances:
    - If the trees or shrubs being replaced are invasive, mitigation requirements may be reduced.
    - If the trees or shrubs being replaced are hazards, mitigation requirements may be reduced:

DBH of hazard tree cut	Number of 1" caliper, 8' tall saplings to be planted	Number of shrubs to be planted
8-16"	1	2
16"-24"	2	3
>24"	3	5

    - If the trees or shrubs being replaced are on small lots, mitigation requirements may be reduced.
    - If the trees or shrubs being replaced are large trees (i.e., over 24" DBH), mitigation caliper inch requirements may be reduced, but species selection may be limited to large canopy tree(s).
    - If the trees or shrubs being replaced are in the inner 50-foot Buffer Zone, mitigation requirements may be increased.
    - In enforcement situations, mitigation requirements may be increased.
    - If the tree being removed is a "legacy tree" (any live native tree greater than or equal to 21" DBH and greater than 150 years old), mitigation requirements may be modified.

Mitigation Planting Area Guidelines -- Location

- To provide maximal ecological benefit, planting areas should:
    - Be sited away from buildings and/or roads when possible, and
    - Be sited adjacent to other natural areas when possible.

Mitigation Planting Area Guidelines – Layout/Design

- A clear planting plan/map that clearly illustrates the locations and the species of the plants to be installed (reflecting the sizes of the plants as they near maturity) is important.
- A good planting plan can help create desired habitat areas and avoid potential conflicts.
- Planting areas should be as large and consolidated as possible (small, isolated, or narrow planting areas have limited ecological value)

- Planting areas should have no walls or fences within or around them
- Planting areas should have an appropriately "natural" "clumping" of plant types and species.

Mitigation Planting Area Guidelines -- Plant Density and Sizes

In addition to the species of plants to be included in a mitigation/restoration area, it is important to consider the sizes and density of plants to be installed. Very small plants may struggle to take hold or may be susceptible to browse. Very large plants may suffer stress and struggle to survive. Plans should show sizes at the time of installation.

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

Mitigation Planting Area Guidelines -- Plant Varieties

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

Mitigation Planting Area Guidelines – A Mix of Trees, Shrubs, and Ground Covers

The chart below is designed to be used as an aid for planning mitigation/restoration areas. Four scenarios are show for mitigation planting areas of different sizes, with possible numbers of plants shown.

- Some sites/projects will accommodate/require mostly shrubs and groundcover
- Some sites/projects will accommodate/require some small understory trees
- Some sites/projects will accommodate/require some canopy trees

*KEY: **GC** = ground cover, **Shr** = shrub, **UTr** = understory tree, **CTr** = canopy tree*

			Numbers of Plants of Different Varieties		
Planting Area	**Square Layout**	**Narrow Layout**	**Shrub**	**Understory**	**Canopy**
			GC / Shr	**GC / Shr/ UT**	**GC / Shr / UT / CT**
100 sf	10 x 10	n.a.	25 / 0	6 / 4 / 0	6 / 2 / 1 / 0
200 sf	14 x 14	10 x 20	50 / 0	12 / 8 / 0	12 / 6 / 2 / 0
300 sf	17 x 17	10 x 30	19 / 12	100 / 3 / 3	100 / 4 / 1 / 1
400 sf	20 x 20	10 x 40	25 / 16	25 / 12 / 4	25 / 10 / 2 / 1
500 sf	22 x 22	15 x 33	n.a.	31 / 15 / 5	31 / 12 / 3 / 1
600 sf	25 x 25	15 x 40	n.a.	38 / 18 / 6	38 / 15 / 4 / 1
700 sf	26 x 26	15 x 47	n.a.	44 / 21 / 7	44 / 18 / 4 / 1
800 sf	28 x 28	15 x 53	n.a.	n.a.	50 / 24 / 5 / 1
900 sf	30 x 30	20 x 45	n.a.	n.a.	57 / 27 / 5 / 2
1000 sf	32 x 32	20 x 50	n.a.	n.a.	63 / 30 / 6 / 3

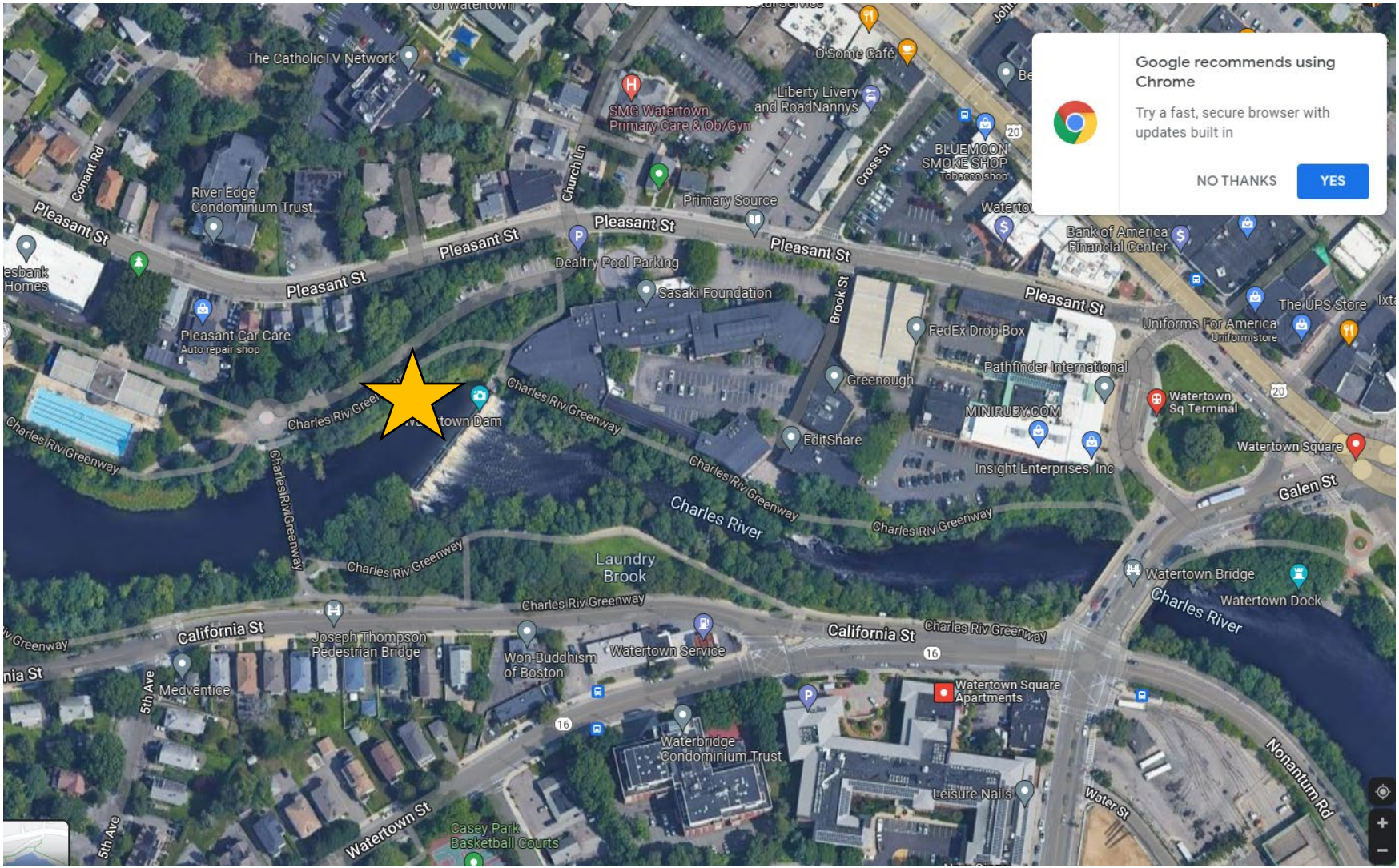
Mitigation Planting Area Guidelines – Site Preparation and Planting Practices

1. Mix compost or other organic amendments into the soil to increase water-holding capacity.
2. Dig planting hole
    - For trees, dig only as deep as needed to keep the trunk flare at ground level.
    - Always dig the hole at least three times the diameter of the root ball.
3. Remove all (or at least the top third) of burlap and wire baskets from the root ball and install plant.
4. Stake large trees for stability for one growing season.
5. Water all plants thoroughly at the time of planting (15-20 gal. per plant).
6. Mulch root zones with 2 inches of mulch.
7. No fertilization is necessary at planting time.

Mitigation Planting Area Guidelines – 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.

Watertown Dam



CONSERVATION COMMISSION MINUTES

Date: Tuesday, January 19, 2023
Time: 7:00 – 10:08pm
Place: This meeting was held as a virtual meeting via Zoom.

With a quorum present, the meeting opened at 7:00 pm with Dan Green presiding as Chair.
Members Present: Dan Green (Chair), Susan Lunin (Vice-Chair), Kathy Cade, Judy Hepburn, Jeff Zabel, Leigh Gilligan, Ellen Katz, Sonya McKnight (Associate Member)
Members Absent: none
Staff present: Jennifer Steel
Members of the Public: not recorded due to remote nature of the meeting

DECISIONS

A. WETLANDS DECISIONS

1. 7:00 – 111 Wells Ave – RDA – solar installation in a business park

- Owner/Applicant. Dan Giuffrida, Plankton Energy
- Representatives. Marianne Diffin, DiPrete Engineering
- Proposed Project Summary.
  - Installation of a solar canopy over an existing parking lot in a business park. 31 steel posts will be installed and spaced to allow stormwater to pass through, preserving the existing stormwater pathways.
  - Proposed project will require new transformer and switchgear, and trenching.
- Request. Issue a Negative Determination of Applicability.
- Documents in packets. Locus map, highlighted plans.
- Additional documents presented at meeting. Site photos.
- Jurisdiction.
  - Within the project area: Riverfront Area to College Brook
  - On-site, but outside the project area: Bordering Land Subject to Flooding, Rare Species Habitat, Bordering Vegetated Wetland, and Buffer Zone,
- Presentation (staff and Marianne Diffin) and Discussion.
  - College Brook bounds the parking area to the east and drains into the Charles River.
  - The parking lot existed prior to promulgation of the Rivers Protection Act.
  - This is a straight-forward solar canopy installation over an existing parking lot. There shall be no change to the amount of degraded area on the site or the stormwater quality or quantity generated by the site. 10 trees (within the Riverfront Area) in the parking lot's interior islands will be removed prior to the installation of the canopies.
  - Appropriate sediment/erosion controls will be installed (layout to be approved by Staff).
  - The project will result in an improvement to the site by: (1) installing ~1515 solar panels, (2) shading the parking lot, and (3) partially servicing the building at 85 Wells Ave with the remainder of the generated energy being transferred to the local electrical grid.
  - One Commissioner asked about the level of use of the parking lot. Diffin responded that use may have declined due to the pandemic.
- Vote to issue a Negative 2 (The work described in the Request is within an area subject to protection under the Act, but will not remove, fill, dredge, or alter that area. Therefore, said work does not require the filing of a Notice of Intent) and a Negative 6 Determination (the area and/or work described in the Request is not subject to review and approval by the Newton Floodplain Ordinance). [Motion: Lunin, Second: Gilligan, Roll-call vote: Green (aye), Lunin (aye), Katz (aye), Gilligan (aye), Zabel (aye), Hepburn (aye), Cade (aye). Vote: 7:0:0]

2. 7:15 – 27 Parsons St – NOI – demo SFH/construct 2FH -- DEP #239-945

- Owner/Applicant. Tom Zou, GZ Fleet, LLC
- Representatives. John Rockwood, EcoTec
- Proposed Project Summary.

Contact Information
1000 Comm. Ave.
Newton, MA 02459

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jsteel@newtonma.gov

- Demolition of the existing single-family house and all existing associated site features (with the exception of the northern retaining wall and the smaller shed) and the removal of two ornamental trees and an arborvitae tree.
- Construction of a larger two-family structure on two foundation areas associated with the proposed garages that are smaller than the existing foundation; the balance of the house and decks will be supported on piers above the floodplain and concealed with lattice comprising greater than 50% voids.
- The project results in two homes and 305 sf less degraded surface on the site (from 4,635± sf to 4,330± sf) so there is no required restoration or mitigation.
- No new proposed degraded surfaces are proposed within the 25' Buffer Zone on the site.
- Driveway and roof runoff will be captured and infiltrated in 2 areas and a grassed swale with drop inlet will prevent off-site overland flow to the north.
- Nine 1.5" caliper ornamental saplings are proposed to be established within the 25' Buffer Zone to the north of the proposed house.

- Request. Issue OOC.
- Documents in packets. Locus map, highlighted plans.
- Additional documents presented at meeting. Site photos.
- Jurisdiction. Riverfront Area, Bordering Land Subject to Flooding, Buffer Zone
- Presentation (Staff and John Rockwood) and Discussion.
  - In general, staff support the conversion of single-family homes to duplexes.
  - The site is extensively developed/degraded and has no canopy trees.
  - Infiltration systems will improve stormwater management.
  - The project complies with the pertinent regulations regarding the placement and extent of degraded areas.
  - In response to staff concerns about meeting the RFA performance standard of site "improvement", the enhancement planting plan (with 9 native understory saplings) will be augmented with: (1) 16 native shrubs co-located with those native understory saplings, (2) three native evergreen saplings, and (3) two native canopy saplings.
  - All other performance standards have been met or exceeded.
- Vote to close the hearing and issue an OOC with the following site-specific special conditions. [Motion: Gilligan, Second: Katz, Roll-call vote: Green (aye), Lunin (aye), Katz (aye), Gilligan (aye), Zabel (aye), Hepburn (aye), Cade (aye). Vote: 7:0:0]

21. The stabilized construction entrance will be required for the duration of the construction to prevent tracking of mud and silt onto City streets.
22. Concrete washout must take place as shown on the approved plans, must limit/control any adverse impact on the wetlands resource area(s) and must be presented to the Conservation Commission for review and approval.
23. A dewatering plan 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 if water is encountered during the course of excavation.
24. The Riverfront Area enhancement planting areas must:
    a. Be installed in compliance with the approved plans (I.e., 9 native understory trees) and the additional plants identified in Condition #25. Desired changes must be approved by the Conservation office in advance.
    b. Be installed under the direction of a qualified wetland consultant to ensure proper installation, proper placement, and appropriate and even filling of the entire mitigation area.
    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.
    d. Mulch applications shall diminish over time and eventually cease as shrubs spread.
    e. Stabilize all disturbed areas.
    f. Be managed to control/minimize invasives species. If herbicides are use, manufacturer's recommended directions must be followed.
25. Additional Plantings
    a. In addition to the 9 native understory saplings shown on the approved plan north of the proposed grassed swale, the applicant must also establish 16 native shrubs co-located with those native understory saplings.
        - The shrubs will be 3 to 4' in height and consist of four of each of the following: Virginia Rose (Rosa virginiana), Inkberry (Ilex glabra), Shrubby Cinquefoil (Potentilla fruticosa), and Mountain Laurel (Kalmia latifolia).
        - The native understory saplings and shrubs located will be mulched to serve to protect these plantings.

b. Additionally, a cluster of three native evergreen saplings (i.e., 1 6-7' tall White Spruce (Picea glauca) and 1 6-7' tall Eastern Red Cedar (Juniperus virginiana) will be established within the existing lawn area near the southern site boundary.
c. Additionally, 2 2" caliper native canopy saplings (one Northern Red Oak *(Quercus rubra)* and one Sugar Maple *(Acer saccharum)*) will be established near the northern edge of the lawn area located in the western portion of the site outside of the limit of work.

26. Plant Survival
    a. The 9 native understory saplings must have a survival rate of 100% after 2 growing seasons
    b. The 2 native canopy saplings and 3 evergreen trees must have a survival rate of 100 % after 2 growing seasons
    c. The 16 native shrubs must have a survival rate of 80% after 2 growing seasons.
27. Finished grades may not deviate from the approved plans, even if high groundwater is encountered.
28. Compensatory flood storage must be provided in its entirety as per the plans, by removing 1,111± cubic feet of material from the site.
29. The stormwater infiltration system must be installed as per the approved plans.
30. The City Engineer must inspect the infiltration system. The applicant must submit proof of inspection to the Conservation Office.
31. 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).

3. 7:45 – 483-655 Dedham St (Charles River Country Club) – Ecological NOI – treatments to reduce pond weeds -- DEP #239-943

- Owner/Applicant. Paul Blanusa, Charles River Country Club
- Representatives. Kelly Cardoza, Avalon Consulting; Paul Blanusa, CRCC; Joe Oronato, Water & Wetland
- Proposed Project Summary.
    - Address excessive weed growth (water chestnut , elodea, naiad, duckweed, and algae) in in four ponds (Holes 1, 4, 15, and 17).
    - This application has been submitted as an Ecological Restoration Limited Project 10.53(4)(a) -- a project whose primary purpose is to restore or otherwise improve the natural capacity of a Resource Area(s) to protect and sustain the interests identified in M.G.L. c. 131, § 40, when such interests have been degraded or destroyed by anthropogenic influences.
    - 'Integrated pond management' to control nuisance vegetation in five ponds: monitoring, aeration, manual removal, best management practices, and chemical treatment over approx. 51,757 sf.
    - *Monitoring and reporting*
        - Ponds will be surveyed by a qualified biologist from April to September (8 visits annually) to document conditions and determine the need for management.
        - Using a small boat, monitoring will include physical observations, throw-rake samples, and field testing of dissolved oxygen and temperature.
        - Annual report will be submitted to the Commission prior to December 1st of each year, to include details of all activities undertaken, photos, problems or concerns, schedule for upcoming year.
    - *Floating Surface Aeration*
        - Project will require installation of electric line in conduit using vibratory plow to each pond site.
        - Seasonal installation of surface aerators in each pond. System has motor/propeller/pump/submersible cord/outlet near the shoreline which will be connected via electrical conduit.
    - *Manual removal*
        - Low densities of Water Chestnut (less than ¼ pond coverage) will be pulled by hand where feasible.
    - *Chemical treatment*
        - Chemical treatment will be performed only as necessary, using dosages appropriate to the densities of the plants observed. MSDS were included for each product.
        - The applicant is seeking approval of 3 chemical treatments in four ponds: Holes 1, 4, 15, and 17 for the following:
            - Fluoridone (Sonar) -- for elodea, naiad, duckweed -- a pre-emergent herbicide, slow acting so reduces the possibility of oxygen depletion due to decaying plant material and the potential for ensuing algae blooms.
            - Imazamox (Clearcast) -- for water chestnut – for submerged, emergent, and floating broadleaf and grass weeds. Water chestnut coverage in August exceeded hand-pulling levels, and the initial years of the program would likely incorporate Clearcast.

- Copper (Captain XTR) -- for algae -- approved to control nuisance filamentous and microscopic algae in potable water reservoirs, fish hatchery ponds and golf course ponds.
  - *Best management practices*
    - Out-of-play natural vegetated buffer strips around pond edges.
- Request. Issue an OOC.
- Documents in packets. Locus map, highlighted plans.
- Additional documents presented at meeting. Site photos.
- Jurisdiction. Land Under Water, Bordering Vegetated Wetland, Riverfront Area, Buffer Zone – through the lens of an Ecological Restoration Limited Project (10.53(4)(e) 5. Other Restoration Projects.
- Presentation (Staff and Kelly Cardoza and Paul Blanusa) and Discussion.
  - Commissioner Judy Hepburn disclosed that she knew Kelly Cardoza, but that that familiarity would not materially affect her impartial consideration of this application.
  - Staff comments/concerns were all addressed in revised application materials.
    - The project goal was clarified: to reduce weed density to allow greater vegetative diversity and more open water habitat, to slow eutrophication, and to improve the overall health of the ponds.
    - Applicants agree that there should have been a 1.5X RFA fee added to the Category 2 $500 fee, and will send the appropriate checks to the City and DEP.
    - Applicants agree that the wetland boundaries shown on the plans should not be approved under this Order, but are sufficient to allow optimization of wetland restoration under the Ecological Restoration OOC.
    - A robust water quality and wildlife habitat enhancement plan was submitted prior to the hearing. It included large "annual mowing only" areas and areas to be planted with native shrubs and vegetation.
    - Mechanisms of weed removal were clarified and the Commission's interest in having water chestnuts removed manually noted.
    - Thresholds for applications of herbicides were clarified in a new table.
    - "Selective" treatment was clarified and will be achieved with the "ECOS" protocol of early applications and low doses of Sonar that will selectively harm the dense populations of Elodea early in the season minimizing the build-up of its biomass, but allowing other native species to persist.
    - Disposal was discussed to ensure that viable seeds and fragments would not be spread inadvertently.
  - Existing conditions were reviewed with site photos.
    - Hole 1 Pond – filamentous algae and extensive cover of invasive water chestnut;
    - Hole 4 Pond – filamentous algae and extensive cover of invasive water chestnut;
    - Hole 15 Pond – extremely dense elodea and filamentous algae; and
    - Hole 17 Ponds (North & South) – extremely dense elodea and filamentous algae; naiad, and duckweed.
  - Blanusa answered a question about wildlife habitat, noting the presence of fish in the Hole 4 pond.
  - Blanusa noted that the plantings of low-bush blueberries on the slope adjacent to the Hole 15 pond (associated with an older, closed Order of Conditions) suffered from deer browsing and drought. Under this Order of Conditions, he will work to reestablish native shrubs on both sides of the slope. There was discussion about the most appropriate species to plant. Commissioners noted that simple fencing would not deter deer and suggested instead a diversity of native shrubs, possibly including gro-low sumac, native roses, and low-bush blueberry.
- Vote to close the hearing and issue an OOC with the following site-specific special conditions. [Motion: Cade, Second: Lunin, Roll-call vote: Green (aye), Lunin (aye), Katz (aye), Gilligan (aye), Zabel (aye), Hepburn (aye), Cade (aye). Vote: 7:0:0]

27. Aeration shall be undertaken throughout the growing season.
28. Mechanical removals of all non-native invasive species may be undertaken throughout the year.
29. The following ecological enhancement planting and maintenance plan must be undertaken in full compliance with the approved plans and the following chart.
    a. Be installed in compliance with the approved plans.
    b. Desired changes must be approved by the Conservation office in advance.
    c. Be installed under the direction of a qualified wetland consultant to ensure proper installation, proper placement, and appropriate and even filling of the entire mitigation area.
    d. 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.
    e. Stabilize all disturbed areas.
    f. Be managed to control/minimize invasives species. If herbicides are use, manufacturer's recommended directions must be followed.

Pond	Area (sf)	Resource/Description	Ecological Enhancement	Maintenance
Hole 1	888	Triangular area of BVW east of pond at edge of bank to tree line, currently mowed and maintained regularly	Allow existing native vegetation to establish (sedges, rushes, milkweed, asters)	Maintain at a height of 18"-24". No irrigation, no fertilization, mow once annually in the fall after milkweed and asters bloom.
Hole 1	3,385	Area of BVW and upland between edge of fairway and wooded area, from pond edge, approximately 100 feet west, currently mowed and maintained regularly	Allow existing native vegetation to establish (sedges, rushes, milkweed, asters)	Maintain at a height of 18"-24". No irrigation, no fertilization, mow once annually in the fall after milkweed and asters bloom.
Hole 4	3,139	Primarily linear upland area between existing cart path and wetland (east of pond), currently mowed and maintained.	Allow existing native vegetation to establish (milkweed, asters, native grasses)	Maintain at a height of 18"-24". No irrigation, no fertilization, mow once annually in the fall after milkweed and asters bloom.
Hole 4	1,191	Existing upland walkway from tees to green on 4th hole. This area serves as the edge of pond	Allow existing native vegetation to reestablish (retain grass path)	No irrigation, no fertilization, mow once annually in the fall to limit woody vegetation growth
Hole 4	709	Triangular area of (primarily) BVW at pond edge, currently mowed and maintained	Allow existing native vegetation to establish (sedges, rushes, milkweed, asters)	Maintain at a height of 18"-24". No irrigation, no fertilization, mow once annually in the fall after milkweed and asters bloom.
Hole 15	812	Rectangular area adjacent to pond weir, currently mowed and maintained	Allow existing native vegetation to establish (sedges, rushes, milkweed, asters, woody vegetation	No irrigation, no fertilization, no mow, maintain access to control structure.
Hole 15	6,973	Expand planting area in BVW adjacent to naturalized area associated with dredging project, currently mowed and maintained.	#Sweet Pepperbush (Clethra alnifolia), Arrow-wood (Viburnum dentatum), Winterberry (Ilex verticillata), Swamp azalea (Rhododendron viscosum), Red chokeberry (Aronia arbutifolia), Meadowsweet (Spiraea latifolia), Steeplebush (Spiraea tomentosa)	Plant 194 shrubs, 2-3' in height, container, 6' on center avg spacing No irrigation, no fertilization, no mow.
Hole 15	4528+ 8954	dry slope (upland)	Replace low bush Blueberry (Vaccinium angustifolium)	Plant 3,371- 4"-1 gallon container, 2' on center avg spacing. No irrigation, no fertilization, no mow.
Hole 17 south	730	10' wide area of BVW around pond, currently mowed and maintained	*Soft rush (Juncus effusus), Three way sedge (Dulichium arundinaceum), Sensitive Fern (Onoclea sensibilis), Canada rush (Juncus canadensis)	Plant 81- 2" plugs, 3' on center avg spacing No irrigation, no fertilization, no mow

Notes

This planting plan includes:

a. 194 native shrubs with a survival rate of 90% after 2 growing seasons

b. 3371 native woody ground cover with a survival rate of 90% after 2 growing seasons

c. 81 native plugs of herbaceous material with a survival rate of 90% after 2 growing seasons

Plants will be irrigated and fertilized as needed for establishment.

\# Depending on availability from local nursery stock at least 3 of the listed species will be selected, with at least 15 specimens of each selected species planted.

* Depending on availability of from local nursery stock at least 3 of the listed species will be selected, with at least 10 specimens of each selected species planted.

30. Water Chestnuts shall first by addressed by mechanical means and only if those efforts are exhausted shall chemicals be employed.
31. Chemical treatments may only be undertaken if thresholds identified in the following table have been met or exceeded.
32. This Order authorizes the use of Sonar only in an Early Control Optimized Sonar (ECOS) program, with early season (April) low-dose applications designed to control densities of aggressive native plants without eradicating native species, to promote greater diversity.

Pond	Area (sf)	Target Vegetation	Proposed Selective Treatment	Thresholds for Chemical Treatment
Hole 1	9,000	Filamentous algae Water chestnut	Captain XTR Clearcast	30% aerial coverage 25% aerial coverage
Hole 4	18,760	Filamentous algae Water chestnut	Captain XTR Clearcast	30% aerial coverage 25% aerial coverage
Hole 15	12,897	Elodea Filamentous algae	Sonar Captain XTR	ECOS 30% aerial coverage
Hole 17 north	4,019	Elodea Naiad Duckweed Filamentous algae	Sonar Sonar Sonar Captain XTR	ECOS ECOS ECOS 30% aerial coverage
Hole 17 south	7,081	Elodea Naiad Duckweed Filamentous algae	Sonar Sonar Sonar Captain XTR	ECOS ECOS ECOS 30% aerial coverage

Note: Treatment will be based on target vegetation observed in the field by qualified biologists. Native Elodea, Naiad and Duckweed will be treated by Fluridone ECOS. This will manage but not eradicate the populations. Due to the density observed in 2022, we expect that it will take at least several years of ECOS to manage the population in the ponds.

33. An annual report must be submitted to the Commission prior to December 1st of each year, to include details of all activities undertaken, photos, problems/concerns, and anticipated maintenance activities for the upcoming year.
34. Harvested materials shall be disposed of in appropriate manners for each species and in appropriate locations to preclude dispersal.

4. 8:20 – 70 Suffolk Rd – NOI – construction of pool, garage, and site features -- DEP #239-946

- Owner/Applicant. Frank & Kyra van den Bosch
- Representatives. Andrea Kendall, LEC Environmental; Peter Stephens and Dan Gordon, Dan K Gordon Assoc; Brian Nelson, MetroWest Engineering
- Proposed Project Summary.
  - Within the 100' Buffer Zone, the following changes are proposed:
    - The 3.5 acre single-family home site property has a 22' grade change from the front the wetland at the back.
    - Remove some of the existing hardscape including driveway, retaining walls, steps; remove a portion of the house.
    - Build a pool, pool house, 1-car garage, terraces and paths; install 2 underground stormwater infiltration systems. This will add 5,214 sf of impervious area to the site.
    - Tree cutting: Remove many mature trees.

- Mitigation
    - 25-foot Naturally Vegetated Buffer. Within the 9,869 sf of 25-Foot NVBZ, the footprint of lawn will be reduced and converted to naturalized or landscaped areas. Currently 54% (5,321 sf) is planted/naturalized, after the project 87% (8,600 sf) will be planted/naturalized.
    - BVW. 7,136± SF of lawn within BVW will be vegetatively restored with native wetland plants comprised of trees, shrubs, ferns, sedges, and forbs (an herbaceous flowering plant other than a grass or a sedge). Within the sunnier areas 2,500 forbs and shrubs and three (3) black tupelo (Nyssa sylvatica) trees will be planted. Within the shadier portions of the BVW, 500 ferns and forbs will be planted.
    - Intermittent stream. The wooden footbridges will be removed by hand and the Bank will be planted with forbs and/or ferns.
    - Invasive species located along the hillside east of the residence and within BVW along the perimeter of the lawn will be managed.
- Request. Issue OOC.
- Documents in packets. Locus map, highlighted plans and photos.
- Additional documents presented at meeting. Site photos.
- Jurisdiction. Bank, Bordering Vegetated Wetland to intermittent stream, Land Under Water, Buffer Zone
- Presentation (Staff and Andrea Kendall, Dan Gordon, and Peter Stephens) and Discussion.
    - Staff noted that revised plans had been submitted today in response to some of the staff comments and a site visit. Staff gave a quick overview of the revised plans and site photos, noting that further revisions were anticipated and that a more detailed review would have to wait until a future hearing.
        - The wetland line was revised based on soils and hydrology.
        - Non-native evergreen trees were replaced with hemlocks.
        - The proposed yew hedge in the 25' NVB has been replaced with a native hedge.
        - Stephens noted that Clethra shrubs would be installed where invasives were removed at the rear of the lot to augment the existing proposed planting plan.
        - The applicants have stated that the outdoor lights will be dark sky compliant.
    - Some staff comments remain to be addressed.
        - Landscape plans on a single sheet.
        - Proposed and existing conditions should be overlaid on one sheet to show the proposed site changes more clearly.
        - Tree information being consistent among the narrative, plans and tables.
        - Adding the City flood elevation (166.5 NAVD88) to the plans.
        - Clarifying symbols and key on the landscape plans.
        - Verifying the revised wetland line and delving into the BVW performance standards.
    - Commissioners noted that the espalier apple trees in the replacement planting schedule barely qualified as "trees".
    - Commissioners and staff noted that although the proposed hemlocks were due to be treated for wooly adelgid, the applicant should consider a variety of native trees that do not rely on chemical treatments to thrive (such as Atlantic white cedar, native fir, native spruce, oaks, and maples).
    - Stormwater will be further reviewed by the Engineering Department.
- Vote to accept the applicant's request to continue to February 9th at 7pm, with revised materials due January 26th at noon. [Motion: Katz, Second: Hepburn. Roll-call vote: Green (aye), Lunin (aye), Katz (aye), Gilligan (aye), Zabel (aye), Hepburn (aye), Cade (aye). Vote: 7:0:0]

5. 8:55 – 528 Boylston St -- informal presentation -- Toll Brothers 40B project

- Owner. Toll Brothers luxury home builders
- Representative. Stephen Buchbinder, attorney; Tim Hayes, Bohler Engineering; Evan Staples, Toll Bros; Tom Schultz, TAT (The Architectural Team)
- Proposed Project Summary.
    - Toll Brothers submitted an application to MassHousing under Chapter 40B to build a multifamily housing project.
    - The developer plans to build a six-story, 244-unit apartment building, with a mix of 1-, 2- and 3-bedroom rentals.
- Request. Offer preliminary feedback on jurisdictional aspects of the proposed project.
- Documents in packets. Locus map, summary information.
- Additional documents presented at meeting. Presentation by applicant team.
- Presentation and Discussion.
    - Chair Green noted that this is not a public hearing, so only if time allowed would public comment be taken and that such comments should focus on the Commission's Wetland Protection Act jurisdiction.

- Leigh Gilligan disclosed that she serves on the board of a non-profit organization with Steve Buchbinder, but that that familiarity would not materially affect her impartial consideration of this presentation.
- Evan Staples gave a short slide presentation illustrating the site and the current proposal, soliciting initial reactions from the Commission.
  - The team has applied with MassHousing for Site Approval and anticipate approval at the end of January or early February and will then initiate the ZBA comprehensive permit process. They anticipate a wetland filing with the Conservation Commission in the fall of 2023.
  - The 5.82-acre site at 528 Boylston St. is made up of multiple parcels with different uses, including a landscaping business, two duplexes, and undeveloped land.
  - The site is bounded on the north by Route 9, to the south by residential properties, and to the west by Paul Brook (and residential properties).
  - The site has State/Federal and City floodplain, BVW, and Buffer Zone.
  - The team will survey all mature trees on the site and provide that information in their application materials.
  - Stormwater will be managed in compliance with the City's Stormwater Ordinance and wetland regulations.
  - Within Commission jurisdiction, the project would restore some of the Riverfront Area and would provide the required compensatory flood storage for the anticipated fill.
- One Commissioner asked whether a 21E study had been completed and that such results be shared with the Commission. The applicant agreed to share results and noted that preliminary results were generally positive ("nothing reportable to date").
- One Commissioner noted interest in a robust planting plan full of native canopy trees.
- When queried by staff, most Commissioners noted their support of the removal of Norway maples if replaced with a truly robust restoration planting plan of native trees (and shrubs).
- The Chair invited public comment.
  - Rob Sellers (16 Olde Field Rd) asked if a comprehensive environmental assessment would be conducted, noted that neighbors had hired a consultant to conduct an assessment that recommended that an "extra" buffer be provided and that disturbance and stormwater management occur outside the buffer zone. He noted that Hagen Road floods and that new development could worsen that situation. He stated that neighbors "had collected 1000 signatures".
  - Hong Liu (Sheldon Road) inquired about the review and permitting process. Staff and Chair summarized the process.
  - Melissa Brown (of Chestnut St and community group "Protect Newton's Trees") asked if the project would require MEPA review, cautioned about damage to trees during construction, and noted the significant swath of trees to the east of the Commission's jurisdiction.
- The team thanked the Commission for their time and input.

6. 9:20 – 190 Sumner St – ex post facto OOC for an addition and driveway -- Request for OOC extension -- DEP #239-806

- Owner/Applicant. Sam Roth.
- Request. Issue OOC extension.
- Documents in packets. None
- Additional documents presented at meeting. Site photos
- Presentation (Staff) and Discussion.
  - On 5/18/2018 an ex post facto OOC was issued for an addition, driveway expansion, and removal of a garage.
  - On 8/21/2022 that OOC was due to expire. When preparing to seek an extension, the owner's engineer identified non-compliant grading.
  - The OOC was extended for an additional 6 months to 2/17/2023.
  - The owner has been very responsible. Most of the required plantings were installed and timely memos have been received for extension requests.
  - A site visit on 1/11/2023 found that the site was in substantial compliance with the approved plans, but for the non-compliant grading and a lack of some plantings behind the garage.
  - The site is within outer RFA and outer buffer zone to Hammond Brook and the excess fill is of no adverse ecological consequence to the RFA or BZ.
- Vote to issue a 6-month OOC extension with instructions to install the final plantings behind the garage as per the approved planting plan; then the Commission will consider issuing a COC. [Motion: Gilligan, Second: Katz. Roll-call vote: Green (aye), Lunin (aye), Katz (aye), Gilligan (aye), Zabel (aye), Hepburn (aye), Cade (aye). Vote: 7:0:0]

7. 9:30 – 16 Grace Rd – teardown/rebuild single-family home -- Request for COC -- DEP #239-837

- Request Made By: Peter Nolan
- OOC Issued To: Craig Halajian

- Request. Issue COC.
- Documents in packets. None
- Additional documents presented at meeting. None
- Presentation (Staff) and Discussion.
  - All necessary paperwork was received for this COC request.
  - A site visit on 1/11/2023 found that the site was is substantial compliance with the approved plans, however the plantings were installed in the fall of 2022, so a "comfort letter" should be issued noting that as soon as the 2-year survival window has lapsed, a COC should be able to be issued.
- Vote to issue a "comfort letter" as noted above. [Motion: Lunin, Second: Gilligan. Roll-call vote: Green (aye), Lunin (aye), Katz (aye), Gilligan (aye), Zabel (aye), Hepburn (aye), Cade (aye). Vote: 7:0:0]

8. 9:35 – 25-27 Christina St – new entryway, planting beds, outdoor seating -- Request for COC -- DEP #239-713

- Owner/Applicant. The Price Center
- Request. Issue COC.
- Documents in packets. None
- Additional documents presented at meeting. None
- Presentation (Staff) and Discussion.
  - All necessary paperwork was received for this COC request.
  - A site visit on 1/9/2023 found that the site was is substantial compliance with the approved plans. The plantings along the sides of the buildings are scant, but otherwise are installed as approved and doing well.
- Vote to issue a complete COC. [Motion: Cade, Second: Lunin. Roll-call vote: Green (aye), Lunin (aye), Katz (aye), Gilligan (aye), Zabel (aye), Hepburn (aye), Cade (aye). Vote: 7:0:0]

B. 9:35 – CONSERVATION AREA DECISIONS – none at this time

C. 9:35 – ADMNISTRATIVE DECISIONS

9. Minutes to be approved

- Documents in packets. Draft 12/20/2022 minutes as edited by Leigh Gilligan.
- Vote to approve the 12/20/22 minutes as edited by Leigh Gilligan. [Motion: Lunin, Second: Zabel. Roll-call vote: Green (aye), Lunin (abstain), Katz (aye), Gilligan (aye), Zabel (aye), Hepburn (aye), Cade (aye). Vote: 6:0:1]
- Volunteer. Ellen Katz will review the 1/19/23 minutes.

D. 9:35 – ISSUES AROUND TOWN DECISIONS – none at this time

UPDATES

E. 9:35 – WETLANDS UPDATES

10. 9:35 – Nahanton St CR – Beaver Activity Causing Flooding

- Owner/Applicant. 210 Nahanton Street Condos
- Request. No formal application has been filed, but communications indicate a desire to remove the beaver dam.
- Documents in packets. None
- Additional documents presented at meeting. Site map and site photos
- Presentation (Staff) and Discussion.
  - Judy Hepburn noted for the record that she and Jennifer Steel sit on the Board of the Nahanton Woods, Inc., the body that hold the CR on the subject property.
  - A site visit on 12/13/2022 found that beavers have dammed the Country Club Brook at the culvert that passes under Wells Ave.
  - Resident of condos is concerned about the impending death of the trees and an increase in mosquitoes.
  - Staff found that on March 27, 2012, the Conservation Commission issued Order of Conditions #239-649 to Louis Taverna, City Engineer, for work at #2 and #199 Wells Avenue to remove the beaver dam/blockage in the culvert.
  - The area has two streams (Country Club and Lacy), jurisdictional bordering vegetated wetlands and a City Flood Plain area (defined at roughly elevation 95.5' (NAVD 88)). Based on the topography, the area was clearly ditched and drained in the past, and probably filled in around the edges to allow for the current surrounding buildings to be built.
  - Steel reviewed the regulatory framework for considering/addressing beaver-related concerns. If there is a documented threat to human health or safety, Health and Human Services can issue an Emergency permit to abate the threat. If there is not an imminent threat, the concerned residents and the owners of the land on which the pond and dam sit would have to submit a Notice of Intent to the Conservation Commission for their preferred abatement efforts.

- Steel noted that the beavers' work is a natural occurrence in a protected natural area and that the forested landscape could be significantly altered as a result of continued flooding, but that to date, to her knowledge, infrastructure is not threatened. The process of wetland evolution would need to be assessed under state law and regulations.
- Steel and Katz attended a webinar on beavers and noted that beavers are a keystone species because the ponds they create support tremendous biodiversity, their dams slow down runoff from large storm events, and their ponds store surface water and recharge aquifers.
- Steel and Katz noted that water flow devices were considered long-term solutions to beaver conflicts and that the Commission should consider such an option if an application were to be brought to the Commission for altering the current conditions.
- Gilligan cautioned that the Commission not "get ahead" of any possible application, with the consideration of possible solutions.

F. 9:35 – CONSERVATION AREA UPDATES – none at this time

G. 9:35 – ADMINISTRATIVE UPDATES – none at this time

H. 9:35 – ISSUES AROUND TOWN UPDATES – none at this time

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

11. 10:00 – New Representative on the Community Preservation Committee?

- Susan Lunin noted that she has been serving as the Conservation Commission's representative on the Community Preservation Committee (CPC). Commissioners were asked if any of them were interested in serving in that role. None were. Lunin said that she would be happy to serve another term on the CPC. The Commissioners were unanimous in their support of having Lunin continue to serve on the CPC.
- Steel noted that Lunin's current term on the Conservation Commission is due to end soon, along with two other members. Lunin said that she would submit an application for another term on the Conservation Commission.
- Staff note: The following members' terms are due to end in 2023.
  - Lunin: 31-May-2023
  - Zabel: 31-May-2023
  - Cade: 31-July-2023

12. 10:05 – Watertown Dam removal letter of support?

- Steel asked if the issue should be placed on the next agenda. The Commission said it should.

13. 10:07 – Remote meetings

- Steel noted that as things stand, our legal right to hold Conservation Commission meetings remotely will end on March 31, 2023. She said that the issue is before the state legislature and hopes that resolution will come in advance of March 31st.

ADJOURN at 10:08 [Motion: Gilligan, Second: Zabel. Roll-call vote: Green (aye), Lunin (aye), Katz (aye), Gilligan (aye), Zabel (aye), Hepburn (aye), Cade (aye). Vote: 7:0:0]