CITY OF MARLBOROUGH MEETING POSTING

Meeting Name: Conservation Commission

Date: April 15, 2021 (Thursday)

Time: 7:00 PM

Location: Will be conducted via remote participation and will be recorded

Agenda Items to be addressed:

"Due to statewide emergency actions limiting the size of public gatherings in response to COVID-19, this meeting will be held virtually with remote participation and will be closed to in-person attendance." The public can participate via Microsoft Teams. The meeting "link" will be posted on the City's main calendar and Conservation Commission's

websites: https://www.marlborough-ma.gov/

A roll call of members present Approval of Minutes: April 1, 2021

Public hearings:

7:00 Abbreviation Notice of Intent (Continued from April 1, 2021)

587 Bolton Street – Bolton Street Tavern (Review draft conditions)

Proposes to add a covered gazebo and bar gazebo structure on existing lawn area near Ft. Meadow Reservoir.

7:10 Notice of Intent (Continued from April 1, 2021)

146 Phelps St. - Delray Realty Trust

Proposes to construct a barn, driveway, and utilities within 100 ft. of the wetland buffer zone and

Riverfront of Mowry Brook.

7:20 Notice of Intent (continued from April 1, 2021 - at applicant's request continue to May 20, 2021)

"0" Phelps St. (next to 107 Phelps St.) - David Franca

Proposes to construct a new house on a vacant lot within the Riverfront Area of Mowery Brook. Map

72, Parcels 11B and 702.

AND

Notice of Intent (Continued from April 1, 2021-at applicant's request continued to May 20, 2021)

107 Phelps St. - David Franca

Proposes to construct a driveway across this lot within the Riverfront Area and buffer zone of Mowery

Brook. Map 72, Parcel 11A.

Discussion/Correspondence/Other Business:

- Solitude Lake Management Ft. Meadow Reservoir Aquatic Management Program-2020 Annual Summary Report.
- Engineering Construction Season 2021-road work list
- Violations Home Depot

Next Conservation Commission meetings: May 6^{th} and May 20^{th} , 2021

Adjournment

THE LISTING OF TOPICS THAT THE CHAIR REASONABLY ANTICIPATES WILL BE DISCUSSED AT THE MEETING IS NOT INTENDED AS A GUARANTEE OF THE TOPICS THAT WILL HAVE BEEN DISCUSSED. NOT ALL TOPICS LISTED MAY IN FACT BE DISCUSSED, AND OTHER TOPICS NOT LISTED MAY ALSO BE BROUGHT UP FOR DISCUSSION TO THE EXTENT PERMITTED BY LAW.

CITY OF MARLBOROUGH

Conservation Commission Meeting

DRAFT

April 1, 2021 (Thursday) 7:00 PM

This meeting was conducted virtually via remote participation and recorded using the Microsoft Team's platform.

Chairman Clancy read the following notice: "Due to statewide emergency actions limiting the size of public gatherings in response to COVID-19, this meeting will be held virtually with remote participation and will be closed to in-person attendance." The public can participate via Microsoft Teams. The "link" will be posted on the City's and Conservation's websites: https://www.marlborough-ma.gov/"

Present: By roll call – remotely: Karin Paquin, William Dunbar, John Skarin, and Edward Clancy. In Memorial Hall: David Williams, Dennis Demers, and Allan White. Also present was Priscilla Ryder, Conservation Officer.

Absent: none

Approval of Minutes: The minutes of March 18, 2021 were reviewed. On a motion to accept and place on file by Mr. Skarin and second by Mr. Demers the minutes were unanimously approved 7-0 on a roll call vote.

Public Hearings:

Request for Determination of Applicability
D'Angelo Dr. pump station - City of Marlborough - DPW

Mr. Tom DiPersio, City Engineer, was present and explained that the DPW proposes to construct a new water line connection and new back up pump station facility at D'Angelo Dr. (Map 115 Parcel 10) near wetlands. He noted that the wetland buffer zone only covers a portion of this project where the MWRA connection is to be made. Work includes placing piping connections from the MWRA and existing pump station to the new station and out to the street. This new system will assist in making sure there is no loss in service if something should happen to the existing pump station, or if it needs maintenance. He explained that the work will go through the detention basin that exists on site and will tie into the water pipes on the MWRA site which is a very deep excavation along their roadway. The existing detention basin can be modified during construction to act as a settling/dewatering basin. At the MWRA section the cut is 25' deep and is less deep at the detention basin location. He expects dewatering to be needed. The new pump chambers will be installed within

7×X

concrete vaults. The Commission inquired as to timing and construction sequencing. Mr. DiPersio explained that they will start as soon as permits are granted, and equipment ordered is delivered. Construction sequencing can be reviewed during the preconstruction meeting. After some discussion about the water pressure and access points, and there being no further questions from the Commission or the public, the hearing was closed. On a motion by Mr. Skarin second by Edward Clancy-Chairman, to issue a negative determination with standard conditions. The Commission voted unanimously 7-0, on a roll call vote to approve the motion.

Abbreviation Notice of Intent 587 Bolton Street – Bolton Street Tavern

Mr. John Stournaras and Mrs. Sharon Stournaras were both present. Mr. Stournaras explained that he proposes to add a covered gazebo and bar gazebo structure with a fire pit ad bocce/horseshoe court on existing lawn area near Ft. Meadow Reservoir. The outdoor seating during COVID in 2020 was very successful and he would like to make some permanent structures on the lawn to be able to continue that activity. The work will involve removing the loam for the walkway and gazebo and install the walkway and open wall gazebo structures. Ms. Ryder noted that she had been to the site with Mr. Dunbar and noted that many of the shrubs along the shoreline had been cut to the base. The edge of wetland appears to be edge of lawn which is above the high-water mark. She believes the 30' setback from the lake is still being met, but the wetland is not shown on the plan, just the high-water mark. She also shared the FEMA flood map layer on the GIS map to show that the structures would be outside of the 100-year floodplain. The Commission asked that the plans be revised to show the elevations, and that the buildings be staked out in the field so the members could observe that. There was discussion about the shrubs that had been cut and a need for a maintenance protocol so the wetland and buffer zone vegetation can function as a filter. Also noted was that one of the curbs along the parking lot had been dislodged and needs to be replaced. Mr. Stournaras explained that last year they had a similar set up with tents, the gazebo will be more permanent. Customers will use the walkway to the building to use the facilities, no utilities or facilities are included in this plan. All excess soil will be removed from the site. The Commission discussed the current drainage system and drainage ditch and wanted confirmation that this work would not change that. After some discussion the Commission noted they wanted to see a revised plan showing elevation, erosion controls, and to have the location staked before the next meeting so

members could see it. There being no further questions, the hearing was continued to the April 15th agenda.

Notice of Intent (Continued from March 18, 2021) 146 Phelps St. – Delray Realty Trust

Mr. Bob Parente P.E and Mr. David Winski were both present. Mr. Parente explained that he had done a redesign of the plans which shows one driveway to the garage building that splits into a Y to access the new barn building and the old garage entrance. This revised plan allows for the restoration of 2,600 sq. ft. of Riverfront area to Mowry Brook. It reduces the curb cut as required by the City Engineer. The Commission asked if the Riverfront area to be restored will include plants and trees. Mr. Parente said he would work with Ms. Ryder to come up with a plan. Mr. Dunbar noted that he had expected to see the driveway come in outside of the first 100' Riverfront area so even more riverfront area could be restored. Ms. Ryder noted the same. Mr. Parente indicated that the grades are better using the existing driveway entrance and that it is narrowed down in size already on this plan. The Commission asked about erosion controls. Mr. Parente noted that there is a note on the plan, but no symbol since the plan was getting too busy. Mr. Clancy noted that the current design requires less of a cut into the hill and thus less disturbance. Mr. White asked for a better planting plan. After some discussion and there being no further questions, the hearing was continued to the April 15th meeting to allow for a revised plan with planting notes to be provided. The Commission asked Ms. Ryder to draft a set of conditions as well.

Notices of Intent

At the applicant's request, prior to the meeting, to <u>continue the hearing to April</u>
15, 2021 in order to have time to provide the needed information for both of these hearings. The Commission continued the hearing to April 15th.

Notice of Intent

"0" Phelps St. (next to 107 Phelps) - David Franca

Proposes to construct a new house on a vacant lot within the Riverfront Area of Mowery Brook. Map 72, Parcels 11B and 702.

AND

Notice of Intent (applicant request to continue to April 15, 2021) 107 Phelps St. - David Franca

Proposes to construct a driveway across this lot within the Riverfront Area and buffer zone of Mowery Brook. Map 72, Parcel 11A.

Discussion/Correspondence

- Letter from KCO Realty Trust, Kevin O'Malley, dated March 17, 2021 RE: Roosevelt St.- The <u>Commission accepted and placed on file</u>
- Yearly Operational Plan 2021 Ms. Paquin asked whether vernal pools are shown on the map, as spraying is prohibited near them. Ms. Ryder indicated these could be added and she'll work to see these are included in the future.

Other Business: items which were not reasonably anticipated until after the agenda was posted:

- Turtle Survey at The Desert Natural Area Ms. Ryder received a request from John Vieira from AECom to continue the turtle study along the railroad line and pipeline in Marlborough which has been going on for several years. The Commission noted this was fine and on a motion by Ms. Paquin, second by Edward Clancy, to approve the turtle survey for 2021. The Commission voted unanimously 7-0 on a roll call vote to approve.
- Minor exempt projects Ms. Ryder noted that she has received request for minor exempt projects and will, going forward, provide an update of which projects have been granted approval through this exemption. She will require utilities and DPW to send an e-mail with their request, but small sheds or other minor projects she will just report. The Commission agreed to this protocol.
- Tree removal at Lake Williams behind Court House Ms. Ryder noted that the large beach tree behind the courthouse on Williams St. and near Lake Williams is dying and the DPW would like to remove it. They also would like to work on removing some huge patches of bittersweet which are pulling down mature trees. Some of this work is within the buffer zone and the DPW will be filing a Request for Determination of Applicability (RDA) for this work. The Commission agreed that the tree work on the dead tree could proceed prior to the RDA filing as it was far enough away from the lake. Ms. Ryder will convey to DPW.
- Barker Ranger Program Ms. Ryder noted that she is working with the 5 groups who manage the Desert Natural Area. Sudbury Valley Trustees (SVT) has put together a program to help educate dog owners to keep dogs on leash in this area to help protect wildlife. A training program for volunteers is being held next week and then the program will be unrolled at the various property entrances to get better compliance with making sure dogs remain on leash and not just at the parking lot. Ms. Ryder and Ms. Paquin will be doing the training and education.

Next Conservation Commission meetings: April 15, 2021 and May 6, 2021.

Adjournment - There being no further business, on a motion by Mr. Skarin, second by Edward Clancy, to adjourn. The <u>vote to approve was unanimous 7-0 on a roll call vote.</u> The meeting was adjourned at 8:39 PM.

Respectfully submitted,

Priscilla Ryder Conservation Officer

- 21. Prior to the beginning of work, the applicant shall:
 - a. Obtain approval of the City of Engineer for the design of all drainage structures and facilities, if applicable.
 - Properly install all siltation controls according to the plans approved by the Conservation Commission.
 - c. Provide the Conservation Officer with the name and telephone number in writing, of the person who will be immediately responsible for supervision of all work on the project site and compliance with this Order of Conditions. The Conservation Officer shall be notified if the site supervisor or contractor is changed.
 - d. Clearly mark the limits of work in the field and instruct all workers not to work beyond the limits.
 - e. Notify Conservation Officer of the date upon which work will commence.
 - f. Hold a meeting on the project site with the Conservation Officer, the project site supervisor identified in Condition No. 21-C above, and other relevant parties identified by the applicant or the Conservation Commission to review the project and this Order of Conditions. Siltation controls shall be inspected at this time.
 - g. Failure to comply with Condition Nos. 21A-F, shall constitute sufficient grounds for the Conservation Commission to order all work to cease until compliance is achieved.
- 22. The Conservation Officer shall serve as the Commission's agent in all matters pertaining to the interpretation and enforcement of this Order of Conditions. Accepted engineering and construction standards shall be followed in the conduct of all work.
- 23. Issuance of this Order of Conditions does not in any way imply or certify that the site or downstream areas will not be subject to flooding, storm damage, or any other form of damage due to wetness.
- 24. All work shall conform to the Notice of Intent, all plans, and all other documents, records, correspondence and representations of the applicant as presented to and approved by Conservation Commission.
- 25. The applicant shall notify the Commission before performing the modified work. If the Commission deems the modification significant, the applicant shall submit an amended Notice of Intent with any necessary documentation and obtain an amended Order of Conditions. The Commission shall reopen the public hearing in accordance with the provisions of 310 CMR I0.05 (5). The Commission may

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- impose additional or modified conditions to protect the interests of the Wetlands Protection Act.
- 26. No excavated material shall be disposed of in violation of any local, state, or federal laws. All stumps must be removed from the site; no burying of stumps on site is permitted.
- 27. Prior to the issuance of a Certificate of Compliance, the applicant shall submit to the Conservation Commission for review and approval an as-built plan and a letter of compliance stamped by a registered professional engineer. Said plan and letter shall show that all conditions of this Order have been complied with in a satisfactory manner.
- 28. The Conservation Commission shall be notified in writing at the time of any transfer in the title to the property or any change in contractor/developers prior to issuance of the Certificate of Compliance. The name, address, and telephone number of the new owner shall be included in the notification as well as certification that the new owner has been provided with a copy of this Order of Conditions.
- 29. Prior to the issuance of a Certificate of Compliance the site shall be stabilized with vegetation or other measures approved by the Conservation Commission.
- 30. Prior to the issuance of a Certificate of Compliance and after the site has been stabilized, all erosion controls shall be removed from the site. Hay bales or compost socks may be dispersed on site; however, all stakes, strings and plastic netting must be removed.

Site-specific conditions:

Prior to Construction:

31. Prior to the commencement of any work on the site a straw wattle erosion control barrier shall be placed near the construction areas to prevent silt from impacting the lawn or lake as shown on the plans. This barrier shall mark the limit of work, no work or clearing shall occur beyond this point. (Adjust if not shown on plan)

During Construction:

- 32. During construction all excess loam or other soil not to be reused on site shall be removed.
- 33. Plantings near and around the gazebo and lawn area are acceptable. Please confirm the plant list with the Conservation Officer before doing any planting. (If plant list has been provided then adjust this condition)

Ongoing maintenance of the shrubs and plants along the water's edge shall meet the following criteria. All shrubs can be trimmed but must be at least 4' high. They may not be pruned to the stump. This vegetation along the waters edge is important to buffer and filter any runoff into the lake. A healthy vegetated buffer is important to the lake water quality. [I'll take some pictures and we can discuss further, what should and should not be permitted along the waters edge, which is usually a no touch zone. In this case they want some water visibility so some pruning could be permitted, we need to think this thru as this could be setting president for other areas around the lake.]

Prior to Issuance of Certificate of Compliance

35. Prior to the issuance of a Certificate of Compliance, all disturbed areas shall be stabilized with vegetation or other measures approved by the Conservation Commission.

Anything else?

END CONDITIONS

- 21. Prior to the beginning of work, the applicant shall:
 - a. Obtain approval of the City of Engineer for the design of all drainage structures and facilities.
 - b. Properly install all siltation controls according to the plans approved by the Conservation Commission.
 - c. Provide the Conservation Officer with the name and telephone number in writing, of the person who will be immediately responsible for supervision of all work on the project site and compliance with this Order of Conditions. The Conservation Officer shall be notified in the event that the site supervisor or contractor is changed.
 - d. Clearly mark the limits of work in the field and instruct all workers not to work beyond the limits.
 - e. Notify Conservation Officer of the date upon which work will commence.
 - f. Hold a meeting on the project site with the Conservation Officer, the project site supervisor identified in Condition No. 19-C above, and other relevant parties identified by the applicant or the Conservation Commission to review the project and this Order of Conditions. Siltation controls shall be inspected at this time.
 - g. Failure to comply with Condition Nos. 19a-f, as well as Nos. 8 &9, shall constitute sufficient grounds for the Conservation Commission to order all work to cease until compliance is achieved.
- 22. The Conservation Officer shall serve as the Commission's agent in all matters pertaining to the interpretation and enforcement of this Order of Conditions. Accepted engineering and construction standards shall be followed in the conduct of all work.
- 23. Issuance of this Order of Conditions does not in any way imply or certify that the site or downstream areas will not be subject to flooding, storm damage, or any other form of damage due to wetness.
- 24. All work shall conform to the Notice of Intent, all plans, and all other documents, records, correspondence and representations of the applicant as presented to and approved by Conservation Commission.
- 25. The applicant shall notify the Commission before performing the modified work. If the Commission deems the modification significant, the applicant

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shall submit an amended Notice of Intent with any necessary documentation and obtain an amended Order of Conditions. The Commission shall reopen the public hearing in accordance with the provisions of 310 CMR I0.05 (5). The Commission may impose additional or modified conditions to protect the interests of the Wetlands Protection Act.

- 26. No excavated material shall be disposed of in violation of any local, state, or federal laws. All stumps must be removed from the site; no burying of stumps on site is permitted.
- 27. Prior to the issuance of a Certificate of Compliance, the applicant shall submit to the Conservation Commission for review and approval an as-built plan and a letter of compliance stamped by a registered professional engineer. Said plan and letter shall show that all conditions of this Order have been complied with in a satisfactory manner.
- 28. The Conservation Commission shall be notified in writing at the time of any transfer in the title to the property or any change in contractor/developers prior to issuance of the Certificate of Compliance. The name, address, and telephone number of the new owner shall be included in the notification as well as certification that the new owner has been provided with a copy of this Order of Conditions.
- 29. Prior to the issuance of a Certificate of Compliance the site shall be stabilized with vegetation or other measures approved by the Conservation Commission.
- 30. Prior to the issuance of a Certificate of Compliance and after the site has been stabilized, all erosion controls shall be removed from the site.

Findings of Fact:

Wetland Resource areas on this project site are:

200' Riverfront area and bordering vegetated wetland associated with Mowery Brook, a named waterway on the USGS maps and noted to be a perennial stream.

The project proposes to alter 3200 sq. ft. of river front area 1400 in inner 100' and 1800 in second 100'. Restoration of 2680 sq.ft. of riverfront area is proposed with the slight alteration of the existing driveway. As allowed the existing building was in place prior to the rivers bill and is not counted in the riverfront area impacts. Only the new impacts were calculated to ensure that the project impact is less than the 5,000 sq.ft. permitted in the regulation.

Based on the Commission' review of the plans and the attached conditions, the Commission believes this project can protect the interest of the Wetlands Protection Act provided that **conditions 1-39** are followed.

SITE-SPECIFIC CONDITIONS Erosion Control/Construction sequencing

- 31. Stone construction entrance pads shall be in place at the proposed accesses onto Royce Rd. as shown on the approved plan to prevent the tracking of mud and silt into the public roadway. Dust shall also be controlled on this site at all times. If dirt is tracked onto the roadway it shall be cleaned up immediately. This area shall be maintained regularly to ensure no tracking of materials onto Royce Rd
- The applicant, property owner, and site contractor shall be responsible for regular inspections of the erosion controls on at least a weekly basis and prior to and immediately after (within 12 hours) each storm event.

 Necessary repairs and maintenance of the erosion control devices shall be made expeditiously. These inspections shall be described in the reports required in the condition below.
- 33. The applicant, property owner, and site contractor shall be responsible for notifying the Conservation Commission in an expeditious manner if any visible siltation of wetlands occurs. Immediate measures as outlined in the soil management plan shall be taken to control the siltation source and to restore any impacted areas.
- 34. Large piles of soil and other materials shall not be stockpiled closer than 50 feet to any wetland resource area without the approval of the Conservation Officer. All large stockpiles must be maintained in a stabilized condition with erosion control in place and approved by the Conservation Officer.

Riverfront area restoration

The project includes alteration 3200 **sq. ft. of Riverfront area**. A portion of the riverfront area which is currently a driveway will be restored with removal of gravel and the addition of loam and seed to stabilize the area. This location as shown on the approved plans will also be planted with vegetation as shown and listed on the approved plans (we can reference what we get more clearly here)

This will restore 2680sq. ft. of the 1st 100' of riverfront area. The new building will alter 1800 sq. ft. of the outer 200' of the riverfront area. (I will add the final numbers here when we get them)

Certificate of Compliance

- 35. Prior to the issuance of a Certificate of Compliance, the site shall be stabilized and working properly.
- 36. Any post construction reporting as required in the Soil Management Plan shall be provided prior to the issuance of a Certificate of Compliance.
- 37. Once the project is complete the project must be monitored before and after storm events of half an inch (1/2") or greater for the first two months, to ensure the new diversion is operating as designed and the replication areas and flow areas are stable. After the first two months a report shall be submitted to the Commission on its stability. If problems are observed, continued monitoring and repair shall be required until such time as the system is working properly.
- Annual maintenance of the OCS #1 pipe shall be performed by the City DPW to ensure the inlet to this structure is not blocked. This shall be an ongoing condition. Monitoring of this pipe is required for the first five years to determine how often it will need to be maintained and cleaned.

END CONDITIONS



Fort Meadow Reservoir Aquatic Management Program 2020 Annual Summary Report Hudson & Marlborough, MA

Prepared for:

Fort Meadow Commission c/o Lee Thompson, Chairman

c/o Marlborough Conservation Commission

140 Main Street, City Hall Marlborough, MA 01752

Submitted:

January 2021

Introduction

SÖLitude Lake Management was contracted by the City of Marlborough/Hudson to conduct an aquatic vegetation management program at Fort Meadow Reservoir. Fort Meadow Reservoir is waterbody comprised of three interconnecting basins. The management program consisted of targeting invasive variable watermilfoil (Myriophyllum heterophyllum) and common reed (Phragmites australis) as well as completing pre- and post-management vegetative surveys. Management was accomplished by performing a series of herbicide treatments using the USEPA/MA DEP registered aquatic herbicide Reward (active ingredient: diquat) and aquatic herbicide AquaNeat (active ingredient: glyphosate).

All work performed at Fort Meadow Reservoir this season was conducted in accordance with the current Order of Conditions (OOC) issued by the Conservation Commissions (DEP #190-0582 Hudson; 212-1146 Marlborough), and the License to Apply Chemicals issued by the MA DEP – Office of Watershed Management (#WM04-0000027). An outline of the 2020 program, along with our recommendations for ongoing management follow.

A chronology of this year's management and brief description of events is as follows:

2020 Program Chronology

•	Received MA DEP License to Apply Chemicals	03/25/20
	Early season pre-treatment survey conducted	
	Submersed aquatic vegetation herbicide treatment	
	Post-treatment survey completed	
	Phragmites locative survey conducted	
	Late season survey and Phragmites herbicide treatment performed	

Early Season Pre-Treatment Survey

On May 27, a SOLitude biologist conducted the pre-treatment survey to assess the aquatic vegetation composition. Usually, this is done in coordination with members from the Hudson and Marlborough Conservation Commission Agents and Fort Meadow Commission, however, due to COVID-19 restrictions and precautions, SOLitude staff conducted the survey alone. The survey was accomplished by using a jon 590 Lake Street, Shrewsbury, MA 01545 | 508-885-0101 | SOLITUDELAKEMANAGEMENT.COM boat to navigate around the ponds to record visible observations of plant growth. In areas where the



submersed vegetation could not be seen (either due to depth or algae surface cover), a specialized throw rake was used. The intent of the inspection was to document dominant vegetation growth during pre-treatment conditions in order to have a baseline by which to evaluate the efficacy of the herbicide treatment, determine the best method of treatment, gauge non-target impacts, if any, and assess future management needs and/or necessary program modifications.

As in previous years, the dominate plant species observed was variable milfoil, as it was found in all three basins. Bladderwort was also found in all three basins in sparse to moderate densities, specifically with the denser populations occurring mixed in with variable milfoil in the larger basin. Curly-leaf pondweed was also observed in sparse populations in the smallest basin. No fanwort was observed in any of the three basins during the time of the survey.

A map illustrating the distribution of aquatic vegetation observed during the pre-management survey is attached.

Submersed Vegetation Herbicide Treatment

On June 29, the submersed vegetation herbicide treatment was conducted utilizing diquat herbicide. Prior to treatment, posters warning of water-use restrictions following the treatment were posted around the shoreline and access points of the lake. Additionally, abutter notices were mailed to all lake residents prior to treatment as well as publication of the notice in the local newspaper. As no fanwort was observed during the pre-treatment survey, only areas of variable milfoil were treated. Overall, diquat herbicide was applied to nine (9) treatment areas, totaling approximately 62 acres (Figure 1).

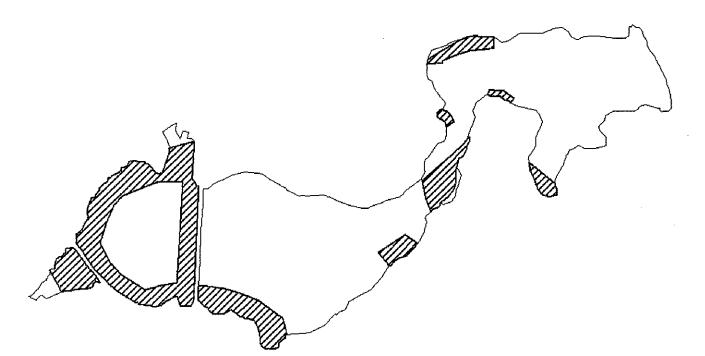


Figure 1. 2020 Treatment Areas

The large basin was treated using an airboat equipped with a low-pressure pump and a calibrated spray system. The two smaller basins were treated using a 12-foot jon boat equipped with a similar calibrated spray system. The liquid herbicide was diluted onboard with lake water in a mixing tank and applied



subsurface, to reduce drift, using trailing hoses. Pre-defined treatment areas were pre-loaded onto a GPS unit to allow for real-time tracking of the treatment boat to ensure even application through the designated areas. SŌLitude's state licensed aquatic applicators completed the treatment in accordance with the product label and the MA DEP License to Apply Chemicals. At no time during the treatment were there any observation or reports of any significant non-target impacts to fish or other aquatic organisms.

Post-Treatment and Phragmites Locative Surveys

On September 16, a SŌLitude biologist conducted a post-management survey of all three basins at Fort Meadow Reservoir to assess the overall effectiveness of the treatment. The treatment worked extremely well as there was minimal milfoil observed within the treatment areas. In the large basin, the milfoil was found in very sparse densities in the large cove to the right of the launch. Native vegetation was present at healthy densities and did not seem to be impacted as a result of the diquat herbicide treatment.

At the time of the September survey, the locations of Phragmites growth were also noted with respective addresses, for future management effort. Most of the growth was scattered, with most areas having 5-10 stems each. The addresses were later provided to the Commissions for waiver notification purposes.

Phragmites Management

Based on the survey results, a treatment was completed on October 6. Prior to treatment, property owners with Phragmites growth on their land were sent a waiver form to allow access onto their property for treatment; all areas for which access was granted were treated. All areas of growth that were below the normal mean water line were also treated as that property is considered to be owned by the Towns. Treatment was conducted from a jonboat using a low-pressure backpack sprayer. The herbicide was applied topically to the plants and allowed to dry for at least 24 hours before the treatment areas were re-entered by anyone.

SŌLitude's state licensed aquatic applicators completed the treatment in accordance with the product label, Orders of Conditions and the MA DEP License to Apply Chemicals. At no time during the treatment did we observe or receive reports of any significant non-target impacts to fish or other aquatic organisms.

Ongoing Management Recommendations

Variable Watermilfoil Management

The diquat herbicide treatment conducted in 2020 provided excellent control of the variable milfoil within each basin of the reservoir. However, regrowth of this species did occur later in the season, which was anticipated and usual for Fort Meadow. Due to the long-standing history of growth of this species in Fort Meadow, it is our presumption that some regrowth will continue due to the plants' extensive root crowns within the sediment. Although regrowth was present within historically problematic areas, the level of regrowth was observed at a lesser density than growth prior to treatment, which is ideal.

Based on this year's treatment, we anticipate a similar level of required acreage to be treated in 2020. Again, we recommend that treatment target the most problematic milfoil growth areas and higher use areas within the large basin to minimize fragmentation and further spread of the species. We anticipate to treat approximately the same acreage in the small and middle basin as well.

Diquat herbicide continues to be the most cost-effective herbicide for annual management of several invasive species within Fort Meadow. Milfoils, curlyleaf pondweed and spiny naiad are all susceptible to diquat. Fanwort is the only invasive species established in the reservoir that is not impacted by diquat. Unfortunately, diquat does not impact the root structures of the susceptible plants and requires annual treatments to manage active growth. Systemic herbicides are available for use but carry a significantly higher cost and historically have had longer water-use restrictions following treatment. However, a new systemic herbicide, ProcellaCOR EC, is available for use in Massachusetts and provides excellent control



of variable milfoil. We will work with both Conservation Commissions to get this added via a minor change request if it's use is of interest to the Fort Meadow Commission. Through the last two seasons, it has been utilized at seven waterbodies throughout Massachusetts, and significantly more throughout New England and New York, with excellent success.

Fanwort Management

Fanwort was not observed during the 2020 season. All future survey efforts will continue to search for any rooted fanwort growth, as there has previously been fragments noted floating in the reservoir. Clipper remains the best spot-treatment option available to manage fanwort as ProcellaCOR does not impact fanwort. However, depending on the configuration of the treatment area(s), spot-treatments utilizing Sonar (fluridone) herbicide can also be highly effective as it is a systemic herbicide option.

Phragmites Management

The overall impact and success of this season's Phragmites treatment will be fully realized during the 2021 season when any regrowth has appeared. However, as this season was the fourth consecutive year of treatment, and only a few areas of regrowth were observed this season, we anticipated a reduced treatment program for the Phragmites moving forward, if any treatment is needed at all, unless new stands appear or begin to spread.

Management Options for 2021

ProcellaCOR Only Treatment - Recommended Primary Choice

A treatment program utilizing ProcellaCOR herbicide only would target the milfoil growth, which has been the primary invasive species managed over the past few seasons as fanwort growth has not yet rebounded. This treatment program would be a spot-treatment approach to areas of milfoil growth, with areas shifted each year as necessary. Once densities become more scattered and sparser in subsequent years, a diquat spot-treatment approach can be reverted back to. If this treatment option is chosen, the current OOCs would have to have ProcellaCOR added as an herbicide option, and we would recommend treating a similar amount of acreage as has been done in recent years to significantly reduce the milfoil population in the first year. This treatment can be timed similarly to the previous diquat treatments, in mid-June prior to the beach openings.

A small diquat treatment may still be required in the smallest basin based on it's historical curlyleaf pondweed presence, which ProcellaCOR will not impact.

ProcellaCOR and Clipper Treatment

Similar to the diquat/Clipper approach, we would use ProcellaCOR to target those areas of milfoil growth, while Clipper would be used in those with fanwort growth.

Diquat Only Treatment – Recommended Secondary Choice

A treatment program utilizing diquat herbicide only is what has been conducted for the past three seasons at Fort Meadow. This treatment program provides maintenance level control of milfoils, curlyleaf pondweed, and spiny naiad (at a later time in the season). Due to the control within areas treated this year, if this treatment option is chosen, we would recommend treating a similar amount of acreage based on the growth observed in the spring.

Consistent with prior years, we would perform the treatment as late as possible prior to the two Town public beaches opening. Delaying treatment until mid-June helps to ensure that longer control is achieved through the season.



Diquat and Clipper Treatment

Similar to the approach used in 2014 and 2015, we recommend continuing with the combination treatment if any fanwort growth is present at the time of the pre-treatment survey. A combination treatment using these two herbicides would effectively control all submersed invasive species found in Fort Meadow currently. Both products are fast-acting, contact herbicides that have short water-use restriction periods following treatment. Using the two products in combination would provide two modes of action to impact the plants, while controlling both milfoil species and fanwort.

We feel that our additional recommendations will help continue to enhance the reservoir's aesthetic, ecological and recreational values. We truly appreciate your business and look forward to working with you again next season in 2021.

Priscilla Ryder

From:

Mark Dascoli

Sent:

Thursday, April 1, 2021 7:45 AM

Subject:

Construction Season 2021

All,

Please see the information below regarding ongoing and upcoming construction projects:

Ongoing:

Utility Improvements on Lincoln Street

• The project consists of water, sewer and drainage improvements

- Project Limits: Broad Street to Highland Street
- Project Completion: Summer 2021
- Contractor: Cedrone Corp.
- Traffic delays and road closures are to be expected

Lead Service Replacement Phase 3

- The project consists of final trench paving at approximately 170 locations
- Project Limits: Various Locations
- Project Completion: Spring 2021
- Contractor: KJS LLC
- Traffic delays are to be expected

Resurfacing of Donald J. Lynch Boulevard Phase 1-A

- The project consists of roadway resurfacing, enhanced pedestrian and bicycle accommodations
- Project Limits: Hudson Town Line to Bigelow Street
- Project Completion: Spring 2021
- Contractor: JH Lynch and Sons, Inc.
- Traffic delays are to be expected

Upcoming:

Cedar Hill Standby Water Pump Station

- The project consists of a multi pump submersible pitless pumping system, a new separate electric service, and all related piping and control services
- Project Limits: Cedar Hill Pump Station
- Tentative Start Date: Spring 2021
- Project Completion: Spring 2022
- Contractor: UEL Contractors, Inc.
- No traffic impacts expected

Reconstruction of Various Streets and Appurtenant Work

- The project consists of roadway reconstruction including drainage improvements, berm and sidewalk replacement and installation of new cement concrete wheelchair ramps
- Project Limits: Fontaine Street, Simpson Road (Dawes to Stow), Dawes Road, McCabe Drive
- Tentative Start Date: Spring 2021
- Project Completion: Fall 2021
- Contractor: Lazaro Paving Corp.
- Traffic delays are to be expected

Resurfacing and Reconstruction of Various Streets and Appurtenant Work

1ktom

- The project consists of milling, paving, hydrant replacement, berm and sidewalk replacement and installation of new cement concrete wheelchair ramps
- Project Limits: Ripley Avenue, Tucker Avenue, Flynn Avenue, Teller Street, Donahue Drive Doucette Drive, Kenney Lane, Bellows Circle, Phelps Street, Dirado Drive, Neil Street, Lambert Street and Zompetti Street
- Tentative Start Date: Spring 2021Project Completion: Fall 2021
- Contractor: TBD
- Traffic delays are to be expected

Lead Service Replacement Phase 4

- The project consists of replacing approximately 467 suspected lead services
- Project Limits: TBD
- Tentative Start Date: Spring 2021
- Project Completion: Fall 2022
- Contractor: TBD
- Traffic delays are to be expected

Reconstruction of Lincoln Street

- The project consists of roadway reconstruction, traffic signal upgrades, replacement of curbing and sidewalks
- Project Limits: Highland Street to Broad Street
- Tentative Start Date: Summer 2021
- Project Completion: Summer 2022
- Contractor: TBD
- Traffic delays and road closures are to be expected

Cullinane Drive Pump Station Rehabilitation

- The project consists of pump station upgrades and modifications
- Project Limits: Cullinane Drive Pump Station
- Tentative Start Date: Fall 2021
- Project Completion: Summer 2022
- Contractor: TBD
- No traffic impacts expected

Sudbury Street Area Sewer Phase 5

- The project consists of new gravity sewers, new sewer service connections, installation of water mains and service stubs and roadway paving
- Project Limits: Minehan Lane
- Tentative Start Date: Summer 2021
- Project Completion: Summer 2022
- Contractor: TBD
- Road closed to thru traffic-local traffic only

Resurfacing of Donald J. Lynch Boulevard Phase 2

- The project consists of milling, paving, traffic signal upgrades, replacement/resetting of curbing, sidewalk replacement/installation
- Project Limits: Westerly entrance of mall (Macy's) to Target
- Tentative Start Date: Fall 2021
- Project Completion: Spring 2022
- Contractor: TBD
- Traffic delays are to be expected

Rt. 20 East-Water Main Replacement and MassDOT Reconstruction Project

• The project consists of water, sewer and drainage improvement including roadway reconstruction, traffic signal upgrades and sidewalk replacement/installation

Project Limits: Phelps Street to Sudbury Town Line

• Tentative Start Date: Fall 2021

• Project Completion: Summer 2023

• Contractor: TBD

• Major traffic delays to be expected

Crack Sealing of Various Streets

The project consists of crack sealing various locations

Tentative Start Date: Fall 2021Project Completion: Fall 2021

Contractor: TBD

• No traffic impacts expected

Eversource gas main relays at Various Locations

• The project consists of gas main relays and final trench paving

- Project Limits: Gas main relays-Rt. 20 (Phelps St. to Sudbury Town Line), South Street, Millham Street, Curtis Avenue, Dudley Street (Elm St. to Millham St.), Shawmut Avenue, Liberty Street, Ringold Street, Stow Road (Fitzgerald Rd. to Simpson Rd.)
- Project Limits: Final trench paving-Church Street, Walnut Street, Vine Street, Howe Street, South Bolton Street
- Tentative Start Date: Spring 2021
- Project Completion: Spring 2022
- Contractor: Eversource-Deveraux
- Traffic delays are to be expected

Letters will be mailed out to the impacted property owners regarding the upcoming reconstruction project prior to the start of construction.

Should you have any questions and/or comments during construction, please let us know.

Thanks,

Mark J. Dascoli Assistant City Engineer Department of Public Works Engineering Division P: 508.624.6910 Ext. 33206

M: 774.463.9243

Email: mdascoli@marlborough-ma.gov