



Town of West Boylston

140 Worcester Street, West Boylston, Massachusetts 01583

Conservation Commission Meeting Minutes

Date / Time / Location of Meeting

Monday, 5/2/2022 6:00p.m./ MEETINGS TAKING PLACE AT WEST BOYLSTON TOWN HALL, LAND USE MEETING ROOM

Members Present

William Chase (Chair, David Mercurio (Vice-Chair), Emily Eaton, Carl Haarmann, Jeffrey Perkins (Associate Member) and Clerk Toby Goldstein.

Members NOT Present

Colin Cahill

Invited Guests

N/A

Welcome – Call to Order

Time: 6:00 p.m.

Approval of Previous Minutes

Minutes of 2/15/2022 and 4/4/2022 Meetings

2/15: Motion Originator

Mr. Haarmann – approved as amended; 4/4: Ms. Eaton – approved as written

Motion Seconded

Mr. Chase

4/4: Mr. Haarmann

Treasurer – Financial Report

Mr. Chase reviewed the report prior to the meeting; discussed with board.

Motion to Accept

N/A

Seconded

N/A

At 6:00 pm, Ms. Eaton made a motion to open the meeting. Mr. Haarmann seconded the motion. All in favor.

Public Hearing, Rebecca Weidman, on behalf of the Massachusetts Water Resources Authority (MWRA), for Notice of Intent, for the removal of the Quinapoxet Dam, management of in-stream sediment, construction of earthen berm to separate main channel from the Quabbin Aqueduct which is associated with the Oakdale

Power Station, and construction of a pedestrian access path to the river's edge, on River Road, West Boylston, MA.

(Jim Mirac and Matt Sanford of SLR represented; also present were representatives from MWRA and DCR). (Ms. Eaton read aloud the public hearing notice). Mr. Mirac began with a Power Point presentation. He showed those present a list of sponsors and stakeholders for the project. He explained that a feasibility study of the dam removal was done in 2016; most of the board members recalled this. First Mr. Mirac showed the board the project site, including where the Quinapoxet River flows. He had an aerial view also. He commented that this is an interesting project because this dam was not built the same way as the usual dam. He pointed out the power station, which he noted was fed from the Quabbin Reservoir through a big underground aqueduct and which generates power. He asserted that there were never sediment issues there. He then showed photos of the existing conditions, taken one or two years ago, and historical photos. Mr. Mirac noted that the fish ladder is not functioning and said that this part is to be removed. He pointed out the pond behind the dam, with an aerial view as well, and pointed out the limit to the project. He also pointed out vegetation that will be impacted by part of the project and mentioned that everything that was cleared there was cleared in the early 1900's when the dam was built.

Mr. Mirac then gave a project history (using the photos and maps). He explained that sediment formed an island on the lower left because of vegetation. The dam was constructed in 1905; he mentioned that the Wachusett Reservoir was then built and the Quabbin was constructed in 1919; later they had the ability to connect to each other. He reiterated that the feasibility study was done in 2016 since the dam was later in poor condition with a risk of failure, and a preliminary design of the project was completed in 2020. In 2021, they began the permitting process. He also showed the board historical photos; one photo was from 1905, showing the old river bed, dam, bank of river and vegetation. Mr. Mirac pointed out where the Rail Trail is currently, and the stumps of trees that were cut down, and added that they did not have the power station yet. He stated that the project goals include removing hazards and poor conditions, restoring habitats and restoring fish passage, improving public access for fishing and constructing an accessible trail, including ADA access, and relocating a timber deck to maintain access. He added that they are working to protect the aqueduct for sediment quality and will be doing thorough sedimentation analysis and monitoring throughout the construction.

Mr. Mirac then addressed why this is considered an interesting dam. He showed the board a normal dam, then pointed out impounded sediment that they had to deal with. He then showed this one, and explained that there is more like a retaining wall there than a dam since they had drilled about 7 or 8 feet below the ground and this makes it more complicated to remove (he showed the board a small area of the plan where this is located), and the water flows like whitewater rapids so there is not a cascading waterfall which could damage the channel. Next Mr. Mirac covered the project elements. They will remove the dam and fish ladder. They will then restore and stabilize the channel through the former dam. He noted that sediment was spilling over and running down the river; he said some will be taken out, then reused to protect the aqueduct. He responded to Mr. Chase that, regarding the shape, a lot of horseshoe dams were built at that time, but arched structures are more stable than something flat. Mr. Mirac then explained to the board the proposed plan diagram. He showed the existing dam, where it starts and where they will come in, about 6 to 7 feet. He noted that they will be relocating an earthen berm that is going to separate the two channels. They have to maintain the functioning of the aqueduct so as to not impede power generation. They will also be providing fish passage and he explained how it will work. Mr. Mirac then explained the post-dam removal plan, and explained the different colored areas on the plan. He explained "channel construction" and "sediment management", noting the results were less than three years old but they are going to update them this summer, and added that about half of what is cut down will be exported from the site and reused.

Mr. Mirac then explained the hydrology and hydraulics. He explained that they evaluated for 100-year flow, with lower ones for the fish and escalated for climate change. He added that there are many different flows and scenarios accounted for. Mr. Mirac discussed how three different things affect the fish; he said that the worst case for fish passage is high flow of the river, low water flow in the aqueduct and low water level in the reservoir. In response to Mr. Chase, Mr. Mirac said that they will be leaving an abutment on the southern side and also

another one. He then explained the post-dam removal conditions for water flow. He showed where the fish ladder was, the limits of public access, and the fish deterrent structure which they need because the fish do not like shallow and fast water.

Mr. Mirac explained to Mr. Mercurio that they looked into rebuilding the dam in 2007, and did not have the money to repair it but could have the money to remove it. There was no financial benefit to repairing it unless it was generating power. He noted that the MWRA is now paying for it. (Someone from the audience, Rebecca Weidman from MWRA, added that there will be MWRA, State or Federal funding). In response to Mr. Mercurio, Mr. Mirac replied that they hope to begin work in the Fall of 2023. Ms. Weidman added that bidding will go out before the Summer of 2023.

In response to Mr. Mercurio, Ms. Weidman responded that the Wachusett and Quabbin Reservoirs are connected and water can be transferred from one to the other. (They then discussed flow of the water to other towns and the location of other reservoirs).

In response to Ms. Eaton, Mr. Mirac replied that they do water quality protection to stop sedimentation; this is a stage in the construction sequence that was depicted in the Power Point presentation. He added that they do turbidity monitoring up and down stream so that nothing is released from the site and want to make sure that the site is stabilized. In response to Mr. Mercurio, Mr. Mirac replied that they expect clean refill but not silty and they could crush it down and use for various uses, which would be up to the contractor. Mr. Mirac replied to Mr. Haarmann that the Rail Trail will not be impacted from this project, and that they expect the work to take 3 to 4 months. Mr. Mirac replied to Ms. Eaton that they will have protective measures in place in case of a lot of rain. He asserted that the pipe phase will be very brief, and they will watch the weather. He replied to Mr. Mercurio that the piping will be removed when done.

Mr. Mirac then showed the board the "channel construction" information. He replied to the board that he did not know if continuous maintenance would have prevented sedimentation downstream, explaining that it was not the purpose of the dam. Ms. Weidman commented that the dam served its purpose. Mr. Mercurio and David Femia of the ZBA, who was present in the audience, discussed maintenance of vegetation, asked if there is a maintenance program in place to deal with vegetation, and commented that the channel appeared to be wide but, over time, narrowed (Mr. Femia pointed out this area after Mr. Mercurio asked for "Downstream Channel" to be brought back up on the screen). Mr. Mirac opined that vegetation is a good thing on river banks and gave reasons why this is the case. He explained that this is not a natural channel and showed them the area and that it was excavated out during the Wachusett's construction. He said that they are sediment-driven systems. He explained that, upstream, the channel is appropriately sized and was excavated and just for water storage. He explained that the river finds its own equilibrium and showed where the proposed channel will be, where he thought the original river was and where the river will run once the dam is gone.

Next Mr. Mirac explained that what is happening downstream is unnatural. Mr. Femia asked, once the dam is gone, will there be maintenance to make sure the vegetation removed doesn't grow back? Mr. Mirac replied that he did not think so, at least at the project site, and asserted that once the site is established, it will remain stable and that the point is removal of previous manipulation and getting the site back to a stable site. Mr. Femia opined that perhaps the dam might not have had to be removed if there was regular maintenance. Mr. Mirac replied that he did not know if this was the case; he noted that repairs were done at one time long ago but it was inspected in 2007 and was in poor condition, so it either had to be repaired or removed.

With no further questions or comments, Ms. Eaton made a motion to close the public hearing. Mr. Mercurio seconded. All in favor. Mr. Chase commented that he thought this project will be good for the Town. Mr. Mirac gave the example of Plymouth, MA, where a similar project was done. Ms. Weidman thought that the project will run from 2023 to 2024, probably from September to May. With no further discussion, Mr. Haarmann made a motion to accept the proposal as presented and issue an Order of Conditions. Ms. Eaton seconded. All in favor.

Other Business:

Minutes of February 15, 2022 Meeting: With changes made by Mr. Chase, Mr. Haarmann made a motion to accept the minutes as amended. Mr. Chase seconded. All in favor.

Minutes of April 4, 2022 Meeting: After review of the draft minutes by the board members, Ms. Eaton made a motion to accept the minutes as written. Mr. Haarmann seconded. All in favor.

Beavers on Woodland St. and Pheasant Hill: Mr. Chase discussed this situation and informed the board that the beavers are gone from that area.

Asian Longhorned Beetle on Pheasant Hill: Mr. Chase informed the board that traps have been set for the beetles.

Treasurer's/Financial Report: Mr. Chase reviewed the most recent report prior to the meeting and discussed it this evening with the board.

Miscellaneous Mail and Paperwork: Mr. Chase had reviewed any mail prior to the meeting and informed the board that there was nothing of importance for them.

NEXT SCHEDULED MEETING – MONDAY, JUNE 6, 2022, AT WEST BOYLSTON TOWN HALL.

With no further questions or comments, Mr. Mercurio made a motion to adjourn the meeting at 6:54 p.m. Mr. Haarmann seconded. All in favor.

Submitted by: _____

Reviewed by: _____

Date submitted: _____

