

**Stow Conservation Commission  
Minutes  
January 15, 2019**

A meeting of the Stow Conservation Commission was held at the Stow Town Building, 380 Great Road, Stow, Massachusetts, on January 15, 2019 at 7:30 in the evening.

There were present: Jeff Saunders, Chair  
Cortni Frecha, Vice-Chair  
Serena Furman  
Ingeborg Hegemann Clark  
Sandra Grund  
Nicki McGachey  
Nick Tepper, Associate

Absent: Andy Snow

comprising a quorum of the Commission

Also present: Kathy Sferra, Conservation Coordinator  
Jacquie Goring, Conservation Assistant

**Minutes:** *Serena Furman made a motion to approve the minutes of December 18, 2018 as written. Nicki McGachey seconded the motion and it was passed unanimously.*

**16-20 Davis Minor Plan Revision** – Sferra reviewed the approved plans with the Commission and noted that the applicant has moved the location of a slider door out to the deck and has requested that the location of the deck stairs be adjusted. Sferra confirmed that the steps will be mostly out of the 35' no disturb buffer and no closer than the stairs that were originally permitted. Sferra added that the request seems reasonable with the steep grade. *Cortni Frecha made a motion to approve the minor red line change to the approved plan. Serena Furman seconded the motion and it was passed unanimously.*

Kathy Sferra recused herself at 7:35 PM.

**Boxboro Road Land Offer** – Goring informed the Commission that they received a letter from Francis Warren Jr. offering the last building lot on Pilot Grove Hill to either the Commission for open space or to Stow Municipal Affordable Housing Trust for affordable housing. Warren stated in his letter that the property is assessed for \$248,100 and offered the parcel for \$230,000. The Commission discussed the offer and noted that the offer is generous however the property is not contiguous to any other conservation parcel and does not show any wetlands or other resource areas on the DEP data layer. *Ingeborg Hegemann Clark made a motion not accept the offer for the Boxboro Road parcel at the offered price. Cortni Frecha seconded the motion and it was passed unanimously.*

Kathy Sferra returned at 7:40 PM.

**Jillian's Lane Update** – Sferra reviewed the letter submitted by Sue Carter regarding Jillian's Lane. Sferra noted that the basin was built without many inspections and the key checks required by the Order during construction may not have been completed. Sferra also noted that Carter reported that the emergency overflow was not constructed correctly.

**Coordinator's Report**

- **Town Center Park:** Sferra noted that there have been ten bids submitted for Town Center Park. The team will be meeting with the low bidder to be sure they understand the scope and to ask questions.

- **141 Whitman Enforcement Order:** Sferra informed the Commission that she visited the site and confirmed the stumps were in place in the berm for stabilization as required by the Enforcement Order. The fence has also been installed but was completed after Sferra visited the site.
- **New Project:** A Notice of Intent for septic replacement at 42 Boxboro Road has been submitted for the January 29<sup>th</sup> meeting. Ingeborg Hegemann Clark will take the lead.

**Request for Determination of Applicability – 127 Adams Drive – Joanna and Nathan Miller –** Homeowner Nathan Miller was present. Miller showed a hand sketch of the 20 trees proposed for removal due to concerns about safety. Miller stated that last winter a tree fell on their house over their children's rooms and that they are concerned about the large pine trees surrounding their home. Cortni Frecha completed a site visit and noted that much of the 35' no disturb buffer on the property is untouched. Frecha reviewed photos of the wetland, drainage swale, and the trees to be removed. Seventeen pines, one oak leaning toward the house, and two damaged maple trees are proposed to be removed. The two maple trees are located within the 35' no disturb buffer and no trees have been proposed for replacement. Frecha noted that there are many understory trees as well as invasives that could be removed as a public benefit for the tree removal. During the site visit Frecha reviewed with Miller the removal of bittersweet and burning bush. Miller confirmed that he is willing to plant or manage invasives on the property as a public benefit for removing the two trees within the 35' no disturb buffer. The Commission noted that a Commission member could visit the property again and staff could advise Miller on invasive species management. *Cortni Frecha moved to close the hearing. Serena Furman seconded and the motion was approved unanimously.*

The Commission discussed the project and requested invasive bittersweet and burning bush be managed on the property in coordination with the Commission and staff. *Ingeborg Hegemann Clark moved to issue a Negative Determination #3. Cortni Frecha seconded and the motion was approved unanimously.*

**Notice of Intent Continuation – 168 Barton Road – 168 Barton Road Realty Trust –** Ron Ham Jr., owner/applicant, John Grenier, J.M. Grenier Associates Inc., Dave Burke, wetland specialist, and Bob Dionisi, Attorney, were present. Jeff Saunders suggested the applicant review new information submitted by Grenier. Dionisi stated that they have addressed the questions raised at the December 4<sup>th</sup> meeting including providing a letter of assent from Portside Realty Trust to the filing by 168 Barton Realty Trust. Dionisi discussed the property line concerns raised by the Commission and stated that the property bound could not be located and is not relevant. Dionisi reviewed the deed and stated that the bound cannot be determined due the shifting property line as a result of erosion except for the fact the boundary is to Lake Boon. Dionisi stated that in his opinion the retaining wall blocks are within the lot lines of the property. Dionisi introduced Grenier, Professional Engineer, stating that he has over 23 years of experience including with work on Lake Quinsigamond in Worcester and Shrewsbury. Dionisi added that the project has an insignificant effect on the resource areas and recommended that the retaining wall be considered a limited project or special project under Stow's bylaw.

Grenier stated that Lake Quinsigamond similarly has gravelly steep slopes with significant boat traffic and eroding shorelines. Grenier stated that he has analyzed the slope of the property and reviewed the resource areas and outlet to Lake Boon to determine the low and high water mark. Grenier stated that he believed that the vast majority of the time the water level is at the high water mark. Grenier reviewed the resource areas including Inland Bank, Land Underwater and Bordering Land Subject to Flooding (BLSF). Grenier visited the site in December and January and noted that during drawdown the lower bank is an exposed beach and stated that the mean annual low water level is also the limit for land underwater, noting that no land underwater has been altered as a result of constructing the wall. Grenier added that there is 36 feet of bank alteration but noted that the retaining wall is preventing erosion and the undermining of tree roots, and improving the stability of the slope. Grenier added that the retaining wall is an overall benefit and has proposed a modification to the slope that would improve the area behind the wall and provide additional plantings. Grenier reviewed the FEMA 100 year flood elevation and stated that survey in the field determined that the 189 elevation for the 100 year flood could not be reached due to the outlet control structure which limits the lake level. Grenier added that in his opinion the 189 elevation of a 100 year flood event would overtop Barton Road at the dam by three feet. Grenier also added that the high water mark of Lake Boon as determined in the field is one foot up the existing retaining wall and the impact to bordering land subject to flooding

is negligible and insignificant. Grenier stated that there is no negative impact to flood storage on the property or downstream as a result of the existing retaining wall.

Grenier reviewed the proposed planting plan which includes filling the flat area above the wall to naturalize and stabilize the slope by adding loam and planting a mix of silky dogwood, northern arrowwood, and sweetfern as recommended by Burke. Burke added that included in the submittal to the Commission are photos that show metal pipes at the original limit of the bank. Burke noted that in the photos there is a flagging tape line connecting the pipes on either side of the lot that shows that the retaining wall extends two to two and a half feet into Lake Boon, not six to seven feet as previously discussed. Burke stated that the Hams spent a lot of time pushing the blocks into the bank and were not able push the blocks back further due to large boulders at the base of the slope. Grenier stated that the wall extends two to two and half feet beyond where the stone lined bottom of the slope was, which is equivalent to the width of the blocks. Grenier and Burke stated that the retaining wall was installed right up against the original bank. Saunders noted that the bank was not straight and that water was visible behind the blocks.

Grenier reviewed the proposal to remove some of the peastone from behind the retaining wall and fill the area behind the wall with loam to create a vegetated slope. Burke stated that they ran a level line from 168 Barton to the outlet control structure and confirmed that water was running over the outfall at elevation 185.9. Burke added that he felt the 100 year flood elevation of 189 would be three feet above Barton Road and there is no way that could happen with a 100 year flood event due to the height of the outfall, therefore in his opinion there is no 100 year flood plain on Lake Boon or the 168 Barton Property. Sferra noted that Burke's statement does not agree with the FEMA floodplain maps. Grenier stated that bank full when the boards are in is at elevation 185.9 which he calculated to be one foot above the bottom of the retaining wall. Grenier stated that the bank full elevation and elevation of the top of the boards in the dam when replaced is 185.9 feet. Grenier described how he calculated that elevation using his surveyed elevation of 187.15 feet for the top of the retaining wall, the elevation of mean low water which he surveyed at 184.83 feet, and the elevation of the boards at dam when they are replaced which he surveyed at 185.9 feet. Grenier pointed out a photo included in the materials he provided the Commission, which shows Ham and Burke standing at the dam with a measuring rod marking the 189 flood elevation as surveyed by Grenier. The Commission noted that those calculations would need to be reviewed. Burke noted that the plan approved with the original Order showed the 100 year flood elevation at 190 and that it did not determine how much water is displaced in a 100 year flood. Sferra clarified that plan was for the previously approved Order.

Hegemann Clark recommended that the hearing be continued to 9PM because the applicant's time was cutting into the next hearing. Saunders asked if the applicant was willing to continue the hearing to a later date to allow for a peer review by an engineer. Dionisi expressed disbelief that the Commission was incapable of reviewing the submittal. Hegemann Clark clarified that the Commission is not incapable, but that it may be helpful for a peer review as a number of questions had not been answered. Hegemann Clark added that the applicant could also choose to continue the hearing to 9PM or close tonight, but the Commission may not be able to evaluate the elevations and compare datums with information available in the files. Dionisi stated that they would like to close the hearing tonight and requested that the hearing be continued to 9PM for further discussion. The Commission discussed the request for peer review and noted that a peer reviewer independent from the Commission may be able to provide helpful information and noted that the work was done without a permit and no alternatives were provided in the submittal by Grenier as requested. Frecha added that she would be comfortable using a peer review and absent one she will need to make a decision based on the limited information the Commission has and stated she is unhappy with the work and a peer reviewer may help her better understand what was done. Sferra confirmed that the Commission would first contact Sue Carter from Places Associates who does engineering review for the town. Dionisi stated that he felt there was nothing so technical or complex about the project that it requires a peer review. *Serena Furman moved to continue the hearing to later that evening at or after 9:00 PM. Sandra Grund seconded and the motion was approved unanimously.*

**Notice of Intent Continuation – Off Barton Road – Robert Collings** – Sferra informed the Commission that the applicant's representative requested a continuation to February 19, 2019. *Ingeborg Hegemann Clark moved to continue the hearing to 2/19/19 at or after 7:30 pm. Nicki McGachey seconded and the motion was approved unanimously.*

**Notice of Intent Continuation – Hallocks Point Road – Sarah Bailin –** Sarah Bailin, Jeff Brem, Meisner Brem Corporation, and Paul Alphen, Attorney for Robert Dawes LLC, were present. Alphen noted that the email sent to Brem from Sferra was not received until just prior to the hearing due to issues with Brem's email and they would do their best to address the questions. Alphen stated that the Chapter 61 process requires the property be sold in its entirety with all necessary permits for the subdivision and cannot be sold with contingencies for permitting. Alphen added that the buyer would be required to request an amendment to the Order if the plans need to be changed or required additions. Alphen also noted the concerns regarding dock locations and clarified that they intentionally did not file for seven docks and they are comfortable with a limited number of docks. Alphen added that they have not surveyed where the docks would go and there are some areas that the water is not deep enough to get a boat in and out of the water. Alphen stated that they have no problem if the Order states that there cannot be more than four docks associated with this project. Brem reviewed the plan changes including the addition of the 35' buffer and adjustments to Lot 3 including moving the house farther from the lake. Brem added that the Commission had previously agreed to take ownership of Lot X and the Planning Board would like a ten foot sidewalk easement. Plans were also modified to incorporate changes requested by Sue Carter including removing the proposed basin and changing it to a bioretention system with infiltration. Brem noted that they received a letter from Sue Carter today with a number of minor changes to the plans.

Brem reviewed Planning Board comments from the earlier hearing and noted the hearing was continued to February 5<sup>th</sup>. Brem stated that the Planning Board discussed requiring a single 40 foot access road, a cistern which was requested by the Fire Chief, lot line clarification, a tax map issue with the roadway and a question regarding if inclusionary zoning applies to the project. Brem clarified the limit of tree clearing shown on sheet 7 of the revised plans and noted that the potential buyer and developer will be required to come back to the Commission for any plan changes. Alphen added that a condition could be added to the Order requiring the developer to meet with the Commission prior to construction commencing. Sferra expressed concern about the potential for plan modifications or additional filings and how the Commission might set expectations for future property owners including the sharing of docks, single four to six foot wide paths to the water, and no tree removal within 35' no disturb buffer, and therefore recommended those restrictions be included in a covenant or in the deed. Sferra added that the proposed plans only show a limit of clearing and a house box for each lot and the recorded plans should include the 35' no disturb buffer as a no cut zone, a single path to the water for each lot, and shared docks. Brem stated that the request is reasonable but would not want to include the buffer on the recorded subdivision plan. Sferra felt it was important to show that for the sake of future buyers. Hegemann Clark noted that if the infiltration basin is to be used during the construction period it must be maintained so it does not become compromised and cannot function as designed after construction. The Commission clarified that any work beyond the house box and limit of clearing shown in the plan should not be done by the developer without further approval or permitting.

Sferra noted that the wetland flag revisions will need to be included on the plans and Lot 3 and the road were requested to be staked out by the Commission. Sferra added that there are concerns that the house for Lot 3 could not be built without encroaching on the 35' no disturb buffer with space to work around the foundation. Alphen stated that they will need to address the rest of the email and suggested that a restrictive covenant be recorded allowing only four docks for the subdivision and single paths to the water for each lot. Sferra agreed that would be a benefit to future owners and noted that a couple of the lots have significant resource areas and shallow water may make a dock infeasible. Alphen noted that the owner of the existing dock has written a letter stating that he will remove the dock prior to development of the property. *Ingeborg Hegemann Clark moved to continue the hearing to 2/5/19 at or after 7:30 PM. Sandra Grund seconded and the motion was approved unanimously.*

**Notice of Intent Continuation – 168 Barton Road – 168 Barton Road Realty Trust –** Sferra reminded the Commission that they had been discussing using a peer review prior to continuing the hearing. Burke confirmed for the Commission that the drainage mitigation in Barton Road was still proposed and should be considered as part of the review. Grenier confirmed the proposed slope grading will be 3 to 1 and the existing slope is not more than 2 to 1. Grenier also confirmed that the cross section he provided showing the top and bottom blocks slightly offset was just a typical detail and the blocks are flush and could not be offset because they would not interlock. Hegemann Clark noted that the Commission may not agree with the upper and lower bank as presented by Grenier and the

presumption that land under water is not impacted by the blocks. Hegemann Clark added that the lake drawdown is a permitted impact to resource areas and is required to be managed appropriately and the high water level is considered the normal condition. Hegemann Clark also noted that the photos provided of the iron pins were helpful.

Grenier stated that according to his surveyed elevations the water level during high water does not rise above the lower block. Hegemann Clark noted that that assumes there is no backwater and the water level does not go over the height of the board. Sferra noted that there is documentation in the Commission's records that the water level is at least several inches above the top of the board during summer conditions because it backs up at the outlet. Burke stated that he doesn't know how that could be possible. Grenier stated that they proposed to soften the bank and if there is a back water it is not significant enough to affect the bank. Grenier added that adding soil, sloping, and planting the slope is a practical alternative and he understands the Commission isn't happy with the blocks as they are installed but the work was not done maliciously and the Ham's were trying to improve the bank and thought they were doing a good thing. Grenier also added that the work is not significant and does not have any impact on the resource areas and is permissible.

Hegemann Clark noted that in an email sent on January 2, 2019 Sferra inquired if some of the peastone could be removed. Grenier stated that without peastone for drainage behind the wall, the wall could be pushed toward the lake due to hydraulic pressure. Grenier added that some peastone is proposed to be removed and replaced with loam to provide a good base for plant material and that some of the plantings chosen by Burke will survive in drier gravelly soil. Grenier confirmed that the peastone that is removed will be brought up the stairs by hand using five gallon buckets. Boulders that are currently in cages at the bottom of the slope are proposed to be placed on either end of the wall to blend the wall into the shoreline. Grenier noted that the boulders will also further stabilize the slope and prevent additional erosion under the steps and roots of the pine tree on the shoreline. The Commission noted that they requested that the ends of the walls be angled out as an alternative which was not addressed in the submittal by Grenier. Grenier confirmed that he was trying to achieve that effect with stones. Burke added that the existing Order allowed for placement of stones along the shoreline and that the block wall won't lock with the end stones angled outward. Saunders asked if the rocks that will be used are large enough to sufficiently stabilize the bank. Grenier stated that bigger rocks would be better but could not be brought down without machinery. Sferra noted that both proposed modifications, including blending the outside face of the wall and grading the existing slope, will result in additional impact to the resource areas. Ham confirmed that the boulders will be placed to blend into the neighboring retaining walls. Ham added that over the last few months none of the stones have moved through the wave action and drawdown and could be used to prevent further erosion under the stairs and pine tree at the shoreline. Grenier confirmed that he does not believe that keeping the retaining wall in place and placing boulders on either side of wall will result in deflection of wave energy to neighboring properties. Ham stated that the water skiing boats go counter clockwise in front of his property and the wall will deflect waves to the south where the pine tree is eroding and boulders are proposed.

Sferra noted that in the submittal Grenier estimated that the retaining wall altered 36 feet of bank and expressed concerns that the additional work placing boulders along the shoreline could push the 50 foot threshold requiring a wildlife habitat evaluation. Burke stated that the Commission had already permitted work on the bank. Sferra clarified that the Order allowed for repair to the existing stone wall by replacing stones by hand that had fallen into the water. Grenier stated that they would use the remaining 14 feet to blend into the existing stone base on either side of the wall and asked if working on improvements to the shoreline is allowable. Sferra clarified that under the existing Order a single row of stones was permitted to be repaired on the bank. Grenier stated that they are not altering the shoreline but performing maintenance to it. The Commission confirmed with Grenier that it is his contention that the retaining wall extended 24 to 30 inches into the Lake and expressed concern about the precedent if they were to accept Grenier's interpretation of the low water mark of Lake Boon. The Commission also noted that they would be curious to know DEP's opinion on this. Dionisi stated that they do not want to be a test case but wanted to know why the Commission couldn't approve the project as a "special project" under the Bylaw as maintenance of a beach area and issue an Order for the proposed work which would avoid the Commission setting a precedent regarding the water level of Lake Boon. Dionisi added that other applicants would not use the same argument because of how egregious the whole process has been for the Hams. Burke and Dionisi added that the Commission could also act under the "lake maintenance" provision. Grenier noted that the Hams have

extenuated circumstances including loss of trees on the slope and significant erosion and some enforcement to the slope is warranted for long term stability. Dionisi stated that the presumption of significance can be overcome and noted how much beach is exposed in front of the Murphy property on Barton Road.

The Commission confirmed with Grenier that the Hams would not be filing for a Letter of Map Amendment or Letter of Map Revision from FEMA. Grenier said they accept the FEMA number. Grenier added that the point he was trying to make was that the summer high water mark elevation is not three feet above Barton Road. The Commission clarified that the summer high water mark is not the same as the 100 year flood elevation. Grenier stated that the purpose of the control structure of the dam is to help with flooding conditions. Grenier also confirmed with the Commission that the text of the submittal incorrectly states elevations used for calculating Bordering Land Subject to Flooding in the submittal and that the cross section in the submittal should be referenced for the correct elevations. Grenier added that in his opinion Land Under Water is not affected by the retaining wall. The Commission confirmed that the plantings shown on the submitted plan do not correlate to specific plants and a mix of the three proposed species will be used. Burke stated that the slope will naturalize. Nick Tepper expressed concerns about the use of sweet fern, which prefers dry conditions. The Commission noted that native plants must be planted and if some of the plantings die they will need to be replaced. Sferra confirmed that the plantings proposed are in addition to the plantings required in the previous Order. Sferra also noted that the Enforcement Order required the Notice of Intent to include the modifications to the steps to the water, which has been included.

Sferra noted that the email sent on January 2<sup>nd</sup> requested that specific alternatives be assessed for their feasibility and were not included in the submittal by Grenier. Grenier stated that removing the face of the existing block retaining wall would impact the structural integrity and an excavator could not be brought down the slope to dig into the bottom of the slope to push the wall back. Grenier added that an excavator would need an area six to eight feet wide to work from and digging into the slope would not solve anything. Ham stated that a long arm excavator could not be used because of the weight. The Commission noted that an excavator could be used during drawdown on the area in front of the wall. Grenier stated that the slope is continuously eroding and the plantings are being undermined. Ham reviewed a photo of the property taken from the Lake in 2005 showing the slope and stated many trees have come down or lost limbs on his property and neighboring properties. Grenier added that the Commission should consider allowing machinery to access along the shoreline allowing property owners to remove existing retaining walls and replace them with something structurally sound. Sferra clarified that the original Order did not allow machinery at the bottom of the slope because the proposed work only included replacing the rocks by hand that had fallen from the slope. Grenier clarified for the Commission that if the end blocks were removed they would still need stones to tie the wall into the slope.

The Commission expressed concerns about the retaining wall extending out into the lake and discussed the proposed three to one slope and confirmed that the area at the top of the wall would not be useable along with sizable plantings. Grenier confirmed that jute netting will be used until the slope is stable. The Commission discussed concerns about future owners cutting the plantings and using the area on top of the wall. Grenier noted that the steep slope and the amount of work to remove the plantings would be a deterrent. Dionisi suggested that something could be included in perpetuity on the deed. The Commission discussed the need for a peer review. Dionisi stated that after the discussion over the last hour the Commission is quite capable of issuing an Order without peer review and they wanted the hearing closed. The Commission noted that they got the sense that the applicant would not allow for an extension to the hearing for peer review and they have enough information from which they can deliberate. Sferra provided the Commission with and reviewed a list of items to include in the record. *Ingeborg Hegemann Clark moved to close the hearing. Serena Furman seconded and the motion was approved unanimously with Sandra Grund abstaining.*

Sferra noted that the Commission has 21 days to issue a decision and will likely discuss the decision at the January 29<sup>th</sup> meeting and vote on February 5<sup>th</sup>.

#### **Coordinator's Report – Continued**

- **Sudbury Road Boat Ramp:** Sferra noted that there has been reports of trash at the Sudbury Road Boat Ramp which could be visited at the same time as Hallocks Point

**Calendar 2019 Project Planning:** Sferra requested that Commission members send her 3-5 of the top items for discussion at a later meeting.

**Adjournment** – *Cortni Frecha made a motion to adjourn the meeting at 10:11 PM. Sandra Grund seconded the motion and it was passed unanimously.*

Respectfully submitted,

Jacquie Goring  
Conservation Assistant

**Materials Used during January 15, 2019 Conservation Commission Meeting:**

16-20 Davis Site plans

127 Adams – site visit photos and application/supporting materials

168 Barton Road – site visit photos and application/supporting materials

Hallocks Point – site visit photos and application/supporting materials

Draft 12/18/18 Minutes