

SOUTH HADLEY CONSERVATION COMMISSION
MEETING MINUTES

July 13, 2011

DRAFT

PRESENT: John (Jack) Fleming, Chair; Dennis Swartwout (7:10 PM), Bradford (Brad) Allen, James (Jim) Canning, William (Bill) Bacis, and Janice Stone, Conservation Administrator.

7:00 PM OPEN FORUM Opportunity for residents to come in and ask questions, discuss wetland concerns with the Conservation Commission. No decisions will be made at this time, all items will be taken under advisement. Individual time may be limited by the number of persons waiting to speak. No one present wishing to speak.

7:01 PM OLD & NEW BUSINESS. Bills payable. Jim reviewed the bill for payment of dues to the MACC. Jim made a motion to approve paying it. Brad seconded, and Jim, Brad, Bill and Jack voted in favor. Request for Certificate of Compliance for Unit 108, *Stonybrook Village Condominiums*, 108 Stonybrook Way (288-362). Janice told the Commission this unit is in front part of property, away from the wetlands, site is completed and stabilized. Brad made a motion to approve issuing a partial Certificate of Compliance for #288-362, for unit 108. Bill seconded, and all voted in favor. Updates. Janice gave an update on the work at the Gatehouse Park and Bicentennial Canal. The contractor for HG&E is still dredging the canal, and has received approval from MA Historical Commission and the local Historical Commission to repair portions of the canal wall that are failing. The Commission recently received a copy of a letter from HG&E to FERC, requesting an extension on the deadline for demolition of the *Texon Building* for another year. Janice went by *31 Sunrise Ave* to see if the shrubs have been planted. There is a lot of tall jewelweed, but there are stakes next to the newly planted shrubs on the slope. Janice told the Commission that the 8 replacement trees (cottonwood and sycamore) have been planted around 22 and 24 *Cove Island* (Western MA Yacht Club and adjoining abandoned property with approval from HG&E). She mentioned her concern about members of the WMYC parking their vehicles next to and around the new trees, and the fact that the only protective barrier they have from accidental abuse from parking or mowing are three wooden stakes around each stem. Mr. Cote from WMYC told Janice they have warned the person who does the mowing to be careful around the new trees, and they will be watering them as needed. Janice will call HG&E about the parking. Janice met the new *DPW engineer* Dan Murphy this week, and discussed with him and Jim Reidy the status of *DPW projects* that need Conservation permitting, including Brainerd St, Morgan St, and the Main St “seawall” area. She was told the Notice of Intent for Brainerd St sidewalk should be in very soon. Janice told the Commission about Tom Wallace reporting a light green opaque plume in the water of the pond at *Black Stevens* last Monday. She went out and observed it also, called DPW, but no one knew of any activity upstream that may have caused that. It seemed to be flowing through and out while she was there.

7:15 PM DISCUSSION & VOTE on the Arbor Day Committee’s request for the Conservation Commission to take over ownership of the *Hahn-Warner Arboretum*. George Hahn from the

Arbor Day Committee was present to request this approval. He summarized previous conversations with the Commission and the favorable results from the site visit. Once they have Conservation Commission approval they will approach the School Committee and Selectboard about the transfer of control from the school committee to the Conservation Commission. Janice handed out a document with excerpts from the MACC handbook about transfers of municipal land between departments. It states that it needs the approval of the departments, the Selectboard and Town Meeting vote. Dennis read the vote language, Brad seconded, and all voted in favor. George thanked them and told them he would be in touch.

7:20 PM OLD & NEW BUSINESS, continued. The Commission discussed *Mountainbrook*, and the status of completion of the requirements from the December 2010 Enforcement Order. Janice told the Commission that the wetland restoration has been done, but she has not received a monitoring report summarizing the work and date completed. There is still some added sediment behind the silt fence behind lots that needs to be removed by hand, but most of that work was done. The streets have not been swept yet (not part of Enforcement Order). The Commission asked about the status of *80 River Road*, and the lack of work on rebuilding the house. Janice has not heard anything from them. Janice passed out the new state *ATV regulations* for the Commission to read through. Brad suggested Janice meet with the Police Chief to discuss how to work together to control illegal ATV use on conservation land.

7:30 PM PUBLIC HEARING, continued on a Notice of Intent (288-409) filed by Craig Authier for *Rivercrest Condominiums LLC* for the construction of 31 condominiums in the buffer zone off Ferry Street. Edward Ryan, Ray Authier, and Russ and Lee Marion (partners on this project) present, along with Mark Reed from Heritage Surveys. Greg Newman from Newman Environmental Engineering also present, as third party reviewer of stormwater plans for the Conservation Commission. Mark Reed showed the Commission a new plan with the revised boundary for the wetland in back. The wetland is reduced in size, with a gap in the middle that makes the northern piece become an isolated wetland, subject to the town wetland bylaw but not the state Wetlands Protection Act. Mark said he would like to have closure on the wetland boundary issue tonight, but Janice and the Commission explained that they are waiting on the field data sheets from Chuck Dauchy and the third party review after that from Tighe & Bond's wetland scientist Jessica Roberts. Janice explained that she was out at the site with Chuck and Jessica today, and Chuck will not be doing the data sheets until next week. She told them they did not have to come tonight since their work was not finished yet, and they should plan to come next time. Janice said they walked and checked the revised wetland line, and informally it looks good, but the Commission cannot provide a formal response until the data sheets and third-party review are complete. Jack stated that the Commission has not met together out at the site yet, since the cancellation because of thunderstorms, but will go once the third-party review is completed.

Mark said he had just received Greg Newman's third-party review of the stormwater management plan, and has not had time to go over it thoroughly yet. They have also received some comments from the Planning Board, and he would like to do one revision of the plan. The Commission asked Greg to present his findings. Greg apologized for not getting it out sooner, but told the Commission his computer crashed last week and he couldn't get the report out. Greg then proceeded with a summary of his review. He stated that he followed the DEP guidance document for stormwater review, and also reviewed the town wetlands bylaw and stormwater

bylaw. He referred to his Summary document, with explanations along the way of how the plan met the DEP stormwater standards and town bylaws, or what was needed to meet them. The remarks included the following:

- 1: Project does not comply with South Hadley *Wetlands Bylaw* (includes work in 50' Conservation Zone)
2. Report does not include a written *alternatives analysis of LID techniques*, as required by DEP storm water regulations. There may be some items proposed in the plan that would at least partially qualify as LID, but they are not discussed.
3. *Missing information* on plan. Plans do not show the number and locations of roof and foundation (full basement) drains; needed to evaluate impact on storm water drainage. Also slope stabilization for the discharge points near steep slopes, and exact elevation/depth of dry wells and yard drains (to identify distance to ground water).
4. *DEP Standard 1 - No Untreated Discharge or Erosion*. There are a number of spots listed in his report where additional information is required to determine that this standard is met. In addition Greg discussed the different ways of calculating the post-development runoff. He described the roadway as a single connected impervious surface, and suggested it should have been modeled separately from the grass lawns next to it. Heritage averaged the roadway (no infiltration) with the lawns, and came out with slightly different discharge for the 100 year storm event. The Heritage model estimated 0.7 cfs (cubic feet per second) discharge from the detention basin for the 100 year storm; while Greg's model separating the roadway and lawn in the calculating stage estimated a discharge of 2.0 cfs for the same storm and discharge point. The difference, he explained, is not that great, but it is 3 times greater. Greg described 0.7 cfs as equivalent to 350 gallons a minute, and 2.0 cfs as 900 gallons a minute, to illustrate the difference. Greg stated that the difference between the two models is negligible for up to and including the 10-year storm. The main concern is for separation from groundwater. For any sites with less than 4 feet separation from ground water the engineer is supposed to do a "mounding analysis", to show what is happening during big storm events, and to identify if any "piping" might occur, where groundwater will come out somewhere else downslope through a permeable vein of soil, causing erosion at that site. This needs to be done for this project. Greg said the town stormwater bylaw requires looking at potential off-site flooding. DEP does not require meeting the peak flow attenuation for the 100 year storm, because sometimes holding back the water may cause more of a problem. Timing is important. A number of places on the plan will have a lot of runoff coming off the roofs to a yard drain, and the drain is next to a steep slope. The yard drains should be modeled separately from the greater surroundings for the 2 and 10 year storms because the drainage swales may not have capacity to hold the water discharging into it. They are supposed to infiltrate really fast, but if there is too much runoff, it will overflow, go down a steep slope, eroding into a wetland, which would violate the first DEP standard. Greg suggested increasing the capacity of the swale to hold runoff by berming up around the backside. Applicant also needs to look at the potential for overflow from the roof drains a short distance from the property boundary flowing off onto private property. Same with foundation drains. There should be no flow off the property, or uncontrolled storm water flow.
5. *DEP Standard 2 - Peak Rate Attenuation*. Greg stated that the detention basin appears to handle the flow pretty well, but he is not able to tell if the other parts of the stormwater management system (yard drains and grassy swales) are because he does not have enough information from the plan. Needs to show models of flow from these areas.

6. *DEP Standard 3 – Stormwater Recharge.* Plan seems to do a good job with recharge, as long as the infiltration features are above the water table. The plan does not presently show the ground water level for most of the yard drains. Heritage recently did additional test pits with the Board of Health. They found ground water at 6 and 7 feet in front. Mark stated that the yard drains would be about 4 feet deep. Greg stated that 2 foot separation from ground water meets the DEP storm water standard, but the town stormwater bylaw requires 3 feet of separation. Greg said they needed to check the groundwater separation for each yard drain.

7. *DEP Standard 4 – Water Quality.* The Stormceptor 900 unit at the end of the system of catch basins, before the detention basin, is a good sized unit. Heritage gave it a TSS rating of 80%, but Greg stated he would only give it 50%, based on the same documents, with special attention to the information in the appendix. The system as a whole still meets the requirement of over 90% TSS removal before discharge to the ground.

8. *DEP Standard 5 – Land Uses with Higher Potential Pollutant Loads (LUHPPLs).* Standard is met because there are no LIUHPPLs.

9. *DEP Standard 6 – Critical Areas.* Standard is met because there are no critical areas in the project area.

10. *DEP Standard 7 – Redevelopment.* The proposed project is not redevelopment, and therefore must comply with DEP standards 1- 6.

11. *DEP Standard 8 – Erosion and Sediment Control Plan and Stormwater Pollution Prevention Plan.* Greg stated that he had a long list of things that needed to be added to the present plans, listed in his report.

Greg spoke a little more about the Town Stormwater Bylaw. It requires easements for any runoff on to other property, and legal agreements for maintenance. It also requires stabilization of slopes within 14 days for relatively flat slopes, but should be sooner for steeper slopes. Particularly important on this site, since once you tear off the topsoil you will expose sands, which are loose and if you get a good flow going through them they will create erosion gullies. Any slopes steeper than 4:1 needs to have slope stabilization. Should not leave it up to contractor to decide when more stabilization is needed – require it for greater than 4:1 slopes. Jack thanked Greg for his review, and asked Mark if he has had time to look this information over. Mark said he just got the comments, and will review them in more depth, along with comments from the new town engineer. Conservation had not realized the DPW engineer had provided comments as well. Janice asked Greg to provide a written summary of his comments as related to just the Town Stormwater Bylaw. Greg questioned whether that should be done now, or after changes to the plan. Janice asked about having the Town Stormwater Bylaw comments ready for the next Planning Board hearing. Ed Ryan stated that they have asked for a continuation of the August 25 Planning Board hearing to a later date, to give Mark time to review these comments from Greg, the comments still to come from the Tighe & Bond wetland reviewer, and the DPW comments. They would like to make one revision to the plans, after receiving all these comments and those from the Planning Board. Brad asked what criteria were used in making the decision to move the wetland boundary. Janice said they looked at soils and vegetation. The wetland vegetation was not present, and the soils in the areas that were removed as wetland were borderline or not hydric. Janice said she would like to see the plans showing the revised wetland boundary, especially in relation to the detention basin, to know how much of the area is within the 50' Conservation Zone, and the distance between the detention basin discharge and the wetland. They can wait until the Commission has Jessica's report to verify the boundary, but after that it would be good to see a revised development plan. Mark said the change in the

wetland delineation puts the outlet (level spreader) approximately 20' further away from the wetland boundary. Mark said he would revise that portion of the plan and send it to the Commission. Janice asked for an explanation of yard drains and dry wells. Greg said DEP defines dry wells as pits filled with stone, while what people normally think of as dry wells (hollow spaces underground) are what DEP calls yard drains. The stone dry wells are 3' x 3' x 3' at each downspout of the roof drains. The yard drains are freestanding throughout the site and collect runoff from the lawn area and other areas. They are at maximum 3' deep, and 9' in diameter with stone cover over it. Greg said these features do not attenuate peak flow, but will infiltrate most of the rainfall from most storms. Mark stated that roof drain dry wells and yard drains are considered LID features, but are not described as such in the Notice of Intent. Greg suggested considering pervious pavers when they are looking at the plan again. Janice asked if there was any phasing to the clearing of the site. Mark stated that the whole work area had to be cleared at once, in order to construct the drainage system in the back and the roadway at the start of the project. The detention basin will be used as a temporary sediment basin, and then cleaned out before it is finalized. Greg recommended modifying the erosion control plan to include creating the sediment basin right after clearing the trees and roughing out the road. Bill mentioned to the applicant that he had observed an area towards the back of the property near future unit 20 and yard drain, during a moderate rain storm. He observed water flowing in the area of the Healey/Grant properties, and then disappearing into the ground. He was not sure of the significance of what he saw, but wanted to mention the flowing water there, especially since it is near the proposed yard drain site. Mark said he was aware of some flow coming from the area of the open field, which then channelizes and becomes an intermittent stream in the back. Jim asked which direction the lots slope for drainage. Mark explained the slopes in different directions around the area. Janice asked for verification that the project will contain runoff on their site. Mark said yes, and he will demonstrate that.

Jack asked Janice to give a brief explanation of the authority and jurisdiction of the Conservation Commission to the public. Janice explained the Commission reviews any activities within 100 feet of a wetland, or 200 feet of a perennial stream. The Commission also reviews stormwater management of the site, if it flows or discharges within areas of their jurisdiction. Jack opened the hearing up to the public for comments and questions. Kristin Stueber, an abutter to the property on Brock Way, expressed concern about the impact of this project on the significant wetland that is on her property. She is very concerned that the marshy area downslope of this project area will be silted in during the construction phase, as has happened to other wetlands in town. She urged the Commission to make very strict guidelines and monitor closely the construction of this project, so that "not one grain of sand" from this site goes into that drainage which is on her property. Norma Monet, Ferry St, asked if the engineer had considered how the drainage system will work when the site is frozen and the shingles are shredding their particles into the roof drains. Mark stated that the roof drains have to be maintained (to prevent them from clogging). She agreed, and asked if there is something that prevents all the water flowing down Ferry Street from the Center school going into the Rivercrest development and drainage system. Greg and Mark stated that the entrance driveway to Rivercrest is slightly higher, so that the stormwater that is on Ferry St stays on Ferry St. Rudy Ternbach, Ferry St, stated that the area has been a natural 10 acre catch basin, and showed photos of flooding on and off Ferry Street in people's yards. This has been a problem for a long time, and has gotten worse as there is more construction on Ferry St, resulting in less area to catch the water. He stated that they are not improving the situation by preventing Ferry Street flow from coming across their property.

Engineers discussed the high and low spots along Ferry St. Rudy reiterated the question of how the stormwater system is going to work in winter. The worst problems tend to be in the winter when there is rain or snow melt with frozen ground. Greg says this is where a yard drain with underlying sandy soils really pays off. If the underlying soils are sand, as soon as the ice over the site melts, the water will disappear. Regarding their concern that filling a low area in front will send more water down the street, Greg explained that traditionally people do build a house up above the present grade a bit in flat terrain, to shed water off away from the house and basement. Filling a shallow area that perhaps held runoff after heavy rains is not really addressed in the stormwater management plans. He said he would check with DEP. John Dyjach, Ferry St, asked Greg about his statement that there is potential for runoff onto other properties from this project. Greg explained that there was potential until he had all the data he needed that documented otherwise. Mr. Dyjach asked about a potential joint meeting with the Planning Board. Jack said it was not a joint meeting, but the Planning Board wants a single stormwater review for the Conservation Commission and Planning Board. Mr. Dyjach asked about the new town engineer, and expressed a wish to have him involved in this review process. Mr. Dyjach asked for clarification about what approvals were from Planning Board and not Conservation. Conservation is looking at wetlands and stormwater, there are many other issues that Planning addresses. Laurel Carpenter, Brock Way Lane, expressed concern about Brock Way Lane, which is a private way. There is an intermittent stream that crosses the road. She showed a plan from the Healey property showing the stream. In the spring it pools near the road. Will the stormwater system create additional flow and pooling near the road? Janice said she and Chuck Dauchy and Jessica Roberts (Tighe & Bond) looked at the intermittent stream in back of the Machak's property, and found it to be about 120' from the property line, so it is outside the Commission jurisdiction. They also checked the back corner of the Brough's property from the Rivercrest side because they had not heard back from the Broughs with access approval before the site visit. Brad suggested looking at the stream during a rain, where its extent might be more obvious. Laurel mentioned that Ms. Healey does have a septic system in her yard, as shown on the plan. Several abutting neighbors have told of their problems with wet or flooded basements. Jane Healey runs two sump pumps at all times from her basement. What will 31 units contributing water do to the groundwater, especially with the clay lower layer in the field? Mark said he would take it under advisement. He does not have access to the other properties to check it out. Russ Marion stated that the neighbor would not have a water problem in the cellar if he had built the house a little higher. He said he would not sell any condos if there were water in the basement: the basements will be dry. Laurel asked if that meant they were going to be raising the ground level around the condos. Jack stated that was a building issue, not conservation. Mark stated they have to and will demonstrate that they are retaining the stormwater on the site. Janice asked how deep the basement was going to be in the areas where the groundwater was found at 6-7 feet deep. Aren't basements usually about 8 feet deep? Mark replied that it was 6-7 feet to groundwater from the present ground level, but with site grading the condos will be built about 3 feet higher, out of the groundwater. Jane Carpenter said she had asked before if Brock Way Lane would receive any runoff from this project, and they have responded no. Does that include the intermittent stream, the culvert under the road? Brock Way Lane is their only way in and out, they cannot take any additional water and flooding. Jack reminded her that the applicant cannot make the situation any worse, but they do not have to make it any better. Mrs. Carpenter stated that Natural Heritage & Endangered Species Program and the Connecticut River Watershed Council were involved with the development of Brock

Way Lane, because of Stony Brook. She suggested that the Commission get these two groups to review and approve these plans as well. The Commission discussed with Mark the continuation of the public hearing, and how much time he needed to respond to the third party review comments. Mark said he preferred August 17th to the 3rd and 24th. Dennis made a motion to continue the hearing to August 17th at 7:30 PM. Brad seconded, and all voted in favor.

8:55 PM OLD & NEW BUSINESS, continued. Minutes. Not all the Commissioners had a chance to look at the minutes, so approval postponed to next meeting. Gloria MacPherson present to discuss status of *Mountainbrook* subdivision. She will submit a summary of the wetland restoration project, for the file.

9:00 PM ADJOURNMENT. Jim made a motion to adjourn, which was seconded by Brad, and all voted in favor. Next regular Conservation Commission meeting will be August 3rd at 7 PM.

Respectfully submitted,

Janice Stone,
Conservation Administrator

Materials distributed or reviewed during the meeting for decision-making. They are all filed in the folders of the relevant project.

1. Administrator Notes for 7/13/11 meeting (in notebook with Conservation Commission Meeting Agendas and Minutes).
2. Excerpt from MACC Handbook on Conservation Commission voting, and sample Arboretum vote language (in Arboretum file).
3. Set of Plans dated 4/15/11 showing proposed development of 31 condominiums at Rivercrest off Ferry Street, in office for review and in Rivercrest file # 288-409.
4. Copy of Plan showing Design for Septic System for John Healey, lot 67 Brock Way Lane, revised July 20, 1991 (submitted by L. Carpenter). In Rivercrest file # 288-409.
5. Set of 7 4"x 6" color photos of flooded conditions on and off Ferry Street, labeled on back (submitted by R. Ternbach). In Rivercrest file # 288-409.
6. Handout listing Recommended Actions for Conservation Commission in South Hadley Comprehensive Plan Implementation Matrix (in Comprehensive Plan file).
7. Copy of new ATV (OHV) regulations, for Commissioners to read for future reference (in ATV folder).