



Town of Merrimack, New Hampshire

Community Development Department

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Planning - Zoning - Economic Development - Conservation

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MERRIMACK CONSERVATION COMMISSION

SEPTEMBER 16, 2013

MEETING MINUTES

A regular meeting of the Merrimack Conservation Commission was held on Monday, September 16, 2013 at 6:33 p.m. at the Merrimack Memorial Conference Room.

Chairman Tim Tenhave presided:

Members of the Commission Present: Matt Caron, Vice Chairman
Ron Davies
Thomas Lehman
Gage Perry
Simon Thomson

Members of the Commission Absent: Councilor Thomas Mahon
Lauren Kras, Alternate
Robert Croatti, Alternate

Also in Attendance: Dan Tinkham, V.P./Sr. Hydrogeologist, Emery & Garrett Groundwater
Bernard Plante, Melton Associates
John Heavisides, Meridian Land Services

PUBLIC COMMENT

Chairman Tenhave requested those present to speak on the YMCA/Melton Associates projects provide hold their input until the item comes up on the agenda.

APPOINTMENTS

1. Merrimack Village District/Emery & Garrett Groundwater: Mitchell Woods – potential Production Well

Commission to discuss and potentially take action on the creation of a public drinking supply well at Mitchell Woods.

Mr. Dan Tinkham, Vice President/Sr. Hydrogeologist, Emery & Garrett Groundwater, stated Emery & Garrett has been working with the Merrimack Village District (MVD) for some 20 odd years exploring and finding ways to protect the groundwater resources that make up the water supply for the Town of Merrimack. A recent project is the development of a new public water supply well at the Mitchell Woods site.

Emery & Garrett was involved with the study to identify new sources of bedrock and/or sand and gravel water wells that could be developed as new portable supplies for the Town. One of the sites focused on was the Mitchell Woods Conservation Area. They appeared before the Commission to discuss the concept of developing a public water supply on the conservation land and to consider the pros and cons of doing so. There was general agreement that it was a very compatible land use, e.g., groundwater supply requires a wellhead protection area/contributing area where the water comes from, which has to be protected. The idea of it being surrounded by a conservation easement is very attractive.

Testing was performed to evaluate the aquifer, which identified a location where it is believed a public supply well could be developed. They returned to the Commission and were granted permission to put in a larger diameter test production well. The well was pumped for a total of 7 days at an average rate of 320 gallons/minute in accordance with the very detailed preliminary hydro study report submitted to the New Hampshire Department of Environmental Services (NHDES). NHDES has strict control over all potential impacts of a new water supply well

on other water resources and users. A very substantial final report was submitted to the State, a process of review conducted, and questions/concerns addressed. At this point, conditional final approval to develop a public water supply on the property has been obtained. However, there are several conditions that have to be met.

The protection of the wellhead Sanitary Protection Area (SPA) has to be guaranteed (400' radius). Land in the 400' radius around the production well has to be left in as close to a natural state as possible and has to be under the control, by ownership or perpetual easement, of the MVD.

Mr. Tinkham provided a handout detailing the properties of interest and noted the 400' SPA goes into the Merrimack Town Forest property (Watkins Forest). An agreement would have to be reached so that MVD has control over the 400' radius so that nothing could occur in the area to put the water supply at risk, e.g., everything in that area has to be related to the withdrawal of groundwater.

Mr. Tinkham stated his belief MVD would draft agreement language based on other SPAs NHDES has approved within the State. That would likely be submitted to the Commission for comment/agreement. He added every conservation area has a different set of restrictions, and the need exists to ensure they could continue on with the requirements of the State and the groundwater supply protection and also meet the needs of the Commission, which he feels comfortable can be done.

Access to the site is required. One of the conditions NHDES will require is long-term groundwater monitoring of the groundwater level. There is always concern of wetland impact when pumping a large supply well. NHDES has required a groundwater level monitoring plan. The monitoring wells already exist in the area. Three automated water level recorders would be installed in those existing wells and would record a water level every two hours or so. These recorders would be reviewed periodically.

The other requirement related to water level monitoring is to have a Wetland Specialist develop study plots that they can do one year ahead of the actual withdrawal of groundwater. The wetland specialist would catalogue all of the species, take note of any particular species that may require high water levels, and put together a monitoring program. As part of that program they would go out 2-3 times a year and perform the same survey so that they can achieve a baseline study of all three plots. After the well is online, they come out every year to see if there are any negative impacts occurring. Emery & Garrett have stated within their report what they believe impacts would be. They believe they would be pretty negligible. They have based the sustainable capacities they believe they can take out of the well on those impacts. Agreement is required to allow the Wetland Specialist access to monitor the three wetland plots.

The Commission was provided with a copy of the list of items that have to be addressed in terms of development of the site for a groundwater supply well. The MVD would need full-time access to the wellhead. There would have to be a permanent access road to the well site. There has to be some sort of a pump station somewhere on the property to get the water into the system. Most of the infrastructure would be closer to the entrance to the site. The Commission and MVD's engineers would determine the footprint of the building, fencing for security, etc.

The desire exists to sample for one more parameter that was not included in the list during the long-term pumping test, which would require access.

Commissioner Perry questioned if the proposed well would be similar in size to the test well. Mr. Tinkham stated they could use the existing 8" test well; however, may propose a larger well. They could function with the 8" test well; is designed properly for a public water supply well in New Hampshire. It somewhat depends on the engineering requirements of the system, e.g., how they will get water into the system and the pressure of the system. The question of whether a new larger diameter well is needed would be posed of the engineers. If needed, the belief is it would likely be within 10' of the existing well.

Commissioner Perry questioned the requirements placed on the road, e.g., what type of vehicle has to be supported. It was noted a large drill rig was brought in to put the production well in place without issue. There are a few wet areas (muddy), which may result in the road being built up. Regular vehicular traffic would be utility vehicles, and on a rare occasion a large truck. When asked, Mr. Tinkham stated his belief the most likely scenario is that water would be carried out to Mitchell Drive. There are pressure considerations at that end of the MVD system, which the engineers will have to address and determine the most suitable location for water to be placed in the system.

When asked whether the pump house would be relatively close to the wellhead, Mr. Tinkham responded placement would depend somewhat on the Commission's desires. Early discussions indicated a preference to located it near the entrance so that any building, fencing, etc. would be located near the houses and away from the pristine part of the site. He reiterated NHDES requests the 400' radius be kept in as natural a state as possible. Walking trails, etc. are permitted. Forestry projects are typically done on a specialty basis providing fueling (chainsaws) occurs offsite.

Chairman Tenhave commented a new wellhead protection area would be established. Mr. Tinkham remarked the wellhead protection area would include this site and go out into the neighborhoods. That is an area where MVD would focus education efforts for the population. It is also used as a land use planning tool for municipalities. Chairman Tenhave noted it would have an impact on zoning ordinances.

Chairman Tenhave questioned forestry efforts and noted the Watkins Forest is primarily there to provide income for the school district. Mr. Tinkham stated his belief an agreement could be worked out with NHDES; however, there would have to be some kind of protocol that would disallow a log landing or fueling within the SPA, minimal vehicular traffic, etc. Chairman Tenhave stated that discussion would have to be had with the Trustees of the trust fund who manage that property.

Mr. Tinkham informed the Commission he has already received a waiver from NHDES to leave out of the SPA the two corners of the private parcels that are off to the southeast as the area is in a natural state protected by the very fact that it is a wetland.

When asked about the quality of the water and how much it would impact the well, Mr. Tinkham stated very good water quality was found during the pumping test. There are concerns about periods of increasing iron near a wetland; however, in this location they believe they are getting a small amount of water through the bottom of the wetland and do not expect to see chemistry being a large issue in terms of degrading water quality.

Commissioner Perry remarked in the '70s the stream that feeds the area had issues with E. coli. Mr. Tinkham stated MVD would have to monitor the system as they do all systems. They do not believe it will be an issue as they are about 150' from the wetland boundary and the screens start at a depth of 45-35' below ground. They expect minimal amount of leakage through that wetland because it is so rich and has so much organic material. He added it is likely the larger impact on any kind of flow or chemistry would be on the stream leaving the ponded wetland and following that small tributary up to Baboosic Brook. That is an area with less organic material. The underlining geology there is very favorable, e.g., glacial lake bottom clays and silts, which should prevent any kind of infiltration from carrying something like E. coli down to the well.

At present, it would be approved as a seasonal well; maximum 45 million gallons/year withdrawal (NHDES stipulation) likely just to take care of peak flows at certain times of year when MVD needs it. The aquifer is not extensive enough to support a full-time well year round at 300 gallons/minutes.

Chairman Tenhave noted the Commission should expect to receive feedback from MVD regarding language for an agreement. Since forestry projects are periodically conducted (every 10-15 years), the location of the pump house would have to be where access would remain to support forestry operations on Watkins forest. Vice Chairman Caron noted the current log landing is within the 400' area. Commissioner Lehman stated a desire for agreement language to include a statement to address who would be responsible for the removal of the pump house in the instance the well is abandoned at some point in the future.

Commissioner Perry will make arrangements with Mr. Tinkham to provide access to the property to conduct he additional sample testing requested.

STATUTORY/ADVISORY BUSINESS

1. YMCA/Melton Associates – 2 Projects

Review for recommendation to the Planning Board:

- a) Of a site plan application for a proposed 57-unit Elderly Housing development, Community building & related site improvements in the R (Residential) District, located on D.W. Highway, between Island Drive

and Angelo Drive. Parcel is located within the Aquifer Conservation District, the Flood Hazard Conservation District, and the Shoreland Protection District. Tax Map Parcel 4D-4/043-1.

Mr. Bernard Plante, Melton Associates, informed the Commission Melton Associates is a contract purchaser of an 8.4 acre property located between D.W. Highway and Horseshoe Pond, Angelo Drive, and Island Drive. The project was last before the Commission in August of 2006. The Planning Board approved the project in February of 2007. The only change to the plan relates to the number of units (previously 61 units).

Being proposed is a combination of two 16-unit buildings (2 and 3-story rectangular buildings with surface and carport parking, closer to D.W. Highway), twenty five units of 1 and 2-story buildings in duplex, triplex, and quadruplex configurations between the access road that will connect Angelo Drive to Island Drive and Horseshoe Pond and then several units up top as well as a clubhouse facility.

The project includes some dredge & fill in the area where Naticook brook flows under D.W. Highway, under the access road, and into Horseshoe Pond. Historically the access road was used for farming purposes. In the early '70s the Town constructed an 18" sewer line directly through the site. In order to construct the sewer, triple culverts had to be placed underneath the access road. The culverts have deteriorated (rib steel construction). The intent is to excavate some of the silt that has built up, remove the silt that exists in the triple culverts, re-line the culverts, and place headwalls on each end. The prior Dredge & Fill Permit expired and has been re-issued. Alteration of Terrain (AoT) and Shoreland Protection permits have also been issued.

The Planning Board raised a concern relative to porous pavement; that it be maintained in accordance with the professional hired to devise the plan and specifications for its construction. The current plans have changed from those presented in 2006 by reducing the well under the porous pavement construction from the original proposal of 4' to 18", which is merely a reflection of greater knowledge of use and maintenance of porous pavement. Concerns were also raised around the amount of Milfoil and phosphorous currently making its way into the pond. The Board wished to be assured construction would not create additional problems for the pond. As a result, the services of Bob Prokop, Wetland Scientist and Wildlife Biologist were obtained. Mr. Prokop was tasked with working with the landscape architect to devise a plan to address the concerns raised regarding the amount of cutting and type of vegetation proposed between the single and two-level units and Horseshoe Pond.

Mr. Prokop has recommended the existing vegetation cutline behind the houses, closest to Horseshoe Pond, be reduced 5-10' from the original plans, to minimize the amount of grass in the area and add 26 cherry trees, the use of zero phosphorous fertilizer, and provided a turf and water quality management plan, which will be implemented into the project and incorporated into the Declaration of Condominium Rules and Regulations. Placards will be placed along the area to prevent cutting. A landscape design has been created that requires little maintenance, will be attractive, and requires no fertilizer.

Chairman Tenhave requested clarification on how stormwater is and will be handled onsite. Mr. John Heavisides, Meridian Land Services, noted the existence of onsite structures; one on Angelo Drive and another near D.W. Highway (catch basins). They are piped straight through the parcel and outlet down the embankment. The proposed system maintains those two pipes (realigned) and proposes the addition of stilling basins to fix the outlets. Onsite stormwater runoff is kept onsite; recharged back into the ground. There are two large infiltration basins underneath the pavement (made out of storm chambers; arch type systems). Those were designed without the credit of the porous pavement. With the porous pavement, there will be no discharge from the site even in a fifty year storm. The existing triple culverts will be relined and headwalls put in place.

Chairman Tenhave questioned whether a mechanism would be in place to allow small critters access through the culverts. Mr. Heavisides stated the inverts of the culverts would not be changed. They will be lined and will lose about 2" in diameter, but will have the same or greater flow capacity. Critters can still swim through them. They are relatively level (4' in diameter). The headwall will be constructed around the existing culverts and the embankment will be filled in behind it. Headwalls were necessary to construct a road, which meets Town standards, to go over it and keep the impact out of the wetland. The headwalls will be up above the culverts. There will be no gaps behind the headwall.

In 2006, the Town's shoreland protection ordinance prevailed over the State's. The Town's ordinance called for a maximum impervious cover of 20%. In 2008 the State revised the Shoreland Protection Act; allowing for a maximum impervious cover of 30%. The Town eliminated its ordinance in favor of the State's. However, the project remains at 20%.

Commissioner Lehman questioned who would be responsible for submitting an annual report of stormwater maintenance procedures to the Community Development Department once the project is completed. Mr. Plante stated the requirement will be an obligation of the condominium association and provisions to provide for that will be built into the budget. He added it will likely be that Mr. Heavisides is contracted to perform that work.

Mr. Plante noted the issue of snow storage was discussed during the Planning Board review. As a result, specific snow storage areas were added to the plan. It was noted there will be some de-icing compound used onsite.

When asked how the rules would be translated from the plans to the condominium association, Mr. Plante stated, under Planning Board approval in 2006, which will repeat itself with this approval, certain aspects of the Declaration of Condominium Rules and Regulations must be reviewed and approved by the Town's legal counsel. It specifically speaks of fertilizer, maintenance of porous pavement, pesticide use, and salt and sand use.

- b) Of a site plan application proposing the development of athletic fields, bathrooms & maintenance structure, related parking & appurtenant improvements in the R (Residential) District, located off Wright Avenue at 381 D.W. Highway. Parcel is located within the Aquifer Conservation District, the Flood Hazard Conservation District, and the Shoreland Protection District. Tax Map Parcel 4D-3/092.

Mr. Plante commented, with one exception that came about as a result of a request made by the Planning Board, the plan remains as it was when reviewed by the Commission in 2006. The one change was in the alteration to Field 1; 90' baseball diamond configuration was changed to a softball configuration, which allowed for home plate and the right field line to be moved 50' further away from Horseshoe Pond. Proposed are six (6) athletic fields with 155 parking spaces (gravel lot). The site is relatively flat with the exception of loam piles along the railroad track. The site fronts on Horseshoe Pond. An Alteration of Terrain (AoT) and Shoreland Protection Permit was issued.

Chairman Tenhave questioned how water would be managed onsite. Mr. Heavisides stated runoff from the fields would be routed over to a stilling and recharge basin that will allow water to infiltrate in. There is also a long, wide swale that will function in the same way. There are no structures, just sheet flow to swales to let it slowly move over to the basin and out into Horseshoe Pond or down into the ground. When asked about the capacity of the swale, Mr. Heavisides was unsure; however, noted with the AoT they cannot increase the 10-year flood and are supposed to look at the 25-year and 50-year. He stated his assumption it would be close to the 25 and 50-year flood capacity.

When asked about the fertilizer schedule, Mr. Plante stated Note #9 on Sheet 2 of the Plan details the use of low phosphate slow release nitrogen fertilizer. A requirement of the Shoreland Protection Permit is for application by a licensed professional. The intent is to develop fields 2 and 3 during Phase I of the project. The fields would be developed by the Manchester YMCA, and would be used for their summer camp program, which runs from mid-June to the third week in August. The YMCA has had discussion with the Merrimack Youth Association (MYA) and a few local schools regarding sharing use of the fields in the spring and fall.

Six (6) pavilions are onsite. They are open-air and approximately 15' x 15' poured concrete slab with posts holding up a hip style roof. The purpose is to protect the YMCA children in the summer in the instance of thunderstorms. The 24' x 24' storage building (concrete masonry) will be utilized for equipment storage and bathroom facilities and will be connected to existing sanitary and water service on Wright Avenue. Lighting is not being proposed at this time. Tree planting will occur; White Pine will be transplanted to create shields along the perimeter.

John McDonald, 19 Pondview Drive

Stated he is opposed to the projects. Noted Horseshoe Pond is an oxbow lake of the Merrimack River. As an oxbow lake it is affected by the Merrimack. The Naticook Brook enters and exits Horseshoe Pond. The Merrimack River usually experiences spring flooding, although it has not in the past few years due to the level being lowered as a result of dam work being performed in Lowell. That project will come to an end and once again seasonal backflushing into Horseshoe Pond will occur where the elevation rises above where it is seen today (5-6') and in a spring with a lot of snow it may go up as high as 8'. During the Mother's Day flood of 2006 (100-year flood) the water level reached an elevation of 118'. Less than a year later in April of 2007 the pond

raised to an elevation of around 2' less. Those types of events serve as a reminder that Horseshoe Pond is part of the Merrimack.

Reverend Wright gifted the land to the Manchester YMCA in 1971. As part of that gift he stated a wish for the land to be used for agriculture, recreation, and conservation. It was for the benefit of the youth of Merrimack and surrounding towns. In 2003 an agreement was reached between the Applicant and the YMCA that divided off 8 acres for the elderly development.

There are approximately 6.5 acres of buildable acreage. Mr. McDonald provided a drawing depicting the areas of hard surface, and remarked the porosity of porous pavement versus non-porous pavement can be debated depending on how it is installed and maintained; however, it remains a hard surface. He remarked what falls on that property for stormwater and what it does for the environment will be replaced by a good deal of hard surface.

He highlighted the 150' woodland buffer, and noted language within the Shoreland Water Quality Protection Act, which reads "at least 25% of the area between 50' and 150' from the reference line must be maintained in an unaltered state." He questioned whether 25% will be unaltered when all of the housing and landscape is in place. He suggested what is being proposed is too much on too small a piece of property in too sensitive of an area. He stated that to be one of the major ecological concerns of his and his neighbors.

Another area he believes the development is not addressing appropriately is that of stormwater. Drawing 4 shows an existing culvert that goes to a catch basin over to the wetlands. Mentioned by the engineer is another pipe that goes to the wetlands from existing catch basin 3, which is at the end of Angelo Drive. It is his belief that pipe ends just beyond the end of Angelo Drive. The document indicates a swale that runs from there to about 100' into the wetlands. The Google drawing used highlighted the natural flow of stormwater as it currently occurs. Under the right conditions, the stormwater enters onto the property. The property does a good job of taking care of the water as indicated by the growth.

The proposal is to take the existing 30" galvanized pipe, bend it, move it some 80' closer to Horseshoe Pond and then improve on the outflow with a basin area. If overflow were to occur anything that falls into the retainage system will eventually find its way into that same pipe and back into the wetlands. Catch basin 3 at the end of Angelo Drive would be a pipe of undetermined size that will go into a headwall and then into the wetlands. He has posed the question of why it wouldn't be tied into the closed system, given there is a catch basin within approx. 25'. The outfall enters into Naticook Brook within the 50' primary building line buffer. Anything that overflows retention system 2 will go out and into the wetlands. It was noted there have been changes to the design of the porous pavement, which he does not believe have been reviewed to ensure there are no problems with placing porous pavement over the retention system.

He spoke of the amount of water entering the property from neighboring properties. He suggested the 30" galvanized metal pipe is not a solid pipe and that in normal events likely leeches into the ground and in higher events works like the retention system being proposed. It won't work like a retention system under the development because it will be a new plastic pipe. Everything will flow better through it and head towards the pond.

He reiterated his concern the project is too large on too small of a parcel in too sensitive of an area. He spoke of concerns with whether the development can be built and maintained safely. He suggested if the development is allowed to be constructed as designed, there will be issues with enforcement.

Bob Shagoury, 71 Island Drive

Remarked over the past 15-20 years there have been a number of floods. The bridge going from D.W. Highway to Horseshoe Pond was rebuilt and raised 10'. During a storm a few years back the water level raised 10' above that. With the rising waters kerosene, oil, etc. came onto the land and into the pond. Recently they have experienced oil spills from the hotel and an oil band around the island on the opposite side of his residence into the pond.

He stated his concern with that as well as the safety factor where they are proposing the road to come from the development into Island Drive. That road is not wide enough to handle buses, trucks, etc. In the event of an emergency, he is concerned emergency vehicles will not be able to gain access. He stated his opposition to the development in its current configuration. He added, during the Planning Board meetings several years ago, there

were a number of open issues that were stated, which he has not yet seen addressed, e.g., slope of road, speed, width of road from 24' to 22', etc.

Russell Scheider, 71 Pondview Drive

Has lived in Merrimack since 1941, has fished Horseshoe Pond since the age of 10, and knows the property probably better than anyone else in town. He commented Mr. Heavisides alluded to the fact there was likely some subterfuge when Reverend's Wrights will was broken. Nobody had the opportunity to see the postings and none of the abutters were aware a court date had been set to discuss breaking of the will. They retained legal counsel back in 2006. He commented if you have not seen Wright's field under several feet of water you have missed something. He spoke of the trust for the Patterson land and the posting of a sign referring to the field where the ball fields are proposed as Wright's Pond; alongside Wright Avenue just before crossing the tracks.

He stated the land where the elderly housing is proposed slopes downward and into the pond; down from Greeley Street and the hill up by the F.E. Everett Turnpike. It all flows into the pond, which is a dying pond. It has problems each year with chemicals, Milfoil, E. coli, etc. He does not believe it can handle any more.

He noted Melton Associates has stated the responsibility of the fields to be that of the Manchester YMCA. He commented no one from the Manchester YMCA was present to address the fields nor were they present in 2006. He stated his belief the fields will never be built. He added the hill above where the fields are proposed is a problem with traffic congestion and is a blind area where he believes more fender benders have occurred than anywhere else in town. The additional traffic that would be generated by the construction of the elderly housing would only exacerbate the problem. He suggested there to be no way the development would be an asset to the Town of Merrimack. He added the residents at Horseshoe Pond and on Island Drive are vehemently against the development.

Wayne Johnson, 79 Island Drive

Echoed comments made regarding the level of density for the area. He strongly encouraged the Commission to conduct its own research on porous pavement. He conducted research back in 2006. At the time, a pilot application of work done over at Pennichuck Square was used as a shining example of the technology. He poured onto that pavement several gallons of water, which remained on the pavement for over ½ an hour. He did not find it to work. Although it has been stated the product has improved, he encouraged the Commission to look into it further.

He spoke of concerns with traffic given the design (as proposed in 2006) calls for a one-way road coming in off D.W. Highway traveling down over the culverts, which have been under water several times over the past ten years. He also spoke of the stress placed on the pond.

He remarked a commitment has not been made with regard to the number of ball fields that will be built. He is of the belief two are proposed with the option of additional fields; although he does not believe construction of additional fields will come to fruition. He spoke of flooding that occurs in the area and the fact the area is infested with ticks, and questioned how that would be addressed. He requested the Commission not support the project, and noted, back in 2006 the vote of the Planning Board was 7/6; clearly not overwhelming support.

John McDonald, 19 Pondview Drive

Can see where the ball fields fit into what Reverend Wright had in mind for the land, and believes it a good and proper thing to do. However, he also believes it to be a stretch and something that raises questions to talk about 5-6 ball fields yet propose plans to construct only two. He echoed comments made about flooding. He spoke of the numerous ball fields within Merrimack, stated his belief there is no shortage of fields, and suggested the Town may not want to participate in getting the other three ball fields built, which is something he believes the Applicant was counting on.

Chairman Tenhave questioned the will of the Commission.

Commissioner Perry spoke of the difficulties with the section of road where the housing is proposed; however, acknowledged the role of the Commission is not related to traffic. He spoke of flooding that occurs in the area of the fields during the spring and noted no indication of intent to raise the area. Chairman Tenhave questioned

whether irrigation would be placed on the fields, and was informed there is an irrigation plan, which would rely on MVD. Although the ideal situation would be the use of Horseshoe Pond, that permitting has not been applied for or considered. Commissioner Thomson stated his concerns with density and adherence to the requirements of the Shoreland Water Quality Protection Act. That combined with flooding that occurs onsite makes it difficult to recommend the project go forward.

Commissioner Lehman questioned the density, and whether it truly is 25% of unaltered vegetation in that woodland buffer and noted specific concern with the stormwater management based upon the amount of impervious surface within that Shoreland Protection Area. He requested someone from the Town reassess that part of the plan. If greater than 25% there are requirements for the specific flow rates and volume for the stormwater to be managed differently.

Commissioner Perry questioned whether the calculation was considered during the reissuance of permits. Mr. Plante responded Stantec, at the request of the Planning Board, has re-reviewed the plans, particularly the porous pavement section and other small modifications, and a letter has been received from them stating, with a few modifications, they would be all set. The density permitted in the zone is 8 units/acre or 66-67 units. Proposed are 57 units. Commissioner Perry questioned whether there is a way to maintain stormwater recharge, and was informed there are access ports. Mr. Plante explained the first line of defense is in the catch basins, which have sumps. The sumps are cleaned to prevent silt from getting into the recharge chambers.

Vice Chairman Caron commented often times the Commission hears of the 100-year storm as a positive in terms of the capability of stormwater systems. The reference used in this project was a 25-year storm. Mr. Heavisides remarked he does not like to oversell a system or boast up to the 100-year storm. They have checked through the 50-year storm and the system works. The porous pavement has been re-reviewed by Santec. Originally the design called for almost 4' of stone underneath the asphalt. The system was recently designed to meet the UNH standards. The only request made by Santec was to be more specific about the stone size and specifications as to the different layers of stone. The drainage system was designed not taking into consideration the porous pavement, and it works up through the 50-year storm. If porous pavement is taken into account, he is confident the system would work well beyond the 50-year flood.

Addressing comments made regarding offsite drainage coming down through catch basins 4 and 3 Mr. Heavisides stated catch basin 4 discharges through the site and might collect the entire area shown. They are not adding to that system. They are just re-piping it through and putting in a stilling basin at the end of the pipe to help dissipate the energy before it goes into the wetland. Catch basin 3 does not end just beyond the end of the road. The outlet was found down near the pond. They are simply straightening that run out after identifying a kink in the line. All proposed drainage will be recharged onsite. Back in 2006, when recharging was being proposed, it was not a requirement of the State. With the change in rules for the AoT that occurred in 2008/2009 onsite infiltration is required. You cannot increase the amount of runoff or volume from your site. This project was actually ahead of the curve and still meets those requirements. When it was re-approved, they were not required to update the design as it meets current design requirements.

The porous pavement area and the soils in that area are such that the soil can take just as much rain as can go down onto it. One of the key factors to sizing porous pavement is determining much and how quickly the soil can absorb water so that whatever hits and goes down through the pavement will make it into the ground. Vice Chairman Caron spoke of the amount of non-porous area (roof space, etc.). Mr. Heavisides responded in the section along the porous pavement, driveways and sidewalks are also porous pavement. Mr. Heavisides noted the road referred to as a one-way road is in fact an emergency access road.

It was the consensus of the Commission to recommend the following stipulations be placed upon project approval:

- 1) Notes included on the plan become part of the Declaration of Condominium Rules and Regulations, that language be included to address enforcement, and that the Declaration be reviewed/approved by the Town's legal counsel**
- 2) Applicators of de-icing compounds be Green SnowPro Certified**

The Commission wished to express a particular concern with the density of the site.

The Commission recessed at 9:17 p.m.

The Commission reconvened at 9:25 p.m.

NEW BUSINESS

1. Wildcat Falls Bridge/Trail Project

Commission to review and potentially approve a bridge/trail project at Wildcat Falls.

Commissioner Thomson stated the intent of the project is to construct a loop trail on a portion of the property that does not get as much use as others. There is a framework in place for a trail; however, to connect it back up to the main portion of the property requires a brook crossing. The proposal is to construct a bridge. A quote was received from Reeds Ferry Lumber (not to exceed \$250).

The Commission agreed a snow rail be added on either side (2 x 4) and that the reinforcing bars be a minimum of 4'.

Chairman Tenhave questioned whether the bridge would support snowmobiles. Vice Chairman Caron stated there is no manner for a snowmobile to gain access to the area and the bridge would not have a width that could support snowmobile crossing. Signage will indicate non-motorized use only.

Raw lumber will be delivered and cut and assembled onsite. The generator used to power the tools will be stored in the trailer, and a tarp will be placed to capture sawdust.

MOTION BY COMMISSIONER PERRY TO ACCEPT THE PROPOSAL AS AMENDED AT A TOTAL COST NOT TO EXCEED TWO HUNDRED FIFTY DOLLARS (\$250.00). SOURCE OF FUNDING IS FUND 51

MOTION SECONDED BY COMMISSIONER CARON

MOTION CARRIED

6-0-0

OLD BUSINESS

1. Grater Woods Sub-Committee Charge

Commission to continue its discussion on establishing a Sub-Committee for Grater Woods.

The review will include the Charge for the Sub-Committee, membership, etc.

It was noted Vice Chairman Caron and Commissioner Perry incorporated into the draft language comments/suggestions made at the previous meeting. Commissioner Lehman further amended the document (dated September 11, 2013) with the intent of streamlining, e.g., eliminate language that was redundant and/or incorporated as part of the plan itself. Commissioner Perry noted some of the information removed from the version dated September 5, 2013 was incorporated based upon recommendations made by Councilor Mahon.

Commissioner Lehman reiterated the desire to remove language he believes unnecessary and which makes the document a difficult read. He noted Commissioner Davies previously stated a desire for a more simplified format. Commissioner Perry noted the draft version dated September 5, 2013 is in a similar format to that of the Charge of the Wildcat Falls Sub-Committee. Commissioner Lehman stated a desire for a standard format; one which would be concise and easily read and understood.

Vice Chairman Caron spoke of the number of volunteers wishing to participate, and stated his opinion the Charge does not need to be included in the advertisement; however, does need to be inclusive. He stated the Commission previously reviewed draft language and reached consensus on amendments, which have been incorporated into the September 5th version. Commissioner Lehman stated disagreement and clarified the Commission discussed amendments to a previous version and tasked members with incorporating those amendments. He did not believe the Commission agreed with the overall format and in fact some members had requested the format be condensed.

It was noted the Charge could be re-addressed at the request of the sub-committee or by the will of the Commission.

**MOTION BY COMMISSIONER TENHAVE TO AMEND THE SEPTMEBER 5, 2013 VERSION BY ADDING PAGE NUMBERS, BY REPLACING THE WORDS "PURPOSE, MISSION & CHARGE" WITH THE WORD "PURPOSE", IN THE FIRST SENTENCE OF THE FIRST PARAGRAPH ON PAGE 2 BY REMOVING THE WORD "THE" BEFORE THE WORDS "FULL-TIME MEMBERS" AND REMOVING THE WORDS "AND ALTERNATE", BY ADDING A NEW LINE BETWEEN THAT PARAGRAPH AND THE PARAGRAPH THAT BEGINS WITH "ALTERNATE MEMBERS WILL SERVE ONE-YEAR TERMS", AND IN THE LAST PARAGRAPH ENTITLED "ORGANIZATION OF COMMITTEE" BY CHANGING THE TITLE "WORKING SUB-COMMITTEES" TO "WORKING AD-HOC COMMITTEES", AND ACCEPT THE CHARGE AS AMENDED
MOTION SECONDED BY COMMISSIONER CARON**

**MOTION BY COMMISSIONER LEHMAN TO FURTHER AMEND IN THE SECTION ENTITLED "MEMBERSHIP" BY ADDING THE WORD "ONLY" AT THE START OF THE FIRST BULLET, WHICH READS IN PART "ONE MEMBER OF THE CONSERVATION COMMISSION TO SERVE"
MOTION SECONDED BY COMMISSIONER THOMSON**

ON THE QUESTION

Commissioner Lehman stated a desire for new members and to avoid members of the Commission making up the composition of the sub-committee. Vice Chairman Caron stated his recollection was a decision not to limit participation by members of the Commission, if elected. Commissioner Lehman noted it is the Commission who appoints members to the sub-committee, and he would not want to see more than 1 member of the Commission appointed. Vice Chairman Caron stated he would not want to restrict members of the Commission from requesting and making a case for membership.

When asked if the possible instance of a sub-committee membership being made up completely of members of the Commission has occurred in the past, Vice Chairman Caron stated it has; the last Grater Woods Sub-Committee consisted of three members of the Conservation Commission, which was the result of not having available volunteers.

MOTION FAILED

1-5-0

Commissioners Caron, Davies, Perry, Thomson, and Tenhave voted in opposition.

Vote on the main motion to amend and accept as amended.

MOTION CARRIED

5-1-0

Commissioner Lehman voted in opposition.

Vice Chairman Caron recommended the Board conduct interviews with interested parties at its October 7th meeting. Chairman Tenhave stated concern with the amount of business, which would be before the Commission at that meeting. After a discussion of the process to be utilized, the concern expressed regarding the timing of formation of the sub-committee, and the number of contacts already made by interested individuals, the ***Commission reached agreement; the openings be posted and interested parties be requested to submit a letter of interest, e.g., full or alternate member, inclusive of residency information and any particular skillset that makes them well-suited for membership, no later than October 1st. Applicants will be interviewed at the Commission's October 7, 2013 meeting.***

Given the lateness of the hour, Item #2 was postponed.

2. Grater Woods Follow-On Projects, RFP, Appendix E items

Commission to potentially take action on an RFP for work that addresses some of the projects in Appendix E of the Grater Woods Stewardship Plan. Commission to also discuss how it wishes to proceed on the other items in Appendix E not included in the RFP (Gates, Beebe Lane access).

3. Red Maple Trail and Conservation Drive Project at Grater Woods

Commission to hear update on the Red Maple Trail and Conservation Drive improvement at Grater Woods. Commission to discuss and potentially take action on any closing activities needed for that project.

Commissioner Perry commented he was on the trail at 9:00 a.m. the prior Sunday and came across 8 people utilizing the trail. Vice Chairman Caron stated a similar experience.

Chairman Tenhave stated the total project cost to have been \$30,900. The original estimate was \$26,500. A Change Order was received (\$3,400) to increase the yards of gravel required and the addition of loam and seed to the slope (\$1,000). The project is not complete. The process of getting a gate on the property continues. The gate will be situated to accommodate all allowable uses.

Commissioner Lehman stated a desire for two gates to be placed onsite (additional gate on section of trail marked as off-limits for motorized use). Chairman Tenhave noted the agenda item would be included on a future agenda. Commissioner Lehman commented when he walked the entranceway he took note of the amount of erosion in the area of the downslope on the upside portion (ditch line). He requested Kyle Fox, Deputy Director, Public Works Department, visit the area, and questioned whether riprap or a similar product should be placed. Deputy Director Fox recommended a mulch mat, which would come at a cost of \$3,000 - \$5,000. He also suggested re-packing (rolling) the entrance area as it is soft and developing a rut line/washout line in the center. Commissioner Perry suggested a request be made for the area to be reviewed.

Chairman Tenhave suggested an area for location of a second gate. Commissioner Lehman noted the area to be that of the motorized access point. He stated concern with users starting up their equipment in the cul-de-sac area, due to the lack of parking down below, and suggested the access point be changed. Chairman Tenhave suggested Commissioner Lehman put together a proposal to be discussed at a future meeting.

PRESENTATION OF THE MINUTES

Merrimack Conservation Commission. June 17, 2013

The following amendment was offered:

Page 1, Line 47; replace the words "was sworn in" with the words "interviewed"

A review of the audio confirmed the words "sworn in" were spoken. Therefore, the proposed amendment was not made.

MOTION BY COMMISSIONER CARON TO ACCEPT AS AMENDED

MOTION SECONDED BY COMMISSIONER PERRY

MOTION CARRIED

5-0-1

Commissioner Tenhave Abstained

Commissioner Perry spoke of the discussion that took place at the June 17th meeting regarding soil testing for soils brought onsite at the sand and gravel pit located at 17 Twin Bridge Road. Commissioner Currier had questioned which Town employee would be designated to receive the information. Chairman Tenhave suggested the question be posed of Sue Holstein in the Community Development Office, and that any response be shared with the entire Commission.

Merrimack Conservation Commission. July 15, 2013

MOTION BY COMMISSIONER PERRY TO ACCEPT AS WRITTEN

MOTION SECONDED BY COMMISSIONER DAVIES

MOTION CARRIED

5-0-1

Commissioner Thomson Abstained

Special Merrimack Conservation Commission July 22, 2013

The following amendments were offered:

Page 8; just prior to "Adjournment" add the sentence "Chairman Tenhave stated the non-public meeting minutes were sealed during the non-public meeting."

Page 8; the Roll Call vote should be corrected to reflect Commissioner Lehman voting rather than Commissioner Thomson.

Page 6, Line 57; replace the word "re-bod" with the word "re-bid".

**MOTION BY COMMISSIONER TENHAVE TO ACCEPT AS AMENDED
MOTION SECONDED BY COMMISSIONER PERRY
MOTION CARRIED
5-0-1**

Commissioner Thomson Abstained

Merrimack Conservation Commission. August 19, 2013

The following amendments were offered:

Page 1; replace "Deborah" with "Debra"

Page 5, Lines 14 and 15; replace the word "bolder" with the word "boulder"

**MOTION BY COMMISSIONER TENHAVE TO ACCEPT AS AMENDED
MOTION SECONDED BY COMMISSIONER CARON
MOTION CARRIED
6-0-0**

PUBLIC COMMENT - None

COMMISSIONER COMMENTS

Commissioner Perry informed the Commission the beaver trapper has completed his intended work (captured 12). Chairman Tenhave stated his belief there is additional work to be done; however, stated further action would be discussed at a future meeting. Commissioner Perry noted calls have been received concerning beaver activity in other areas of Town.

Chairman Tenhave informed the Commission a representative from LLMP will be in attendance at the October 7th meeting. It was noted all necessary paperwork for the property located at 283 Continental Boulevard has been signed. The official process continues, and it is hoped the Deed will be stamped shortly transferring ownership of the property. Chairman Tenhave expressed his gratitude to Edna Patterson and her children.

Chairman Tenhave stated the need for the Commission to take up the Horse Hill Nature Preserve Sub-Committee membership as some terms have expired.

ADJOURNMENT

**MOTION BY COMMISSIONER CARON TO ADJOURN
MOTION SECONDED BY COMMISSIONER PERRY
MOTION CARRIED
6-0-0**

The September 16, 2013 meeting of the Merrimack Conservation Commission was adjourned at 10:33 p.m.

Submitted by Dawn MacMillan