

Town of Pelham, NH
Pelham Conservation Commission
6 Village Green
Pelham, NH 03076-3723

MEETING OF 09/09/15

APPROVED 10/14/15

Members Present:

Karen Mackay, Louise Delehanty
Kaela Law, Paul Dadak

Members Absent:

Lisa Loosigian, Paul Gagnon
Mike Gendreau

Co-Chairman Paul Dadak brought the meeting to order at 7:06 p.m.

NEW BUSINESS:

Map 36 Lot 10-358	52 Dutton Road – Proposed eight lot conservation subdivision with WCD impacts – Presentation by Joseph Coronati of Jones and Beach Engineers, Inc.
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Presentation by Joseph Coronati and Mike Garrepy.

The proposal is for an 8 lot conservation subdivision on a 10.3 acre parcel. Mr. Coronati and Mr. Garrepy have presented the yield plan to Planning. The proposed yield plan has been accepted for 8 lots. The proposed conservation subdivision is for 8 lots. The applicant is not requesting any bonus lots for the conservation subdivision. The applicant has requested to reduce their street width from 26 feet to 22 feet.

The open space after development will be 4.2 acres. Open space wraps all the way around the subdivision and borders all the properties. There are no wetland impacts. The detention pond will be located within the open space. The detention pond will impact 4,670 square feet of WCD. The impacts will be temporary. The area will be revegetated after the pond is built.

Topography slopes down, north toward Dutton Road and toward the east slightly. There is a wetland on the eastern border of the property that continues onto the neighboring property. All surface water currently heads toward Dutton Road. There is a ridgeline divide on the property which roughly runs along the proposed road. The road goes up the ridge line. Water falling on the east of the road will flow to the east into the existing wetland. The detention pond will be located at the front of the site along Dutton Road. A small portion of the pond is within the WCD. All house lots are outside the WCD buffer. The detention pond is pushed out of the WCD to the extent possible.

The front of the lot is scrubby vegetation with some lawn and trees. These will need to be removed for the construction of the detention pond. There is an old garage/barn that will also need to be removed. The pond is designed to be a dry pond. The pond will collect storm water then drain the water into the ground and exit the area through the culvert under Dutton Road.

A small ditch line on the outside of the detention pond directs flow from the hill around the pond into an existing culvert under Dutton Road. This design deals with the run off that is currently coming off the site. Storm water within the development will be caught in a series of catch basins along the road. The catch basins will direct the water into the sediment forebay then the water will spill over the berm into the detention basin. The sediment forebay will capture sediments before they go into the pond. All water then empties out of the pond to the area of the culvert under Dutton Road.

The detention pond is designed for the 50 year storm event. There are two methods for emergency overflow capabilities. The berm is designed to be lower in one area near the culvert. If the pond is too full, it will overtop in this one area. The other overflow capability is in the outlet structure itself. The elevation of the top of the pond is 210 feet. The elevation of the top of the emergency spillway is 209.5 feet. The emergency spillway directs where the pond overtops. The spillway is a depression in the berm that is filled with rip rap stone.

There are 6 catch basins on the road. The lowest catch basins on the proposed road are about 75 feet from Dutton Road. There will be no splash out of water from this subdivision onto Dutton Road. The grade slopes down 2 percent from Dutton Road to a point about 10 feet into the subdivision. This is an elevation change of about 2 inches over the 10 feet. Water from the edge of Dutton and the beginning of the proposed road will flow down into the subdivision. The proposed road is curbed so storm water is directed down the street into the catch basins and into the forebay. Curbing on the east side of the proposed road ends near the entrance to the forebay so water from the lower portion of the proposed road can drain directly into the forebay. There is one catch basin located on the west side of the proposed road near Dutton Road. Water entering this basin will not enter the forebay. The water will be piped under the proposed road and released near the culvert that crosses under Dutton Road.

All homes will be single family. There will be no cisterns on this property. Each home will be equip with a sprinkler system. Each home will have a 2 foot crushed stone pad around the house to promote water infiltration. This is designed to minimize overland flow. Water from the subdivision will be caught in catch basins on the road.

The land surrounding this property is already developed. Some storm water comes from off site as many of the neighboring properties are upslope from this property. Water exits the site through a culvert under Dutton Road. The culvert empties into a rocky channel across the street from the subject property. The channel is for drainage only; there is no flowing stream.

The wetlands were flagged by Jim Gove. There is no stream associated with this wetland on this property. The wetland is wooded. Currently, storm water fills the wetland then spills across the property to the culvert under Dutton Road.

Mr. Dadak recalled that some abutters had comments about drainage at the yield plan meeting. Steve Keach, the town engineer, explained how the drainage works on the site. He felt there would be no drainage problems on neighboring lots. Storm water amount will remain the same before and after development. Regulations require that post development storm water intensity leaving the site must remain the same or be reduced.

A small rain garden will be added to the north-west corner of the site to deal with a small amount of storm water that will drain to this corner of the site. The rain garden will be located partially on lot 'eight' and partially within the open space.

Documentation has been submitted to the Natural Heritage Bureau for this project. The applicant has received a letter stating there are no sensitive species in the area of the development.

Silt fencing will be used on the site to prevent erosion. The fencing will be fully inspected per town regulations. A storm water pollution and prevention plan (SWPPP) is a permit issued by the state and regulated by the federal government that must be in place prior to construction.

The road is situated on the plan to allow for the flare out of pavement adjacent to Dutton Road. The flare makes turning into and out of side roads easier and is required in the regulations. The road flare cannot extend passed the property line onto a neighboring property. The proposed road is located several feet from the lot line in the north-west corner of the property in order to account for the grading associated with building the road. Grading slopes cannot cross property boundaries onto neighboring lots.

No further development will be allowed in the deeded open space lot. This space is owned collectively by all residents in the subdivision and deed restrictions will be written in the deed and the home owners' association documents. The open space lot is common land deeded to all home owners. All owners will own a portion of the open space. Open space is intended only for passive recreation. In the center of the cul-de-sac a small garden is planned. The garden will be maintained by the home owners. Low maintenance plants are proposed. This garden reduces the amount of impervious road surface.

The highest elevation on the property is 286 feet along the southern border. The land slopes down to the north to an elevation of 212 feet near Dutton Road. The elevation difference is 74 feet over a distance of about 1,500 feet. The road grade varies from about 3 percent near Dutton Road, to about 10 percent in the center of the development, to about 4 percent around the cul-de-sac. All these slopes meet town requirements. The length of the road in the yield plan was 1,185 linear feet. The conservation subdivision road length will be 1,062 linear feet. This is a reduction of 120+ feet of road.

Stone walls will need to be removed where they cross the center of lots or block access to lots or the road. Some are located in open space and they will be preserved. Some walls will need to be moved and may be rebuilt. The developer will reuse the stones to make new walls when rebuilding is feasible.

The road will be maintained by the developer or the home owner's association while the homes are built and for some time after the construction. The residents will be responsible for the drainage on the site and maintaining the forebay and detention pond. At some point after the road/lots have been developed, the road will go before the town to be accepted as a town road. After the town has accepted the road as a town road, the town will be responsible for maintenance of the road and drainage structures.

Mr. Dadak restated the positive aspects of the plan. Stone walls will be maintained as much as possible. The plan deals with the current as well as the proposed drainage issues. The yield plan and the conservation subdivision have the same number of houses. No extra bonus lots were requested by the applicant. A rain garden has been designed and added to the north-west corner of the property. The road width has been reduced and crushed stone pads along the drip line of the houses will help infiltrate water coming off the roofs.

The applicant will be meeting with Planning on September 21, 2015 and would like any formal comments sent to Planning prior to the meeting.

Public input:
None.

Motion: (Mackay/Delehanty) to send a positive letter to Planning to accept the environmental impacts of this plan.

Vote: 4-0-0 in favor

WALK IN ITEMS:

The Commission received a letter from National Grid and Eversource to inform the town that the company intends to conduct geotechnical borings at locations of proposed utility structures associated with the Merrimack Valley Reliability Project. The purpose of the borings is to assess subsurface conditions. Ms. Mackay is planning to ask the company when these borings will be started and if the impacts of these borings have been covered in the wetlands impacts application.

The Commission received the results as well as a bill from the state for water testing at Long Pond. Ms. Loosigian usually explains these results to us. The results will be forwarded to Ms. Loosigian.

At the last Conservation meeting, Mr. Gagnon requested Ms. Mackay attend a meeting of the Windham Conservation Commission (WCC) to listen to a presentation about the rebuilding of the dam at the end of Moeckel Pond. The pond is just north of the town line. Golden Brook runs through the pond, into Pelham and behind the transfer station. Originally, the pond had a dam at the end of Moeckel Pond. The dam formed the pond. Several years ago the dam fell into disrepair then broke through. The state said the dam must be dismantled because it was unsafe. Residents of Moeckel Pond now want to rebuild the dam and reestablish the pond. The state has to permit this dam. Total impacts for the dam construction are 11,628 square feet. Permanent impacts are 1,552 square feet. The condition of the pond presently is a small stream through the center of the area with a wide spread out wetland around the stream. The Friends of Moeckel Pond group has gone through proper procedures and is going to rebuild the dam. Ms. Mackay asked if water would still flow through Pelham after the dam is built. While the dam is being built, water will be pumped around the dam to maintain the flow. After the dam is built, Ms. Mackay assumes water flow will be heavy in the spring, but by late summer/fall the stream will be dried up because the stream was almost dry at the date of the WCC meeting. Once the dam is built, water will not flow if the water level is below the dam. If the pond elevation goes below

146.5 feet no water will flow over the dam and the stream will dry up unless the lower gate is opened. Windham will have the ability to open the lower gate in the dam to let water flow, but may not do this because letting water out will drain Moeckel Pond.

Evidence of brook floater mussels, an endangered species, were found in the Golden Brook stream bed downstream from the dam. Shells numbering in the hundreds were found. All were dead. The scientist who evaluated the stream speculated the brook floater mussels were killed when the dam breached. The rush of the dam water could have uncovered the shells, buried them in sediments and/or washed them away.

ADJOURNMENT:

Motion: (Law/Mackay) to adjourn

Vote: 4-0-0 in favor.

Adjourned 8:34 p.m.

Respectfully submitted,
Karen Mackay,
Recording Secretary