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

MEETING OF 07/08/20

APPROVED 08/12/20

Members Present Karen Mackay, Paul Gagnon, Brandie Shydo, Lisa Loosigian, Mike Gendreau, Ken Stanvick, Dennis Hogan (alt)

Members Absent: Al Steward (alt), Louise Delehanty, Kara Kubit (alt)

Paul Gagnon brought the meeting to order at 7:04 p.m. He appointed Mr. Hogan as a voting member tonight. Mr. Gagnon announced that this would be a fully in-person meeting. No one will participate via Zoom.

OLD BUSINESS:

Map 35 Lots 10-	Currier Road – Proposed 40 lot conservation subdivision – Discussion will
200, 10-312, 10-	focus on an update to the plan and the drainage structures – Presentation by
351	Peter Zohdi of Edward N. Herbert Associates, Inc.

Mr. Zodhi gave Mr. Gagnon a copy of the drainage study. The document was well over an inch thick. Mr. Gagnon asked Mr. Zohdi to give the study to Mr. Keach, the town engineer, or to the Planning Board as they have more knowledge about drainage calculations than us. Mr. Zodhi has already submitted the drainage study to Planning and Mr. Keach. Mr. Zohdi was asked to explain any changes to the plan and the drainage designed on the plan.

Originally, the developer wanted the new subdivision to attach to Peabody Lane. The residents on Peabody did not want this subdivision attached to their road so Mr. Zohdi ended the road in a cul-de-sac with a 100 foot view shed buffer between the cul-de-sac and the properties on Peabody Lane. Planning asked the developer to build a stub road out to Currier so there would be two entrances/exits from the new neighborhood.

Five treatment structures are proposed on the project. Two rain gardens are proposed; both with forebays to settle out solids. One wet pond is proposed to the south side of the main road at the first curve in the road. The pond will remain wet at all times. The applicant has dug a lot of test pits. The seasonal high water table is 2-3 feet below the surface. The wet pond may eventually become a wetland. There are also 2 independent treatment swales that are not related to the rain gardens or the wet pond.

Storm water flows down both sides of the cul-de-sac road, from the stub road intersection, into two catch basins at the end of the cul-de-sac. Water will flow from the catch basins to a drop man hole (DMH), through a 15 inch, 180 foot long high-density polyethylene (HDPE) pipe to an outlet. The outlet leads to a treatment swale, a sediment forebay, to allow sediment to settle out, prior to the water flowing into rain garden 1. The rain garden will slow the velocity of the water before it enters the outlet structure to two more catch basins then outlets and flows through an existing culvert under Currier Road.

There is a no cut zone along the back of the lots on the east side of the cul-de-sac road as a buffer to the yards along Currier Road. The 25 foot buffer is a not cut zone that was established 10-15 years ago when Mr. Zohdi worked on the development of the lots on Currier Road. The no cut zone has a designed slope that conveys water to rain garden number 1.

Water will be conveyed along the back side of the lots on the west side of the cul-de-sac road toward rain garden number 2 near the cul-de-sac end. There is a series of catch basins on the street with water flow going north. There is a drainage easement along the lot line between lots 60 and 61. Water will flow from the catch basins down the piped drainage easement into a sediment forebay then enter rain garden number 2.

The stub road drains both toward the subdivision and toward Currier Road. Water drains from 100 feet down the stub road toward the main subdivision road. The water flows south on the main subdivision road, collects in catch basins and flows to a swale on the north-west side of the road. Only a small portion of road way drains in this direction; therefore, a swale can handle the runoff. The remainder of the stub road drains out to Currier Road and flows to the south through a series of catch basins on Currier Road.

The top of the hill is located to the south of the stub road at the curve in the road. Water drains from the road curve to the west and the south to the bottom of the hill along a series of catch basins to a wet pond. The wet pond will be located on the south-west side of the road adjacent to and partially within the 100 foot prime wetland buffer. The outlet structure will be within the 100 foot buffer and will empty toward the wetland.

The road is elevated in the area of the gas line to provide clearance for the gas lines below the road. A certain amount of cover is required over the gas line in order to site the road on top of the line. This causes some damming of water on the north-east side of the road in the area of the wet pond. Water will drain from the dammed area under the road via a 22-24 inch high-density polyethylene (HDPE) cross culvert. The culvert will outlet to the east of the wet pond and drain toward the prime wetland. No treatment is necessary for this storm water because the area of drainage is so small.

Other drainage comes from the section of road from the wet pond down to Currier Road. This water will enter a swale that is about 180 feet long. This swale also empties into the prime wetland. If the state requires Mr. Zohdi to treat the water entering the site from Currier Road, then the treatment swale will need to be lengthened by about 50 feet to make a 230 foot swale.

Mr. Zohdi speculated the state may want him to treat the existing drainage along Currier Road from the stub road to the main road. There is currently no treatment for the storm water along Currier. If the state wants the storm water from Currier treated, Mr. Zohdi will incorporate the water from Currier into the new development treatment systems. The water will come off Currier, run down the main road or the land north of the road. A culvert will be installed under the road to drain the water from the north side of the road to the swale system. The length of the swale will increase by about 50 feet in length if the water from Currier is brought into the subdivision. Mr. Zohdi suspects the state will want some treatment from the water on Currier because the stub road was added to the plan after all the calculations were done. He is waiting for New Hampshire Alteration of Terrain (NHAOT) to tell him what they expect from him. Water from the stub road largely runs down the stub road to Currier then down Currier. Mr. Zohdi could pick up the water and send it down the main subdivision road to the swale. There will be no rain garden or hold back of water needed if the state wants the Currier Road water treated because Currier Road is a pre-existing condition and he is not required to treat the water he is just improving on a current condition.

The town of Pelham and Department of Environmental Services (DES) regulations require storm water not drain from the site any faster after development than prior to development. All drainage numbers have been calculated and the study has been submitted to NHAOT.

There are no prime wetland impacts. There will be prime wetland buffer impacts for drainage structures and grading. There will be no impacts to the buffer for any developed lots.

MS4 is a federal law that governs detention ponds and related structures. The new regulations require the town identify all such structures and write up a maintenance plan for each. A report must be written at least once a year and sent to DES in order for the town to remain in compliance with MS4. About a year ago, the town inventoried all basins and out falls and made a database. The detention ponds and rain gardens on this project will need to be added to the list and must have a maintenance plan. The town will be accepting the maintenance of the rain gardens when the subdivision is completed. Ms. Loosigian said this could be complicated because, as stated on the plan, the rain garden needs to be weeded twice during the growing season. Mr. Zohdi said the town will have responsibility for maintaining the rain gardens. These gardens are specified on the plan. If the town accepts the plan, the town will accept the rain gardens and all maintenance that comes with them. All drainage structures will be accepted as described on the plan. Mr. Greenwood stated that the town is in the process of looking to hire a person to oversee MS4 implementation. Ms. Loosigian is concerned about rain gardens being overused on large projects like this. If done well they are great, but often they are not done well. Plants in the rain garden take up the water. She has talked to people at the storm water center at UNH. They have replaced rain gardens with grass basins and had similar results for clean water.

There are trails on the property that will be re-routed. A lengthy discussion about the trails was undertaken. Mr. Stanvick questioned if the trail should be running through the prime wetland buffer. This is supposed to be a no cut, no disturb zone. If a trail is relocated to the buffer, it will get more use and create more disturbance in the buffer. The Commission is trying to protect wetlands and WCD's. In addition, homeowners are not allowed to disturb the buffers, why should the Commission be allowed to disturb the WCD because we want a trail. Mr. Stanvick

questioned whether building trails in the buffer was legal. Mr. Gagnon said that trails are allowed in buffer zones. There is a trail manual available online through the state that describes how and where to build trails. The Wildlife Action Plan has identified high value areas for wildlife and plant species. These areas should be avoided if possible.

One trail Mr. Stanvick questioned was a trail on the gas line easement that appears to run on solid land then crosses the wetland and emerges on the other side of the wetland. He felt this trail should be discontinued as it takes hikers into the wetland. Ms. Mackay said the trail was most likely used only in winter when the wetland is frozen. Snow mobiles run over lakes and other water bodies in winter when they are frozen. Ms. Mackay said it was a balance. We want people out using outdoor areas. We don't want everyone restricted so the public can't go near prime wetlands. If there is too much restriction then we are saying to the public, you can't use the prime wetland and you can't use the buffer either. A trail has canopy cover and lots of vegetation along the sides of the trail. The main purpose of the buffer is to keep contaminants from flowing into the wetland. The buffer is there to protect the wetland and keep the wetland clean. A trail 10 feet wide out of 100 feet is not that much impact even if it gets used a lot. Mr. Hogan asked if there was a difference between a home owner clearing a buffer and using fertilizers on their lawn and a person walking occasionally on a trail in a buffer. He thought it sounded like the bulk of the use of this trial was for snow mobiles. Mr. Gagnon said if/when this becomes town land it might be a trial on town maps and get more use. It is about balance. Mr. Gagnon would be happy to get rid of the trail that runs into the wetland. Ms. Mackay disagreed. The trail is under water most of the year, but is usable in the winter when the ice freezes.

The main trail that will be rerouted through the site is a corridor trail. The problem with this trial is if we close it down there is no connection of the trail system from the east to west sides of town. This is a very important connecting trail. Ms. Mackay said this discussion is important because the applicant is offering to put this trail through. If we are saying we do not want this trail than, Mr. Zohdi will take it off the plan and we will not maintain our trail connection through town. At our last meeting, Mr. Gendreau asked while equipment was onsite to do construction could equipment be used to help us build/reroute the new trail. Mr. Gendron was open to that possibility. The trail must go along the prime wetland boundary because the wet pond treatment structure will be taking up much of the 100 foot buffer. Mr. Stanvick questioned if we should use heavy equipment in this sensitive area. Mr. Gagnon is concerned about the grading and construction for the wet pond, but the trail will be within the area of already disturbed land.

Mr. Zohdi had the Natural Heritage Bureau (NHB) review the project. There were species sightings in the area, but in the space that will be donated for open space not in the area of construction. Mr. Zohdi said the area is sensitive but the gas company comes in a does whatever they want. The trail is on the gas line easement. No one can stop the work on the gas line easement. The open space land will be deeded to the town so the town can do what it wants with the trail.

At our last meeting, Mr. Gendreau asked if the lots along the north-west portion of the plan could be made shorter so the trail could be on town land behind the lots. Mr. Zohdi explained the residents on Peabody didn't want town land behind them. They wanted private lots to come to

their lot lines. Planning agreed to the change that the lots in the new subdivision will directly abut the Peabody Lane lots. There will be a trail easement on the plan and on the deed for those properties so that the land owners will not be able to shut the trail down. The town will have the legal use of the trail in perpetuity. The trail will be within the existing gas line. The existing trail curves down through the 100 foot view shed that separates Peabody from the cul-de-sac, then crosses Peabody. Mr. Gagnon would like the road crossing to remain in the current location and have the trail within the view shed as it is currently. The view shed trail should then attach to the new trail at the rear of the properties in the gas line easement. The view shed trail will be included in the homeowners' association documents and will not be able to be shut down.

Ms. Mackay requested the lot 44 lot line be moved completely out of the prime wetland buffer. Mr. Zohdi agreed he could move the line back so no lots would have any area in the buffer.

All contiguous open space is proposed to be donated to Conservation. The Selectmen must accept the donation for the land to become conservation land. This land is adjacent to Wolven Conservation Area and will be added to that area.

Mr. Zohdi described all instructions on the plan for planting vegetation in ponds and rain gardens, erosion control measures, installation, cleaning and maintaining water treatment structures, running underground utilities and road cross sections. The installation and maintenance for all structures is detailed on the plan.

There will be two community wells. They are approximately 10 feet from the prime wetland buffer, but will not impact the buffer in any way. The wells have not been drilled at this time.

Motion: (Hogan/Mackay) to recommend Planning accept the plan with the following conditions:

- 1) Revise lot 44 to have all area outside the WCD buffer.
- 2) Any trail not on town land must have an easement such that it cannot be blocked by homeowners.
- 3) The trail that runs along the gas line should run through the view shed and cross Peabody Lane in the same location as the current trail crosses.

Vote: 7-0 in favor.

MINUTES:

Motion: (Stanvick/Gendreau) to approve the minutes of June 10, 2020.

Vote: 7-0 in favor.

WALK-IN ITEMS:

Mr. Stanvick asked about the Valley Hill Road case. Mr. Gagnon summarized the case. DES has reopened the case based on an environmental report done by Mark West that describes damage to vernal pools. We will follow a process to evaluate this case. Planning has met on this case. The applicant asked to be date specified until after they come to Conservation. The applicant is waiting for comments from DES before coming to Conservation. We expect to see the case at

our August meeting. Mr. Gagnon described 3 possible actions. 1) The applicant may have to recreate the pools at the same size, elevation, location. 2) They may have to make new vernal pools (mitigation). 3) They may not have to do anything. Mr. Stanvick asked if there were fines or penalties for the damage. Mr. Gagnon was not sure as we have no example to point to where DES fined someone in our town. This may have been done and we just do not know about the fine. Ms. Loosigian brought up the Aquatic Resource Mitigation (ARM) fund which is a mitigation fund run by the state for approved projects that are anticipated to destroy wetlands. The fund provides money to recreate wetlands in a different location in the same watershed as the destruction. Valley Hill Road is not eligible for donation to the ARM fund for this project as the project did not seek a permit for wetland destruction rather the applicant destroyed the wetlands, got caught, then sought a permit.

Our next meeting is scheduled for August 12, 2020.

AJOURNMENT:

Motion: (Hogan/Gendreau) to adjourn.

Vote: 7-0 in favor.

Adjourned 8:31 p.m.

Respectfully submitted, Karen Mackay, Recording Secretary