

# Shapleigh Planning Board

## *Minutes*

November 23, 2021

Members in attendance: Roger Allaire (Chairman), Steve Foglio (Vice Chairman), Madge Baker, Roland Legere, Maggie Moody & Alternate Ann Harris. The Code Enforcement Officer Mike Demers was also in attendance.

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### Workshop began at 5:00 pm

### Mindee Goodrum, Project Manager from York County Soil & Water Conservation District to Speak on Revegetation in the Shoreland District

Madge B. opened with the fact the Board was looking for guidance on Shoreland revegetation. She noted the fact the Board has been reviewing a lot of properties along the waterfront and often when it comes to requiring revegetation, the Board admits to not being an expert at what works best with respect to soil erosion and storm water management. She said often the property owner wants grass and so the board allows them to have grass but she was not sure that was the best at preventing sedimentation from going into the lake. She said she was hoping Ms. Goodrum could provide some guidance as to what she has seen work, and what does not. Maggie M. introduced herself and said she agreed with Madge, that the Board needed guidance and perhaps some back bone and alternatives to grass. Barbara F. introduced herself and said she has worked with the Board for 20 years and they are very good at what they do, but sometimes if the landowner requests grass the Board allows it, not having a strong background in stormwater mitigation, meaning not knowing what a better alternative is. Barbara added that the Board would like good examples of what works, that they could possibly share with applicants, and why they work. She felt that if the Board had the 'why' they could explain vs just saying it's what they want. Ms. Goodrum agreed, that you need to make people care about why the Board is requiring something.

Roger A. introduced himself, stating that he had been the Chairman for quite some time. Board members noted 'for decades'. Ann H. introduced herself as one of the newest members and noted that she lived on Granny Kent Pond. Roland L. stated that Ms. Goodrum knew him as she chairs a number of committees that he sits in on. He said she was very familiar with runoff issues on Goose Pond Road, because it's been an issue for some time. He said they were hoping to do more mitigation activities in the future. Roland noted this year with the help of Terry Pearsall, along with Ms. Goodrums assistance, they added riprap and a chain-link fence to prevent runoff, it will also control foot traffic which has contributed to runoff going into channel for some time. He said this was just the beginning of measures being taken in that area. Barbara F. noted that she saw the fence and riprap but did not know who had done it.

CEO Demers introduced himself as Code Officer in Shapleigh, and Assistant Code in Acton, and he said he was interested in what Ms. Goodrum had to say. CEO Demers asked if Ms. Goodrum got into how the Board would treat a legally existing opening vs a new best practical location, moving a house back. He asked if the Board can force them, saying 'you cannot have grass', because it's a new area that wasn't lawn? He said, 'If they have lawn, then they can keep it, where that structure is or was. Can we put that restriction on them, as no grass, it has to be something else'. Ms. Goodrum stated that she had no regulatory enforcement power behind her, but she could provide recommendations. She added that she tries to know what each town has for regulations, but

she is still working on it. She said she was familiar with the State regulations, and by knowing the Town or State regulations, she is able to help guide people into doing what is best. CEO Demers asked if she was going to show what works and what doesn't? Ms. Goodrum stated that, as Barbara said, the 'why' it does or doesn't work, so the Board can pass that along. She said she also had links to resources that she can provide, that the Board could share with applicants. Barbara thought that would be great.

Roland L. asked if there were design services from her office or a subset of her office, that individuals could be directed to? Ms. Goodrum said that her office does technical assistance for landowners. She said that they do charge a fee for drafting up plans, but they usually can do a site visit for free and provide verbal advice. She said they do not have an engineering background if there is a big fix that needs to take place, but planting plans they certainly could help with, along with permitting help for State permits and the Town. She said at times people get intimidated with the forms, so the Board could refer them as someone who could help if they need extra help. She stated that she has helped out with the planting plans in the past, and would be happy to do so anytime. Barbara F. asked if there was an average cost for their services for a planting plan for stormwater mitigation? Ms. Goodrum stated that they estimate about 5 hours for a project at \$65 an hour, unless it is more complicated than it could be more. She said the average was \$300 to \$400. Barbara thought that was reasonable for a good plan that could solve a lot of issues.

Ms. Goodrum introduced herself as the Project Manager at York County Soil & Water Conservation District. She said she had been with them for about 1 1/2 years. She said she has done work in Shapleigh, noting she had a couple of grants on Mousam Lake currently, and another on Square Pond. She said because she was working in the community it was nice to meet the Board. Ann H. asked if Ms. Goodrum filed for grants for York County? Ms. Goodrum said the grants she got were funded through the EPA, and the State DEP works with her on them. She said they were for water bodies that are considered impaired or threatened, so the grant money is only eligible for certain projects and most of the money is used for erosion control, buffer vegetation, and things such as that around the lakes. She noted that Mousam and Square are not currently impaired, but they are threatened due to the increasing development. She added that Mousam was impaired years ago, and a good job was done bringing it back. She said they try and identify projects in the water sheds to help with the grant funds to address the erosion and other issues.

Roland L. asked Ms. Goodrum to share her involvement with the Acton/Shapleigh Youth Conservation Corps. Ms. Goodrum stated they are good partners on the grants. She said they provide a lot of the technical assistance and installation. She said they try to do matching grants for landowners for smaller projects, like light erosion control, and ASYCC helps a lot with that. She said they help to identify projects, help with permitting, and for extra support she said she goes out and inspects the projects at the end of the year to see how everything turned out. She said the ASYCC are also a source to refer applicants to. She wasn't sure they had planting expertise but erosion control measures are up their alley.

Ann H. said there is an ordinance regarding tree cutting, and the Board has seen a lot of people wanting to cut trees because the tree roots are destroying retaining walls. She said that instead of replacing a tree for a tree, which will create problems down the road, perhaps having them instead of planting another tree, put in a number of blueberry bushes that may not ruin the new wall. She asked if there was something the Board could require instead of a tree that would work as well as a tree. Ms. Goodrum said the roots of a blueberry bush wouldn't cause as much issues, and they work in sandy soils. She said there is a link that she could provide that speaks of shoreline vegetation. Ann also noted that often people do not want to put a tree in, so they won't take care of it, so it is likely the tree won't make it anyhow. She asked what Ms. Goodrum thought would be a good

alternative to a tree. Ms. Goodrum said blueberry bushes were small, so you would want probably a dozen, but if you got a Dogwood, you would not need as many. Ann stated that she didn't know a Dogwood was native to Maine, and she knew the State wants plants native to Maine. Ms. Goodrum agreed. She also added that often with plants, they are like an iceberg, what you see on the top doesn't always represent what is going on below. She showed a sketch depicting several grasses and shrubs, where the roots systems were very impressive below the surface. She said the bigger the plant on top the bigger the root system. Ms. Goodrum said the Board could give them a size class, such as a shrub that grows 8 to 10 feet. Ann said that perhaps the Board could require 10 bushes for one tree, and she added that there needed to be consistency across the board, so an applicant would feel they were being treated fairly. Ann asked if the Planning Board could do this? Madge B. thought there could be a change to the ordinance. Ann wanted to be sure everyone was in agreement to change it, and have the same requirement for everyone. Maggie M. thought perhaps YCS&W could help them create a chart, for example, so many bushes required for this kind of tree or size of tree. Ann agreed and wondered if they should go by height or width of a tree. Ms. Goodrum said she didn't have anything with her in regards to this, but she thought you could create something with a certain size or class of plants. She said there were existing list of plants that are good for the shoreline, so the Board could use that as a starting point.

Ann H. asked who they could speak with to determine what would be a good ratio? Ms. Goodrum said she could speak with her supervisor about this. Ann said she would welcome someone who knew more about this, to help the Board. Ann said she would also like to have people move away from using grass. Maggie M. stated it should be based on the amount of bare soil after the trees are removed, combined with the slope of the land, this would tell you what type you would want. She said if it was a hill, you want something that was going to stop the water from going downhill. Ann said if they had something to look at, they could give them a choice. Maggie agreed, but thought the chart should also be based on what was going on. CEO Demers thought they had to be careful not to design it for the applicant, just take the application to see whether or not it conforms to the ordinance. Roland L. said he agreed with that, but he thought it would behoove the board to take particular attention to the contour of the land, etc. so that when they review the revegetation plan, the Board could say whether or not the plan worked and why or why not. Roland said if he had a choice he would ban grass. He said the only way in most locations that you are going to have grass that is viable, you will need sun, water, lime and fertilize it, otherwise it will wither and die. He said if an applicant wants to replace a wall, remove trees, part of that goes along with being responsible for the care of the lake. Roger A. said a lot of the time they don't want heavy mulch because they want to be able to walk on it barefoot. CEO Demers agreed. Ann said if they can plant a tree, then they should. She said often if a tree is removed, there is no other place to put a new one other than where the existing was, since it has to be the same distance from the water. She said if the tree will hurt the new wall, then the Board should switch to plantings, not grass.

Ms. Goodrum said she wasn't sure what the Board was looking for, but she had a diagram showing turf grass, which showed how tiny the roots are. She said the other shrubs and plants have deeper roots than the grass. She said even small shrubs or perennials have a better root system than grass. She did note that there are several native grasses that grow tall and have deeper roots than a typical lawn. Ann H. asked if the Board could have a copy to show people? Ms. Goodrum said if the Board can't ban grass, keeping longer periods between watering will encourage the grass to grow longer / deeper roots. She said when you water it, it doesn't have to look for water, so the plant focuses on growing up instead of deeper.

Ms. Goodrum said another good measure is to have an established width or buffer that is required along a shoreline. Roger said the Board did not have that at present. She said that was another good way to protect the

lake from erosion. Ann H. asked what a good width would be? Ms. Goodrum had a chart from New Hampshire which showed a 50 foot buffer recommendation. She realized it was ideal but probably not practical. CEO Demers stated that Chapter 1000 does define a vegetative buffer strip of 100 feet, he stated that anything within 100 feet of the water does require a permit for removal and replacement. He said beyond the 100 feet you are still in the Shoreland Zone but the 40% rule comes into effect, where no more than 40% of the trees can be cut in a 10 year period. He said with respect to fine tuning it more within 25 or 50 feet, the ordinance does not have that. Roland L. asked if the Board could establish a minimum of 5 or 10 feet, such as behind a wall for example? He said it would seem that a mulch berm with plantings for that width would help to catch runoff, or slow it down, so it could be caught up by roots and not go toward the lake. Ann asked what a good minimum would be, asking if 5 or 10 feet would be good. Ms. Goodrum stated that something was better than nothing, but she would start with at least 10 feet. Madge B. asked what happens in that buffer in New Hampshire, in the 50 foot buffer. Ms. Goodrum said she didn't read it in depth but she thought most of that 50 foot area was to be left untouched except for hazard trees. She said there could be a path through it to access the lake, and she noted that you could have the path in Maine as well.

Ann H. asked if someone had a retaining wall within 10 feet of the water, would the width of the wall count as part of the buffer? Ms. Goodrum did not think so, but the Board would have to put it in the ordinance. Ann thought someone would challenge it. Ms. Goodrum stated that a wall wouldn't act as a filtering buffer. Roland L. asked if putting in that a minimum of 10 feet of 5 or 6 inches deep of mulch with plantings should be required? He wanted to know if the Board was looking for that kind of detail? Ann wanted to know if mulch was good? Ms. Goodrum stated that erosion control mulch and conservation mulch were both the good mulch for erosion purposes. She said they were made of stump grindings and didn't wash away easily, recommending 3 or 4 inches, but it does need to be replaced every 3 or 4 years. Ms. Goodrum stated that you can do stepping stones to walk on. Madge B. asked if there was a difference between erosion control mulch and conservation mulch? Roger A. said the size of the chips. Ms. Goodrum said the erosion control mulch is bigger chunks, people prefer the conservation mulch. She thought both worked well. Madge said if the Board requires 3 or 4 inches of one of these types of mulch, CEO Demers can enforce it. She said if the Board says just put down mulch, all he has to do is go out and say 'well there's mulch'. Steve F. said the only down side he sees is in 2 years CEO Demers is not going back down to look at this and the mulch does break down, now there is 10 feet of dirt. CEO Demers agreed. Steve asked if there is the ability to put teeth into the ordinance? Ms. Goodrum said she recommended to have mulch and plantings, because the mulch will protect the plants so they won't wash away while they are getting established, and then it will break down and provide good soil. She said the plants are the long term solution. Madge said the Board says mulch, but they don't say mulch and plantings. Madge said people don't want blueberry bushes because they want to be able to walk around. Ann said they could put a little stone path to walk on. Roland said some of the grasses Ms. Goodrum showed may be better than blueberry bushes. Roland said blueberry bushes need sunlight or they will fail. He thought some of the ornamental grass may do well. Madge asked if it needs sunlight? Roland did not know and he asked Ms. Goodrum if someone local carried the grass. Ann said it would still be the homeowner's choice what they want to use. Madge thought the Board could limit the choice if they were clear. Ann agreed but there should be a choice, meaning no sunlight these are the choices. She said this has to be enforceable. Steve noted there are different soils, so there is no one size fits all, adding there are rocky areas, areas with pine trees that are acidic, so there is not a one size fits all for every location around the lake. He added that even with a cove of a lake, there may need to be a bunch of different options.

Ann H. said she has seen in some circumstances no plantings for erosion control but they used riprap, driftwood, and a variety of things, because the plants would not grow. She didn't know if the riprap was good along with wood, branches, mulch, etc. She asked Ms. Goodrum if riprap was good to stop soil from going into the water? Ms. Goodrum said in some areas it is hard to establish plants, riprap may be good. She said you may have to follow certain State standards with riprap, depending on how close it is to the water. CEO Demers stated that the DEP recommends nothing over a 30% slope, because anything over 30%, riprap doesn't work. He said sometimes in certain applications it will work. Ms. Goodrum said she could send a link for live stakes, using cuttings of plants such as dogwoods or willows, planting a branch in the side of a hill, it's good for steep slopes and you plant them during the fall after the leaves are gone or just before the leaves come out. She said you can bundle them, creating a fence or retaining wall, when they root in they will grow. She said it was an interesting bioengineered option for a shoreline. Madge B. said she knew about them, because the Land Trust uses them around wet areas. She said they use Pussy Willow. Roland L. asked if there was a booklet the Board could pass along to applicants? Ms. Goodrum said one of the links she will share is the DEP link for watershed resources, which includes a plant list to shoreline vegetation, and other facts sheets on erosion control techniques, such as rain gardens, infiltration steps and it shows people how to install them. She said they are quick fact sheets and they are easy to use. Ms. Goodwin stated that if people come to them, they use Pierson Nurseries in Dayton which has a larger selection of native plants than smaller nurseries. Ms. Goodrum noted it is a wholesale place, so people cannot shop there, but they can get information and YCS&W has access to the plants.

Steve F. asked Ms. Goodrum if she would be ok with the Planning Board sending all their applicants to them for a replanting plan? Steve asked Ms. Goodrum if they could handle 20 more people a year? Ms. Goodrum thought they could, if they knew to expect it. She said it was good business for them and a benefit. Steve stated that the Board had a multitude of projects come through and he could count on one hand the amount that came through with a decent plan. He didn't know if they would want to put it in the ordinance that people had to go to them for a plan. Ann H. thought if it were in the ordinance it would be more enforceable. Steve said they could use 'may' or 'shall' as key words.

CEO Demers stated that if replacing a retaining wall on the water, the DEP considers the land behind the wall stabilized. He said any plantings would just be a bonus. He said perhaps around the edges of the wall would be an area of concern, but behind the wall it is stabilized land. Steve F. said he was trying to look at the practical use of the revegetation plan. Madge B. said she was thinking of when someone moves a structure, or tears down and moves it, that is different. She said she was a visual person, and in her mind she thinks 'you just move it', but we have to picture it with all the disturbance, and these applications are particularly good ones to send for a plan. She said, because otherwise the application needs to show the slope, because even though you can see it on site, she said that she could not state what a 30% slope is. She thought when a structure is being moved, they may want to send them to YCS&W for a plan. CEO Demers stated that even if the structure is not being moved, but a new foundation is being placed under it, there is a lot of space around the structure that is disturbed. He said there is a structure now, close to the point, where a lot of trees will come down because they are close to the building, a septic system is going in, and it will be noticeable. He noted there is a buffer strip currently that they are willing to maintain. Madge said there were a lot of trees coming down on that property.

Ms. Goodrum said that for future projects, she wanted it noted that YCS&W tries to sway people away from retaining walls because they are not the best for the waterfront. She said they block access between the land and the water for turtles and other amphibians. She said the wave action gets dissipated down the wall and causes a problem further down, instead of really fixing the problem. She said the water can scour under the wall, and if

they are on a slope it can still scour behind the wall. Steve F. asked what a good alternative was? Ms. Goodrum stated vegetation is always the best alternative, but depending on the slope sometimes the riprap along with plants is still a better option than a retaining wall, because the rocks break up the wave action better and you can still get some sort of potential habitat.

Roland L. said if you are talking about an area where there is a substantial slope and height, the ordinance calls for, if it is over 4 feet in height, the wall to be engineered. He asked if an engineer can stamp a riprap wall, stating it is safe and will meet standards? Steve F. said it would not be a wall. Roger A. agreed, stating it would be a grade and not a wall. Ann H. said if someone wants to replace a wall, and they want a wall, and it is over 4 feet, then it has to be engineered because it is a structure. She said if they say they don't want a wall, and would rather have riprap, then they don't need an engineered plan, because no wall is going back in. Roland said that is what he just found out.

Maggie M. said if someone doesn't have a wall, and Ms. Goodrum is saying vegetation is the best thing, if someone moves to a property and wants to put a wall in, can the Board say 'no you can't' because vegetation is better, because it is stopping the turtles, etc.? Steve F. said they could do a low retaining wall. CEO Demers agreed, 25 feet back. Maggie said, "So you are already not allowed to put in a new retaining wall". The Board agreed you cannot put in a new wall within 25 feet of the water.

Roland L. asked if the Board should suggest riprap? Roger A. said that people will not want it. He said riprap will be undermined by boat traffic, and it will just end up in the lake. He said that would also reduce the swimming area. He said people would not like the effort of having to move the rocks back up on the bank each year, so most want to put a wall in to eliminate a maintenance issue. He added that it also creates more useable land by backfilling the wall. Roland said they cannot do it unless there was a wall there initially. Roger agreed. Roland said he was referring to areas where there isn't a wall, encouraging them to put riprap. Roger said they wouldn't be coming to the Board for that. CEO Demers agreed they would not have to come to the Planning Board to put in riprap. Roland asked if it was just the DEP? CEO Demers said the DEP and himself for shoreland stabilization, unless they were moving more than 10 yards of earth. Roland asked if that included the riprap? CEO Demers thought so. Roger said that any material in excess of 10 yards comes to the Planning Board, which includes 10 yards of rock. Roger asked how far is 10 yards of rock going to go? Roland asked Roger if he was saying they would have to come before the Board? Roger said if they use more than 10 yards of material for the project.

Ms. Goodrum stated that at times it is hard to make people care. She said if they want the nice aesthetic eye pleasing lawn and they meet the ordinance, there isn't anything they can do. She noted that she doesn't always get as many plans in for projects that she would like to see, but she tries to encourage people and teach them why the plants are important. CEO Demers agreed education is the biggest key. He said often people come to the lake on vacation, and they just can't sit, so they start raking up the pine needles, etc. and it is one of the worse things they can do. He said it is best to let the duff alone, but people don't want it. He added that people tend to take the same route to the water over and over and it is usually a direct route which encourages runoff. He said that we are trying to regulate behavior instead of standards. Ms. Goodrum said they try to encourage people to create a defined path, and make it a winding path, which is best for stormwater management. She said she knew it wasn't enforceable.

Ann H. said the biggest problem the Board is faced with is people not having a planting plan included in their application. CEO Demers thought that perhaps the Board should have a binder available to look at with a bunch

of options. He said there could be possible scenarios and possible remedies and then ask them to pick something that would work, and said educate them on what works. The Board agreed. Ms. Goodrum said it would be good if they had a list of good native plants and sort them by light needed, soil type, water. She said the Board could encourage people to get a soil test, so they will have more faith that the plants they choose will survive. If the soil is acidic and they place something that won't grow in acidic soil, they will get frustrated that the plants they bought did not survive. It was asked where they could get the soil tested? Ms. Goodrum stated the University of Maine has a soil testing lab and she thought it was \$12 or \$20, and the forms are on line. Madge B. said it was very easy to do. Ms. Goodrum said the report will give what nutrients they might need or not, so people may not have to fertilize certain plants. CEO Demers noted that you cannot fertilize within 100 feet of the water. He asked if you could lime within 100 feet? Ms. Goodrum did not know. No one knew the answer. Ms. Goodrum said if you have a list of plants that will grow in acidic soils, you would not need lime, noting there were quite a few that grew in acidic soils.

Roland L. asked if the Board should consider adding detail about the buffer area, the width, the depth, what it's made of and what it should include? Roland asked if there was time before Town Meeting to introduce something about the buffer? Barbara F. stated that there should be some words created this evening around what he was asking. She said it could be amended after the next meeting, but there needs to be something started. CEO Demers said that now it reads it must be stabilized to ensure that no erosion will take place. Steve F. asked what the re-plant plan said?

Roger A. and Barbara F. referred the Board members to §105-51.3 'Revegetation requirements.' And asked them to read through it. The ordinance reads as follows:

§ 105-51.3. Revegetation Requirements.

When revegetation is required in response to violations of the vegetation standards set forth in Section 105-51, to address the removal of non-native invasive species of vegetation, or as a mechanism to allow for development that may otherwise not be permissible due to the vegetation standards, including removal of vegetation in conjunction with a shoreline stabilization project, the revegetation must comply with the following requirements.

- A. The property owner must submit a revegetation plan, prepared with and signed by a qualified professional, that describes revegetation activities and maintenance. The plan must include a scaled site plan, depicting where vegetation was, or is to be removed, where existing vegetation is to remain, and where vegetation is to be planted, including a list of all vegetation to be planted.
- B. Revegetation must occur along the same segment of shoreline and in the same area where vegetation was removed and at a density comparable to the pre-existing vegetation, except where a shoreline stabilization activity does not allow revegetation to occur in the same area and at a density comparable to the pre-existing vegetation, in which case revegetation must occur along the same segment of shoreline and as close as possible to the area where vegetation was removed.
- C. If part of a permitted activity, revegetation shall occur before the expiration of the permit. If the activity or revegetation is not completed before the expiration of the permit, a new revegetation plan shall be submitted with any renewal or new permit application.
- D. Revegetation activities must meet the following requirements for trees and saplings:
  - (1) All trees and saplings removed must be replaced with native noninvasive species;
  - (2) Replacement vegetation must at a minimum consist of saplings;
  - (3) If more than six (6) trees or saplings are planted, then at least three (3) different species shall be used;
  - (4) No one species shall make up 50% or more of the number of trees and saplings planted;
  - (5) If revegetation is required for a shoreline stabilization project, and it is not possible to plant trees and saplings in the same area where trees or saplings were removed, then trees or saplings must be planted in a location that effectively reestablishes the screening between the shoreline and structures; and
  - (6) A survival rate of at least eighty (80) percent of planted trees or saplings is required for a minimum five (5) year period.
- E. Revegetation activities must meet the following requirements for woody vegetation and other vegetation under three (3) feet in height:

- (1) All woody vegetation and vegetation under three (3) feet in height must be replaced with native noninvasive species of woody vegetation and vegetation under three (3) feet in height as applicable;
- (2) Woody vegetation and vegetation under three (3) feet in height shall be planted in quantities and variety sufficient to prevent erosion and provide for effective infiltration of stormwater;
- (3) If more than three (3) woody vegetation plants are to be planted, then at least three (3) different species shall be planted;
- (4) No one species shall make up 50% or more of the number of planted woody vegetation plants; and
- (5) Survival of planted woody vegetation and vegetation under three feet in height must be sufficient to remain in compliance with the standards contained within this chapter for minimum of five (5) years.

F. Revegetation activities must meet the following requirements for ground vegetation and ground cover:

- (1) All ground vegetation and ground cover removed must be replaced with native herbaceous vegetation, in quantities and variety sufficient to prevent erosion and provide for effective infiltration of stormwater;
- (2) Where necessary due to a lack of sufficient ground cover, an area must be supplemented with a minimum four (4) inch depth of leaf mulch and/or bark mulch to prevent erosion and provide for effective infiltration of stormwater; and
- (3) Survival and functionality of ground vegetation and ground cover must be sufficient to remain in compliance with the standards contained within this chapter for minimum of five (5) years.

Steve F. noted that the Board has it, but they have to use it. Ann H. read Section A and noted the Board can require a revegetation plan without changing anything. Roger A. stated that §105-51.3 refers back to §105-51 'Clearing or removal of vegetation for activities other than timber harvesting', and in response to violations. He thought that once there was a violation then you go to 51.3. CEO Demers asked if Roger was saying 51.3 only applies after a violation? Roger believed that yes, under 51 you would go to Section B 'Buffer strips of vegetation' to address revegetation. Ann asked if 'The property owner must submit a revegetation plan, prepared with and signed by a qualified professional, that describes revegetation activities and maintenance.' was in 51 somewhere, and if not should it be? Madge B. thought it should be under §105-4.D(7) 'Relocation'. Ann asked if the Board can move it into that section. Madge said the Board needs be careful as to whether it is under a wall or building, as that was CEO Demers point, that they shouldn't both be treated the same.

Steve F. asked if you have a 3 foot retaining wall and 40 feet of flat sandy beach, are you going to convince people to get rid of their beach, and add mulch and revegetate? Madge B. said, no. Steve said that was his point, that there are a lot of instances where this works, but certain locations it will not. Madge said 105-4.D(7) is speaking about where you have disturbed the existing cover, and she thought it could be added there because it was for the relocation of buildings. She believed this is what the Board should focus on, and send them to professionals to look at the slope and disturbance for a relocated structure. Steve agreed. CEO Demers stated that §105-4.D(7) did refer to §105-51.3, looking at Section (b) it says 'the Planning Board shall require replanting of native vegetation to compensate for the destroyed vegetation in accordance with §105-51.3'. So he said you can use 51.3. Steve asked if the Board could strike 'in response to violations'? CEO Demers stated that because 105-4 sends you there, you do not have to. Madge said, 'We can require it, so let's start doing this'. Ann agreed. CEO Demers stated that it appears the ordinance is structured properly, we just need more tools in order for the applicant to comply. Ann said they should have this done when they present the application. Barbara said that it appears the ordinance sends them to a professional and shouldn't the professional give them options. Ann read the ordinance again in part, which stated 'prepared with and signed by a qualified professional, that describes revegetation activities and maintenance'. Barbara asked if YCS&W was a qualified professional? Board members and Ms. Goodrum said, yes. CEO Demers believed Springvale Nurseries was as well. Steve said his concern was the words 'in response to violations'. He asked if 105-4.D(7) sends the Board to this section or Section A in 51.3? He said when he reads this, it says it doesn't apply to him because he is not in violation.



Barbara F. asked the Board if they had other questions for Ms. Goodrum with respect to revegetation? She did not feel she had to sit through the Board discussing possible ordinance changes. Ann H. asked Ms. Goodrum what she likes to see from Planning Boards to help with revegetation? Ms. Goodrum stated she hadn't been before many Planning Boards and believed this was a good opportunity for her. She said they would like to do more outreach, because the Board has a big impact on the Town. She thought the Board was aligning with many of the things they like to see, such as a larger buffer, and incorporating stormwater management into their design plans if they are rebuilding their house. She said things like making sure they are addressing their roof runoff, and other impervious surface runoff, incorporating best management practices into their design are important. Ann asked if she was speaking about rain gardens and things like that? Ms. Goodrum said yes, and infiltration steps over stone steps. She said focusing on the little details that often get overlooked on applications where they are rebuilding a whole house, the applicants may not be thinking about where all the stormwater is going.

Steve F. said a lot of the challenge comes in with lot size. He said if you have a 50 x 75' or 50 x 100' lot, and you are rebuilding a 24 x 24' cottage, there isn't a lot of real estate to work with. He said they can't dump the water onto the neighbor's lot, so it is tough. He thought many of the projects before the Board are like this. Ann H. thought that is why the Board has mentioned rain gardens to keep the water on the applicant's property. Ann said there was a flyer on rain gardens as well. Ms. Goodrum thought that rain water coming off the roof is easy to address even without gutters, they can dig a trench below the roof line to catch the storm water and direct it to a rain garden or rain barrel. Ann asked if rain water was bad after it hits the shingles? Ms. Goodrum said that was part of it, but it will erode the property carrying the sediment particles into the lake. She said that was how you end up with algae blooms, from the phosphorus that adheres to the sand and then it is carried into the lake from a storm. She said there needs to be a way to be able to filter out the sand before it gets into the lake.

Ms. Goodrum stated that even if the Board cannot enforce some of the changes, but if the Board explains it to them and why it is important, it may help. She felt most of the people living on the lake want to see the lake stay clean, and good for the grandchildren in the future. Barbara F. stated that is how she has gotten people to see it differently by bringing up families being able to swim in the water long into the future, by making some simple changes. Maggie M. added that talking about the history of the lake and how much it has improved might help.

The Board thanked Ms. Goodrum for her time. She stated she would send Barbara F. the links to some facts sheets and said she would be happy to answer follow up questions. Ms. Goodrum stated that they could link the link she sends to the Town's website. Ms. Goodrum left the meeting at this time.

Roger A. stated that he did not feel the Board had to make any changes to the ordinance as written because under §105-51.3 it was not just addressing violations because in the second sentence it said 'or as a mechanism to allow for development that may otherwise not be permissible due to the vegetation standards, including removal of vegetation in conjunction with a shoreline stabilization project'. He felt the Board just has to pay attention and enforce it. Madge B. thought 'in response to violations' should be removed. CEO Demers stated there were three reasons you land on 51.3; the violation is one, the removal of invasive species is two, and the third is the mechanism for development. Madge said, ok. Roger agreed but said again the Board just needs to be using it. Madge asked why they hadn't been using it? CEO Demers said it was just read three times and three people had three different interpretations. Steve F. said it isn't in one spot, and there isn't a checklist to go through to say where to go. Roger reminded the Board about requiring a survey, it has been in the ordinance but not adhered to until recently, until it was noticed. Madge said that as long as it could be applied to other things besides violations, she thought it was fine.

Ann H. read §105-51.3.D(5) ‘If revegetation is required for a shoreline stabilization project, and it is not possible to plant trees and saplings in the same area where trees or saplings were removed, then trees or saplings must be planted in a location that effectively reestablishes the screening between the shoreline and structures’.

She asked why the board couldn’t change it from trees to ‘trees and plantings’ must be planted in a location... She thought the Board wouldn’t have to do one to one with the tree. Maggie M. wanted to be sure the requirement doesn’t get too watered down. Steve F. said, “We are already looking for the professional plan”. Ann noted it is only if it is not possible to plant another tree, such as a root issue next to the wall. CEO Demers stated that he did talk to Jeff Kalinich (DEP) about that specific scenario and that is when he stated the intent of the plantings is to stabilize the shore, but everything behind the wall is stabilized. He said any vegetation is a bonus. Ann thought Ms. Goodrum said it was great that there is no washout with the wall, but there is still no filtering to prevent sand from going into the lake. She said the wall retains earth, but it doesn’t filter the phosphorus going into the water, where plantings do. CEO Demers thought the water hits the wall and percolates down, he thought it was filtered. Roger A. agreed unless the ground was higher than the wall, then it will run over. Madge B. said that even if the area is stabilized, we do not want grass. CEO Demers said that the DEP doesn’t have anything against grass, but they do have an objection regarding fertilizer. He said when people have grass they tend to fertilize. The Board agreed that was the issue. Roger said you can’t go to each site and say it was fertilized. CEO Demers agreed and said he was not qualified to make that assumption. Madge said that based on this, the less grass the Board allows the better. Ann thought that when someone goes to a qualified professional, they would not put grass on the plan, because it doesn’t have a good root system. CEO Demers said there were other grasses, they didn’t have to use Kentucky Blue Grass, there was Orchard grass and Buffalo grass. Barbara F. noted that the Board can be more strict than the DEP, just not less strict. She added that any change to the Shoreland Zoning would have to be approved by the DEP. CEO Demers reminded the Board if someone has a legally existing cleared opening, they are allowed to keep it and maintain it. The Board agreed.

Nothing further was discussed.

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**The minutes from Tuesday, November 9, 2021 were accepted as written.**

Minutes are not verbatim, unless in quotes “” – If the name of a citizen making a comment was not requested by the Planning Board Chairman, the reference to their name will be known as ‘Citizen’ or ‘Abutter’ depending on who is speaking. When ‘Board’ is used in a sentence it is referring to the ‘Planning Board’.

**The Planning Board meeting started at 6:30 p.m.**

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**Conditional Use Permit – Earth Moving in the SD to Replace Retaining Wall – Map 28, Lot 46 (33 Carpenters Cove Road) – Michael Gullikson, Applicant; Jovanne Lowe, Property Owner**

Mr. Gullikson was present for the review of the application.

Provided along with the application were the following:

- Email from Joyanne Lowe dated October 18, 2021, stating ‘I, Joyanne Lowe, owner of the property at 33 Carpenters Cove, give authorization to Michael Gullikson to do work on my property. Any further inquiries can be referred to Michael at 207.XXX.XXXX’.
- Copy of the approval from the Planning Board to replace deteriorating retaining wall, dated October 26, 2007. The approval was to replace the existing wall with precast concrete blocks per the engineered plan received and it was to be completed by January 15, 2008.
- Provided was the Modular Block Details, drafted by Civil Consultants, dated 9/24/2007, which were the engineered wall plans for the original replacement wall approval.
- Copy of the MDEP Permit by Rule Notification Form, dated 10/15/2021, for 33 Carpenters Cove Road, which gave a project description as follows: Install 6 ounce erosion fabric behind retaining wall, replace rotting wood wall with stone.
- A copy of the revegetation plan for 33 Carpenters Cove Road, which was written as follows:  
From the Maine Erosion and Sediment Control Practices Field Guide for Contractors:
  - The topsoil should be 4 inches deep and be distributed uniformly. Rototilling for a deeper rooting zone on poor quality subsoils (sloping wet sites or with sand and gravels) is recommended.
  - Lightly compact the topsoil to ensure a uniform and firm seedbed (excessive compaction will increase runoff, and prevent seed rooting).
  - The seed bed should be scarified or roughened after topsoil is added to provide a deeper rooting depth for vegetation, traps moisture for the re-establishment of vegetation, and retains water for infiltration. To prevent compaction, rutting or erosion, the surface should be prepared for topsoil and seeding during a dry period and when the soil is not saturated.

The project will be re-vegetated to these standards, utilizing whichever mixture of grass seed is most appropriate for the conditions. Also, any plant life that is impacted by this project will be corrected for under the advice and scrutiny of the Shapleigh CEO.

- Provided was a letter which read as follows:  
There are consequences to every decision. Fifty years ago, Russell and Joyanne Lowe were just starting a family. The camp on Mousam Lake was the first thing they purchased. As an employee of the power company, he had access to free telephone poles. He used these in the construction of a retaining wall along the shoreline of his camp, believing they’d last ‘forever’. He was twenty six years old, when forever really means a few decades. When he died, several years ago, he could see that he had been wrong.

The wall that he worked so hard to build is now a detriment to his property, as well as to the quality of Mousam Lake, in general. We are excited by the idea of solving this problem, for the benefit of all.

In looking around, it is easy to imagine the solution as being the manufactured concrete blocks, which are appearing, increasingly, around Mousam and other lakes. At first, we thought this would be the right answer for us, too, but, upon greater consideration, we feel it is not. There are few straight lines in nature; it bends. Natural design standards avoid straight lines. When there were a few manufactured concrete walls along the shore, they seemed like a clean, convenient solution. With each new installation, however, the lake takes on a manufactured appearance, it becomes less naturally beautiful. Taken to the extreme, an overabundance of concrete walls will make any lake look artificial, as though it is a project of man, not nature.

A second consideration for us is longevity. My father-in-law once thought in terms of ‘forever’, the way people today likely consider their new concrete walls. If one looks at old concrete, that point of view is less convincing. The bases of many old bridges are yellowed and marred by scaling; it is inevitable, just a question of time. Many sources declare that the useful life of concrete is fifty to one hundred years, depending on use. Even standard 8 inch concrete blocks, having been in use for thirty or forty years are losing their cement to erosion, leaving a grainy aggregate, which will also erode in time. It is natural for people to be hopeful about longevity, but history does not support optimism when building with telephone poles, or concrete.

By contrast, stone is vastly more durable. It is not unfair to suggest that stone actually will last forever. The pyramids at Giza are 4,600 years old. Hadrian’s Wall, a dry stacked, 20 foot high, 73 mile long wall, separates Scotland from Northern England and is 2,000 years old. The Central American Incan structure at Machu Picchu are 700 years old. All of these are aging well.

Having learned that forever does not necessarily mean forever, we are intending to construct a solution to our problem which will not have to be dealt with again, a few decades from now. Also, we believe that natural stone will be better for health and aesthetics of Mousam Lake. It is a dramatic ecological shift to go from telephone poles to natural stone, one we are very much looking forward to.

A key feature of dry stacks stone walls (rockeries) is the randomness that is found in all of nature. This randomness is different from building with blocks, insofar as with the blocks, you know the exact arrangement, before the wall is begun. With stone, the engineering is through principles and practices, rather than a prescription for the placement of individual pieces.

The Federal Highway Administration (FHWA), as part of the Department of Transportation (DOT) promotes development of applied research and technology applicable to solving transportation-related issues on federal lands. In 2006, the Federal Lands Highway (FLH) undertook a comprehensive study to provide technology delivery, innovative solutions, recommend best practices and related information and knowledge sharing to Federal agencies, tribal lands, and other offices in the FHWA. The objective of this study was to review existing analytical methods and construction techniques currently in use for design and construction of rockeries and to develop a unified framework for design and specification of rockeries in modern highway construction.

Clearly, we are not building a highway along Mousam Lake, but for the purpose of sound highway construction, the FHWA has had unmatched levels of funding for, and eminent practical interest in, developing professional standards for the construction of rockeries. Utilizing these standards, developed by the FHWA, will result in the best result for this project. The standards are as follows:

- Base rocks will have an embedment of 12”, meaning 12” below grade.
- Base rocks will have to be sloped 5% toward the back of the rockery.
- The base rocks will be at least 1/3 the height of the rockery.
- All rocks will have their longest side perpendicular to the face of the rockery.
- All rocks second longest side will be parallel to the face of the rockery, placed horizontally.
- All rocks third longest side will be parallel to the face of the rockery, placed vertically.
- The rockery will have a batter of 16%, or one unit of horizontal placement, into the wall, for every six units of vertical placement.
- Each rock should bear on at least two other rocks.
- Each rock should have at least three bearing points; two in front, one in the rear.
- The front most bearing points for each rock should be within 6” of the average face of the rockery.
- The rear of the rocks should be aligned on an imaginary vertical plane. If rocks larger than the minimum specified base are used, they can extend beyond this imaginary plane, provided they do not interfere with rockery drainage.
- The tops of each rock should be sloped back 5%, as previously described for the base rock.

- Rocks will be stacked in an approximate running bond pattern; that is there should be no vertical columns of rock or continuous vertical joints running through the rockery.
  - Continuous horizontal joints should also be avoided.
  - If gaps larger than 6” cannot be avoided, they should be chinked (filled) with smaller rocks.
  - Chinking rocks may not provide structural support for overlying rocks.
  - Rock should be separated from surrounding soil surfaces by a non-woven geotextile.  
All seams in geotextile must be overlapped by at least 12”.
- Provided was a sketch plan depicting 33 Carpenters Cove Road. The sketch showed the size of the lot, depicted as 100’ x 200’; the location of Carpenters Cove Road (ROW); the approximate location of the existing shed & house; and the location of the wall to be replaced. Two abutters were also noted, those being Sean & Karen White, and Dave Sousa & Kathy Otumbre.
- The detailed description of the project on the application read as follows: *Replacement of a dated telephone pole retaining wall along the shore with a structure of natural stone. Erosion fabric to be installed.*

Roger A. asked Mr. Gullikson to let the Board know what he wanted to do. Mr. Gullikson stated what they are trying to do is replace the wall in front of the camp on 33 Carpenters Cove Road. He said the existing wall was made of telephone poles, and they are eager to replace it. He said this summer he was going through DEP guidelines that state you can make improvements on your waterfront wall, as long as you don’t replace it. He said his plan was to take out the fill behind the wall and replace it with an erosion fabric and stones, the reason being there are gaps in the wall and there is erosion occurring. He stated he went to CEO Demers and let him know what he was going to do to remedy the problem in the short, while intending to have a long term solution. CEO Demers said what he was proposing was fine as long as it didn’t get too big, but after getting an excavator on site, someone call CEO Demers and he came out to the site. CEO Demers told him the project was too big and it had to stop, which he did. He stated he now wanted to satisfy the Board and what CEO Demers requires in terms of replacing the telephone pole wall with a stone wall. He said the initial plan of just shoring up behind the existing wall morphed into replacing the wall, which needs to be done, and he noted he probably should have done this initially. He stated he would answer any questions the Board may have.

Roland L stated he read the narrative included with the application. He said his take was that the replacement would be more of a riprap situation than a wall. He asked if he was correct? Mr. Gullikson said he spoke with the DEP recently and that was their concern. He said the answer is no, it is actually a wall called a rockery. He said the neighboring property put up concrete blocks and he said he made an argument against using that for their property. He said the neighbors have a stacked block wall, and they are looking to do the same, but without using the concrete blocks. He said the narrative was a wordy way of making the argument, that it is their belief that they don’t want concrete, because they do not believe its long lasting, and if overused it leaves an appearance along the lake that isn’t great. He said with each added application of using concrete blocks, it takes away from the quality of the lake in his opinion. Roland said that he gathered that from the narrative. Roland asked, “The soil level to the water level is how much?” Mr. Gullikson stated, “Just under 8 feet”. Roland asked if he was aware that the ordinance in Shapleigh for the replacement of the retaining wall is that anything over 4 feet has to have an engineered stamp? Mr. Gullikson stated that he was aware. Roland asked if he was proposing to replace 8 feet of it in height? Mr. Gullikson stated, “Yes, to the same level”.

Steve F. asked if he was taking out 8 feet of wall and putting in 8 feet of riprap? Mr. Gullikson stated it was not riprap, stacked stone. Roland didn’t think the plan he submitted in 2007 was what he was proposing now. Mr. Gullikson stated that in part it was. Ann H. asked where he was getting the rocks? Mr. Gullikson stated that he

already had the rocks, they are on site. He said he owned land up north and he brought the stones down from there, and he now has more rocks than he needs on his property and for his neighbors, but it turns out they don't want them. He said he has more than enough rocks for the project. Mr. Gullikson stated that the original wall was engineered but with a stone wall you can't engineer it the same way, because each stone is individual. He said the plan the Board has is designed as close to what he is going to do, as he can imagine it being, with a base of gravel under the wall, backing behind the wall of gravel, and he said the plan for the new wall is the same except for changing from concrete to stacked rock. He said the actual material used goes from stacked concrete to stone.

Roger A. stated the difference is that it has not been engineered, the stones that are being used have not had an engineer state that it is guaranteed not to fail. Roger said the Board needs an engineer to say what he is doing, using rocks, will not fail; that at 9'2" the wall will not move. Mr. Gullikson said, "9'2".” Roger stated that is what the original plan states. Roger said the Board needs to have the proposed wall, built with stone, engineered by a licensed engineer.

Mr. Gullikson said he would like to get the problem dealt with. Mr. Gullikson said he had only so much time, so if he built another concrete wall per the plan, would that work. He thought most people would rather see a stone wall. Roger A. and Ann H. stated that he could have the stone wall, but the ordinance specifies that any wall over 4 feet in height must be engineered. Roger said this is so the Board will know the wall will not fail because the engineer put his stamp on it stating if built per the plan it will hold up. Roger stated the current plan calls for blocks per the engineer, if the engineer will state that using the rocks instead will not fail, then the Board will accept that. Steve F. stated it is due to the height of the wall, if the wall was under 4 feet it would be different.

Roland L. asked Mr. Gullikson if he was aware that the person doing the work has to be certified in erosion control by the DEP? CEO Demers stated, "Or it has to be a family member". Roger stated, "It has to be the owner." Roger asked if Mr. Gullikson was on the deed? Mr. Gullikson stated it was a family Trust. Roger asked if Mr. Gullikson was in the Trust? He stated he believed so, but hadn't read the Trust. He said he understood what Roger was speaking about and that he had taken the DEP course, but he never had reason to call for the final inspection to get his certification. He said he was intending to do it for this, but hadn't done it yet. Roger said the person doing the job with certification, his license number has to go on the permit. Roger suggested that he re-apply, get his license number, and then he can do the work. Mr. Gullikson stated, "Ok".

Roland L. said the Board applauds anyone's efforts to do right by the lake. He said as a resident of Mousam Lake, that that wall was in the top 5 in most need of work. He said he's seen it for the last 70 years. He didn't want Mr. Gullikson to misinterpret the Board's questions as the Board members not wanting to support his efforts, but the ordinance requires certain things be followed, the engineered plan, DEP certification, etc. He wanted Mr. Gullikson to know it was not personal. He said that if Mr. Gullikson can meet the ordinance, then what he is proposing will be fine, otherwise, it will not happen as presented. Mr. Gullikson thanked Roland and said he understood the Board was restricted in what they are permitted to do.

Roger A. said that once the wall is approved, there will need to be a survey to show that the new wall will be where the existing wall is located. He said a surveyor will have to come out and place the location of the existing, the length of the existing, and then he will come out to state that the location of the new wall is in that same location. He said this ensures the wall does not encroach toward the lake. Roger said he understood that it may take some time for a surveyor to get out there. Mr. Gullikson said it was just as difficult to get an engineer out.

Madge B. said the rock wall sounded terrific to her, she was tired of looking at the block walls. Ann H. said it is possible an engineer will state the rock wall as proposed is ok. Mr. Gullikson stated he has not been able to date. He stated that it appeared he will have to take the project up again at another time. Steve F. asked Mr. Gullikson if he wanted the Board to table the application? Mr. Gullikson asked what the ramifications of that would be? Roger A. stated it would give him 90 days to try to gather more information. Madge stated that the Board can extend the time. She told Mr. Gullikson if he comes back within 90 days and states he needs an extension, it is likely the Board will give it to him. Mr. Gullikson thanked the Board. Roger told Mr. Gullikson that he needed to be back to the Board within the 90 day window in order for the Board to be able to table the application again. He said if it is over 90 days, then the application is no longer valid, but if he comes back within the 90 days to report where he was at, the Board could table for another 90 days. Mr. Gullikson said he would like the Board to table the application to be able to get the information the Board wants.

**Steve F. made the motion to table the application for 90 days in order for the applicant to provide the information requested (engineered plan and find a surveyor to place the existing wall). Madge B. 2<sup>nd</sup> the motion. All members were in favor. By a vote of 5 – 0, the motion to table passed unanimously.**

Roger A. stated the Board would also need to know an expected completion date. He stated once the Board approves the application the Board will want to know an estimated start date, and a date of completion. This gives the Board and the CEO a date when the area will be completely stabilized to protect the lake.

Roland L. added that the Board will ask how many trees will need to be removed, what is the revegetation plan for the area that is disturbed, and where will the telephone poles be relocated to, since they cannot stay in Shapleigh. Roland added that they cannot stockpile them on the hill with the rocks. Steve F. agreed, stating that he cannot keep them in Shapleigh. Mr. Gullikson said that was not a problem.

Mr. Gullikson stated that he wanted to say that this project was already approved once, his father-in-law tried to find a contractor to do the project and could only find one person, who backed out. He said his father-in-law was discouraged and now he has since passed away. Steve F. noted it was a difficult location. Mr. Gullikson agreed. Roger A. stated that if he was going to replace the wall with the engineered concrete block plan, the Board could approve it. He noted the Board would also need the survey, and to be told where the existing material will be taken to. He said the rock cannot be used, because it isn't what the engineer approved. Mr. Gullikson said he would rather see stone, as he believes it will last longer, concrete degrades over time. Ann H. said the Board likes the stone, but an engineer has to say its ok. Roger A. stated that the original engineered plan was done by Civil Consultants, so Mr. Gullikson could contact them to see if they could engineer the stone wall. Roger added that the engineer may want more than 12 inches of stone behind the wall, since it was going to be a dry laid wall, so there would be enough infiltration for the storm water, and other measures to be sure the wall will not fail from the wave action. Roger said the new locking block concrete stones, which weigh 2000 lbs. plus, they are made to interlock, but even those move and could fail down the road. He said this is why the Board wants an engineered stamp for those as well.

Roger A. stated that once Mr. Gullikson has all the information for the Board, the Board will then have to notify abutters, so the approval would not be at that meeting, a second meeting will be required before the Board could act on it once they receive the info.

Roger A. reminded him again to return before the 90 days expires. Nothing more was discussed.

**Proposed Zoning Changes for Town Meeting 2022**

Barbara F. asked Steve F. where he thought the requirement for a full survey should be placed in the ordinance, as this was initially his suggested amendment, and backed by the other Board members. He said first it needs to be added to the application. Barbara stated the issue with this was the application covered many areas, such as you would not require a survey for a business. Steve agreed, but noted he liked the wording of the requirement. CEO Demers asked Steve when he was thinking it should be required? He asked if he was thinking of a best practical location on a non-conforming lot? Steve said it was already required that the location be set by a licensed surveyor. Roger A. agreed, but only after it has been approved. Steve said he wanted to see it prior, along with the application. Ann H. asked if it should be under §105-4.D(1) ‘A nonconforming structure may be added to or expanded after obtaining a permit from the same permitting authority as that for a new structure **and providing a full survey at the time of application....**’ She asked if this was a good location for it. CEO Demers said that he has seen other ordinances where it speaks of best practical location, where it speaks about the purpose, the ordinance then talks about submission requirements. He asked if the Board would want to do this? Roger A. stated that best practical is under §105-4.D(3), (5), (7). Madge said she agreed there are a lot of places to review best practical location. Roger added that a survey is required in multiple locations. CEO Demers asked if this is a similar thing in that the Board just has to start enforcing it? Roger said it is required ‘after’ approval ‘not prior to’. He said we are looking at getting it with the application.

Ann H. asked if it would go under Basic requirements after C ‘Permits must be obtained from the Code Enforcement Officer prior to commencing any activity controlled by this chapter and shall include the erection of signs and the movement in or out of Town of manufactured housing units.’ She said then you would add ‘**An application for a nonconforming structure, required to be reviewed by the Planning Board, shall require a full survey be provided at the time of application.**’, placing it in paragraph C.

Steve F. said he was hesitant when it comes to plugging something in, because the ordinance is like a spider-web sometimes, whereby one piece will flip you to another. CEO Demers added that if it were on an applicant checklist, the Board would know it was in there.

The Board agreed to add it under Basic Requirements, having its own section E. Madge B. added that the Board was only requiring a survey on a non-conforming structure. Steve said the Board has to be careful because the Board agreed retaining walls fall under a structure. Steve asked if the Board wants to have a full survey required for a retaining wall? He said if not, it has to be separated as to what non-conforming structure the Board wants to see a survey for. He said a house, tear-down / rebuild, is a yes for him. He said he didn’t think so for a retaining wall.

Madge B. said it definitely applies to structure, but she also thought it applied to foundations. Roger A. agreed, foundations it was required for placement. Steve F. asked if the Board puts it in the ordinance, adding ‘except retaining walls’, or does this create a problem? Madge said with walls, it is not a full survey, so that was the difference. Roger and Steve said, correct. Maggie M. asked if there could be a second sentence saying ‘as this pertains to retaining walls, a full survey is not required’. Steve said what he was looking for was that everyone played by the same rules. Madge said everyone agreed with that. He said his push for this was to get some sort of uniformity from applicants, on what the Board looks at and approves. Maggie asked if retaining walls were the only exception? Steve said yes, until the Board runs into an issue. Madge said the Board could exempt retaining walls expressly. Steve thought the Board could put it in and work with it, and see if there were any potential down sides. Madge didn’t think there was a serious down side because they were just requiring a



survey, the Board wasn't requiring something the Board or the applicant did not understand. Steve said it wasn't a strange requirement. Madge thought the Board could put it under Basic Requirements, under E and add 'except for retaining walls'. Barbara asked if this would be a separate sentence or part of the sentence? It was thought it could be separate. CEO Demers said the retaining walls were exempt because they could only be placed in the same location and the same size. He asked if a best practical location was being placed in the same location, was the Board going to require a full boundary survey? Barbara stated at the last meeting the Board said yes, because on a non-conforming lot it was a concern. Madge and Roger agreed, Roger added that it needs to be verified that the structure actually fits on the lot and is not on someone else's. CEO Demers said the Board doesn't care if it is a retaining wall, only if it is a dwelling. Roger said for example a building has been on site for 50 years, and then they do the full survey; part of the building is on the neighboring property, now the Board can ask that the building be moved. Roger noted that the structure is being replaced and the person wants it in the same location, but it's on the next door neighbor's property, so the Board can ask it be moved. CEO Demers was concerned if there were conflicting surveys. Steve stated that if you cannot come up with a survey, then you shouldn't be tearing down your structure. CEO Demers asked if they had to go to court before replacing the structure. Steve thought they needed to come up with an agreement. CEO Demers said that the full survey would be for everything except retaining walls. Steve asked if they wanted it for retaining walls? He said if a retaining wall is a few feet over it can be remedied, but if your house is not where you think it is and you have to move it, that is big money. The Board continued to discuss the necessity of a full survey for a wall and did not conclude one would be required.

*The Board agreed that placing it under 105-3 was best, as 105-4 was broken out in too many sections.*

**Place it under §105-3 'Basic requirements'**

**Place under New Section 'E'**

**An application for a nonconforming structure, required to be reviewed by the Planning Board, shall require a full survey be provided at the time of application. *Retaining walls exempt from a full survey.***

*Note: It will be placed in Section F, as E was taken by 'Proctographic record required' (See Below)*

§105-15. Definitions.

Amending the following definitions:

- Medical Marijuana Caregiver  
Cultivating, processing and/or storing of medical marijuana by a qualifying patient at their own residence or a medical marijuana caregiver at their own primary year-round residence for use by a qualifying patient. ~~This use shall be considered an accessory use.~~
- Building Height: **See Height of Structure.**
- Driveway – A vehicular accessway ~~servicing two dwelling units or less.~~  
*Barbara F. stated she had not found another definition for driveway as yet, but would try to find one for the next meeting to review.*

New definition:

- **Tiny House – State definition: “Tiny house” means a dwelling that is less than 400 square feet in floor area, excluding the area of any floor level located above the main floor.”**



New Requirement from the Dept. of Environmental Protection:

**Place it under §105-3 ‘Basic requirements’**

**Place under New Section ‘E’**

**Photographic record required. An application for a permit for development within the Shoreland District must provide preconstruction photographs at the time of application, of the shoreline vegetation and development site to the reviewing authority of the permit, and post construction photographs no later than 20 days after completion of the development. If the reviewing authority is both the Planning Board and the Code Enforcement Officer, both shall receive a copy of before and after picture documentation.**



*Board members agreed to allow the sale of alcohol in the Shoreland District reviewed as a Conditional Use Permit (CU), as no concerns were noted. The section was amended as follows:*

**§105-17. Land Uses**

Commercial

RP	SD	GP	FD	SP
----	----	----	----	----

Premises selling alcoholic beverages

NO	<del>NO</del> CU	CU	NO	NO
----	------------------	----	----	----

*Roger A. stated that if the Board was going to allow alcohol be allowed in the SD, then he felt eating establishments should also be allowed in the Shoreland District as a CU. The Board members agreed, therefore the section was amended as follows:*

RP	SD	GP	FD	SP
----	----	----	----	----

Eating establishments

NO	<del>NO</del> CU	CU	CU	NO
----	------------------	----	----	----



Proposed amendment to note to table by the CEO:

105-19. Notes to table on dimensional requirements.

Front yards. Whichever of the two methods for determining front yard setbacks (specified in the table in §105-18) yields the greater distance shall apply. When a lot fronts on the shore and on a road or right-of-way, both the Shoreland setback of 100 feet and the front setback as defined in §105-18 shall be met, ~~or a variance must be obtained. If a legally existing structure which does not meet the required front yard standard is located on the property, any new structure may be set back the same distance from the right-of-way as the existing structure, so long as all other performance and dimensional standards of this chapter are met.~~ **Except on non-conforming lots of record, in which case the setback may be no less than twenty-five (25) feet from the property line or road. This reduction shall be considered a conditional use permit from the Planning Board. All conditional uses approved relating to setbacks shall require conformation in writing by a licensed surveyor that the placement of the structure is correct and the plan shall be recorded in the York County Registry of Deeds within 90 days of the date of the Planning Board approval. If the plan is not recorded within this time period, the approval of the Planning Board shall be null and void.**

*Board members were in agreement with the amendment.*

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Madge B. asked how you enforce the ‘after’ photograph? Barbara F. stated a copy was to be given to the CEO and Board. Steve F. thought it could be attached to the occupancy permit. Madge said that was what she was wondering. CEO Demers said he could put it as a condition of the occupancy permit. Madge thought there had to be some way to enforce it. Madge asked CEO Demers if he could put it on the occupancy permit, so that it is written down? CEO Demers stated that he could, but noted it only affects non-conforming structures. Steve said he could put down ‘if applicable’. CEO Demers agreed. It was noted that a wall doesn’t get an OC. CEO Demers stated that if he gets calls back for a final inspection, it will be one of the things he looks at. He said often with inspections people never called him for an inspection and he isn’t chasing them down. Barbara asked if the Board can put on the approval that it is null and void if the pictures are not received? Maggie M. agreed. Barbara asked why they could not have a consequence if they do not comply? Madge asked why it was being required if it cannot be enforced? Barbara stated that the DEP is requiring it. Madge asked why they don’t tell us how to enforce it? Barbara stated that as a Town we have the ability to enforce compliance with fines and such, in a manner that the Town chooses, that is allowed by State law. Roger agreed that it should be enforced. He felt it goes to the CEO, if the date has gone by he reaches out and says the date has gone by, and that he did not receive it. Madge asked what needs to be changed? CEO Demers said with tree permits he is supposed to follow up after a year. He said the tree comes down, it goes in a booklet, if a year goes by if he gets there he is lucky. He said if he was lucky someone comes in for something else and he sees in the system that he had a tree permit, so then he asks if they replanted; if they say no, he tells them to get it done. He felt he needed a full time employee to chase all this down. He said he didn’t know how to enforce it, other than making it a check box on the OC. Madge thought if this was in the records it would be great, but if it isn’t enforceable then it isn’t. Steve said the Planning Board isn’t going to enforce it, Madge agreed. Steve thought it would be up to the Selectmen to enforce it, the Planning Board cannot enforce, that is a different branch of government. Barbara didn’t see why it wouldn’t be helpful to put it a condition of approval, just like best management practices, to remind them to do it. She said the Board doesn’t say ‘or else’, they just say it is a requirement.

Maggie asked if they get a copy of their conditions with their approval. Barbara stated that of course they do. She also noted that often she reaches out to the applicants with a reminder of material required as a courtesy.



Madge B. asked about the definition of Public Road which is as follows: *A roadway used by the general public, whether or not the same has been laid out as a Town way.* She said it’s used by the general public but it doesn’t say who maintains it. Barbara F. reminded Madge that at the last meeting she said this definition worked, and that when she said she didn’t quite understand it, Madge said it worked as written. The Board members agreed and thought they had hashed it out. Barbara said if Madge had another definition that worked better, she was welcome to bring it to the next meeting to discuss it. Madge said she would look more into it. Barbara added that if she wanted to find another definition for driveway that would be great as well.



*This addition is already an MDOT requirement, by putting it in the ordinance the Board will remember to see that it is done.*

**§105-34. Access control on Routes 109 and 11.**

- A. Land lying on Routes 109 and 11 may be divided into lots, but all vehicular movements to and from the highway shall be via a common driveway or entranceway serving adjacent lots or premises. All lots of record existing at the time of the ordinance amendment shall be allowed direct access to Routes 109 and 11, provided that minimum safe sight-distance standards can be met.
- B. All lots accessing Route 109 and 11 must obtain an MDOT Entrance Permit. All conditional use permits requiring access, applicant shall provide proof of MDOT Entrance Permit prior to obtaining approval.**



*Amending as this new definition is more in alignment with the rest of the ordinance.*

**Chapter 89 – Subdivision of Land**

Article III ‘Definitions’

§89-6 ‘Terms defined’

Street Classification

A. Arterial Street

A major thoroughfare which serves as a major traffic way for travel between municipalities and through the municipality.

B. Collector Street

A street servicing at least 15 lots or dwelling units, or streets which serve as feeders to arterial streets, and collectors of traffic from minor streets.

C. Industrial or Commercial Street

Streets servicing industrial or commercial uses.

D. Minor Street

A street servicing fewer than 15 lots or dwelling units.

~~E. Private Right of Way~~

~~A vehicular accessway serving no more than two dwelling units.~~

**E. Private Way**

**A category of road not owned or maintained by the Town of Shapleigh or the State of Maine which provides frontage to a lot or lots.**

~~~~~  
This addition was requested by the Postal Service.

89-15. Submissions. (Minor Subdivision)

B. The application for approval of a minor subdivision shall include the following information:

**(11) Proof that the developer coordinated the mail delivery system per post office specifications.**

89-19. Submissions. (Major Subdivision)

B. The application for approval of the final plan shall include the following information:

**(14) Proof that the developer coordinated the mail delivery system per post office specifications.**

~~~~~  
*Stone monuments are always an approved requested waiver, so it made sense to amend to remove the requirement.*

§89-30. Required improvements.

**A. ~~Monuments.~~**

~~(1) Stone monuments shall be set at all street intersections and points of curvature, but no further than 750 feet apart along street lines without curves or intersections.~~

~~(2) Stone monuments shall be set at all corners and angle points of the subdivision boundaries where the interior angle of the subdivision boundaries is 135° or less.~~

~~(3) Stone monuments shall be a minimum of four inches square at the top and four feet in length, and set in the ground at final grade level. After they are set, drill holes, 112 inches deep, shall locate the point or points described above.~~

~~(4) All other subdivision boundary corners and angle points, as well as all lot boundary corners and angle points, shall be marked by suitable monumentation.~~

**A. Monumentation.**

**(1) All subdivision boundary corners and angle points, as well as all lot boundary corners and angle points, shall be marked by suitable monumentation prior to approval.**

~~~~~  
*There are no required sidewalks currently in Shapleigh, as this is a rural community, and the requirement is always an approved requested waiver; therefore, the Board agreed to amend the ordinance to remove the sidewalk requirement from the following sections:*

§89-36. Street design standards.

I. The following design standards apply to street classification:

| Description    | Arterial | Collector | Minor | <del>PROW</del><br>Private Way | Industrial/Commercial |
|----------------|----------|-----------|-------|--------------------------------|-----------------------|
| Sidewalk Width | 5        | 5         | 5     | N/A                            | 8                     |

**M. Sidewalks.**

**(1) Bituminous sidewalks.**

- ~~(a) The gravel aggregate subbase course shall be no less than 12 inches thick.~~
- ~~(b) The crushed aggregate base course shall be no less than two inches thick.~~
- ~~(c) The hot bituminous pavement surface course shall be no less than two inches after compaction.~~

**(2) Portland cement concrete sidewalks.**

- ~~(a) The sand base shall be no less than six inches thick.~~
- ~~(b) The Portland cement concrete shall be reinforced with six-inch square, Number 10 wire mesh and shall be no less than four inches thick.~~

~~~~~

*The Board agreed that in certain circumstances pavement does not need to be required within a minor subdivision, therefore an amendment was made under ‘Minor’ (However, the requirement for pavement in a major subdivision shall remain in place.) In addition, the definition under Street Classification for a private right-of-way was removed and the definition of private way was added, so an amendment was required under Notation 1.*

§89-36. Street design standards.

I. The following design standards apply to street classification:

Description	Arterial	Collector	Minor	<del>PROW</del> Private Way	Industrial/Commercial
Min Pavement	44	24	20 <sup>2</sup>	12 <sup>1</sup>	44

<sup>1</sup>Pavement requirement for a ~~private right-of-way~~ private way in a minor subdivision may be at the Board’s discretion.

<sup>2</sup>Pavement requirement for a minor subdivision street may be at the Board’s discretion.

~~~~~

This section was also amended to reflect the ability to waive pavement for a minor subdivision.

§89-37. Street construction standards.

A. Minimum thickness of material after compaction shall be as follows:

| Street                              | Arterial | Collector | Minor <del>PROW</del><br>Private Way | Industrial/Commercial |
|-------------------------------------|----------|-----------|--------------------------------------|-----------------------|
| Hot bituminous<br>Pavement (inches) |          |           |                                      |                       |
| Total Thickness                     | 3 ¼      | 2 ½       | 2 ½ <sup>1</sup>                     | 3                     |
| Surface course                      | 1 ½      | ¾         | ¾ <sup>1</sup>                       | 1 ¼                   |
| Base course                         | 1 ¾      | 1 ¾       | 1 ¾ <sup>1</sup>                     | 1 ¾                   |

Note: <sup>1</sup>Pavement requirement for a minor subdivision street may be at the Board’s discretion.

This concludes the additions of amendments for Town Meeting to date. There may be further adjustments at the Planning Board meeting on December 14, 2021.

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**Growth Permits**

There are still several Growth Permits available.

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The Planning Board meeting ended at 7:50 p.m.

**The next Planning Board meeting scheduled will be December 14, 2021 and the meeting will be held IN PERSON at the Town Hall.**

**NOTE: The winter hours are in effect through March 30th; the meetings will begin at 6:30 p.m. and any scheduled public hearing begins at 6:00 p.m.**

The Planning Board meets the 2<sup>nd</sup> and 4<sup>th</sup> Tuesday of each month unless it falls on a holiday or Election Day. Should there be a cancellation due to a storm event, holiday or Election, the meeting will typically be held the following Wednesday, also at 7:30 p.m. Please contact the Land Use Secretary if there is a question in scheduling, 207-636-2839, x4.

Respectfully submitted,  
Barbara Felong, Land Use Secretary  
Town of Shapleigh  
[planningBoard@shapleigh.net](mailto:planningBoard@shapleigh.net)