

CLASS V ROADS STUDY COMMITTEE  
TUESDAY, June 19th, 2018  
4 PM  
TOWN OFFICE CONFERENCE ROOM

Present: Sue MacKenzie, Dan Brand, Karen Henry, Mike Smith, Ernst Kling, Kevin Sahr (consultant), Frank Bowles, Bill Malcolm, Steve Williams

## Agenda

- Minutes from 6-5-2018
- Review plan to reopen River Road
- Review Baker 1 plans
- Grant Brook Area Project to start July 2
- River Road Bridge over Hewes Brook- Proposals are due June 20 to be opened Thursday AM 6-21-18 in Board meeting time not set
- Review new problems on South River Road
- Gravel Road Project- Dorchester “the last mile”
- Report on Bridge repairs for Market St Bridge, Baker Hill, Highbridge (Steve)
- Need for identifying a “go to” engineer

Minutes – The minutes from the 6-5-2018 were approved as amended. There was some discussion in which it was clarified that all Committee members will receive copies of the DRAFT minutes for review, even when they did not attend the meeting.

Review Plan to reopen River Road – Sue said that the current plan for rerouting the closed portion of River Road was posted (physically) on the bulletin board in the conference room for inspection. There was some debate about the actual size of the planned re-route and Sue reported that Mr. Tensen told Dina Cutting that he would like the Town to give him the closed portion of River Road (and the riverbank) in exchange for the land required for the new route.<sup>1</sup> Presently Mr. Tensen owns to the East edge of the road, and indications are that he will want what is on the West side of the road in exchange. Frank said that there could be concern on the part of abutting landowners regarding plans for that portion of the road (e.g., lots of visitors camping, parking and leaving behind garbage). Discussion revealed that there has not yet been an official request for this property and that there may be a legal public viatic (meaning travel) easement on the roadway. This led to a conversation about how the road will be stabilized – helical anchors vs. cased grout piles – in either case, there will be vertical structural elements to stabilize the current road section where “needed” to provide support for the nearby planned road to the East of the current road. The plans also include installing the guard rail along the new road and providing a right hand turn off of it (when traveling south) for access to the properties that will require it.

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<sup>1</sup>It was noted by Bill Malcolm subsequent to the meeting that the Town does not own the River Road, but has a Right-of-way for the River Road.

There was further discussion in which Karen pointed out that no official request has been made for the exchange of land, but that it's good to think about this potential request. Mike asked the Committee to think about uses of the current roadway and riverbank that would not be well-liked by the Town and/or the current abutters. For example, it might be desirable to have the asphalt removed and reseeded. Mike said that he would like to see the land restored to a natural state.

Bill asked about a driveway shown on the plan, and Sue said that it was a curb cut that Tensen requested in order to provide access to a farm road. Mike asked about the Northernmost culvert, pointing out that the stream it serves has some very sharp turns. Sue said that the culvert will be approximately twice as long as it is now, and that the permits should be prepared for NE DES (Department of Environmental Services) by Thursday.

Baker 1 plans – Nothing to review.

Grant Brook Area Project – Sue announced that it will start on July 2<sup>nd</sup>. She is wondering what to do about cracked concrete on the Grant Brook bridge abutments. Karen said that there are two kinds of concrete – that which has cracked and that which hasn't yet cracked. Sue said that the NH bridge inspectors pointed out that the cracks are there but that they do not make recommendations. Karen does not think that they are a problem, but she would ask structural engineer friends if Sue forwards her photos of the cracks. Sue is concerned about the SW corner of the bridge abutments.

River Road Bridge over Hewes Brook – Sue said that the proposals for construction were due on the 20<sup>th</sup>; however, now they are due on the 27<sup>th</sup>. They will be opened on June 28<sup>th</sup>.

Review new problems on South end of River Road – Sue asked if anyone had been down to the South end of River Road to look at the riverbank. Karen and Dan said that they had been there with Perry Kairis from Geostabilization International. Sue said that the riverbank all the way down to the Town line was beginning to deteriorate. (The length of the scarp that is showing is approximately 100 ft). Mike asked about the responsibilities of the managers of the river levels. Sue said that this will be a condition of the relicensing (meaning of Wilder Dam). She said that we will be insisting on and demanding mitigation fund. She also said that this area is most vulnerable right now and was made a little worse with last night's storm. Frank said that he and Kevin had identified that area as unstable several years ago. Sue said that she had thought in the past that the rock (meaning boulders) on which it was built was stabilizing it. She asked what should the Town do about it now that it is failing. She asked should we put riprap in and notify DES that we did it on an emergency basis or should we do nothing? Do we go for an engineer and plan to do the whole thing, which the Town cannot afford? Karen said that Perry Kairis said that he will prepare a proposal using soil nails to stabilize it; however, it could be stabilized with geotextile and riprap with gradually decreasing sizes as one travels up slope (18" to 30" diameter at the water line). The soil nailing would be much more expensive.

Karen asked does this involve DES permitting. Sue stated that if we call it an emergency and tell DES this is what we're going to do, then we will have to come up with a permit application after-the-fact. Karen asked about required equipment. Steve said that an excavator would be required, but that the material budget is low on funds. Sue said that DES won't approve anything that isn't stamped by an engineer, and Karen said that she would stamp the design (later, on 6/23/2018 she withdrew this offer to help via email due to lack of professional liability insurance). Sue asked about drawing up the plan, and Karen said that she wouldn't do that. Frank said that once plans are produced, DES has many questions. There was some discussion about culverts in this general area. More conversation about how high the water

levels ensued. Sue again asked about how to proceed. Karen described generally how to do bank stabilization with geotextile and riprap. Sue asked Karen if she wanted to spearhead this problem, and Karen replied that she (Karen) should not be the driver of this project. There was some discussion of budget and process. Sue asked for detailed plans and a cost estimate. Karen said she would help Steve with the cost estimate. Karen asked about timing, and Sue replied that this should be done asap because another storm could cause the slope failure along the bank to progress into the road. Mike asked if last night's storm damaged the road and Sue replied that it did, and there was visible damage. Ernst asked whether he could bid on projects and still remain on the Committee (no clear answer). Sue will notify DES that we are going to do this. Karen and Steve agreed to meet at 8 am on Wednesday, June 20<sup>th</sup> to develop the cost estimate.

Mike asked for clarification on how the money to be used to reconstruct the closed section of River Road can be disbursed should the project be completed under budget. Sue answered that the reconstruction of River Road money can be used only for the reconstruction of the closed portion of River Road, and if there is any remaining funding, decisions about how to use it would be made at Town Meeting. Steve pointed out that the Town has block grant money, and Mike said that next year, perhaps we could use any remaining funds from the River Road reconstruction to stabilize this section of road. Frank expressed concern that this section of road is looking unstable. Sue said that the Town should be able to find funding to save this road (meaning very soon vs. next year).

Questions were raised about when the construction would begin on the reconstruction of the closed portion of River Road. Sue replied September or October, provided that we have permits from DES. The permit applications should be ready Thursday morning, and we are asking for an expedited permit, as are many other Towns in the State.

Sue also pointed out that we are spending a lot of money on the distal end of Dorchester Road. Sue asked Steve and Karen to estimate the costs of making Dorchester Road "mud proof." Karen asked about any particular bad spots along the last mile of Dorchester, and Steve replied that the whole mile is terrible. He said that test pits might reveal usable material already there in place (i.e., the road surface). Sue asked Karen how she would "mud proof" the road and Karen recommended two layers of geotextile with a 6" layer of clean sand or other large-pored material in between them buried a minimum of 18" below the road surface. She (Karen) said that the road could be built up vs. excavated for the full 18". Sue and Steve said that 3 culverts should be replaced in the last ½ mile of Dorchester Road, and some trees need to be removed. Steve pointed out that we probably cannot build up the road where driveways intersect it. Sue said that she needs a budget for this ½ mile of road.

Sue asked Steve whether Daniels has looked at some bridges, and Steve said "no." She asked him whether they have trimmed little trees on Highbridge Road bridge – top and wingwalls, etc...and Steve said that he will be really busy for the next month.

Need for identifying a "go to" engineer - Sue said that she would like a consulting engineer, for example someone who has retired and wants to remain active in engineering. She does not need a design/project engineer, but rather a consultant. Sue asked if there were any other ideas for consultants. Karen explained that she and Sue were talking to Anthony Puntin on Friday about someone who can help us expedite projects and help us on compliance issues.

Some discussion ensued about the upcoming culvert inventory work. The first visit to observe the culvert work being done by the UVLSRPC (Upper Valley Lake Sunapee Regional Planning Commission) will be Friday, June 22 by Dan and Bill. Dan will report on this to the committee at our next meeting.

Other business – Karen, Dan and Mike described their visit with Perry Kairis of Geostabilization International. Everyone was favorably impressed and would be comfortable working with him. They also found his observations to be educational. Dan pointed out that he will give us proposals for all three areas – 1) the unstable bank near North Thetford Road, 2) The unstable bank near the Hanover Town line and 3) the closed portion of River Road. He is willing to work with the USACE (USArmy Corps of Engineers) for the River Road/North Thetford Road stabilization project. There was considerable discussion about how the soil nailing technique does not address erosion at the toe of the slope in the Connecticut River. Karen pointed out that the proposal regarding the closed portion of River Road could be a plan B, should something fall through with the current plan. The soil nailing could allow the road to open up again, but we would still have to address the erosion. The Committee agrees that the current plan is preferred because the rerouting of the road avoids the major erosion problem along the riverbank.

There was some discussion about how soil nailing looked promising for the riverbank near North Thetford Road. Dan pointed out that Geostabilization International has 40 crews working in the New England region.

The meeting was adjourned at 5PM.

Respectfully submitted,

/s/ Karen Henry