



TOWN OF BOW

Conservation Commission

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Bow Conservation Commission

Meeting – February 11, 2019

DRAFT Minutes

The extra meeting of the Bow Conservation Commission was held on February 11 at 7:00 p.m. Chair Sandy Crystall called the meeting to order.

Members present: Sandy Crystall, Wendy Waskin, Amanda Kallenbach, Michael Hansen, and Bob Ball.

Item s for Consideration/Discussion

Review wetland applications and provide comments to NHDES:

File # 2019-0140 - Applicant: G Gardner Contracting LLC; Create a 34-lot residential subdivision with two conventional frontage lots, 32 open space lots, one open space lot and a lot to be merged with Knox Forest. The open space lots will be accessed by a new cul-de-sac and a new road that will loop between two existing roads. Town clerk signature 1/18/19; intervention submitted 1/29/19.

Chair Ms. Crystall opened the meeting by mentioning that the Commission needs to submit comments to NHDES on the wetlands application for G Gardner subdivision. She also noted that Jen McCourt, project engineer, and Tom Sokolowski, project wetland scientist, were in the audience to answer questions.

Then Ms. Crystall referred everyone to the packet that had a portion of the NHDES wetlands application with answers to 20 question. Each question was reviewed individually.

1. Need for proposed project. Mr. Ball noted that some residents expressed concerns about any need for additional housing in Bow. He also asked whether the developer had requested any waivers from Section 3.02.P of the Town of Bow Subdivision regulations. He concluded with asking whether the proposed plan was indeed the least wetland impact as it seemed that the vernal pool along Smokey Road would be impacted. He wondered if bringing the road through Boulder lane would be better.

Ms. McCourt explained that the proposed plan shows the least wetland impact and how Mr. Ball's suggestion will actually create more wetlands impacts.

2. Plans showing least impact to wetlands or surface waters on site. Ms. Crystall noted that the regulations do not include the amount of lots in a subdivision and there is possibly a way to come up with a plan with even less wetlands impact. Mr. Hanson asked about the wetland crossing and whether a culvert will be used. Ms. McCourt explained that the wetland crossing was planned at the narrowest spot to minimize the impacts and confirmed the use of a culvert. Ms. Crystall also noted that for wildlife the means provided for crossing matter just as much as whether it creates a corridor.

Then members asked the developer about the distance from the crossing to the closest vernal pool (about 650 feet); how wetlands inhabitants usually cross the wetlands (Mr.

1 Sokolowski explained that critters can go through the culvert or the road itself); he use of
2 uplands to provide access to the site (Ms. McCourt said that wetlands will only be impacted
3 by the road, no individual lots require conditional use permits); and width of the culverted
4 stream how it was measured) (2-3 feet).

5 Mr. Hansen asked which storm was used to size the culvert and Ms. McCourt said that she
6 used a 25 year storm event but did check that a culvert will pass a 50 year one as well. She
7 added that for the big culvert in the intermittent stream crossing she made sure it passed a
8 50 year storm.

- 9 3. Type and classification of wetlands. Ms. Crystall listed the types from the application.
- 10 4. Relationship of wetlands impacted to the ones nearby and surface waters. Ms. Crystall said
11 that they are part of the wetlands complex and vernal pools are nearby as well. Mr. Ball
12 asked about the vernal pool along Boulder Lane and the location of the headwaters for the
13 stream and weather the water leads towards the Town Pond. Ms. McCourt showed the
14 location on the map and confirmed the water direction towards the Town Pond. She also
15 explained that this was the reason why the stormwater was planned to be treated, detained,
16 and infiltrated before it hit the Bow Fire Pond. She also noted that the discharge rate will be
17 equal or less than what is existing today. Ms. Waskin asked about width of the open space
18 strip (50 feet) and how it will work with drainage and discharge. Ms. McCourt showed the
19 stormwater management features for the cul-de-sac area on the map.
- 20 5. Rarity of the wetland and surface waters. Ms. Crystall noted that despite the application
21 stating that the impacted wetlands are not a rarity, vernal pools are considered sensitive
22 resources although none are directly impacted here. Mr. Ball asked how a vernal pool would
23 not be affected if its buffers are impacted. Ms. Crystall responded that in this case impact
24 means filling parts or the whole vernal pool and that not all the questions speak about fill in
25 the wetland.
- 26 6. The surface area of the wetlands that will be impacted. 5,985 square feet.
- 27 7. Impacts on plants, fish, and wildlife. Ms. Crystall noted that Natural Heritage Bureau
28 DataCheck did not produce any hits and the vernal pools were not directly impacted.
29 However, she added, the stormwater treatment was proposed within the vernal pool
30 buffers and the fact that buffer impact means removing the canopy around the vernal pool
31 which will have a negative effect. Ms. McCourt responded that the only vernal pool with a
32 buffer impact will be the one along Smokey road extension and that canopy will be removed
33 only on the northern side, thus not having an adverse effect as the shade will remain. Ms.
34 Crystall added that sun in the summer is quite high. Ms. Waskin noted that vernal pool
35 amphibians will somewhat be impacted as they have to travel through the road. She also
36 asked a question about bat verbiage in the application. Mr. Sokolowski explained that the
37 tree cutting will be done according to bat seasonal timeframe (May through September) in
38 order to not disturb them. Mr. Ball also noted that the plan seems to fragment the existing
39 open space and it is not clear how the other animals that migrate along the brook to the
40 Town Pond will be affected. Ms. McCourt answered that there is plenty of open space
41 allocated within the subdivision as well as the Town Forest adjacent to it, and there were no
42 walls being put up, therefore, the animals can still travel through people's backyards.
- 43 8. Impact on public commerce, navigation, and recreation.
44 Mr. Ball noted that Bow Open Spaces raised a concern with the development being too close
45 to existing trails and affecting recreation. Ms. Waskin also noted that many residents were
46 concerned with loss of access to the Town Forest trails. Ms. McCourt responded that the will
47 be access provided between the lots and the open space parcel of the subdivision and the
48 donation parcel will be adjacent to the Town Forest and will enlarge the area and will have

- 1 the two boulders that are closest to the trails. Ms. Waskin reiterated to Ms. Crystall the need
2 to add the access comment to the list of comments to NHDES. She also asked about visual
3 impacts and aesthetics. Ms. McCourt responded that she was not quite sure that visual
4 impacts were relevant to NHDES wetlands application and also asked Ms. Crystall about a
5 SHAPEfile for the trails in Knox Forest and Ms. Crystall said she will provide her with one.
- 6 9. Project interference with the aesthetic interests of the general public. Ms. McCourt noted
7 that the parcel is currently under current use, therefore the access to it is not being
8 obstructed. Ms. Crystall also noted that providing a single point of access to the Town Forest
9 directs people a certain way and is much better for wildlife.
- 10 10. Project interference with public right of passage or access. Ms. Crystall noted that this issue
11 was addressed in the discussion prior. Ms. Waskin reiterated the visual impacts.
- 12 11. Impact upon abutting owners properties. Mr. Hansen noted that this impact should be
13 relative to the stream crossing and asked which size culvert was propose. Ms. McCourt
14 responded that a 50 year storm requires a 24 inch culvert. Mr. Hansen asked if it would be
15 more beneficial to install a bit bigger pipe given the size of the stream. He then asked how
16 the bankfull width was determined. Mr. Sokolowski responded that he relied on his visual
17 recollection when determining the width. Ms. Crystall noted that increasing the culvert
18 radius for the stream crossing could be another recommendation. Ms. Waskin also said that
19 abutters were concerned with potential adverse impacts to their wells. A short discussion
20 ensued about relevancy of wells' impact to the wetlands impacts. Ms. Waskin asked that it
21 be noted that concerns were voiced about the hydrology of the area and how the road may
22 affect it. Ms. Crystall added that there was testimony about Mother's Day Flood and
23 washouts on Robinson Road. Mr. Ball noted that the abutter to the lots on the northwest
24 side of the cul-de-sac may be impacted by stormwater runoff. Ms. McCourt showed the
25 direction of stormwater flow and explained the detention and drainage features in that
26 particular area. She added that the design will have to go through NHDES and Town
27 engineer review to make sure that stormwater runoff is designed to the current standards
28 and there is no impact. Mr. Ball asked who will maintain the detention pond, and Ms.
29 McCourt said that the Town will, as it currently maintains all other existing ponds in the
30 area. She added that a maintenance manual will be provided to the Town.
- 31 12. Benefit of the project to health, safety, and well-being of general public. Ms. Crystall said
32 that this project was not an impact for a public facility, therefore, it would not apply.
- 33 13. The impact of the project on quantity or quality of surface and ground water. Mr. Hansen
34 asked about calculations for meeting the peaks for infiltration and whether frozen
35 conditions were taken into account. Ms. McCourt responded that calculations were done in
36 accordance with NHDES alteration of terrain requirements and there is science out there
37 that shows that infiltration still works in frozen conditions as designed. Mr. Hansen added
38 that his backyard is very sandy and this winter it is not infiltrating. He then asked if the
39 ponds have the capacity to hold the water. Ms. McCourt answered in the affirmative and
40 added that all ponds can hold extra volume to hold water over a 50 year storm event and
41 also have emergency outlets to prevent breaching. Ms. Crystall brought up the potential
42 impacts to groundwater by road salt which cannot be treated and impacts to vernal pools by
43 the same contaminant. Discussion ensued about chlorides showing up in groundwater and
44 ways to avoid that (e.g. reduce or eliminate road salt) and the fact that watershed around
45 Town Pond already has issues with chlorides.
- 46 14. The impact of the project to cause or increase flooding, erosion, or sedimentation.
47 Ms. Crystall noted that there are always potential issues with increased sedimentation when
48 construction is underway. Mr. Hansen noted that the Commission was going to recommend
49

1 that there are inspections during construction. Ms. McCourt responded that the Town
2 engineer will do the inspections and the building inspector will also once construction of
3 individual houses begins. Mr. Ball asked about maintaining the road and who will be
4 responsible and at what stage. Ms. McCourt said that the Town eventually will accept the
5 road, but the developer will be responsible for maintenance until then. Ms. Crystall
6 reiterated concerns regarding Mother's Day flooding and wondered whether the design
7 could be upgraded to account for a larger storm event than a 50 year storm.

8 15. The extent to which a project located in surface waters reflects or redirects current or wave
9 energy. Ms. Crystall said this question did not apply to this project.

10 16. The cumulative impact if all parties owning or abutting the affected wetland were also
11 permitted alterations to the wetland to the extent proportional to their property rights. Ms.
12 Crystall noted that interpretation of this questions is not as straightforward and provided
13 an example that if someone had a small lot and proposed a bigger impact, someone with an
14 even bigger lot, may then be able to increase that impact proportionally to their lot size.
15 Members briefly discussed the purpose of the question. Ms. Crystall added that the amount
16 of impact is very small in this particular case (Ms. McCourt specified that it is .8% only). Mr.
17 Sokolowski also spoke about the meaning of the question and said that .8% is a very small
18 impact for cumulative effect to be of significance, and added that the proposed wetlands
19 impacts for this subdivision could not be enlarged later and the neither the subdivision
20 regulations, nor the NHDES would allow it. Ms. Crystall noted that some lots do show
21 extensive wetlands on them and maybe the lot lines could be adjusted to protect those
22 wetlands. Mr. Sokolowski said that the lots are not as small as they seem on the plan and the
23 4K area that is shown is much bigger than an individual septic system. Ms. Crystall
24 responded that once the houses are built, homeowners can and often do impact the
25 wetlands by cutting vegetation in the buffers and creating lawns, or placing additional
26 structures in them. Mr. Ball added that the use of fertilizer also negatively affects the
27 wetlands. Mr. McCourt inquired whether there were any such problems in Bow and Ms.
28 Crystall responded that people put irrigation systems in the open space portion, lawns, etc.
29 Ms. Waskin added that enforcement of such activity is very problematic.

30 17. The impact of the project on the values and functions of the total wetland complex. Ms.
31 Crystall noted that a wetlands values and functions analysis was prepared by Mr.
32 Sokolowski and Ms. Mc. Court confirmed that. Ms. Waskin asked if the answer to the
33 question in the wetlands application stated improvement and Mr. Sokolowski responded
34 that it was an optimistic way to look at it. He added that the stormwater system will provide
35 treatment to the water leaving the site. Ms. Crystall stated that there will be habitat
36 disturbance by the road fragmenting the area. Ms. Kallenbach added that the area is the
37 highest ranked habitat in New Hampshire, and Ms. Crystall noted that this was probably due
38 to the land being adjacent to the Town Forest. Ms. Kallenbach continued to say that peatland
39 under the powerlines is a high value wetland, and Ms. McCourt responded that those
40 wetlands will remain on the open space parcel. Mr. Sokolowski reiterated that wetlands
41 impacts will be minimal and Ms. Crystall noted that there are still going to be impacts.

42 18. Impacts upon the value of sites included in the latest published edition of the Natural
43 Register of Natural Landmarks. Ms. Crystall said there were no such impacts.

44 19. The impact upon the value of areas named in acts of congress or presidential proclamations
45 as national rivers, national wilderness areas, national lakeshores. Ms. Crystall noted that
46 this was not relevant to this project.

47 20. The degree to which a project redirects water from one watershed to another. Ms. McCourt
48 said that there is no redirection of water.

1 Ms. Crystall also noted that some abutters were concerned with how wetlands delineation was
2 done for this project. Ms. McCourt requested that Ms. Crystall notes in the comments that these
3 concerns were expressed by the general public and not a professional wetland or soil scientist. Ms.
4 Crystall said she will and added that the Commission still recommended independent review. Mr.
5 Ball then spoke about updated plans for the driveways for the lots off Robinson Road and asked if
6 redesign or driveways affected the open space calculations in any way. Ms. McCourt responded
7 that those are regular size lots and provided the details for the updated driveways.

8 Ms. Crystall said that she will draft a letter to NHDES with all the comments gathered and forward
9 it to the BCC members for their review before she sends it to NHDES. Mr. McCourt asked for a copy
10 of the letter to be sent to her.

11 Mr. Ball said that there was a site visit scheduled at the property on February 16th at 9:00 AM. He
12 asked how much wetlands were flagged for the Commission to see. Mr. Sokolowski explained what
13 he flagged and said he will stop by the property before the sitewalk and check again.

14
15 There were some members of the public in the audience and Ms. Crystall allowed them to ask
16 questions.

17
18 Patricia Ramsay, 5 Nesbitt Drive, asked about when the Town will take over the maintenance of the
19 road and what the phasing plan was. Ms. Crystall explained that after the Town accepts the road as
20 substantially complete, there will be a two year latent defect period when the developer has to post
21 a guarantee. Ms. McCourt went over the phasing plan: Robinson Road, Boulder Lane, Nesbitt to
22 wetlands crossing, and from there to Smokey. Ms. Waskin asked about maintenance of the
23 stormwater features and whether the Town will be maintaining them. Ms. McCourt answered in
24 the affirmative and added that the state will provide a maintenance manual for the developer. Ms.
25 Crystall also added that the Tow may monitor the construction process and Ms. McCourt agreed.

26
27 Linda Millman, 80 Robinson Road, asked about certain conditions of the wetlands permit that were
28 only referenced in the regulations and wondered how a responsible developer was to know about
29 them and what needs to be done. Ms. McCourt answered that all the conditions would be
30 incorporated into the design, and state and federal permits. Ms. Crystall elaborated that plans
31 usually have notes on them with all the conditions listed. Ms. McCourt concurred and said that
32 there are detail sheets on the plans. Ms. Crystall added that sometimes it is appropriate to spell out
33 the conditions on the permit. Mr. Sokolowski added that the permits state that the project has to be
34 developed according to the plans, which is also helpful if the developers change in the process.
35 Ms. Crystall reminded everyone about the site walk on February 16th at 9:00 AM.

36
37 **File #: 2019-0187 – Applicant: NHDOT: Rehabilitation of a 48 ft. CMP; proposed slip lining**
38 **with 42” metal liner; Town Clerk signature: 1/16/19; intervention submitted 1/29/19.**

39 Ms. Crystall noted that the project was a maintenance project, thus no mitigation was required.

40 41 **NRI RFP/Q – review comments**

42 Ms. Crystall noted that she received the comments from a reviewer on the RFQ/P and he suggested
43 to make the scope of work an attachment to the RFQ/P. She also asked if anyone was willing to
44 format the final document. Ms. Waskin agreed to do it. Timeframe was also discussed and
45 agreement was that two weeks was sufficient.

46 47 **Other items**

1 **Saturday, Feb. 16, 9 am. Planning Board site walk for G Gardner Contracting LLC.**

2 Ms. Crystall noted the sitewalk.

3 **Turee Pond milfoil contract & grant**

4 Ms. Crystall said that she was not able to get into the budget process on time, therefore, the
5 Commission will have to vote on whether this year's treatment should be covered by the BCC fund.
6 Ms. Waskin noted that she just wants to reiterate that she objected the treatment itself. Ms. Crystall
7 said that the cost would be around 21,000 dollars and the grant portion of that from NHDES would
8 be around 5,000 dollars. She also noted that this is only for a single chemical treatment with
9 ProcellaCOR. *Mr. Hansen made a motion to approve the expenditure from the BCC funds for milfoil
10 treatment. Ms. Kallenbach duly seconded and motion passed, with everyone present voting in the
11 affirmative but Ms. Waskin, who objected.*

12
13 **Other**

- 14 **a)** Ms. Crystall noted that she sent another email to Bow High School to remind them about
15 possible projects that could be done in cooperation with the Commission.
16 **b)** Ms. Kallenbach asked about NHANRS membership renewal and whether the Commission
17 was interested. *Mr. Ball made a motion to approve the expenditure of \$20 to renew the
18 membership. Duly seconded by Mr. Hansen, motion passed unanimously.*
19 **c)** Ms. Crystall also noted that she will be recusing herself from the vote on the Gardner
20 subdivision at the Planning Board meetings as she is already involved with the case as the
21 Chair of the BCC. A short discussion ensued about Ms. Crystall's recusal and whether there
22 was a conflict of interest. *Ms. Kallenbach made a motion to allow Ms. Crystall to represent the
23 BCC at the Planning Board on the Gardner project. Ms. Waskin duly seconded and motion
24 passed unanimously.*

25
26 **Unapproved Minutes 01/07/2019, 01/14/2019, and 01/28/2019**

27 The three sets of minutes were reviewed and changes were made. Mr. Ball made a motion, duly
28 seconded by Mr. Hansen to approve the all three sets of January 2019 minutes as amended. The
29 motion passed unanimously.

30
31 *Mr. Ball made a motion, duly seconded by Mr. Hansen to adjourn the meeting and the vote was
32 unanimous. Meeting adjourned at 9:45 PM.*
33