

*These minutes were approved at the July 13, 2005 meeting.*

**DURHAM PLANNING BOARD MINUTES  
WEDNESDAY, APRIL 20, 2005  
TOWN COUNCIL CHAMBERS, DURHAM TOWN HALL**

**MEMBERS PRESENT:** Stephen Roberts; Amanda Merrill; Nick Isaak; Kevin Webb; Richard Kelley; Bill McGowan; Councilor Diana Carroll; Councilor Gerald Needell

**MEMBERS ABSENT:** Richard Ozenich

**OTHERS PRESENT:** Jim Campbell

**I. Call to Order**

Chair Roberts said that Bill McGowan would be a regular voting member for the meeting, replacing Richard Ozenich.

**II. Approval of Agenda**

Mr. Campbell said former Planning Board member Rachel Rouillard had requested that the Board talk about the provisions for calculating usable area first.

Councilor Needell requested that the Board discuss Section 175-55 E, concerning minimum contiguous usable area. He said he had tried to reconstruct the argument for the wording in it, but could not.

Mr. Campbell suggested that the Board could discuss this after the other provisions in Item IV had been discussed.

***Councilor Needell MOVED to amend the Agenda, to add a discussion of 175-55 E. Bill McGowan SECONDED the motion, and it PASSED 7-0.***

***Amanda Merrill MOVED to approve the Agenda as amended. The motion was SECONDED By Kevin Webb, and PASSED 7-0.***

**III. Introduction**

Mr. Campbell recommended the Board move on to deliberation on the Zoning Ordinance Amendments.

**IV. Deliberation on Zoning Ordinance Amendments**

***Councilor Needell MOVED to allow a member of the public to engage in an open discussion with the Board concerning an Agenda Item. The motion was SECONDED by Amanda Merrill, and PASSED unanimously 7-0.***

Section 175-55 F, Calculation of usable area

Mr. Campbell noted that what had been posted on these provisions for the January public hearing included some deletions and additions to the list of criteria for calculation of usable area. He said the Board had not made any further changes to this list since that time, and said the list as it stood in January was what the Board would be discussing that evening.

Ms. Merrill said she had provided a series of emails on these provisions, when she couldn't attend some previous meetings that discussed them. She said she had not provided specific proposals in these emails, but said there were discussion items she hoped the Board would cover.

She said she had come to the meeting that evening with a more specific proposal in mind that addressed two of the items in the calculation of usable area: 1) reinstatement of the somewhat poorly drained deduction; and 2) reinstatement of moderate depth to ledge soils, with a 50% credit, with the addition of the language "...if the site will use on-site sewage disposal".

She said that having done additional reading, she'd come away with the impression that somewhat poorly drained soils were not the same as moderately well drained or well-drained soils, and therefore should not be lumped with them in terms of being used toward usable area. She read the definition of somewhat poorly drained soils in the Soil Survey for Rockingham County: "Water is removed slowly enough that the soil is wet for significant periods during the growing season".

She also referred to the Army Corps of Engineers Guidelines for Soil Drainage Classification, which gave detailed descriptions of soils categories, and said she thought it was interesting that very poorly drained and poorly drained soils were described as having an Aquic moisture regime, and that somewhat poorly drained soils were described as having an Aquic or Udic moisture regime, while moderately well drained soils were said to have a Udic regime. She said these categorizations reflected different levels of wetness, saturation for different amounts of times of year, and said it was illuminating to see that somewhat poorly drained was somewhere in the middle.

She noted other information she had come across, some of it from other states, where in some classifications for evaluating soils, somewhat poorly drained soils were sometimes lumped in with poorly drained soils. She said while the Board wanted to be as science based as possible, there were judgments that had to be made, and said in the case of somewhat poorly drained soils, the evidence suggested it made sense to look at the separately, and that they were in between, in terms of suitability for development.

Ms. Merrill noted that Ben Frost of the NH Office of Energy and Planning had questioned why the Board would want to build on these soils. She also referred to

previous concerns expressed by some that Hollis soils were so different and better than Durham's, and said Virginia Mills of Hollis had said that really was not the case.

She said the Board should at least go with the 50% deduction for somewhat poorly drained soils, if people weren't comfortable with the full deduction, and said doing this would reflect that somewhat poorly drained soils were somewhere on the continuum of suitability of soils. But she said if people were comfortable with going back to the full deduction that would be fine.

Ms. Merrill also noted comments from Jack Farrell as to why it would make sense to put back Item 4, regarding the 50% deduction for moderate depth to ledge soils.

Mr. Webb agreed there could be a compromise position concerning somewhat poorly drained soils. He said this recognized that when a soil scientist did test pits, and a lot was largely characterized by somewhat poorly drained soils, he/she would occasionally hit some good soils and bad soils, so the 50% deduction therefore made sense. He said he would be willing to support that, but said he still had difficulty going with a 100% deduction for somewhat poorly drained soils.

Councilor Needell asked why the currently proposed changes to Section 175-55 F had been recommended by the Board.

Chair Roberts said the Board had been challenged by the public at the public hearings, and by applicants coming in for subdivisions. He explained that the Town didn't have soil based lot sizing, but rather had a mixture of concentric circles of fixed lot sizes by area, and had set the lot size at a very high level. He said this had been done thirty years ago, to try to accommodate the variability of soils in the community.

He said when the Board had looked at what Hollis did, it had found they had a soil based 2-acre lot size mechanism. He also referred to a table provided by the SSSNNE (Society of Soil Scientists of Northern New England) that had recommended a 132,000 s.f. lot size for somewhat poorly drained soils.

He said the complaint brought to the Board was that if a piece of land had good soils for a septic system, a building permit for a house on good soil, had a drainage plan, etc., why would the Ordinance deduct for something that just sat there, and wasn't a function of building, grading or drainage. He said that was what these provisions were doing, when these required larger parcels, which conceivably could fit 5-6 septic systems, or 4-5 house lots, were determined not to have enough area for building.

Mr. Webb noted that the comments on Section 175-55 F hadn't come from the Council.

Chair Roberts said the comments on the criteria for calculation of usable area were made at the Council public hearing, noting that among other things, a member of the public did his own buildout analysis.

Mr. Campbell said the Council had adopted it with the full list of criteria, but said other people started coming in to the Planning Office. He noted he had discussed this at several

Board meetings, and had told the Board that people were saying they should be able to do more with their land than what the Ordinance allowed. He said that was why the Board made some of the changes to the list, but said whether it went too far the other way was what the Board was now trying to discuss.

Mr. Campbell noted that the Chase farm subdivision application required 23 test pits to get an approved septic system. He said although this was a large lot, only one house could be put on the lot because of this.

Ms. Merrill noted what this was indicating was that the septic regulations provided some protection.

Chair Roberts said that Francesca Latawiec, a soil scientist with SSSNNE, had told him, that towns shouldn't mix soil based lot-sizing approach with lot size by area, and should have either one or the other. He said if he were in Hollis, his lot of 4 acres would be a legal lot. He said he had five septic system locations, and 3 house lot locations, but said his lot was not legal lot according to the original calculation of usable area proposal.

Ms. Merrill said she understood the issue of not wanting to mix the two approaches, but said the Board probably wouldn't be addressing this at present. She noted that the Master Plan recognized that resource based planning was something that would take time to work on. But she said that given that the Town was stuck with a hybrid of the two approaches at present, and that they were still going to employ this method of calculating usable area, some recognition in that context should be given for somewhat poorly drained soils.

Chair Roberts said if someone asked him why these soils were being deducted, he wouldn't know what to say. He said the soil just sat there; it wasn't to be built on.

Ms. Merrill said from what she had read, these soils were wet a good part of the season. She noted that very poorly drained and poorly drained soils were also not built on.

Chair Roberts said these soils could affect water flow on a site.

Mr. Kelley said that when the somewhat poorly drained soils classification was included in the calculation of usable area, this didn't necessarily mean the land with that soil was being used. He noted at minimum, 30% of usable area was set aside as open space, and said somewhat poorly drained soils were the kind of soils that would be set aside.

There was discussion as to whether that would actually happen.

Ms. Merrill asked if there was harm in including this 50% deduction, as a kind of backup protection.

Mr. Kelley said his concern was how the current provisions in 175-55 F were limiting the use of residents' soils. He said it had been demonstrated to the Board that these provisions were doing that, and he said in an attempt to mitigate some of this, he was supporting taking somewhat poorly drained soils out of the soils categories to be

deducted in calculating usable area. He said he felt comfortable doing this, because 30-50% of the usable area would be put in common open space.

Mr. Needell asked if this calculation of usable area was only done for conservation subdivisions, and was told that was correct. He then asked if there was any kind of usable area calculation for regular subdivisions.

Mr. Campbell said that wetlands on a property couldn't be included toward meeting the lot size requirement.

Mr. Eyerman said when thinking about drainage classes, from very poorly drained to excessively drained, in most classification systems, very poorly drained and poorly drained soils were considered to be hydric soils, meaning they were wetlands. He said if one looked at the soils based lot sizing approach that soil scientists advocated, and that the State used in reviewing subdivisions, one could see that for very poorly drained and poorly drained soils, they allowed a minimum lot size of zero. He said deducting them under Section 175-55 F was therefore consistent with practice.

He said if one looked at the remaining soils by drainage classification, from excessively drained to somewhat poorly drained, the soil based lot sizing system increased the lot sizes as soils went from excessively drained to somewhat poorly drained (30,000 sq. ft. for lots on level land, with excessively drained soils to 132,000 sq. ft. on somewhat poorly drained soils on relatively steep slopes. He said that the people involved in developing that system would say that it was based on science, but he said it was his understanding that there had been a technical committee meeting for over 4 years to review that system, and had discussed revamping it.

Mr. Eyerman said it was probably not appropriate to lump somewhat poorly drained soils with very poorly drained and poorly drained soils, but asked, if they were allowed to be used, how they should come into play in determining density.

Councilor Needell said he was having a hard time seeing from the language of Section 178-55 F or elsewhere in the Ordinance that calculation of usable area applied to conservation subdivision only.

There was discussion about this.

Mr. Eyerman provide details on this, and explained that under the Housekeeping amendments, there was a revision to the dimensional table, which tried to clarify that the usable area requirement only applied to conservation subdivisions. He said the Board had discussed this issue after the May 2004 adoption of the Ordinance, and it was decided the intention was that it only apply to conservation subdivisions.

Mr. Campbell said noted there was also a language change under Section 175-7 concerning this.

Councilor Needell said if the somewhat poorly drained soils were allowed to be used in calculation of usable area, then of whatever was determined to be usable, 30% -50% of

this still had to be left as open space. He said the compromise of taking the 50% deduction for somewhat poorly drained soils was good in that it would impact the ability to use that soil for open space.

Mr. Webb said it didn't necessarily impact what soils specifically were in the conservation area, it only impacted what area of one's lot could be used to calculate usable area.

Mr. Eyerman said the subdivision regulations spoke about a process for determine what land should be put in the open space, which was based on areas having the highest natural resource value and the lowest development potential being put into the open space. He said if the process worked, the housing units would be put on the good land, and the marginal land would become part of the open space.

Chair Roberts said if the Town had reduced the lot size to 2 acres, the Board wouldn't be having this discussion. He said in the 1970's 2 acres was the lot size for the R and RC districts, but said at that time, concern developed about the sustainability of septic systems, so the lot size was increased to about 3 acres, and now had increased it to 150,000 sf. He said each deduction now for particular soils meant an increase of acreage per lot devoted to the subdivision, and noted this was increasing the price per lot, and the price per house.

Chair Roberts said Durham had a 72% larger base lot than the soil based lot sizing people recommended, so when the Town superimposed the soils based requirements on this, a huge lot could be required, depending on where the soils were.

There was detailed discussion on this, and on what could and could not be done on somewhat poorly drained soils if they were not deducted from the calculation of usable area.

Mr. Isaak noted that there was a wetland setback from very poorly drained and poorly drained soils, so within that setback there would likely be somewhat poorly drained soils, and in this way, these soils were being taken into consideration.

Former Planning Board member Rachel Rouillard said the two lot size approaches collided in a way that there was no right answer for. She said she thought the only way to proceed at this point, if they were going to stick with the half and half system, was to find some acceptable level of somewhat poorly drained soils that could be counted toward usable area.

Chair Roberts noted he had asked Mr. Campbell if the Ordinance could allow either or, - a 2 acre basis, with exemptions, or a 3.25 acres, and which ever was greater would be the lot size. There was discussion about this.

Mr. Kelley said he liked the concept and goals of the conservation subdivision, but said he could not support including somewhat poorly drained soils in the calculation of usable area.

Mr. Isaak suggested they could try allowing a deduction of 50% of somewhat poorly drained soils, and see what happened. He said if people had hardships, they could seek variances.

There was discussion about how the deduction of somewhat poorly drained soils presently impacted development in Durham. There was also discussion on the extent of these soils in Durham, and present mapping available on these soils.

Ms Merrill said she felt they should be making a decision on what was good resource protection and what made sense, and not how much of these soils there was in Durham.

Chair Roberts asked how this could be reconciled with what the soil scientists said, - that 132,000 sq. ft. was enough for a lot with somewhat poorly drained soils on it.

Councilor Needell said these soils were clearly a gray area.

Mr. Webb said that was why he thought it was not unreasonable to have a 50% deduction.

There was discussion on the table Chair Roberts was referring to.

Ms. Merrill said her way of looking at it was concerning the continuum of soils, and said there seemed to have been a decision that there was some importance to this, so this should be acknowledged relative to somewhat poorly drained soils.

Ms. Rouillard said the Board might want to consider whether it wanted to answer this in a policy framework concerning land use and density, or in a soils based continuum framework, for resource protection. She said they couldn't really come to a conclusion unless they decided this. She noted Chair Roberts' publication was only one of several around, and said they all took a somewhat different tack. She provided details on this.

Chair Roberts said he needed something else that showed different numbers than the Table he was referring to.

Mr. Webb said they were trying to reach multiple goals, through a charge from the Master Plan. He said one goal was to try to control growth in the Town and impacts on the school system, by limiting the number of new homes. He said they had done this by expanding the lot size, especially in the rural area. He said they also were charged with the goal of protecting the Town's resources. He said these were two different goals, both of which were defensible.

Mr. Eyerman provided some history on the soils discussion in Durham. He said the Master Plan said that in the Rural and RC districts, the minimum lot size on the best soils should be 3 acres, and should be larger based upon a soils based system. He said the Board had then looked at the State system, which said that under the worst conditions, the lot size would be a little less than 3 acres and in the best conditions, would be less than an acre. He said the Board had looked at ways to reconcile these different perspectives.

Mr. Eyerman said the SSSNNE Technical Review Committee reviewing soil based lot sizes at the time had recommended significantly lower lot sizes, so the largest lot that would be required would be about 2 acres. He said this recommendation was essentially bottled up in the committee, because it was not considered politically viable to put forth a proposal to reduce lot sizes, given that many communities used this as a growth control mechanism. He said that led the Board to the compromise the Town was currently involved with.

He said this compromise came from Randall Arendt's approach of deducting soils proportionally, and said what Durham had proposed was therefore not some crazy scheme. He noted there were other areas of the country, including the State of Pennsylvania, which used this kind of system.

Councilor Needell said he knew the new wording in the Ordinance the previous year was based on what seemed at the time to be sound reasoning and judgment, and asked what had changed on this, other than complaints from developers.

Chair Roberts provided details on this, and Mr. Eyerman said when property owners began to apply the usable area calculation adopted by the Council, upon recommendation of the Board, the impact became apparent. He noted this was because of the cumulative impact on usable area of the various factors - shallow soils, somewhat poorly drained soils, slope, etc.

He said he agreed there was no right answer, and said this was a judgment call, because the Town in the Master Plan had said it wanted to make density lower than what was scientifically supportable based only on consideration onsite sewage disposal and groundwater protection issues - the main basis for the soil based lot size system. He said Mr. Webb had said the Town's goal was to achieve other things than just what was scientifically defensible in terms of lot size.

He said he thought the fact that Chair Roberts was pointing to the 132,000 sq. ft. lot size for somewhat poorly drained soils from the SSSNNE table was not the whole story. He said the community had already said in the Master Plan that this wasn't going to be the standard that would be used, and had said 130,000 sq. ft. would be the lot size under the best conditions, and with worse soils, the density should be lower. He said there was no scientific basis for that.

Councilor Needell said the basis for this was the desire to lower density in the community, and said he presumed that because the Master Plan said that, this was allowed.

Mr. Webb said the Town had the right to do that in order to protect rural character, protect the tax base, the school system, etc.

There was discussion about this. There was also discussion on the status of the proposed impact fee ordinance.



***Amanda Merrill MOVED to add a new Item 2 under Section 175-55 F, which would read “50% of somewhat poorly drained soils, as identified on the HISS.” Kevin Webb SECONDED the motion.***

Mr. Kelley said he would like Ms. Merrill to try to convince him to support the motion.

Ms. Merrill said that as a result of her research, she had seen further evidence that somewhat poorly drained soils should be treated as a separate soils category. She said the suggestion of allowing a 50% deduction recognized that these soils were not categorized as hydric soil, although they could be wet a significant part of the time.

Chair Roberts said this would be a judgment call.

Ms. Merrill said the Board tried to be as scientific as possible, but was in the business of making judgments calls, and said the 50% deduction reflected where these soils lay on the continuum of soils. She said the Ordinance addressed the fact that there was this continuum of the suitability of soils, which was taken into consideration with the idea of calculation of usable area. She said if a soil was differentiate from good soils in terms of suitability, this should be acknowledged in the regulations. She agreed the Town should try this out, and could revisit the criteria later if needed, and also noted that if a resident said the somewhat poorly drained criteria caused a hardship, relief could be sought from the ZBA.

Chair Roberts asked Ms. Merrill to provide specific backup from other studies that indicated this provision was needed, stating he saw the absence of this backup as a major problem.

There was discussion on this.

Mr. Eyerman said he wouldn't argue for or against the motion. But he said in response to Mr. Kelley's challenge to Ms. Merrill, that if one wanted a reason to include the 50% deduction for somewhat poorly drained soils, one could look at the soil based lot size table Chair Roberts was referring to. He said if one looked at the lot size required for excessively well drained soils, well drained soils and somewhat well drained soils, and took an average of these three categories, versus the lot size required for just somewhat poorly drained soils, one would find a relationship that approached 1:2.

He said that meant that for one foot of area needed for the well-drained soils, one needed 2 ft. of area for the somewhat poorly drained soils. He said using that relationship, if 50% of the somewhat poorly drained soils were deducted from calculation of usable area, this would maintain that relationship. He said one could argue that that was consistent with what the Master Plan said.

There was discussion about these calculations.

Mr. Webb said he believed the motion represented a reasonable compromise.

Councilor Needell agreed, based on the fact that these soils were on a continuum, and that they didn't fit into either category, as Ms. Merrill had indicated.

Mr. Kelley said he would speak against the motion. He said he recognized that somewhat poorly drained soils were in-between soils, but said whether one was looking at seasonal high water table, impaired soils, characterization, etc., they were talking about 2-3 inches of mottling that could occur in soils that might be adjacent to much different soils. He said he would rather leave somewhat poorly drained soils out of soils to be deducted, because the Ordinance provided other protections in terms of common open space requirements, where 30%-50% of the usable area had to be set aside as open space. He also noted the wetland buffer that protected the somewhat poorly drained soils. He said both the conservation subdivision approach and minimum lot size requirements together protected resource areas, and limited growth.

Mr. Isaak said he agreed with Mr. Kelley. He said if one didn't own property in Town, it was easy to say as much as possible should be protected. But he said he wanted to see a balance, for people trying to subdivide their land for their children, and said he thought the provisions now in the Ordinance were quite restrictive.

Ms. Merrill noted that situations where people wanted to subdivide their land for their children were exempt from conservation subdivision and thus these requirements.

Mr. Webb said the conservation subdivision requirements related to "for profit" subdivisions.

Chair Roberts noted, in reference to an issue related to this discussion, a graph that showed the rising cost of homes and land in New Hampshire, compared to family income. He said in the future, the Board might have to adopt some goals concerning affordable housing.

Ms. Merrill said she shared these concerns, but said there were other ways to address this.

Councilor Carroll said developers came in all the time, but how many said they wanted to build affordable housing.

There was discussion on this issue. Chair Roberts provided details on innovative affordable housing ideas in other towns.

Councilor Carroll said looking at soils as a continuum, and said including somewhat poorly drained soils on this continuum made sense. She also said the regulations shouldn't be based on how much land there was available to develop.

Mr. Kelley noted the map on the wall that showed the relatively small amount of land in Town that could still be developed.

Chair Roberts said half of the Town's land was under public ownership, and said he liked this approach to land protection. He said it gave the citizens their money's worth, but said he wasn't sure that making the lot sizes bigger did.

Councilor Needell said putting back 50% of somewhat poorly drained soils into the calculation of usable area was a big step in alleviating hardship, yet still recognized that not all of these soils should be considered in development.

Chair Roberts said this was also a means of revenue shifting, and he provided details on this.

Ms. Merrill suggested that the affordable housing issue was more likely to be addressed with density waivers, etc. There was discussion on this.

Ms. Rouillard said concerning the tax issue, that when a property was undeveloped, it was taxed at a current use rate, so there was not any loss in revenue to the Town when it was developed, and in fact there was a gain. There was discussion about this.

Councilor Needell said the motion was relaxing what was passed the previous year, and he said 50% was a good start. He noted that the initial plan was done in good faith.

Chair Roberts noted he had stood up and defended it at the time, and then the Board and Mr. Campbell had started getting reports that there were problems with it.

Mr. Isaak asked if anyone had seen HISS maps for typical properties in Town, which showed that somewhat poorly drained soils were a big part of the lot.

Mr. Campbell provided details on what had been found with recent applications. Ms. Rouillard said there had been a great process behind the development of the provisions being discussed, and said she realized there were still a lot of questions about this process. She said making some good improvements over time made sense, and suggested the Town could go through some development proposals with the proposed changes, and could then hire a soil scientist to evaluate the policies, and provide some solutions if there were problems.

She noted that State Soil Scientist Steve Hundley and other soil scientists, along with people at NHDES and NHOEP, had weighed in on these proposed standards, and said they looked good, made sense, were defensible, and were consistent with what other towns were doing. She said the Board should feel good about the basis for them, and if changes were needed, so be it. She said before making any major changes, the Town should hire someone who could provide some feedback, because this issue was so complex and technical. She said the full soils based approach was above the heads of most people.

Mr. Kelley asked if the individuals cited had seen the Town's approach in its aggregate form, and were not just looking at 175-55 F, but were also looking at the common open space calculations as well

Ms. Rouillard said no, that was not part of what they looked at.

Mr. Kelley asked if they had looked beyond the way the Town used soils to determine usable area, and had seen the Town's lot sizes as well, and how these two systems worked together.

Ms. Rouillard said that was the complex issue these people had bumped into, and said they had recognized the awkwardness of trying to put these two things together, and balancing the two Master Plan goals of controlling growth and resource protection. She said that although the soil scientists had said they thought the Town should do the whole soils based approach, they had looked at the regulations as a whole package, and said the regulations put forth relative to soils based decisions on usable area represented good soil science.

Mr. Kelley said that when Ms. Rouillard said the Board should feel comfortable that other communities were using the same source, what other communities were not using was the combination of soils based lot sizes and minimum lot size. He said what she meant was that other communities were doing something like 175-55 F. There was discussion that Durham was the only Town doing the combination of approaches.

***The motion FAILED 3-4, with Chair Roberts, Mr. Kelley, Mr. Isaak and Mr. McGowan voting against it.***

Ms. Rouillard thanked the Board for allowing her to speak at the meeting, and said she would be happy to come back if they needed her.

***Amanda Merrill MOVED that Item 4 under Section 175-55 F be reinstated "Fifty (50) percent of the area with moderate depth to ledge soils (20" to 40" to bedrock) as identified on the HISS", and that additional wording be added "if the site will use on-site sewage disposal".***

Ms. Merrill referred to the comments from Jack Farrell, and said they made sense in terms of reasons one might want to reinstate the deduction. She noted he was a local developer who had worked on the original proposal involving calculation of usable area with Ms. Rouillard and others.

***Richard Kelley SECONDED the motion.***

Ms. Merrill made reference to Mr. Farrell's comments that a 20-40 in. depth to ledge soils didn't come close to meeting septic standards. She also noted that he had pointed out that there were ways in which these soils might be chancy in terms of disruption of soils during construction, problems with runoff, effluent from failed septic systems, stormwater runoff, and other factors related to development. She said in his judgment, it therefore made sense to reinstate the 50% language. She said she thought, given the change made with Item #3, it made sense to add the language concerning on site sewage disposal.

Councilor Needell said this was somewhat less restrictive than the original language, in that if there wasn't on-site sewage disposal, the requirement didn't apply. He also asked

for a distinction between variable depth to ledge and moderate depth to ledge. There was discussion about this.

Mr. Webb asked if it was correct that one could not build a septic system on moderate depth to ledge soils, and Mr. Campbell said yes.

Chair Roberts asked why moderate depth to ledge was a concern, and Ms. Merrill again noted the concerns expressed by Mr. Farrell. Mr. Campbell read through these comments.

Mr. Kelley said some of these arguments were valid, but said the ones relating to septic systems were not, because a system could not be put on those soils. He said Mr. Farrell appeared to acknowledge this. He also said runoff from a failed septic system adjacent to this kind of soil had nothing to do with whether it was usable or not. .

Ms. Merrill said she thought Mr. Farrell was saying this was an indicator of the general suitability of these soils, even if septic systems couldn't be put on them. There was additional discussion about this.

Mr. Isaak said his only issue was that to remove these soils from the usable area, when it could still be built upon, with 40 inches of good soil above the ledge, didn't make sense.

Mr. Kelley said a blast hole for a foundation would not extend that much beyond what was needed for the foundation. He also said there would be site disturbance from machines, but said there were ways to address this.

Chair Roberts said a drainage plan was required, a septic plan was required, and a certified soil scientist had to observe these things.

Mr. Kelley said concerning the stormwater runoff issue, this soil had a moderate depth to bedrock, so the soil could be as shallow as 20 inches, where there was potential to see standing water. But he said to see a 40-inch layer of standing water was unlikely. He said he could go either way on this, but would like the Board to have something to stand on, whichever way it went. He said he was not completely convinced by Mr. Farrell's perspective. He asked if there had been perspective from any one else on this.

There was discussion about some comments from Mike Sievert concerning a particular property with ledge, that unless there was on site sewage disposal, the deduction didn't make sense.

Ms. Merrill noted that language regarding on-site sewage was added after discussion with Mr. Sievert.

Councilor Needell asked why the Board had decided to change this criterion on the list.

Chair Roberts said the public had asked what the problem was with these soils if there were no drainage issues, septic issues, etc. He also noted it bothered him that the people who had advocating changes to what the Board had previously done hadn't come to

Board meetings to make these kinds of comments, when the Board was working on these provisions, but instead had expressed their opinions later at the Council hearings.

Mr. Campbell noted it was more difficult the way the Board had set up the proposed Zoning changes for public hearing last time, whereas this time they were sending proposed changes to the Council in sections.

Mr. Kelley said with the previous motion, the argument was that to some degree, they were protecting a resource area. But he said he didn't see that the present motion dealt with protection of a resource area.

Mr. Webb said he agreed, although noting the points Mr. Farrell was making.

Mr. Kelley also said that if proper measures were taken on moderate depth to ledge soils, potential problems noted by Mr. Farrell could be addressed.

Ms. Merrill said she agreed that the conservation subdivision regulations provided reassurance about protections during the construction process, but noted the success of this process depended on the players involved, and was not set in stone. She said one could look at this criterion as another layer of protection. She said in terms of the continuum model, saying that for soils with ledge at 0-20 inches, 100% should be deducted, but for soils slightly more than 20 inches in depth to ledge there should be no deduction, didn't make sense.

Mr. Kelley said he thought the deduction concerning moderate to ledge soils might be more restrictive, and have more of an impact in Durham than the somewhat poorly drained soils deduction.

Ms. Merrill said the Board might have to find out how some of these things worked, because they really didn't know.

Mr. Campbell said they got somewhat of an answer on this from the buildout analysis done for the Town.

Mr. Kelley noted that the information on soils with ledge was pretty good in that analysis.

Mr. Webb asked what criteria the buildout analysis was based on, and Mr. Campbell said it was based on all the criteria adopted in 2004. Mr. Kelley said it had been difficult to put the somewhat poorly drained soils into the model, and Mr. Campbell noted that the 50% moderate depth to ledge was also difficult to model.

***The motion FAILED 2-5, with Amanda Merrill and Councilor Needell voting in favor of it.***

Councilor Needell asked whether, because the provisions did not change, they would not be going to public hearing again, and Mr. Campbell said that was correct.

**Final review of Shoreland overlay, Aquifer Protection overlay, Wetland overlay, and wetland related definitions**

**Shoreland Overlay**

Mr. Eyerman said the Board had reviewed the shoreland overlay, and had considered input from the Conservation Commission. He said the areas colored in red were changes that had cumulatively been proposed to the draft since the public hearing in December, and had been discussed at length.

Mr. Campbell said most of the comments from the Conservation Commission had been incorporated.

Mr. Eyerman noted that under Agriculture on page 9, he had changed the wording to reflect the fact that the discussion concerning soil disturbance applied to agriculture in general (both commercial and accessory agriculture), but the requirement of a management plan only applied to commercial agriculture.

Mr. Webb asked if the definitions reflected this, and Mr. Eyerman said they did.

Ms. Merrill said the Wetlands provisions paralleled this.

Mr. Kelley noted that on page 8, wording was added back in concerning shoreland buffers for existing lots. He also said that under 175-71, the wording said the “..following uses shall be allowed without a permit provided they did not alter the surface condition or configuration of the land..”, yet the provisions allowed gardening. There was discussion about this.

***Richard Kelley MOVED to send the amendments to the Shoreland Overlay provisions to public hearing on May 4<sup>th</sup>, 2005. Kevin Webb SECONDED the motion.***

Ms. Merrill asked about the addition of language from the state Shoreland Protection Act.

Mr. Webb said this addition was recommended by the Conservation Commission, to remind people that the basis of this was State law. He said the Town had expanded on it because of the unique nature of the area.

There was discussion that the local provisions could be more restrictive, but not less restrictive than what was required by the state Shoreland Protection Act. He noted that the Town currently didn't comply with the state law in terms of the shoreland setback, which required 250 ft.

***The motion PASSED unanimously 7-0.***

**Wetlands Overlay**

Mr. Eyerman noted that when the final draft for the Wetlands overlay was developed, it had two parts, definitions, and proposed additions, etc. to the overlay. He said that

somehow the definitions part never got included in the part that was posted, so they had to be put in now.

There was discussion as to whether the definition for somewhat poorly drained soils should be included somewhere in the Ordinance. There was also detailed discussion about which wetlands definitions were most appropriate to include in the Ordinance, and where they should go.

Mr. Campbell said the wetlands definitions were going under 175-7, and not under the wetland overlay provisions. He said very poorly drained, poorly drained, and somewhat poorly drained soils needed to be included, and should be referenced to the most recent SSSNNE documentation.

***Amanda Merrill MOVED to send the Wetland overlay provisions to public hearing on May 4<sup>th</sup>, 2005. The motion was SECONDED by Nick Isaak.***

Mr. Webb said the provisions relating to vernal pools were essentially unenforceable because they were vague. He also said there was a former definition of bog that specifically referenced sphagnum moss, so was a more of a biological definition.. But he said it was generally understood that peat was sphagnum moss.

There was discussion about vernal pools were located, and that no such process yet existed in New Hampshire. Mr. Webb noted that in Massachusetts, there was a state defined formal process for Conservation Commissions to register where vernal pools were located.

Mr. Eyerman noted language he had added on page 11 under 175-65 E, concerning performance standards for trails within the wetlands overlay, as a way to keep out vehicles that destroyed vegetation: “The use of trails within the WCO shall be limited to non-motorized activities, except when the trail is snow covered.”

There was discussion about this.

Chair Roberts said four-wheelers could still make a mess of trails when there was snow on the trails, whereas the snow machines didn’t seem to.

Mr. Eyerman said he had tried to make the changes to the Shoreland protection overlay and Wetland Protection overlay parallel, where appropriate. He asked Mr. Webb to double check this and get back to him before Friday of that week.

Mr. Webb said that on page 10, the word “shore” in the first paragraph should be replaced with “wetland reference line”.

Ms. Merrill said that on page 5, the first paragraph of 175-60, Permitted Uses in the WCO District, should say “...and complies with the regulations of this district.”

Mr. Eyerman noted that this same language was in the Shoreland overlay provisions, and said he would make the changes in both places.



***The motion as amended PASSED unanimously 7-0.***

Aquifer Protection Overlay

Mr. Eyerman noted there were some comments from Conservation Commission Chair Dwight Baldwin that had been lost but then found again, and had now been incorporated into the most recent draft.

He noted that on page 4, under the site drainage section, the wording had been revised

Mr. Kelley said that might have really changed things, because if he wanted to put a house on a lot, and put in an impervious driveway, he just had to figure out how to handle septic wastes. He noted that at one time, they had determined there was no way to get a house out there in the aquifer protection overlay district. He asked when the wording concerning “except roof and exterior foundation drains” was included.

There was discussion about this, and said it was realized that taking this water out of the aquifer area didn’t make sense because it would be reducing the recharge, when it was essentially clean water.

Mr. Kelley noted that the provisions said that approval of the design and construction of detention or holding ponds was approved by the Town Council. There was discussion about this, including consideration of what expertise the Council would have in this area.

Mr. Eyerman said this wording reflected a previous pattern of Council involvement with various aspects of the Ordinance.

Mr. Kelley suggested changing the wording to say “ The design and the construction of any detention or holding pond must be approved by the Public Works Department and the Planning Board.”

Mr. Campbell agreed, saying including the Planning Board made much more sense. Board members agreed this wording should be changed.

Mr. Isaak asked if this was something that should be approved by a certified engineer. Mr. Kelley and Mr. Isaak discussed this.

Mr. Campbell noted that on page 5, under 175-86 G, Nonconforming Uses, the Town Council was included in the process of determining if there was a potential hazard to water quality of the aquifer. There was discussion about this.

Mr. Eyerman said the action being taken in this provision would be fairly onerous, and said it was reasonable to ask if only Town staff should be involved, or if some Board or Council should be involved as well.

Mr. Kelley said it was agreed that Mr. Johnson was involved with this, but asked who he reported to on this. There was detailed discussion about this.

Mr. Kelley said he was trying to figure how this would work through the system.

Ms. Merrill asked if this provision was intended to provide some kind of relief.

Councilor Needell noted that this was a health and safety issue, not a zoning issue.

Mr. Eyerman said that based on comments from Board members, the language on Council involvement would stay, and the words “and/or” would be included.

Mr. Webb noted that the most recent draft said non-conforming uses could be improved, which was a mistake. He said the wording “improved” should be taken out, and the provision should say “Any nonconforming use may continue and may be maintained and repaired...”

Chair Roberts asked if Board members had any issues with removal of the word “improved”, and they agreed it should be taken out.

Mr. Campbell asked the Board about the requirement in the provisions on page 5 that a hydrogeologic study be required for subdivisions of four lots or greater.

Mr. Webb said that was to make it consistent with conservation subdivisions. He said if there were three lots or fewer, the study wouldn't be required.

Mr. Campbell said – what if lots were not being created, when the land would be owned in common by an association.

Mr. Webb said he had not considered this, and suggested the word “lots” could be changed to “dwelling units”. There was discussion about this.

Councilor Needell suggested the wording simply refer to conservation subdivisions.

Mr. Eyerman asked if there were any areas in Town subject to the aquifer overlay provisions at present or possible in the future, which were not in any of the residential districts. There was discussion about this. Mr. Eyerman said if someone proposed to develop a research facility, if the Town would want to see a hydrogeologic study. He said as he read 175-87, that wasn't required.

Mr. Webb suggested that a hydrogeologic study could be required for any development requiring site plan review or conservation subdivision.

Mr. Campbell noted that page 2, in the list of commercial activities presumed to use toxic or hazardous materials, it didn't say anything about offices.

Mr. Webb said that K on this list included anything else “Any other commercial or industrial activity.....” He said the provisions couldn't list every possible use.

Mr. Campbell asked if this addressed their concerns, and Mr. Eyerman asked what the concerns were – a large impervious parking lot associated with an office structure.

Mr. Kelley said yes, but said it probably didn't warrant a hydrogeologic study. He asked if a waiver could be requested. He suggested it might be better to say under 175-87 – Hydrogeologic Study, that such a study "may" be required, not "shall be required". He noted it was an expensive thing to do, and said in some situations it might be determined a study wasn't needed.

Mr. Webb said they were talking about only a few small pockets of aquifer protection areas in the Rural and RB districts, and asked what kind of activities in these areas would have a paved parking lot.

Mr. Isaak noted that if the aquifer was covered by a parking lot, this limited recharge. There was discussion about this, and about the location of stratified drift aquifers in Town.

Chair Roberts asked whether they needed A-L in 175-7.

Mr. Campbell said the question was what would require a hydrogeologic study.

Mr. Eyerman asked what the Board was trying to accomplish with this. He said to him, the biggest threat to groundwater quality in a stratified drift aquifer was runoff from paved parking.

Board members decided to let the draft go on to public hearing without any more changes.

Mr. Eyerman noted language on page 6, under 175-87, 1, c, which was inserted based on comments from Conservation Chair Baldwin.

Mr. Campbell said Mr. Dwight had said that one boring dug to bedrock seemed very little. There was discussion about this, and about the specific language in this provision, which said there should not be less than one boring dug to bedrock.

Mr. Eyerman said there was suggestion about adding a complete analysis of one randomly selected sample. He said they were considering adding the listing of things that would be sampled in the analysis, based on comments from Mr. Baldwin. He listed the things that were proposed to be sampled.

Mr. Campbell said Mr. Baldwin had recommended that this complete analysis be done for one strategically chosen sample. Mr. Eyerman said he would change the wording on this.

Mr. Kelley said he found it interesting that under 175-76 E, that if a nonconforming use that through injection well injections disposed of waste into the ground in an aquifer district, that would be ok, yet someone couldn't mow their lawn near the shoreland.

There was discussion about this. Mr. Webb said the Town didn't have such uses. He also noted that under 175-86 G, if the use were determined to be a hazard, the Town could step in. There was detailed discussion about this.

Chair Roberts suggested inverting the wording, so it would read that a nonconforming use could not continue until unless it was determined was not to be a threat.

Mr. Campbell Jim suggested additional language, under Prohibited uses: "The following uses shall not be permitted in the Aquifer Protection Overlay District, except where permitted to continue as a nonconforming use as per 175-76 G. He said this provided the backup, if there were problems.

Mr. Webb agreed that sounded better.

Mr. Campbell asked if the Board wanted to deal with Mr. Farrell's comments, and it was agreed these could be dealt with at the public hearing.

***Kevin Webb MOVED to send the Aquifer Protection Overlay provisions to public hearing on May 4<sup>th</sup>, 2005. The motion was SECONDED by Nick Isaak, and PASSED unanimously 7-0.***

Mr. Campbell said the public hearing on the proposed Irving station had been postponed until May 11<sup>th</sup> because the engineer would be in Mexico and because the design issues would be hard to address before this.

There was discussion that the Board would like the building to have brick, not clapboard siding, to change the pitch of the roof, and to address the flat canopy. There was discussion about this.

Mr. Campbell also told the Board members that new Planning Board alternates Lorne Parnell and Susan Fuller were now eligible to sit on the Board, because they were filling terms that had not been completed.

Mr. Campbell noted a letter from Administrator Selig to Candace Corvey. He said in light of the fact that the University had come back and made a presentation, and were working with the Town, that as far as the Town was concerned, the University could go ahead and start work on it.

It was agreed that the discussion on Section 175-55 F could take place at the Board meeting on April 27<sup>th</sup>.

Councilor Needell said what he was looking for was for someone to explain why someone couldn't design something really weird, based on these provisions. There was some discussion about this.

Mr. Campbell asked how the proposed Ordinance changes should be sent on to the Town Council. He provided details on this, and said this could be discussed the following week, based in part on feedback from Administrator Selig and some Council members.

**V. Approval of Minutes**

(Postponed until the April 27<sup>th</sup> Planning Board meeting)

**VI. Adjournment**

*Richard Kelley MOVED to adjourn the meeting. The motion was SECONDED by Amanda Merrill, and PASSED unanimously.*

Adjournment at 10:40 pm

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W. Arthur Grant, Secretary