

Town of Underhill
Development Review Board Minutes
Chairperson Scott Tobin

February 21, 2011

Board Members Present:

Will Towle
Matt Chapek
Penny Miller
Chuck Brooks
Peter Seybolt
Charles Van Winkle, Vice Chair

Also Present:

Kari Papelbon, Zoning & Planning Administrator

6:28 PM: Vice Chairperson Charles Van Winkle called the continued Goplen preliminary hearing to order.

Consultant Present:

Gunner McCain
McCain Consulting, Inc.
93 South Main St., Ste. 1
Waterbury, VT 05676

Other(s) Present:

Scott Tobin (recused)
16 Orchard Rd.
Underhill, VT 05489

Kathryn Barickman
2 Lower English Settlement Rd.
Underhill, VT 05489

Andrea Phillips
211 River Rd.
Underhill, VT 05489

Identifier: Contents:

ZA-1	A copy of the revised plans prepared by Gunner McCain of McCain Consulting, Inc. for Brent Goplen (Sheets S-1 – S-2 and S-4 – S-5 revised 2-3-11, Sheet S-3 dated 11-2-10, and Sheets S-6, SW-1, and SW-2 dated 2-3-11)
ZA-2	A copy of the preliminary survey prepared by Keith Van Iderstine of McCain Consulting, Inc. for Brent Goplen (dated 2-7-11)

- ZA-3 A copy of the letter from Harry Schoppmann of the Underhill-Jericho Fire Department (dated 2-7-11)
- ZA-4 A copy of the Stormwater Treatment and Discharge application materials
- S-1 A copy of the Waiver Request letter (dated 2-16-11)
- S-2 Drafts of the Subdivision Deeds and Homeowners Association documents
- S-3 A copy of the letter from Michael Cypes (dated 2-17-11)

- Vice Chairperson Van Winkle began the meeting by explaining the procedure for the continued preliminary hearing. He then swore in new interested parties and entered the above items into record.
- Gunner McCain, consultant for Brent Goplen, provided an overview of the plans to date. The proposal is to create a 5-lot subdivision on the southeast side of Lower English Settlement Road with a proposed private development road using the existing curb cut.
- Board Member Chuck Brooks asked if the map that was mailed with the information packet was the most recent. ZA Papelbon replied that it was.
- Mr. McCain continued his presentation by going through the independent consultant review letter from Mitch Cypes of Llewellyn-Howley, Inc. dated 2-17-11. Mr. McCain expressed his frustration at the letter and stated that most of it was “blatantly wrong.” Mr. McCain also stated that his main frustration was that his client will be charged for an assessment that he referred to as “garbage.”
- Vice Chair Van Winkle explained that the DRB had asked the consultant to review the road design relative to the local regulations and give comments on the stormwater plans. Board Member Penny Miller pointed out a typo in the letter dated 2-17-11. Vice Chair Van Winkle asked Mr. McCain whether the plans referenced in the consultant’s letter, aside from the typo in the date of the plans, were accurate. Mr. McCain responded that they were.
- Board Member Will Towle asked Mr. McCain to present an overview of the proposed plans for stormwater prior to his response to the independent consultant’s letter. Mr. McCain stated that the previous submission did not include the stormwater plans, partly due to the technical nature of the stormwater permit application. Mr. McCain stated that DRBs are not expected to understand the stormwater permit materials, and that DRBs should look at the stormwater plans and require a permit from the State of Vermont that satisfies their criteria. Mr. McCain further explained that culverts had been moved from the locations on the previous plans due to the design of the stormwater infrastructure. Sheet SW-1 is the overview of the stormwater plans. Bold, dashed lines represent drainage areas. Mr. McCain stated that the site does not have a lot of runoff, and it is a crested site that

sheds water in three directions. Mr. McCain further explained that whatever water is present on the site, which is not much due to the soils, will run downhill, hit houses, and collect in the proposed ditches and grass swales. The water will be directed toward the stormwater ponds.

- Vice Chair Van Winkle stated that he would like to hear Mr. McCain's responses to the letter from Mitch Cypes. Mr. McCain stated that Mr. Cypes' letter enumerated concerns, presumably from a letter that someone sent to him. Mr. McCain stated that he would have liked to see the letter. Vice Chair Van Winkle stated that it was a transmittal letter. Mr. McCain started by saying that most of the itemized areas in the letter are areas where waivers had been requested or were things that the Town "never makes us do" (e.g. guardrails on 5-foot drops or meet the A-76 standard for a 24-foot wide road).
- Mr. McCain continued:
 - Bullet 1 – proposal calls for a 16-foot wide road with 1-foot shoulders, which is what every other subdivision in Town designed by McCain Consulting has presented and has been approved. The Town has never requested a 24-foot wide road for such small development projects. Board Member Matt Chapek asked what the width of Wheeler Road was, to which Mr. McCain responded that it was the same as the proposed road for this project.
 - Bullet 2, Guardrail Required – this is not something ever requested by the Town before. Board Member Peter Seybolt asked whether or not a slope of 1 on 2 with a change of 16 feet meant a vehicle would drop 16 feet? Mr. McCain stated such was true, but it is not a cliff or an immediate drop-off. It is a bank over approximately 35 feet.
 - Bullet 3, 80-foot road radius requirement - A waiver was requested.
 - Bullet 4, part of road at 12% grade – A waiver was requested.
 - Bullet 5, driveway intersection for Lot 2 does not conform – True. However, there would be only a possibility that someone would want to make a right to go up the road into the development. Most of the time the traffic out of Lot 2 would be toward Lower English Settlement Rd. Making the intersection into a "T" with more earthwork is possible, but Mr. McCain stated it did not make sense to do so.
 - Bullet 6, lack of culverts required by the Road Policy – Culverts are laid out on the plans according to the stormwater management requirements.
 - Page 2, bullet 1, culvert section not provided – Not true. Shown twice on Sheet S-5 and Sheet SW-2.
 - Bullet 2 – Design is for a shared driveway to serve 5 lots, not a superhighway. Part of the road around the corner is canted to lean inward. Sheet S-6 shows 3 different possible sections.
 - Bullet 3 – Soil tests have been done.
 - Bullet 4 – No, the site is all sand.
 - Analysis section – Two school buses can pass on a 16-foot wide road. There are no proposed turnouts. There is no cliff face, the steepest slope is a 2 on 1, and there is not a dangerous drop-off. Board

- Board Member Towle stated that the UJFD has requested a 24-foot wide road and turnaround. Mr. McCain stated that he could probably design a 24-foot wide road for the project but it would create a larger scar on the landscape than is necessary. A waiver has been requested. A configuration has been proposed that would allow for a hammerhead turnaround at the end of the road. Mr. McCain stated that the edge of road and ditch lines (to Lots 3 & 4) as shown are drafting errors and that they should be close together. Board Member Towle asked if there was room in that area to widen the turnaround for the fire department, to which Mr. McCain stated there was. Board Member Seybolt asked if the area was large enough for the largest truck to turn around. Mr. McCain stated that it was, but he could make each of the legs 20 feet.
- Vice Chair Van Winkle stated that he would like Mr. McCain to respond to the letter. Mr. McCain continued, stating that he would make the turnaround with a 50-foot radius. Vice Chair Van Winkle stated that he would like to know what is proposed rather than going back and forth at the hearing. A discussion ensued. Board Member Brooks stated that in his experience the Board has never reviewed a subdivision on such steep land. There have been roads that were required to meet the Road Policy criteria and variances have been granted. Board Member Brooks requested patience for and from the Board as this was the steepest roadway seen in many years. Mr. McCain stated that he would present a turnaround that meets the road ordinance. Vice Chair Van Winkle stated that the smartest thing to do would be to meet with the fire department. Mr. McCain explained that the fire department will not negotiate their requirements as they must adhere to national standards. Board Member Miller stated that such might not be true of turnarounds since their letter was not explicit in specifications for such. Mr. McCain stated that he would speak to Harry Schoppmann at the fire department.
- Board Member Towle stated that Mr. McCain should not assume that the DRB has directed or accepted the engineering letter because neither is true. The Board asked for the letter, but did not tell the engineer what to come up with. The Board wants to hear Mr. McCain's response to the letter, and see whether he can be convincing as to whether his opinion is the one the Board should follow. Mr. McCain stated that part of the frustration is that his client will have to pay for the engineering review.
- Mr. McCain then addressed the stormwater concerns in the Cypes letter. Mr. McCain emphasized that the contracted engineering firm does not determine conformance with State requirements for stormwater permitting. Requirements are met through a paragraph on the plans and in the application regarding the Environmentally Sensitive Rural Development

Credit paired with the Disconnection of Rooftop Runoff Credit. Mr. McCain continued, stating that channel protection is met through the application, water will not be concentrated, nor will the proposed roadway be undermined. A brief discussion ensued. Board Member Towle asked for specific address of the issues raised in the letter.

- Mr. McCain explained that the site is small from a runoff perspective. There is not a lot of land uphill, there is not a lot of contributing drainage area, the site sheds a lot of water in three directions, and the soils allow for a lot of infiltration. The existing low points do not show evidence of running water ever. Mr. McCain further explained that there is no increase in the amount of water to the site, but there will be changes to ground conditions in the addition of impervious surfaces and the removal of trees. Five culverts are proposed across the development road between Stations 4+00 and 12+00. Mr. McCain stated that very little distance of road is concentrating into one culvert - water is collected and discharged in multiple locations to prevent large volumes of concentrated flow.
- Mr. McCain explained that culvert outlet details are provided, although the Cypes letter states that such details are missing. Such outlet protections are included to prevent erosion channels.
- Board Member Miller asked whether the sandy soils suitable for maximum infiltration are not stable for roads. Mr. McCain agreed that the sandier the soils the more highly erodible they will be. Stabilization will be required through either vegetation or rip-rap.
- Board Member Towle asked about the comment in the Cypes letter which claims the unprotected fill adjacent to station 7+00 and the proposed road could potentially be undermined by the proposed culvert at station 8+00. Mr. McCain stated that the flow from the culvert outlet will follow the edge of the fill on the bottom side of the road. Mr. McCain stated that he did not understand the concern considering stabilization measures have been proposed.
- Vice Chair Van Winkle asked about the comment in the Cypes letter that states most of the stormwater discharge will bypass the two proposed detention ponds according to the site contours. Mr. McCain referred to Sheet SW-1, which contain grass-lined swales below impervious surfaces to direct water into the ponds. Board Member Miller stated that it was not in the legend on Sheet S-4.
- Board Member Towle asked whether Mr. McCain and Mr. Cypes were ultimately disagreeing on where the water will run downhill. Mr. McCain replied that he did not believe they were disagreeing, but he believes Mr. Cypes did not review the proposed plans well. Board Member Towle asked whether the criticism was that the swales were in the wrong location. Mr. McCain stated that he did not believe Mr. Cypes saw that such swales were

included in the plans. Vice Chair Van Winkle stated that he was having difficulty finding them and asked if the grass-lined swales were on stormwater management plan. Mr. McCain stated that they are located on Sheet SW-1. It was also stated that the legend symbology for the swales is an 8 with a circle around it.

- Board Member Towle asked Mr. McCain whether he believed Mr. Cypes would have agreed with the plans had he not missed the swales. Mr. McCain replied in the affirmative and referred to paragraph 1 on page 3 of the letter. With regard to rooftop disconnection, Mr. McCain stated that there is a note on Sheet SW-2 for the detail that gives the end-user an alternative if rooftop disconnection is not possible. Proposed stormwater runoff mitigation is via the stormwater ponds.
- Mr. McCain stated that he does not accept the first sentence on page 4 for the reasons stated. Mr. McCain then addressed the design improvement recommendations:
 - Road width – a waiver has been requested.
 - Extend length of road to reduce grade - one section of the road is proposed at 12% at the end, a waiver has been requested.
 - Guardrails – they have never been required, but Mr. McCain stated that he could widen the slope to 3 on 1 and cut more trees. Vice Chair Van Winkle stated that there is a threshold in the State Standard A-76 for a guardrail requirement. Mr. McCain stated that once the slope is 3 on 1 or flatter guardrails are no longer required. A discussion ensued. Mr. McCain stated that he would add guardrails if the DRB required such.
- Board Member Brooks asked whether there was a name for the road, to which Mr. McCain replied that there was not.
- Mr. McCain continued with his comments on the letter:
 - Reduce size of building envelopes – Mr. McCain stated that the proposed design is viable and stated that he explained why he believes Mr. Cypes missed the viability of the design.
 - More treatment areas – Mr. McCain stated that there is more than one way to design stormwater treatment and management. He further stated that the proposed design is the one his firm believes is best suited for the site.
 - Protect culvert ends with riprap – shown on the plans.
 - Design plan to state standards – Mr. McCain stated that the state standard is that nothing has to be designed on paper for erosion control. The state standard is to meet the construction general permit (CGP) requirements for low-risk sites. Mr. McCain further stated that the requirement is to submit a Notice of Intent to the State (which they are doing), obtain coverage under CGP (in process), and the contractor must follow the State-issued handbook. Mr. McCain stated that the erosion control State standards are exceeded on plans.

- Mr. McCain provided the following final comments on the letter:
 - The wetland may not be labeled on the plans; however, the buffer is for houses, not the road.
 - The existing septic system on Lot 2 is not located in the Lot 1 well shield as shown on the plans.

- Mr. McCain stated that he would have appreciated a phone call from Mr. Cypes to discuss the issues prior to writing the letter.

- Board Member Chapek asked Mr. McCain what Mr. Cypes was referring to in his letter regarding siting and sizing the proposed houses to avoid the need for stormwater mitigation. Mr. McCain stated that Mr. Cypes does not understand the stormwater plan, but he is suggesting that building in the corner of the building envelopes could be done to possibly avoid water runoff to the ponds. Mr. McCain explained that the owners are obligated to meet the requirements of the stormwater permit. Moving the house requires moving some of the stormwater infrastructure. Board Member Miller asked if moving the proposed house site as depicted on the plans requires revision to the stormwater or whether building anywhere in the building envelope is ok. Mr. McCain stated that most of the building envelope would be alright, but there are probably a couple of locations that would require different plans. The house is primarily taken care of through the rooftop disconnection process or by using the stormwater structure adjacent to the house to deal with the impervious surface.

- Board Member Seybolt asked what the rooftop disconnection process was. Mr. McCain explained that it is a way of grading the site so that the water shedding off of the roof has sheet flow over land before concentrated flow. No gutters and no downspouts are allowed unless going to a drywell. Mr. McCain then provided further explanation of the details.

- Board Member Brooks asked about whether the proposed road begins at the existing driveway, to which Mr. McCain replied that it was. Board Member Brooks expressed a concern for runoff onto the Town road (Lower English Settlement Road). Mr. McCain referred to the road profile on Sheet S-5. A depression to keep water off the Town road is proposed.

- Board Member Miller asked whether the profile on Sheet S-6 showing the road canting to one side would be challenging for winter driving? Mr. McCain stated that it would help winter driving, and explained that the canting is 2 inches over 10 feet.

- ZA Papelbon spoke, stating that Road Foreman Rod Fuller had some questions on the road. Why is the lower stormwater pond location proposed as close to the road as on the plans? Mr. McCain stated that it was to capture maximum stormwater runoff from the road. ZA Papelbon explained that Mr. Fuller's concern was that the pond would be draining into the culvert

on Lower English Settlement Road and into the town ditch, and asked Mr. McCain to explain his plans. Mr. McCain provided an explanation of flows to design points. Dry ponds are proposed to keep increased runoff from overwhelming any one design point (i.e. culvert). Mr. McCain stated that he captured water flows out of the dry pond at a slower rate than it enters so that the design point sees no change in flow rates. ZA Papelbon asked whether it was possible to move the pond and still achieve the desired stormwater mitigation. Mr. McCain stated that it was not, but stated that the proposed driveway could be moved a couple of feet.

- Board Member Chapek asked if the configuration of the pond could be changed. Mr. McCain replied that moving the pond to the other side of the proposed road would prevent much of the runoff from the road from being captured. He added that the goal was also to prevent additional impact to Romar Drive.
- ZA Papelbon asked why the proposed culvert at the end of the road was 24 inches. Mr. McCain stated that he did not know, but he would check with his designer.
- Board Member Miller asked whether the town culvert was considered a design point for the stormwater plans. Mr. McCain stated that the culvert was not the design point, but the pond was.
- ZA Papelbon stated that Mr. Fuller was concerned that, with the layout of the plans, the proposed road would be constructed over the stump dump. Mr. McCain replied that this was not the proposal and that using stumps as a road base is not a good idea. Mr. McCain then explained why the spot was chosen as a stump dump.
- ZA Papelbon stated that a note in the plans required stone-lined ditches above 10% grade, but the Better Backroads manual and Mr. Fuller recommend that ditches 5% and above be stone-lined. Mr. McCain replied that such would be changed. ZA Papelbon then stated that Mr. Fuller requires type 3 minimum, 7.5" thick for stone on slopes of 5-10% and type 4 on slopes in excess of 10% with a minimum thickness of 12 inches. Mr. McCain stated that he would check into that. ZA Papelbon stated that Mr. Fuller's notes indicated that gravel should be a minimum of 12 inches for driveways and 18 inches for the road. She suggested that Mr. McCain talk to Mr. Fuller for clarification. ZA Papelbon then stated that Mr. Fuller requested a 30-foot radius onto the town road from the intersection with the proposed road, and stated that an 18-foot road with 1-foot shoulders is preferred. The town trucks are between 7 and 8 feet wide, and winter maintenance issues were considered. A discussion of the road and winter maintenance ensued. Board Member Miller asked if pull-offs could be incorporated, to which Mr. McCain stated he preferred adding such rather than widening the road. ZA Papelbon expressed her concern that she may not have accurately reflected

Mr. Fuller's comments and recommended that Mr. McCain contact Mr. Fuller directly.

- Board Member Towle asked what Mr. Fuller's specific concerns were for the road. ZA Papelbon stated that discussion could ensue regarding conformance with State standards and the Road Policy, but should the road ever be considered in the future for takeover by the town that it would have to meet local requirements. Board Member Towle provided his experience with pull-offs and recommended incorporating such into the plans. He then asked how the maintenance of the stormwater infrastructure would be handled. Mr. McCain stated that it would be the responsibility of the Homeowners Association. ZA Papelbon added that very rough drafts of Homeowners Association documents were provided. Mr. McCain provided an explanation of stormwater permitting, which requires a Homeowners Association.
- Vice Chair Van Winkle asked for public comment.
- Scott Tobin, 6 Orchard Road, asked for verification that the lower stormwater pond's outflow was directed south toward the town culvert on Lower English Settlement Road. Mr. McCain stated that such was correct. Mr. Tobin stated that he heard the goal of the stormwater design was to keep the water flow neutral and directs the water to the pond. Mr. McCain stated such was correct and provided a brief explanation. Mr. Tobin expressed a concern for trees susceptible to wind and blow-downs in the proposed building envelopes. Mr. McCain stated that best management practices would be utilized and, after some discussion, stated that he would look at the building envelopes for Lots 4 and 5 regarding blow-downs. A brief discussion of blow-downs in the area ensued.
- Board Member Miller stated that since the plan is a PRD, dimensional requirements are not typically considered in the design. In this case, the minimum acreage requirement is 5 acres. Nearly every lot is 5 acres or larger except for one lot. Board Member Miller continued, stating that she believes the intent of a PRD is to cluster houses more to preserve more of the natural landscape and shield building. That may not be what these plans show, but they do show setbacks to be waived. Board Member Miller asked why waivers were being requested in this application when the building envelopes could be configured to meet the minimums. A discussion of the waiver requests ensued. Mr. McCain stated that building envelope on Lot 5 would be configured to meet the 50-foot rear setback. Board Member Miller asked where the front lot line is for Lot 4 as a 25-foot waiver request for the front setback was requested. She then asked why waivers were requested with such large lots and large building envelopes. Mr. McCain stated that with regard to the Lot 4 request, it is an internal setback. Board Member Miller stated that it is an extra 25 feet. Mr. McCain stated that such could be met if required, but the goal was to allow as much flexibility as possible for the lot owner. Board Member Miller stated that the rest of the Board may not feel the same, but that the design was almost set up as a subdivision, there are

no clustered houses, which is the whole point of getting out of the dimensional requirements. Mr. McCain responded that there are many reasons for PRDs, including flexibility of development, but the conventional layout would result in oddly-shaped and unusable lots due to the road requirements.

- Board Member Towle asked whether the location of pond #1's spillway, at 2 feet above the house site and on the same contour line as the proposed septic system on Sheet SW-1, was problematic (resulting in water in a basement or a submerged septic area) considering the testimony provided regarding ponding. Mr. McCain stated that there is not a concern, but he stated he would not be surprised to see continued ponding in the field. Such is considered another place to store stormwater until infiltration. Mr. McCain further stated that the septic area will not be inundated as 7 feet of good material and a groundwater table at around 5 feet were seen during the soils tests, and there are well-drained soils present onsite. The stormwater application addresses the house site in relation to the pond. Board Member Towle stated that the plans look like approximately 800 feet of grassy berm channel all of the drainage from the top half of the project to the pond to be discharged 100 feet from the house. He asked what would happen should the pond fail. Mr. McCain replied that the stormwater plans note that the runoff from the Lot 1 house site might not make it to the pond, but the rooftop disconnection will treat the runoff. Board Member Towle stated that his concerns are for water leaving the spillway. Mr. McCain stated that he has no concern for the house as the pond is 100 feet away and lower. Board Member Towle asked whether the building envelope should be restricted to the contour line. Mr. McCain stated that the drainage from the pond is already outside of the building envelope. A brief discussion ensued. Mr. McCain stated that the building envelope could be brought above contour 780.
- Board Member Towle asked if it was a problem to have a septic field underwater. Mr. McCain stated that the proposed septic area is above where the ponding occurs, but that it does not matter if the septic area occasionally is underwater.
- ZA Papelbon asked if any areas of wetland were discovered in the wet meadow. Mr. McCain replied in the negative, that the soils were too well-drained to be hydric.
- Board Member Miller asked whether the Board decided where the front lot lines were on the plans. It was stated that such had not been decided. A brief discussion ensued. Vice Chair Van Winkle stated that the applicant should propose a front lot line. Discussion continued. ZA Papelbon suggested making the lot lines clear by a note on the map or in the DRB's decision. Board Member Brooks asked for Mr. McCain to highlight the front lot lines on his map. ZA Papelbon explained that the front lot line has a

different setback than the sides, which is partly why they need to be explicit. Mr. McCain highlighted the lines.

- Board Member Miller stated that the amount of trees to be removed is significant and wanted confirmation that such is “just the way it is.” It was agreed that such is true.

8:21 PM: Vice Chairperson Charles Van Winkle asked if the Board had enough information to make a decision on the application. Vice Chairperson Van Winkle then provided a brief summary and a brief discussion ensued. The Board indicated that they had enough information to make a decision. Vice Chairperson Van Winkle asked the Board if they wished to deliberate in open or closed session.

8:23 PM: Board Member Chuck Brooks made a motion, seconded by Board Member Peter Seybolt, to move into deliberative session. Vice Chairperson Charles Van Winkle stated that the evidentiary portion of the hearing was closed. The motion to move into deliberative session was passed by all Board Members present.

9:36 PM: The Board, by consensus, decided to continue deliberations at a meeting on February 28, 2011 at 6:30 PM at the Town Hall.

9:36 PM: End of meeting.

These minutes of the 2-21-11 meeting of the DRB were accepted

This _____ day of _____, 2011.

Vice Chairperson Charles Van Winkle

These minutes are subject to correction by the Underhill Development Review Board. Changes, if any, will be recorded in the minutes of the meeting of the DRB.