



## NEWINGTON CONSERVATION COMMISSION

Tuesday, May 17, 2016

### MEETING MINUTES

#### I. CALL TO ORDER

Vice-Chairman Sadil called this meeting to order at 7:05 p.m. in Room 101 of the Town Hall.

#### II. ROLL CALL

Andreas Sadil  
John Igielski  
Cathleen-Marie Clark  
Philip Block  
John Casasanta  
John Bachand  
Peter Manke  
Peter Arburr

#### Also present

Chris Greenlaw, Town Engineer  
Susan Gibbon, Recording Secretary

*(\*These minutes are a brief overview of the meeting held on May 17, 2016. Please refer to tapes for full transcript.)*

Vice Chairman Sadil seated Commissioner Bachand for Chairman Zelek.

#### III. PUBLIC PARTICIPATION ON NON-AGENDA ITEMS (each speaker limited to 2 minutes) *(This portion of the meeting is verbatim.)*

Stanley Sobieski, 26 Deepwood Drive, Newington, CT. I have a question. A couple of weeks ago somebody from this commission posted something on Facebook that said to the effect that any open property in this town is considered open space. My question is, I have a lot next to my house. Is that considered open space, because if it is I am going to definitely look to get a tax abatement from this town, so if the committee could either. I believe it was the chairman that posted on Facebook. So I would like a ruling here.

Vice-Chairman Sadil: Mr. Greenlaw.

Chris Greenlaw: Technically, a commission does not engage in questions with the public, but I would ask the member of the public, I know that the commission that you serve on, your staff agent, Mr. Miner, I believe also serves on the open space committee.

S. Sobieski: That is correct.

Chris Greenlaw: I believe you would be best served going to the individual.

S. Sobieski: I was there. Mr. Greenlaw my question is, I don't believe any member of a commission should be making statements like that, that was my point.

Chris Greenlaw: Understood.

Vice-Chairman Sadil: Commissioner Block.

Commissioner Block: Yes, it's a question of semantics. There are two different ways to view words. One is the simple meaning, i.e. open space not developed and the other is designated open space i.e. reserved by some means or another to remain undeveloped. I believe yours meets the first definition since you are telling us there is no structure there.

S. Sobieski: That is correct.

Commissioner Block: It does not meet the second because the designated open spaces have to be done so by the town following a procedure.

S. Sobieski: I understand that, but I believe the way it was put on Facebook it was anything out there and that was my concern. That is all. Thank you very much for your time.

#### **IV. ACCEPTANCE OF MINUTES**

##### **A. Regular Meeting of April 19, 2016**

Commissioner Block: Section II, Roll Call: John Block needs to be changed to Philip Block.

Commissioner Block: First page, Chairman Zelek statement, needs to add "no" to the first sentence.

Commissioner Clark: I have the same comment, but I thought he might have said "no need to appoint" any of the alternates.

Commissioner Block: I would agree with that. On page 2 down three quarters of the page, the, add the word "page" after front.

Chris Greenlaw: Mr. Chairman if I may. The official tally of the attendance that is recorded is kept by the staff agent and I make note of those who are tardy and those who have ben absent, so it is recorded as such.

Commissioner Block: Thank you, I knew that. Nothing further.

Commissioner Igielski: On page 39, there are two references to Chairman Igielski, it should read Chairman Zelek and on page 50, preliminary should read plenary. That's all I have.

Commissioner Clark: On page 37, middle of the page, add "go" to the statement.

Vice-Chairman Sadil: Can I get a motion to accept the minutes as amended.

Motion by Commissioner Clark, second by Commissioner Bachand. Motion passes.

**V. PUBLIC HEARING**

**A. Inland Wetlands Regulation Changes – L.I.D. (Low Impact Development)**

Chris Greenlaw: No updates to report at this time.

**VI. NEW BUSINESS**

**A. Application 2016-09, 593 Cedar Street – Utility Building in the Upland Review Area (URA)**

Herbert S. May: Good evening, my name is Herb May, Macchi Engineers representing iHeart. I also have with me Rick Walsh.

Richard Walsh: Richard Walsh of iHeart Media, Hartford.

Mr. May: This site is located between Route 173 and Route 9. It is on the southern side of Route 175 Cedar Street. The reason we are here tonight is we are looking to add a 10' x 20' precast concrete utility building to the site. The approximate location of the utility shelter will be on the west side of the existing shelter. We will also be removing a foundation and a satellite pier. The red dash line represents the wetland line, so everything to the south is basically the wetlands. The upland review area encompasses the remainder of this, this bowl shaped area that you see here up to Cedar Street. The overall site is 16.1 acres. The upland review area is .73 acres, so essentially the entire site is wetlands.

Vice-Chairman Sadil: Isn't a wetland. It's encompassed by the wetland.

Mr. May: Correct. Yes. We are not proposing any improvement within the wetlands, just in the upland review area, the regulated area. We are disturbing .08 acres within the regulated area. I mentioned this concrete pad and this satellite dish. The reason why we have to remove these items is they are in the 100 year flood plain and as a result this is taking up some of the volume of the flood plain so to compensate, offset that volume we will remove this concrete pad here with is approx. 70' x 40', 1.8 feet thick and this is 5' x 5'.

Vice Chairman Sadil: So what is your motivation to take that front slab out?

Mr. May: That is one of the first things we are going to do in this project. Because of the portion of the site that we are adding the proposed structure basically is within the 100 year flood plain that would have a negative impact on the area. In order to offset that, we are removing more volume than we are adding.

Commissioner Block: In that regard, you are showing the areas, but I don't see anything in the plan to create the volume you just referenced.

Mr. May: The table is on the site plan, I believe it is on the second page. I'm sorry, it is on C-1, the table underneath the zoning information.

Commissioner Block: You are saying the pad you are removing is one and a half feet thick.

Mr. May: It's 1.8 feet thick, overall 360 cubic feet.

Commissioner Block: The shelter is 1.8 as well?

Mr. May: There are elevations on the other plan I was referring you to. Section 2. Maybe I should back up and explain a little bit what this is. I brought a picture.

Commissioner Block: It is obviously more volume than 1.8.

Mr. May: No, keep in mind that once we are above that flood elevation of 73.4 than you are above the water plain, so it doesn't really effect your flood storage.

Commissioner Block: So you are basing your calculation on the difference between the existing elevation and the 20 year flood level.

Mr. May: It is the 100 year flood. Yes, that is denoted on your plan here. This dash line here represents the 100 year floor plain.

Commissioner Block: Maybe I missed it.

Vice Chairman Sadil: Can you point it out on the map.

Mr. May: It is this dash line here. The elevation starts on the 73 ½ , it sweeps down by the driveway and then sweeps back up basically. We were able to get this elevation from FEMA because they had done a study for Piper Brook so that flood elevation is pulled right from that report.

Commissioner Block: But it is not labeled on the drawing.

Mr. May: It is labeled.

Vice Chairman Sadil: Can you show us one more time for the commissioner.

Commissioner Block: I see a 100' buffer review, but I don't see any reference to the 100 year flood line.

Mr. May: It looks like the arrow heads didn't print out.

Commissioner Block; It is very faint printed area in the margin, that is the 100 year line.

Vice Chairman Sadil: Mr. Greenlaw.

Chris Greenlaw: For the benefit of the commission, the applicant and the applicant's consultant has been very gracious for the interjection of the question as it relates to the flood zone. A point of order is that this is not germane to the wetlands. Certainly the removal and activity of concrete and work within the upland review is, but I would ask the applicant, I believe you have already spoken. As you see on sheet C-1, all the information you have requested falls underneath the zoning table. Flood zone is regulated by Zoning. Per statute, anyone with a site plan development that is in flood zone is required to come to wetlands first. They will be consulting with TPZ and I believe it is going to be a special permit for zoning as it relates specifically to flood zone. These maps compiled with the calculations on there are going to be reviewed specifically by the TPZ to look at that compensatory mitigation of exchanging as the consultant gave the example. These questions as it relates to the flood zone will be covered by TPZ regulations. Your questions should be geared towards this activity as it relates to removing something from the ground, that soil that is altered and how they migrate towards the stream in the wetlands, how are you going to mitigate that.

Commissioner Block: That is where I was trying to go but I needed the identifiers in order to ensure that the calculations made sense to me.

Commissioner Bachand: It is interesting that you are compensating for the cubic volume of the building, correct.

Mr. May: Correct. The building is above the flood plain. Let me just back up for a moment. I understand it is not your purview to act on the flood, and thank you for clarifying that Chris, but I want you to understand why we needed to do this additional disruption within your upland review area. If I may finish, we are going to topsoil and seed it, so it is going to be vegetative, it is going to be better within your upland review area than it is now.

Vice Chairman Sadil: So let's just back up and explain your activities and what their impact to the wetland is since this will be in the upland review area. It's good to know the flood plain, but again as Mr. Greenlaw pointed out, that is out of our purview at this point, that is TPZ.

Mr. May: I understand it can be a little confusing, but at least you understand why we are doing it and we are making it better in my opinion.

Commissioner Bachand: I am just trying to understand. You are compensating for the cubic volume of the building that is below the flood line.

Mr. May: Keep in mind we are elevating the building above the flood plain because we certainly don't want it to get flooded. So that 1.8 feet is basically the pedestal that goes around the building that is going to store some wires and stuff.

Commissioner Bachand: The slab is at grade, correct.

Mr. May: No, it is actually a foundation that is sticking up out of the ground a little bit.

Commissioner Block: What is the function of the building you are adding as far as the contents are concerned?

Mr. Walsh: The equipment building is to house broadcast transmitting equipment for the site. There are broadcast towers in the rear of the property and the proposed shelter would house new equipment for the transmission of WPOP.

Commissioner Bachand: Transformers involved in that?

Mr. Walsh: They are all dry transformers.

Vice Chairman Sadil: No hazardous materials that could...

Mr. Walsh: Nothing, just passive electronic components and transmitting equipment. All solid state and no oil filled transformers.

Vice Chairman Sadil: So let's back up again and let's talk wetland impact.

Commissioner Casasanta: Just a question regarding the removal of the pad. I was looking through here, I didn't see. What were you planning to do with that piece of land.

Mr. May: Top soil and seed. Same thing as well as this small little satellite dish. This is basically all that we were doing in your upland review area. We talked about the pad, the satellite dish, we are trenching from this utility pole up here across to the new proposed building. The will be a temporary disturbance when you put conduit in the ground. This will all be restored to what it is here.

Vice Chairman Sadil: How deep is that trench going to be?

Mr. May: Between 22 - 24 inches of cover, maybe 3 feet at the most from finished grade to the bottom of the trench. I mentioned that the proposed building is already on an impervious surface so we are not adding any impervious surface, we are actually reducing the impervious surface in the upland review area. The only area I think they will put impervious surface back will be back in this pad area surrounding it. New chain link fence, with access gates. Silt fence will be a temporary disturbance. Other than that, that is basically our disturbance in the upland review area.

Vice Chairman Sadil: So there will be no changes in flows. How is the grading in that area. Would anything change?

Mr. May: Matching grade. It is fairly level. We will top soil and seed it.

Commissioner Igielski: Can you point out on your map the 100' upland review line.

Mr. May: It is this magenta line here. There is an elevation of 73.5.

Commissioner Igielski: The 100' upland review line.

Mr. May: This dash line here is actually the wetland line. So everything to the south is the wetlands, the upland review area is basically inside here up to the road.

Commissioner Igielski: Again, would you point out the 100' upland review line on your map.

Mr. May: I think it goes beyond the street.

Commissioner Igielski: According to the print, 1" = 20'. So the 100' would be five inches from the wetland line, would be the place where the 100' upland review line would be, that would not put it off the print.

Mr. May: As I understand it looking at the town mapping...

Commissioner Igielski: It would be five inches from the wetland line, it's where the 100' upland review line would be.

Mr. May: No. This whole area is the upland review area. It ends at the street basically.

Commissioner Igielski: But it's not labeled.

Mr. May: It is labeled.

Commissioner Igielski: It just references an area that is in the upland review line.

Mr. May: Because it encompasses the entire area, as I understand it from my review.

Commissioner Igielski: Wouldn't it be best for accuracy of the map you are providing us to provide us the 100' review line on the map.

Mr. May: I am pretty sure that is would be off the page.

Chris Greenlaw: For the benefit of the commission, it is certainly something that we can ask the applicants consultant to put on for the next meeting to clarify, but I believe, from recollection and from inspection of this map, the site, if you look at the property line which is highlighted in red and very linear, I believe that what the consultant is saying if you went at 20 scale the whole area which is owned by the applicant is encompassed by the upland review, but certainly if you wanted to see that upland review line that would extend beyond their property line that is something we can ask them to put on the map.

Commissioner Casasanta: I was thinking about an application from probably about 4 or 5 months ago. Mr. Lahickey wanted to put up a shed in a flood zone, that wasn't the upland review area but actually a flood zone. I thought we had an intent conversation that the flood zone is actually considered the wetland. I thought that was the determination, the point of contention was he was actually going in a flood zone.

Chris Greenlaw: Point of order, Mr. Chairman. Before you go any farther. We learned a lot from that application and I will be happy to speak with this commission and the chairman. The confusion was the fact that the definition for wetland soils and the definition and regulations for zoning use the same word "flood plain". We have a soil scientist and ecologist in the audience and perhaps he would be so gracious to reiterate this. The confusion was that they discussed as part of the inland wetland definition are alluvial soils and flood plain soils and that word flood plain was also used in the regulation at it relates to zoning. As for those areas, they act as a table to hold water during flood zones. The carry over of that word in two regulations caused a great deal of confusion. The consultant will go over it with you, all the activities are in the upland review area.

Commissioner Casasanta: I recall that from that specific application so I can go over that with you later to clear up any misconceptions there might have been.

Chris Greenlaw: And also for some clarity, we saw that I believe, and I would like to ask the soil scientist later, I believe we saw that definition used under HAHT soils (human altered human transported), it mentioned flood plain. That word is used in many different areas and we have to remember our charge and the statute and what we are working for.

Commissioner Casasanta: Absolutely, I just recalled from that application it was very contentious because some of my fellow commissioner felt that the applicant was doing work actually in the wetland because it was a flood zone, flood plain.

Chris Greenlaw: And the last comment I will make, it that although they are different, its not saying that you can have applications like that application where they are superimposed on top one another.

Commissioner Bachand: I think Mr. Igielski points out the obvious. If the map it to scale, if you took five inches you are out here somewhere, so some of the work is not in the upland review.

Mr. May: As Chris mentioned, it is near the property line so that would pretty much be it. The utility building is 20', so if you use that as a gauge it goes up to the property line. We certainly can add that.

Vice Chairman Sadil: Maybe you can clean up the map a little bit, use better designation for the lines. I get confused here by the silt fence line, it looks like the wetland boundary line, you have the 100' buffer near the property line, maybe highlight that a little bit better with a different line spacing or feature or something for less confusion.

Mr. May: Agreed, we can certainly clarify them.

Vice Chairman Sadil: When was this work being planned? The silt fence is going to be adequate to hold any storm water?

Mr. May: Definitely, yes. The disruption is very minimal to install the actual proposed structure and even the concrete pad is not that much work, you basically hammer it up and move it off site. Anything that they pull out is going to be hauled off site, not just moved on site. As far as the schedule, I am comfortable with what we show here for erosion control and it meets the intent of the 2002 CT Storm Water or Storm Erosion Control manual.

Vice Chairman Sadil: Any other comments from the commissioners?

Commissioner Block: Yeah, I would like to follow up. Are you saying that you are proposing for the work to be done this summer?

Mr. May: Yes.

Commissioner Block: So the flood season is over already and it will be complete before the winter.

Mr. May: Yes.

Vice Chairman Sadil: We will table this to the next meeting; do the map changes we requested. Mr. Greenlaw.

Chris Greenlaw: Yes Mr. Chair I will follow up with the applicant's consultant.

Vice Chairman Sadil: Moving on to old business Application 2016-08, 131 Summit Street – Commercial building and LID measures in the Upland Review Area (URA). If the applicant and consultant would state their names for the record.

## **VII. OLD BUSINESS**

### **A. Application 2016-08, 131 Summit Street – Commercial building and LID measures in the Upland Review Area (URA)**

Dan Pizzoferrato: Applicant and sole member of 131 Summit Street LLC, the official owner of this property.

Clinton Webb: Environmental consultant, Clint Webb. You should all have revised plans in front of you.

Vice Chairman Sadil: Are there any changes to them?

C. Webb: You should have four sheets. I didn't include the fifth sheet because that was just the survey plan that you already have. I am going to go through the list of comments and requests

that we had last meeting and then also, not only comments from the commission but also the engineering department.

Vice Chairman Sadil: Thank you, please proceed.

C. Webb: Something that is not on the plans is a question from Commission Arburr about how long the water was detained in the swale after the rain stopped before it would empty out and that was calculated to be 34 minutes for the 25 year storm. Even though the hydrology report itself looked at 2, 10, 25, 50 and 100. I believe it was Commissioner Block who asked that we submit the MDC approval letter. We submitted that to Chris Greenlaw, along with an email chain back and forth that lead up to that approval.

Vice Chairman Sadil: What was the MDC's concern relative to this application?

C. Webb: Their biggest concern was pretty much they don't want us getting within 3 feet of their pipes, so they limited us to one foot excavation on both the pipe line at the rear of the site and along the southern boundary.

Vice Chairman Sadil: South being, you want to point that out on your map there.

C. Webb: Yes, that is also the side where the building will connect. We have another comment that asked us to show profile between proposed sewer hook up and proposed swale.

Vice Chairman Sadil: Maybe you can come up to the front here and put your drawing on an easel. Let go through the plan, get an overview and refresh ourselves.

C. Webb: Ok, if you look at the south it is referred to as the Lombardo property, the bus way would be the eastern border, Summit Street would be the western and the Cyr property would be the north.

Vice Chairman Sadil: Ok, where is the MDC line and point out these changes.

C. Webb: The MDC line is just to the west of the bus way sound barrier. If you look in the middle of the plan you will see 20" MDC easement which actually encompasses both sides of the bus way barrier so that is the main trunk line.

Vice Chairman Sadil: Ok, let's start with the overview, a summary of where we were last time and then let...

C. Webb: The proposal is for a 75' x 40' one story commercial building on a 1/3 acre property that would have access from Summit Street. The bus way is here, there is a commercial property to the north and a residential property to the south. The building is being proposed to be located at the back of the site with parking in front and the southern border would be the storm water management system comprised of 3 swales and chambers and overflow berms. We are here because there is a wetland limit here on the town map that surrounds the culvert that goes underneath the bus

way out into the wetland. This area receives water from a catch basin out in Summit Street that feed in this way, plus a much larger wetland system down here from this direction that passes under the bus way. When you put that wetland limit is accurate. There is not wetland where the bus way is anymore. It wouldn't change the upland review line that reached into our site. We are within the 100' upland review line which basically encompasses this corner of the site. Right now water flows off of the Cyr factory site, which has 100% impervious surface, that sheet flows on to the 131 site and then the natural flow channels all that water to this corner of the site into a grass swale that discharges into the wetland. Our charge is to slow this water down from our development, treat it for both sedimentation and erosion, but also its velocity and thermal impact. If just so happens that there is little bit of property in the upland review. The hydrology study was prepared which did a pre and post analysis, existing conditions against versus proposed conditions. The increase in runoff and our goal is to have zero increase or less run off than the existing today. We came up with this swale treatment bio filtration system with three berms and an overflow channel here. We also put check dams here, so the water coming from the Cyr site will be captured in this in just a slight swale grading from behind the building and proceed out just as it goes today. All these additional new development flow will be directed to these 3 chambers, into these bio filtration chambers and out to the storm water system. In addition to the questions that the commission asked about the plan, we also had a 2 page letter from the engineering department with a number of comments, some being housekeeping and another being a different opinion on approach and also some refinement of calculations. What I wanted to do was go over the comments first. Again the calculation for water infiltration is 34 minutes for the 25 year storm. These check dams are notched so that the water can fill up a foot or so before it spills over the notches.

Vice Chairman Sadil: What set the standard for 34 minutes? How do you know that is acceptable?

C. Webb: Because we are using an extra layer of infiltration material that is draining really quickly. I would say more typical is 2-4 hours for a commercial site. The genesis of this design is something that town staff and I worked on previously over by the NU site so I carried that same basic principal into this site to slow down storm water before it gets to the wetland. There was a need for a maintenance plan for the swale because we are proposing a wet tolerant plant species for the swale. You can't just plant it and walk away so that maintenance plan is typical of other maintenance plans where this plant material gets mowed once a year in the fall after it turns to seed. Have to make sure it doesn't call brush, trash, leaves. Those need to be cleaned out, if it erodes it needs to be replanted. I have outlined that and it should be on the detail sheet. I have received one comment and I would like to ask the commission to make it a condition for approval, we add the statement in front of that maintenance plan that the applicant or land owner will do these things, so it is on the record, it is on the maps, it is on the property records that it has to be maintained. Good for first owner, new owner needs to know.

D. Pizzoferrato: I concur with this condition.

C. Webb: We have submitted all correspondence from MDC approving this plan. We have a swale above this MDC line and we have swale above this MDC line.

Vice Chairman Sadil: So heaven for bid if some pipe breaks they can come in with their backhoe and dig.

C. Webb: Yes, exactly. We are not facilitating that potential for any type of impact because we are staying a minimum of 3' above.

Vice Chairman Sadil: If something happens, is the applicant aware that they would need to restore the system.

C. Webb: Actually, the MDC would.

Vice Chairman: OK. Someone has to do it. The applicant is aware of that.

D. Pizzoferrato: I absolutely am.

Vice Chairman Sadil: Please continue. Thanks for mentioning that, that is a good point.

C. Webb: We had a lot of typical cross sections on the detail sheet and now those areas all specific to this project. They are not typical. They really are what this plan shows, which is a significant change as far as being able to understand the project. Got rid of two story building. The sewer lines coming out of the building and connecting to this trunk line, which MDC actually left the stub there, this is where they would like the developer to hook up, there is a profile on the detail sheet that shows where that pipe is in regards to where the swale is and the MDC has also confirmed that is acceptable. That takes care of the comments that we had. The town is addition to just your standard calculations for storm water management for various floods, they also want to see the water quality values and the function of the swale. How well will it function, will it handle and treat? We know the swale can hold the water, but will it treat that water or will it just sit there and not treat the water and the next storm pushes it out. We were asked by the town staff to evaluate that. It is an elaborate calculation that is associated with LID type of projects. Staff raised some questions and when we did the calculations for the swales 2 and 3 we found them more than adequate, they actually function a little bit above what the minimum requirement would be. However, the large swale, the longest swale, in the biggest area, swale number one falls a little short. We have the volume, but we need to expand that dark area you see, it needs to be expanded to include more of the bio retention material.

Vice Chairman Sadil: The volume must increase.

C. Webb: Yes, we are looking at taking that from 3 or 4 feet wide to 8 to 10 feet wide in that same area, it won't change the outward design of the swale, it will just have more medium.

Vice Chairman Sadil: Inside upland boundary.

C. Webb: Yes and the reason for a range of numbers is because right now we are calling for 6" of that material above the crushed stone and we can minimize the overall size if we increase the thickness. It will probably be a combination of the two when finished. I sat down with town staff this

afternoon, we worked that out. I am very close to what needs to be done. We would also like to ask the commission to make that a condition before the Mylar's are completed and ready for signature that we would.

Vice Chairman Sadil: Revise the plan. Does the applicant agree with those changes?

D. Pizzoferrato: Yes.

C. Webb: That sums up what I have to present.

C. Greenlaw: One thing I want to add a point of record, is that when I sat down with the consultant and we looked at the efficiency, the swale big enough volumetrically to hold the water, but the filter material, we have some many different factors, it's the same formula but we have professional opinions. Again LID is new, but we have a certain requirement as to the filter the media; how much sand, how much top soil and compost and we use certain factors and we asked that engineer to use these factors. As the town, we are going to actually require that they expand the filter media, such that we believe that we are going to get more cleansing of the pollutants off the property. The important note is they have the room to make the modifications in the swale. The large area that they have, what it means is the filter media just needs to be enlarged and they physically have the room to do it within the swale that they have. They need to adjust their calculations and their plans and it can be achieved without a redesign.

Vice Chairman Sadil: To my fellow commissioners, I guess you have make the assessment whether these last minutes tweaks to the design is acceptable to you and have it them as a condition, we can move forward if you are ok with that. This is a last minute detail that needs to be worked out between the engineers, the consultant and the applicant.

Commissioner Block: The big problem I have with it, correct me if I am wrong, there is no maintenance access around the building except by going in the swale, is that correct?

C. Webb: You mean like a roadway or pathway?

Commissioner Block: Pathway for maintenance to get to the outside of the building.

C. Webb: The building is approximately 23' from the...

Commissioner Block: 24.5 according to the plan.

C. Webb: No, that is the other side of the wall. I'm saying if you look at the west side of the wall it is closer to 23'. You have 23' with a gradual size, it has to be done to mow this.

Commissioner Block: The elevation of the swale is a 69 and at one point 68.2 and it looks like around the corner the swale comes right up to the corner to the side of the structure.

C. Webb: The south, down here.

Commissioner Block: Yes. So if somebody has to do something to the rear outside of the building, they are going to be traipsing in the swale.

C. Webb: Well for maintenance, it is grass. This swale is not a bio swale.

Commissioner Block: I understand that, but if they need to put a ladder up, they are going to be in the swale. If they need to cut the grass they are going to be walking in the swale.

C. Webb: Absolutely.

Commissioner Block: Normally there is some margin of clearance, a pathway. Are the dimensions so critical that there couldn't be some footpath around the wall of the building.

C. Webb: We have the shelf directly behind which gets narrower in this corner.

Commissioner Block: Right, but on the north side of the building it vanishes.

C. Webb: The north side of the building is very shallow. Here is the property line. This is a small little lawn mower or weed whacker with somebody walking along, it is totally acceptable. You don't need equipment there so there is no reason...

Commissioner Block: There are maintenance requirements to the swale. We are talking about long term.

D. Pizzoferrato: To answer your question in regards to maintenance and equipment, one of the stipulations the MDC has given us, is that they do not want any heavy equipment in their designated right of way. MDC was very important in saying that they didn't want us grading within 3' and it was very important to them that we don't operate heavy equipment or vehicles in their designated area. Our design took that into account. We are using every ounce of this site that we can possibly use. Everything has been calculated and we have sketched it many different ways. MDC gave us several different hook-ups for our sanitary, we assessed it with the utility department multiple times and everyone has found the most effective way to do this in terms of maintenance, in terms of economics, in terms of construction.

Commissioner Block: Then if I might resolve the issue. On your maintenance procedure listing here would you have an objection to adding a number 8, saying that all maintenance activities will be done by hand.

D. Pizzoferrato: Sure.

Commissioner Block: That would resolve as far as the swale is concerned. It still leaves a question, if you need to get a ladder up in the spring or something you are going to have some issues.

D. Pizzoferrato: To help you regarding the maintenance issue. This building is actually going to be similar to a building we have at 308 Alumni Road. We use a steel building, they are very low maintenance. This building is actually going to have a 3' 6" foundation wall that encompasses the entire perimeter of the building. We put that is our design for maintenance. There is not going to be any steel, wood, nothing lower than 3' 6". From that point up it is a steel building; they will have access from the front. We constructed our building on Alumni Road in 2011 and since then we haven't had to even change a light bulb there, not a single thing in terms of maintenance.

Commissioner Block: To add to that point, on the rear and south sides no gutters, no light fixtures?

D. Pizzoferrato: We will probably have wall packs on either side and the front of the building. If zoning requires us to put a wall pack in the rear, we will talk about that.

Commissioner Block: A wall pack being a light fixture.

D. Pizzoferrato: Yes, a wall pack is a light fixture.

Commissioner Block: I am only saying it is going to be difficult to do any maintenance on the building if you are right up against the swale. From my point I don't want the swale hindered, on the other hand, if the swale is full of water you are not going to be able to do the maintenance. It is a contradiction that would ordinarily be resolved by having a 3 or 5 foot margin between the edge of the swale and the building.

D. Pizzoferrato: If that could have been designed into our plan we would have loved to have done it.

C. Webb: It couldn't be accommodated, it couldn't have occurred within the MDC right of way is the problem Commissioner Block. So now you are pushing the building forward and then there is no room for parking. The parking is very compromised on this site.

Commissioner Block: That answers another unasked question.

Commissioner Clark: If we add that amendment, Commissioner Block stated something had to be done by hand, I assume hand means you can use a weed whacker.

Commissioner Block: Yes, absolutely.

Commissioner Clark: But hand actually makes it sound like you are down on the ground with clippers.

Vice Chairman Sadil: As long as it is not a tractor or something like that.

Commissioner Block: No vehicles.

C. Webb: And not heavy equipment.

Commissioner Bachand: As far as the space needs, you mentioned you wished they had more space, I notice that it is undersized on the minimum lot requirement; this may be a question for the engineers, did it go to the zoning board or does this need...

C. Webb: No, it is grandfathered in.

Vice Chairman Sadil: Any other questions from commissioners?

Commissioner Bachand: I have been following along, everything is so tight in that corner, but can you just explain how ultimately all the storm water exits the property and exactly where it goes.

C. Webb: Once again, the water that currently comes off the 100% impervious Cyr site comes across, is collected in this swale and brought around the back of the site and outlets to where it does today and it is just grass there, there is no erosion going on so we know it can handle that, but it can't handle a more in velocity or volume. Basically the reason you see three chambers is that the majority of the site, the western 5/8 of the site goes into the big chamber, swale one. It is actually designed this way, part of the roof comes over and goes into swale two and the rest of it goes into swale three. So, we subdivided the water shed into three parts and directed it into three different directions so not everything is going into one. You have the smallest volume going into swale three, the next slightly larger volume goes into swale two and the majority goes into swale one and that meets here at the same place but we have an additional check dam right here before it connects to this check dam.

Commissioner Block: That elevation is 67?

C. Webb: Yeah, actually 66.

Commissioner Block: The check dam top, it says...

C. Webb: Oh yeah, right there.

Commissioner Block: That is the exit point.

C. Webb: The exit point, yes.

Commissioner Bachand: So that just exits to the surface of the neighboring property?

C. Webb: Right, that is correct. It is just a grass swale right now. It has functioned that way without eroding, so it is pretty stabilized considering the bus way was in there in recent years.

Commissioner Bachand: Is this a culvert down here further down that property that ultimately drains into the wetland.

C. Webb: Yes, it comes in right about that headwall.

Commissioner Bachand: Is this improved yard, is that someone's yard or is that just rough area where it is going to be flowing across.

Commissioner Block: Talking about the Lombardo property?

Commissioner Bachand: Yeah. Is that someone's lawn?

C. Webb: The back of their property is undeveloped and it is fenced off. Cyr's has a drainage easement to this property from way back when, and both these properties have an easement to get to that.

Vice Chairman Sadil: Any other comments from commissioners? Mr. Greenlaw.

Chris Greenlaw: Mr. Chair, as far as the calculations that we review, the applicant can tell you the volume that was dropped off today, for the record he is holding up today's calculations.

C. Webb: 111 pages.

Chris Greenlaw: Usually on page 1 or 2 the first thing we look at is what is called the pre post analysis that Mr. Webb referred to and what that means is that one of first things we look for is where does the water go today, how much water is there. What the engineer has to prove in their document is that after construction that water that comes off the land has to be equal or less and that is volume metric calculations. Then it gets more comprehensive when we start to partition and make sure we are going to attenuate this water and clean this water; that is where it becomes more elaborate for them to demonstrate what is going to be the amount of water for each staged area to attenuate that water, clean that water, treat that water, cool that water and each one of these swales has a component. It is simple, in the beginning of the report, have you increased or decreased the amount of water to that property. So if you look at the property it is tilted in the southeast corner, so what happens if its grass it has a certain rate of runoff, when you start putting pavement and roof water it is going to come off much quicker. That is why they have the attenuation with all the swales. That last berm is actually designed to take the water and spread it out so that it comes off as sheet flow rather than channel flow, just to reduce those velocities before it exits the property. If you look on that adjoining property you will actually see if you look at the southeast corner that 66 contour channels that water back to its natural state and aims it right for that culvert. At lot of lines on this paper and a lot of calculations to demonstrate that we are capturing this water, we are holding the water and the applicant has acquiesced and included the LID efforts. The bio swale is the last component of LID that they need to expand within that swale, just to reiterate that.

C. Webb: If I could add; one last factor is that without the LID this system, if it was just a standard system the way we designed it, supplies a 150% reduction from existing condition. We wouldn't have designed it to do that much, it would have been easier if we didn't have to incorporate LID so it kind of ran hand in hand. It is a huge reduction, normally you are looking at zero decrease or a little less and were are at 150%.

Vice Chairman Sadil: Ok, that is the end of the presentation portion. Any last minute comments from commissioners do they feel they want to move forward with the application? I see two conditions: one is the adjustment to the bio swale number one and the maintenance condition to cut by hand will be added to the permit.

Commissioner Arburr: I have a question regarding the maintenance plan as proposed on the plans before us. Is that adequate as far as the way it is explained and the timing so that the developer or owner of the property be able to follow it.

C. Webb: I believe so, I actually added a couple of additional steps that I had on previous maintenance plans.

Commissioner Arburr: The only reason I raise that question is like it is 8 statements. It doesn't appear to have continuity.

C. Webb: They are not unique steps. Some years you may only need to do 3 of the 8 steps and some you may need to do all eight and some years five. Not every one of those steps, I would anticipate that the swale itself will not, because of the slow infiltration rates, because of the slow release of storm water you won't be adding much new plant material so that is why it is kind of disjointed like that.

Commissioner Bachand: Is there a life expectancy of the system, in other words you are at 150% reduction now, is there a standard that you have to meet? This has to work for 10 years before it is back to zero or 20 years before it is back to zero. Even with maintenance, I imagine it degrades over time adding mulch and the riprap becoming clogged and sediments filling in the system. Is there a standard for that or is it just a floating equation?

C. Webb: In this particular case I don't think it will ever reach zero unless he starts dumping sand in the channel or putting sand every winter on the site. It should have a 20 year life plus for the bio filtration part. For the storm water part it is way over designed so it will always hold storm water.

Vice Chairman Sadil: Ok, do the commissioners see fit to move forward with the application at this time? Consensus to move forward? Do we need to take a short recess to adjust the conditions or can we...

Commissioner Igielski: If there are additional conditions than what Mr. Greenlaw has already prepared then I believe a short recess would be in order to add those just mentioned.

Chris Greenlaw: Perhaps, if it is the desire of the commission to move forward with the application for action, they would first want to look at those conditions to see what they encompass before we recess.

Vice Chairman Sadil: Ok, Mr. Greenlaw, I think article C solved the bio-swale calculations that we have been discussing, those adjustments. To Commissioner Block's comments about the

maintenance getting a condition D for a provision that the applicant understands the required maintenance of the bio-swale shall be done by hand equipment only or some type of appropriate words for that.

Commissioner Block: May I suggest that condition 8 is to be added to the bio-swale maintenance procedures "No vehicles, only hand maintenance tools to be used in the bio-swale."

Vice Chairman Sadil: I'm confused, would that be D?

Commissioner Block: It is D on the proposed conditions and it refers to condition 8 on the map.

Vice Chairman Sadil: Ok, condition 8.

C. Webb: Procedure 8.

Vice Chairman Sadil: Let's write that slow, you said it very well, let's repeat it for the record.

Commissioner Block: Ok. D. Condition 8 is to be added to the bio-swale maintenance procedures on the plan "No vehicles, only hand maintenance tools to be used in the bio-swale."

Commissioner Bachand: It's kind of redundant, you can't get a vehicle in their anyway.

Commissioner Block: You would be amazed.

C. Webb: Right a bobcat. Compaction is the death of this system.

Commissioner Block: That is acceptable to the applicant?

D. Pizzoferrato: Sure.

C. Webb: Mr. Chairman, I would like to ask through you to ask the secretary if he has the amendment as proposed? I have D.

Secretary Igielski: I was going to ask Commissioner Block to pass the provision to me. Also a need for recess to transcribe what Mr. Block has and even modify a little further.

Chris Greenlaw: One general statement as it relates to the comments. It is all encompassing, so my most important comment was what I put in condition C and in addition to the bio-swale calculation which is inherent of an LID effort to clean the water for this was very important, so I spoke to it specifically. What I did was, combining the comments today, I also said "also in accordance with the engineering comments dated today to the satisfaction of the town engineer." One of those comments was that bio-swale maintenance procedures. I was asking for a new number 1, not as a condition, just something they would throw on the plan and that was the property owner or

is agent shall maintain the bio-swale in accordance with the following and what that does is it carries forward with all owners that would take over this property, they would follow it in accordance with all these other conditions. So what I am trying to say is your number 8 may become number 9. The other statement I would like to put on the record is that Commissioner Bachand brings up a very good point with regard to what is the life span? This LID is a very new technology so what I ask is, number one right out of the door is that we have a drainage certification and a narrative by a licensed PE, this could be done in combination with the environmental consultant. The reason I ask for a PE is that the drainage certification, that all these berms, the engineer is going to say the water is going to stay in this first swale for 34 minutes for a 25 year storm. It doesn't do that unless the berm is constructed to a certain height and we have someone actually put an elevation on it. If we don't get out of the gate in stride and in accordance with the plan, we are not going to make that 20 years, they have to follow the maintenance plan, before we get to the maintenance plan, it has be built correctly. So if Mr. Webb has the capability of doing the as built, certainly, traditionally we have drainage certifications performed by the licensed PE. Additionally the storm water management systems, as far as being built and we have the right see mixture in there I would also recommend that the environmental consultant send me an email that the proper seed mixture was put in; the bio-swale mixture was put in accordance with the spec. I tried to condense that and actually condition it.

Vice Chairman Sadil: Shall we take a short recess? I hear what you are saying, but did you want to get that wording on that condition D or just capture those words that you put on the plan.

Chris Greenlaw: Yes Mr. Chair.

Vice Chairman Sadil: OK.

Commissioner Block: I suggest a 10 minute recess.

Vice Chairman Sadil: A 10 minute recess at 8:30. We will reconvene in 10 minutes. Motion?

Commissioner Block motion to recess, seconded by Commissioner Bachand.

Vice Chairman Sadil: We are calling the Newington Conservation Commission meeting back into session at 8:47 p.m. Secretary Igielski will read that condition for all commissioners to hear and then we will proceed.

Secretary Igielski: The wording of the condition D would be Bio-Swale Maintenance Procedures will be amended to include a condition stating "that power hand tools shall only be used in the upland review area and swale."

Commissioner Clark: May I interrupt? The "only" has to be in a different place. What you said there does not mean what you mean, it has to be "that only power hand tools shall be used" this says power hand tools can only in a particular area.

Secretary Igielski: That was the language provided to me.

Commissioner Block: I accept the change, she is correct.

Vice Chairman Sadil: Secretary Igielski why don't you read it one more time for the record.

Secretary Igielski: Ok. Condition D would then read the Bio-Swale Maintenance Procedures will be amended to include a condition stating "that only power hand tools shall be used in the upland review area and swale."

Chris Greenlaw. Mr. Chairman, I have a question on the condition now. So you are extending your purview and authority outside the upland review area to include all of the swales? That is the way it reads. I would think that you would stop at upland review area limit, where your jurisdiction stops.

Vice Chairman Sadil: I would say yes to that, I concur.

Commissioner Block: I differ because I believe that its part of the drainage system that feeds into an therefore our authority extend to cover it.

Commissioner Bachand; I can see Mr. Block's point of view, because if the swale is compromised anywhere on the site then it affects the whole system.

Vice Chairman Sadil: My rebuttal to that is only on the applicant's property, right? Can we restrict it to his property?

Commissioner Block: No, that is a matter of law. Of course he only has access to maintain his own property.

Vice Chairman Sadil: Mr. Greenlaw, are you referring to just the one the side, on the east side or are you concerned about the ones on the south side when you made your comment all the swales.

Chris Greenlaw: In retrospect, it is a condition that is placing a requirement under the heading of Bio-Swale Maintenance Procedures so thereby which it is all encompassing to all swales by nature of the fact where it is listed it stands. I will remove my remarks.

Commissioner Block: Mr. Chairman, the town engineer had previously reordered the conditions to add something of his own, I want to make sure that is an appropriate addition so I want to make sure the numbering of the conditions on the permit are appropriate. I don't want that to be left out.

Vice Chairman Sadil: Any comment on that. You will be renumbering and that condition may be referring to a specific footnote that is on the plan.

Chris Greenlaw: Yes, I believe that is why we striped the condition 8 phrase from the condition.

Vice Chairman Sadil: And just let the general maintenance plan so it doesn't have to coincide with what is on the actual Mylar.

Commissioner Block: But is your comment also now added to the permit conditions.

Chris Greenlaw: As I indicated, it is one of my comments the letter dated as such, my specific comments are all encompassed that was dated today in the condition.

Commissioner Block: It doesn't have to be on the permit motion itself?

Chris Greenlaw: No.

Commissioner Block: Ok, fine, as long as it is there.

Vice Chairman Sadil: Secretary Igielski. Want to do a reread one last time.

Secretary Igielski: Condition D, the Bio-Swale Maintenance Procedures will be amended to include a condition stating "that only power hand tools shall be used in the upland review area and swale."

Vice Chairman Sadil: Ok, with that I think the application is complete.

Chris Greenlaw: Yes.

Vice Chairman Sadil: So I think we can put a vote.

Secretary Igielski: With the application being complete, I'll make a motion that based on the evidence before it the commission have a finding of fact that a public hearing is not necessary for Application 2016-08 because the proposed activities will not have major impact or significant effect on the regulated area.

Vice Chairman Sadil: Can I have a second.

Commissioner Manke: Second.

Vice Chairman Sadil: Second by Commissioner Manke. All in favor?

Commissioners: Aye.

Vice Chairman Sadil: Against? Abstentions? Motion passes unanimously.

Secretary Igielski: I'll make a motion that the commission issue a permit by summary ruling for Application 2016-08, and subject to the following conditions: numbers 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12 and subject to the following additional conditions:

- A. This permit is valid for wetlands only; additional approvals/permits may be required from other Town departments, State or Federal agencies. It is the responsibility of the applicant to verify what other approvals/permit may be required for this project.
- B. A drainage certification and narrative (signed by a licensed PE in the State of Connecticut) shall be provided to the Town Engineer stating that the Stormwater Management System including as-built elevations, were installed in accordance with the approved plans, prior to the issuance of a building CO (certificate of occupancy).
- C. The applicant's consultant shall provide updated bio-swale calculations and amend the final Mylar in accordance with the engineering comments dated May 17, 2016 to the satisfaction of the Town Engineer.
- D. The Bio-Swale Maintenance Procedures will be amended to include a condition stating that only power hand tools shall be used in the upland review area and swale.

Vice Chairman Sadil: Thank you. Can I get a second?

Commissioner Casasanta: I second.

Vice Chairman Sadil: Second by Commissioner Casasanta. All in favor?

Commissioners: Aye.

Vice Chairman Sadil: Motion passes unanimously. Thank you very much.

C. Webb: You still have an outstanding question on the difference between flood plain wetlands and flood zone?

Commissioner Casasanta: No, that is discussion for me and Mr. Greenlaw.

C. Webb: Ok, very good. Have a good evening.

Vice Chairman Sadil: Moving on with Old Business, Article B. Inland Wetlands Regulations Changes – L.I.D. (Low Impact Development), Mr. Greenlaw do you have an update?

B. Inland Wetlands Regulations Changes – L.I.D. (Low Impact Development)

Chris Greenlaw: I have no updates at this time.

C. New Initiative – Vernal Pools

No update.

#### D. Invasive Plants

Commissioner Clark: The CT Invasive Plant working group symposium is being held at the UConn Student Union on Tuesday, October 11, 2016 from 8:30 a.m. - 4:00 p.m. It sells out very quickly. It is a great seminar; anyone who wants to know about invasive plants should attend this. I will email to commissioners if that is ok with the Chairman.

#### VIII. PUBLIC PARTICIPATION ON NON-AGENDA ITEMS (each speaker limited to 2 minutes)

None.

#### IX. COMMUNICATIONS AND REPORTS

Vice Chairman Sadil. Mr. Greenlaw do you have anything to report?

Chris Greenlaw: I have the latest edition of The Habit that I would like to hand out.

Commissioner Block: While he is doing that Mr. Chairman, I gave you a packet of water pollution and invasive plant information that I collected while in Georgia. It is available for reference or incorporation if and when we have need of such materials. Put them in the library if you would.

Vice Chairman Sadil: Thank you Commissioner Block.

Commissioner Bachand: Just an interesting note right on the front page here, it is showing that DEEP would like to obtain another 62,000 open acres of space. I wish we could help direct them to some. I could think of some I wish they would acquire.

Vice Chairman Sadil: Here locally?

Commissioner Bachand: Yeah, Cedar Crest Hospital is one of them.

#### X. ADJOURNMENT

Motion by Commissioner Block, seconded by Commissioner Casasanta; it was unanimously voted to adjourn the meeting at 8:57 p.m.

Respectfully Submitted,



Mrs. Susan Gibbon  
Recording Secretary – Conservation Commission