



# BERRIEN COUNTY HEALTH DEPARTMENT

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## BERRIEN COUNTY SEWAGE APPEALS BOARD

Wednesday, August 3<sup>rd</sup>, 2022

BCHD- Conference Room

2149 E. Napier, Benton Harbor MI

### Approved Minutes

**Present:** **Sewage Appeals Board Members:** Peg Kohring Cichon (Berrien County Board of Health Chair), Ezra Scott (Berrien County Commissioner), Dr. Wayne Gleiber (Great Lakes Scientific), Thaddeus Hackworth (Berrien County Corporate Counsel), and Joseph Taylor (Private Citizen).

**BCHD:** Guy Miller (BCHD Health Officer), Nick Margaritis (Manager of Environmental Health, BCHD), Chris Nagy (Registered Sanitarian, EH), Angela Reeves-Price (Program Support Specialist, EH), Mollie Scheffler, (BCHD Intern, EH)

**GUESTS:** Tom Allen (Realtor/Broker), Justin Robinson (Potential Buyer), Matt Blakeman (Excavator), (Owner), Linda Stocker (Property owner)

**10:30 a.m.** Meeting called to order by Peg Kohring Cichon

**Approval of Agenda:** Ezra Scott made a motion to approve the agenda; a second was made by Joseph Taylor supported. Motion carried.

**Approval of 07/06/22 Minutes:** Dr. Gleiber made a motion to approve the minutes of July 6<sup>th</sup>, 2022. Dr. Gleiber moves, Joseph Taylor supported. Motion carried.

### **Introductions:**

Those present made introductions, printed name and title on a sign in sheet.

Peg Kohring Cichon: We will begin with the Owner/Installer presentation and then the Berrien County Health Department Presentation, then the Board members may ask questions, discussions will follow and the board will make a decision.

### **Owner/Installer Presentation:**

Matt Blakeman (Excavator), & Tom Allen (Realtor / Broker) 5742 Ontario St., 3.6 acres, Parcel IDs#: 11-10-450-0402-00-3 and 11-10-4540-0647-00-6, Hagar Twp., Sec. # 11.

Matt Blakeman (Excavator): On this property is a big clay hill. A few test soils were done with the BCHD and it showed nothing but clay. I propose on the lower south of the property to do an above ground system. The owners are wanting to build a 2 bedroom house so a system was designed that is a little bigger than what is called for a 2 bedroom which is 900 sq. ft. as opposed to a 600 sq. ft., if needed for expansion in the future, and will include two 1,000 gallon tanks. Since the property sits on a hill gravity flow will be easy to get and a pump chamber wouldn't be necessary. The south section of the property levels out but it doesn't level out enough so a little excavation into the hillside would be necessary. The property is surrounded by trees which makes it hard to see what's really needed.

Since this is my first time seeing the topographical map of the property from the health department I would like to change my design a little bit if possible. I have it on a 30 x 30 sq. with 114 ft. from toe to toe. If we were able to stay on the south of this property and do a mound system across the south property line, I think we could fit something in a little better there. I am seeking the guidance of the health department on what I'm able to do there.

Peg Kohring Cichon: So you have talked about a 2 bedroom house but the application says 2-3 bedrooms?

Matt Blakeman (Excavator): I wasn't aware when I drew up the plans but confirmed later they want to build a 2 bedroom home.

Justin Robinson (Potential Buyer), I was thinking that in the future I may want to add on an addition.

Peg Kohring Cichon: So you want to make a decision on 2-3 bedrooms?

Justin Robinson (Potential Buyer): A 2 bedroom yes.

Thaddeus Hackworth: You can ask for a 3 bedroom now and not build a 3 bedroom but have the approval for it but build later.

Matt Blakeman (Excavator): Let's build the system for a 3 bedroom home.

Justin Robinson (Potential Buyer): Understood, I'll take that advice.

Peg Kohring Cichon: So you are talking about moving the system so I'm unclear at what you're saying.

Matt Blakeman (Excavator): By staying of the south end of this property which is 280 ft. deep so doing a narrow long system would be more feasible than the square system that is designed.

Peg Kohring Cichon: So the south end of the property we see some elevation numbers here so what elevation numbers are you talking about?

Matt Blakeman (Excavator): **(Discussion)**

Blakeman discussed elevations including the west property parcel and starting system at the 664' and 658' elevation to create gravity for an above ground system. House will be located on top at 679' to create gravity flow to system.

Thaddeus Hackworth: Are you including the west parcel in your design?

Matt Blakeman (Excavator): Yes that's where we get our 280 ft.

Peg Kohring Cichon: Ezra is there something you'd like to talk to the group about?

Ezra Scott: Yes are there homes below that property butting up to the lot on the back side?

Matt Blakeman (Excavator): No, there are no homes on the south side. There is the Sweet cherry resort which are small weekend cottages which are roughly 200 ft. away from the property line.

Ezra Scott: What concerns me is it wouldn't be a 30 x 30, it could be a longer skinnier one but because of the slope of the property there shouldn't be a 7-1 drainage going to the props as it is illegal in the state of Michigan. You would then have to move the drive way coming from Ontario St. due to the elevations there if you go longer you will have a driveway over your septic field. You wouldn't want a driveway?

Matt Blakeman: The driveway could be put in wherever necessary.

Ezra Scott: Now you're saying that you could do it a different system and make it longer. But I'll leave it to the health department to give their opinion on that.

Peg Kohring Cichon: Before we give our opinion let's have the health department presentation please can we just hear them.

**Berrien County Health Department Presentation:**

Chris Nagy: On May 17<sup>th</sup> I visited the property with Tom and we did a couple soil borings and it was heavy clay hard to get through it. We did a couple holes and decided to bring a backhoe. On June 8<sup>th</sup> we brought the backhoe with Matt from Four Seasons and again attempted in the same areas we did

the soil borings to do the backhoe cuts. We did 3 backhoe cuts down to 14 feet finding again the clay never stopped and we never found any good material below it. We did not check to the west due to the amount of trees and tried to maneuver around and stopped at the 3 backhoe cuts on the east side. In the area that is proposed, we are concerned about water that might bleed out of that hill. Without doing any soil borings in that area, I'm unsure. I agree with Matt that by making the design longer it might serve that area better. But I don't know without really seeing it.

Peg Kohring Cichon: So an on- site visit is going to be critical.

Nick Margaritis: I think that consideration needs to be given on how the proposal is changing from a free standing mound to what we call a hillside cut. When you dig into a slope, that slope cannot bleed any water through the sandfill that will be brought in. When we have seasonal high water tables as high as it was found it usually indicates that more than likely you may have water seeping out of the hill and flooding the area where the sandfill will be placed. The other issue I see on these slopes you have to be able to establish the contour of grade for the bottom of your sand field there's quite a bit of engineering that goes into figuring out your placement. So I'm unsure how this will fit on the property. In your case I would direct you to get the services of an engineering firm so they can pinpoint where it needs to be rather than having our guidance as we already rejected the property for a conventional system and now you're making a proposal for something imperative. I think you should have it completely marked out what needs to happen on a proper hillside cut design. So I have reservations as far as that part goes.

Peg Kohring Cichon: So at this point you would not recommend approving this system?

Nick Margaritis: In our point of view yes we do not agree with the design

Nick Margaritis: (Passed out a drawing of what a hillside cut should look like Margaritis discussed amount of sand to blend to achieve proper slope with original topography and maintain isolation distances. Recommends an engineering firm to achieve this).

Ezra Scott: I have a question to the BCHD. Looking at the topography map you're looking at a 657 so if it's going to be about the 664 or 670 right? Minimum you will have to put on that far south side to level it off an 8ft plus layer of sand on a base.

Nick Margaritis: A hillside cut is not supposed to do that.

Ezra Scott: I'm not talking about a hillside cut.

(Scott discussed alternatives with slope and location of system to avoid a hillside cut).

Nick Margaritis: With that if you don't cut the hill out then you have wedge of sand underneath the system with the original topography if I'm understanding correctly?

Ezra Scott: Correct

Nick Margaritis: Were not supportive of that because you don't have enough infiltrative area of depth to what your original topography is for the proper drainage to happen

Ezra Scott: I understand

**Discussion back and forth:**

Nick Margaritis and Blakeman discussed not encroaching the southeast corner of property due to clay soil, high water table, and cabins about 200' away.

Peg Kohring Cichon: Ok Dr. Gleiber you had a question?

Dr. Gleiber: Where were borings made? How far?

Chris Nagy: Borings were made in area of the first 2 backhoe cuts. Boring #1 & Boring #2 represent backhoe #1 and backhoe #2 and one was made at the top of the hill.

**Discussion back and forth:**

Dr. Gleiber: So water table just below surface at all those sites?

Chris Nagy: It was a seasonal water table. I didn't see any water seeping in, it was hard packed clay.

Matt Blackman: I have a question if we were to go in and flatten the area out down to a clay flat land would a system get approved on something like that? (Blakeman discussed alternative to reshaping the hill and leveling the property).

**Discussion back and forth:**

(Peg Kohring Cichon, Nick Margaritis, Matt Blakeman, Chis Nagy, Ezra Scott, Tom Allen).

Discussion regarding options of leveling the property. Margaritis did not agree due to clay soil not meeting requirements and neighboring properties affected with shedding water. Compaction of soil was also discussed during excavation of the property. Ezra Scott did not agree with the option of excavating and compaction rate of the soils. Matt Blakeman's hypothetical ideas were turned down by Nick Margaritis and Ezra Scott.

Ezra Scott: As far as the compaction rate that will not work in my opinion. If you don't do that and don't compact it, it will sit for a year and then when you build a septic system everything will be moving. Even though it's solid clay underneath it. It's disturbed soil.

Nick Margaritis: We agree with that. You want to avoid compaction and smearing of the original soil even as you are cutting it out and removing it. Once you compact the soil it can take 100-200 years before it bounces back.

If you compact and smear the soil whatever percolation is you may see even from clay you'll see cracks and crevices opening up the pours and that soil becomes useless. So we would not be supportive of something like that.

Matt Blakeman: With the situation that were running into what if on a 2 bedroom house we were to do a 3,000 gallon holding tank?

Nick Margaritis: That's for the board to decide. We are not supportive of holding tanks for the simple reason as its gets costly to maintain depending on your water usage.

Chris Nagy: it's a lot to absorb for an existing house there's no way for us to police that to see if it's getting pumped out regularly. It's very easy to throw a pump down into the tank and pump it on the ground.

Tom Allen: So it looks like we're not going to get approved so what is your recommendation for the best opportunity to get approved?

Nick Margaritis: We can evaluate and provide support but the approval does not come from the health department. We already rejected the property. Ultimately it's your proposal and all we're doing is pointing out what we think is not going to work based on our experience.

Peg Kohring Cichon: So I heard engineering firm has to come in?

Tom Allen: What information do we have to give them from you that will help get us to where we want to go?

Nick Margaritis: The soil conditions and the design if it's going to be a mound, free standing mound, hillside cut. We've always supported what we do for repair jobs of 4ft of sandfill underneath the system 7-1 slopes and then they take that to see how it fits on the property.



Tom Allen: If we had an engineering firm to do a study and make a proposal what are the odds that we'll be successful?

**Discussion back and forth:**

Nick Margaritis, Linda Stocker, Peg Kohring Cichon

(Margaritis discussed providing input to the engineering firm to match Health Department expectations in supporting proposal. It was made clear from Margaritis that Health Department will provide input but not "approve" the proposal. Kohring mentioned to property owner it is helpful to have all information available and continue to work with the Health Department).

Tom Allen: Thank you for that information.

Ezra Scott: I'd like to make a motion to deny this appeal and note we would like you to have an engineering study done and bring it back to us for another review.

**MOTION RESOLUTION:**

**Appeal Board Decision:**

Peg Kohring Cichon: So we have a motion in front of us is there a support?

Dr. Gleiber: Motion to deny.

Peg Kohring Cichon: Any discussion on that motion to deny?

Mr. Taylor: Based on the recommendation of the health department and the issues of public health we support the motion.

Peg Kohring Cichon: Any other discussion.

Ezra Scott: I would ask the corporate council give his opinion along with the correct wording and motion.

Thaddeus Hackworth: Is the motion simply to make a denial of the current application?

Ezra Scott: Correct

Thaddeus Hackworth: In that case I have no other comment

Nick Margaritis: Will they be required to pay another fee or will the board accept a continuation of the current application?

Peg Kohring Cichon: I would be in favor of a continuation.

Ezra Scott: I will add that to my motion that they do not be charged appeal fee again.

Peg Kohring Cichon: All those in favor aye, motion carried.

**11:10 a.m.** Meeting adjourned by Peg Kohring Cichon

Minutes Submitted by A.Price