

ZONING BOARD OF APPEALS
238 Main Street, Cold Spring, NY 10516

MEETING AGENDA
February 11, 2013
7:30 pm

REGULAR MEETING

- 1.) **Approval of Minutes-** October 15, 2012 and November 12, 2012

- | | | |
|-----------------------|---------------------|----------------------|
| 2.) Lausca LLC | Appeal # 877 | TM#27.12-1-10 |
| 3166 Route 9 | (Resolution) | |

The applicant is appealing the Notice of Violation dated 12/9/11 issued by Code Enforcement Officer Kevin Donohue. The violation states that no barrier is shown on the 3/24/10 Planning Board approved Site Plan, and therefore must be removed. Applicant was sent to the Planning Board for their review and recommendation on this matter, specifically the Boards intention and clarification of the site plan, as well as possibly implementing new warning stripes and signage. The Planning Board completed their review, and the applicant is ready to move forward with the ZBA.

- | | | |
|---------------------------------|---|-----------------------|
| 3.) Gleick, James | Appeal # 883 | TM# 82.-1-42.1 |
| 200 Long and Winding Rd. | (Review for completeness of application) | |

Applicant would like to install a Residential Wind Turbine that will be 140 feet in height. According to the Code of The Town of Philipstown, no structures shall exceed 40 feet in height, therefore the applicant is requesting a 100 foot height variance.

PUBLIC HEARING

- 4.) **Gleick, James Appeal # 883 TM# 82.-1-42.1**

This Public Hearing will only take place if the ZBA has voted and approved this application as complete

- 5.) **New / Old Business**

Items may not be taken in order as listed

ZBA ACTIVE APPEALS

#877 Lausca LLC Resolution

#883 Gleick, James Approval of Submitted Application/ Public Hearing

ZONING BOARD OF APPEALS

NOVEMBER 12, 2012

MINUTES

The Zoning Board of Appeals for the Town of Philipstown held a work session on Monday, November 12, 2012, at the Philipstown Town Hall, 238 Main Street, Cold Spring, New York. The work session was opened by Vincent Cestone, Chairman, at 7:30 p.m.

PRESENT: Vincent Cestone - Chairman
Robert Dee - Member
Bill Flaherty - Member
Linny Lim - Member
Paula Clair - Member
Dominic Cordisco - ZBA Council

ABSENT: Tina Andress- Landolfi - Secretary

CONTENTS:

Lausca LLC Pages 2 thru 5

James Gleick Pages 5 thru 18

The Pledge of Allegiance was said.

Vincent Cestone- The first item on the agenda is the continuation of Lausca Public Hearing. Does the applicant have anything additional to say? Speak in the mic please.

Larry Paggi- My Name is Larry Paggi, and I represent Lausca LLC. I would just like to give a quick statement adding review of the minutes from the last meeting. I would just like to state that it appears that there was a lot of confusing conversation at the last meeting, and I would just like to clarify and reiterate. Kevin's notice of violation claimed that there was no curb indicated on the approved site plan. We take exception to that. Could it have been clarified? Yes, but there are many items on that site plan that we pointed out to this board, that demonstrated that there was a curb in place that was part of the approved site plan. The fact that there was a speed bump being installed, and there were details for curb tapers. We are in a disagreement the the curb was actually not shown. Perhaps not clarified, but was shown. This Board asked us to go back to the Planning Board to verify that the barrier was in fact part of the site plan. It was clearly shown in the resolution of site plan approval. We asked the Planning Board to pass an additional resolution to demonstrate, for your benefit, was in fact part of the original site plan approval. They did that, and I believe you have that for your records. We are requesting that this board determine that the violation was issued in error, because it was in fact part of the site plan approval. That is very simply the matter that we have before you. Everything else that was done beyond that to get modifications approved, was done in good faith and in recognition that we could make the situation better, and the applicant did so. That is it. Thank you.

Vincent Cestone- Any questions from the board? Any questions from the audience?

Robert Cinque- I appreciate Mr. Paggi's comments.

Vincent Cestone- You need to state your name please.

Robert Cinque- Sorry. Robert Cinque attorney for the Town Code Enforcement Officer. I appreciate the comments that there may have been some confusion. Clearly there was. I think most of the confusion stems from the fact that the drawings Mr. Donohue was relying on when he wrote the violation. I think we went into some detail at the last meeting. Those drawings did not really show the curb, and I think we have certain difference of opinion there. Based on that we stick by our position as we stated earlier that when Mr. Donohue wrote that violation, there was in fact a violation not only of a condition that was not indicated on that site plan that was approved at that time, but also a hazardous condition. Again, we have been through this and I don't want to reargue what we have already argued, but our position remains because of those two situations. One the site plan not really showing the as built conditions, and two the fact that there was in fact a hazardous condition. For those reasons we think that the violation was properly issued and should be upheld.

Vincent Cestone- Thank you. Any more comments or questions?

Paula Clair- I just want to say that I understand the view points of both parties. I think that progress has been made with this issue which ever way we vote, because it seems there was a hazardous condition that has been ameliorated, and that is a good thing. I guess as a board member on the Zoning Board we have to pay attention to what is told to us by the Planning Board and what was originally intended. Maybe it was not on the drawing, but they have made it clear that is what the intention was. However, I think that in the end this was a good thing that came up, because it corrected a situation that was really hazardous.

Vincent Cestone- Anymore Comments?

William Flaherty- I think that we are to the point on this where we are spending an awful lot of time on this issue and it seems to me to be pretty cut and clear. The Planning Board reviewed this issue, determined that there was no reason for the violation, as I understand it. Provisions have been made to the site plan, which we have here. There are going to be

changes made to the curb. The curb is going to be more widened than it is today, landscaping is going to be done on the site which I think is a good idea. The applicant has agreed to incorporate all these changes for safety purposes. That is a very widely traveled area. I spent about fifteen to twenty minutes over the weekend watching the traffic go by (inaudible) That gas station has the lowest prices around here, and as a result there are always many many cars waiting for gas. That itself is a problem, but that has nothing to do with this issue. This issue in my judgement should be resolved and litigated, and I think it is going to be in a way that is going to be an improvement. That is what this is all about. Are we improving that particular site to reduce anymore accidents (inaudible) It is really not a safety issue anymore. I think that we have pretty much established that we have done everything possible to reduce the possibility of future accidents from occurring in that area. I would like to say that we get on to business here, and the Chair close the Public Hearing, and we take a vote and get on with the issue.

Vincent Cestone- OK. Any more comments from the Board or the audience? With that I make a motion to close the Public Hearing. Do I have second?

William Flaherty- I will second.

Vincent Cestone- All those in favor?

ALL MEMBERS WERE IN FAVOR.

Vincent Cestone- Carried. Ok now I make a motion to rule in favor of the applicant in this instance. Do I have a second?

William Flaherty- I will second.

Vincent Cestone- All those in favor?

All Board members were in favor.

Vincent Cestone- Now we will do a roll call vote.

Linny Lim- By ruling in favor of the applicant are we ruling in favor of the Planning Board?

Vincent Cestone- Yes. Linny?

Linny Lim- I vote in favor of the Planning Board.

Robert Dee- I vote in favor.

William Flaherty- I vote in favor.

Paula Clair- I vote in favor.

Vincent Cestone- So do I. Sometimes it is not a matter of being right, sometimes it is a matter of doing the right thing. It is obvious from my perspective that as soon as the Planning Board said that this was part of the original application, that's what it was. I looked at the original plan and there was a mention of the curb detail. It was not clear on the plan, but it seems to me that would be a phone call, not a violation. With that, that ends this issue.

Larry Paggi- Thanks very much for your time and your patience.

Vincent Cestone- Your welcome, sorry it took so long. Next item on the agenda is a pre application discussion with Mr. Gleick to talk about a wind turbine. This is not a full presentation. What we want to understand, you said there were things in our code that did not apply to a residence, and me knowing the code I'm not sure what you had in mind, so if you could elaborate on that I would appreciate it.

Doug Passeri- I'm Doug Passeri with Hudson Valley Wind and Energy. We feel that it would fall under a minor and not a major.

Robert Dee- Please start explaining what you want to do.

Doug Passeri- Ok. We want to put up a residential size wind turbine on Mr. Gleick's property.

William Flaherty- I am not sure that proper protocol has been followed in this issue. In accordance to our code 175-66. Im gonna read verbatim. Before filing an application a preliminary conference with the Zoning Administrator Officer and a Planning Board member designated by the Planning Board Chair is required to discuss the nature of the proposed use and to classify the nature of the proposed use and to classify it as a major or minor project. Has that been done in this case?

Vincent Cestone- Sounds clear to me.

Dominic Cordisco- Im not sure whether or not the Planning Board met with the applicant. Im not familiar with that. I do know from reading the minutes of last months meeting that Mr. Donohue had said that he has already reviewed preliminarily as the Zoning Administrative Officer that it was his determination that it was a major application.

William Flaherty- His determination, not with a Planning Board member (inaudible)

Dominic Cordisco- I cant answer that question, because I don't know one way or another.

William Flaherty- There was no mention of that by Mr. Donohue when he was here at the last meeting.

Dominic Cordisco-Correct. I will say that the code as written in connection with making that initial determination does obviously refer to the Planning Board. However, This kind of application for a wind energy conversion system, a wind turbine requires a special use permit from this Board.

William Flaherty- That is correct.

Dominic Cordisco- It was because of that confusion in the code that I recommended they come here to tonights meeting as a preliminary discussion, because it seems to me, having Planning Board members make initial determinations on an application they may not even see at all, because it may only requires Zoning Board approval. I thought that if the applicant came tonight, they could make their presentation to the board,

and get some initial feedback. Then they can make a decision on whether they will even want to file an application, and what that application should include.

Paula Clair- The only thing that they don't comply with is the height variation Right?

Dominic Cordisco- It is a 100 foot variance.

Paula Clair- Right. If we granted a waiver of that, I don't know if we are in our rights to do that, but if we are (inaudible)

Vincent Cestone- Not without a Public Hearing.

Dominic Cordisco- They have not applied yet.

Paula Clair- Ok, so then they would be in compliance with the code right?

Dominic Cordisco- They would still need a special permit from the board.

Paula Clair- From the Planning Board as well?

Dominic Cordisco- No permit from the Planning Board. A permit from this Board.

(inaudible)

Robert Dee- Code Enforcement has determined it a major project.

Dominic Cordisco- He has.

Robert Dee- So they would have to file under those (inaudible) Is that what you are arguing? You want it to be a minor project? The Code Enforcement Officer has already said it is a major project.

Doug Passeri- Yes, just based on one thing, because of the height.

Robert Dee- But that is his determination.

Doug Passeri- Right, but if you look at everything under a major and you just eliminated the height, we comply with everything.

Robert Dee- I understand that. What I am trying to say is he has determined that. So don't you have to go before him with an application and have him turn you down, then come here? Am I wrong?

Dominic Cordisco- You are right.

Robert Dee- We are going backwards on this.

Doug Passeri- I don't know. I am just following the guidelines. I thought that was done.

Robert Dee- I'm not the Chairman, but I would suggest you file with the building department first.

Doug Passeri- I thought that was already done. We have a rejection letter.

Robert Dee- We don't have it.

Dominic Cordisco- But you have not applied to the Zoning Board yet.

Doug Passeri- No, because there is confusion. We don't know if it is a minor or a major. There is a lot of confusion. We are learning also. We have a denial letter also.

Dominic Cordisco- To be honest I don't think that there should be any confusion, because the Building Inspector has determined this a major application.

William Flaherty- I agree that it would probably be classified a major project.

Dominic Cordisco- It has to be 50 feet or less.

William Flaherty- My concern is the (inaudible) meeting by our Code Enforcement officer and the Planning Board representative, and we have no evidence to that effect that this was done. My concern is that, if this should ever go to an article 78. Are we looking at saying the proper procedure has not been followed for this, and therefore you better do it over again.

Dominic Cordisco- I understand the concern, but I think that would be a more legitimate issue to be mindful of if the Building Inspectors decision went the other way. If he had said that this is a minor application, where it is clearly a major application, then someone could certainly attack it. Now let's just play it out. Let's just assume it goes all the way through the application process and at the end of the day you render a decision that someone is unhappy with, and they file an article 78. If they were to go back and one of their bases would be to challenge the process, and say, well you did not meet with two planning Board members when you first came in. I don't think that would be a reversible error. I don't think that would be successful for anybody to claim that, because the decision that was made by Mr. Donohue whether it included Planning Board members or not, was that it was a major application. That is going to require the heightened level of review by this board.

Lenny Lim- I agree with Bill here, we have to follow the procedures.

Paula Clair- It seems to me that the reason that the applicant would need to meet with the Planning Board, would be to determine if it is a major or a minor application. It has already been determined that it is a major. That has been satisfied.

Dominic Cordisco- I think at this point do you want to send the applicant back to have a meeting with Mr. Donohue and two Planning Board members? That is an option.

Paula Clair- I know.

Vincent Cestone- I think it makes it (inaudible) I think that we should go under the premiss that it is a major application, and when we refer you to the Planning Board, you can ask them, and if they change, they can over

rule Mr. Donohue, and if they rule it as a minor, then we will go under that premiss for the site plan. I think that is the most logical way of doing this, so it does not delay the process and cost you time and money.

Doug Passeri- So we put an application in to the Planning Board?

Vincent Cestone- You put an application in for a special use permit with us, then we refer you to the Planning Board for site plan approval.

Dominic Cordisco- This Board would grant special use permit. The Planning Board would grant site plan approval.

Doug Passeri- I think we did that already.

Vincent Cestone- You have been to the Planning Board?

Doug Passeri- The application has been submitted to the Zoning Board. That has been submitted already.

Vincent Cestone - Usually you cant get to the Planning Board unless we refer you there. That is a completely different board that meets at a different time of the month. They meet on Thursday I think. If you have not been here on a Thursday with a different group of people, then you have not met with the planning board. They wait till we refer you to them. Unless you have been to that board?

Doug Passeri- No we have not. We were here a month ago just to go over that one thing, and we feel that if it is going to be a major, then the customer is not going to go through with the project anymore, because it is a totally different ball of wax all together.

Robert Dee- Well, that is the customers decision.

Vincent Cestone- The thing about that, lets take residential wind turbine out all together. If this was a cellular tower, a commercial entity, and we have several of those in Philipstown which are smaller than this proposed wind turbine. That would be considered a major application. Taking the wind turbine out of it totally, just from the height alone. My personal opinion,

it would be a major application. There is no reason why you could not contact the Planning Board and ask them directly. You know, we have Old Business and New Business and allow people to speak, they have the same thing and you can ask the same question of them. I don't want to tell you definitely without a doubt it is going to be a major application. My suggestion is you ask the Planning Board. They are easy people to talk to and they will tell you exactly where it is, and then you can go for information, then you can make the application if they say it is a minor, I am ok with that.

Doug Passeri- Great. So you are going to refer the application to them, then we get notified in the mail with a date?

Vincent Cestone- I am going to try and save you money. For you to do an application, you would have to file an application and pay for that. I think you have to put up a bond for a certain amount of money, and the application fee is not refundable, but the bond is. I suggest that you ask to be placed on the agenda like you did with us and ask them directly. You just say that the Zoning Board said that it would be prudent to go talk to them about this. I will talk to him, he is the chairman, and give him a heads up to expect you. He will give the straight dope on whether it is a major or a minor and then you can do it from knowledge. If he says it is a minor, then you go down to the Building Department down here and fill out the application, then we will put you on the agenda, and we will go from there.

Doug Passeri- Would there still need to be a variance for the height then at that point?

Vincent Cestone- A special use permit, and a variance for height. I think that is the quickest and cheapest way to do it.

Doug Passeri- Ok.

Vincent Cestone- I don't want to spend the applicants money, unless we have to.

Doug Passeri- Well at least now we know what direction to go in, because it was unclear before this, so now we know.

Vincent Cestone- The Chairman of the Planning Board is Mike. I will give him a call and tell him to expect you at the next meeting, and ask to be placed on the agenda to ask this question. You can ask the question, and they will give you the straight answer. I think that is the safest and smartest thing to do.

Doug Passeri- Ok.

Vincent Cestone- Anything else that you would like to talk about?

James Gleick- Can I say a word?

Vincent Cestone- Sure

Robert Dee- Just a suggestion when you go to the Planning Board. Inform them that you have already spoken to the Code Enforcement Officer, and he declared it a major application. That should save you a lot of time.

Doug Passeri- Yes.

James Gleick- I am James Gleick. I am the property owner, I don't want to waste anymore of your time. I don't understand what has happened here and hopefully Doug will explain it to me when we leave. I just wanted to say that I hope that it is the feeling of this body that this is a worthwhile thing for a homeowner in the area to be doing. You have seen the pictures of it. I cant understand why the bureaucracy exist and the various procedures, but I hope it is clear to everybody hear that this is a project to which I don't believe any local resident or neighbor or anyone else can possibly object.

Robert Dee- You don't know that yet (inaudible) Believe me you will find out. There are a lot of people that could object. (inaudible) they say birds get killed by it. There a lot of people that come out of the wood work.

James Gleick- Ok. That is why I am asking. I just hope it is clear to everybody that it is not visible, that no one can see it from anywhere or hear it.

Robert Dee- There are other considerations than that.

Vincent Cestone- Just from my experience, I have been on the Zoning Board since the early nineties. People in Philipstown have this aversion to height for some reason. I cant put my finger on it, but when they propose things like cell towers this room will fill up. There will be fifty people in here, arguing a point. Why? I could not tell you. They all want their cell phones, but they don't want a cell phone tower.

James Gleick- This wont be visible. Whatever the height is there is no visible location which is not on our property, from which anyone will be able to see it.

Vincent Cestone- That is a valid point, and that is something that when there is a Public Hearing relating to that, it has to be eminently clear. Made clear, because people will, and I may be totally wrong, but they will come to voice their negative opinion about it for whatever reason.

James Gleick- Is this the first? Has there never been a wind turbine approved in Philipstown?

Vincent Cestone- You are number one.

James Gleick- Ok. I have a feeling. I mean Doug knows better than I do. I have a feeling clearly there is a black and white height limit written in the code, but I don't think that there is any such thing as a 40 foot wind turbine. I have a feeling that in the long run the Town is either going to like wind turbine or not like wind turbines. I cant imagine that they are not going to like them, but if they like them, I imagine that the process is going to have to be streamlined somehow in the long run. If there is anything that is in your power to make the process easier for us, all I can say is that we would appreciate it.

Robert Dee- Is that the minimum height you can make that?

Doug Passeri- That is the maximum height.

Robert Dee- Is there a minimum height?

Doug Passeri- Based on his elevation would be anywhere from 100 to 140 feet. Those two towers right there. The one on the left is a 120 and the one on the right is a 140.

Robert Dee- So you are showing the maximum not the minimum?

Doug Passeri- For his location you would need the 140.

Vincent Cestone- Why are you using a guide lattice? Instead of an axial turbine you are using the ones with the blades. (inaudible)

Doug Passeri- Because this is the brand we sell. It is called _____ Wind Power, and they are probably the number one selling small residential wind turbine in the United States, made in America.

Robert Dee- It is not just the height. There are a lot of birds down there. There are people that watch the hawks and everything like that, so they might have an opposition to it, and certainly we want to give them their chance.

Doug Passeri- Typically speaking, all the questions that you would normally have are for commercial wind turbines. Commercial wind turbines have blades that are bigger than that tower.

Robert Dee- This does not have blades?

Doug Passeri- No, It does, but the blades are 11 (inaudible) These blades are 11 feet, but the blades on a commercial turbine are anywhere from 90 to 110 feet. The blades alone. These blades are 11 feet, so there is a big difference.

Robert Dee- If a bird flew through this blade would it get killed?

Doug Passeri- If a bird flew into anything it would get killed.

Robert Dee- You answered my question.

Paula Clair- It would seem to me, and I am just saying this from my own opinion rather than official (inaudible) It would seem to me that you might want to talk at the Town Board meeting and introduce the concept that you want to have a wind turbine on your property, and you wanted to inquire about the towns position on this, and if it would be receptive to this technology.

Vincent Cestone- The Town can change the code, we cant. We have the power to interpret the code, but not to make new law.

Doug Passeri- We did send a letter to the Town Supervisor.

Paula Clair- You might want to go to a Town Board meeting and voice appropriately.

Robert Dee- Has he answered you yet?

Doug Passeri- No he has not

Paula Clair- Well he is busy. These things are televised and personally I would love to see the Town have wind turbines as long as it does not interfere with peoples other rights. I don't know what the feeling of the remainder of the Town is on this. I don't think it would hurt to introduce it at a Town Board meeting to get a feel for the, you know what the sentiment is on this.

Doug Passeri- The state guidelines that we have to go by are very strict on setbacks, heights. All these different guidelines we have to go by. That is basically how we position our turbine to go on his property, and where it is on his property and the height that we go with to accommodate the customer and the electrical use in his house. We basically go by certain guidelines, which is tower height plus 10 percent plus the blades, so it is about 100 feet all the way around , and he clearly has that all the way around his property. He is a perfect applicant for a residential turbine.

Vincent Cestone- You may be the first of many. I tell you with Sandy it would have been nice. I guess you feather the blades so they don't get caught in high winds.

Doug Passeri- They actually do auto _____. When it reaches a peak speed they actually start to come out of prevailing wind.

William Flaherty- The problem that I have here is that we don't have a specific code covering wind turbines. I think this is the first time that such an issue has become before the Zoning Board that I am aware of. I think what could be done, and what should be done is have a specific code devoted entirely to turbines. (inaudible) that is up to the Town Board, and perhaps six months from now, maybe, we can have a code specifically written for the purpose of these turbines. I think that is important, because I think (inaudible) the additional opportunities for people to take advantage of clean energy, which I am a proponent. You may be able to set the stage for future development in this area. You got 40 acres which is great for this turbine. Most people don't have that kind of acreage, but they could be put on one acre. That could be very doable. As energy cost increases and more people become more inline with the environment, we will probably have several more opportunities to hear people on issues such as this, which I think is important, and is a step in the right direction, if our Town Board goes ahead and adopts a code specifically tailored to this kind of energy.

Doug Passeri- If I could use an example. I know that Towns are different, and they all run differently. About for or five months ago we were up in Albany in the city of _____. Their Zoning was very similar to yours, almost to the tee. What they had the ability to do was to waive most of it, because it was a residential turbine. That is what they did. They streamlined the whole process and we put the wind turbine up this past Wednesday.

Vincent Cestone- Their Zoning Board was able to waive parts of the code? We are generally not allowed to.

Doug Passeri- The Planning Board handled that.

Greta Passeri (inaudible)

Vincent Cestone- It currently does not address that.

Dominic Cordisco- The only reference in the code in connection with wind turbine is section 175-10 in listing allowable uses does say that wind turbines that produce electricity for onsite use can be an accessory use, but it does go on to say that if the turbine exceeds height limits, then it would be considered to be a major application. What you are talking about here and what you are hinting about is, do you want to suggest to the Town Board that they consider an amendment to their code that would establish some different standards for residential turbines that might make it easier and quicker to go through the process. Wind turbines could be wind turbine farm, definitely you have a hillside filled with wind turbines that also meets this definition. You covered by that broad brush, because that is the only brush there is.

Paula Clair- I also just wanted to say, that in my opinion this is an environmentally friendly town, and that factors in your favor.

Vincent Cestone- Any other questions you would like to ask us?

Doug Passeri- I think I am good.

Vincent Cestone- I will make a call to the Planning Board Chairman this week, and tell him to expect to hear from you, and hopefully he can clarify things for you.

Doug Passeri- We are hoping that maybe we can go Thursday.

Vincent Cestone- Say again, I am sorry.

Doug Passeri- I want to ask them if we can come down on Thursday, maybe we can put it down as old business or something to speed up the process just a little bit.

Paula Clair- When is the next Town Board meeting?

Vincent Cestone- Every Wednesday.

Paula Clair- Every Wednesday?

Inaudible

Paula Clair- An issue like this would have to be brought up at a regular Town Board meeting I assume, Right?

Dominic Cordisco- Every Town Board meeting has an opportunity for general public comment, so you could go to that meeting, and as part of the open session you could get up and say. You might want to give the Town Supervisor a heads up that you are coming, so he knows what you are about to speak about, so you don't hit him cold.

Doug Passeri- Still follow through with the planning?

Dominic Cordisco- Correct. I think that your best bet is to go for both. I don't know if the rest of received it with a packet of materials. It has a partially completed application, so you did start some working connection with that. It does have some background material, but to be clear it does not have the level of detail that you would need for a major application.

Doug Passeri- We are aware of that.

Vincent Cestone- Thank you for coming, and hope that makes it clear.

Doug Passeri- It does. Thank you.

Vincent Cestone- I am going to waive the minutes tonight since Tina is not here. There are some corrections. If there is not any old or new business I will make a motion to end the meeting.

Linny Lim - Second

Vincent Cestone- All those in favor?

ALL MEMBERS WERE IN FAVOR.

Vincent Cestone- Our next meeting will be January 14th.

MEETING WAS CLOSED

NOTE: These minutes were prepared for the Zoning Board of Appeals and are subject to review, comment, emendation, and approval thereupon.

DATE APPROVED: _____

Respectfully Yours,
Tina Andress- Landolfi, ZBA Secretary

DRAFT

APPEAL # 883 Tax Map # 82-1-42.1

Final hearing date _____ Zoning Board decision APPROVED / DENIED

Date application submitted 1-8-13

VARIANCE - \$100
Appeal - \$100

Application fee \$ 100 ^{100 - appeal} _{Variance} Escrow \$ — Received by MB Landolfi

To the Zoning Board of Appeals, Town of Philipstown, New York:

I (we), James Gleick

residing at 200 Long & Winding Rd., Garrison, NY 10524

Telephone: home 845-424-3909 business _____

HEREBY appeal the decision of (name and title) Kevin Donohue CFM

whereby he/she

GRANTED _____ DENIED ☒ a BUILDING PERMIT ☒ a CERTIFICATE OF OCCUPANCY _____

For Residential Small Wind Turbine Installation

To _____

of _____

For property at tax map # 82-1-42.1 in zoning district R.R

WHEN FILLING OUT APPLICATION, ATTACH ADDITIONAL PAGES AS NECESSARY TO ANSWER QUESTIONS.

1. LOCATION OF PROPERTY: (Give 911 address and a map and detailed narrative giving directions to the property using road names, such as Route 9 or 9D, Old Albany Post Road, East Mountain Road South, etc. and landmarks such as Garrison School, North Highlands Fire House, Highlands Country Club, etc:

See Attached Page

2. NAMES AND ADDRESSES OF ADJOINING PROPERTY OWNERS (Include those opposite on streets/highways. Use additional sheets if necessary. This information may be obtained in the Town assessor's office)

3. PROVISIONS OF ZONING CODE INVOLVED (give Article, Section, Sub-section, paragraph by number. Do not quote text of code)

4. PREVIOUS APPEAL (If there have been any previous appeals for this property or any portion thereof, set forth the appeal number, date, relief sought and the ZBA decision resulting)

TYPE OF APPEAL:

☐ an INTERPRETATION of the Zoning Code or Maps

☒ a VARIANCE from the Zoning Code - 175-11 B. Height limitations

☐ a SPECIAL USE PERMIT under the Zoning Code

☒ an Appeal of Decision, Letter from Code Enforcement Officer dated 10/1/12

5. DETAILS OF APPEAL (Complete only that section which applies to the appeal you are submitting)

(a) INTERPRETATION of the Zoning Code is requested

(1) An exact statement of the interpretation requested is:

Town of Philipstown, NY
Zoning Board of Appeals

Dear Chairman Vincent Cestone and Board Members,

In September an application for a building permit was submitted for a residential small wind turbine in the town of Garrison, NY. The application was denied by the town Code Enforcement Officer, Mr. Donahue, citing Philipstown Code. §175-30 E. (2) §175-60 A & C. (1), (f).

My feeling is "Small Wind" is not adequately defined in the current Town Code in two areas. The first being Small Wind also referred to as Residential Wind, is not the same as Industrial or Commercial Wind. It is important to note and understand the differences when looking at permitting and labeling a project Minor or Major. The code for wind facilities should be separated into two categories for permitting, Small Wind and Large Wind, not grouped as only "Wind facility". This will allow for a streamlined process when appropriate. Generally most small wind projects will conform to town code and need only to have a variance granted for height.

Residential Turbines name plate capacity 10kW - 100kW - On-site Consumption
Commercial Turbines name plate capacity 100kW – 1.5 Megawatt - Off-site Consumption

Residential Turbines Tower height up to 160' - Blades 12' in length
Commercial Turbines Tower height 200' and greater – Blades 100' and greater in length

The second thought is Small wind as an Accessory use as defined in 175-60 A. Some uses are allowed by right, subject only to site plan approval (see Use Table in § 175-10)
And subject to an area variance for the height.

Article IX, Special Permits and Site Plan Review
Purpose and Applicability
§175-60 A & C. (1), (f)

- A. It is the policy of the Town of Philipstown to allow a variety of uses of land, provided that such uses do not adversely affect neighboring properties, the natural environment, or the rural and historic character of the Town. Many uses are therefore permitted only upon issuance of a special permit by the Planning Board, in order to ensure that these uses are appropriate to their surroundings and consistent with the purposes of this chapter. Some uses are allowed by right, subject only to site plan approval (see Use Table in § 175-10) Editor's Note: The Use Table is included at the end of this chapter. Communication towers, soil mines, and certain solar and wind energy facilities [see § 175-30 E (2)] require a special permit issued by the Zoning Board of Appeals. Adult entertainment uses and uses not listed on the Use Table (if not prohibited by § 175-10C) require a special permit issued by the Town Board. In reviewing special permit applications, the Town Board and Zoning Board of Appeals shall follow the procedures and standards established for the Planning Board in this Article IX.
- C. Minor and major projects. In order to tailor the scope of a project review to the scale of a project, applications are divided into two categories, major and minor. In recognition of their lesser impact, minor projects involve simpler application materials, a more streamlined review process, and less detailed findings requirements, while major projects undergo a more detailed and rigorous review procedure because of their greater impact. The classification of major and minor only applies to projects that require

site plan or special permit review. This classification system does not apply to development allowed by right without review by the Planning Board, Zoning Board of Appeals, or Town Board.

- (f) Construction of a structure that is 50 feet in height above average grade level (provided that it otherwise complies with this chapter or is the subject of an area variance).

Article VII, Supplementary Dimensional Regulations.

§175-10 E. (2)

- D. Accessory uses. Uses customarily incidental and subordinate to a principal use shown on the Use Table *Editor's Note: The Use Table is included at the end of this chapter.* shall be allowed by the same permit process as the principal use, unless otherwise indicated on the Use Table. (For example, if a light industrial use requires a special permit in a particular zone, then a service business operated as an accessory use to it would also require a special permit.) Such accessory uses may be on the same lot, on adjoining lots, or on lots that face each other across a street. Noncommercial recreational uses shall be permitted as an accessory use in all districts, provided that they do not create noise, traffic, dust, odor, or other impacts that exceed those normally associated with single-family residential uses. If there is no principal use on a residential lot, a use that is typically a residential accessory use, such as a residential garage, swimming pool, tennis court, or tool shed, may be allowed by special permit granted by the Zoning Board of Appeals. Attached or detached garages associated with single-family residences shall not exceed 1,000 square feet in footprint area. Solar and wind energy conversion systems producing electricity and/or heat primarily for on-site use, including those with net metering, shall be considered customary accessory uses to all principal uses, except that wind energy conversion systems which exceed otherwise applicable height limits shall be considered major wind energy conversion systems allowable only by special permit from the Zoning Board of Appeals.

Article VII, Supplementary Dimensional Regulations.

§175-30 E. (2)

[http://ecode360.com/6319215 - 6319215E](http://ecode360.com/6319215-6319215E). Height exceptions.

- (2) Solar energy facilities, communications towers, and wind energy conversion systems may exceed height limits in the Dimensional Table, *Editor's Note: The Dimensional Table is included at the end of this chapter.* provided that they comply with applicable sections of this Article VII. Vegetation planted on green roofs may also exceed height limits. Any wind energy conversion system that exceeds 40 feet in height and any solar energy facility or wind energy conversion system that is used to generate electricity primarily for off-site consumption shall require a special permit from the Zoning Board of Appeals.

My interpretation of the Philipstown Code is that Small wind is an Accessory use as it conforms to all regulations except height; therefore an area variance is necessary.

Regards,

Doug Passeri
Hudson Valley Wind Energy LLC

Residential vs. Commercial



When comparing

Small wind = Residential

Large Wind = Commercial

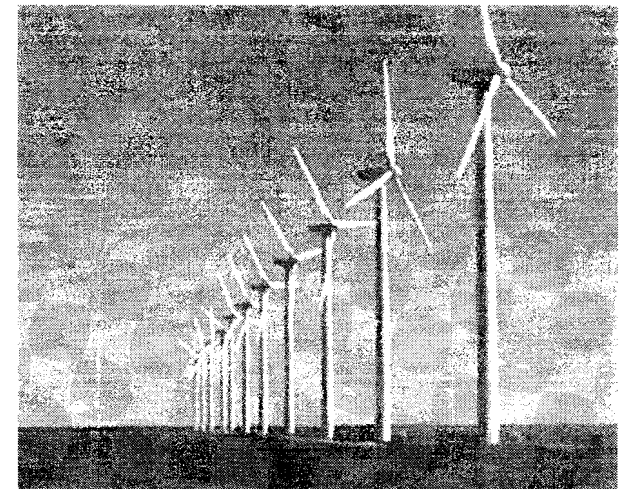
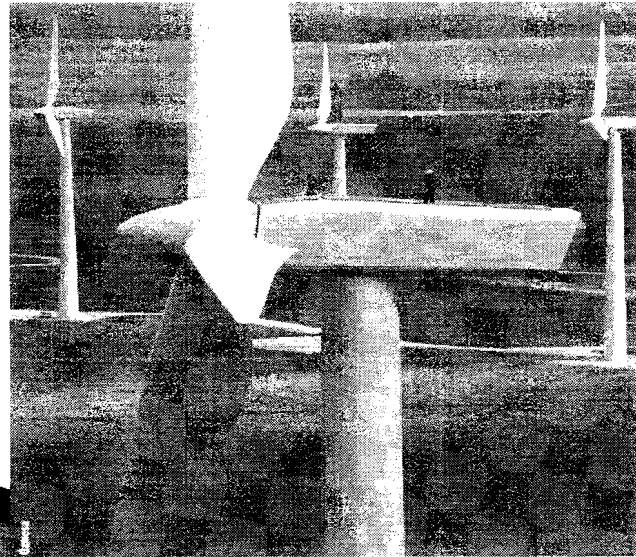
Think of a Volkswagen vs. Semi-Tractor Trailer

Residential Towers 140' High Blades 12' Long

Commercial Tower 200+' High Blades 100'+Long

Residential Turbines 10kW – 100kW

Commercial Turbines 100kW – 1.5Megawatt +





Town of Philipstown

Code Enforcement Office
238 Main Street, PO Box 155
Cold Spring, NY 10516

Office (845) 265- 5202 Fax (845) 265-2687

October 1, 2012

Doug Passeri
70 County Route 7
Pine Plains, NY 12567

RE: Building Permit - Wind generator on a 140 foot lattice tower
Owner: James Gleick
200 Long and Winding Road, Garrison NY
ID# 82.-1-42.1

A review of your building permit application for the construction of a wind generator on a 140 foot lattice tower at 200 Long and Winding Road, Garrison NY, reveals that the Code of the Town of Philipstown, section 175-30 E. (2) requires a Special Use Permit from the Zoning Board of Appeals before a building permit can be processed;

175-30 E. (2) Solar energy facilities, communications towers, and wind energy conversion systems may exceed height limits in the Dimensional Table, provided that they comply with applicable sections of this Article VII. Vegetation planted on green roofs may also exceed height limits. Any wind energy conversion system that exceeds 40 feet in height and any solar energy facility or wind energy conversion system that is used to generate electricity primarily for off-site consumption shall require a special permit from the Zoning Board of Appeals.

Further be advised that according to the Code of the Town of Philipstown, section 175-60 C. (1) (f) this application for Special Use Permit will be deemed a Major Project as it exceeds 50 feet in height.

175-60 C. (1) (f) A minor project is a special permit or site plan application for a project that does not exceed any of the following thresholds (over a five-year period):

(f) Construction of a structure that is 50 feet in height above average grade level (provided that it otherwise complies with this chapter or is the subject of an area variance).

After receipt of a Special Use Permit from the Zoning Board of Appeals the application for a building permit can be processed. If you have any question you may contact my office at (845) 265-520.

Thank you,

Kevin Donohue, CFM
Code Enforcement Officer

APPEAL # _____ Tax Map # 82-1-42.1

Final hearing date _____ Zoning Board decision APPROVED / DENIED _____

Date application submitted _____

Application fee \$ _____ Escrow \$ _____ Received by _____

To the Zoning Board of Appeals, Town of Philipstown, New York:

I (we), James Gleick

residing at 200 Long & Winding Rd., Garrison, NY 10524

Telephone: home 845-424-3909 business _____

HEREBY appeal the decision of (name and title) Kevin Danohue CFM

whereby he/she

GRANTED _____ DENIED ☒ a BUILDING PERMIT ☒ a CERTIFICATE OF OCCUPANCY _____

For Residential Small Wind Turbine Installation

To _____

of _____

For property at tax map # 82-1-42.1 in zoning district R-R

WHEN FILLING OUT APPLICATION, ATTACH ADDITIONAL PAGES AS NECESSARY TO ANSWER QUESTIONS.

1. LOCATION OF PROPERTY: (Give 911 address and a map and detailed narrative giving directions to the property using road names, such as Route 9 or 9D, Old Albany Post Road, East Mountain Road South, etc. and landmarks such as Garrison School, North Highlands Fire House, Highlands Country Club, etc:

See Attached Page

2. NAMES AND ADDRESSES OF ADJOINING PROPERTY OWNERS (Include those opposite on streets/highways Use additional sheets if necessary. This information may be obtained in the Town assessor's office)

3. PROVISIONS OF ZONING CODE INVOLVED (give Article, Section, Sub-section, paragraph by number. Do not quote text of code)

4. PREVIOUS APPEAL (If there have been any previous appeals for this property or any portion thereof, set forth the appeal number, date, relief sought and the ZBA decision resulting)

TYPE OF APPEAL:

_____ an INTERPRETATION of the Zoning Code or Maps

☒ a VARIANCE from the Zoning Code

_____ a SPECIAL USE PERMIT under the Zoning Code

5. DETAILS OF APPEAL (Complete only that section which applies to the appeal you are submitting)

(a) INTERPRETATION of the Zoning Code is requested

(1) An exact statement of the interpretation requested is:

(b) a VARIANCE from the Zoning Code is requested:

(1) An exact statement of the details of the variance requested is:

(2) The grounds on which this variance should be granted are:

(c) a SPECIAL USE PERMIT is requested:

(1) The reason the permit is requested:

(2) An exact statement of use for which the permit is requested:

(3) The facts showing the use is permitted as a SPECIAL USE under the code and the ability of the applicant to comply with all requirements of the code for granting of a special use permit:

Philipstown, New York Zoning Board of Appeals
Area Variance Application
Mr. & Mrs. James Gleick
200 Long & Winding Rd., Garrison, NY
10kW Residential Small Wind

1.) Location of Property:

Address: 200 Long and Winding Rd, Garrison, NY 10524
Adjacent Road(s): West on 9D/Bear Mt. - Beacon Highway.
Landmarks: Manitou

2.) Names and Addresses of Adjoining Property Owners:

See attached sheet and map

3.) Provisions of Zoning Code Involved:

Article III, §175-10 D.
Article VII, §175-30 E. (2)
Article IX, §175-60 A & C. (1), (f)

4.) Previous Appeal:

No

Type of Appeal:

☐ an INTERPRETATION OF THE Zoning Code or Maps

☒ a VARIANCE from the Zoning Code

☐ a SPECIAL USE PERMIT under the Zoning Code

5.) Details of Appeal:

(a) Interpretation of Zoning Code is Requested

(1) An exact Statement of the Interpretation requested is:

Re-address how residential small wind is categorized in the current zoning. Streamline permitting process to allow for small wind as an accessory use with zoning that is in line with the States On-Site Small Wind requirements.

(b) A Variance from the Zoning Code is requested:

(1) An exact Statement of the details of the Variance requested is:

This Residential Small Wind project meets and conforms to all zoning requirements in Philipstown however, is restricted do to the RR max height set at 40'. An area variance is needed for the installation of the 140' guyed lattice tower. Variance request is for 100'.

(2) The Grounds on which this variance should be granted are:

For Small Wind to be effective and efficient, turbines must be atop towers that are 80 – 140' to adequately harness wind speeds to generate significant energy. The current zoning for does not separate small wind from industrial or commercial wind. Small wind (residential, farm or rural business) is for on-site consumption.

(c) A Special Use Permit is requested:

**** Not requested at this time****

(1) The reason the permit is requested:

(2) An exact statement of the use for which the permit is requested:

(3) The facts showing the use is permitted as a SPECIAL USE under the code and the ability of the applicant to comply with all requirements of the code for granting of a special use permit:

PHILIPSTOWN ZONING BOARD OF APPEALS
SUPPLEMENTAL WORKSHEET FOR AREA VARIANCE APPLICANTS

In accordance with state law, the Zoning Board must grant or deny an area variance based on specified factors and a balancing of "the benefit to the Applicant if the variance is granted, as weighed against the detriment to the health, safety and welfare of the neighborhood or community". We have developed this Supplement to assist you with preparing, submitting and presenting your case to the Zoning Board. Please complete the factors 1a – 5 below and submit with your application (attach additional pages if necessary). We have provided suggested questions which will assist you in answering each factor and in preparing for the Board's review. It is strongly suggested that you structure your presentation at the hearing in accordance with the factors. Provide facts and proof to support each factor.

FACTORS TO BE CONSIDERED BY THE BOARD

1a. What possible detriment would the variance have on nearby properties?

How close are nearby structures? – Will your structure be visible to others or will it block a view? – Do you propose exterior lights?

1b. What impacts would the variance have on the character of the neighborhood?

Have others in the neighborhood received similar variances? – Does the Neighborhood contain similar structures with similar setbacks/heights etc.? Is your property similar to or different from others in the area? – If several of your neighbors were to receive variances in the future similar to the one you now request, would the neighborhood be changed?

2. If you didn't get the variance, how else could you build what you want or accomplish your goal?

For example: different location or design; shorter fence, smaller deck; smaller overhang or addition?

3. What is Code requirement you seek to vary? _____

How large of a variance do you seek? _____

- 1 What impact or effect will the variance have on the current physical and environmental conditions in the area? Is there grading (or blasting) proposed? - Will you be paving previously unpaved surfaces? - Are you proposing to remove any vegetation? - Are there wetlands or other watercourses on site? - Will normal drainage patterns be affected? - How close are the nearest wells and septic systems? - Will the proposed use or activity produce emissions (noise or odors)? - Will traffic be increased? - Is the area considered scenic?

- 5 Is the variance requested as a result of a "self-created hardship"?
Was there a need for the variance when you purchased the property? - How long ago did you purchase the property? - Did you build the structure without a permit?
Is the need for a variance as a result of someone's mistake? Describe

Factors to be considered by the board

Area Variance Application

Mr. & Mrs. James Gleick

200 Long & Winding Rd., Garrison, NY

10kW Residential Small Wind

- 1a.) There will be no detriment to nearby properties in granting an area variance.
The closest structure is owned by the applicant (small studio) and is 217' away
The wind energy conversion system (WECS) can not be seen from the sited location.
It will not block views or have exterior lights, banners or flags.
- 1b.) There will be no negative impact from a variance on the character of the surrounding neighborhood.
Utility poles, flag poles, transmission/cell towers and others are all structures in the community that are above the 40' height limit.
Specific set backs for a residential small wind installation are required and will follow both Town and State guidelines.
The WECS is situated on the east side (back) of the 30+ acre parcel on top of a Mt. surrounded by forest
The closest human occupied structure is 1,800' to the west of the property on Route 9D.
- 2.) Without a variance the proposed residential small wind project can not be completed. Height is a must when incorporating small wind power as the chosen renewable resource. Restricting tower height is like putting solar in the shade. Even at a high elevation with spectacular wind speeds, the lowest industry standard for 10kW residential turbine can range from 100' to 140'tower height. Mature trees can be 75 to 100' . Key factors in determining tower height are obstruction and elevation.
For a turbine to harness the desired wind speeds to generate electricity a tower must have a height that is greater then the surrounding obstructions such as trees & buildings.
- 3.) The current dimensional table for RR has a maximum height of 40'. A variance of 100' is necessary for the erection of the Gleick WECS small wind project for residential on-site energy consumption and net metering.
- 4.) There will be no significant impact on the environment. All soils disturbed will be reclaimed, base and anchor pads will be backfilled. There will be no physical change to the landscape.
There will be no blasting and no paving involved with this residential project.
Trees located within the 84' area radius of the site with be cut down and used for fire wood by the resident. No lose of vegetation that would create changes to the natural look or harm the environment will take place. No wetlands or water courses will be disturbed. The Well is located >100' north of site, the Septic is >200' to the west.
No pollution will be created by this project. The rated sound level is 54.7 dbA. Traffic will be not be increased. The chosen site away from neighboring properties and will not dramatically alter the scenic character of the surrounding forest.

- (5.) This is not a self created hardship. This particular variance was not apart of purchasing the property. It is strictly for the erection of a small wind, on-site consumption/ net metering renewable resource residential project, that is partially funded by a NY State on-site small wind program (PON 2439), established to encourage and help those NY residents who are interested in using a form of green power.

The property was purchased by the resident in 1994. A permit was obtained to build residential dwelling. There was no mistake creating the need for an area variance. The variance is requested to obtain a building permit for a residential small wind energy conversion system.

STATE OF NEW YORK, COUNTY OF PUTNAM

Douglas Passeri

being duly sworn, says: I have read the foregoing appeal and papers attached; that the statements and representations made therein are true to the best of my knowledge and belief

[Signature]
Signature of applicant or agent

Sworn before me this 7th day of January 2013

Notary, [Signature] County, Dutchess

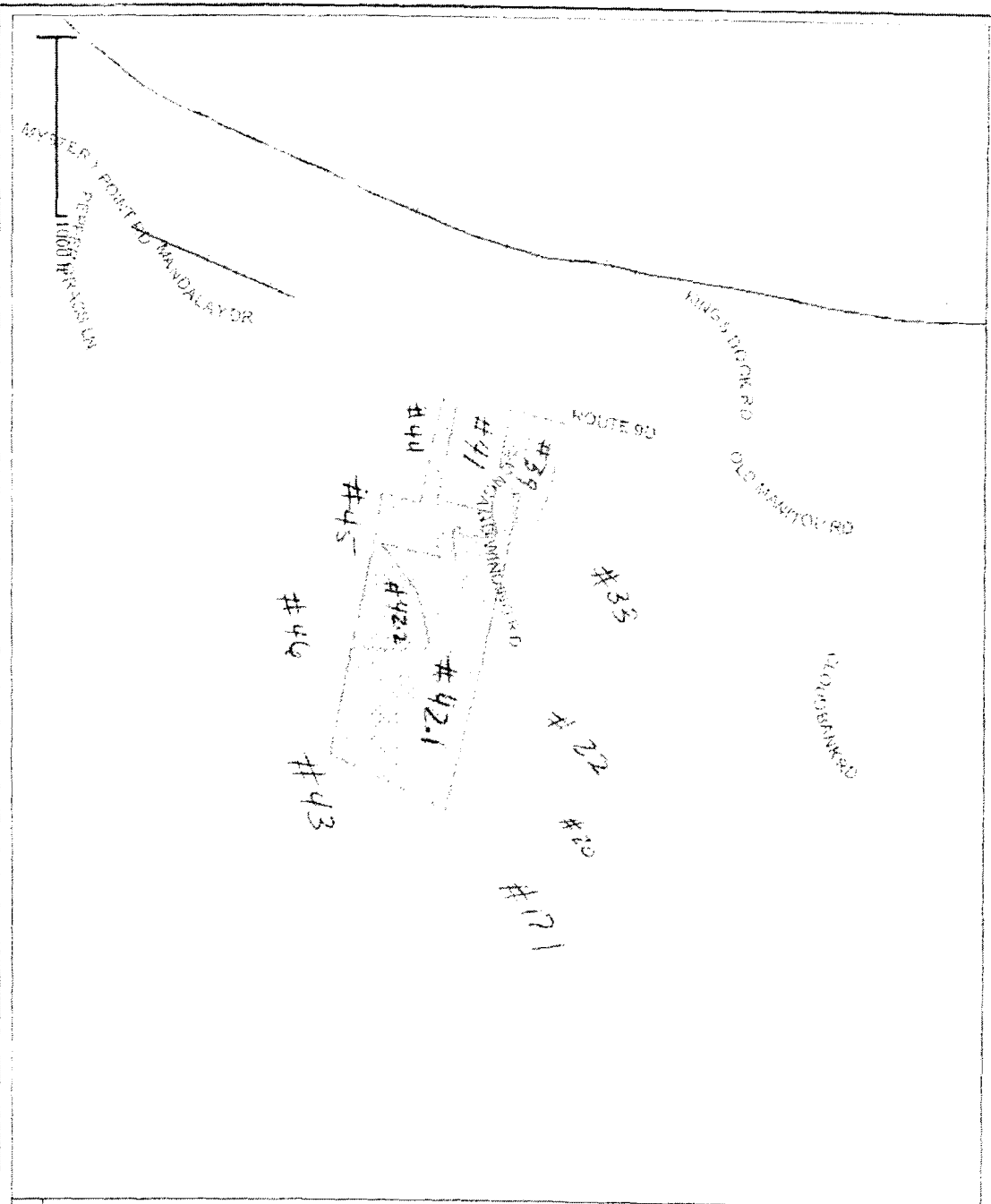
NASIR MAHMOOD
Notary Public, State of New York
No. 01MA000451
Qualified in Dutchess County, 2013
Commission Expires December 15, 2013

SUBMISSION REQUIREMENTS: (1) For a VARIANCE or INTERPRETATION please submit (7) individual packets
(2) For a SPECIAL USE PERMIT please submit (19) individual packets

each packet containing one each of the below listed items. These items are very specific and MUST be complied with exactly

1. Completed appeal form
2. Deed to property
3. Denied application for Building Permit or Certificate of Occupancy
4. Building plans with ONE ORIGINAL professional seal and signature
5. Survey prepared by NYS licensed surveyor, showing all property lines, structures and dimensions to property lines. One survey with ORIGINAL professional seal and signature
6. Certificates of Occupancy for any existing structures
7. Contour maps as required by conditions

Putnam County, NY Tax Map



Brewster Catchbasins
Brewster Outfalls
Brewster Streams
Parcels
ROWS
Private Roads
Like Path
Road Names
Road Lines
Railroads
Schools
Major Parks
Golf Courses
Lakes
Town Lines
Legend
En Nov 2 12 04:00 EDT 2012

James & Cynthia Gleick Abutting Properties

#42.1

82.-1-42.1 240
Gleick James Garrison
Crossen Cynthia M Parcel 1
200 Long And Winding Rd
Garrison, NY 10524 00130000000000003200
ACRES 21.53

#42.2

82.-1-42.2 322
Gleick James Garrison
Crossen Cynthia M Parcel 2
200 Long And Winding Rd
Garrison, NY 10524
ACRES 10.21 FD013

#39

82.-1-39 280
Freeman Susan C - Cutler Robert B Jr
540 Route 9D
Garrison, NY 10524-1202 00154000000000000220
ACRES 2.36

#41

82.-1-41 280
Smith Allen
627 Route 9D
Garrison, NY 10524 00300000000000000395
ACRES 3.95

#44

82.-1-44 210
Richmond Katherine K
Priddy Rodney
512 Route D
Garrison NY 10524 00300000000000000376
ACRES 3.76

#45

82.-1-45 322
Kien, LLC Garrison
504 Route 9D
Garrison, NY 10524 00492000000000001029
ACRES 10.29

#46

82.-1-46 322
Friedman-Kien Alvin
486 Route 9D
Garrison NY 10524 00412000000000001617
ACRES 16.17

#17.1

82.-1-17.1

USA – Secretary of the Interior

Washington, DC 20240

#20

82.-1-20

Manitoga

583 Cloud Bank Rd

Garrison, NY 10524

Mailing Address PO Box 249, Garrison NY 10524

#22

82.-1-22

Manitoga

586 Route 9D

Garrison, NY 10524

#33

82.-1-33

Manitoga

20-22 Old Manitou Rd

Garrison, NY 10524

#43

82.-1-43

USA – Secretary of the Interior

Washington, DC 20240

acon Hwy



Along and Winding-Rs

Applicant: **Gleick, James**
Address: **200 Long and Winding Rd., Garrison, NY 10524**
Phone: **845.424.3909**
Email: gleick@around.com
Putnam County ~Tax ID 82.-1-42.1

Proposed Project

Installation quantity one (1) Wind Energy Conversion System (WECS), consisting of Bergey WindPower Model BWC Excel - S 10kW class wind turbine atop 140' Guyed Lattice Tower.

The installation will produce electricity for the use at the site in which it is generated, and offset the rising cost of electricity associated with daily living.

The expected AEO produced from this grid interconnection application is 12,512kW providing a reduction in the current annual residential power used, and decreasing the demand placed on the utility company.

The selected WECS site will have no negative aesthetic effect to the surrounding landscape or change the character of neighboring scenic views. There is no foreseen impact to the environment; water, plant or animal.

The elevation for this location is 721'.

Latitude = 41.34315 °, Longitude = -73.94812°

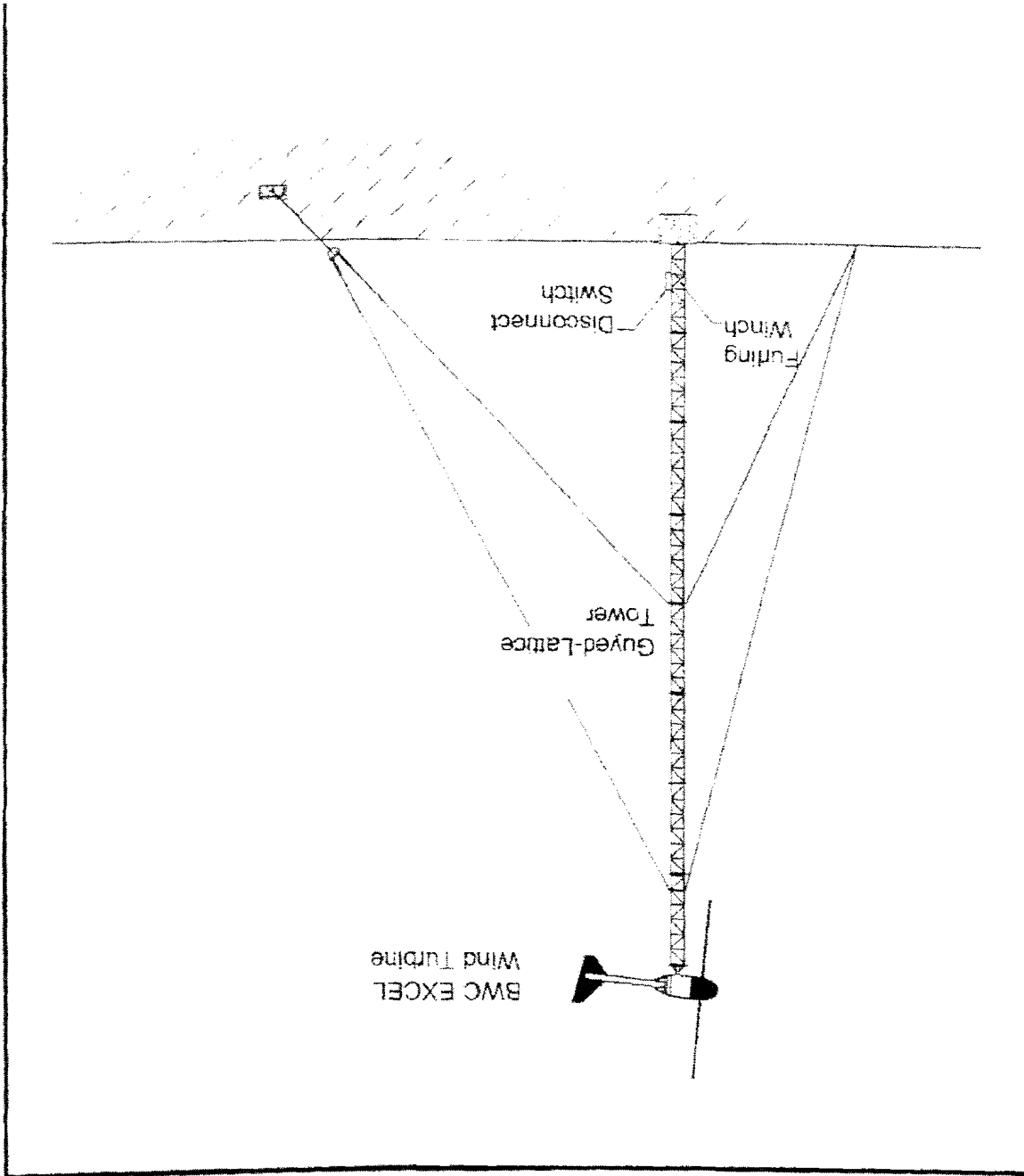
Specifications for Wind Energy Conversion System (WECS)

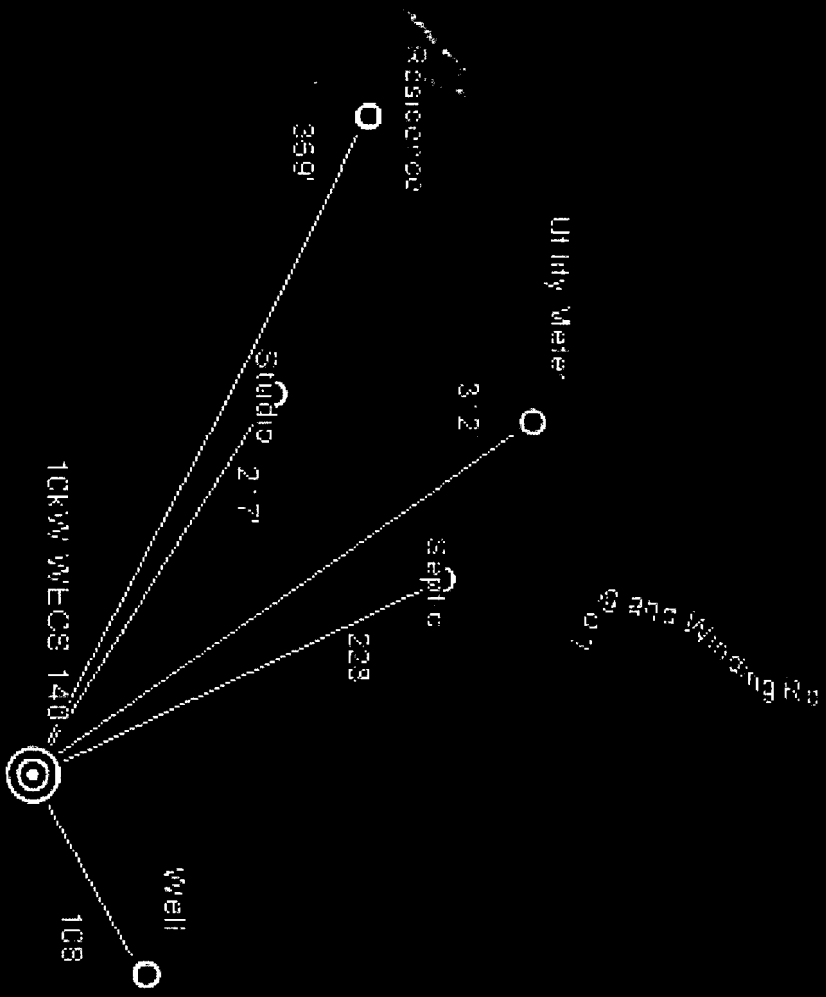
The **BWC Guyed-Lattice** tower comes in 10ft sections; (1) base, (12) standard, & (1) top to equal a 140ft tower.

The **BWC EXCEL** is a modern 7 meter (23 ft) diameter, 10 kW wind turbine designed for high reliability, low maintenance, and automatic operation in adverse weather conditions. It is available in two configurations: battery charging and grid-connected. The BWC Excel is a ruggedly built turbine that comes with the longest warranty (10 years) in the industry. Connected to the grid, the BWC EXCEL can provide most of the electricity for an average total electric home at moderate wind sites. The all new Powersync II power processor (inverter) is the most advanced in the industry and it carries a full UL certification to the latest utility standards.

The blades attach directly to a specially designed very-low-speed permanent magnet alternator which uses state-of-the-art neodymium super- magnets. "We have designed an oversized alternator that slows the rotor down and makes the turbine very quiet." Over speed protection is provided by the proven BWC AutoFurl passive sideways furling system. "In spite of the claims otherwise, no other over speed protection system has proven to be more reliable or effective than AutoFurl."

In July 2009 the Excel turbine was upgraded with a more powerful alternator and longer blades. Performance has been improved by an average of 25%. The BWC Excel 10kW class wind turbine has a 30 to 50 year life expectancy and a 10 year warranty for the wind turbine, their associated electronics, and tower supplied by Bergey Windpower Co., Norman, Oklahoma







HUDSON VALLEY WIND ENERGY LLC

Douglas Passeri ~ 581.821.9761

**Small Wind / Bergey WindPower Excel-S GL
10kW Wind Energy Conversion System (WECS)
140' Guy Lattice Tower**

Lat: 41.34315 Long: -73.94812 Elevation: 720.80'

Mr. James Gleick
200 Long and Winding Road
Garrison New York 10516

Property Lines

Base of tower to **North** Property Line >500'
Base of tower to **East** Property Line >250'
Base of tower to **South** Property Line 210'
Base of tower to **West** Property Line >1574'

Base Pad Measurements

Base of tower **NW** to Utility 312'
Base of tower **NW** to Gleick Residence 369'
Base of tower **NW** to Studio 217'
Base of tower **NW** to Inverter/Panel Located in Shed by Utility 312'
Base of tower **NW** to Septic >228'
Base of tower **NE** to Well 108'
Base of Tower to **West** Town Road >2000'

The proposed installation is distanced as required and does not affect agricultural districts, scenic protected areas, ridgelines, open spaces or watersheds.

Nov 31 1885

BEACON MOUNTAIN - BEACON HIGHWAY - U.S. ROUTE 2

Formerly Dawson
Now or formerly Rindge
or Newcomb

Now or formerly known

Formerly Mogyura
Non or former

The Museum - Kien

Now or formerly King
of Montego Bay

METER 2000

7.

5

127

wer

well

500+

Formerly King
one of the

LOW or formerly The People of the United States of America

McFadyen, J. C. (1981) *Journal of the Royal Society of Medicine*, 74, 101-104.

SURVEY OF PROPERTY
 1001 E. 10TH ST.
 JAMES J. & CAROL B.
 TRUSTEES OF THE
 TRUMAN TRUST BUILDING

Putnam County, NY Tax Map



Brewster Catchbasins



Brewster Outfalls



Brewster Streams



Parcels



ROWs



Road Names

Road Lines



Railroads



Schools



Major Parks

Golf Courses



Lakes



Town Lines

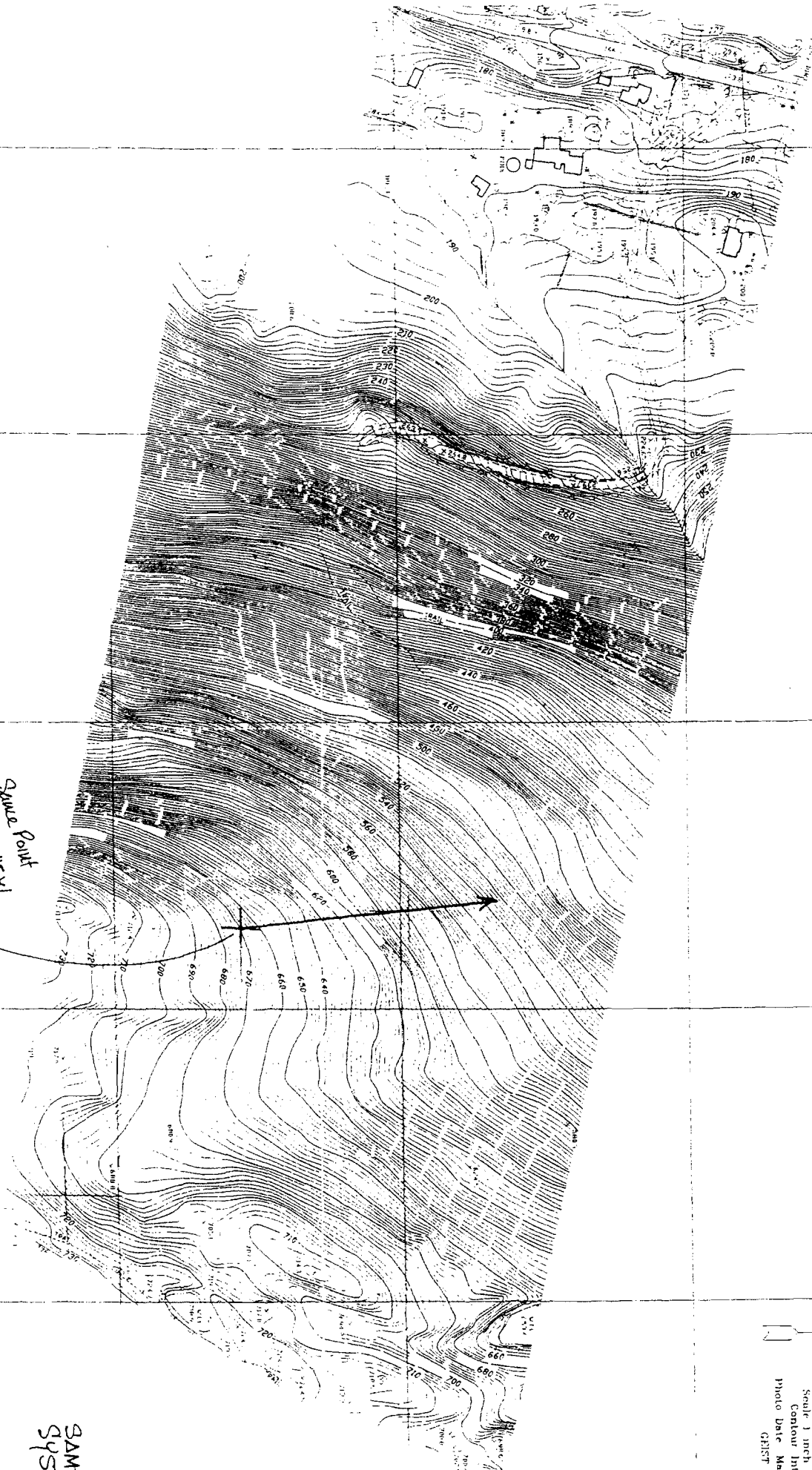


Mon Sep 24 13:48:20 EDT 2012

ROUTE 9D

CONESTOGA

1500 ft



SAME POINT
 VIEW
 This view is photoduplicated
 on electronic
 copy

SAME NOE
 SYSTEM.

PHOTOGRAMMETRY BY
Geomatics
 INTERNATIONAL
 725 East 12th Street, Suite 100
 Vancouver, BC V6E 2K1
 Scale: 1 inch = 100 feet
 Contour Interval: 2 feet
 Photo Date: March 22, 1981
 GUEST SITE

Bergey WindPower ~ Hudson Valley Wind Energy



~~~~~

All Bergey turbines are built on strong design basics:

**Simplicity.** There are only three moving parts, and none are 'wearing' mechanical parts so no replacement maintenance is needed. There are also no complex hydraulics, integrated electronics or mechanical weaknesses that would require a costly maintenance regime.

**Reliability.** The technology has been developed in 'Tornado Alley' and proven in critical military applications. Clever aeronautical design technology includes robust storm protection, controlled automatically by the wind alone.

**Performance.** With a low start-up (2.5m/sec /5mph), Bergey turbines deliver exceptional 'low wind speed' performance and with no mechanical gearbox present are extremely quiet in operation. All Bergey turbines come with extended warranties. In the case of the 10kw turbine, this is for an industry leading 10 years.

## **Key product features**

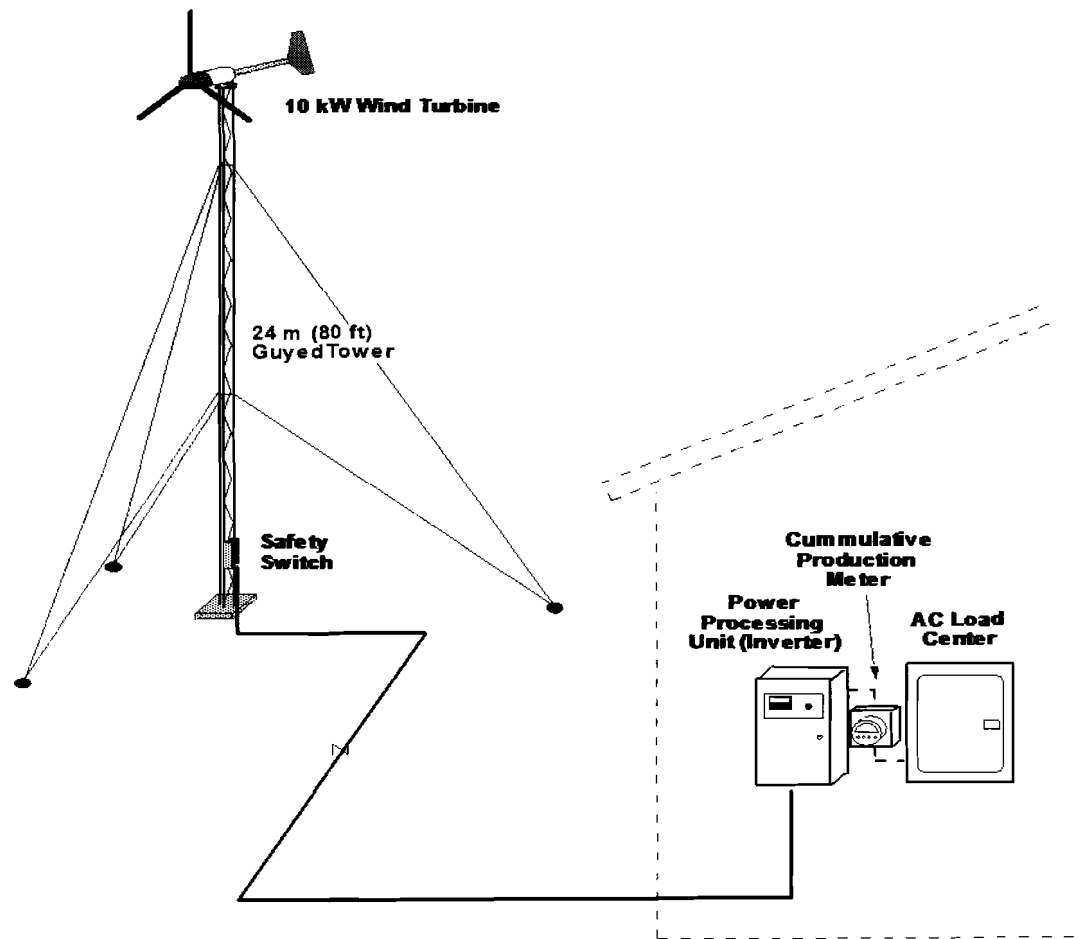
**Powerflex Blades.** Exclusive 'full length reinforced' fibreglass pultruded blades are stronger than steel - and the strongest in the industry. Developed from advanced aeronautical technology, they've received two national design awards.

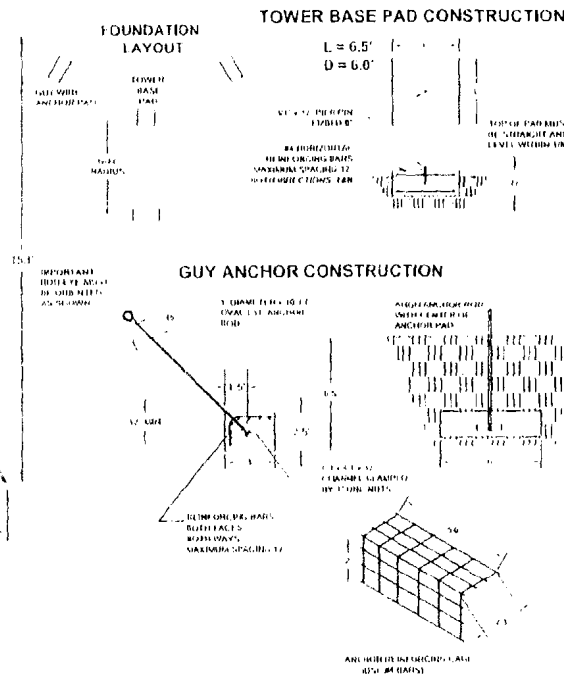
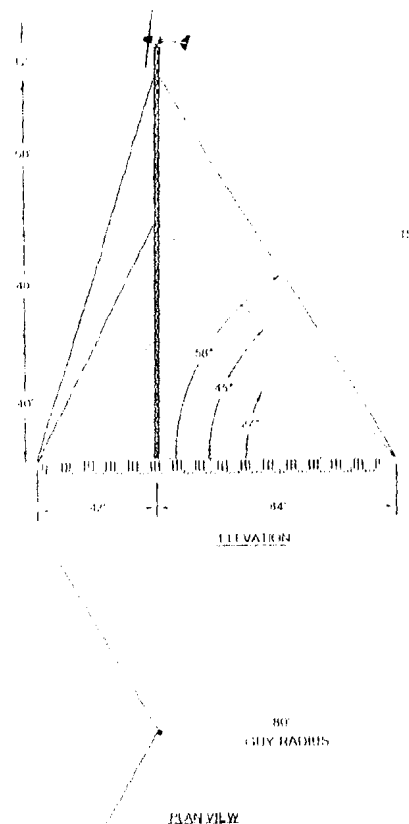
**BW-7 Airfoil.** The custom designed airfoil (blade shape) is quieter and more efficient than the more widely used 'catalogue airfoils'.

**Neo-10 Alternator.** Bergey's custom designed, very low speed 'super magnet' alternator also serves as the blade mounting hub, integrating what are typically two assemblies.

**AutoFurl Storm Protection.** Bergey's unique fully automatic, high wind protection system is hurricane proven. A robust and well engineered turbine designed for anything the US climate can throw at it, and more.

## POWER YOUR DREAM...with the wind





## Foundation Notes:

1. Concrete: 2500 psi minimum ultimate strength
2. ASTM A-615 Grade 40 deformed reinforcing bars, 1/2" minimum diameter, two faces, both ways, 12" O.C., maximum spacing
3. Minimum concrete cover on all reinforcing bar is 2" top, 3" all other locations
4. Compact fill to 8" lbs to minimum 100 psi
5. Water table below all concrete at all times
6. Soil bearing strength 1500 psi minimum
7. No inspection of concrete / rebar placement required per CBC 1701.5.3 and 1701.5.4

## Design Criteria

1. CEC-2007 compliant
2. Design Basic Wind Speed: 85 mph
3. Design Exposure Class: C
4. Rotor Thrust: 2400 lb max
5. Turbine Weight: 1200 lb
6. Maximum Torque: 250 ft-lb @ 300 rpm
7. Locked Moment: 875 ft-lb
7. No Ice Accumulation

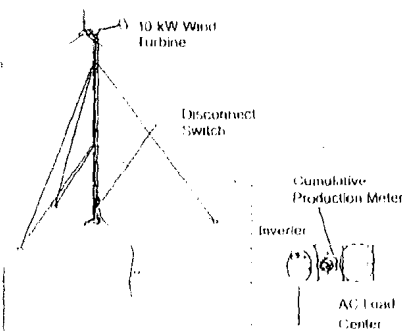
## Notes and Requirements

1. An approved Accessory Wind Energy Review along with any conditions from the Planning Division is required to be submitted at the time of permit application
2. A plot plan is required. Submit individual plot plans for approval at the time of permit application. Tower height and system height setbacks from the property lines shall be clearly identified on the plot plan submitted for review. In no case shall the property line setbacks be less than equal to the system height which includes the turbine and height of the blade in the 12:00 position
3. The following height limitations shall apply to all accessory wind energy towers, provided that the application for such a system includes evidence that the proposed height does not exceed the height recommended by the manufacturer or distributor of the system.

| Land Use District RS and RM                      | Valley Area 52' 5" | Mountain Area 52' 5" | Forest Area 52' 5" one system allowed |
|--------------------------------------------------|--------------------|----------------------|---------------------------------------|
| RL (on parcels less than 2 1/2 acres)            | 65'                | 65'                  | 80' one system allowed                |
| RL (on parcels 2 1/2 acres to less than 5 acres) | 85'                | 85'                  | 100' one system allowed               |
| RL 5 or greater, AG, RG                          | 100'               | 100'                 | 120' one system allowed               |

Additional height may be allowed at rate of one unit for every 10 acres to a max of three units. Units shall be separated by a minimum of 240'

4. Any climbing apparatus must be located at least 12' above the ground, and the tower must be designed to prevent climbing in the first 12 feet
5. No protected trees or plants shall be removed. No drainage course shall be obstructed. No land clearing will be conducted as part of this plan
6. A grading plan, if required, shall be approved separately
7. All footings are to be in undisturbed soil
8. This stock plan is not approved for use if soil bearing pressure exceeding 1,000 psi. Soil bearing capacity shall be not less than 1,600 psi
9. Water table to be below concrete at all times
10. Special foundation design or detailing may be necessary due to various analysis performed on certain tracts. It will be the applicant's responsibility to research and ascertain that no special foundation soil or site conditions exist as stipulated for various tracts throughout the county
11. Plan not approved for construction in any expansive or alkaline soil area
12. Plan not approved for construction in areas required to have seismic shadows
13. Plan not approved if listing or approval of any proposed material, appliance, fixtures, are void, canceled, or delisted
14. San Bernardino approved Fabricator: #205
15. Concrete: 2,500 PSI MINIMUM ultimate strength
16. ASTM A-615 Grade 40 deformed reinforcing bars 1/2" minimum diameter (#4) Minimum concrete coverage 3" bottom, 2" top
17. A 325 tower bolts require a Special Inspector. The special inspector application must be submitted prior to permit issuance. The Special Inspector must be approved by San Bernardino County prior to work being done. Submit Special Inspector's report for review prior to final
18. The installation and owner's manual shall be on file with the Building & Safety office and a copy shall be available to the inspector on the jobsite

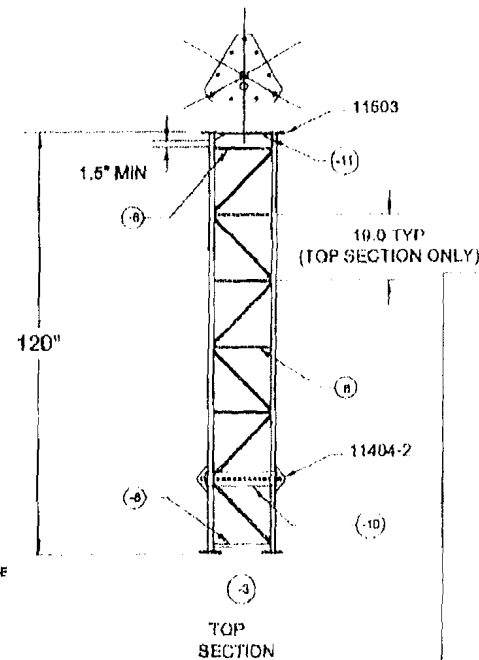
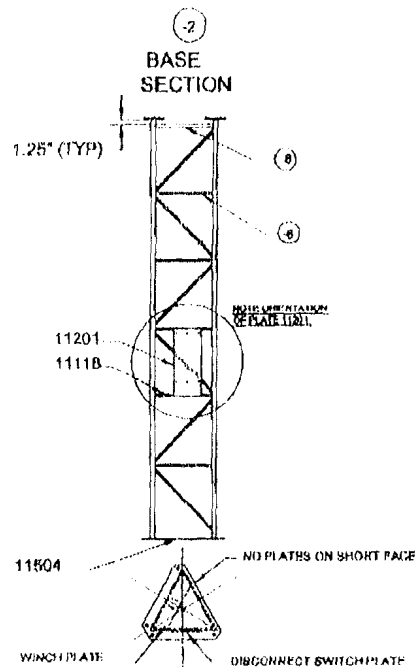
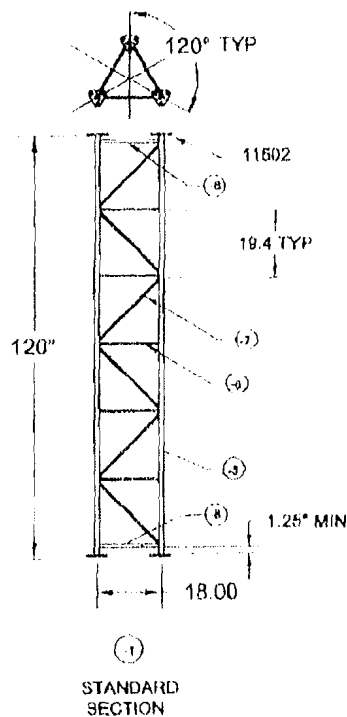


## Material Specifications

1. Tower Legs: ASTM A529 Grade 50  
Minimum yield stress: 50,000 psi
2. Tower Hangers: ASTM A572 Grade 50  
Minimum yield stress: 50,000 psi
3. Tower Braces: ASTM A529 Grade 50  
Minimum yield stress: 50,000 psi
4. Tower Bolts: ASTM A325 construction grade  
Minimum tensile stress: 120,000 psi  
Minimum yield stress: 92,000 psi
5. Anchor Rods: A. B. Chance 1" Oval-eye  
Minimum tensile strength: 36,000 lb

## BERGEY WINDPOWER

|                                           |                                                  |
|-------------------------------------------|--------------------------------------------------|
| DRAWN<br>A. L. W.<br>09/19/2010<br>010000 | DATE<br>SUMMARY SHEET<br>10 kW ON GL18-140 TOWER |
| APPROVED<br>DATE<br>09/19/2010            | SCALE<br>1400-XL-GL18-140                        |



NOTES:  
1. MATERIAL - STEEL, A628-360 OR AS NOTED.

| NO | REQD | QTY | LEVEL (FT) | TOWER HEIGHT (FT) |
|----|------|-----|------------|-------------------|
| 1  | 1    | 12  | 40         | 140               |
| 1  | 1    | 10  | 30         | 130               |
| 1  | 1    | 8   | 20         | 120               |
| 1  | 1    | 6   | 10         | 110               |
| 1  | 1    | 4   | 0          | 100               |
| 1  | 1    | 2   | 0          | 90                |
| 1  | 1    | 1   | 0          | 80                |
| 1  | 1    | 1   | 0          | 70                |
| 1  | 1    | 1   | 0          | 60                |
| 1  | 1    | 1   | 0          | 50                |
| 1  | 1    | 1   | 0          | 40                |
| 1  | 1    | 1   | 0          | 30                |
| 1  | 1    | 1   | 0          | 20                |
| 1  | 1    | 1   | 0          | 10                |
| 1  | 1    | 1   | 0          | 0                 |

| NO | REQD | PART NO | DESCRIPTION      | REMARKS   |
|----|------|---------|------------------|-----------|
| 1  | 1    | 11504   | BASE PLATE       | 0.5" A36  |
| 1  | 1    | 11503   | TOP PLATE        | 0.75" A36 |
| 1  | 1    | 11502   | TRANSVERSE PLATE | 0.75" A36 |
| 1  | 1    | 11501   | GUY LUG          | 0.8" A36  |
| 1  | 1    | 11500   | SWITCH BOX DRKT  | 0.25" A36 |
| 1  | 1    | 11499   | WINCH DRACKET    | 0.25" A36 |
| 1  | 1    | 11498   | TOP DISCONNECT   | 0.25" A36 |
| 1  | 1    | 11497   | GUY STRAP        | 0.25" A36 |
| 1  | 1    | 11496   | GUY END          | 0.25" A36 |
| 1  | 1    | 11495   | DIAGONAL         | 0.25" A36 |
| 1  | 1    | 11494   | CHRT (INNER)     | 0.25" A36 |
| 1  | 1    | 11493   | SIDE RAIL (LEG)  | 0.25" A36 |

TOLERANCES  
UNLESS OTHERWISE  
SPECIFIED

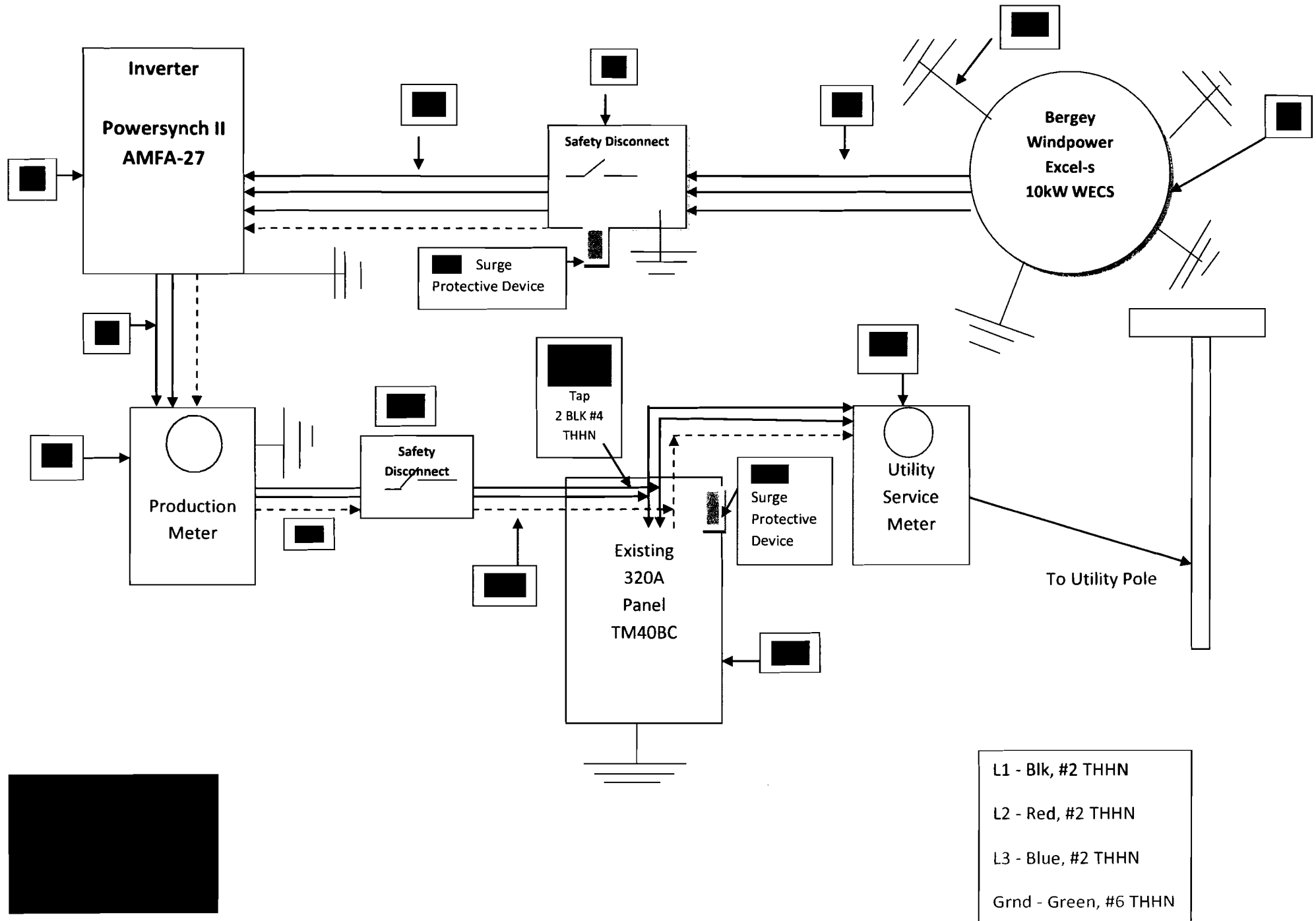
X = ± .060  
XX = ± .030  
XXX = ± .010

BERGEY WINDPOWER

DRAWN  
X (S. C.)  
02-20-2001  
CHECKED

APPROVED

SCALE  
NONE



**Hudson Valley Wind Energy, LLC #3183**

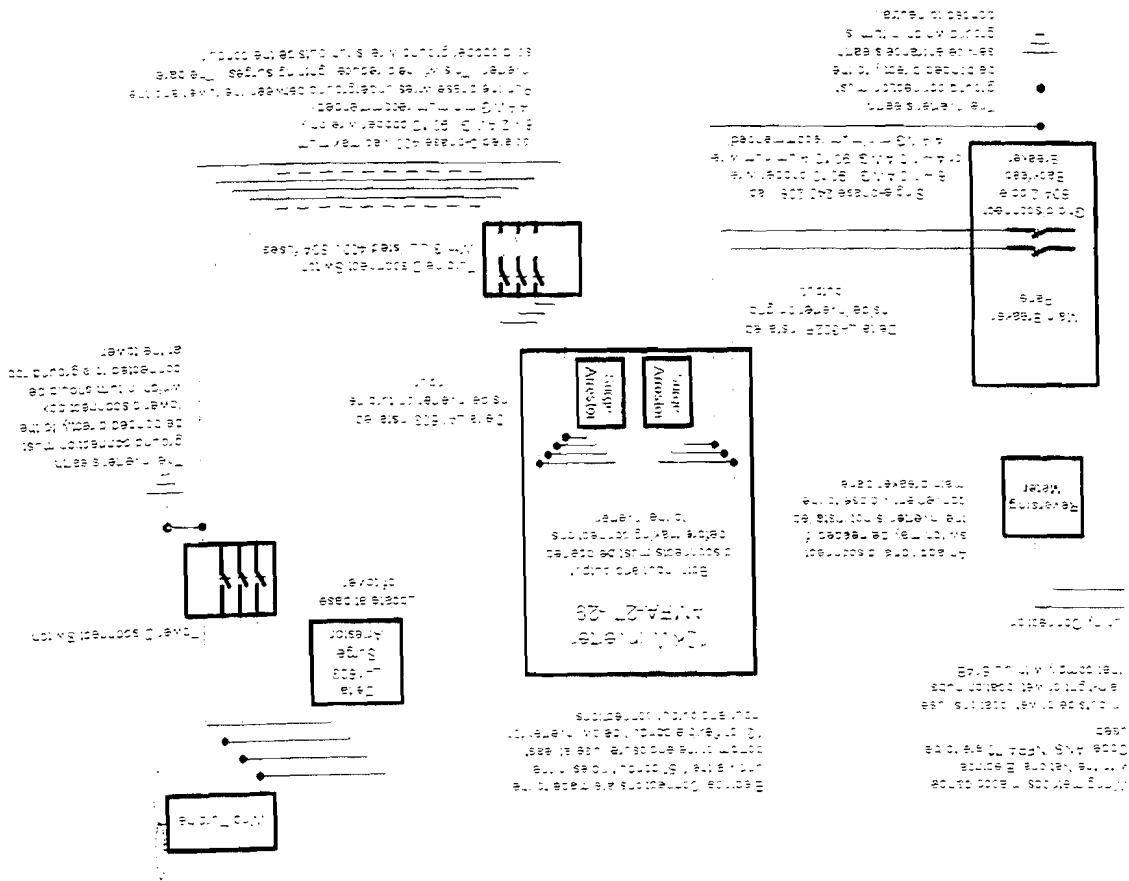
Mr. James Gleick

200 Long and Winding Rd, Garrison, NY 10524

Small Wind - 10kw 3 line wiring diagram page 2, foot notes

1. *Bergey Windpower 10kw Excel-S Turbine* installed on a 140' guyed lattice tower. All wire will be copper.
2. (4) 5/8" grounding rods (one per tower leg or guyed cable & one for tower) #8 insulated grounding wire to tower base
3. (3) #4 THHN MC armored jacketed cable, for tower wiring to tower mounted disconnect.
4. Wind Turbine Safety Disconnect, NEMA 3R 3 pole-600 volt 60A fused disconnect switch, Square D #H362-RB/Equiv, Fuses 45A-FRS-R-45. Labeled - "**Warning High Voltage Revolving Machinery**" approximately 5ft above grade.
- 4a. Surge Protective Device UL 1449 Voltage protective rating.
5. 2" RIDGID schedule 40 PVC conduit with (3) #2 THHN with a #8 insulated ground wire total distance to customer panel is 311' plus 140' tower height with a 1% voltage drop per conductor and a 11% fill percentage.
6. Tier Electronics Inverter, Powersynch II model #AMFA-27 mounted in shed by Production meter
7. (2) #2 THHN MC armored jacketed cable (1) #8 THHN insulated ground wire to cumulative production meter.
8. Type AB1, form 2S, 200 CL, 240 V, 3W, 60 Hz. Production meter
9. (2) #6 THHN MC armored jacketed cable (1) #8 insulated ground wire to Disconnect Switch
10. Lockable NEMA 3R 240 Volt 60Amp fused "Wind Turbine Disconnect switch" Disconnect labeled: **HIGH VOLTAGE Wind Turbine Disconnect**
- 10a. Surge Protective Device UL 1449 Voltage protective rating.
11. (2) #6 THHN MC armored jacketed cable (1) #8 insulated ground wire
12. Supply Tap - L1 & L2 and ground taped with Polaris IPLDS (UL Listed) - Labeled **Caution this Equipment is supplied by more than one Power Source**
13. Existing 320A Square D model TM40BC/TM40200CU
14. 320A 120-240V single phase utility service - Labeled **"Danger this panel is supplied by more than one Source of Power"**

**Connection Example**  
 Surge arrestors are not required but are recommended for a minimum amount of lightning and surge protection. No lightning protection system provides complete protection. Lightning damage is not covered under your warranty.



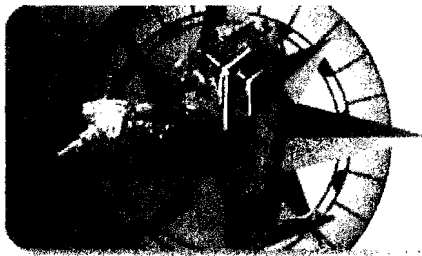
## Markings

- a. Enclosure, Type 1 - for INDOOR USE ONLY
- b. Each ground is indicated by the following marking:



## Operation

This equipment is a UL Type 1 certified lightning arrester and complies with the requirements of IEEE 1647 which is the standard for connecting distributed resources in electric power systems. The Normal Operation of the arrester is as follows: When a surge passes 120VAC is added to the arrester, the display will power up and a message stating that the unit is in testing is shown. A countdown timer set for 60 seconds starts after the arrester is ready to transfer power to the utility grid. The arrester will automatically transfer power to the utility when the voltage is in the range of 80VAC to 400VAC and are present at the time the unit



## Wind Professional Wind Resource Report

9/13/2012 9:06:09 AM

Landowner: James Gleick  
 Location: 300 Long and Winding Road Garrison, NY  
 Installer: DouglasPasseri

## Wind Resource

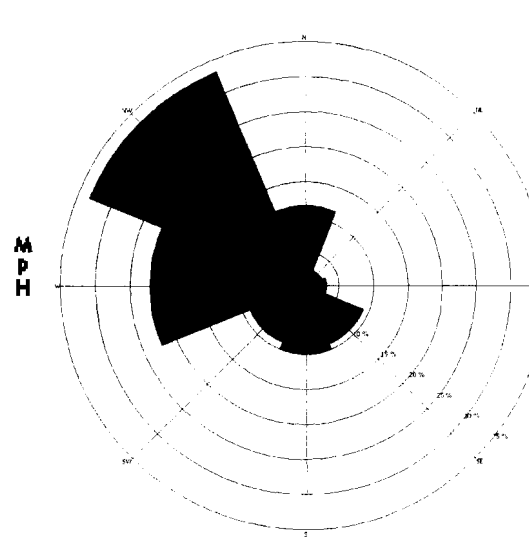
Average Annual Wind Speed at 140ft (42.67 m) = 11.44 mph (5.11 m/s)  
 Weibull k = 2.33, Weibull A = 5.77, Roughness = 0.9 m

## 100ft Wind Resource Map



Latitude = 41.34315°, Longitude = -73.94812°, Elevation = 720.80ft (220 m)

## Wind Rose



## System Description and Energy Production

Hub Height: 140 ft  
 Turbine: Bergey Excel (10 kW, 23 ft RD, Powersync II inverter, Neodymium alternator)  
 Gross Energy Production at 140ft: 10433 kWh - 15778 kWh

### Turbulence Induced Losses

| Sector | Roughness | % Energy | % TI | % Loss of Total |
|--------|-----------|----------|------|-----------------|
| N      | 1         | 11.55    | 26.6 | 3.1             |
| NE     | 0.4       | 2.46     | 21.4 | 0.5             |
| E      | 1         | 3.04     | 26.6 | 0.8             |
| SE     | 1         | 9.03     | 26.6 | 2.4             |
| S      | 1         | 9.84     | 26.6 | 2.6             |
| SW     | 1         | 8.73     | 26.6 | 2.3             |
| W      | 1         | 22.14    | 26.6 | 5.9             |
| NW     | 0.3       | 33.21    | 20.2 | 6.7             |
| Total  |           |          |      | 24.4            |

### Total System Losses

| Loss                      | Estimated |
|---------------------------|-----------|
| Turbulence Intensity Loss | 24.4%     |
| Availability Loss         | 2.0%      |
| Additional Loss           | 0.0%      |
| Total Loss(TL)            | 25.9%     |
| Maximum Loss*             | 31.1%     |
| Minimum Loss*             | 20.7%     |

\*Maximum and minimum range represents a 20% uncertainty in estimating the above losses

$$\text{Gross Energy} \times (1 - \text{Total Loss}) = \text{Net Energy}$$

$$10433 \text{ kWh} \times (1 - \text{Maximum Loss}) = \underline{7193} \text{ kWh} \rightarrow \text{Low Estimate}$$

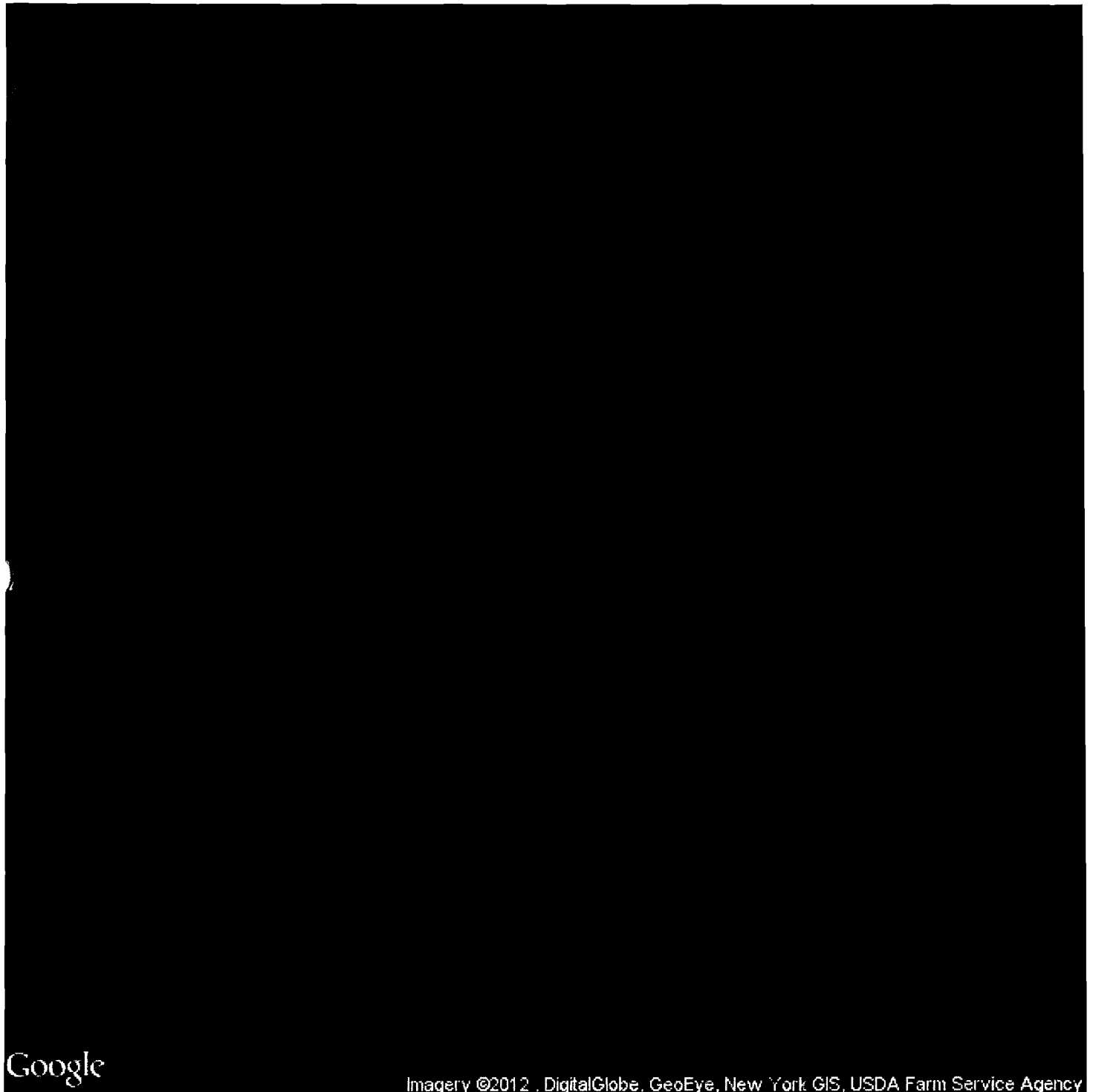
$$12967 \text{ kWh} \times (1 - \text{Total Loss}) = \underline{9612} \text{ kWh} \rightarrow \text{Medium Estimate}$$

$$15778 \text{ kWh} \times (1 - \text{Minimum Loss}) = \underline{12512} \text{ kWh} \rightarrow \text{High Estimate}$$



# Satellite Image with Wind Rose Overlay

*Each ring in the wind rose represents approximately 200ft on the Google map*



**IMPORTANT NOTICE AND DISCLAIMER:** The wind map and wind rose were created by AWS Truepower, LLC using the MesoMap® system and historical weather data. Annual energy estimates were calculated using the local wind resource, estimated loss factors, and a generic power curve. For more information on the program's methodology, please refer to the [Help](#) page. AWS Truepower and NYSERDA do not guarantee the above estimates and are not responsible for the contents of this report. For applications requiring greater accuracy, the wind resource estimates should be confirmed by measurement. For more information on NYSERDA wind incentives, please refer to [NYSERDA's webpage](#).

## Small Wind Certification Council Certified Small Wind Turbine

Manufacturer/Model

**Bergey Windpower Company**  
**Excel 10** (240 VAC, 1-phase, 60 Hz)



### **Rated Annual Energy**

Estimated annual energy production assuming an annual average wind speed of 5 m/s (11.2 mph), a Rayleigh wind speed distribution, sea-level air density and 100% availability. Actual production will vary depending on site conditions.

**13,800**  
kWh/year

### **Rated Sound Level**

The sound level that will not be exceeded 95% of the time, assuming an annual average wind speed of 5 m/s (11.2 mph), a Rayleigh wind speed distribution, sea-level air density, 100% availability and an observer location 60 m (~ 200 ft) from the rotor center.

**42.9**  
dB(A)

### **Rated Power**

The wind turbine power output at 11 m/s (24.6 mph) at standard sea-level conditions.

**8.9**  
kW

Certified to be in Conformance with:  
**AWEA Standard 9.1 – 2009**

For a summary report and SWCC Certificate visit:

[www.smallwindcertification.org](http://www.smallwindcertification.org)