

**ZONING BOARD OF APPEALS  
107 Glenclyffe, Garrison, NY 10524**

**December 11, 2017  
7:30 P. M.**

**Regular Monthly Meeting**

**Pledge of Allegiance**

**Approval of Minutes:**

November 13, 2017

**Public Hearing (continued):**

***Homeland Towers LLC,  
50 Vineyard Road***

***TM #38-3-24.1***

***Appeal #906***

(4,300 square foot fenced compound containing a 140 foot monopole, painted brown, and related equipment at base of the structure.)

**JOINT MEETING of the ZONING BOARD OF APPEALS  
& CONSERVATION BOARD  
November 13, 2017  
MINUTES**

The Zoning Board of Appeals for the Town of Philipstown held their regular monthly meeting on Monday, November 13, 2017, at the Philipstown Recreation Center, 107 Glenclyffe, Garrison, New York.

**PRESENT: ZONING**

Robert Dee	-	Chairman
Vincent Cestone	-	Member
Paula Clair	-	Member
Granite Frisenda	-	Member
Leonard Lim	-	Member
Ron Gainer	-	Engineer
Ralph Puglielle Jr.	-	Attorney

**CONSERVATION**

Mark Galezo	-	Chairman
M.J. Martin	-	Member
Robert Reperrto	-	Member
Jan Baker	-	Member
Andrew Galler	-	Member

**ABSENT:**

Lew Kingsley	-	Member
Eric Lind	-	Member

**\*\*PLEASE NOTE that these minutes were abstracted in summary from being present at the meeting and the television video. If anyone should seek further clarification, please review the video.**

**Chairman Robert Dee** opened the meeting at 7:30 P. M. with the Pledge of Allegiance.

**MINUTES**

**Chairman Robert Dee:** Okay. First item of business is approval of October 7 meeting minutes. Are there any changes? Corrections? You make a motion to approve?

**Granite Frisenda:** Yea.

**Paula Clair:** Second.

**Chairman Robert Dee:** All in favor?

**Granite Frisenda:** Aye.

**Paula Clair:** Aye.

**Chairman Robert Dee:** Aye. Okay. Takes care of that. Next item of business is a review of completion of Essex Green. Yes, take it up to the mic if you would please. I know there's a crowd here. Introduce yourself, if you would.

**Dan Richmond:** Good evening Chairman Dee, members of the Board, members of the Conservation Board, my name is Dan Richmond. I'm an attorney with the law firm Zarin & Steinmetz here on behalf of Essex Green.

**(Mr. Cestone & Mr. Lim arrived to the meeting at this time)**

**Chairman Robert Dee:** Well, we've been doing this a few months...

**Dan Richmond:** I'm prepared to do a presentation.

**Chairman Robert Dee:** No, I don't need a presentation. We've been doing this a few months and the last meeting we had, we were gonna have a public hearing but the building inspector had a issue he wanted to go over with and I guess, understanding you've read the building inspectors letter, and basically he doesn't have enough information to determine if it's a legal non-conforming so he wants this board to interpret wording from 1957 Zoning Board. Is that correct?

**Dan Richmond:** He asked us to apply for an interpretation of the code and in the alternative to apply for any variances if the board doesn't agree with our interpretation of the 1957 code.

**Chairman Robert Dee:** Okay.

**Dan Richmond:** So we're going for both the interpretation and the variances.

**Chairman Robert Dee:** Okay. So the application was complete to begin with so this is just an amendment. So at this point in time I'd like to make a vote, to have a motion to have, the application's complete so set it for a public hearing. This is Essex Green. I make the motion you second it?

**Granite Frisenda:** Yes.

**Chairman Robert Dee:** All in favor?

**Granite Frisenda:** Aye.

**Paula Clair:** Aye.

**Vincent Cestone:** Aye.

**Leonard Lim:** Aye.

**Chairman Robert Dee:** Aye. Okay. We'll set it up for January, a public hearing for January 8<sup>th</sup>.

**Dan Richmond:** Thank you very much.

**Chairman Robert Dee:** Okay. And that will be in Town Hall.

**Dan Richmond:** Great.

**Chairman Robert Dee:** Okay. Thank you.

**Dan Richmond:** Thank you very much Mr. Chair.

**Chairman Robert Dee:** Okay. I suggest you leave because it's gonna be a long meeting. Okay. I got a letter from a Mrs., let's see where was it, Marian Rockwell, Cold Spring Organic Farms. Pretty much she wants to know, is there a limit on cell towers in the area, who's keeping track of the cell towers, and she lives in the area and basically she has no complaints of coverage and neither do her neighbors. And a second letter we have is from the county. Now, Putnam County, right. It's called a referral, 239. What it is basically when we have a case like this with a cell tower or any big thing we send the information to the county. They review it and they give us a decision. There's three boxes that they could check; one is approved as submitted, second is modification and third is disapproved. They marked a modification and this is from Barbara Barosa, the planner from the County of Putnam. "Dear Mr. Dee, Chairman and Zoning Board of Appeals. I reviewed the Homeland Towers 50 Vineyard Road application that was referred to our office pursuant to New York general municipal law 239. Please take notice that before determination on the referral case can be issued, the following information is requested: Number 1. An 'Antenna Site FCC RF Compliance Assessment and Report' prepared by Pinnacle Telecom Group was submitted as part of the materials for the proposed project. The report does not assess or provide any documentation on the gaps in coverage to justify the need of the proposed tower at 50 Vineyard Road. Therefore, data verifying coverage gaps and cellular service should be provided.'" Her second point is "The applicant, in a second in a separate application made for a cell tower on Rockledge Road in Nelsonville, stated that the Verizon Wireless plans to construct a proposed cellular tower in the town of Philipstown, along with a proposed tower in the Village of Nelsonville to replace an existing tower at McKeel's Corners. No analysis was included as to the need for replacing the existing tower. An analysis is necessary for the McKeel's Corners cellular tower including whether the needed coverage will be attained if it is reconstructed to the height of 180 feet. The applicant should verify that no other area carriers or tall structures, including fire towers, exist for collocation to fill any gaps in coverage. It is opined that it would be preferable if the applicant could co-locate and/or modify the existing tower at McKeel's Corners to avoid the construction of one or both of the proposed new towers, thereby avoiding potential significant visual, historic and environmental impacts to the new sites. The Board may wish to encourage further vetting of alternative sites to the proposed location of 50 Vineyard Road." This is a public hearing on for the cell tower at 50 Vineyard Road. There's a lot of people here tonight, okay, so what we're gonna do is, this meeting's gonna end at 10:30. There's too many people here and there's not enough coverage; there's a lot to be covered and we'll never get done by 10:30 but we aren't gonna get done by 3 o'clock in morning either. So at this point I'd like to...we never really meet in December, the board, the Zoning Board but I think under these cases I'd like to ask for people to volunteer for meeting for December 11<sup>th</sup>. It would be the second Monday in December, just for this public hearing for this tower. Is, would anybody, is anybody available?

**Vincent Cestone:** I'm not going to be available.

**Chairman Robert Dee:** You're not gonna be available. Okay. Lenny?

**Leonard Lim:** I won't be available.

**Granite Frisenda:** I'll be available.

**Chairman Robert Dee:** Great. And how about the Conservation Board?

**Paula Clair:** I'll be available.

**Chairman Robert Dee:** Number 3. Conservation Board?

**MJ Martin:** I'm available.

**Mark Galezo:** Couldn't tell you.

**Chairman Robert Dee:** Will you have enough for a quorum, I guess is what I'm trying to say.

**Mark Galezo:** I'm not sure quite honestly.

**Chairman Robert Dee:** You're not sure. Well, that puts us in a spot. How many people do you need for your quorum on your Board? Four?

**MJ Martin:** I'm available.

**Chairman Robert Dee:** There's one, two...

**Andy Galler:** And I should be available.

**Chairman Robert Dee:** Three. We need one more.

**Robert Repetto:** I'm not sure. I'm supposed to go out of town that week.

**Mark Galezo:** As am I.

**Chairman Robert Dee:** Alright. I'm gonna set the meeting and because it's so close to the holidays and all like that so I can't fool around with it, you know, and there is a time limit on this thing here. We're looking at January so I'm gonna set the meeting for January 11<sup>th</sup>. I'm sorry not January, December, to December 11<sup>th</sup> but I think I'm gonna do it at Town Hall, okay, because there's just as many seats at Town Hall, I think, that there are here and I think it'd be a little easier for people like that. So it's going to be December 11<sup>th</sup> and it'll be at Town Hall. Okay. Balloon Test. The balloon test that was for this trial was conducted on November 1<sup>st</sup> from 8 a.m. to 10 a.m. at a height of 150 feet. At the site I met with Ron Gainer, Saratoga, a gentlemen from Saratoga Associates and Councilman Flaherty. After the balloon was raised I visited the following locations to observe the test: 60 Roundhill, 100 Rockwald Road, 43 Rockwald, lot 3 on Rockwald Road and 23 White Rock Lane. The balloon was visible from all locations. Mr. Sheehan at 43 Rockwald will, he's going to see two towers. They'll see this tower from his front door and his back deck he has a view of the McKeel's Corners tower. At this point in time I'd like to call Mrs. Eldridge. Is she here? Yes could you come up the microphone please?

I'm calling Mrs. Eldridge first because she took us to several different locations. We drove and she jogged because she, I guess you're practicing for a 5k or something with your grandson?

**Priscilla Eldridge:** With my grandson, a Thanksgiving 5k run.

**Chairman Robert Dee:** You were pretty quick, I gotta tell you. So that's why I put you up first. Alright I guess you could tell us a little bit about the balloon test, you were there, and what happened.

**Priscilla Eldridge:** Yes, we had requested, and Mr. Gainer had arranged, balloon tests from our deck, from the deck of the Sheehan's and from lot three. All three properties are contiguous to the tower. And so, since I was aware of where north, east, south, and west were based on my home it was much easier for me to point out where the balloon was from each of these spots. So after the test was completed and people had gone on to other other locations I went back to my home and shortly thereafter there was a knock on my door and at the door was a gentleman who introduced themselves as Manuel Vicente, the president of Homeland Towers, and he indicated that he wanted to come and see the balloon test for himself. So I took him out to my my deck and pointed to the balloon, which was still up at that point, and we had a very cordial discussion about the cell tower and mitigation and his beliefs regarding cell towers and during that discussion he indicated that he was working with Verizon engineers to lower the tower to a height of a hundred and forty feet. After much cordial discussion we parted, he gave me his business card to give to any of my neighbors who might have any questions and he departed and then shortly thereafter the balloon went down.

**Chairman Robert Dee:** Thank you very much. At this time I'd like to address the report that we received October 31st from Snyder & Snyder, Mr. Gaudio. Introduce yourself, you know probably everybody already knows you but, you know.

**Robert Gaudio:** Good evening. Thank You Mr. Chairman, members of the Conservation Board and members of the Zoning Board, Robert Gaudio with the law firm of Snyder and Snyder on behalf of the applicants. Mr. Chairman we have a number of items to go through that we previously submitted and some updates on both the balloon tests and a response to your consultants engineering report.

**Chairman Robert Dee:** Okay. I'd like to go over your letter point by point just starting with number one, on your letter here.

**Robert Gaudio:** Sure.

**Chairman Robert Dee:** Okay, well first of all you're proposing a 180 foot tower. I see you changed your application to make a error; there was an error on the name of the company. Instead of being, the change is from an LLP to an LLC, your application.

**Robert Gaudio:** I think it was a typo on the P to the C.

**Chairman Robert Dee:** Okay great. Now there's no other change. So I guess my question is are you still looking at 180 foot, is that what you're asking for?

**Robert Gaudio:** So, we'll get to that. We have a proposal in the visual analysis that we prepared to be able to compare with 140 foot tower and 180 foot tower.

**Chairman Robert Dee:** Okay. Let's start with number one here. Number one you talk about noise and you submitted a report from your project manager confirming that any noise from the facility will be in compliance with the Town code.

**Robert Gaudio:** Correct.

**Chairman Robert Dee:** Alright what I'm gonna do is, I'm gonna send that to the Building Inspector and Zoning Board Code Enforcement and have them give us a report at a later date.

**Robert Gaudio:** Sure, I'd just like to...

**Chairman Robert Dee:** For the December 11<sup>th</sup>.

**Robert Gaudio:** Sure, I'd just like to talk about some of the conclusions in there just to reiterate what we did. The code has two different noise levels, one during the daytime basically and one during the nighttime. We look specifically at the nighttime, which is the lower amount, which is 40 dB at the property line. Our property line is 159 feet away from where the generator would be, which is the only thing that would actually create any type of significant or potentially significant noise. We actually looked at the specification sheets and even at full load, meaning the generator were operating at full load, it would be between 28 and 33 dB at only 150 feet. So there's another, so it's well within the code even closer than the distance to the property line and in addition, that doesn't take into account any baffling from the woods or any other structures, as you know the proposed fence has black vinyl slats as recommended by the town engineer, which would create additional baffling. So, based on the calculations the facility will be well within the noise limits of the Town code including the night time limit. Just to give you an understanding of the generator it's a KW propane generator. It's for emergencies only. It will cycle approximately 45 minutes during daytime hours with a limit, I think it's 60 DB, but that would only be once a week for 45 minutes during daytime hours like any other typical household generator.

**Chairman Robert Dee:** Okay, I'm gonna have the Zoning Code officer look at it if that's okay with you.

**Robert Gaudio:** Sure.

**Chairman Robert Dee:** Number two, the PVC pipes I know there was an issue about the PVC pipes. You submitted a report again from your project manager which basically states that they're old pipes, they've been here, they really serve no function. It seems to be, that seems to be backed up by a report I got from Mr. Gainer. Is he here, Ron Gainer? He's not here, okay. Mr. Gainer, I think it was also the Town... I had it here, it was a report, hold on...Town Wetlands Inspector. I guess he had gone out there. You got the other report? Max Garfinkle, something like that. I guess he mentioned, they reviewed it and all, they looked at it and they seem to say it came from a, years ago that he had, Mr. Fadden had tried to put some kind of a septic system in there or sewer system and did some tests and so on and so forth and the pipes are, to them the pipes are not any function, they don't serve any function. And by your report it looks like, they're not even in your compound, I mean not even in your area, right? Okay, so they wouldn't really be a disturbance to you.

**Robert Gaudio:** Correct.

**Chairman Robert Dee:** Okay.

**Robert Gaudio:** Is there an actual report or a letter of report? If I could obtain a copy of that after the meeting I'd appreciate that.

**Max Garfinkle:** Ron was the final author on that so....

**Chairman Robert Dee:** I had it here. Let's see, hold on. Alright we'll get it to you. Basically what it says is that it backs up what you're saying and that's the pipes are...okay.

**Robert Gaudio:** And in that letter we also gave some facts and statistics about the project because there have been a lot of statements throughout that I think were somewhat misleading if not incorrect. The access drive, which we changed specifically at the request of the fire district, is 15 feet wide by approximately 300 feet.

**Chairman Robert Dee:** I'm sorry I have the report right in front of me.

**Robert Gaudio:** Sure.

**Chairman Robert Dee:** Okay, that's why I couldn't see it.

**Robert Gaudio:** Okay. That's where it usually is.

**Chairman Robert Dee:** Okay, right. Basically what you're saying is that it was, they went back and looked so, wetlands permit expired in 1997, before that he had done some work over there to see if he could put some kind of a sewer system in or septic system and it didn't work out so. Well we'll get a copy of this to you.

**Robert Gaudio:** Great, appreciate that. Also there's an 86 by 70 turnaround area for about 6,800 square feet; that's all gravel, both the access drive in that the 4,300 square foot compound. If you may recall that compound has been reduced in size from 5,600 when we started. It's still able to support the future colocation. There's very little impervious surface. There's been comments that the entire compound is a concrete slab, there's really just the tower foundation. There were four piers for the Verizon Wireless grading that sits up on four piers and there's a five foot by five foot propane tank slab. Other than that the entire compound, access drive, turnaround area is a gravel pervious surface.

**Chairman Robert Dee:** Okay. Number three, a Supplemental Alternative Site Analysis. "Submitted herewith is a Supplemental Alternative Site Analysis from Vincent Xavier that includes confirmation any tower at the Town landfill property or McKeel's Corners over 200 feet in height will require FAA lighting and marking. Moreover, the analysis describes the locations reviewed at the Town landfill property and the reasons why the landfill property is not less intrusive than the proposed site." I guess what you're trying to say is that the Town landfill and McKeel's Corners is of no use to you?

**Robert Gaudio:** So there were 2 things. One, we submitted two things, one, we submitted a report that I'll get to in a moment about those from an engineering standpoint. We also looked at them you

know from basically an intrusive standpoint. We thoroughly analyzed both; both are in a zone where the height limits 110 feet. The height limit of the OC zone that we're in is actually 195 feet. So anything over 110 feet will require height variance. The landfill, for example, the setback, the proposed location picked by the Town is approximately 50 feet from the side property line; that would not meet the side yard setback at the Town landfill. It would also actually be closer to residences and we indicated on maps and by distances that actually, the Town landfill would actually be closer to the closest residence than the proposed site. And I believe it's the same situation at McKeel's where there's a house literally right next to the tower; whether it meets the setbacks there or not I haven't looked at the maps but...

**Chairman Robert Dee:** McKeel's Corners has been there from 1999.

**Robert Gaudio:** Yea but extending it would exacerbate whatever type of setback. It would also exceed the 110 foot height limit.

**Chairman Robert Dee:** But we said we were willing to work with you on that though.

**Robert Gaudio:** Sure, no I understand that but we also did submit the engineering report which shows that neither one of them would provide the coverage even up to a height of 210 feet, which as Mr. Xavier's report shows, anything over 200 feet at either one of those locations would require FAA lighting or marking.

**Chairman Robert Dee:** Right we understand that. But one of the reasons, I happen to see here Mr. Xavier (inaudible) we're not agreeing to the landfill because there was a site A and site B. Because the first site they looked at then Mr. Gainer found another site. He says that they were there at the location and he says "the new location as identified site B even with the pathway and road being mowed, access to the proposed location would be difficult for vehicles since the pathway is under improved and overgrown with vegetation. My experience, the pathway would need to be significantly improved to allow for larger vehicles including the construction and emergency service vehicles to gain access." That's exactly the road you're building at Vineyard. I mean you, what, it's 280 feet.

**Robert Gaudio:** No. Absolutely not. No but this is totally different.

**Chairman Robert Dee:** Did you climb back there to where the site is? There's a lot of overgrown things and all that like...

**Robert Gaudio:** That's different. That's different than a steep grade and having to construct on that steep grade. Where we're proposing is relatively flat and it looks like there had, at some point been some type of access back in there, probably when the development was going. So, comparing those 2 access drives from a construction standpoint is really apples to oranges, but that's not the point.

**Chairman Robert Dee:** In your opinion.

**Robert Gaudio:** But at the end of the day...well in our experts opinion. But at the end of the day, the Lane Gate Town landfill does not work from an engineering standpoint and that was confirmed by two separate RF engineers that the town hired.

**Chairman Robert Dee:** No no. The Town, we'll get to that. The RF engineer the Town hired looked at your reports. Okay he was hired, just hired Thursday. Okay. And he turned his report in Saturday. The only things he's looked at is your reports, he hasn't done anything independently. We're gonna be asking him to doing things independently.

**Robert Gaudio:** Well, look you could ask him to do whatever you like.

**Chairman Robert Dee:** Thank you for that, appreciate it.

**Robert Gaudio:** The fact of the matter is we've had this on the record for a very long period of time and if, you know as long as it doesn't delay the process, we're very confident that the engineering shows, you know, based on physics, based on the topography, based on the service, that it's not gonna, his opinion won't change.

**Chairman Robert Dee:** They (Inaudible) RF guy, you can understand why we want an independent one to look at it.

**Robert Gaudio:** Well you've had a couple independent ones but that's understandable. I understand.

**Chairman Robert Dee:** Okay. Now where are we at. Let's see, supplement RF engineering. Okay

**Robert Gaudio:** We did just receive a report after you fired your last consultant. We did receive a report...

**Chairman Robert Dee:** We didn't fire him we just stopped his services. We terminated his services, he wasn't fired. He agreed and we agreed.

**Robert Gaudio:** Chairman, however you want to characterize it.

**Chairman Robert Dee:** It was an agreement. It was termination of an agreement.

**Robert Gaudio:** And what was the basis of that?

**Chairman Robert Dee:** The basis of that? He owned his own cell tower.

**Robert Gaudio:** Okay, so...

**Chairman Robert Dee:** And we felt that it wouldn't be, might not be completely independent. We want an independent person.

**Robert Gaudio:** Did he do something that you felt was not independent?

**Chairman Robert Dee:** I don't think it's any of your business.

**Robert Gaudio:** Well I think this is number one because you fired him and it's delaying our application.

**Chairman Robert Dee:** File a FOIL.

**Robert Gaudio:** Number 2...

**Chairman Robert Dee:** File a FOIL.

**Robert Gaudio:** Okay. that'd be fine we'll...

**Chairman Robert Dee:** Sure.

**Robert Gaudio:**... go file a FOIL, no problem. We'll file a FOIL.

**Chairman Robert Dee:** Do that.

**Robert Gaudio:** But number two, Mr. Chairman, we did have to pay his bill so I think it is our business.

**(Inaudible comments by audience member(s))**

**Robert Gaudio:** Well actually I was at the meeting where they voted to discontinue the services. So, that was on the record.

**(Inaudible comments by Councilwoman Montgomery)**

**Robert Gaudio:** For what and I'm sorry I don't know who you are...

**(Inaudible comments by Councilwoman Montgomery)**

**Robert Gaudio:** ...and this basis of discontinuance?

**Councilwoman Montgomery:** We're not here to discuss that (inaudible).

**Robert Gaudio:** So, it's a secret why the consultant was fired, okay.

**Councilwoman Montgomery:** It's a personnel issue not to be discussed here.

**Robert Gaudio:** So, what we did is, we did receive your new consultant's report on Saturday and what we did is we prepared a short response. Mr. Xavier if you could hand out a copy. This includes the information that your new consultant has asked for, particularly regarding the McKeel's site and...

**Chairman Robert Dee:** Alright but you gotta understand, you're handing us something now, we don't have time to look at it.

**Robert Gaudio:** I understand.

**Chairman Robert Dee:** That'll be in next months.

**Robert Gaudio:** We got something on Saturday so, we just want to make sure it's part of the record.

**Chairman Robert Dee:** Sure.

**Robert Gaudio:** So what this report basically looks at is different antenna down tilts, different antenna azimuths, different frequency levels. I'm sorry not different frequency levels different design criteria. It also looks at the issue of interference with respect to raising McKeel's up to various different heights that don't comply with the height requirement. And we just would like to make that part of the record.

**Chairman Robert Dee:** Okay. Where are we now. Property values. You submitted a property value report from Paul Alfieri of Lane Appraisals. Basically, I'll read it. Basically you're saying is that "Numerous state and federal courts have relied on paired sales analyses performed by Lane Appraisals, similar to the Lane Appraisal Report submitted to this Honorable Board, in reversing a zoning denial for a new tower. In T-Mobile vs. Town of Ramapo, the Southern District Court of New York found that the Planning Board's conclusion that the tower would lower property values was almost entirely conclusory in contrast to the comparative sales analysis submitted by T-Mobile that concluded the tower would not adversely affect property values. Similarly, in Sprint versus Cestone, a copy of which is submitted herewith, the Southern District Court held that "generalized concerns about a potential decrease in property values stemming from the construction of the proposed communications antenna, especially in light of the expert reports contained in its record before the Court, are not adequate to support the conclusion that a special use permit be denied." And there again, you cite in the Cestone case and you cite a cellular tower, Town of Oyster Bay. "In reversing the ZBA's denial of the cell tower site application, the Cestone court pointed to the carrier's compelling paired sales analysis, like the Lane Appraisal Report prepared for the instant case, to support a conclusion that the antennas would not reduce nearby property values." I looked at that appraisal report. He uses, there's 10 exhibits, correct?

**Robert Gaudio:** 12. There's 12.

**Chairman Robert Dee:** 12. 10 of them are in Westchester, Ramapo and Orange County. Correct?

**Robert Gaudio:** They're spread throughout four different counties.

**Chairman Robert Dee:** Is that correct?

**Robert Gaudio:** Including one within the Town of Philipstown off the top of my head.

**Chairman Robert Dee:** One, okay. So you have one within the Town of Philipstown. There's nine cell towers in the town of Philipstown and you have one report and your expert, your expert has one report. In that report that's located at Sky Lane, the 400-foot former radio antenna, and they put, since added cell tower equipment. The gentlemen says that the following sales are located on surrounding streets and very close to the tower. And he basically gives Sprout Brook Road, Steuben Road. I'm familiar with the area. The roads that are close to that tower are Aqueduct, Ridge, Morris. There's not one house listed here.

**Robert Gaudio:** There may have not been a sale at that time, in that timeframe.

**Chairman Robert Dee:** Let me finish please. There's not one house here that's listed, okay? So, I'm sure between 1915 I'm sorry between 2015 and 2017 that houses were sold on these streets. It's not included in here. These, in his expert report, are further away than any street near the Sky Lane tower. That's number one. Number two...

**Robert Gaudio:** Do you for a fact that houses were sold?

**Chairman Robert Dee:** Yes I do.

**Robert Gaudio:** You do. And what was the address on the street?

**Chairman Robert Dee:** He lives on the street, Aqueduct.

**Robert Gaudio:** And which, which houses?

**Chairman Robert Dee:** I'm gonna, you want me to give you a list of houses? That's his job, not my job.

**Robert Gaudio:** Well I mean you...

**Chairman Robert Dee:** There's the guy you hired.

**Robert Gaudio:** You're saying that you...

**Chairman Robert Dee:** I'm saying we know for a fact that a house has been sold. Why don't you have your man check it? He's the expert according to you. All right number two. You put "Area of Patterson, Putnam Lake". There's one house, one house that was sold. And then the rest are in, like I said, Westchester and like that. Like I said there's nine cell towers in Philipstown. It would have been nice if you could have had a couple of appraisals from the area we're talking about, you know, like McKeels Corners or any other of the 8 towers. It would have been nice.

**Vincent Cestone:** The Garrison Greenhouse.

**Chairman Robert Dee:** The Garrison Greenhouse, I mean there's a lot of other cell towers, would have been nice. So I read it and I looked at it. To me it's not only misleading, it's an insult to the Board's intelligence to put this before us.

**Robert Gaudio:** Well Mr. Chair I think that's unfair and may be misleading in and of itself. The appraisal report has to have a certain comparison, a paired sales analysis, between similarly situated houses depending on how he's doing it, whether it's with or without a view, before or after the tower, so you can't just cherry-pick a house because I know this house happens to be closer. It may not be the same square footages of the other houses. So if you look at all the 12 different reports from 2007 almost for 10 years until today, which is really a good cross-section throughout different markets, throughout different communities, throughout different timeframes, throughout different types of towers, distances to homes, sizes of homes, different values of homes. There are homes in Pound Ridge that are very expensive; there are homes in other areas that are much less expensive and in every single

indication, his professional opinion is that there was no diminution in property values from the tower. And that's the expert report, so you can't just say that he should have done this or he should have done that. He chose the methodology which is consistent with not only the two cases we submitted but I can tell you at least two others off the top of my head recently in the area where a very similar methodology was used and upheld by the courts. So, we'll certainly ask him for some follow-up information but I don't think the report was misleading in any way whatsoever. It was prepared by an MAI appraiser in accordance with the methodology that's been upheld numerous times.

**Chairman Robert Dee:** Well I disagree with that but that's fine.

**Andy Galler:** Mr. Dee could I make a comment?

**Chairman Robert Dee:** Sure anyone can make a comment.

**Andy Galler:** I've gone through a lot of real estate appraisal because just recently I bought a big piece of land with the Hudson Highlands Land Trust as a partner. There were probably, I'm gonna guess, about a hundred and fifty houses in this town that have significant views. And when I say significant views I don't mean of the countryside; I mean they're seeing the river or they're seeing 5 to 20 miles away. I know my house, I can see the skyscrapers in New York City. There needs to be an appraisal that looks at that; that should be one of your exhibits to show when you have houses that have very significant, whether it's river views or long mountain views, what happens when there's a cell tower there. Sometimes it might not make a difference because I can actually see the radio tower, I would say that does not affect me. If there was a cell tower about a half-mile away that was a hundred and eighty feet in the south, southwest direction, I think that would affect my property value. So I think that needs to be looked at. Thank you.

**Chairman Robert Dee:** Anybody else?

**Vincent Cestone:** Back when McKeel's Corners was put up, I was on the Zoning Board at that time and there was a line of real estate people brought in by the residents demonstrating multiple property values where they went down. So even though you stick by your report, I think it's a bunch of bullshit in all honesty.

**Robert Gaudioso:** Mr. Chairman, I would respectfully request on the record that Mr. Cestone recuse himself from this application. He's obviously prejudged it. I think the language that he's used is unfair to the applicant and we'd request that he recuse himself from this application.

**Vincent Cestone:** I refuse.

**Robert Gaudioso:** ...and leave the dais as well.

**Chairman Robert Dee:** He refuses, so.

**Robert Gaudioso:** Okay we'd ask him to leave the dais as well.

**Chairman Robert Dee:** I'm sorry?

**Robert Gaudio:** We'd ask him to leave the dais as well.

**Chairman Robert Dee:** Well he's not gonna do that so let's move along.

**Paula Clair:** I have something. On your visual resource assessment you've stated that the nearest residence is approximately 760 feet northeast of the tower site on Rockwald Road and I think that we established on your site plan or whatever that you submitted previously that the nearest house is 350 feet away.

**Robert Gaudio:** No that's not correct. That is not correct.

**Paula Clair:** Well that's what it said on your document.

**Robert Gaudio:** No that is not what it said in that document.

**Chairman Robert Dee:** Okay. We're gonna speak to that next.

**Paula Clair:** Yes it did.

**Robert Gaudio:** Well if you can show me, show me on the page, we'll take a look at it right now because that's not correct. The closest house is not three hundred and some-odd feet away, it's simply not.

**Chairman Robert Dee:** That's gonna be covered next in the visual resource assessment.

**Robert Gaudio:** That's fine.

**Chairman Robert Dee:** Okay, number 6. The visual resource assessment report states the nearest residential structure is approximately 700 feet, 760 feet northeast of tower site on Rockwald Road. Both 100 rock walled and 43 Rockwald are about the same distance from the proposed tower. The distances provided are approximate and are measured to roughly the center of the structure from an aerial photograph. Any discrepancies with measurements provided by neighbors are nominal and incidental to the assessment of project visibility. And when you say aerial how high is that? I mean is that from the planes at 10,000? Is that from the satellite in the sky, in space?

**Robert Gaudio:** It's a satellite image but it's scaled depending on how you scroll in or scroll out.

**Chairman Robert Dee:** Okay, now, yes I understand what you are saying. Your fence line for your compound is approximately a hundred fifty two feet from Mr. Eldridge's property and you're within the code because the code is 150 feet. So you have 24 inches to play with.

**Robert Gaudio:** Actually no, the code is 185 foot setback from the tower. I'm sorry the code is the height of the tower, which we'll talk about in a moment, to the closest residential district or Street line. So if the tower, as currently proposed is 180 feet, we actually have 185 feet to the closest property line in that direction. So just to the property line is 185 feet from the tower to the property line.

**Chairman Robert Dee:** The fence line though is 152 feet.

**Robert Gaudio:** From the fence line correct. But the code doesn't have, the code side yard setback is 50 feet and we're 100 feet plus that.

**Chairman Robert Dee:** It's 50 feet in that area?

**Robert Gaudio:** I believe it's 50 feet, correct. It's on the plans.

**Chairman Robert Dee:** I'll have to check on that. Okay. The August 27, 2017 Saratoga Associates submitted to the Zoning Board states that 60 Round Hill is the second nearest residential structure to the proposed tower. The distance from this residence to the proposed tower is approximately 825 feet. Given 43 Rockwald and 100 Rockwald are roughly the same distance from the tower, 60 Round Hill was the third closest residential structure. Basically what you're saying is that since there's been some confusion as to which resident was referred to in the original statement contained in the visual assessment report. So this is from a satellite, satellite images. Okay correct. They may be right, I don't know. I'm just trying to say, I'm not gonna argue. All I know is, sitting out on those decks it looks a lot shorter than 185 feet; it does. In appearance, if you're sitting on those decks it just looks a lot closer than 760 feet but that's just something people have to live with. Alright the application form. You changed the, you said, we went over that. You changed the name from, the companies entity name from LLP to LLC. Correct? And you still have 180 feet on that.

**Robert Gaudio:** Correct.

**Chairman Robert Dee:** Okay, now. Telecommunications Act Prohibition Standard. Certain resident comments, this is your report, certain resident comments to the Zoning Board mistakenly indicate that the Applicants are required to prove a significant gap in service and that the proposal is the least intrusive means of remedying such gap. While we believe that the administrative record does establish these facts, they are not required to be established under the Zoning Boards special permit review authority. Can you explain that to me? We don't have authority to look at that? Is that what you're saying?

**Robert Gaudio:** So it's a, it's the legal standard. So the legal standard is the Board has to look at what the criteria for the special permit, which in and of itself by law is a use permitted as of right provided we meet that criteria. So there's certain criteria in the code and in order for the Board to deny the application the Board would have to find substantial evidence in the written record and make a decision that wasn't arbitrary and capricious on those standards. There is no standard in your code that the Applicant prove a prohibition of service or prove that this is the least intrusive means. What the case law says, and what the Telecommunications Act of 1996 says, is that if the Board did deny the application and if the court did uphold the fact that there was substantial evidence to deny the application, the court would then look at whether there was a substantial gap in service and whether this was the least intrusive means. And the court would do that on a de novo review, meaning the court would go outside the record here. The court would have a mini trial or take depositions or require expert testimony and look at that standard to determine whether, if that was the case then the Town's denial will be considered a prohibition and the court would have the authority to issue the permit from the bench. So we do not have, as part of this application, a duty or responsibility or criteria to prove a significant gap in service or that this is the least intrusive means.

**Chairman Robert Dee:** You don't have to prove there's a gap, that's what you're saying.

**Robert Gaudio:** Under the Willoth decision and under the Federal Telecommunications Prohibition Standard as part of this application we do not.

**Chairman Robert Dee:** I have to leave that to the attorneys to look at that because I guess you put enough law cases in here, I'm not a lawyer so let them look at it. Okay let me ask you a question.

**Robert Repetto:** If there was something written in the Town code that required, that met that criteria, would then it still be exempt because of this act?

**Robert Gaudio:** Well then there would be two issues; then there would be, we would have to show it under the Town code as part of the special permit criteria, which there is not, and then we would still have the prohibition argument under federal law. But that criteria is not in the Town code.

**Robert Repetto:** Right.

**Chairman Robert Dee:** We talked a lot about this gap and all that. Does the FCC set the standards for the gap? The gap in service. Who sets those standards? I mean what I'm trying to say is like, what is the standard? Is it ten calls is okay out of a hundred dropped calls? Out of 100? Or five out of a hundred? I mean is there any, does the FCC have standards for that?

**Robert Gaudio:** No there's not a specific standard by FCC rule of what the courts has interpreted the prohibition standard is judged by. The prohibition standard in the Federal Telecommunications Act of 1996 says that a municipality may not prohibit or have the effect of prohibiting personal wireless services. What, the courts have then interpreted that and they've looked at it and there's various court cases that have looked at it on a case-by-case factual basis and decided in those particular cases whether there was a significant gap and whether the least intrusive means was proposed. And the court will do its own de novo review on that.

**Paula Clair:** I'd like you to comment on the county's letter which does address the fact that you haven't established there's a significant gap. They apparently feel that they have the authority to delay the project for that reason.

**Robert Gaudio:** Sure. I'd be happy to respond to that. Number one, the county letter is entirely confused and misplaced. The county letter cites to the Pinnacle Report for not having provided any data for the need for the facility. The Pinnacle Report has nothing to do with that. The Pinnacle Report has to do with the radio frequency exposure.

**Paula Clair:** They probably meant the PierCon Report.

**Robert Gaudio:** Okay so I don't think so because if they had read the PierCon Report everything they asked for is in the PierCon Report, even to the point that your own Town engineer acknowledged the fact that the county must have either overlooked that report or not had it and I have an email that I believe the Board or at least the Chairman was copied on where the Town engineer Mr. Gainerr said that it appears to him that also they did not have the right report in front of them and that he provided a copy of that report to them after the fact that they wrote that letter.

**Chairman Robert Dee:** Okay. I'll speak to him on that. Alright let me finish this, this your telecommunications act here. He said, "Rather, if the Zoning Board were to deny the application and a federal court action was instituted, the Applicants could bring a prohibition of service claim to challenge the denial and upon establishing such criteria the permits would likely be ordered. The burden of proof is commonly mistaken by opposing residents such as in recent cases of..." and you put more law cases in there. I'm glad you use the word likely, you know in that, because nobody knows how a case, you can't determine how a case is going to be, the judge is gonna rule.

**Robert Gaudio:** No, I can only tell you likely because the vast majority of them...

**Chairman Robert Dee:** Right. So you don't know how it could come out.

**Robert Gaudio:** Well I haven't brought a case yet so.

**Chairman Robert Dee:** Thank you. Now the application was initially filed on May 23<sup>rd</sup>. The Town issued comments by the way of an engineer's technical memorandum. You're talking about the shot clock. Mr. Rodd is not here tonight unfortunately and you said it's going to expire January 5th. Please let me know if the Town disagrees with that. Well I disagree without certain but I'll let him explain it at our next meeting. Okay. He'll go through it legally, the legal points, why we might be disagreeing with that time clock. Okay? And finally in your end you put here "We look forward to the joint public hearing with the Conversation Board at your October 15<sup>th</sup> Zoning Board meeting." Want to change that because this is, obviously, because if we go to court I would hate for the judges to say you made mistake here.

**Robert Gaudio:** And we have one other thing Mr. Chairman. We have the results from the balloon test which I'd like to hand out and just to clarify the...

**Chairman Robert Dee:** My question, before you give me the results for the 150 foot balloon test. My question was at the hundred fifty foot, why would, you volunteered to do it at 150 feet because we didn't, the board didn't ask you to do it at 150 feet, that was volunteered by Homeland Towers. And what was the reason for you to volunteer to do it at that height, I guess is my question.

**Robert Gaudio:** Well actually we had come to an agreement that you wanted another balloon test.

**Chairman Robert Dee:** We did, we agreed on another balloon test.

**Robert Gaudio:** And we specifically discussed going at the height that you're long parted original RF consultant had said would be a reasonable height to provide the necessary service which was the hundred and fifty feet. Now, just one point of clarification. The balloon test was not 150 feet. The Town engineer asked that we add additional length to the line so the top of the balloon between the six feet of additional line and the four foot of the balloon, the top of the balloon was actually at a hundred and sixty and we have that documented in the report that, Mr. Xavier I'd like to ask your permission to hand out. So what we have in this report, we have the photographs from that and what we did is we show the balloon at 160 feet and based on the various factors, including Mr. Graiff's original report, Homeland Towers and Verizon Wireless are willing to agree, as mitigation, to lower the height of the proposed facility to 140 feet. And what we've done in this report is we've shown, we have more copies coming,

what we've shown is not only the height of the balloon at 160 feet, we showed that the height of the balloon, I'm sorry the height of the tower, which it would be at 140 feet. There's one location, and we did this on the photographs and on the renderings, there's one location where you could still see it through the trees and what we've offered, because of the ability to see it through the trees, is a brown-colored monopole. In the past we've shown you as the galvanized gray monopole. We think with the lower height, below the ridge line, where all the photographs now are generally below the ridge line, and the few locations where you could see it through the trees, that the brown would be the better color for the monopole. And that's what this report details, is the lowering of the height from 180 feet to 140 feet to be able to provide the service that Mr. Graiff had indicated and also to be able to minimize the visibility from the surrounding areas, including the residences that were mentioned before.

**Chairman Robert Dee:** So is that what you're volunteering now, to put it at 140 feet?

**Robert Gaudio:** Correct.

**Chairman Robert Dee:** All right. So you'll change the application for next month's meeting?

**Robert Gaudio:** We can certainly change the form. I mean that's...

**Chairman Robert Dee:** Please. Well I need the form changed, you know, if you're gonna go to 140. You're agreeing now to do it at 140 feet.

**Robert Gaudio:** Yes.

**Chairman Robert Dee:** Thank you. Anything else?

**Robert Gaudio:** No that'll be all for now, thank you.

**Chairman Robert Dee:** Okay. Thank you. All right I'd just like to call, let's see do we have your names here? How about Michael Vullock? I guess he's an attorney. Introduce yourself please.

**Mike Valente:** Good evening. My name is Mike Valente from the law firm of Campanelli & Associates, P.C., 1757 Merrick Avenue, Suite 204, Merrick, New York. I represent a few of the homeowners around here. I was just coming to the meeting today. I understand there's been a bit of a moving target as far as the application and as we heard, just now, the proposed application is changing again to, they're gonna reduce it to 140. My law firm, we've been retained. We want to oppose this application. We want to make sure we oppose everything correctly as the new application hasn't been submitted yet. I was wondering, I understand the next hearing is gonna be December 11<sup>th</sup>. I was wondering how far ahead of time would the board want opposition to the proposed installation.

**Chairman Robert Dee:** Ten days before, at least, at a minimum and it goes to the secretary in the Town Hall, our secretary.

**Mike Valente:** Okay.

**Chairman Robert Dee:** She's in back. This way because what they do is mail it out to us and this gives us, the Board, time to review it.

**Mike Valente:** Thank you and also I wanted to address, I understand there had been threats made to the board of potential litigation if the...

**Chairman Robert Dee:** Threats, well I guess you could look at it like that. Let me tell you something, there's a lot of things the board has to consider, being sued is not one of them.

**Mike Valente:** Okay that's, well I wanted to address that and I'm glad the Board is of that mindset. It's my understanding, under the TCA the only thing that a lawsuit from Homeland Towers would gain from the board is permit approval; no damages, nothing of that sort. Other than that I would like to refrain from going into it any more but I will put in my opposition 10 days before the next hearing.

**Chairman Robert Dee:** At least 10 days.

**Mike Valente:** Thank you.

**Chairman Robert Dee:** Okay thank you. And if you get it sooner, you know, but 10 days before would be, you know, efficient,

**Mike Valente:** Thank you.

**Chairman Robert Dee:** Thank you very much. Okay let's see who else we got here. Oh did Mr. Gainer. Mr. Menkes is there? Menkes, I'm sorry.

**Ron Gainer:** With me tonight is the RF engineer that the town recently retained to do an analysis of the alternate tower site RF study. Mr. Menkes is with me to present a summary of his findings I've transmitted to the board over the weekend.

**Chairman Robert Dee:** Okay.

**Ron Gainer:** ...his report upon its receipt...

**Chairman Robert De:** I got it.

**Ron Gainer:** ...so he could present it personally tonight.

**Chairman Robert Dee:** All right yeah there's a couple questions I'd like to ask him. Is he there? Mr. Menkes? Want to step up please and give your name please.

**Hank Menkes:** My name is Hank Menkes. M-E-N-K-E-S.

**Chairman Robert Dee:** Okay Mr. Menkes you're an RF engineer and you're located in New Jersey?

**Hank Menkes:** Yes, that's correct.

**Chairman Robert Dee:** Mr. Gainer spoke to you Thursday I guess, on the phone, was it Thursday? Retained Wednesday or Thursday and he gave you the information and pretty much, you know.

**Hank Menkes:** Yes.

**Chairman Robert Dee:** And then you've turned it around to and you got the report to us on Saturday. That was a very quick turn around so thank you for that. In looking at your introduction here, it looked like all the things you reviewed, like our ordinance, Philipstown Zoning Ordinance, the RF report by PierCon, report by the last gentleman, Graiff, and report by PierCon Solutions again in October. And what I'm gathering here is you pretty much think that Vineyard Road is a better location than the landfill.

**Hank Menkes:** Yes, yes.

**Chairman Robert Dee:** Right, okay, but in your executive summary I see you say "it is unclear from the data presented, with a raise in the antenna, elevation at the McKeel's Corners site would totally satisfy Verizon's cover objective. Okay, now I know you've only had this for a couple of days, I appreciate that, but what the Board is looking for is an independent person. I mean, you know, you can be, you know, I understand there are forms but were looking for somebody independent to look at McKeel's Corners, let's ,for argument's sake okay, and try and see what height that would have to be in order to eliminate the site at Vineyard. Are you prepared to do it? Could you do that for us?

**Hank Menkes:** Yes. I have looked at the McKeel's Corner site and...

**Chairman Robert Dee:** You've been there?

**Hank Menkes:** No I have not unfortunately, excuse me, unfortunately I had my granddaughter's birthday party over the weekend so I couldn't come up here to look at the site and it was rather difficult to see it in the darkness tonight.

**Chairman Robert Dee:** Okay no problem. Well like I said, our next meeting is going to be December 11<sup>th</sup> okay. So what I'd like you to do in that month, if possible, is to review all this independently. Go look at the town landfill, go look at the Vineyard, go look at McKeel's Corners and do your own study. What the board is trying to see, if the McKeel's Corners can be raised to a height that would negate another cell tower in the Town. Okay, it's a small town, we've got a lot of cell towers and that's just something we're looking at. Also I know that you talk about a gap along Route 9 there, by 301.

**Hank Menkes:** North of 301 on route 9.

**Chairman Robert Dee:** Route 9 and 301 right. I guess if it's possible to see if they will use...

**Hank Menkes:** Mr. Dee I want to clarify that. I want to make sure which cell site, which proposed cell site we're talking about when we're talking about the gap. So I don't want to generally say that there's a gap unless you specify which proposed cell site we're discussing.

**Chairman Robert Dee:** Well where are they saying the gap is?

**Hank Menkes:** Well Verizon and Homeland Towers is saying that there's a gap on route 9 and there are gaps elsewhere that they're claiming but I just want to make sure that you're not making reference to the Lane Gate property proposed cell sites.

**Chairman Robert Dee:** No, my reference is to all three. I'd like you to review all three independently.

**Hank Menkes:** Yes.

**Chairman Robert Dee:** From their reports.

**Hank Menkes:** Yes.

**Chairman Robert Dee:** Okay.

**Hank Menkes:** Yes but I'd like to comment on the McKeel's Corners cell site because to be thorough and do due diligence with regard to the viability of that cell site there's really some additional information from Homeland Towers and specifically Verizon or PierCon that is necessary in order to come to a conclusion as to the viability of that site. So I don't want you to believe that I can go off on my own and come to a conclusion without getting additional data from them.

**Chairman Robert Dee:** Well you could get that for whatever, you know additional information you would need you, Mr. Gainer would be able to help you to get that through...

**Hank Menkes:** It may be more expedient to work through the applicants attorney to request the information. That's all I'm asking.

**Robert Gaudio:** We have no objection.

**Chairman Robert Dee:** No objection to that. Okay.

**Hank Menkes:** I appreciate that thank you.

**Chairman Robert Dee:** But I'm looking for an independent report.

**Hank Menkes:** Yes.

**Chairman Robert Dee:** I understand you gotta work with him but you know I don't want him to give you papers and you tell me it's okay.

**Hank Menkes:** No. That's not the way we do it.

**Chairman Robert Dee:** Okay. Thank you very much. Go ahead.

**Andy Galler:** Pardon my naiveté but in the PierCon reports they talk about in building suburban, suburban coverage. What does that mean?

**Hank Menkes:** Verizon establishes two levels of receive, of a signal that they seek. One is typically in vehicle and the other one is typically in building. In building signal is usually asked to be a higher signal level, meaning it's a less negative number. A in-vehicle signal would be a more negative number which would represent a lower receive signal strength. Okay. Now in this area Verizon has chosen to use minus 105 DBM for the reference signal receive power for the in vehicle value and they've chosen to use minus 95 DBM for the in building value. Now, I have to tell you, I've seen lots of Verizon applications both in New York and New Jersey and in other locations in the Northeast and these are low numbers meaning that they are conservative from the standpoint that it doesn't give Verizon the advantage. I have seen numbers much higher which would result in larger gaps on the plots. These numbers are lower and they would tend to minimize the gap on the plots, and to the credit of the applicant, I think they've chosen the values that are appropriate for this area.

**Chairman Robert Dee:** Before, Homeland Towers says they're gonna have to abandon the site of McKeel's Corners when they put this tower up because the signal would be too close and it would interfere with each other. So instead of abandoning that we're more, we're looking to improve it, ways to improve it. In fact even when this was passed in 1999 the Board put it, 97 ok, the Board put in there that, in their wisdom actually, put in there that the footprint had to be large enough that for future extension of the pole. So I thought that everybody read that; I thought that was a pretty good thing. That was going way back but I guess what I'm looking for is a complete independent report from you and well, you know, we're stressing mostly on the McKeel's Corners tower, if that's possible to raise, whatever to 180-190, whatever it is.

**Hank Menkes:** Yes, if I can get the additional data that's requested in my report I think that there will be no problem providing a definitive answer with regard to the viability of McKeel's Corners.

**Chairman Robert Dee:** Okay if you could have this by, you know, December that would be great.

**Hank Menkes:** Yes.

**Chairman Robert Dee:** Thank you very much. Anybody have any questions?

**Hank Menkes:** We provide a quick turnaround.

**Chairman Robert Dee:** Okay thank you.

**Ron Gainer:** If we could stay with that for just one minute, Mr. Chairman. The report that you do have discusses both of those sites, both Lane Gate and McKeel's, it addresses the issue of potential higher tower heights and it looks at McKeel's from a reference standpoint of a few different elevations. The current elevation of the tower I think is a hundred and ten feet in height. The antenna array that's on the tower is at approximately a hundred feet. In the study that was done by...Verizon has proposed two differing tower heights and I believe they're 190 and 210. If Mr. Menkes could at least present what his findings are with respect to their data that they have submitted to date, it might be helpful to the Board to then understand what further information is appropriate to determine if McKeel's can still be made viable. So if it's...

**Chairman Robert Dee:** Yeah I understand what you're saying but I, you know, I guess the question is that the information he's looked at now has just been supplied by Homeland Towers and Verizon.

**Ron Gainer:** And that's where the data typically comes from but it's the analysis that's performed by your engineer that determines the validity of it or the understanding as to what further data is necessary from the applicant to ascertain those heights.

**Chairman Robert Dee:** Right I read in his application he doesn't have enough information to make that determination.

**Ron Gainer:** That's right for a specific reason. If he could just discuss that in more length for you tonight that might be helpful for the Board.

**Chairman Robert Dee:** You could tell me what information you need. Sure.

**Ron Gainer:** Okay, thank you.

**Hank Menkes:** I don't know how much time you're going to allow me so if I go on too long...

**Chairman Robert Dee:** I'll stop you.

**Hank Menkes:** Please say that that's enough. One of the issues with looking at whether or not there's coverage or there isn't coverage is understanding what these plots actually represent. Now, to the credit of the applicant, they have been prolific in producing plots. I've never personally seen an application with as many plots as this application has but some of them are not applicable to making the decision. In the case of the McKeel's Corners site there are some plots specifically showing the propagation at 700 megahertz and -95 DBM reference signal receive power. And on the face, if you look at those plots, they show a lack of coverage on a section of route 9, north of route 301. The problem is, however with those plots, is you have to understand how they're produced and how they're generated. They're generated by a computer that uses software that is supplied information by the RF engineer, some of which comes from Verizon themselves with regard to the surrounding cell sites, and other information then comes from the RF engineer who's operating that software. Now the computer only can predict as well as, as good as the information that's put into it. The problem, however, is that the accuracy of the result is a function of how many samples you take, how many calculations you do and how long the computer has to operate. There's no information that's been provided in this application as to what software the applicant is using. I'm sure it's a professional package but there's no details, there's no information with regard to the geographic bin size that's being analyzed and what that refers to is the size of the area that the computer is looking to calculate a signal value. Now typically in the industry you can change that geographic bin size; you can make it bigger, you can make it smaller. If you make it smaller you get a lot more resolution in the plot. If you make it bigger the computer has to crank for a shorter period of time; you get a quicker answer but you don't get a lot of resolution. The other thing that's missing in the data that I'd like to see is a little more resolution with regard to the way they bend the signal values. If you look at the plots the way they're produced they're essentially in two colors. One is representing signals that are greater than minus 105 DB M at 2100 megahertz or at 700 megahertz, which would be the in-vehicle signal level, and the other is at greater than or equal to minus 95 DBM. The problem is there's no resolution as to what's between minus 95 and minus 105. That's a 10 DB difference; that's an order of magnitude difference in the received signal level. What would be nice to know is, is that signal level minus 96, minus 97, or is it minus 104. The reason for that is that first of all, if it's minus 96 or minus 97 that's probably within the calculating accuracy of the predictive

program. And a difference of 1 or 2 DB is not going to have a significant difference on the overall network performance of Verizon's system. And the reason for that is that these numbers that show up, the minus 95 and the minus 105 are actually mean values. What that means is that a radio signal is not a constant value, it varies all over the place. And what the computer then does is, it calculates a bunch of samples in a geographic bin and it takes an average; it takes a mean value and typically there's a plus or minus 4 DB variation. So the signal could really be minus 91 or it could be minus 95 and what Verizon is saying is that somewhere in between there the mean is 95 but anywhere from 91 to 99 is an acceptable value for in building coverage. What I'd like to see is a little more resolution on those plots that gives us an idea of what that signal really is, not just less than minus 95 or greater than minus 105.

**Chairman Robert Dee:** Okay. That's why I say you can work through Ron and Mr. Gaudio and Homeland.

**Hank Menkes:** Let me just add one more thing.

**Chairman Robert Dee:** Sure.

**Hank Menkes:** In the PierCon report they also make reference to when they did the plots for the McKeel's Corners cell site they adjusted the azimuth of the antennas. Now the azimuth refers to the angle relative to the compass that the antennas are pointing. They make no indication as to what they did in terms of what those values are. I'd like to know where those antennas are pointing because it may be possible to move them a little bit and get better coverage on that northern portion of route 9. I'm not suggesting that when all of this is done that the McKeel's Corners site is going to be acceptable. I'm simply saying that with the information available right now from the data provided you cannot come to a conclusion.

**Chairman Robert Dee:** Okay. And like I said to you we're looking for you to do an independent and get the information from them that you need. I'm sure they'll provide, they've been providing everything so far and height-wise 180-190, whatever, 200 whatever, you know, whatever would need to...

**Hank Menkes:** I can tell you now Mr. Dee that I looked at the plots that have been provided and going above 190 feet, which is 90 feet above what it's currently, where the antennas are currently located, is not going to give you much of an improvement. So, it's either 190 or it's nothing.

**Chairman Robert Dee:** Okay. Thank you very much.

**Paula Clair:** I have a question for Verizon or Homeland Towers, whichever. In looking at the exhibits that you just provided us in this most recent package, it shows that reliable in vehicle coverage, and I'm looking at exhibit C, the McKeel's Corners C4. Well, in looking at C4 the reliable in vehicle coverage is represented by a yellow. Then, but I see in other maps reliable in vehicle coverage or reliable in building coverages covered by green. Now this map has mostly yellow but with some green, what does that mean?

**(Inaudible)**

**Paula Clair:** October 31<sup>st</sup>, yeah, the one that was included with the October 31<sup>st</sup> package.

**Robert Gaudio:** Which exhibit were you referring to?

**Paula Clair:** Okay well lets start at C4 because that's, you know that's the, it represented reliable in vehicle coverage at 2100 MHz is represented in yellow. So there's a lot of yellow here and then there's some green, but there's no legend of what green means. It doesn't say on the legend.

**Robert Gaudio:** Green is just the background. Greens the area that would not have the reliable in vehicle coverage at 2100.

**Paula Clair:** Okay because you have, on other, you have, oh okay, you have dark green as reliable in building coverage on exhibit 3C. So you're saying that, this report is saying that you're only gonna have reliable in building coverage, on C3, on a small part of this area?

**Robert Gaudio:** The 2100 megahertz frequency bands.

**Paula Clair:** And what frequency do you normally use?

**Robert Gaudio:** So we use both 2100 and 700.

**Paula Clair:** Okay.

**Robert Gaudio:** The 2100 doesn't cover as far as the 700.

**Paula Clair:** Yeah the 700, there's quite a...

**Robert Gaudio:** And the 700 covers better.

**Paula Clair:** Yeah.

**Robert Gaudio:** So what we're looking at specifically when we raised McKeel's was even best-case scenario which is the 700 and even at the 700 at in building it doesn't cover that area up on route 9.

**Paula Clair:** Well, okay but it covers most of the area but there's, okay I can see in the area on route 9. However you know that confuses me because I drive up route 9, you know north of 301 and I don't remember ever losing coverage.

**Robert Gaudio:** Well this is also related to in building as well.

**Paula Clair:** Well this is, okay. All right, so, okay so let me just look at your in vehicle. Oh your in vehicle you basically have coverage.

**Robert Gaudio:** And again remember this is at the speculative height of 190 or 210 feet.

**Paula Clair:** Right.

**Robert Gaudio:** And this is only from an RF standpoint. And there's also the issue on route 301.

**Paula Clair:** Okay so our RF expert is gonna look into this further. Okay. That's what I wanted to know.

**Robert Gaudio:** Thank You.

**Chairman Robert Dee:** Mr. Menkes could you step up? Mr. Menkes please. Mr. Cestone has a request.

**Vincent Cestone:** I was wondering if you can do like a "what-if" analysis for us. What, in essence what I'm asking is, can you look at the current resources that are there and go by the, that Vineyard was not available, and tell us how or if you could possibly fill that void with other technologies that are currently available?

**Robert Gaudio:** Mr. Chairman, I just have to, again, object. We had a recusal. I don't believe it's proper for Mr. Cestone...

**Paula Clair:** We didn't talk about a recusal.

**Chairman Robert Dee:** We didn't have a recusal. He hasn't recused himself.

**Robert Gaudio:** He said he recused himself.

**Chairman Robert Dee:** No he said "refuse".

**Vincent Cestone:** I did not. I said I refuse.

**Chairman Robert Dee:** You missed that part.

**Robert Gaudio:** My apologies I thought you said "recuse". Again, for the record, I offer my objection based on the pre-judging of the application.

**Chairman Robert Dee:** I got it. Thank you. Yes, Sir go ahead.

**Hank Menkes:** All right. In my report I commented on the alternative technologies as well and this may not be the answer that you want to hear but I have to agree with PierCon's assessment that in this topography, with the trees that you have in the area and the utility poles, you're not gonna get a lot of coverage out of an alternate technology to fill the gap. Now can you do it? Yes. Are you gonna get reliable coverage? No. The bigger issue isn't really the coverage; the bigger issue is the reliability of that portion of the network because distributed antenna systems or small cells that are mounted on utility poles typically do not have backup power. So if you have a tree come down it, takes down the utility power, that portion of the network goes down. So it wouldn't be my recommendation that you consider some of these alternative technologies because it's just not a good idea to have a backup wireless cellular system go down if the utility power goes down.

**Chairman Robert Dee:** I saw that you studied our town code, to the cell towers. Do you see any weaknesses there, in the town code?

**Hank Menkes:** Surprisingly I've read a lot of town codes and I've written some of them for some of the towns in New Jersey. I think your code needs to be updated in light of what you're about to face in the future as well as some of the things that need to be modified. Just as an example, the tower setback that you have in your code is, excuse me for saying, rather strangely written because in some cases the tower could actually fall and land on somebody else's property which is not a good thing to have happen. Typically Towns will specify tower height plus a percentage setback. You specify them in terms of fixed distances which obviously if you have a tall tower, a 50-foot setback or half the height of the tower is not a very wise thing to do from a liability standpoint.

**Chairman Robert Dee:** What would the percentage be, you would think, of the tower?

**Hank Menkes:** Towns have used anything from a hundred and five to one hundred and... I've seen one hundred and thirty. That's up to you guys as to what it is you prefer. It's a very...

**Chairman Robert Dee:** It's a hundred and thirty percent of the height of the tower?

**Hank Menkes:** Of the height of the tower. Typically you see things fall in the hundred and ten, hundred and twenty percent of height of the tower.

**Chairman Robert Dee:** Okay.

**Hank Menkes:** The other thing that your ordinance needs to take consideration of is that there is going to be a change in the wireless industry. We're going from the 4G technology which is referred to as LTE to the 5G technology. The 5G technology is at much higher frequencies. Consequently, the signal propagates even less. And what's happening is there's a densification of the networks that's taking place to find locations to mount all of these additional cell sites. These are typically not macro cellular sites with tall towers, they're typically small cells that are mounted on utility poles, sides of buildings, and things like that. Now they still have to overcome all the reliability issues but there are other tower companies that are looking for sites and the issue that materializes is the rights of way along your roadways with regard to laying fiber cables to the poles and so forth. Your ordinance does not, from what I could see, give any consideration to that right now.

**Chairman Robert Dee:** Okay. Thank you very much.

**Hank Menkes:** Okay.

**Chairman Robert Dee:** I like to call Annie Meyers, whose name is here, Annie Meyers, to speak? There's a name here, Annie Meyers. Would you like to speak? No? Come up here then please. I saw your name here to speak that's why I called you.

**Annie Meyers:** I thought I was signing the attendance list.

**Chairman Robert Dee:** Oh ok, so you made a mistake.

**Annie Meyers:** But as long as I'm here, I'm the landowner on the McKeel's Corners site.

**Chairman Robert Dee:** Okay.

**Annie Meyers:** And I want to address Mr. Cestone.

**Vincent Cestone:** Yes.

**Annie Meyers:** When that site was put up there was no houses there. That was a developed piece of property, or you know an empty piece of property. It's on a lot five. Lot four is empty, lot one is empty, those are the contiguous lots. The pole, present pole, is directly in one houses living room window, their panorama living room that faces the long views, has a cell tower at eye level. I also want to say that a hundred, two hundred feet, you're gonna see that from Fahnestock. I mean did you do visual stuff?

**Chairman Robert Dee:** Well we're getting into that.

**Annie Meyers:** Yeah because that's gonna be visible. Right now the tower is...

**Chairman Robert Dee:** It's visible now. I looked from Mr. Sheehans deck at 43, I could see. So I mean...

**Annie Meyers:** Are you on the next property?

**Chairman Robert Dee:** No he's at 43 Rockwald road.

**Annie Meyers:** Rockwald.

**Chairman Robert Dee:** On his rear deck you're gonna look right at the tower.

**Annie Meyers:** Okay. Alright. So, that's it.

**Chairman Robert Dee:** Okay. Thank you. Next I'd like to call Mrs. Ellen Weininger from Grassroots Environmental to speak.

**Ellen Weininger:** Good evening and thank you to the Board and to the community. My name is Ellen Weininger. I'm Director of Educational outreach at Grassroots Environmental Education. I have some brief written comments which I can submit to you and another document which I'd like to provide to you and I'm primarily going to speak to health impacts although I know that those are not generally considerations, there are other considerations, but I think it's important to get on the public record and for the community to hear and for the Board to hear as well. Grassroots Environmental Education is a science-based environmental health nonprofit with a mission to educate the public about environmental exposures and the links to human and environmental health impacts. We work with a network of leading medical and scientific experts and we serve local and state governments, school systems, health professionals, environmental and civic organizations nationwide. Grassroots Environmental Education is deeply concerned about the proposed siting of the cell tower in a residential community and the associated health impacts. Peer-reviewed, published, scientific research indicates that exposure to radio frequency radiation can increase cancer risk, damage sperm, and alter brain development. Most people are unaware that the FCC guidelines, they're not regulations they're guidelines, for radio frequency

radiation merely set those guidelines based on thermal effects of radio frequency radiation exposure, that's heating of tissue or body tissue, but do not consider the biological effects. Cell tower radiation is linked to damage in humans. The scientific evidence demonstrates adverse health impacts. Children and developing fetuses are at greater risk from these exposures as they are a uniquely vulnerable population. They have thinner skulls. The absorption rate is much greater than it is for adults. A newly published study in 2017 compared people living in close proximity and at a distance from cell antennas and found a significant impact on people living closer. Damage was found in their blood which predicts cancer development. People living or working in close vicinity to a cell tower will have the highest exposures. Radio frequency radiation from cell towers is a non-stop, 24/7 full-body exposure that cannot be turned off. Many government and local jurisdictions have blocked the placement of cell towers and cell antennas near schools and residences because of the higher density of radiation in close vicinity to these antennas. We are attaching the Index to the Digest on Independent Science on the Effect of Wireless Radiation on Human Health compiled by Grassroots Environmental Education for your review. The hundreds of peer-reviewed scientific studies included in this compendium are only a sampling of the thousands of independent scientific studies concerning the adverse health impacts of radio frequency radiation. In closing, we strongly recommend exercising extreme caution and every possible measure to prevent the placement of a cell tower in close proximity to residents and school communities. And I'll be happy to provide this statement to you and this compendium. I just want to take a moment, I didn't bring the full compendium. It's over a hundred studies, it's three volumes, it's quite large. This is an index. It's a table of contents and it provides the actual studies by name, the authors, the journals that they appear in, all the details, so anyone can access them and read them if they so choose. But I want to give you an idea of some of the categories of health effects that this compendium provides. Effects on fetal and newborn development is one category with dozens of studies. Again these are samplings; this is not, these are not all the studies that are out there on this technology, this is just a sampling. Effects on young children. Effects on DNA, parotid gland tumors, brain tumors, neurological and cognitive effects, male fertility is a whole section. There are several other categories including effects on implanted medical devices which is of concern. And this is readily available if anyone wants it but I'm happy to provide a copy and if you'd like to have an electronic version I'm happy to provide that as well. And I really appreciate the opportunity to address the Board. And I also very much appreciate the questions that have been asked in terms of the siting of this cell tower. And also the deep consideration that this board has given to the issue.

**Chairman Robert Dee:** Thank you very much. Anything you could supply to the Board would be helpful. Thank you very much. Let's see next will be Ellyn Varela, to speak.

**Ellyn Varela-Burstein:** Good evening. My name is Ellyn Varela-Burstein and I'm speaking to you tonight on behalf of the Board of Directors of the Putnam Highlands Audubon Society which is a mid-hudson chapter of the National Audubon Society. As a chapter of a major environmental organization we are very concerned about the effect that a tower will have on our environment and its effects on wildlife and the quality of the surrounding community. For this reason we're requesting immediate monitoring of air, soil, and water, including aquifers, to establish baseline data and that continuing monitoring be required to ensure that there are no negative impacts should a tower be approved. We would also recommend that alternative solutions be considered first. Distributed antenna systems is one alternative that already exists and should be explored and considered but there may be other newer technologies that could meet our communication needs without endangering our environment as a cell tower does. Therefore we request a report on alternative options be prepared and vetted by outside engineers. Thank you.

**Chairman Robert Dee:** Steve Sterling. Mr. Sterling.

**Steve Sterling:** Thank you. Good evening again everybody. Thank you all for the good work you're doing. You guys are really champions because you'd think you were trying to do rocket science out of nowhere with all that's going on here so I really appreciate that and everybody here should. I was also at the Nelsonville meeting last week about the same number of people showed up, maybe a little more. It's the same thing going on. I did make some notes because I got a little nervous so I...

**Chairman Robert Dee:** Take your time.

**Steve Sterling:** Thank you. I know we've all learned a lot here. There's 500 thousand cell towers in America right now. There are 50 thousand applications in the works right now. It's a lot of cell towers going up and the issue of radio frequency, as much as we all should be worried about it, it's really caught in the spin cycle and it's not getting resolved. It's an open issue and as long as it can remain an open issue there isn't any federal provision for us to take issue with it substantially. The only issue that we all can take, which thankfully is provided for, is aesthetic. And if there's one place that an aesthetic consideration should be made, this is that place. I also want to point up, I'm sure Mr. Gaudioso loves his family, I'm sure he's a good community person where he lives. But we have to admit right now that Homeland Towers has made a number of misleading comments. You all have pointed up things in their application, you've corrected things for them. He's come back time and again, he's adjusted things. This gentleman has to do this all day long, in multiple communities, for his clients who are Verizon, AT&T and others, as Homeland Towers. Homeland Towers is a more of a regional company; they're much more in the, you know, more and bigger towers. And the history appears that they're sort of trolling communities looking for the gap and wherever they can find a gap, they can go in and become an applicant and justify the process to get another tower in. From that tower they get to rent a lot of facilities, preferably Verizon, AT&T, big ones, but also much smaller ones and they are clearly, in the meetings that I've attended, looking to do the least amount of possible in order to justify what they need to accomplish. You all have been fantastic and holding them to due diligence. I feel that we're getting to a point where there is really bad faith going on and I really would like to understand what the process might be to actually find them to be an unfit applicant, because they are saying misleading things. They're presenting you information, they're writing down things and you, all in good faith and learning a lot and trying to catch up on all this detailed information, are actually correcting things. And I think we may get to a point to say, you know, that they're an unfit applicant. And they're not really cooperating with us to get to a good answer; they're only trying to get to one answer and that's to get another cell tower or two in our community to build their business. I think that what we're really finding out is that there may be other applicants that would be more cooperative. We should know that. We should give it an opportunity to find out because I think tonight, again, we're seeing bad faith. I think it's getting a little too acrimonious and I feel sorry for you guys because the brunt of it keeps coming back to you, I do want to pick up, and I'm glad Mr. Menkes was here, thank you for that. I too want to get on that distributed antenna system thing again because I do see now, I read where Ramapo is leaning towards it. Spring Valley, apparently Woodbury Commons is beginning to use it as a secondary source because they get, they have a real high traffic and I think that anyone who says it doesn't work, Mr. Menkes I'd like to talk to you again about it because I respect what he's saying already, it's falling into the line of where it's, well it's a challenging RF environment, it's very difficult, it's impossible. And I have to ask the question of, would that be the same thing people would have said when they talked about, household electricity is never going to work because you have to string poles

along and run wires into everybody's home? Would you say that about the water and sewer system? And even the reliability question. Hey, tree falls down our transformer goes out, we lose power for a while. There are other companies. Crown, I've researched Mobility and ATC who do both towers and distributed antenna systems. And there are mixes of them that happen, where aesthetics do make a difference and people want to actually spread it around to somewhere where aesthetics is a big part of it. I know we're all trying to get through this process. It occurs to me that the only thing that anybody can stand on around now is aesthetics and I think there's a very big case to be made here to look at alternatives or find a more compliant and good-faith applicant that actually is going to come into this Town and say, 'we know what you're trying to do with it from an aesthetic standpoint, let us tell you how we can work with you' rather than try to get another 10 feet, another 20 feet. You know it's, there's 500 people, you corrected it when he said there's 500 people that would see it and you said 'there's 500 people an hour that would go by route 9'. Those to me indicate there's not good faith going on here with this applicant and I really think that should be challenged. I also understand this, and lastly, this is the issue of the "shot clock", you know the time we have to run down, and it really was in benefit of the tower people and the service providers, that there are opportunities to reset that clock, where there are things that go on in the application process where you can actually say 'okay, well that actually, that new information that you brought up tonight about the new application resets the clock again'. And at minimum I would really ask that you do whatever you can to reset that clock. Everybody's trying to catch up on all this information, to hear what Mr. Menkes says. It is rocket science to me but you all are really, really picking up the pace on this now and I just think everybody needs more time and there is a better solution for us in this community; there is a more aesthetic solution and I ask that you find a way to reset that clock. Push this down farther so we can all get the amount of time we need. The thing that is really bothering me I guess the most, from a community standpoint, it is, and particularly in that Nelsonville meeting it was very apparent, it's very much not in my backyard. As soon as any group of us says 'oh it's not going to be near me, okay that's okay, wow that's great.' It's a community situation. It isn't whether it's in your backyard or my backyard, these things are populating all over. We're gonna be driving around looking at big steel towers and we're gonna look and say, this was our legacy. In 2017-2018 we had an opportunity to say there must be an alternative and we didn't because we said 'oh it's in their backyard not my backyard what do I care'. We have to change that. You have to look at this from a community standpoint. It's a very, very big issue and in five to ten years the truth is, cell towers are probably gonna be obsolete and we're gonna be looking around and seeing these big steel structures and say 'gee what do they have those for'. So I ask you if you could just buy more time for all of this. I do feel like everybody's getting more together. I do feel like everybody's willing to look at this as a community situation not like 'oh my god it's not going to be near me, it's okay not in my backyard'. And again, I can't thank you all enough for your diligence and your persistence and one, hearing us all out, but also putting up with a team that has a lot of resources to go up against us. And we must prevail. Thank you very much for that.

**Paula Clair:** I just want to comment on the gentleman's suggestion about the distributed antennas systems. I'm not an expert on that but I've talked to a number of people who have expressed concern about those because what they are is, they're like very frequently placed in the community, like every couple of houses they'll be a little mini antenna on the telephone pole, and I'm not sure that that's something that we want in Philipstown either, so.

**Steve Sterling:** May I please respond to that?

**Chairman Robert Dee:** You're gonna have to, sorry, because you're gonna be a TV star so they're going to see you.

**Steve Sterling:** I'm trying to hurry because I know you're trying to get us all out of here.

**Paula Clair:** Okay I said I'm not an expert so.

**Steve Sterling:** The best point you make is, we need expertise on our side with it because it's quite a discussion. If you notice on 301 right now, Central Hudson put up much smaller things, but they put up transmitters by their transformers to get real-time information on what they're doing. It is an arm that hangs off a pole and everybody can say 'well you got to go here, you got to go there' but in the end of the day, the poles exist, the wires exist. To Mr. Menkes, you know, rightful suggestion, there may be a question of reliability but trees fall on transformers and we lose power for some amount of time; somebody gets to it quickly because they know there's money and things at stake but, I really think, and the fact is, many other communities in America now are pushing and going toward that because it is the aesthetic solution. You can say 'okay, I'm gonna drive down a street with a bunch of telephone poles with a little arm and a bread box sitting on it' but in the end of the day you're driving by those pretty quickly. The poles we're seeing from our houses, you're seeing from all over the place, they don't disappear into the landscape so quickly. So I would really suggest, again I'm far from an expert, there may be a lot of reason not to do it, but I'm not so ready to accept anybody who's saying 'oh it's inconvenient, it's a challenge, it's not possible'. Lots of things are possible but thank you for...

**Paula Clair:** I'm just saying that I think that before we would want to look at, to go forward with something like that we certainly would have to look into it much more thoroughly because I mean they may be aesthetically more pleasing but it might not be health more pleasing.

**Steve Sterling:** Well I think it's worth looking at because a lot of other communities are tending towards it now and it seems to be somewhat of a solution so, you're right but it should be looked at. To me it should be looked at as equally as what we're doing now so...

**Paula Clair:** I think that possibly the companies are pushing it you know more than the communities.

**Steve Sterling:** Well that's not what I understand from the reading but, again, I would just say let's try to give it some equal time just to see because we'll all learn as much about that as we're learning about monopoles.

**Paula Clair:** Okay, I think it would be a learning thing rather than a 'let's go do it'.

**Steve Sterling:** Yes I agree with you. Thank you.

**Andy Galler:** Could I make a comment on the Visual Impact?

**Chairman Robert Dee:** Sure.

**Andy Galler:** I've looked at the Visual Impact Studies that were done and they're very good but there's one area that's largely lacking. In our chapter 175 we talk about communication towers and tall structures and that what needs to be looked at, is the exact words they use, is from trails. This town, 40

percent of the land area of this town is public land and that's really probably our greatest asset in many ways, other than the people in the town. So that to me is just a profound gap that needs to be looked at.

**Chairman Robert Dee:** Alright would anybody like to speak? Everybody's quiet all of a sudden. Yes, could you please step up to the thing please and just tell us who you are.

**Marybeth Eldridge:** My name is Marybeth Eldridge.

**Chairman Robert Dee:** Relax. You ended the meeting, see?

**Marybeth Eldridge:** I just would like to ask us all to to applaud our presenter with regard to our medical hazards or risks that we might be facing. I found that to be especially compelling.

**Chairman Robert Dee:** Thank you. Anybody else that would like to speak? Boy, really quieted up. Nobody like to speak? Okay. Let me address one thing. a couple of people said about the community and everything, that's right. We all live in this town and we're all looking out for the residents like that but one thing I have to say like when I was at that balloon test, eight o'clock in the morning and I had to walk through 300 feet, whatever and I get there, I met with Councilman Flaherty, was there. And you might think it's strange that a Councilman was gonna meet you at 8 o'clock in the morning in the woods but, the entire Town Board, Mr. Flaherty, Van Tassel, Mr. Leonard, Ms. Montgomery, Richard Shea, they have nothing but deep concern for the residents of this town in this issue. I could tell you that for sure because they've all spoken to me personally and by phone. As far as, they have given this board 100% complete support, so I want to thank them for that, personally. Okay. Now, since nobody wants to speak, we're gonna have Mr. Eldridge. I'm sorry wait wait wait, okay. I'm sorry. I didn't know if you want to speak. Okay. Wait, hold on. Mrs. Gorevic, I didn't mean to cut you short.

**Cali Gorevic:** That's okay. Cali Gorevic. I'm the 60 Round Hill Road person. The idea of the second balloon test was specifically to be able to see what it would look like without leaves on the trees. We had a very late autumn this year, there are still leaves on the trees and we're not any closer to knowing how much of the tower we're going to be able to see once the leaves come down. Also, I'd like to, you're talking about what they're going to do to their access road but what about the road all the way from route 9? Is that going to be upgraded also? Okay.

**Chairman Robert Dee:** No.

**Cali Gorevic:** No, interesting. Okay. The fact that the setback distance has to at least match the height would seem to indicate the towers do fall over and I also know that they catch fire and that they have problems with lightning and construction and a whole variety of things, and I wish I'd brought the list with me tonight but, on Round Hill Road there's only one way off the mountain. And I would not have access to that road if something happened to this tower. Then, I would also like to ask why, I believe, tell me if I'm wrong, that towers have to be 1500 feet from schools? Is that correct?

**Robert Gaudio:** No. That's not correct.

**Cali Gorevic:** No? There's no...okay. All right, just asking. Thank you.

**Chairman Robert Dee:** Thank you. What is the ordinance? Mr. Gaudio. Do you know? The tower from the school? How far it has to be from a school.

**Robert Gaudio:** There is no ordinance on that.

**Chairman Robert Dee:** There is no ordinance. So it could be right next door to the school.

**Robert Gaudio:** Correct. But were not. We're in...

**Chairman Robert Dee:** Well I'm just asking you. You're telling me it can be. You know, I'm not saying... you guys wouldn't do that, I know that. I'm just trying to say that, you know, that it's possible.

**Robert Gaudio:** And in the cases where there were ordinances with the school setbacks, they've generally been (inaudible).

**Chairman Robert Dee:** Okay, I get it. Likely. Right, okay, thank you. Anybody else would like to speak in the audience? Okay. At this time I'm going to, Mr. Eldridge and Mr.... you're gonna handle it?

**Paul Eldridge:** Yes I got the short straw.

**Chairman Robert Dee:** You got the short straw, okay. He's got a PowerPoint presentation, okay. It's a little lengthy, it's not, you know, but I'm gonna cut him short if it gets too long and we'll see what...he's put a lot of time and effort into it. I think we should pay some attention. I guess, is there anyway to hit a couple of lights? Does anybody know where the lights are? Okay.

**Paul Eldridge:** It just has to warm up a little bit.

**Chairman Robert Dee:** Okay. I bet you want to speak first a little bit about what you're gonna do here.

(INAUDIBLE)

**Paul Eldridge:** Yeah if we could move this so it could be seen that would be great. I'm not sure if, can you hear me? My name is Paul Eldridge from 100 Rockwald Road and as they indicated I got the short straw for the.... we're gonna have to slide this over...gotta go the other way. It's a little bit cockeyed but I think you'll get the intent of this.

(INAUDIBLE)

**Paul Eldridge:** Say it again...out of the way? First off I'd like to thank the Zoning Board of Appeals and the Conservation Board for allowing us to make this presentation. I'm doing this on behalf of the Rockwald Road Association. It's all the folks that live on Rockwald Road and we wanted to make this presentation. With the limits of a public hearing I wasn't sure if we could. I asked Mr. Dee if it would be possible and he said well, I'll put you at the end. So hopefully I won't put you all to sleep and I don't think I will because I think there's some very significant information that we have to present tonight. Okay, if you would move ahead. I'm sorry that it...

**Chairman Robert Dee:** ...the jogger.

**Paul Eldridge:** Yeah, exactly, that's the jogger. The presentation topics, we want to talk about the statutory basis for placement, construction, and modification of telecommunication facilities. When I talk about the PierCon report, there's a number of reports that were attached to the application that was originally submitted in May and there's a number of those, PierCon is one. There's a couple of others that we'll make reference to in the process here. I want to talk about cell phone technology 101. I think we're all becoming educated and Mr. Sterling do I have that correct? You're right, we're all in the learning curve here and trying to get up to speed with people that have been doing this for many years. But some of the sources that we tapped into, for example for this, this is right from the Verizon Wireless website. Joel Cooper, Vanessa, our neighbors, Priscilla and I, and my sister Mary Beth, did some field tests relative to phone calls and so forth. We're going to cover that a little bit and then I want to address the errors, omissions in the Homeland Towers three applications and the attachments to this project. And then a conclusion. I apologize that this is so slanted but if you tip your head I think you'll be okay. The Telecommunications Act of 1996 and 47 US Code section 332 provides that the statutory basis for telecommunication companies to build or modify personal wireless service facilities. 47 US Code 332 states in pertinent part that "any state or a local government shall not prohibit or have the effect of prohibiting the provision of personal wireless services." Well, what is personal wireless service? Well numerous court cases have addressed the intent of these legal provisions. A seminal case regarding the meaning of these provisions is Sprint Spectrum LP v. Willoth, US Court of Appeals, Second Circuit, which parsed elements of the statutory language, including what is meant by "personal wireless service". Quoting directly from the court in the (1999) Willoth case cited above they stated "Our task, regrettably, requires a detailed parsing of the statutory language, including layers of highly technical definitions. From this exercise, however, we conclude that the parameters of the statutory proscription of local government's prohibition of 'personal wireless services'" as indicated in the first bullet "in the context of this case depends upon a conception of 'personal wireless services' and that is the equivalent of the ability of mobile, hand-held telephones to reach a cell site that provides access to a land-line exchange and allows phone calls to be made to and from the national telephone network." In other words the legal definition concerning personal wireless service relates to phone calls, voice transmissions, not high-speed data transmission for streaming videos, surfing the web, and downloading music. Therefore the showing of a gap in service must relate to the proscriptions and the intent of the Telecommunications Act of 1996 and as further defined by the courts. The statutory language relates to the voice transmission, not Verizon Wireless' business plan to create seamless, high-speed, 4G LTE data transmission services. Going to the PierCon report, which was attached to the original application. This is dated September 6<sup>th</sup> of 2017, Purpose & Scope, and you'll see that it was intended to be an independent analysis, you'll see it in red but they used the information obtained applicable, they obtained applicable engineering data from Verizon Wireless, a review drive test data and so forth. My question, and our question from Rockwald Road Association is, how is this an independent analysis when all of the data that was provided came from Verizon Wireless, the entity seeking ZBA approval? Shouldn't the truly independent analysis consist of PierCon collecting and analyzing their own data? Under Section 2 of the PierCon report, general overview. The Wireless, now this is their statement, the wireless telecommunication facility proposed in this application is to provide coverage for voice and data in Cellular, PCS, and LTE services. I will describe those later. The FCC assigns licenses in the Cellular service to the 850 megahertz frequency band, assigns PCS service to 1900 frequency band, LTE service to the 700 and 2100 megahertz frequency bands that were referenced before by Mr. Gaudio. For Verizon Wireless the cellular frequency band handles mostly voice traffic. The PCS band serves Third-Generation, or 3G data, but also serves Fourth-Generation (4G) broadband data. The 700 megahertz band and 2100 megahertz band are for 4G broadband data. A

gap in coverage exists when the wireless user, now this again is PierCon's words, cannot reliably initiate, receive, or continue telephone conversations or establish a data session on the wireless network. Again this slide just indicates that all of the information that they used was provided by Verizon Wireless. I want you to recall just from two slides ago the FCC assigned cellular service to the 850, PCS service to the 1900, LTE service to 700 and 2100. Every propagation map that's in the PierCon report is at 700 or 2100 megahertz. That is frequency bands for 4G LTE service. Why didn't PierCon provide propagation maps for the cellular service at 800, the 800 frequency band. I refer to the maps. At the attachment to the PierCon report there's probably two dozen maps and they show, and it was kind of, I think Paul you were looking at some of the propagation, these are called the propagation maps. This is showing the green and if you were able to read this, and it's kind of hard, but there's an indication of what the green is for, that's reliable in building suburban service. Okay less than or equal to minus 95 DBE or DBM, excuse me, and the yellow is for reliable, in vehicle service. The red is for unreliable coverage. Do you see any red on there? The only red that you see are the two proposed towers and there's one little dot above on 301 which is outside of what PierCon has described as the gap area. If we can just put this so it comes on here a little bit. So, now I go to the Verizon Wireless website. And how does Verizon explain the various technologies. Network speeds 101: Comparing 3G and 4G LTE, this is a very significant slide I feel. First the basics: G stands for generation. 4G is the most current generation of cell phone network coverage and speeds. Obviously they're working on 5G. 3G technology created the first networks fast enough to make smart phones practical. Before that, they were too slow to allow you to do all the things that make smart phones great, like streaming videos, surfing the web and downloading music. But it's 4G, now again this is all Verizon's words. It's 4g that really, that's really allowed smartphone technology to spread its wings. That's because it's much, much faster than 3G. So when you want to download a new game or stream a TV show in HD, high definition, you can do it without buffering and lags that make the experience not worth the wait. But you can do that; you can use 3G for those activities. 4G is pretty much everywhere now but even if you happen to be in a place that only has 3G, your phone will automatically switch to 3G. So you'll experience no call problems. You'll experience no call problems, just slower internet speeds. So what are we talking about here? We are talking about phone service under the Telecommunications Act but we've gotten way, the horses run way out of the barn to provide a lot of this downloading of data and at a high speed. How Verizon explains 4G LTE. LTE stands for Long Term Evolution. It's a term used for the particular type of 4G that delivers the fastest mobile Internet experience. You'll usually see it called 4G LTE. Using a smartphone on Verizon's 4G LTE network means you can download files from the Internet up to 10 times faster that you can do it with 3G. You still can download it with 3G but 4G is 10 times faster. With 4G LTE, using the web from your phone is just like using it from your home computer. So what we're building here is a network so that your phone is gonna be like a home computer. For 4G LTE to work all you need is a smartphone that's configured to work with it. So we decided to do some field testing and the initial one was Vanessa, and Joel, and I, and we went out, and Joel's phone was iPhone 6s plus. And it consisted of our review of going through the full gap area that was identified by PierCon. We looked, we established the latitude and longitude reading and an intersection where applicable. We had voice DBM signal strength readings. We had LTE DBM signal strength readings, and you can do that on your phone. Most phones do that, certainly the iPhone 6s plus does. And in each case a phone call was initiated, connected, continued and terminated successfully. And we answered yes or no on that and it was every single one was communicated and successfully completed. A copy of all the information regarding this is attached to a memorandum in opposition to the application which has been submitted to the board tonight. The data collected is also summarized in Exhibit C, attached to that memo. We're absolutely confident that if PierCon or the ZBA or whomever else conducts the same field test they will obtain virtually the same readings and will be able to

successfully make the same phone calls. Additionally, we decided, my sister, myself, and Priscilla, decided that we were going to do a couple of more field tests. So we did, on October 22<sup>nd</sup>, went out. I went through all of the area that it was identified by PierCon, placed numerous calls from each location throughout that of the gap areas. I was in my pickup truck. I successfully initiated, connected, and completed a call via my Samsung SCH-i545 S4 smartphone to our 100 Rockwald home landline. No issues; no problems. Every call was made successfully, was voluntary concluded, until the next phone call was placed at the next location, and that's in Exhibit D of the attachment of the memo. Did it again on the 5<sup>th</sup> of November. The only difference here was, we did the first couple and then I decided, let me see if I can have the phone connected and on and go to every place in the gap and see if my phone works throughout that. So after the first few, starting from around Campbell Road and Route 9, I had a continuous phone call for 54 minutes from that location all the way through all of the rest of the gap sites that were indicated in the PierCon report and had perfectly clear, crystal clear reception, was never dropped, was strong throughout the 54 minutes, until I concluded the call once I was back in my driveway. That's exhibit E on the, attached to our memo. So what's the conclusion we can judge from those field tests? We didn't see any significant gaps in service under the Willoth standard; a phone call was able to be completed from every alleged gap area. The PierCon propagation maps reflect only two radio frequencies, 700 and 2100, that are dedicated to 4G LTE service. Exhibit A5 shows no unreliable 4G LTE service at the 700 megahertz band. And if we move forward to the, was the map in there? I guess we passed that. Okay, now to the errors, omissions, and misstatements, and they've been referred to here before, earlier tonight, that have been challenged in some ways by the Board and obviously from some of the speakers. The May 11<sup>th</sup> Saratoga Associates report section on visual resources states "Within the half mile study area residential streets included Vineyard Road, Round Hill Road, White Rocks Lane and Armando Road and a 40 plus/minus mobile home park is located along US Route 9 approximately 1500 feet west of the tower site." For some reason they completely ignored Rockwald Road. There's 8 parcels there and completely ignored it. There is no mention of the houses along Rockwald Road as being clearly within the half mile study area, despite the fact that the CBRE attachments and maps, that were also included to the original application, clearly show the existence of Rockwald Road within the half mile distance. An attachment to the May 11<sup>th</sup> Saratoga reports, Associates report relative to the likely visibility of the tower takes a photo at a turn on Rockwald Road and it says it's 490 feet away. To that turn it's 290. If you give them the benefit of the doubt that they took the picture from maybe a little bit back from there, it's maybe 300, 390. It was 490; it's at least a hundred foot off. The August 27<sup>th</sup> Saratoga Associates report gives inaccurate distances, most often inflated to their favor, if you will, to the various homes within line of sight of the tower. The August 27<sup>th</sup>, 17 Saratoga Associates reports, they've done 2 and apparently they're working on a third, incorrectly indicates that 100 Rockwald Road was the closest residence to the tower, completely missing 43 Rockwald Road. It happens to be that 43 is closer than we are. The report also omits "lot 3", a vacant lot on Rockwald Road which shares a property line with the tower site. Portions of this property, including a recently dug deep hole test, for house that apparently is going to be built there, are within 300 to 500 feet radius of the tower. In his October 31<sup>st</sup>, 2017 letter Mr. Gaudioso states any discrepancies with measurements provided by neighbors are nominal and incidental to the assessment of project visibility. We don't believe that it's nominal or incidental to omit the closest residence within a clear line of sight of the tower, that being 43 Rockwald Road. There was no mention of 43 Rockwald Road in either of those two reports, May 11<sup>th</sup> or August 27<sup>th</sup>, and perhaps it will be in the next report that comes from Saratoga Associates. Move on. In Mr. Gaudioso's October 31<sup>st</sup>, 2017 letter, he indicates in item number two regarding the PVC pipes, something near and dear to my heart, that a number of commentators, and I'm sure he's referring to me, have mistakenly described the type and area of disturbance. I'd like to point out that our description was completely accurate and included color

photographs supporting our contentions and our concerns. In contrast, Homeland Towers engaged JMC, a consultant, and in the letter dated October 20<sup>th</sup>, 2017 incorrectly describes the perforated pipes as both "lying on the ground and standing vertically approximately five feet into the air". In fact, the majority of the PVC pipes are underground, they're not lying on the ground, they're under the ground, they're in the ground. There's a very long distance of pipe that is throughout that area and some of it is in the compound area. As previously correctly described by the commentators, at least twelve to fifteen pipes are coming out of the ground, ranging from four to six inches as a low to in excess of five feet. In his May 23<sup>rd</sup>, 17 cover letter with the original application. Mr. Gaudioso states "the facility will be designed to support colocation, including the emergency service antennas and equipment for Putnam County." That's a falsehood. Additionally, the Pinnacle Telecom Group, another consultant that had a report attached to the original application, they reported, did a report dated August 18<sup>th</sup>, 2017 and they make multiple references to Putnam County antenna operations being on the tower to include a Putnam County whip antenna - a Sinclair SC476 - blah blah blah blah. That's also false. Putnam County in a letter dated November 7<sup>th</sup>, and a copy is on the next slide, has indicated that they have "spoken to the company proposing the tower, Homeland Towers, on numerous occasions and made it clear that based on studies provided by Motorola the tower offers no advantage to Putnam County and at this time we have no desire to use the tower in any capacity".

**Chairman Robert Dee:** This audience, it's full and there's people standing. Okay so, I said the next meeting was going to be in Town Hall, we're gonna have to take that back and change it, because I think there is more seating here and we're probably gonna have to get more chairs. We need a bigger boat, so, with the people that are here. So the meeting on December 11<sup>th</sup> will be here.

**Paul Eldridge:** Okay. That's just a copy of the letter. Conclusion. We respectfully implore the Philipstown Zoning Board of Appeals, and also the Conservation Board for any aspect that relates to their purview, to deny the application of Homeland Towers, LLC and New York SMSA Limited Partnership doing business as Verizon Wireless for a cell tower at 50 Vineyard Road, Cold Spring, New York, on at least, but not limited to, the following criteria: There is no gap for personal wireless services (phone services) in the area claimed, based upon existing statutory requirements. In Willoth, the US Court of Appeals ruled a local government may reject an application for construction of a wireless service facility in an under-served area without thereby prohibiting personal wireless services if the service gap can be closed by a less intrusive means. Also in Willoth, the local government may also reject an application that seeks permission to construct more towers than the minimum required to provide wireless services as long as fewer towers would provide users in the given area with some ability to reach a cell site. There are multiple existing cell towers in this general area, there's apparently 8 or 9 in the town of Philipstown. One is up by Minardi's garage, there's another one at McKeel's Corners and obviously this site is being proposed at Vineyard Road. There are multiple in this area. The one at McKeel's Corners is approximately eight tenths of a mile from the proposed new cell tower location. The application from Homeland Towers and Verizon Wireless is riddled with irrelevant materials, errors, omissions and misstatements. Quite frankly, it's hard to tell what information is accurate, truthful, and can be honestly relied upon. At its proposed location, it's our belief that there will be a significant, deleterious effect on all homes and property values for those living within at least a 1/2 mile radius of the tower due to the stigma associated with living near a cell tower. For those of us who have lived, in some cases as long as 35 years, my wife and myself and our family have lived in our house for 35 years, this cell tower is 152 feet, the fence is 152 feet from our property. We've been here for, we've owned the property for 37 years; we've lived in that house for 35. It's really, really tough when all of a sudden along comes this kind of a situation, it's plopped right next and in front of our

house where we'll see it every day from almost every room in our house. Our view shed, clearly, will be dramatically changed forever and there was a comment before relative to that. We do have a long distance view, or we had it but I'm not sure where it's going from here. There are new technologies being developed, and that was discussed a little bit tonight, that will likely make cell towers obsolete in the near future. And I want to end on one particular point. I personally think it's morally wrong that a property owner with a total of 91 acres, more than 91 acres, can benefit by leasing land to a tower company in a location as far away from that owners residence as possible, yet make that site, put it at a site that's approximately 100 feet from their neighbors line. When I first heard about this, thank you the Gorevie's for letting us know because we were kind of asleep at the wheel with this stuff going on, my first reaction was to call my neighbor, Chris Fadden, neighbor-to-neighbor. I think that's the right thing to do. Some told me that he's probably not gonna take your call. Well, that's not how I do business, I figured let me call and speak to him one-on-one. So I said to bim, I said, 'Chris', I said, 'I want to talk to you about the cell tower'. He said, 'I had nothing to do with where they're putting it.' I said 'Well, you realize that it's going to be right in front of our house and we'll see it every day. The deck that we spend a lot of our time on will be looking directly at this. We won't be able to miss it.' And he said to me, 'I, again, I had nothing to do with it' and I wrote down what his quote was to me on the phone. "I told them, you know, it was they that were gonna cite it but I just told him, don't put it anywhere where I can see it." So, okay, it's not where you can see it but it's where I can see it. Subsequent to that, that was on July 2<sup>nd</sup>, by the way, that I had that telephone conversation with him. He subsequently wrote to another neighbor who was concerned about it and what was going on and I'm gonna quote a little bit from the email that he sent to my neighbor. "You must realize that our little neighborhood has been targeted for the construction of a cell tower." Our little neighborhood? His 91 acres is a neighborhood. All the homes on Rockwald Road don't add up to 91 acres. "You must realize that our little neighborhood has been targeted for the construction of a cell tower. It is ultimately going to happen and there's nothing anyone can really do about it. If it's not placed on our property, it will be nearby. When I was approached I felt it would be to my advantage to consider it so that I might have some input on its location", which is at the absolute extreme of his 91 acres and 150 some-odd feet from ours, from our property. "Unfortunately, I had very little influence on the site they chose". He goes on "I did not seek them out, they approached me." I don't know if it's true or not. "They made it very clear that a cell tower would ultimately be constructed in our immediate area and that if I chose not to cooperate, someone else would. As I said previously I thought it would be better to be a part of the process rather than just sit back and have others making all the decisions." Pretty interesting isn't it? It's gonna change our lives dramatically, it's gonna change those up on Rockwald Road. I know that these are things that have affected others in our community. I think we have to stand together. This information that I pointed out here is just from what I was able to decipher from what's been submitted and I'm not an expert but I can tell you that I implore the ZBA to turn this application down. Thank you.

**Paula Clair:** I would just like to add that Mr. Fadden subsequently wrote a letter that said that the area that they were placing, they were proposing this cell tower was the only area that he, was available in...

**Chairman Robert Dee:** No, it was the only area that he would...

**Paula Clair:** ...that he would allow, right, right, on his property.

**Paul Eldridge:** Exactly. (Inaudible)

**Paula Clair:** Right.

**Chairman Robert Dee:** I would, we've spend a lot of time, well we've got two balloon tests and I've been in the area and like that. In fact Mr. Gainer, I'm gonna ask you to speak to this. If you could just step up, to speak to this. At the of that, you were out there with me also, a couple of times on this, I think it's 64, he says 90, I think it's 64 acres he owns. On the top, if the tower could go on top of that hill, let's say in the area of Mr. Fadden's house, could it be shorter? The cell tower.

**Ron Gainer:** I expect so, yes. It's not been studied but obviously it's a much higher elevation.

**Chairman Robert Dee:** But it wouldn't have to be any higher. It could be, might even be 140 up there would be fine.

**Ron Gainer:** Obviously I'd have to do the same propagation studies to understand coverage.

**Chairman Robert Dee:** But it would be by his house, that would be the problem. Okay thank you. You'll have to stand up. I'm sorry you'll have to go to microphone.

**Joel Cooper:** I just want to...from what I understand, probably using the same Google Map satellites, the height of Fadden's house is about 980 feet above sea level. The site for the tower is about 680, 690, so it would start with the 300 foot gain.

**Chairman Robert Dee:** Unfortunately we don't have that option. Mr. Fadden doesn't want it there so. Thank you.

**Joel Cooper:** But it is actually, when we say 91 acres it's the 64 plus the 27 that he controls.

**Chairman Robert Dee:** Thank you. I didn't know that. Is there anybody else that would like to speak tonight? Thank you very much for your, that was an excellent, that gave us a lot of information. Is there anybody else that would like to speak? No, okay. Like I say, I was, the next meeting is December 11<sup>th</sup>. I was gonna have it at Town Hall but there's too many people here, okay, you know. I can see, I counted the people and there's probably over a hundred people here or something like that so, and people standing in the back, I don't want that. So we'll do it here again, 7:30, December 11<sup>th</sup>. And at that point in time we're gonna hope to have, Mr. Menkes is gonna do his report on, you know, the McKeel's Corners. Mr., I'm sure Homeland Towers and they'll get their, more information as what was discussed tonight or something like that, they'd like to address that. And we will talk to the attorney, of course our regular attorney is not here tonight. We'll talk to him about that stop clock thing and see if we can get that extended. Yes Sir. You're gonna have to come over to the microphone, I'm sorry. You were shorter than expected, Mr. Eldridge. I thought you were gonna go longer, you did good.

**Ronald Soodalter:** Just a quick comment for those who might...

**Chairman Robert Dee:** Could you just tell us who you are please.

**Ronald Soodalter:** I'm sorry, I'm Ron Soodalter. I live in Cold Spring. For those who don't know, and I'm sure they're a few, Chris Fadden doesn't live there anymore. I live in Glassbury Court and he moved across the street from me. So, there you go.

**Chairman Robert Dee:** Does he own a home there?

**Ronald Soodalter:** I'm thinking about putting a cell tower in...

**Chairman Robert Dee:** How about Glassbury Court? Want to put it in Glassbury Court? Yes, yes.

**Ellen Varela-Burstein:** Once again I'm Ellen Varela Burstein and I'm representing the Putnam Highlands Audubon Society. We did, we did request that monitoring be started on soil and water and air so that we have baseline levels and I'd like to just point that out again that we would like that as a formal request.

**Chairman Robert Dee:** Alright. I'll have to ask...

**Robert Repetto:** Any wildlife surveys or anything like that are you requesting as well?

**Ellen Varela Burstein:** Yes we would love to have that as well.

**Robert Repetto:** Okay because that wasn't stated so could you clarify what you're asking for?

**Ellen Varela Burstein:** Yes I would certainly like to include wildlife and bird studies as well to, so we have baseline information as to how this might be impacted. Thank You.

**Chairman Robert Dee:** Mr. Gainer, the engineer, could you address that or...to address the baseline for the water and the air and...

**Ron Gainer:** I'll have to evaluate exactly what's being requested and what's been provided to date. We can provide some analysis to the Board.

**Chairman Robert Dee:** Okay, thank you. And wildlife, thank you. Mr. Gaudioso, one of the members has a question. Mr. Cestone, you have a question?

**Vincent Cestone:** Yes. Mr. Gaudioso, at the next meeting can you provide us with a landscaping and view mitigation plan of some sort. I've asked this a couple times, haven't seen one yet.

**Robert Gaudioso:** You want landscaping of exactly what? What view are you actually...

**Vincent Cestone:** To hide the facility. You know, specimen type trees to hide as much as of the pole as possible, fast-growing things that will grow quickly.

**Robert Gaudioso:** Yeah, we can certainly provide a response. It's in a heavily wooded area so there's no way to provide anything that's gonna grow in that area relatively quickly even above the existing tree lines; the existing tree line that we're preserving.

**Vincent Cestone:** I beg to differ. You get red maples and oaks, they could grow five seven feet a year, even in a shaded area.

**Robert Gaudio:** And where would we plant those, though. I think that's the problem, is that, in order to plant there we'd have to take certain...

**Vincent Cestone:** I was protecting the landowners who are directly adjacent from having to look, besides looking at the tower, looking at the cages and the fencing and everything that's there. That's what I'm looking for. Instead of a gray pole maybe a brown pole is better.

**Robert Gaudio:** So we actually did propose all of that. So in the, I know you haven't had a chance to look at it, but in the visual resource analysis we provided tonight we showed that the top of the tower is actually below the tree line and then what we showed is actually a brown tower as an alternative.

**Vincent Cestone:** But, you show it, but it's never been officially presented, you know.

**Robert Gaudio:** Well we presented it this evening. That was...

**Chairman Robert Dee:** They gave us some information. We haven't had a chance to look at it.

**Robert Gaudio:** I understand. So, I would say take a look at that and the landscaping. I don't know what, if the base would, we would actually literally have to take out trees to plant something in there. Something that would be an evergreen in that area.

**Vincent Cestone:** Well then put that into the plan and say these trees are currently there. We proposed putting additional trees there or whatever.

**Robert Gaudio:** We can certainly look at that, you know. Thank you.

**Chairman Robert Dee:** Thank you. We've got a lot tonight to digest, that's for sure and our RF engineer is gonna do a survey for us and independent and Mr. Gainer is gonna look at it and I want to thank everybody for coming out tonight, you know. And like I say, the Zoning Board is trying to look out for the Town and the interests. Thank you, the next thing will be here 7:30 on the 11<sup>th</sup>, be here again because there's still too many people. Oh yes. I make a motion to adjourn.

**Paula Clair:** Second.

**Chairman Robert Dee:** All in favor?

**Vincent Cestone:** Aye.

**Leonard Lim:** Aye.

**Paula Clair:** Aye.

**Granite Frisenda:** Aye.

**Chairman Robert Dee:** Aye. Everybody's aye. Okay.

**(The meeting adjourned at 9:45 pm by a unanimous decision.)**

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

DATE APPROVED: \_\_\_\_\_

Respectfully submitted,

Tara K. Percacciolo  
Secretary

LAW OFFICES OF  
**SNYDER & SNYDER, LLP**  
94 WHITE PLAINS ROAD  
TARRYTOWN, NEW YORK 10591

(914) 333-0700

FAX (914) 333-0743

WRITER'S E-MAIL ADDRESS  
rgaudioso@snyderlaw.net

NEW YORK OFFICE  
445 PARK AVENUE, 9TH FLOOR  
NEW YORK, NEW YORK 10022  
(212) 749-1448  
FAX (212) 932-2693

LESLIE J. SNYDER  
ROBERT D. GAUDIOSO

DAVID L. SNYDER  
(1956-2012)

NEW JERSEY OFFICE  
ONE GATEWAY CENTER, SUITE 2600  
NEWARK, NEW JERSEY 07102  
(973) 824-9772  
FAX (973) 824-9774

REPLY TO:

November 30, 2017

Honorable Chairman Robert Dee  
and Members of the Zoning Board of Appeals  
Town of Philipstown  
238 Main Street  
Cold Spring, NY 10516

Re: Homeland Towers, LLC and New York SMSA Limited Partnership d/b/a Verizon Wireless, Proposed Public Utility Wireless Communication Facility 50 Vineyard Road, Cold Spring, Town of Philipstown, New York

Dear Hon. Chairman Dee and  
Members of the Zoning Board of Appeals:

As you are aware, we represent Homeland Towers, LLC ("Homeland Towers") and New York SMSA Limited Partnership d/b/a Verizon Wireless ("Verizon Wireless"); collectively referred to as the "Applicants" in connection with the above referenced matter.

The Applicants propose a public utility wireless communication facility ("Facility") consisting of a 180-foot monopole with antennas, together with related equipment at the base thereof within a multi-carrier equipment compound. In the alternative, the Applicants propose as a condition of approval a 140-foot monopole that may be painted brown. Pursuant to comments from the public and the Zoning Board the following responses are respectfully submitted together with the nine (9) copies of enclosed documents and a disc with all documents:

1. Application Form: Submitted herewith is amended application form noting the alternative 140 foot monopole that may be painted brown.
2. Supplemental Alternative Site Analysis: Submitted herewith is a supplemental alternative site analysis from Vincent Xavier, dated November 27, 2017, that includes confirmation that any extension to the tower at McKeel's Corners will require setback and height variances, and will be closer to residences than the proposed site at 50 Vineyard Road.
3. Supplemental RF Engineering Report: Submitted herewith is a supplemental RF engineering report from PierCon, dated November 30, 2017, confirming that the

proposed facility will provide personal wireless services, that the handheld call test is based on anecdotal and unreliable methodology, but is consistent with PierCon's determination, as confirmed by the Town's own RF consultants, that there is a significant gap in in-building service, and in response to the Menkes Associates Report, dated November 28, 2017. In contrast to the actual engineering analysis, drive test data, propagation maps and statements of need offered by the Applicants and confirmed by both Mr. Graiff and Mr. Menkes, being the two radio frequency engineers retained by the Town, the residents submission offers only the unscientific claim that they drove around the area and allegedly did not lose cell phone coverage. However, attempts by municipalities to rely on such pseudo-science have not been countenanced by the courts that have dealt with this issue. See *AT&T Wireless Services of California LLC v. City of Carlsbad*, 2004 WL 527025 (S.D. Cal. 2003) at \*3-\*4; citing *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 113 S.Ct. 2786 (1993). By way of example, a similar methodology was flatly rejected by a Massachusetts federal district court in *Nextel Communications of the Mid-Atlantic, Inc. v. Town of Sudbury, Massachusetts*, 2003 WL 543383 (D. Mass. Feb. 26, 2003). The same methodology was also rejected in *Cellular Telephone Company, et al. v. Zoning Bd. of Adjustment of the Borough of Ho-Ho-Kus*, 197 F.3d 64, 75 (3d Cir. 1999), as well in a recent decision on June 8, 2015 decided in the Supreme Court of the State of New York, County of Westchester in *Lindenthal et al. v. Town of New Castle, Homeland Towers, LLC and New York SMSA Limited Partnership d/b/a Verizon Wireless* (Index No. 14/3069).

As previously noted, certain discussions at the public hearing questioned whether the Applicants are required to prove a significant gap in service and that the proposal is the least intrusive means of remedying such gap. However, the Applicants do not have to meet this burden of proof before the Zoning Board. The burden of proof is commonly mistaken by opposing parties such as in the recent case, *In the Matter of John DeCarr v. Town of Verona*, a copy of which was previously submitted. Moreover, please note that the Significant Gap and Least Intrusive Means standard is not necessarily relevant to Section 253 of the Telecommunications Act, which states: "No State or local statute or regulation, or other State or local legal requirement, may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service." 47 U.S.C. 253(a). Likewise, there is no legal basis for, and in fact it is *ultra vires*, for the Zoning Board to consider whether the service being provided is voice as opposed to broadband data service as both forms of service are telecommunications services protected by both Sections 332(c) and 253 of the Telecommunications Act. LTE, while a data only channel (packet switched), supports voice calls. Voice calls over LTE are called VoLTE. Any such calls made to a recipient utilizing a landline, including possible emergency service calls, are routed through the Public Switched Telephone

Network. See PierCon report submitted herewith. Accordingly, the Applicants have nevertheless demonstrated a significant gap in reliable service as confirmed by the Town's radio frequency engineer even though there is no such burden of proof in this administrative proceeding for a special use permit.

4. Property Values: Submitted herewith is a property value report prepared by Paul Alfieri, an MAI appraiser from Lane Appraisals, Inc., dated November 17, 2017. The Lane Appraisal Report concludes that "the installation, presence, and/or operation of the proposed Facility will not result in the diminution of property values or reduce the marketability of properties in the immediate area," based Mr. Alfieri's inspection of the site and the proposal and on numerous paired sales analyses throughout Orange, Putnam, Westchester and Rockland counties over an extended time period.

The Lane Appraisal Report has been revised based on the comments raised by the Zoning Board to include an additional tower in Philipstown, and explanation as to why other Philipstown Towers were not included, and confirmation that the relevant sales were evaluated with respect to the Sky Lane tower. As noted in the Xavier Analysis, the Zoning Board decision with respect to the McKeels Corners site relied upon a similar Lane Appraisals Report. Please also note that the Court in the *Lindenthal* case cited above similarly upheld the approval of a tower proposed by the Applicants in part on the basis of a Lane Appraisals Report.

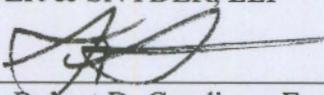
5. Visual Resource Assessment: Submitted herewith is a report from Saratoga Associates, dated November 29<sup>th</sup> that responds to comments from the public, analyzes the McKeels Corners site compared to the proposed 50 Vineyard Road site by way of viewshed mapping and visual renderings, and documents the existing visibility of towers, including the large Fahnstock Park tower, from hiking trails in the area.
6. County Planning Referral: Submitted herewith is an email from the Town Engineer, dated October 20, 2017, confirming that the County Planning Department comments appear to have been prepared without the review of the RF Report previously submitted.
7. Landscaping Plan: Pursuant to the request of Mr. Cestone, attached please find a Landscaping Plan prepared by JMC.

The application was initially filed on May 23, 2017. The Town issued comments by way of the Town Engineer's Technical Memorandum dated June 9<sup>th</sup> and received by the Applicants on June 12<sup>th</sup>, thereby tolling the Federal shot clock after 20 days. At present the shot clock is set to expire on January 5, 2018. Please let me know if the Town disagrees with this calculation.

If you have any questions or require additional information with respect to the application, please do not hesitate to call me at (914) 333-0700.

We look forward to the joint public hearing with the Conservation Board at the December 11<sup>th</sup> Zoning Board meeting.

Respectfully submitted,  
SNYDER & SNYDER, LLP

By: 

Robert D. Gaudio, Esq.

RDG/cae

cc: Applicants  
Ronald Gainer, PE  
Conservation Board (9 Copies)

z:\ssdata\wpdata\ss3\rdg\homelandtowers\philipstown\171 zba letter 11-30-17.rtf

APPEAL # \_\_\_\_\_ Tax Map # \_\_\_\_\_

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), Homeland Towers, LLC and New York SMSA Limited Partnership d/b/a Verizon Wireless  
residing at c/o Snyder & Snyder, LLP, 94 White Plains Road, Tarrytown, NY 10591

Telephone: home N/A business (914) 333-0700

HEREBY appeal the decision of (name and title) N/A

whereby he/she

GRANTED \_\_\_\_\_ DENIED \_\_\_\_\_ a BUILDING PERMIT \_\_\_\_\_ a CERTIFICATE OF OCCUPANCY \_\_\_\_\_

For Wireless telecommunications services facilities, including a 180' monopole\* with antennas thereon and related equipment at the base thereof.

To \*In the alternative, a 140' monopole that may be painted brown

of \_\_\_\_\_

For property at tax map # 38-3-24.21 in zoning district OC

WHEN FILLING OUT APPLICATION, ATTACH ADDITIONAL PAGES AS NECESSARY TO ANSWER QUESTIONS. See letter submitted herewith from Snyder & Snyder, LLP.

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.)

50 Vineyard Road  
Cold Spring, NY 10516

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.)

See Sheet ZD-2 of Site Plan submitted herewith.

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

§ 175-46

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

N/A

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:

See letter from Snyder & Snyder, LLP submitted herewith.

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

(3) The facts showing the use is entitled to 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:

(b) a VARIANCE from the Zoning Code is requested

STATE OF NEW YORK COUNTY OF WESTCHESTER *David J. Kossy, at attorney*

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

being duly sworn to before me on this 31<sup>st</sup> day of October 2017  
Homelink Towers, LLC and New York SMSA Limited Partnership d/b/a Verizon Wireless  
By: *[Signature]* as attorney

Subscribed before me this 31<sup>st</sup> day of October 2017  
at *[Signature]* Westchester

David James Kossy  
NOTARY PUBLIC, STATE OF NEW YORK  
Commission Expires June 28, 2022

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

EXEMPTION REQUIREMENTS (1) FOR VARIANCE & INTERPRETATION UNDER RULE (2)  
(2) FOR SPECIAL USE PERMIT (see below) (3) ZONING CODE

(c) a SPECIAL USE PERMIT is requested:

(1) The reason the permit is requested:

See letter from Snyder & Snyder, LLP submitted herewith.

(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:

STATE OF NEW YORK, COUNTY OF PUTNAM Robert D. Gaudioso, as attorney

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

Homeland Towers, LLC and New York SMSA Limited Partnership d/b/a Verizon Wireless

By: [Signature] as attorney

Signature of applicant or agent

Sworn before me this 31<sup>st</sup> day of October 2017

Notary, [Signature] County, Westchester

David James Kenny  
NOTARY PUBLIC, STATE OF NEW YORK  
Registration No. 02KE6343903  
Qualified in Westchester County  
Commission Expires June 20, 2020

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



HOMELAND TOWERS

November 27, 2017

Honorable Chairman Robert Dee and  
Members of the Zoning Board  
Of Appeals  
Town of Philipstown  
238 Main Street  
Cold Spring NY 10516

RE: Analysis of existing telecommunications site at Grey Rock Road, also known as "McKeels Corner site" and comparison of setbacks to property lines and nearest residential structures to the proposed site at 50 Vineyard Road.

Honorable Chairman Dee and  
Members of the Zoning Board of Appeals:

On July 6, 1998, the Board issued a decision narrowly approving the erection of a 100ft monopine tower at the end of Grey Rock Road on 6.7 acres owned by Ann Myers ("the Decision") with a bare majority of only 3 votes. Current Zoning Board member Cestone voted to deny the application. The Decision includes condition F, which limits the height of tower to 100 feet. This site is referred to by Verizon Wireless as the McKeels Corner site. During the review process, the Town Board passed Local Law No. 4 regulating cell towers. The law adds Article XB "Communications Towers" to the zoning code (Chapter 175-46 of the Town Code). Pursuant to the Decision on page 5, Item 9 under Findings of Fact the applicant "supplied all necessary information..." and "...the applicant was in compliance with the (NEW) Code." At the time of the application the property was zoned R-40. In 2011 the local Town Zoning Districts were revised and the property is now in the RC- Rural Conservation zone.

Section "VI" under Findings and Conclusions Concerning the Special Use Permit on Page 8 of the Decision states that "The proposed use and the buildings, structures, facilities and site layout will not be detrimental to the public health, safety and property values in the neighborhood." This finding was based on similar testimony concerning RF emissions as provided in the present application and on an appraisal report prepared by the same firm, Lane Appraisals Inc., that submitted an appraisal report concerning 50 Vineyard Road.

Pursuant to Town Code section 174-46 G(3) the setback requirements for communications towers located within the RC Zoning District shall be 150 feet from side and rear lot lines or half the height of the communications tower, whichever is greater. Under the current code and zoning district designation, the existing site would appear to need a variance from the side yard setback in order to be approved today. In other words the existing tower is already non-compliant with the underlying setback requirements. Any extension of the height of the tower would require a setback variance, as well as a height variance for any height above 110 feet. The current side yard setback from the monopole is approximately 139ft based on the tools available through the Putnam County GIS system. It also appears that the McKeels Corners site does not have the necessary road frontage in violation of section 174-46 G(1). An image of the measurements from the GIS System is included herewith as Exhibit A. The proposed site at 50 Vineyard Road is within the



HOMELAND TOWERS

OC (office/commercial/industrial mixed use) Zoning District and meets all setback and height requirements and would not need a variance.

Based on the tools available through the Putnam County GIS system, the McKeels Corner site is approximately 620ft from the nearest residential structure. The Proposed site at 50 Vineyard Road is approximately 760 feet from the nearest structure (43 Rockwald Road). A satellite image depicting the distance from the McKeels Corner site to the two nearest structures is included herewith as Exhibit B.

Based on the foregoing, any modification to the height of the McKeels Corners site would not be a less intrusive alternative to the proposed zoning compliant facility at 50 Vineyard Road.

Respectfully submitted,

Vincent Xavier  
vlx@homelandtowers.us  
914-879-9172



HOMELAND TOWERS

# EXHIBIT A





HOMELAND TOWERS

## EXHIBIT B





# Supplemental Report Regarding Board Members and Public Comments and Menkes Report

## Site ID: "Philipstown"

50 Vineyard Road  
Philipstown, NY  
Putnam County

Prepared for  
New York SMSA Limited Partnership d/b/a Verizon Wireless

By

PierCon Solutions, LLC  
November 30, 2017

**TABLE OF CONTENTS**

**1 PURPOSE AND SCOPE..... 3**

**2 DETAILED EXPLANATION OF VOICE CALLS ON LTE..... 3**

**3 THE HAND HELD CALL TEST PERFORMED BY RESIDENTS..... 4**

**4 MENKES REPORT FROM NOVEMBER 28<sup>TH</sup> ..... 6**

**5 CONCLUSION ..... 6**

---

## 1 PURPOSE AND SCOPE

---

PierCon Solutions LLC, an engineering firm specializing in wireless communications, performed an independent analysis regarding the existing McKeel's Corners Site located on Grey Rock Road. This report addresses comments and concerns raised by Board members and members of the public. This report also addresses the Menkes report from November 28<sup>th</sup>.

The following report provides detailed explanations to the LTE technology in regard to voice calls and a response to the hand held call test performed by residents.

---

## 2 DETAILED EXPLANATION OF VOICE CALLS ON LTE

---

During the public hearing on November 13<sup>th</sup>, a presentation made by Paul Eldridge, representing Rockwald Road Association, cited portions of the Telecommunications Act of 1996 and portions of the court ruling of the Willloth Case. Mr. Eldridge incorrectly argued that since "Long Term Evolution" LTE is a data service, personal wireless service could not be applied to LTE. He incorrectly argued that LTE would not be able to exchange phone calls with the national telephone network (PSTN or Public Switched Telephone Network) in order to reach a landline. It is understandable that a layman is not familiar with the current standards and the wireless technology generation that is supporting today's applications; including voice. His arguments are incorrect. Section 704 of the 1996 Telecommunication Act defines personal wireless services to include a broad range of spectrum-based services. All commercial mobile services fall within the definition of personal wireless services; which includes LTE.

Mr. Eldridge's claims are inaccurate as LTE technology supports voice calls through Voice over LTE or VoLTE ("VOLTEE"). The current 4<sup>th</sup> generation personal wireless service mobile network technology in use today is LTE. While users still have access to the legacy 3<sup>rd</sup> generation technology, most network traffic and all newer devices operate on the 4G / LTE services. When engaging in a voice call over LTE (VOLTE) the user device will connect to the public switched telephone network (PSTN) through a gateway in order to complete a call to a non-LTE device. Therefore LTE (4G) is a personal wireless service, not only for the voice application it provides for but also for the range of additional mobile services offered. For example, a person making an emergency E911 call from a mobile device to a public safety operator on a landline, such emergency call will be routed through the PSTN. This is just one example.

PierCon's initial report discusses the frequency bands which Verizon Wireless is licensed for and the names which the FCC has assigned them (Cellular, PCS, AWS, 700). PierCon's initial report stated that "this application is to provide coverage for voice and data in the Cellular, PCS, and LTE services." This statement does not indicate that only the Cellular (850 MHz) or PCS (1900 MHz) bands handle voice. As already described above, the bands which deploy LTE also handle voice through VoLTE. The next paragraph in PierCon's initial report provides a description of the use of frequency bands by Verizon Wireless. The statement that the Cellular band handles mostly voice traffic does not indicate that the Cellular band is the only band which handles voice traffic. This simply means that since LTE is currently not deployed on that band, a device would likely attempt to utilize LTE on a different band for a faster data session. The statement that the PCS band serves 3G technology is no longer correct as that entire band has been designated to provide LTE (see next paragraph for further details). The remaining statements that 700 MHz and the AWS (2100 MHz) bands provide 4G LTE service indicate that data and voice services through VoLTE technology are provided.

PierCon's initial report also provided propagation plots in the 700 MHz and 2100 MHz frequency bands. From a coverage perspective 700 MHz will cover the furthest. From a capacity perspective, 2100 MHz will provide the most capacity. All other Verizon licensed frequency bands fall between these two frequencies; 850 MHz and 1900 MHz. Since the current personal wireless service technology is LTE, only LTE technology is represented. The other frequency bands, 850 and 1900 MHz, are currently migrating towards LTE only or are already LTE only. The 1900

MHz band previously supporting 3G (CDMA) has already been decommissioned and is only deployed with LTE. The 850 MHz band has a portion currently reserved to support legacy customers whose phones are not capable of LTE. Nevertheless, showing 850 or 1900 MHz propagation would show larger existing coverage gaps than 700 MHz since they are a higher frequency bands. Therefore, it is irrelevant to show propagation on those bands since it would also show a significant gap in wireless service.

---

### 3 THE HAND HELD CALL TEST PERFORMED BY RESIDENTS

---

A customer hand-held call test is not common practice or an industry standard approach to determining coverage. To the best of my knowledge none of Verizon Wireless' competitors utilize customer hand-held call tests to design wireless networks and customer call tests are not generally accepted within the field of radio frequency engineering. The reliability of a customer call test has never to my knowledge been scientifically tested, there is no estimation of the potential rate for error, and the customer call test has never to my knowledge been subject to peer review and publication. A customer call test does not represent accepted engineering practices, since any such customer call test would be based on unreliable principles and statistical methods and would thereby fail to produce sufficient facts or data to draw scientifically and statistically relevant conclusions. Rather, a customer call test will provide mere anecdotal evidence that may lead to misleading conclusions. Accordingly, a customer call test is not a methodology that is generally accepted within the field of radio frequency engineering.

Each wireless facility provides service to hundreds of Verizon Wireless users, utilizing many different wireless devices, including varying phone models which all have differing receiver, transmitter, and processing algorithm properties. The network must be designed to handle numerous variables including the wide variety of wireless devices on the market, and the times when and places where such devices are used. Therefore, vast amounts of information about call initiation and progress must be collected and processed. This can only be done scientifically with specialized equipment and computer programs designed for this purpose, not by simply placing a series of voice calls from an ordinary hand held wireless phone. A true and fair assessment of a network's needs requires data collected at literally thousands of data points throughout a given area, to provide a statistically significant analysis. The signal level at any location is also in constant flux in time because of reflections, refraction and diffraction from a mobile and changing environment, which causes fading and multi-path propagation (where multiple versions of the signal arrive at the mobile device's antenna with a statistically distributed power, phase and polarization). In addition, losses attributable to a vehicle and a person's head and body must be taken into account. Such losses may vary as a car travels and temporarily locates a person's head and body between a base station and the antenna on the mobile device. Thus, the signal is not constant in any of its properties at any time, wherever it exists. The properties of radio signals are therefore naturally complex and are not readily determined by simple means.

In conclusion, it is my opinion that customer call testing and anecdotal customer claims are statistically flawed methodologies that can result in unreliable conclusions. The hand held call test also contained measurements recorded by hand held phones and a signal meter. Although the methods used and quantity of points recorded fall substantially short of becoming statistically relevant from an engineering perspective, the report is reviewed and compared with PierCon submitted documentation below. Note that several assumptions needed to be made in order to compare the report which are detailed below.

Nevertheless, the following is a review of the hand held call test and associated report submitted and performed by the Rockwald Road Association. This report makes the same claim as that which was made in the presentation on November 13<sup>th</sup> by the Rockwald Road Association. The claim is that since LTE is a data service, it is not classified as a personal wireless service. Simply put, LTE does qualify as a personal wireless service and LTE technology is capable of performing voice calls utilizing VoLTE technology. These calls are routed to the PSTN through several gateways when making a voice call to a landline as referred to by the Telecommunications Act of 1996. Therefore LTE (4G) is a personal wireless service. Please review section 2 of this report for more details regarding VoLTE.

---

**4 MENKES REPORT FROM NOVEMBER 28<sup>TH</sup>**

---

The following is a review of the Menkes report dated November 28<sup>th</sup>, 2017. This report specifically compares the coverage gains at 700 MHz between two options. The existing site increased to 190' with azimuth adjustments (existing site option) and the proposed site at 50 Vineyard Road at 140' (proposed site option) were the two options considered. Based on the plots Mr. Menkes used in his analysis, the proposed site performs better (less gap area remaining) on Route 9 to the north whereas the existing site performs better on Route 301 to the west. The Menkes report concludes that the gaps on Route 301 and Route 9 are difficult to prioritize without knowing the population differences. The Menkes report also concludes that the proposed site is the better option if the Nelsonville site is erected, but if it is not, the existing site increased to 190' is the better choice.

Based on solely the area of coverage provided by the two options, Mr. Menkes is correct in concluding that the existing site option is the better choice without Nelsonville. However, given that level of coverage provided is for reliable in-building coverage, it would be more precise to count the number of buildings in the affected areas rather than compare the total area of coverage. Since a portion of the covered buildings are overlapped by the two options, these buildings will not be considered. Instead, the number of buildings which only one of the options provides coverage will be counted. This will provide a comparison of how much better, if any, that one option is, in comparison to the other. The buildings will be counted in two different scenarios below.

The number of buildings will first be counted in the main gap areas of discussion (Route 301 and Route 9) as Mr. Menkes references in his report. Using Google Earth (image date of 4/16/16), the proposed option provides approximately 36 buildings with coverage in addition to the overlapping area. These 36 buildings contain approximately 14 different businesses and are located on the Route 9 gap to the north. Using Google Earth (image date of 4/16/16), the existing option provides approximately 5 buildings with coverage in addition to the overlapping area. All of these 5 buildings are residences and are located on the Route 301 gap to the west. After comparing only the main gap areas (Route 301 and Route 9), it is clear that the proposed site option is able to cover more buildings where individuals would occupy than the existing site option.

The number of buildings will also be counted in the total area including Route 301 and Route 9, since additional coverage is provided in areas besides these two roads. Using Google Earth (image date of 4/16/16), the proposed option provides approximately 54 buildings with coverage in addition to the overlapping area. These 54 buildings contain approximately 14 different businesses. Using Google Earth (image date of 4/16/16), the existing option provides approximately 48 buildings with coverage in addition to the overlapping area. These 48 buildings contain approximately 2 different businesses. After comparing all of the area, it is clear that the proposed site option is able to cover more buildings where individuals would occupy than the existing site option.

Therefore regardless of if the Nelsonville site is erected, the proposed site is the better option to provide coverage to more individuals. This conclusion is based off of the coverage maps referenced in the Menkes report and the quantity of residences and businesses which will benefit from the proposed option versus the existing option.

---

**5 CONCLUSION**

---

Long Term Evolution (LTE) is mobile wireless 4<sup>th</sup> generation technology. The wireless industry has gone through 4 generations and is soon to deploy 5<sup>th</sup> generation technology. All of these mobile technologies are personal wireless services. LTE, while a data technology, supports a multitude of applications including voice (VoLTE). The VoLTE application connects to the PSTN through gateways and meets the FCC 1996 telecom act's definition.

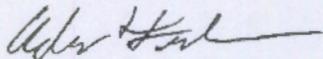
PierCon reviewed the Rockwald coverage test report and identified a number of inconsistencies in the method of data collection. Absent of a calibrated test receiver and a technically sound approach to testing PierCon was able to correlate

PierCon Solutions for New York SMSA Limited Partnership

the Rockwald results based on our assumptions noted. While being based on anecdotal and unreliable methodology, the Rockwald report nevertheless identifies a significant gap with in-building LTE service which is the same conclusion PierCon has presented.

Therefore based upon the responses herein and a review of the Rockwald report PierCon maintains its conclusion regarding Verizon Wireless' significant gap and that the relocation is required to provided service where the existing McKeels Corners site is unable.

Report Prepared by:



Adam Feehan  
Sr. RF Engineer  
11/28/2017  
PierCon Solutions, LLC

# LANE APPRAISALS, INC.

Real Estate Valuation Consultants

EDWARD J. FERRARONE, MAI  
PAUL A. ALFIERI, III, MAI  
GREGORY FAUGHNAN, MAI  
JANE MOSS  
STEVEN BAMBACE  
JOSEPH P. SIMINSKY  
LORI COADY

178 MYRTLE BOULEVARD  
LARCHMONT, NEW YORK 10538  
914-834-1400  
FAX 914-834-1380

E Mail : lane.app@verizon.net

JOHN W. LANE, MAI (1907-1993)

November 17, 2017

Honorable Chairman Dee and  
Members of the Zoning Board  
Town of Philipstown  
238 Main Street, P.O. Box 155  
Cold Spring, NY 10516

Re: Revised Report Based on ZBA Comments  
Proposed Wireless Telecommunications Facility  
50 Vineyard Road, Cold Spring, NY

Dear Chairman Dee and  
Members of the Zoning Board:

In accordance with the request of Homeland Towers, LLC ("Homeland"), I have inspected the above site and have completed an analysis of the potential impact of the proposed public utility wireless telecommunications facility including a 180 foot tower ("Facility"), which is to be located on the property at 50 Vineyard Road, in the Town of Philipstown, Cold Spring P.O., NY ("Property"). Homeland Towers, LLC (the "Applicant"), is requesting permission to erect the Facility at the Property. This analysis is to be used in connection with the application for approval which is being presented to the appropriate municipal board.

The Property is known and designated as Section 38, Block 3, Lot 34.21 on the Assessment Maps of Philipstown, NY. The site is located in a "OC - Office Commercial Industrial Mixed Use" zone where the Facility is permitted by Special Use Permit. This site has 64.29 acres of land area to the east of Route 9, in the unincorporated area of the Town of Philipstown, east of the Village of Cold Spring but with a Cold Spring P.O. No changes in the lot size are contemplated. All required setbacks and the 195 foot height limit will be met.

The proposed Facility will be located on an undeveloped portion of the property, east of Route 9. I have reviewed the 2 visual reports prepared by Saratoga Associates for the character of the views of the proposed Facility which will be accessed via an access driveway and will run north and east from Vineyard Road, to the east of Route 9.

The proposed Facility will consist of a 180 foot high, "monopole" with panel antenna mounted on the pole. In the alternative Homeland Towers has proposed a 140 foot brown monopole. All cables will be run within the monopole. The compound will have a protective fence and gate. Additionally the compound will contain Verizon's equipment on a steel platform, with room reserved within the compound area for

additional carriers and public safety equipment in the future. Future installations may include prefabricated shelters or outdoor equipment on pads provided, however, the compound will not be visible from the surrounding area.

At the request of Homeland Towers, the subject property was inspected to consider the effect of the proposed Facility upon the value of the surrounding properties. In connection therewith, I have made use of an ongoing study of sales of homes within a close proximity of similar communications facilities in Orange, Westchester, Putnam and Rockland Counties. I offer the following comments regarding the locations and value trends noted in areas which have similar communications facilities. There are fourteen separate studies, covering various time periods ranging from 2007 to the present. We have studied several sites in Philipstown, including those at 1111 US Route 9 and 20 Manitou Road, Philipstown, NY. However, there were insufficient sales within sight at these towers, so I did not include these studies in this analysis, based on the comments of the ZBA. Study 2 was originally included, despite having only one sale within sight, due to its' proximity to the subject site.

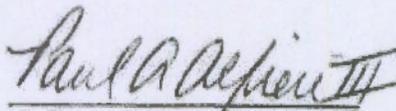
We have completed more than a dozen other such studies in additional, nearby counties in New York State. In every instance, the results have been consistent and similar. There is no diminution in the value of homes with a view of a wireless telecommunications facility.

The sales which were utilized in this analysis are summarized on the fourteen, attached exhibits. All of these studies involved communication monopoles or towers, and in no instance did I find that views of such communication facilities had any detrimental effect on property values. There was a normal range of value with typical increases or decreases in value according to the market for homes regardless of whether or not they had views of communications facilities.

My qualifications and experience are detailed at the end of this report in an attachment titled "Qualification of Appraiser". In sum, I am designated as an MAI (Member of the Appraisal Institute); I am a certified general appraiser in the State of New York and an accredited New York State Department of Transportation, Right of Way Appraiser, and have been qualified as an expert by New York Courts in real estate valuation. I have been engaged exclusively in appraising real estate since 1984, including appraising values of residential and commercial properties in New York.

As a result of this analysis and my inspection of the site in this case, it is my expert opinion that the installation, presence, and/or operation of the proposed Facility will not result in the diminution of property values or reduce the marketability of properties in the immediate area. If you have any questions, please contact me.

Sincerely,



Paul A. Alfieri III, MAI  
Certified General Appraiser  
State of New York #46-9780  
October 30, 2017

## Exhibit 1, Sky Lane, Philipstown, Putnam County, NY

A 400' former radio antenna located at the top of Sky Lane, east of Ridge Road, in the Town of Philipstown, NY. The following sales are located on the surrounding streets and are within sight of the tower: <sup>1</sup>

### 2015 - 2017 STUDY

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Area</u>	<u>Price/SF</u>
20 Steuben Rd	\$ 227,000	1-06-2016	1,316	\$172
15 Steuben Rd	\$ 268,000	8-21-2017	1,384	\$194
7 Steuben Rd	\$ 210,000	9-02-2015	1,124	\$187
21 Valley Ln	\$ 215,000	3-21-2016	1,168	\$184
420 Sprout Brook Rd	\$ 307,500	6-23-2015	1,728	\$178
418 Sprout Brook Rd	\$ 379,000	08-03-2016	2,420	\$157
384 Sprout Brook Rd	\$ 135,000	2-21-2017	768	\$176
338 Sprout Brook Rd	\$ 352,000	6-22-2017	1,808	\$195
334 Sprout Brook Rd	\$ 269,000	2-09-2015	1,816	\$148
326 Sprout Brook Rd	\$ 300,000	2-01-2017	1,200	\$250
322 Sprout Brook Rd	\$ 419,800	5-13-2015	2,671	\$157
319 Sprout Brook Rd	\$ 235,000	4-20-2017	1,159	\$203
308 Sprout Brook Rd	\$ 300,000	10-18-2017	1,660	\$181
303 Sprout Brook Rd	\$ 325,000	1-14-2015	1,414	\$230
19 Sky Ln	\$ 687,000	6-29-2017	2,741	\$251
39 Mountain Dr	\$ 447,500	7-22-2015	2,400	\$186

Average Sales Price per Square Foot: \$190

The following properties are in the same neighborhood but have no view of the tower:

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Area</u>	<u>Price/SF</u>
159 Old Albany Post	\$ 210,000	11-30-2015	1,100	\$191
200 Old Albany Post	\$ 370,000	8-19-2016	1,868	\$198
196 Old Albany Post	\$ 370,000	5-19-2017	1,776	\$208
180 Old Albany Post	\$ 480,000	12-18-2014	3,517	\$136
20 Old Albany Post	\$ 289,000	6-12-2015	1,554	\$186
516 Sprout Brook Rd	\$ 335,000	1-29-2017	1,503	\$223
504 Sprout Brook Rd	\$ 315,000	8-05-2016	1,750	\$180
495 Sprout Brook Rd	\$ 520,000	4-27-2016	2,904	\$179
492 Sprout Brook Rd	\$ 325,000	12-11-2015	2,188	\$149
471 Sprout Brook Rd	\$ 365,000	3-15-2015	1,860	\$196
54 Steuben Rd	\$ 270,000	3-27-2015	1,512	\$179
90 Steuben Rd	\$ 289,000	6-09-2017	1,456	\$198
60 Steuben Rd	\$ 300,000	6-06-2016	1,260	\$238
62 Steuben Rd	\$ 330,000	9-27-2017	1,823	\$181
72 Steuben Rd	\$ 300,000	2-23-2015	1,700	\$176

Average Sales Price per Square Foot: \$188

Study indicates that the properties with views of a radio tower and properties without a view of a radio tower have virtually equal average price per square feet, in this specific neighborhood.

---

<sup>1</sup>I understand that a question was raised about a missing sale in proximity to the Sky Lane tower. Please note that pursuant to my well accepted methodology I compiled all single family sales from the State deed recording service, then sorted them by map number and took all the sales in the immediate area. I then checked the MLS and added several sales which were noted as sold but were not listed by the State. No sales were left out in that particular area that I am aware of. I would be happy to review a particular sale if provided with the address.

**Exhibit 2, Putnam Lake area of Patterson, Putnam County, NY**

A monopole located on the hillside behind 25 Garland Road in Patterson, NY. The following sale are located several streets away and has a direct view of the communications tower:

**2010 - 2012 Study**

<u>Address</u>	<u>Sale Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
7 Brandon Road	\$173,000	3-29-2010	778	\$220

The following properties are in the same Putnam Lake neighborhood but have no view of the communications tower:

<u>Address</u>	<u>Sale Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
1 Allen Drive	\$252,500	2-1-2010	920	\$274
111 Haviland Drive	\$160,000	10-0-2010	1,048	\$153
18 Ottawa Road	\$150,000	2-24-2011	768	\$195
50 Homer Drive	\$190,000	3-4-2011	1,880	\$101
Average price per square foot:				\$181

**Exhibit 3, Lewisboro, Westchester County, NY**

A 130' monopole located at the Lewisboro Town Park on Route 35, in Cross River, NY. The following sales are located on the surrounding streets and are very close to the communications tower, within sight:

**2012 - 2016 STUDY**

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
1046 Route 35	\$ 542,000	6-30-2014	2,232	\$242
1 Buck Run	\$ 419,000	6-25-2015	1,784	\$235
7 Buck Run	\$ 578,000	4-10-2014	2,560	\$225
12 Apple Hill Ct	\$ 891,000	2-24-2012	3,416	\$260
4 Apple Hill Ct	\$1,100,000	9-20-2013	5,664	\$194
5 Pamela Ln	\$ 630,000	6-27-2014	2,713	\$232
1173 Old Post Rd	\$ 480,000	11-4-2013	2,112	\$227
5 Hunts Farm Rd	\$ 515,000	6-12-2014	2,040	\$252
14 Hunts Farm Rd	\$ 783,000	7-14-2015	3,236	\$242
19 Hunts Farm Rd	\$ 725,000	4-25-2012	2,973	\$243
42 Hunts Farm Rd	\$ 885,000	9-04-2013	3,179	\$278

Average Sales Price per Square Foot: \$239

The following properties are in the same neighborhood but have no view of the communications tower:

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
58 Mark Mead Rd	\$ 395,000	2-18-2014	1,233	\$320
924 Route 35	\$ 325,000	7-17-2014	1,433	\$226
3 Debbie Ln	\$ 533,000	9-11-2012	2,548	\$209
1195 Route 35	\$ 390,000	6-06-2014	2,000	\$195
1191 Route 35	\$ 312,500	2-28-2014	1,896	\$164
20 Hunts Farm Rd	\$ 830,000	5-09-2014	3,266	\$254
21 Hunts Farm Rd	\$ 850,000	12-5-2013	4,500	\$188
22 Hunts Farm Rd	\$ 810,000	8-16-2016	3,444	\$235
23 Hunts Farm Rd	\$ 780,000	7-20-2016	3,503	\$223
24 Hunts Farm Rd	\$ 824,500	1-17-2014	3,333	\$247
27 Hunts Farm Rd	\$ 619,000	7-28-2014	3,300	\$187
33 Hunts Farm Rd	\$ 700,000	6-27-2013	2,715	\$257

Average Sales Price per Square Foot: \$225

Study indicates that the properties with views of a communications tower have a greater average price per square foot than those without a view of a communications tower.

**Exhibit 4, New Castle, Westchester County, NY**

A 130' monopole constructed in 2015 and located on a nursery property on Armonk Road, in the Town of New Castle, NY. The following sales are located on the surrounding streets and are very close to the communications tower:

**2015 - 2016 Study**

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
768 Armonk Rd	\$ 470,000	9-15-2016	1,416	\$332
785 Armonk Rd	\$1,266,000	8-26-2016	5,910	\$214
20 Hollow Ridge Rd	\$1,625,000	5-01-2015	5,695	\$285
23 Hollow Ridge Rd	\$3,350,000	9-11-2015	8,976	\$373
77 Whippoorwill Lk	\$1,700,000	12-7-2015	5,000	\$340
72 Whippoorwill Lk	\$1,875,000	9-29-2015	6,617	\$304

Average Sales Price per Square Foot: \$308

These properties are in the same neighborhood but have no view of the communications tower:

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
66 Tripp St	\$ 870,500	1-11-2016	2,972	\$293
30 Roseholm Pl	\$ 764,000	5-21-2015	3,303	\$231
6 Whippoorwill Cl	\$1,260,000	9-21-2015	4,430	\$284
340 Whippoorwill Rd	\$ 885,000	3-30-2016	3,184	\$278
335 Whippoorwill Rd	\$1,500,000	5-02-2016	5,566	\$269
20 Bessel Ln	\$3,648,888	1-06-2015	8,200	\$445
82 Carolyn Pl	\$1,900,000	12-7-2015	6,662	\$285
50 Carolyn Pl	\$2,540,000	9-29-2015	7,675	\$331

Average Sales Price per Square Foot: \$302

Study indicates roughly equal value for properties, with and without a view of a communications tower.

**Exhibit 5, Pound Ridge, Westchester County, NY**

A 130' monopole located on a Town site at 89 Westchester Avenue in Pound Ridge, NY. The following sales have a view of the communications tower:

**2014 - 2017 STUDY**

These properties have a view of the communications tower.

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
17 Trinity Pass Rd	\$885,000	8-10-2016	2,850	\$311
97 Westchester Av	\$2,100,000	7-12-2016	3,853	\$545
24 Pine Dr	\$640,000	12-2-2016	3,112	\$206
32 Pine Dr	\$795,000	7-15-2016	3,456	\$230
10 Trinity Ln	\$640,000	7-18-2014	2,152	\$297
12 Hemlock Hill Dr	\$1,050,000	8-17-2016	3,205	\$328

Average sales price for homes with a view:	\$320
Average sales price for homes without 97 Westchester Av	\$274

The following properties are in the same neighborhood but have no view of the communications tower:

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
57 Upper Shad Rd	\$575,000	7-31-2014	2,040	\$282
49 Upper Shad Rd	\$617,500	6-15-2016	3,234	\$191
17 Bayberry Way	\$750,000	9-29-2015	3,408	\$220
140 Westchester Av	\$985,000	5-08-2014	2,838	\$347
33 Hemlock Hill Dr	\$1,200,000	3-24-2016	4,023	\$298
33 Hemlock Hill Dr	\$1,162,500	7-28-2014	4,023	\$289
34 Hemlock Hill Dr	\$568,000	7-30-2014	2,102	\$270

Average sales price for homes with no view of the tower	\$271
---	-------

Study indicates higher prices for homes with a view of a communications tower if the property next door to the Tower is considered. If the sale at 97 Westchester Avenue is withheld from the average calculation, then the average price per square is virtually the same for properties with and without a view of the Tower.

**Exhibit 6, Pound Ridge, Westchester County, NY**

A 155' monopole, constructed in 2007 and located off Adams Lane in Pound Ridge, NY. The following sales have a view of the communications tower:

**2014 - 2017 STUDY**

These properties have a view of the communications tower.

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
21 Donbrook Rd	\$799,900	7-28-2016	2,546	\$315
29 Donbrook Rd	\$1,030,000	9-14-2016	4,227	\$244
51 Salem Road	\$1,675,000	9-15-2015	5,993	\$279
65 Salem Road	\$527,000	1-13-2017	1,521	\$346
65 Salem Road	\$360,000	3-24-2014	1,521	\$237

Average sales price for homes with a view: \$284

The following properties are in the same neighborhood but have no view of the communications tower:

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
21 Salem Rd	\$407,062	3-14-2014	2,529	\$160
21 Salem Rd	\$715,000	3-21-2016	2,529	\$283
35 Salem Road	\$1,375,000	9-12-2014	5,114	\$269
54 Old Stone Hill Rd	\$4,050,000	4-23-2014	6,273	\$646
90 Old Stone Hill Rd	\$757,500	11-17-2015	2,876	\$263
147 Salem Rd	\$415,000	5-01-2015	1,749	\$237
157 Salem Rd	\$510,000	4-28-2015	3,222	\$158
36 Kitchawan Rd	\$485,000	1-19-2017	2,412	\$201
167 Salem Rd	\$1,327,500	11-22-2016	4,199	\$316

Average sales price for homes with no view of communications tower \$282

Study indicates very similar prices on homes with no view of the communications tower and with a view of the communications tower.

**Exhibit 7, Somers, Westchester County, NY**

A 100' monopole located at the top of the West Hill in the Heritage Hills Condominium complex Somers , NY. The following sales have a view of the communications tower:

**2014 - 2016 STUDY**

These properties have a direct view of the communications tower.

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
346D Heritage Hills	\$305,000	7-29-2015	1,168	\$261
348A Heritage Hills	\$315,000	1-07-2015	1,428	\$221
349A Heritage Hills	\$362,000	3-20-2015	1,435	\$252
351E Heritage Hills	\$331,500	11-15-2015	1,435	\$231
352C Heritage Hills	\$622,500	6-24-2016	1,973	\$316
449A Heritage Hills	\$350,000	7-18-2014	1,353	\$259
451D Heritage Hills	\$400,000	1-04-2016	1,265	\$316
462B Heritage Hills	\$517,000	8-28-2014	1,905	\$271
464B Heritage Hills	\$370,000	4-23-2014	1,265	\$292
464C Heritage Hills	\$549,000	6-13-2016	1,793	\$306

Average sales price for unit with view of tower: \$273

The following properties are in the same neighborhood but have no view of the communications tower:

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
332A Heritage Hills	\$359,000	7-08-2015	1,550	\$232
332B Heritage Hills	\$395,000	12-23-2016	1,550	\$255
332B Heritage Hills	\$417,000	8-06-2015	1,550	\$269
333C Heritage Hills	\$341,000	11-3-2014	1,435	\$238
339B Heritage Hills	\$390,000	11-18-2016	1,550	\$252
340B Heritage Hills	\$389,000	8-02-2016	1,594	\$244
355B Heritage Hills	\$389,000	1-12-2016	1,484	\$262
355D Heritage Hills	\$495,000	10-3-2014	1,793	\$276
358A Heritage Hills	\$435,000	2-03-2016	1,435	\$303
358C Heritage Hills	\$350,000	1-27-2014	1,550	\$226
361A Heritage Hills	\$545,000	7-22-2014	1,793	\$304
364D Heritage Hills	\$422,500	8-25-2016	1,484	\$285
460B Heritage Hills	\$464,900	9-15-2015	1,472	\$314
468B Heritage Hills	\$600,000	4-06-2015	1,905	\$315
478D Heritage Hills	\$352,500	5-05-2015	1,265	\$279
468A Heritage Hills	\$280,000	10-21-2016	967	\$290
478C Heritage Hills	\$285,500	9-13-2016	967	\$295
480C Heritage Hills	\$443,000	9-16-2014	1,598	\$277
482B Heritage Hills	\$415,000	6-19-2015	1,483	\$280
486B Heritage Hills	\$348,000	5-12-2015	1,265	\$275
487A Heritage Hills	\$297,000	7-26-2016	967	\$307
489B Heritage Hills	\$391,000	12-22-2016	1,483	\$264
490B Heritage Hills	\$485,000	7-17-2014	1,598	\$304
494D Heritage Hills	\$276,000	3-19-2014	967	\$285
497B Heritage Hills	\$580,000	11-7-2014	1,905	\$304
498A Heritage Hills	\$342,420	9-04-2015	1,265	\$271

Average sales price for unit without a view of tower: \$277

Study indicates very similar prices on homes with no view of the communications tower and with view of the communications tower.

**Exhibit 8, Stony Point, Rockland County, NY**

A 130' monopole located at the Stony Point Police Department on Route 210, in Stony Point, NY. The following sales are located in the surrounding streets and are very close to the communications tower:

**2007 - 2009 STUDY - Stony Point**

Homes with Direct View of Tower

Smaller Homes

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
11 Sunrise Drive	\$435,000	6-29-2007	1,748	\$248.85
122 Route 210	\$345,270	11-24-2008	1,228	\$281.16

Average Sales Price per Square Foot: \$265.00

Larger Home

3 Florus Crom Ct	\$595,000	10-15-2007	2,737	217.39
------------------	-----------	------------	-------	--------

The following properties are in the same neighborhood but have no view of the communications tower:

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
<u>Smaller Homes</u>				
35 Sunrise Drive	\$445,000	4-18-2007	1,824	\$243.96
9 Wenzel Lane	\$415,000	8-22-2007	1,872	\$221.68
14 Garrison Lane	\$389,000	4-24-2009	1,896	\$205.16

Average Sales Price per Square Foot: \$223.60

Larger Homes

156 Route 210	\$475,000	3-21-2007	2,110	\$225.11
17 Brooks Dr	\$370,000	11-26-2008	2,286	\$161.85
8 Garrison Lane	\$415,000	7-17-2008	2,104	\$197.24
11 Schassler Pl	\$465,000	2-19-2009	2,853	\$162.98
3 Garrison Lane	\$389,000	4-20-2009	2,166	\$179.59

Average Sales Price per Square Foot \$185.35

Study indicates no price reduction for homes with a view of a communications tower.

**Exhibit 9, Suffern, Rockland County, NY**

A stealth flagpole was constructed at 61 Washington Avenue and consists of a monopole/flagpole at the Suffern Village Hall. It is approximately 90' in height. The following sales have a direct view of the communications tower:

**2007 - 2010 Study - Suffern**

The following sales have a direct view of the communications tower:

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
23 Clinton Pl	\$520,000	8-09-2007	2,611	\$199.15
17 Mansfield Pl	\$420,000	2-28-2008	1,826	\$230.01
54 E. Maltbie St	\$375,000	6-14-2007	1,306	\$287.13

Average Sales Price per Square Foot: \$238.76

These properties are in the same neighborhood but have no view of the communications tower:

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
6 Cross St	\$300,000	8-10-2007	1,176	\$255.10
11 Riverside Dr	\$365,000	6-28-2007	1,709	\$213.57
169 Wayne Av	\$347,000	1-04-2008	1,482	\$234.14
143 Wayne Av	\$351,000	1-09-2008	1,458	\$240.74
48 Park Av	\$310,000	8-18-2008	2,269	\$136.62
7 Maple Ave	\$317,000	11-12-2009	1,400	\$226.42

Average Sales Price per Square Foot: \$217.76

The study indicates lower prices without a view of a communications tower. It is interesting to note that the highest price per square foot was paid for a house with a view of a tower. No usable sales in 2010.

**Exhibit 10, Orangeburg, Rockland County, NY**

A monopole located at the Orangeburg Town Hall on Orangeburg Road. The following sales are located in the surrounding streets and have a direct view of the communications tower:

**2008 - 2010 Study - Orangeburg, NY**

These are sales during this time period with a direct view of the communications tower:

<u>Address</u>	<u>Sale Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
50 Dutch Hollow Dr	\$465,000	8-22-2008	1,900	\$244.73
66 Dutch Hollow Dr	\$568,000	7-13-2009	2,300	\$246.96
116 Parkway Dr S	\$420,000	10-13-2009	1,544	\$272.02
Average Sales Price				\$254.57

The following properties are in the same neighborhood but have no view of the communications tower:

<u>Address</u>	<u>Sale Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
14 Parkway Dr S	\$430,000	1-31-2008	1,840	\$233.69
2 Fern Oval W	\$411,000	5-22-2009	1,874	\$219.31
1 Edgewood Dr	\$510,000	9-22-2009	2,400	\$212.50
39 Carleton Rd	\$463,000	10-15-2009	1,840	\$251.63
43 Carleton Rd	\$435,000	10-20-2009	1,840	\$236.41
34 Chestnut Oval	\$351,000	3-02-2010	1,504	\$233.37
Average Sales Price per Square Foot:				\$231.15

Study indicates no loss of value for properties with a view of a communications tower.

**Exhibit 11 Spring Valley, Rockland County, NY**

A monopole located at the Spring Valley Hook and Ladder building on Furman Place. The following sales are located in the surrounding streets and have a direct view of the communications tower:

**2007 - 2010 Study**

After second monopole erected at DPW site in same neighborhood.

The following sales are located in the surrounding streets and have a direct view of the communications towers:

<u>Address</u>	<u>Sale Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
6 Cole Ave N	\$433,160	6-15-2007	2,086	\$207.65
26 Cole Ave S	\$350,000	12-10-2007	1,476	\$237.12
5 Collins St	\$250,000	3-22-2010	849	\$294.46
Average Sales Price per Square Foot:				\$246.41

The following properties are in the same neighborhood but have no view of the communications towers:

<u>Address</u>	<u>Sale Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
48 West St	\$365,000	1-04-2007	1,500	\$243.33
7 Van Orden Ave	\$453,200	3-13-2007	1,872	\$242.09
51 Collins St	\$145,500	4-26-2010	960	\$151.56
18 Van Orden Ave	\$196,000	6-10-2010	1,092	\$179.48
50 Collins St	\$160,000	6-24-2010	650	\$246.15
Average Sales Price per Square Foot:				\$212.52

Study indicates lower values for homes without a view of a communications tower.

**Exhibit 12, 117 Duelk Ave, South Blooming Grove, Orange County, NY**

A 125' monopole located just west of Route 208, on Duelk Avenue, in South Blooming Grove, in the Town of Monroe, NY. The following sales are located on the surrounding streets and are very close to the communications tower, within sight:

**2014 - 2017 STUDY**

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Area</u>	<u>Price/SF</u>
303 Lake Shore Dr	\$ 360,000	9-27-2016	2,147	\$168
316 Lake Shore Dr	\$ 235,000	9-26-2016	1,512	\$155
4 Red Bird Dr	\$ 267,000	10-13-2016	1,716	\$156
2 Beech Tree Rnd	\$ 210,000	7-07-2016	1,040	\$202
25 Merriewold Ln N	\$ 150,000	8-17-2015	1,552	\$ 97
4 Lone Oak Cir	\$ 225,000	10-31-2016	1,728	\$130
14 Old Town Rd	\$ 265,000	12-8-2014	1,778	\$149
11 Lee Av	\$ 319,000	11-8-2016	1,934	\$165
26 Duelk Av	\$ 240,000	12-13-2016	960	\$250
19 Duelk Av	\$ 160,000	3-31-2016	960	\$167
83 Duelk Av	\$ 245,000	12-1-2016	1,092	\$224
25 Duelk Av	\$ 275,000	11-14-2016	1,012	\$272
4 Laredo Ct	\$ 319,900	11-29-2016	1,504	\$213
4 Laredo Ct	\$ 237,900	3-27-2015	1,504	\$158
5 Laredo Ct	\$ 210,000	9-12-2016	960	\$219
23 Duelk Av	\$ 260,000	1-23-2017	960	\$271
106 Duelk Av	\$ 305,000	2-22-2017	1,772	\$172
2 Pecos Ct	\$ 230,000	7-21-2016	1,240	\$185
90 Duelk Av	\$ 209,500	1-29-2016	1,184	\$177
86 Duelk Av	\$ 230,000	11-12-2014	1,280	\$180
Average Sales Price per Square Foot:				\$185

The following properties are in the same neighborhood but have no view of the communications tower:

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Area</u>	<u>Price/SF</u>
10 Hawks Nest Rd	\$ 242,300	1-14-2016	1,332	\$182
252 Lake Shore Dr	\$ 254,800	4-23-2014	1,852	\$138
374 Lake Shore Dr	\$ 307,500	12-8-2016	1,840	\$167
20 Hawthorne Dr	\$ 466,100	11-9-2016	1,993	\$234
22 Hawthorne Dr	\$ 346,000	11-23-2016	1,616	\$214
25 Hawthorne Dr	\$ 350,000	2-21-2017	1,796	\$195
19 Hawthorne Dr	\$ 315,000	1-13-2017	1,792	\$176
15 Hawthorne Dr	\$ 245,000	7-15-2015	1,104	\$222
10 Pine Hill Rd	\$ 250,000	10-10-2014	1,332	\$188
23 Pine Hill Rd	\$ 260,000	7-27-2016	1,340	\$194
37 Pine Hill Rd	\$ 240,000	8-15-2016	1,260	\$190
56 Duelk Av	\$ 299,000	9-29-2016	1,176	\$254
56 Duelk Av	\$ 255,000	5-11-2016	1,176	\$217
56 Duelk Av	\$ 170,000	4-01-2015	1,176	\$145
54 Duelk Av	\$ 240,000	2-23-2017	960	\$250
46 Duelk Av	\$ 250,000	11-8-2016	960	\$260
40 Duelk Av	\$ 190,000	10-1-2015	1,680	\$113
40 Duelk Av	\$ 275,000	1-25-2017	1,680	\$164
65 Duelk Av	\$ 243,000	3-10-2016	1,464	\$166
51 Duelk Av	\$ 230,000	10-14-2016	1,344	\$171
12 San Antonio Cir	\$ 270,000	1-24-2017	1,410	\$191
11 San Antonio Cir	\$ 335,000	11-28-2016	2,124	\$158
1 San Antonio Cir	\$ 190,000	1-30-2017	960	\$198
76 Duelk Av	\$ 220,000	4-04-2016	1,523	\$144
13 Dallas Dr	\$ 170,000	3-03-2016	994	\$171
34 Peddler Hill Rd	\$ 240,000	9-11-2015	1,390	\$173

Average Sales Price per Square Foot: \$187

Study indicates that the properties with views of a communications tower and properties without a view of a communications tower have virtually equal average price per square feet, in this specific neighborhood.

**Exhibit 13, 1 Ridge Rd, Hamptonburgh, Orange County, NY**

A 162' self supporting pole located just south of Route 207, on Ridge Road, in Hamptonburgh, in the Town of Monroe, NY. The following sales are located on the surrounding streets and are very close to the communications tower, within sight:

**2014 - 2017 STUDY**

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Area</u>	<u>Price/SF</u>
506 Ridge Rd	\$ 215,000	10-22-2015	1,528	\$141
4 Lincolndale Rd	\$ 315,000	6-12-2015	2,378	\$132
10 Shea Rd	\$ 380,000	12-3-2015	2,604	\$146
18 Kimberly Dr	\$ 390,000	8-22-2014	3,124	\$125
118 Sarah Wells Trail	\$ 200,000	3-22-2017	1,147	\$174
5 Arbor Rd	\$ 370,000	9-16-2016	2,064	\$143
	Average Sales Price per Square Foot:			\$143

The following properties are in the same neighborhood but have no view of the communications tower:

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Area</u>	<u>Price/SF</u>
43 Day Rd	\$ 405,000	3-09-2017	2,210	\$183
66 Day Rd	\$ 285,000	9-20-2016	2,222	\$128
58 Day Rd	\$ 425,000	6-22-2015	2,956	\$144
7 Darren Dr	\$ 245,900	8-16-2016	1,532	\$161
32 Day Rd	\$ 278,000	6-25-2014	2,044	\$136
27 Arbor Rd	\$ 450,000	8-25-2015	3,208	\$140
27 Arbor Rd	\$ 324,000	8-09-2016	1,993	\$163
27 Arbor Rd	\$ 365,000	2-01-2017	2,592	\$141
27 Arbor Rd	\$ 340,323	10-3-2014	2,400	\$142
	Average Sales Price per Square Foot:			\$143

Study indicates that the properties with views of a communications tower and properties without a view of a communications tower have virtually equal average price per square feet, in this specific neighborhood.

**Exhibit 14, 1924 Route 9, Philipstown, Putnam County, NY**

A monopine located on the hillside behind 1924 Route 9 in Philipstown, NY. The following sale are located within winter view of the communications tower:

**2015 - 2017 Study**

<u>Address</u>	<u>Sale Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
1910 Route 9	\$630,000	9-30-2016	2,688	\$234
1941 Route 9	\$356,000	2-13-2015	2,610	\$136
41 Daffodil Hill Rd	\$1,350,000	3-15-2017	3,652	\$370
14 Stone Ridge Rd	\$635,000	6-06-2016	2,522	\$252
8 Stone Ridge Rd	\$375,000	7-20-2017	1,060	\$354

Average price per square foot: \$269

The following properties are in the same neighborhood but have no view of the communications tower:

<u>Address</u>	<u>Sale Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
88 Snake Hill Rd	\$1,050,000	5-02-2017	3,638	\$289
18 Coleman Rd	\$749,000	9-28-2015	3,136	\$239
71 Travis Corners Rd	\$549,000	2-24-2015	1,561	\$352
85 Travis Corners Rd	\$736,000	5-22-2017	3,567	\$206
70 Frazier Rd	\$555,000	4-19-2017	2,882	\$193
89 Frazier Rd	\$380,000	11-28-2016	1,332	\$285
64 Kona Way	\$585,000	3-03-2016	2,316	\$253

Average price per square foot: \$259

Study indicates that the properties with views of a communications tower have a slightly greater average price per square foot than those without a view of a communications tower.

**QUALIFICATIONS OF APPRAISER**

## QUALIFICATIONS

**PAUL A. ALFIERI, III, MAI**

Senior Appraiser  
Lane Appraisals, Inc.  
178 Myrtle Boulevard  
Larchmont, New York 10538

### PROFESSIONAL DESIGNATIONS

**MAI - Member of the Appraisal Institute - #12165**

Certified General Appraiser  
State of New York #46000009780

Accredited New York State Department of Transportation, Right of Way Appraiser

### GENERAL EDUCATION

St. Lawrence University  
Canton, New York  
B. A. - 1984

### PROFESSIONAL APPRAISAL EDUCATION

#### The Appraisal Institute -

#1A-1	- Fall, 1985	- Appraisal Principles
# 8-2	- Spring, 1985	- Residential Valuation
#1A-2	- Fall, 1986	- Basic Valuation
#1B-A	- Spring, 1989	- Capitalization Theory and Techniques - A
# SPP	- Summer 1989	- Standards of Professional Practice
#1B-B	- Fall, 1989	- Capitalization Theory and Techniques - B
# 2-1	- Spring 1990	- Case Studies in Real Estate Valuation
# 2-2	- Summer 1991	- Report Writing and Valuation Analysis
# 520	- Winter 1994	- Advanced Highest and Best Use and Market Analysis
# 320	- Spring 1994	- General Applications
# 530	- Summer 1994	- Advanced Sales Comparison and Cost Approaches
# SPP A	- Fall, 1994	- Standards of Professional Practice (USPAP) - A
# SPP B	- Fall, 1994	- Standards of Professional Practice (Ethics) - B
# SPP C	- Fall, 1999	- Standards of Professional Practice (USPAP/Ethics) - C
# 710	- Summer 2003	- Standards of Professional Practice (USPAP/Ethics) - 15 Hr
	- Fall 2004	- Condemnation Appraising: Principals and Applications
	- Summer 2007	- Evaluating Commercial Construction
	- Fall 2007	- Small Hotel and Motel Valuation
	- Summer 2008	- Convenience Store Valuation
	- Winter 2008	- Apartment Valuation
	- Winter 2008	- Subdivision Valuation
	- Spring 2011	- Litigation Skills for the Appraiser
	- Winter 2012	- Residential and General Appraisal Curriculum Overview
	- Spring 2012	- IRS Valuation Webinar
	- Winter 2013	- Business Ethics
	- Spring 2013	- International Valuation Standards
	- Fall 2013	- Analyzing Operating Expenses
	- Fall 2013	- Rates & Ratios: Making Sense of GIMs, OARs & DCFs
- Fall 2014	- Right-Of-Way Easements; Case Studies Webinar	
- Fall 2015	- Contamination and the Valuation Process	

### QUALIFIED AS AN EXPERT IN REAL ESTATE VALUATION

US Bankruptcy Court      New York State Supreme Court      New York State Court of Claims

Since 1984, engaged exclusively in appraising real estate. Assignments include:

Single family homes, condominiums, cooperative apartments, two to six family dwellings, rental apartment buildings, cooperative apartment buildings, condominium complexes, Section 8, Section 236 (Mitchell Lama) and HUD apartment projects, nursing care and life care communities, senior living facilities, public buildings, municipal properties, parks, hotels, industrial buildings, gas and service stations, auto dealerships, office buildings, retail and wholesale facilities, regional and neighborhood shopping centers, estates, marinas, country clubs, golf courses, sub-divisions, easements, encroachments, air rights and vacant parcels for purposes of finance, purchase, sale, gift tax, estate tax, divorce, bankruptcy, condemnation, tax certiorari proceedings, internal and estate planning, Right-of-Way analysis, gas pipeline expansion, HUD Rent Comparability Study, and New York State Equalization Rate challenges.

Primary professional territory comprises Westchester, Putnam, Dutchess, Rockland, Orange, Ulster,

**Sullivan, Greene, Bronx, Queens, Kings (Brooklyn), Richmond (Staten Island) and New York (Manhattan) Counties in New York, and Fairfield and New Haven Counties in Connecticut.**

**PAUL A. ALFIERI, III, MAI**  
**APPRAISAL EXPERIENCE**  
**APPRAISALS COMPLETED FOR**

New York State Supreme Court  
State of New York, Office of General Svcs  
State of New York, Dept of Transportation  
State of New York Office of Parks,  
Recreation & Historic Preservation  
State of New York, Office of Mental  
Retardation and Developmental Disabilities  
State of New York, Office of Mental Health  
Bureau of Housing Development & Support  
County of Westchester  
County of Putnam, Dept. of Finance  
County of Rockland, Dept. of Finance  
City of Mount Vernon  
City of New Rochelle  
City of Yonkers  
City of Rye  
City of Peekskill  
City of White Plains  
Town of Bedford  
Town of Carmel  
Town of Greenburgh  
Town of Ossining  
Town of Pelham  
Town of Lewisboro  
Town of New Castle  
Town of Patterson  
Town of Putnam Valley  
Town of Harrison  
Town of Mt. Pleasant  
Town of Rye  
Town of Southeast  
Town of Scarsdale  
Town of Blooming Grove  
Village of Ardsley  
Village of Croton-on-Hudson  
Village of Dobbs Ferry  
Village of Harrison  
Village of Mamaroneck  
Village of Larchmont  
Village of Ossining  
Village of Pelham Manor  
Village of Irvington  
Village of Elmsford  
Village of Pelham  
Village of Port Chester  
Village of Scarsdale  
Village of South Blooming Grove  
Brewster Central School District  
Town of Greenburgh Department of  
Community Dvlpmt and Conservation  
State of New York, Business Dvlpmt Corp.  
Empire State Certified Development Corp.  
U.S. Small Business Administration  
Statewide Zone Capital Corp.  
Yonkers, New Main St. Redevelopment Corp.

Environmental Protection Agency  
Dormitory Authority of the State of NY  
Mount Vernon Hospital  
St. Josephs Medical Center  
St. Vincents Hospital Westchester  
St. Agnes Hospital  
Phelps Memorial Hospital Corp.  
White Plains Medical Center  
The Burke Rehabilitation Hospital  
The Seabury Wilson Home  
The March of Dimes  
The United Way of Westchester  
The Salvation Army  
The Congregation of Jehovah's Witnesses  
LDS Church  
Good Shepard Presbyterian Church  
Hudson River Presbyterian Church  
St. Johns Lutheran Church  
Zion AME Baptist Church  
Shiloh Baptist Church  
Valhalla United Methodist Church  
Missionary Church Investment Foundation  
Corporation of the Presiding Bishop of the  
Church of Jesus Christ of Latter-Day Saints  
Retirement Living Services  
Hebrew Hospital Home Foundation, Inc.  
Beth Abraham Health Services  
Schnurmacher Nursing Home  
Saint Michael's Home for the Aged  
Jewish Board of Family & Children's Svcs  
Board of Cooperative Educational Services  
(BOCES)  
YM+YWHA of Southern Westchester  
YMCA of Central & Northern Westchester  
YMCA of Mt. Vernon  
Tarrytown YMCA  
New Rochelle YMCA  
Iona College  
The Windward School  
The Berkley School  
Pace Business School  
Mid Westchester Elks Club  
Westchester Interfaith Council  
Westhab  
Innovations for Community Advancement  
The Masonic Guild of Port Chester  
Planned Parenthood of Westchester and  
Rockland, Inc.  
Westchester Land Trust  
Westchester Joint Water Works  
National Development Council  
Legal Services of the Hudson Valley  
The Institute for Justice  
Putnam Community Foundation  
Community Builders

**PAUL A. ALFIERI, III, MAI**  
**APPRAISAL EXPERIENCE**  
**APPRAISALS COMPLETED FOR**

**MBIA Insurance Company**  
**Metropolitan Life**  
**Principal Mutual Life Insurance Co.**  
**Guardian Insurance Company**  
**GDC Development Corp.**  
**Capelli Enterprises**  
**APEX Development Compnay**  
**Urstadt Biddle Properties**  
**Jones, Lang, Wooten**  
**Halpern Enterprises**  
**Forest City Daly Housing Corp.**  
**Mack Cali**  
**Colliers Int'l Valuation & Advisory Services**  
**Industrial Heater Corp.**  
**Sunoco**  
**Barrier Oil Company**  
**Castle Oil**  
**Motiva Enterprises**  
**Neptune Moving Company**  
**Toyota**  
**Toyota Financial Services**  
**Pepe Auto Group**  
**Alfredo's Foreign Cars**  
**Soundview Chevrolet**  
**Westchester Chrysler Plymouth**  
**Pace Honda**  
**Rye Ford Subaru**  
**Acura of Westchester**  
**Willow Motors**  
**Heart Kia**  
**Heart Ford**  
**Mallory Kotzen Tires**  
**Direcktor's Boatyard**  
**Steel Style Development Corp.**  
**Swanson Boat Transport Co.**  
**Mid Ocean Tankers**  
**Defender Marine**  
**Mamaroneck Boat and Motors**  
**Nichols Boatyard**  
**McMichael Boating Center**  
**Glen Island Yacht Club**  
**West Harbor Yacht Services, Inc.**  
**Tax Assessment Experts**  
**Consumers Union**  
**Combe Inc.**  
**USTA National Tennis Center**  
**Ticor Title Guarantee Co.**  
**Security Mutual Life Insurance Co. of NY**  
**The Community Builders**

**Reichhold Chemical**  
**Leroy Pharmacies**  
**Ciba Geigy**  
**Akzo Nobel, Inc.**  
**Quick Quality Restaurants**  
**Mutual Biscuit Company**  
**Imperial Yacht Club**  
**Manursing Island Club**  
**Glen Island Yacht Club Inc.**  
**Willow Ridge Country Club**  
**Beckwith Point Beach and Tennis Club**  
**PCC Real Estate, Inc. (A Penn Central Co.)**  
**Pepsico.**  
**Store 24**  
**The Great Atlantic and Pacific Tea Co.**  
**ShopRite Supermarket Inc.**  
**New York Telephone**  
**Plaza Materials Company**  
**Transpo Industries**  
**Suburban Carting Company**  
**Dunham Paint Company**  
**Landauer Metropolitan Medical**  
**The Chapson Corporation**  
**Robert Martin Rosedale Corporation**  
**Otto Brehm**  
**Neri Bakery**  
**Tork Time Clock**  
**Liberty Lines Bus Company**  
**General Motors**  
**Teledyne, Inc.**  
**Verizon Wireless**  
**Prodigy**  
**Kenneth Cole**  
**Purdue Frederick Company**  
**Rostenberg-Doern Company**  
**Houlihan-Parnes**  
**Strategic Resources Corporation**  
**Flynn Burner**  
**Continental Hosts**  
**Lifetime Fitness Co.**  
**CSX Railroad/CSX Realty Corp.**  
**Spectra Energy/Algonquin Gas**  
**Zipjack Industry**  
**Cugine Foods**  
**Quick Quality Restaurants**  
**Hudson Valley Resorts**

**PAUL A. ALFIERI, III, MAI**  
**APPRAISAL EXPERIENCE**  
**FINANCIAL INSTITUTIONS**

Abacus Federal Savings Bank  
American Savings Bank  
America's Christian Credit Union  
Apple Savings  
Anchor Savings Bank  
Allstate Appraisal Services  
Algemene Bank of Netherlands  
Alliance Bank  
Alliance Funding  
A-1 Preferred Mortgage  
Anchor Equities, Ltd.  
BNC National Bank  
BMC Capital  
Beacon Financial  
Banco Popular  
Bankers Trust Company  
Bank of America  
Bank Leumi  
Bank of New York  
Barclay's Bank of New York  
Business Loan Express  
Carver Federal Savings Bank  
The Chase Manhattan Bank, N.A.  
Chemical Bank  
Century Capital Corporation  
Columbia Equities, Ltd.  
Consumer Capital Corporation  
Central Federal Bank  
Chase Bank  
Chemical Bank  
The Chase Manhattan Bank, N.A.  
Citibank, N.A.  
Cititrust  
City and Suburban Federal Savings Bank  
Crossland Savings Bank  
Comfed Savings Bank  
Commonwealth Mortgage Company  
Community Mutual Savings Bank  
Community Preservation Corporation  
Conamero Development Corporation  
Condo Plus  
Consortium Financial  
Countrywide Funding Corporation  
Country Bank  
Crossway Capital, Ltd.  
Customers Bank  
Dime Savings Bank  
Dollar Dry Dock Savings Bank  
DuPont Mortgage Corporation  
Eagle Funding  
Eastchester Savings Bank  
Eastern Savings Bank  
Educational and Governmental Employees  
Credit Union  
Edison Funding  
Emigrant Savings Bank  
Empire Financial Corporation  
Empbanque Capital Corporation  
Empire of America  
Ensign Bank  
Equity Mortgage  
Equity Stars  
Exchange Mortgage Corporation  
Express Equity  
Family Financial  
The First Boston Corporation  
FDIC  
First Boston Mortgage Center  
First Fidelity  
First Northern  
First National Mortgage and Finance Co.  
First National Bank of North Tarrytown  
First Union Corporation  
Fleet Bank  
Florida Capital Management  
Four Star Funding  
Foremost Funding  
Full Service Funding  
Gibraltar Money Center  
Goldstar Resources  
Goldome  
GM Wolkenberg, Inc.  
Green Park Financial  
Heartland Bank  
Heritage Funding  
Holme Capital  
Homequity  
Home Funding  
Home Mortgage  
Home Savings Bank  
Houlihan Lawrence Financial  
Hudson United Bank  
Hudson Valley National Bank  
IBM Relocation  
Intercounty  
Investors Mortgage

**PAUL A. ALFIERI, III, MAI**  
**APPRAISAL EXPERIENCE**  
**FINANCIAL INSTITUTIONS**

**J P Morgan Chase**  
**Kadillac Funding, Ltd.**  
**LaJolla Bank**  
**Larchmont Federal S & L Association**  
**Lehman Brothers Bank**  
**Love Funding**  
**Mahopac National Bank**  
**Mansfield Mortgage**  
**Marine Midland Bank**  
**Medallion Funding Corporation**  
**Meritor Credit Corporation**  
**Merrill Lynch Mortgage**  
**Merrill Lynch Relocation**  
**Metro Bank**  
**Metropolitan Fundin**  
**Midlantic Mortgage Corporation**  
**The Money Store**  
**The Mortgage Center**  
**Mutual Bank**  
**Nazarene Credit Union**  
**National Cooperative Bank**  
**National Westminster Bank U. S. A.**  
**New York Community Bank**  
**New York National Bank**  
**Omega Funding Group**  
**People's Mortgage**  
**Peoples Westchester Savings Bank**  
**PMI Mortgage Insurance Company**  
**Preferred Mortgage**  
**Prudential Mortgage Company**  
**Putnam County National Bank**

**Real Estate Recovery, Inc.**  
**Resolution Trust Company**  
**Resource Funding**  
**Roosevelt Savings Bank**  
**Scarsdale National Bank**  
**Seacoast Mortgage**  
**Signature Bank**  
**Society for Savings**  
**Sound Federal Savings & Loan Association**  
**Statewide Zone Capital Corp.**  
**Tarrytown and North Tarrytown Savings & Loan Association**  
**TD Bank**  
**Tompkins Trust**  
**Tremont Federal Savings & Loan Assoc.**  
**UBS Warburg Real Estate**  
**Ulster Saving Bank**  
**Union State Bank**  
**United Northern Federal Savings Bank**  
**USA Bank**  
**U.S. Mortgage**  
**Village Savings Bank**  
**Wachovia Corporation**  
**Washington Federal S & L Association**  
**Welcome Home Realty**  
**Wells Fargo**  
**Westfair Funding Corporation**  
**Westchester Bank**  
**Westchester Federal Savings Bank**  
**Williamsburgh Savings Bank**

UNIQUE ID NUMBER  
46000009780

State of New York  
Department of State  
DIVISION OF LICENSING SERVICES

FOR OFFICE USE ONLY  
Control  
No. 91061

PURSUANT TO THE PROVISIONS OF ARTICLE 6E OF THE  
EXECUTIVE LAW AS IT RELATES TO R. E. APPRAISERS.

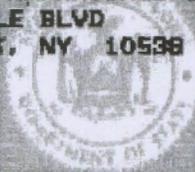
EFFECTIVE DATE

MO. | DAY | YR.  
03 | 01 | 16

ALFIERI PAUL A III  
C/O LANE APPRAISALS INC  
178 MYRTLE BLVD  
LARCHMONT, NY 10538

EXPIRATION DATE

MO. | DAY | YR.  
02 | 28 | 16



HAS BEEN DULY CERTIFIED TO TRANSACT BUSINESS AS A  
R. E. GENERAL APPRAISER

In Witness Whereof, The Department of State has caused  
its official seal to be hereunto affixed.

ROSSANA ROSADO  
ACTING SECRETARY OF STATE

# SARATOGA ASSOCIATES

Landscape Architects, Architects,  
Engineers, and Planners, P.C.

November 29, 2017

Honorable Chairman Robert Dee and Members of the Zoning Board of Appeals  
Town of Philipstown  
238 Main Street  
Cold Spring, NY 10506

Re: Visual Resource Assessment  
Proposed Wireless Telecommunications Facility  
50 Vineyard Road  
Phillipstown, NY

Dear Honorable Chairman and Zoning Board of Appeals Members:

Saratoga Associates is writing on behalf of Homeland Towers, LLC regarding the proposed monopole telecommunications tower and associated equipment at the above referenced address. Saratoga Associates prepared the Visual Resource Assessment (VRA) submitted for this project.

At the November 13 public hearing a number of comments were made concerning the potential visual impact associated with this project. To address these concerns we offer the following supplemental information.

1. Concern was raised over potential visual impact from residential homes on Round Hill Road and Rockledge Road.

As discussed at the November 13 hearing, the project sponsor has agreed as an alternative to reduce the height of the proposed tower from 180 feet to 140 feet above grade. Saratoga Associates has provided supplemental information in a letter to the ZBA dated November 13, 2017 that demonstrates how this height reduction will substantially reduce or completely prevent views of the proposed tower from these residential properties.

2. Several requests were made that the McKeels Site be considered as an alternative to the Vineyard Road site to minimize visual impact.

Hon. Robert Dee

November 29, 2017

Page 2 of 5

Homeland Towers has concluded that use of the McKeels site would require construction of a tower greater than 210 foot tall. To compare the potential visual impact of even a 210 foot tall tower at the McKeels site vs. a 140 foot tall tower at the Vineyard Road site a supplemental viewshed map is provided in Appendix A. This viewshed map demonstrates the following:

- > Tower visibility will be greater at McKeels site. The 140 foot Vineyard Road tower is visible from approximately 19.0 acres. The 210 foot-tall McKeels tower is visible from approximately 26.7 acres; 30% more land area than the Vineyard Road tower.
- > The McKeels tower would be visible from approximately 8-10 homes within a ½ mile radius. This is about the same as the Vineyard tower. The nearest residential structure (45 Grey Rock Road) affected by the McKeels tower is approximately 620 feet southwest of the tower. This compares to approximately 760 feet to the nearest residential structure (43 Rockwald Road) at the Vineyard site.

Please note that all such distances are measured from digital ortho photos using Global Mapper 2017 GIS software. Measurements may have a +/- factor of 5 feet and are provided for informational purposes. The Philipstown code does not have a setback requirement to homes.

- > It is likely that the McKeels tower will be directly visible above foreground vegetation from the backyards at 43 and 99 Rockwald, and 60 Round Hill Road. These properties are situated on a ridgeline with sweeping views to the northwest of the valley below in the direction of the McKeels tower.

The McKeels tower would be more than 70 feet taller than the Vineyard Road tower. Although the two tower locations would be visible from approximately the same number of homes, the degree of tower visibility would be greater for homes within the taller McKeels tower viewshed.

Also, at 210 feet the McKeels tower will be required by the Federal Aviation Administration (FAA) to be illuminated at night with a red flashing aviation obstruction beacon. At 140 feet, the Vineyard Road tower requires no nighttime lighting.

To help visualize the potential visual effect of the McKeels four (4) supplemental photo simulations are provided in Appendix B demonstrating the degree of tower visibility.

- > VP 16 – 60 Round Hill Road – This view is from the back deck of the residence at 60 Round Hill Road. From this location both the Vineyard and McKeels towers fall within the field-of-view. At 140 feet tall the Vineyard tower is located below the foreground tree line at a

Hon. Robert Dee

November 29, 2017

Page 3 of 5

distance of approximately 820 feet. At 210 feet tall the McKeels tower is visible above the tree line at a distance of approximately one (1) mile.

- > Grey Rock Road – This simulation is representative of two residences located at 45 Grey Rock Road. These residences are less than 800 feet from the McKeels site. The photo simulation illustrates that the 210 foot tall tower will be visible though deciduous trees during leaf off season. Based on viewshed analysis it is likely that a similar unscreened view will occur from the adjacent residences.
- > Country Hill Lane – This simulation is representative of a single family residence at 44 Country Hill Lane. This residence is approximately 1,300 feet east of the McKeels tower site. Based on viewshed mapping it is likely that a direct view of the 210 foot tall tower will occur from this residence.
- > Route 301 – This simulation demonstrates that the 210 foot tall McKeels tower would be directly visible from NYS Route 301 in the vicinity of Country Hill Lane. Based on viewshed mapping residences along NYS Route 301 in this vicinity, as well as residences on nearby Ashley Lane would be similarly affected.

3. A comment was received that the proposed telecommunications tower would be visible from hiking trails within Fahnstock State Park.

As was highlighted in a comment at the November 13 public hearing, there are currently nine (9) telecommunications towers located within the Town of Philipstown. It is likely that several of these existing towers are presently visible from various locations along hiking trails in the area. Attached is a photograph of a large existing telecommunications tower visible from NYS Route 301 as it passes through Fahnstock State Park. This tower is bordered to the north, east and west by Fahnstock State Park and to the south by property owned by the Open Space Institute. There are numerous public trails on these lands. This tower is presumably visible from various trail locations. Accordingly, view of towers including the extremely large Fahnstock tower are the current condition in this area and the proposed 140 foot tall brown monopole will not adversely change this condition as it relates to views from hiking trails.

4. In a Power Point presentation made at the November 13 public hearing a number of possible errors, omissions and misstatements found by the commenter in previously submitted documents concerning visual impact assessment were identified. These are summarized with our response below.

Hon. Robert Dee

November 29, 2017

Page 4 of 5

- a. Comment - Saratoga Associates' Visual Resource Assessment (VRA) fails to mention Rockwald Road in a sentence listing residential streets within a ½ mile radius of the proposed tower.

Response – The sentence in question, page 1, last paragraph, inadvertently omits Rockwald Road as a road falling within ½ mile of the project. However, the VRA (dated May 11, 2017) fully identifies potential visual impact on Rockwald Road properties in several places other places in the VRA. These include:

- > Page 1, 4th paragraph, "The nearest residential structure is approximately 760 feet northeast of tower site on Rockwald Road";
- > Page 4, the table listing photos taken during field reconnaissance identifies a photo taken from Rockwald Road approximately 480 feet from the proposed tower location. This photograph is provided as VP7 – Rockwald Road in Figure A4 of the VRA; and
- > Rockwald Road is clearly labeled and identified as being within the project viewshed on Figure 2 – Viewshed Map ½ Mile Radius.

- b. Comment - The May 11, 2017 Saratoga Associates report inaccurately measures the distance photo "VP7" to the center of the tower as 490'.

Response – As was reported in Saratoga Associates' letter to the ZBA dated August 27, 2017, the proposed tower is located approximately 300 feet from the nearest point on Rockwald Road. The photo provided in the VRA (Figure A4-VP7) is taken from the nearest road location with an unobstructed view (approximately 490 feet from the tower). The distance from the location of VP7 to the proposed tower is accurately measured at 490 feet.

- c. Comment - The August 27, 2017 Saratoga Associates report gives inaccurate distances (most often inflated) to the various homes within line of sight of the Tower.

Response – This comment does not identify cases where inaccurate distances are given. We reviewed all documents and found no inaccurate measurements.

- d. Comment - The August 27, 2017 Saratoga Associates report incorrectly indicates that 100 Rockwald Road was the closest residence to the Tower, completely missing 43 Rockwald Road.

Response – 100 Rockwald Road is approximately 760 feet from the tower location (to the center of the structure). 43 Rockwald Road is also approximately 760 feet from the tower

Hon. Robert Dee

November 29, 2017

Page 5 of 5

location (to the center of the structure). For all practical purposes these homes are equidistant from the tower center. In our August 27 letter we were responding to a question concerning views from 100 Rockwald Road and 60 Round Hill Road. 43 Rockwald Road was not "missed" as it was not the subject of the referenced response.

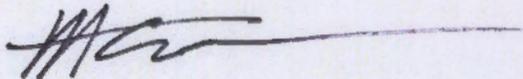
43 Rockwald Road was specifically visited during the November 1, 2017 balloon test and a photo simulation was prepared illustrating project visibility. Please refer to our November 13 letter to the ZBA for this information.

- e. Comment - This report also omits "Lot 3", a vacant lot on Rockwald Road, which shares a property line with the tower site.

Response – Rockwald Road "Lot 3" is undeveloped and heavily wooded. A photograph representing the most exposed view in the direction of the project site from this portion of Rockwald Road is provided in the VRA (Figure A4-VP7). Additional photography was taken during the November 1, 2017 balloon test. Please refer to our November 13 letter to the ZBA for this information.

Both the Vineyard Road and McKeels sites are within 800 feet of several residential properties. However, the lower height of the Vineyard Road tower at a lower allows local foreground vegetation to substantially screen tower views. At a minimum of 210 feet tall the McKeels tower cannot be similarly screened from nearby residences. Moreover, several of the same residences in proximity of the Vineyard Road site are also within the viewshed of the McKeels site. Whereas the McKeels tower will be illuminated with flashing FAA aviation obstruction lights the tower will be visible at all times. Based on this analysis it is clear that a 210 foot tall tower at the McKeels site would have greater visual impact than a 140 foot tall tower at the Vineyard Road site.

Thank you for your attention to this matter.



Matthew W. Allen, RLA

Principal

**SARATOGA ASSOCIATES**

Landscape Architects, Architects, Engineers, and Planners, P.C.

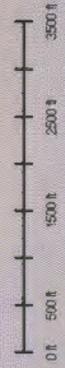
## Appendix A

Viewshed Map - Site Comparison

**LEGEND**

- Land Cover Viewshed Area  
Vineyard Rd Site - 140' Tower
- Land Cover Viewshed Area  
McKeels Site - 210' Tower

V Photo Simulation



VIEWSHED MAP - SITE COMPARISON  
VINEYARD RD. SITE (140FT) VS. MCKEELS SITE (210FT)

Visual Resource Assessment  
Proposed Telecommunications Tower

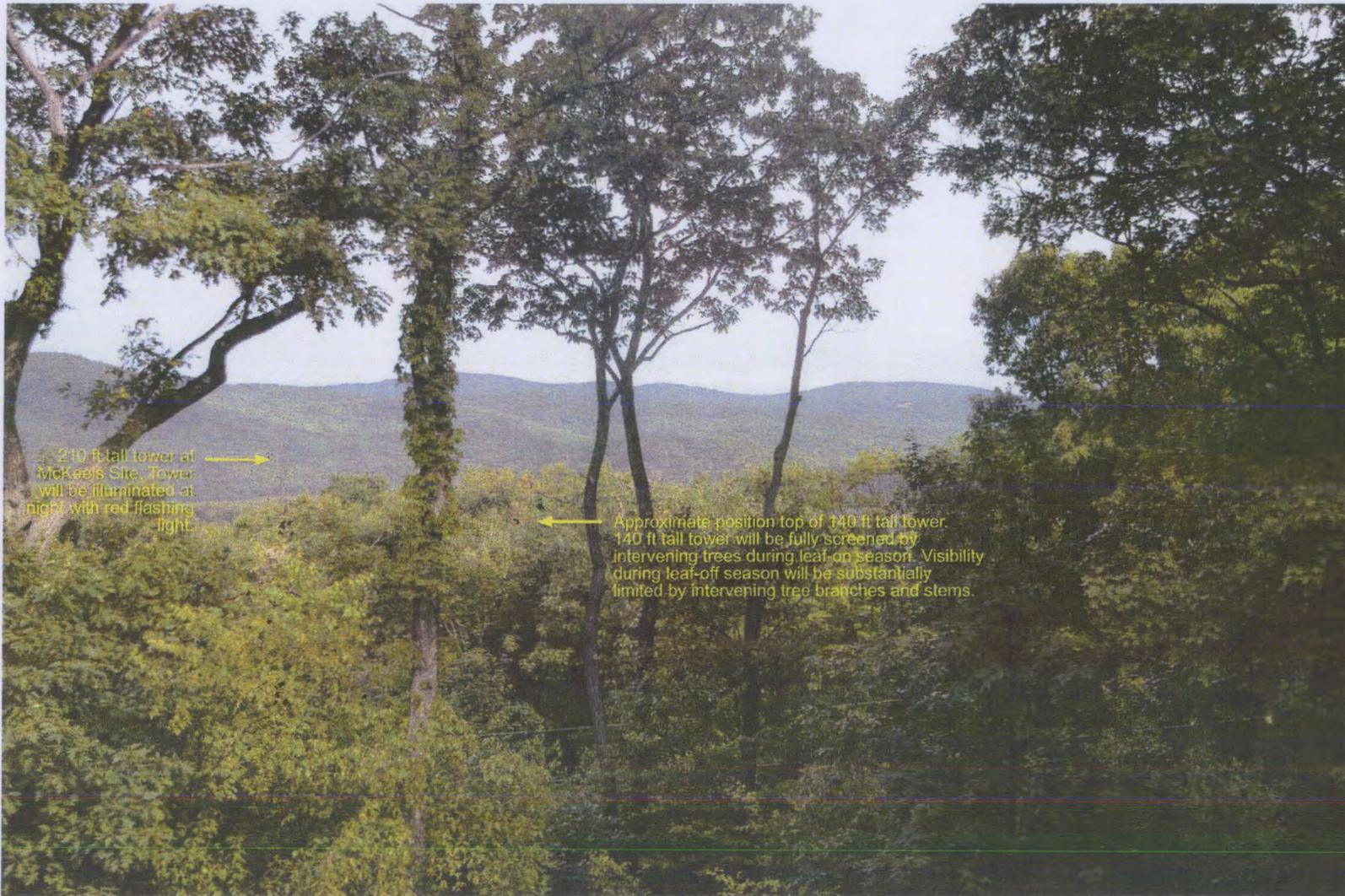


Philipstown Site (NY171)  
50 Vineyard Road  
Philipstown, NY

HOMELAND TOWERS

## Appendix B

### Supplemental Photo Simulations



210 ft tall tower at McKeels Site. Tower will be illuminated at night with red flashing light.

Approximate position top of 140 ft tall tower. 140 ft tall tower will be fully screened by intervening trees during leaf-on season. Visibility during leaf-off season will be substantially limited by intervening tree branches and stems.

**Photograph Information**

Date: November 1, 2017  
 Time: 9:19am  
 Focal Length: 48mm (film equivalent)  
 Camera: 14.2mp Nikon D3100  
 Photo Location: 41° 25' 52.6528" N  
 73° 54' 25.3357" W  
 Distance: 825 Ft - Vineyard Rd Site  
 1 Mi - McKeels Site

Visibility: Seasonal - Vineyard Rd Site  
 Year-round - McKeels Site

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Simulated Condition  
 VP16 - 60 Round Hill Road - View from elevated deck in rear of house

View Comparison - Vineyard Rd. Site (140ft Tall) vs. McKeels Site (210 ft tall)  
**PROPOSED TELECOMMUNICATIONS TOWER**

**SARATOGA**  
 ASSOCIATES



Philipstown Site (NY171)  
 50 Vineyard Road  
 Philipstown, NY



210 ft tall tower at McKeels can visible through trees from this roadside vantage point. Tower will likely be visible above trees from any nearby roadways. Tower will be illuminated at night with red flashing light.

#### Photograph Information

Date: November 25, 2017  
Time: 12:12pm  
Focal Length: 48mm (film equivalent)  
Camera: 18mp Canon Rebel T2i  
Photo: 41° 26' 12.5" N  
Location: 73° 55' 24.5" W  
Distance: 780 feet

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Simulated Condition  
Grey Rock Road - View from Roadway

**SARATOGA**  
ASSOCIATES

Alternative Site Assessment - McKeels Site (210 ft tall)  
PROPOSED TELECOMMUNICATIONS TOWER



Phillipstown Site (NY171)  
50 Vineyard Road  
Phillipstown, NY



210 ft tall tower at McKeels Site (210 ft tall) view of tower from the roadway looking north. Tower will likely be visible from users from a nearby residence. Tower will be illuminated at night with red flashing light.

#### Photograph Information

Date: November 25, 2017  
Time: 12:20pm  
Focal Length: 48mm (film equivalent)  
Camera: 18mp Canon Rebel T2i  
Photo: 41° 26' 13.3" N  
Location: 73° 55' 13.6" W  
Distance: 1,100 feet

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Simulated Condition  
Country Hill Lane - View from Roadway

**SARATOGA**  
ASSOCIATES

Alternative Site Assessment - McKeels Site (210 ft tall)  
**PROPOSED TELECOMMUNICATIONS TOWER**



Phillipstown Site (NY171)  
50 Vineyard Road  
Phillipstown, NY



**Photograph Information**

Date: November 25, 2017  
Time: 12:25pm  
Focal Length: 48mm (film equivalent)  
Camera: 18mp Canon Rebel T2i  
Photo: 41° 26' 08.5" N  
Location: 73° 55' 12.2"W  
Distance: 1,500 feet

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Simulated Condition  
Rte 301 near Country Hill Lane

**SARATOGA**  
ASSOCIATES

Alternative Site Assessment - McKeels Site (210 ft tall)  
**PROPOSED TELECOMMUNICATIONS TOWER**



Phillipstown Site (NY171)  
50 Vineyard Road  
Phillipstown, NY

Fahnstock Tower Photograph

Appendix C

Existing Fahnestock Telecommunications - Looking South from Rte. 301  
Distance: 2,800 feet



## Robert Gaudioso

---

**From:** Ron Gainer <rjgainer@comcast.net>  
**Sent:** Friday, October 20, 2017 11:09 AM  
**To:** Bob Dee; Tara Percacciolo  
**Cc:** Robert Gaudioso  
**Subject:** (T) Philipstown ZBA - Homeland Towers

Just an FYI – Based upon the recent ltr received from the PC Planning Department on the above matter, it appeared that they did not review the RF report submitted by the applicant which was originally transmitted to the County in the earlier referral package sent. As a result, I personally spoke with Barbara Baroso (Cty Planner) this morning, and have dropped off another copy of the report for her information and comment. Hopefully, this should address the concerns raised in her prior 239m response ltr that was received by the ZBA.

Any questions, pls call.

### *Ron Gainer*

*Ronald J. Gainer, PE, PLLC*  
PO Box 417  
Pawling, NY 12564  
(tel) 845-878-6507  
(cell) 845-527-1432  
[rjgainer@comcast.net](mailto:rjgainer@comcast.net)



HOULIHAN LAWRENCE  
SINCE 1888

November 16, 2017

Ref: Homeland Towers Cell Tower – Vineyard Road Cold Spring

Town of Philipstown Zoning Board of Appeals

238 Main Street, Cold Spring NY 10516

The Philipstown community that values small town living has agreed, through its comprehensive 2020 plan, that open space and environmental protection is its priority. While the larger township address the desirability for country dirt roads and private settings, the historic 19<sup>th</sup> century Villages of Cold Spring and Nelsonville prioritize the importance of historic architecture and visual impacts of the mountain ranges in the choices homeowners have made in foregoing larger land parcels for the intimacy of downtown living. They also acknowledge that tourism and hiking add to the value of homes: Lifestyle choices here are a balance of tolerance of visitors who arrive by the hundreds of thousands to admire the historic community by the Hudson River surrounded on 4 sides by thousands of acres of protected mountain ridges and state parks and knowing that those visitors reactions are those of current homeowners when they first visited this community. The choice to pursue homeownership was an investment both financial and emotional.

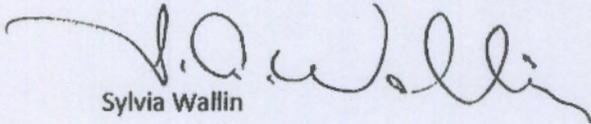
Both the Villages and Philipstown communities share a strong sense of maintaining value in the Mayberry lifestyles of their choice of homes and settings, in the decision to restrict development, and in the decision to utilize zoning to prohibit oversized construction or elevated homes.

It is rare to need to explain the selling points of this community. The absolute beauty of this natural setting, along the majestic Hudson River, bordered by mountain ranges in four directions, incredible expanses of open space and colorful period homes on tree-lined streets, country roads leading to hidden driveways – this is the visible charm that Philipstown offers. The lifestyle options, once here, from participation in farmers markets and Memorial Day Parades, hiking trails and summer outdoor movies, kayaking through marshlands and bicycling country roads, and so much more, remind newcomers that perhaps this is a step back in time, but it is the reason so many chose to make this place home.

To ask about devaluation of property values is to ask about whether an eyesore is real or imagined. To ask for the mathematical methodology of looking backwards historically at impact on sales - after a major nuisance factor is introduced - is pointless. Certainly an option that an Appraiser can utilize, factoring in a probability approach to future devaluation, is viable for every home in the community; but why should a community which knows that visual aesthetics draw an emotional reaction be forced

collectively to defend what is intrinsically obvious - all in defense of an application to mar the view shed with a multi-story tower in the name of progress? To do so goes against trusting one's instincts. If over one hundred thousand tourists yearly choose Philipstown's visual scenery and architecture and historic shopping areas to spend their time and dollars in, the risk of marring this historic scenery, and its subsequent property demand, is a huge risk for our community to gamble away in the name of filling communication gapping coverage with multi-story steel structures.

The Wall Street Journal chose to focus on the beauty of this historic area in a June 4, 2016 article – the focus was on city dwellers looking for a slower pace in the beauty of the Hudson Valley, in Philipstown, and in the historic Villages and our great outdoors. One wonders how easy it would be to entice future buyers to this area if our own perception becomes the reality of future visitors.

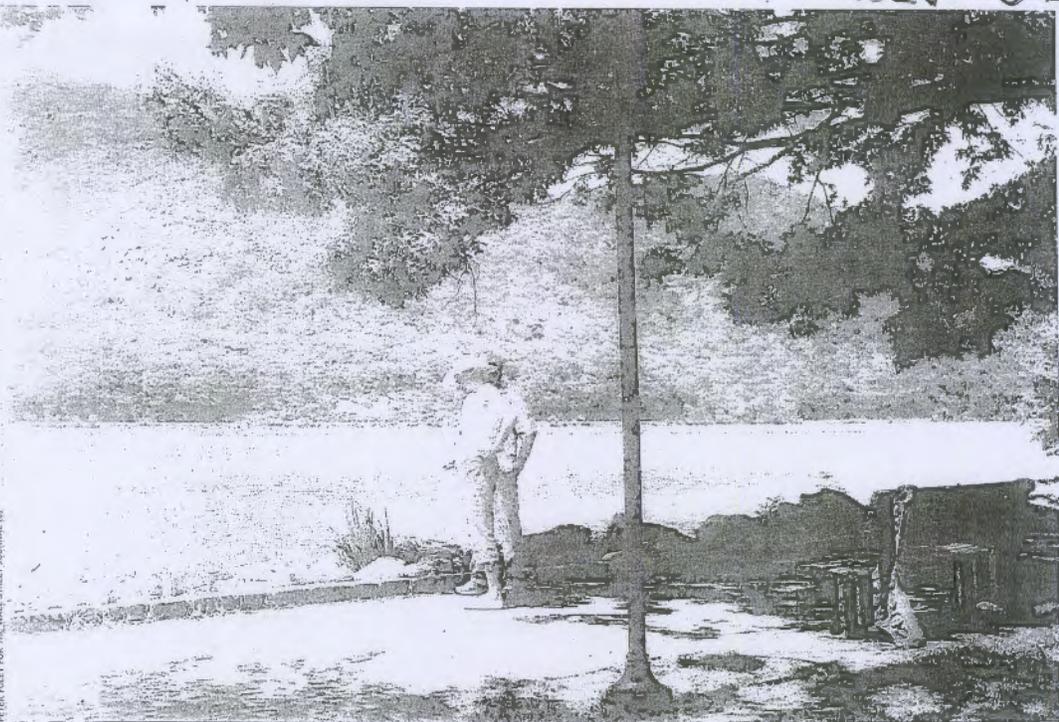
A handwritten signature in black ink, appearing to read 'S. Wallin', with a large, sweeping flourish at the end.

Sylvia Wallin

Branch Manager

Houlihan Lawrence Real Estate

PHOTO COURTESY OF THE WALL STREET JOURNAL



# Warm-Hearted Cold Spring

A historic village in the Hudson Valley embraces newcomers, business and the great outdoors

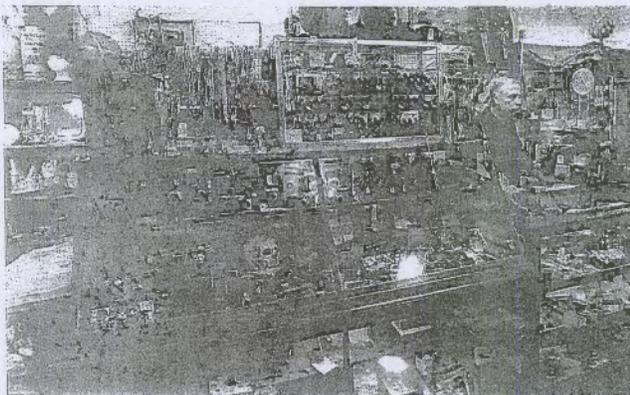
When Leonora Burton moved to Cold Spring in New York's Hudson Valley in the 1980s, she recalls several empty storefronts on Main Street. Then, a handful of antique places came along, followed by a cafe here and there.

Ms. Burton even took the plunge herself three decades ago, opening a gift shop that is now called Highland Baskets at the Country Goose. And she has watched other businesses sprout up steadily over time, but she hasn't seen anything like the growth lately: five new shops in the last two years, she estimates.

Cold Spring, 50 miles outside of New York City with views of the river and a wealth of outdoor activities, is booming. Houses are selling in a week and sometimes over asking price.

"There isn't a lot of turnover because houses go on the market and go off pretty quickly," said 73-year-old Robert McCaffrey, a lifelong resident and owner of McCaffrey Realty. "It's really small-town U.S.A."

There aren't any chain



A picturesque view of the Hudson River, top. Collectibles inside Cold Spring Antiques Center, above.

stores on the strip, and the central shopping area and its nearby 19th-century homes are on the National Register of Historic Places, keeping new development at bay.

The quiet lifestyle of the Putnam County village of 2,000 draws city dwellers looking for a slower pace and more space. For those who work in New York, the commute on Metro-North Railroad from the Cold Spring station

to Grand Central Terminal is just shy of 90 minutes.

"They like that it is a small town but a little sophisticated," said Melissa Carlton, a broker with the real-estate firm Houlihan Lawrence.

Single-family homes close to Main Street are priced generally from \$450,000 to \$600,000, said Ms. Carlton, noting many have fewer than 2,000 square feet of space. "It's good for people getting started," she said. "When you are coming out of the city, it feels pretty spacious."

The taxes on homes, a combination of a school tax and a village tax, are reasonable as well, Ms. Carlton said. Taxes on a \$500,000 house, for instance, has an annual tax bill of about \$7,000, she said.

Families with young children also like Cold Spring because of its schools, small in size with lots of programs and within walking distance from most homes, Mr. McCaffrey said.

"We have a large number of families who are transplants from New York City, many Park Slope transplants," said Brett Harrington, principal of Haldane Elementary School.

Hikers and climbers also can enjoy trails in the 6,000-acre Hudson Highlands State Park Preserve, which runs through Westchester, Putnam and Dutchess counties. The Philipstown Recreation Department has nature activities for schoolchildren; toddlers can play at the Cold Spring Tiny Tots Park on High Street.

**Schools:** The Haldane Central School District has 875 students in three buildings—an elementary school, a middle school and a high school. Class size is 15 to 25 students, according to the district's website.

For the 2014-15 school year, 48% of district students in grades three through eight met standards in English Language Arts and 60% met standards in math, according to data from the New York State Education Department. In the high school, 97% of students graduated and 42% graduated with the advanced Regents diploma.

The private Manitou School has 50 students in prekindergarten through fourth grade and offers a Spanish program.

**Dining:** Cold Spring Depot serves burgers and cocktails; the Foundry is a spot for brunch and lunch; and Brasserie Le Bouchon offers bistro fare. For sweets, there is Moo Moo's Creamery and Go-Go Pops. Barber and Brew, a place for haircuts and beer, is set to open on Main Street this summer.

**Shopping:** The Cold Spring General Store, Cold Spring Apothecary, Archipelago At Home and Once Upon a Time Antiques are on Main Street. Foodtown is the village's supermarket. Cold Spring Emporium is a newcomer with space for 10 boutiques, and Old Souls is a camping store.

**Entertainment:** In the July and August, there are Sunday concerts at the Cold Spring Riverfront Gazebo. The Hudson Valley Shakespeare Festival runs from June to September in Garrison, which is only a few miles away.

**'We have a large number of families who are transplants from New York City, many Park Slope transplants.'**

Bronx native Danielle Stracci, a midwife, and her husband, Joe, who stays at home with their 3-year-old and 9-month-old daughters, moved into a house near Main Street this spring. One neighbor dropped off a pie and a jar of jam, and another brought books and toys the children, she said. "Some people don't want to live in a place where everyone knows each other but after not having that, I want that," said Ms. Stracci.

**Parks:** West Point Foundry Preserve, a former ironworks, covers 87 acres and has both hiking trails and marshland.

**IF YOU'RE BROWSING FOR A HOME...**



**\$1.3 million**

**133 Skyline Drive**  
This home has four bedrooms, two bath and a half-bath. There balcony off the master bedroom and the dining room has sliding door lead to a deck. Other features include two fireplaces, large wind throughout and hardwood floors. The property has two-car garage.

**Year Built:** 2005  
**Square Footage:** 2000  
**Lot Size:** 15.37 acres  
**Property Plus:** Lots of shopping and the trail  
**Listing Date:** May 19  
**Listing Agent:** Joyce Fillebrown of Coldwell Real Estate LLC  
**Open House:** By appo



**\$695,000**

**24 Lake Surprise Rd.**  
This house has three bedrooms and two bathrooms. It also has fireplaces, a deck, windows and a finish basement. There is a detached two-car garage.

**Year Built:** 1930  
**Square Footage:** 2,200  
**Lot Size:** 1.75 acres  
**Property Plus:** A large porch  
**Property Minus:** The bedroom is on the first floor  
**Listing Date:** March 2014  
**Listing Agent:** Nora I of A.D. Preusser Real Estate  
**Open House:** By appo



**\$575,000**

**12 Highland Rd.**  
This home has three bedrooms, one bath and a half-bath, a den and kitchen. Other features include a den, a storage fireplace, hardwood and a wraparound deck. The property has a detached garage and room for swimming pool.

**Year Built:** 1827  
**Square Footage:** 1,400  
**Lot Size:** 2.5 acres  
**Property Plus:** A side porch  
**Property Minus:** The bedroom is on the first floor  
**Listing Date:** April  
**Listing Agent:** Mary Harrington of Doug Elliman Real Estate  
**Open House:** By appo

## CALIFORNIA CLOSETS®

We have a large number of families who are transplants from New York City, many Park Slope transplants.





Menkes Associates, LLC

**Homeland Towers, LLC and Verizon Wireless  
Cell Site Application  
50 Vineyard Road, Philipstown, NY**

**Radio Frequency Evaluation and Recommendations  
Relative to the Suitability of McKeel's Corners Cell Site**

November 28, 2017

## **Introduction**

At the request of the Zoning Board of Appeals for the Town of Philipstown, NY, Menkes Associates, LLC reviewed the Homeland Tower/Verizon Wireless "Supplemental Report Regarding the Existing McKeel's Corners Site" prepared by Mr. Adam Feehan of PierCon Solutions, dated November 13, 2017. The applicant generated this report in response to questions raised in the November 10, 2017 Menkes Associates, LLC report. The Menkes Associates report indicated that there was insufficient data presented in the earlier PierCon RF reports to form a definitive conclusion regarding the suitability of the existing McKeel's Corners cell site if the tower and antennas were elevated to 190 feet above ground level.

## **Comparison of Coverage Plots for McKeel's Corners Antenna Elevation Change**

At the November 13, 2017 Board meeting, the applicant's attorney indicated that they would be revising their application for the proposed tower at 50 Vineyard Road to include a 140 foot tower rather than the original 180 foot structure. Since there are no coverage plots for this revised tower height in any of the RF reports, the D1-D4 plots from the original PierCon report of September 6, 2017 showing coverage with a 150 foot tower will be used as the new comparison baseline for the proposed tower at Vineyard Road. The difference of 10 feet will not be significant for these comparisons; and, if anything, would pose a greater challenge for the McKeel's Corners site to prove viable. To be considered a viable alternative site, the coverage from the modified McKeel's Corners site must equal or exceed the coverage from the proposed Vineyard Road site.

As was stated in the earlier Menkes Associates, LLC report, it is important to understand that achieving reliable coverage at 2100MHz at a -95 dBm Reference Signal Receive Power (RSRP) level is a significant challenge in any environment because of the reduced signal propagation at this high frequency. It is particularly difficult with an irregular topography as in the Philipstown area. This can be seen in plot A3 for the existing network, and plot D3 for the composite coverage from the existing network and the proposed coverage from the site at 50 Vineyard Road in the September 6, 2017 PierCon RF report. Since Verizon appears to recognize and accept the reduced coverage at this frequency; reliable coverage at an in-building signal level of -95 dBm RSRP at 700 MHz will be given priority, for this report, over coverage at 2100 MHz in making judgement on the viability of an extended tower at McKeel's Corners. Furthermore, no modified plots at 2100 MHz were provided in the November 13, 2017 supplemental PierCon RF report.

Plot D1 from the September 6, 2017 PierCon RF report and plot A1 from the supplemental RF report of November 13, 2017, which represent the composite coverage at 700 MHz and -95 dBm, compare the performance of the proposed site at 50 Vineyard Road to the McKeel's Corners site with an antenna height of 190 feet, approximately 90 feet higher than the current antennas. The McKeel's Corners site leaves a gap along Route 9 north of Route 301. Increasing the antenna height to 210 feet and/or modifying the antenna down-tilts do not eliminate the gap, as shown in the remaining plots in the November 13, 2017 PierCon report. However the 150 foot tower at Vineyard Road leaves a gap along Route 301 west of Route 9.

The McKeel's Corners site, at the elevated antenna height of 190 feet, would partially mitigate this gap along Route 301.

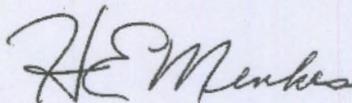
Prioritizing the remaining coverage gaps on either Routes 9 or Route 301 is a challenge laden by speculation. In a case like this, potential opportunities (POPs) might have typically been considered in formulating a decision. POPs is analogous to the population in an area that would be offered wireless service. The fixed population densities along Routes 9 and 301 in the gap areas are both relatively small and when multiplied by Verizon's market share of approximately 37 percent, become even smaller. Consequently deciding the priority for coverage between the two remaining gaps is difficult.

### **Conclusions**

Menkes Associates, LLC examined the coverage performance of raising the tower height to 190 feet at McKeel's Corners, Philipstown, NY relative to Verizon's objective of alleviating coverage gaps along Route 9 north of Route 301, and Route 301 west of Route 9. The McKeel's Corners RF coverage analysis was performed by comparing its coverage to the coverage of the proposed tower at 50 Vineyard Road at a revised height of 150 feet. This analysis used the predictive computer generated coverage plots from the PierCon RF reports to compare the coverage for all cases.

Raising the antenna elevation to 190 feet and adjusting the antenna orientations at the McKeel's Corners site would improve the in-building coverage at 700 MHz along Route 301 west of Route 9; however a gap would remain along Route 9 north of Route 301. Conversely, the proposed tower at 50 Vineyard Road provides reliable in-building service at 700 MHz along Route 9, but leaves a larger portion of Route 301 without reliable service. The Homeland Towers' application for the Nelsonville site appears to be proposed to provide coverage along Route 301 and in additional areas west of the proposed Nelsonville site. If the Nelsonville cell site is erected, the proposed tower on Vineyard Road would be the better choice. Conversely, if the Nelsonville tower is not constructed, the McKeel's Corners site with a 190 foot tower is the better choice based on offered coverage.

Prepared and submitted by:



H. E. Menkes, President