

Board of Appeals, January 13, 2015

Present:

Tom Carey -president

Cheryl Herr-Rains-secretary

Roger Pelton, Jr.

Dan Simons

Peg Lang

Andrew Hamilton, counsel for American Tower Assets

Stephen Langsdorf, Town of Vienna attorney

Jim Hebert, Black Diamond Consultants

Neal Pratt, counsel for America Tower Assets

Blain Hopkins project manager for American Tower Assets

Bryan Lanir, design engineer for American Tower Assets

Dodi Thompson, selectman for Vienna

Waine Whittier, Planning Board for Vienna

Austin Harrell, Planning Board for Vienna

Jon Lawless, abutter and interested party

Christopher Smith interested party

Jeff Rackliff, selectman for Vienna

Allan Harville

Libby Harville

Telecommunication Facility Application,

Applicants: Global Tower Assets, LLC & Northeast Wireless Networks, LLC

Issue of this meeting;

"In its review of the Application, the Planning Board determined the Applicants met all of the requirements set forth in the standards of the Town of Vienna Wireless Telecommunications Facility Sitting Ordinance [the "Ordinance"] with the exception of a setback requirement. In response to the Applicant's request for a setback waiver pursuant to Section 7.2E of the ordinance, the Planning Board voted against granting a setback waiver due to safety concerns expressed during the February 19, 2014 deliberations. Therefore, the only Ordinance standard at issue in this Appeal is Section 7.2E." ~from Eaton Peabody Attorneys at Law

Town of Vienna Wireless Telecommunications Facilities Sitting Ordinance

E. Setbacks.

1.) A new or expanded wireless telecommunications facility must comply with the setback requirements for the zoning district in which it is located, or be set back one hundred five percent (10%) of its height from all property lines, whichever is greater. The setback may be satisfied by including the areas outside the property boundaries if secured by easement. The following exemptions apply:

a.) The setback may be reduced by the Planning Board upon a showing by the applicant that;

i. The facility is designed to collapse in a manner that will not harm other property.

ii. Ice build-up and discharge will not present a public safety hazard,

iii. Any hazard guy wires or tower structure will not adversely affect public safety.

The board does have standing.

The board votes concerning the present appeal have standing.

Interested parties

Blain Hopkins project manager for American Tower Assets

Christopher Smith, Selectmen

Jonathan Lawless, abutter

Charlene Stevens, abutter

Anna-lee Height, abutter

Milton Lawless, abutter

Waine Whittier, Planning Board

Presentation by the Applicants

Andrew Hamilton, Attorney

Bryan Lanir design engineer for American Tower Assets

Blain Hopkins, project manager for American Tower Assets

American Tower Assets is the largest tower owner in US and in the state of Maine.

The Besse Rd site is important due to not having a tower and limited service in the area with increased demand. 4G service would be a desired service and is available throughout the state. Increased services would be made available which are needed for Public safety with 911 calls. Other carriers are interested in using the tower once it is in place.

The May 20 appeal suggested the safety setback is met for standard 7.2 and therefore all standards have been met. Based on the evidence which will be presented will prove the issues have been met and the Board of Appeal should approve the permit.

It was suggested the independent review means focus on the issues of the ordinance and not past decisions and the board is to interpret the dispute according to 2691 legislative act gives the Appeals board this power.

What is the risk to abutters?

7.2 Set back of 10.5% or the alternate setback may be reduced if the applicant of the applicant can prove that the tower will collapse on itself and remain strictly on the site.

The 2nd standard that ice will not cause risk, will be shown to remain only within the fenced area and there will be without a possible risk.

The decision also hinges on the definition of the word "may". The meaning is consistent to the to the context. In Webster's Dictionary, it is defined as "Have the ability to ..."

2nd definition: "equivalent to "shall" or "must" , permission to act."

Issues being addressed:

Stressors on the tower that would cause it to fail are extreme wind and weather as well as the possibility of terrorists.

No unwritten standards can be applied.

The standards of weather and terrorists is felt to be improbable.

Only relevant, credible and substantial evidence will be presented and will outweigh conflicting evidence.

The most relevant evidence in the notebook, pages 18 -20, begins by showing a tower like the one proposed. Exhibit 7 pg. 25. of notebook, is a letter from Johnny I Rhodes, licensed in 32 states, presenting an affidavit vouching for the safety of this tower.

Report, section #26 of notebook presents weather analysis.

Exhibit 13 -There are no other feasible sites for a tower site with in the town of Vienna.

Exhibit 18-B the tower meets the design and safety standards.

Exhibit 20, 206 - 207 Addresses the three questions and concerns from the Planning Board:

Weather

Stressors

Explosions

How is this evidence best summarized? (See the map.)

The applicant has addressed "May" meaning "shall" and not a discretionary choice.

The applicant has addressed the standards for possible collapse.

The applicant has addressed ice build-up and discharge or "thrown ice".

The applicant has addressed how the tower design causing the tower to buckle and dangle from tower base.

The applicant has addressed the zone of risk is defined by the arc of the fence.

Decision based on 2 Questions

Does the evidence show that the tower is designed to collapse in a manner that will not harm other property or adversely affect public safety?

Does the evidence show that ice build-up and discharge will not present a public safety hazard?

Part 2 Questions asked by Neal Pratt, counsel for American Tower Assets and answered by Brian Laniar, engineer with American Tower Assets; Brian Laniar first presented his credentials and then spoke about tower design and safety.

A "Building code" is the legal requirement for building standards, vs. Local ordinances.

This tower is designed like a truss with symmetrical strength. As the wind blows the stretch and compression holds it in place.

The antenna height is according to the needs of the signal and transferred to and from the buildings below. Taller towers would be used to accommodate more antenna.

A simulation of the tower was built using software and compared to the designs of their own company. A weak point is designed into the tower at 120 ft (The weak point meets the standard while the rest of the tower meets higher standards to insure the "weak point" would be the place where the tower would fail should conditions be that catastrophic. The capacity of strength is 25% more than the estimated worse that could be thrown at the tower.

Based on all of Brian's review of the tower the risk is minimal and the ice would also not be a hazard.

The design meets the standards and codes of the state of Me.

Should the tower be compromised, only the top 25% would collapse, remain attached with cables and remain within the fenced area, but if the whole tower should fall it would still be within the property area.

The state standard is that the tower must be inspected once every 5 years. Inspection means climbing the tower and searching for all possible deterioration. However, American Tower Assets visits each tower 2 times per year with a goal of careful maintenance.

Exhibit 7 Eastport Engineering Group describes that it is unlikely the tower would fail.
Exhibit 23 Conclusions by Mr Rhodes.

Exhibit 15, pages 103-4, 2013 letter by Blain Hopkins who concludes the tower is unlikely to collapse but if it did it would fold.

Exhibit 26 A report expecting the highest possible wind could be 90 mph. This is based on Augusta Airport records. Pg 4 shows the wind gust speed for specific directions. 67.4 is the maximum recorded over 41 yrs.

The wind is lower closer to the ground and higher one goes the higher the speed due to more friction slowing the wind closer to the earth surface.

Exhibit 20 Nov 19, 2013 From Deletesky Engineering with response to questions of improbable scenarios; weather and human intervention.

Exhibit 14 Eastport Engineering analysis: Report on Ice accumulation.

The two reports have comparable results and this tower is designed to withstand pressures at a higher standard.

Questions

Q. Waine Whittier, concerning the collapsing of the tower, the tower is 160 ft high meaning the possible radius of the fall being more then the 64ft suggested.

A. Brian Laniar, It is expected the upper tower will collapse with the possibility of the lower area falling within the 64ft range.

Q Waine Whittier, are you an expert on wind behavior?

A. Brian Laniar, I've studied it but not am expert in the field

Q. Waine Whittier, Wind sheer tornados?

A. Brian Laniar, Studied the records of tornados in ME. and the wind speed.

Q. Waine Whittier, do you know about wind distribution within a tornado?

A Brian Laniar, it is relatively consistent bottom to top.

Q Jon Lawless Did the American Tower Group look at other properties?

- A. Blain Hopkins, other sites were inspected. The very best site owner was not interested in selling land but this site gave the next best coverage for the most carriers with maximum service.
- B. Easements were sought from John Lawless who was not interested in being persuaded by either interest or financial gain.

Q What direction would the tower fall?

A It could fall any direction

Q During the year of the big Ice storm does anyone remember the thickness of the ice?

A The qualities of metal and wood in the presence of ice react differently. Wood becomes brittle.

Q What are the considerations of the 1" of ice?

A Ice adds more weight and is a load risk, but there is little concern for ice and wind damage.

Q Stephen Langsdorf; If the tower bends with the ice is it possible to fling the ice?

A No because the ice would be stopped by the succeeding braces of the tower. The ice would stay within the radius. It is more likely the falling ice would damage the lower braces.

Q If you were having 90 mph winds how would that affect tower because of the trees and other objects around the tower?

A Good question,

Q Tom Carey, Would ice weight plus wind cause the tower to break.

A The more likely damage would be in a wind only situation.

Q So what would be that sort of event?

A Above a 90 mph wind.

Q. Ed Lawless; When the area was cut several years back, the large trees left behind were snapped by a significant wind. And there has been a tornado in the area.

A Cedar trees can snap with only 20-30 mph especially in an area that has been logged.

Q Tom Carey; How is the tower anchored in the ground, this was described during the site review.

A. Typically for a tower like this one a hole is dug. 7 ft down and 30 ft wide, rebar is placed in the lower 3 ft and then filled with concrete. The next 3.5 feet is filled with soil with the attachment pipes sticking out of the ground in 3 concrete piers with anchor rods embedded 6 ft into the concrete.

Q Dan Simons How big will be the actual footprint of the working space be? There surely will be big equipment, an access road, etc.

A 250ft or just a bit bigger than the fenced area.

Q Roger Pelton how many towers does your company have and maintain?

A Brian Lanir; Approximately 25000

Q. Have any failed?

A 1 due to failed maintenance, 5 due to extreme weather events.

Q. Did the towers fall within the expected zone?

A. A 120ft high tower fell within 90 ft. area with 30 ft still standing.

Q. Peg Lang; what is the life expectancy of a tower?

A Most towers are expected to last 50 yrs but usually are replaced within 25

Q. Does acid rain have a negative affect?

A The towers are galvanized to protect from corrosion and surface damage is a concern in maintenance but superficial corrosion will not cause structural failure.

Q. Tom Carey; How far could it fall in the unlikely event of a tower design failure?

A The towers are most likely to fall in the direction of the leg points or angles. It is 110 ft to the property line and 252 to the residence, the tower would not reach that far. And the present tower alignment can be changed redirecting the points.

Jim Hebert, independent engineer, did an analysis of the tower designs and is in agreement with the assessments given by the American Tower design team.

How significant was the 1998 ice storm?

A The ability to evaluate and measure ice from ice storms has not been available for very many years and there is no record for that storm.

Waine Whittier said his co has a standard for power lines of 1.5 inch.

Tom Carey asked for Statements by the interested parties.

None were given.

Summation by Andrew Hopkins: If you look at the 2 questions which the counsel for American Tower feels answers the question of safety of the tower and if you look at the exhibits which are the key for the board to review, they give credible, relevant evidence and there was no credible, relevant evidence to the contrary. We think we have established and met the standard of the town standard of safety.

There is no way to have a tower without immediate abutters and the history of the building of towers has shown frequent contention of the subject.

The definition of the word "may" does not mean discretionary.

If the standards are met then and objective of the word "may" is equivalent to "shall".

Waine Whittier; Does the Planning Board not have some discretion in their decisions when considering proposals for such as natural resources and especially for a private residence, and especially if there is the slightest possibility of danger?

Why is there an option for a set back ordinance?

We did not draft the ordinance If the draft intended "shall" it would have said, "shall".

Andy Hopkins; The planning board used unlikely events as the reason for voting the tower down. But the zone of risk has to be found somewhere within the ordinance. We can't prevent conflict but a tower is a required utility by the national ordinance.

Tom Carey; Will the applicant will be paying for the expert hired by the Appeals Board?
Andy Hopkins; Yes.

Stephen Langsdorf gave an objective opinion on the decision.

I do agree with the view of the applicant. The ordinance does state that if there is a chance of damage on the neighboring land, all the risk is on the property in question and not on adjacent land. "May" does mean that if the standards are met then requirement has been met and the request should be allowed. All restrictions have to be within the language of the ordinance and a person has to be able to read the law and understand the standards. The applicant had to show that the standard was met and if they did then we have to let them go forward. We cannot base the decision on other standards.

Comments by the Board of Appeals

Tom Carey; said he had struggled with this question and did not want to grant it but the applicant has met all the burden of proof based upon the testimony of engineers and our expert has corroborated the applicants information.

Peg Lang; While she feels for her neighbors, the Lawless family, sees no reason to object.

Cheryl Herr-Rains: Though there are issues I would like to base the decision on, by legal structure I am not able to dissent and must vote to grant the application.

Dan Simons: I agree with what has been said by the other board members. Dan made additional comments. Local people needing emergency help are not similar to the standards described and would not necessarily need to use a cell phone.

Roger Pelton, Jr.; I also agree with the others.

The Board of Appeals unanimously voted to allow the proposed tower on Besse Rd.

Respectfully submitted,
Cheryl Herr-Rains

