CITY OF DOVER
BOARD OF ADJUSTMENT MINUTES
September 16, 2015

A Regular Meeting of the City of Dover Board of Adjustment was held on Wednesday, September 16, 2015 at 9:00 A.M. with Chairman Sheth presiding. Members present were Mr. Hufnal, Mr. Senato, Mr. Keller, and Chairman Sheth. Colonel Ericson was absent.

Staff members present were Mrs. Townshend, Mrs. Purnell, Mr. Cook and City Solicitor Nick Rodriguez.

APPROVAL OF AGENDA

Mr. Hufnal moved to approve the agenda with the omission of Application V-15-12, seconded by Mr. Senato and unanimously carried 4-0. Colonel Ericson was absent.

APPROVAL OF THE REGULAR BOARD OF ADJUSTMENT MEETING MINUTES OF AUGUST 19, 2015

Mr. Keller moved to approve the meeting minutes of August 15, 2015 with the necessary corrections, seconded by Mr. Hufnal and unanimously carried 4-0.

OPENING REMARKS CONCERNING DEVELOPMENT APPLICATION

Mrs. Townshend, Director of Planning and Community Development stated that the meeting would be conducted in accordance with the agenda. There is one item (new application) on the agenda under New Business. The application file will be read, and the floor will be opened for questions of the applicant by the Board and for public testimony. If the Board needs to consult the City Solicitor they will adjourn to discuss legal matters. If the applicant must leave, they can contact the Planning Office at 736-7196 to learn of the Board's decision. A formal notice of the decision will be mailed to the applicants. Approved variances expire after one year if the approved project has not commenced.

All public notice for the new application on the agenda today was completed in accordance with code requirements. The meeting agenda was posted in accordance with Freedom of Information Act requirements.

NEW BUSINESS

Applicant #V-15-13

118 Galaxy Drive. Cellco Partnership dba Verizon Wireless has requested a variance from the requirements of Article 4 § 4.16 of the *Zoning Ordinance* pertaining to maximum permitted building height to allow construction of a 158 foot telecommunications monopole and associated facilities. Subject property is zoned IPM (Industrial Park Manufacturing Zone- Planned Industrial Park) and is subject to the AEOZ (Airport Environs Overlay Zone). The Tax Parcel is ED-05-087.00-01-07.13-000. The owner of record is Independent Newspapers Inc.

Mr. Bill Cook Exhibits for the record: Staff Report and plans submitted by the applicant. The legal notice was published in the Delaware State News on September 6, 2015, and the public was notified in accordance with the regulations.

Mr. Bill Cook gave a brief overview of the application.

Chairman Sheth questioned if there was any member present who had a conflict of interest and there was none.

Representative: Mr. Jonathan Jordan Esquire on behalf of Verizon Wireless, Mr. Michael Fischer P.E. Radio Frequency Engineer, W. Jeffery Nagorny P.E. Civil Engineer

Mr. Jordan stated that the application today was nearly identical to the application brought before the Board of Adjustment in June regarding another property. In both instances the applicant was seeking a height variance. The Zoning District has a 35 foot maximum height. Today instead of going into a lengthy and formal presentation regarding the site and how the site of the tower is chosen the witnesses (Radio Frequency Engineer and Civil Engineer) is present to answer any questions the Board might have. At the request of the Board of Adjustment the witnesses could give a summary of why the height variance is necessary and appropriate.

Mr. Keller suggested that the presentation may lend questions of the Board of Adjustment and they could go in as deeply as they would see fit to inquire.

Mr. Michael Fischer was sworn in by Mr. Rodriquez.

Radio Frequency Design Presentation/Exhibit

Mr. Fischer stated that they were looking for a variance to go above the 35 foot limitation to 150 feet. Cell towers are generally not built at 35 feet, since antennas need to be above the tree lines to go around the surrounding building clutter. Radio signals would not really work at such a low height. There is a water tank near the proposed location that is roughly the same height of the structure they are looking to build. It is the height that other carriers have used in this area. There is no other existing structure within a mile. There are three (3) surrounding Verizon sites that are currently providing services to this area. Additional coverage is needed in the area around the proposed site, and the facility is needed to pull off wireless traffic from the existing sites. He gave a brief overview of the different areas listed on the exhibit. The area would also provide new coverage to the DAFB (Dover Air Force Base), on Route 1, Little Creek Road, Route 9, as well as surrounding buildings and auxiliary roads.

Responding to Chairman Sheth's question regarding the distance between the cell tower and the water tower, Mr. Fischer stated a little over 900 feet.

Responding to Chairman Sheth's question whether the water tower would be an obstacle to the signal for the proposed tower, Mr. Fischer stated no.

Responding to Mr. Hufnal's question whether the radio frequency interfered with any frequencies the DAFB used in their telecommunications, Mr. Fischer stated they did not. Verizon is licensed in four (4) separate frequency bands. If there was ever an issue with interference DAFB could go to Verizon or file a complaint with the FCC (Federal Communications

Commission).

Responding to Mr. Hufnal's question if the DAFB was aware the tower was being proposed, Mr. Jordan stated that in terms of the FAA interference question there was a copy of an email exchange (Exhibit 2) with DAFB in which they requested that there be a reduction in the height of the tower. The applicant agreed with DAFB to propose a 145 foot tower with a five (5) foot lightning rod. The five (5) foot lightning rod is Verizon new standard.

Responding to Chairman Sheth's question whether there was any written communication from the DAFB allowing the tower, Mr. Jordan stated as previously mentioned it was the email exchange (Exhibit 2).

Responding to Mr. Keller's question whether the communication with DAFB initiated with 158 foot height tower that was being requested, Mr. Jordan stated yes, Mr. Herriott had the conversation with DAFB.

Mr. John Herriott was sworn in by Mr. Rodriguez.

Mr. Herriott testified that he contacted the DAFB to make sure they were on board with the possible locations. Dover Air Force Base agreed with all three (3) locations. At that point DAFB agreed to the height of 158 feet. But some time had passed and when the zoning drawings were prepared they had to shift the location of the tower slightly due to the presence of wetlands. He then went back to the DAFB and informed them of the shift of the tower and asked for their approval. He then received an email on September 15, 2015 stating that DAFB approved of the location, but the height of 158 feet was not acceptable, but they could agree to a 150 foot tower that would include the lightning rod. The applicant agreed to the 150 foot tower and DAFB then provided the email agreeing to the 150 foot tower. There was also verbal discussion prior to the email.

Responding to Mr. Hufnal's question whether a reduction in height did not degrade the service in any way, Mr. Herriott stated that the antenna will be lower and it will not be able to pull as much traffic off the surrounding sites since at the edges coverage area the signal will be slightly reduced.

Responding to Mr. Hufnal's question whether it was still adequate to cover what was intended, Mr. Fisher affirmed.

Responding to Mr. Keller's question whether the five (5) feet reduction is absolutely critical, Mr. Fischer stated no, the site will still operate.

Responding to Chairman Sheth's question about the criteria for the 150 feet tower, and whether it needed to match the nearby water tower, Mr. Fischer stated that he thought that AT&T and Sprint were on the water tower. Because antennas on the water tower were at that height does not mean that the Verizon tower has to be the same height. There are various conditions and factors to take into account when designing the facility.

Responding to Mr. Jordan's question about how the signal would get around the water tank, Mr. Fischer stated that if the water tank was much closer then there may be an issue where the signal could be blocked if the antennas were transmitting directly into the water tanks, but at 900 feet apart it would not be an issue.

Responding to Mr. Keller's question whether in the course of site selection the other sites were investigated (raw land sites), Mr. Herriott affirmed. This lot was chosen because it was larger and they were able to fit within the setbacks as compared to the other sites that were closer to wetlands. They did not think they could get the 100 foot separation from the wetlands that is required by the City of Dover code.

Mr. W. Jeffery Nagorny was sworn in by Mr. Rodriguez.

Presentation

Responding to Mr. Keller's question whether there was any regard given to a clear zone or fall zone in case of the collapse of the towers, Mr. Nagorny stated that the fall zone for the tower is something that has to be addressed and evaluated occasionally when the regulations or ordinances of the authority or municipality having jurisdiction requires it. The design of the monopole towers are made in sections such that there are designed weak points. Under wind conditions that exceed the design criteria there would be most likely a failure point somewhere approximately ½ to ⅓ down from the top of the tower, at which point the tower would slightly fold or bend over. There are heavy coax cables that keep things in place if the towers would happen to fold or bend. The Design Standards are such that the towers have a factor of safety built in on the order of 15 to 20 percent. There are wind charts in place that are developed by American Society of Civil Engineers. Once you get inland from the coast the design wind speed is a three (3) second burst of 90 miles an hour, as you get closer to the coast the speed increases because of the potential for hurricane force winds. He was not sure if the wind speed for the City of Dover was 90 or over 100, but the tower is designed for 15 to 20 percent factor of safety above that. They have to look at winds on the order of 120 to 150 miles per hour.

Mr. Nagorny stated that they are proposing a 145 foot tower with a 5 foot lightning rod on the property owned by Independent Newspapers. They are due west within a ½ mile of the northern end of the main runway for the DAFB. If they are within a ½ mile west of the runway it is not really interfering with flight paths, etc. They have reached out and coordinated with DAFB. The height that they were seeking approval for is a little lower than what was originally requested. The tower will have a fence compound, gravel drive off of Galaxy Drive to the site, and equipment shelter on the ground with a natural gas generator (rather than diesel which is typical) due to the proximity of wetlands.

Chairman Sheth opened the public hearing.

Chairman Sheth closed the public hearing after seeing no one else wishing to speak.

Chairman Sheth questioned if there was any additional correspondence for the record. Mrs. Townshend stated that it was what was seen from DAFB, tab 2, and applicant Exhibits as

presented during the meeting.

Discussion

Mrs. Townshend stated that the Planning Office received the same information that the applicant received from DAFB. The Planning Office specifically sent something to DAFB because we knew it was in the Airport Environs Overlay Zone (AEOZ). Because all of the Planning Commission application items go to DAFB we made a point to reach out to DAFB and give them the opportunity to comment.

Mr.Hufnal moved to approve the variance V-15-13 based on the testimony given today and based on the revision in response to correspondence with the Dover Air Force Base that the monopole be 145 feet with the proposed lightning rod of 5 feet with the total of the monopole and lightning rod not to exceed a maximum of 150 feet. The motion was seconded by Mr. Senato and unanimously carried 4-0. Colonel Ericson was absent.

Chairman Sheth asked if there were any questions.

Comment(s)/Discussion

Mr. Keller's discussion was in regards to the advisory comments to the applicant, site plan submission, Staff Report and Exceptional Practical Difficulty.

Roll Call Vote

Mr. Keller – Yea on the approval of Variance V-15-13 given that the placement of the tower is in keeping with the surrounding area and in accordance with the IPM Zone for private utility structure, etc.

Mr. Senato – Yea

Mr. Hufnal – Yea

Chairman Sheth - Yea

Motion passed.

Mr. Hufnal moved to adjourn the meeting, seconded by Mr. Keller and unanimously carried 4-0. Colonel Ericson was absent.

Meeting adjourned at 9:50 A.M.

Sincerely,
Maretta Savage-Purnell
Secretary