



RECEIVED  
NORTON TOWN CLERK  
2022 SEP 15 AM 10:23

**Town of Norton  
Zoning Board of Appeals  
Minutes of Meeting Held on February 9, 2022**

The February 9, 2022 meeting of the Zoning Board of Appeals was held remotely via the ZOOM platform, provided for interested parties and members of the public as noticed.

The meeting was called to order at 7:04 p.m. by Tom Noel, Chair. Members participating were Mr. David Wrenn and Mr. James Tenore. Mr. Lukas Wasiak was absent. Also, in attendance is Building Commissioner Nicholas Iafrate and Administrative Assistant Bryan Carmichael.

The meeting was recorded and made available to the public on the Norton Media Center YouTube page.

**PUBLIC HEARING – Variance**

ZBA File No. 12873

Property Address: 182 South Washington Street

Owner/Applicant: McDonough Family Limited Partnership

Mr. Henry Sousa is the attorney representing the applicant who is working at 248 West Main Street in Norton, along with Mr. Christopher Olsen the Sight Surveyor, and Mr. Andrew Pigney the Radio Frequency Engineer are present to speak for the applicant. Mr. Noel asks if the tower is being set up on the same lot as a residential building. Mr. Sousa confirms. Mr. Noel asks Mr. Sousa to give a summary of the application and asks for a clearer version of the plan.

Mr. Sousa starts by explaining the application is for a variance to allow a Latus Tower at 190 feet that the Norton bylaw only allows a Monopole Tower that goes up to 125 feet. The bylaw in regards to wireless communications failed to consider microwave communications which require a more stable tower than a monopole to transit effectively. The height request is also to ensure an effective tower which would use microwave and cellular communications. The Fire and Police departments of Norton were asked for their input when developing the plan for the tower. The applicant is willing to let Norton collocate on the tower for communications. The applicant is also willing to donate the necessary equipment Norton would need to collocate, which is about 37000 dollars' worth of equipment. The tower will improve Norton's communications and it will improve business communications both microwave and cellular.

Mr. Noel asks if the single-family residence will be remaining on the property after the construction of the Latus Tower. Mr. Olsen the consultant for McDonough responds that there are three single-family residences still in the area. The current residence and the two residences

to the left of the property are the only ones still in use. There are plans to redevelop the current residence to a commercial property and the lease is not a long-term residence and will become commercial/industrial use. Mr. Noel asks if there is someone living there now. Mr. Olsen states that yes, it is a month-to-month lease that will end when the property is redeveloped. Mr. Noel asks which houses are occupied. Mr. Olsen states the two houses on the left have residents and the two houses on the right are from a dumpster company with dumpsters up to the property line. Mr. Noel asks if there are fall distance points. Mr. Olsen states they do not have one and will get one if the Zoning Board requires it. Mr. Noel will look into whether or not a falling study is required.

Mr. Noel asks what is meant by the height being 140 feet but extendable to 190 feet. Mr. Olsen states that it is designed to be 190 feet but it will be built as a 140-foot structure and will be built to 190 feet if necessary. Mr. Noel which variance relief the applicant is hoping to get 140 or 190. Mr. Sousa answers that they are applying for the 190-foot variance to not over build will start out at 140 feet and if there is demand for colocations will be built taller up to 190 feet. Mr. Noel asks based on the design if the Latus tower will be a 140-foot pyramid shape and the last 50 feet would be thinner. Mr. Sousa confirms that that is the design.

Mr. Noel asks what height does the tower need to be immediately. Mr. Pigney introduces himself as an independent consultant. Mr. Noel requests he show the Zoning board his credentials. Mr. Pigney states he will give the board his resume. Mr. Noel asks if only the three houses on the map in about a quarter mile radius is residential. Mr. Olsen states that from the property up to the Holiday Inn everything on the right side of South Washington is an Industrial use property. Mr. Noel inquires if Waste Management is the dumpster company next to the property. Mr. Olsen is unsure as there are several trash companies sharing the site. The neighbors were notified of the intentions to make the property a commercial industrial development. Mr. Tenore asks if this is close to the billboard that was approved going over the highway. Mr. Noel states it is on the same street. Mr. Tenore states the area is trending commercial property. Mr. Noel states that the area has become industrial and is losing residents because of it. Mr. Olsen believes the houses currently there are pre-existing non-conforming. The site is on a hill and is pretty much exclusively visible from the highway and it won't be seen very much on the South Washington Street side.

Mr. Olsen states that the area is a blind spot for both carriers and for Town Communications. Mr. Olsen had worked with the Fire and Police Departments on finding out that the communication is weak and could create a public safety hazard if they are unable to communicate. The plot plan that was used for 190 South Washington Street lit up the whole area. Mr. Noel asks if Norton has any Microwave Links. Mr. Bob Wood, a Captain of the Norton Fire Department states that there are multiple microwave links that join all the radio towers. It goes from 308 Taunton Ave. to about 32 Newland Street their signal shoots back to the Water Tower at Cottage Street and then goes back to the Fire Department through fiber.

Mr. Pigney shows the location of the 190-foot cell support in relation to the buildings on Route

495. Route 495 is covered by the other towers which has a large cover area but a very small amount of capacity. Which gives a smaller amount of data and with this tower being put into place and the amount of frequency bands that come into play with 5g with a higher frequency there which is 600 – 700 megahertz. It currently is mid-band and there's a lot of spectrums in there which is what drives the high data speeds with the data rates that people would get which would go from 20 megabits per second to 200 to 500 megabits per second. This would allow the broadband to fill in any gaps they may have and access the buildings with 5G networks as well. The Board is then shown where the wireless carrier would go on a tower and if a 120-foot monopole would barely be reaching the tree line which would ruin the reception of the higher frequency bands. The medium frequency requires that the carriers each be separated at least ten feet apart which would put the lowest carrier in the trees which would be ineffective. Giving the 190-foot gives the Latus Tower line of sight with the Water Tank for direct microwave access as well as the auxiliary backup tank. That is so the public safety access to the areas isn't lost. With the current coverage there is adequate coverage to the North and the East but the Industrial Park is very scattered and will be filled in by the Latus Tower being proposed. With the Verizon Tower already in the industrial park, the proposed tower should cover the entire Industrial Park.

Mr. Tenore asks if this is the carrier viewpoint to which Mr. Pigney confirms it. Mr. Pigney continues and shows the town analysis. It shows the Norton Water Tank back up, the Modern Water Tank Primary at 55 West Main Street connecting to the 190 self-support in the middle of the Industrial Park which also connects to a couple of receiver stations, the SBA Tower on Taunton Ave, and an SBA tower on Newland Street. The proposed tower has complete line of sites on all of the sites which can give backup data links going to the other towers in case of an emergency. This uses the microwave shots that the public safety group is using on the towers, which would be effective linking the tower to the others. There is an orthogonal beam that is sent out to connect with the other towers called a Fresnel Zone which determines whether or not that path is affected by reflections from the ground over water or if it has any problems with achieving its full data rate when it's connected to all of these sites with no blockage. The proposed tower would be the same height as the Water Tank at 190 feet and would connect at the current construction height of 140 feet. The problem is the carriers aren't higher over the tree line, the lowest carrier that comes in ends up suffering and not being able to get good RF coverage out to the rest of the industrial park.

Mr. Noel asks if the main water tower is 190 feet tall. Mr. Pigney states that the water tank on 55 West Main Street is illustrated at 190 feet where the public safety radios are. Mr. Olsen adds the information that was plotted was from the Fire and Police Departments. Mr. Pigney states that the tower would completely saturate the Industrial Park area which would improve the radio signal strength in the Industrial Park. The Fire and Police Departments both have difficulties with their radios. Mr. Olsen shows the difference between the radio connection now and what it can be.

Mr. Tenore asks Mr. Brian Clark, the Police Chief of Norton if the Police have problems communicating at the Industrial Park. Mr. Clark states that the Industrial Park has increased over

the past several years including Horizon Beverage and Alnylam and the Extended Stay Hotel has become the largest call volume area in Norton which is on South Washington Street just before Taunton. The Radio coverage there is horrible and has talked to Mr. Robert Wood, Fire Captain of Radio Tech about trying to get some adjustments for years and never have been able to a good game plan. So, a Latus Tower in the area would make a dramatic difference in a capability for communication. Mr. Noel asks if portions of Norton don't have any signal. Mr. Clark states yes in Extended Stay with a radio there is now signal which is a safety hazard and states that the Fire Department probably feels the same way. Mr. Noel was under the impression that the communication in Norton was completely covered and states that he sees the safety concern that the Fire and Police departments could have with spotty communication. Mr. Clark states that back in around 2010 there was a communication project that Mr. Wood led and everywhere else in Norton has good coverage down on the Taunton line of Taunton Avenue that wasn't there before but the Industrial Park remains dull and there is Bay Road on the other side that no longer above the tree line. Mr. Tenore asks if Taunton has the same communication problem in that area. Mr. Clark states that he hasn't heard anything from Taunton but believes that the Latus Tower would help their communications as well.

Mr. Jason Robbins, Deputy Chief of the Norton Fire Department states that they had requested use from the Holiday Inn to put a tower on top of their building and was denied. BDAs can be required which would amplify radio communications in a building but they can only reach so far, they are also required for most buildings in the Industrial Parks which helps but the Latus Tower will be a significant improvement. Mr. Noel asks to confirm that the Holiday Inn had denied Norton's request. Mr. Robbins confirms that they have denied the request to have a tower on top of the Holiday Inn.

Mr. Noel asks why not every tall building would want a Communication Tower. Mr. Pigney states that it has to do with access as there has to be technicians that have to access it and a lot of them do it because they just don't want to guarantee 24-hour access for repairs. Which is why the tower is more ideal to get as maintenance access is easier to do. Two other factors that make owners not want to is that they are afraid the tower will affect everything else on the roof like the air conditioner. The other factor is that the buildings typically are not high enough that are 100 feet or 105 feet but the tree line around the Industrial Park is tall and will have to get multiple towers on top of buildings that the one Latus Tower would provide.

Mr. Olsen states that there are other non-technical reasons as well. One reason is that carriers pay money to be on the tower and if there is no offer for private companies to get money, they sometimes will take the attitude of wanting something in return.

Mr. Noel asks if there needs to be technical advice as to whether the Latus Tower is enough for Norton to benefit from this. Mr. Robbins states that the resident technical expert in town is Mr. Wood. Mr. Noel asks if there is assurance that this is going to be beneficial. Mr. Wood states that the tower just has to be high enough to be beneficial for communications, this would assist the Fire and Police Departments. Mr. Noel asks if the Town's communications are UHF. This

confirmed by Mr. Robbins. Mr. Noel asks if UHF is the standard or if it outdated. Mr. Robbins states that UHF is where the Fire and Police Departments are going to stay and there are talks that they have to supplement at 700 but that is further in the future. UHF is the best for public safety because it's got the ability to penetrate through the buildings and just needs to be supported with repeaters and receivers throughout the area. The reason for the weak signal is because there is no equipment tall enough to strengthen the east side of Norton. Mr. Pigney states that there is a benefit with AT&T with a national public safety net called FirstNet that will be deployed there when they locate their equipment there. The FirstNet equipment makes is essentially a bridge to make all local and federal radio stations compatible and it is using 700 megahertz which will be a part of the AT&T when they go onto the Latus Tower and that'll enhance everything on the national network as well.

Mr. Wrenn asks if the Mansfield Airport on the other side of Interstate 495. Mr. Pigney states that the airport glide scope was in a different direction than what the tower is so it's not actually in the glide path of the Mansfield Airport and it is far enough away to not have an impact and it would need to be lighted if the Tower was over 200 feet but doesn't need to be at 190 feet. Mr. Pigney explains that 190 feet works well because Norton's backup link system located on 32 Cottage Street, if the primary were to go down it would open Norton up to poor coverage as it is located a bit further from the Industrial Park. With the proposed Latus Tower, the coverage would be robust in the Industrial Park area even if on the backup system. This would reinforce the idea that not only would this serve your capacity and penetration needs on the primary, it also fills in Norton as a backup as well.

Mr. Noel asks what would happen if there was a total power outage and if there are generators or batteries on the communications. Mr. Wood states all of the Fire Department's communications equipment is battery backup as well as generator backup that is mostly housed in AT&T shelters. AT&T pays for the electricity, heating, cooling, and fuel for the generator. Mr. Noel asks if the Tower will be equipped with an emergency backup. Mr. Pigney states the tower will not only have a generator backup which is supplied two ways, one is a large-scale generator put onto supply all the wireless carriers and they contribute to that so they share the generator power but the public safety equipment that would go on that can also share that same generator power. So, it would be the same type of industrial grade equipment that is being used at the other two locations. Mr. Noel asks if all new towers have that backup. Mr. Pigney confirms that they do because of all the infrastructure that is dependent on wireless coverage and there has to be at least an 8-hour backup for the towers so that personal can get in there to repair any issues that are going on. Mr. Olsen adds that there is natural gas on that side of the street which will probably be how the generator is run.

Mr. Tenore believes NEMA would also come in to help if the backups failed. Mr. Wood states that there are two mobile generators light tower style and a couple of smaller ones as well which is why they have battery backup as well. The Batteries hold up until the generator can ramp up the transfer switch kicks over and if the generator should fail the batteries will pick up the load again. Mr. Olsen states the Tower would also help the local businesses in the Industrial Park

which could help bring in other businesses.

Mr. Noel asks if the weather radar provide any opportunity for communications or does that have to be separate. Mr. Pigney states it has to be separate because the National Weather Service would not allow it because if anything gets near it would show up as false imaging to the Weather Service. Mr. Noel asks if the proposed Latus tower would be seen as a problem. Mr. Pigney answers that it won't be a problem as the weather radar is scanning at a lower frequency band so it handles huge swaths of 100 plus miles and it filters all localized clutter including the towers.

Mr. Noel suggests that the Zoning board look over the by-law again to go over particulars and the requirements to see if this application abides by the by-law. Then if the application passes what variances should be given. Mr. Noel asks if Mr. Sousa would be able to appear before the board in March. Mr. Sousa states he is unable to and would have to come back in April. Mr. Sousa states that from his reading of the by-law a special permit is also required from the Planning Board and would still need their approval before going forward with construction of the Latus Tower. Mr. Noel asks if they have approached the Planning Board with an application. Mr. Sousa states no as they believe they would be denied unless they went and go the Zoning Board's approval first and that the Planning Director Paul DiGiuseppe was included as part of the initial conversations of the Latus Tower. Mr. DiGiuseppe was who suggested going to the Zoning Board of Appeals to get the variances.

Mr. Noel asks the Board if they are okay with continuing the application to the April meeting. Mr. Wrenn agrees with Mr. Noel that it should be continued. Mr. Noel states he would like to look at the by-law again and to run by town council what the policy considerations are with the telecommunications act because they have changed over the last few years but the federal statute says that Towns/Cities need good communications throughout the country. Mr. Sousa states Norton's first cellular communication tower was located behind Low Temp Engineering the preset day Bernie and Phyl's warehouse. The ZBA did not approve that tower and the applicant appealed the decision to the Supreme Court and they overruled which is how it was constructed. Mr. Noel asks what year that was. Mr. Sousa believes it was in the late 80's. Mr. Olsen adds that the area is more residential than the proposed Latus Tower's location. Mr. Noel asks if there are any members of the public that wants to give an opinion on the application. There is no member of the public to speak on this application. Mr. Noel requests that the applicant submit the Radio Frequency study material and Mr. Pigney's resume.

**Motion to continue the application to the April 13, 2022 meeting at 7:05pm is motioned by made by Mr. Wren and seconded by Mr. Tenore. Roll Call; Mr. Wrenn Yes, Mr. Tenore Yes, and Mr. Noel Yes.**

### **General Business**

Meeting Minutes for October 2021, September 2021, and January 2022. Mr. Noel emailed edits

of minutes to the other Board members prior to the meeting. Mr. Noel states that because Mr. Carmichael is writing the minutes he will now sign off on the accepted minutes. November minutes were discussed and found that they were not approved last meeting.

**Mr. Wrenn motions to approve the October 13, 2021 meeting minutes with edits and seconded by Mr. Tenore. Roll Call; Mr. Wrenn Yes, Mr. Tenore Yes, and Mr. Noel Yes.**

**Mr. Wrenn motions to approve the September 15, 2021 meeting minutes with edits and seconded by Mr. Tenore. Roll Call; Mr. Wrenn Yes, Mr. Tenore Yes, and Mr. Noel Yes.**

**Mr. Wrenn motions to approve the January 12, 2022 meeting minutes with edits and seconded by Mr. Tenore. Roll Call; Mr. Wrenn Yes, Mr. Tenore Yes, and Mr. Noel Yes.**


Next Meeting the August, November, and January meeting minutes will be reviewed.

**Adjournment**

**Motion to adjourn at 8:22 by Mr. Wrenn and seconded by Mr. Tenore. Roll Call; Mr. Wrenn Yes, Mr. Tenore Yes, and Mr. Noel Yes.**

Minutes contemporaneously typed by: Bryan Carmichael, Administrative Secretary for the Planning and Zoning Board of Appeals.

Edited and Respectfully Submitted,



Bryan Carmichael  
Administrative Secretary, Norton Zoning Board of Appeals

Approved by Committee on: September 14, 2022

