

TOWNSHIP OF LOWER MAKEFIELD  
ZONING HEARING BOARD  
REORGANIZATION MEETING  
MINUTES – JANUARY 6, 2009

The regular meeting of the Zoning Hearing Board of the Township of Lower Makefield was held in the Municipal Building on January 6, 2009. Mr. Toadvine called the meeting to order at 7:30 p.m.

Those present:

Zoning Hearing Board:       David Malinowski, Chairman  
                                      Paul Bamburak, Vice Chairman  
                                      Gregory J. Smith, Secretary  
                                      Jerry Gruen, Member  
                                      Anthony Zamparelli, Member

Others:                         Robert Habgood, Code Enforcement Officer  
                                      John Donaghy, Township Solicitor  
                                      James Majewski, Township Engineer  
                                      Allen Toadvine, Zoning Hearing Board Solicitor  
                                      Matt Maloney, Supervisor Liaison

REORGANIZATION OF THE BOARD

Mr. Toadvine called for nominations for Chairman of the Zoning Hearing Board for 2009. Mr. Bamburak moved, Mr. Smith seconded and it was unanimously carried to elect David Malinowski as Chairman of the Zoning Hearing Board for 2009.

The meeting was turned over to Mr. Malinowski who called for nominations for Vice Chairman of the Zoning Hearing Board for 2009. Mr. Smith moved, Mr. Gruen seconded and it was unanimously carried to elect Paul Bamburak as Vice Chairman of the Zoning Hearing Board for 2009.

Mr. Malinowski called for nominations for Secretary of the Zoning Hearing Board for 2009. Mr. Zamparelli moved, Mr. Bamburak seconded and it was unanimously carried to elect Gregory J. Smith Secretary of the Zoning Hearing Board for 2009.

APPOINTMENT OF COURT REPORTER

Mr. Gruen moved, Mr. Bamburak seconded and it was unanimously carried to appoint DDL Court Reporting Service as the Court Reporter for 2009 under the same terms and conditions as last year.

#### APPOINTMENT OF SOLICITOR

Mr. Bamburak moved, Mr. Smith seconded and it was unanimously carried to appoint Allen Toadvine of the firm Marte & Toadvine as the Solicitor of the Zoning Hearing Board for 2009 under the same terms and conditions as last year.

#### APPEAL #08-1483, #08-1483 (A) #08-1483(B) – T- MOBILE NORTHEAST LLC

Eric Goldberg, attorney, was present and stated at the last Hearing they were in the middle of their testimony of the radio frequency engineer, Mr. Iskanver. He stated he advised the Board's Solicitor and the Township's solicitor that Mr. Iskanver would not be available to attend this evening's meeting for religious reasons. Mr. Goldberg stated the solicitors agreed to resume with Mr. Iskanver's testimony at the next Hearing, and they will present three other witnesses this evening.

Mr. Petros Tsoukalas was sworn in and stated he works as a project engineer, civil engineer, and structural engineer. He stated he has a Bachelor's in Civil engineering and his work experience is primarily as the project engineer for T-Mobile projects and deals with structural engineering for tele-com projects. He has been accepted by Boards in Pennsylvania as an expert. Mr. Tsoukalas was accepted as an expert by the Board.

Mr. Goldberg asked Mr. Tsoukalas if he reviewed any Ordinances, Plans, or documents prior to this evening, and Mr. Tsoukalas stated he has. Sheet S-1 of Exhibit A-2 was shown and Mr. Tsoukalas stated this shows the overall property with the existing structure which is a 35' tall water tank owned by American Water and a fenced compound. It also shows the proposed monopole in the new fenced compound that would be installed. The lot is approximately 1.987 acres, and the frontage of the property is approximately 534' with a width of 385'. The property is located in the R-2 District. The proposed tower and equipment would be located outside of the existing compound in the northwest corner next to the existing water tower. Mr. Tsoukalas stated it will be located on the outside because the owner of the water tower does not want access through their existing compound to get to any T-Mobile equipment; and they want T-Mobile to have their own access for security reasons.

Mr. Goldberg asked Mr. Tsoukalas to describe the existing landscaping, and Mr. Tsoukalas stated it is surrounded by existing mature trees approximately 50' to 80' in height. The tower will be located inside the existing vegetation. Around the existing compound there is a cleared area so there is access to the water tank.

Mr. Goldberg asked about ingress and egress to the site, and Mr. Tsoukalas stated it will be from an existing access drive from Williams Lane and a new access drive approximately 10' wide coming from the existing access drive to the new compound.

They will need to take out four existing trees as shown on the Plan to make room for the new access road.

Mr. Goldberg asked what the Application consists of, and Mr. Tsoukalas stated it consists of a 35 ½' by 15' fenced area. Within the fenced area will be an 18 ½' by 10 ½' concrete pad which will support up to six equipment cabinets which are roughly the size of a refrigerator – 6' high, 4' wide, and 2' deep. The initial installation will be just one of these equipment cabinets to be installed by T-Mobile. The height of the fence is 6' high with 1' barbed wire and it will match the height of the existing fence. The proposed monopole is a "tree" pole so that it will look like a tree. It will be 100' tall with the "branches" hiding the antennas. They will install nine antennas at 100'. Mr. Goldberg stated some Boards prefer tree poles and some prefer monopoles, and T-Mobile would install whatever the Township prefers. Mr. Tsoukalas stated a tree pole would blend in with the existing vegetation but will stick up above the existing vegetation as the antennas cannot have anything in front of them so that the radio frequency signal can get out. A regular monopole would be a silver pole and would not look like a tree. He stated the antennas will be 6' tall, 1' wide, by 1' deep and will be installed on a low-profile platform mounted at 100' center line at the top of the monopole. He stated the antennas and the platform will be concealed within the "branches" if a tree pole were the preferred type by the Township. The antennas are connected to the cabinets by co-ax cables which are 1 5/8" thick cables with two per antenna; and they will be connected to the antennas, routed within the pole, down to the equipment at the base of the monopole, and then routed along an ice bridge which protects the co-ax from any ice falling off the monopole. Nine antennas will be installed, three per sector, with three sectors.

Mr. Goldberg stated it was earlier noted that a tree pole may be appropriate given the surrounding existing vegetation, but they could also have a monopole or a flag pole. He asked Mr. Tsoulas to describe a flag pole, and Mr. Tsoulas stated a stealth flag pole is a monopole that is disguised as a flag pole with the antennas concealed within a dome at the top of the flagpole. He stated the one drawback would be that with this option there are only three antennas that can be mounted per height rather than the nine that T-Mobile prefers.

Mr. Goldberg asked if the pole would be constructed in such a way that additional users could be accommodated, and Mr. Tsoulas stated it would. He stated it would be difficult for other carriers to co-locate on a flag pole as they would only be able to accommodate three antennas, and they may need to take two levels so there is limited space on the tower that is above the tree line. He stated each carrier likes to have a 10' vertical separation between their own and another carrier's antennas for maintenance purposes and possible interference. He stated T-Mobile is proposing to mount its antenna at 100' feet so a subsequent carrier would go at 90' regardless of what type pole is constructed. The tower would also be built to accommodate local police, fire, and emergency users.

Mr. Goldberg asked if the tower would satisfy all structural standards including those for wind gusts, and Mr. Tsoulas stated it would. Mr. Goldberg asked if the tower would satisfy all applicable standards under the American National Standards Institute and the Tele-Communications, industry, and Mr. Tsoulas stated it would.

Mr. Goldberg asked if this is an unmanned site, and Mr. Tsoulas stated it is unmanned, and there are provisions for remote monitoring of the site. He stated there is a system within each cabinet that has silent alarms so that if anything goes wrong within the cabinets, it will go through a telephone line back to the main station and alert them to the problem at the facility. Mr. Goldberg asked about maintenance required for the site, and Mr. Tsoulas stated they would need cleaning and check-ups once a month which would be done by a technician driving up to the site. No sanitary sewer or water service is required. It will not generate any dust, odor, noise, glare, or pollution. Mr. Goldberg asked if any parking will be required, and Mr. Tsoulas stated these facilities typically have one parking space for the technician. The only fencing to be installed would be the fencing that will surround the equipment. Telephone and electric are required at the site, and these will be brought to the site from the existing utility pole located on the site and routed to an overhead to another utility pole within the existing pole and then underground to their facility. No generator is proposed. The pole does not need to be lit. T-Mobile will provide a bond to cover the cost of removing the facility in the event it was no longer to be utilized.

Mr. Goldberg asked Mr. Tsoulas to describe the Variances being requested, and Mr. Tsoulas stated the Application requires a height Variance, a use Variance, a setback Variance for the pole, a landscape Variance, and a total lot area Variance. The use Variance is needed because the site is not in the Overlay District and tele-communication facilities are not permitted in the R-2 Zone. The maximum building height permitted in R-2 is 35', and they are proposing a 100' tower; however tele-communication towers are permitted to be up to 300' in the Ordinance. With regard to the Variance being requested for the size of the lot, the size of the lot is .97 acres, and the requirement is one acre.

Mr. Goldberg stated the Ordinance indicates that the minimum lot size for a tele-communications facility is what is "reasonably needed." With regard to the landscaping Variance, Mr. Tsoulas stated the site is surrounded by existing vegetation that shields it from any housing or public right-of-way. They are asking for the Variance since it cannot be seen from any public areas and is right next to existing vegetation so to install a complete buffer around it, they would be buffering existing landscaping with more landscaping. Mr. Goldberg stated in this regard, the Applicant would be willing to comply with this if the Board requests it, although they do feel it would be superfluous.

Mr. Gruen asked if they can see this from any of the neighboring homes, and Mr. Tsoulas stated you cannot see the equipment at the ground from the public right-of-ways or from the street. Mr. Gruen asked if it can be seen from the three houses surrounding it, and

Mr. Tsoulas stated there are trees between the houses and the proposed location of the equipment, but he is not sure that they are completely screened. Mr. Gruen asked if they are deciduous or non-deciduous trees, and Mr. Tsoulas stated they are non-deciduous. Mr. Gruen stated in the winter there would be no leaves, and Mr. Tsoulas stated it is a mixture of both. Mr. Goldberg stated T-Mobile would be willing to plant additional buffering.

With regard to the setback Variance, Mr. Tsoulas stated the Ordinance requires that a new monopole be setback 150' from any existing dwelling, and there is a property from which they cannot meet the requirement southwest of the property on Parcel 20-41-32 where they would be 140' from the existing dwelling. Mr. Goldberg asked if it is possible to locate the pole anywhere on the site and meet this setback requirement, and Mr. Tsoulas stated it is not possible to relocate the pole in a location on the property that will work for the pole and not be within 150' of a house. He stated the property to the north and northwest has a steep slope so that they cannot move the compound any further away without going into that slope. The pole is more than 150' from the closest cartway of a street, roadway, or highway. Mr. Tsoulas stated if they moved the pole closer to the northeast, they would be closer than permitted to two other homes and the only way to move it 150' away from any home would be to move it to the north or northwest and they cannot because of the steep slope.

Mr. Gruen asked how far away the equipment can be from the pole, and Mr. Tsoulas stated possibly they could have the building 50' away from the pole and they would have to run a cable. They would not be able to locate the pole at another location because of the slope and they would also have to increase the height of the pole. He stated there are also concerns about the area because it is a wet area and this could result in an environmental issue.

Mr. Goldberg asked Mr. Tsoulas to describe how the poles are designed, and Mr. Tsoulas stated the monopole is designed of steel and tapers from top to bottom. It is hollow for the routing of the co-ax, and there are pre-installed ports at the top and bottom. The pole is bolted to a drilled caisson that can go from 20' to 80' depending on the soil conditions. It is designed to meet all Building and Design Codes.

Mr. Gruen asked what kind of wind it can withstand, and Mr. Tsoulas stated in this area, he feels it would be designed to withstand wind of 90 miles per hour at a minimum. It could be designed for whatever the Code calls for. Mr. Goldberg asked Mr. Tsoulas to describe what a wind gust is, and Mr. Tsoulas stated the Code has predefined what the wind loading is in different areas of the Country, and the Code tells what you should use in your calculations.

Mr. Goldberg asked Mr. Tsoulas to describe what would happen if the tower were to collapse, and Mr. Tsoulas stated a rule of thumb is used which is one-thirds, two-thirds, and the tower is designed to collapse upon itself at two-thirds of the height so it would fall approximately 60'.

Four photos taken the last week in August were presented and marked collectively as Exhibit A-7. Mr. Tsoulas stated they took four different locations around the compound. One shown was from the intersection of Hedgerow Drive and Makefield Road and shows where the proposed tree pole would be and the balloon which was floated. They superimposed what the tree pole would look like. The second photo was taken from Kirby and Lyons Drives. The third location was taken on Big Oak between Williams Lane and Derbyshire Road, and they could not see the balloon from that location. The fourth location was Makefield Road between Hedgerow Drive and Big Oak Road and shows the tree pole behind trees.

Exhibit A-8 was marked which is a photo simulation of a proposed 100' monopole which are the same locations as Exhibit A-7 showing a monopole as opposed to a tree pole.

Mr. Goldberg stated no other dimensional Variances are required other than those previously noted and the Application complies with all other applicable requirements.

Mr. Donaghy asked how far away from the proposed pole were the photos taken, and Mr. Tsoulas stated there is a map on the Exhibit and below each photo it shows the distance. None were taken from the immediate property line.

A short recess was taken at this time to allow everyone to view the photos presented this evening. The meeting was reconvened at 8:20 p.m.

Mr. Donaghy asked Mr. Tsoulas if there is a reason the photos were taken from the distances they were rather than the property line, and Mr. Tsoulas stated they like to take the pictures from locations the public would view from so they are usually taken from intersections or major highways. He stated if you go up close to the site to take the picture, particularly if there is existing vegetation, you really cannot see the monopole.

Mr. Donaghy stated there was a comment made about the existing water tower being active, and Mr. Tsoulas stated this means it currently holds water and is used by the Water Company. The proposed pole will be 40' away from the water tower. Mr. Donaghy stated Mr. Tsoulas testified if the pole were to collapse, the collapse would be approximately 60'; and Mr. Tsoulas stated this is a rule of thumb that is used, and the towers are obviously designed not to collapse, and to his knowledge there is no situation where a monopole has collapsed due to wind or ice loading; but if it were to collapse, it could fall on the water tower. Mr. Donaghy asked if it were to hit the water tower, did Mr. Tsoulas have an estimate as to the damage that could occur, but Mr. Tsoulas did not. He agreed there is water in the tower.

Mr. Donaghy stated Mr. Tsoulas discussed the availability of the pole for other carriers, and asked if other carriers were to make use of the pole, would it be likely that it would be necessary to expand the compound where the cabinets are located, and Mr. Tsoulas stated this would depend on the carriers and the equipment they require. He added the compound as proposed would serve T-Mobile's expected use.

Mr. Donaghy asked what method he used to measure the distance from the tower to the existing homes in the area, and Mr. Tsoulas stated surveyors were hired to survey and locate the homes in relation to where the proposed monopole would be located. He does not know the method they used, but he could find out. He stated the Plans and his testimony are based on the information provided by the surveyors. The surveyors work for his office and he could get the information as to the methodology used. Mr. Donaghy asked that this be provided to the Township.

Mr. Donaghy stated Mr. Tsoulas had indicated that there are trees around the perimeter, and he asked if they are evergreen. Mr. Tsoulas stated he believes they are a mixture. Mr. Donaghy stated the area of the compound could be more visible during the winter, and Mr. Tsoulas stated he feels the compound area would be hidden by the lower trunks of the tree but the monopole may be more visible in the winter. He noted the photos were taken in August which is the time of year when the area had the greatest amount of screening.

Mr. Gruen asked if the antennas will be sticking up 3' above the pole, and Mr. Tsoulas agreed. Mr. Gruen stated he also indicated that if there were other carriers, they would need a 10' differential between each carrier, and he asked if this means T-Mobile could be served at 60' if there were no other carriers. Mr. Tsoulas stated T-Mobile wants to be at 100' as they want to be above the tree line. He stated if another carrier came in, they would have to go at least 10' above or below T-Mobile. Mr. Gruen stated another carrier could then request to go at 110', and Mr. Tsoulas agree and stated they could go also go at 90'. Mr. Gruen asked if they could go as low as 60', and Mr. Tsoulas stated theoretically he assumes they could. Mr. Gruen asked why T-Mobile could not go in at 60', and Mr. Tsoulas stated he feels this would be a question for the radio frequency engineer. Mr. Gruen stated someone may want to come in at 110' and he asked if T-Mobile would come in for a Variance to increase the height of the pole; and Mr. Goldberg stated T-Mobile would not make that request, but another carrier may request this if they want to utilize the site at a height greater than 100'. Mr. Malinowski asked if another 10' could be put on top of this pole, and Mr. Tsoulas stated it could be designed to be extendable.

Mr. Gruen stated Mr. Tsoulas testified that the concrete pad could support six equipment cabinets, and Mr. Tsoulas agreed that the maximum build-out is six cabinets. Mr. Gruen asked if all six would be used by T-Mobile, and Mr. Tsoulas agreed. Mr. Gruen stated if any other carrier were to come in, they would need an additional pad for their cabinets, and Mr. Tsoulas stated this would depend on the needs of that carrier and if they needed to expand the compound, they would have to come in front of the Board. Mr. Gruen asked if it is possible to operate without putting in equipment on the ground, and Mr. Tsoulas stated this is not possible to his knowledge. Mr. Gruen stated they do not have room for any other carrier on their pad, and Mr. Tsoulas agreed. Mr. Goldberg stated this would be true for the 18 ½' by 10 ½' concrete pad but not for the fenced-in compound area which could accommodate another carrier, and Mr. Tsoulas agreed. The concrete pad which will be installed will be only for T-Mobile's equipment.

Mr. Zamparelli asked if there is any interest by other carriers in this location at this point, and Mr. Goldberg stated there is and this will be discussed by another witness.

Mr. Bamburak asked if they considered installing a flag pole at one of the Schools in the area which would look more appropriate, and Mr. Goldberg stated they have considered this, and the next witness will testify about this.

Mr. Michael Polter was sworn in and stated he is employed by Smart Link LLC and was hired by T-Mobile to do site acquisition and Zoning for tele-communications sites. Mr. Goldberg stated this means he looks for appropriate sites and negotiate Leases, and Mr. Polter agreed. Mr. Goldberg stated T-Mobile is obligated under its FCC License to provide reliable service, and Mr. Polter agreed. Mr. Goldberg asked Mr. Polter to describe what benefits to the public are provided by a wireless network; and Mr. Polter noted there is 911, E911, family needs, emergency personnel, distressed motorists, witnesses to crimes, and for public safety.

Mr. Goldberg asked Mr. Polter if he reviewed the Lower Makefield Township Zoning Ordinance and Map, and Mr. Polter stated he did and also drove around and is familiar with the general area. Mr. Goldberg stated in the Township's Zoning Ordinance tele-communication facilities are allowed in certain Zoning Districts, and Mr. Polter stated Lower Makefield has a Tele-Communications Overlay Districts in which they are allowed as well as in the O/R District. Mr. Goldberg stated there are three Overlay Districts in Lower Makefield, and Mr. Polter agreed. Mr. Goldberg stated a monopole exists in each of these Overlay Districts, and Mr. Polter agreed and added that T-Mobile is on a pole in each of those Districts. Mr. Goldberg asked Mr. Polter if the O/R District is located near the proposed site, and Mr. Polter stated it is not and locating a site in the O/R District would not be of use to T-Mobile to cover this particular gap in coverage. Mr. Goldberg asked if T-Mobile could use an additional site in the Overlay District to cover this gap, and Mr. Polter stated they could not and it would also conflict with existing sites in the Overlay District.

Mr. Goldberg asked Mr. Polter if he tried to locate antennas for this area on an existing structure rather than proposing a new structure, and Mr. Polter stated he did. He stated the water tank was too low as it is not above the tree line, and the radio frequency engineer who he submitted this to rejected it based on the height and the surrounding trees. There was nothing that could be done to the water tank to get it over the trees. Mr. Goldberg asked if there were any structures in the area that had sufficient height and could fill this gap in coverage, and Mr. Polter stated there were two possibilities, but both were rejected by the landlords. He stated one was the St. John's Catholic Church at 782 Big Oak Road and they could have possibly replaced their steeple and located the antennas within a faux steeple. He stated across Big Oak Road from the proposed site, there is a smoke stack on the Middle School, but the School Board did not wish to enter into a Lease Agreement with T-Mobile. Mr. Goldberg asked if this response was the same whether it was a new build site such as a new flag pole or to co-locate on the smoke stack, and Mr. Polter agreed.

Mr. Goldberg asked Mr. Polter to describe other sites which were considered in the general area to fill this gap in coverage; and Mr. Polter stated other than the two just noted, there was also a PECO sub-station on Big Oak Road, but this was rejected by PECO. He stated all of the Pennsbury School District sites in the area were rejected by the landlord. They also looked at sites in Falls Township, but they were not able to locate anything in the area. Any other sites would require a Use Variance because none of the other sites were in the O/R District or in the Overlay District.

Mr. Goldberg asked if there were any sites other than the proposed site that could fill the gap in coverage that were less intrusive, and Mr. Polter stated there were none other than the Middle School sites. He chose the proposed site because it was located within the gap in coverage and was a utility site located in a Residential area. Based on the direction he was given by the radio frequency engineer, T-Mobile would have preferred to locate the site further north, but this site was selected because of aesthetics and the use of the property. He added the sites further north were less appropriate.

Mr. Goldberg asked when looking for a site does he look for a site that will be the least intrusive to the community it serves, and Mr. Polter agreed and stated this was the least intrusive available site in the community. Mr. Goldberg asked if he looks for ways to locate a site that will minimize the impact on the surrounding area including visual, and Mr. Polter agreed. He stated for this site they would recommend using a tree pole as it would be colored brown to blend in with the surrounding vegetation and trees and the tip would have evergreen-type "leaves" which from a distance would blend in well. He feels this was the most aesthetically-appropriate site.

Mr. Goldberg asked Mr. Polter if he inquired as to whether any other carriers would be interested in co-locating on this site in the event it were erected, and Mr. Polter stated he did and received responses from Metro PCS would expressed some interest. He stated the other carriers have not responded. If Metro PCS were interested in co-locating on the site, T-Mobile would be willing to enter into a Lease with them. Mr. Goldberg stated the fact that other carriers have not expressed interest in the site does not mean that they may not be interested in the future, and Mr. Polter agreed and added they may also not want to reveal their gaps in coverage at this point.

Mr. Goldberg asked if there are any sites that could fill the gap in coverage that would be allowed either by Conditional Use, by right, or by Special Exception; and Mr. Polter stated there are not and every other site would require a use Variance.

Mr. Goldberg asked what is to the north of the site which is the area where T-Mobile would prefer to locate the tower, and Mr. Polter stated they are single-family homes and the Middle Schools; however, the Middle School sites were rejected by the landlord. It is his opinion that the proposed site is the most appropriate, and least intrusive available site.

Mr. Donaghy asked if Mr. Polter testified that there may be appropriate sites that are further north from the proposed location; and Mr. Polter stated the sites he found were the Middle School sites, but the Pennsbury School District refused to enter into a Lease with T-Mobile. Mr. Donaghy asked what efforts were made to contact the School District, and Mr. Polter stated they sent them a proposal with a standard Lease which was brought before their Board in February, 2007 and turned down. Mr. Donaghy asked if this would have involved the use of the existing smoke stacks or an entirely new tower; and Mr. Polter stated the first thing they would have looked at would be the smoke stack and they would probably have moved onto a flag pole design.

Mr. Donaghy stated Mr. Polter testified about a “gap,” and asked if he has determined that a gap exists based on his own knowledge and information or information provided by others; and Mr. Polter stated this information was provided to him by the radio frequency engineer who previously testified before the Zoning Hearing Board.

Mr. Donaghy asked if the School District provided any specific reason why they rejected the proposal, and Mr. Polter stated they did not. Mr. Donaghy asked about St. John’s, and Mr. Polter stated St. John’s is run by the Archdiocese of Philadelphia, and they will not allow any tele-communication sites on their property. Mr. Donaghy stated there are a few other locations in the area that may not have the height but are non-residential properties. He noted another Church in the area and a gas station as well as the Ferri Tract farm and asked if he investigated any of these. Mr. Polter stated he did look at the gas station, but there was not ample room to locate the monopole and their equipment.

He stated the other Church in the area does not have a steeple, but he is not certain that he researched that site thoroughly. Mr. Donaghy stated there may be some non-Residential properties that were not thoroughly investigated, and Mr. Polter agreed.

Mr. Smith stated a question was asked by Mr. Goldberg that the fact that other carriers did not express interest did not mean that they were not interested, and Mr. Smith stated this also does not mean that they are interested, and Mr. Smith agreed. Mr. Smith asked if T-Mobile currently owns a tower in the Overlay District, and Mr. Polter stated he is not sure if they own a tower or only lease space. Mr. Polter stated the radio frequency engineer issues a map with a search ring where he is interested in finding a location preferably in the center of the search ring. Mr. Smith stated Mr. Polter indicated there were sites which were closer to the center including St. John's but that request was rejected on the basis that the Archdiocese does not allow any tele-communications in any of their churches, and Mr. Polter agreed. Mr. Smith stated Mr. Polter indicated that the Pennsbury School Board also rejected this, and Mr. Polter agreed. Mr. Smith asked if they gave a reason why it was rejected, and Mr. Polter stated they did not. Mr. Smith asked Mr. Polter if he asked why it was rejected, and Mr. Polter stated he did and they told him that they do not want tele-communication sites on their property. Mr. Smith asked if he received a written response from them, and Mr. Polter stated he did not and he spoke to someone on the phone although he does not recall who he spoke to as it was two year ago. Mr. Smith asked if they have made a counter-proposal since then, and Mr. Polter stated it was not a money issue and they simply did not want it on their property. Mr. Smith stated Mr. Polter also indicated he discussed this with PECO and they rejected the offer, and Mr. Polter stated PECO does not allow any tele-communication companies to locate their facilities within any of their fenced compounds.

Mr. Smith asked Mr. Polter if he knows if T-Mobile considered possibly putting their own tower in any of the Overlay Districts, and Mr. Polter stated they currently have antennas in each of the Overlay Districts. Mr. Goldberg asked if Mr. Smith is looking to do this to fill this gap in coverage, and Mr. Smith stated he is asking if they considered putting their own tower in an Overlay District to cover any gap in coverage for any reason. Mr. Polter again stated they are currently in all of the Overlay Districts.

Mr. Smith asked at what height their antennas are located, but Mr. Polter stated he feels this question should be addressed to Mr. Iskanver.

Mr. Smith asked Mr. Polter if T-Mobile considered any sites in Trenton, and Mr. Polter stated he feels that would be too far out for this particular gap in coverage, but this question would be better asked of the radio frequency engineer.

Mr. Zamparelli stated one of the sites noted was the gas station, but Mr. Polter indicated that there was not sufficient room. He asked if this was based on the 100' high pole, and Mr. Polter stated it was because of the 10' by 20' platform and the pole.

Mr. Gruen stated the radio frequency engineer gave Mr. Polter a map to look at, and Mr. Gruen asked if he has a copy of that map to show the Zoning Hearing Board. Mr. Polter stated it is basically Exhibit A-6, but it would have a circle in the middle of it with a radius of about one half mile. Mr. Gruen asked Mr. Polter if he looked at the Five Mile Woods location on Big Oak Road, but Mr. Polter stated he is not familiar with that location. Mr. Gruen showed Mr. Polter the location of the Five Mile Woods on Exhibit A-6, and Mr. Polter stated it appears that it would be too far west to cover the ring. He suggested that the radio frequency engineer consider this, and Mr. Gruen asked that the radio frequency engineer be asked about this prior to the next meeting adding if the Township would allow this, this would suit everyone.

Mr. Toadvine noted Exhibit A-6 and asked Mr. Polter if he could identify the center of the ring on the exhibit, but Mr. Polter stated he could not and feels the radio frequency engineer would have to testify to this. Mr. Toadvine asked if there are any PECO high tension wires located within the ring, and Mr. Polter stated there are not.

Mr. Gruen asked if they could produce at the next meeting, the map with the circle which was provided to Mr. Polter, and Mr. Polter agreed to provide this.

Mr. Goldberg stated earlier they discussed the Middle Schools owned by the Pennsbury School District, and the St. John's Church owned by the Archdiocese. He stated even though these particular sites are new, in the past T-Mobile has unsuccessfully tried to negotiate Leases for other sites with the Pennsbury School District and the Archdiocese, and Mr. Polter agreed. Mr. Goldberg stated since 1997 T-Mobile has never been able to enter into a Lease with either of them, and Mr. Polter agreed.

Mr. Gruen asked if they could approach the School again and ask if they would consider a flagpole by the bus parking lot which would be far enough away from the School, and Mr. Polter agreed to contact them prior to the next meeting.

Dr. Kenneth Foster was sworn in. Mr. Goldberg stated he will be testifying as to compliance issues with regard to radio frequency. Mr. Goldberg stated this area has been preempted by the Federal Communications Act, but Dr. Foster will testify to the fact that this site complies with all requirements of that Act and that they are far below any standards of safety set forth in that Act.

Mr. Smith asked if T-Mobile were to construct a cell phone tower that did not comply with the regulations concerning emissions and safety, would they be allowed to do this by the Federal Government, and Mr. Goldberg stated they would have to comply with all applicable laws.

Dr. Foster stated he is a professor of bio-engineering at the University of Pennsylvania although he does not represent the University this evening. He stated he has a PhD in Physics and is a registered professional engineer in Pennsylvania. Since 1971 he has been doing research on medical uses and possible health risks of electro-magnetic fields including radio frequency energy. He has published more than one hundred papers in this and related subjects and is a member of a National Committee that sets limits for human exposure for radio frequency energy. He has also been a consultant for a number of companies as well as International agencies on possible health risks of electro-magnetic fields. He has previously been accepted as an expert regarding radio frequency compliance and limitations by Boards in Pennsylvania. Dr. Foster was offered as an expert, and there was no objection.

Dr. Foster stated at the request of T-Mobile he did an analysis of the radio frequency, electro-magnetic environment in the vicinity of the proposed tele-communication facility and prepared the report dated November 18, 2008 which was marked as Exhibit A-9. Dr. Foster stated this report determines the maximum level of human exposure to radio frequency energy, and he offers his opinion that this site will comply with the FCC requirements. It was prepared on the basis of engineering data that the company provided him about the site and using a standard technique that the FCC specifies. He concluded that the site will comply with FCC limits by a large margin. He determined that the maximum exposure would be less than .15% of FCC limits under the worst-case assumptions.

Mr. Toadvine stated Dr. Foster indicated that he prepared his report based on information T-Mobile provided him indicating the level of emissions, and Dr. Foster stated they provided him information on the type of antenna, and how high it will be mounted off the ground, the amount of power transmitted; and from this he determines the exposure levels based on manufacturer's information. Mr. Toadvine asked if he ever has occasion, after a site is installed, to go back and measure to see if it conformed to his findings; and Dr. Foster stated he has done this as have others and papers have been published reporting those measurements. He stated if the calculations were based on actual engineering data, the measurements are always very close to the actual levels. He stated he makes his calculations based upon the maximum theoretical capacity of the site so the signal levels that he calculates will be substantially higher than those that will actually be present. Mr. Toadvine stated his calculations were based only on T-Mobile and not if there were two or three other companies co-locating, and Dr. Foster agreed. Mr. Toadvine stated this would increase the levels, and Dr. Foster agreed. He stated each of the applications, if they were standard base station antennas, will produce tiny signals compared to the limits so that if they add up three tiny signals, the net sum of the signals is still far below the limits.

Dr. Foster stated he determines whether the site will comply with FCC limits.

Mr. Gruen asked if he feels those site levels are safe, and Dr. Foster stated he is not sure that this is something that an expert in this type of Zoning Hearing Board should provide an expert opinion on although he could explain his views on this. Mr. Gruen stated Dr. Foster was presented as an expert on electro-magnetic fields and their effect; and while he understands he is testifying as to what the FCC requires, it has been seen in the past that the Government has certain regulations that are not quite safe and it is found out later that they are wrong. He noted particularly asbestos and some other chemicals. Mr. Gruen asked as an individual who has studied this, does Dr. Foster feel the FCC regulations are safe. Mr. Goldberg stated he feels this goes beyond what Dr. Foster was asked to testify to which was if they meet the FCC regulations. Mr. Gruen stated he would like to know what are safe levels.

Dr. Foster stated he writes books on this subject. He stated the FCC limits are based upon the best available evidence and are those that were developed some years ago by the Committee which he is a member of. He stated the limits were adopted by the FCC using the standard rule-making process which involves setting the limits out for everyone to comment on. The FCC received comments from scientists, activists, environmental officials, etc.; and based upon the Federal rule-making process, they set the limits. He stated his own view is that they are protective against all known hazards, and the limits have been affirmed by other agencies including the International Non-Ionizing Radiation Protection Commission which sets limits throughout Europe. He stated two years ago the IEEE established a new set of limits which are very close to the FCC limits. He feels that the limits are highly protective and other agencies have come to similar conclusions. He stated to affirm that there is no possibility of any error anyplace in the limits is something he does not feel any human being can do, but he personally is comfortable with the limits having studied this issue for many years and does not see any reason to be concerned about the very low levels of exposure that they are talking about from this base station; but he is uncomfortable as an expert affirming that there is absolutely no chance of any adverse effect as this is beyond human knowledge.

Mr. Gruen asked if when they set those limits, is there a time limit they feel a person has to be exposed. He noted someone may live under the tower who is exposed to it twelve to fourteen hours a day may have much greater exposure than a passer-by. Dr. Foster stated the limits apply to any member of the population for any level of exposure even continuous. He stated for short exposure the limits are higher and you can allow someone to be exposed at higher levels for short periods of time of a few minutes or less. He stated there is some controversy about possible health risks in using mobile hand sets, and there a person's exposure actually approaches safety limits because you are holding a low-powered transmitter against your head. He stated he is not aware of any health agency that has expressed concerns about exposure to the low-levels of fields from base stations because they are a thousand times or more below safety limits.

Mr. Goldberg thanked the Board for their understanding regarding Mr. Iskanver.

There was discussion on the next date this matter will be considered, and Mr. Malinowski stated they could come back on January 20 as they have an opening on that Agenda. After discussion it was agreed to continue the matter to March 3, 2009 and Mr. Goldberg agreed to waive the time limits.

Mr. Gruen moved, Mr. Smith seconded and it was unanimously carried to continue the matter until March 3, 2009.

#### OTHER BUSINESS

##### Appeal #08-1481(A) Frankford Hospital of City of Philadelphia, Inc.

Mr. Malinowski stated there is a request to continue the Hospital matter from January 20 to February 3.

Mr. Smith moved and Mr. Gruen seconded to continue this matter to February 3 at

7:30 p.m.

Mr. Toadvine stated he received a request from the Township's Solicitor, Mr. Truelove, to continue the matter and he advised that Mr. VanLuvanee, the Applicant's attorney, did not object to the continuance, but Mr. Smolow, who represents some of the neighbors, did not respond. Mr. Toadvine stated they are assuming Mr. Smolow does not oppose this continuance since he did not respond one way or the other.

Motion carried unanimously.

##### Appeal #04-1254(A) – John McGinn Extension Request

Mr. Smith moved, Mr. Zamparelli seconded and it was unanimously carried to grant an extension to 9/15/09.

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There being no further business, Mr. Smith moved, Mr. Gruen seconded and it was unanimously carried to adjourn the meeting at 9:20 p.m.

Respectfully Submitted,

Gregory J. Smith, Secretary