

**CHARTER TOWNSHIP OF PLYMOUTH
ZONING BOARD OF APPEALS MINUTES
REGULAR MEETING
THURSDAY, FEBRUARY 1, 2007**

Meeting called to order at 6:04 p.m. by Chairman Levensgood.

MEMBERS PRESENT: Gene Levensgood
Robert Doroshewitz
Harry Jachym
Ray Sturdy, Jr.
Jim Zdanek

MEMBERS ABSENT: None

OTHERS PRESENT: Mark Lewis, Chief Building Official
12 members of the public

ITEM NO. 1 - APPROVAL OF MINUTES

1. Regular Meeting – December 7, 2006

Moved by Mr. Zdanek, supported by Mr. Sturdy, to approve the minutes of the Regular Meeting of December 7, 2006, as presented. Ayes all.

ITEM NO. 2 – NEW BUSINESS

**1. Application No. 1434 - Metro PCS
5770 Napier
Plymouth, MI 48170**

**Location – Metro PCS
5770 Napier
Plymouth, MI 48170
Tax I.D. #78-043-99-0002-001**

The Applicant is requesting an appeal of an Administrative decision denying Building Permit No. BP06-0001 to permit the addition of six new cellular communication panel antenna arrays on existing microwave tower and the installation of four new outdoor equipment structures with associated new fencing and cabling equipment.

Jason Byrne of Warner, Norcross and Judd appeared on behalf of his clients, Metro PCS and Global Tower Partners, the current owner of the lattice microwave tower located at 5770 Napier Rd. He was joined by Dan Nauman of VelociTel, representing Metro PCS.

Mr. Byrne explained that Metro PCS wished to remedy a gap in current cell coverage in portions of western Plymouth Township by seeking to add six new cellular communication panel antenna arrays on the microwave tower located at 5770 Napier Rd along with the installation of four new outdoor equipment structures and associated new fencing and cabling equipment. Their application for a building permit was denied because the

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proposed expansion was not permitted by the non-conforming use provisions of the zoning ordinance and recent prior determinations of the Township Planning Commission. Applicants felt that the proposal complies with all the applicable Township ordinances and asks the Zoning Board to allow it to go forward.

The GTP microwave tower is a lattice-type tower, constructed in 1967 and approved for use as a microwave communication tower. When the Township's wireless communication ordinance was adopted later, it contained a specific prohibition for the use of lattice towers for wireless communications: Since this tower was constructed prior to the adoption of the wireless ordinance, according to the Township zoning ordinance this renders it a Class B non-conforming structure. Mr. Byrne contended that as a Class B non-conforming structure, alterations and modifications are permitted so long as they don't increase the non-conformity of the structure and modifications and changes are allowed so long as they are necessary for the continuous advantageous use of the structure during its natural life.

The Applicants contended that the above conditions were met, arguing that the addition of six more new panel antenna arrays to the twenty-five existing panel antenna arrays and omni whip antenna currently installed on the tower wouldn't change the non-conformity of the lattice-type tower. It does not add height or change dimensions. Mr. Byrne confirmed that there was no plan to remove any of the twenty-five antenna panels or the whip antenna currently installed on the tower.

Mr. Byrne argued that the proposed expansion would continue the advantageous use of the structure. He understood that the structure and its use had been originally approved as a microwave communication tower but claimed that microwave communication was simply one form of "wireless communication". He recognized that communication technology has changed and that the equipment the tower originally supported and the use for which it was approved are now obsolete. He contended that allowing a changeover to cellular technology was necessary to ensure continued advantageous use to this tower.

Mr. Byrne stated that it seems apparent that the entire structure has always been intended to support wireless communications antennae and that any such use can be extended to any part of that tower since it is all intended to support wireless communication equipment.

Chairman Levensgood asked any members of the public who wished to provide comments to present their thoughts. The following residents of the area asked questions or expressed their opinions regarding the request: Thomas Ditzhazy; Scott McCormick, President of the Huntington Park Homeowners Association; Bill Strahan of Country Club Village; Paul Hoffman, Jr., also of Huntington Park; Dwight Dean whose property is located immediately adjacent to the tower; and Matt McKinnon.

Resident concerns centered on the lack of maintenance to the tower area; adding to an obsolete tower too close to a residential area rather than tearing it down; allowing the owners to profit without maintaining the property; an implication in prior meetings to move in the direction of removing the tower rather than adding to it which was done

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without public notification; lack of lighting, security and lawn upkeep at the tower; and safety of emissions from the tower,

Mr. Byrne stated that all FCC regulations relating to site emissions were currently being and would continue be met.

Mr. Sturdy did not agree with a suggestion by Mr. Byrne that the only non-conformity at issue in this matter was the “lattice” steel character of the tower. Mr. Byrne confirmed that a GTP Site Detail aerial photo taken from the GTP website (Ex BA 1) was an accurate portrayal of the 268 ft. tower structure and the 383 ft. x 383 ft. tower site surrounded on the north and east property lines by nine residential dwellings. Mr. Byrne also confirmed that considering the position of the 50 ft. x 50 ft. square tower base, as shown on page A1 of Applicant’s Exhibit H, located just southeast of the center of the parcel, the tower is located within 140 ft. of the easterly residential property line and as close as 200 ft. to the northerly residential property line.

Mr. Sturdy pointed out that the Township Zoning Ordinance provisions for Wireless Communication Facilities and Services (Sec. 28.11) permits the construction of wireless communication feature towers and monopoles within the Township so long as they are no greater than 150 ft. in height (unless specifically authorized by the Planning Commission up to a maximum height of 200 ft.) and set back from general property lines no less than 1-1/2 times the height of the facility – 402 ft. in this case – and a minimum of one thousand (1,000) feet from any property that is zoned or used for residential purposes. Thus, the structure is non-conforming not only in its character as a lattice steel tower, but also in its overall height, its setback dimensions from the west and south general property lines, and its setback dimensions from the east and north property lines. Mr. Sturdy believed that these deviations were substantial and significant.

Mr. Sturdy asked the Applicants if they were aware of what the building official was referring to in the notation “findings of the Planning Commission” in explaining one of the bases for denying the application for the building permit. Mr. Byrne thought it might be a reference to the Planning Commission’s review of an application for Class A vs. Class B non-conforming status for the tower structure that was submitted in 2002. Mr. Sturdy confirmed that it was and presented a copy of the Township Planning Commission Minutes for November 20, 2002 obtained from the Township website (Ex BA 2) which described information presented and considered at the public hearing that was conducted at that meeting. The public hearing was held pursuant to an application submitted by American Tower Corporation, former owner of the GTP tower, to change the status of the non-conforming structure and use from Class B, where the ordinance requires the gradual elimination of nonconforming structures and uses, to Class A, where the ordinance permits nonconformities to be continued in certain circumstances. Based on information presented at the public hearing, the Planning Commission denied the request for Class A non-conforming status.

Mr. Byrne said that he had reviewed a November 15, 2002 report submitted at the public hearing by McKenna Associates, the Township’s planning consultants. Mr. Sturdy

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reviewed the information presented in the McKenna report (Ex BA 3) along with the extensive findings and conclusions that supported the consultant's recommendation that the Planning Commission deny the requested nonconforming status change from Class B to Class A.

The McKenna report indicated that the existing tower and building were approved by the Planning Commission on March 16, 1967. The use approved at that time was for a microwave tower and radio relay building. The report indicated that the microwave reflectors had been removed about 18 months prior to November, 2002 and that the tower now supported a variety of panel antenna equipment currently being used for cellular communication purposes. The report indicated that this modification from microwave use to cellular communication use constituted a change of use, not permitted without first obtaining a Class A designation.

The report detailed site conditions at the time, indicating the presence of a rundown metal building with three overhead doors, which appeared to be used for storage. The report noted that one of the doors appeared to be kept partially open. The report also concluded that the site is blighted, with metal framing pieces piled outdoors, broken and deteriorated asphalt pavement, and considerable weeds and overgrowth along a dilapidated 3-4 foot high metal farm fence topped with two stands of barbed wire surrounding the site.

During the November, 2002, Planning Commission hearing, residents of the neighborhood presented written materials and photographs supporting the consultant's conclusions that the site was blighted and deteriorated. This information (Ex BA 4), showing, among other things, that the site access gate was chained in such a way that various animals could access the property through disrepair of the fence, was shared with the Applicants. Mr. Sturdy then presented Applicants with new photos taken in January, 2007 (Ex BA 5) demonstrating that the conditions of the site remained at least as bad as, if not worse than those described to the Planning Commission more than four years earlier. Current pictures showed a muffler pipe and a couple of shoes hanging from the same dilapidated fence. A residential sidewalk ends at a location where the farm fence is particularly broken down. The door on the storage building that was partially open in 2002 was still open.

The November, 2002, McKenna report then went on to evaluate and comment on criteria that members of the Planning Commission were required to consider in connection with the request for Class A nonconforming status. Among other things, the report stated that "continuance of the nonconforming use and structure may pose an immediate danger for the adjacent single family residential neighborhood. No evidence has been provided of the facility's structural strength and stability, the security of attachment of the antenna, whether all the panes are functional, or documentation of regular maintenance and inspections. The site's south, east, and west boundaries appear to be closer than the height of the tower and abutting residents and dwellings could be harmed if the tower were to fall or antenna were to come off." The report continued, stating that "it has been our observation that new homes adjacent to the tower have less value than similar homes located elsewhere in the Township. Therefore, it may be assumed that continuance of the structure will depress the value of nearby properties." The report pointed out that "the

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facility is clearly an incompatible land use, out of scale and character with the adjacent single-family zoning and uses, due to its being 8-10 times higher than the prevailing residential structures common to the area, its industrial appearance, garish paint pattern and lights. The facility's blighted condition is a nuisance for nearby single family properties, and may pose an attractive nuisance to children of the area to access the site and attempt to climb the tower."

The report noted that "the facility was constructed for microwave communications which is apparently an obsolete use, and which has been eliminated from the tower. The effect of doing this without obtaining required zoning approvals has been to circumvent the Township's current cell tower regulations." In recommending Planning Commission denial of the request for Class A nonconforming status, the McKenna report stated that the facility "has negative impacts on the single family residential character of the area and is a nuisance to the surrounding current and future residents and for a significant portion of the Township."

After commenting that the findings of the McKenna report appeared to be as true today as they were in November 2002, Mr. Sturdy then turned to the two page structural review of the tower that had been conducted at the request of the Applicants by Communications Structures Engineering, Inc. (CSEI) of Portland, Oregon (Applicant's Exhibit H). Mr. Sturdy stated that he was particularly interested in the report, having spent a significant part of his career as a structural engineer involved directly with the design, engineering, and construction of several thousand lattice steel towers that have been erected in southeastern Michigan.

Applicants' Exhibit H indicates that the structure was originally designed as a self-supported non-standard tower and built in 1967. At that time, it was intended to support a total of six microwave horn reflectors. The report noted that the tower was substantially modified in 1968, 1970 and 1983 to permit the addition of four new microwave reflectors. The report also indicated that all of the microwave equipment, except for supporting and access platforms, had been removed from the tower.

The analysis stated that it considered loadings impressed on the structure by existing antennas which were proposed to remain on the tower. These consisted of one 10 ft. omni whip antenna, nine 4 ft. panel antennas, six 6 ft. panel antennas, and nine 8-ft. panel antennas and a significant number of heavy cable runs and mounting frames, along with additional loadings associated with 9 new dipole panel antennas and 18 new cable runs and mounting frames and 6 more new dipole panel antennas with 12 more new cable runs and associated mounting frames for a total of 41 existing and proposed cellular antenna panels in place of the 10 microwave reflectors that had been originally approved by the Township for installation at this location.

CSEI described its analysis as consisting of a structural review of the original 1967 tower design drawings and original load tabulations along with tower mapping information and cabling information provided by GTP and T-mobile. The report stated that "a site visit or

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condition survey of this tower was not a part of CSEI's scope of work for this tower. We have assumed that the tower has been maintained in good physical condition."

The CESI analysis concluded that "this tower will not require any structural modifications or changes to support the listed equipment provided that all customer's antenna and cable mounts are properly engineered and installed by the firms responsible for that work scope." The report also warned that "CESI's structural analysis of this overall tower structure does not include tower stresses that could occur from improper customer equipment attachments that may locally stress individual tower braces....Improperly connected customer equipment can significantly stress individual tower members and consequently reduce the overall load capacity of the entire tower structure. The design and installation of all customers' antenna and cable mounts and their proper connections to this tower are the responsibility of the individual customer and their engineers, suppliers and contractors."

Based on his engineering experience with lattice steel towers, Mr. Sturdy stated that a number of serious flaws and deficiencies were readily apparent on the face of this engineering analysis. Chief among these was the recognition by CSEI that significant substantial modifications had been made to many of the structural elements of the tower on at least seven, if not more, separate occasions (in 1968, 1970 and 1983 when the four additional microwave reflectors were added, and then on each occasion that the various existing panel antenna arrays, cabling and mounting frames were added to the structure) without any review of how these individual modifications may have changed the strength of individual tower elements from those initially considered when the tower was designed. This despite the express recognition in the CSEI disclaimer, noted above, that "improperly connected equipment can significantly stress individual tower members and consequently reduce the overall load capacity of the entire tower structure."

Beyond that the analysis also failed to include a review of field erection notes that are normally produced and retained any time a lattice tower of this nature is initially constructed or substantially modified. Particularly with non-standard towers, Mr. Sturdy explained that fabricated steel arriving at a construction site frequently include plates, angles and other members that don't quite fit together. This results in field modifications during tower erection which consist primarily of re-punching or reaming of holes for bolts or other attachment devices. A review of field notes of such changes are critical if subsequent analyses of structural integrity are to be valid. The CESI report does not indicate that any field notes produced at the time of initial construction or made at the time of the numerous modifications since 1967 were consulted.

Mr. Sturdy restated his view that CESI's structural analysis of the tower was deficient, and likened the report to an analysis of the design of the Titanic that demonstrated that the ship is unsinkable. He indicated that numerous changes to lattice steel structures, originally sound when constructed, can lead to premature failure and collapse. He stated that such conclusions were not sheer fantasy, and he cited a specific situation involving the catastrophic failure and collapse several years ago of a 260 ft. plus high lattice steel tower in Sarnia, Ontario that had originally been erected in 1953 and then modified with mid-

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level additions in the mid 1970s. When that tower failed and collapsed, no one was injured because appropriate clearances had been observed in locating the tower away from areas of public access.

Mr. Sturdy also indicated his concurrence with the McKenna report's conclusion that the conversion in the use of the structure from a microwave use to a cellular communication use constituted a significant and unauthorized change in use. Applicants' contention that no change from the original 1967 authorization for microwave use has or will occur because the use approved at that time was for any type of "wireless communication" is simply semantic "gamesmanship". If the claim that "cellular communication" is simply a use of a different part of the electromagnetic spectrum than "microwave communication", then presumably any "wireless communication" use of the electromagnetic spectrum would be valid, including high intensity "searchlights" using the visible light portion of the spectrum, or long range radio or television broadcasting, which would also fall into the same category. Clearly searchlights and broadcasting uses were not approved by the Planning Commission in 1967 any more than was the use currently under consideration which was not even in existence at that time.

Mr. Doroshewitz commented that he is currently directly involved with the telecommunications business and holds two degrees in telecommunications. He also strongly agreed that microwave communication and cellular communication are clearly two different uses. He noted that microwave communication, prevalent in the 60's, was point-to-point in nature and was used primarily to carry information long-haul long distance. Current day cellular communication is local, is not point-to-point and is only used for short distances. He did not agree with the argument that cellular technology is an extension of microwave technology—it's not—it's very different.

Mr. Levengood indicated to Applicants that he had a serious concern with the continued deterioration of the site.

Mr. Byrne responded that the issue in 2002 was with a different owner. He, personally, has not appeared before Plymouth Township before and it is his first knowledge of these issues.

Mr. Levengood felt GTP assumed the responsibilities of the former owner when it purchased the tower.

Mr. Jachym spoke regarding hearing of problems with the tower, Mettetal Airport, and Western Wayne County Conservation Association noise. He said he felt the residents knew what they were getting into when they bought in the area, though some were told the tower was going to be taken down when they bought. He was also told 20 years ago when he bought his house along I-275 there would be a wall put up, but it's still not there. This represents one side of his thinking; however, the company bought a tower which may be structurally dangerous or if permission is not granted, another tower may have to be constructed. Maybe it's time to look at the whole tower situation, and with all respect to the company, this may be one that has to be denied.

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Mr. Zdanek indicated there's no substitute for safety. He can't imagine leaving a door open in the building. If he was GTP, he'd want to address the situations making his neighbors unhappy. He was surprised at the lack of concern about safety.

Moved by Mr. Sturdy, supported by Mr. Doroshewitz, to deny Application 1434, Metro PCS, and uphold the determination of the Plymouth Township Building Department denying Building Permit No. BP06-001 for the addition of new antennae on cell tower at 5770 Napier Road, for several independent reasons, to wit:

First, the appeal is a collateral attack on the determination of the Planning Commission, in violation of Section 27.3.6 of the Zoning Ordinance. Under the zoning ordinance, the Township has established two classes of non-conforming structures and uses that distinguish between those that are not considered desirable which are called Class B structures and uses, and those that may not have a significant adverse impact upon nearby properties or the public health, safety and welfare, and which are known as Class A. The ordinance declares that Class B non-conforming structures and uses are incompatible with other uses in a district and are likely to have a negative impact on the neighboring properties and the ordinance declares that it is the intent of the Article on non-conformities to eliminate Class B non-conforming structures and uses as rapidly permitted by law without the payment of compensation. The ordinance also recognizes that certain non-conforming uses and structures may not have a significant negative impact on neighboring properties, and these non-conforming structures and uses may be designated as Class A nonconformities and may be continued. Further, the ordinance permits owners of Class B non-conforming structures and uses to apply for a change to Class A designation upon satisfying a number of standards and criteria that are expressly set forth in the ordinance. That, in fact occurred in November, 2002, when a public hearing was held by the Planning Commission and, based on information presented at that public hearing, the application for a Class A designation was denied by the Planning Commission. Section 27.3.6 of the Township Zoning Ordinance, entitled, "Effect of Denial of a Class A Designation," states that an application for a Class A designation that has been denied by the Planning Commission shall not be eligible for appeal to the Zoning Board of Appeals but may be re-submitted to the Planning Commission for consideration as a new application after a minimum of 365 days have elapsed from the date of denial. Although this appeal to permit an enlargement and expansion of a current Class B nonconforming use is framed as a challenge to a determination of the Township Building Department, it is, in reality and in effect, an unauthorized collateral attack on the November 2002 decision of the Township Planning Commission. From a procedural standpoint, the Zoning Board should not be able to properly consider this matter and the appeal should be denied on that basis alone.

Second, and more importantly, setting aside the procedural side of the controversy, if the substance is examined based on the significant amount of information presented for consideration, it's clear that the proposed alteration, enlargement, and extension for this additional set of six more new panels on the tower and the other site changes which include four new outdoor equipment structures and associated new fencing and cabling equipment would improperly continue and enlarge the significant adverse impact the

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structure and use imposes on nearby properties and upon the public health, safety and welfare of immediate neighbors and the community as a whole. More specifically with respect to neighborhood impact, the review and report of McKenna Associates that was discussed clearly describes the situation prevalent today and details the depressed value of the homes neighboring the tower site compared to similar homes in the Township.

Third, with respect to safety, there is serious cause to be concerned that the continually increasing number of cellular antenna arrays on this tower, coupled with the significant number of tower member modifications necessary to mount the new structures and the cables to attach them, could very well overstress individual tower members ultimately leading to member failure and possible collapse. The purported structural analysis is superficial, seriously flawed, and ultimately misleading.

Also troubling is the apparent abdication of responsibility for operations and maintenance that has occurred, not because of anything intentionally done by Metro PCS or Global Towers, but as a natural result of the significant changes in the structure of the telecommunications industry since the tower was constructed in 1967. At that time, a single owner was operating a microwave system where they had total ownership and control of the structure and complete responsibility and accountability for installation, modification and ongoing maintenance and operations. Fragmentation of the industry has resulted in a corresponding severe fragmentation of the responsibilities for installation, operation and maintenance as evidenced by the continuing denigration and deterioration of the site in question. This has a serious adverse impact on the immediate neighborhood and imperils the health, safety and general welfare of the community.

Although the Township encourages co-location and considers itself to be a “wireless friendly” community, installations such as proposed here cannot be permitted to contravene other important Township policies calling for the lawful elimination of nonconformities and blight, and the public health and safety cannot be compromised or endangered.

In summary, this is clearly a proposal for an enlargement, expansion or extension of an existing Class B non-conforming structure and use that, if approved, would have a significant adverse impact on neighboring properties and the public health, safety and welfare. The proposal seeks to perpetuate a nonconforming structure and use that the ordinance requires to be removed and eliminated as rapidly as lawfully permissible. The decision of the Township Building Official to deny the application was correct, and the appeal should be denied.

Ayes all.

Moved by Mr. Sturdy, supported by Mr. Jachym, to adjourn the meeting. Ayes all.

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Meeting adjourned at approximately 8:30 p.m.

Respectfully submitted,

Raymond O. Sturdy, Jr.

Raymond O. Sturdy, Jr., Secretary
Zoning Board of Appeals

**NOTE: Upon granting a zoning variance, a building permit is required.
If denied, the Applicant may appeal to Circuit Court.**

The Charter Township of Plymouth will provide necessary reasonable aids and services, such as signers for the hearing impaired and audio tapes of printed materials being considered at the meeting, to individuals with disabilities at the meeting/hearing upon two weeks notice to the Charter Township of Plymouth. Individuals with disabilities requiring auxiliary aids or services should contact the Charter Township of Plymouth by writing or calling the Human Resource Office, Charter Township of Plymouth, 9955 N. Haggerty Road, Plymouth, Michigan, 48170, (734) 453-3202, TDD users: 1-800-649-3777 (Michigan Relay Service)-