BEFORE THE MONTGOMERY COUNTY
BOARD OF APPEALS
OFFICE OF ZONING AND ADMINISTRATIVE HEARINGS
Stella B. Werner Council Office Building
Rockville, Maryland 20850
(240) 777-6660

IN THE MATTER OF:	*	
T-MOBILE NORTHEAST, LLC	*	
and	*	
RALPH AND MARGARET GIBSON	*	
Petitioners	*	
Ralph Gibson, Matt Chaney, Mathew Butcher	*	
Oakleigh J. Thorne and Curtis Jews	*	Board of Appeals Case No. S-2816
For the Petition	*	OZAH No. 11-38
Ed Donohue, Esquire	*	
Attorney for Petitioners	*	
* *		
Jim Reid, David Leeger, McKinley Hudson,	*	
Chen Lin Teng, Jeff Coles, Trang Nguyen,	*	
John Potts, Bill Auld, Zandra Watson,	*	
Najla Dildar, Lisa Stine, Bernie Flores,	*	
Hameed Karzai and Stewart Saphier	*	
Opposed to the Petition	*	
* *		

Before: Martin L. Grossman, Hearing Examiner

HEARING EXAMINER'S REPORT AND RECOMMENDATION
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I. STATEMENT OF THE CASE

Petition No. S-2816 was filed on June 16, 2011, by T-Mobile Northeast LLC and co-applicants Ralph and Margaret Gibson. Petitioners seek the special exception, pursuant to §59-G-2.58 of the Zoning Ordinance, to construct an unmanned wireless telecommunications facility within a 115-foot tall "concealment" monopole, and an associated equipment area, at 2815 Cabin Creek Drive, in Burtonsville, Maryland.

The site is on land (Parcel P161) owned by co-applicants Ralph and Margaret Gibson (Tax Account Number 05-00260453).[1] The subject site is in the RE-1 Zone, which permits telecommunications facilities by special exception.[2] It is also in the Upper Paint Branch Environmental Overlay Zone. The Montgomery County Transmission Facility Coordinating Group (TFCG), also known as the "Tower Committee," reviewed the application, and on May 6, 2011, recommended approval of the facility, conditioned upon the applicant obtaining a special exception.[3] Exhibit 7.

On June 23, 2011, the Board of Appeals issued a notice that a hearing in this matter would be held before the Office of Zoning and Administrative Hearings on September 12, 2011. Exhibit 14. However, Petitioners moved on July 22, 2011, to continue the hearing to November 18, 2011, to give Technical Staff time to review a Water Quality Plan, a Plan which must be approved by the Planning Board since the tower would be located in a special protection area (SPA). Exhibit 15.

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[1] The subject site is sometimes erroneously referred to as "Gibson Rawland." Petitioners meant to say "raw land."

[2] The application (Exhibit 1(a)) incorrectly identified the site as being in the R-200 Zone. It is actually in the RE-1 Zone. As a result of this error, all the notices incorrectly identify the Zone as R-200. The Hearing Examiner raised this issue at the initial hearing and gave the parties an opportunity to comment. After receiving no objections, the Hearing Examiner allowed Applicants' counsel, Ed Donohue, to amend the application by crossing out "R-200," substituting "RE-1," and initialing the change. 1/20/12 Tr. 22-24. It is easy to understand how this error occurred because most of Cabin Creek Drive, the listed street address of the facility, is actually in the R-200 Zone, as are the homes on it; however the parcel (P161) where the facility will be located is in the RE-1 Zone and is accessed over an easement from Cabin Creek Drive. The Hearing Examiner found that this error did not deprive anyone of notice since both zones are single-family, residential zones, and notices do not have to be perfect, just reasonably calculated to give adequate notice. The level of participation by the neighborhood in this case makes it evident that the notice was adequate.

[3] The proposed location of the telecommunications tower was shifted about 40 feet after the TFCG's approval to take it out of the stream valley buffer, but the TFCG's Tower Coordinator did not recommend another review by the TFCG because he considered the change to be de minimis. Exhibit 58, p. 11.

The Hearing Examiner granted this request and issued a notice continuing the hearing to November 18, 2011. Exhibit 16. Petitioner submitted revised plans and other documentation on August 26, 2011 (Ex. 18), and a notice of the motion to amend was issued on September 20, 2011 (Ex. 20).[4]

On November 3, 2011, Petitioners filed another motion requesting that the hearing date be moved again to late January or early February of 2012 to give Technical Staff and the Planning Board time to review a revised NRI/FSD, a revised water quality plan and a revised stormwater management plan. Exhibit 34. The Hearing Examiner granted this motion and issued a notice on November 8, 2011, rescheduling the hearing to January 20, 2012. Exhibit 36.

By letters dated December 19 and 20, 2011, Petitioners submitted revised plans, and on January 4, 2012, the Hearing Examiner issued a notice of the motion to amend.[5] Some of the plan revisions resulted from Technical Staff's insistence that the proposed location of the tower be moved about 40 feet to take it out of the stream valley buffer. Petitioner agreed to do so (Exhibit 42), and in a report dated January 11, 2012, Technical Staff of the Maryland-National Capital Park and Planning Commission recommended granting the special exception, with conditions (Exhibit 58).

A public hearing was convened as scheduled on January 20, 2012, but could not be completed on that date. It was announced at the January 20, 2021 public hearing that the hearing would resume on February 24, 2012. A schedule was also established for additional submissions by the parties prior to the resumption of the hearing. These submissions included photo studies by both sides (Exhibits 70 and 71(b)); an affidavit from Petitioners' radio frequency (RF) engineer explaining why a tower height of 115 feet was needed (Exhibit 71(a)); legal arguments from both

[4] Letters in opposition to the motion to amend were filed by a number of neighbors based on their fear that, under the new plans, equipment cabinets could be located outside of the fenced compound. Exhibits 23 and 24. Petitioners made it clear at the first hearing that all equipment cabinets would be located inside the fenced compound. 1/20/12 Tr. 63-64.

[5] Objections to allowing the amendments so close to the hearing date were raised by the opposition and were addressed at the hearing on January 20, 2012. After the opposition indicated that it did not wish to postpone the hearing, the Hearing Examiner granted the motions to amend and proceeded with the hearing. 1/20/12 Tr. 17-22.

sides relating to the validity of the easement needed for Petitioners' access to the site (Exhibits 71(c), 73 and 77)); color samples for the proposed monopole (Exhibit 71(d); competing articles from both sides on the issue of whether cell towers affect property values of nearby homes (Exhibits 70(c) and 71(e)); and the Planning Board's Resolution of February 2, 2012, approving Petitioners' Water Quality Plan for the site (Exhibit 75).

The hearing resumed, as scheduled, on February 24, 2012, and thirteen opposition witnesses testified.[6] The record was held open after the hearing, at Petitioners' request, so that Petitioners could file a response to evidence presented by the opposition, and file a written closing argument. Petitioners were given until March 2, 2012, to make these filings, and the opposition was given until March 9, 2012, to respond. Petitioners were allowed until the record-close date of March 14, 2012, to reply. These filings were timely made, and the record closed, as scheduled, March 14, 2012.

This special exception petition generated very strong and well-organized community opposition from the beginning. Pre-hearing opposition included numerous letters (Exhibits 25 - 31, 33, 37, 50, 52, 53, 56 and 69); 127 preprinted and signed opposition postcards (Exhibits 32, 37(a) and 39(a)); and an opposition petition with 127 signatures (Exhibit 57). Thirteen neighbors testified in opposition at the two hearings, and the opposition also called a real estate agent to testify as an expert on the impact of cell towers on land values. No one from the neighborhood wrote or testified in support of the petition except the owner of the site, Ralph Gibson. The concerns of the neighbors will be discussed in Part II. C. of this report. Suffice it to say at this point that the neighborhood is overwhelmingly in opposition to this petition.

This case has raised some significant issues, including questions relating to the easement required for access to the subject site, and the weight, if any, to be given to conflicting testimony

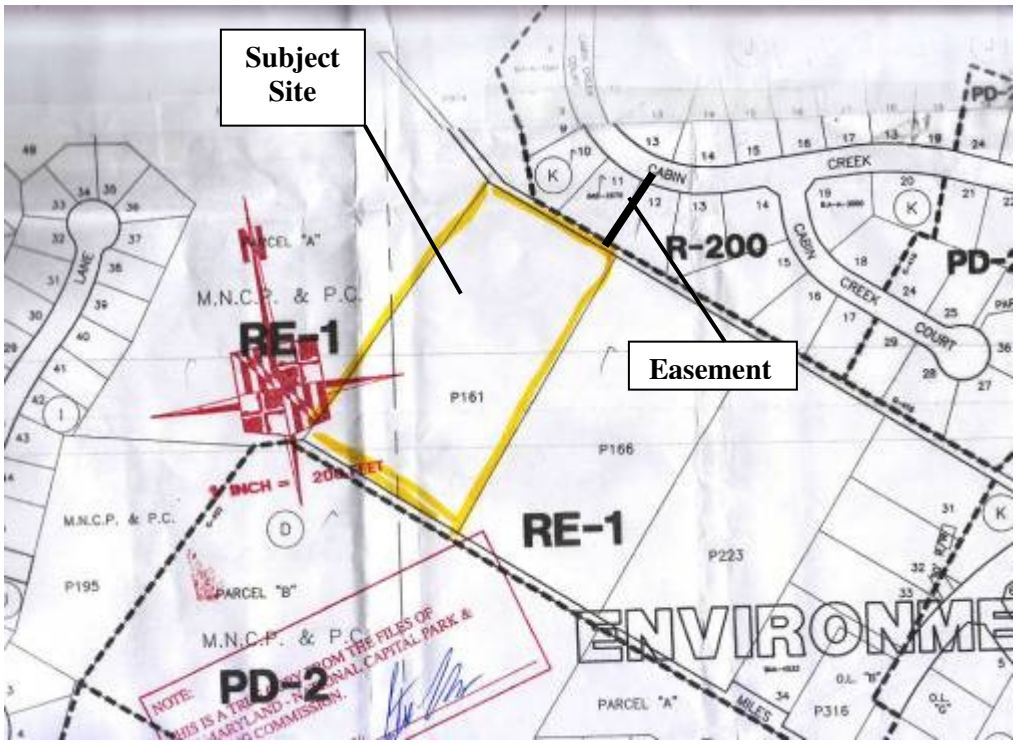
[6] Since there were two hearing dates, the transcripts are denoted by the date of the referenced session. For example, a reference to the hearing on February 24, 2012, would be labeled "2/24/12 Tr. xx."

about the impact of cell towers upon the property values of nearby homes. For reasons that will be discussed below, the Hearing Examiner concludes that Petitioners have met the statutory requirements for the special exception they seek, and the Hearing Examiner recommends that it be granted, with conditions specified in Part V of this report. However, one of the recommended conditions would require all telecommunications service providers using the site to have legal access to the site via Cabin Creek Drive before this special exception may implemented.

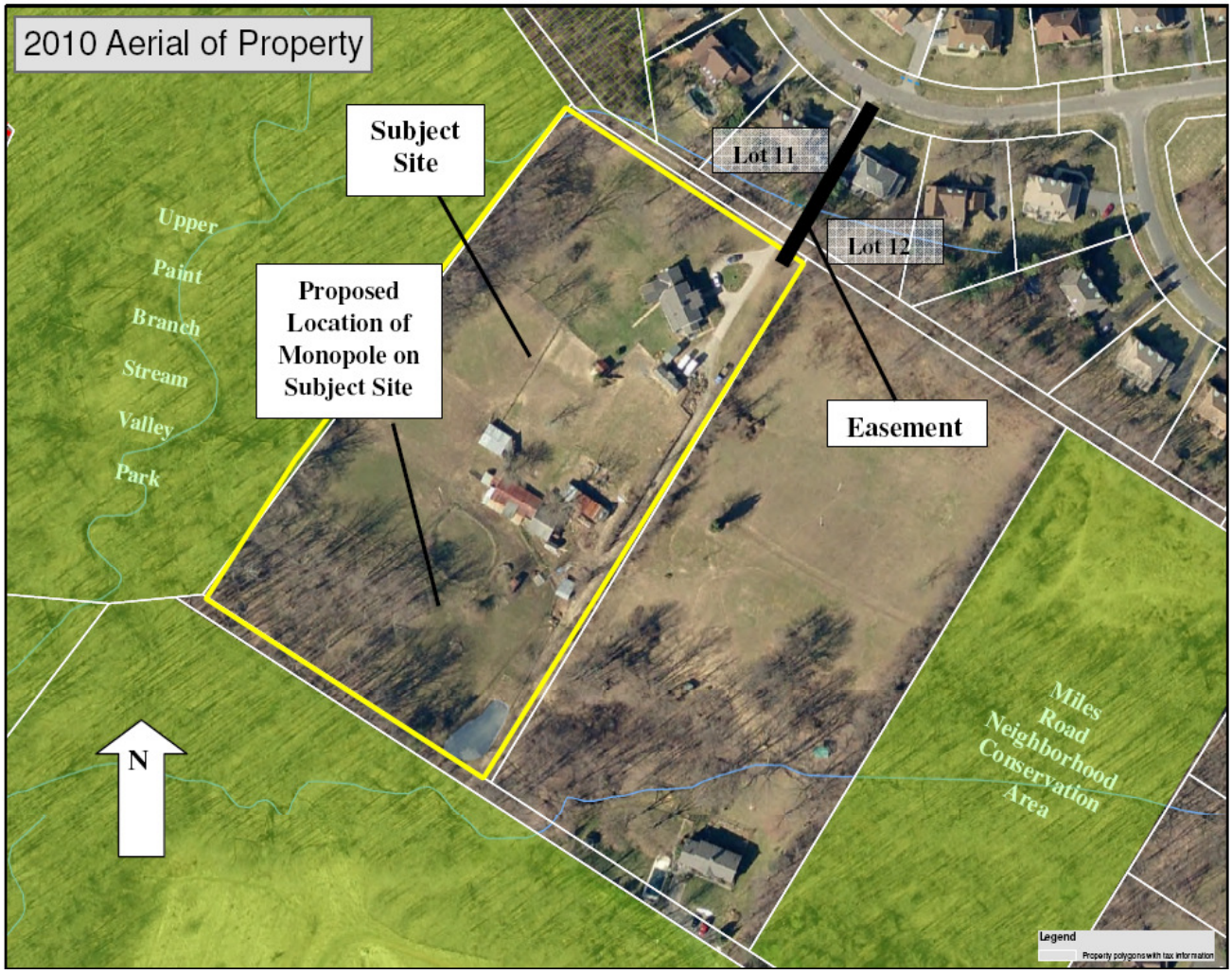
II. FACTUAL BACKGROUND

A. The Subject Property and the General Neighborhood

The subject property is just southwest of Cabin Creek Drive, in Burtonsville, Maryland, and about three quarters of a mile north of Briggs Chaney Road and west of MD Route 29. It is in both the RE-1 Zone and the Upper Paint Branch Environmental Overlay Zone. The special exception site is located on a 5.88-acre, unrecorded parcel (Parcel P161), owned by co-applicants, Ralph and Margaret Gibson. The site's property line is separated from Cabin Creek Drive by R-200 residential Lots 10, 11 and 12, which front on Cabin Creek Drive, and the site therefore must be accessed by an easement across Lots 11 and 12, which can be seen on the Zoning Map (Exhibit 13):



The parcel is rectangular. Currently on the property are one single-family home, a mobile home, several barns and outbuildings, a horse riding rink and horse pastures. Exhibit 58, p. 2. These features can be seen on the following aerial photo provided by Technical Staff (Exhibit 58, p. 2):



Also notable on the above photograph is that the site abuts the Upper Paint Branch Stream Valley Park to the northwest, west and south, and is near the Miles Road Neighborhood Conservation Area to the Southeast. The area surrounding the site is heavily forested. 1/20/12 Tr. 67-69, 72.

Technical Staff provided ground-level photographs of the location of the proposed monopole on the subject site (Exhibit 58(b)(v)). They are reproduced on the following page:

Site of the proposed monopole

Technical Staff proposed to define the neighborhood as bounded on the west by the Upper Paint Branch Stream Valley Park, on the north by Perrywood Drive, on the east by Friendlywood

Road and on the south by Fairdale Road and Bradshaw Drive. No objection was raised to this neighborhood definition, and it is accepted by the Hearing Examiner. This area, which encompasses parkland and about 80 residences, is shown below on a neighborhood map supplied by Technical Staff (Exhibit 58, pp. 3-4):

According to Staff, there are two special exceptions that are approved in the neighborhood. One special exception (S-1597), at 2801 Cabin Creek Drive, was approved in October 1988 for a child care facility. A special exception (S-2670) was approved at 2813 Cabin Creek Drive on October 2006 for an accessory apartment. A third special exception (S-1732), at 2925 Maplehill Road, was dismissed in November 1989. Exhibit 58, pp. 3.

B. The Proposed Use

The proposed use is an unmanned wireless telecommunications facility, with a 115-foot "concealment" monopole. It is called a concealment pole because all the antennas will be concealed within the pole itself to reduce the visual impact. It will be painted brown (Swatch "SW6089-Grounded," attached to Exhibit 71(d)) to blend in with its surroundings, the color selected by members of the community. 2/24/12 Tr. 8-9, 203 and Exhibit 70(a).

Petitioners propose that access to the cell tower will be over an existing perpetual easement, granted on July 1, 1983 (Exhibit 33(a)), that runs between Lot 11 (2813 Cabin Creek Drive) and Lot 12 (2817 Cabin Creek Drive). Technical Staff has made it clear that no access to the site should be permitted from Miles Road for environmental reasons. Exhibit 58, pp. 7-9.

1. The Easement Access Issue:

Given the environmental concerns, the only possible access to the site is from Cabin Creek Drive over the easement. The problem is that Jeffrey Coles, the current owner of one of the properties over which the easement runs (Lot 12), disputes the validity of the easement for the purpose of accessing the proposed telecommunications facility. The owner of Lot 11, currently Wells Fargo Bank, was notified of the case by OZAH,[7] but it has not entered an appearance or taken a position with regard to use of the easement. 1/20/12 Tr. 33.

As recited in the 1983 easement (Exhibit 33(a)), Globe Development Corporation (the then owner of Lots 11 and 12) "for itself, its successors and assigns," granted a "perpetual easement" for "ingress to and egress from the Grantees' property to Cabin Creek Drive" to Ralph E. Gibson and Mrs. Margaret A. Gibson (and "their heirs and assigns") for "good and valuable consideration." The driveway easement describes the length and width of the access and contains the following language:

[7] Notice of the January 20, 2012 hearing was faxed to Wells Fargo on December 19, 2011, but no response was received.

> The easement shall be for the use by Grantees, their successors and assigns, for reasonable pedestrian and vehicular ingress to and egress from their property to Cabin Creek Drive. Grantees may improve the easement area with a driveway of materials and design compatible with the surrounding residential subdivision. Grantees shall be responsible for the proper maintenance of the easement area.

This driveway easement was recorded in Montgomery County on July 5, 1983, as evidenced by a stamp on the face of the easement. It is clearly depicted in two aerial photographs (Exhibits 84(c) and (d)) provided by Hameed Karzai, one of the neighbors in opposition.

Mr. Coles originally agreed to Petitioners' proposed use of the easement, and signed a statement on May 14, 2008, to that effect. Exhibit 38(a). It is undisputed that Mr. Coles received no consideration for this purported additional grant of authority. 1/20/12 Tr. 28-50. However, he changed his mind when he learned that the facility would potentially house multiple carriers, thereby requiring more maintenance visits and concomitant use of the easement. Mr. Coles expressly revoked his May 14, 2008, grant of permission for Petitioners to use the easement in a letter dated November 8, 2011. Exhibit 38. Since Mr. Coles does not have the power to unilaterally revoke the July 1, 1983 perpetual easement, the legal question remains as to whether that easement is sufficient to grant Petitioners the access they require to build and maintain the proposed facility.

Mr. Coles objects to the Hearing Examiner or the Board of Appeals determining the validity of the easement, arguing that this legal dispute is the province of the courts, not the Zoning authorities. Exhibit 73 and 2/24/12 Tr. 56. The Hearing Examiner concludes that he is correct on this point. Private covenants on the land are not matters for the Zoning authorities to determine; rather they are subject to court resolution. However, this case law also holds that the Zoning authority should not be deterred by the private covenants, but rather should act on the zoning issues based on the Zoning Ordinance. As stated by the court in *Perry v. Board of Appeals, 211 Md. 294, 299-300, 127 A.2d 507, 509 (1956)*,

> The [zoning] ordinance does not override or defeat whatever private rights exist and are legally enforceable, but neither is it controlled in its workings or effects by such rights. The enforcement of restrictive covenants is a matter for the exercise of the discretion of an equity court in the light of attendant circumstances. Many times the covenant relied on may not have been originally effective or for many reasons, may have ceased to be effective at the time relief is sought. 2 *Rathkopf, The Law of Zoning and Planning,* p. 387, says: "**The validity of the zoning ordinance, the grant of a variance or 'exception' should be considered independently of its effect upon covenants and restrictions in deeds**." [Emphasis added.]

Even though the *Perry* case was addressing private restrictive covenants rather than easements, *per se,* the Hearing Examiner considers the situations to be analogous and therefore will follow the *Perry* rationale in this case. We therefore now turn to the impact of the unresolved easement issue on the subject petition.

Nothing in the Zoning Ordinance expressly requires an applicant for this kind of special exception to establish access to the site, but common sense dictates that such access must be available for maintenance of the facility, which is a requirement of Zoning Ordinance §59-G-2.58(a)(10). Indeed, Petitioners' evidence indicates that site visits for maintenance will be needed about once a month. *Petitioners' Statement of Justification* (Exhibit 48(b), pp. 2-4). In addition, applicants must show that their special exception will be served by adequate public facilities, including roads. Zoning Ordinance §59-G-1.21(a)(9). Thus, the ultimate question is whether a special exception can be granted given the current unsettled state of the access to the site.

The answer to this question is provided by a 1995 decision of the Maryland Court of Appeals*, Halle Companies et al. v. Crofton Civic Association et al.*, 339 Md. 131, 661 A.2d 682 (1995).

In *Halle*, the Anne Arundel County Board of Appeals granted a special exception for sand and gravel landfill operations, subject to numerous conditions. Among the conditions were the requirements that applicant gain access to the site through a fee-simple right of way to a particular street (Conway Road)[8], and that the sand and gravel operations should not begin until certain improvements were made to Conway Road. Although the court's opinion was directed mostly at the procedural question of whether the Anne Arundel Board had the authority to add such a condition at a *de novo* review, it also addressed the propriety of the conditions themselves and

[8] The condition did not permit an easement access, but that distinction is irrelevant to the issue of whether a Board of Appeals can grant a special exception when access is uncertain and conditional.

upheld both the special exception and the specified conditions (*Id,* 339 Md. at 148-149, 661 A.2d at 690):

> . . . The uncertainty of a prerequisite's occurrence [*i.e.*, the applicant's success in obtaining fee simple access] is irrelevant if the Board is satisfied that, once that prerequisite occurs, the approved activities would be appropriate. *See also Gulick v. Board of Environmental Protection, 452 A.2d 1202, 1210 (Me. 1982)* ("The Board is free to set any conditions that fall within the range of its statutory authority. If any of those conditions require action by someone other than the applicant itself, it is up to that applicant to get whatever agreements or guarantees it needs."). The Board here imposed a true condition, not an illusory one. Contrary to the circuit court's conclusion, the condition imposed does in fact restrict Halle's use of the property. We shall uphold that condition, as it is justifiable in terms relating to the public health, safety and welfare.

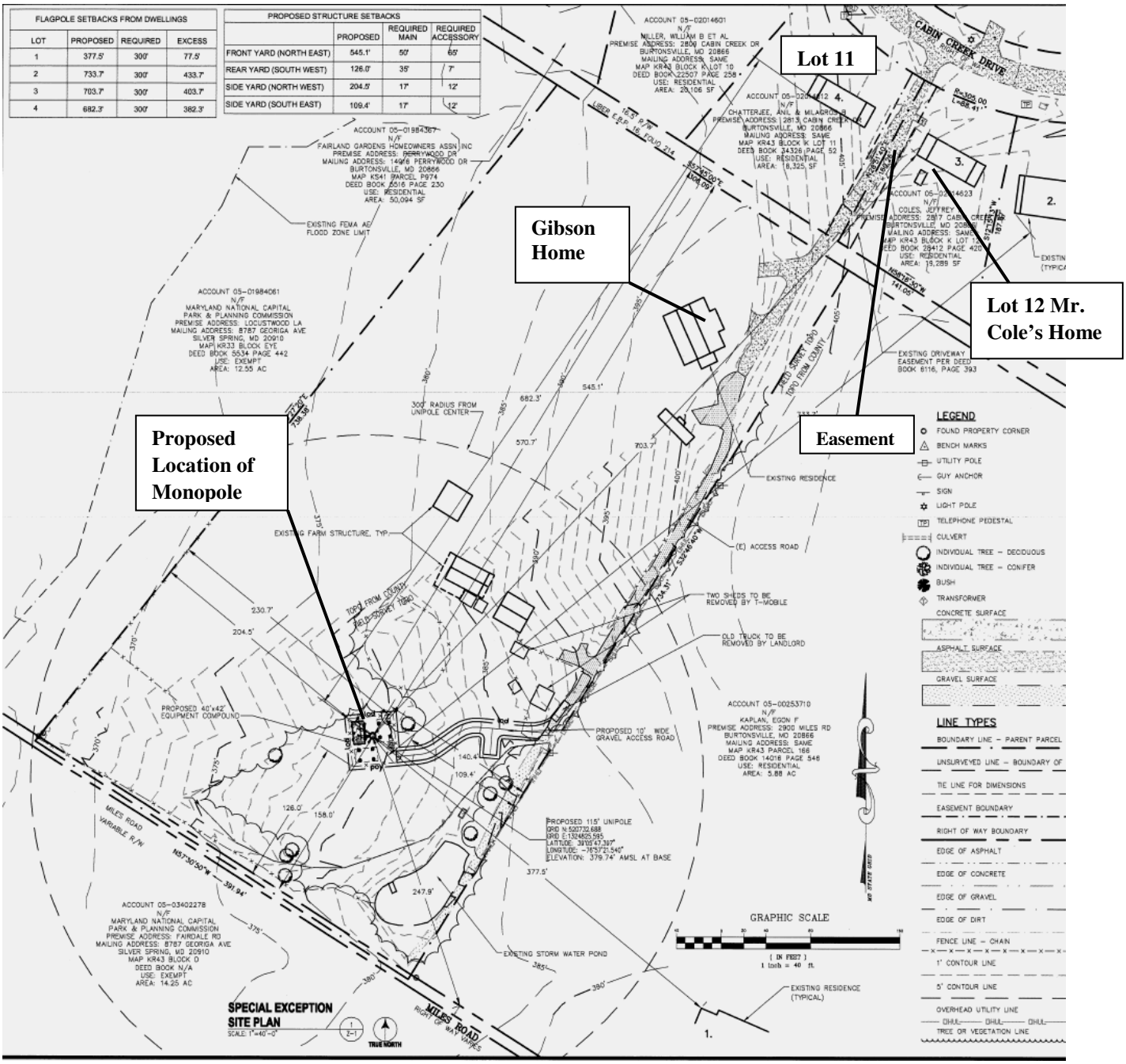
In sum, the Maryland Court of Appeals has specifically held that a Board of Appeals may condition a special exception upon obtaining lawful access to a site. Thus, the possibility of lack of access should not prevent the granting of the special exception in the subject case because it can be conditioned upon legal access being available. Although in *Halle*, the Board required more than an easement; here a valid easement would suffice. The Hearing Examiner therefore recommends the following condition in Part V of this report:

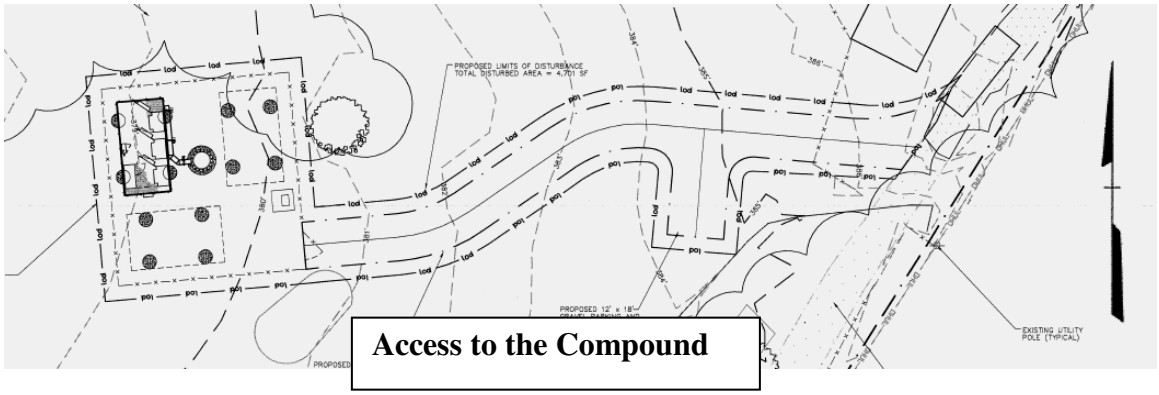
> Telecommunications service providers using this site must have legal access to the site via Cabin Creek Drive before this special exception may be implemented. No access will be permitted from Miles Road for environmental reasons. While the current easement (Exhibit 33(a)) may appear to grant legal access on its face, the Board of Appeals does not decide the legal dispute between the parties regarding the enforceability of a private land use agreement (*i.e.*, the challenged easement).

Petitioner's attorney, Ed Donohue, agreed at the hearing that it would be appropriate to have a condition on any grant of the application that T-Mobile must have legal access to the site before the special exception may be implemented. 2/24/12 Tr. 66.

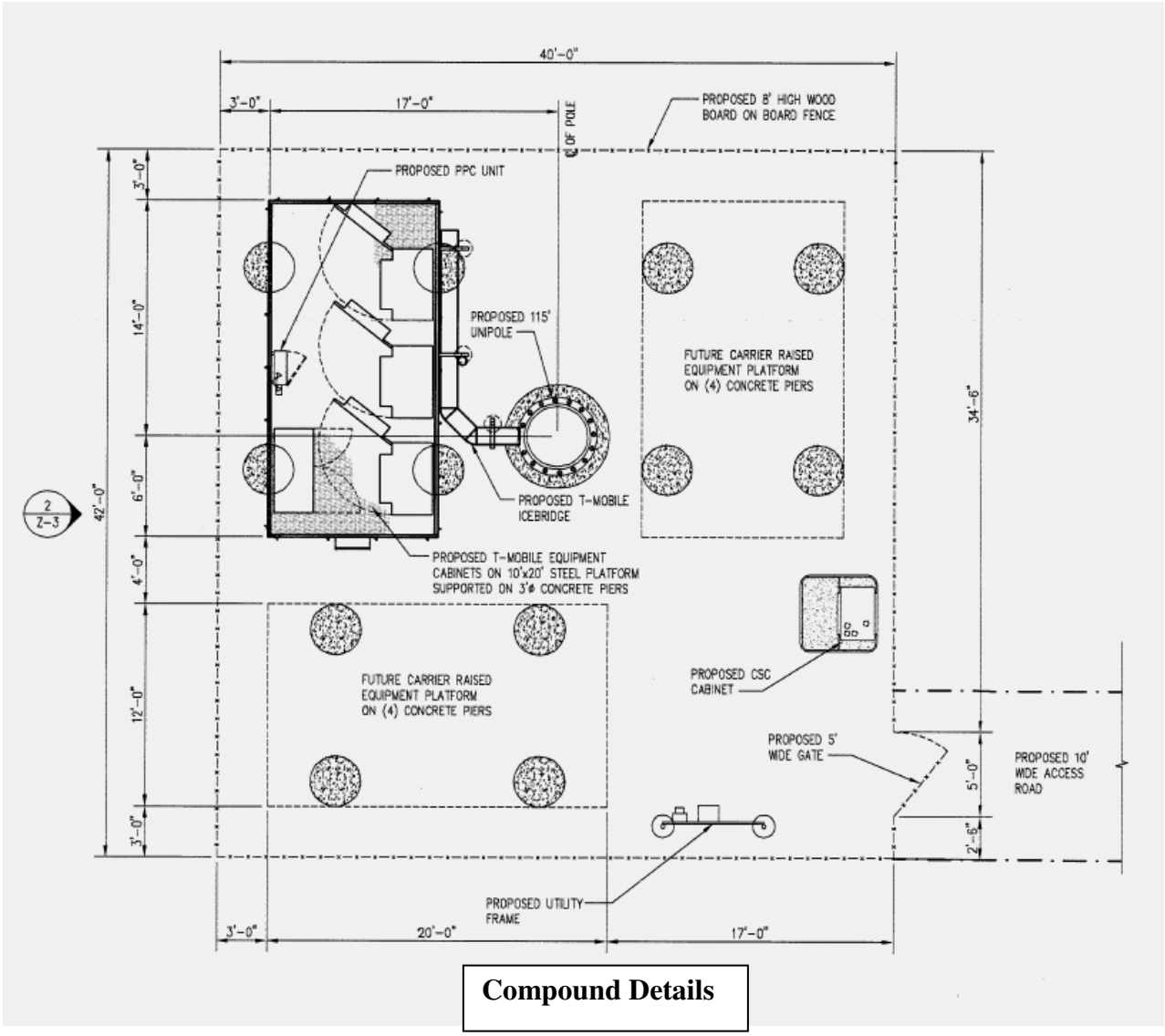
2. Petitioners' Plans:

As previously mentioned, the location of the proposed monopole was shifted, at the request of Technical Staff, about 40 feet to the northwest to take it out of the stream valley buffer. The final site plan, showing this relocation, is dated December 16, 2011, and was filed on December 21, 2011, as Exhibits 42(b)-(h). The revised site plan is depicted below and on the following pages:

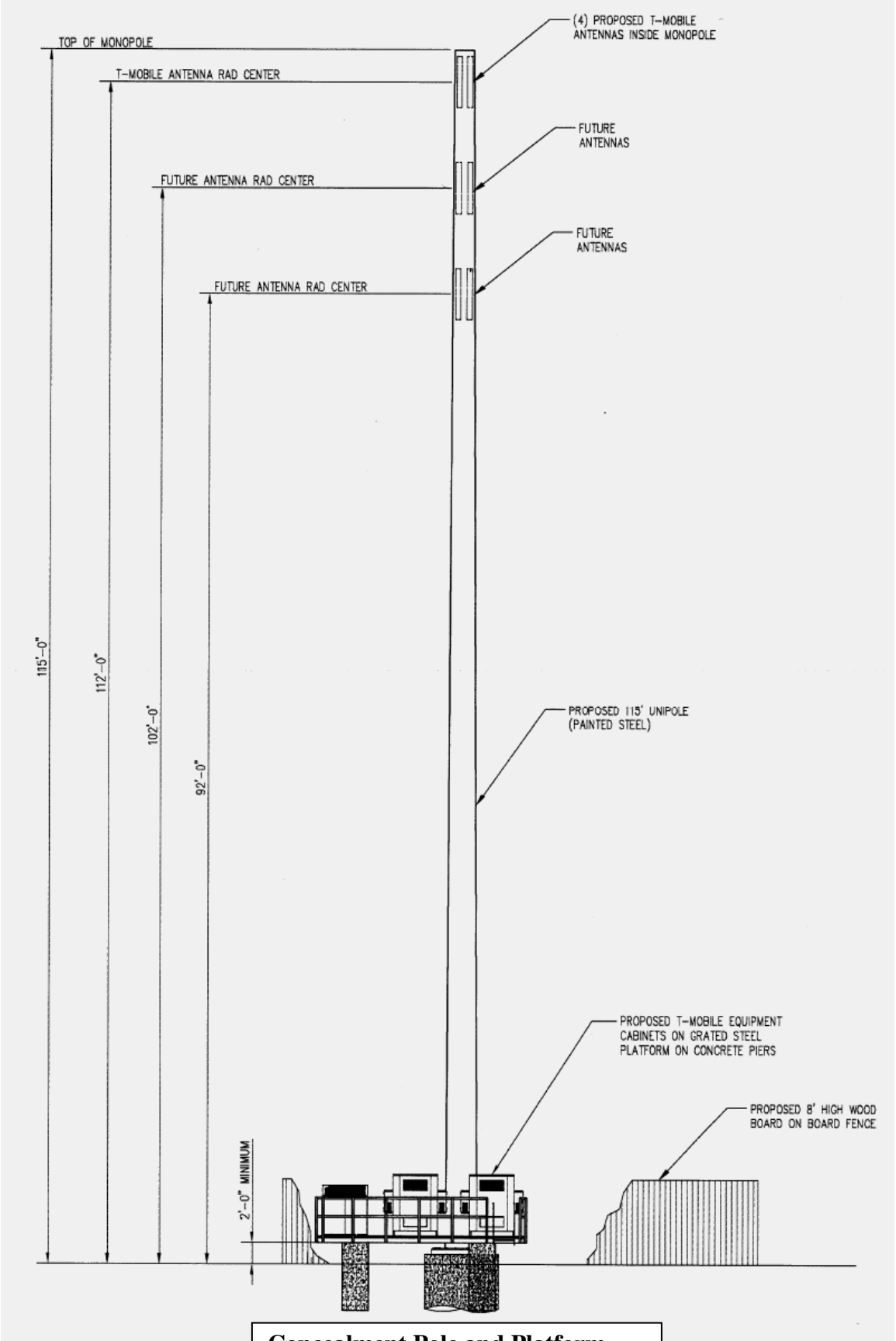




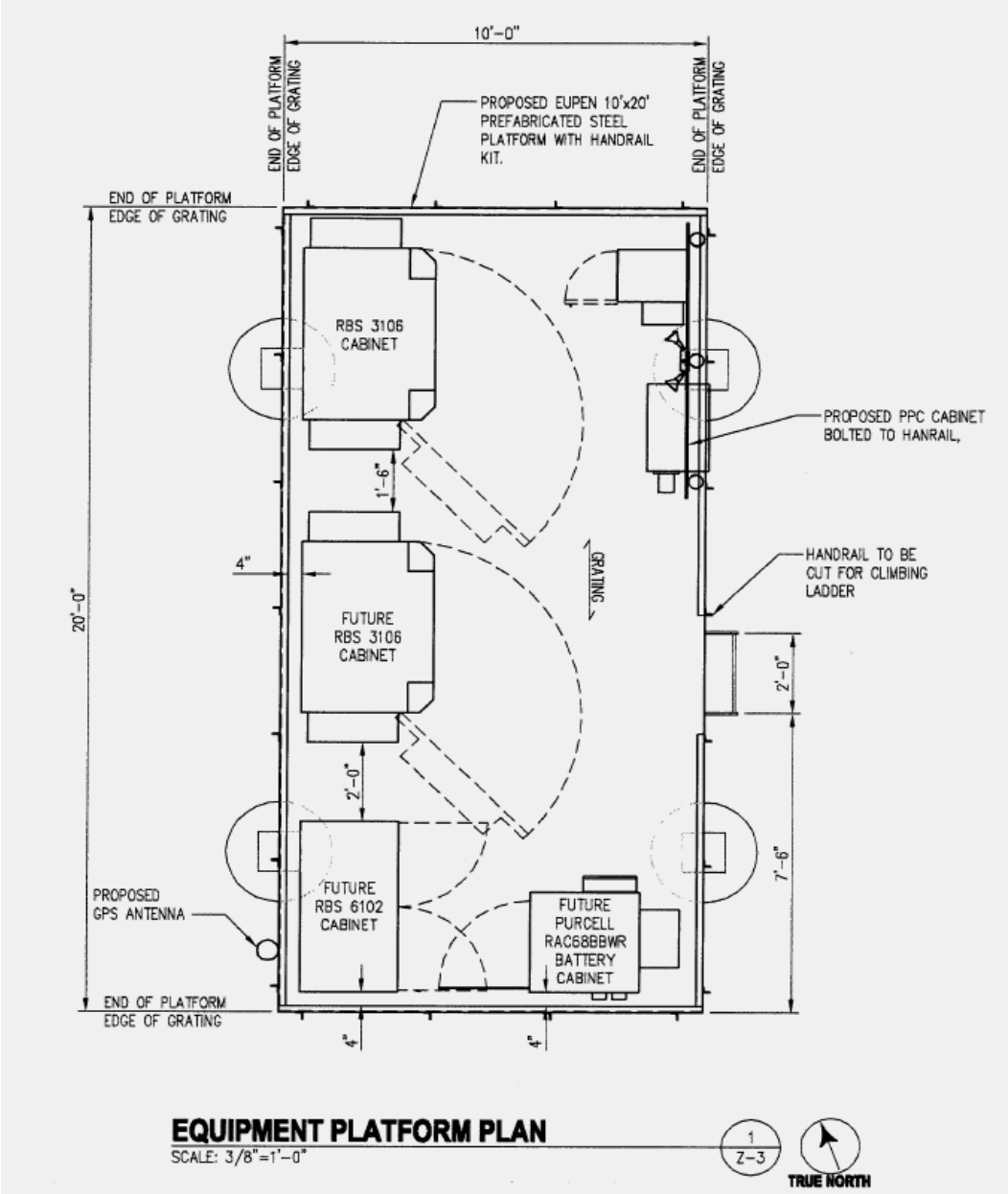
Access to the Compound

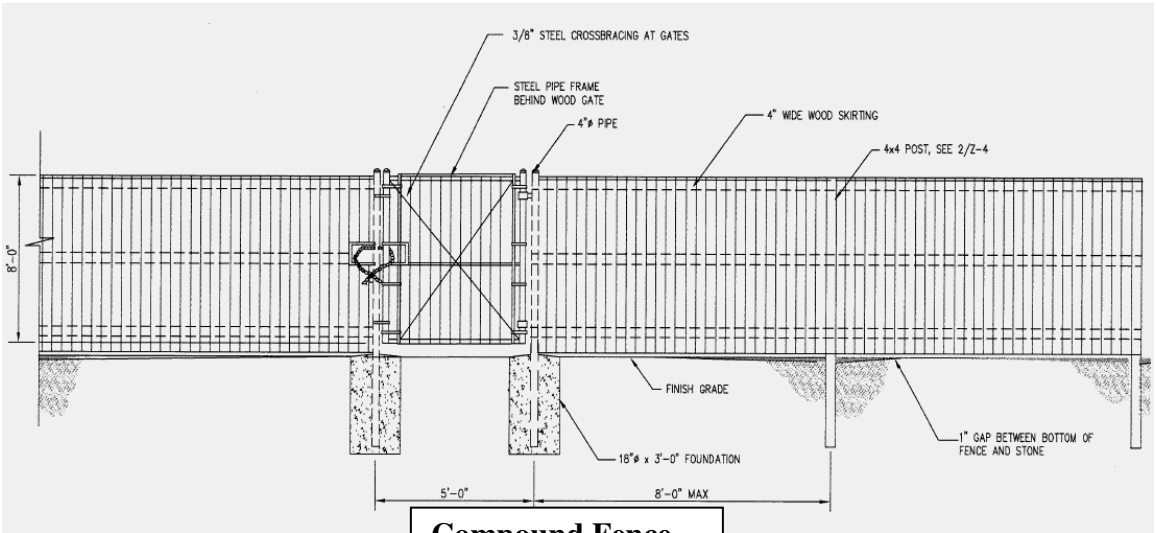


Compound Details



Concealment Pole and Platform





Compound Fence

PROPOSED UNIPOLE SETBACKS		
	PROPOSED	MIN. REQUIRED
FRONT YARD (NORTHEAST)	570.7'	115'
REAR YARD (SOUTHWEST)	158.0'	115'
SIDE YARD (NORTHWEST)	230.7'	115'
SIDE YARD (SOUTHEAST)	140.4'	115'
CLOSEST ROAD	247.9'	N/A
CLOSEST RESIDENCE	377.5'	N/A

As shown on the above diagrams, the 115-foot tall, unlighted concealment pole will have four antennas mounted inside the pole and centered at 112 feet. The monopole and related equipment will all be contained within an 1,680 square-foot compound (40 feet by 42 feet), surrounded by an eight-foot tall, board-on-board, fence. 1/20/12 Tr. 63-64. Radio base station equipment cabinets and a battery cabinet will be placed on a 10-foot by 20-foot steel platform within the proposed compound. Additional cabinets may be added in the future, but all cabinets and equipment will be within the compound fence. 1/20/12 Tr. 64. The steel platform sits off the ground on 3-foot concrete piers.

The proposed facility will be constructed with sufficient capacity to hold the antennas of at least two other communication carriers (co-locators) in addition to the antennas of T-Mobile, and there will be space within the compound for raised steel equipment platforms for two other carriers, as shown in the diagrams depicted above.

Although the facility will be unmanned, it will be in operation twenty four (24) hours a day, 365 days a year. There will be no light on the tower, just a standard light bulb in the cabinets for emergencies. There will be no other lighting. 1/20/12 Tr. 116-121. The facility will generate about one visit per month for general maintenance purposes. Typically, once a month, a technician would come out to the site, in daytime, in a sport utility vehicle, for 30 to 45 minutes of routine maintenance. Construction of the facility requires light construction vehicles. There would be a

small cement truck, a gravel truck and trucks to carry steel for the platform. Construction would take a couple of weeks. 1/20/12 Tr. 98-113.

When asked about the time and equipment it would take for a co-locator to install its equipment, T-Mobile's zoning project manager, Matt Chaney, testified that he is not familiar with practices of other carriers; however, he did state that when constructing a co-location, it is a considerably smaller project, especially when the compound does not have to be built. In this case, there would be trucks that would bring in their steel platform and then a Bobcat probably to grade out something if it needed to be graded out, though depending on when they co-locate it, that may not be necessary. A small truck would be needed to bring the antennas, equipment, cabinets, et cetera. Construction for a co-locator would take about a week. 1/20/12 Tr. 113-115.

T-Mobile's RF engineer, Curtis Jews, testified that he assumed that maintenance operations by co-locators would be "slightly similar. I have worked for other carriers in my past and I really don't see too much of a difference in the way we do things and the way they will do things." 1/20/12 Tr. 237-238.

The proposed monopole will not be lighted and will contain no signage except a sign no larger than 2 square feet affixed to the support structure or equipment shelter to identify the owner and maintenance service provider, as required by Zoning Ordinance §59-G-2.58(a)(8).

In this residential zone, Zoning Ordinance §59-G-2.58(a) requires that the cell tower be set back a distance of one foot for every foot of height from all surrounding property lines, and 300 feet from any offsite dwellings. Since the height of the monopole will be 115 feet, the setback requirement from the property lines is also 115 feet. In the subject case, the front yard setback, which is to the northeast, is 570.7 feet. The rear yard setback, which is to the southwest, is 158 feet. The side yard setback to the northwest is 230.7 feet and the side yard setback to the southeast is 140.4 feet. These setbacks are from the cell tower location itself, not from the compound. The

closest offsite dwelling is 377.5 feet to the southeast, on Miles Road. Thus, the proposed facility more than meets every minimum requirement. 1/20/12 Tr. 76-78.

The equipment shelters house the electronics for the structure and backup batteries. T-Mobile will use a NorthStar battery or the equivalent. Exhibits 45 and 47. Exhibit Nos. 47(a) and (b) provide specifications for NorthStar batteries. Exhibit No. 47(c) is a fact sheet that describes the chemical safety information with regard to NorthStar batteries used in T-Mobile sites.

According to Mr. Chaney, T-Mobile has battery backup power in each of the cabinets to allow the cell site to continue running should the power go out. When they are not on backup, they get power from standard sources such as Pepco. Battery backup is located within the cabinets and is consistent with T-Mobile's facilities throughout the County. The batteries are computer-monitored from a control center, and since the network was deployed in 1999, there have been no instances of leakage. T-Mobile does not keep generators on site and rarely uses generators, typically only in the case of widespread power outages, for very short periods of time. They are standard diesel-powered generators, pulled in by trailer, and they're encased in an aluminum shield to restrict the sound. No fuel is stored on site. Both batteries and generator would be in compliance with all applicable regulations. When the generator is not in use, there is no noise or fumes. 1/20/12 Tr. 116-121.

C. Impact of the Proposed Facility on the Neighborhood

The neighborhood is overwhelmingly in opposition to this petition. Pre-hearing opposition included numerous letters (Exhibits 25 - 31, 33, 37, 50, 52, 53, 56 and 69); 127 preprinted and signed opposition postcards (Exhibits 32, 37(a) and 39(a)); and an opposition petition with 127 signatures (Exhibit 57). Thirteen neighbors testified in opposition at the two hearings, and the opposition also called a real estate agent to testify as an expert on the impact of cell towers in general on land values. No one from the neighborhood wrote or testified in support of the petition except the owner of the site, Ralph Gibson. Nevertheless, it must be observed that the decision on a

zoning matter "is not a plebiscite." *Rockville Fuel v. Board of Appeals*, *supra,* 257 Md. at 192, 262 A.2d at 504 (1970).[9] It is not the Hearing Examiner's function to determine which position is more popular, but rather to assess the Petitioner's proposal against the specific criteria established by the Zoning Ordinance. The standard to be applied is contained in Zoning Ordinance §59-G-1.2.1:

> *A special exception must not be granted without the findings required by this Article. In making these findings, the Board of Appeals, Hearing Examiner, or District Council, as the case may be, must consider the inherent and non-inherent adverse effects of the use on nearby properties and the general neighborhood at the proposed location, irrespective of adverse effects the use might have if established elsewhere in the zone. Inherent adverse effects are the physical and operational characteristics necessarily associated with the particular use, regardless of its physical size or scale of operations. Inherent adverse effects alone are not a sufficient basis for denial of a special exception. Non-inherent adverse effects are physical and operational characteristics not necessarily associated with the particular use, or adverse effects created by unusual characteristics of the site. Non-inherent adverse effects, alone or in conjunction with inherent adverse effects, are a sufficient basis to deny a special exception.* [Emphasis added.]

Thus, we must determine whether the proposed monopole will cause non-inherent adverse effects on the neighborhood, without which a special exception may not be denied. In *Montgomery County v. Butler*, 417 Md. 271, 308, 9 A.3d 824, 846 (2010), the Maryland Court of Appeals upheld the Board of Appeals' denial of a special exception for a landscape contractor because ". . . the Board was within reason to conclude that Butler's proposed use -- deemed a 'very intense and industrial commercial establishment'[10] -- would have unique, non-inherent adverse effects on adjoining properties in the immediate vicinity, within the meaning of §59-G-1.2.1." In so holding, the court expressly noted, "To be sure, considering that the County Code plainly allows landscape contractors to locate in residential areas in the RDT zone by special exception, such a special exception application cannot be denied simply because the lot upon which the proposed use will be

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[9] *But see, New Cingular Wireless v. Fairfax County, 2012 U.S. App. LEXIS 5640 (4th Cir. 2012),* where the court upheld denial of a cell tower special exception based in part upon community opposition. It should be noted that the Fairfax law does not appear to contain the inherent/non-inherent dichotomy found in our law and that the Fairfax cell tower, though shorter than the one proposed here, would have been only 100 feet from residences.

[10] Referring to the daily, noisy operations of trucks loading and unloading their equipment and materials on a narrow lot, close to the neighbors.

located is adjacent to residences." *Butler,* 417 Md. at 308, 9 A.3d at 846.

Thus, the *Butler* decision highlights the problem with the argument made by the opposition in the case at bar. There is no evidence that the proposed cell tower would be "a very intense and industrial commercial establishment." The evidence is that the facility will take approximately two weeks to construct and will thereafter be visited for maintenance approximately once a month, for 30 to 45 minutes, by a technician in a sport utility vehicle. 1/20/12 Tr. 98-113. There would be no visible lights and no noise or fumes, except in the rare event of a widespread power outage, when a generator might have to be bought in after battery backup was exhausted.[11] 1/20/12 Tr. 98-121. In fact, the Zoning Ordinance does not even classify a telecommunications facility as a commercial use. Zoning Ordinance §59-C-1.31 lists such facilities under "(b) Transportation, communication and utilities," not "(c) Commercial."

Even more fundamentally, despite the intense efforts of the neighborhood, they produced no evidence that the proposed cell tower will create non-inherent effects that will adversely impact them. While there are two non-inherent site conditions in this case (location near parkland in a special protection area with environmental constraints and access limited to a challenged easement), neither of those circumstances will create adverse impacts on the neighbors that are not to be expected from having any cell tower in the area.[12] In fact, the evidence is that the proposed cell tower will be set back from the community well over the setback distances required in the Zoning Code, that it will be a stealth tower (with all antennas inside), that it will be painted a color to blend in with its surroundings, and that it will be screened from the community by extensive woodlands and intervening structures, as is evident from the Google aerial photograph in the record as Ex. 63:

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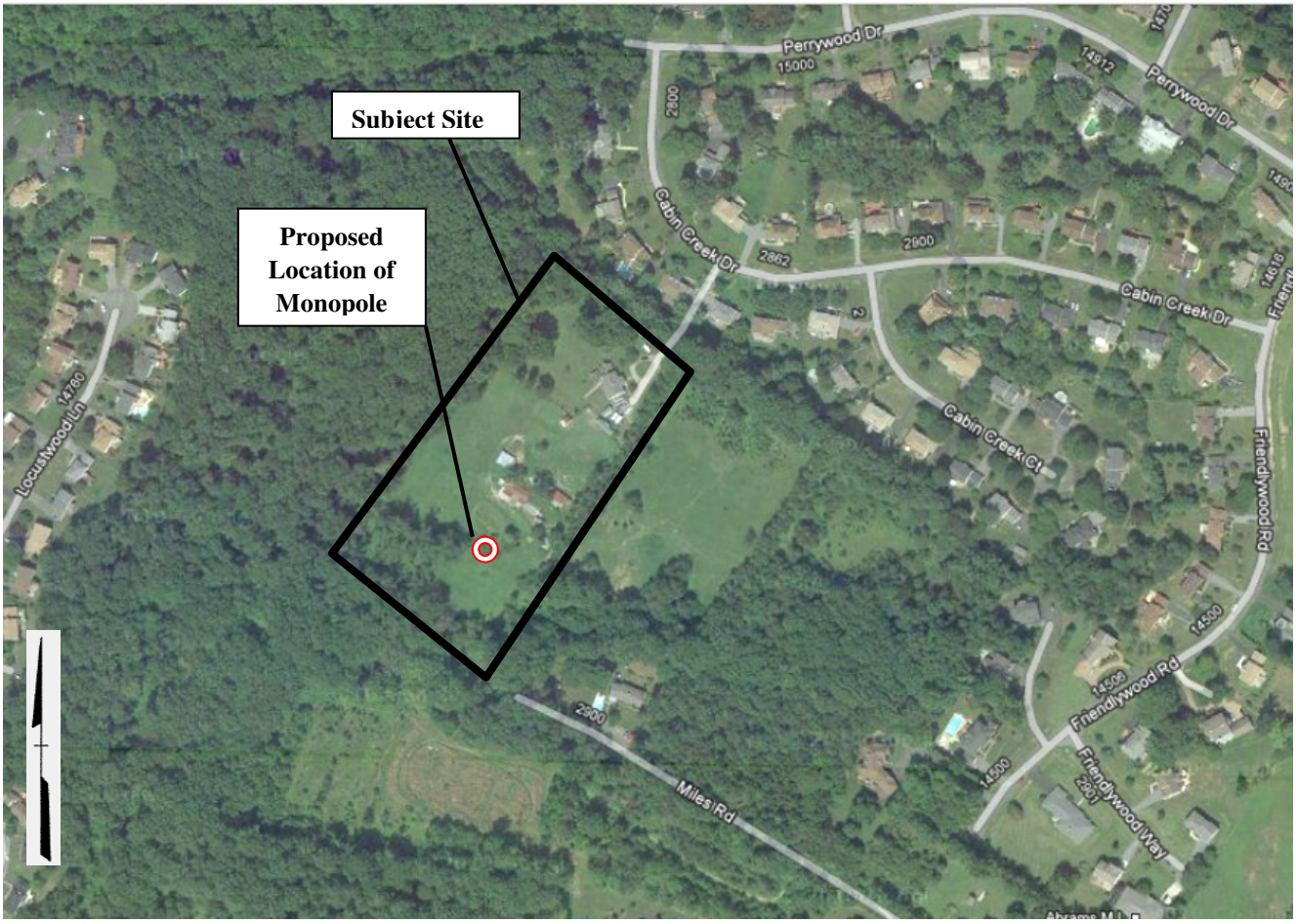
[11] The issue of construction and operation by potential co-locators will be discussed below.

[12] The legal implications of the easement dispute have been discussed in Part II. B.1. of this report, and are handled by a recommended condition in Part V of this report. The environmental concerns relating to the special protection area have been resolved by the approval of a Water Quality Plan by the Planning Board (Exhibit 74) and conditions imposed by Technical Staff, such as moving the proposed site out of the stream valley buffer and elevating it onto a steel platform.



Although this aerial photograph was clearly taken while the leaves were on the trees, the intervening distances, trees and structures will continue to provide significant screening. Moreover, the final balloon study, which will be discussed below in connection with the view issue, was done when the leaves were off the trees.

While the Hearing Examiner may be cognizant of the community's concerns and admiring of its earnest efforts in opposition, he must be governed by Zoning Ordinance's clear language requiring some showing that the adverse impacts feared in this case are not inherent in virtually every cell tower in a residential zone. The evidence produced by one of the neighbors, Lisa Stine, that no other cell towers have been approved on private property in a single-family residential area with below-ground utilities (2/24/12 Tr. 99-100 and Exhibit 82) cannot trump the Council's

decision to permit cell towers in single-family residential zones if certain conditions, including significant setbacks, have been met, as they have been in this case.[13]

The fact that this tower would be in a quiet, residential area does not, *per se,* render the effects of this particular tower non-inherent, since the Zoning Ordinance expressly permits cell towers by special exception in single-family, residential areas. As observed in the *Butler* decision, given that the Code plainly allows this special exception in residential areas, the "application cannot be denied simply because the lot upon which the proposed use will be located is adjacent to residences." *Butler*, 417 Md. at 308, 9 A.3d at 846.

The Hearing Examiner finds nothing about the below-ground utilities in this neighborhood that makes the view of this planned cell tower a non-inherent effect. Actually, on cross-examination, Ms. Stine admitted that on the Gibson property itself, there are above-ground power lines. 2/24/12 Tr. 121-122. This fact clearly undermines her contention that the impact of the tower on her view will be especially pronounced because of her neighborhood's underground utilities.

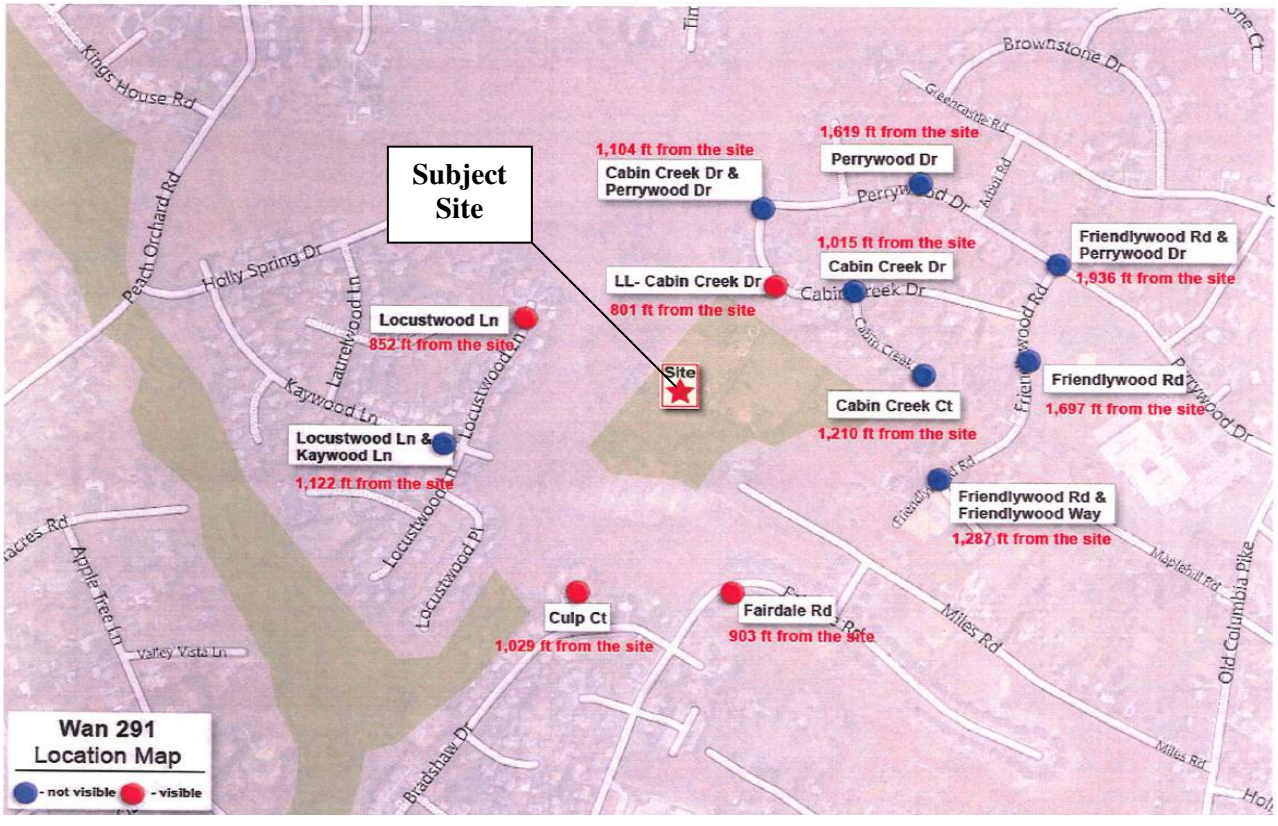
Each tower site, whether in a residential area or not, will differ from every other tower site because each parcel of land is unique. That uniqueness cannot render the impacts from every cell tower non-inherent because that rationale would eviscerate the statutory distinction between inherent and non-inherent effects. Turning to the case at bar, the fact that Ms. Stine's analysis excludes cell towers located on schools in single-family residential areas militates against her argument that her data establishes the non-inherency of the adverse impacts in her neighborhood, since cell towers on schools in quiet residential areas may well be just as visible and impactful to the neighbors as the one planned here.

[13] Ms. Stine's claim at the hearing that the case at bar is the "only" case in the TFCG's database where that body approved a cell tower on private property in a residential zone with below-ground utilities (2/24/12 Tr. 100) was called into doubt by data submitted by Bob Hunnicutt, the TFCG's Tower Coordinator. Exhibit 90. The Hearing Examiner finds it unnecessary to determine whether Ms. Stine's claim is precisely accurate because even if true, it is not dispositive for the reasons stated in the main text, above. Nevertheless, she is to be congratulated on putting forth extraordinary efforts to produce such a thought-provoking exhibit.

Technical Staff listed the many concerns raised by the neighbors (Exhibit 58, pp. 22-23), but the central issues are the impact on the view from the neighborhood, possible negative effects on property values, noise from construction and maintenance, environmental impacts and potential safety hazards from equipment outside the compound, and from truck traffic and cell tower radiation. Each concern is discussed below, and the issue of the need for the tower will be addressed in a separate section, Part II. E of this report:

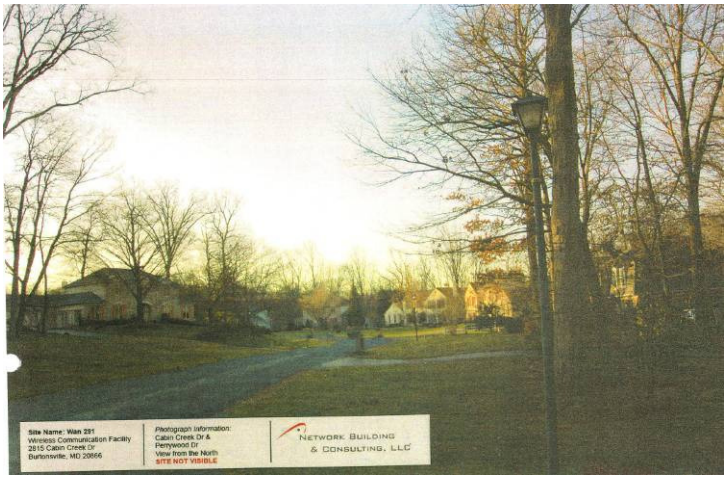
1. The View:

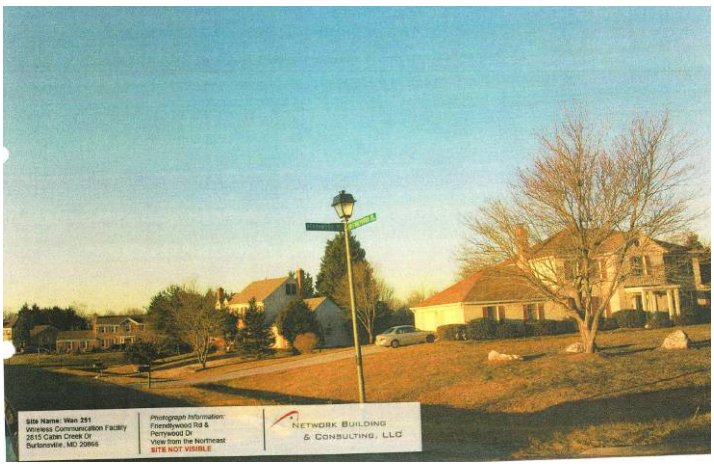
The most significant issue regarding a telecommunications facility in a residential zone is its potential visual impact upon the neighbors. T-Mobile's zoning project manager, Matt Chaney, testified that T-Mobile did a visual test, using a red balloon (about three feet in diameter) raised to the height of the proposed monopole, 7Wan291I, at the proposed location. In this case, the balloon was flown on January 14, 2012, when the leaves were off the trees. Visibility was examined at various points around the site, and photographs of the site were taken from these points, at the locations designated on the following map (Exhibit 71(b)(iii)). 1/20/12 Tr. 95-96.

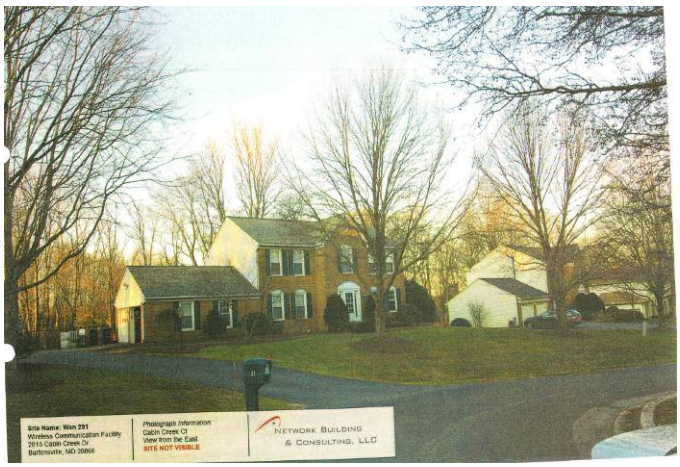


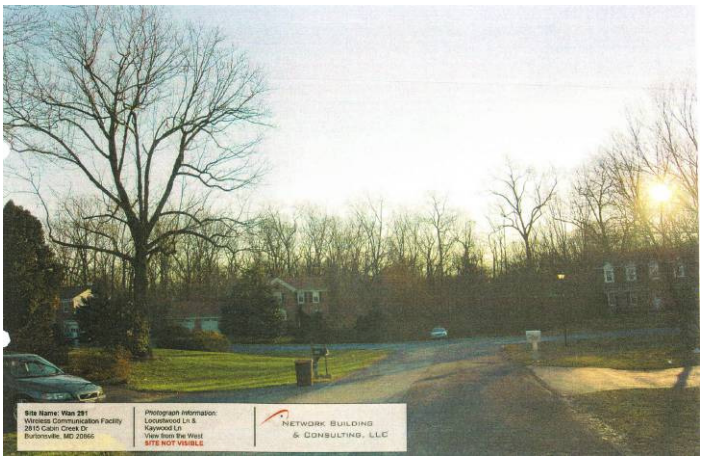
The tag, WAN-291, pertains to this particular transmission tower. The red star at the center marked "Site" shows the proposed location of the monopole based on its coordinates. The various blue and red dots show the points where the pictures were taken, looking towards the site. Blue dots represent locations from which the balloon was not visible (8 locations), while red dots indicated the balloon was visible (4 locations). The bottom line of each location caption, in red, shows how far that point is from the proposed tower.

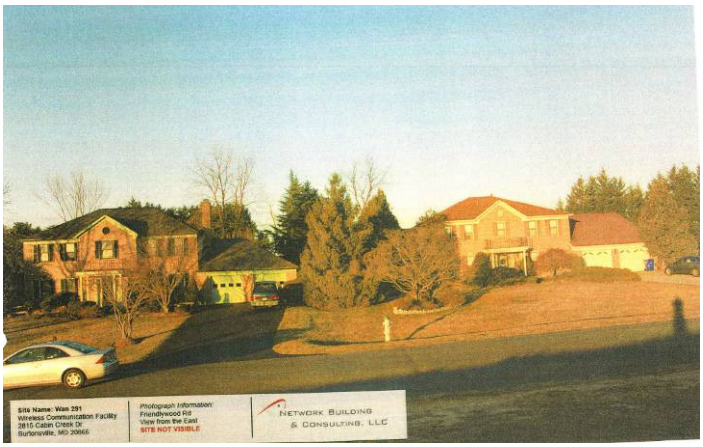
The following photographs (Exhibits 66(a) through 66(l)), depict the site as it exists, viewed from the locations indicated on the photographs. The first eight pictures (Exhibits 66-a, b, d, e, f, g, h and j) purport to show that the balloon is not visible from those locations. 1/20/12 Tr. 97-108.

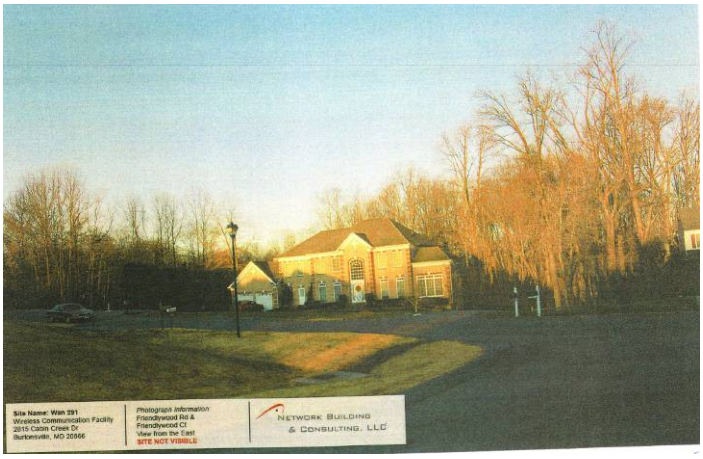


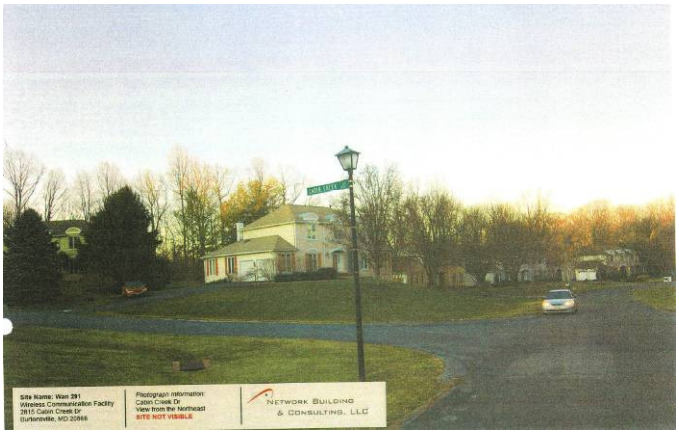




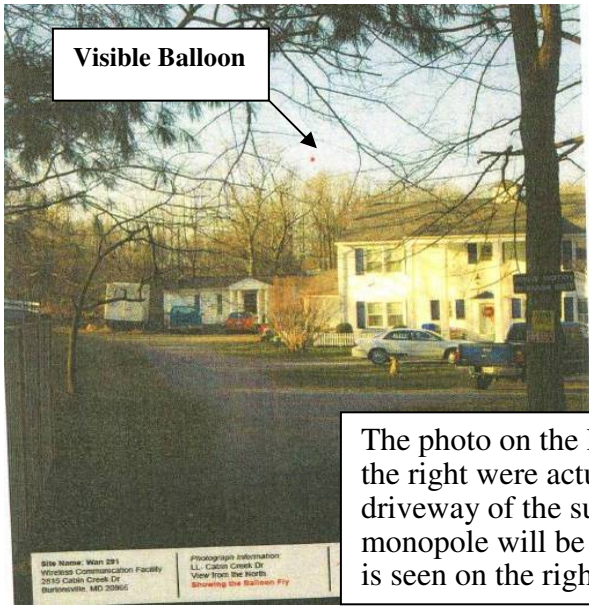


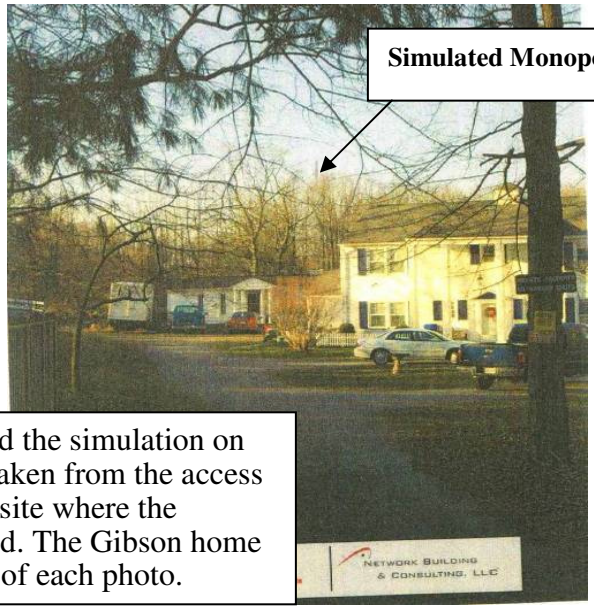




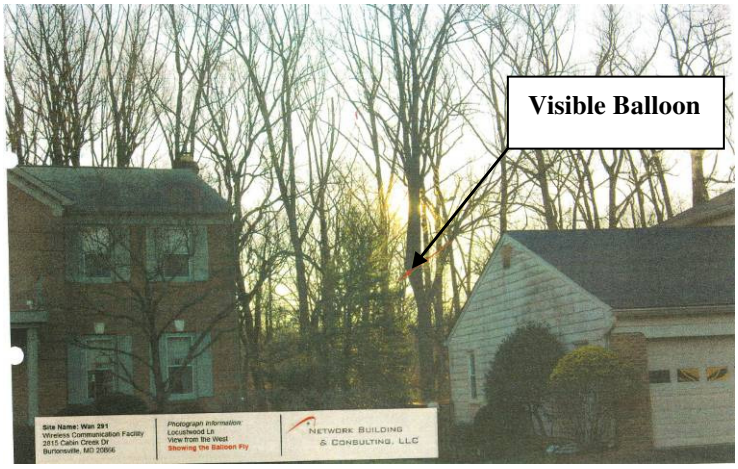


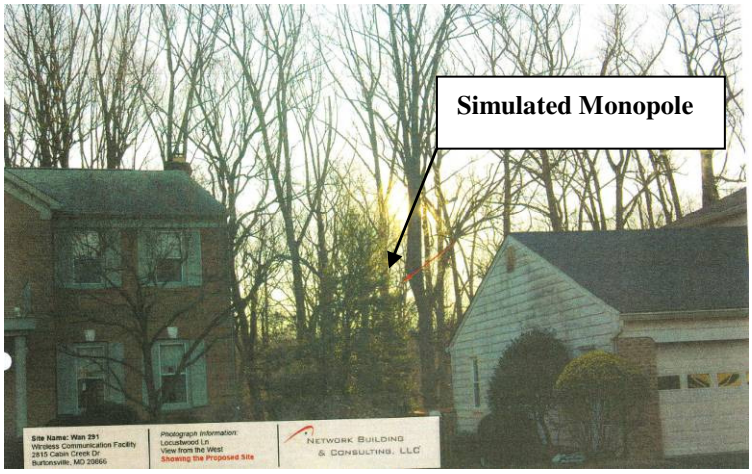
Exhibits 64 (ci, Ii, li and ki), depicted below on the left, are the photographs showing where the balloon was visible. Exhibits 64(cii, Iii, lii and kii), depicted below on the right, simulate the site as one would see it with the proposed monopole from the locations where the balloon was visible.

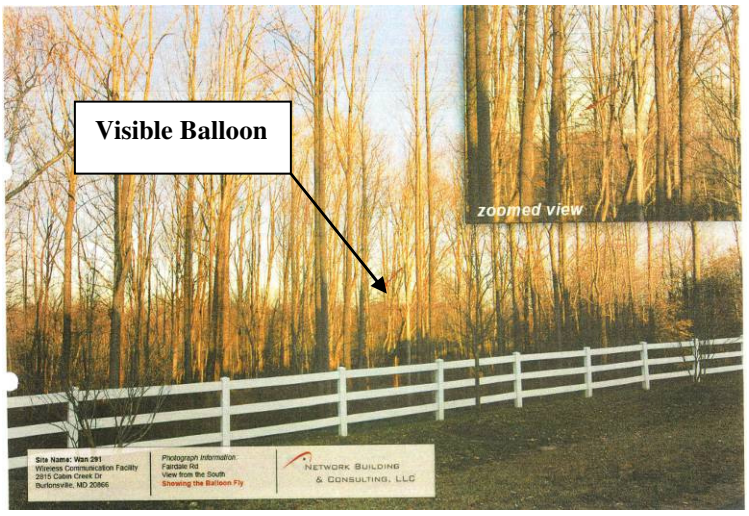


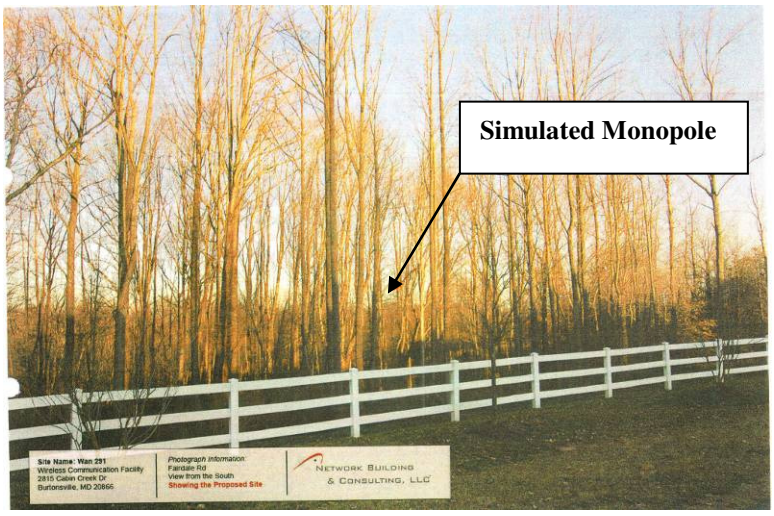


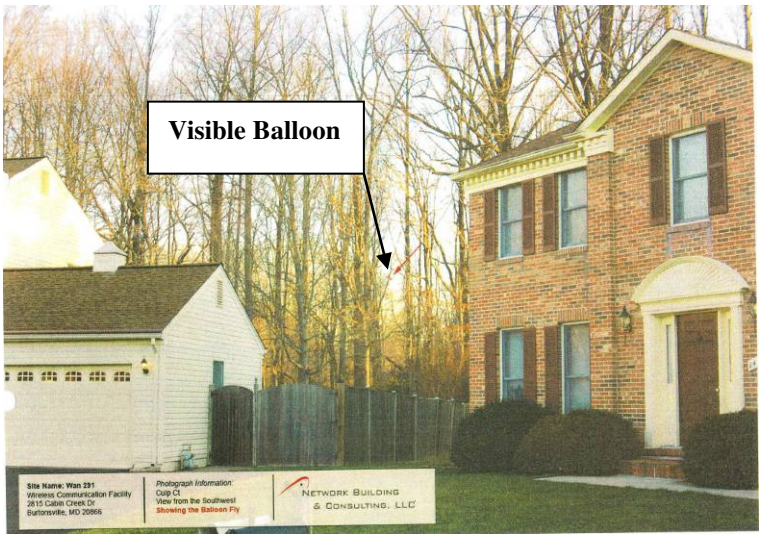
The photo on the left and the simulation on the right were actually taken from the access driveway of the subject site where the monopole will be located. The Gibson home is seen on the right side of each photo.

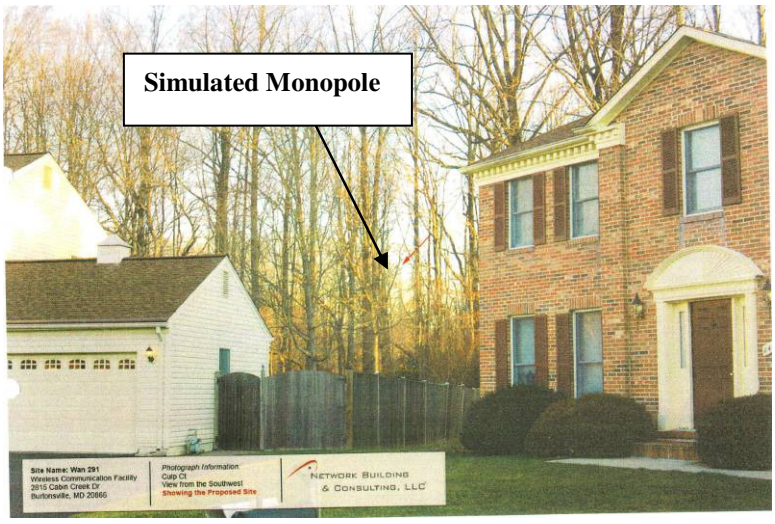

Visible Balloon
Site Name: Wan 291
Wireless Communication Facility
2815 Cabin Creek Dr
Burtonsville, MD 20866
Photograph Information:
Locustwood Ln
View from the West
Showing the Balloon Fly
NETWORK BUILDING & CONSULTING, LLC


Simulated Monopole
Site Name: Wan 291
Wireless Communication Facility
2815 Cabin Creek Dr
Burtonsville, MD 20866
Photograph Information:
Locustwood Ln
View from the West
Showing the Proposed Site
NETWORK BUILDING & CONSULTING, LLC


Visible Balloon
zoomed view
Site Name: Wan 291
Wireless Communication Facility
2815 Cabin Creek Dr
Burtonsville, MD 20866
Photograph Information:
Fairdale Rd
View from the South
Showing the Balloon Fly
NETWORK BUILDING & CONSULTING, LLC


Simulated Monopole
Site Name: Wan 291
Wireless Communication Facility
2815 Cabin Creek Dr
Burtonsville, MD 20866
Photograph Information:
Fairdale Rd
View from the South
Showing the Proposed Site
NETWORK BUILDING & CONSULTING, LLC


Visible Balloon
Site Name: Wan 291
Wireless Communication Facility
2815 Cabin Creek Dr
Burtonsville, MD 20866
Photograph Information:
Culp Ct
View from the Southwest
Showing the Balloon Fly
NETWORK BUILDING & CONSULTING, LLC


Simulated Monopole
Site Name: Wan 291
Wireless Communication Facility
2815 Cabin Creek Dr
Burtonsville, MD 20866
Photograph Information:
Culp Ct
View from the Southwest
Showing the Proposed Site
NETWORK BUILDING & CONSULTING, LLC

The accuracy of this balloon study was hotly disputed by Ms. Stine and Dr. Saphier of the opposition. They claim that on at least one of the photos showing no visible balloon (Exhibit 66(a), taken from Cabin Creek Drive and Perrywood Drive), the photographer was not pointing accurately in the direction of the balloon. Exhibit 70(a) and 2/24/12 Tr. 210-224. According to Ms. Stine,

> . . . Even though the wind was moving the balloon quite a bit, the following is a list of 16 locations either I or a neighbor reported the balloon could be seen:
> - On the street at 15007 Perrywood Drive (see photo).
> - On the street on Cabin Creek Drive at houses 2801, 2805, 2808 (see photo), 2817, 2813 & 2912.
> - On the street on Cabin Creek Court at houses 5, 9, 13 & 17.
> - From the backyards at 5 (see photo), 9 & 13 Cabin Creek Ct and 2825(see photo) & 2817 Cabin Creek Drive.

Ms. Stine included an aerial photo to highlight her point about the misdirected photo taken by Petitioners (Exhibit 70(a)(i)) and winter photos of the balloon taken by her and the neighbors from various locations, including backyards (Exhibits 70(a)(i) – (v)), all of which are reproduced below:

Petitioners responded with an affidavit from their photographer, Daniel Tully (Exhibit 71(b)), stating his methodology and asserting that he did accurately aim his camera to ensure Petitioners' photographs would accurately convey the scene.

The Hearing Examiner finds that this dispute over the accuracy of Mr. Tully's aim in one or two photos has been marginalized by the diligence of Ms. Stine and other neighbors in submitting their own photographs of the balloon in the winter setting, thereby conveying a sufficiently complete picture of the likely visible impacts of the proposed tower.

The Hearing Examiner finds that the balloon was not visible from most of the locations chosen by Petitioners, and therefore the cell tower would likely not be visible from those locations; however, as Petitioners' own evidence establishes and the opposition's evidence confirms, it will be visible from other locations in the general neighborhood. Moreover, it undoubtedly will be more visible from the rear of the homes adjoining the Gibson's land since the backs of those homes face the tower area. Petitioners took all their photos from public areas, not private back yards. 2/24/12 Tr. 138.

Nevertheless, virtually all cell towers have a visual impact on the area in which they are established, and the pictures submitted by Ms. Stine, including two taken from backyards, give a full sense of the likely visibility of the proposed tower. What they show is that, even in the winter time, with the leaves off the trees, the visibility of the proposed tower, as seen form the neighborhood, will not be overly imposing. It will be visible through some trees from some vantage points, and from other vantage points it will be partially visible over the trees, but because of the large setbacks, it will appear to be (as it will be) quite distant. None of this visibility evidence tends to show that this proposed tower will have any visual impacts beyond those inherent in cell towers in general. In fact, the contrary appears true. As observed by Oakleigh Thorne, Petitioners' real estate appraisal expert, in the 16 years he has been working in this industry, he has never seen a site where the tower would be "this shrouded, this isolated [*i.e.*, well-screened] from the community." 1/20/12 Tr. 312-314.

The Hearing Examiner finds that the visual impacts from the proposed tower are inherent in its nature and not unduly intrusive, given the screening effect of the intervening eight-foot tall board-on-board fence, setback distances, trees and structures, and the stealth design and color of the pole.

2. Property Values:

One of the great concerns expressed by the neighbors is that the proposed cell tower may diminish their property values – *e.g.*, the letters in Exhibits 25 – 31 and the hearing testimony at

2/24/12 Tr. 53, 69-71, 71-80, 80-83, 96-98, 124-132 and 169-172.

Both sides produced extensive evidence on the question of whether cell towers (and other similar structures), in general, adversely impact property values of nearby residential properties. The Hearing Examiner finds none of them to be directly on point because the issue before the Hearing Examiner and the Board is not whether cell towers, in general, may have adverse effects; rather, it is whether there are any non-inherent characteristics of the particular proposed cell tower or its site which would have undue adverse effects. There is no evidence in this case that the tower proposed here would have effects on nearby residential property values that are not inherent in cell towers in general.

Nevertheless, the Hearing Examiner will address the main evidence produced by both sides on this property value issue.

a. Applicants' Evidence on Property Value Impacts:

Applicants produced testimony from Oakleigh J. Thorne, a certified general real estate appraiser in the State of Maryland and a member of the Appraisal Institute. He testified as an expert in real property price evaluation and on the impact of nearby facilities on home prices, based on multiple, peer-reviewed studies. 1/20/12 Tr. 291-359.

Mr. Thorne testified he found no evidence that sellers or buyers of homes within the visual impact area either discounted the price or experienced extended marketing periods to execute a sale due to the visual presence of a communication device. He concluded that the proposed facility will not contribute to a devaluation of the property values in the neighborhood, and there would be no negative impact on marketing period or selling price. He also noted that since his studies found no negative impact from a taller traditional monopole with large outside antennas, there certainly wouldn't be any negative impact from the proposed 115-foot stealth device. Mr. Thorne observed that in the 16 years he has been working in this industry, he has never seen a site where the tower

was "this shrouded, this isolated [*i.e.*, well-screened] from the community." 1/20/12 Tr. 312-314.

Mr. Thorne has done eleven "impact studies," which is distinguished from appraisals. The impact in this case is the visibility of the cell tower. His studies go from 1996 to 2010, and cover 11 existing, non-stealth towers. The smallest or the lowest he studied is a120-foot tall monopole, and the highest, 280 feet in lattice towers. Verizon and AT&T funded these studies. T-Mobile did not fund these studies., though he is compensated for his testimony by T-Mobile. 1/20/12 Tr. 299-302, 325, 328.

Mr. Thorne explained his methodology and how the data was collected (1/20/12 Tr. 298-306): He finds a subdivision where there is homogeneity of the housing stock – similar type homes all about the same size, and all on about the same type of lots. He then chooses 4 to 8 pairs of similar houses to study, each pair having one house near the cell tower or other facility and one house not near it. Then he collects data on the sales prices of the homes and compares the sales prices of those in the viewshed of a cell tower with those that sold within a couple of months that are not within view of the tower, based on the price per square foot. Essentially, Mr. Thorne is looking to see if there is parity between the sales prices of houses in the viewshed versus the sales prices of houses outside of the viewshed. Parity is defined as within $2 a square foot. He also physically inspects all these sale sites. 1/20/12 Tr. 306-307.

Mr. Thorne further testified that in one of his studies, there was a decline in the values of the properties that were near the monopole, but he attributed it, based on interviews, to the fact that the nearby highway had expanded creating more noise, not to the view of the monopole. 1/20/12 Tr. 326-327. Mr. Thorne also submitted four published studies for the Hearing Examiner's consideration. Exhibits 71(e). [14]

[14] Initially, the Hearing Examiner refused to accept the studies submitted by Mr. Thorne (1/20/12 Tr. 317) and an internet survey proffered by `opposition expert, Jim Reid (1/20/12 Tr. 195) since they were hearsay and did not address

Of the four published studies submitted by Mr. Thorne, two studies concern areas outside this country, New Zealand and South Africa (Exhibits 71(e)(iii) and (iv)), and the Hearing Examiner feels they are too removed from the subject case to warrant consideration.[15] The third study (Exhibit 71(e)(i)) concerns the Bullis School, and it was conducted by Mr. Thorne himself and discussed at the hearing in this case. Hence, there is no reason to further explore the findings he already testified to at the hearing. The fourth study, published in 1999, concerned the impact of cell towers on residential home values in the Richmond, Virginia area (Exhibit 71(e)(ii)). The authors, Allen Dorin, Jr. and Joseph Smith, III, concluded that "the presence of communications towers resulted in essentially no impact on residential values in the price range of $70,000 to $150,000 in those areas investigated." Exhibit 71(e)(ii), p. 2. The Hearing Examiner has no basis to extrapolate these conclusions to the subject neighborhood, a much higher-priced residential area in Montgomery County, Maryland, where according to the undisputed testimony, homes had been averaging about $700,000 at their peak, and now are selling for about $500,000. 1/20/12 Tr. 186.

This brings us back to Mr. Thorne's own testimony. The statistical validity of Mr. Thorne's methodology was questioned by the Hearing Examiner (1/20/12 Tr. 339-340 and 2/24/12 Tr. 245), and attacked by Mr. Karzai and Dr. Saphier. 1/20/12 Tr. 348 and 2/24/12 Tr. 234-288. Dr. Saphier testified, as an expert in research techniques and procedures, that the methodology used in Mr. Thorne's studies was not statistically valid for many reasons, among them the tiny data sample (4 to 8 pairs), his failure to use randomly selected data, his intervention in the data-gathering process and his method of choosing pairs of houses to compare. 2/24/12 Tr. 234-288.

The Hearing Examiner agrees with many of these observations about Mr. Thorne's failure to

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the issue which must be decided – the non-inherent impact, if any, of this particular tower. However, since both sides wanted to place their studies regarding the general impact of cell towers on residential prices in the record, the Hearing Examiner allowed them in and addresses them in this report according to the weight they should be given.

[15] Ironically, the New Zealand study is co-authored by Sandy Bond, the same person who authored the studies submitted by the opposition. The Hearing Examiner also will not consider the New Zealand study by Ms. Bond submitted by the opposition.

follow the scientific method, and therefore puts little weight in the pure scientific value of the Thorne studies. On the other hand, as conceded by Dr. Saphier (2/24/12 Tr. 267-268), Mr. Thorne is an expert in real estate appraisals, and based on his background and experience, his opinions about the effects of nearby structures such as cell towers on residential housing prices is entitled to some weight (significant weight in the opinion of the Hearing Examiner),[16] whether or not his formal studies have statistical validity. In Mr. Thorne's opinion, the proposed facility will not contribute to a devaluation of the property values in the neighborhood, and there would be no negative impact on marketing period or selling price. 1/20/12 Tr. 312-314.

b. The Opposition's Evidence on Property Value Impacts:

The opposition also introduced expert testimony to buttress its claim of damage to the neighborhood's property values. They called Jim Reid, a real estate agent, who testified as an expert in home values and as to what will help or hurt those values. Though not an appraiser, he has significant experience in this particular neighborhood, and in his opinion, "if someone comes into a neighborhood and they see a cell tower, that's going to negatively impact them as far as their desire to want to buy that home." 1/20/12 Tr. 197. He also proffered an internet survey of studies on the effect of cell towers on residential property values (Exhibit 70(b)).

According to Mr. Reid, if the price is reduced, a house will sell even with a cell tower, but he believes that the neighborhood is going to be impacted dramatically in terms of the values because there are other homes that buyers can purchase that would not have that type of a setting, that view being obstructed by a high tower. 1/20/12 Tr. 197. He indicated that his answers address cell towers in general of this height, not this particular cell tower. He was assuming a tower about

[16] Dr. Saphier argued that Mr. Thorne's opinion is entitled to less weight than Mr. Reid's opinion because it is "tainted" by the fact that Mr. Thorne is being paid by T-Mobile for his testimony and he was paid by AT&T and Verizon to perform his studies. 2/24/12 Tr. 268. The Hearing Examiner agrees that this connection is evidence of potential bias (as is true for all paid experts), but it does not discredit Mr. Thorne's testimony; rather it affects the weight which it should be given.

50 or 60 yards from the homes, but even if it were 377 feet to the nearest home, Mr. Reid felt it would negatively affect property values, if visible. 1/20/12 Tr. 199-201.

On cross-examination, Mr. Reid admitted that distance, topography and intervening trees (depending on their height) would affect the tower's impact. 1/20/12 Tr. 204-205. However, he indicated that even if the tower is not visible from a particular home, the fact that it is visible from other neighborhood homes would affect prices of comparables, and therefore all home prices in the area. 1/20/12 Tr. 209-210. Mr. Reid admitted that some might see wireless services as an enhancement to home value. 1/20/12 Tr. 211.

The Hearing Examiner credits Mr. Reid's testimony as some evidence that a cell tower, if close to a neighborhood, may have some impact on real estate prices; however, it was evident that Mr. Reid was underestimating the distance to the proposed tower from the homes in question. He assumed that the tower would be about 50 or 60 yards (*i.e.*, 150 to 180 feet) from the homes in question (1/20/12 Tr. 199-201), when it actually will be 703.7 feet from the nearest home of anyone in opposition (Mr. Coles) and significantly screened. Exhibit 42(c). As Mr. Reid conceded, distance, topography and intervening trees (depending on their height) would affect the tower's impact. 1/20/12 Tr. 204-205.

The opposition also introduced State of Maryland tax records for a home at 911 Schindler Drive in Silver Spring, where the Maryland Property Tax Assessment Appeal Board for Montgomery County reversed a tax assessment based, at least in part, on its observation that "Probability of neighboring cell tower also affects value negatively." Exhibit 81. Although that property is not in the subject neighborhood, the opposition relies on the exhibit to support its arguments that cell towers, in general, will reduce the values of nearby residences.

The opposition also provided various studies of the generally negative effect of nearby cell towers upon residential property values. Exhibits 70(c), and 85(c). Chiefly relied on by the

opposition are studies by Dr. Sandy Bond, who reportedly has a degree in property valuation and management (Exhibit 70(c)(ii)). She studied the impacts of cell towers on residential properties in Florida and New Zealand. She concluded in her Orange County, Florida study, that "while a tower has a statistically significant effect on prices of property located near a tower, this effect is minimal. The price of properties within 200 meters (656 feet) decreased, on average, by just over 2%." Exhibit 70(c)(i), Florida study, p. 13.

Ms. Bond's study also showed that in cases where the cell towers were more than 300 meters from the cell tower, the home prices actually increased, as shown in the following table from her report. Exhibit 70(c)(i), Florida study, p. 11.

Table 4: A Comparison of Distance-Based Location Coefficients *(% impact on price)*	
DISCRETE LOCATION	**ADJ. R^2 = 0.826257**
500-450MTRS	2.30E-02 ***(2.33%)***
450-400MTRS	1.91E-02 ***(1.93%)***
400-350MTRS	2.17E-02 ***(2.19%)***
350-300MTRS	1.04E-02 ***(1.045%)***
200-150MTRS	-2.75E-02 ***(-2.71%)***
150-100MTRS	-1.56E-02 ***(-1.57%)***
EXPLICIT LOCATION	**ADJ. R^2 = 0.8282641**
DISTANCE	5.69E-05 (5.69-03%)
DISTANCE2	-1.49E-08

Her data is not clear regarding the cell tower's effect on prices of homes located between 200 and 300 meters from the tower, but given that this is the area in which the effect switches from negative to positive, it is fair to say that there is no evidence in this study that a cell tower in that range or above will decrease property values.

The closest of the Cabin Creek Drive homes to the proposed tower is the one on Lot 11 (2813 Cabin Creek Drive), and it is 682.3 feet (208 meters) from the proposed tower, based on the measurements found on the Site Plan (Exhibit 42(c)). The owner, Wells Fargo, has not appeared in this case, nor filed anything indicating opposition. Mr. Coles home is 703.7 feet (214 meters) from

the proposed tower location. There are no closer off-site homes to the proposed tower except for one which is located at 2900 Miles Road. As far as the Hearing Examiner can tell, the owner of that residence, Egon Kaplan, has not entered an appearance in this case, nor expressed any opposition.[17] Thus, all of the homeowners in opposition are located in homes so distant from the proposed cell tower that the Sandy Bond Florida study, submitted by the opposition, would indicate no decrease in their property values.[18]

c. The Hearing Examiner's Conclusion on the Property Value Impact Issue:

As the Hearing Examiner stated at the beginning of this section, the issue here is not whether cell towers, in general, may have adverse effects on nearby residences; rather, it is whether there are any non-inherent characteristics of the particular proposed cell tower or its site which have undue adverse effects on the residences in the area. There is no evidence in this case that the tower proposed here would have effects on nearby residential property values that are not inherent in cell towers in general. In fact, the evidence introduced by the opposition tends to prove the opposite. Given the distances to "nearby" residences, the Florida study by Sandy Bond would seem to indicate the possibility of an increase in home values for many of the neighborhood homes. At the very least, there is no evidence that this particular tower will actually reduce property values in the neighborhood.

3. Noise from Construction and Operations:

There was some concern expressed by the neighbors, especially Mr. Coles, whose home shares the access driveway, about the potential of noise from construction of the facility and

[17] There is a great deal of woodland between the proposed cell tower and his home to the southeast of the tower site.

[18] Some neighbors argued that the perception of radiation danger (whether or not fact based) may discourage potential buyers and thus decrease property values (2/24/12 Tr. 96-97; 124-132; and 169-173). Evan aside from the question of whether such evidence can be considered under federal law which is discussed in Part II.C.5(c) of this report, it appears from the Sandy Bond study that such perceptions have no negative effects on properties located as distant from the tower as the opposition neighbors, and in any event, this "perception" effect would be inherent in all cell towers.

maintenance operations. 1/20/12 Tr. 34-35; 2/24/12 Tr. 71-80, 148.

The evidence is that the facility will take approximately two weeks to construct and will thereafter be visited for maintenance approximately once a month, for 30 to 45 minutes, by a technician in a sport utility vehicle. 1/20/12 Tr. 98-113. There would be no visible lights and no noise or fumes, except in the rare event of a widespread power outage, when a generator might have to be bought in after battery backup was exhausted. 1/20/12 Tr. 98-121.

It appears to the Hearing Examiner that, unlike the *Butler* case, *supra,* the amount of activity reasonably expected on this driveway will be minimal, amounting to approximately two weeks of construction on the site and one trip per month for the primary carrier. 1/20/12 Tr. 98-113. There is no evidence that this scenario is different from the activity attending the construction and maintenance of any cell tower.

The situation is less clear for any potential co-locators. As mentioned on page 19 of this report, T-Mobile's zoning project manager, Matt Chaney, admitted that he was not familiar with practices of other carriers; however, he did testify that when one is constructing a co-location, it's a considerably smaller project, especially when the compound has already been constructed. In this case, there would be trucks that would bring in their steel platform and then a Bobcat probably to grade out something if it needed to be graded out, though depending on when they co-locate it, that may not be necessary. A small truck would be needed to bring the antennas, equipment, cabinets, et cetera. Construction would take about a week. 1/20/12 Tr. 113-115. T-Mobile's RF engineer, Curtis Jews, testified that he assumed that maintenance operations by co-locators would be "slightly similar. I have worked for other carriers in my past and I really don't see too much of a difference in the way we do things and the way they will do things." 1/20/12 Tr. 237-238. There was no other evidence on the point.

Given this state of the record, and given that we do not know whether there will ever be any co-locators, the Hearing Examiner is recommending a condition, in Part V of this report, that before any co-location occurs, an administrative modification must be requested by Petitioners so that the level of potential imposition on the community can be reviewed at that time. Notice of any modification would be sent to all parties entitled to notice at the time of the original special exception filing, as well as to current adjoining and confronting property owners, so that they have the opportunity to request a hearing, as spelled out in Zoning Ordinance §59-G-1.3(c)(1).

The Hearing Examiner finds that, with this condition, there is no basis to deny this petition because of the potential for any noise from construction or operations on the subject site.

4. Environmental Impacts:

Some members of the opposition have indicated a concern about potential impacts on the environment from the proposed cell tower. Because this site is located within the Upper Paint Branch Special Protection and its Environmental Overlay Zone, it is subject to restrictions spelled out in Zoning Ordinance §59-C-18.15, and this petition has received heightened scrutiny by Technical Staff and the Planning Board to avoid any adverse environmental impacts.

At the request of Technical Staff, the proposed location of the telecommunications tower was shifted about 40 feet to the northwest to take it out of the stream valley buffer. Petitioners' Water Quality Plan was conditionally approved by the Department of Permitting Services (DPS) Water Resources Section on November 30, 2011. Exhibit 58, p. 10. It was then reviewed and approved by the Planning Board on February 2, 2012. Exhibit 75(a). As stated by Technical Staff (Exhibit 58, p. 10), the Planning Board's responsibility is to determine whether environmental buffer protections, SPA forest conservation and planting requirements, and site imperviousness limits have been satisfied.

The Planning Board's approval resolution (Exhibit 75(a)) included a number of conditions, which have been incorporated into the conditions recommended in Part V of this report. Most importantly, these conditions require the Petitioners to maintain imperviousness below eight percent and protect the on-site environmental buffers, in accordance with the approved Water Quality Plan. They also require Petitioners to remove the telecommunications facility and all impervious surfaces constructed as part of this approval, at the cost of the owner of the telecommunications facility, when the facility is no longer in use by any telecommunications carrier for more than 12 months.

According to Technical Staff's review of the Water Quality Plan (Exhibit 58, Attachment C, p. 6.), the site, as shown on Exhibit 42(h), has 17,092 square feet of existing impervious surface, or about 6.7 percent imperviousness. These impervious surfaces include an existing residence, outbuildings and a driveway. The proposed project will add an additional 1,772 square feet of impervious surface for construction of the proposed cell tower compound and the access road. The resulting impervious area on the property is 18,864 square feet, or about 7.4 percent imperviousness. The proposed project would thus result in an impervious area that is below 8 percent. Based on this record, Technical Staff and the Planning Board concluded that the project conforms to the Environmental Overlay Zone provisions for imperviousness. Exhibit 58, Attachment C, p. 6. and Exhibit 75(a), p. 2.

Technical Staff reports that a forest conservation plan exemption (42009174E) was confirmed for this site by Planning Staff on December 8, 2011, under Chapter 22A-5(q)(3) of the County Forest Conservation Law, based on the revised plan submitted on December 6, 2011. Exhibit 58, p. 9. The exemption is based on the fact that the total disturbance for the proposed special exception use will not exceed 10,000 square feet, and clearing will not exceed a total of

5,000 square feet of forest or include any specimen or champion trees. All activities, including any associated utilities, must be within the approved Limits of Disturbance.

According to Technical Staff, the proposed cell tower will have "no significant impacts to the adjacent and nearby parkland, as the site is outside of the stream valley buffer." Exhibit 58, p. 10.

Based on this review by DPS, Technical Staff and the Planning Board, the Hearing Examiner finds that all environmental concerns have been appropriately addressed, and that the conditions imposed will adequately protect the environment.

5. Safety Concerns (Equipment Outside the Compound; Traffic and RF Exposure):

The opposition raised three significant safety concerns – that there might be equipment placed outside the compound fence; that trucks needed for construction and maintenance might raise a traffic hazard for children because there are no sidewalks in the neighborhood; and that cell tower radio frequency (RF) radiation might pose a health hazard.

a. Equipment Outside the Compound:

The concern about the possibility of equipment being stationed outside of the compound was removed by the testimony of T-Mobile's zoning project manager, Matt Chaney, at the hearing. Mr. Chaney stated clearly that there would be no equipment stationed outside the compound fence. 1/20/12 Tr. 63-64. The Hearing Examiner has also included a condition in Part V of this report requiring that " . . . all equipment must be enclosed in the 8-foot tall compound fence."

b. Traffic Safety:

A number of the neighbors testified to their concern that trucks needed for construction and maintenance might raise a traffic hazard for children because there are no sidewalks in the neighborhood.

Although Petitioners assert that routine maintenance for T-Mobile will require only about one trip per month to the site (1/20/12 Tr. 98-113), Technical Staff, in reviewing possible traffic impacts, assumed that there would be three carriers, requiring a total of three to six trips per month to the site. Even with this assumption, Staff concluded that "the proposed installation of the telecommunication facility under the subject special exception application with access from via Cabin Creek Drive will have no adverse effect on area roadway conditions." Exhibit 58, pp. 6-7. Technical Staff also directly addressed safety issues, finding "With three to six trips per month, the proposal will not reduce the safety of vehicular or pedestrian traffic." Exhibit 58, p. 15.

The opposing neighbors produced no evidence that the proposed use would produce any greater danger to the safety of their children than might be expected from normal traffic in the area. While it is true that one can argue that any additional vehicular traffic poses some additional, if diminimus, threat, the evidence in this case establishes that few vehicles will be added to the roadway traffic, and they will not differ from what is inherent in this type of use. Such a record cannot be the basis for rejecting a special exception petition because so holding would virtually eliminate any additional uses that require some vehicular traffic (*i.e.,* almost all uses), even though they are permitted by the Zoning Ordinance.

Technical Staff also found that the proposed installation of an unmanned wireless telecommunication facility will not increase the number of weekday peak period trips generated by the site. Therefore, no Local Area Transportation Review/Policy Area Mobility Review is required, as the special exception will not generate 30 or more peak–hour trips. Exhibit 58, pp. 6-7.

Based on this record, the Hearing Examiner finds that, despite the fears expressed by some of the neighbors, there is no evidence that the proposed facility will have any significant impact on area traffic or traffic safety.

c. Fears of Cell Tower Radio Frequency (RF) Radiation:

Finally, a number of people attempted to testify about their fears concerning the health hazards of cell tower radio frequency (RF) radiation (2/24/12 Tr. 44-48, 69-71, 81-85, 86-91), and Mr. Karzai attempted to introduce evidence of a scientific study to buttress this claim of danger. Exhibit 85(d) at 2/24/12 Tr. 173-175. The Hearing Examiner would not receive this testimony and documentation into evidence because local officials are prohibited by federal law from deciding, based on health concerns regarding RF radiation, that a facility is inappropriate, as long as it complies with Federal Communications Commission (FCC) regulations.

Section 704(a)(7)(B)(iv) of the Telecommunications Act of 1996, 47 USC §332(c)(7)(B)(iv), provides:

> *No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the [Federal Communications] Commission's regulations concerning such emissions.*

T-Mobile asserts in its *Statement of Justification* for this application (Exhibit 48(b), p. 1) that "T-Mobile holds a license issued to it by the Federal Communications Commission ("FCC") to provide personal communication service ("PCS") throughout the greater Baltimore-Washington, DC metropolitan areas, including all portions and sections of Montgomery County."

T-Mobile's lead radio frequency (RF) engineer, Curtis Jews, testified that if this site is approved, T-Mobile commits to complying with FCC regulations regarding radio frequency emissions. 1/20/12 Tr. 249. Petitioners also provided testimony from Matthew Butcher, a licensed professional engineer in Maryland and other jurisdictions. He is the vice-president of engineering of Sitesafe, a company in Arlington, Virginia that does RF contract work for the wireless industry, primarily regarding RF health and safety. 1/20/12 Tr. 274-275. Mr. Butcher testified as an expert in radio frequency engineering, in terms of the maximum permitted exposure under FCC

regulations. 1/20/12 Tr. 280.

Mr. Butcher identified the Site Compliance Report (Exhibit 62) prepared by his company, which indicates that this site will comply with FCC RF regulations. Following FCC standards, he found that the proposed cell tower would be well within RF levels permitted by FCC RF regulations, as indicated in the Site compliance report (Exhibit 62). Mr. Butcher also studied the projected RF levels at nearby homes and found that levels would be far below permitted standards, even if there were a collocated service provider. 1/20/12 Tr. 182-190.

This evidence is undisputed in the record, and the Hearing Examiner therefore finds that this use will be operated consistent with FCC RF regulations. Based on Section 704(a)(7)(B)(iv) of the Telecommunications Act of 1996, quoted above, he is preempted from regulating the placement and construction of the subject cell tower based on any evidence proffered by the opposition with regard to the health impacts of RF radiation from cell towers.

In sum, the Hearing Examiner finds, based on the evidence discussed above, that the proposed use, though it will be visible from some vantage points in the neighborhood, will have no non-inherent adverse effects on the surrounding community that cannot be remedied by appropriate conditions. Neither the Hearing Examiner nor the Board of Appeals is authorized to vary the County's policy regarding cell towers, and that policy is established in the Zoning Ordinance.

The proposed tower will meet all the setbacks established in the Zoning Ordinance, including being more than 300 feet (377.5 feet) from the closest off-site residence. In fact, it will be located more than 700 feet from the nearest home of a neighbor in opposition, a distance great enough to effectively eliminate impacts on property values. The Hearing Examiner further finds that Applicants have taken appropriate measures, consistent with the Zoning Ordinance, to reduce the visual impact of the proposed monopole and mitigate any environmental impacts. In addition to the

use of a concealment pole to hide the antennas and use of an unobtrusive paint on the pole, Applicants have agreed to move the pole out of the environmentally sensitive area, raise the equipment up on a metal platform and surround the compound with an eight-foot tall, board-on-board fence.

D. The Master Plan

The proposed site is located in the area subject to the 1997 Fairland Master Plan. Neither T-Mobile's Statement of Justification (Exhibit 48(b), p. 2), nor Technical Staff's discussion of the Master Plan (Exhibit 58, pp. 5-6) is very helpful in explaining how the Master Plan applies to this case. Petitioner T-Mobile has a heading entitled "Compliance with Master Plan" on page 2 of its "Statement of Justification" (Exhibit 48(b)), but remarkably, there is NO text in that section; nor did Petitioners bother to call a witness on the subject at the hearing.

Technical Staff's discussion of the Fairland Master Plan is limited to an analysis of environmental concerns, which are relevant, but do not deal with other issues raised by special exceptions, which may be addressed in a master plan. Staff also does not tell us whether the 1997 Fairland Master Plan addresses the subject site specifically.

The environmental issues analyzed by Staff were discussed earlier in this report, so they will not be repeated in this section. The "Plan Concept" for the Fairland Master Plan is found on page 16 of the Plan. For residential communities, such as this one, the Plan proposes to emphasize suburban densities and single-family detached housing and to provide better street, bikeway and sidewalk connections. Nothing in the current proposal offends those Master Plan goals.

The Hearing Examiner's review of the Master Plan does not reveal any direct reference to the subject site in the text; however, it is depicted in Figure 25 on page 60 of the Plan as part of the "Perrywood" area, which includes the subdivisions of Perrywood, Fairland Acres and Fairland Gardens. Perrywood is described on page 57 of the Master Plan, which notes that there are about

770 homes in the area (as of 1997), consisting of 721 single-family detached homes and 47 townhouses.

The Hearing Examiner finds no evidence that the proposed cell tower will offend any of the recommendations of the Master Plan, environmental or otherwise. Moreover, the Master Plan does not make any recommendation to change the RE-1 Zoning for the subject site. Because the proposed telecommunications facility is an allowable special exception use in the RE-1 Zone, and the plan does not recommend changing that zoning, the requested special exception is consistent with the 1997 Fairland Master Plan.

E. Need for the Proposed Facility

T-Mobile is proposing to locate a new telecommunications facility on the Gibson property in order to fulfill its service requirements in this area. The Montgomery County Transmission Facility Coordinating Group (TFCG) reviewed the initial application (TFCG #200810-07) on May 6, 2011, and recommended approval of the cell tower at the first location, "conditioned on the applicant meeting the requirements of Zoning Code §59-G-2.58 and obtaining a Special Exception from the Board of Appeals." [19] Exhibit 7.

Even though this petition has been recommended by both the Transmission Facilities Coordinating Group (Exhibit 7) and the Technical Staff (Exhibit 58, p.1), the Board of Appeals "must make a separate, independent finding as to need and location of the facility." Zoning Ordinance §59-G-2.58 (a)(12).

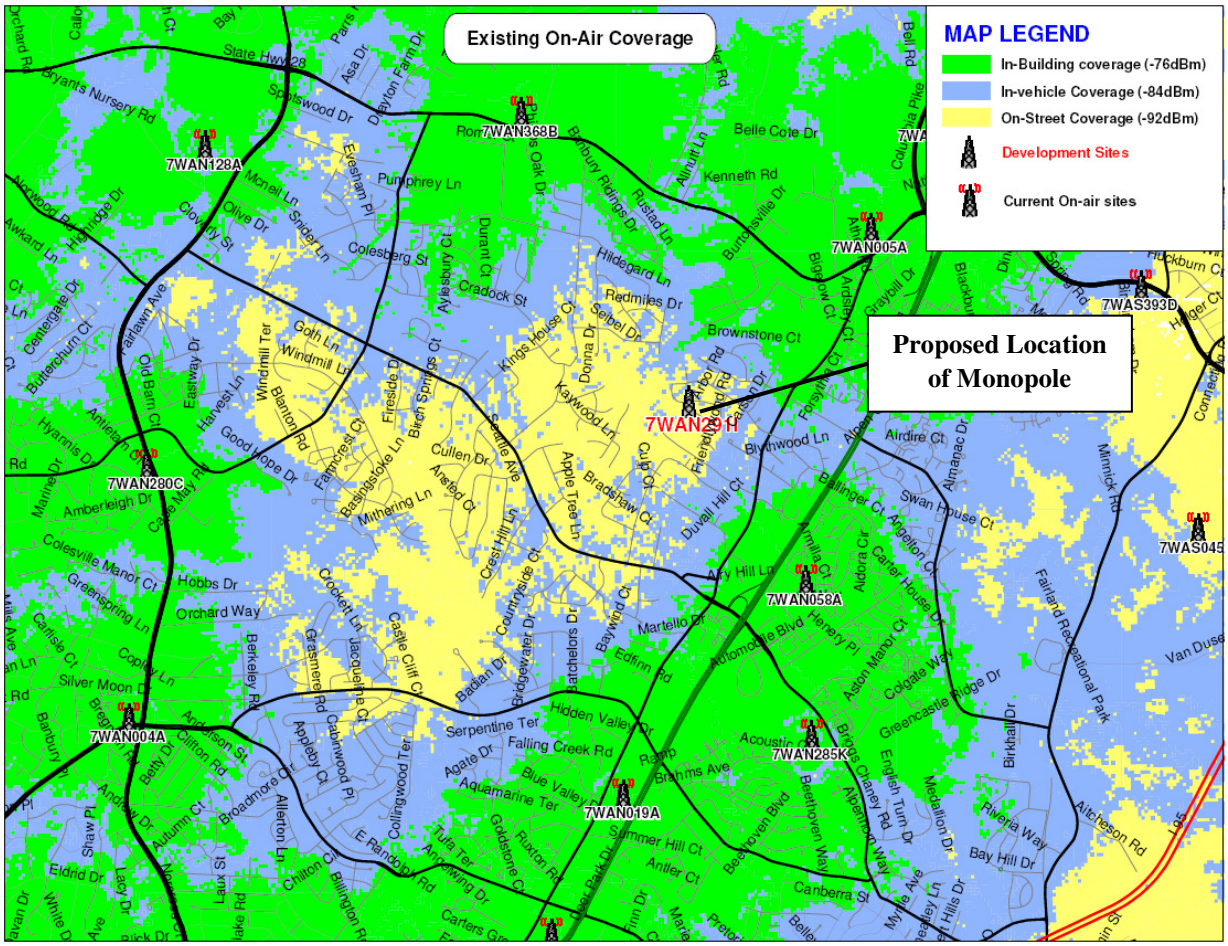
Petitioners presented evidence at the hearing and by affidavit as to both the need for a 115-foot cell tower, and the proper location of the proposed telecommunications facility. That testimony came from T-Mobile's lead radio frequency (RF) engineer, Curtis Jews. 1/20/12 Tr.

[19] The proposed location of the telecommunications tower was shifted about 40 feet after the TFCG's approval to take it out of the stream valley buffer, but the TFCG's Tower Coordinator did not recommend another review by the TFCG because he considered the change to be de minimis. Exhibit 58, p. 11.

224-272 and Exhibit 71(a).

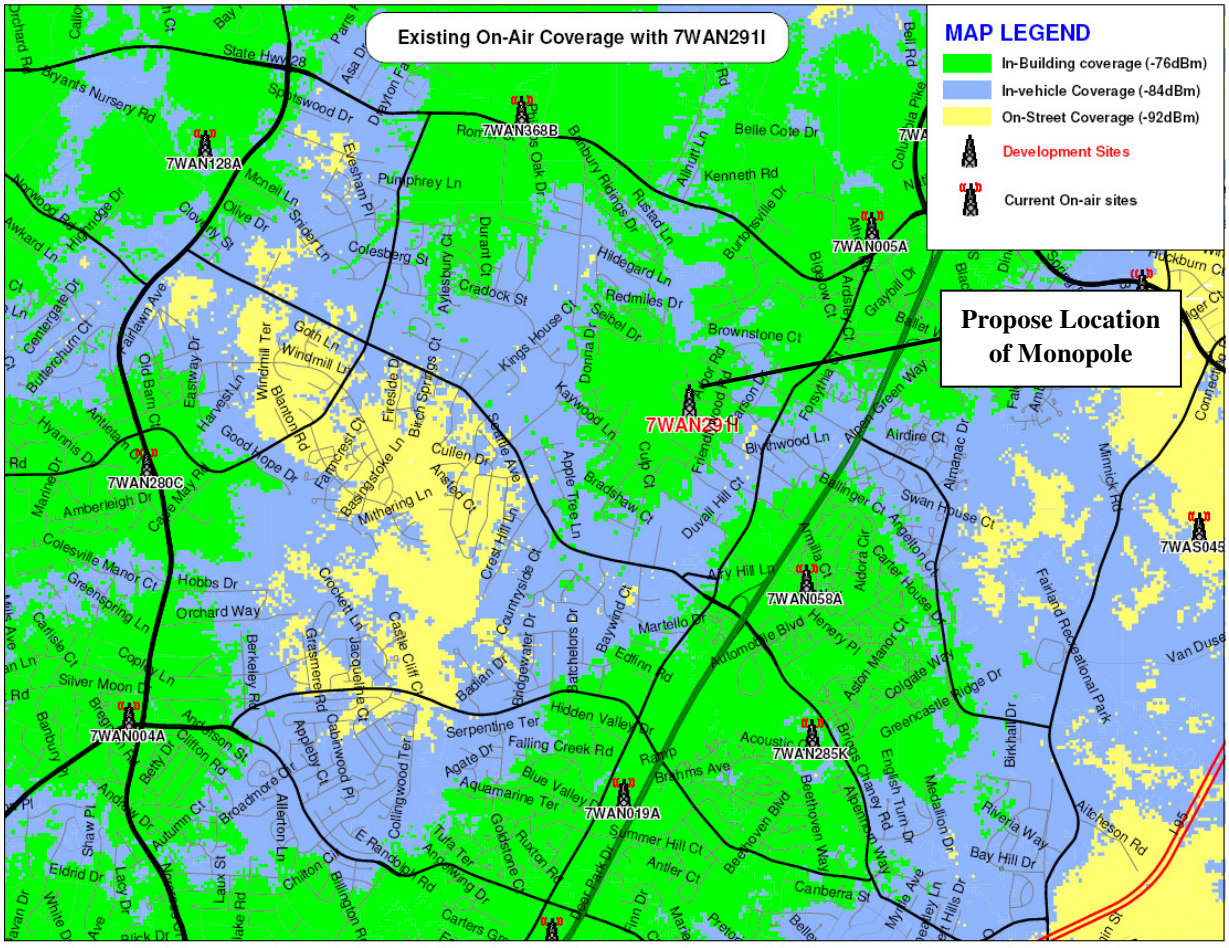
Curtis Jews testified as an expert in Radio Frequency (RF) Engineering. Mr. Jews testified that T-Mobile's coverage objectives for the area are to improve the in-building coverage in the area and the in-vehicle coverage along Briggs Chaney Road, as well as the surrounding areas of Columbia Pike and Briggs Chaney. 1/20/12 Tr. 229.

Mr. Jews also introduced two coverage maps, Exhibit 64 showing current on-air coverage around the site and Exhibit 65, showing current on-air coverage with the proposed site, 7 WAN 291I, activated. Green is in-building coverage, which is the coverage that one can expect inside of the home. Blue is in-vehicle coverage, and the yellow is the on-street coverage. The most reliable signal is shown in the green. 1/20/12 Tr. 231. The current coverage map (Exhibit 64) is reproduced below:



As is apparent from Exhibit 64, there is currently a lack of in-building coverage in the area of the proposed cell tower – 7 WAN-291I. According to Mr. Jews, the current coverage is not working well. There are customer complaints about dropped calls inside homes and vehicles. 1/20/12 Tr. 257-258. Mr. Jews also noted that people are requesting cell service now because of wireless internet, texting and all kinds of other data uses. Those services will not work reliably with the current coverage that is there now. 1/20/12 Tr. 270.

Exhibit 65, depicted below, shows the expected coverage with 7 WAN-291I on air:



As is evident from Exhibit 65, showing the expected coverage with 7 WAN-291I on air, there is an improvement in both in-building (green) and in-vehicle (blue) coverage. Where there was a lot of yellow, which is on-street coverage, there now is in-building coverage, which is green,

and more of the blue in-vehicle coverage in the surrounding area. Thus, the new facility would fill in the gap and fulfill T-Mobile's goal of providing in-building (green) coverage.

Three other issues were raised by the opposition with regard to need – whether other site locations were considered; whether other devices were available to boost in-home signals; and whether the availability of service from competitors of T-Mobile satisfied the need criterion.

Mr. Jews testified that Applicants did search for other possible site locations, but there was no good alternative. Paint Branch High School is not within the area considered for tower location because it is not centered well in the area with coverage gaps. There were no co-location opportunities, thus renewing the need for new construction on the Gibson property. 1/20/12 Tr. 247-249.

As noted by Mr. Jews, the TFCG examines collocation opportunities and whether there are other structures in the area that can be used instead of the proposed site. 1/20/12 Tr. 240-245. The Tower Coordinator's report, attached to the TFCG approval (Exhibit 7), supports his testimony:

> Co-location options: The applicant reports that they considered antennas inside a steeple atop a church located on Greencastle Road but ruled that out because the church is farther away from Briggs Chancy Road - a part of the coverage objective. We agree, but note that it appears that Briggs Chaney Road is shown to be covered by signals at levels satisfactory for in-vehicle coverage from other T-Mobile sites already active. Regardless, the church location would place the antennas approximately one-half mile farther away from homes to the south and west, likely reducing signal levels to those residents (approximately 150 homes). **In conclusion, we concur that the proposed site could better meet T-Mobile's coverage objective.**
>
> **Based on our site visit, we did not see any existing structures to which T-Mobile could attach antennas to meet their coverage objective.** [Emphasis added.]

One neighbor in opposition, McKinley Hudson, pointed to the availability of wireless service from competitors and the availability of other means of communications, such as through a landline connected to a router. 2/24/12 Tr. 28-30. These alternatives cannot be considered by the Hearing Examiner as eliminating the need for T-Mobile's facility since the Telecommunications

Act clearly contemplates that each provider must have the opportunity to compete and that cell phone service should be made available.

Section 704(a)(7)(B)(i) of the Telecommunications Act (codified at 47 U.S.C. § 332(c)(7)(B)(i)), provides:

> *The regulation of the placement, construction, and modification of personal wireless services facilities by any State or local government or instrumentality thereof*
> *(I) shall not unreasonably discriminate among providers of functionally equivalent services; and*
> *(II) shall not prohibit or have the effect of prohibiting the provision of personal wireless services"*

Mr. Hudson made a point about the sparseness of data documenting Petitioners' claims of dropped calls and of need in general. 2/24/12 Tr. 27-28. While it would have been helpful to have actual data on dropped calls in the area, the standard the Hearing Examiner must apply is "preponderance of the evidence," and there is no expert evidence in this record weighing against Petitioners' claims of coverage gaps that they need to fill through the use of the proposed cell tower. In support of Petitioners' claim, the TFCG made a finding of need for the cell tower at this location, and Petitioners produced coverage maps and expert testimony to the effect that there are significant coverage gaps and dropped calls that need to be rectified.

Other neighbors suggested that a device is available to boost a signal within one's home, without the need for the proposed cell tower. Mr. Jews confirmed that there is a product that home consumers can put in their homes to boost their signal for their cell phones, but he stated that even with the use of the booster, one has to have adequate signal or coverage, and the current coverage is not reliable or sufficient for it to work. 1/20/12 Tr. 263. He indicated that his conclusion about the on-street coverage, rather than in-building and in-vehicle coverage, is based not just on a computer simulation, but by an actual "drive test." A drive test is a process by which the tester makes cell phone calls as he drives through neighborhoods, trying to collect many samples of the coverage

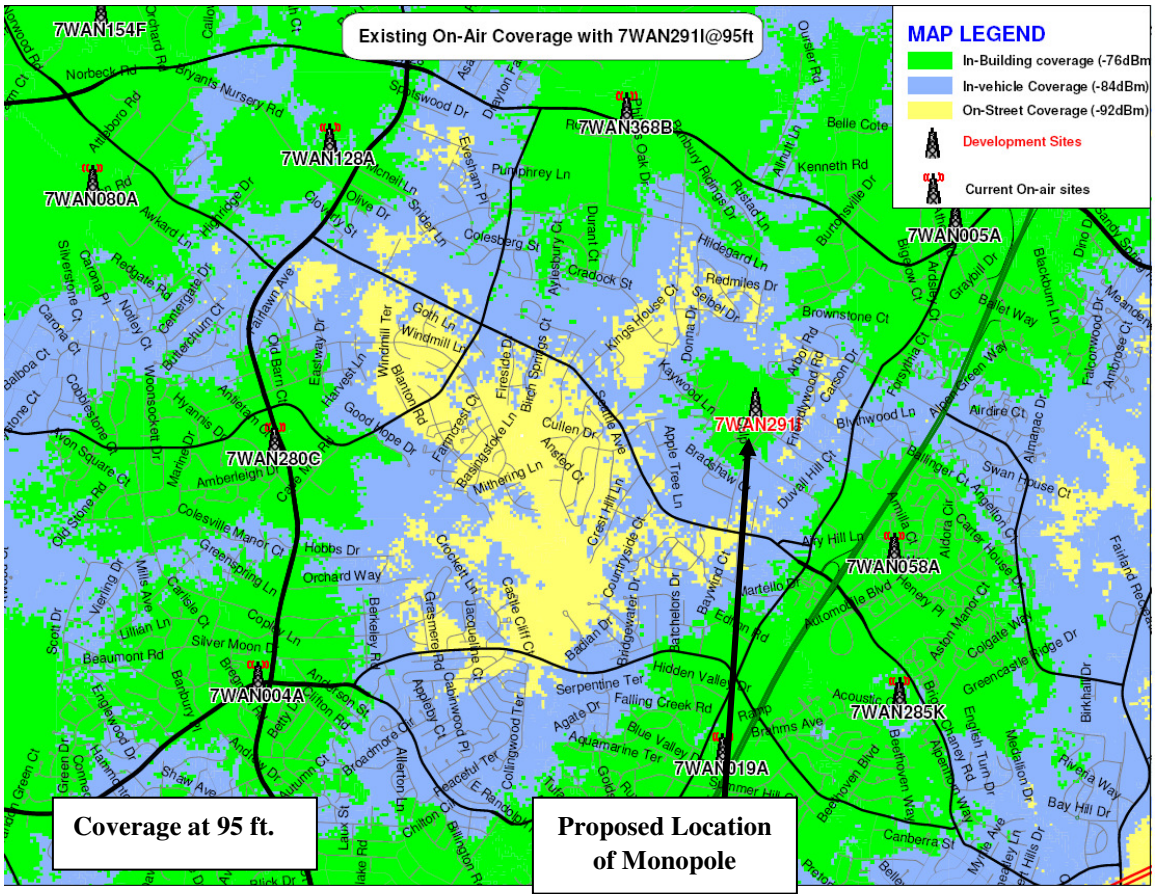
areas and different conditions, such as residential or urban, to see exactly what shape the network is in. 1/20/12 Tr. 264-265.

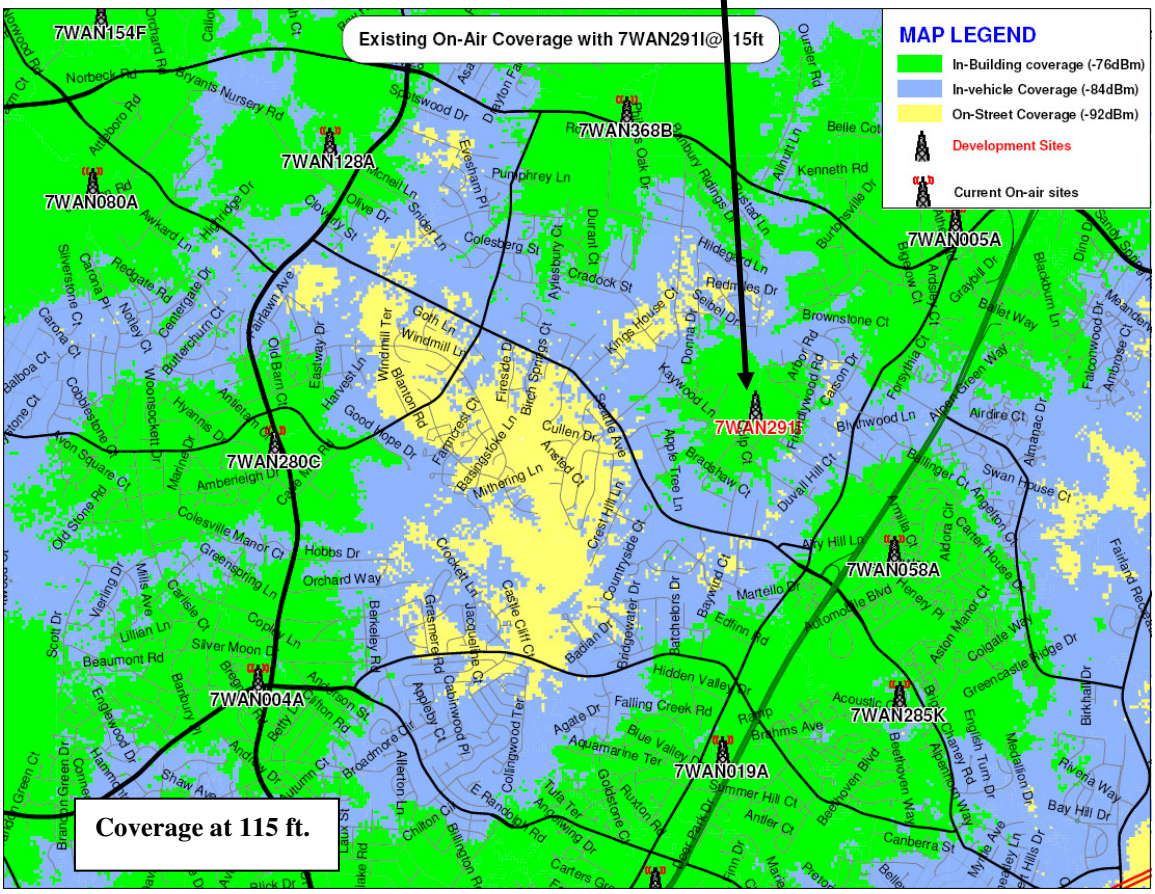
Finally, the Hearing Examiner raised the question of the need for the 115-foot tower height, rather than 95 feet, based on a statement made on page 2 the Tower Coordinator's report attached to the TFCG approval (Exhibit 7):

> Based on our review of the maps with antennas at the 95' level, there does not appear to be a significant difference from the coverage illustrated with antennas at the 115' level. However, the maps illustrating coverage with antennas at the 75' level show that the coverage area for signals at the target levels is greatly reduced for homes to the southwest of the site. That area contains approximately 100 homes near the Fairdale Elementary School where T-Mobile was unsuccessful in its attempt to site a monopole a few years ago (TFCG App # 200704-06).

Mr. Jews testified that the proposed tower height, 115 feet, is minimally necessary in order to meet T-Mobile's objectives. 1/20/12 Tr. 237. He tries to find the lowest height that will still enable T-Mobile to meet or exceed its coverage objective. He found that he could not go lower in this case. 1/20/12 Tr. 232. He also noted that while a customer is on a phone call traveling along or walking along, the various cell tower sites have to communicate with each other and hand off or hand over the call. That's what this site, WAN 291I, will do with the neighboring sites. A lowered height at the Gibson property could affect that handoff. 1/20/12 Tr. 231-237. At the request of the Hearing Examiner (1/20/12 Tr. 245-246), Mr. Jews supplemented the record with an affidavit (Exhibit 71(a)) and coverage maps showing coverage at the two levels (Exhibit 78(a) and (b)). In his affidavit, Mr. Jews explained that "It is necessary for T-Mobile's antennas to be installed at the RAD center of one hundred and twelve feet (112') [*i.e.*, within a 115-foot pole] in order for the signal to effectively propagate over the surrounding trees to reach the surrounding areas of targeted coverage improvement."

The two propagation maps, Exhibit 78(a) showing a 95-foot tall tower and Exhibit 78(b) showing a 115-foot tall tower are reproduced on the next page.


Existing On-Air Coverage with 7WAN291I@95ft
MAP LEGEND
In-Building coverage (-76dBm
In-vehicle Coverage (-84dBm)
On-Street Coverage (-92dBm)
Development Sites
Current On-air sites
7WAN154F
7WAN128A
7WAN368B
7WAN080A
7WAN005A
7WAN291I
7WAN280C
7WAN058A
7WAN004A
7WAN285K
7WAN019A
Coverage at 95 ft.
Proposed Location of Monopole


Existing On-Air Coverage with 7WAN291I@115ft
MAP LEGEND
In-Building coverage (-76dBm)
In-vehicle Coverage (-84dBm)
On-Street Coverage (-92dBm)
Development Sites
Current On-air sites
7WAN154F
7WAN128A
7WAN368B
7WAN080A
7WAN005A
7WAN291I
7WAN280C
7WAN058A
7WAN004A
7WAN285K
7WAN019A
Coverage at 115 ft.

One can see from these two coverage maps that the green and blue areas around the proposed new tower are expanded at the greater height. As explained in Mr. Jews' affidavit:

> The result of a decreased height of the facility is an increase in the amount of on-street coverage . . . and a reduced amount of in-building coverage in the area of targeted coverage improvement. This degradation in signal propagation is best explained, in my professional opinion, by the combination of decrease in structure height, blockage by surrounding tree cover and topography.
>
> In quantifiable terms, the percentage of coverage lost with a decrease in height from one hundred and fifteen feet (115') to ninety-five feet (95') is as follows:
>
> On-Street Coverage: Twenty percent (20%) coverage loss
> In-Vehicle Coverage: Thirty-five percent (35%) coverage loss
> In-Building Coverage: Forty-five percent (45%) coverage loss
>
> It must be noted that T-Mobile's customer base demands wireless service in their homes and businesses and the improved on-street coverage achieved by a ninety-five foot (95') unipole would neither satisfy that demand nor provide an answer to the customer complaints motivating the carrier to invest in a facility in this search ring.

Given this unrebutted evidence, the Hearing Examiner finds that the 115-foot cell tower proposed by Petitioners is needed to fulfill T-Mobile's coverage objectives, and that the record established a need for the facility at the proposed location, as required by Zoning Ordinance §59-G-2.58(a)(12).

III. SUMMARY OF HEARING

A public hearing was convened as scheduled on January 20, 2012. Petitioners called five witnesses – Petitioner Ralph Gibson, the owner of the site, who testified regarding the easement issue; Matt Chaney, a zoning project manager with Network Building & Consulting, a firm which contracted with T-Mobile to do the site development tasks; Curtis Jews, a radio frequency (RF) engineer; Matt Butcher, a licensed professional engineer; and Oakleigh J. Thorne, a certified general real estate appraiser, who testified that the proximity of cell towers does not adversely affect residential property values. 1/20/12 Tr. 291-359. Two opposition witnesses testified at the January 20 hearing – Jeff Coles, an abutting land owner, who testified regarding his claim that the

existing easement is not valid for the proposed use (1/20/12 Tr. 28-40); and Jim Reid, a real estate agent, who testified as an expert in home valuation, and specifically that nearby cell towers do adversely affect residential property values. 1/20/12 Tr. 185-224.

The hearing could not be completed on January 20, and it was announced at the public hearing that the hearing would resume on February 24, 2012. A schedule was also established for additional submissions by the parties prior to the resumption of the hearing.

The hearing resumed, as scheduled, on February 24, 2012, and thirteen opposition witnesses from the neighborhood testified – David Leeger, McKinley Hudson, Chen Lin Teng, Jeff Coles, Trang Nguyen, John Potts, Bill Auld, Zandra Watson, Najla Dildar, Lisa Stine, Bernie Flores, Hameed Karzai and Stewart Saphier. The final community witness, Dr. Saphier, was qualified as an expert in research techniques and procedures, an expertise he used to attack the methodology used by Petitioner's real estate appraiser, Oakleigh Thorne. 2/24/12 Tr. 189-288.

The record was held open after the hearing, at Petitioners' request, so that Petitioners could file a response to evidence presented by the opposition, and file a written closing argument. Petitioners were given until March 2, 2012, to make these filings, and the opposition was given until March 9, 2012, to respond. Petitioners were allowed until the record-close date of March 14, 2012, to reply.

A. Petitioner's Case

1. Ralph Gibson (1/20/12 Tr. 47-50):

Petitioner Ralph Gibson testified that the driveway on which there is an easement was put in before the houses were built in the neighborhood. He ran a little construction business for years and ran his trucks "back and forth over it lots of times" every day, but he hasn't used it that way in about 10 years. He indicated that the driveway is capable of handling commercial vehicles. He hauled

"big gravel trucks . . . over it with 20 ton on them," and he did not believe that T- Mobile would use anything that big. On cross-examination, Mr. Gibson noted that Mr. Coles once used the driveway for a "Bobcat" pulled by a big truck to dig up his basement. 1/20/12 Tr. 47-50.

2. Matt Chaney (1/20/12 Tr. 61-183):

Matt Chaney testified that he is a zoning project manager with Network Building & Consulting, a firm which is contracted with T-Mobile to do the site development tasks. He has worked on the T-Mobile project since 2005. His responsibility is to find an appropriate solution for a coverage gap that needs to be filled.

Mr. Chaney described the proposed facility. It would be a 115-foot unipole, which is a monopole where all of the antennas and associated equipment are located inside the pole so there won't be any arms sticking out. Everything is incased within the pole. It looks very much like a flagpole, just without the flag and finial. That 115-foot unipole is proposed near the rear of the subject property owned by the Gibsons. That pole will be located within a 40 by 42-foot equipment compound. All three equipment cabinets will be located inside that compound on a steel platform. The equipment compound will be surrounded with an eight-foot board-on-board fence. Nothing will be outside the fence. 1/20/12 Tr. 63-64.

The purpose of a unipole is to minimize visual impact. It can be painted whatever color blends into the surroundings. In this case, a light brown or a dull gray. 1/20/12 Tr. 64.

The purpose of this facility is to cover a coverage gap in this area Basically, the coverage gap here is in-vehicle traffic along Briggs Chaney Road and throughout this neighborhood, and also to increase in-building coverage to this neighborhood. 1/20/12 Tr. 65.

Mr. Chaney described the process of site selection and the review process. The first thing they look for are existing tall structures. If there's an existing monopole there, if there's a water tank, if there's a tall building, those are the first places that Petitioner would use. In this case, there

unfortunately were not any tall structures in this area that would accommodate this RF need, and when there isn't a tall structure for us to co-locate to, then they have to begin looking for properties in which to build a new facility such as this. 1/20/12 Tr. 66-67.

Mr. Chaney described the Gibson site, noting that it slopes downhill from the front (*i.e.*, by Cabin Creek Drive), to the back (*i.e.*, the woods). It is wooded, and there are a lot of trees that surround the parcel on adjacent properties. 1/20/12 Tr. 67-69, 72. He identified an aerial photo (Exhibit 63) depicting the site and the proposed facility marked as 7 WAN 291-I. The site will be accessed by an existing road along the property line, that T-Mobile will extend out to get to where the compound is. 1/20/12 Tr. 73. The site was shifted at the request of Technical Staff to get the compound entirely outside of that stream valley buffer area in the southeast portion of the site. 1/20/12 Tr. 74-75.

Mr. Chaney detailed the setback requirements for the zone. The pole is required to be set back a distance of one foot for every foot of height from all surrounding property lines and 300 feet from any offsite dwellings. Since the height of the facility will be 115 feet, the setback requirement form the property lines is also 115 feet. The front yard setback, which is up to the northeast, is 570.7 feet. The rear yard setback, which is to the southwest, is 158 feet. The side yard setback to the northwest is 230.7 feet and the side yard setback to the southeast is 140.4. These setbacks are from the cell tower location itself, not from the compound. The closest offsite dwelling is 377.5 feet. Thus, the proposed facility more than meets every minimum requirement. 1/20/12 Tr. 76-78.

As is required, the plans show space in the tower and the compound for two future carriers. 1/20/12 Tr. 80. At the request of Technical Staff, the ground equipment will be located on a steel platform to keep it off the ground in an environmental overlay zone. 1/20/12 Tr. 81.

Using a coverage map (Exhibit 64), Mr. Chaney explained the gap in coverage and described the surrounding cell tower locations. He concluded that "There were no tall structures for

co-location in that area that would serve this [coverage] objective." 1/20/12 Tr. 85-90. They also looked for sites that would reduce visibility of the tower from nearby homes. According to Mr. Chaney (1/20/12 Tr. 91-93),

> [t]he exceptional tree screening at Gibson makes it an exceptional candidate. It's very difficult in this sort of area to find a location that has as much tree screening as this one does. . . . [G]iven that this area falls in the Upper Paint Branch Environmental Overlay Zone, given all the restrictions that that imposes, finding a site that has minimal visual impact and can meet the requirements of the NRI/FSD process of and water quality plan process makes, made this the best site in the area.

Mr. Chaney testified as to the use of a balloon test to determine visibility. They fly a balloon at the proposed location that is measured off to be the same height as the tower. The balloon is bright red and a representative diameter. In this case, it was a three-foot balloon that was flown on January 14, 2012, when the leaves were off the trees. They then drive around, and the visibility of the balloon gives a representation of what can be seen of the proposed tower. 1/20/12 Tr. 95-96. Mr. Chaney introduced Exhibit 66, which is a location map showing places from which the balloon was viewed, and Exhibits 66(a) through 66(l), which are the photographs pointing towards the balloon and tower simulations shot from those locations when the balloon was visible. 1/20/12 Tr. 97-108.

Mr. Chaney described the shared drive which will be used to access the site. There's a 25-foot easement. The road is paved and in good condition. It will not need to be improved for T-Mobile's use. The construction requires light construction vehicles. There would be a small cement truck, a gravel truck and trucks to carry steel for the platform. Construction would take a couple of weeks. Typically, once a month, a tech would come out to the site, in daytime, in a sport utility vehicle for 30 to 45 minutes for routine maintenance. 1/20/12 Tr. 98-113.

Mr. Chaney is not familiar with practices of other carriers; however, he did testify that when you're constructing a co-location, it's a considerably smaller project, especially when you don't

have to build out your own compound. In this case, there would be trucks that would bring in their steel platform and then a Bobcat probably to grade out something if it needed to be graded out, though depending on when they co-locate it, that may not be necessary. A small truck would be needed to bring the antennas, equipment, cabinets, et cetera. Construction would take about a week. 1/20/12 Tr. 113-115.

According to Mr. Chaney, T-Mobile has battery backup power in each of the cabinets to allow the cell site to continue running should the power go out. When they are not on backup, they get power from standard sources such as Pepco. Battery backup is located within the cabinets and is consistent with T-Mobile's facilities throughout the County. They do not keep generators on site. T-Mobile very rarely uses generators, and it's typically only in the case of widespread power outages, for very short periods of time. They are standard diesel-powered generators, pulled in by trailer, and they're encased in an aluminum shield to restrict the sound. No fuel is stored on site. Both batteries and generator would be in compliance with all applicable regulations. The batteries are computer-monitored from a control center, and since the network was deployed in 1999, there have been no instances of leakage. When the generator is not in use, there is no noise or fumes. There will be no light on the tower, just a standard light bulb for emergencies in the cabinets. There's no other lighting. 1/20/12 Tr. 116-121.

Mr. Chaney indicated that T-Mobile would ordinarily paint the tower light brown or dull gray, but if there's some other color that the Board feels is more appropriate, Petitioners would do so. 1/20/12 Tr. 124. He noted that "There are no other towers that we could co-locate to." 1/20/12 Tr. 129.

On cross-examination, Mr. Chaney was asked why the tower was not placed on nearby Banneker Middle School. He responded that there were two reasons. One is that the school system apparently has not been willing, recently, to approve those unless there are stadium lights, and two,

it would be more visible in the community if it were in that location. 1/20/12 Tr. 133-136. T-Mobile recently attempted sites at three other middle school locations that were standalone facilities, and after originally pursuing it, the schools have backed out of the leasing arrangement. 1/20/12 Tr. 145. Mr. Chaney explained that they do not take pictures from the back of people's homes because the graphic artists have to stay on public rights-of-way, and they don't have the right to trespass on people's property. 1/20/12 Tr. 138.

When asked whether there was any other possible access to the site, Mr. Chaney responded that Miles Road exists but it ends at the Kaplan house, so there is no existing access through there. To extend Miles Road, one would have to cut through the stream buffer, that Technical Staff is protecting, so he did not believe such an extension would be approved. Thus, there is no other easement available. 1/20/12 Tr. 142. Mr. Chaney also responded that their plans comply with all the restrictions of the special protection area for the Upper Paint Branch Watershed, and that they have gotten approvals of the NRI/FSD and water quality plan. 1/20/12 Tr. 144.

Mr. Chaney asserted that T-Mobile will comply with all regulations, laws and standards that are set by County, State, Federal government and the manufacturer regarding battery containment. 1/20/12 Tr. 153. Mr. Chaney also noted that there are some products that can be purchased that are supposed to boost in-home service, but he doesn't know much about them. 1/20/12 Tr. 154.

Mr. Chaney admitted on cross examination that the graphic artists who did the balloon studies are employed by the same company he is, and that they frequently take photos for T-Mobile. He is comfortable with the accuracy of their work and believes that when they cannot see the balloon, they attempt to line themselves up with the direction of the site so they will get an accurate graphic representation. 1/20/12 Tr. 159-161. His instructions were to produce, as accurately as possible, photographs and photo simulations. 1/20/12 Tr. 179.

Mr. Chaney testified that if the generator did need to operate to provide the backup power, it

would create noise of 68 decibels at 23 feet. [The Hearing Examiner noted that T-Mobile would be governed by Montgomery County Noise Ordinance, in any event.] 1/20/12 Tr. 164. According to Mr. Chaney, a standard tower of this kind is approximately 42 inches at the base tapering up to approximately 30 inches at the top. 1/20/12 Tr. 170-171.

3. Curtis Jews (1/20/12 Tr. 224-272):

Curtis Jews testified as an expert in radio frequency (RF) engineering for T-Mobile. Mr. Jews is the lead RF design engineer for T-Mobile, and has been working as a radio frequency design engineer for 12 years, designing over 2,000 sites. He worked on this site for T-Mobile. 1/20/12 Tr. 225.

Mr. Jews testified that T-Mobile's coverage objectives for the area are to improve the in-building coverage in the area and the in-vehicle coverage along Briggs Chaney Road, as well as the surrounding areas of Columbia Pike and Briggs Chaney. 1/20/12 Tr. 229.

Mr. Jews also introduced two coverage maps, Exhibit 64 showing current on-air coverage around the site and Exhibit 65, showing current on-air coverage with the proposed site, 7 WAN 291I, activated. Green is in-building coverage, which is the coverage that one can expect inside of the home. Blue is in-vehicle coverage, and the yellow is the on-street coverage. The most reliable signal as shown on Exhibit 64 is shown in the green. 1/20/12 Tr. 231.

At the subject site, 7 WAN-291I, there is currently a lack of in-building coverage. Exhibit 65, showing the expected coverage with 7 WAN-291I on air, there is an improvement in coverage. Where there was a lot of yellow, which is on-street coverage, there now is in-building coverage, which is green, and more of the blue in-vehicle coverage in the surrounding area. Thus, the new facility would fill in the gap and fulfill T-Mobile's goal of providing in-building (green) coverage. Also, while a customer is on a phone call traveling along or walking along, these sites have to communicate to each other and hand off or hand over the call. That's what this site, WAN 291I,

will do with the neighboring sites. A lowered height at the Gibson property could affect that handoff, and tree cover and topography affect signal propagation. 1/20/12 Tr. 231-237.

According to Mr. Jews, the proposed tower height, 115 feet, is minimally necessary in order to meet T-Mobile's objectives. 1/20/12 Tr. 237. He tries to find the lowest height that will still enable T-Mobile to meet or exceed its coverage objective. He found that he could not go lower. 1/20/12 Tr. 232.

Mr. Jews further testified that the County requires availability for collocation of two other carriers. When asked if he was familiar with the way in which other carriers do their maintenance operations, and how frequently they have to do maintenance, he answered that he could "only assume it's slightly similar. I have worked for other carriers in my past and I really don't see too much of a difference in the way we do things and the way they will do things." 1/20/12 Tr. 237-238. Should subsequent carriers want to co-locate on the facility, they would be subject to the requirement that they also locate within the skin of the unipole. 1/20/12 Tr. 246-247.

According to Mr. Jews, the TFCG examines collocation opportunities and whether there are other structures in the area that can be used instead of the proposed site. 1/20/12 Tr. 240-245. [Since the TFCG stated in its report that, with antennas at the 95-foot level, there does not appear to be a significant difference from the coverage illustrated with antennas at the 115-foot level, the Hearing Examiner asked Petitioners to supply coverage maps contrasting the 115-foot level with the 95-foot level, so it can be determined whether the height difference is justified. 1/20/12 Tr. 245-246.]

Mr. Jews further testified that Paint Branch High School is not within the area considered for tower location because it is not centered well in the area with coverage gaps. There were no co-location opportunities, thus renewing the need for new construction at Gibson. 1/20/12 Tr. 247-249. Mr. Jews stated that T-Mobile comply with all FCC regulations regarding radio frequency

emissions. 1/20/12 Tr. 249.

According to Mr. Jews, the current coverage is not working well. There are customer complaints about dropped calls inside homes and vehicles. 1/20/12 Tr. 257-258. There is a product that home consumers can put in their home to boost their signal for their cell phones, but even with the use of the booster, one has to have adequate signal or coverage, and the current coverage is not reliable or sufficient for it to work. 1/20/12 Tr. 263. Mr. Jews admitted that it is possible that the customers who are complaining need to upgrade their equipment. 1/20/12 Tr. 264. He indicated that his conclusion about the on-street coverage, rather than in-building and in-vehicle coverage, is based not just on a computer simulation here but actually by a drive test. A drive test is where he makes phone calls as he drives through neighborhoods trying to collect as many samples of the coverage areas and different conditions, such as residential or urban, to see exactly what shape the network is in. 1/20/12 Tr. 264-265.

Other carriers could install their equipment using cherry pickers and entering through panels in the side of the tower. 1/20/12 Tr. 266-267.

Mr. Jews noted that people are requesting cell service now because of wireless internet, texting and all kinds of other data uses. Those services will not work reliably with the current coverage that's there now. 1/20/12 Tr. 270.

4. Matt Butcher (1/20/12 Tr. 274-290):

Matt Butcher testified that he is a licensed professional engineer in Maryland and other jurisdictions and has been working as an engineer for 20 years. He is the vice-president of engineering of Sitesafe, a company in Arlington, Virginia that does RF contract work for the wireless industry, primarily regarding RF health and safety. 1/20/12 Tr. 274-275. He testified as an expert in radio frequency engineering, in terms of the maximum permitted exposure under FCC regulations. 1/20/12 Tr. 280.

Mr. Butcher identified the Site compliance report (Exhibit 62) from his company. He testified that T-Mobile asked him to model and predict the amount of exposure in the neighborhood around the proposed tower, in order to predict how much energy anybody would be exposed to as a result of this tower being constructed. 1/20/12 Tr. 180-181. Following FCC standards, he found that the proposed cell tower would be well within RF levels permitted by FCC RF regulations, as indicated in the Site compliance report (Exhibit 62). Mr. Butcher also studied the projected RF levels at nearby homes and found that levels would be far below permitted standards, even if there were a collocated service provider. 1/20/12 Tr. 182-190.

5. Oakleigh J. Thorne (1/20/12 Tr. 291-359):

Oakleigh J. Thorne, a certified general real estate appraiser in the State of Maryland and a member of the Appraisal Institute, testified as an expert in real property price evaluation and the impact of nearby facilities on home prices. 1/20/12 Tr. 291-297.

Mr. Thorne explained his methodology (1/20/12 Tr. 298-299):

> . . . the first step is to download all the information off the web that we can about the property, where it is, its acreage. We download the aerial photographs that we see here. We also get access to when the property, or the deeds because access to deeds in the state of Maryland are free, they're on the web. So we know when they purchased the property or if there's any financing on that property, we know who the owners are.
>
> The next step is to go out and look at the property, the proposed site, and to look at the neighborhood We drive it, we walk it. We were cold when I did it a few days ago, but it's a long steep hill down to the site. But we look at housing prices in the neighborhood, and I have a researcher that's cataloged all the sales in this general area on Perrywood Drive, Carson Place, Fairdale Drive, Greencastle Road, Brownstone Court and between 2010 and '11, there's been 36 sales. The maximum price was 1.3 million, the lowest price was 178,000. The median was about 470,000. These are sales between 2010 and '11 all in this clustered neighborhood on the, on the west side of 29.
>
> So we learn about the neighborhood and then I return to the studies that we've done of which there have been 11 different studies. Some of them have been studied multiple times because there was more data available at subsequent studies than originally occurred. And we develop, I develop, through my analysis of our prior studies, my inspection of the site, the site plan, the height of the monopole and make a

> determination based on these studies if there's anything unique or peculiar about this property that doesn't fit into the studies that we've done. And I derive an opinion based on my experience and the studies that we've done.

According to Mr. Thorne, these are "impact studies" which is distinguishing from appraisals. The impact in this case being visibility of the cell tower. His studies go from 1996 to 2010, and cover 11 existing, non-stealth towers. The smallest or the lowest he studied is a120-foot tall monopole, and the highest, 280 feet in lattice towers. Verizon and AT&T funded these studies. T-Mobile did not fund these studies. 1/20/12 Tr. 299-302.

Mr. Thorne further explained how is data was collected (1/20/12 Tr. 302-306):

> The methodology was the same. We have to find a subdivision where there was homogeneity of the housing stock. I've already said that. What it means is we need a vanilla subdivision with similar type homes all about the same size, all on about the same type of lots, and I'll explain why.
>
> We need sales of homes within the viewshed and we need sales of homes outside the viewshed to compare and come up with pairs, so we need a high level of sale activity. To come away with a valid conclusion in each of these studies, we needed at least four to eight pairs. That's a supported conclusion. We needed comparability in style, profiles, lots, house sizes. We have to have, if we're going to choose pairs, we have to make sure we were in the same school district, because that's a critical factor, and the road neck, network. We drove and walked these areas. We talked to homeowners.
>
> Eventually, through walking and driving the area, we derive an impact area of those homes that have a visual relationship to the monopole and those that don't. Then we collect data on the sales prices of the homes just like we would here, a list of all the sales. Then we earmark those sales that are within the relationship or within that viewshed and those that do not. The sources of data are mostly tax records and MRIS. And MRIS is what the brokers do to list homes to be sold on multiple listing. MRIS is Multiple Regional Information Systems.
>
> So we collect the data, we earmark, from our physical inspection, those homes that are in the viewshed and those that are not. We go back to the area, to that existing monopole, talk to homeowners when we can if they answer the phone or answer the front door, and we then look to compare pairs. In other words, they have to have sold within a couple of months of each other. We can't compare a sale two or three years back or, they'd have to have been sold roughly within six weeks of each other or 30 days of each other.
>
> And we have access to two facts of information. We made no adjustments in these pairs because the minute we try to make adjustments for lack of comparability and

> house size or lot size or condition of the home, these had to be almost identical pairs because in the Appraisal Institute, these are called pure pairs. There's no adjustments. We only dealt with two facts which anyone can concur with and find.
>
> The sale price. Sale price comes from multiple listing, comes from the tax record and anyone can get access to the deed. We function in a disclosure environment here. Sale prices are reported. So they can pick this price off of the deed. Next is the size of the house. That comes from two different elements. One is the tax records and the other is MRIS. Sometimes there's a conflict. If there is, we try to resolve that conflict but the conflicts have not been significantly large.
>
> We do one thing. We divide the price by the square footage of the home for the home that's in the viewshed and for the home that's not in the viewshed. If there is parity, if there is parity in that pair, by $250.76 a square foot for the home versus $250.74 a square foot, that, to us, means no impact on property prices. We need four, eight of those pairs for each of these subdivisions and each of these sites that I mentioned in these counties and at these locations.

Essentially, Mr. Thorne is looking to see if there is parity between the sales prices of houses in the viewshed versus the sales prices of houses outside of the viewshed. Parity is defined as within $2 a square foot. He also physically inspected all these sales. 1/20/12 Tr. 306-307.

Mr. Thorne testified he found no evidence that sellers or buyers of homes within the visual impact area either discounted the price or experienced extended marketing periods to execute a sale due to the visual presence of a communication device. He concluded that the proposed facility will not contribute to a devaluation of the property values in the neighborhood, and there would be no negative impact on marketing period or selling price. He also noted that since his studies found no negative impact from a taller traditional monopole with large outside antennas, there certainly wouldn't be any negative impact from the proposed 115-foot stealth device. Mr. Thorne observed that in the 16 years he has been working in this industry, he has never seen a site where the tower would be "this shrouded, this isolated [*i.e.*, well-screened] from the community." 1/20/12 Tr. 312-314.

On cross-examination, Mr. Thorne indicated that he had a minimum of four to as many as eight different pairs which were compared for his studies. 1/20/12 Tr. 318. He also stated that he

was being compensated for his testimony by T-Mobile (though the 11 studies were paid for by other companies). 1/20/12 Tr. 325, 328. Mr. Thorne further testified that in one of his studies, there was a decline in the values of the properties that were near the monopole, but he attributed it, based on interviews, to the fact that the nearby highway had expanded creating more noise, not to the view of the monopole. 1/20/12 Tr. 326-327.

Later in cross-examination by Mr. Karzai, Mr. Thorne was asked how he came up with the methodology for his studies, and the Hearing Examiner asked whether the purity of his parings was eliminated by the fact that he went in afterwards and talked to the people to determine that increased road noise caused a decline in property values, not the view of a nearby tower. Mr. Thorne responded that it did not undermine the purity of his parings, and he lamented that he didn't have the "luxury of having 200 data points . . ." 1/20/12 Tr. 339-340. Later, in cross-examination by Dr. Saphier, Mr. Thorne admitted that if there was parity in some of the pairs, at some of the sites, he did not interview the homeowners. 1/20/12 Tr. 348.

B. Community Witnesses

1. Jeff Coles (1/20/12 Tr. 28-40; 2/24/12 Tr. 49-67):

[Jeff Coles is the owner of the property at 2817 Cabin Creek Drive (Lot 12), which adjoins the subject site and partially controls the driveway which would provide access to the site. The owner of the other property adjoining the driveway in question (Lot 11, 2813 Cabin Creek Drive) is Wells Fargo, which has not entered an appearance in the case. There are two documents in the record which purport to grant permission to use the driveway— Exhibit 33(a), a perpetual easement dated July 1, 1983, and Exhibit 38(a), a document signed on May 14, 2008, by Mr. Coles. Petitioner's attorney, Ed Donohue, indicated that the 1983 perpetual easement Exhibit 33(a)), is sufficient in itself to grant the needed access, and that the 2008 document, is "just icing on the cake," as described by the Hearing Examiner. 1/20/12 Tr. 27-28.]

Mr. Coles testified that the document he signed in May of 2008 was executed at a time when he knew very little about what T-Mobile had proposed to do (1/20/12 Tr. 28-29):

> They did not give indication that, what the regular use of the easement would be for, they did not give indication that the cell tower could be leased to multiple carriers at the time. So this was given at the very beginning of this whole process and it was made to seem that this would be a minor inconvenience when it's turning out to be the exact opposite. . . .

Mr. Coles noted that there was no consideration given for the May 2008 document, and Petitioner's attorney, Ed Donohue, confirmed that fact. 1/20/12 Tr. 29, 41.

Mr. Coles is a licensed real estate broker in Maryland. He argued that the 1983 easement, by its terms, was granted for a reasonable pedestrian and vehicular use by the grantee, and that it is not reasonable usual and ordinary access over a residential driveway for a commercial use and for construction, maintenance and repair of a commercial tower used by commercial trucks. The driveway easement was for residential use, not for commercial uses. 1/20/12 Tr. 30-32.

Mr. Coles indicates that the proposed use of the driveway would harm him by the loss of quiet enjoyment (1/20/12 Tr. 34-35):

> The noise from these commercial trucks, like I said for construction, repair, maintenance, delivery of the generators, will therefore be causing a nuisance to me. My bedroom faces this driveway. All of the major living areas of my house I use on a regular basis when I'm in the house face the driveway. Any vehicle that goes up and down that driveway I hear. Any large vehicle is a disturbance within my home.

In addition, T-Mobile, plans to lease out to two other cell phone companies, so there would be three times the traffic over the driveway, and possibly noisy generator operation if the electricity goes out.

Mr. Coles also is concerned that the "commercial" use of the easement would diminish the value of his home, increase wear and tear on his driveway and create safety issues. 1/20/12 Tr. 35-37.

Mr. Coles noted that he signed the May 2008 document because he "was made to believe

that this would be a minor nuisance, that it was basically to be used for construction and I'd hardly ever see them again. That is not the case.: 1/20/12 Tr. 39.

Mr. Coles further testified that on November 8, 2011, he sent a letter stating that he revoked the easement to the president of T-Mobile, Philip Humm, to Hillorie Morrison, the senior zoning manager and agent for T-Mobile, and to you the Hearing Examiner.

[In response, Petitioner's attorney, Ed Donohue, stated 1/20/12 Tr. 40-41):

> … I'd ask you to reflect on the 1983 document which is not limited, does particularly talk about the successors and assigns, and then the addition of the May 14, '08 letter signed by Mr. Coles and you asked or you read a couple of the lines from there but I'm going to read the last line. Mr. Coles can look at it too, but it says for purposes of erecting and maintaining a wireless communication facility at 2815 Cabin Creek Drive. There are no limitations there on the number of users or number of trips or duration of the easement. This is Mr. Coles' signature agreeing to T-Mobile's proposal that it be, that the easement contemplates this kind of thing, and that's the reason that the letters were prepared and circulated for signature. I understand that he's changed his mind and now he's in opposition to the case, and he can speak in opposition but I think the easement issue is very clear.]

Mr. Coles also testified at the second hearing. He stated that he "wholeheartedly" opposes the approval of this special exception in this case. 2/24/12 Tr. 50. Mr. Coles repeated his argument against the use of the easement, and contended that it was not intended for any commercial use whatever because it is in a residential zone. 2/24/12 Tr. 50-52.

Mr. Coles stated that the proposed use of the easement would constitute an undue burden on his estate in several capacities. a. increase traffic due to commercial use; b. uncompensated expenses from damage, wear and tear to the estate and driveway; c. loss of quiet enjoyment, and d. diminished value of the estate. 2/24/12 Tr. 53.

Mr. Coles noted that T-Mobile cannot testify to the amount of use of the easement by other carriers who will co-locate on the antennae. This includes construction time, repair frequency, and maintenance schedule increasing the burden by a three times multiple or more. He stated (2/24/12

Tr. 54-55),

> All of this simply equates to an undue burden and substantial risk thereof if the use of my driveway for commercial purposes is given, I and future owners of my home, will be impacted by T-Mobile and their assignees. Safety, driveway maintenance, and quiet use of enjoyment of my home are all impaired resulting in loss of value and marketability of my home. Again, this is not reasonable per the granted easement agreement.

Mr. Coles concluded that "this is a property rights issue which will need to be decided in a court of law." 2/24/12 Tr. 56. Petitioner's attorney, Ed Donohue, agreed that it would be appropriate to have a condition on any grant of the application that the easement which may appear valid on its face does, in fact, give T-Mobile legal access to the site. 2/24/12 Tr. 66. On cross-examination, Mr. Coles indicated that he would still object to the use of the easement by T-Mobile even if there were no co-locating users. 2/24/12 Tr. 57-58.

2. Jim Reid (1/20/12 Tr. 185-224):

Jim Reid testified that he is a real estate agent and has specialized in the neighborhood Fairland Gardens for probably 20 to 23 years. The past two years, he sold seven out of the eleven homes that were sold in this neighborhood. In the peak of the market, the houses were going for a little over 700,000 average. He does not live in the neighborhood and has not been hired by the neighbors. 1/20/12 Tr. 186, 192.

Mr. Reid admitted that he is not an appraiser and does not have any experience of selling land or reviewing the sale of land around cell towers, but he claims an expertise in home values and understanding what helps to improve a home value and what will hurt home values. Petitioners objected to his testifying as an expert because they don't think Mr. Reid's expertise or his training, education rise to the level of an expert in property valuation. Mr. Reid claims that in 25 years of selling houses, he has gained a tremendous amount of knowledge as to what things around the house will or will not increase or decrease the value of a house. The Hearing Examiner decided to

allow Mr. Reid to testify as an expert in home values and what will help or hurt those values, but to weigh his testimony in accordance with his credentials. 1/20/12 Tr. 190-195.

Mr. Reid testified that, in his opinion, "if someone comes into a neighborhood and they see a cell tower, that's going to negatively impact them as far as their desire to want to buy that home." 1/20/12 Tr. 197. According to Mr. Reid, if the price is reduced, it will sell even with a cell tower, but he believes that neighborhood is going to be impacted dramatically in terms of the values because there are other homes that buyers can purchase that would not have that type of a setting, that view being obstructed by a high tower. 1/20/12 Tr. 197. He indicated that his answers address cell towers in general of this height, not this particular cell tower. He was assuming a tower about 50 or 60 yards from the homes, but even if it were 377 feet to the nearest home, Mr. Reid felt it would negatively affect property values, if visible. 1/20/12 Tr. 199-201.

On cross-examination, Mr. Reid admitted that distance, topography and intervening trees (depending on their height) would affect the tower's impact. 1/20/12 Tr. 204-205. He indicated that even if the tower is not visible from a particular home, the fact that it is visible from other neighborhood homes would affect prices of comparables, and therefore all home prices in the area. 1/20/12 Tr. 209-210. Mr. Reid admitted that some might see wireless services as an enhancement to home value. 1/20/12 Tr. 211.

Mr. Reid testified that he had shown a listing to a perspective buyer of a home that is near a cell tower or other form of utility with a visual structure, and the buyer had a negative concern. 1/20/12 Tr. 212. According to Mr. Reid, if a buyer has perceived health concerns, it reduces demand and therefore home values. 1/20/12 Tr. 216-217.

Mr. Reid summarized his testimony (1/20/12 Tr. 223):

> . . . the summary is that the cell tower will have a negative impact on property values. We've discussed visibility, and there will some homes that will be impacted greater than other homes in the community but those homes, when they're on the

> market, that will have an impact on the value of those homes and that will, in turn, as appraisers use the comp of that sale, it's going to have an impact on that community as far as the value of the properties.

Mr. Reid testified that utilities in this neighborhood are below ground. 1/20/12 Tr. 224.

3. David Leeger (2/24/12 Tr. 14-21):

David Leeger testified that he lives on Locustwood Lane, about a quarter of a mile from the proposed cell tower. He challenged T-Mobile's claim that this is the best location for the antenna, given the impact on the community. He stated that no one he had spoken to in his neighborhood is in favor of the cell tower in the neighborhood, Mr. Leeger fears an adverse impact on the environment because there are protected park lands right next to the proposed site. He cited the Exxon-Valdez oil spill in Alaska, British Petroleum's oil rig in the Gulf of Mexico and the cruise ship off the coast of Italy. He also questioned T-Mobile's claim that its tower would have improved range because there's no obstructions. That may be true for part of it, but for part of it, it's not. Mr. Leeger stated that this is not the only site that would work.

[Mr. Donohue introduced Exhibit 78(a), a propagation map for a 95-foot tall tower, and Exhibit 78(b), a propagation map for a 115-foot tall tower, and Mr. Chaney testified that these were the propagation maps referred to in Mr. Jews' affidavit. 2/24/12 Tr. 24.]

4. McKinley Hudson (2/24/12 Tr. 25-43, 67-69):

McKinley Hudson testified that he lives at 13 Cabin Creek Court in Burtonsville, Maryland. His back property line abuts the county designated park area that is adjacent to the Gibson property. Mr. Hudson opposes the construction of the T-Mobile unipole on the Gibson property for many reasons, but he feels that the overriding factor that there has not been sufficient investigation into establishing a need for the placement of this tower in his residential neighborhood. He noted that Section 59-G-2.58(a)(12) of the telecommunications facility standards requires that the Board of Appeals make a separate and independent finding as to the need for the telecommunications facility.

The applicant must submit evidence sufficient to demonstrate that need, and he contends that that standard has not been met.

To best determine whether there is a need for the T-Mobile unipole, a needs assessment must be conducted. However, at this point in the hearing process, the applicant is only provided maps comparing existing on-air coverage with suggested improvements in on-air coverage in buildings after the building of 7WAN291I. Mr. Hudson characterized the maps as "nothing more than a marketing analysis portraying how in-building telephone reception service will be improved for their envisioned customer base." 2/24/12 Tr. 27. Mr. Hudson suggested that at a minimum, a needs assessment would clearly define who are the T-Mobile customers receiving the service; state what problems those customers are encountering with the current service; determine who are the customers requiring the improved service; determine whether those customers have alternative outlets for obtaining better service, and if so, what are those outlets; and finally, indicate what type of service T-Mobile can provide to close the gap between the existing service and the desired service.

Mr. Hudson stated that the applicant has thus far provided two map comparisons that ask the Hearing Examiner to first assume that all within the on-air coverage area are T-Mobile customers "just itching for improved in-building coverage." He noted that that there are telecommunication service customers other than T-Mobile represented in both maps. The applicant has not clearly identified its customer base in the grid, nor provided data that there have been dropped calls, as claimed. 2/24/12 Tr. 27-28.

Mr. Hudson asserted that some of the non-T-Mobile customers may already have access to improved in-building wireless communication by virtue of being customers of T-Mobile's competitors. [The Hearing examiner noted that he cannot make a decision or recommendation based on the fact that there may be competitors in the area that have similar service because each

telecommunications provider is entitled to demonstrate that they, for their purposes, need to have the additional tower if they can produce the evidence]. 2/24/12 Tr. 28-29.

Mr. Hudson contends that free wireless routers can be used for wireless phones irrespective of carrier to gain quick access to the internet. Additionally, there is no need for redundant cell phone service in these in-building locations because land line or cable television service already exists. It should also be noted that T-Mobile's own internal wireless department could provide the same improvement in on-air reception. T-Mobile's own website extols the virtues of such a product, Wi-Fi calling. "Consequently, T-Mobile's Wi-Fi calling product rules out T-Mobile's own justification for erecting unipoles in residential neighborhoods." 2/24/12 Tr. 29-30.

Mr. Hudson asserts that the addition of this unipole and the proliferation of other unipoles in Montgomery County neighborhoods "is nothing more than a marketing ploy based on a projection of future data consumption needs of consumers. I believe that T-Mobile has taken this approach to better position itself to compete with the cable, landline telephone industry for primacy in providing in-home or in-building services." 2/24/12 Tr. 31. He supports this contention with references to T-Mobile's website and hearsay from neighbors and his son indicating that those who receive wireless service from Verizon Wireless receive a strong wireless signal in the area.

According to Mr. Hudson, all of the current operating T-Mobile towers are positioned near major road networks. Tower 7WAN291I appears to be the first deviation from the pattern by its placement in a clearly delineated residential area, the Gibson property. 2/24/12 Tr. 32. Mr. Hudson argued that "the placement of the tower or the Gibson property is redundant, too obtrusive, and ruins the aesthetics of the neighborhood." 2/24/12 Tr. 33. Given the choice of having a 115-foot tower or a small in-house wireless router or T-Mobile's Wi-Fi calling enabled phone, he believes most residents will opt for the latter rather than the former.

5. Chen Lin Teng (2/24/12 Tr. 44-48):

Chen Lin Teng lives at 14404 Culp Court, in Silver Spring, Maryland. She testified that she has three kids that live there, and she is concerned because of the radiation. When the Hearing Examiner explained that radiation is not an issue that he is permitted to consider, Ms. Teng said that she did not see the need for a tower because people could use their home phones.

6. Trang Nguyen (2/24/12 Tr. 69-71):

Trang Nguyen testified that she lives at 14500 Fairdale Road in Silver Spring, Maryland. She testified that she is opposed to the T-Mobile tower in her area because she has five children, and there are three schools in that area. She fears injury from the cell tower radiation. She also fears a decrease in her property values.

7. John Potts (2/24/12 Tr. 71-80):

John Potts testified that he lives at 14737 Locustwood Lane, and based on the balloon tests, he believes the cell tower will be visible from the back of his house, as he can see the Gibson property from his deck. Part of why he chose this location was the proximity of the Paint Branch Watershed and the park land that has inherent value to him as a homeowner. He feels the cell tower would impair and harm the surroundings and environment where he had chosen to live.

Mr. Potts believes that because it is a residential area, not on a roadway or a school, it will have adverse effects on home values, and these are non-inherent characteristics. He feels it will not be in harmony with the neighborhood, as required by 59-G-1.21(a)(4). It will also make objectionable noise, vibrations, fumes and odors when a generator is needed.

Mr. Potts also feels it will not be in alignment of the overall objectives of the master plan to maintain impervious levels at 1990 levels. Mr. Potts opposes to special exception, but in response to the Hearing Examiner's question, was unable to state what makes the proposed cell tower in a residential area different from any other cell tower in a residential area.

8. Bill Auld (2/24/12 Tr. 80-83):

Bill Auld testified that he moved into this neighborhood 25 years ago. His two children were born there and grew up with its friendly streets and wonderful neighbors. He wanted this environment – single family, mostly four bedroom homes on spacious lots, quiet streets with no road noise from traffic such as trucks or fire engines speeding up and down the main highway nearby. No high tension power lines were in sight and no above-ground power or telephone lines. Everything was underground. Essentially, no commercialism of any kind was in view of his homes and streets.

According to Mr. Auld, you just don't see cell towers in neighborhoods such as his, with single family homes that have already been established. "This proposal to erect this outlandishly tall and hideous 115-foot tower is a game changer in terms of the personality of our living area. I strongly object to this project on the basis that it is not within the character of our neighborhood." 2/24/12 Tr. 82. Further, it is clear by the 150 plus postcards and letters that were filed that a large majority of our home owners feel the same. This tower will also bring additional traffic to the streets to both build it and maintain it. There are no sidewalks, and the school aged children must walk in the streets in order to get to the local school.

Mr. Auld challenged the testimony by Thorne Consultants that this tower will not impact the future value of area homes. According to Mr. Auld, it's just plain common sense that many buyers will look elsewhere when they lay eyes on this massive tower. The elimination of any quantity of these buyers will lower the demand therefore lowering the selling price of area homes. He is just asking Petitioners to co-locate on an existing tower or choose another area that's not visible within the sight of neighborhood homes and streets.

9. Zandra Watson (2/24/12 Tr. 83-85):

Zandra Watson testified that she moved into the neighborhood approximately 19 to 20

years. She chose the area for the beauty of the neighborhood, with no power lines or anything like that. Ms. Watson stated that she will definitely be able to see the cell tower. She is also concerned about the effects of radiation and is definitely against having a cell tower in the neighborhood.

10. Najla Dildar (2/24/12 Tr. 86-91):

Najla Dildar testified that she is a resident of this area, and a mother of two children. It is a very friendly neighborhood. There are no power lines, no cell phone towers and no commercial activities there. There is no traffic in that area. Bringing this mobile cell tower is taking away her piece of mind. She also has concerns about the radiation. [The Hearing Examiner read her Section 704(b) of the Telecommunications Act of 1996, which provides that no state or local government or instrumentality thereof may regulate the placement, construction and modification of personal wireless services facilities on the basis of environmental effects of radio frequency emissions to the extent that such facilities comply with the Federal Communications Commission's regulations concerning such emissions.]

Ms. Dildar also expressed a concern for the safety of children from traffic generated by the cell tower.

11. Lisa Stine (2/24/12 Tr. 92-123):

Lisa Stine testified that she lives at 5 Cabin Creek Court, Burtonsville, Maryland. She introduced two exhibits – State of Maryland tax records, for a home at 911 Schindler Drive in Silver Spring, which is not in her neighborhood, [but indicates that the tax assessor found a negative impact on property values from a nearby cell tower] (Exhibit 81); and a printout of the TFCG database for cell towers (Exhibit 82).

Ms. Stine stated that she moved into her home eleven years ago because she liked the fact that it was located in a limited access neighborhood on a court that backed up to a field. The homes in the neighborhood were all well maintained and showed pride in ownership.

Before purchasing her home, she consulted the area master plan to ensure that the ICC or other factors such as commercial development would not hamper her family's enjoyment. In the master plan, there is no mention of proposed commercial development in the subdivision. When she learned about the proposed T-Mobile cell tower, she was concerned about its impact on her neighborhood. She was most concerned about what it would look like and how it would affect the value of her home.

Ms. Stine attended the most recent balloon flight conducted by T-Mobile and was able to see the balloon from her own home as well as in other locations. Totaling her own sightings and those of her neighbors, it was seen from sixteen locations – on the street at 1500 Perrywood Drive; on the street on Cabin Creek Drive at houses 2801, 2805, 2809, 2817, 2813, and 2912; on the street at Cabin Creek Court at houses 5, 9, 13, and 17; and from the backyards at 5, 9, and 13 Cabin Creek Court and 2825 and 2817 Cabin Creek Drive. The balloon was seen above the tree lines as well as through it. For approximately six months of the year, there are no leaves on the trees. They are not evergreens and thus provide no screening from the tower.

Ms. Stine argues that there are two basic reasons why this tower will lower her property values – the perception of adverse effects from RF radiation and aesthetics. She is one of those buyers who would not buy her home because of the tower. She currently enjoys her view during all seasons, but her home and her neighbor's homes are well positioned for a view of the proposed cell tower. Both perception and aesthetics of the tower will decrease the prospective buyer pool for her home. With less demands, the price goes down. Although T-Mobile's expert has stated he's not familiar with studies that contradict his own results, there are many studies, and the tax record in Exhibit 81, showing a reduction in a tax assessment in a different neighborhood because of a cell tower, that suggest that cell towers do lower values in neighborhoods.

Ms. Stine also downloaded the Transmission Facilities Coordinating Group database from

their website, and summarized her findings in Exhibit 82. There are 1,735 entries on the database. Three hundred sixty-three were labeled public. Five were labeled public/private with no details. One was unlabeled. 1,365 were labeled private which is her focus. Of the 365 public, 277 were recommended. Of the 1,365 private, 1,232 were recommended by the group. Removing the duplicates of the same site ID number, 354 remain. (The duplicates were the co-locators where they attached or made changes to the site.) Ms. Stine then looked up the remaining sites on Google maps. Two hundred of the 354 were some kind of business, a church, a private school, a store, a landscape business, something like that. Seventeen were on farms with no nearby neighbors. Forty-five are on multi-dwelling units, condos or apartments, non-single family homes. Seventy-nine are on PEPCO property or on property with major power lines nearby. Six are located on major or main roads. One was next to an airport. Two were placed on existing tall structures. One was a farm silo. The other one was Ham radio. One was not a cell site but a radio tower. Only one was located at the back of a neighborhood. That's the Gibson property. Only one. "Based on my research, Montgomery County has never placed a cell phone tower in a limited access neighborhood with below ground utilities. Placing one in our neighborhood would change the character of our neighborhood and impact our views as well as reduce our property values. Therefore, I respectfully request that you recommend this tower be denied." 2/24/12 Tr. 99-100. On cross-examination, Ms. Stine admitted that on the Gibson property itself, there are above-ground power lines. 2/24/12 Tr. 121-122.

Ms. Stine noted that she filtered out all those applications that were not recommended by the TFCG or were not on private property.

Ms. Stine admitted that she works for Verizon Communications, a competitor of T-Mobile, but denied that her company had anything to do with her opposition. 2/24/12 Tr. 122.

12. Bernie Flores (2/24/12 Tr. 124-132):

Bernie Flores testified that he lives at 5 Cabin Creek Court, in Burtonsville, Maryland. He noted that everybody in the neighborhood respects the Gibsons. His concern is that the perception of radiation may discourage potential buyers of his home. He estimated that tower will be about 500 feet from his home. He mentioned that he works for Verizon, and they told him that a network extender could be used to improve the reception in one's house. His extender helps his reception to some extent even when he is in his car.

13. Hameed Karzai (2/24/12 Tr. 132-190):

Hameed Karzai testified that he lives at 2911 Cabin Creek Drive, in Burtonsville, Maryland. Mr. Karzai addressed a number of issues. He first challenged Petitioners compliance with the provisions of Zoning Ordinance §59-G-1.21(a), arguing that the proposed tower would not be compatible. Mr. Karzai introduced photographs in Exhibit 84. Exhibit 84(a) shows that there are no sidewalks in his neighborhood. 2/24/12 Tr. 138. He noted that the above-ground utilities on Mr. Gibson's land are not 115 feet tall, and therefore are not that noticeable. 2/24/12 Tr. 141.

Mr. Karzai further testified that the tower will not be in harmony with the neighborhood and will create noise when it is being built, when it is serviced and if a generator has to be brought in. He stated that placing a 115 foot pole in a neighborhood with no above ground utilities in itself will alter the nature of this area. 2/24/12 Tr. 148. Mr. Karzai also fears for the safety of his children when truck drivers come through the neighborhood. He believes that more than 3 trips per month will be needed go service the tower.

Mr. Karzai also expressed a concern that the cell tower could spark a fire in the surrounding woods because it is an electrostatic device and it may fall. 2/24/12 Tr. 154-160. He asked whether T-Mobile is required to put up a bond to finance the removal of the tower, should they go out of business. 2/24/12 Tr. 161-162. Mr. Karzai cited the *Butler* case, arguing that it was similar to the

effect on Mr. Cole's property. 2/24/12 Tr. 163-169.

Mr. Karzai also introduced a survey indicating that proximity of a cell tower affected how people valued a home. 2/24/12 Tr. 169-172. He also sought to introduce an article from the International Agency for research on cancer, as it relates to electromagnetic fields (Exhibit 85(d)). The Hearing Examiner marked it as an exhibit but would not admit it into evidence because of the federal law which preempts the issue. 2/24/12 Tr. 173-175.

14. Stewart Saphier (2/24/12 Tr. 190-288):

Stewart Saphier testified that he lives at 2901 Friendlywood Way, in Burtonsville, Maryland. Based on his extensive background in doing research and in teaching its techniques (Exhibit 86), he was accepted as an expert in research procedures and techniques. 2/24/12 Tr. 191-198. Dr. Saphier noted that the zoning notice sign was down. [The Gibsons indicated it had just blown over and been run over. Mr. Donohue stated that it would be replaced.] 2/24/12 Tr. 198-200.

Dr. Saphier commented that the generator, if needed, would be noisy and that allowing any traffic to the site would endanger children. 2/24/12 Tr. 200-202. Dr. Saphier elected the color swatch marked "SW6089, grounded," if the cell tower is approved. 2/24/12 Tr. 204.

Dr. Saphier argued that this cell phone tower is different from others for a number of reasons – it is not near a main road; it is on residential property, and only one is literally on residential property like this, Mr. Gibson's farm. The others are on a school, on a water tower, on some other thing other than on the property. That makes it non-inherent. He believes that for property values it's magnified by being on a residential property near the residential houses, as opposed to on a school, for example. 2/24/12 Tr. 205-206. Dr. Saphier asked that a bond be required to ensure removal if the tower is approved, and he argued that neither the Board of Appeals nor the Hearing Examiner had the authority to rule on the easement issue. 2/24/12 Tr. 207-209.

Dr. Saphier further testified that the photograph taken by Petitioners from Cabin Creek and

Perrywood Drives, theoretically towards the red balloon in the January balloon test, was misdirected. Given Petitioners' affidavit challenging the allegation of misdirection, he argued that Petitioners cannot be trusted and their whole case should be dismissed. 2/24/12 Tr. 210-224. [The Hearing Examiner rejected this argument.]

Dr. Saphier argued that T-Mobile does not need the cell tower because they have cell phone coverage in the entire area and beyond and they could have co-located. Moreover, the tower will not be in harmony with the neighborhood, which currently has a sleek look. The monopole will be more than six times larger in diameter than the street lighting poles in the neighborhood. 2/24/12 Tr. 226-231.

Dr. Saphier attacked the methodology of Mr. Thorne's studies as not being statistically valid on many grounds, among them the tiny data sample (4 to 8 pairs), his failure to use randomly selected data, his intervention in the data-gathering process and his method of choosing pairs of houses to compare. According to Dr. Saphier, to have validity, the study would have to have about 1,000 data points, not 4 to 8. He noted that Mr. Thorne claimed he had perfect pairs that needed no adjusting, but then he adjusted them. 2/24/12 Tr. 234-266.

Dr. Saphier conceded that Mr. Thorne is an expert in real estate appraisals, and based on his background and experience, his opinions about the effects of nearby structures such as cell towers on residential housing prices is entitled to some weight, whether or not his formal studies have statistical validity. However, Dr. Saphier argued that Mr. Thorne's opinion is entitled to less weight than Mr. Reid's opinion because it is "tainted" by the fact that Mr. Thorne is being paid by T-Mobile for his testimony and he was paid by AT&T and Verizon to perform his studies. Mr. Reid, in contrast, was not a paid witness. 2/24/12 Tr. 267-270.

Dr. Saphier argued that the number of people who signed the petition and sent in cards (which he believes exceeds 140) indicate that the cell tower would negatively affect values in his

community, thus supporting the validity of Mr. Reid's opinion. 2/24/12 Tr. 270 -275.

Dr. Saphier also pointed to language in an article submitted by Petitioners theoretically in support of Mr. Thorne's position, which Dr. Saphier felt actually favor the opposition's take on the impact of cell towers on home values. 2/24/12 Tr. 276 -283. Dr. Saphier argued the Petitioners had not met their burden to show no negative effect on property values, while the opposition had proven a negative effect. 2/24/12 Tr. 284-285.

IV. FINDINGS AND CONCLUSIONS

A special exception is a zoning device that authorizes certain uses provided that pre-set legislative standards are met, that the use conforms to the applicable master plan, and that it is compatible with the existing neighborhood. Each special exception petition is evaluated in a site-specific context because a given special exception might be appropriate in some locations but not in others. The zoning statute establishes both general and specific standards for special exceptions, and the Petitioners have the burden of proof to show that the proposed use satisfies all applicable general and specific standards. Technical Staff concluded that Petitioners will have satisfied all the requirements to obtain the special exception, if they comply with the recommended conditions (Exhibit 58).

Weighing all the testimony and evidence of record under a "preponderance of the evidence" standard (Code §59-G-1.21(a)), the Hearing Examiner concludes that the instant petition meets the general and specific requirements for the proposed use, as long as Petitioners comply with the conditions set forth in Part V, below.

A. Standard for Evaluation

The standard for evaluation prescribed in Code § 59-G-1.2.1 requires consideration of the inherent and non-inherent adverse effects on nearby properties and the general neighborhood from

the proposed use at the proposed location. Inherent adverse effects are "the physical and operational characteristics necessarily associated with the particular use, regardless of its physical size or scale of operations." Code § 59-G-1.2.1. Inherent adverse effects, alone, are not a sufficient basis for denial of a special exception. Non-inherent adverse effects are "physical and operational characteristics not necessarily associated with the particular use, or adverse effects created by unusual characteristics of the site." *Id.* Non-inherent adverse effects, alone or in conjunction with inherent effects, are a sufficient basis to deny a special exception.

Technical Staff have identified seven characteristics to consider in analyzing inherent and non-inherent effects: size, scale, scope, light, noise, traffic and environment. For the instant case, analysis of inherent and non-inherent adverse effects must establish what physical and operational characteristics are necessarily associated with a telecommunications facility. Characteristics of the proposed telecommunications facility that are consistent with the "necessarily associated" characteristics of telecommunications facilities will be considered inherent adverse effects, while those characteristics of the proposed use that are not necessarily associated with telecommunications facilities, or that are created by unusual site conditions, will be considered non-inherent effects. The inherent and non-inherent effects thus identified must then be analyzed to determine whether these effects are acceptable or would create adverse impacts sufficient to result in denial.

Technical Staff listed the following inherent physical and operational characteristics necessarily associated with a telecommunications facility use (Exhibit 58, p. 11):

- Antennas installed on or within a support structure with a significant height;
- A technical equipment area that may or may not be enclosed by a fence;
- Visual impacts associated with the height of the support structure;
- Radio frequency emissions; and
- A small number of monthly vehicular trips for maintenance.

In addition, Staff found the following non-inherent characteristics of the site (Exhibit 58, p. 12):

- The location of the facility abutting parkland;

- The environmental constraints on the site, including the stream valley buffer;
- The location of the facility within a special protection area; and
- The access to the property via an easement across two other properties.

The Hearing Examiner agrees with Technical Staff's listing of inherent and non-inherent characteristics in this case, although he would combine the non-inherent characteristics into two factors:

- Location near parkland in a special protection area with environmental constraints; and
- Access limited to a challenged easement

The inherent effects of a typical monopole telecommunications facility would generally have only a visual impact on the neighborhood, since it would be noiseless, unmanned and require only occasional servicing. With the exception of the non-inherent factors cited above, that is the case here, and neither of those non-inherent circumstances will create adverse impacts on the neighbors that are not to be expected from having any cell tower in the area. The legal implications of the easement dispute have been discussed in Part II. B.1. of this report, and are handled by a recommended condition in Part V of this report. The environmental concerns relating to the special protection area have been resolved by the approval of a Water Quality Plan by the Planning Board (Exhibit 74) and conditions imposed by Technical Staff, such as moving the proposed site out of the stream valley buffer and elevating it onto a steel platform.

The evidence is that the proposed cell tower will be set back from the community well over the setback distances required in the Zoning Code, that it will be a stealth tower (with all antennas inside), that it will be painted a color to blend in with its surroundings, and that it will be screened from the community by extensive woodlands and intervening structures.

The opposition argues, in effect, that because the cell tower will be adjacent to their lovely, single-family, detached neighborhood, there are non-inherent adverse effects. The Hearing Examiner cannot accept this argument since the Zoning Ordinance expressly permits cell towers by

special exceptions both in the zone where the tower will be located (RE-1) and in the zone where the opposition members live (R-200). Zoning Ordinance §59-C-1.31(b).

For the reasons stated at some length in Part II. C. of this report, the Hearing Examiner finds that the proposed cell tower does not have any non-inherent adverse effects, or combination of inherent and non-inherent adverse effects, which would justify denial of this petition. Rather, appropriate conditions are recommended in Part V of this report.

B. General Conditions

The general standards for a special exception are found in Zoning Code §59-G-1.21(a). The Technical Staff report, the approval of the Transmission Facilities Coordinating Group, the exhibits in this case and the testimony at the hearing provide ample evidence that the general standards would be satisfied in this case.

Sec. 59-G-1.21. General conditions.

§5-G-1.21(a) *-A special exception may be granted when the Board, the Hearing Examiner, or the District Council, as the case may be, finds from a preponderance of the evidence of record that the proposed use:*

(1) Is a permissible special exception in the zone.

Conclusion: A telecommunications facility is a permissible special exception in the RE-1 Zone, pursuant to Code § 59-C-1.31(b).

(2) *Complies with the standards and requirements set forth for the use in Division 59-G-2. The fact that a proposed use complies with all specific standards and requirements to grant a special exception does not create a presumption that the use is compatible with nearby properties and, in itself, is not sufficient to require a special exception to be granted.*

Conclusion: The proposed use complies with the specific standards set forth in § 59-G-2.58 for a telecommunications facility as outlined in Part IV. C, below.

(3) *Will be consistent with the general plan for the physical development of the District, including any master plan adopted by the Commission. Any decision to grant or deny special exception must be consistent with any recommendation in a master plan regarding the appropriateness of a special exception at a particular location. If the Planning Board or the Board's technical staff in its report on a special exception concludes that granting a particular special exception at a particular location would be inconsistent with the land use objectives of the applicable master plan, a decision to grant the special exception must include specific findings as to master plan consistency.*

Conclusion: Petitioners' property is located in the area subject to the 1997 Fairland Master Plan. For the reasons set forth in Part II.D. of this report, the Hearing Examiner finds that the planned use is not inconsistent with the goals and objectives of the applicable Master Plan.

(4) *Will be in harmony with the general character of the neighborhood considering population density, design, scale and bulk of any proposed new structures, intensity and character of activity, traffic and parking conditions, and number of similar uses.*

Conclusion: Technical Staff found that "The intensity and character of activity, traffic, and parking will be in harmony with the neighborhood." Exhibit 58, p. 13. The proposed installation will be minimally visible from the adjacent community due to the large setbacks and buffers, and its construction as a concealment pole. There will also be no significant impact on traffic or parking. The proposed use is a low intensity use, only requiring on-site personnel for emergency repairs and regularly scheduled maintenance visits about once a month for 30 to 45 minutes.

Based on these facts and the other evidence of record, the Hearing Examiner concludes, as did Technical Staff, that the proposed use will be in harmony with the general character of the neighborhood.

(5) *Will not be detrimental to the use, peaceful enjoyment, economic value or development of surrounding properties or the general neighborhood at the subject site, irrespective of any adverse effects the use might have if established elsewhere in the zone.*

Conclusion: Technical Staff found the telecommunications facility will not be detrimental to the use, peaceful enjoyment, economic value or development of surrounding properties or the general neighborhood. Exhibit 58, p. 13. The Hearing Examiner agrees for all the reasons stated immediately above, and those discussed in Part II.C. of this report. Therefore, the Hearing Examiner finds that the telecommunications facility will not be detrimental to the use, peaceful enjoyment, economic value or development of surrounding properties or the general neighborhood at the subject site.

(6) *Will cause no objectionable noise, vibrations, fumes, odors, dust, illumination, glare, or physical activity at the subject site, irrespective of any adverse effects the use might have if established elsewhere in the zone.*

Conclusion: The tower will have no lights, and the equipment building will not be illuminated at night except when night-time servicing is required. Technical Staff found that the special exception would cause no objectionable noise, vibrations, fumes, odors, dust, illumination, glare or physical activity at the subject site. Exhibit 58, p. 14. As discussed in Part II.C. of this report, the weight of the evidence supports the conclusion that the telecommunications facility will cause no objectionable noise, vibrations, fumes, odors, dust, illumination, glare, or physical activity, and the Hearing Examiner so finds.

(7) *Will not, when evaluated in conjunction with existing and approved special exceptions in any neighboring one-family residential area, increase the number, intensity, or scope of special exception uses sufficiently to affect the area adversely or alter the predominantly residential nature of the area. Special exception uses that are consistent with the recommendations of a master or sector plan do not alter the nature of an area.*

Conclusion: According to Technical Staff, there are two special exceptions that are approved in the neighborhood, a child care facility and an accessory apartment. Staff found that the proposed use does not generate additional traffic, and will have a minimal impact. Staff concluded: "The proposed use does not adversely affect the neighborhood, or alter the predominantly residential nature of the area or parkland." Exhibit 58, p. 14. The Hearing Examiner also notes that the proposed use is consistent with the Master Plan. Based on all these factors, the Hearing Examiner finds that this section is satisfied.

(8) *Will not adversely affect the health, safety, security, morals or general welfare of residents, visitors or workers in the area at the subject site, irrespective of any adverse effects the use might have if established elsewhere in the zone.*

Conclusion: The evidence supports the conclusion that the proposed use would not adversely affect the health, safety, security, morals or general welfare of residents, visitors or workers in the area at the subject site. Moreover, the federal Telecommunications Act of 1996, 47 USC §332(c)(7)(B)(iv), provides that:

> *No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the [Federal Communications] Commission's regulations concerning such emissions.*

Petitioners' radio frequency (RF) expert, Curtis Jews, testified that if this site is approved, T-Mobile commits to complying with FCC requirements regarding radio frequency emissions. 1/20/12 Tr. 249. Matthew Butcher, a licensed professional engineer, identified the Site Compliance Report (Exhibit 62) prepared by his company, which indicates that this site will comply with FCC RF regulations. Following FCC standards, he found that the proposed cell tower would be well within

RF levels permitted by FCC RF regulations, as indicated in the Site Compliance Report (Exhibit 62). Mr. Butcher also studied the projected RF levels at nearby homes and found that levels would be far below permitted standards, even if there were a collocated service provider. 1/20/12 Tr. 182-190.

Petitioners will also be required to comply with all applicable hazmat regulations governing the site. The Hearing Examiner therefore concludes that the proposed telecommunications facility will not adversely affect the health, safety, security, morals or general welfare of residents, visitors or workers in the area.

(9) Will be served by adequate public services and facilities including schools, police and fire protection, water, sanitary sewer, public roads, storm drainage and other public facilities**.**

Conclusion: The evidence supports the conclusion that the proposed special exception would be adequately served by the specified public services and facilities, to the extent they are needed for this type of use.

(A) *If the special exception use requires approval of a preliminary plan of subdivision, the Planning Board must determine the adequacy of public facilities in its subdivision review. In that case, approval of a preliminary plan of subdivision must be a condition of the special exception.*

(B) *If the special exception:*
(i) does not require approval of a new preliminary plan of subdivision; and
(ii) the determination of adequate public facilities for the site is not currently valid for an impact that is the same as or greater than the special exception's impact;
then the Board of Appeals or the Hearing Examiner must determine the adequacy of public facilities when it considers the special exception application. The Board of Appeals or the Hearing Examiner must consider whether the available public facilities and services will be adequate to serve the proposed development under the Growth Policy standards in effect when the application was submitted.

Conclusion: The special exception sought in this case would not require approval of a preliminary plan of subdivision. Exhibit 58, p. 6. Therefore, the Board must consider whether the available public facilities and services will be adequate to serve the proposed development under the applicable Growth Policy standards. These standards include Local Area Transportation Review (LATR) and Policy Area Mobility Review (PAMR). Technical Staff concluded that the proposed use would add no additional trips during the peak-hour weekday periods. Thus, the requirements of the LATR and PAMR are satisfied without a traffic study. By its nature, the site requires no school, water or sewer services. Technical Staff concluded, as does the Hearing Examiner, that the proposed facility will be adequately served by public facilities. Exhibit 58, p. 15.

(C) *With regard to public roads, the Board or the Hearing Examiner must further find that the proposed development will not reduce the safety of vehicular or pedestrian traffic.*

Conclusion: Based on the evidence that this use will require no more than 3 to 6 vehicle visits per month if three users share the pole (Exhibit 58, p. 15), Technical Staff found that the proposal will not reduce the safety of vehicular or pedestrian traffic. The Hearing Examiner so finds.

C. Specific Standards

The testimony and the exhibits of record, as well as the Technical Staff Report (Exhibit 58) and the conclusion of the Transmission Facilities Coordinating Group (Exhibit 7), provide sufficient evidence that the specific standards required by Section 59-G-2.58 are satisfied in this case, as described below.

Sec. 59-G-2.58. Telecommunication facility

(a) Any telecommunication facility must satisfy the following standards:

(1) A support structure must be set back from the property line as follows:

A. In agricultural and residential zones, a distance of one foot from the property line for every foot of height of the support structure.

B. In commercial and industrial zones, a distance of one-half foot from property line for every foot of height of the support structure from a property line separating the subject site from commercial or industrial zoned properties, and one foot for every foot of height of the support structure from residential or agricultural zoned properties.

C. The setback from a property line is measured from the base of the support structure to the perimeter property line.

D. The Board of Appeals may reduce the setback requirement to not less than the building setback of the applicable zone if the applicant requests a reduction and evidence indicates that a support structure can be located on the property in a less visually obtrusive location after considering the height of the structure, topography, existing vegetation, adjoining and nearby residential properties, if any, and visibility from the street.

Conclusion: Zoning Ordinance §59-G-2.58(a)(1)(A) requires, in a residential or agricultural zone, that the cell tower be set back a distance of one foot from the property line for every foot of height of the support structure. Given the total height of 115 feet for the cell tower, a 115-foot setback from each property line is required. This setback is easily met on all sides: it is 570.7 feet from the eastern (front) property line; 158 feet from the southwestern (rear) property line; 230.7 feet from the northwestern (side) property line, and 140.4 feet from the southeastern (side) property line.

(2) A support structure must be set back from any off-site dwelling as follows:

A. In agricultural and residential zones, a distance of 300 feet.

B. In all other zones, one foot for every foot in height.

C. The setback is measured from the base of the support structure to the base of the nearest off-site dwelling.

D. The Board of Appeals may reduce the setback requirement in the agricultural an[sic] residential zones to a distance of one foot from an off-site residential building for every foot of height of the support structure if the applicant requests a reduction and evidence indicates that a support

structure can be located in a less visually obtrusive location after considering the height of the structure, topography, existing vegetation, adjoining and nearby residential properties, and visibility from the street.

Conclusion: The subject site is in a residential zone, so the 300-foot setback requirement applies. As shown in the Site Plan (Exhibit 42(c)), the closest off-site dwelling is 377.5 feet to the southeast, and that owner has not opposed this petition. (The closest home of an opponent is 703.7 feet away.) Thus, the proposal is in compliance with this requirement.

(3) The support structure and antenna must not exceed 155 feet in height, unless it can be demonstrated that additional height up to 199 feet is needed for service, collocation, or public safety communication purposes. At the completion of construction, before the support structure may be used to transmit any signal, and before the final inspection, pursuant to the building permit, the applicant must certify to the Department of Permitting Services that the height and location of the support structure is in conformance with the height and location of the support structure, as authorized in the building permit.

Conclusion: The support structure will be 115 feet in height, and as shown in Exhibit 42(e), the top antenna will be centered internally at about the 112-foot level. The antenna will reach up to an internal height of approximately 115 feet, the top of the tower. Thus, the proposal meets the requirement of not exceeding 155 feet. A condition has been proposed in Part V of this report to ensure compliance with the certification requirement.

(4) The support structure must be sited to minimize its visual impact. The Board may require the support structure to be less visually obtrusive by use of screening, coloring, stealth design, or other visual mitigation options, after considering the height of the structure, topography, existing vegetation and environmental features, and adjoining and nearby residential properties. The support structure and any related equipment buildings or cabinets must be surrounded by landscaping or other screening options that provide a screen of at least 6 feet in height.

Conclusion: As discussed in Part II.C of this report, the proposal conforms to this requirement. It is sited to the rear of the subject property, far back from the neighboring homes, and will be screened by forest. The compound will be surrounded by an 8-foot tall, board-on-board fence, and the tower will be painted brown to blend in with its surroundings.

(5) The property owner must be an applicant for the special exception for each support structure. A modification of a telecommunications facility special exception is not required for a change to any use within the special exception area not directly related to the special exception grant. A support structure must be constructed to hold no less than 3 telecommunications carriers. The Board may approve a support structure holding less than 3 telecommunications carriers if:

(A) requested by the applicant and a determination is made that collocation at the site is not essential to the public interest; and

(B) the Board decides that construction of a lower support structure with fewer telecommunications carriers will promote community compatibility. The equipment compound must have sufficient area to accommodate equipment sheds or cabinets associated with the telecommunications facility for all the carriers.

Conclusion: The property owners, Ralph and Margaret Gibson are co-Petitioners. The facility will be capable of supporting three telecommunications carriers. Exhibit 42.

(6) No signs or illumination are permitted on the antennas or support structure unless required by the Federal Communications Commission, the Federal Aviation Administration, or the County.

Conclusion: No signs or illumination are proposed, except the two-square-foot sign required by subsection (8), below, and a light in the equipment shelters to be used if emergency repairs are required at night.

(7) Every freestanding support structure must be removed at the cost of the owner of the telecommunications facility when the telecommunications facility is no longer in use by any telecommunications carrier for more than 12 months.

Conclusion: A condition is recommended in Part V of this report requiring removal by Petitioners of the facility and all impervious surfaces constructed as part of this approval, if the facility is not used for more than one year.

(8) All support structures must be identified by a sign no larger than 2 square feet affixed to the support structure or any equipment building. The sign must identify the owner and the maintenance service provider of the support structure or any attached antenna and provide the telephone number of a person to contact regarding the structure. The sign must be updated and the Board of Appeals notified within 10 days of any change in ownership.

Conclusion: The specified sign is required by a condition recommended in Part V of this report.

(9) Outdoor storage of equipment or other items is prohibited.

Conclusion: No outdoor storage of equipment is proposed. Equipment must be enclosed in a board-on-board fence, as described elsewhere in this report and recommended by a condition in Part V of this report.

(10) Each owner of the telecommunications facility is responsible for maintaining the telecommunications facility, in a safe condition.

Conclusion: A condition is recommended in Part V of this report requiring the owner of the facility to maintain the facility in a safe condition.

(11) The applicants for the special exception must file with the Board of Appeals a recommendation from the Transmission Facility Coordinating Group regarding the telecommunications facility. The recommendation must be no more than 90 days old, except that a recommendation issued within one year before June 22, 2010, must be accepted for one year from the date of issuance. The recommendation of the Transmission Facility Coordinating Group must be submitted to the Board at least 5 days before the date set for the public hearing.

Conclusion: A recommendation of approval from the TFCG, dated May 6, 2011, was filed herein as Exhibit 7. It was less than 90 days old when the petition was filed on June 16, 2011.

(12) The Board must make a separate, independent finding as to need and location of the facility. The applicant must submit evidence sufficient to demonstrate the need for the proposed facility.

Conclusion: As noted, both the Transmission Facility Coordinating Group and the Technical Staff recommended approval. The Hearing Examiner recommends that the Board make the

finding that there is a need for the proposed telecommunications facility and that it will be appropriately located, based on the evidence set forth in Part II.E. of this report.

(b) Any telecommunications facility special exception application for which a public hearing was held before November 18, 2002 must be decided based on the standards in effect when the application was filed.

Conclusion: Not applicable.

(c) Any telecommunications facility constructed as of November 18, 2002 may continue as a conforming use.

Conclusion: Not applicable.

D. Additional Applicable Standards

Section 59-G-1.23. General development standards.

(a) Development Standards. Special exceptions are subject to the development standards of the applicable zone where the special exception is located, except when the standard is specified in Section G-1.23 or in Section G-2.

Conclusion: This petition falls under the exception because Zoning Ordinance §59-G-2.58 specifies the development standards for telecommunications facilities. As discussed above, the proposed use meets those standards.

(b) Parking requirements. Special exceptions are subject to all relevant requirements of Article 59-E.

Conclusion: Technical Staff did not recommend any parking for the proposed facility because it will ordinarily require no more than one service visit per month. Staff found that the existing gravel area is sufficient for the occasional parking of a maintenance vehicle. Exhibit 58, p. 16.

(c) Minimum frontage. In the following special exceptions the Board may waive the requirement for a minimum frontage at the street

line if the Board finds that the facilities for ingress and egress of vehicular traffic are adequate to meet the requirements of section 59-G-1.21:

* * *

(5) Public utility buildings and public utility structures, including radio and T.V. broadcasting stations and telecommunication facilities.

Conclusion: Petitioner has not requested a waiver regarding frontage, presumably because the subject site is located on a large property, and Technical Staff did not indicate that a waiver was required. Frontage was originally on Miles Road, according to Technical Staff (Exhibit 58, p. 7), but that access has been abandoned and no longer connects to the subject site. Assuming it still counts as frontage, Staff indicates a frontage of 390 feet. Exhibit 58, p. 16. Since the Hearing Examiner has recommended a condition which would require Petitioners to have legal access via Cabin Creek Drive before they can implement this special exception, and the easement access via Cabin Creek Drive would be adequate for this use, if it is determined to be legal access, there is no reason for the Board to address a frontage waiver issue. Moreover, Petitioners have not requested a waiver regarding frontage, so the application of this provision is moot.

(d) Forest conservation. If a special exception is subject to Chapter 22A, the Board must consider the preliminary forest conservation plan required by that Chapter when approving the special exception application and must not approve a special exception that conflicts with the preliminary forest conservation plan.

Conclusion: According Technical Staff, the property is exempt from submitting a forest conservation plan (Exhibit 6).

(e) Water quality plan. If a special exception, approved by the Board, is inconsistent with an approved preliminary water quality plan, the applicant, before engaging in any land disturbance activities, must submit and secure approval of a revised water quality plan that the Planning Board and department find is consistent with the approved special exception. Any revised water quality plan must be filed as part of

an application for the next development authorization review to be considered by the Planning Board, unless the Planning Department and the department find that the required revisions can be evaluated as part of the final water quality plan review.

Conclusion: As previously discussed, this site is in an SPA, and a water quality plan was approved for this site by the Planning Board on February 2, 2012 (Exhibit 75).

(f) Signs. The display of a sign must comply with Article 59-F.

Conclusion: As indicated earlier in this report, the only sign on the facility will be the two-square-foot sign required by the special exception.

(g) Building compatibility in residential zones. Any structure that is constructed, reconstructed or altered under a special exception in a residential zone must be well related to the surrounding area in its siting, landscaping, scale, bulk, height, materials, and textures, and must have a residential appearance where appropriate. Large building elevations must be divided into distinct planes by wall offsets or architectural articulation to achieve compatible scale and massing.

Conclusion: The subject cell tower will be in a residential zone, as permitted by Zoning Ordinance §59-C-1.31(b), but a cell tower cannot possibly have a "residential appearance," and therefore it is not "appropriate" to require it in this case. Nevertheless, the proposed monopole is designed as a "stealth tower" and will be painted brown to maximize compatibility with the area.

(h) Lighting in residential zones. All outdoor lighting must be located, shielded, landscaped, or otherwise buffered so that no direct light intrudes into an adjacent residential property. The following lighting standards must be met unless the Board requires different standards for a recreational facility or to improve public safety:

(1) Luminaires must incorporate a glare and spill light control device to minimize glare and light trespass.

(2) Lighting levels along the side and rear lot lines must not exceed 0.1 foot candles.

Conclusion: As previously stated, there will be no lighting on the cell tower, and the only lights will be small bulbs inside the equipment cabinets for emergency night repairs.

Sec. 59-C-18.15. Environmental Overlay Zone for the Upper Paint Branch Special Protection Area.

59-C-18.151. Purpose.

It is the purpose of this overlay zone to:

(a) Protect the water quality and quantity of the Upper Paint Branch Watershed and its tributaries, as well as the biodiversity situated in these resources. The resources consist of the headwater tributary areas-Good Hope, Gum Springs, Right Fork and Left Fork-and the segment of the main stem of the Paint Branch north of Fairland Road.

(b) Regulate the amount and location of impervious surfaces in order to maintain levels of groundwater, control erosion, and allow the ground to filter water naturally and control temperature.

(c) Regulate land uses that could adversely affect this very high quality, cold water stream system resource that is afforded the highest order of resource protection (Use III Waters) under the State of Maryland's watershed classification system.

59-C-18.152. Regulations.

(a) Development standards. The development standards of the underlying zone apply except as modified by the requirements of this overlay zone.

(1) Restriction on Impervious Surface. Any development must not result in more than 8 percent impervious surface of the total area under application for development.

(A) Any impervious surface lawfully existing pursuant to a building permit issued before July 1, 2007 that exceeds the 8 percent restriction, may continue or be reconstructed under the development standards in effect when the building permit was issued.

(B) Any impervious surface which results from construction pursuant to a building permit may be constructed or reconstructed under the development standards in effect on July 31, 2007 if:

(i) the building permit application was pending before the Department of Permitting Services on July 31, 2007, or

(ii) the building permit is for a lot in a subdivision approved before July 31, 2007, if the subdivision was approved for fewer than 20 housing units,

(C) Any expansion of an impervious surface above the 8 percent restriction is not allowed, except in accordance with the waiver provisions of Subsection (a)(2) or as provided under Subsection (a)(1)(D).

(D) Any impervious surface resulting from an addition or accessory structure to an existing one-family residential dwelling must not be counted against any calculation of the 8 percent impervious surface restriction.

Conclusion: As discussed in Part II. D. of this report, the subject site will comply with the 8% imperviousness restriction.

(2) Waiver. The Director may grant a waiver from the 8 percent impervious surface restriction subject to the following standards and procedures:

(A) Written Request. An applicant may apply for a waiver from the 8 percent impervious surface restriction if enforcement would result in undue hardship to the applicant. The request must be in writing to the Director.

(B) Review and action. The Director may grant a waiver from the 8 percent impervious surface restriction if the applicant shows by clear and convincing evidence that:

(i) the 8 percent impervious limitation would result in undue hardship to the applicant because of events or circumstances not caused or facilitated by the applicant;

(ii) the applicant complies with all applicable federal, state, and county water quality standards; and

(iii) the relief sought is the minimum needed to prevent the hardship and the Director must consider alternative techniques.

Conclusion: Inapplicable; no waiver is requested.

(b) Land use. All permitted or special exception uses allowed in the underlying zones are allowed in the overlay zone except that:

(1) The following special exception uses are allowed subject to the requirements of Article 59-G and specified environmental protection requirements:

Landscape contractor.[1]
Retail nursery or garden center.[1]
Wholesale nursery or greenhouse.[1]
Golf courses and country clubs.[2]
Golf driving range.[2]
Riding stables.[3]

(2) The uses in Section (1), if validly existing on July 1, 1997, may be continued under the regulations in effect at the time the use was established. Any expansion requires compliance with the provisions of this overlay zone.

(3) The following uses are prohibited in the overlay zone:

Airstrips, in common open space.
Helistops.
Pipelines, aboveground.[4]
Pipelines, underground.[4]
Automobile filling stations.
Automobile fluid maintenance stations.
Automobile repair and services.

Conclusion: The subject special exception is not one of the special exceptions prohibited herein.

Based on the testimony and evidence of record, I conclude that the telecommunications facility use proposed by Petitioners, as conditioned below, meets the specific and general requirements for the special exception, and that the Petition should be granted, subject to the conditions set forth in Part V of this report.

V. RECOMMENDATION

Based on the foregoing analysis, I recommend that Petition No. S-2816 for a special exception to construct and operate a telecommunications facility, including a 115-foot tall "concealment" monopole, and related equipment, at 2815 Cabin Creek Drive, in Burtonsville, Maryland, be GRANTED, with the following conditions:

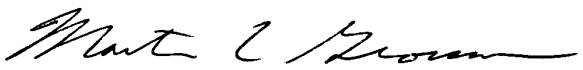
1. The Petitioners shall be bound by all of the exhibits of record, and by the testimony of their witnesses and the representations of counsel identified in this report.
2. At the completion of construction, before the support structure may be used to transmit any signal, and before the final inspection pursuant to the building permit, the Petitioners must certify to the Department of Permitting Services that the height and location of the support structure is in conformance with the height and location of the support structure as authorized in the building permit.
3. The Petitioners must paint the concealment pole brown, consistent with the color swatch "SW6089-Grounded," attached to Exhibit 71(d)), so that it will better blend in with its surroundings.
4. The Petitioners must maintain imperviousness below eight percent and protect the on-site environmental buffers, in accordance with the approved Water Quality Plan (Exhibit 75(a)).
5. Telecommunications service providers using this site must have legal access to the site via Cabin Creek Drive before this special exception may be implemented. No access will be permitted from Miles Road for environmental reasons. While the current easement (Exhibit 33(a)) may appear to grant legal access on its face, the Board of Appeals does not decide the legal dispute between the parties regarding the enforceability of a private land use agreement (*i.e.*, the challenged easement).

6. The telecommunication facility must display a contact information sign, no larger than two square feet, affixed to the outside of the equipment enclosure. This sign must identify the owner and the maintenance service provider and provide the telephone number of a person to contact regarding the installation. The sign must be updated and the Board of Appeals notified within 10 days of any change in ownership.
7. There must be no antenna lights or stroboscopic lights unless required by the Federal Communications Commission, the Federal Aviation Administration, or the County.
8. There must be no outdoor storage of equipment, except equipment specified in the Site Plan, and all equipment must be enclosed in the 8-foot tall compound fence.
9. Each owner of the telecommunications facility is responsible for maintaining the facility in a safe condition.
10. The facility shall be available for co-location of up to three carriers; however, before any co-location occurs, Petitioners must file an administrative modification request so that the level of potential imposition on the community can be reviewed and any appropriate conditions imposed. If the administrative modification request is granted, Zoning Ordinance §59-G-1.3(c)(1) provides for notification to all parties entitled to notice at the time of the original special exception filing, as well as current adjoining and confronting property owners, giving interested parties an opportunity to request a hearing.
11. The telecommunications facility and all impervious surfaces constructed as part of this approval must be removed at the cost of the owner of the telecommunications facility when the facility is no longer in use by any telecommunications carrier for more than 12 months.
12. Petitioners must obtain a Hazmat Use Permit for the subject site before commencing operations.
13. Petitioners must obtain and satisfy the requirements of all licenses and permits, including but not limited to building permits and use and occupancy permits, necessary to occupy the special

exception premises and operate the special exception as granted herein. Petitioners shall at all times ensure that the special exception use and the entire premises comply with all applicable codes (including but not limited to building, life safety and handicapped accessibility requirements), regulations, directives and other governmental requirements.

Dated: April 13, 2012

Respectfully submitted,



Martin L. Grossman
Hearing Examiner