



City of Harrisonburg, Virginia Planning Commission Meeting

September 11, 2013

7:00 p.m.

Regular Meeting
409 South Main Street

- 1) **Call to order, roll call, determination of quorum, and review/approval of minutes from the August 14, 2013 regular meeting.**
- 2) **New Business**
Considering Amendments for Telecommunications Regulations
- 3) **Unfinished Business**
- 4) **Public Input**
- 5) **Report of secretary and committees**
Proactive Zoning
- 6) **Other Matters**
- 7) **Adjournment**

Staff will be available Monday October 7, 2013 at 4:30 p.m. for those interested in going on a field trip to view the sites for the October 9, 2013 agenda.

MINUTES OF HARRISONBURG PLANNING COMMISSION

August 14, 2013

The Harrisonburg Planning Commission held its regular meeting on Wednesday, August 14, 2013 at 7:00 p.m. in the City Council Chambers, 409 South Main Street.

Members present: Richard Baugh, Gil Colman, MuAwia Da'Mes, Judith Dilts, Deb Fitzgerald, Jefferson Heatwole, and Henry Way.

Members absent: None

Also present: Stacy Turner, Director of Planning and Community Development; Adam Fletcher, City Planner; Alison Banks, Senior Planner and Secretary.

Chair Fitzgerald called the meeting to order and determined there was a quorum with all members in attendance. She then asked if there were any corrections, comments or a motion regarding the minutes from the July 10, 2013 Planning Commission meeting.

Mr. Way moved to approve the minutes as presented from the July 10, 2013 regular Planning Commission meeting.

Mr. Heatwole seconded the motion.

Dr. Dilts abstained from voting because she was not in attendance at the July 10, 2013 meeting.

All members voted in favor of approving the July 2013 minutes (6-0).

New Business

1,557 Square Foot Area Street Closing Kin Group, LLC

Chair Fitzgerald read the request and asked staff to review.

Mr. Fletcher said the following land uses are located on and adjacent to the property:

Site: Undeveloped Collicello Street right-of-way, adjacent to property zoned R-7

North: Undeveloped Collicello Street and undeveloped 6th Street recently approved for closure and to become zoned R-7 when purchased by the applicant

East: Undeveloped property, zoned R-7

South: Undeveloped Collicello Street

West: Undeveloped Collicello Street and undeveloped property, zoned R-7

Kin Group, LLC is requesting to close a 1,557 +/- square foot portion of undeveloped Collicello Street right-of-way (ROW) located in the block between 5th Street and undeveloped 6th Street. The applicant owns all adjoining properties, which are now zoned R-7, Medium Density Mixed Residential Planned Community District. If closed, the undeveloped ROW would become part of the R-7 master plan.

The applicant is the same entity that has been to Planning Commission and City Council on three separate occasions to make way for an R-7 development. In June 2012, the applicant requested to close a 3,000 square foot undeveloped portion of a public alley located between 5th Street and undeveloped 6th Street. Then, in February of this year, the applicant requested to close over 33,000 square feet of undeveloped portions of Collicello Street, undeveloped 6th Street, and undeveloped

ROW near Edom Road. Finally, in June, the applicant requested to rezone almost three acres of property, which included the undeveloped public ROW areas as described above, to the R-7 district. Planning Commission recommended in favor of, and City Council approved, all three requests.

During the rezoning request process, it was explained that Kin Group, LLC would return to Planning Commission and City Council to request closure of this 1,557 square foot undeveloped ROW as this area is planned to contain a significant retaining wall, which is important to the road design. The subject area is also the location of a portion of the shared use path that would connect bicyclists and pedestrians from Collicello Street to Edom Road and vice versa.

As has been known throughout the planning of this development, Columbia Gas has a six inch pipeline located in the Collicello Street ROW. This gas line runs through portions of the subject area herein described. The City will retain an easement for Columbia Gas prior to closing the ROW and it will be the responsibility of the applicant to accurately identify the location of the infrastructure and to work with Columbia Gas to identify on a plat where easements shall be located. The applicant has been aware of this situation for some time and has already been communicating with Columbia Gas regarding this matter.

There are no public water or sewer lines within the subject areas, the areas are not used for trash pick-up, and the City is not interested in maintaining ownership of this section of the ROW.

With the easement as described, staff recommends closing this portion of undeveloped Collicello Street.

Chair Fitzgerald asked if there were any questions for staff. Hearing none, she said this is not a public hearing; but, if the applicant or the applicant's representative would like to speak they may do so at this time. Seeing none, Chair Fitzgerald asked for discussion or a motion on the request.

Dr. Dilts moved to approve the street closing as requested by Collicello North.

Mr. Colman seconded the motion.

Chair Fitzgerald called for a voice vote on the motion.

All voted in favor (7-0) of the motion to recommend approval of the street closing.

Chair Fitzgerald said this item goes before City Council on September 10, 2013.

Alley Closing – Undeveloped Oak Drive (Between 22-E-9 & 22-F-8)

Chair Fitzgerald read the request and asked staff to review.

Mr. Fletcher said the following land uses are located on and adjacent to the property:

- Site: Undeveloped Oak Drive right-of-way, adjacent to property zoned R-1
- North: Across Circle Drive, the continuation of undeveloped Oak Drive and single family homes, zoned R-1
- East: Undeveloped parcel, zoned R-1
- South: City of Harrisonburg's Rocktown Trails at Hillendale Park, zoned R-1
- West: Single family home, zoned R-1

The City is proposing to close a 9,386 +/- square foot portion of Oak Drive—an undeveloped public street right-of-way (ROW) located off of Circle Drive. Oak Drive was platted in Rockingham

County as Conrad's Addition as Part of Sunset Heights and did not become part of the City until the 1983 annexation. No part of Oak Drive has ever been constructed. The section to be closed is 50-foot wide extending approximately 190-feet in length south from Circle Drive toward the City's Rocktown Trails at Hillandale Park property.

Knowing the City has never had plans to construct this section of Oak Drive, the Bicycle and Pedestrian Subcommittee—a subcommittee of the Harrisonburg Transportation Safety Advisory Commission—has discussed for sometime using this area as a possible access point into Rocktown Trails. After adjoining property owners expressed concerns about the use of this section as an officially recognized access to the trail system, and after Bicycle and Pedestrian Subcommittee members evaluated the site and determined a nearby location to be a better spot to create an access point, the City made an agreement with adjacent property owners to close this ROW and establish a new, smaller ROW more than 50 feet to the east. The new location will be more suitable for trail users while at the same time being sensitive to the privacy of the adjacent property owners. The new ROW would be 20-feet in width stretching about the same distance and would be constructed as a shared use path for individuals to access the mountain biking trails from this neighborhood and vice versa.

There are no public water or sewer lines within the Oak Drive ROW, it is not used for trash pick-up, and there are no private utilities within the undeveloped street ROW; therefore, no easements need to be retained.

Staff recommends closing the 9,386 square foot portion of undeveloped Oak Drive.

Chair Fitzgerald asked if there were any questions for staff.

Mr. Way asked if the City had support of both adjoining property owners.

Mr. Fletcher replied yes.

Chair Fitzgerald asked if there were any further questions. Hearing none, she said this is not a public hearing, but if there is anyone present who would like to speak regarding this request you may do so now. Seeing none, she asked if there was discussion or a motion on the matter.

Mr. Way said he likes the symmetry of this, we have been closing some alleys recently and now we are opening a new right-of-way for public use. I feel this is a nice effort on behalf of all parties. I move to recommend approval of the closing.

Mr. Da'Mes seconded the motion and said I know that in previous years this neighborhood was a bit reluctant with bike paths. I am glad to see that staff and the community have been able to work together to get this connectivity.

Chair Fitzgerald called for a voice vote on the motion.

All voted in favor (7-0) of the motion to recommend approval of the street closing.

Chair Fitzgerald said this item will be heard at City Council on September 10, 2013.

Unfinished Business

None.

Public Input

None.

Report of secretary and committees

Mr. Fletcher said in July City forces visited the Long Avenue/Norwood Street area of the City for proactive zoning. Eleven violations, consisting of tall grass and weeds, inoperable vehicles, and discarded materials, were found. This month the inspectors will be in the Greystone Street area of the City for inspections.

Mr. Baugh said at City Council last night we approved two items from Planning Commission; the ordinance amendment regarding through lots and the Daly property preliminary plat with variances. The Chicago Avenue commercial development, Family Dollar, was tabled by the applicant. They actually requested that it be deferred to the September 10th Council meeting.

I also attended the Rockingham County Planning Commission meeting and they had one matter on the agenda, a radio tower issue which would require a rezoning and then a special use permit before the County. The County does seem very interested in what we are doing regarding our telecommunications.

Other Matters

Mr. Fletcher said provided before you this evening is the completed research regarding the telecommunications regulations. It is a rather comprehensive document; covering many different things. In the packet we have provided information on the basics, as to “what is telecommunications and how are they regulated.” There is information on what other localities are doing. As well, we included information on some of the new technology that is being deployed on sites and what things might be changing within the industry.

This information has been sent to industry representatives and we have received most all of the communication back from them, which has all been very positive so far. These comments will be comprehensively put together to share with you, so that you can review everything together and we can begin the discussion on this next month. Lastly, we have identified the inventory of telecommunications equipment and their locations. In the correspondence with the industry representatives I asked them to confirm their equipment locations within the City.

There is no need to discuss this tonight; I just wanted to get it out to you because it is a lot to review. This is online for the public, so you may get some feedback from the public as well.

Chair Fitzgerald asked if there would be a presentation on this at the next meeting.

Mr. Fletcher said we will try to figure out over the next month how we want to present the information. There may be a condensed presentation in more layman’s terms.

Chair Fitzgerald asked if there was any further discussion.

Mr. Way said he has a couple of things he would like to bring up. The Downtown Streetscape Plan had a presentation last week, and I would like to encourage any of you to go on line and have a look at it and perhaps give some input.

The other question I have is about possible zoning violations and what is the process someone needs to take to have it addressed.

Mrs. Turner described the process that staff would take regarding complaints and said the concerned neighbor should contact Community Development with as much information as possible regarding the violation and that staff would look into it.

Mr. Way said he does have another question; this one regards the Municipal Building situation. How much would Planning Commission be involved in that; it seems to be something that comes under our review. I was just wondering what and how that process would be.

Mr. Baugh said this is an issue that has gone from being not on the radar at all, to very intensely debated, within a two week period. I can say that of the discussions, while there have been a number of suggestions as to what Council should do, I cannot say that Planning Commission has particularly come up; however, I can see where this has some potential for Planning Commission involvement.

Mr. Way said I do not want to push anything; I was just interested because under the City Code it says public buildings come through the Planning Commission.

Mr. Baugh said that is definitely something for us to keep in mind.

Mr. Fletcher said public buildings come to the Planning Commission with respect to the CIP. Traditionally, design, layout, and site development have not come to Planning Commission. For example, the Harrisonburg Department of Transportation Building, which is currently under construction, was not reviewed by Planning Commission.

Mr. Baugh said that is one disconnect that is happening within the community. I think a lot of people are looking at this and perhaps even comparing it with the Downtown Streetscape Plan presentation. They are saying I went to the Downtown Streetscape meeting and it was really good, and the process is valuable, why are you not using the same process for the Municipal Building. The Downtown Streetscape is a plan that is in many aspects, driven internally through staff. It has been put together, reviewed by Council, and sent out for various public review sessions. The Municipal Building is a multi-million dollar construction project; the two are not reviewed in the same way. This does not mean that we are not open to public input; but at this stage we are not there yet.

Mr. Baugh continued saying as Mr. Chenault said last night, we are discussing the relationship between a major City construction project, with some details still to be determined and input still welcomed, but still a project that largely had the budgeting lined up and that we really want to move forward with. Now it is inter-related with this park that while it has a lot of support, still remains an aspirational thing. We do not know that the park would be here thirty years from now. It is easy to understand how the two groups should be meeting, talking, and planning together; however, there is more to it than just that.

Chair Fitzgerald said sometimes in the past Planning Commission has been used as kind of a filter for comments. It is a way to formally have a conversation with people before having it move to Council.

Mr. Baugh said exactly. I had a suggestion come to me this evening that has some potential to address this issue that way. I do appreciate this being brought up.

Mr. Colman said along these lines, I have a question regarding the Comprehensive Plan. What is the role of the Planning Commission when it comes to the Comprehensive Plan? We obviously follow the plan when it comes to requests before Planning Commission, so on things that are beyond those requests what is our role?

Mr. Baugh said if you look at our Comprehensive Plan you actually have numerous goals and aspirations that in theory, sight unseen, almost any of which if it has not resulted in more specific

implementation of policies, this would be the place where it could start. If we felt that as for the implementation of the Comprehensive Plan we needed to step something up in a particular area, it would begin with Planning Commission.

Mrs. Turner said the Comprehensive Plan is very broad. It talks about educational facilities, parks and recreational facilities, about art and culture; not all of these are things that Planning Commission really gets to put their hands on. It is a plan that is to be used and considered by other groups when they are doing things as well; for instance the Parks and Recreation Department, or Public Safety. It does not mean that everything mentioned in the Comprehensive Plan is also something that Planning Commission gets to have a hands-on look at it too.

Mr. Colman said we look at the Comprehensive Plan as a filter before we make a decision. If the Municipal Building was a private building we would have a lot of say in what was going on and the Comprehensive Plan would be very influential.

Mr. Baugh said unless it was a by-right development.

Mrs. Turner said the property where the Municipal Building is located is zoned B-1, Central Business District. There are no setback requirements; therefore, lot line to lot line development is allowed, up to 75-feet in height and no on-site parking requirements.

Mr. Way said after discussing this more with Mr. Fletcher as a side bar conversation, let me put this out here because I feel it is a good public discussion for here. I was looking at the City Code, Section 10.1.6, which reads: *No street, square, park or other public way, ground or open space, public building or structure shall be constructed or authorized in the city or in the planned section or district thereof, nor shall any real property be acquired by the city until and unless the general location, character and extent thereof has been submitted to and approved by the city planning commission.* Does the Municipal Building fall under this Code Section?

Mr. Baugh said that is a good question and I have never asked staff about this. This is only the second time that I have ever had someone mention this section to me. The other time was on the periphery of the construction of the new high school. I believe there was some discussion among Planning Commissioners whether they ought to insist on their right to review; but nothing came of it at that time.

Mr. Fletcher said I am not quite certain about how all those things (street, square, park or other public way, ground or open space, public building or structure) are viewed and how the CIP captures all of them.

Mrs. Turner said the CIP does capture all those.

Mr. Fletcher said when you look at the detail of the CIP it explains all of the things that go into it and it lists the priorities.

Mr. Baugh said does the mere fact that we review the CIP every year cover all of those things.

Mrs. Turner said yes, the CIP does cover all of those things; however, it is always at the pleasure of the City Council if they want to refer something to Planning Commission to review. Regardless, even if something were not in the CIP it would not get to you unless Council wanted to send it to you anyway.

Mr. Way said I just wanted to explore ways of offering some consultation or some process without it holding up the City Council process.

Chair Fitzgerald said Planning Commission could focus on specific conversation; a way to get out the themes that people are concerned about in a way that is formal and structured and public. It is something to think about.

Adjournment

The meeting was adjourned at 7:45 p.m.

DRAFT



City of Harrisonburg, Virginia

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

STAFF REPORT September 11, 2013

Review of “Considering Amendments for Telecommunications Regulations” Report

At the August 14th regular Planning Commission meeting, staff provided the Commission with a reported titled: “Considering Amendments for Telecommunications Regulations,” which was completed to assist the City in deciding whether the City Code should be amended to further address the regulation of telecommunications. Along with a great deal of supporting information—including an explanation of regulatory authority—the report includes staff’s recommendations for moving forward and what could be considered in an updated ordinance. Then, on August 29th, staff provided the Commission with responses to the report offered by industry representatives and also from the Director of the Harrisonburg-Rockingham Emergency Communications Center.

Since that time, staff has received further input from other City Departments. In brief, the more noteworthy responses are as follows:

1. At this time, and with the concern of potential maintenance and liability issues, the Department of Public Works is not interested in establishing provisions that would allow telecommunications equipment to be collocated on traffic control devices (i.e. traffic signals, road signs, etc.). Rather, the Department recommends allowing collocations on utility poles that already have fiber and power connections. They further suggest that if it is determined to allow utility pole collocations, the ordinance should specify that such equipment shall be relocated, at the expense of the equipment owner, within 30-days of notification when public improvement projects require such relocation.
2. The Department of Public Utilities would like reassurances that any wireless telecommunications equipment that is installed in the City does not interfere or disrupt any of the wireless communications systems the City currently uses. Secondly, they want to ensure they will have the opportunity to review and, if necessary, deny the installation of antennas on any of their infrastructure (i.e. water storage tanks, etc.) they are responsible in maintaining.
3. In general, the Harrisonburg Electric Commission is open to the idea of allowing collocations on some transmission towers versus the idea of allowing telecommunications equipment being located on distribution poles or street lights.

In response to the above comments, Planning staff anticipates any collocations on public infrastructure that could be permitted would require review and approval by the department or organization that is responsible for maintaining the supporting infrastructure.

With regard to the comments offered by the industry representatives concerning staff’s recommendations in moving forward, it appears there was a general feeling of support. However,

emphasis should be placed upon some of the repeating comments/concerns that were provided, including: requiring telecommunications towers be setback 110 percent the height of the tower is probably too strict for an urban environment; understanding that small cells/microcells can only work where macrocells already exist; and understanding that the implementation of having or requiring more collocations requires having taller towers to make it feasible.

Although the Commission is now only formally beginning discussions on this matter, staff has spent enough time researching, thinking, and writing about this topic and analyzing the helpful feedback and comments, that, if the Commission so desires, we can hit the ground running in drafting such an ordinance.



City of Harrisonburg

Department of Planning and Community Development

409 South Main Street
Harrisonburg, Virginia 22801
540-432-7700

www.harrisonburgva.gov/community-development

Memorandum

To: Harrisonburg Planning Commission
From: Adam Fletcher City Planner
RE: Considering Amendments for Telecommunications Regulations
Date: Wednesday, August 14, 2013

Staff has completed its research regarding whether the City's telecommunications regulations should be amended. The result of this work is a comprehensive document, which, as described in the Introduction of the report, explains why the City is investigating telecommunications regulations; what authority the City has in regulating telecommunications; a section describing example regulations; and information about recent and future telecommunication practices that should be understood when considering legislation. The report also includes two appendices consisting of the January 12, 2012 report regarding the City's existing telecommunications regulations as well as an inventory of telecommunications facility locations in the City. Finally, the conclusion of the report includes staff's recommendations for moving forward.

The report was provided to and has already been reviewed by several telecommunication industry representatives from AT&T, NTelos, Shentel, Verizon Wireless, and to two private contractors. The roles of the individuals are diverse and include: the regional General Attorney or other attorneys of major carriers, Real Estate Manager, Site Acquisition Manager, Remote Access Network or RAN Engineer/Strategic Planner, Leasing Coordinator, and Private Contractor. Aside from one private contractor, as of yesterday, staff has received feedback from all of its contacts and will soon review this information and provide it to you as soon as possible.

Please review the report herein and the industry representative comments, once they are provided to you, all by next month's regular meeting on September 11th. The Commission can discuss all of the information and determine how to move forward.



City of Harrisonburg, Virginia

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

STAFF REPORT

August 14, 2013

Considering Amendments for Telecommunications Regulations

I. Introduction

The information herein is the result of research and study staff has conducted since January 2012 to assist in deciding whether the City should revise its telecommunications regulations. The document includes an explanation as to why the City is investigating telecommunications regulations; what authority the City has in regulating telecommunications; a section describing example regulations; and information about recent and future telecommunication practices that should be understood when considering legislation. Appendices include current City telecommunications regulations and reported FCC regulated telecommunication facility locations in the City. The question to answer is to what extent, if any, should the City Code be updated and amended to further address land use issues involving telecommunications facilities. Staff recommendations are provided in the conclusion of this report.

For the purposes of this document, “telecommunications” shall refer to mobile device services infrastructure such as towers, antennas, panels, dishes, cabinets, and related pieces of equipment that are erected, or mounted to buildings and other structures, to provide service to personal wireless services facilities technology. Such technology includes but is not limited to personal communication services (PCS) (including cellular phones), smart phones, lap top computers, tablet computers, and other similar devices that use the wireless system authorized and controlled by the Federal Communications Commission (FCC) and further managed by the FCC’s Wireless Telecommunications Bureau (WTB).

II. Why is the City Investigating Telecommunications Regulations?

In the past, the City has discussed the idea of adopting new telecommunications controls and regulations to address the ever-changing wireless technology demand. In fact, the idea of adopting more specific telecommunications regulations goes back to 1996 when the City dealt with its first telecommunications request at 1178 South High Street.

The year 1996 is significant for a few reasons. First, on February 8, 1996, President Bill Clinton signed into law the Telecommunications Act of 1996; along with many other things, this legislation granted local governments the authority to regulate telecommunications. At the same time, the City was already working on a comprehensive rewrite of the Zoning Ordinance, and with the adoption of the Telecommunications Act of 1996, the City incorporated relatively basic regulations to govern telecommunications (for the most part, those provisions are the same regulations that remain in place today). The City adopted the revamped Zoning Ordinance on

April 23, 1996. Then, in September 1996, the City reviewed its first telecommunications request to locate equipment on the top of the water tower at 1178 South High Street. During the hearing for the telecommunications special use permit (SUP) request, which was ultimately approved in October, City Council, staff, and City residents discussed the idea of instituting a study on communications towers and to consider things that might need to be changed in the City's existing ordinance dealing with telecommunications. During much of 1996 and 1997, Planning staff conducted a significant amount of research regarding how the City could implement telecommunications regulations. Staff attended regional workshops, communicated often with carriers and providers, and researched and studied how other localities from across the country were implementing the regulatory power granted by the Telecommunications Act of 1996. When much of the research ended in 1997, the regulations that were adopted during the Zoning Ordinance rewrite remained in place.

Since 1996, other public hearings similar to the 1178 South High Street example have sparked discussion on whether the City should adopt additional regulations for telecommunications, but other than discussing this idea and collecting and reviewing examples from other localities, the idea was never pressed and staff ended up working on other matters.

In November 2011, however, this idea was again resurrected during discussion involving a SUP to allow a 124-foot in height telecommunications tower at 1106 Reservoir Street. Planning Commission held a public hearing to review the SUP request on the B-2 zoned property, where in brief, opinions differed regarding whether the SUP should be approved. Even though staff understood that such infrastructure was needed to provide stronger signal strength, capacity and connectivity to that area and generally to the entire City, staff recommended denial of the request believing that such a use would be incompatible with the uses in the surrounding area. Furthermore, staff interpreted that the use was not conforming to the Comprehensive Plan's long term goals for this area of the City. Planning Commission, however, voted 3-2 (with 2 members absent) in favor of recommending approval of the request with conditions that were suggested by staff. During the meeting, the Commission advised staff to evaluate the City's existing regulations and questioned whether the City should do more research regarding more controls and regulations for telecommunications.

In December 2011, City Council held their public hearing regarding the request and ultimately approved the application as suggested by Planning Commission with a 4-1 vote. During this meeting, Council Member David Wiens noted he would like City Council to ask Planning Commission to develop a plan of provisions for collocations. In addition, Council Member Charlie Chenault (also a member of the Planning Commission at that time) noted that Planning Commission spoke briefly about the need of a separate ordinance specifically for telecommunications towers and mentioned the Commission would visit the issue in the future.

Subsequent to the City Council meeting, staff prepared a report that discussed the City's current zoning regulations regarding telecommunications and presented the information to Planning Commission at their January 2012 regular meeting. That report, titled Current Zoning Regulations Regarding Telecommunications, explains which zoning districts allow telecommunications and how they are regulated. The described report provides other detailed information and is included as Appendix A. Table 1 below is a summary of some of the information in that report.

Table 1: Summary of Where and How Telecommunications Are Allowed in the City

Zoning Districts Permitting Telecommunications	Telecommunications Permitted By-Right	Telecommunications Permitted By Special Use Permit
R-1	Not permitted.	Communications facilities necessary for public safety purposes up to 200 feet in height (private collocations are permitted).
R-2	Not permitted.	Communications facilities necessary for public safety purposes up to 200 feet in height (private collocations are permitted).
R-3 Multiple Dwelling and Medium Density	Not permitted.	Communications facilities necessary for public safety purposes up to 200 feet in height (private collocations are permitted).
R-4	Not permitted.	Communications facilities necessary for public safety purposes up to 200 feet in height (private collocations are permitted).
R-5	Not permitted.	Not permitted.
R-6	Not permitted.	Not permitted.
R-7	Not permitted.	Not permitted.
U-R	Not permitted.	Communications facilities necessary for public safety purposes up to 200 feet in height (private collocations are permitted).
MX-U	Not permitted.	Not permitted.
B-1	Telecommunications equipment and facilities, provided such equipment and facilities are located in an enclosed structure (at no more than 75 feet in height).	Telecommunications equipment and facilities not located in an enclosed structure and communications facilities necessary for public safety purposes up to 200 feet in height (private collocations are permitted).
B-2	Not permitted.	Communications towers no more than one hundred twenty-five (125) feet in height and Communications facilities necessary for public safety purposes up to 200 feet in height (private collocations are permitted).
M-1	Communications towers not more than one hundred twenty-five (125) feet in height.	Communications towers more than one hundred twenty-five (125) feet in height and communications facilities necessary for public safety purposes up to 200 feet in height (private collocations are permitted).

***Note: Any City use, determined to be a public use, is permitted by-right in any zoning district.**

During the January 2012 Planning Commission meeting, after reviewing and discussing the report within Appendix A, the Commission advised staff to investigate the options involving telecommunications regulations and offered specific investigatory objectives including:

researching other locality regulations, talking to telecommunications providers about the technology and future technology of telecommunications and the infrastructure necessary to support it, and researching available resources through the Virginia Municipal League (VML). There was also interest in researching regulations that would encourage collocations by-right and decommissioning of infrastructure.

Staff began researching information and writing this document throughout 2012, however other issues arose (among other things the business garden proposal) that slowed the progression of this project. In February 2013 after Planning Commission acted on the business garden proposal, the Commission advised staff to make the telecommunications regulations project a priority rather than focusing efforts on researching and drafting additional agricultural/horticultural regulations or investigating new or revised ordinances associated with accessory structures, which was an issue that had received public attention at that time.

III. What Authority Does the City Have in Regulating Telecommunications?

Before discussing the various options for telecommunications regulations, it is best to understand what authority the City has in regulating them. This authority is primarily outlined within the Telecommunications Act of 1996 with other regulatory provisions included within the recently adopted Middle Class Tax Relief and Job Creation Act of 2012 Section 6409 Wireless Facilities Deployment.

The Telecommunications Act of 1996

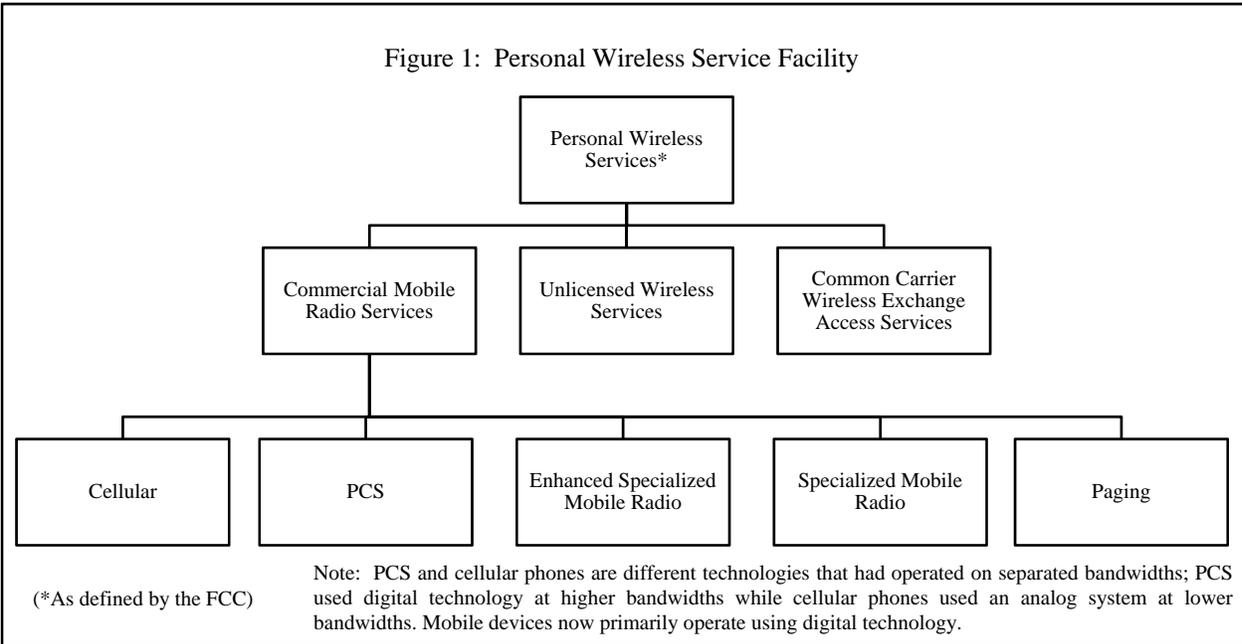
The Telecommunications Act of 1996 (the 1996 Act), administered by the FCC, is the main legislation for telecommunications regulations. The 1996 Act amended the Communications Act of 1934, which created the FCC and intended to provide for the regulation of interstate and foreign communication by wire, radio, and for other purposes. As noted by the FCC, the goal of the 1996 Act, was to let anyone enter into the communications business and to let any communications business compete in any market against any other.¹ Within the 1996 Act, local governments were granted authority to regulate telecommunications through zoning practices. This authority is codified in 47 USC § 332 Mobile Services (c) Regulatory Treatment of Mobile Services (7) Preservation of Local Zoning Authority.²

47 USC 332 (c) (7) provides local governments the authority to decide the placement, construction, and modification of personal wireless service facilities. Within this legislation the FCC defines “personal wireless service” as: commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services.² It also defines “personal wireless service facilities” as: facilities for the provision of personal wireless services² (see Figure 1³). In other words, and for the intents and purposes of this document, the legislation allows local governments to regulate the placement, construction, and modification of *telecommunications*—as described in the introduction of this document.

1 Federal Communications Commission. <http://transition.fcc.gov/telecom.html>.

2 Telecommunications Act of 1996. <http://transition.fcc.gov/Reports/1934new.pdf> - page 182 of 333.

3 Kreines and Kreines. Planwireless. <http://planwireless.com/tehnno.htm>.



More specifically, 47 USC 332 (c) (7), limits state and local government regulatory authority by specifying:⁴

1. Local zoning requirements shall not unreasonably discriminate among providers that compete against one another.
2. Local zoning requirements shall not prohibit or have the effect of prohibiting telecommunications service.
3. Local governments shall act on any request to place, construct, or modify telecommunications within a reasonable period of time. (In 2009, the FCC issued the, commonly known, “shot clock” ruling to provide further guidance on the meaning of “reasonable period of time.” The ruling states that local governments must act within 90 days of a collocation application and within 150 days for all other applications.⁵)
4. Any decision by a local government to deny a request to place, construct, or modify telecommunications shall be in writing and supported by substantial evidence contained in the written record.
5. Local governments shall not regulate the placement, construction, or modification of telecommunications based upon the environmental effects of radio frequency emissions to the extent that such facilities comply with the FCC’s regulations concerning such emissions. (Radio frequency emissions from these facilities are presumed safe as long as they meet the technical standards set by the FCC.⁶)

In other words, local governments cannot: outright ban telecommunications, favor one provider (i.e. AT&T, Ntelos, Verizon, and others) over another, purposefully delay regulatory review, or

⁴ Telecommunications Act of 1996. <http://transition.fcc.gov/Reports/1934new.pdf> - page 181 of 333.

⁵ Federal Communications Commission. http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-09-99A1.pdf.

⁶ Byers, Jackie et al., 1997. *Siting Cellular Towers: What You Need to Know What You Need to Do*. National League of Cities: Washington, D.C. – page 6 of 25.

deny requests due to radio frequency emissions being harmful to the environment or the health of residents. Local governments must also document the reasons for denying requests.

The 1996 Act also specifies that any person adversely affected by any final action or failure to act by the local government may take such matter to court. In addition, any person adversely affected by the local government that may be inconsistent with the limitations specified regarding action based upon radio frequency emissions may petition the FCC for relief.⁷

In summary, local governments are able to implement controls and regulations within the parameters of local zoning authority, which among other things could include: the zoning districts in which telecommunications are permitted or not permitted; height limitations; setbacks; the appearance of telecommunications structures including design, color, screening, and camouflaging mechanisms; and other site design controls. (Note the City currently implements some of these control mechanisms—see Appendix A.)

Section 6409 Wireless Facilities Deployment

Beyond the authority granted to States and local governments by the 1996 Act, new rules regarding telecommunications controls are now in place with the recently approved Middle Class Tax Relief and Job Creation Act of 2012 signed by President Barack Obama in February 2012. Within this legislation, specifically Section 6409 Wireless Facilities Deployment (Section 6409), there is regulatory relief for telecommunications providers that specifies when local governments must lessen or alleviate controls when making particular modifications to existing sites. Among other rules within Section 6409, subsection (a) is the most relevant for state and local governments. Section 6409 (a) is as follows:⁸

(a) Facility Modifications

- 1) In general.—Notwithstanding Section 704 of the Telecommunications Act of 1996 (Public Law 104—104) or any other provision of law, a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station.
- 2) Eligible Facilities Request.—For purposes of this subsection, the term “eligible facilities request” means any request for modification of an existing wireless tower or base station that involves—
 - A. collocation of new transmission equipment;
 - B. removal of transmission equipment; or
 - C. replacement of transmission equipment.
- 3) Applicability of Environmental Laws.—Nothing in paragraph (1) shall be construed to relieve the Commission from the Requirements of the National Historic Preservation Act or the National Environmental Policy Act of 1969.

With such new legislation on the books, States and local governments are still applying these new rules to the best of their ability as there has been little time for sound interpretations of the law to be established. Staff has researched this matter, discussed the legislation with the former

⁷ Telecommunications Act of 1996. <http://transition.fcc.gov/Reports/1934new.pdf> - page 182 of 333.

⁸ Middle Class Tax Relief and Job Creation Act of 2012. Public Law 2012—96—Feb. 22, 2012. <http://www.gpo.gov/fdsys/pkg/PLAW-112publ96/pdf/PLAW-112publ96.pdf> - page 78 of 102.

City Attorney, and has purchased additional educational resources specifically on this topic to understand and implement the new rules as was hopefully intended.

There are several terms and phrases used in Section 6409 that must be understood before one can properly implement the new rules, including: base station, collocation, facility, tower, and substantially change. Section 6409 does not define the use of these terms; therefore, one must refer to several federal documents including the Code of Federal Regulations—47 CFR § 24.5 Terms and Definitions, the FCC’s 2004 Nationwide Programmatic Agreement, and the FCC’s 2002 Antenna Collocation Programmatic Agreement.

47 CFR 24.5 defines “base station” as:⁹

Base Station: A land station in the land mobile service. (Note: On January 25, 2013, the FCC released a Public Notice that offered guidance for interpretation of Section 6409, where they further described “base station” as consisting of radio transceivers, antennas, coaxial cable, a regular and back-up power supply, and other associated electronics. Also, in the context of Section 6409, the FCC believes it is reasonable to interpret that “base station” shall also include a structure that currently supports or houses an antenna, transceiver, or other associated equipment that constitutes part of a base station. Furthermore, the FCC believes that “base station” encompasses any technological configuration, including distributed antenna systems and small cells.¹⁰)

Then, the 2004 Nationwide Programmatic Agreement defines the following:¹¹

Collocation: The mounting or installation of an antenna on an existing tower, building, or structure for the purpose of transmitting radio frequency signals for telecommunications or broadcast purposes.

Facility: A tower or an antenna. The term facility may also refer to a tower and its associated antennas.

Tower: Any structure built for the sole or primary purpose of supporting Commission-licensed or authorized antennas, including the on-site fencing, equipment, switches, wiring, cabling, power sources, shelters, or cabinets associated with that tower but not installed as part of an antenna as defined herein.

Lastly, the 2002 Antenna Collocation Programmatic Agreement clarifies what is meant by “substantially change.” It should be understood, the wording “substantially change” or “substantial change” is not used. Instead, it explains that a *Substantial increase in the size of the tower* occurs when:¹²

- (1) The height of the tower will be increased by more than the greater of: (a) 10% of the height of the tower; or (b) the height extension needed to accommodate one additional antenna array with a separation of 20 feet from the nearest existing antenna. Thus, a 150-foot tower may be increased in height by up to 15 feet without constituting a substantial increase in size. If there is already an antenna at the top of the tower, the tower height may be increased by up to 20 feet plus the height of a new antenna to be located at the new top of the tower.

9 Federal Communications Commission. 47 CFR § 24.5 Terms and Definitions. <http://www.gpo.gov/fdsys/pkg/CFR-1999-title47-vol2/pdf/CFR-1999-title47-vol2-sec24-5.pdf> - page 1 of 2.

10 Federal Communications Commission. January 25, 2013. DA-2047. http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-12-2047A1.pdf. - page 3 of 5.

11 Federal Communications Commission. September 2004. FCC 04-222. Nationwide Programmatic Agreement: Appendix B. http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-04-222A3.pdf - page 6 of 29.

12 Federal Communications Commission. January 10, 2002. Antenna Collocation Programmatic Agreement. http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-02-28A1.pdf - page 4 of 12.

- (2) More than four new equipment cabinets or more than one new equipment shelter will be added.
- (3) The width of the tower will be increased by more than the greater of: (a) 20 feet in any direction from the edge of the tower; or (b) the width of the tower structure at the level of the appurtenance. For example, if the width of the tower structure at the level of the appurtenance is 40 feet, the appurtenance can protrude up to 40 feet from the edge of the tower at that point without constituting a substantial increase in the size of the tower.
- (4) Excavation will occur outside the current tower site, defined as the area within the boundaries of the leased or owned property surrounding the tower at the time of the proposed collocation, and including any access or utility easements related to the site.

In brief, to take advantage of Section 6409, a telecommunications provider can only make a modification (as listed) on an existing wireless tower or base station (as defined) and such modification cannot substantially change the characteristics of the eligible facility. Furthermore, to make a modification to an eligible facility, the local government shall make the decision as to whether an eligible facility would be substantially changed.

To date, only one provider in the City has requested, and has received approval, to make modifications to an eligible facility under the provisions of Section 6409.

IV. Regulations in Practice and Other Suggested Legislation

Typical Telecommunications Provisions

According to *Siting Cellular Towers: What You Need to Know, What You Need to Do*¹³, a guide book published by the National League of Cities and supported by the American Planning Association, the International City/County Management Association, the National Association of Counties, the National Association of Telecommunications Officers and Advisors, the National League of Cities, and Public Technology, Inc., there are key elements local governments should consider when establishing a telecommunications ordinance. These elements include: specifying application requirements; provisions that maximize the use of collocation (also known as site sharing); addressing if and how public property may be used; safety (which cannot be associated with radio frequency emissions); aesthetics; lighting and structural integrity; maintenance and parking; and abandonment.

Within the guidelines of the 1996 Act, there are almost limitless ways to regulate telecommunications through zoning enforcement. Staff has reviewed many ordinances and has read a multitude of variations currently in practice. Along with the typical regulations one would expect in a telecommunications ordinance (i.e. height limitations, setback minimums, etc.) there are many other things to consider for zoning regulations.

The list below includes a handful of localities selected by staff to demonstrate examples of provisions across a variety of issues. The information does not list or describe every provision from each of the listed localities or model ordinances, nor are there examples from every locality that staff reviewed. Generally, each locality and model ordinance had repeating themes of typical provisions such as height limitations, setback minimums, and different characteristics of regulations depending upon the type of zoning districts in which they are permitted. There is not

¹³ Byers, Jackie et al., 1997. *Siting Cellular Towers: What You Need to Know What You Need to Do*. National League of Cities: Washington, D.C. – pages 10-13 of 25.

a one-size-fits-all model as some localities take a more restrictive approach requiring public hearings prior to installing any type of facility while others provide some approval by administrative review.

- *Rockingham County, Virginia:*¹⁴ Exempts amateur radios, television reception antennas, and satellite earth station antennas; requires providers to submit an inventory of their equipment by February 1st of each year; prohibits advertising on the facility; encourages providers to conduct a public information meeting if towers are proposed to be taller than 100 feet in height; landscaping is required that effectively screens the view of the support buildings and fence from adjacent property; components of a telecommunications facility that is not operated for a continuous period of six months shall be considered abandoned and must be removed within 90 days; a form a surety in the amount of \$10,000.00 or 25 percent of the material costs of the structure (whichever is greater) is required to secure the cost to remove the tower and return the site to its original condition to the extent reasonably possible.
- *Westmoreland County, Virginia:*¹⁵ Limits the sizes of antennas and dishes, which may be larger than otherwise permitted by special exception; limits the height and amount of space the unmanned equipment structures (i.e. equipment sheds and cabinets) can contain on the site; requires photo-imagery or other visual simulation upon application; prohibits the removal of trees within 200 feet of telecommunications towers; requires that all monopoles shall be designed to accommodate at least three providers.
- *City of Charlottesville, Virginia:*¹⁶ Requires all communications facilities to comply with the minimum setback requirements of the zoning district in which they are located; when attaching facilities to an existing structure, the structure shall be at least 40 feet in height and the total height of the communications facility shall not increase the height of the attachment structure by more than 20 feet; structures supporting one communications facility shall be no taller than 70 feet, structures supporting two communications facilities shall be no taller than 100 feet, and structures supporting three or more communications facilities shall be no taller than 150 feet; special use permits are available for facilities above the regulated heights.
- *City of Staunton, Virginia:*¹⁷ Allows the placement of telecommunications on alternative structures such as roofs, walls, water tanks, existing towers, and other structures approved by the zoning administrator so long as the height of the structure is not increased by 20 feet; telecommunications on alternative structures must be identical in color or closely compatible with the structure; requires telecommunications facilities to meet all setback requirements for primary structures for the zoning district in which they are located; requires telecommunication facilities not on alternative structures to be setback 110 percent the height of the tower from structures intended for human habitation.

14 Rockingham County, Virginia Code of Ordinances Chapter 17 Article VII Division 6A Wireless Telecommunication Facilities:

http://library.municode.com/HTML/12196/level4/SUHITA_CH17ZO_ARTVIIUSRE_DIV6AWITEFA.html#TOPTITLE.

15 Westmoreland County, Virginia Code of Ordinances Zoning Ordinance Article 4 Supplemental Use Regulations 4-7 Telecommunications Facilities: <http://www.westmoreland-county.org/assets/docs/ART%204%20Supp%20Regs.pdf>.

16 City of Charlottesville, Virginia Code of Ordinances Chapter 34 Article IX Division 5 Telecommunications Facilities:

http://library.municode.com/HTML/12078/level4/CO_CH34ZO_ARTIXGEAPRE_DIV5TEFA.html#TOPTITLE.

17 City of Staunton, Virginia Code of Ordinances Chapter 18.185 Telecommunications Facilities:

<http://www.codepublishing.com/VA/staunton.html>.

- *City of Lexington, Virginia:*¹⁸ Requires applicants to provide an inventory of its existing facilities that are either within the City or within five miles of the City limits of which shall specify the location, height, and design of each tower; regulates aesthetics including evaluating not only the compatibility with their surroundings but also by the extent of visual clutter they create; prohibits artificial lighting unless required by the FCC; in evaluating conditional use permits they consider the proximity of towers to residential structures and residential district boundaries.
- *Louisa County, Virginia:*¹⁹ Exempts antenna support structures, antennas, and/or antenna arrays for AM/FM/TV/HDTV broadcasting transmission facilities licensed by the FCC; exempts wireless communications facilities when it is an accessory use to a business operated on the same property, provided that zoning review determines certain criteria is met, some of which includes that the height of the antenna support structure shall not exceed 100 feet in height, no more than one antenna support structure shall be permitted per property, no support structure is located within 200 feet of a public road, no support structure shall be visible from another support structure, as determined from grade level at the base of the support structure; generally requires that equipment cabinets shall not be visible from pedestrian views; All freestanding telecommunications facilities up to 120 feet in height shall accommodate no less than four antenna arrays, facilities between 121 feet and 150 feet shall accommodate no less than five antenna arrays, and facilities that are 151 feet and taller shall accommodate no less than six antenna arrays; attached non-concealed facilities shall only be allowed on electrical transmission towers and existing light stanchions subject to approval by the community development department and utility company.
- *Alleghany County, North Carolina:*²⁰ Requires all towers less than 40 feet in height to be registered with the government and requires a special use permit for any tower above 40 feet in height; at the discretion of the County Planner, experts may be contracted to assist with the review at an expense of the applicant not to exceed \$5,000.00.; additional users' equipment, which does not add to the tower height, may be added without approval or review (aside from required building permits) and no application or fee is required; collocation is permitted on power poles; stealth or camouflage technology must be used when the proposed tower is within particular viewsheds—one of which is the Blue Ridge Parkway.
- *City of Minnetonka, Minnesota:*²¹ Grants staff authority to approve equipment administratively when telecommunications facilities are located on electric transmission towers carrying over 200 kilo volts of electricity, located on support structures that have already received a conditional use permit, and gives staff the authority to grant a one-time 15-foot height extension to towers; grants staff authority to approve facilities located in public right-of-way that meet certain criteria; facilities not eligible for administrative

18 City of Lexington, Virginia Code of Ordinances Part 2 Chapter 420 Article II 420-28 Telecommunications Towers: <http://ecode360.com/9735964#9736025>.

19 Louisa County, Virginia Code of Ordinances Chapter 86 Article IX Telecommunications Regulations: http://library.municode.com/HTML/12480/level3/CO_CH86ZO_ARTIXTERE.html#TOPTITLE

20 Alleghany County, North Carolina Code of Ordinances 1-166 2001 Wireless Tower Communication Ordinance: <http://alleghanycounty-nc.gov/ordinances/1-166.pdf>.

21 City of Minnetonka, Minnesota Code of Ordinances Chapter 3 Zoning Regulations Section 300.34 Telecommunications Facilities: [http://www.amlegal.com/nxt/gateway.dll/Minnesota/minnetonka/chapter3zoningregulations?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:minnetonka_mn\\$anc=JD_300.34](http://www.amlegal.com/nxt/gateway.dll/Minnesota/minnetonka/chapter3zoningregulations?f=templates$fn=default.htm$3.0$vid=amlegal:minnetonka_mn$anc=JD_300.34).

approval must obtain a conditional use permit, where among other guidelines must use stealth design techniques as reasonably possible—financial considerations alone are not justification for failing to provide stealth design; facilities located on an existing building shall not extend more than 15 feet above the height of the building.

- *Cuyahoga County, Ohio (model ordinance):*²² Suggests requiring applicants wishing to install a new tower within a quarter mile of another tower to provide written evidence of the contact made with the owners of the other tower that they have inquired about the potential collocation opportunities that are technically feasible locations; encourages underground equipment shelters.
- *Scenic Virginia, Inc. (model ordinance):*²³ Suggests requiring a balloon test be conducted to illustrate the height of the proposed tower and to notify the local government for when the test would be conducted; to require photographs of the balloon test be taken and submitted upon application; to allow facilities, other than a microwave dish, that are attached to an existing structure and which does not exceed the height of the existing structure and is flush mounted to the structure to be permitted by-right; allow only flush mounted antennas on existing buildings that are painted the same color as the existing building and prohibit such antennas from projecting more than 12 inches from the existing building; require applicants to submit a report each year identifying each user of the existing structure.
- *PCIA (Personal Communications Industry Association) – The Wireless Infrastructure Association (model ordinance):*²⁴ Suggests using the term “concealed” rather than “stealth” for facilities that are integrated as an architectural feature of a structure so that the purpose of the facility provides the services necessary while the structure is not readily apparent to a casual observer; concealed antennas must be enclosed, camouflaged, screened, or obscured—examples include but are not limited to flagpoles, bell towers, clock towers, crosses, monuments, smoke stacks, parapets, and steeples; allow towers and support structures by administrative review in any zoning district, except residential districts, at heights that are less than 60 feet; allow concealed facilities by administrative review that are less than 60 feet in height in residential districts; allow concealed telecommunications facilities in any district, except residential districts, up to 150 feet in height; allow towers and support structures by administrative review in industrial districts up to 199 feet in height; allow monopoles and replacement facilities on public property and right-of-ways and on structures such as municipal communication facilities, athletic field lights, traffic lights, street lights, and other utility poles; monopoles and towers shall be setback from all property lines a distance equal to their height.

If revised regulations are desired by the City, one of the more noteworthy examples demonstrated in the list above, and supported by PCIA (the Wireless Infrastructure Association), is the encouragement or requirement of stealth/concealed technology. This type of technology is integrated as an architectural feature of an existing structure or any new support structure designed so that the purpose of the facility or support structure for providing telecommunications services is not readily apparent to a casual observer. Examples of this technology include

22 <http://planning.co.cuyahoga.oh.us/documents/pdf/celltower.pdf>.

23 <http://www.scenicva.org/docs/ordinances/Scenic%20Virginia%20Model%20Cell%20Tower%20Ordinance.pdf>.

24 http://www.pcia.com/images/Advocacy_Docs/PCIA_Model_Zoning_Ordinance_June_2012.pdf.

flagpoles, bell towers, clock towers, crosses, monuments, smoke stacks, parapets, steeples, faux trees, and structures intended as art. According to the consulting firm Kreines and Kreines, Inc., Consultants to Cities & Counties on Wireless Planning, and the publisher of the *PlanWireless* newsletter, the term “concealed” should be used in place of “stealth” as the latter is often used synonymously with “sneaky,” where the intent is to fool or deceive, and therefore a negative application to use in an ordinance.²⁵

Concealed telecommunications technology is in use across the country and locally in Rockingham County in the Massanutten Resort area. The Physical Plant Director for Massanutten Resort explained the resort has four concealed facilities in the form of flagpoles ranging from 90 to 110 feet in height, one of which is located at the entrance to the Massanutten Water Park. The Massanutten Property Owners Association also has a concealed telecommunications facility in the form of a flagpole at 100 feet in height (Figure 2). Furthermore, the associated equipment facility for the concealed flagpole tower, as shown in Figure 2, is located entirely underground within a vault (Figures 3 & 4); a practice that is encouraged within the Cuyohoga County, Ohio telecommunications model ordinance.



Figure 2: A concealed telecommunications facility as a flagpole at Massanutten Village.²⁶

²⁵ Kreines and Kreines. Planwireless. http://planwireless.com/700_mhz_%26_aws.htm.

²⁶ Provided by the Administrator of the Massanutten Property Owner’s Association (11-16-12).



Figure 3: Front view of the base of the concealed telecommunications flagpole. The underground equipment vault is located in the background of the picture, behind the base of the flagpoles.²⁶



Figure 4: Rear view of the base of the concealed telecommunications flagpole. The underground equipment vault is located under this area with only the visible small piece of equipment at the surface.²⁶

Figures 5 and 6 demonstrate other concealed technology examples that are in use in Virginia while Figure 7 exhibits a facility located in Liberty, Missouri that serves as a telecommunications tower and a piece of art that honor's the City's commitment to education.



Figure 5: Concealed telecommunications in the form of a tree near Mt. Vernon, VA.²⁷



Figure 6: The Unitarian Universalist Church of Roanoke's steeple includes telecommunications inside the structure completely concealed from view.²⁸ The provider, Ntelos, paid to remove the old steeple, to install the new steeple, and for all of the other necessary equipment.²⁹

²⁷ Bedford County, Virginia's Strategic Plan for Commercial Wireless Telecommunications Facilities. Prepared by the Atlantic Group of Companies. August 26, 2002. Page 44 of 88. <http://www.co.bedford.va.us/res/Planning/pdf/telecommunications.pdf>.

²⁸ Unitarian Universalist Church of Roanoke, Virginia. <http://uuroanoke.org/photo.f.htm>

²⁹ Podger, Pamela J. November 11, 2006. *The Roanoke Times*. Church Receives Steeple Upgrade. <http://www.roanoke.com/news/roanoke/wb/90988>.



Figure 7: A 100-foot telecommunications tower disguised as a No. 2 pencil located in Liberty, Missouri.³⁰ City officials hoped the design of the tower would draw attention to the community's commitment to education at institutions such as William Jewel College and the Liberty School District.³¹

Another noteworthy regulation, as suggested in the examples above, is the requirement in particular situations to have flush mounted antennas that are painted the exact same color as the supporting structure. Although such a regulation is not part of the City's existing regulations, this practice has already been conditioned on a telecommunications SUP in the City. Figure 8 illustrates the flush mounted antennas that have been painted the same color as the Holiday Inn building at 1400 East Market Street in the City—a condition of that property's SUP granted in 2006.

³⁰ News-Press and Gazette Company, NPG Newspapers Inc. <http://prewww.kccommunitynews.com/image/28033721/detail.html>.

³¹ Federal Communications Commission. In the Matter of Acceleration of Broadband Deployment Expanding the Reach and Reducing the Cost of Broadband deployment by Improving Policies Regarding Rights of Way and Wireless Facilities Siting. Reply Comments of the City of Liberty, Missouri. WC Docket No. 11-59. <http://apps.fcc.gov/ecfs//document/view.action?id=7021711459>.



Figure 8: Flush mounted antennas painted the same color as the supporting structure at 1400 East Market Street, Harrisonburg, Virginia.

Legislation for Recent and Future Practices in Telecommunications

The regulations discussed so far are the typical provisions that localities have been implementing since the 1996 Act was approved. Generally speaking, many of these ordinances were formulated to regulate the 1G, 2G, and 3G cell sites, all of which are referred to as “macrocells.”³² These macrocells are the most familiar component of the telecommunications network including but not limited to towers and the antenna installations that are installed on tall buildings, water tanks, and other tall structures (Figures 2 through 8 above are all macrocell sites.) Macrocells form the core of the macrocellular network that allows providers to deliver voice, text, and broadband to wireless subscribers.³³ These facilities are free standing, needing only a landline connection to the Public Switched Telephone Network (PSTN)—the name given to the traditional landline telephone network.³⁴ They are effective in covering large areas with relatively high capacity, capable of hosting multiple providers, all while transferring radiofrequency signals at high power levels. As technology has changed over the years, macrocells have been upgraded, but the coverage areas have typically not been expanded.³³

The macrocells have functioned well in receiving and sending voice calls, however, these systems have been strained with the continuous demand for sending and receiving data from and to so many wireless devices. Because of this, “small cells,” or “microcells,” are the future of the wireless industry (Figure 9)³².

32 Kreines & Kreines, Inc. *Planwireless: A Newsletter About Planning for Personal Wireless Service Facilities*. December & January 2013. Vol. 17. No. 1.

33 The DAS Forum. February 4, 2013. *Distributed Antenna Systems (DAS) and Small Cell Technologies Distinguished*. http://www.thedasforum.org/wp-content/uploads/2013/02/DAS-And-Small-Cell-Technologies-Distinguished-2_4_13.pdf.

34 Dictionary.com. February 22, 2013. Public Switched Telephone Network. <http://dictionary.reference.com/browse/public+switched+telephone+network>.

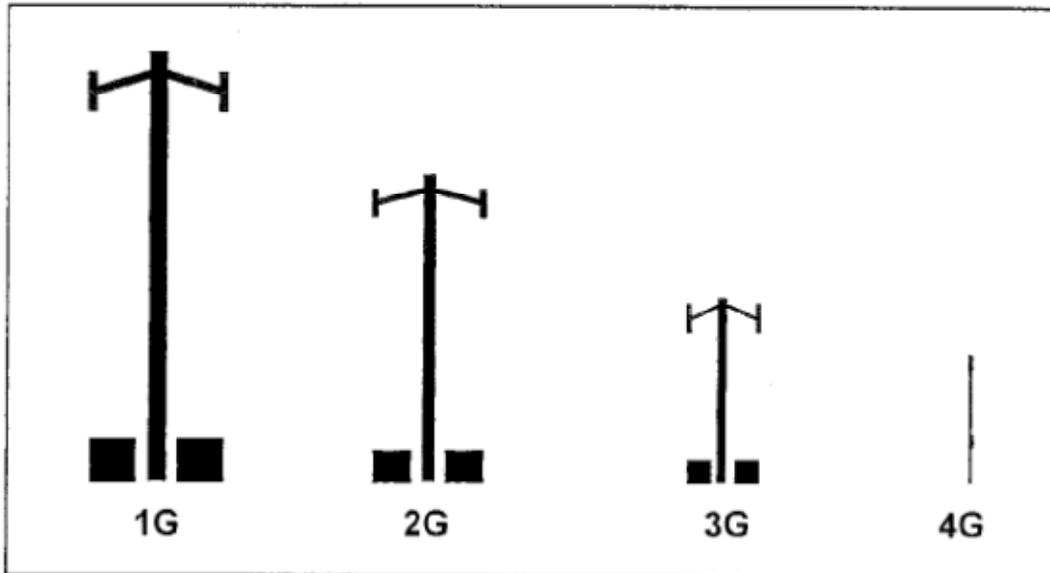


Figure 9: As illustrated in *Planwireless*, the evolution of cell sites will change with 4G. While 1G, 2G, and 3G relied on independent macrocells, 4G will depend on small cell sites.³²

The solution to serving so many users transferring so much data is having many microcells to work in unison with the macrocells. In years past, providers requested to erect new macrocell telecommunications facilities because of issues with low coverage; however, that is no longer the case as in most populated areas there is wall-to-wall cell site coverage (Figure 10).³²

As noted above, the wall-to-wall macrocell coverage works well for voice transfer, but data transfer, especially video data and the use of “apps,” overwhelm the system and therefore necessitate the installation of microcells. The system works by a macrocell handing off the data to a nearby microcell, which finds its own way through the network, whether it is handed off to another cell site or to what is known as a “hub,” to eventually off-load the data to its final destination.³² For providers to continue properly serving their clients, many microcells can be established within the coverage of macrocells (Figure 11).³² Although the use of microcells is predicted to increase and be the “future of the wireless industry,” this is not a new practice. As noted in an issue of *Planwireless*, a provider in the suburbs of Chicago placed microcells underneath the coverage areas of towers back in 1997 for matters of capacity.³⁵

³⁵ Kreines & Kreines, Inc. *Planwireless: A Newsletter About Planning for Personal Wireless Service Facilities*. February & March 2012. Vol. 16. No. 2.

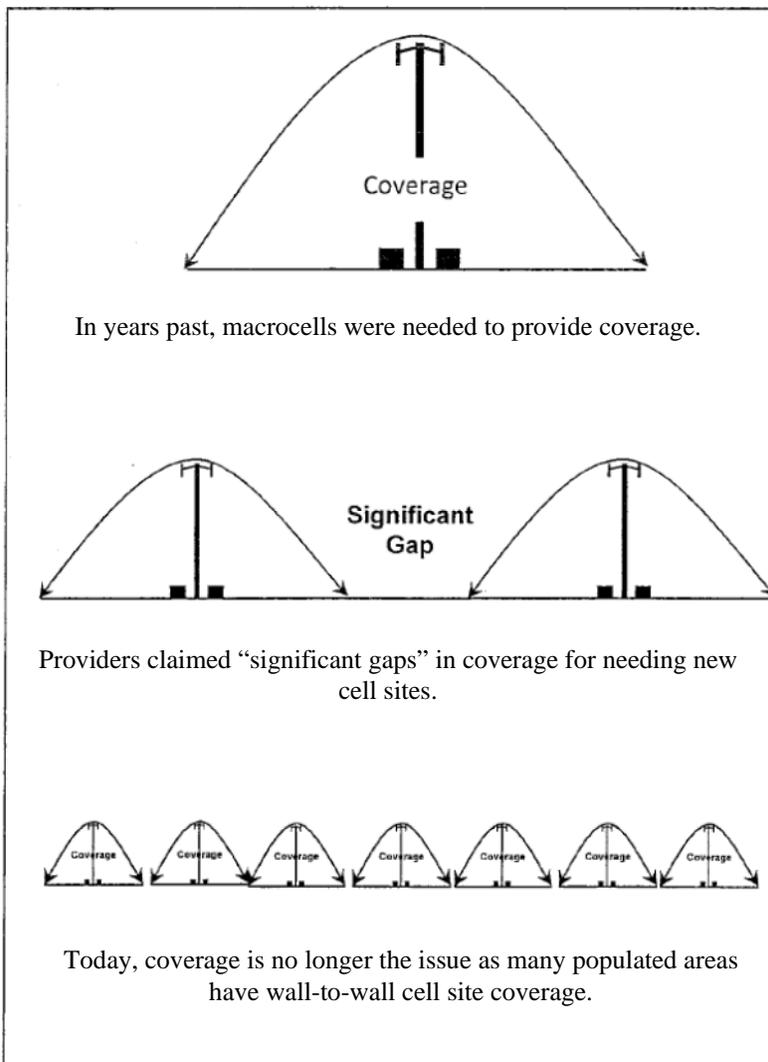


Figure 10: As illustrated in *Planwireless*, the progression of cell site installation due to coverage issues.³²

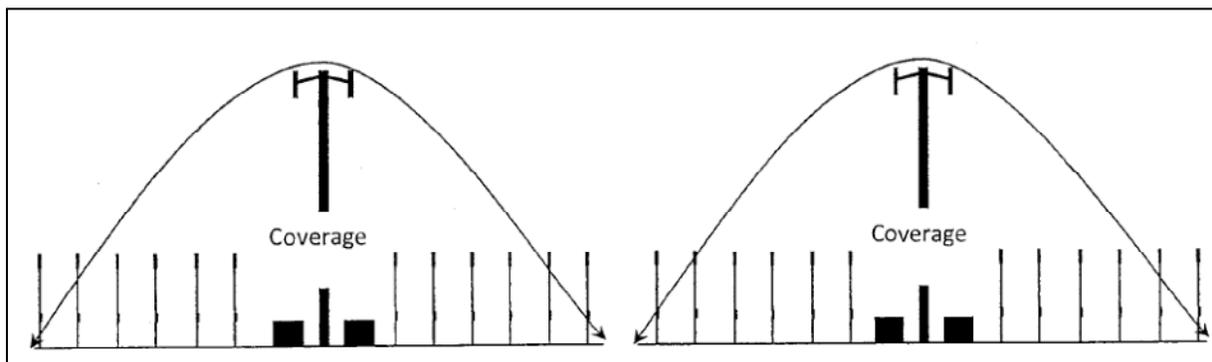


Figure 11: Small cells built within macrocell coverage to support data transfer.³²

The scenario as generally depicted in Figure 11 is, for the most part, already occurring in the City. The telecommunications tower at 1106 Reservoir Street, the same facility that triggered this telecommunications regulations research project, although may not be classified as a small cell

or microcell, fits the description of the intent of a microcell site. As noted in the staff report for the 1106 Reservoir Street SUP request to allow the telecommunications facility, the tower was needed “to offer a solution for off-loading capacity from the surrounding AT&T antenna locations.”³⁶ In addition, the minutes from the Harrisonburg Planning Commission meeting held on November 9, 2011, reflects the contractor, who represented the applicant for the SUP, stating the site was needed for both “in-building coverage” and was “a solution for off-loading the capacity from the other sites,”³⁷ both of which are arguments supporting microcell solutions. Adding to this argument, the site is adjacent to a tributary of Blacks Run, which is not in a typically desired higher elevation point within the City.

If this is an example of things to come, then the City may soon have an influx of telecommunication facility requests in areas that were never previously imagined to be desirable. Microcells are solutions to capacity and in-building coverage, but as noted macrocells, like the one recently erected at 1106 Reservoir Street, can also be used as a solution for capacity and in-building coverage. What further makes erecting macrocells so attractive to providers is that they can serve their clients’ demands while also making significant amounts of money by having a platform for other carriers to rent space for their equipment. Knowing there is generally no longer significant gaps in coverage, providers will most likely continue demanding to establish macrocell sites, even though microcells could satisfy the service issues, mainly due to the significant economic benefit to their company.

The good news about microcell technology is that it does not only come in the form of smaller towers. This technology can simply be an antenna and a box hanging on a pole or building, which is commonly referred to as a “microcell,” a “booster,” or a “repeater.” Another more complex and involved system, which is sometimes included in the microcell technology category is known as DAS (Distributed Antenna System).³² (The following information regarding boosters and DAS is not meant to provide a strict, technical understanding of the technology but rather a basic description of what the technology needs to operate and generally how they work.)

Booster and repeater devices are stand alone, short range radio transceivers that are located in specific locations, either indoors or outdoors, where there is often low signal quality and high demand for a telecommunications signal. Typically boosters are hard wired while repeaters are commonly wireless (the wireless technology also includes mobile, in-vehicle capabilities). Some devices are specifically called “microcells” and have defined coverage ranges and can usually support up to 200 users. Pico/metrocells is another example of this technology and have smaller coverage areas of up to 30,000 square feet and can handle about 80 users. Both microcells and pico/metrocells require professional installation. (The James Madison University Festival Conference Center has a professionally installed microcell repeater.) An even smaller device that does not require professional installation and which does not require an existing telecommunications signal, is called a femtocell. These units are located in homes or offices and are connected through a high speed broadband internet connection and usually require specific phone numbers to be registered to the unit. Depending upon the femtocell unit, four to 20 phones can be covered and the registered phones are the only devices that can receive the additional coverage³³ (Figure 12).

36 Planning Commission Staff Report. November 9, 2011. “Communications Tower 1106 Reservoir Street.” Special Use Permit.

37 Harrisonburg Planning Commission Minutes November 9, 2011. Special Use Permit 1106 Reservoir Street. Page 7.

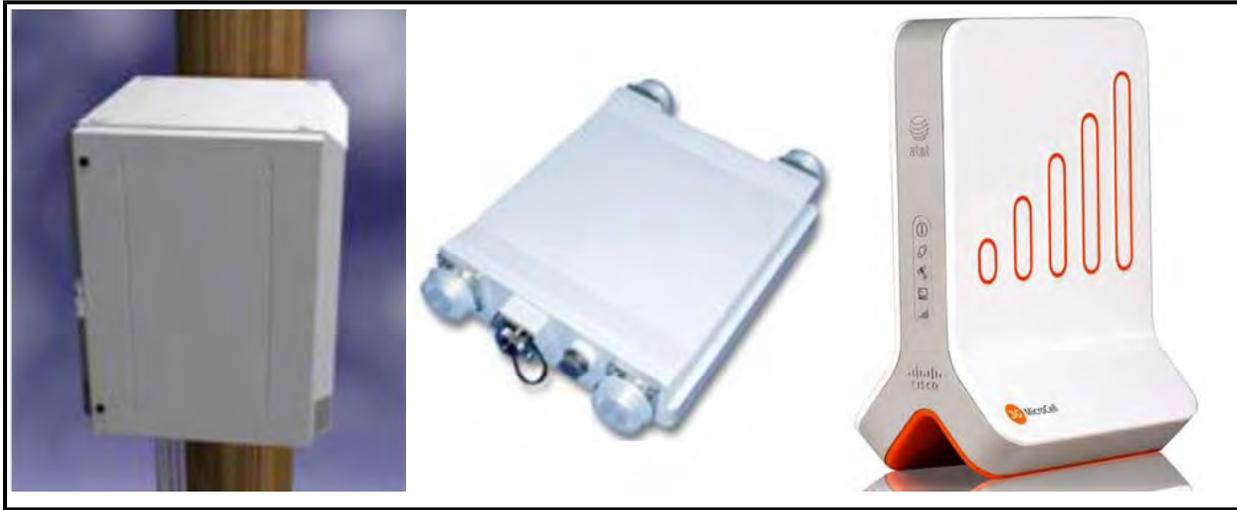


Figure 12: Example of a microcell³³ (left), picocell³³ (center), and femtocell³⁸ (right).

By some estimates, there are more than 2 million signal boosters in use today. They are used to fill coverage gaps in urban environments, such as buildings, tunnels, and bridges, which benefits individuals working in office buildings, health care facilities, and on educational campuses.³⁹ They are also used in rural, underserved, and difficult to reach areas. When used properly, they can provide public safety benefits where coverage is deficient or where a signal is blocked or shielded by enabling the public to connect to 911 in an emergency.³⁹

From their initial use to the present time, boosters and repeaters have not been heavily regulated by the FCC. The industry has learned, however, that malfunctioning, improperly installed, or technically-deficient boosters may cause harmful interference to commercial and public safety wireless networks. In knowing this, on February 20, 2013, the FCC released a *Report and Order* to incorporate safeguards, generally known as the Network Protection Standard, to mitigate interference to wireless networks.³⁹ In this report, the FCC categorized the booster technology into two categories: Consumer Signal Boosters and Industrial Signal Boosters.

Consumer signal boosters are designed to be used “out of the box” and are specifically defined by the FCC as: “a bi-directional signal booster that is marketed and sold to the general public for use without modification.” These types of devices do not require professional installation and are used for personal use by individuals to improve coverage in a home, car, boat, recreational vehicle and related areas. Subscribers must obtain a form of licensee consent to operate the booster, register the unit with the provider, and the booster must be certified by the FCC. A femtocell, as described and pictured above in Figure 12, is an example of a consumer signal booster. The new rules require consumer signal boosters to have specific technical features to protect against interference.³⁹

Industrial signal boosters include a variety of devices that are designed and installed by licensed or qualified professionals and are typically used to serve multiple users and cover large areas such as stadiums, airports, office buildings, hospitals, tunnels, and educational campuses. They are specifically defined by the FCC as: “all signal boosters other than consumer signal boosters.” These devices require an FCC license or express license consent to operate. Because

38 Image found at: http://blogs-images.forbes.com/anthonykosner/files/2012/10/3g-microcell_large_verge_medium_landscape.jpeg.

39 Federal Communications Commission. 2013. Report and Order. In the Matter of Amendment of Parts 1, 2, 22, 24, 27, 90 and 95 of the Commission’s Rules to Improve Wireless Coverage Through the Use of Signal Boosters. http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0320/FCC-13-21A1.pdf.

these devices are installed with explicit licensee consent and close licensee coordination, they do not require particular interference protection. These devices may also require additional antennas, amplifiers, and other components to operate appropriately.³⁹

In the February 20, 2013 *Report and Order*, the FCC stated they will no longer accept applications to certify any boosters that do not comply with the new rules, and furthermore, on or after March 1, 2014, all consumer and industrial signal boosters sold and marketed in the United States must meet the new requirements.³⁹

Although sometimes referred to as microcell technology, DAS should not be confused with boosters and similar independent microcell devices. The DAS Forum, a broad-based organization dedicated to the DAS component of the nation's wireless network, and made up of leaders focused exclusively on shaping the future of DAS as a viable complement to traditional macrocell sites in challenging environments,⁴⁰ states that DAS is being deployed to provide coverage in targeted locations, moving radios closer to the subscriber, and or to providing additional call and data-handling capacity in areas with concentrated demands for wireless service.³³ (Note: As of April 22, 2013, the DAS Forum was renamed the HetNet Forum.⁴¹ The HetNet Forum is a membership body within PCIA. "HetNet" is short for heterogeneous network⁴⁰ and is further described below.)

DAS networks include three primary components: 1) a number of remote communications nodes, each having at least one antenna for transmission and reception, 2) a high capacity signal transport medium, which is typically a fiber optic cable (either underground or aerial⁴²), connecting the nodes to the central communications hub, and 3) equipment located at the hub site to propagate and/or convert, process or control the signals transmitted and received through the nodes (the hub is where the equipment is stored similar to the equipment found at the base of telecommunications towers). Furthermore, and depending upon the exact environment of the DAS, additional equipment such as amplifiers, remote radio heads, signal converters, and power supplies, may be needed³³ (Figure 13).

DAS can be deployed indoors and outdoors, and it is often desirable in urban areas and within or around college campuses. Indoor DAS networks can be deployed in spaces where large numbers of people congregate such as sports stadiums and arenas, convention centers, and healthcare facilities. Outdoor DAS networks are deployed in targeted locations within areas already covered by macrocells to increase capacity. DAS systems can range from two to hundreds of nodes, and each node transmits radiofrequency signals at much lower power levels than common macrocell sites. Often DAS nodes are attached to utility poles or similar structures (Figure 14) in the public right-of-way covering several blocks, whole neighborhoods, and even entire cities.³³ DAS hubs can be located up to 30 miles away, which could be in different jurisdictions.³⁵

40 The DAS Forum. February 21, 2013. About Us: Who We Are. <http://www.thedasforum.org/about-us/who-we-are/>.

41 The HetNet Forum. <http://www.thedasforum.org/the-das-forum-renamed-hetnet-forum/>.

42 American Tower. 2011. DAS Solutions: Delivering Coverage and Capacity in Today's Challenging Environments. <http://www.americantower.com/marketing227/AmericanTowerDASSolutionsBrochure.pdf>.

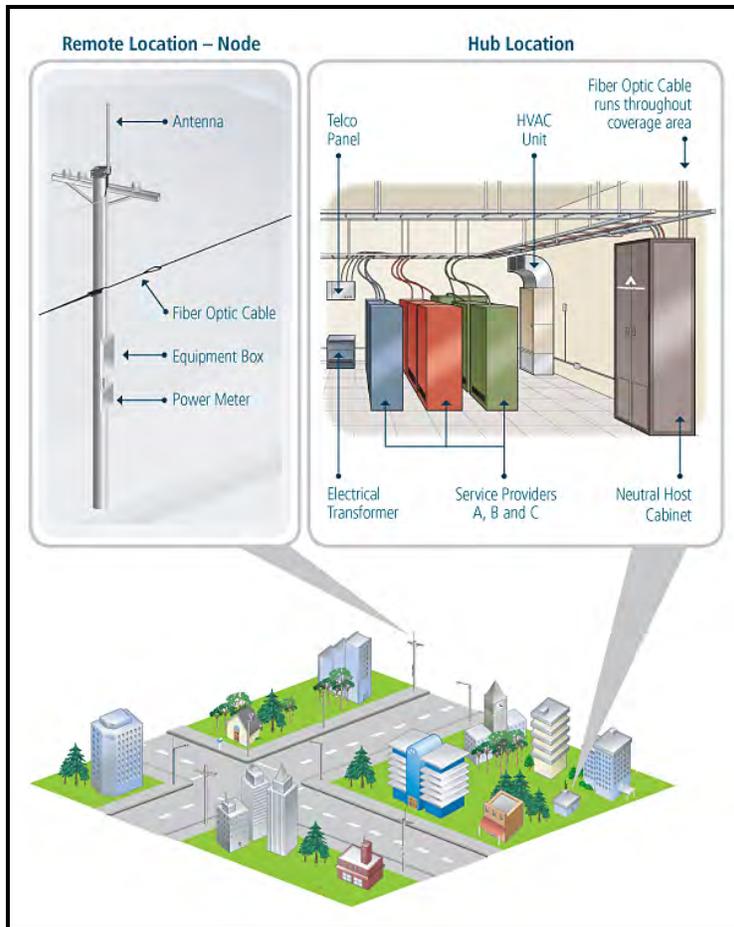


Figure 13: Basic example of an outdoor deployed DAS network.⁴³



Figure 14: A DAS node attached to a street light in North Carolina⁴⁴ (left), a node attached to a wooden power pole in New Jersey⁴⁴ (center), and a close-up view of node equipment (right)³³.

⁴³ Crown Castle. February 22, 2013. We Are Solutions Case Study: Deployment in New York City. <http://www.crowncastle.com/das/caseStudies/newYork.pdf>.

There are of course advantages and disadvantages with DAS technology. Some of the advantages include: providing low-profile infrastructure, providing coverage in challenging or hard to reach areas, utilizing less power, operating multi-system networks (i.e. PCS, broadband, WiFi, etc.), and it is easier to upgrade.⁴⁵ The disadvantages are usually associated with the expense of such systems. Regardless of who the financier is, there is usually significant upfront capital investments needed, especially when deployed outside due to design and installation issues and for the need of miles of fiber optic cabling.³³ Specifically from a provider's perspective, some of the disadvantages are that leases are usually higher than macrocell sites, the coverage area per node is small, and there may be pole attachment issues (i.e. availability or right-of-way/ownership).⁴²

Furthermore, depending upon which side of the aisle one falls, DAS deployment may be easy or difficult to implement, and it all depends upon how the locality chooses to regulate the technology. Interestingly, the model ordinance devised by PCIA includes a statement that “no provisions of [the model ordinance] shall apply to the siting of Distributed Antenna Systems (DAS) or wireless facilities located within and intended to provide wireless coverage within a structure.”²⁴ On the other hand, Kreines and Kreines, Inc. contends that microcell technology should require discretionary review and approval, just like macrocells because microcells emit radio frequency radiation—although at lesser amounts—just like macrocells. Kreines and Kreines, Inc. also states that some microcell sites will be close to the macrocells that they support and in such cases the cumulative RFR emissions environment (often called the RF floor) will be raised.³²

As the City moves forward with considering telecommunications policies and regulations, the term heterogeneous network, or the “HetNet,” as mentioned above, should be understood as it is one of the newest identifications or terminologies used when describing the wireless network. The HetNet, as described by 4G Americas—an organization devoted to promoting, facilitating, and advocating for the deployment of the 3rd Generation Partnership Project (3GPP) family of technologies throughout America⁴⁶—in their white paper *Developing and Integrating a High Performance HET-NET*,⁴⁷ consists of different wireless technologies working together to provide a seamless wireless experience. It is comprised of traditional large macrocells, microcells, picocells, femtocells, and WiFi networks to offload telecommunications traffic.⁴⁷ In addition, the HetNet Forum describes the HetNet as a wireless system, comprised of an array of mobile and wireless technologies and infrastructure that are interoperable with the macrocellular network that provides harmonious voice and data communications.⁴⁰ Figure 15 below provides a basic illustration of the HetNet.

44 HetNet Forum. <http://www.thedasforum.org/gallery/outdoor-das-images/>, and <http://www.flickr.com/photos/dasforum/6420156075/sizes/o/in/photostream/>, and <http://www.flickr.com/photos/dasforum/6420104509/sizes/o/in/photostream/>.

45 Malone, Christine A. January 24, 2011. DAS and the Town of Carefree: Technology Overview and Answer to Common Questions. Comp Comm/STM COMM, LLC. <http://www.carefree.org/vertical/sites/%7B7E577914-08B7-498C-8013-7E6515AE5610%7D/uploads/%7B05262F5F-E40B-4461-BDE4-327D28E7C812%7D.PDF>.

46 4G Americas. About 4G Americas. <http://www.4gamericas.org/index.cfm?fuseaction=page§ionid=106>.

47 4G Americas. October 2012. *Developing and Integrating a High Performance HET-NET*.

<http://www.4gamericas.org/documents/4G%20Americas%20-Developing%20Integrating%20High%20Performance%20HET-NET%20October%202012.pdf>.



Figure 15: Basic Illustration of the HetNet as included in 4G Americas' *Developing and Integrating a High Performance HET-NET*. Image used from RCRWireless.com.⁴⁸

As noted above, the utilization of existing power poles, street lights, and traffic control infrastructure is very important to the deployment of traditional telecommunications infrastructure, DAS networks, and other microcell installation. Since much of this infrastructure is often desired to be located within public street and alley right-of-ways, other provisions, outside of zoning regulations, must also be devised so that comprehensive telecommunications regulatory control can be properly implemented in the City. In understanding this, input provided by the Department of Public Works and the Harrisonburg Electric Commission will be necessary. Such provisions must work within the confines of 47 USC § 224 Pole Attachments of the 1996 Act, which outlines specific rules regarding rates, terms, and conditions when attaching telecommunications to utility infrastructure,⁴⁹ and within the guidelines of the FCC's April 7, 2011 *Report and Order and Order of Reconsideration in the Matter of Implementation of Section 224 of the Act*.⁵⁰

If the City decides to amend the existing telecommunications regulations, planning for the installation of microcell sites must be considered, and if the City does not want towers popping up in places that are considered undesirable, then this technology should be encouraged by ordinance.

V. Conclusion

In returning to the discussion from the City's first telecommunications request in September 1996, a representative of the telecommunications industry stated, "...not only does [telecommunications] service increase the available communications services and therefore help people better communicate, it stimulates economic development... [and]... [i]t promotes economic growth as businesses realize their facilities and executives have access to state-of-the-art communications services." Although that statement was true then, the telecommunications technology has advanced well beyond its intentions in 1996, and therefore that quote is much more relevant and imperative to current lifestyles and the economy today than it was almost 17

48 Image found on RCRWireless.com. RCRWireless: Intelligence On All Things Wireless. Mobile Backhaul Trends and Analysis. <http://www.rcrwireless.com/mobile-backhaul/lte-network-architecture-diagram.html>.

49 Telecommunications Act of 1996. <http://transition.fcc.gov/Reports/1934new.pdf> - pages 59 of 333.

50 Federal Communications Commission. April 7, 2011. *Report and Order and Order of Reconsideration in the Matter of Implementation of Section 224 of the Act*. WC Docket No. 07-245. <http://www.fcc.gov/document/implementation-section-224-act-national-broadband-plan-our-future-0>.

years ago. As identified in a February 2013 published FCC White Paper titled, *The Mobile Broadband Spectrum Challenge: International Comparisons*, the mobile wireless landscape is transforming with mobile broadband networks rising not only as the foundation of communications but also as the infrastructure that supports economic growth and innovation in widespread, consumer focused areas such as healthcare, public safety, education, and social welfare.⁵¹

As noted by Kreines and Kreines, Inc., since 2009, providers across the country have been steadily making, or requesting to make, upgrades and improvements to existing sites and requesting new sites to locate their infrastructure. In 2010, there was about 600 MHz of spectrum in the United States available for personal wireless services carriers to buy or use, and by 2015, an additional 800 MHz of spectrum could be needed.³ In addition to this prediction, the FCC believes global mobile data traffic is anticipated to grow eighteen-fold between 2011 and 2016.⁴⁴

Technology has changed significantly over the past 17 years and staff believes it would be good practice to update the City Code by amending the Zoning Ordinance and other policies by further addressing land use issues involving telecommunications facilities. Staff believes the driving force to update these regulations should be in being sensitive to the needs and desires of the Harrisonburg community while providing more opportunities for telecommunications. If Planning Commission agrees, staff will formally begin to draft a telecommunications ordinance.

Although ultimately more provisions would be included in the ordinance and other discussions still must be had—one of which is whether or not existing private property rights relative to telecommunications should be changed—at this time staff recommends some form of the following provisions be incorporated in an ordinance for the City to adopt:

1. To allow telecommunications within more zoning districts.
 - a. Such provisions could include allowing telecommunications in residential districts by special use permit only, where providers must utilize concealed technology.
2. To create opportunities for administrative review and approval.
 - a. Such provisions could include: allowing the placement of telecommunications by-right on existing roofs, walls, water tanks, existing towers, and other structures within business and industrial districts so long as the height of the structure is not increased or is not increased by a certain height or percentage of the supporting structure—these facilities should also be identical in color or closely compatible with the structure and flush mounted; and allowing concealed facilities by right in business and industrial districts.
 - b. Such provisions should not require additional fees aside from such required by building and sub-trade permits.
3. To allow telecommunications in public street right-of-way, other public right-of-way, and on publicly owned properties.
 - a. Such provisions could allow, with support from the Department of Public Works and the Harrisonburg Electric Commission, telecommunications on light stanchions, traffic signal infrastructure, and power and other utility poles. In

⁵¹ Federal Communications Commission. February 26, 2013. *The Mobile Broadband Spectrum Challenge: International Comparisons*. http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0227/DOC-318485A1.pdf.

addition, such facilities, with support from the Harrisonburg City School Board, could be located on athletic facility light poles.

- b. These allowances could be permitted by administrative review and approval.
4. To require more information and details be submitted upon application.
 - a. Such requirements could include: photo-imagery or other visual simulation; for new towers—a balloon test shall be conducted to illustrate the height of the proposed tower and to notify the City when the test would be conducted and to require photographs of the balloon test be submitted upon application; an inventory of the providers existing facilities that are either within the City or within five miles of the City limits which shall specify the location, height, and design of the facility; and written evidence of the contact made with the owners of nearby facilities that they have inquired about the potential collocation opportunities that are technically feasible locations.
5. To require all telecommunication facilities, not on alternative structures (i.e. existing buildings, water tanks and towers, etc.), be setback 110 percent the height of the tower.
6. To require landscaping or other material that effectively screens the view of the support buildings from adjacent property.
7. To require freestanding telecommunications facilities to be designed to accommodate at least three providers or more depending upon the height of the facility.
8. To prohibit artificial lighting unless required by the FCC.
9. To require a form of surety to secure the cost to remove the tower and equipment and return the site to its original condition to the extent reasonably possible.
10. To allow at the discretion of the Director of Planning and Community Development, or their designated agent, to contract with experts to assist with the review of telecommunications facilities at an expense of the applicant not to exceed a specified amount.
11. To incentivize microcell and DAS technology.

Appendix A: Current Zoning Regulations Regarding Telecommunications



City of Harrisonburg, Virginia

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

STAFF REPORT January 11, 2012

Current Zoning Regulations Regarding Telecommunications

The following report describes the City's current zoning regulations regarding telecommunications towers and equipment. In brief, three zoning districts—B-1, B-2, and M-1—allow private, commercial telecommunications structures through by-right permission or by approval of a special use permit (SUP). Such towers should not be confused with “communications facilities necessary for public safety purposes” or private amateur radio antennas.

The Zoning Ordinance does not define “telecommunications” or “telecommunications equipment;” the term associated with such systems is “communications tower,” and is defined as: *a structure that is intended to send and/or receive radio, television and other telecommunications signals*. It is interpreted that this definition includes stand alone towers as well as co-location equipment on buildings and other structures. Nevertheless, the Zoning Ordinance is not consistent with its use of “communications tower” and sometimes only refers to “telecommunications,” which staff treats the same as “communications tower” and “communications facilities.”

Other than its occurrence in Article F. Definitions, “communications tower” is only referenced three times. First, it occurs within Section 10-3-91, which is the special use permit (SUP) section of the B-2, General Business District. It is listed as subsection (4), where it states: *Communications tower no more than one hundred twenty-five (125) feet in height*. There have been several such SUPs approved in the past, and in 2011, the City approved two requests for this SUP. The first was in July for the property at 130 University Boulevard, at the corner of University Boulevard and Evelyn Byrd Avenue, where Verizon co-located on an existing tower, which now reaches 79 feet in height. The second request occurred recently in November and was located at 1106 Reservoir Street, where AT&T will erect a 125-foot tower. As most are aware, SUPs require public hearings with advertisements in the newspaper, postings of property, notifications sent to adjacent property owners, Planning Commission review, and a decision by City Council.

“Communications tower” is next referenced in Section 10-3-96, which is the M-1, General Industrial District's uses permitted by-right category, listed as subsection (15). The language is exactly the same as that within the B-2 SUP section, where the only difference is the use is by-right and not by SUP. These uses only require administrative approval that could include comprehensive site plan review and obtaining building, electrical, or mechanical permits. An

example of a property owner that took advantage of this by-right allowance is at 922 South High Street. This tower is located near Keister Elementary School's Central Avenue parking lot, but it is accessible from South High Street, diagonally across the street from the Taste of Tai restaurant. It was permitted in January 2007 and reaches a height of 120 feet. The City does not have an easy way to query records to determine exactly how many towers or co-locations on these towers have been permitted per this by-right use.

The last section of the Zoning Ordinance where "communications tower" is referenced is within the SUP category of the M-1, General Industrial District at 10-3-97 (6). The language within that subsection states: *Communications towers more than one hundred twenty-five (125) feet in height.* There have been only two such SUPs reviewed and approved by City Council. The first was in June 2003, when City Council approved a SUP that granted permission to Verstandig Broadcasting to bring their non-conforming, 350-foot towers into conformance with the Zoning Ordinance. The towers are located near Garbers Church Road and were annexed into the City in 1983. The other SUP was located at 30 Kratzer Avenue, where, in August 2004, Nextel Partners requested to co-locate communications equipment at the top of the Cargill Turkey Products, LLC feed tower, which stands at 185 feet in height. Although the SUP was approved, to staff's knowledge, Nextel never co-located their equipment on the feed tower.

The B-1, Central Business District also allows telecommunications equipment, however, the regulations within this district do not refer to the use as "communications tower," but rather as "telecommunications equipment and facilities," which, as a reminder, is not defined by the Zoning Ordinance. This district allows two different uses related to telecommunications. The first is within Section 10-3-84 (9), which permits telecommunications equipment and facilities by-right, provided such equipment and facilities are located in an enclosed structure. This use was added to the list of by-right uses of the B-1 district in 1994 when Shentel wanted to allow telecommunications equipment in the B-1 zoning district as a principle use in a building where they had no offices. The amendment was approved and they subsequently located within the building at 151 South Mason Street. To staff's knowledge, 151 South Mason Street is the only property that has this use. Also in B-1, Section 10-3-85 (2) allows telecommunications equipment and facilities not located in an enclosed structure by SUP. There have been four such requests and all were approved. The first occurred in December 2003 when Shentel received approval to locate on the rooftop of the building at 2 South Main Street (the building at the corner of Court Square and East Market Street). A second permit was approved in July 2005 to allow Verizon to also co-locate on the same rooftop. Then, in August 2005, Cellone received approval to locate on the rooftop of 101 North Main Street (also known as Harrison Plaza where the Police Department, the Fire Department, and the Emergency Communications Center (ECC) is located). Finally, in October 2006, Alltel received approval to also co-locate on the rooftop of Harrison Plaza. Since the time of the Harrison Plaza co-location SUPs, there has been an administrative acceptance of the concept that the City does not have to abide by its own zoning regulations.

There has been some confusion regarding the issue of "co-location." It should be understood that any telecommunications company can co-locate on any structure or building in the B-1, B-2, and M-1 zoning districts so long as they abide by the zoning regulations, which may require SUP approval, and, if necessary, submit and receive approval of a comprehensive site plan and further obtain the proper building, electrical, or mechanical permits. It is up to individual property owners and the interested party to determine if existing structures and buildings have the

physical capacity to allow co-location, and if necessary, these individuals are working in cooperation with the City's Building Inspections Division in receiving approval of appropriate permits, which may be related to a building's structural/physical capacity. One example of a co-location on a building in the B-2 district is on the Holiday Inn structure at 1400 East Market Street. In 2006, T-Mobile received approval of a SUP and mounted their panels to the side of the building. The panels are painted the same color as the building and are disguised extremely well. Although the properties are zoned residentially, co-location is also permitted on the City-owned public safety tower at Tower Street, the water tank at Tower Street, and at the tower behind Stone Spring Elementary School.

To be clear, "communications facilities necessary for public safety purposes" are permitted by SUP in all zoning districts except R-5, R-6, R-7, and MX-U. The use of communication facilities was added to the Zoning Ordinance in 2005 (prior to the creation of the R-5, R-6, R-7, and MX-U districts) in preparation of the installation of the public safety towers now located at Tower Street and near Stone Spring Elementary School. Both properties were granted SUPs in 2005 and both towers reach 199 feet in height. Per ordinance, these towers may reach 200 feet in height, and they may also include rental of space to private communication service providers. Private amateur radio antennas are permitted in all residential districts, including the MX-U district, when such structures are intended for public service and emergency use. These antennas may exceed the height otherwise established within the district so long as the height is justified for proper radio communications. Examples of such antennas would be amateur or ham radio antennas.

Staff does not have an inventory of every communications equipment or tower in the City nor do we know of every structure that may have co-location of telecommunications equipment. With this, it should be recognized that telecommunications equipment could be located on structures that may somehow be non-conforming, or they could even be located in an illegal fashion—meaning they did not receive appropriate permission or located in a place that, by ordinance, would not be permitted. We appreciate when property owners/telecommunication providers contact us regarding location and co-location opportunities; first, so we can ensure they abide by all governing regulations, but also so we can inform the ECC of the situation to ensure that it does not disrupt their communications systems.

Appendix B: Telecommunications Facility Locations

Table 1 includes the telecommunications sites within the City that are regulated by the Federal Communications Commission and were reported to the Virginia State Corporation Commission (SCC) as of September 20, 2012. Additional assistance was provided by the City's Commissioner of Revenue's Office including the Real Estate Office and the Virginia Department of Taxation. (The Verizon Wireless locations were further verified by the Verizon Wireless Real Estate Manager serving the region in which the City is located.) Note this list is intended to be comprehensive, but if there is equipment deployed on sites not listed below, then it was either not required to be reported, not reported to the SCC as of the date listed above, or has simply not been reported. Note that each row number corresponds to the telecommunications facilities numbered on the included map. Table 2 differentiates legal names with common carrier names.

Table 1: Telecommunications Towers, Antennas and Equipment within the City of Harrisonburg

	Tax Map	Physical Property Address	Zoning	Supporting Infrastructure & Height	Company Name(s) and Number of Tenants on Infrastructure
1*	6-C-1	2510 South Main Street	M-1	Tower (Exact height unknown)	1. WWC License, LLC
2	13-A-3	1400 East Market Street	B-2	Holiday Inn Building (42' – Flush mounted antennas)	1. T-Mobile License, LLC
3	14-L-7	1108 Reservoir Street	B-2	Tower (124')	1. New Cingular Wireless PCS, LLC 2. Shenandoah Personal Communications LLC Shentel
4^	17-B-1	206 Port Republic Road	R-3	Tower (Exact height unknown)	1. APC PCS, LLC 2. New Cingular Wireless PCS, LLC 3. Virginia PCS Alliance, L.C. 4. T-Mobile License, LLC
5	19-D-5	904 South High Street	M-1	Tower (120')	1. Verizon Wireless (VAW) LLC 2. APC PCS, LLC
6	20-A-2B	1176 South High Street	M-1	Water Tower (150' – Antennas reach 160')	1. APC PCS, LLC 2. Cook Inlet/VIS GSM VII PCS, LLC 3. New Cingular Wireless PCS, LLC 4. T-Mobile License, LLC 5. Virginia PCS Alliance, L.C.
7	25-H-19	320 Chesapeake Avenue	M-1	Tower (199')	1. New Cingular Wireless PCS, LLC

8 [#]	32-D-1	670 Vine Street/653 Tower Street	R-2	Tower (199')	1. Verizon Wireless (VAW) LLC 2. T-Mobile License, LLC 3. APC PCS, LLC
9	34-B-1	30 Kratzer Avenue	M-1	Cargill Feed Mill Building (183' – Antennas mounted at 175')	1. New Cingular Wireless PCS, LLC 2. Nextel WIP License Corp.
10 [#]	34-P-1	101 North Main Street	B-1	Harrison Plaza Building (66' – Antennas reach 88')	1. WWC License, LLC
11	34-Y-10	2 South Main Street	B-1	Multi-use Building (82'4" – Antennas reach 84'6")	1. APC PCS, LLC 2. Virginia PCS Alliance, L.C. 3. Verizon Wireless (VAW) LLC or WWC License, LLC
12	35-X-9	135 West Market Street	B-1	Rosetta Stone In-Building Base Station/Booster (Height N/A)	1. T-Mobile License, LLC
13	37-C-3	85 Waterman Drive	M-1	Tower (Exact height unknown)	1. APC PCS, LLC
14	41-E-1	166 Charles Street	M-1	Tower (Exact height unknown)	1. APC PCS, LLC
15	56-A-9	1640 Red Oak Street	M-1	Tower (125')	1. T-Mobile License, LLC
16	78-B-2	85 University Boulevard	B-2	Hampton Inn Building (45'2" – Antennas reach 55'6")	1. New Cingular Wireless PCS, LLC 2. Verizon Wireless (VAW) LLC 3. Virginia PCS Alliance, L.C.
17	78-C-1	130 University Boulevard	B-2	Tower (79')	1. WWC License, LLC 2. APC PCS, LLC 3. Verizon Wireless (VAW) LLC
18 [@]	91-A-2	1575 Peach Grove Avenue	R-2	Tower (199')	1. Verizon Wireless (VAW) LLC 2. APC PCS, LLC 3. T-Mobile License, LLC

* Property listed by the SCC as an active site, however, Verizon Wireless decommissioned its equipment in 2010. Per a site visit, it appears this site has not been used by a telecommunications company in some time.

[^] Property owned by Visitors James Madison University

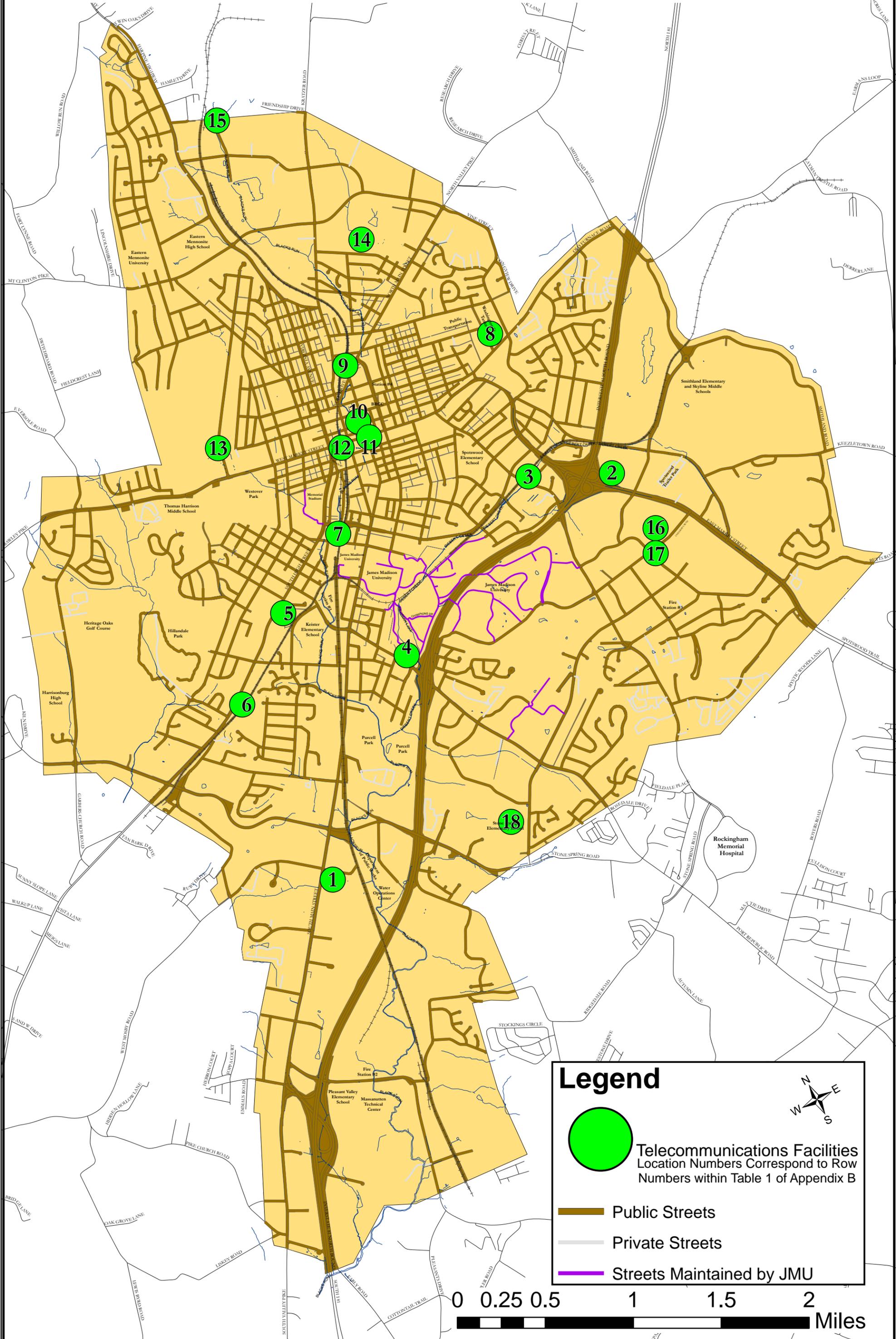
[#] Property owned by the City of Harrisonburg

[@] Property owned by School Board City of Harrisonburg

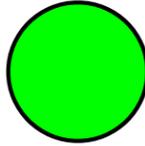
Table 2: Wireless Companies Assessed by the State Corporation Commission

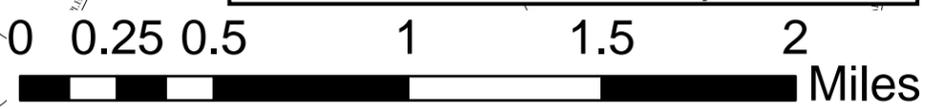
Common Carrier Name	Legal Name As Shown in Table 1
AT&T	<ul style="list-style-type: none">• New Cingular Wireless PCS, LLC
NTELOS	<ul style="list-style-type: none">• Virginia PCS Alliance, L.C.
Sprint-Nextel	<ul style="list-style-type: none">• APC PCS, LLC• Nextel WIP License Corp.
Shentel	<ul style="list-style-type: none">• Shenandoah Personal Communications LLC Shentel
T-Mobile	<ul style="list-style-type: none">• Cook Inlet/VS GSM VII PCS, LLC• T-Mobile License LLC d/b/a T-Mobile Northeast LLC
Verizon Wireless	<ul style="list-style-type: none">• Verizon Wireless (VAW) LLC• WWC License, LLC

Telecommunications Facility Locations (September 2012)



Legend

-  Telecommunications Facilities
Location Numbers Correspond to Row Numbers within Table 1 of Appendix B
-  Public Streets
-  Private Streets
-  Streets Maintained by JMU





City of Harrisonburg

Department of Planning and Community Development

409 South Main Street
Harrisonburg, Virginia 22801
540-432-7700

www.harrisonburgva.gov/community-development

Memorandum

To: Harrisonburg Planning Commission
From: Adam Fletcher, City Planner
RE: **Comments Regarding the Telecommunications Report**
Date: Thursday, August 29, 2013

Included herein are the comments that staff has received regarding the telecommunications report provided to you at the August 14th regular meeting. As was previously noted, aside from one private contractor, staff has received input from all of its industry contacts. Within the comments, the Shentel representative recommended that we share this document with the Virginia Wireless Association, and therefore we have solicited for their feedback.

Since the August 14th regular meeting, staff has also requested feedback from appropriate City Departments. Comments offered by Jim Junkins, Director of the Harrisonburg-Rockingham Emergency Communications Center, are also included. If necessary, staff will forward comments from other Departments.

The only item of New Business that was scheduled for September has, as of this morning, withdrawn their application; thus telecommunications will be the only major matter discussed in September.

Please review these comments for the September 11th regular meeting. If you have any questions, please let us know.



Philip S. Shapiro
General Attorney

Legal Department
Oakton, Virginia 22185
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August 7, 2013

By U.S. Mail and
By E-Mail to: AdamF@harrisonburgva.gov

Mr. Adam Fletcher
City Planner
City of Harrisonburg
409 South Main Street
Harrisonburg, Virginia 22801

RE: Considering Amendments For Telecommunications Regulations

Dear Mr. Fletcher:

Enclosed please find Comments of AT&T regarding the above-referenced topic.
Also enclosed please find AT&T's Model Wireless Facilities Ordinance.

If you have any questions, please do not hesitate to contact the undersigned.

Respectfully,

A handwritten signature in cursive script, appearing to read "Philip S. Shapiro".

Philip S. Shapiro
VA Bar No. 66139

Enclosures



Phillip S. Shapiro
General Attorney

Legal Department
Oakton, Virginia 22185
Tel: 703-272-1478
Fax: 832-213-0278
E-Mail: ps8412@att.com

August 7, 2013

By U.S. Mail and
By E-Mail to: AdamF@harrisonburgva.gov

Mr. Adam Fletcher
City Planner
City of Harrisonburg
409 South Main Street
Harrisonburg, Virginia 22801

Re: AT&T Comments Regarding Telecommunications Ordinance

Dear Mr. Fletcher:

AT&T is pleased to provide the following comments regarding the Report ("Report") of the Staff of the Department of Planning and Community Development ("Planning Department") with respect to possible amendments to the City of Harrisonburg's telecommunications regulations. In these comments, we address the Staff's specific recommendations (Report, pp. 25-26) and also raise several other matters that we believe should be considered. In addition, we attach for the Planning Department's consideration a model wireless facilities ordinance that is specifically designed to balance the interests of the various stakeholder interests while complying with applicable Federal laws, including the recently enacted Middle Class Tax Relief and Job Creation Act of 2012.

As an initial matter, AT&T would like to compliment the thoughtful and detailed approach that the Planning Department has taken in analyzing the issues and preparing the Report. The Report reflects a commendable understanding of the telecommunications industry and provides helpful details about the City's past experiences with siting telecommunications facilities over the last two decades.

Background and Summary of Position.

Like their counterparts throughout the country, Harrisonburg residents and businesses want robust and reliable wireless telecommunications services. Nationally, 38% of households depend exclusively upon wireless communications while a comparable portion of households rely primarily upon wireless services for communications. Moreover, this trend reflects the demands of two key demographics –

younger users and new and expanding businesses – two groups that all communities seek to retain and attract.

Wireless providers such as AT&T design wireless facilities to reduce coverage gaps and meet the explosive growth in demand for mobile broadband services. Since capital and other resources are finite, the decision to invest in a given area, and the timing of such investments, necessarily depend upon several factors, including the demands of other communities and regulatory costs, both in terms of time and money.

Harrisonburg’s approach to regulating wireless facilities should encourage the provision of advanced telecommunications while striving not to unduly impact existing land uses. The objectives of AT&T and other wireless providers are ultimately the same as those of the City. Although wireless providers compete vigorously in the retail market, both our investors and the communities we serve put great value on the efficiency of commercially feasible collocation. Obviously, when more carriers collocate on towers, the total number of towers needed to serve a community is reduced.

The location of wireless telecommunications facilities involves many considerations – engineering, the demands of residents, businesses, and public safety authorities, and visual concerns, among others. AT&T is committed to work cooperatively with the City of Harrisonburg to develop a well-balanced regulatory framework that is most likely to produce reasonable optimal outcomes.

Section I of these comments discusses the dramatic change that has occurred as a result of Federal law governing certain applications for approval of wireless facilities. Section II discusses practical limitations of microcell technology. Section III addresses each of the Staff’s specific recommendations. AT&T also recommends that the City consider using the attached model wireless telecommunications ordinance as a basis for designing a new ordinance.

I. Federal Pre-Emption Of Certain Wireless Telecommunications Facilities Requests

In a substantial change from the traditional law-use authority of state and local governments, Federal law now requires approval of certain requests for approval of wireless telecommunications facilities. As noted in the Report, Section 6409 of the Federal Middle Class Tax Relief and Job Creation Act of 2012 (“Section 6409”) expressly states that “a State or local government **may not deny, and shall approve, any eligible facilities request** for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station.” (Emphasis added.) 47 U.S.C. §1455(a)(1). As a result, applications for approval of “eligible facilities” must be approved. For this reason, the City’s regulatory framework should be compatible with this law.

An “eligible facilities request” is defined as “(A) collocation of new transmission equipment; (B) removal of transmission equipment; or (C) replacement of transmission equipment.” 47 U.S.C. §1455(a)(2). This would include collocation of a new carrier at

an existing telecommunications facility (tower, water tank or roof top location) and modification of existing telecommunications equipment (*i.e.*, antenna replacements). The new law authorizes the immediate installation of these eligible facilities to help improve the economy, create jobs, and speed the deployment of the services they provide. Further, applicants for approval of eligible facilities can no longer be burdened with requests for extraneous information (such as, for example, requiring photo imagery for a collocation request).

On January 25, 2013, the Federal Communications Commission (“FCC”) issued a Public Notice (“Public Notice”) which provides interpretive guidance on Section 6409 and specifically establishes that only an administrative approval process may be required for eligible facilities requests. (The Public Notice also provides guidance on what constitutes a substantial change in the physical dimensions of a tower or base station. Since that information is contained in the Report, AT&T has not provided it in these comments.)

Again, this a dramatic change to the legal landscape, and many of the sample telecommunications ordinances cited in the Report contain provisions which have not yet been updated to comply with Section 6409. The trend, however, is that municipalities are quickly conforming to the requirements of Section 6409 and using the simple administrative approval process to eligible facilities requests.

Any revisions to the City of Harrisonburg’s telecommunications regulations should also ensure compliance with the FCC’s “shot clock” rules, which require wireless facilities applications to be decided within either 90 or 150 days.¹ The United States Supreme Court recently upheld those rules in *City of Arlington v. Federal Communications Commission* (decided May 20, 2013). That decision also confirmed that Federal statutes in this area, and the FCC’s rules implementing those statutes, are binding on state and local governments.

II. No Preference For Microcells And DAS Technology .

Staff did a very thorough job preparing Section IV of the Report, which discusses Regulations in Practice and Other Suggested Legislation. In the subsection titled Legislation for Recent and Future Practices in Telecommunications, “microcell technology” is correctly identified as a potential infrastructure option for wireless providers such as AT&T. However, the Report errs in some of its assumptions that would favor the use of microcell facilities.

The Report asserts that macrocells are highly profitable because they can provide space to rent to collocating service providers. In fact, wireless infrastructure, whether using macrocell or microcell technology, is capital intensive. The vast majority of

¹ (Declaratory Ruling WT Docket No. 08-165 adopted November 18, 2009 (the “Shot Clock Order”) and the Public Notice, in which the FCC established 90 days as the presumptively “reasonable period of time” beyond which inaction on an eligible facilities request constitutes “a failure to act” in violation of Section 6409 and the 1996 Telecommunications Act.

AT&T's cell sites are located on structures owned by third parties (such as tower companies) because it is the most efficient means of deploying capital. Collocation of multiple providers' equipment on a tower is thus driven by the requirement of each providers' shareholders to conserve capital as much as by the desire of communities to reduce the number of towers.

The Reports conclusions, on page 23, regarding the PCIA's model ordinance provision concerning DAS is not correct. That provision, which addresses in-building DAS and other microcell technology, clarifies that zoning and land use laws should not govern the placement of such technologies *within* buildings. AT&T agrees.

While the regulation of outdoor DAS and similar technology may be appropriate for local zoning regulation where it may affect aesthetics, it is not appropriate for interior placements. The Report notes that Kreines and Kreines, Inc., believes that local land-use authorities should regulate interior placements of microcell technology because "microcells emit radio frequency radiation..." However, under the 1996 Telecommunications Act, radio-frequency emissions may not be considered in land-use decisions.

For its part, AT&T employs microcell and DAS technology where such technology enhances service and is commercially feasible. For various reasons, however, such technology is not appropriate in some situations. Various factors must be taken into account in deciding the appropriate technology in a given location, such as, geographical features and terrain, the presence and extent of ground "clutter" (e.g., buildings, other structures and trees) and other features which inhibit signal propagation, the location of existing sites and the ability to integrate new sites/technologies into the network, as well as the demands of AT&T's customers. Where microcell or DAS technology can be used to efficiently close a coverage gap or upgrade service, AT&T will do so. But a governmental preference for such technology is inappropriate. Indeed, a municipality's attempt to create a preference for using microcell or DAS technology was held invalid and pre-empted by the Telecommunications Act of 1996. See, *New York SMSA Limited Partnership v. Town of Clarkstown*, 612 F. 3d. 97 (2d Cir. 2010).

III. Staff's Specific Recommendations

1. Allowing Wireless Facilities in More Zoning Districts.

AT&T strongly agrees with the Report's recommendation to allow telecommunications facilities in more zoning districts. Excluding broad areas of the City creates gaps in networks that cannot otherwise be effectively remedied. In addition, network upgrades to necessary provide the innovative services and higher speeds demanded by residents and businesses plainly cannot be made if facilities are zoned out of those districts.

The Report mentions a possible requirement for the use of concealment techniques of facilities placed in residential districts. AT&T recommends that

concealment requirements be established on a case-by-case basis taking into account the unique circumstances of each application rather than attempting to apply general concealment requirements to all applications to place facilities in residential districts.

2. Administrative Review and Approval.

AT&T strongly agrees with the Report's recommendation that the City create opportunities for administrative review and approval. The attached model ordinance provides for administrative review in a number of instances.

The opportunity for administrative review serves as an appropriately strong incentive to wireless providers such as AT&T to remedy service gaps utilizing approaches that are subject to administrative review. As discussed in more detail in Section B above, it should also be noted that administrative review must be provided for any eligible facilities request pursuant to Section 6409.

3. Use of Public Rights-of-Way and Properties.

AT&T supports the recommendation that the City expand the ability of wireless providers to deploy facilities on public property. Use of public assets gives services providers more options for meeting customers' needs and also can provide revenue to the City.

4. Mandatory Supporting Information.

AT&T urges caution with regard to the Report's recommendation to require applicants to provide more supporting information and details. Any such requirements should be reasonable, closely tailored to nature of the facilities in question, and not be permitted to unduly delay processing applications.

While some types of additional information can be useful in considering certain proposals, blanket requirements for information that may not be relevant to most applications would be needlessly cumbersome and costly, and in some cases may violate Section 6409. The attached model ordinance provides a list of specific information that AT&T believes is appropriate to request for every special use permit application. AT&T recommends that additional information only be required at the reasonable discretion of the City depending upon the circumstances of a pending application.

The City should not require applicants to inventory all potentially technically feasible locations within a given radius and document evidence of attempts to collocate. As noted above, all carriers have an economic incentive to collocate. However, in many instances collocation is not feasible for other reasons, such as the need to place facilities in a particular location for meet a coverage gap. Thus, the mere existence of existing sites does not, and should not, override the other considerations involved in choosing where to place facilities. Again, wireless providers such as AT&T strongly favor collocation whenever feasible. New sites are only proposed when collocation is not feasible. And due to the higher cost of new construction, the process should recognize

that such a decision was only made after considering the feasibility of availability of potential collocation sites.

5. Setbacks Equal To 110 Percent of Tower Heights.

AT&T understands the concerns behind the Report's recommendation that facilities not situated on alternative structures should be set back a distance of 110 percent of the height of the tower. However, there are many instances, particularly in more densely developed areas, where such a setback requirement cannot be accommodated. In such instances, it is typical to design what is commonly known as a "self-collapsing" tower. In the extremely unlikely event of a catastrophic failure, such a tower is engineered to fold on to itself, rather than fall to one side. AT&T recommends that, to the extent a 110 percent setback is required, the regulations should allow for an administrative waiver of the requirement upon certification by a licensed engineer that the tower structure is designed to be self-collapsing. Such a waiver is fairly common in local telecommunications ordinances.

6. Screening Requirements.

AT&T understands the rationale for Report's recommendation that ground equipment be effectively screened from adjacent property. AT&T and other service providers strive to minimize the visual impact of their facilities, but it must be noted that telecommunications facilities cannot be made to "disappear." We believe that screening requirements should be tailored to the specific facts of each application and therefore urge the City not to impose blanket requirements applicable in all situations.

7. Preference For Technically and Commercially Feasible Collocations.

AT&T supports the Report's recommendation that the City require new free-standing telecommunications facilities to be designed to allow for collocation. As noted above, wireless providers such as AT&T strongly favor collocation whenever technically and commercially feasible and they propose new-site construction only proposed when such collocation is not feasible. Thus, requiring that new free standing telecommunications facilities to be designed to allow for collocation makes some sense. Indeed, this is a feature of the attached model ordinance (Section VI. A).

AT&T would note that a municipality's interest in collocation – and a reduced overall number of towers – is at times at odds with a desire to limit the height of such facilities. Public policy should generally oppose arbitrary height limits, for two reasons. First, unreasonably low height limits will result in theoretical available collocation spaces that are too low to effectively address the engineering requirements to address specific service needs. Second, more generally, arbitrary height limits increase the need for more towers. For these reasons, AT&T supports a requirement for technically and commercially feasible collocations and cautions against arbitrary height limits that work to defeat the value of collocation.

8. Artificial Lighting Prohibition.

AT&T generally supports the Report's recommendation to prohibit artificial lighting unless required by the FCC or FAA. (See the attached model ordinance, Section VI. D). We note, however, that some artificial lighting of telecommunications facilities is needed to aid navigation for emergency wireless providers which utilize helicopters. Given the various stakeholder that may be affected by an artificial lighting prohibition, the City should, in soliciting public comment on an ordinance, bring special attention to any proposed lighting prohibition.

9. Provisions For Facility Removal and Site Restoration.

AT&T generally does not object to the recommendation that the City address the removal of telecommunications facilities that are permanently abandoned. However, AT&T does not support a surety requirement. We believe that a simple requirement that abandoned facilities be removed, coupled with the City's authority to enforce its zoning laws, is more than adequate to ensure removal of facilities after abandonment. (This subject is addressed in Section VII. A of the attached model ordinance.) A surety requirement would impose an unnecessary financial burden on wireless providers and an unnecessary administrative burden for the City.

10. Applicant Liability For The Costs of City-Retained Consultants.

AT&T strongly urges caution with regard to the recommendation that the City have the ability to hire consultants to assist with the review of telecommunication applications at the expense of the applicants. Such a mechanism is unnecessary and would create financial incentives that are inconsistent with the public interest.

As demonstrated by the thoroughness of the Report, the Planning Department is well informed regarding the issues of wireless telecommunications applications. In very unusual circumstances, it may be appropriate for a consultant to be retained, but this should be the exception, not the rule, and, in any event, there should be a reasonable limit on the portion of a consultant's compensation that is imposed upon the applicant.

When the costs of a municipality's consultant are borne by an applicant, the compensation structure inherently rewards the consultant for protracting the application process, such as by repeatedly challenging the "completeness" of an application or minutely questioning the rationale for an applicant's decision not to propose an endless variety of alternative designs or locations for the proposed facilities. This not only increases the applicant's costs and burdens its engineers, who would be required to explain their design considerations, but could easily lead to short-sighted outcomes. For example, if an applicant proposed a tower that could accommodate three collocating wireless providers, but the consultant successfully argued that the project should be scaled back to the point where only one service provider could attach facilities, the next service provider seeking to place facilities in that area would necessarily have to apply to install a new tower. The result would be more tower applications -- and more towers.

Any provision authorizing the hiring of consultants at the expense of an applicant should be designed to substantially reduce the risk that the consultants might engage in wasteful activity. Among other things, contracts should expressly limited in scope of the consultant's work to specific issues (*i.e.*, review of structural information and tower loading) and so limit the portion of compensation that may be imposed upon an applicant that the consultant will not have a financial incentive to protract an application review process.

11. Incentives For Microcell and DAS Technology.

For the reasons stated above in Section II, the City should not create any preference for the use of microcell and DAS technology. An applicant's choice of technology to best meet a service need is the result of taking into account numerous factors, and the City should not second-guess an applicant's choice of technologies.

Again, as noted, the investment capital available to AT&T and other service providers is finite and therefore must be deployed efficiently. Where service needs can appropriately be addressed or service can be efficiently upgraded using microcell or DAS technology, AT&T will do so; and, as also noted in Section II, technology preferences are inconsistent with the 1996 Telecommunications Act.

Conclusion

The Report concludes by stating that telecommunications technology is imperative to current lifestyles and the economy today. We at AT&T could not agree more. While more and more communities across the United States are coming to the same conclusion, local regulations nonetheless constitute a significant impediment to closing coverage gaps and deploying more robust technology.

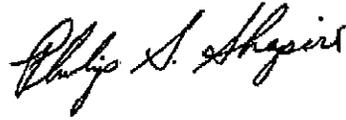
Restrictive municipal regulations can have the very practical effect of denying communities the investments and services that residents, businesses, and public safety agencies need. As a result, such regulations tend to be short-sighted and fail to recognize the substantial overall benefits that can be realized by policies that encourage such basic infrastructure improvements.

For these reasons, we urge the City of Harrisonburg to keep in mind the need to balance siting concerns of some about wireless deployment with the needs of the larger community. Again, as stated in the Report, mobile broadband networks are expanding not only as the foundation of communications, but also as the infrastructure that supports economic growth and innovation in widespread consumer focused areas such as healthcare, public safety, education and social welfare.

AT&T would, again, like to compliment the thoughtful and detailed approach that the Planning Department has taken with regard to the preparation of the Report. We also would like to thank you for providing AT&T this opportunity to comment upon the Report.

Should you have any questions or require any additional information, please do not hesitate to contact the undersigned.

Respectfully,

A handwritten signature in black ink, appearing to read "Philip S. Shapiro". The signature is written in a cursive style with a large initial "P".

Philip S. Shapiro
VA Bar No. 66139

Attachment: Model Wireless Facilities Ordinance

Adam Fletcher

From: KITCHINGS, LANGLEY (Legal) [lk2673@att.com]
Sent: Wednesday, August 07, 2013 4:46 PM
To: Adam Fletcher
Cc: SHAPIRO, PHIL (Legal)
Subject: RE: Considering Amendments for Telecommunications Regulations

Mr. Fletcher:

One additional note pursuant to my prior email below. In your email correspondence of July 18, 2013, addressed to Ms. Martha Penton of AT&T, you requested that we review Attachment B and confirm our equipment locations. Please allow this email to serve as confirmation that our personnel have reviewed the Appendix and the information contained therein, to the best of our knowledge, is correct.

From: KITCHINGS, LANGLEY (Legal)
Sent: Wednesday, August 07, 2013 4:09 PM
To: 'AdamF@harrisonburgva.gov'
Cc: SHAPIRO, PHIL (Legal)
Subject: Considering Amendments for Telecommunications Regulations

<< File: 2597_001 >> Mr. Fletcher:

On behalf of AT&T, attached please find the Comments of AT&T regarding the above-referenced matter. Also attached is AT&T's Model Wireless Facilities Ordinance. Any questions regarding these documents can be addressed to Phil Shapiro at (703) 272-1478, or via email at ps8412@att.com. A physical copy of this filing has been placed with the United States Postal Service for delivery to you. Thank you for your assistance in this matter.

MODEL WIRELESS TELECOMMUNICATIONS ORDINANCE

I. Purpose and Legislative Intent.

The purpose of this Wireless Telecommunications Ordinance is to ensure that residents, businesses and public safety operations in [Jurisdiction] have reliable access to wireless telecommunications networks and state of the art communications services while also ensuring that this objective is accomplished according to [Jurisdiction's] zoning, planning, and design standards. To accomplish the above stated objectives and to ensure that the placement, construction or modification of wireless telecommunications facilities complies with all applicable Federal laws, including without limitation Section 6409 of the federal Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, which, among other things, creates a national wireless emergency communications network for use by first responders that in large measure will be dependent on facilities placed on existing wireless communications support structures, [the Jurisdiction] adopts this single, comprehensive, wireless telecommunications ordinance. By enacting this Ordinance it is [the Jurisdiction's] intent to ensure [Jurisdiction] has sufficient wireless infrastructure to support its public safety communications throughout [Jurisdiction] and to ensure access to reliable wireless communications services throughout all areas of [the Jurisdiction].

II. Definitions.

For the purposes of this Ordinance, the following definitions apply:

Abandon - Occurs when an owner of a Wireless Support Structure intends to cease permanently all business activity associated therewith.

Accessory Equipment - Any equipment serving or being used in conjunction with a Wireless Facility or Wireless Support Structure. The term includes utility or transmission equipment, power supplies, generators, batteries, cables, equipment buildings, cabinets and storage sheds, shelters or similar structures.

Administrative Approval - Approval that the [Zoning Administrator] or designee is authorized to grant after Administrative Review.

Administrative Review - Non-discretionary evaluation of an application by the [Zoning Administrator] or designee. This process is not subject to a public hearing. The procedures for Administrative Review are established in Section IV.E of this Ordinance.

Antenna - Communications equipment that transmits and receives electromagnetic radio signals used in the provision of all types of wireless communications services.

Base Station - A station at a specific site authorized to communicate with mobile stations, generally consisting of radio transceivers, antennas, coaxial cables, power supplies and other associated electronics.

Carrier on Wheels or Cell on Wheels (COW) - A portable self-contained Wireless Facility that can be moved to a location and set up to provide wireless services on a temporary or emergency

basis. A COW is normally vehicle-mounted and contains a telescoping boom as the Antenna support structure.

Collocation - The placement or installation of Wireless Facilities on Existing Structures, including Electrical Transmission Towers, Water Towers, buildings and other structures capable of structurally supporting the attachment of Wireless Facilities. The term Collocation includes the placement, replacement or modification of Wireless Facilities within a previously approved Equipment Compound.

Concealed Wireless Facility - Any Wireless Facility that is integrated as an architectural feature of an Existing Structure or any new Wireless Support Structure designed so that the purpose of the Facility or Wireless Support Structure is not readily apparent to a casual observer.

Electrical Transmission Tower - An electrical transmission structure used to support high voltage overhead power lines. The term shall not include any Utility Pole.

Equipment Compound - An area surrounding or near the base of a Wireless Support Structure within which are located Wireless Facilities.

Existing Structure - A previously erected Wireless Support Structure that is capable of supporting the attachment of Wireless Facilities, including, but not limited to, Electrical Transmission Towers, buildings and Water Towers. The term shall not include any Utility Pole.

Monopole - A single, freestanding pole-type structure supporting one or more Antennas. For the purposes of this Ordinance, a Monopole is not a Tower or a Utility Pole.

Ordinary Maintenance - Ensuring that Wireless Facilities and Wireless Support Structures are kept in good operating condition. Ordinary Maintenance includes inspections, testing and modifications that maintain functional capacity and structural integrity; for example, the strengthening of a Wireless Support Structure's foundation or of the Wireless Support Structure itself. Ordinary Maintenance includes replacing Antennas of a similar size, weight, shape and color and Accessory Equipment within an existing Equipment Compound and relocating the Antennas to different height levels on an existing Monopole or Tower upon which they are currently located. Ordinary Maintenance does not include Substantial Modifications.

Replacement - Includes constructing a new Wireless Support Structure of equal proportions and of equal height or such other height that would not constitute a Substantial Modification to an Existing Structure in order to support Wireless Facilities or to accommodate Collocation and removing the pre-existing Wireless Support Structure.

Substantial Modification - The mounting of a proposed Wireless Facility or Wireless Facilities on a Wireless Support Structure which: (i) increases the existing vertical height of the Wireless Support Structure by (a) more than ten percent (10%), or (b) the height of one additional Antenna array with separation from the nearest existing Antenna not to exceed twenty (20) feet, whichever is greater; or (ii) involves adding an appurtenance to the body of a Wireless Support Structure that protrudes horizontally from the edge of the Wireless Support Structure more than twenty (20) feet, or more than the width of the Wireless Support Structure at the level of the appurtenance, whichever is greater (except where necessary to shelter the Antenna from inclement weather or to connect the Antenna to the tower via cable); or (iii) increases the square

footage of the existing Equipment Compound by more than 2,500 square feet.

Tower - A lattice-type structure, guyed or freestanding, that supports one or more Antennas.

Utility Pole - A structure owned and/or operated by a public utility, municipality, electric membership corporation or rural electric cooperative that is designed specifically for and used to carry lines, cables, or wires for telephony, cable television, or electricity or to provide lighting.

Water Tower - A water storage tank, or a standpipe or an elevated tank situated on a support structure, originally constructed for use as a reservoir or facility to store or deliver water.

Wireless Support Structure - A freestanding structure, such as a Monopole or Tower, designed to support Wireless Facilities. This definition does not include Utility Poles.

Wireless Facility or Wireless Facilities - The set of equipment and network components, exclusive of the underlying Wireless Support Structure, including, but not limited to, Antennas, Accessory Equipment, transmitters, receivers, Base Stations, power supplies, cabling and associated equipment necessary to provide wireless telecommunications services.

III. Approvals Required for Wireless Facilities and Wireless Support Structures.

- (A) *Administrative Review and Approval.* A [Building Inspector] shall issue a building permit for the following types of Wireless Facilities and/or Wireless Support Structures upon Administrative Review in accordance with the process and standards in this Ordinance. No other type of zoning or site plan review is necessary:
- (1) Collocation, in any zoning district;
 - (2) New Wireless Support Structures that are less than sixty (60) feet in height, in any zoning district;
 - (3) New Wireless Support Structures that are less than two hundred (200) feet in height, in any Industrial District;
 - (4) Concealed Wireless Facilities that are sixty (60) feet or less in height, in any residential district;
 - (5) Concealed Wireless Facilities that are one hundred fifty (150) feet or less in height, in any zoning district *except* residential districts;
 - (6) Monopoles or Replacement Poles located on public property or within utility easements or rights-of-way, in any zoning district; and
 - (7) COWs, in any zoning district, if the use of the COW is either not in response to a declaration of an emergency or disaster by the Governor, or will last in excess of one hundred-twenty (120) days.

- (B) *Special Permit.*¹ Any application for Wireless Facilities and/or Wireless Support Structures not subject to Administrative Review and Approval pursuant to this Ordinance shall be permitted in any district upon the granting of a Special Permit from the [Zoning Board] in accordance with the standards for granting Special Permits set forth in applicable [Jurisdiction] ordinances.
- (C) *Exempt from All Approval Processes.* The following are exempt from all [Jurisdiction] zoning and approval processes and requirements:
- (1) Ordinary Maintenance of existing Wireless Facilities and Wireless Support Structures, as defined in this Ordinance;
 - (2) Wireless Facilities placed on Utility Poles; and
 - (3) COWs placed for a period of not more than one hundred twenty (120) days at any location within [the Jurisdiction] or after a declaration of an emergency or a disaster by the Governor.

IV. Administrative Review and Approval Process.

(A) *Content of Application Package.* All Administrative Review application packages must contain the following:

- (1) Administrative Review application form signed by applicant;
- (2) Copy of lease or letter of authorization from property owner evidencing applicant's authority to pursue application. Such submissions need not disclose financial lease terms; and
- (3) Site plans detailing proposed improvements which complies with [Jurisdiction's existing site plan requirements]. Drawings must depict improvements related to the applicable requirements, including property boundaries, setbacks, topography, elevation sketch, and dimensions of improvements.

(B) *Fees.* The total fees for reviewing an Administrative Review application shall (a) in the case of an application for Collocation, a Monopole or Replacement Pole, a Concealed Wireless Facility or a COW, the lesser of [Jurisdiction's] actual, direct costs (including third-party costs such as consultants fees) incurred for the review, or \$500.00; and (b) in the case of an application for a New Wireless Support structure subject to Administrative Review and Approval, the lesser of [Jurisdiction's] actual, direct costs incurred for the review (including third-party costs such as consultants fees), or \$1,500.00. Applications for new Wireless Support Structures with proposed Wireless Facilities shall be considered together as one application requiring only a single application fee. An applicant for Administrative Review shall submit an initial deposit of \$500.00 toward the fees to be paid under this section of the Ordinance.

¹ "Special Permit" as used in this model ordinance is intended to describe the zoning approval process that a Jurisdiction already has in place. The name given to such a process varies -- for example, it may be called "special use" or "conditional use."

(C) *Procedure and Timing.*

(1) Applications for Collocation, Monopole or Replacement Pole, a Concealed Wireless Facility or a COW. Within thirty (30) days of the receipt of an application for Collocation, a Monopole or Replacement Pole, a Concealed Wireless Facility or a COW, the [Zoning Administrator] will:

- (a) Review the application for conformity with this Ordinance. An application under this Section IV.B.1 is deemed to be complete unless the [Zoning Administrator] notifies the applicant in writing, within ten (10) calendar days of submission of the application of the specific deficiencies in the application which, if cured, would make the application complete. Upon receipt of a timely written notice that an application is deficient, an applicant may take ten (10) calendar days from receiving such notice to cure the specific deficiencies. If the applicant cures the deficiencies within ten (10) calendar days, the application shall be reviewed and processed within thirty (30) calendar days from the initial date the application was received. If the applicant requires a period of time beyond ten (10) calendar days to cure the specific deficiencies, the thirty (30) calendar days deadline for review shall be extended by the same period of time;
- (b) Make a final decision to approve or disapprove the application; and
- (c) Advise the applicant in writing of its final decision. If the [Zoning Authority] denies an application, it must provide written justification of the denial, which must be based on substantial evidence of inconsistencies between the application and this Ordinance.
- (d) Failure to issue a written decision within thirty (30) calendar days shall constitute an approval of the application.

(2) Applications for New Wireless Support Structures That Are Subject to Administrative Review and Approval. Within forty five (45) calendar days of the receipt of an application for a New Wireless Support Structure that is subject to Administrative Review and Approval under this Ordinance, the [Zoning Administrator] will:

- (a) Review the application for conformity with this Ordinance. An application under this Section IV.B.2 is deemed to be complete unless the [Zoning Administrator] notifies the applicant in writing, within fifteen (15) calendar days of submission of the application of the specific deficiencies in

the application which, if cured, would make the application complete. Upon receipt of a timely written notice that an application is deficient, an applicant may take fifteen (15) calendar days from receiving such notice to cure the specific deficiencies. If the applicant cures the deficiencies within fifteen (15) calendar days, the application shall be reviewed and processed within forty five (45) calendar days from the initial date the application was received. If the applicant requires a period of time beyond fifteen (15) calendar days to cure the specific deficiencies, the forty five calendar days deadline for review shall be extended by the same period of time;

- (b) Make a final decision to approve or disapprove the application; and
- (c) Advise the applicant in writing of its final decision. If the [Zoning Authority] denies an application, it must provide written justification of the denial, which must be based on substantial evidence of inconsistencies between the application and this Ordinance.
- (d) Failure to issue a written decision within forty five (45) calendar days shall constitute an approval of the application.

V. Special Permit Process.

(A) Any Wireless Facility or Wireless Support Structures not meeting the requirements of Section III.A above, shall be permitted by Special Permit in all zoning districts subject to:

- (1) The submission requirements of Section V.B below; and
- (2) The applicable standards of Section VI below; and
- (3) The requirements of the special permit general conditions at Code Section _____. *[Insert cross reference to Jurisdiction code section that establishes general conditions applicable to Special Permits.]*

(B) *Content of Special Permit Application Package.* All Special Permit application packages must contain the following:

- (1) Special Permit application form signed by applicant;
- (2) Copy of lease or letter of authorization from the property owner evidencing applicant's authority to pursue zoning application. Such submissions need not disclose financial lease terms;

- (3) Written description and scaled drawings of the proposed Wireless Support Structure or Wireless Facility, including structure height, ground and structure design, and proposed materials;
- (4) Number of proposed Antennas and their height above ground level, including the proposed placement of Antennas on the Wireless Support Structure;
- (5) Line-of-sight diagram or photo simulation, showing the proposed Wireless Support Structure set against the skyline and viewed from at least four (4) directions within the surrounding areas;
- (6) A statement that the proposed Wireless Support Structure will be made available for Collocation to other service providers at commercially reasonable rates, provided space is available and consistent with Section VI(A)(1)(a) of this Ordinance; and
- (7) Notification of surrounding property owners and posting as required by *[insert Jurisdiction's relevant existing code provisions regarding notice]*.

(C) *Fees.* The total fees for reviewing a Special Permit application shall be the lesser of [Jurisdiction's] actual, direct costs (including third-party costs such as consultants fees) incurred for the review, or \$3,000.00. Applications for new Wireless Support Structures with proposed Wireless Facilities shall be considered together as one application requiring only a single application fee. An applicant for Administrative Review shall submit an initial deposit of \$1,000.00 toward the fees to be paid under this section of the Ordinance.

(D) *Procedure and Timing.* Within one hundred fifty (150) calendar days of the receipt of an application under Section V. of this Ordinance, the [Zoning Administrator] will:

- (1) Complete the process for reviewing the application for conformity with ordinances applicable to Special Permits, including conducting a hearing in accordance with *[insert Jurisdiction's relevant hearing rules]*. An application under this Section V. is deemed to be complete unless the [Zoning Administrator] notifies the applicant in writing, within thirty (30) calendar days of submission of the application of the specific deficiencies in the application which, if cured, would make the application complete. Upon receipt of a timely written notice that an application is deficient, an applicant may take thirty (30) calendar days from receiving such notice to cure the specific deficiencies. If the applicant cures the deficiencies within thirty (30) calendar days, the application shall be reviewed and processed within one hundred fifty (150) calendar days from the initial date the application was received. If the applicant requires a period of time beyond thirty (30) calendar days to cure the specific deficiencies, the one hundred fifty (150) calendar days deadline for review shall be extended by the same period of time;

- (2) Make a final decision to approve or disapprove the application; and
- (3) Advise the applicant in writing of its final decision. If the [Zoning Authority] denies an application, it must provide written justification of the denial.
- (4) Failure to issue a written decision within one hundred fifty (150) calendar days shall constitute an approval of the application.

VI. General Standards and Design Requirements.

(A) *Design*

- (1) Wireless Support Structures shall be subject to the following:
 - (a) Shall be designed to accommodate a minimum number of Collocations based upon their height:
 - (i) Support structures sixty (60) to one hundred (100) feet shall support at least two (2) telecommunications providers;
 - (ii) Support structures from one hundred (100) to one hundred-fifty feet (150) shall support at least three (3) telecommunications providers;
 - (iii) Support structures greater than one hundred-fifty (150) feet in height shall support at least four (4) telecommunications carriers.
 - (b) The Equipment Compound area surrounding the Wireless Support Structure must be of sufficient size to accommodate Accessory Equipment for the appropriate number of telecommunications providers in accordance with Section VI(A)(1)(a).
- (2) Concealed Wireless Facilities shall be designed to accommodate the Collocation of other Antennas whenever economically and technically feasible. Antennas must be enclosed, camouflaged, screened, obscured or otherwise not readily apparent to a casual observer.
- (3) Upon request of the Applicant, the [Zoning Board or Zoning Administrator] may waive the requirement that new Wireless Support Structures accommodate the Collocation of other service providers if it finds that Collocation at the site is not essential to the public interest, or that the construction of a shorter support structure with fewer Antennas will promote community compatibility.
- (4) A Monopole or Replacement Pole shall be permitted within utility

easements or rights-of-way, in accordance with the following requirements:

- (a) The utility easement or right-of-way shall be a minimum of one hundred (100) feet in width.
- (b) The easement or right-of-way shall contain overhead utility transmission and/or distribution structures that are eighty (80) feet or greater in height.
- (c) The height of the Monopole or Replacement pole may not exceed by more than thirty (30) feet the height of existing utility support structures.
- (d) Monopoles and the Accessory Equipment shall be set back a minimum of fifteen (15) feet from all boundaries of the easement or right-of-way.
- (e) Single carrier Monopoles may be used within utility easements and rights-of-way due to the height restriction imposed by Subsection (c) above.
- (f) Poles that use the structure of a utility tower for support are permitted. Such poles may extend up to twenty (20) feet above the height of the utility tower.

(B) *Setbacks*

- (1) Unless otherwise stated herein, each Wireless Support Structure shall be set back from all property lines a distance equal to its engineered fall zone.

(C) *Height*

- (1) In residential districts, Wireless Support Structures shall not exceed a height equal to one hundred ninety-nine (199) feet from the base of the structure to the top of the highest point, including appurtenances. Notwithstanding the foregoing, the [Zoning Board] shall have the authority to vary the foregoing height restriction upon the request of the applicant. With its waiver request the Applicant shall submit such technical information or other justifications as are necessary to document the need for the additional height to the satisfaction of the [Zoning Board].

(D) *Aesthetics*

- (1) **Lighting and Marking.** Wireless Facilities or Wireless Support Structures shall not be lighted or marked unless required by the Federal Communications Commission (FCC) or the Federal Aviation Administration (FAA).

(2) Signage. Signs located at the Wireless Facility shall be limited to ownership and contact information, FCC antenna registration number (if required) and any other information as required by government regulation. Commercial advertising is strictly prohibited. Notwithstanding the foregoing, nothing in this Ordinance shall prohibit signage that is approved for other uses on property on which Wireless Facilities are located (e.g., approved signage at locations on which Concealed Facilities are located).

(E) *Accessory Equipment.* Accessory Equipment, including any buildings, cabinets or shelters, shall be used only to house equipment and other supplies in support of the operation of the Wireless Facility or Wireless Support Structure. Any equipment not used in direct support of such operation shall not be stored on the site.

(F) *Fencing*

(1) Ground mounted Accessory Equipment and Wireless Support Structures shall be secured and enclosed with a fence not less than six (6) feet in height as deemed appropriate by the [Zoning Board] or [Zoning Administrator].

(2) The [Zoning Board or Zoning Administrator] may waive the requirement of Section VI.F.1 if it is deemed that a fence is not appropriate or needed at the proposed location.

VII. Miscellaneous Provisions.

(A) *Abandonment and Removal.* If a Wireless Support Structure is Abandoned, and it remains Abandoned for a period in excess of twelve (12) consecutive months, the [Jurisdiction] may require that such Wireless Support Structure be removed only after first providing written notice to the owner of the Wireless Support Structure and giving the owner the opportunity to take such action(s) as may be necessary to reclaim the Wireless Support Structure within sixty (60) days of receipt of said written notice. In the event the owner of the Wireless Support Structure fails to reclaim the Wireless Support Structure within the sixty (60) day period, the owner of the Wireless Support Structure shall be required to remove the same within six (6) months thereafter. The [Jurisdiction] shall ensure and enforce removal by means of its existing regulatory authority.

(B) *Multiple Uses on a Single Parcel or Lot.* Wireless Facilities and Wireless Support Structures may be located on a parcel containing another principal use on the same site or may be the principal use itself.

VIII. Wireless Facilities and Wireless Support Structures in Existence on the Date of Adoption of this Ordinance.

(A) Wireless Facilities and Wireless Support Structures that were legally permitted

on or before the date this Ordinance was enacted shall be considered a permitted and lawful use.

(B) *Activities at Non-Conforming Wireless Support Structures.* Notwithstanding any provision of this Ordinance:

- (1) Ordinary Maintenance may be performed on a Non-Conforming Wireless Support Structure or Wireless Facility.
- (2) Collocation of Wireless Facilities on an existing non-conforming Wireless Support Structure shall not be construed as an expansion, enlargement or increase in intensity of a non-conforming structure and/or use and shall be permitted through the Administrative Approval process defined in Section IV.
- (3) Substantial Modifications may be made to non-conforming Wireless Support Structures utilizing the Special Permit process defined in Section V of this Ordinance.

Adam Fletcher

From: Schweller, Lori H. [Lori.Schweller@leclairryan.com]
Sent: Tuesday, August 13, 2013 9:19 AM
To: Adam Fletcher
Cc: Faulkner, Catherine; {F715397}.LECLAIR1@wcs.leclairryan.com; Guy.Randall@VerizonWireless.com
Subject: RE: Harrisonburg Telecommunications Report [IWOV-LECLAIR1.FID715397]
Attachments: Memorandum on behalf of Verizon Wireless re 7-17-13 Reports re Telecommunications Ordinance Amendment_1.PDF

Good Morning, Adam,

Attached is a memorandum prepared on behalf of Verizon Wireless in response to your well-researched and thoughtful staff report. I am happy to discuss any time and look forward to working with you as this process progresses.

Verizon Wireless confirms that the VAW sites you have listed on your report's Appendix B is the complete list of current Verizon Wireless sites in the city. Verizon Wireless also has current leases on all of the WWC License sites. These have been decommissioned (the equipment and antennas have been removed), but Verizon Wireless may install equipment on them in the future.

Thanks again for the opportunity to participate in the ordinance amendment.

Best,
Lori

Lori H. Schweller
Attorney at Law
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Please consider the environment before printing this email.



TO: Adam Fletcher, Planner, City of Harrisonburg, Virginia

FROM: Lori H. Schweller, Esq. ~~LS~~

DATE: August 13, 2013

RE: Comments on behalf of Verizon Wireless addressing the July 17, 2013 Reports regarding Proposed Harrisonburg Telecommunications Ordinance Amendments

Wireless communications, particularly data transmission via wireless devices, has increased dramatically over the past decade. To accommodate the continually escalating demand for wireless services, wireless carriers, such as Verizon Wireless, work continuously to improve the quality, strength, and capacity of coverage from existing sites while expanding coverage in underserved areas. Verizon Wireless supports amending the current City Code regarding the zoning of wireless telecommunications facilities (the "Ordinance") for the reasons discussed in the Staff Report. From Verizon Wireless' perspective, the most pressing reasons for updating the Ordinance are the following:

- (1) To permit wireless facilities in zoning districts where currently prohibited. Wireless services are used in every zoning district, but they are currently not permitted in any zoning districts except B-1, B-2, and M-1, where collocations on buildings and existing public safety facilities as well as freestanding support structures are permitted. In residential and mixed use districts, wireless facilities are not permitted. Without provision for wireless facilities, agricultural, residential, and mixed use zoning districts will be left without communications services that have become a necessity for business, education, public safety, and convenience. We support permitting wireless facilities in every zoning district with appropriate design standards.
- (2) To incorporate the provisions of Federal law. Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012 (MCTRA) requires localities to approve by-right collocations on, and replacements of, existing wireless facilities if such modifications do not substantially change the dimensions of the facility. The current Ordinance permits collocation by private carriers on existing emergency communications towers in some zoning districts and collocation on buildings but

MEMORANDUM

is otherwise silent about collocations and replacements. Many areas do not contain buildings tall enough for wireless facilities. Collocation is an important tool that allows the wireless industry to propagate services without undue construction and allows localities to avoid unnecessary support structures where existing structures have capacity for collocation. The Ordinance needs to be amended to comply with this provision of Federal law. The Ordinance should also provide for an approval timeline that ensures consistency with the FCC Declaratory Ruling 09-99 (the "Shot Clock").

- (3) To set out standards and requirements for wireless facilities in one location within the Ordinance. For clarity and ease of use by applicants and the City, the Ordinance should have a section dedicated to zoning provisions that apply to new wireless telecommunications structures, including definitions, design standards (height; relevant district setbacks, if any; setbacks based on tower height; landscaping or tree preservation, etc.), application components, and approval process; as well as provisions applicable to collocations on existing wireless towers and other structures.

We support the types of provisions your memorandum sets out on pages 25 and 26. One point that we would like to clarify is the assertion that small cells will soon replace traditional wireless infrastructure. Exciting information regarding new technologies and future technologies is continually circulated and discussed. Small cells are currently used on college campuses, in sports stadiums and other large venues, and in densely populated urban areas where the base infrastructure is already in place and additional facilities are needed to increase capacity to handle intense demand within these areas of dense population. It is incorrect, however, to assume that there are "generally no longer significant gaps in coverage" and that small cell technology will supersede the need for traditional infrastructure. On the contrary, small cells only work where large cells already exist. They provide infill coverage and heightened capacity in areas of high demand, but they cannot be implemented where full, seamless coverage has not yet been established. The City would be forward-thinking to plan zoning provisions addressing small cells, but we encourage you to focus on today's needs so that carriers can provide service throughout the City at a level that will meet existing and rising consumer demand.

Verizon Wireless is working hard to expand its 4G service to serve all areas of Virginia and to add sites and antennas to improved existing coverage and increase capacity to satisfy increasing demand. It is important to keep in mind that the business of a wireless services provider like Verizon Wireless is to provide an array of wireless services -- voice, text, internet, data transmission -- to its customers. It has no interest in building expensive cell towers except to propagate those services and to do so with the highest possible quality, so it will never propose a tower or other facility where it is not needed to provide or improve service. We are very happy to work with public

entities and other carriers to collocate antennas on publicly-owned towers, electric transmission towers, and other tall structures. But, if wireless service is to be provided to citizens in the area, monopoles or towers may be needed where there is no tall support structure available on which to collocate antennas. The Ordinance should be amended so that wireless facilities can be constructed to provide wireless services where needed.

Successful ordinances in urban areas like Harrisonburg tend to provide for a mix of wireless facilities – some that require special use permits and some that may be constructed with only administrative review. For example, administrative review is appropriate for collocations permitted by-right pursuant to the MCTRA and may be sufficient for short (e.g. $\leq 70'$) neutral-painted monopoles in all or most zoning districts, whereas a special use permit would be required for monopoles and towers above a certain height, which would vary among districts. This blend of approval routes affords the community due review authority while allowing wireless providers to build out networks as quickly as possible so that the community may reap the benefit of carriers' offered services without waiting on time-consuming zoning processes.

Keep in mind that all facilities are not equal in the strength and quality of signal propagated. Since wireless technologies work by line of sight, which can be blocked or impeded by tree leaves, buildings, and terrain, taller structures typically propagate farther than shorter structures so, where shorter structures are required, more structures are needed to supply the same level of service as a taller tower. Also, flush-mounted antennas (generally speaking, those that are mounted to extend no further than 12" to 24" from the support structure) provide an inferior signal to full antenna arrays set off further from the support structure with each technology using its own or multiple antennas. It should be noted that carriers have different infrastructure needs depending on the type(s) and number of services provided so that some carriers require only a single set of antennas on a structure to propagate its services, whereas another like Verizon Wireless, may provide several different services requiring multiple antenna arrays on a single support structure. These are examples of the type information that the City will need to consider as it balances the public need for wireless communications with the desire to mitigate the potential impact of wireless facilities.

Verizon Wireless appreciates this opportunity to respond to your memorandum and would be happy to participate in your ordinance revision process and to offer its expertise as requested. We have worked and continue to work with several other localities that are amending their wireless ordinances, including Albemarle, Amherst, Nelson, and Chesterfield Counties, and look forward to working with the City of Harrisonburg.

Adam Fletcher

From: Len Greisz [Len.Greisz@emp.shentel.com]
Sent: Wednesday, August 07, 2013 10:07 AM
To: Adam Fletcher
Subject: FW: Harrisonburg Telecommunications Report
Attachments: Considering Telecommunications Regulations (07-17-13).pdf; Appendix A (07-17-13).pdf; Appendix B (07-17-13).pdf

Mr. Fletcher:

Thank you for the opportunity to review your work. It is commendable that you have solicited input from those in the industry, on the future direction of your local ordinance. And, please let me compliment you on the historical overview. Wireless technology has experienced phenomenal growth since the 1990s. Who really knows where it'll be in another thirty years? Yet, both, industry and government must prepare as best we can to meet the coming demands.

I will begin my comments with Table 1, where special allowances are provided for "public safety purposes". I'm going to step out on a limb and suggest that the front end calls for the vast majority of public emergency citizen calls now originate from wireless phones. In my mind, that makes wireless an integral part of the public safety system and it should enjoy enhanced zoning treatment to promote and guarantee its viability. Previously, such emergency calls were made via the regulated public phone system which enjoys a somewhat protected status. Now that these communications are handled more via a competitive wireless system they seem to have lost their "public" persona and get treated with much more scrutiny. –just my observation.

On Page 4 the Virginia Municipal League is mentioned. For balance the Virginia Wireless Association might have observations to make as well.

The eleven provisions beginning on Page 25 of the attachment entitled "Considering Telecommunications Regulations" are commented on as follows (by the number)

1. Concur. Residential areas are difficult to serve and, as such, underserved in jurisdictions where ordinances are restrictive. Concealment technology is understandable as long as it is equally applied across the carriers and is reasonable to the situation. It is not practical to expect antennas to disappear from sight in every case. Particularly when so many more antennas and support facilities (cables, cabinets, power supplies, etc.) will be deployed as micro-cells become more numerous.
2. Concur. The sole purpose here should be to promote the use of existing structures as a counter-balance compared to more towers. With that mindset, co-locations should be readily allowed and relatively easy to approve. That in itself will cause the carriers to prefer and seriously look for co-lo opportunities.
3. Concur. Though it must be recognized that the rights of way are pretty restrictive in size and shape, and there are several carriers with licenses to operate in any given area. How will equality of opportunity be managed here. Definitely support administrative approval.
4. Concur. The information required, however, must be only that which is necessary, pertinent and useful to the decision process. We've seen jurisdictions where the information requirements were borderline restrictive.
5. I do not concur with the 110% setback. Harrisonburg is a city, first and foremost. A 110% setback requirement eliminates a large portion of the city's lots from consideration. And, where it is applied it unnecessarily encumbers additional space and sometimes renders a parcel less useful for other purposes. Are, high-rise signs, water tanks, other poles and towers, silos, etc., similarly restricted? What really is the difference that demands that a communications tower be treated otherwise. 33% or 50% of the height is reasonable.
6. Concur
7. Concur
8. Concur

9. Concur, if it is a substantial tower or communications site and every carrier is treated the same. I'm curious to know what other developments/facilities are treated similarly?
10. This is a difficult provision to take a position on. We are not unfamiliar with such discretionary practices. But what administrator can really decide when consultant help is necessary, or not? How does the complexity or application of one carrier's technology requirements stack up to that of another and therefore requires or does not require review? How will you ensure fairness or equal treatment.
11. I cannot disagree that Microcell and DAS technology are likely players going forward. But, I caution against possibly overly promoting them as a panacea to eliminate macro-cells. The verdict is still out on how well the technology will serve the market needs in our area. It is possible that, by overly promoting microcells, it delays the deployment of wireless coverage or restricts the carriers' licensed competitive opportunities. Macro-cells will continue to play a big part in the development of wireless coverage in our rural valley for the foreseeable future.

Thanks for this opportunity to comment,

Len



Len Greisz | Manager Site Acquisition
Office (540) 984-3003 | Len.Greisz@emp.Shentel.com

Adam Fletcher

From: Lynn Koerner [lynnk@shentel.net]
Sent: Monday, August 05, 2013 2:08 PM
To: Adam Fletcher
Subject: RE: Harrisonburg Telecommunications Report

Adam:

I would like to address a couple of items in your conclusions. These are #5 and #7. I believe the you need to be careful with the requirement for setbacks at 110% as well as the requirement for 3 carriers. Most lots/parcels are not large enough to accommodate a large setback. The parcels are typically used for things like a service station or strip mall and the only place on the property that is available is in a rear corner someplace. I understand fully a setback from a residential structure, but I believe you restrict things extensively with the 110% rule. The City of Winchester does not have a setback for the height of the structure. The setback is based on the zoning district and the normal structure setback of let's say 10 foot etc.

I may have missed it, but if I come in and want to put up a small pole for an antenna, let's say at 50 ft., is it considered a tower? The same applies to the requirement to build them for 3 carriers.

The use of power poles that are owned by HEC are a great idea and concept. I do not believe that HEC will agree. They have not been open previously to any discussion regarding the use of their poles. The micro site concept is great in residential areas, except you still need something to put the antenna or cell on that has some height to it. If the HEC does not come around and let us use the poles, we run into the same situation of needing to set a pole and then the zoning district does not allow for a telecommunications structure and so to be able to serve the area we need to build a macro site to reach to cover the area.

The concept of the micro cells is a great concept, but the requirements to make them work is more detailed that meets the eye. You need a fiber line to connect each cell and then the whole line of cells need to connect back to a macro cell at some point. I do not know about the fiber connections along Reservoir Street and how that could have been or even if it could have been done as micro cell configuration. I am not the engineer on these projects, I just deal with the leasing, zoning and permitting and pick up some of the business as we go along.

I would like to respectfully suggest that you contact someone that is outside the carrier realm, because they will tell you what is good for them financially. I would contact, George Condyles with Atlantic Technology. 804-550-7490. George is the consultant that the County uses for their applications. George is really connected with the industry and could give you a logical plan, or yes or no, response to what will work for the industry as well as the community. George can offer that opinion without being partial to any one carrier or type installation.

My only other comment is just a personal comment. I still think that the installation at Reservoir Road is appropriate for the area. Nothing personal, just my opinion.

I do not have all the carrier information and locations for your appendix B. I do believe however that those you have as APC are actually Shentel. Hopefully the carriers will respond to you.

Hope this helps. Please call me if you have any questions.

Lynn
540-335-0030

Adam Fletcher

From: Lynn Koerner [lynnk@shentel.net]
Sent: Wednesday, August 07, 2013 11:57 AM
To: Adam Fletcher
Subject: One more little thing

Adam:

One thing that I had in my notes and I don't think I addressed in my comments.

Item 10 in conclusions:

Either you have a consultant or you don't. This is very open ended and based on what criteria would you elect to have or not have a consultant. You could have two similar sites and one you get a consultant and the other you don't for any minor reason etc. This could potentially open your office up for possible legal action.

Just a thought.

Lynn

Adam Fletcher

From: Balsler, Debbie [balserd@ntelos.com]
Sent: Friday, August 02, 2013 12:18 PM
To: Adam Fletcher
Subject: RE: Harrisonburg Telecommunications Report

Adam – good afternoon! I apologize that I have not had much time to devote to this, but here are few comments:

- As stated, NTELOS, as well as the other major carriers, are in the midst of an LTE/4G upgrade (faster data) where we are going in and replacing or adding antennas/lines and other associated tower and ground equipment at our existing sites. One thing that would make the process easier is if we were allowed to replace and/or add this equipment, provided we did not increase the height of the structure more than the 10-20' and presented a passing structural analysis by building permit only. We will not be changing the character of an existing site that has been there and that everyone is used to seeing now.
- I think that collocations on existing structures, signs, buildings and rooftops should be encouraged and that processes should be simpler and approved administratively rather than through public hearings. We are not opposed to painting antennas to match buildings and doing stealth chimneys, but the approval process needs to be made simpler so it takes less time to receive approvals.
- The requirement where all telecommunication facilities need to be setback 110 percent the height of the tower, especially in a City, is difficult. This can be achieved in the rural areas more easily because you have larger lots/acreages. In cities, lots are much smaller and there is not enough room to meet these setback requirements, and if you want to encourage collocation – the towers need to be taller in order to do that. Would waivers/variance of these requirements be allowed?
- NTELOS looks for all collocation opportunities first when searching for a new site (we don't want the asset to manage, we want to provide superior service) – so improving the approval process for new collocations and the upgrading of existing facilities would be something that we would encourage highly.

Again, I apologize that I was not able to devote more time to this, but these are some issues that I believe are important to us as a local carrier. Please let me know if you have any questions. Thanks for the opportunity to review this document.

Debbie

Comments from:

James Baran

Principal RAN Engineer IC VI AT&T RAN Strategic Planner Virginia/West Virginia

Mr. Baran verbally communicated the following feedback regarding the telecommunications report:

- Based upon the staff recommendations, it appears the City is “not doing much crazy stuff.”
- The higher telecommunication facilities can be, the better, as more carriers can be located on the facility.
- If height limits are strict, then more facilities could be needed.
- The City should know that people in Charlottesville are demanding more coverage.
- Some carriers operate on different bandwidths.
- Microcells can be used in residentially sensitive areas but they do not typically substitute for macrocells.
- Staff's report demonstrates that they have done a lot of work and have accumulated good information.

Adam Fletcher

From: Jim Junkins [JLJunkins@HRECC.org]
Sent: Thursday, August 15, 2013 7:14 PM
To: Adam Fletcher
Subject: RE: Telecommunications Report

Adam,

My next several weeks are slammed so I went ahead and got this done. Good report! From a public safety communications opinion, we support microcells and the direction the City is taking. Here are some specifics:

Page 3, table 1: I still cannot see the logic of why a public safety communications facility needs special use permit to facilitate its own radio system that needs to provide protection to any and all citizens. Fortunately we have not had an issue to date of coverage being a significant concern for our system. But what if it would? Why would a public safety telecommunications facility not be permitted in R5, R6, R7 and mixed us and other areas with a special permit? I am no way stating that public safety is above the law but it seems this limitation is counterintuitive to the mission of protecting the citizens. I know this is current state but I feel this needs to be addressed. Ponder this...why does this ordinance not also apply to Public Works Street stoplight telecommunications devices mounted on street poles and other purpose built poles? According to section 1 (page 1) this ordinance applies to all telecommunications devices under the control of the FCC. Under FCC control does not mean that devices have to have FCC licensure. The Public Works wireless traffic control system is a significant wireless system containing many antennas, most small but still noticeable, in every zoning classification. I'm guessing that you have not considered that system under the control of this ordinance. What about the Water Department's SCADA system which has many wireless components. Now, if I seem outrageous, yes, I am making a stretch of this for a point. My overarching point is why is public safety specifically restricted and not permitted when other government wireless systems have free reign? I do not want to restrict Public Works and Water but to identify how restrictive the ordinance is for the City's most mission critical system, it's public safety radio facilities. Think about and consider public safety radio systems when developing the modifications to the ordinance.

Page 23, 2nd paragraph: In general, microcells pose less interference potential with public safety systems by since they use far less effective radiated power (ERP). Our relatively high-power public safety radios can overcome frequency specific interference. From a public safety standpoint, we are not concerned with a cumulative rise in RF floor impacting public safety. You may want to consider some people's concerns of increased cellular RF noise floor in their neighborhood "frying their brains" from that transmitter being outside of my house; hence a march on City Council to deny an applicant. As long as the system is designed within the FCC limits as a defined microcell, the locality cannot restrict a carrier system for this reason. Maybe a point to be addressed up front versus when the fist pounders are at the Planning Commission or Council meeting.

Microcells will provide better in-building coverage (including residences in neighborhoods). This affords people more opportunities to use their cell phones at many more locations to access emergency services via 9-1-1. Be cautious that some wireline carriers may feel "pushed out" of the City if the City entices wireless into neighborhoods. I am not advocating that but the fact is over 1/3 of the homes nationally no longer have wireline phones and rely on cellular for dialing 9-1-1 in their homes. 73% of our 9-1-1 calls come from wireless devices.

Page 26, item 4: What is the purpose to require an inventory of applicant assets up to 5 miles outside of the City? Same for co-locations research. Be cautious that these type of things have been challenged in the courts and to the FCC and localities lost for too many limitations, hoops, etc to go through for the applicant. I'm neutral on this but just noting where I have seen legal challenges with localities losing. Make sure legal is closely looking at precedent with past cases from around the country.

Page 26, item 5: Why 110%? Is this for safety of adjacent property if structure would fail? If so, self supporting towers (what we have) typically have designed fall zones within 33% of the tower height. If you are wanting to provide opportunities for micro-cell technology and on purpose-built (traditional) towers, albeit much smaller, I encourage you to consider the fall factor design of the structure and not make a blanket statement of 110%. While there is risk of anything more than 100% impacting another's property, there are already risks from other uses. Fences, structures themselves, etc do not necessarily have to be placed 110% away from an adjacent property owner. Bottom line, at least consider options as part of the application and proof of design and not "blanket hard code" "110%".

Page 26, item 6: I encourage consideration of screened, privacy fencing as an alternative to landscaping. It can look just as neat, professional and limit view of the internal compound, presuming that is the purpose. I contend that simple landscaping does provide totality of hiding anything. Take a look at our Tower Street site. There are lots of shrubs, etc that we have to fill in gaps but the site is just as visible with them. Given that this site is elevated above current streets and makes it worse but you can still see through lots of areas such as gates. Also the shrubbery is a maintenance nightmare and is a prime spot for intruders to hide and breach the fence without being seen. Bottom line, consider visibility-screen fence like that is at tennis courts.

Page 26, item 7: I know you are getting at efficiency in co-location and limiting the number of sites but in requiring at least 3 providers at any site may cause microsites to look more like beefy, short macrosites. There must be vertical separation between systems (for the most part). It's simply a technical thing. Design changes over time must be taken into consideration. One would think antennas get smaller and less obvious as time goes by. Systems upgrading to 4G have seen just the opposite. Improved technology also means more capacity. So instead of going smaller, they have actually gotten bigger to allow more capacity (concurrent phone calls or data users) at that site. Point being, a "small looking" macro or micro site today, may actually look bigger when the next upgrade comes along.

Page 26, item 8: Consider an exception for tower work lighting for safety purposes if night work must commence. It's a safety thing and should be on only when there are workings on the tower. We do not have this on our towers but with the advent of low amperage, high lumen LED lighting, there are some doing this. I would encourage "darked out" site compounds; meaning no ground or building lights on all the time. Dusk to dawn prohibited but allow the use of motion sensor lights. Given they are sometimes triggered by nearby shrubs moving in the wind (another reason I hate shrubs is they keep our lights on when windy and waste electricity) but much better than have typically bright compound lights on all the time. I require all of our co-locators to use motion sensor or manual switch lights; no permanent on or dusk to dawn. While some applicants may consider this "restrictive", the FCC is not going to beat up a locality on this requirement.

Hope this helps

Jim

August 2013 Proactive-Zoning Report

For the month of August 2013 the proactive-zoning program inspected the **Greystone** section of the city. During the proactive inspections eleven violations were found. The violations consisted of tall grass and weeds, inoperable vehicles, and discarded material violations.

MONTH	SECTOR	4 th CYCLE VIOLATIONS	CORRECTED	1 st CYCLE	2 nd CYCLE	3 rd CYCLE
December 2011	Wyndham Woods	2	2	2	0	4
January 2012	Northfield	13	13	21	6	19
February 2012	Purcell Park	8	8	7	6	5
March 2012	Parkview	5	5	19	7	16
April 2012	Ind./Tech Park	0	0	0	1	0
May 2012	Northeast	29	29	80	45	63
June 2012	Exit 243	1	1	10	0	1
July 2012	Fairway Hills	2	2	1	0	0
August 2012	Smithland Rd.	2	2	0	4	0
September 2012	N. Main St.	10	10	13	4	4
October 2012	Liberty St.	11	11	6	4	18
November 2012	Westover	13	13	18	8	17
December 2012	Garbers Church	9	9	1	2	1
January 2013	Spotswood Acres	8	8	6	4	1
February 2013	Jefferson St.	21	21	26	22	35
March 2013	Forest Hills/JMU	1	1	6	1	1
April 2013	S. Main St.	5	5	1	0	2
May 2013	Hillandale	11	11	7	5	17
June 2013	Maplehurst/JMU	0	0	6	5	2
July 2013	Long Ave/Norwood	11	9	12	28	17
August 2013	Greystone	9	n/a	13	10	13
September 2013	Greendale/SE			3	2	5
October 2013	Ramblewood			4	8	1
November 2013	Stone Spring Village/JMU			2	10	0
December 2013	Sunset Heights			7	29	10
January 2014	Reherd Acres			10	12	9
February 2014	RT 33 West			0	16	6
March 2014	Chicago Ave			16	22	29
April 2014	Pleasant Hill			4	13	17
May 2014	Avalon Woods			7	26	11
June 2014	Waterman Elementary			6	61	18
July 2014	Keister Elem			6	5	8
August 2014	500-600 S. Main			7	30	16
September 2014	Court Square			0	3	2
October 2014	Bluestone Hills & Valley Mall			3	33	31
November 2014	Preston Heights			8	3	1

The proactive-zoning program for September 2013 will be directed towards the enforcement of the Zoning Ordinance in the **Greendale/SE** section of the City.