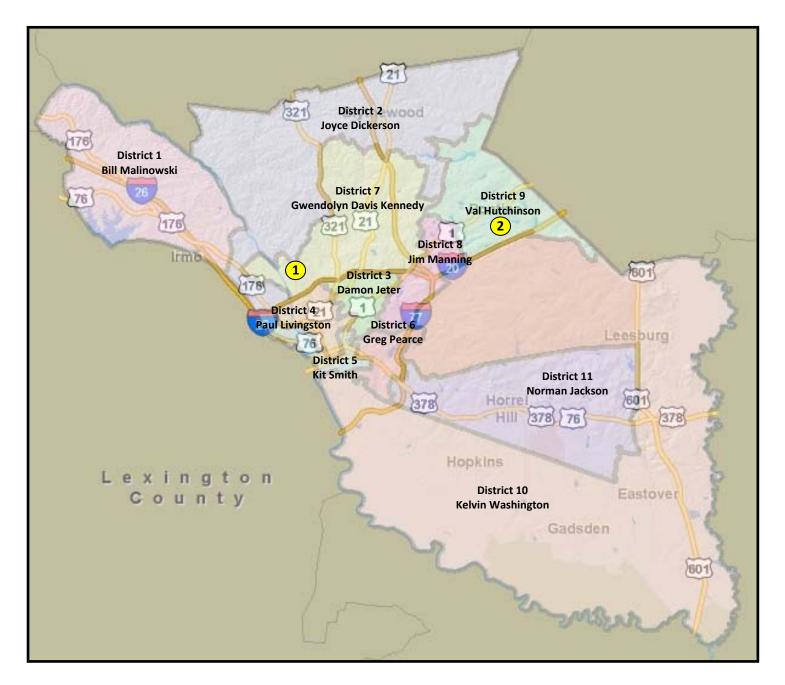
RICHLAND COUNTY BOARD OF ZONING APPEALS



Wednesday, 2 June 2010 1:00 p.m. Council Chambers

RICHLAND COUNTY BOARD OF ZONING APPEALS June 2, 2010



CASE NO.	APPLICANT	TMS NO.	LOCATION	DISTRICT
1. 10-06 SE	Kevin Corrigan	07614-01-07	7011 Frost Ave., Columbia, SC	Kennedy
2. 10-07 V	Tonya Curtis	25901-02-06	625 Park Place Drive, Columbia, SC	Hutchinson



Richland County Board of Zoning Appeals Wednesday, June 2, 2010 2020 Hampton Street 2nd Floor, Council Chambers

Agenda

- I. CALL TO ORDER & RECOGNITION OF QUORUM
- **II.** RULES OF ORDER
- III. APPROVAL OF MINUTES April 2010
- **IV. PUBLIC HEARING**

Joshua McDuffie, Chairman

Amelia Linder, Attorney

Geonard Price, Zoning Administrator

OPEN PUBLIC HEARING

10-06 SE PTA-FLA, Inc Kevin Corrigan 7011 Frost Avenue Columbia, SC 29203	Requests a special exception to construct cell tower on property zoned RU. (Rural District)
07614-01-03	P. 01
10-07 V Tonya Curtis 625 Park Place Drive	Requests a variance to encroach into the setbacks on property zoned RS-MD. (Residential, Single-Family, Medium Density)

P. 29

V. OTHER BUSINESS

Elgin, SC 29045 25901-02-06

VI. ADJOURNMENT



REQUEST, ANALYSIS AND RECOMMENDATION

10-06 Special Exception

REQUEST

The applicant is requesting the Board of Zoning Appeals to grant a special exception to permit the construction of a communication tower in a GC (General Commercial) district.

GENERAL INFORMATION

Tax Map Number

07614-01-03

Applicant

Kevin Corrigan (PTA-FLA, Inc.)

Location

7011 Frost Avenue

Parcel Size 1.67-acre tract Existing Land Use Vacant

Existing Status of the Property

The subject parcel is currently vacant.

Proposed Status of the Property

The applicant proposes to erect a 190-foot telecommunications tower, within a 5,625 (75 x 75) square foot leased area.

Character of the Area

The adjacent properties along Frost Avenue are primarily residential. A place of worship is located south of the subject parcel; Columbia International University abuts the northern portion of the subject parcel; the eastern abutting property contains a driveway which provides access to a number of residential structures located on the C.I.U. campus; and west of the property is a GC (general commercial) zoned parcel which contains a number of gas tanks (the property is owned by Keenan Oil Company).

ZONING ORDINANCE CITATION

Table 26-V-2 of the Land Development Code authorizes the Board of Zoning Appeals to authorize radio, television and all other types of communications towers subject to the provisions of section 26-152 (d) (22).

CRITERIA FOR SPECIAL EXCEPTIONS

In addition to definitive standards in this chapter, the Board shall consider the following:

- 1. Traffic impact.
- 2. Vehicle and pedestrian safety.
- 3. Potential impact of noise, lights, fumes or obstruction of airflow on adjoining property.

- 4. Adverse impact of the proposed use on the aesthetic character of the environs, to include possible need for screening from view.
- 5. Orientation and spacing of improvements or buildings.

Special exception requirements (as found in section 26-152 (d) (22)):

- (22) Radio, television and telecommunications and other transmitting towers.
- a. Use districts: Rural; Office and Institutional; Neighborhood Commercial; Rural Commercial; General Commercial; LI Light Industrial; Heavy Industrial.
- b. Communication towers shall have a maximum height of three hundred (300) feet. For towers on buildings, the maximum height shall be twenty (20) feet above the roofline of buildings forty (40) feet or four stories in height or less. For buildings greater than four stories or forty-one (41) feet in height, the maximum height of communication towers shall be forty feet above the roofline.
- c. The minimum setbacks for communication towers from abutting districts shall be as follows: (Ord. No. 040-09HR; 7-21-09)
 - 1. Communication towers abutting a residentially zoned parcel shall have a minimum setback of one (1) foot for each foot of height of the tower as measured from the base of the tower. The maximum required setback shall be two hundred and fifty (250) feet. (Ord. No. 040-09HR; 7-21-09)
 - 2. Communication towers abutting a non-residentially zoned parcel with a habitable residential dwelling shall have a minimum setback of fifty (50) feet. (Ord. No. 040-09HR; 7-21-09)
 - 3. Communication towers abutting a non-residentially zoned parcel without a habitable residential dwelling shall observe the setbacks of the district in which it is located. (Ord. No. 040-09HR; 7-21-09)
- d. The proposed user must show proof of an attempt to collocate on existing communication towers, and must be willing to allow other users to collocate on the proposed tower in the future subject to engineering capabilities of the structure. Evidence of an attempt to collocate must show that alternative towers, buildings, or other structures are not available for use within the applicant's tower site search area that are structurally capable of supporting the intended antenna or meeting the applicant's necessary height criteria, or provide a location free of interference from other communication towers.
- e. Towers shall be illuminated as required by the Federal Communications Commission, Federal Aviation Administration, or other regulatory agencies. However, no nighttime strobe lighting shall be incorporated unless required by the Federal Communications Commission, the Federal Aviation Administration, or other regulatory agency.
- f. Each communication tower and associated buildings shall be enclosed within a fence at least seven (7) feet in height.
- g. Each communication tower site shall be landscaped in accordance with the requirements of Section 26-176 of this chapter.
- h. No signage may be attached to any portion of a communications tower. Signs for the purpose of identification, warning, emergency function or contact or other as required

by applicable state or federal rule, law, or regulation may be placed as required by standard industry practice.

i. A communications tower which is no longer used for communications purposes must be dismantled and removed within one hundred twenty (120) days of the date the tower is taken out of service.

DISCUSSION

The applicant proposes to erect a 190-foot telecommunications tower, within a 5,625 square foot leased compound.

Staff visited the site.

The tower is proposed to be located 210' feet from the nearest residentially zoned parcel. According to the provisions of subsection 26-152 (d) (22) (c) (1), towers must have a setback, from the property line which abuts a residentially zoned district, that is equal to the height of the tower, up to 250 feet. According to the application, the tower will meet all other required setbacks.

Meeting the criteria for a special exception in section 26-152 (d) (22) (c) may indicate that the applicant has taken necessary measures to minimize the impact of a communication tower on the surrounding area. Staff believes that this request will not impair the properties in the immediate or surrounding area.

The applicant must address, before the Board, the special exception requirements of section 26-152 (d) (22) (d).

Staff recommends approval for this request.

CONDITIONS

Section 26-56 (f) (3)

(3) Conditions: In granting a special exception, the board of zoning appeals may prescribe conditions and safeguards in addition to those spelled out in this chapter. The board of zoning appeals may also prescribe a time limit within which the special exception shall be begun or completed, or both. All conditions placed on the project by the board of zoning appeals shall be incorporated into such project.

OTHER RELEVANT SECTIONS

N/A

ATTACHMENTS

Site plan

CASE HISTORY

No record of previous special exception or variance request.

Case 10-06 SE



		BOARD OF ZONING APPEALS SPECIAL EXCEPTION						
1.	Loc	ation: 7011 Frost Avenue, Columbia, SC 29203						
	ТМ	S Page:07614Block:01Lot:03Zoning District:GC						
2.		e Board of Zoning Appeals is requested to consider the granting of a special exception permitting: Communications Tower						
3.	Des	Describe the proposal in detail: see attached narrative.						
4.	Are	a attributed to the proposal (square feet):5,625						
5.		other uses located upon the subject property? I No I Yes (if Yes, list each use and the square tage attributed to each use):						
		Usesquare footage						
	b.	Usesquare footage						
	C.	Usesquare footage						
6.	Tot	al number of parking spaces on the subject property:0						
7.	Tot	al number of employees on shift of greatest employment:0						
8.	Dev ans	dress the following Standards of Review (Sec. 26-56 (f) (2) of the Richland County Land velopment Code). Please note that the members of the Board of Zoning Appeals will use your swers, among other things, as they evaluate your request.						
	a.	Traffic impact:See attached narrative						
	b.	Vehicle and pedestrian safety: see attached narrative						
	C.	Potential impact of noise, lights, fumes or obstruction of airflow on adjoining property:						
	d.	Adverse impact of the proposed use on the aesthetic character of the environs, to include possible need for screening from view: <u>See attached narrative</u>						
	e.	Orientation and spacing of improvements or buildings: <u>See attached narrative</u>						

STATEMENT OF INTENT

PTA-FLA, Inc., a subsidiary of Clear Talk, respectfully submits this Statement in support of its Special Exception Application to the Richland County Board of Zoning Appeals to construct, operate and manage a 190' self-supporting wireless communication facility, on the property currently owned by Avalon Properties, LLC located at 7011 Frost Avenue in Richland County (Tax Map No. 07614-01-03).

The proposed site is a critical component of Clear Talk's core wireless network services in the Columbia metropolitan area and, more specifically, will serve an area of Richland County and the City of Columbia from I-20 north along State Route 215 including Denny Terrace and surrounding neighborhood.

Attached to this Statement are the following Exhibits:

- 1. Exhibit "A" A letter of authorization from the current landowner, Avalon Properties, LLC.
- 2. Exhibit "B" Site Plan and Survey.
- 3. Exhibit "C" Richland County Aerial Photo and Parcel Map.
- 4. Exhibit "D" A letter from Clear Talk's RF (Radio Frequency) Engineer, William Howard summarizing Clear Talk's network design and this site's importance to coverage in the above-described area, as well as the Search Ring for this proposed tower and propagation map.
- 5. A copy of Clear Talk's FCC license granting authorization to operate a wireless network in the Columbia, SC market area.
- 6. A copy of Clear Talk's FAA notice regarding this proposed tower.

Introduction

Clear Talk is a national provider of low-cost, flat-rate wireless communications services. We operate under the basic principal that wireless phone and high-speed Internet should be simple, affordable and available everywhere. We have been building mobile networks in underserved areas of the country since 1999.

In the past eleven years, Clear Talk has built wireless networks in seventeen different markets including, Colorado (Grand Junction); Idaho (Pocatello/Twin Falls); Tennessee (Jackson); Alabama (Florence); Arizona (Yuma), California (El Centro); Florida (Jacksonville); and Texas (Lubbock).

We are currently building out two networks in South Carolina (Columbia and Greenville). We have also applied for Federal Stimulus Funds to bring much-needed voice and broadband options to customers in rural areas of this State that would otherwise go un-served because of the high cost of the initial infrastructure investment.

The Technology

Clear Talk operates its wireless network in the 1710-megahertz range of the AWS band and our antennas function with an effective radiated power ("ERP") of 500 watts. Our communications facilities will not interfere with television or radio reception because we are licensed by the FCC to operate in this very specific frequency throughout our Basic Trading Area ("BTA") in Columbia.

The RF Design and Site Selection Process

This proposed site is critically important to our core network for the Columbia BEA. It will serve a crucial area of Richland County and the City of Columbia north of 1-20 extending east to Route 321 (Fairfield Road) including the residential area of Denny Terrace. As the northern-most site in the current Columbia design, the verticality of the proposed site is vital in extending our footprint as far north as possible.

The process of developing a wireless network includes designing a system-wide grid of smaller "cells," each containing a single antenna that will receive and transmit our signal. Each cell must be precisely located relative to the other cells so that they can create an effective communication grid and provide signal continuity. The design of this grid must take into account not only the antenna's radius of reliable transmission but also population density, traffic patterns and the topography of the area. The rolling topography of this part of Richland County had a large impact on the site selection process for this particular requirement.

Clear Talk's strong preference is to collocate on existing towers whenever possible. Collocation is the quickest and most cost effective way to build out a new network. Out of the 40 initial requirements in our core Columbia BTA, we have signed agreements to collocate on 36 existing towers or rooftops. This is the first site requirement in our network core where collocation was not a viable option.

There are several existing towers in this area but for various reasons described in Exhibit "D", we were not able to use them as part of our network.

The proposed "Frost Avenue" site has been carefully selected to meet the goals of the community while providing adequate height and range for Clear Talk's network. The proposed tower is also designed to allow for future collocation of additional carriers or government services equipment.

The Proposed Facility

PTA-FLA, Inc., a subsidiary of Clear Talk, has entered into a contract to purchase the approximately 1.67 acre tract owned by Avalon Properties, LLC located at 7011 Frost Avenue in Richland County as depicted on the Survey included in Exhibit "B". We propose to construct a 190' self support (or lattice) communications tower as depicted also in Exhibit "B" on a 75"x 75' fenced portion of the property as shown on the Site Plan. In addition to the tower the fenced compound with contain our equipment cabinet which is 6'2" high, 2' wide & 2' deep.

Zoning Standards & Compliance

The property is zoned GC (General Commercial) by Richland County and there are no other residences or other structures on the property.

The proposed tower will be set back approximately 263' from the Frost Avenue right-ofway. We will leave all the existing mature trees on site for natural screening and we will landscape the perimeter of the fenced compound for additional screening. The size of the property itself (1.67 acres) is more than we need for a tower facility but it gives us the opportunity to create a large buffer from the road and the nearest residential property.

Richland County's Special Exceptions standards for Wireless Telecommunication Towers are contained in Code Sec. 26-152(d)(22). In this Section, a Wireless Telecommunication Tower is allowed on GC zoned property with a Special Exception granted by the Board of Zoning Appeals. The relevant Special Exceptions standards are listed below with our response:

Sec. 26-152 (d) (22): Radio, television and telecommunications and other transmitting towers a. Use districts: Rural; Office and Institutional; Neighborhood Commercial; Rural Commercial; General Commercial; LI Light Industrial; Heavy Industrial

<u>Response</u>: The tower will be located on a 1.67 acre General Commercial zoned parcel in Richland County (Tax Map No. 07614-01-03).

b. Communication towers shall have a maximum height of three hundred (300) feet. For towers on buildings, the maximum height shall be twenty (20) feet above the roofline of buildings forty (40) feet or four stories in height or less. For buildings greater than four stories or forty-one (41) feet in height, the maximum height of communication towers shall be forty feet above the roofline.

Response: The proposed tower will be 190' from the ground-mounted base.

c. The minimum setbacks for communications towers from abutting districts shall be as follows:

- 1. Communication towers abutting a residentially zoned parcel shall have a minimum setback of one (1) foot for each foot of height of the tower as measured from the base of the tower. The maximum required wetback shall be two hundred and fifty (250) feet.
- 2. Communication towers abutting a non-residentially zoned parcel with a habitable residential dwelling shall have a minimum setback of fifty (50) feet.
- 3. Communication towers abutting a non-residentially zoned parcel without a habitable residential dwelling shall observe the setbacks of the district in which it is located.

<u>Response</u>: The propose tower location meets and exceeds all required set-backs as shown in the following table:

Adjoining Parcel Map #	Zoning	Required Set-Back	Proposed Set-Back
#07614-01-10	RS-MD	190' (Tower Height)	210'
#07614-01-02	GC	0'	220'
#07600-12-29 (City)	GC	50'	54'
#07614-01-04	NC	0'	20'

d. The proposed user must show proof of an attempt to collocate on existing communications towers, and must be willing to allow other users to collocate on the proposed tower in the future subject to engineering capabilities of the structure. Evidence of an attempt to collocate must show that alternative towers, buildings or other structures are not available for use within the applicant's tower search area that are structurally capable of supporting the intended antenna or meeting the applicant's necessary height criteria, or provide a location free of interference from other communication towers. <u>Response:</u> We attempted to collocate on three towers located within the search ring for this cell. Below are the locations of the towers and the reason why they will not work for our equipment.

- 1. There is an existing tower located at 6901 Frost Avenue (Tax Map No. 07613-02-45) which is owned and operated by WXBT/WSCQ FM. This tower was carefully considered but eliminated due to capacity constraints and potential interference issues. The WXBT guyed tower was designed and engineered in 1989 as an FM broadcast tower and does not offer the integrity to support the necessary equipment Clear Talk requires. Furthermore, the intrinsic qualities of high power FM broadcast facilities introduce a number of RF variables. These variables, generated by the incumbent equipment, include, but are not limited to, spurious emissions, receiver de-sensitivity, and third order harmonics. Any new equipment collocated alongside WXBT's antennas (transmitting at a licensed ERP of 5.9kW) would be subject to interference levels such that commercial viability would be compromised.
- 2. There is an existing tower located at 6539 Frost Avenue (Tax Map No. 07516-01-14) which is owned and operated by Time Warner. This is an old tower that has a large number of microwave dishes attached to it. It was not constructed with collocations in mind, and therefore presents several serious problems that will prevent us from being able to use it for our equipment. (A) Our engineers have told us that the existing equipment exceeds the tower's structural capacity. (B) It does not have a safety climb, climbing pegs or a ladder; therefore, our installers would have to climb the tower structure itself to install our equipment. This is not compliant with current OSHA standards. (C) Finally, there is no room on the ground at the base of the tower for our equipment.
- 3. There is an existing tower on Monticello Road (Tax Map No. 07600-02-36) owned by Crown Castle. Clear Talk currently has collocations on 13 Crown Castle towers in the Columbia BEA. The Crown guyed tower on Monticello Road was the primary candidate but after initial inquiries to the Crown engineering department, the site was disqualified due to structural issues. Current engineering reports demonstrated the tower is exceeding maximum capacity and overstressed by 5%.

It is Clear Talk's strong preference to collocate on existing towers whenever possible. Collocation is the quickest and most cost effective way to build out a new network. Out of the 40 initial requirements in our core Columbia BTA we have signed agreements to collocate on 36 existing towers or rooftops. This is the first site requirement in our network core that collocation was not a viable option. The tower will be designed for future collocation opportunities. All of the towers in our network are available for collocation and we have numerous lease agreements in place with all the national wireless companies.

e. Towers shall be illuminated as required by the Federal Communications Commission, Federal Aviation Administration, or other regulatory agencies. However no night time strobe lighting shall be incorporated unless required by the Federal Communications Commission, Federal Aviation Administration, or other regulatory agency.

<u>Response:</u> The proposed height of this tower at 190' will not require any safety lights by the FAA.

f. Each communication tower and associated buildings shall be enclosed within a fence at least seven (7) feet in height.

Response: The proposed 75'x 75' equipment compound will be enclosed with a chain link fence that will be at least seven (7) feet in height, and will be topped with industry standard three-stranded barbed wire for safety and security of the site.

g. Each communication tower shall be landscaped in accordance with the requirements of Section 26-176 of this Chapter.

<u>Response:</u> Clear talk will acquire the entire 1.67 acre tract and build the proposed tower on only a 75'x 75' -portion of the property. This will allow for ample buffering and set-backs that exceed the minimum requirements. All the mature trees on the site will remain undisturbed to provide natural screening of the tower and the fenced compound will be screened with additional landscaping.

h. No signage may be attached to any portion of a communications tower. Signs for the purpose of identification, warning, emergency function or contact or other as required by applicable state or federal rule, law, or regulation may be placed as required by standard industry practice.

<u>Response</u>: Clear Talk will not install any signage on any part of the tower. We will only install the required federal identification information and emergency contact information on an industry standard sign located on the compound gate.

i. A communication tower which is no longer used for communications purposes must be dismantled and removed within one hundred and twenty (120) days of the date the tower is taken out of service.

<u>Response</u>: If the Tower is taken out of service, Clear Talk will dismantle and remove it within one hundred and twenty (120) days of the date it was taken out of service.

Richland County's General Conditions for granting a Special Exceptions request are set forth below with Clear Talk's response.

Sec. 26-152 Special Exceptions:

(b) Conditions. All special exceptions shall, at a minimum, meet the conditions set forth in this section. The Board of Zoning Appeals shall approve or deny an application for special exception (see also Section 26-56 of this chapter) based on the following:

(1) A determination that all standards for the particular use, as defined in this article and in other relevant sections of this chapter, have been met.

<u>Response</u>: See the discussion above. Clear Talk has addressed all development standards set forth in Section 26-152(d)(22) of the Code.

(2) A finding that the special exception is in harmony with the intent and purpose of this chapter. In making this determination, the board shall consider the following:

(a) Traffic impacts.

Response: The tower will be unmanned and will only require infrequent maintenance visits.

(b) Vehicle and pedestrian safety.

<u>Response:</u> The tower will be located on the rear portion of a 1.67 acre site approximately 263' off of Frost Avenue with all required safety fencing. It will not affect vehicles or pedestrians on Frost Avenue.

(c) Potential impact of noise, lights, fumes or obstruction of airflow on adjoining properties.

<u>Response</u>: The tower will not emit any noise or odors and will not be required to have any lights under the FAA regulations.

(d) Adverse impact of the proposed use on the aesthetic character of the environs, to include the possible need for screening from view.

<u>Response:</u> Clear Talk is acquiring a 1.67 acre parcel on which the 75' x 75' tower facility will be located. The large size of the parcel and existing mature hardwood trees will provide natural buffering and screening from the surrounding area. Clear Talk plans to leave all the existing mature trees on site for natural screening and will landscape the perimeter of the fenced compound for additional screening. The property is located on the north side of Frost Avenue which is primarily zoned commercial and will not pose any adverse impact on the environs.

(e) Orientation and spacing of improvements or buildings.

<u>Response:</u> Of the 1.67 acre parcel Clear Talk is acquiring, the proposed improvements (the communications tower and equipment) will only occupy a 75' x 75' fenced area, or approximately 8% of the total site. The additional land will allow Clear Talk to meet or exceed all the required set-back requirements and provide ample screening as stated in the response above.

In granting a special exception, the board may impose such additional restrictions and requirements as it may deem necessary in order that the purpose and intent of this chapter are served.

<u>Response</u>: Clear Talk will be pleased to discuss any additional restrictions or requirements that the Board or Staff deems necessary.

Conclusion

Clear Talk's proposed Frost Avenue site is critically important to our core network for the Columbia BTA. It serves a crucial area of Richland County and the City of Columbia from I-20 north along State Route 215 including the Denny Terrace neighborhood. Clear Talk explored the possibility of collocating on existing towers in this area but, for the reasons stated above, none of them proved to be viable candidates.

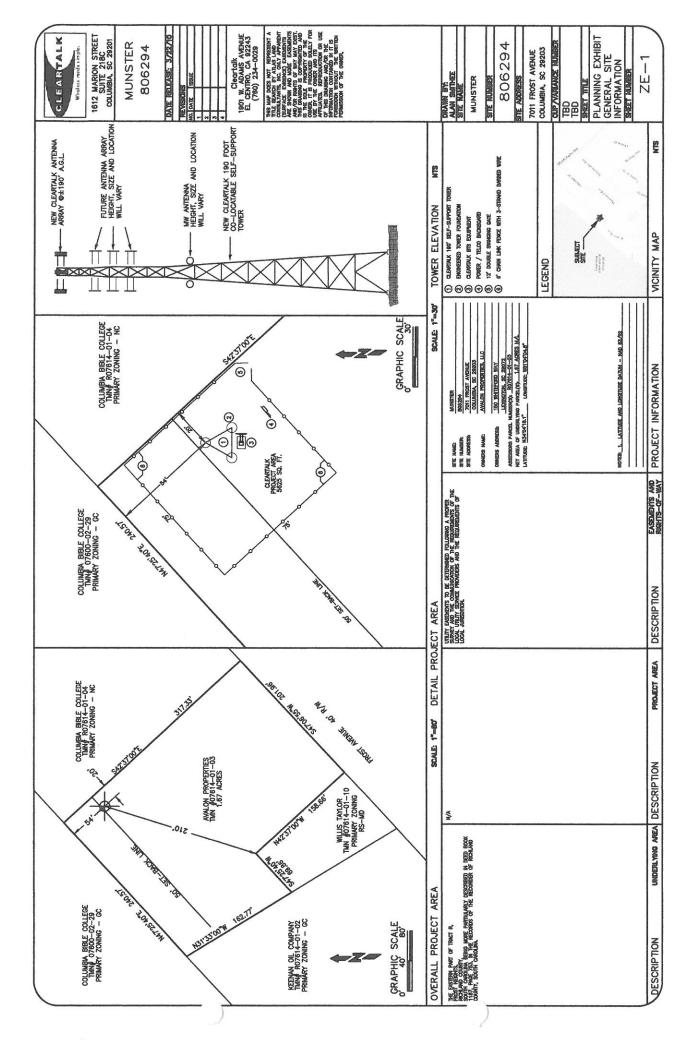
The site has been carefully selected to provide our networks the required coverage; to provide adequate screening and buffering from the surrounding area; and to meet or exceed all the development standards of the Richland County Code.

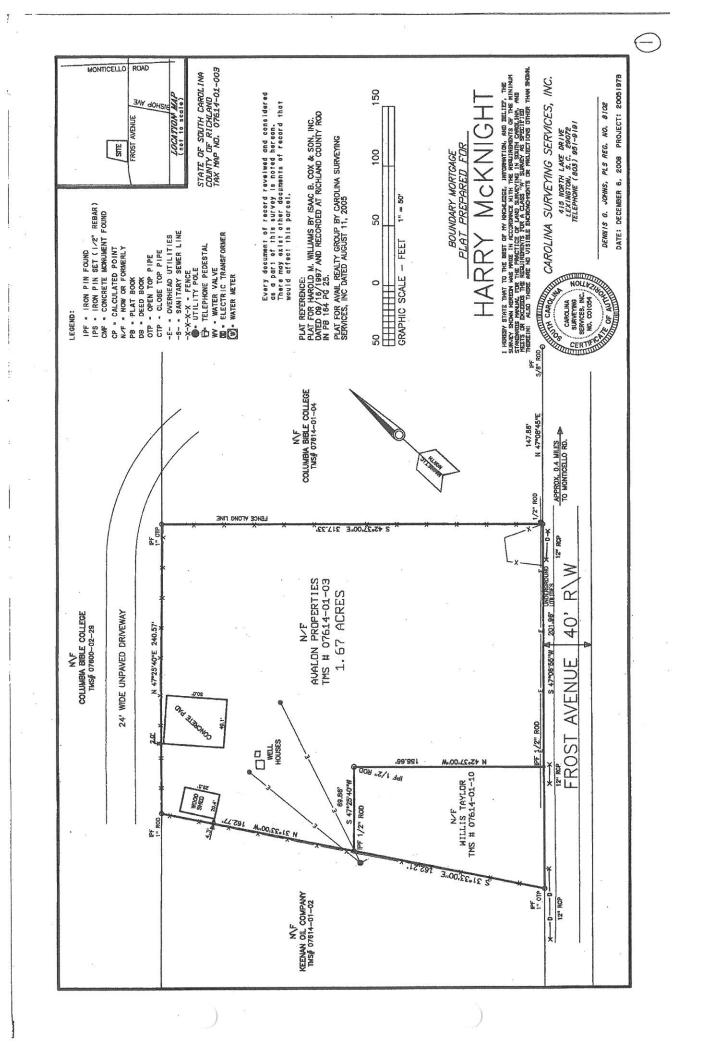
While the overwhelming majority of our sites are being developed through collocation on existing towers, the necessary addition of this tower will allow us to complete our core network and provide a reliable a reliable, affordable option for wireless services to the community.

Clear Talk requests that the Board of Zoning Appeals approve this Special Exception Application for the proposed communications tower on the General Commercial zoned parcel, Tax Map No. 07614-01-13.

Respectfully Submitted, Clear Talk

By: PTA-FLA, inc Kevin Corrigan







April 28, 2010

Mr. Geonard Price Zoning Administrator Richland County Planning & Development Services 2020 Hampton Street P.O. Box 192 Columbia, SC 29202

Re: Special Exception Application to the Board of Zoning Appeals filed by PTA-FLA, Inc. (Clear Talk) for a Communications Tower located at 7011 Frost Avenue, Tax Map No. R07614-01-03.

Dear Mr. Price:

The purpose of this letter is to outline Cleartalk Wireless's need for the Frost Avenue site from a technical design standpoint.

Considerations for Designing AWS Systems

With the seemingly ubiquitous use of cellular and PCS telephones, the Federal Communications Commission (FCC) sought to introduce additional service providers. It was an effort to increase competition, which in turn would drive down the price of quality wireless telephony. This was achieved by allocating a segment of frequency for companies which bought the rights and committed to providing wireless AWS service in their licensed area.

Cleartalk Wireless is obliged to the FCC to provide quality AWS service to existing and future customers in BEA 24 which includes the county of Richland. Constant network maintenance and optimizations is fundamental for providing high-quality digital voice and



April 28, 2010

Mr. Geonard Price Zoning Administrator Richland County Planning & Development Services 2020 Hampton Street P.O. Box 192 Columbia, SC 29202

Re: Special Exception Application to the Board of Zoning Appeals filed by PTA-FLA, Inc. (Clear Talk) for a Communications Tower located at 7011 Frost Avenue, Tax Map No. R07614-01-03.

Dear Mr. Price:

The purpose of this letter is to outline Cleartalk Wireless's need for the Frost Avenue site from a technical design standpoint.

Considerations for Designing AWS Systems

With the seemingly ubiquitous use of cellular and PCS telephones, the Federal Communications Commission (FCC) sought to introduce additional service providers. It was an effort to increase competition, which in turn would drive down the price of quality wireless telephony. This was achieved by allocating a segment of frequency for companies which bought the rights and committed to providing wireless AWS service in their licensed area.

Cleartalk Wireless is obliged to the FCC to provide quality AWS service to existing and future customers in BEA 24 which includes the county of Richland. Constant network maintenance and optimizations is fundamental for providing high-quality digital voice and

Mr. Geonard Price April 29, 2010 Page Two

data communication services to our customers. Cellular networks operate in the 800 MHz frequency band, however, PCS networks operate in the 1900 MHz band and AWS utilizesthe 2100 MHz band. Since radio waves propagate significantly better at lower frequencies, AWS sites must be spaced closer together than those in cellular and PCS networks from a coverage perspective. The fact that AM radio stations reach greater distances than FM radio stations (which are at higher frequencies) is another example of the same phenomenon.

A "grid" of sites must then be deployed to provide continuous coverage over the service area. Any given site in that grid is designed as part of the entire continuity of the network and cannot be considered in isolation. Design changes to one site impact those around it. Movement of a site creates a domino effect on the entire network. Once sites have been built, movement or loss of a site can be devastating to the quality of the network.

The Cleartalk Wireless network is designed around existing telecommunications structures and collocations are pursued whenever feasible. The Frost Avenue site is the primary candidate for north Columbia and the residential areas both north and south of interstate 20. The exact placement of other sites into a grid around this site and the spacing of the grid is what wireless system design engineering encompasses. Some of the basic considerations are outlined below.

Design Objectives

Cleartalk Wireless is committed to providing only the highest quality AWS network to its customers. Any two-way wireless system, such as AWS telephony, has three basic design objectives, which must be met. First, the network must provide *coverage* over the region of operation, meaning there is sufficient signal strength for customers to receive and make calls. Secondly, the network must be designed to handle the *capacity* of calls generated by its customers. This equates to having a sufficient number of channels for users to place calls. Without sufficient capacity, even in areas with strong signal strength and excellent coverage, users are blocked from making a call and get a "fast busy" signal. Larger capacity requires more sites that are spaced closer together and the Cleartalk Wireless network has been designed to handle a large number of anticipated users.

Mr. Geonard Price April 29, 2010 Page Three

Thirdly, the *quality* of the network is essential. This encompasses a number of issues which are related to the coverage and capacity of a network. Insufficient signal strength (coverage) is the prime culprit of poor voice quality. However, interference from the radio waves from our other sites can be just as devastating to voice quality and results in a very delicate engineering design requiring a balance between maximizing coverage and minimizing interference. For this reason, careful site selection is critical. Sites that are too close to each other or too tall can cause damaging interference. Sites that are too far apart or too short may not provide sufficient signal strength to an area.

Quality also refers to the level of service that will be offered, or stated another way, where the portable phones will work: only outside and away from any obstructions; inside vehicles; inside homes; or inside dense office buildings and malls. These increasing levels of service require stricter design considerations. The most basic level of service that must be provided along highways is in-vehicle coverage. Cleartalk Wireless must also be able to provide inhome coverage in all cities and towns to meet customer expectations.

Objectives of Frost Avenue

The Frost Avenue site will serve the north Columbia design by covering interstate 20 and from the Broad River extending east to Route 321 (Fairfield Road) including the residential area of Denny Terrace. It will be a major capacity site as well carrying a substantial number of calls during the busy drive hours along I20. Furthermore, this site will provide vital coverage in an area of residential growth while linking existing SBA and Crown Castle collocations.

Because the neighboring sites have been constructed and are scheduled to go live, ATC 'Winnsboro' in particular, little leeway exists for a compromise on the location and height of Frost Avenue. If the site shifts much to the north, the primary objective of offering in vehicle coverage along I20 will be severely compromise. Movement south will limit the ability to handoff with SBA 'Marley' and reduce in vehicle penetration in the area of Broad River Road. As vital to the network as site location is, obtaining the proper verticality is just as important. To lower the proposed antenna centerline from 190' would substantially weaken the signal produced by the Frost Avenue site. A collocation on the existing Crown Castle site

Mr. Geonard Price April 29, 2010 Page Four

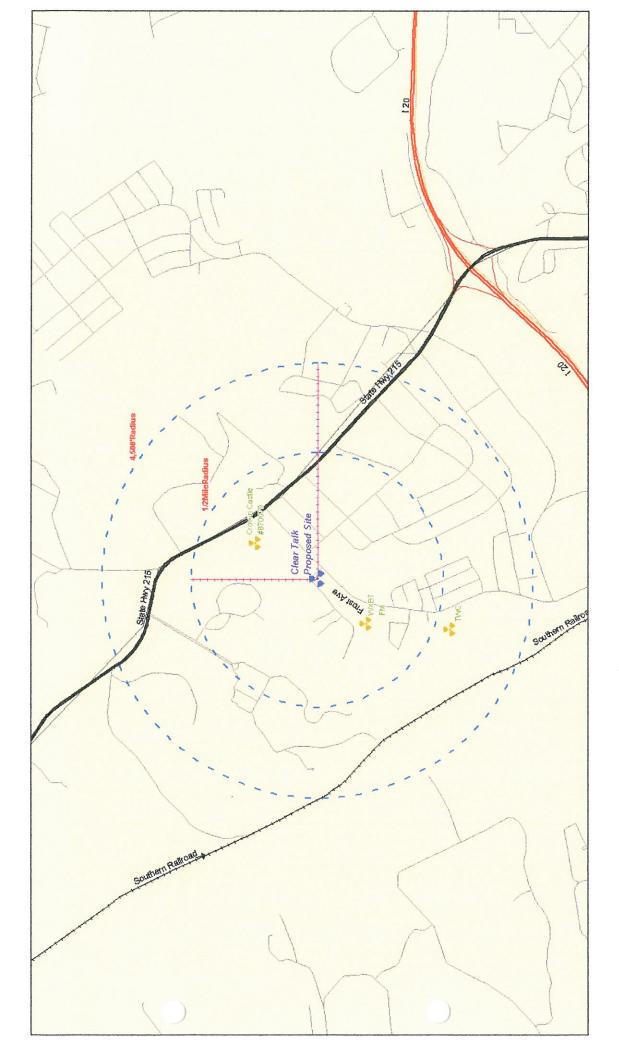
to the south at the available acl of 130'would result in a failure to address the majority of the current drop call areas identified in the design. All objects within the same horizontal planeare considered 'clutter' because they seriously attenuate the signal produced by the antennas. Clutter is intrinsic with areas like that surrounding Frost Avenue. If forced to penetrate through the clutter rather than down upon it, the propagation from the antennas will be considerably degraded. To offer in building coverage with such a poor quality signal would be impossible. A 190' antenna centerline on Frost Avenue significantly mitigates this issue and will help meet the design objectives. The Frost Avenue site is an essential component in the grid of sites providing quality coverage in the county of Richland. Any network without solid coverage along I20 and Monticello Road would be unacceptable – hence the Cleartalk Wireless network will not remain commercially viable without this site. Only one tower in the vicinity of the proposed Frost Avenue site, a guyed tower off of Route 215, could have been considered a viable candidate based upon the aforementioned criteria. However, after running several analyses and studying alternate scenarios, this site was deemed unsuitable and disqualified due to an over stressed structural capacity of 104.4%.

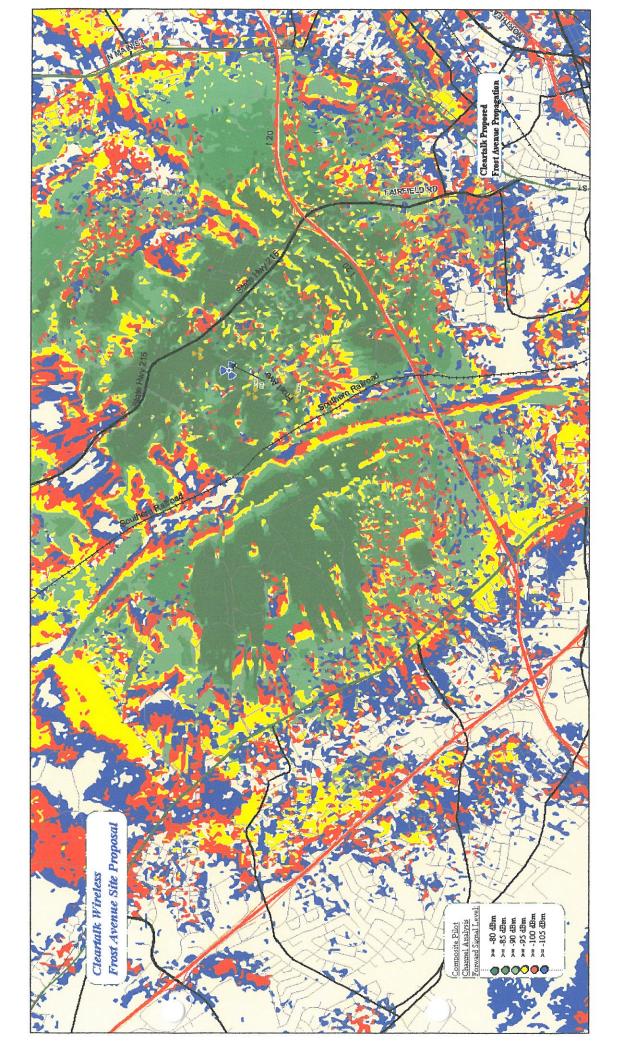
In summary, the Frost Avenue site is necessary in allowing Cleartalk Wireless to provide continuous quality coverage in the County of Richland. Alternatives have been investigated and eliminated. The proposed site meets all engineering, interference and collocation constraints.

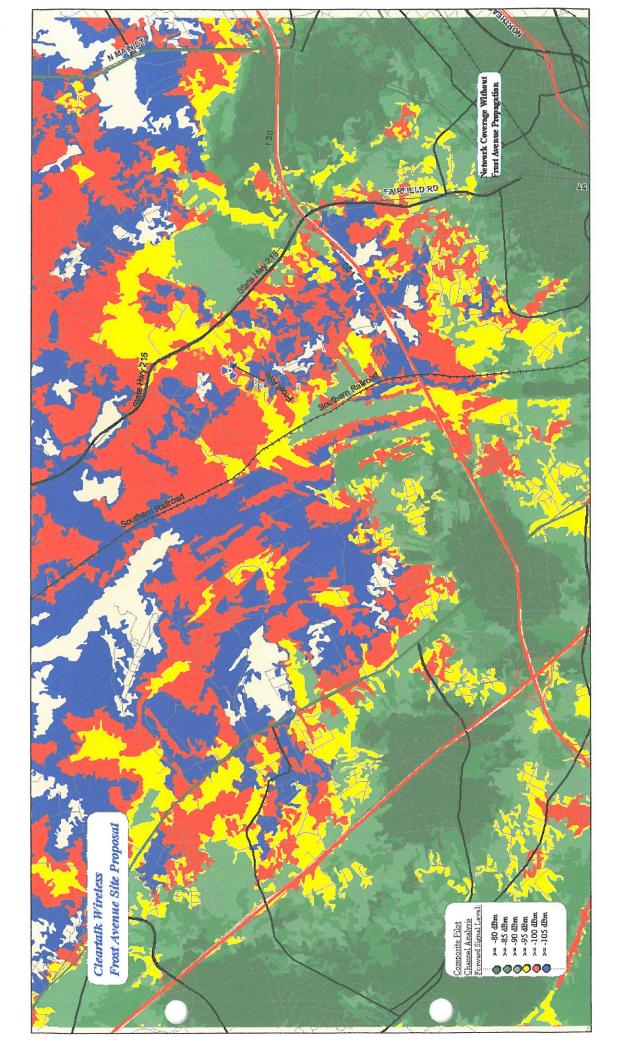
Sincerely,

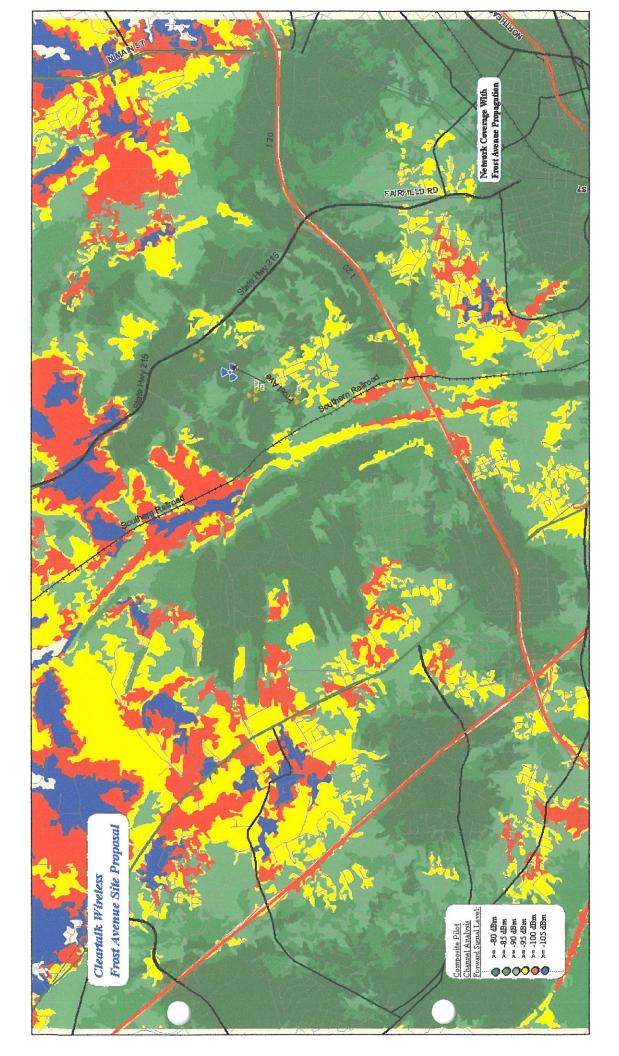
William Howard

RF Design Engineer Cleartalk Wireless











REQUEST, ANALYSIS AND RECOMMENDATION

10-07 Variance

REQUEST

The applicant is requesting the Board of Zoning Appeals to grant a variance to encroach into the required side yard setback on property zoned RS-MD (Residential, Single-Family, Medium Density District).

GENERAL INFORMATION

.19± acre tract

Applicant

Tonya Curtis

25901-02-06
Parcel Size

Tax Map Number

Existing Land Use

Residential

Location

625 Park Place Drive

Existing Status of the Property

The subject property has an existing 2,452 square foot residential structure.

Proposed Status of the Property

The applicant is proposing an addition to the west side of the existing structure.

Character of the Area

The area is comprised residentially developed parcels.

ZONING ORDINANCE CITATION

Section 26-33 (a) (2) of the Land Development Code empowers the Board of Zoning Appeals to authorize upon appeal in specific cases such variance from the terms of this chapter as will not be contrary to the public interest where, owing to special conditions, a literal enforcement of the provisions of this chapter would result in an unnecessary hardship. Such appeals shall be made in accordance with the procedures and standards set forth in Sec. 26-57 of this chapter.

CRITERIA FOR VARIANCE

Standard of review. The board of zoning appeals shall not grant a variance unless and until it makes the following findings:

- a. That there are extraordinary and exceptional conditions pertaining to the particular piece of property; and
- b. That these conditions do not generally apply to other property in the vicinity; and

- c. That because of these conditions, the application of this chapter to the particular piece of property would effectively prohibit or unreasonably restrict the utilization of the property; and
- d. That the authorization of a variance will not be of substantial detriment to adjacent property or to the public good, and the granting of the variance will not harm the character of the district.

DISCUSSION

Staff visited the site.

The applicant is requesting a variance to construct a $12' \times 30'$ (360 square feet) addition (porch) to the side of the existing residential structure. This addition will encroach into the required side yard setback by two (2) feet.

According to the applicant, the side yard is the most appropriate, and only, location for the proposed structure. The master bedroom is located in the rear and placing the porch on the rear would require access by guest through the bedroom.

As previously stated, it is the applicant's desire to have a 360 square foot porch added to the existing structure. A 10' x 30' (300 square feet) porch could be constructed to meet the required setbacks. In lieu of a variance, the following option is available to the applicant:

1. Reduce the size of the proposed structure.

Reducing the square footage of the proposed structure would allow the structure to be constructed within the required setback.

According to the standard of review for a variance, the first criterion that must be established is a determination that extraordinary or exceptional conditions to the property are present. Staff was unable to identify any extraordinary or exceptional conditions pertaining to the request. Because the criteria for granting a variance is predicated upon the Board's findings that all standards of review are present, it is staff's recommendation that the variance request be denied.

CONDITIONS

26-57(f)(3)

Conditions. In granting a variance, the board of zoning appeals may attach to it such conditions regarding the location, character, or other features of the proposed building, structure or use as the board of zoning appeals may consider advisable to protect established property values in the surrounding area, or to promote the public health, safety, or general welfare. The board of zoning appeals may also prescribe a time limit within which the action for which the variance was sought shall be begun or completed, or both.

OTHER RELEVANT SECTIONS

26-57 (f) (1) Formal review.

(1) Action by the board of zoning appeals. Upon receipt of the application for a variance request from the planning department, the board of zoning appeals shall hold a public meeting on the proposed variance request. Any party may appear in person or be represented by an authorized agent. In considering the application, the board of zoning appeals shall review the application materials, the staff comments and recommendations, the general purpose and standards set forth in this chapter, and all testimony and evidence received at the public hearing. After conducting the public hearing, the board of zoning appeals may:

- a. Approve the request;
- b. Continue the matter for additional consideration; or
- c. Deny the request.

Any approval or denial of the request must be by a concurring vote of a majority of those members of the board of zoning appeals both present and voting. The decision of the board of zoning appeals shall be accompanied by written findings that the variance meets or does not meet each of the standards set forth in subparagraph (2) below. The decision and the written findings shall be permanently filed in the planning department as a public record. The written decision of the board of zoning appeals must be delivered to the applicant.

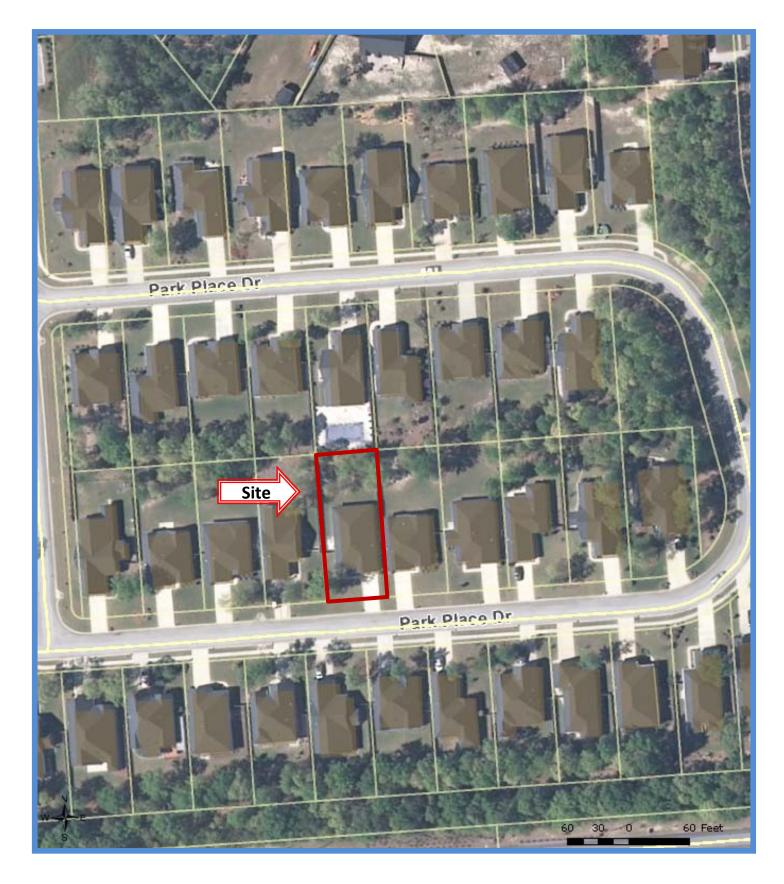
ATTACHMENTS

- Plat
- Letter from neighbor

CASE HISTORY

No record of previous special exception or variance request.

Case 10-07 V

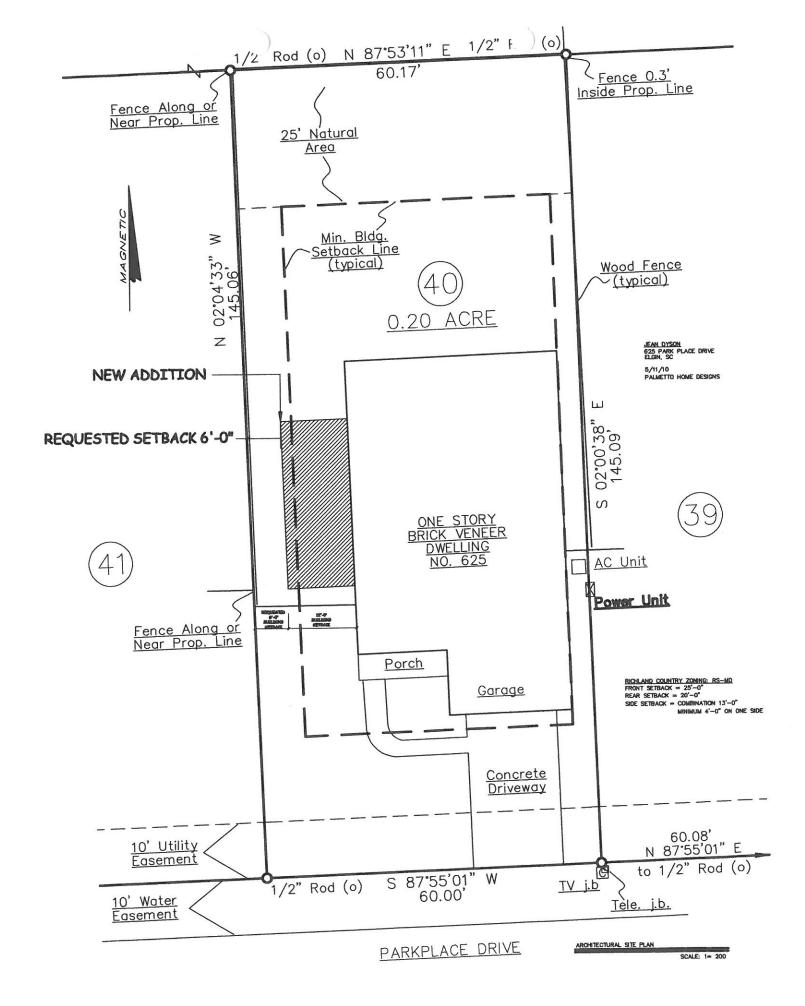


10-07 V Tonya Curtis 625 Park Place Drive





(a. 5)	BOARD OF ZONING APPEALS	
	Application #	
1.	Location <u>LEZS</u> Park Place Drive, Elgin, SC 29048	
	TMS Page (25901 Block 02 Lot 00 Zoning District Applicant hereby appeals to the Zoning Board of Appeals for a variance from the strict application to the property as described in the provisions of Section of the Richland County Zoning Ordinance.	
3.	the second site plan	
4.	The application of the ordinance will result in unnecessary hardship, and the standards for a variance set by <u>Sec. 26-602.3b(1)</u> of the Richland County Zoning Code are met by the following facts.	
	a) There are extraordinary and exceptional conditions pertaining to the particular piece of property as following: <u>Screened in Porch</u>	
	b) Describe how the conditions listed above were created: <u>to add coverved</u>	
	c) These conditions do not generally apply to other property in the vicinity as shown by: <u>masker on</u> <u>NOUCK</u> SO Addition needs to be on Side.	
	Because of these conditions, the application of the ordinance to the particular piece of property would effectively prohibit or unreasonably restrict the utilization of the property as follows:	
	 e) The authorization of the variance will not be of substantial detriment to the adjacent property or to the public good, and the character of the district will not be harmed by the granting of the variance for the following reasons: 	
5.	The following documents are submitted in support of this application [a site plan must be submitted]: a)	
	b) c)	
1	(Attach additional pages if necessary) Applicant's Signature TONYA A CUARS Printed (typed) Name (Attach additional pages if necessary) (Attach additional pages i	
1	Palmetto Home Designs 607 White Falls Drive Commerce, sc, 29212	35



May 3, 2010

Dear Mr. and Mrs. Nylander,

I want to build a porch on the west side of my house off of my French doors from the living room. I need a two foot variance in order to meet regulations regarding setback requirements by Richland County. I am asking permission from you, as my neighbor on the west side of my house, to petition the court for approximately a one to two foot variance that I need to build the porch.

Thank you,

Sincerely,

fear Dipeon

Jean Dyson

Jun Corrine M. Julander

Mr. and Mrs. Jerry Nylander



Richland County Government 2020 Hampton Street Columbia, SC 29204 Phone (803) 576-2180 Fax (803) 576-2182