

**COUNTY OF ALBEMARLE****APPLICATION FOR A SPECIAL EXCEPTION**

☒ Request for a waiver, modification, variation or substitution permitted by Chapter 18 = **\$457**

☐ Variation to a previously approved Planned Development rezoning application plan or Code of Development = **\$457**

OR

☐ Relief from a condition of approval = **\$457**

**Provide the following**

- ☐ 3 copies of a written request specifying the section or sections being requested to be waived, modified, varied or substituted, and any other exhibit documents stating the reasons for the request and addressing the applicable findings of the section authorized to be waived, modified, varied or substituted.

**Provide the following**

- ☐ 3 copies of the existing approved plan illustrating the area where the change is requested or the applicable section(s) or the Code of Development. Provide a graphic representation of the requested change.
- ☐ 1 copy of a written request specifying the provision of the plan, code or standard for which the variation is sought, and state the reason for the requested variation.

**Project Name :** CV369 - AT&T Upgrade

**Current Assigned Application Number (SDP, SP or ZMA)**

**Tax map and parcel(s):** 07500-00-00-047C0

**Applicant / Contact Person** Sharon Weddle

**Address** 4801 Cox Rd, Ste 302 **City** Glen Allen **State** VA **Zip** 23060

**Daytime Phone#** ( 804 ) 714-6238 **Fax#** ( ) **Email** sharon.weddle@jacobs.com

**Owner of Record** Holiday Trails, Inc (portion leased by Verizon Wireless)

**Address** 400 Holiday Trails Ln **City** Charlottesville **State** VA **Zip** 22903

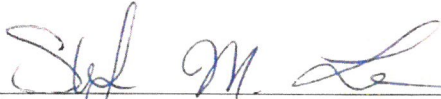
**Daytime Phone#** ( ) **Fax#** ( ) **Email**

**COUNTY OF ALBEMARLE****APPLICATION FOR A SPECIAL EXCEPTION****APPLICATION SIGNATURE PAGE**

If the person signing the application is someone other than the owner of record, then a signed copy of the "CERTIFICATION THAT NOTICE OF THE APPLICATION HAS BEEN PROVIDED TO THE LANDOWNER" form must be provided in addition to the signing the application below. (page 3)

**Owner/Applicant Must Read and Sign**

By signing this application, I hereby certify that I own the subject property, or have the legal power to act on behalf of the owner of the subject parcel(s) listed in County Records. I also certify that the information provided on this application and accompanying information is accurate, true, and correct to the best of my knowledge. By signing this application, I am consenting to written comments, letters and or notifications regarding this application being provided to me or my designated contact via fax and or email. This consent does not preclude such written communication from also being sent via first class mail.

  
Signature of Owner / Agent / Contract Purchaser  
Tower

Stefanie M. Lewis - Verizon as Tower Owner  
Print Name

2/5/20  
Date

757-771-4779  
Daytime phone number of Signatory

FOR OFFICE USE ONLY APPLICATION# B2020-00402 Fee Amount \$ 157 Date Paid 2/25/20  
By who? Jacoby Talcan Receipt # 120714 Ck# 13298 By 02



**COUNTY OF ALBEMARLE****APPLICATION FOR A SPECIAL EXCEPTION****CERTIFICATION THAT NOTICE OF THE  
APPLICATION HAS BEEN PROVIDED TO THE LANDOWNER**

*This form must accompany this zoning application if the application is not signed by the owner of the property.*

I certify that notice of the application for, CV369 - AT&T Upgrade  
[Name of the application type & if known the assigned application #]

was provided to see attached lease agreement - Holiday Trails, Inc.  
[Name(s) of the record owners of the parcel]

the owner of record of Tax Map and Parcel Number 07500-00-00-047C0

by delivering a copy of the application in the manner identified below:

\_\_\_\_\_ Hand delivery of a copy of the application to \_\_\_\_\_  
[Name of the record owner if the record owner is a person; if  
the owner of record is an entity, identify the recipient of the  
record and the recipient's title or office for that entity]  
on \_\_\_\_\_  
Date

\_\_\_\_\_ Mailing a copy of the application to \_\_\_\_\_  
[Name of the record owner if the record owner is a person; if  
the owner of record is an entity, identify the recipient of the  
record and the recipient's title or office for that entity]

on \_\_\_\_\_ to the following address \_\_\_\_\_  
Date

[ A ddress; written notice mailed to the owner at the  
last known address of the owner as shown on the  
current real estate tax assessment books or current real  
estate tax assessment records satisfies this  
requirement].

\_\_\_\_\_  
Signature of Applicant

\_\_\_\_\_  
Print Applicant Name

\_\_\_\_\_  
Date



February 19, 2020

Albemarle County  
Department of Community Dev.  
401 McIntire Road  
North Wing  
Charlottesville, VA 22902

Re: Special Exception Request/CV369\_ 700 Holiday Trails Lane

Dear Community Development:

Jacobs Telecommunications LLC, contractor for New Cingular Wireless LLC (AT&T) is requesting a Special Exception to Albemarle County code, Section 5.1.40, Development Requirements 2(c) which says, "in no case shall the farthest point of the back of the antenna be more than eighteen (18) inches from the facility, structure, or building". This request is being made regarding our plans to upgrade the wireless communications at 700 Holiday Trails Lane, AT&T Site ID, CV369. The main reason for this exception is to provide the new FCC license regarding Band 14 spectrum for the National First Responder Network (FirstNet).

In order to provide FirstNet service to this site, we need to add 3 antennas to this site, bringing the total to 6 antennas, 2 antennas per sector. In order for the communications system to work properly the Band14 frequency antenna must maintain at least 3 feet separation from each other. In addition, because there are already existing carriers above and below AT&T's existing RAD center, we cannot vertically separate the antennas either. Carriers must maintain at least 10 feet vertical separation from each other to prevent interference with each other. Therefore, we must keep all 6 antennas at the same height. We have researched an extensive list of mounts and antennas, but we cannot meet the code's requirement of 18 inches standoff from the tower and maintain 3 feet separation between antennas. It is imperative that the antennas have 3 feet separation for the FirstNet service to work properly. Please see the attachment "Explanation for Three Feet Separation of Antennas for FirstNet" along with "AT&T Antenna Collocation Guidelines". The closest we can make the standoff is 4 feet 9 inches. Please keep in mind that there is already an existing full array of antennas by another carrier at the top of this tower that does not meet the current guidelines. And, we are not proposing an increase in the antenna size or tower elevation. Therefore, we do not believe this will have a visual impact.

4801 Cox Road  
Suite 302  
Glen Allen, VA 23060  
T +1.410.837.5840  
F +1.410.837.3277  
www.jacobs.com



It is critical for First Responders to have access to dedicated lines, fast access to voice and data during times of crisis, the basis for FirstNet service. We have carefully devised a plan that will meet the needs of First Responders and provide the best compromise to the standoff requirement. We respectfully request that you consider a special exception in this case.

Thank you very much for your consideration.

Included with this request are the following:

- 1) The Personal Wireless Service Facility Application
- 2) Application for a Special Exception
- 3) Explanation for Three Feet Separation of Antennas for FirstNet
- 4) AT&T Antenna Collocation Guidelines
- 5) FirstNet Information, Letter and FCC License
- 6) Two (2) copies of the project drawings
- 7) Two (2) copies of the structural analysis
- 8) Two (2) copies of Spec Sheets (Antennas and Mounts)
- 9) Option and Lease Agreement showing rights to file
- 10) Retainer of Jacobs by AT&T through 2020
- 11) Jacobs Contractor License

Should you have any questions or need any additional information, please call or email me at any time.

Thank you,

A handwritten signature in black ink, appearing to read "Sharon Weddle".

Sharon Weddle | Jacobs | 4801 Cox Road, Suite 302 | Glen Allen, VA 23060  
[Sharon.Weddle@jacobs.com](mailto:Sharon.Weddle@jacobs.com) | 804-714-6238 | [www.jacobs.com](http://www.jacobs.com)



**Explanation for Three Feet Separation  
of Antennas for FirstNet**

**Parcel Number: 07500-00-00-047C0**

**Address: 700 Holiday Trails Lane**

New Cingular Wireless LLC (AT&T) is requesting a Special Exception to Albemarle County Code, Section 5.1.40 Development Requirements 2(c) which says, "in no case shall the farthest point of the back of the antenna be more than eighteen (18) inches from the facility, structure, or building". With the new FirstNet technology that needs to be added to this site, AT&T is unable to comply with these standoff requirements. The antennas need a large separation that we cannot accomplish with the current flush mounts.

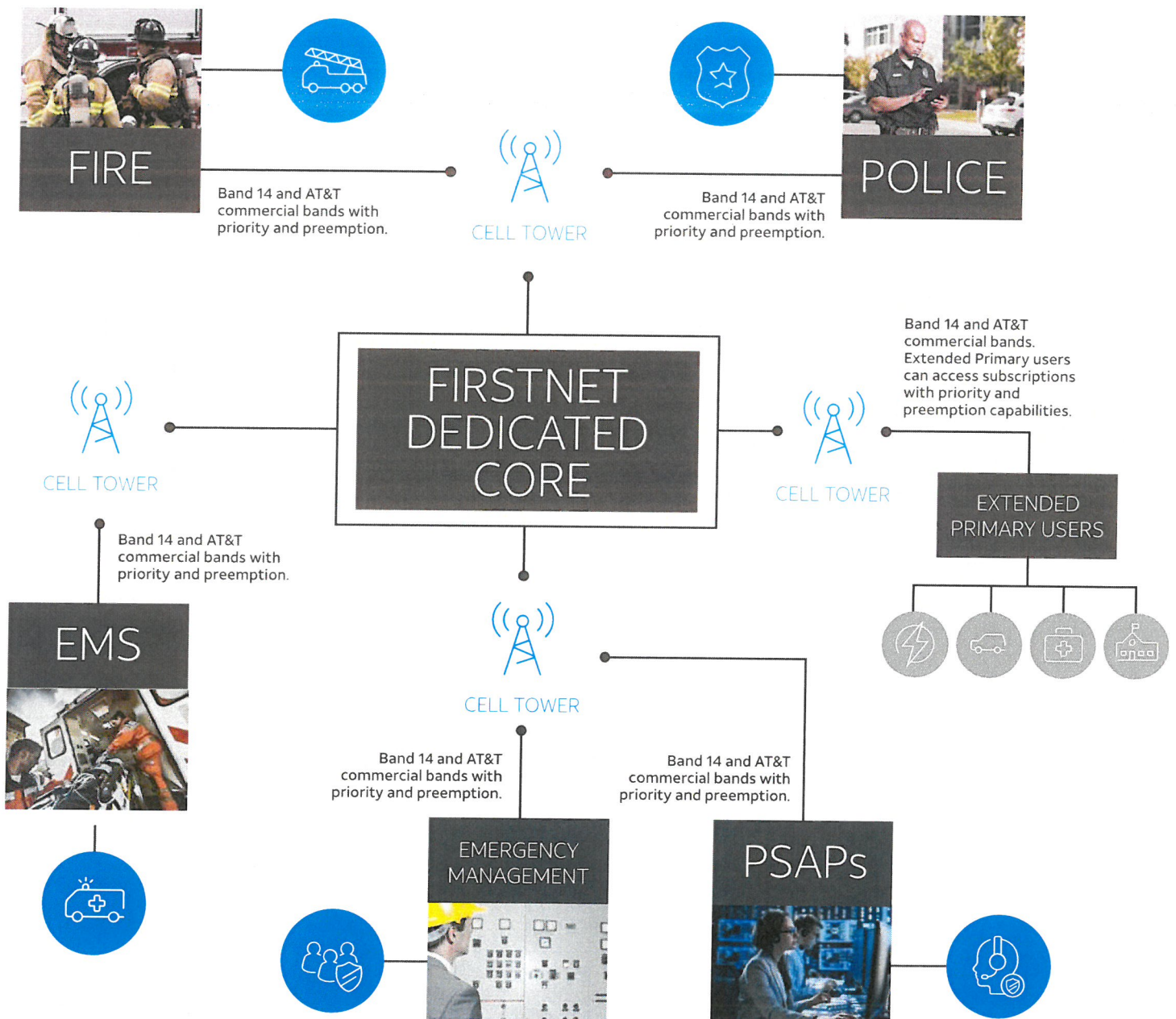
The frequency band licensed to AT&T for the First Responder Network (FirstNet) are in close proximity to frequencies licensed to AT&T for consumer LTE services. Because these frequency bands are in close proximity, they create Passive Intermodulation products (aka PIM) in part of the spectrum that the consumer mobile needs to communicate to the tower and the level of these PIM byproducts are so strong that the receiver in the base station desensitizes – meaning it cannot demodulate the receive frequencies. This makes it impossible to operate both the First Responder Network band and the consumer network band on the same antenna, or even two separate antennas in close proximity. Field trials have validated that AT&T needs a minimum of 3 feet of horizontal separation to achieve the minimum electrical isolation to effectively operate both bands without the harmful effects of PIM and receiver de-sensitivity.

Detailed engineering guidelines are attached in AT&T Antenna Collocation Guidelines where Section 7 starting on page 28 describes RF and engineering requirements.

In conclusion, 3 feet of horizontal antenna separation is needed to operate a reliable, high performance First Responder Network (FirstNet).

# FIRSTNET

FirstNet is the nationwide public safety broadband platform dedicated to first responders and those that support them. It is more than a network, including advanced services, applications and purpose-built devices. The FirstNet core serves as the brain and nervous system of the nationwide network – it separates public safety traffic from commercial traffic and supports current FirstNet functions, like Quality of Service (QoS), priority and preemption.





February 8, 2018

To Whom It May Concern:

The purpose of this letter is to provide verification pertaining to a Federal Communication Commission (FCC) license regarding Band 14 spectrum and in support of the New Cingular Wireless PCS, LLC's (hereinafter "AT&T") application to install or upgrade a wireless communications facility in your community. Per information from AT&T, your application requires that an applicant submit a copy of its FCC license. In lieu of a FCC license which lists AT&T as the license holder, this letter explains why the attached FCC license lists the First Responder Network Authority (hereinafter "FirstNet") as the license holder.

As reflected elsewhere in AT&T's application, it proposes to install equipment to transmit and receive communications signals utilizing Band 14 spectrum. This Band 14 spectrum will be deployed in conjunction with the construction of our country's first nationwide wireless broadband radio access network designed and built for first responders. The Band 14 spectrum is licensed by the FCC to FirstNet. Pursuant to federal law, FirstNet entered into a contract with AT&T. Under that contract, FirstNet authorizes AT&T to use the spectrum to build, deploy, operate, and maintain a radio access network for the benefit of AT&T's end users, which include first responders who will be AT&T FirstNet customers, and AT&T commercial customers.

If you have any questions with regard to this letter and/or the FCC license, please feel free to contact me on 571-665-3995 or via email at [Terrie.Callahan@firstnet.gov](mailto:Terrie.Callahan@firstnet.gov).

Sincerely,

A handwritten signature in blue ink that reads "Terrie L. Callahan".

Terrie L. Callahan  
Contracting Officer, FirstNet



**REFERENCE COPY**

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.



**Federal Communications Commission  
Public Safety and Homeland Security Bureau**

**RADIO STATION AUTHORIZATION**

**LICENSEE: FIRST RESPONDER NETWORK AUTHORITY**

ATTN: UZOMA ONYEIJE  
FIRST RESPONDER NETWORK AUTHORITY  
12201 SUNRISE VALLEY DRIVE  
RESTON, VA 20192

<b>Call Sign</b> WQQE234	<b>File Number</b> 0008029447
<b>Radio Service</b> SP - 700 MHz Public Safety Broadband Nationwide License	
<b>Regulatory Status</b> PMRS	
<b>Frequency Coordination Number</b>	

**FCC Registration Number (FRN): 0025487950**

<b>Grant Date</b> 11-15-2012	<b>Effective Date</b> 12-29-2017	<b>Expiration Date</b> 11-15-2022	<b>Print Date</b> 12-30-2017
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**STATION TECHNICAL SPECIFICATIONS**

**Fixed Location Address or Mobile Area of Operation**

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**Antennas**

Loc No.	Ant No.	Frequencies (MHz)	Sta. Cls.	No. Units	No. Pagers	Emission Designator	Output Power (watts)	ERP (watts)	Ant. Ht./Tp meters	Ant. AAT meters	Construct Deadline Date
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**Control Points**

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**Associated Call Signs**

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<NA>

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**Waivers/Conditions:**

This authorization is subject to any rules the Commission may adopt pursuant to its authority under the Middle Class Tax Relief and Job Creation Act of 2012 or the Communications Act of 1934, as amended.

**Conditions:**

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.