

RECEIVED

NOV 04 2019

October 31, 2019 PUBLIC SERVICE COMMISSION

Matthew R. Clark
Robert B. Scott
Charles R. Grahn
Frank D. Otte*
John "Bart" Herriman
John M. Moses
Michael P. Maxwell
William W. Gooden**
Jennifer F. Perry
Russell L. Brown**
Christopher Engel
Sean A. Brown
N. Davey Neal
Maggie L. Sadler

Senior Counsel James C. Clark Thomas Michael Quinn

Land Use Consultant Elizabeth Bentz Williams, AICP

> Raymond J. Grahn (2014) Alex M. Clark (1991) Peter A. Pappas (1986) Thomas M. Quinn (1973) Joseph M. Howard (1964)

*Also admitted in Montana

** Registered Civil Mediator

VIA FedEx Overnight Delivery

Kentucky Public Service Commission Attn: Ms. Renee Smith Division of Filing 211 Sower Boulevard Frankfort, KY 40602

RE: Application to Construct Wireless Communications Facility

Docket No. Docket No. 2019- 00394 Site Name: OLD US 127 & KY 845

Dear Ms. Smith:

On behalf of our client, Cellco Partnership, d/b/a Verizon Wireless we are submitting an original and five copies of an Application for Certificate of Public Convenience and Necessity to Construct a Wireless Communication Facility.

Please contact me or Elizabeth Bentz Williams if you require any future documentation or have any questions concerning this application.

Sincerely,

Russell¥. Browr

Attorney for Verizon Wireless

RLB/jdj enclosures

RECEIVED

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

NOV 0 4 2019

PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF)	
CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS).	
FOR ISSUANCE OF A CERTIFICATE OF PUBLIC)	CASE NO. 2019-00394
CONVENIENCE AND NECESSITY TO CONSTRUCT)	
A WIRELESS COMMUNICATIONS FACILITY)	
IN THE COMMONWEALTH OF KENTUCKY)	
IN THE COUNTY OF OWEN)	

SITE NAME: OLD US 127 RD & KY 845

* * * * * *

APPLICATION FOR CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR CONSTRUCTION OF A WIRELESS COMMUNICATIONS FACILITY

Cellco Partnership, d/b/a Verizon Wireless ("Applicant"), by counsel, pursuant to (i) KRS §§278.020, 278.040, 278.650, 278.665, and other statutory authority, and the rules and regulations applicable thereto, and (ii) the Telecommunications Act of 1996, respectfully submits this Application requesting issuance of a Certificate of Public Convenience and Necessity ("CPCN") from the Kentucky Public Service Commission ("PSC") to construct, maintain, and operate a Wireless Communications Facility ("WCF") to serve the customers of the Applicant with wireless communications services.

In support of this Application, Applicant respectfully provides and states the following information:

1. The complete name and address of the Applicant: Cellco Partnership, d/b/a Verizon Wireless, having a local address of 2421 Holloway Road, Louisville, KY 40299.

- 2. Applicant is a Delaware general partnership and a copy of the Amended Certificate of Assumed Name is on file with the Secretary of State of Commonwealth of Kentucky is included as part of **Exhibit A**.
- 3. Applicant proposes construction of an antenna tower for communications services, which is to be located in an area outside the jurisdiction of a planning commission, and Applicant submits this application to the PSC for a certificate of public convenience and necessity pursuant to KRS §§ 278.020(1), 278.040, 278.650, 278.665, and other statutory authority.
- 4. The Applicant operates on frequencies licensed by the Federal Communications Commission ("FCC") pursuant to applicable FCC requirements. A copy of the Applicant's FCC licenses to provide wireless services are attached to this Application or described as part of **Exhibit B**, and the facility will be constructed and operated in accordance with applicable FCC regulations.
- 5. The public convenience and necessity require the construction of the proposed WCF. The construction of the WCF will bring or improve the Applicant's services to an area currently not served or not adequately served by the Applicant by increasing coverage or capacity and thereby enhancing the public's access to innovative and competitive wireless communications services. A statement from Applicant's RF Design Engineer outlining said need is attached as **Exhibit Q**. The WCF is an integral link in the Applicant's network design that must be in place to provide adequate coverage to the service area.
- 6. To address the above-described service needs, Applicant proposes to construct a WCF at 3100 Hwy 127 N, Owenton, KY 40359 (38° 34' 17.32" North latitude, 84° 49' 28.79" West longitude), on a parcel of land located entirely within the county referenced in the caption

of this application. The property on which the WCF will be located is owned by Kim Juett pursuant to a Deed recorded at Deed Book 234, Page 475 in the office of the County Clerk. The proposed WCF will consist of a 255-foot tall tower, with an approximately 5-foot tall lightning arrestor attached at the top, for a total height of 260-feet. The WCF will also include concrete foundations and a shelter or cabinets to accommodate the placement of the Applicant's radio electronics equipment and appurtenant equipment. The Applicant's equipment cabinet or shelter will be approved for use in the Commonwealth of Kentucky by the relevant building inspector. The WCF compound will be fenced and all access gate(s) will be secured. A description of the manner in which the proposed WCF will be constructed is attached as **Exhibit C** and **Exhibit D**.

- 7. A list of utilities, corporations, or persons with whom the proposed WCF is likely to compete along with a map showing the proposed location as well as the identified like facilities is attached as **Exhibit E**.
- 8. The site development plan and a vertical profile sketch of the WCF signed and sealed by a professional engineer registered in Kentucky depicting the tower height, as well as a proposed configuration for the antennas of the Applicant has also been included as part of **Exhibit C**.
- 9. Foundation design plans signed and sealed by a professional engineer registered in Kentucky and a description of the standards according to which the tower was designed are included as part of **Exhibit D**.
- 10. Applicant has considered the likely effects of the installation of the proposed WCF on nearby land uses and values and has concluded that there is no more suitable location reasonably available from which adequate services can be provided, and that there are no reasonably available opportunities to co-locate Applicant's antennas on an existing structure.

When suitable towers or structures exist, Applicant attempts to co-locate on existing structures such as communications towers or other structures capable of supporting Applicant's facilities; however, no other suitable or available co-location site was found to be located in the vicinity of the site.

- 11. A copy of the application for Determination of No Hazard to Air Navigation (project name 2018-ASO-25834-0E) has been submitted to the Federal Aviation Administration ("FAA") is attached as **Exhibit F**.
- 12. A copy the application submitted to the Kentucky Airport Zoning Commission ("KAZC") to construct the tower is attached as **Exhibit G**.
- 13. A geotechnical engineering report was performed at the WCF site by Power of Design Group, LLC, Louisville, KY, dated August 28, 2019, and is attached as **Exhibit H**. The name and address of the geotechnical engineering firm and the professional engineer registered in Kentucky who prepared the report are included as part of **Exhibit H**.
- 14. Clear directions to the proposed WCF site from the County seat are attached as **Exhibit I**. The name and telephone number of the preparer of **Exhibit I** are included as part of this exhibit.
- 15. Applicant, pursuant to a written agreement, has acquired the right to use the WCF site and associated property rights. A copy of the agreement or an abbreviated agreement recorded with the County Clerk is attached as **Exhibit J**.
- 16. Personnel directly responsible for the design and construction of the proposed WCF are well qualified and experienced. The tower and foundation drawings for the proposed tower submitted as part of **Exhibit D** bear the signature and stamp of a professional engineer

registered in the Commonwealth of Kentucky. All tower designs meet or exceed the minimum requirements of applicable laws and regulations.

- 17. The Construction Manager for the proposed facility is Mike Rerecich and the identity and qualifications of each person directly responsible for design and construction of the proposed tower are contained in **Exhibits C & D**.
- 18. As noted on the Survey attached as part of **Exhibit C**, the surveyor has determined that the tower site and access easement are not within any flood hazard area per Flood Hazard Boundary Map, Community Panel Number 21187C0150C, Dated June 2, 2011.
- 19. **Exhibit C** includes a map drawn to an appropriate scale that shows the location of the proposed tower and identifies every owner of real estate within 500 feet of the proposed tower (according to the records maintained by the County Property Valuation Administrator). Every structure and every easement within 500 feet of the proposed tower or within 200 feet of the access road including intersection with the public street system is illustrated in **Exhibit B**.
- 20. Applicant has notified every person who, according to the records of the County Property Valuation Administrator, owns property which is within 500 feet of the proposed tower or contiguous to the site property, by certified mail, return receipt requested, of the proposed construction. Each notified property owner has been provided with a map of the location of the proposed construction, the PSC docket number for this application, the address of the PSC, and will be informed of his or her right to request intervention. A list of the notified property owners and a copy of the form of the notice to be sent by certified mail to each landowner are attached as **Exhibit K** and **Exhibit L**, respectively.
- 21. Applicant has notified the applicable County Judge/Executive by certified mail, return receipt requested, of the proposed construction. This notice included the PSC docket

number under which the application will be processed and informed the County Judge/Executive of his/her right to request intervention. A copy of this notice is attached as **Exhibit M**.

- 22. Notice signs meeting the requirements prescribed by 807 KAR 5:063, Section 1(2) that measure at least 2 feet in height and 4 feet in width and that contain all required language in letters of required height, have been posted, one in a visible location on the proposed site and one on the nearest public road. Such signs shall remain posted for at least two weeks after filing of the Application, and a copy of the posted text is attached as **Exhibit N**. A legal notice advertisement regarding the location of the proposed facility has been published in a newspaper of general circulation in the county in which the WCF is proposed to be located. A copy of the newspaper legal notice advertisement is attached as Exhibit O.
- 23. The general area where the proposed facility is to be located is undeveloped and removed a significant distance from any residential structures. There are no residential structures within 500' of the proposed tower site.
- 24. The process that was used by the Applicant's radio frequency engineers in selecting the site for the proposed WCF was consistent with the general process used for selecting all other existing and proposed WCF facilities within the proposed network design area. Applicant's radio frequency engineers have conducted studies and tests in order to develop a highly efficient network that is designed to handle voice and data traffic in the service area. The engineers determined an optimum area for the placement of the proposed facility in terms of elevation and location to provide the best quality service to customers in the service area. A radio frequency design search area prepared in reference to these radio frequency studies was considered by the Applicant when searching for sites for its antennas that would provide the coverage deemed necessary by the Applicant. A map of the area in which the tower is proposed

to be located which is drawn to scale and clearly depicts the necessary search area within which

the site should be located pursuant to radio frequency requirements is attached as **Exhibit P**.

25. The tower must be located at the proposed location and proposed height to

provide necessary service to wireless communications users in the subject area, as set out and

documented in the RF Design Engineer's Statement of Need and Propagation Maps, attached as

Exhibit Q. . The proposed tower will expand and improve voice and data service for Verizon

Wireless customers.

26. All Exhibits to this Application are hereby incorporated by reference as if fully set

out as part of the Application.

27. All responses and requests associated with this Application may be directed to:

Russell L. Brown Clark, Quinn, Moses, Scott & Grahn, LLP

320 North Meridian Street, Suite 1100

Indianapolis, IN 46204 Phone: (317) 637-1321

FAX: (317) 687-2344

Email: rbrown@clarkquinnlaw.com

WHEREFORE, Applicant respectfully request that the PSC accept the foregoing Application for filing, and having met the requirements of KRS §§278.020(1), 278.650, and 278.665 and all applicable rules and regulations of the PSC, grant a Certificate of Public Convenience and Necessity to construct and operate the WCF at the location set forth herein.

Respectfully submitted,

Russell L. Brown

Clark, Quinn, Moses, Scott & Grahn, LLP 320 North Meridian Street, Suite 1100

Indianapolis, IN 46204

Phone: (317) 637-1321 / FAX: (317) 687-2344

Email: rbrown@clarkquinnlaw.com

Attorney for Cellco Partnership d/b/a Verizon Wireless

LIST OF EXHIBITS

Α	Applicant Entity
В	FCC License Documentation
C	Site Development Plan:
	500' Vicinity Map Legal Descriptions Flood Plain Certification Site Plan Vertical Tower Profile
D	Tower and Foundation Design
E	Competing Utilities, Corporations, or Persons List And Map of Like Facilities in Vicinity
F	FAA
G	KAZC
Н	Geotechnical Report
I	Directions to WCF Site
J	Copy of Real Estate Agreement
K	Notification Listing
L	Copy of Property Owner Notification
M	Copy of County Judge/Executive notice
N	Copy of Posted Notices
О	Copy of Newspaper Legal Notice Advertisement
P	Copy of Radio Frequency Design Search Area
Q	Copy of RF Design Engineer State of Need & Propagation Maps



COMMONWEALTH OF KENTUCKY TREY GRAYSON SECRETARY OF STATE



Secretary of State Received and Filed 08/21/2008 12:06:00 PM Fee Receipt: \$20.03

CERTIFICATE OF ASSUMED NAME

Verizon Wireless			
Comme Contract And the Burn	not tel to Badeled		
has been adopted by See Addendus	and a mark of the same of the	·	
which is the "real name" of product check over a Domestic General Partnership a Domestic Registered Limited Liability Partnership a Domestic Limited Partnership a Domestic Business Trust a Domestic Corporation a Domestic Limited Liability Company a Joint Venturo	a Foreign General Particle a Foreign Registered U a Foreign Limited Particle a Foreign Business True a Foreign Corporation a Foreign Umited Liability	mited Elabül erski'p st	
organized and existing in the state or country of		end v	Miose address is
One Verizoe Way	Basking Ridge	NJ	07920
Grad Shine, Fire	E-7	S wis	De Dreit
The certificate of contented name is executed by NYNEI PCS Inc. Jano A. Schapker-Assistant Secretary June 15, 2006	Stranger som with		

escate (IMI)

(Read advantage school for (webucklone)

0641227.07

dcornish

Allson Lundergan Grimes Kentucky Secretary of State Received and Filed 1/22/2013 1:43 PM Fee Receipt: \$20.00



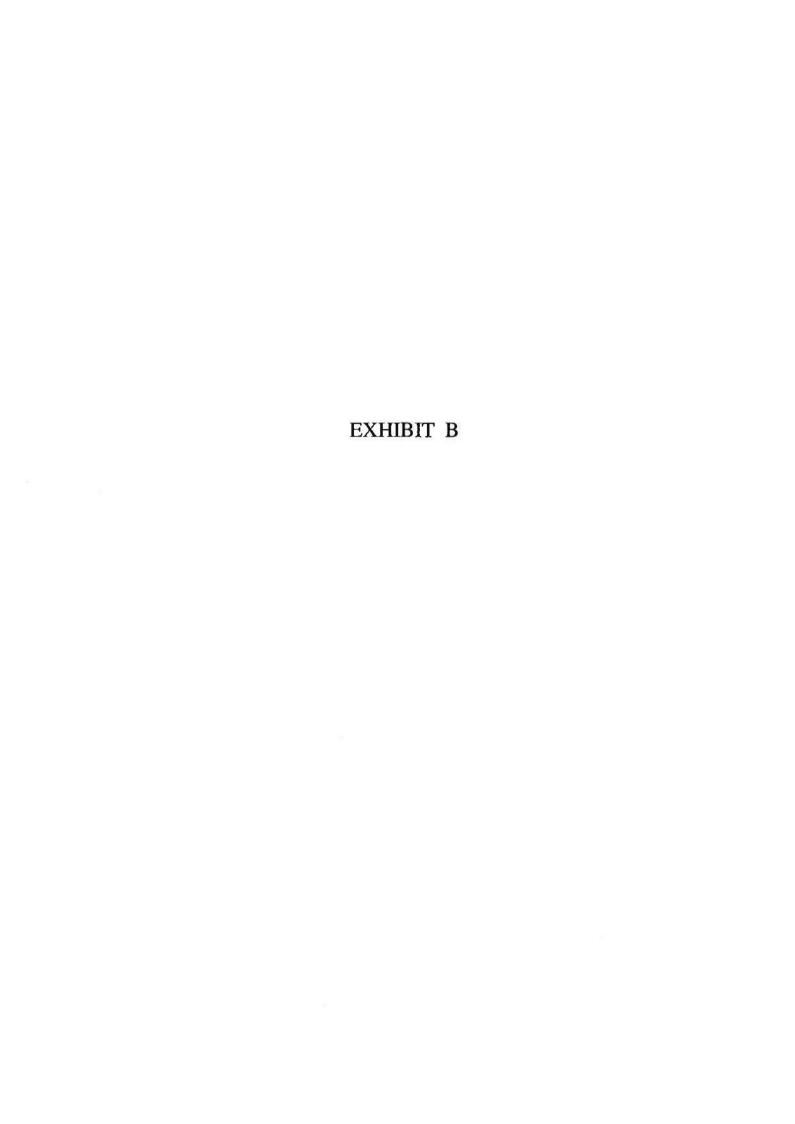
COMMONWEALTH OF KENTUCKY ELAINE N. WALKER, SECRETARY OF STATE

Division of Business Filings Business Filings PO Box 718 Frankforf, KY 40802 (502) 584-3490 www.sos.ky.gov		Certificate of Assumed Foreign Business Entity)		AAN
Pursuant to the provisions of KR purpose, submits the following st	atement		lficele of essumed	name and, for that
1. The assumed name is Ve	rizon Wireles	S		
(The runn	e must be identical to	the name on record with the Secre	tary of State.)	
2. The certificate of assumed ne	me was filed with th	e Secretary of State on:	6/21/2006	·
3 The current principal office ad	Idress (If any) is:			
One Verizon Way		Basking Ridge	NJ	07920
Street Address or Post Office Box Nur	upete	City	State	Zip
4. The principal office address is	hereby changed to	: -		
Street Address or Post Office Box Nur	mbere *	City	State	Zlp
5. This application will be effective the delayed effective date can				o ls
•				(Delayed effective date and/or time)
6. The changes in the identity of	the pertners are es	follows: See Addendu	ım for curre	
				-
I declare under penalty of perjury		Centucky that the forgoing is to Incorporated	rue and correct.	
sare aschargeen	Jana A Schar	oker A	salutant Secretary	1/21/2012
Synature of Applicant	Printed Name		Title	Date

Addendum

The full name of the Partnership is Cellco Partnership, a Delaware general partnership composed of the following partners:

General Partners of Cellco Partnership	Address
Bell Atlantic Mobile Systems LLC	One Verizon Way Basking Ridge, NJ 07920
GTE Wireless Incorporated	One Verizon Way Basking Ridge, NJ 07920
PCS Nucleus, L.P.	Denver Place South Tower 999-18 th Street, Suhe 1750 Deaver, CO 80202
JV ParinerCo, LLC	Donver Place South Tower 999-18th Street, Suite 1750 Denver, CO 80202



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

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY CELLCO PARTNERSHIP 5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING ALPHARETTA, GA 30022

Call Sign KNKN837	File Number
Radio :	Service
CL - C	ellular
Market Numer	Channel Block
CMA449	A
Civiliani	

FCC Registration Number (FRN): 0003290673

Market Name Kentucky 7 - Trimble								
Grant Date 08-30-2011	Effective Date 11-01-2016	Expiration Date 10-01-2021	Five Yr Build-Out Date	Print Date				

		(m	The state of the s					ructure
		(II	neters)	(m	eters)		Registratio	n No.
38-10-37.0 N 08	5-06-25.0 W	36	50.0	90	.8		1036601	
ddress: Top of Shelbyville Mour	ntain		6	SPECT IN	V			
ity: Shelbyville County: SHEI		KY Co	nstruction	Deadline:				
				VIII V				
intenna: 4				4600				
Maximum Transmitting ERP in Wa	tts: 140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
ntenna Height AAT (meters)	188.400	190.600	203.000	190.500	202.900	218,800	217.100	203.30
ransmitting ERP (watts)	27.480	50.000	19.910	2.510	0.210	0.100	0.440	3.790
					VECTOR.			
Intenna: 5	**** 140 920				Will .	4		
Maximum Transmitting ERP in Wa		15	90	125	190	225	270	215
	tts: 140.820 0 188.400	45 190.600	90 203.000	135 190.500	180 202.900	225 218.800	270 217,100	315 203.30

Conditions:

Azimuth(from true north)
Antenna Height AAT (meters)

Transmitting ERP (watts)

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.

90

203.000

1.140

190.600

14.230

188.400

51.690

135

0.300

190.500

180

0.570

202.900

315

203.300

69.660

270

217,100

41.390

218.800

8.130

The state of the s	l Sign: KNKN837 File Number: Print Date				:			
Location Latitude 2 38-12-25.9 N	Longitude 084-51-45	(n	round Elev neters) 11.2	(Structure Hg (meters) 56.9	gt to Tip	Antenna S Registration	
Address: 400C Clifton Av	enue							
VIIII A	unty: FRANKL	IN State: KY	Constr	uction De	eadline:			
						,		
Antenna: 4	D . W	000						
Maximum Transmitting ER Azimuth(from true nor		820 45	90	135	180	225	270	315
Antenna Height AAT (mete		300 35.800	23.200	8.600	71.400	29,500	60.100	36.900
Transmitting ERP (watts)	55	320 50.990	15.260	1.540	0.340	1.580	15.980	54.030
Antenna: 5	AMP							2
Maximum Transmitting ER Azimuth(from true nor	EDDES TOTAL A	Account to the second	00	135	100	225	250	215
Antenna Height AAT (mete		300 45 35.800	90	135 8.600	180 71.400	225 29,500	270 60.100	315 36.900
Transmitting ERP (watts)	- ALEXAN	33.600	23.200 58.750	55.210	43.890	7.580	0.410	0.240
Antenna: 6	A		20.,20	55.210	15.070	7.500	0.110	0.210
Maximum Transmitting ER			00	125	100	225	270	245
Azimuth(from true nor Antenna Height AAT (meter		300 45 35,800	90	135	180	225	270	315
Transmitting ERP (watts)	3.5		23.200 0.490	8.600 7.700	71.400 44.940	29.500 57.490	60.100 54.760	36.900 29.400
	3.3	(1)	0.170	7.700	11.710	37.170	31.700	27.400
Location Latitude	Longitude	G	round Elev	vation S	Structure Hg	t to Tip	Antenna S	tructure
		**COUNT.	neters)	(meters)	•	Registratio	n No.
3	085-15-56.	400-0	52.9		90.5		1036602	
3 38-28-54.3 N		V033	A1100	-	0.0		.050002	
50-20-54.5 14		-	~2330H9					
Address: 4920 Fallen Tim	ber Drive	tata: KV Can	etruction I	Doodling	•			
Address: 4920 Fallen Tim	ber Drive	tate: KY Con	struction l	Deadline	: 	1		
Address: 4920 Fallen Tim City: SULPHUR Count	ber Drive	tate: KY Con	struction I	Deadline	:	•		
Address: 4920 Fallen Tim City: SULPHUR Count Antenna: 4	ber Drive ty: HENRY St		struction l	Deadline:	:			
Address: 4920 Fallen Tim City: SULPHUR Count Antenna: 4 Maximum Transmitting ER	ber Drive ty: HENRY St RP in Watts: 140.	820	(225	270	315
Address: 4920 Fallen Tim City: SULPHUR Count Antenna: 4	ber Drive ty: HENRY St RP in Watts: 140.3 th) 0		90	135	180	225 95 500	270	315 97 100
Address: 4920 Fallen Tim City: SULPHUR Count Antenna: 4 Maximum Transmitting ER	ty: HENRY Some state of the sta	820 45	(225 95.500 1.150	270 105.400 0.200	
Address: 4920 Fallen Tim City: SULPHUR Count Antenna: 4 Maximum Transmitting ER	ty: HENRY Some state of the sta	820 45 5.900 85.200 10.470	90 102.800	135 77.800	180 84.300	95.500	105.400	97.100
Address: 4920 Fallen Tim City: SULPHUR Count Antenna: 4 Maximum Transmitting ER	ty: HENRY St. RP in Watts: 140.3 th) 0 126 0.3 RP in Watts: 140.4	820 45 5.900 85.200 190 10.470 820	90 102.800 67.610	135 77.800 87.100	180 84.300 22.910	95.500 1.150	105.400 0.200	97.100 0.200
Address: 4920 Fallen Tim City: SULPHUR Count Antenna: 4 Maximum Transmitting ER Azimuth(from true nor Antenna Height AAT (meter Transmitting ERP (watts)	ty: HENRY Some state of the sta	820 45 5.900 85.200 190 10.470 820	90 102.800 67.610	135 77.800 87.100	180 84.300 22.910	95.500 1.150 225	105.400 0.200 270	97.100 0.200 315
Address: 4920 Fallen Tim City: SULPHUR Count Antenna: 4 Maximum Transmitting ER Azimuth(from true nor Antenna Height AAT (meter Transmitting ERP (watts) Antenna: 5 Maximum Transmitting ER Azimuth(from true nor Antenna Height AAT (meter Transmitting ERP (watts)	ty: HENRY Some state of the sta	820 45 5.900 85.200 10.470 820 45 5.900 85.200	90 102.800 67.610	135 77.800 87.100	180 84.300 22.910	95.500 1.150	105.400 0.200	97.100 0.200 315 97.100
Address: 4920 Fallen Tim City: SULPHUR Count Antenna: 4 Maximum Transmitting ER	ty: HENRY Some sty: HENRY Some	820 45 6.900 85.200 10.470 820 45 6.900 85.200 170 0.200	90 102.800 67.610 90 102.800	135 77.800 87.100	180 84.300 22.910 180 84.300	95.500 1.150 225 95.500	105.400 0.200 270 105.400	97.100 0.200 315 97.100
Address: 4920 Fallen Tim City: SULPHUR Count Antenna: 4 Maximum Transmitting ER	ty: HENRY Some sty: HENRY Some	820 45 5.900 85.200 10.470 820 45 5.900 85.200 0.200 820	90 102.800 67.610 90 102.800 0.200	135 77.800 87.100 135 77.800 1.260	180 84.300 22.910 180 84.300 23.990	95.500 1.150 225 95.500 87.100	105.400 0.200 270 105.400 66.070	97.100 0.200 315 97.100 10.000
Address: 4920 Fallen Tim City: SULPHUR Count Antenna: 4 Maximum Transmitting ER	ty: HENRY Str. 140.3 RP in Watts: 140.3	820 45 6.900 85.200 10.470 820 45 6.900 85.200 170 0.200	90 102.800 67.610 90 102.800	135 77.800 87.100	180 84.300 22.910 180 84.300	95.500 1.150 225 95.500	105.400 0.200 270 105.400	97.100 0.200

0

	ı: KNKN837	File	File Number:			Print Date:				
Location	1 Latitude 38-38-10.0 N	Longitude 085-05-53.5 W	(n	round Elev neters) 15.3	(Structure Hg (meters) 90.2	t to Tip	Antenna So Registratio 1036425		
Address	: 312 Whites Run Road		-		•			1000.20		
	WWW ASSESSMENT	ty: CARROLL	State: K	V Consti	uction D	eadline:				
City. Cr	ICKOLL TOTA COUR	ity. Criticion	State. It		uction D					
A		7								
Antenna:	Transmitting ERP in	Watts: 140 820								
Azi	imuth(from true north)	0	45	90	135	180	225	270	315	
	Height AAT (meters)	156.300	107.900	120.600	148.800	94.800	91.100	112.600	147.700	
Transmit	ting ERP (watts)	0.200	11.220	72.440	91.200	25.700	0.370	0.200	0.200	
	n Transmitting ERP in	Watts: 140.820								
Azi	imuth(from true north)	0	45	90	135	180	225	270	315	
	Height AAT (meters)	156.300	107.900	120.600	148.800		91.100	112.600	147.700	
Transmit	ting ERP (watts)	0.200	0.200	0.200	0.940	18.570	33.150	30.890	10.840	
	n Transmitting ERP in	Watts: 140.820								
Azi	imuth(from true north)	0	45	90	135	180	225	270	315	
	Height AAT (meters)	156.300	107.900	120.600	148.800	94.800	91.100	112.600	147.700	
Transmit	ting ERP (watts)	33.110	26.080	3.390	0.200	0.200	0.200	4.070	24.940	
Location	1 Latitude	Longitude	4000	round Elev		Structure Hg	t to Tip	Antenna St		
_			-4503-40	ieters)	3	(meters)		Registratio	n No.	
_		001 51 07 0 11/	24	16.9	9	90.8		1036424		
5	38-43-25.0 N	084-51-06.0 W	VIII -	A95355						
	38-43-25.0 N : 120 Boone Trail (off		1	1339						
	: 120 Boone Trail (off	Highway 455)	1	truction D	eadline:					
Address:	: 120 Boone Trail (off	Highway 455)	1	truction D	eadline:	-	. .		· · · · · ·	
Address: City: Spa	: 120 Boone Trail (off arta County: GALL	Highway 455) ATIN State: K	1	truction D	eadline:		¥ ·.			
Address: City: Spa Antenna: Maximun	: 120 Boone Trail (off arta County: GALL 2 in Transmitting ERP in	Highway 455) ATIN State: K	Y Cons							
Address: City: Spa Antenna: Maximun	2 120 Boone Trail (off arta County: GALL 2 n Transmitting ERP in imuth(from true north)	Highway 455) ATIN State: K Watts: 140.820	Y Cons	90	135	180	225	270	315	
Address: City: Spa Antenna: Maximun Azi Antenna l	: 120 Boone Trail (off arta County: GALL 2 in Transmitting ERP in	Highway 455) ATIN State: K Watts: 140.820 0 127.200	Y Cons	90 114.900	135 96.300	80.600	140.600	110.100	133.300	
Address: City: Spa Antenna: Maximun Azi Antenna l Transmit Antenna:	2 n Transmitting ERP in imuth(from true north) Height AAT (meters) ting ERP (watts)	Highway 455) ATIN State: K Watts: 140.820 0 127.200 0.200	Y Cons	90	135			20 1 2	(2) (2)(2)	
Address: City: Spa Antenna: Maximun Azi Antenna l Transmit Antenna: Maximun	2 n Transmitting ERP in imuth(from true north) Height AAT (meters) ting ERP (watts) 3 n Transmitting ERP in	Highway 455) ATIN State: K Watts: 140.820 0 127.200 0.200 Watts: 140.820	45 119.000 0.500	90 114,900 11,300	135 96.300 20.180	80.600 19.990	140.600 13.040	110.100 0.740	133.300 0.200	
Address: City: Spa Antenna: Maximun Azi Antenna: Transmit Antenna: Maximun Azi	2 n Transmitting ERP in imuth(from true north) Height AAT (meters) 13 n Transmitting ERP in imuth(from true north)	Highway 455) ATIN State: K Watts: 140.820 0 127.200 0.200 Watts: 140.820 0	45 119.000 0.500	90 114.900 11.300	135 96.300 20.180	80.600 19.990	140.600 13.040	110.100 0.740 270	133.300 0.200	
Address: City: Spa Antenna: Maximun Azi Antenna: Transmit Antenna: Maximun Azi Antenna	2 n Transmitting ERP in imuth(from true north) Height AAT (meters) ting ERP (watts) 3 n Transmitting ERP in	Highway 455) ATIN State: K Watts: 140.820 0 127.200 0.200 Watts: 140.820 0 127.200	45 119.000 0.500 45 119.000	90 114.900 11.300 90 114.900	135 96.300 20.180 135 96.300	80.600 19.990 180 80.600	140.600 13.040 225 140.600	110.100 0.740 270 110.100	133.300 0.200 315 133.300	
Address: City: Spa Antenna: Maximun Azi Antenna: Transmitt Antenna: Maximun Azi Antenna Transmitt	2 County: GALL 2 Transmitting ERP in imuth(from true north) Height AAT (meters) ting ERP (watts) 3 Transmitting ERP in imuth(from true north) Height AAT (meters) ting ERP (watts) 4	Highway 455) ATIN State: K Watts: 140.820 0 127.200 0.200 Watts: 140.820 0 127.200 6.850	45 119.000 0.500	90 114.900 11.300	135 96.300 20.180	80.600 19.990	140.600 13.040	110.100 0.740 270	133.300 0.200	
Address: City: Spa Antenna: Maximun Azi Antenna: Maximun Azi Antenna: Transmit Antenna: Maximun Azi Antenna	2 120 Boone Trail (off arta County: GALL 2 n Transmitting ERP in imuth(from true north) Height AAT (meters) ting ERP (watts) 3 n Transmitting ERP in imuth(from true north) Height AAT (meters) ting ERP (watts) 4 n Transmitting ERP in imuth(from true north)	Highway 455) ATIN State: K Watts: 140.820 0 127.200 0.200 Watts: 140.820 0 127.200 6.850 Watts: 140.820	45 119.000 0.500 45 119.000 0.200	90 114.900 11.300 90 114.900 0.200	135 96.300 20.180 135 96.300 0.200	80.600 19.990 180 80.600 1.830	140.600 13.040 225 140.600 17.930	110.100 0.740 270 110.100 20.220	133.300 0.200 315 133.300 19.450	
Address: City: Spa Antenna: Maximun Azi Antenna: Maximun Azi Antenna: Maximun Azi Antenna: Maximun Azi Antenna: Antenna: Antenna: Antenna: Antenna:	2 County: GALL 2 Transmitting ERP in imuth(from true north) Height AAT (meters) ting ERP (watts) 3 Transmitting ERP in imuth(from true north) Height AAT (meters) ting ERP (watts) 4	Highway 455) ATIN State: K Watts: 140.820 0 127.200 0.200 Watts: 140.820 0 127.200 6.850	45 119.000 0.500 45 119.000	90 114.900 11.300 90 114.900	135 96.300 20.180 135 96.300	80.600 19.990 180 80.600	140.600 13.040 225 140.600	110.100 0.740 270 110.100	133.300 0.200 315 133.300	

0

Call Sign: KNKN837	File	Number:			P	rint Date	:	
6 38-43-30.0 N	Longitude 084-38-29.0 W	(n	round Elev neters) 75.2	ation	Structure Hg (meters) 90.8	t to Tip	Antenna Si Registration 1036179	
Address: 3000 Dry Ridge Moun		WW 6		D				
City: DRY RIDGE County: 6	GRANT State	KY C	onstruction	Deadl	ine:			
Antenna: 2 Maximum Transmitting ERP in W Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 3	Vatts: 140.820 0 112.100 0.360	45 115.000 9.930	90 114.500 41.040	135 92.600 48.250		225 136.400 1.120	270 142.300 0.200	315 143.700 0.200
Maximum Transmitting ERP in W Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 4	0 112.100 0.350	45 115.000 0.200	90 114.500 0.200	135 92.600 1.230	180 110.000 19.460	225 136.400 48.290	270 142.300 40.110	315 143.700 9.480
Maximum Transmitting ERP in W Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	/atts: 140.820 0 112.100 51.290	45 115.000 30.370	90 114.500 3.550	135 92.600 0.200	180 110.000 0.200	225 136.400 0.200	270 142.300 3.980	315 143.700 31.080
Location Latitude	ongitude	4000A	round Elev neters)	ation	Structure Hg (meters)	t to Tip	Antenna So Registratio	0.0000000000000000000000000000000000000
	084 - 34-38.2 W	28	36.5		91.7		1036600	
Address: 8162 Dixie Highway	MARKET ST. 18 MIN 7 (188)		199					
City: Williamstown County:	GRANT State	e: KY C	onstructio	n Deadl	line:	_		
Antenna: 2 Maximum Transmitting ERP in W Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 99.800	45 117.800	90	135 131.20		225 124.100	270 129.900	315 133.100
Antenna: 3 Maximum Transmitting ERP in W Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0.200 /atts: 140.820 0 99.800 0.200	14.790 45 117.800 0.200	79.430 90 153.400 0.200	87.100 135 131.20 1.660	180	0.200 225 124.100 95.500	0.200 270 129.900 66.070	0.200 315 133.100 7.760
Antenna: 4 Maximum Transmitting ERP in W Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts)		45 117.800 41.690	90 153.400 1.950	135 131.20 0.200	180	225 124.100 0.200	270 129.900 6.030	315 133.100 56.230

0

Call Si	ign: KNKN837	File	Number:			P	rint Date	:	
Locati 8	38-12-03.3 N	Longitude 085-19-18.8 W	(m	ound Elevers) 8.6	vation	Structure Hg (meters) 90.8	t to Tip	Antenna S Registration	
Addre	ss: (Simpsonville) 7202	2 Brunerstown Roa	ıd						
City: S	SIMPSONVILLE Co	unty: SHELBY	State: KY	Constr	uction I	Deadline:			
Antenn Transn Antenn Maxim Antenn Transn Antenn Maxim	um Transmitting ERP in Azimuth (from true north) ha Height AAT (meters) nitting ERP (watts) has 5 um Transmitting ERP in Azimuth (from true north) ha Height AAT (meters) nitting ERP (watts) has 6 um Transmitting ERP in Azimuth (from true north) ha Height AAT (meters) has Height AAT (meters)	0 77.800 23.690 n Watts: 140.820 0 77.800 0.700	45 77,700 197,020 45 77,700 0,700	90 82.200 127.210 90 82.200 5.510 90 82.200	135 92.900 10.100 135 92.900 77.010	180 103.900 274.490	225 101.600 0.960 225 101.600 96.500 225 101.600	270 100.000 0.960 270 100.000 7.530 270 100.000	315 92.400 1.460 315 92.400 0.740 315 92.400
Transn	nitting ERP (watts)	25.970	1.720	0.960	0.960	0.960	8.600	124.310	201.610
Locati	on Latitude	Longitude	4000 A	ound Eleveters)	vation	Structure Hg (meters)	t to Tip	Antenna S Registratio	
9	38-41-11.3 N	084-20-37.8 W	24	4.4		88.4		1036605	
Addres	ss: RT 1 BOX 510A SN	NAKE HILL OFF	MONROE	RD					
City: F	FALMOUTH County	: PENDLETON	State: KY	Const	ruction	Deadline:			
Antenn	um Transmitting ERP in Azimuth(from true north) na Height AAT (meters)	0 146.200	45 108.800	90 86.000	135 113.40	180 00 88.700	225 111.100	270 81.600	315 95.800
Transn Antenn	nitting ERP (watts)	0.200	11.220	72.440	91.200		0.370	0.200	0.200
Maxim Antenn	um Transmitting ERP in Azimuth(from true north) ha Height AAT (meters) mitting ERP (watts)	1 Watts: 140.820 0 146.200 0.200	45 108.800 0.200	90 86.000 0.200	135 113.40 0.910	180 00 88.700 26.300	225 111.100 91.200	270 81.600 74.130	315 95.800 12.020
Maxim Antenn	um Transmitting ERP in Azimuth(from true north) ia Height AAT (meters) nitting ERP (watts)	Watts: 140.820 0 146.200 97.720	45 108.800 4.900	90 86.000 0.210	135 113.40 0.200	180 88.700 0.200	225 111.100 0.200	270 81.600 0.200	315 95.800 5.370

0

Call Sig	gn: KNKN837	File	Number:			P	rint Date	::	
Locatio	n Latitude	Longitude		round Elev neters)		Structure Hg (meters)	t to Tip	Antenna S Registratio	
10	38-24-39.0 N	084-19 - 07.0 W	24	14.0	I	129.0		1044001	
Address	s: 0.4 KM NE OF SR :	36 2.9 KM NE							
City: Cy	ynthiana County: H	ARRISON Stat	e: KY C	Constructio	n Deadli	ine:			
		A)		-			· ·		
Antenna	- Vocania V	7.000.							
	m Transmitting ERP in zimuth(from true north)	Watts: 140.820	45	90	135	180	225	270	315
	Height AAT (meters)	106.300	106.200	91.500	96.400	97.000	87.700	83,600	113.900
Transmi Antenna	itting ERP (watts)	0.300	12.030	75.920	91.280	26.320	0.960	0.200	0.200
	m Transmitting ERP in	Watts: 140.820							
Az	zimuth(from true north)	0	45	90	135	180	225	270	315
	Height AAT (meters)	106:300	106.200	91.500	96.400	97.000	87.700	83.600	113.900
Antenna		0.350	0.200	0.200	1.000	26.940	93.400	74.190	10.720
	m Transmitting ERP in	10000	FERRI						
	zimuth(from true north) Height AAT (meters)	0 106.300	45 106.200	90 91.500	135 96,400	1 80 97.000	225 87.700	270 83.600	315 113.900
	itting ERP (watts)	100.080	50.160	3.980	0.270	0.200	0.200	4.080	50.160
		(1)	T W						
Locatio	n Latitude	Longitude	SECURIOR .	round Elev ieters)		Structure Hg (meters)	t to Tip	Antenna S Registration	
11	38-09-19.0 N	084-54-05.0 W	1000000	13.8		67.1		1036604	/II 110.
Address	s: 396 OLD HARROD		1	433	•			.050001	
		y: FRANKLIN	State: KY	Constru	ection De	eadline:			
			7	Allegan	SA.				
Antenna	: 3			1					
	m Transmitting ERP in			Man and a second	1				
	zimuth(from true north) Height AAT (meters)	0 87.400	45	90	135	180	225	270	315
	itting ERP (watts)	3.550	89.800 22.910	61.900 39.810	68.700 22.390	66.700 3.310	57.900 0.270	65.300 0.100	79.300 0.300
Antenna	15 (5)		22.710	57.010		3.510	0.270	0.100	0.500
	m Transmitting ERP in zimuth(from true north)	0	45	90	135	180	225	270	315
Antenna	Height AAT (meters)	87.400	89.700	61.900	68.700	66.700	57.900	65.200	79.300
Transmi	itting ERP (watts)	49.000	6.310	0.490	0.200	0.980	12.030	64.600	97.770
Locatio	n Latitude	Longitudo	G	round Elev	ation 9	Structure Hg	t to Tin	Antenna S	tunotuvo
Locatio	n Lantude	Longitude	2	ieters)		meters)	A	Registratio	
12	38-39-42.6 N	085-11-59.5 W	•	50.6		54.0		1235824	1100
			20		,			.200021	
	s: (Carrollton) Z.L. Day	vis Laue					A STATE OF THE PARTY OF THE PAR		
	s: (Carrollton) 211 Day ARROLLTON Cou		State: K	Y Constr	uction D	eadline:	A CONTRACTOR		
		nty: CARROLL	State: K	Y Constr	uction D	eadline:			
City: CA	ARROLLTON Cou		State: K	Y Constr	uction D	Peadline:			
City: CA Antenna Maximus	ARROLLTON Country 2 2 m Transmitting ERP in	nty: CARROLL	State: K						
Antenna Maximus	ARROLLTON Country 2: 2 m Transmitting ERP in zimuth(from true north)	nty: CARROLL Watts: 140.820	45	90	135	180	225	270	315
Antenna Maximus Az Antenna	ARROLLTON Country 2 2 m Transmitting ERP in	Watts: 140.820					225 96.700 1.230	270 62.500 1.020	315 115.500 1.020

Call Sign: KNKN837	File	Number:			P	rint Date	:	
Location Latitude 12 38-39-42.6 N	Longitude 085-11-59.5 W	(m	round Elev eters) 60.6		ructure Hg eters) .0	t to Tip	Antenna St Registratio 1235824	
Address: (Carrollton) 211 Day City: CARROLLTON Cou	nty: CARROLL	State: KY	Consti	ruction Dea	adline.			
Antenna: 3 Maximum Transmitting ERP in Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 4 Maximum Transmitting ERP in Azimuth(from true north) Antenna Height AAT (meters)	Watts: 140.820 0 99.800 0.760	45 130.700 2.050 45 130.700	90 115.800 53.790 90 115.800	135 93.100 380.820 135 93.100	180 74.200 138.270 180 74.200	225 96.700 8.330 225 96.700	270 62.500 1.290 270 62.500	315 115.500 0.760 315 115.500
Transmitting ERP (watts)	1.140	1.020	1.020	3.970	144.070	499.530	109.290	5.110
Location Latitude 13 38-34-31.7 N	Longitude 085-10-49.7 W	(m	round Elev eters) 4.8		ructure Hg eters) .0	t to Tip	Antenna St Registratio 1000357	
Address: 1299 MILL CREEK	(9)		w c					
City: TURNERS CORNER	County: HENRY	State: 1	KY Con	struction [Peadline:			
Antenna: 2 Maximum Transmitting ERP in Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 3	Watts: 140.820 0 149.700 0.390	45 134.900 10.470	90 138.900 67.610	135 105.800 87.100	180 75.600 22.910	225 92.700 1.150	270 100.700 0.200	315 106.700 0.200
Maximum Transmitting ERP in Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 4	0 149.700 0.370	45 134.900 0.200	90 138.900 0.200	135 105.800 1.260	180 75.600 23.990	225 92.700 87.100	270 100.700 66.070	315 106.700 10.000
Maximum Transmitting ERP in Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	1 Watts: 140.820 0 149.700 95.500	45 134.900 43.650	90 138.900 3.550	135 105.800 0.200	180 75.600 0.200	225 92.700 0.200	270 100.700 3.980	315 106.700 44.670
Location Latitude	Longitude		ound Eleveters)		ructure Hg eters)	t to Tip	Antenna St Registratio	
14 38-40-30.2 N	084-58-18.8 W	24	5.7	91	T.	~	1000358	
Address: 7238 KENTUCKY I City: SANDERS County: 0		e: KY C	onstructio	n Deadline	. 4			
County:	JANUARE STATE	U.K.I. C	- Institution		- 4			
Antenna: 2 Maximum Transmitting ERP in Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	Watts: 140.820 0 135.500 0.200	45 116.800 0.910	90 113.800 26.300	135 90.000 91.200	180 115.700 74.130	225 134.700 12.020	270 115.100 0.200	315 130.100 0.200

Longitude	C						
084-58-18.8 W	(m	round Elev neters) 15.7	(n	tructure Hg neters) l.l	t to Tip	Antenna St Registratio 1000358	
HWY 47							
CARROLL Stat	e: KY C	Constructio	n Deadlin	e:			
0 135.500 3.390 1 Watts: 140.820 0	45 116.800 0.200	90 113.800 0.200	135 90.000 0.200	180 115.700 4.070	225 134.700 24.940	270 115.100 33.110	315 130.100 26.080
NUMBER * 200	116.800	113.800	90.000	115.700	134.700	115.100	130.100
	70						10.140
Longitude	(m	eters)	(n	neters)	t to Tip	Registratio	
085-10-05.6 W	21	1.3	12	26.2		1000277	
HENDY C	WW C	4	D				
HENKY State:	KY Co	nstruction	Deadline	<u> </u>			
93.400 0.350	45 115.800 3.550	90 125.100 37.150	135 97.500 93.330	180 110.900 77.620	225 108.400 18.620	270 102.900 1.740	315 96.500 0.200
93.400 8.320	45 115.800 0.680	90 125.100 0.200	135 97.500 0.740	180 110.900 8.910	225 108.400 57.540	270 102.900 100.000	315 96.500 56.230
93.400 77.620	45 115.800 93.330	90 125.100 35.480	135 97.500 3.390	180 110.900 0.270	225 108.400 0.200	270 102.900 1.860	315 96.500 19.500
Longitude				ATTURES.	t to Tip		
085-20-21.9 W	26	52.7			4	1043334	
				S S	1000		
TRIMBLE State	e: KY C	onstructio	n Deadlin	e:			
1 Watts: 140.820 0 119.700 18.090	45 114.200 60.420	90 128.200 1.770	135 102.700 2.060	180 100.400 1.770	225 180.500 1.770	270 135.200 11.150	315 147.800 67.550
	CARROLL State Watts: 140.820 135.500 3.390 Watts: 140.820 0 135.500 30.230 Longitude 085-10-05.6 W HENRY State: Watts: 140.820 0 93.400 0.350 Watts: 140.820 0 93.400 77.620 Longitude 085-20-21.9 W TRIMBLE State Watts: 140.820 0 119.700	CARROLL State: KY Con Watts: 140.820 135.500	CARROLL State: KY Construction Watts: 140.820 135.500	A Watts: 140.820 A S B S S S S S S S S S S S S S S S S S	Watts: 140.820	Watts: 140.820	Watts

Call Sign: KNKN837	File	Number:			P	rint Date	:	
Location Latitude	Longitude	S=2.43	round Eleva neters)	tion	Structure Hgr (meters)	t to Tip	Antenna St Registratio	
16 38-36-14.0 N	085-20-21.9 W	26	52.7		126.2		1043334	
Address: COLBERT LANE								
City: BEDFORD County: T	RIMBLE State	KY C	onstruction	Dead	line:			
Antenna: 2 Maximum Transmitting ERP in Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 3 Maximum Transmitting ERP in Azimuth(from true north)	0 119.700 2.500	45 114.200 37.650	90 128.200 400.090	135 102.70 508.44		225 180.500 4.000	270 135.200 2.110	315 147.800 1.770
Antenna Height AAT (meters) Transmitting ERP (watts)	119.700 3.280	114.200 1.770	128.200 1.770	102.70 3.180	and the second s	180.500 496.870	135.200 390.980	147.800 21.150
Location Latitude 17 38-12-30.4 N Address: Hwy 127 East 916 E	Visi	(m 23	round Eleva neters) 3.5		Structure Hgg (meters) 54.8	•	Antenna So Registratio	
City: Frankfort County: FR	ANKLIN State	KY Co	onstruction	Deadl	ine: 02-05-201	l 		
Antenna: 1 Maximum Transmitting ERP in Azimuth(from true north) Antenna Height AAT (meters)	0	45	90	135	180	225	270	315
Transmitting ERP (watts) Antenna: 2	75.600 458.530	35.900 214.470	31.000 17.840	25.800 0.910	0.900 0.910	56.300 0.910	86.000 24.060	56.700 224.580
Maximum Transmitting ERP in Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 3	0 75.600 0.910	45 35.900 53.690	90 31.000 223.450	135 25,800 268,12		225 56.300 3.650	270 86.000 0.910	315 56.700 0.910
Maximum Transmitting ERP in Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	Watts: 140.820 0 75.600 0.910	45 35.900 0.910	90 31.000 0.910	135 25.800 7.110	180 60.900 61.760	225 56.300 33.430	270 86.000 37.730	315 56.700 41.260

Control Points:

Control Pt. No. 3

Address: 500 W. Dove Rd

City: Southlake County: TARRANT State: TX Telephone Number: (800)264-6620

Waivers/Conditions:

License renewal granted on a conditional basis, subject to the outcome of FCC proceeding WT Docket No. 10-112 (see FCC 10-86, paras. 113 and 126).

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

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY CELLCO PARTNERSHIP 5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING ALPHARETTA, GA 30022

Call Sign WQJQ692	File Number
Radio	Service
WU - 700 MHz Up	per Band (Block C)

FCC Registration Number (FRN): 0003290673

Grant Date 11-26-2008	Effective Date 05-21-2019	Expiration Date 06-13-2019	Print Date
Market Number REA004	Chann	el Block	Sub-Market Designator 0
	Market Mississipp		
t Build-out Date 06-13-2013	2nd Build-out Date 06-13-2019	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

If the facilities authorized herein are used to provide broadcast operations, whether exclusively or in combination with other services, the licensee must seek renewal of the license either within eight years from the commencement of the broadcast service or within the term of the license had the broadcast service not been provided, whichever period is shorter in length. See 47 CFR §27.13(b).

This authorization is conditioned upon compliance with section 27.16 of the Commission's rules

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.

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS). To view the license record, go to the ULS homepage at http://wireless.fcc.gov/uls/index.htm?job=home and select "License Search". Follow the instructions on how to search for license information.

FCC 601-MB October 2017

Call Sign: WQJQ692

File Number:

Print Date:

700 MHz Relicensed Area Information:

Market

Market Name

Buildout Deadline

Buildout Notification

Status

ULS License

700 MHz Upper Band (Block C) License - WQJQ692 - Cellco Partnership

Q New Search Q Refine Search → Return to Results → Printable Page → Reference Copy

MAIN ADMIN MARI	KET MAP LOCATIONS LEASES
This license has pending appli	ications: <u>0008694125</u> , <u>0008587218</u> , <u>0008404248</u>
Call Sign	WQJQ692
Status	Active
Rural Service Provider Bidding Cre	edit
Is the Applicant seeking a Rural Service F	Provider (RSP) bldding credit?

EXHIBIT C

Eco-Site

1010 SYNC ST., SUITE 575 MORRISVILLE, NC 27560

NEW 255' SELF SUPPORT TOWER w/5' LIGHTNING ARRESTOR **TOTAL TOWER HEIGHT 260'**

ECO-SITE SITE LV OLD US 127 RD & KY 845 SITE #: KY-0024

VERIZON WIRELESS SITE

LV OLD US 127 RD & KY 845 PROJECT#: 20171595393 LOCATION CODE: 449184

SITE ADDRESS

3100 HIGHWAY 127 NORTH OWENTON, KY 40359 OWEN COUNTY E911 ADDRESS: TBD

TOWER OWNER

ECO-SITE 1010 SYNC ST., SUITE 575 MORRISVILLE, NC 27560 CONTACT: GRETCHEN BLANTON OFFICE: (919) 695-4842 MOBILE: (704) 472-0374 E-MAIL: GBLANTON@ ECO-SITE.COM

PROPERTY OWNER

KIM JUETT 2920 HWY 127 N OWENTON KY 40359 CONTACT: KIM JUETT PHONE: (502) 395-1531

PROJECT SUMMARY

OWEN COUNTY SHERIFF OFFICE 102 N MADISON ST OWENTON, KY 40359 PHONE: (502) 484-3363

OWENTON CITY FIRE DEPARTMENT OWENTON, KY 40359

PHONE: (502) 484-2131 GENERAL INFORMATION

LATITUDE: 38° 34' 17.32" N LONGITUDE: 84° 49' 28.79" W 1983 (NAD83) ELEVATION: 949.00' AMSL 1988 (NAVD88)

ECO-SITE LEASE AREA 100'-0" x 100'-0"

(10,000 SF) **VERIZON WIRELESS LEASE AREA**

12'-0" x 30'-0"

PROJECT TOTAL DISTURBED AREA
COMPOUND: (10,000 SF) = (0.23 ACRE

ACCESS DRIVE: (27,418 SF) = (0.63 ACRE UTILITY EASEMENT: (19,306 SF) = (0.44 ACRE (56,724 SF) = (1.30 ACRE

LV OLD US 127 RD & KY 845

KY-0024

3100 HIGHWAY 127 NORTH **OWENTON, KY 40359 OWEN COUNTY**

TENANT: CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS "LV OLD US 127 RD & KY 845"

FROM OWEN COUNTY JUDGE EXECUTIVE: 100 NORTH THOMAS STREET, OWENTON KY 40359: HEAD NORTH TOWARD BRYAN ST (102 FEET). TURN RIGHT ONTO BRYAN ST (236 FEET). TURN LEFT AT THE 1ST ROSS STREET ONTO US-127 N/N MAIN (3.1 MILES). SITE WILL BE LOCATED ON LEFT (EAST) SIDE OF ROAD.

FROM LOUISVILLE MTSO: 2421 HOLLOWAY ROAD LOUISVILLE, KY 40299: HEAD SOUTH ON HOLLOWAY RD TOWARD PLANTSIDE DR (0.1 MI). TURN LEFT AT THE 1ST CROSS STREET ONTO PLANTSIDE DR (0.9 MI). USE THE LEFT 2 LANES TO TURN LEFT ONTO BLANKENBAKER PKWY (0.7 MI). USE THE RIGHT LANE TO TAKE THE RAMP ONTO I-64 E (0.3 MI). MERGE ONTO I-64 E (1.6 MI). TAKE EXIT 19B FOR KY-841 N/GENE SNYDER FWY/I-265 N (0.3 MI). MERGE ONTO I-265/KY-841 E/GENE SNYDER FWY (8.9 MI). TAKE EXIT 35A TO MERGE ONTO I-71 N TOWARD CINCINNATI (47.5 MI). TAKE EXIT 57 FOR KY-35 TOWARD WARSAW/SPARTA (0.2 MI). TURN RIGHT ONTO KY-35 (6.2 MI). CONTINUE ONTO US-127 S (5.5 MI). SITE WILL BE LOCATED ON LEFT (EAST) SIDE OF ROAD.

HEET NUMBER

B-1 TO B-1.4

TOWER ELEVATION

TE-1

C-1

DESCRIPTION

REVISION LOG

TOWER FLEVATION

DETAILED SITE PLAN

DIMENSIONED SITE PLAN

500' RADIUS AND ABUTTERS MAP

OVERALL SITE PLAN w/AERIAL OVERLAY

PROJECT INFORMATION, SITE MAPS, SHEET INDEX

TE ALL ITEMS WITHIN THESE CONSTRUCTION DOCUMENTS ARE BY TOWER OWNER'S GENERAL ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT NTRACTOR AND HIS SUB-CONTRACTORS UNLESS NOTED AS (VZW GC) WHICH SHALL INCLUDE VERIZON VIRELESS GENERAL CONTRACTOR AND HIS SUB-CONTRACTORS, GENERALLY DESCRIBED BELOW ECO-SITE SCOPE: INSTALL A NEW 255' SELF SUPPORT TOWER w/ 5' LIGHTNING ROD (TOTAL 260')

BUILDING CODE STRUCTURAL CODE MECHANICAL CODE ELECTRICAL CODE FIRE/LIFE SAFETY CODE ENERGY CODE 2013 KENTUCKY BUILDING CODE (KBC 2012) TIA/EIA-222 - REVISION G (INCLUDES ADDENDUM #2) 2012 INTERNATIONAL MECHANICAL CODE (IMC 2012) KENTUCKY STATE PLUMBING CODE (815 KAR CHAP. 20 2014 NATIONAL ELECTRICAL CODE (NEC) - NFPA 70 2012 INTERNATIONAL FIRE CODE (2012 IFC)
2012 INTERNATIONAL ENERGY CODE (COMMERCIAL) 2009 NATIONAL FUEL GAS CODE (NFPA 54)

ACCESSIBILITY REQUIREMENTS:

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS

APPLICABLE CODES

SURVEYOR

POWER OF DESIGN GROUP, LLC 11490 BLUEGRASS PARKWAY LOUISVILLE, KY 40299 PHONE: (502) 437-5252

ARCHITECTURAL

POWER OF DESIGN GROUP, LLC 11490 BLUEGRASS PARKWAY LOUISVILLE, KY 40299

LECTRICAL

KENTUCKY UTILITIES COMPANY ADDRESS: 1100 MAIN ST SHELBY VILLE, KY 40065 CONTACT: TIM PROBUS PHONE: (502) 333-6611 MOBILE: (502) 396-1147 FAX: (502) 333-6623 EMAIL: TIM.PROBUS@LGE-KU.COM

CONSULTANT TEAM



11490 BLUEGRASS PARKWAY

LOUISVILLE, KY 40299 502-437-5252



1010 SYNC ST., SUITE 575 MORRISVILLE, NC 27560

9/25/2019



EN PERMIT: 3594

ZONING **DRAWINGS**

REV.	DATE	DESCRIPTION
Α	9.23.19	ISSUED FOR REVIEW
0	9.25.19	ISSUED AS FINAL

SITE INFORMATION: LV OLD US 127 RD & KY 845

3100 HIGHWAY 127 NORTH OWENTON, KY 40359 OWEN COUNTY

ECO-SITE SITE NUMBER

KY-0024

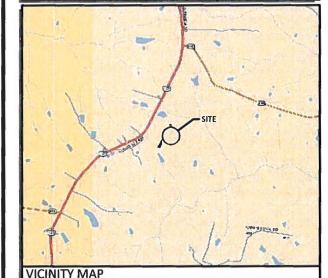
VERIZON WIRELESS SITE NAME: LV OLD US 127 RD & KY 845

09.23.19 SHEET TITLE:

19-43099

PROJECT INFORMATION, SITE MAPS, SHEET INDEX

I-1





INSTALL A NEW TOWER FOUNDATION SYSTEM
INSTALL A 16' CATTLE GATE
INSTALL A 16' CATTLE GATE
INSTALL A 12' TEMPORARY CATTLE GATE
INSTALL A NEW 75'Y5' FENCED GRAVEL COMPOUND
INSTALL A NEW SITE H-FRAME

INSTALL A NEW GRAVEL ACCESS DRIVE NO WATER OR SEWAGE SERVICES RUN TO SITE

PROJECT DESCRIPTION

LOCATION MAP

INSTALL A NEW SITE H-FRAME
INSTALL NEW TOWER LIGHTING AND TOWER LIGHTING CONTROLLER
INSTALL A NEW ELECTRICAL SERVICE RUN TO SITE H-FRAME

INSTALL NEW TOWER & SITE GROUNDING SYSTEM
INSTALL NEW YZW SUBSURFACE GROUNDING SYSTEM
INSTALL NEW 11-6"-19-6" CONCRETE EQUIPMENT PAD
INSTALL A ENEW 11-6"-19-6" CONCRETE EQUIPMENT PAD
INSTALL ELECTRICAL SERVICE CONDUIT WITH PULL TAPES FROM ILC ENCLOSURE STUB-UP WITHIN YZW

EQUIPMENT PAD TO UTILITY H-FRAME NSTALL NEW CONDUITS WITH PULL TAPES FROM VZW ILC ENCLOSURE STUB-UPS TO EQUIPMENT

ENCLOSURE STUB-UPS WITHIN VZW EQUIPMENT PAD
NSTALL NEW CONDUITS WITH PULL TAPES FROM RF CABINET TO OVP H-FRAME LIT FIBER LOCATION

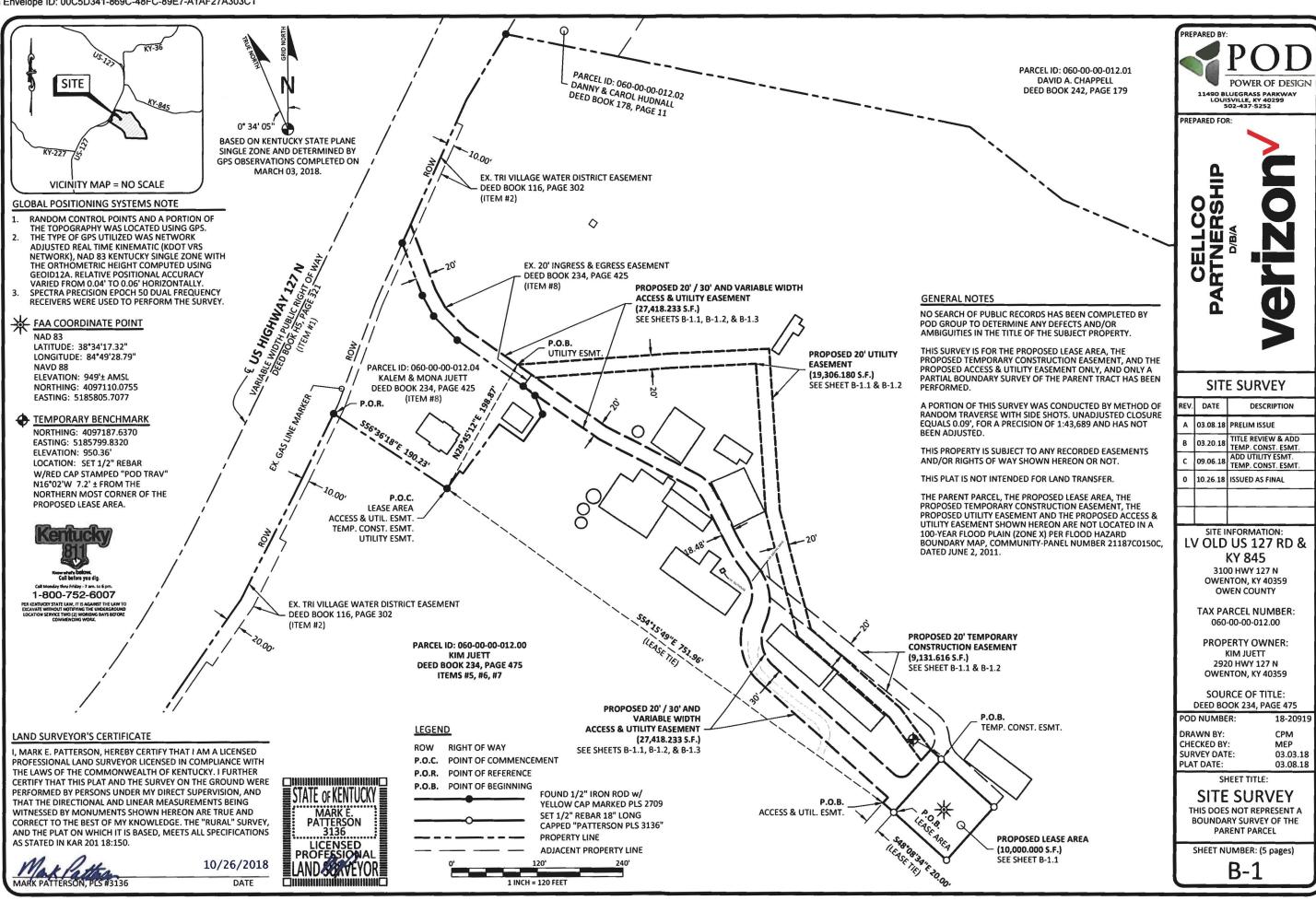
INSTALL (1) NEW "VERIZON WIRELESS ONLY" FIBER OPTIC CONDUIT WITH PULL TAPE AND TRACER WIRE

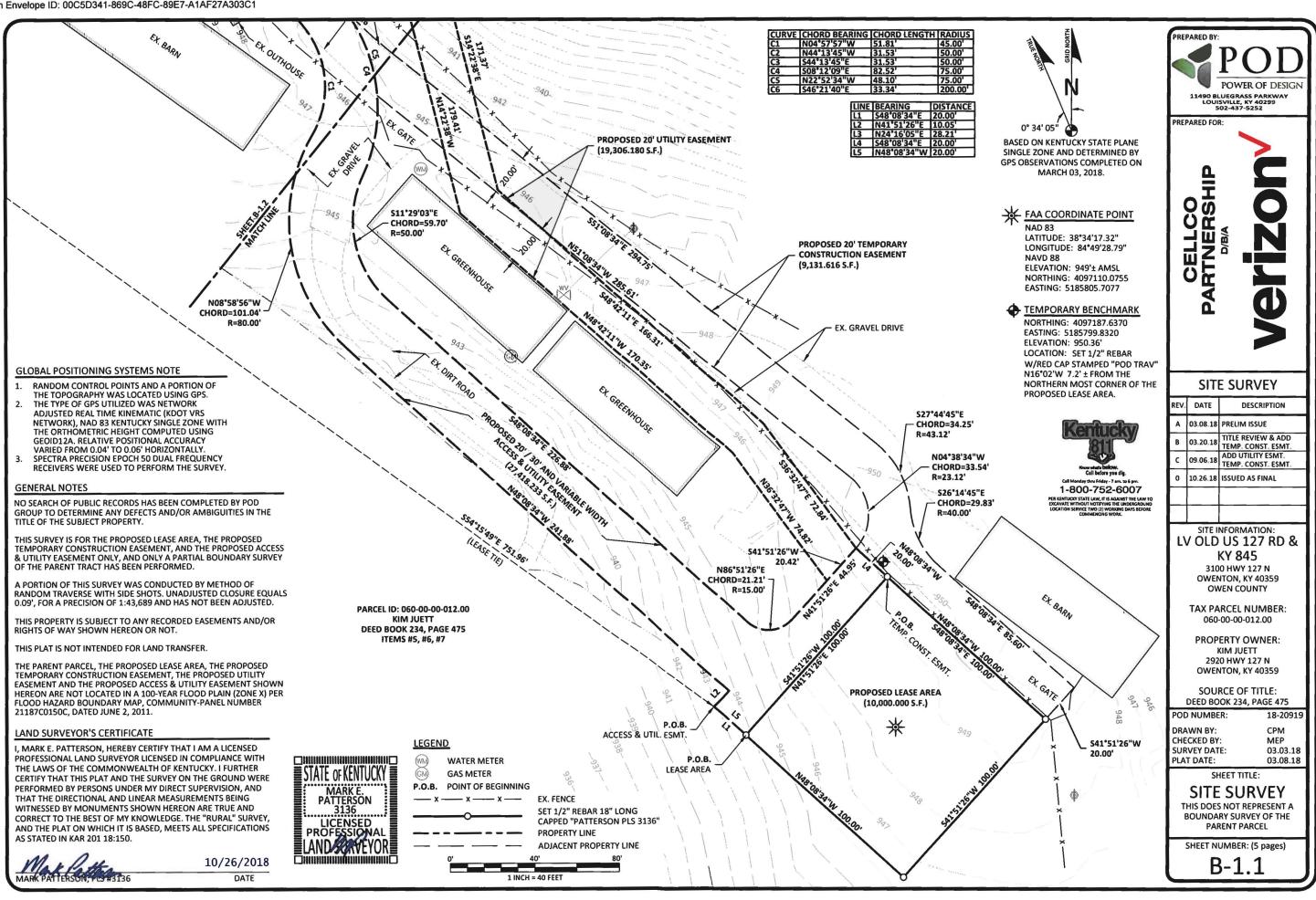
FROM NEW "VERIZON WIRELESS ONLY" 24" x 36" HAND HOLE OUTSIDE COMPOUND TO NEW "VERIZON WIRELESS ONLY" 36" A 60" HAND HOLE AT ROW "INSTALL (1) NEW "VERIZON WIRELESS ONLY" 18" X 18" HAND HOLE OUTSIDE CONDUIT WITH PULL TAPE FROM NEW "VERIZON WIRELESS ONLY" 24" x 36" HAND HOLE OUTSIDE COMPOUND AND STUB UP AT FUTURE FIBE PEDESTAL COCATION

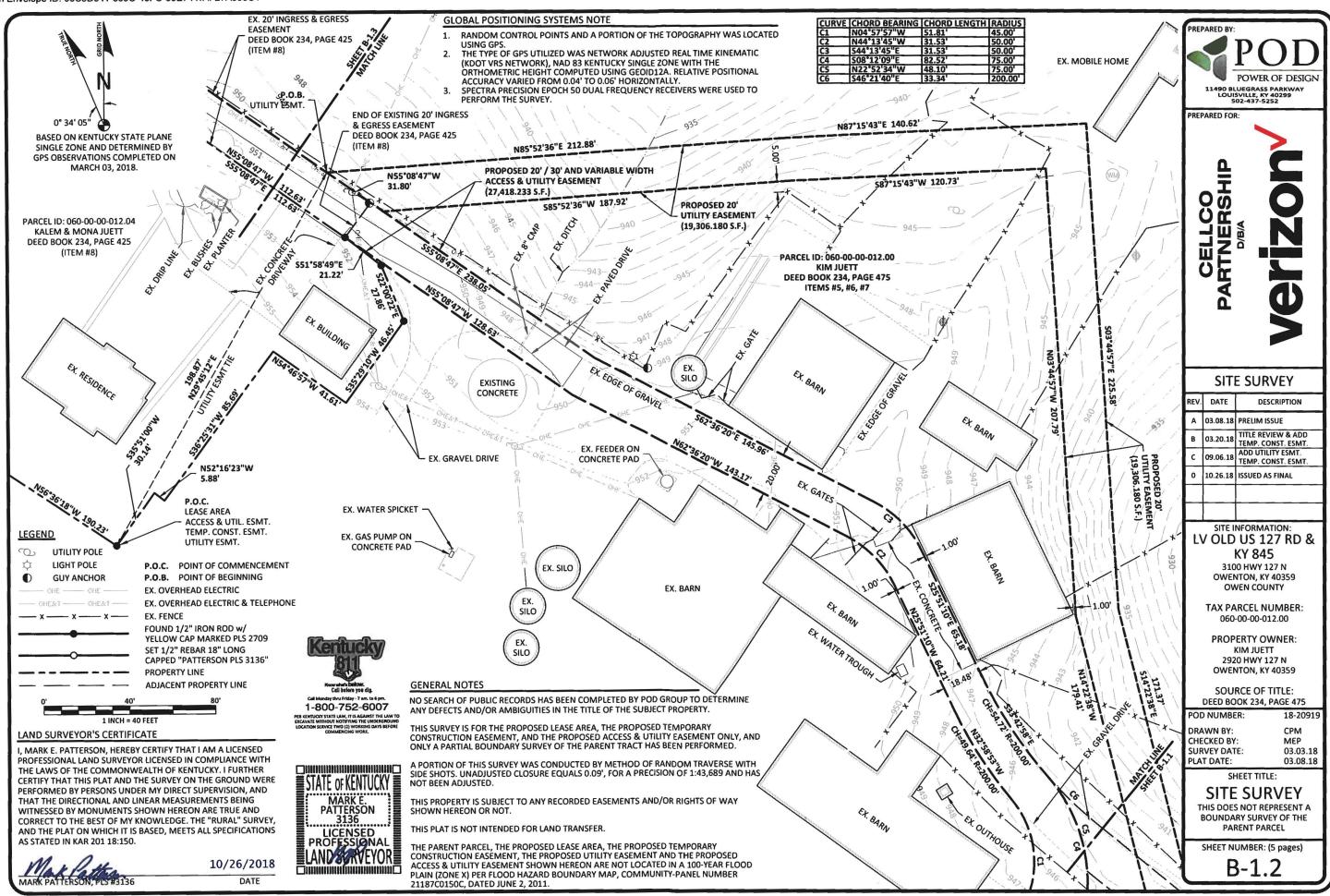
ERIZON WIRELESS SCOPE <u>[VZW GC]:</u>
INSTALL A NEW 11'-6"x14'-9" PREFABRICATED CANOPY ON EXISTING CONCRETE PAD FOUNDATION

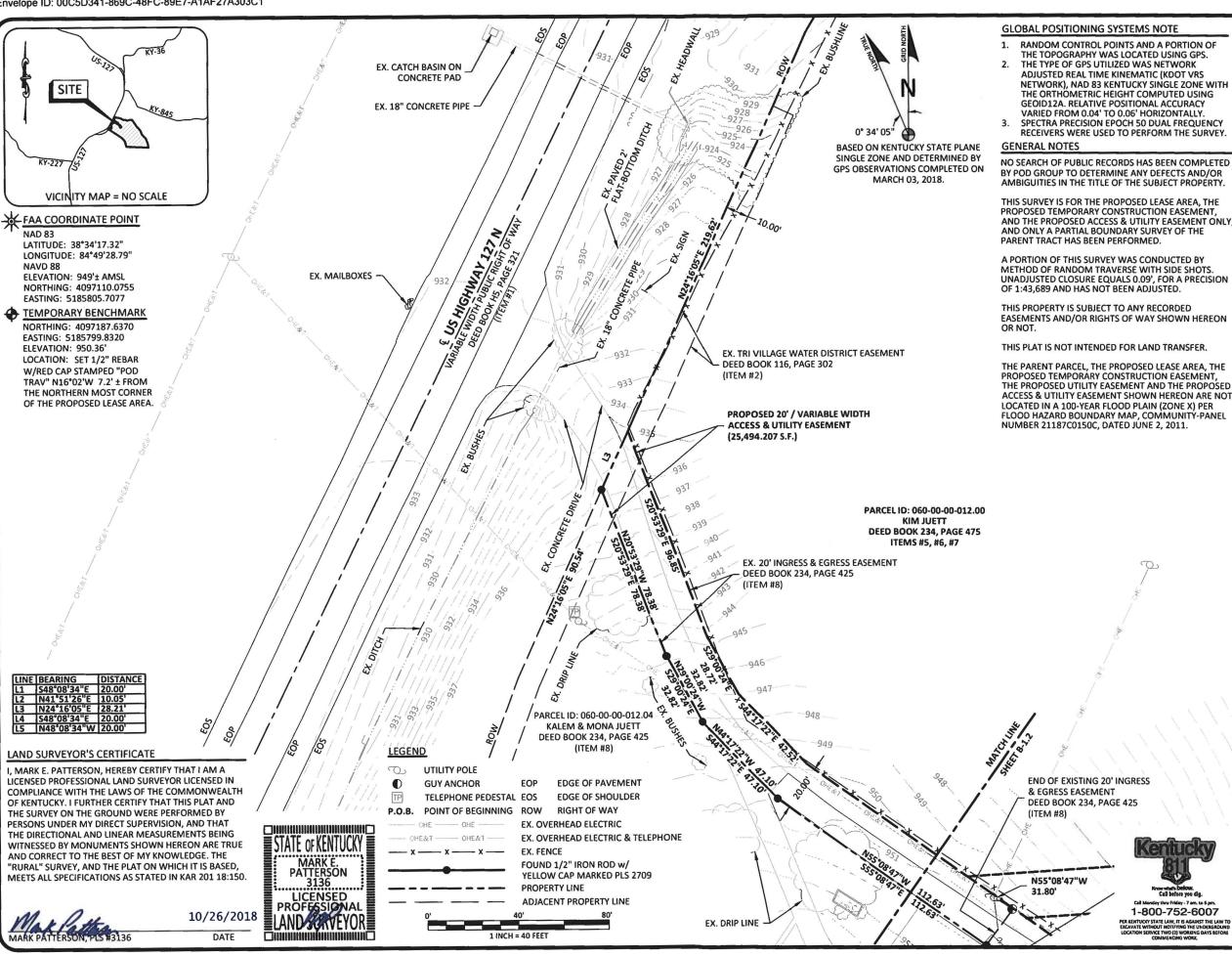
INSTALL A NEW 11'-6"14'-9" PREFABRICATED CANOPY ON EXISTING CONCRETE PAD FOUNDATION INSTALL VZW LOTE BRIDGE AND FOUNDATION INSTALL VZW ANTENNA MOUNTING SUPPORT STRUCTURE ON TOWER INSTALL VZW ANTENNA MISS. COAX, GR. SANTENNA AND RADIO EQUIPMENT INSTALL EXISTING SUBSURFACE GROUND LEADS TO VZW EQUIPMENT & FACILITIES INSTALL EXISTING SUBSURFACE GROUND LEADS TO VZW EQUIPMENT & FACILITIES INSTALL VZW ELECTIC SERVICE CONDUCTORS FROM UTILITY H FRAME TO VZW ILC ENCLOSURE INSTALL INCUIT'S FROM VZW ILC TO VZW EQUIPMENT ENCLOSURES INSTALL NEW OUTDOOR OVP AND CABLING H-FRAME SUPPORT INSTALL (2) 1-1/4" & (1) 1" INNERDOUCTS WITH PULL TAPES AND TRACER WIRE WITHIN OWNER INSTALL (2) 1-1/4" & (1) 1" INNERDOUCTS WITH PULL TAPES AND TRACER WIRE WITHIN OWNER INSTALL (2) "VERIZON WIRELESS ONLY" FIBER OPTIC CONDUITS

NENT ELECTRIC POWER MUST BE AVAILABLE FOR VERIZON WIRELESS AT THE METER BASE PRIO









SPECTRA PRECISION EPOCH 50 DUAL FREQUENCY

AMBIGUITIES IN THE TITLE OF THE SUBJECT PROPERTY.

UNADJUSTED CLOSURE EQUALS 0.09', FOR A PRECISION

THE PROPOSED UTILITY EASEMENT AND THE PROPOSED **ACCESS & UTILITY EASEMENT SHOWN HEREON ARE NOT** FLOOD HAZARD BOUNDARY MAP, COMMUNITY-PANEL



11490 BLUEGRASS PARKWAY

PREPARED FOR:

SITE SURVEY

DESCRIPTION DATE A 03.08.18 PRELIM ISSUE TITLE REVIEW & ADD TEMP. CONST. ESMT. 09.06.18 ADD UTILITY ESMT. TEMP. CONST. ESMT. 10.26.18 ISSUED AS FINAL

> SITE INFORMATION: **LV OLD US 127 RD & KY 845**

3100 HWY 127 N OWENTON, KY 40359 **OWEN COUNTY**

TAX PARCEL NUMBER: 060-00-00-012.00

PROPERTY OWNER: KIM JUETT 2920 HWY 127 N OWENTON, KY 40359

SOURCE OF TITLE: DEED BOOK 234, PAGE 475

POD NUMBER 18-2091

DRAWN BY: CHECKED BY: MEP SURVEY DATE: 03.03.18 PLAT DATE: 03.08.18

SHEET TITLE:

SITE SURVEY THIS DOES NOT REPRESENT A

BOUNDARY SURVEY OF THE PARENT PARCEL

SHEET NUMBER: (5 pages)

B-1.3

LEGAL DESCRIPTIONS

PROPOSED LEASE AREA

THE FOLLOWING IS A DESCRIPTION OF THE PROPOSED LEASE AREA TO BE LEASED FROM THE PROPERTY OF KIM JUETT AS DESCRIBED IN DEED BOOK 234, PAGE 475, PARCEL ID: 060-00-012.00, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARING DATUM USED HEREIN IS BASED UPON KENTUCKY STATE PLANE COORDINATE SYSTEM, SINGLE ZONE, NAD 83, FROM A REAL TIME KINEMATIC GLOBAL POSITIONING SYSTEM OBSERVATION USING THE KENTUCKY TRANSPORTATION CABINET REAL TIME GPS NETWORK COMPLETED

COMMENCING AT A FOUND 1/2" IRON ROD WITH A YELLOW CAP MARKED PLS 2709 IN THE SOUTHERNMOST CORNER OF PROPERTY OF KALEM & MONA JUETT AS DESCRIBED IN DEED BOOK 234, PAGE 425, PARCEL ID: 060-00-00-012.04, SAID IRON ROD ALSO BEING A COMMON CORNER TO PROPERTY OF KIM JUETT AS DESCRIBED IN DEED BOOK 234, PAGE 475, PARCEL ID: 060-00-00-012.00, FOR REFERENCE, SAID COMMENCEMENT POINT IS \$56°36'18"E 190.23' FROM A FOUND 1/2" IRON ROD WITH A YELLOW CAP MARKED PLS 2709 IN THE EAST RIGHT OF WAY LINE OF U.S. HIGHWAY 127 N; THENCE LEAVING SAID COMMON CORNER AND TRAVERSING ACROSS THE LAND OF KIM JUETT, 554°15'49"E 751.96' TO A POINT IN THE LINE OF THE PROPOSED 20' / 30' AND VARIABLE WIDTH ACCESS & UTILITY EASEMENT; THENCE WITH SAID LINE OF THE PROPOSED 20' / 30' AND VARIABLE WIDTH ACCESS & UTILITY EASEMENT, \$48°08'34"E 20.00' TO A SET 1/2" REBAR 18" LONG CAPPED "PATTERSON PLS 3136" HEREAFTER REFERRED TO AS A "SET IPC". IN THE WESTERN MOST CORNER OF THE PROPOSED LEASE AREA, BEING THE TRUE POINT OF BEGINNING: THENCE N41°51'26"E TO A "SET IPC"; THENCE S48°08'34"E 100.00' TO A "SET IPC"; THENCE S41°51'26"W 100.00' TO A "SET IPC"; THENCE N48°08'34"W 100.00' TO THE POINT OF BEGINNING CONTAINING 10.000.000 SQUARE FEET AS PER SURVEY BY MARK E. PATTERSON, PLS #3136

PROPOSED 20' / 30' AND VARIABLE WIDTH ACCESS & UTILITY EASEMENT

THE FOLLOWING IS A DESCRIPTION OF THE PROPOSED 20' / 30' AND VARIABLE WIDTH ACCESS & UTILITY EASEMENT TO BE GRANTED FROM THE PROPERTY OF KIM JUETT AS DESCRIBED IN DEED BOOK 234, PAGE 475, PARCEL ID: 060-00-00-012.00, WHICH IS MORE PARTICULARLY DESCRIBED AS

BEARING DATUM USED HEREIN IS BASED UPON KENTUCKY STATE PLANE COORDINATE SYSTEM, SINGLE ZONE, NAD 83, FROM A REAL TIME KINEMATIC GLOBAL POSITIONING SYSTEM OBSERVATION USING THE KENTUCKY TRANSPORTATION CABINET REAL TIME GPS NETWORK COMPLETED

COMMENCING AT A FOUND 1/2" IRON ROD WITH A YELLOW CAP MARKED PLS 2709 IN THE SOUTHERNMOST CORNER OF PROPERTY OF KALEM & MONA JUETT AS DESCRIBED IN DEED BOOK 234, PAGE 425, PARCEL ID: 060-00-00-012.04, SAID IRON ROD ALSO BEING A COMMON CORNER TO PROPERTY OF KIM JUETT AS DESCRIBED IN DEED BOOK 234, PAGE 475, PARCEL ID: 060-00-00-012.00, FOR REFERENCE, SAID COMMENCEMENT POINT IS S56°36'18"E 190.23' FROM A FOUND 1/2" IRON ROD WITH A YELLOW CAP MARKED PLS 2709 IN THE EAST RIGHT OF WAY LINE OF U.S. HIGHWAY 127 N; THENCE LEAVING SAID COMMON CORNER AND TRAVERSING ACROSS THE LAND OF KIM JUETT, S54°15'49"E 751.96' TO THE TRUE POINT OF BEGINNING: THENCE N41°51'26"E 10.05': THENCE N48°08'34"W 241.88': THENCE WITH THE CHORD OF A CURVE TO THE RIGHT HAVING A RADIUS OF 80.00', NO8°58'56"W 101.04'; THENCE WITH THE CHORD OF A REVERSE CURVE TO THE LEFT HAVING A RADIUS OF 45.00', NO4"57'57"W 51.81'; THENCE WITH THE CHORD OF A REVERSE CURVE TO THE RIGHT HAVING A RADIUS OF 200.00', N32°58'53"W 49.64'; THENCE N25*51'10"W 64.21'; THENCE WITH THE CHORD OF A CURVE TO THE LEFT HAVING A RADIUS OF 50.00', N44*13'45"W 31.53'; THENCE N62*36'20"W 143.17'; THENCE N55°08'47"W 128.63 TO A FOUND 1/2" IRON ROD WITH A YELLOW CAP MARKED PLS 2709, HEREAFTER REFERRED TO AS A FOUND ROD 2709", SAID ROD BEING A CORNER TO THE AFOREMENTIONED KALEM & MONA JUETT PARCEL, SAID ROD ALSO BEING THE SOUTHERN MOST CORNER OF AN EXISTING 20' INGRESS & EGRESS EASEMENT AS RECORDED IN DEED BOOK 234, PAGE 425; THENCE WITH THE LINE OF SAID KALEM & MONA JUETT AND THE SOUTH LINE OF SAID EXISTING 20' INGRESS & EGRESS EASEMENT FOR THE NEXT 4 CALLS. N55°08'47"W 112.63' TO A "FOUND ROD 2709"; THENCE N44°17'22"W 47.10' TO A "FOUND ROD 2709"; THENCE N29°00'24"W 32.82' TO A "FOUND ROD 2709"; THENCE N20°53'29"W 78.38' TO A "FOUND ROD 2709" IN THE NORTHERN MOST CORNER OF KALEM & MONA JUETT, SAID ROD ALSO BEING A COMMON CORNER TO KIM JUETT, SAID ROD ALSO BEING IN THE EAST RIGHT OF WAY LINE OF U.S. HIGHWAY 127 NORTH; THENCE LEAVING THE LINE OF KALEM & MONA JUETT AND CONTINUING WITH AFOREMENTIONED EXISTING 20' INGRESS & EGRESS EASEMENT AND SAID EAST RIGHT OF WAY LINE OF U.S. HIGHWAY 127 NORTH, N24°16'05"E 28.21'; THENCE LEAVING SAID EAST RIGHT OF WAY LINE AND TRAVERSING THE LAND OF KIM JUETT WITH THE NORTH LINE OF AFOREMENTIONED EXISTING 20' INGRESS & EGRESS EASEMENT FOR THE NEXT 3 CALLS, \$20°53'29"E 96.85'; THENCE \$29°00'24"E 28.72'; THENCE \$44°17'22"E 42.52'; THENCE \$55°08'47"E 238.05', PASSING THE END OF THE EXISTING 20' INGRESS & EGRESS EASEMENT AT 111.28'; THENCE S62°36'20"E 145.96'; THENCE WITH THE CHORD OF A CURVE TO THE RIGHT HAVING A RADIUS OF 50.00', S44*13'45"E 31.53'; THENCE S25*51'10"E 65.18; THENCE WITH THE CHORD OF A CURVE TO THE LEFT HAVING A RADIUS OF 200.00', S33*42'58"E 54.72'; THENCE WITH THE CHORD OF A REVERSE CURVE TO THE RIGHT HAVING A RADIUS OF 75.00', S08*12'09"E 82.52'; THENCE WITH THE CHORD OF A REVERSE CURVE TO THE LEFT HAVING A RADIUS OF 50.00', S11°29'03"E 59.70'; THENCE S48°08'34"E 226.88'; THENCE WITH THE CHORD OF A CURVE TO THE LEFT HAVING A RADIUS OF 15.00', N86°51'26"E 21.21'; THENCE N41°51'26"E 44.95'; THENCE S48°08'34"E 20.00' TO A SET 1/2" REBAR 18" LONG CAPPED "PATTERSON PLS 3136", HEREAFTER REFERRED TO AS A "SET IPC" IN THE NORTHWEST CORNER OF THE PROPOSED LEASE AREA; THENCE ALONG THE WEST LINE OF SAID LEASE AREA, S41°51'26"W 100.00' TO A SET IPC AT THE SOUTHWEST CORNER OF SAID LEASE AREA; THENCE N48°08'34"W 20.00' TO THE POINT OF BEGINNING CONTAINING 27,418.233 SQUARE FEET AS PER SURVEY BY MARK E. PATTERSON, PLS

PROPOSED 30' / VARIABLE WIDTH CONSTRUCTION EASEMENT

THE FOLLOWING IS A DESCRIPTION OF THE PROPOSED 30' / VARIABLE WIDTH CONSTRUCTION EASEMENT TO BE GRANTED FROM THE PROPERTY OF KIM JUETT AS DESCRIBED IN DEED BOOK 234, PAGE 475, PARCEL ID: 060-00-0012.00, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARING DATUM USED HEREIN IS BASED UPON KENTUCKY STATE PLANE COORDINATE SYSTEM, SINGLE ZONE, NAD 83, FROM A REAL TIME KINEMATIC GLOBAL POSITIONING SYSTEM OBSERVATION USING THE KENTUCKY TRANSPORTATION CABINET REAL TIME GPS NETWORK COMPLETED ON MARCH 3, 2018

COMMENCING AT A FOUND 1/2" IRON ROD WITH A YELLOW CAP MARKED PLS 2709 IN THE SOUTHERNMOST CORNER OF PROPERTY OF KALEM & MONA JUETT AS DESCRIBED IN DEED BOOK 234, PAGE 425, PARCEL ID: 060-00-00-012.04, SAID IRON ROD ALSO BEING A COMMON CORNER TO PROPERTY OF KIM JUETT AS DESCRIBED IN DEED BOOK 234, PAGE 475, PARCEL ID: 060-00-00-012.00, FOR REFERENCE, SAID COMMENCEMENT POINT IS S56°36'18"E 190.23' FROM A FOUND 1/2" IRON ROD WITH A YELLOW CAP MARKED PLS 2709 IN THE EAST RIGHT OF WAY LINE OF U.S. HIGHWAY 127 N; THENCE LEAVING SAID COMMON CORNER AND TRAVERSING ACROSS THE LAND OF KIM JUETT, S54°15'49"E 751.96' TO A POINT IN THE LINE OF THE PROPOSED 20' / 30' AND VARIABLE WIDTH ACCESS & UTILITY EASEMENT; THENCE WITH THE LINE OF SAID PROPOSED 20' / 30' AND VARIABLE WIDTH ACCESS & UTILITY EASEMENT, \$48°08'34"E 20.00' TO A SET 1/2" REBAR 18" LONG CAPPED "PATTERSON PLS 3136", HEREAFTER REFERRED TO AS A "SET IPC" IN THE SOUTHWEST CORNER OF THE PROPOSED LEASE AREA; THENCE ALONG THE WEST LINE OF SAID LEASE AREA, N41"51'26"E 100.00' TO A SET IPC AT THE NORTHWEST CORNER OF SAID LEASE AREA AND BEING THE TRUE POINT OF BEGINNING; THENCE LEAVING SAID LEASE AREA, N48°08'34"W 20.00'; THENCE WITH THE CHORD OF A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 23.12', NO4°38'34"W 33.54'; THENCE NS1°08'34"W 285.61'; THENCE WITH THE CHORD OF A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 75.00', N22°52'34"W 48.10', THENCE WITH THE CHORD OF A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 200.00', S46°21'40"E 33.34'; THENCE \$51°08'34"E 294.75'; THENCE WITH THE CHORD OF A CURVE TO THE RIGHT HAVING A RADIUS OF 43.12', \$27°44'45"E 34.25'; THENCE WITH THE CHORD OF A REVERSE CURVE TO THE LEFT HAVING A RADIUS OF 40.00', S26"14'45"E 29.83'; THENCE S48"08'34"E 85.60'; THENCE S41°51'26"W 20.00' TO A SET IPC IN THE NORTHEAST CORNER OF SAID LEASE AREA; THENCE ALONG THE NORTH LINE OF SAID LEASE AREA N48°08'34"W 100.00' TO THE POINT OF BEGINNING CONTAINING 19,306.180 SQUARE FEET AS PER SURVEY BY MARK E. PATTERSON, PLS #3136 DATED MARCH 3, 2018.

TITLE OF COMMITMENT (PARCEL ID: 060-00-00-012.00)

THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY POD GROUP, LLC AND AS SUCH WE ARE NOT RESPONSIBLE FOR THE INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE, UNRECORDED EASEMENTS, AUGMENTING EASEMENTS, IMPLIED OR PRESCRIPTIVE EASEMENTS, OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE. INFORMATION REGARDING THESE MATTERS WERE GAINED FROM AMERICAN TITLE COMPANY, INC., FILE NO. CT-570, PREPARED FOR VERIZON WIRELESS, DATED FEBRUARY 12, 2018 AT 8:00 AM. THE FOLLOWING COMMENTS ARE IN REGARD TO SAID COMMITMENT AND THE NUMBERS IN THE COMMENTS CORRESPOND TO THE NUMBERING SYSTEM IN SAID POLICY

SCHEDULE B - SECTION II (EXCEPTIONS)

- OUT CONVEYANCE FROM RAYMOND AND DOROTHY JUETT TO COMMONWEALTH OF KENTUCKY DATED MARCH 5, 1969 OF RECORD IN DEED BOOK H5, PAGE 321, IN THE OFFICE AFORESAID. (OUT CONVEYANCE AS RECORDED IN DEED BOOK H5, PAGE 321 DESCRIBES THE DEDICATION OF LAND TO THE PUBLIC RIGHT OF WAY OF US HIGHWAY 127 AND DOES AFFECT THE PARENT PARCEL AND A PORTION OF THE PROPOSED. ACCESS & UTILITY EASEMENT, BUT DOES NOT AFFECT THE PROPOSED 20' UTILITY EASEMENT, THE TEMPORARY CONSTRUCTION EASEMENT OR THE PROPOSED LEASE AREA, AND IS SHOWN HEREON.)
- RIGHT OF WAY GRANTED TO TRI VILLAGE WATER DISTRICT DATED MARCH 15, 1969 OF RECORD IN DEED BOOK 116, PAGE 302, IN THE OFFICE AFORESAID. (RIGHT OF WAY AS RECORDED IN DEED BOOK 116, PAGE 302 DESCRIBES A PERPETUAL WATER PIPELINE EASEMENT, WHICH DOES AFFECT THE PARENT PARCEL AND A PORTION OF THE PROPOSED ACCESS & UTILITY EASEMENT, BUT DOES NOT AFFECT THE PROPOSED 20' UTILITY EASEMENT, THE PROPOSED TEMPORARY CONSTRUCTION EASEMENT OR THE PROPOSED LEASE AREA, AND IS SHOWN HEREON.)
- RIGHT OF WAY GRANTED TO SOUTH CENTRAL BELL TELEPHONE COMPANY DATED NOVEMBER 6, 1969 OF RECORD IN DEED BOOK 115, PAGE 408, IN THE OFFICE AFORESAID. (RIGHT OF WAY AS RECORDED IN DEED BOOK 115, PAGE 408 DESCRIBES A RIGHT OF WAY EASEMENT FOR A BURIED CABLE. SAID CABLE WAS PROPOSED TO BE PLACED APPROXIMATELY 6' FROM THE WATERLINE. HOWEVER, NO WIDTH IS SPECIFIED FOR SAID EASEMENT, AND FURTHER, NO UNDERGROUND WATERLINES OR CABLES WERE LOCATED. AS SUCH, SAID EASEMENT COULD NOT BE PLOTTED HEREON, AND ITS EFFECT ON THE PARENT PARCEL, THE PROPOSED 20' UTILITY EASEMENT, THE PROPOSED ACCESS & UTILITY EASEMENT, THE PROPOSED TEMPORARY CONSTRUCTION EASEMENT, AND THE PROPOSED LEASE AREA COULD NOT BE DETERMINED.)
- OUT CONVEYANCE FROM R.W. JUETT AND DOROTHY JUETT TO MARK JUETT AND CINDY JUETT DATED MARCH 31, 1979 OF RECORD IN DEED BOOK 140, PAGE 14, IN THE OFFICE AFORESAID. (OUT CONVEYANCE AS RECORDED IN DEED COOK 140, PAGE 14 DESCRIBES THE CONVEYANCE OF A PORTION OF THE PARENT PARCEL LOCATED IN THE SOUTHWEST CORNER OF THE PARENT PARCEL, AND DOES AFFECT THE PARENT PARCEL, BUT DOES NOT AFFECT THE PROPOSED 20' UTILITY EASEMENT, THE PROPOSED ACCESS & UTILITY EASEMENT, THE PROPOSED TEMPORARY CONSTRUCTION EASEMENT, OR THE PROPOSED LEASE AREA.)
- WILL OF RECORD FOR ORVILLE ROSE DATED DECEMBER 14, 1990 OF RECORD IN WILL BOOK Q, PAGE 293, IN THE OFFICE AFORESAID. (WILL OF RECORD IN WILL BOOK Q, PAGE 293 DOES AFFECT THE PARENT PARCEL, THE PROPOSED 20' UTILITY EASEMENT, THE PROPOSED ACCESS & UTILITY EASEMENT, THE PROPOSED TEMPORARY CONSTRUCTION EASEMENT, AND THE PROPOSED LEASE AREA.
- WILL OF RECORD FOR R.W. JUETT DATED FEBRUARY 4, 2010 OF RECORD IN WILL BOOK X, PAGE 397, IN THE OFFICE AFORESAID. (WILL OF RECORD IN WILL BOOK X, PAGE 297 DOES AFFECT THE PARENT PARCEL, THE PROPOSED 20' UTILITY EASEMENT, THE PROPOSED ACCESS & UTILITY EASEMENT, THE PROPOSED TEMPORARY CONSTRUCTION EASEMENT, AND THE PROPOSED LEASE AREA.)
- WILL OF RECORD FOR DOROTHY ROSE JUETT DATED OCTOBER 1, 2010 IN WILL BOOK X, PAGE 542, IN THE OFFICE AFORESAID, (WILL OF RECORD IN WILL BOOK X, PAGE 542 DOES AFFECT THE PARENT PARCEL, THE PROPOSED 20' UTILITY EASEMENT, THE PROPOSED ACCESS & UTILITY EASEMENT, THE PROPOSED TEMPORARY CONSTRUCTION EASEMENT, AND THE PROPOSED LEASE AREA.
- OUT CONVEYANCE FROM MARK JUETT AND KIM JUETT TO KALEM JUETT AND MONA JUETT DATED SEPTEMBER 22, 2011 OF RECORD IN DEED BOOK 234, PAGE 425, IN THE OFFICE AFORESAID. (OUT CONVEYANCE AS RECORDED IN DEED BOOK 234, PAGE 425 DESCRIBES THE CONVEYANCE OF A PORTION OF THE PARENT PARCEL, SPECIFICALLY PARCEL ID: 060-00-012.04, AND A 20' INGRESS & EGRESS EASEMENT ACROSS THE PARENT PARCEL, AND DOES AFFECT THE PARENT PARCEL, A PORTION OF THE PROPOSED ACCESS & UTILITY EASEMENT, BUT DOES NOT AFFECT THE PROPOSED 20' UTILITY EASEMENT, THE PROPOSED TEMPORARY CONSTRUCTION EASEMENT, OR THE PROPOSED LEASE AREA, AND IS SHOWN HEREON.)

PROPOSED 20' UTILITY EASEMENT

THE FOLLOWING IS A DESCRIPTION OF THE PROPOSED 20' UTILITY EASEMENT TO BE GRANTED FROM THE PROPERTY OF KIM JUETT AS DESCRIBED IN DEED BOOK 234, PAGE 475, PARCEL ID: 060-00-00-012.00, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARING DATUM USED HEREIN IS BASED UPON KENTUCKY STATE PLANE COORDINATE SYSTEM, SINGLE ZONE, NAD 83, FROM A REAL TIME KINEMATIC GLOBAL POSITIONING SYSTEM OBSERVATION USING THE KENTUCKY TRANSPORTATION CABINET REAL TIME GPS NETWORK COMPLETED ON MARCH 3, 2018.

COMMENCING AT A FOUND 1/2" IRON ROD WITH A YELLOW CAP WARKED PLS 2709 IN THE SOUTHERNMOST CORNER OF PROPERTY OF KALEM & MONA JUETT AS DESCRIBED IN DEED BOOK 234, PAGE 425, PARCEL ID: 060-00-00-012.04, SAID IRON ROD ALSO BEING A COMMON CORNER TO PROPERTY OF KIM JUETT AS DESCRIBED IN DEED BOOK 234, PAGE 475, PARCEL ID: 060-00-012.00. FOR REFERENCE, SAID COMMENCEMENT POINT IS \$56°36'18"F 190.23' FROM A FOUND 1/2" IRON ROD WITH A YELLOW CAP MARKED PLS 2709 IN THE EAST RIGHT OF WAY LINE OF U.S. HIGHWAY 127 N; THENCE LEAVING SAID COMMON CORNER AND TRAVERSING ACROSS THE LAND OF KIM JUETT, N29°45'12"E 198.87' TO A POINT ON THE LAND OF KIM JUETT PARCEL ID: 060-00-00-012.00 AND BEING THE TRUE POINT OF BEGINNING; THENCE N85°52'36"E 212.88'; THENCE N87°15'43"E 140.62'; THENCE S03°44'57"E 225.58'; THENCE S14°22'38"E 171.37'; THENCE S48°42'11"E 166.31'; THENCE S36°32'47"E 72.84'; THENCE S41°51'26"W 20.42'; THENCE N36°32'47"W 74.82', THENCE N48°42'11"W 170.35', THENCE N14°22'38"W 179.41', THENCE N03°44'57"W 207.79', THENCE S87°15'43"W 120.73'; THENCE S85*52'36"W 187.92'; THENCE N55*08'47"W 31.80' TO THE POINT OF BEGINNING CONTAINING 19,306.180 SQUARE FEET AS PER SURVEY BY MARK E. PATTERSON, PLS #3136 DATED MARCH 3, 2018.

TATE OF KENTUCKY

PATTERSON 3136

LAND SURVEYOR'S CERTIFICATE

I, MARK E. PATTERSON, HEREBY CERTIFY THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR LICENSED IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF KENTUCKY. I FURTHER CERTIFY THAT THIS PLAT AND THE SURVEY ON THE GROUND WERE PERFORMED BY PERSONS UNDER MY DIRECT SUPERVISION, AND THAT THE DIRECTIONAL AND LINEAR MEASUREMENTS BEING WITNESSED BY MONUMENTS SHOWN HEREON ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. THE "RURAL" SURVEY, AND THE PLAT ON WHICH IT IS BASED, MEETS ALL SPECIFICATIONS AS STATED IN KAR 201 18:150.



10/26/2018 DATE

POWER OF DESIGN

11490 BLUEGRASS PARKWAY LOUISVILLE, KY 40299 502-437-5252

PREPARED FOR:

CELLCO PARTNERSHIP

SITE SURVEY

DATE DESCRIPTION 03.08.18 PRELIM ISSUE TITLE REVIEW & ADD 03.20.18 TEMP. CONST. ESMT. C 09.06.18 ADD UTILITY ESMT. TEMP. CONST. ESMT. 0 10.26.18 ISSUED AS FINAL

> SITE INFORMATION: **LV OLD US 127 RD & KY 845**

> > 3100 HWY 127 N OWENTON, KY 40359 OWEN COUNTY

TAX PARCEL NUMBER: 060-00-00-012.00

PROPERTY OWNER: KIM JUETT 2920 HWY 127 N OWENTON, KY 40359

SOURCE OF TITLE: DEED BOOK 234, PAGE 475

POD NUMBER:

18-2091 DRAWN BY: CPM

CHECKED BY: **SURVEY DATE:** PLAT DATE:

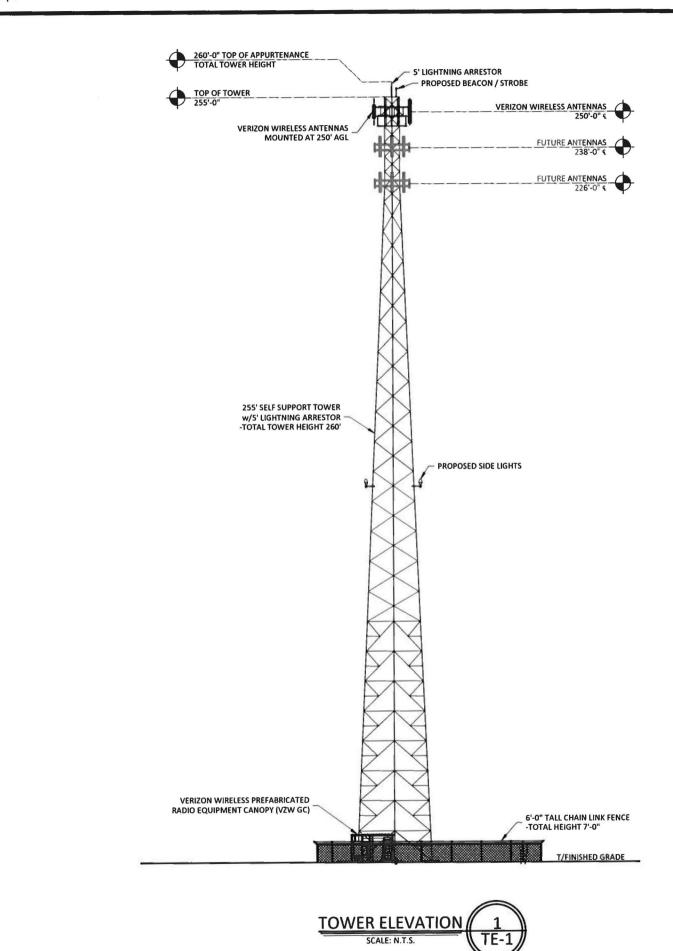
MEP 03.03.1 03.08.13

SHEET TITLE:

SITE SURVEY

THIS DOES NOT REPRESENT A **BOUNDARY SURVEY OF THE** PARENT PARCEL

SHEET NUMBER: (5 pages)



NOTE:

- 1. IT IS THE INSTALLING CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL ANTENNA INFORMATION AGAINST FINAL RADIO ENGINEERING PLAN PROVIDED BY CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS (VZW GC)
- 2. ALL TOWER LIGHTING SHALL BE INSTALLED AS REQUIRED BY THE FEDERAL AVIATION ADMINISTRATION AND RECOMMENDED BY THE USFWS INTERIM GUIDELINES (2000) FOR LIGHTING OF TOWERS OVER



POWER OF DESIGN 11490 BLUEGRASS PARKWAY LOUISVILLE, KY 40299 502-437-5252



1010 SYNC ST., SUITE 575 MORRISVILLE, NC 27560

9/25/2019



EN PERMIT: 3594

ZONING **DRAWINGS**

DATE	DESCRIPTION
9.23.19	ISSUED FOR REVIEW
9.25.19	ISSUED AS FINAL
	9.23.19

SITE INFORMATION: LV OLD US 127 RD & KY 845

3100 HIGHWAY 127 NORTH OWENTON, KY 40359 OWEN COUNTY

ECO-SITE SITE NUMBER: KY-0024

VERIZON WIRELESS SITE NAME: LV OLD US 127 RD & KY 845

POD NUMBER:

DRAWN BY: CHECKED BY:

POD 09.23.19

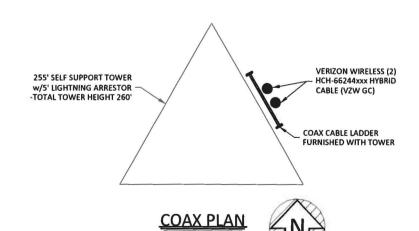
19-43099

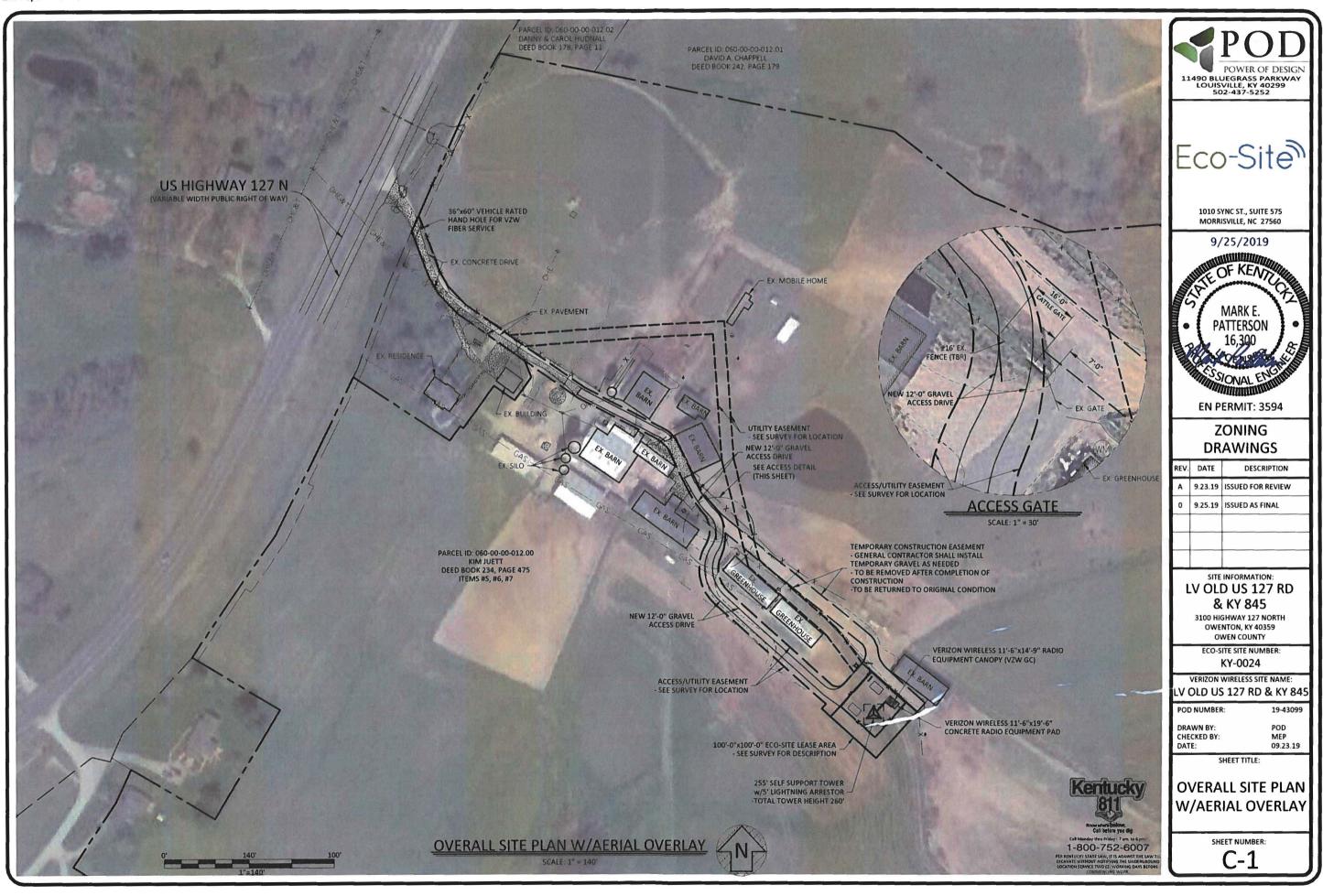
SHEET TITLE:

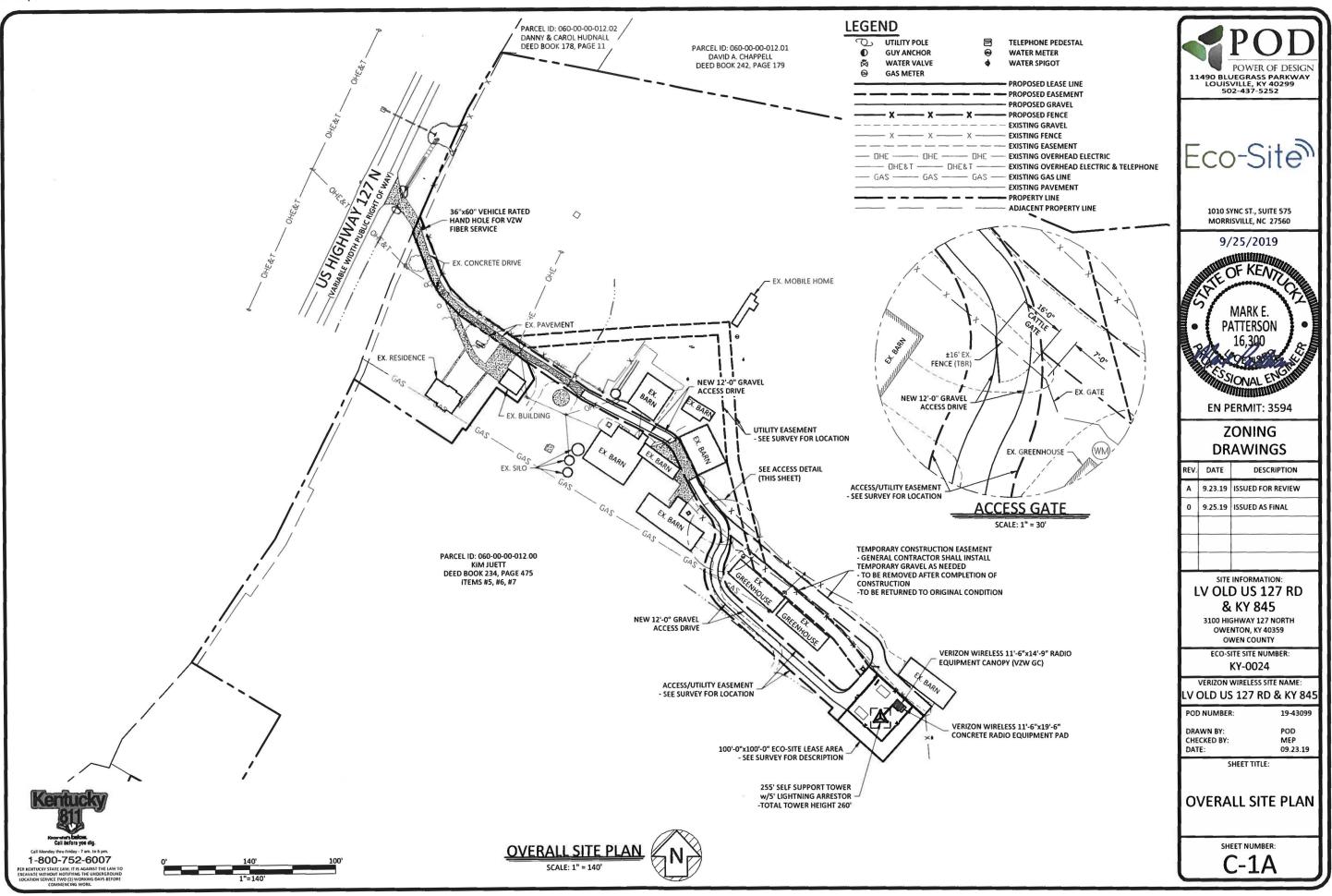
TOWER ELEVATION

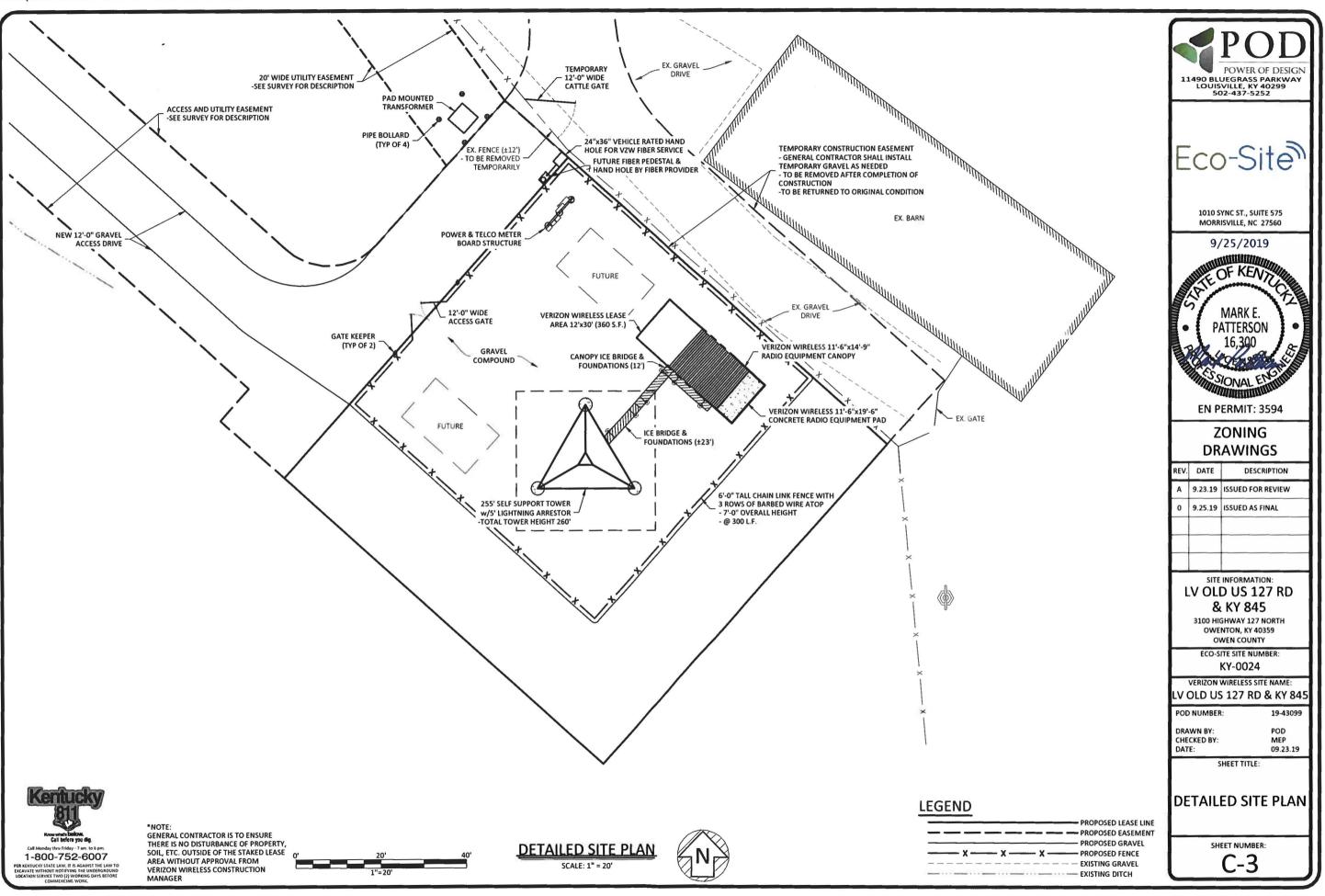
SHEET NUMBER:

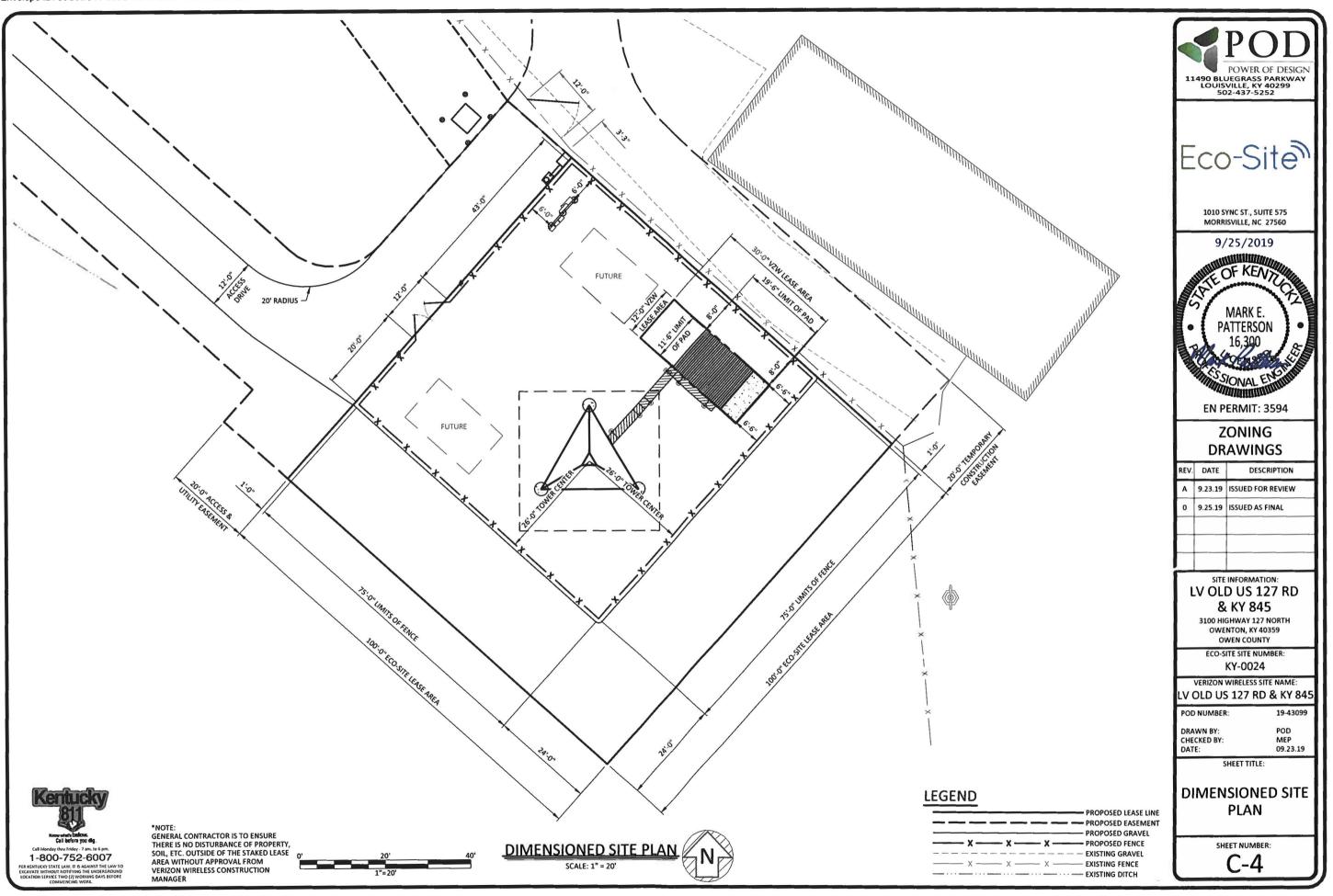
TE-1











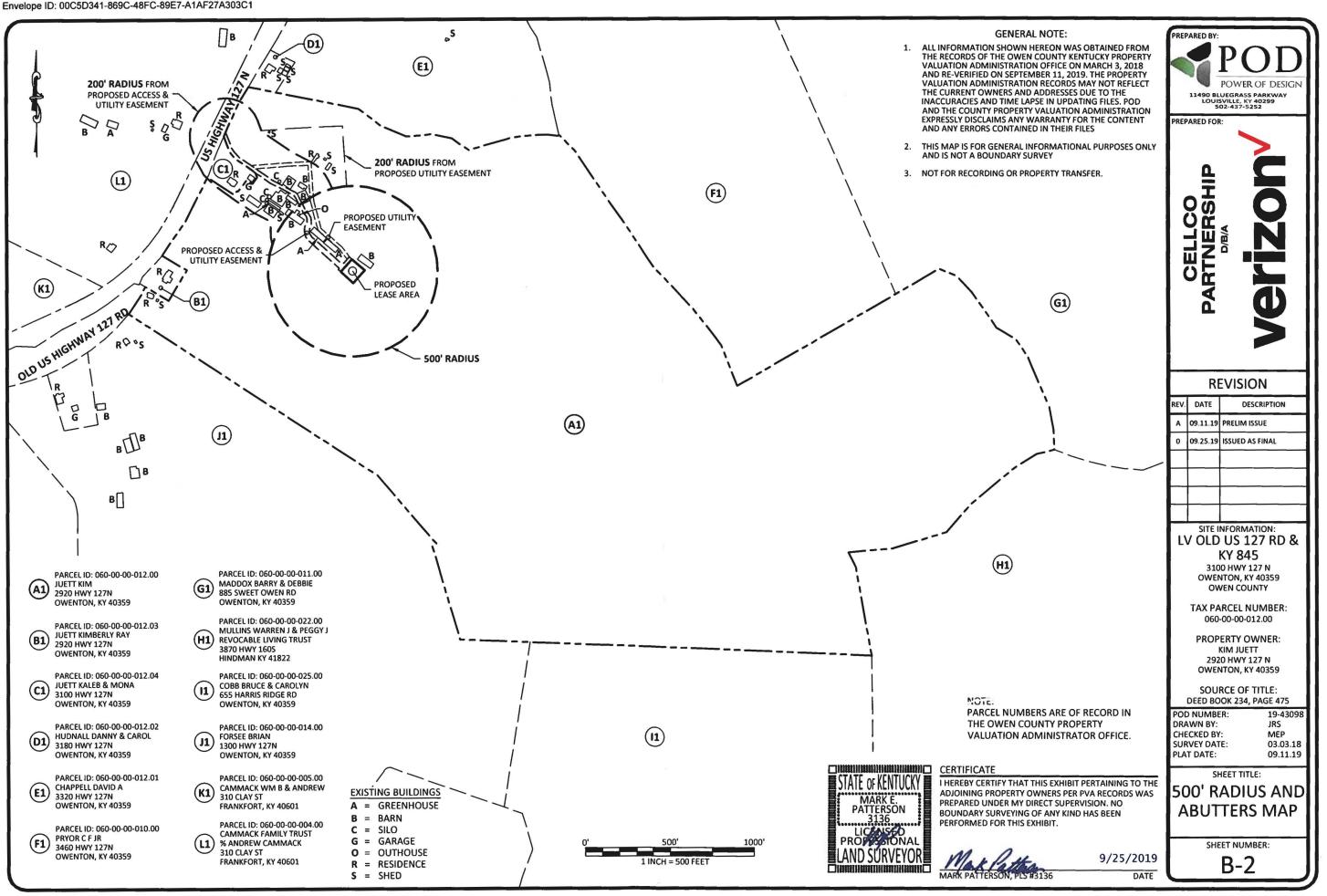
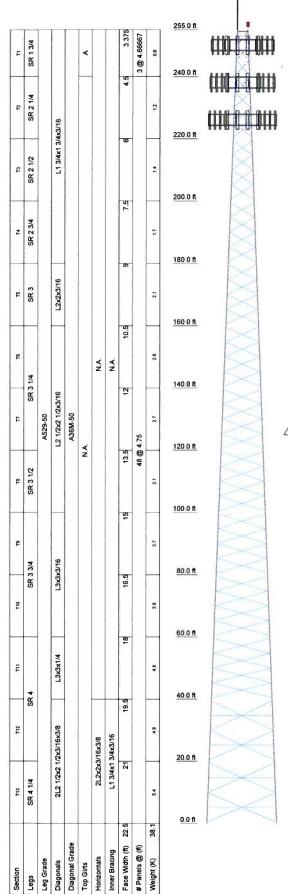


EXHIBIT D



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Lightning Rod 1"x10"	255	Sector2(CaAa=63.333 Sq.ft)No Ice	238
Top Beacon	255	(Carrier 2)	
Sector1(CaAa=83.333 Sq.ft)No Ice (Carrier 1)	250	Sector3(CaAa=63.333 Sq.ft)No Ice (Carrier 2)	238
Sector2(CaAa=83.333 Sq.ft)No Ice (Carrier 1)	250	Sector1(CaAa=50 Sq ft)No Ice (Carrier 3)	226
Sector3(CaAa=83.333 Sq.ft)No Ice (Carrier 1)	250	Sector2(CaAa=50 Sq ft)No Ice (Carrier 3)	226
Sector1(CaAa=63.333 Sq.ft)No Ice (Carrier 2)	238	Sector3(CaAa=50 Sq ft)No Ice (Carrier 3)	226

SYMBOL LIST

	The second secon			
MARK	SIZE	MARK	SIZE	
Α	L1 3/4x1 3/4x3/16			

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A529-50	50 ksi	65 ksi	A36M-50	50 ksi	65 ksi

TOWER DESIGN NOTES

- Tower is located in Owen County, Kentucky.
- Tower designed for Exposure C to the TIA-222-H Standard.
- Tower designed for a 106 mph basic wind in accordance with the TIA-222-H Standard.
- Tower is also designed for a 30 mph basic wind with 1.50 in ice. Ice is considered to increase in thickness with height.
- Deflections are based upon a 60 mph wind.
- Tower Risk Category II.
- Topographic Category 1 with Crest Height of 0.000 ft
- 8. Please see feedline plan for proper feedline placement. Deviation from plan may reduce tower capacity.

ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:

DOWN: 481 K SHEAR: 35 K

UPLIFT: -418 K SHEAR: 32 K

AXIAL 197 K SHEAR MOMENT 8 K 1223 kip-ft

TORQUE 3 kip-ft 30 mph WIND - 1.500 in ICE

AXIAL 71 K SHEAR MOMENT 8904 kip-ft

TORQUE 31 kip-ft REACTIONS - 106 mph WIND







B+T Group

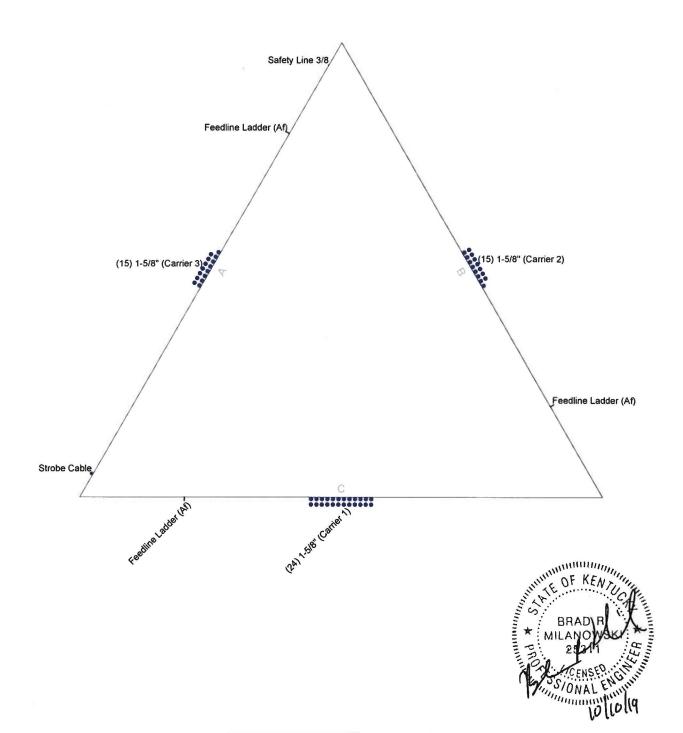
Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265

-		-			_
Job:	138409.001.01 - LV Old US 127	8	KY 8	145 (Site# KY-	Ot

1717 S. Boulder, Suite 300 Project: 255' SST - Owen County, KY Client: Eco-Site Drawn by xjones App'd Scale: NTS Code: TIA-222-H Date: 08/30/19 Dwg No. E-1

Feed Line Plan

App Out Face







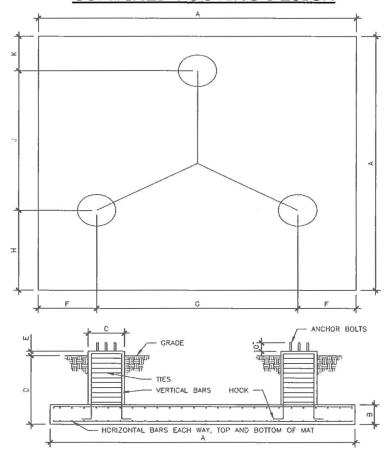
B+T Group 1717 S. Boulder, Suite 300
Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265

138409.001.01 - LV Old US 127 & KY 845 (Site# KY-0)

Project: 255' SST - Owen County, KY

Client: Eco-Site Drawn by: xjones App'd: Scale: NTS Code: TIA-222-H Date: 08/30/19 Dwg No. E-7

COMBINED FOOTING DESIGN



A (ft)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	H (in)	J (in)	K (in)
32.5	28.0	36	72	6	60	270	117 1/16	233 13/16	39 1/8
					Rebar Schedul	е		NAME OF THE PROPERTY OF THE PR	
Each Pier	(3 req'd)	Use (10) #9	vertical bar	s w/ 16" hook w	/ #4 ties @ 6" c/	'c.			
Pad		Use (38) #1	.0 bars equa	lly spaced, each	way, top and bo	ttom of mat. (152 bars total)		

General Notes:

- 1 . Concrete shall be placed in accordance with ACI 318-14 Latest Revision.
- 2. Concrete shall have a minimum 28 day compressive strength of 4,000 PSI, in accordance with ACI 318-14.
- 3. Rebar to conform to ASTM specification A615 grade 60, except ties may be grade 40.
- 4 . All rebar to have a minimum of 3" clear cover.
- 5. Bottom and front surfaces shall rest on undisturbed soil.
- $6\ . \ \$ Backfill shall be compacted to 95% of maximum proctor density.
- 7. Contractor shall be responsible to review and follow all recommendations of the geotechnical report.
- 8. Concrete mixtures shall meet the durability requirements of Chapter 19 of the ACI 318-14.
- 9 . Total estimated concrete volume: 94.55 cubic yards.

Supplemental Notes:

Soil values obtained from Power of Design Group, LLC, Project No. 17-15962, Dated: August 28, 2019 Anchor bolts provided by others

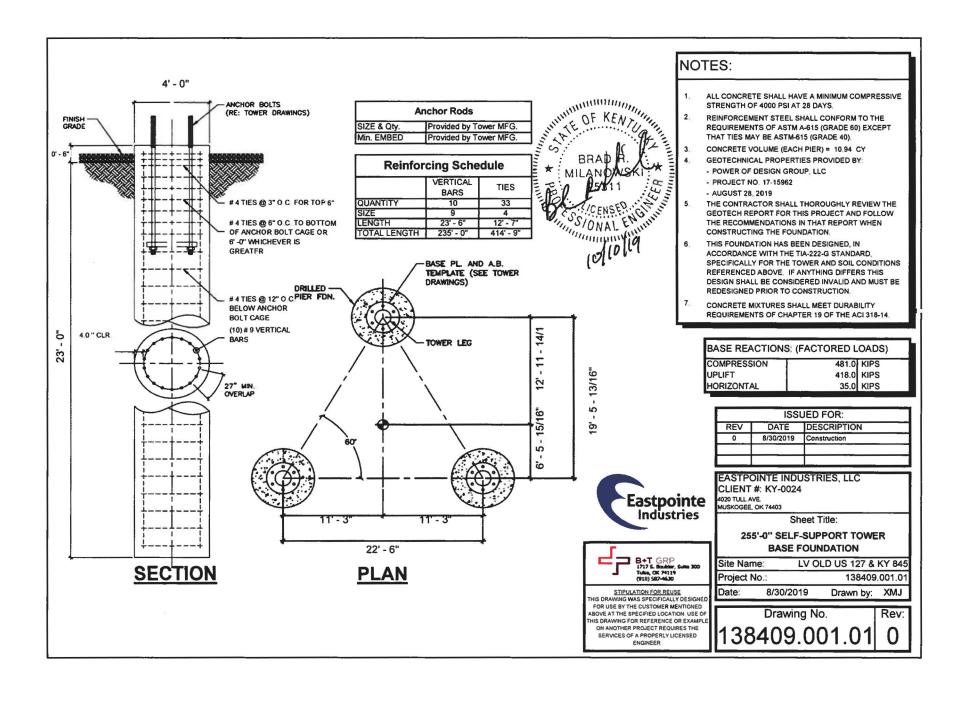


B+T Group 1717 S. Boulder, Suite 300 Tulsa, OK 74159 (918) 587-4630

Scale:	NTS	Drawn By: XMJ
Job:	138409.	.001.01a
Project:	190' - S	elf-Supporter
Site:	KY-0024	- LV Old US 127 & KY845
Date:	10/10/2	019



Eastpointe Industries 4020 Tull Ave. Muskogee, Ok 74403 (918) 683-2169



SST Unit Base Foundation

TIA-222 Revision: G

Top & Bot. Pad Rein. Different?:	F
Tower Centroid Offset?:	
Block Foundation?:	Г

Superstructure Analysis	Reactio	ns
Global Moment, M:	8904	ft-kips
Global Axial, P:	71	kips
Global Shear, V:	60	kips
Leg Compression, P _{comp} :	481	kips
Leg Comp. Shear, V _{u_comp} :	35	kips
Leg Uplift, Puplift:	418	kips
Leg Uplift. Shear, Vu_uplift:	32	kips
Tower Height, H:	255	ft
Base Face Width, BW:	22.5	ft
BP Dist. Above Fdn, bp _{dist} :	3	in

Founda	tion Analy	sis Checks		
	Capacity	Demand	Rating	Check
Lateral (Sliding) (kips)	286.58	60.00	20.9%	Pass
Bearing Pressure (ksf)	6.00	2.91	48.5%	Pass
Overturning (kip*ft)	11737.09	9309.00	79.3%	Pass
Pier Flexure (Comp.) (kip*ft)	838.86	145.95	17.4%	Pass
Pier Flexure (Tension) (kip*ft)	204.77	133.44	65.2%	Pass
Pier Compression (kip)	3374.26	486.31	14.4%	Pass
Pad Flexure (kip*ft)	4690.70	2342.08	49.9%	Pass
Pad Shear - 1-way (kips)	738.72	414.23	56.1%	Pass
Pad Shear - Comp 2-way (ksi)	0.164	0.115	70.3%	Pass

Pier Properties	\$	
Pier Shape:	Circular	
Pier Diameter, dpier:	3.0	ft
Ext. Above Grade, E:	0.50	ft
Pier Rebar Size, Sc:	9	
Pier Rebar Quantity, mc:	10	
Pier Tie/Spiral Size, St:	4	
Pier Tie/Spiral Quantity, mt:	6	
Pier Reinforcement Type:	Tie	
Pier Clear Cover, cc _{pler} :	3	in

Soil Rating:	79.3%
Structural Rating:	70.3%

Pad Properties		
Depth, D:	6.00	ft
Pad Width, W:	32.50	ft
Pad Thickness, T:	2.33	ft
Pad Rebar Size (Bottom), Sp:	10	
Pad Rebar Quantity (Bottom), mp:	38	
Pad Clear Cover, ccpad:	3	in

Material Propertie	es				
Rebar Grade, Fy: 60 ksi					
Concrete Compressive Strength, F'c:	3	ksi			
Dry Concrete Density, &c:	150	pcf			

Soil Properties	5	
Total Soil Unit Weight, γ:	120	pcf
Ultimate Gross Bearing, Qult:	8.000	ksf
Cohesion, Cu:	0.500	ksf
Friction Angle, φ:		degrees
SPT Blow Count, Nblows:	SHEET AL	
Base Friction, μ:	0.3	
Neglected Depth, N:	2.0	ft
Foundation Bearing on Rock?	No	
Groundwater Depth, gw:	N/A	ft

<-- Toggle between Gross and Net

Drilled Pier Foundation

TIA-222 Revison: G
Tower Type: Self Support

Applied	Loads	
	Comp.	Uplift
Moment (kip-ft)	100	
Axial Force (kips)	481	418
Shear Force (kips)	35	32

Material Properties					
Concrete Strength, fc:	4	ksi			
Rebar Strength, Fy:	60	ksi			

Pier Desi	gn Data	- 60
Depth	23	ft
Ext. Above Grade	0.5	ft
Pier Se	ction 1	
From 0.5' above grad	e to 23' below	grade
Pier Diameter	4	ft
Rebar Quantity	10	
Rebar Size	9	
Clear Cover to Ties	4	in
Tie Size	4	

Analysi	s Results		
Soil Lateral Capacity	Compression	Uplift	
D _{v=0} (ft from TOC)	12.50	12.50	
Soil Safety Factor	29.35	32,10	
Max Moment (kip-ft)	329.70	301.44	
Rating	4.5%	4.1%	
Soil Vertical Capacity	Compression	Uplift	
Skin Friction (kips)	428.83	428.83	
End Bearing (kips)	499.51	-	
Weight of Concrete (kips)	53.16	39.87	
Total Capacity (kips)	928.34	468.69	
Axial (kips)	534.16	418.00	
Rating	57.5%	89.2%	
Reinforced Concrete Capacity	Compression	Uplift	
Critical Depth (ft from TOC)	12.85	10.52	
Critical Moment (kip-ft)	329.02	284.63	
Critical Moment Capacity	1396.53	422.30	
Rating	23.6%	67.4%	Min Steel is assume

Check Limitation	
N/A	1
Load Z Normalization:	

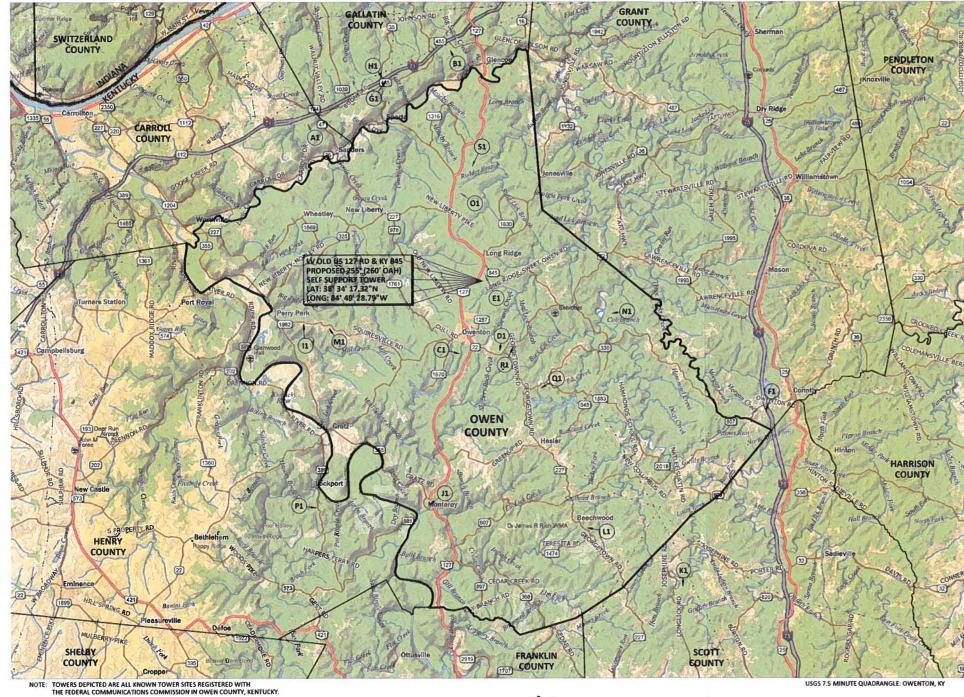
Soil Interaction Rating 89.2%
Structural Foundation Rating 67.4%

Soil Profile

Groundwate	er Depth	N/A	ft		l	# of Layers	4							
Layer	Top (ft)	Bottom (ft)	Thickness (ft)	Y _{soll} (pcf)	Y _{concrete} (pcf)	Cohesion (ksf)	Angle of Friction (degrees)	Calculated Ultimate Skin Friction Comp (ksf)	The second second second second	Ultimate Skin Friction Comp Override (ksf)	Ultimate Skin Friction Uplift Override (ksf)	Ult. Gross Bearing Capacity (ksf)	SPT Blow Count	Soil Type
WHOLE IS 1	Ó	3	3	120	150	0	0	0.000	0.000	0.00	0.00			Cohesionless
2	3	8	5	120	150	2		1.100	1.100	1.00	1.00			Cohesive
3	. 8	11	3	135	150	4		2.045	2.045	1.50	1.50			Cohesive
4	11	23	12	135	150	10		4.500	4.500	3.00	3,00	53		Cohesive



OWEN COUNTY, KENTUCKY **CELLCO PARTNERSHIP SITE NAME: LV SPARTA**





EXISTING TOWER LEGEND

FCC REGISTRATION #: 1000358
CROWN CASTLE GT COMPANY, LLC
LAT: 38* 40' 30.2"N



FCC REGISTRATION #: 1043324 CROWN CASTLE SOUTH, LLC LAT: 38" 31' 26.1"N LONG: 84" 50' 39.9"W

FCC REGISTRATION #: 1048215 KENTUCKY AUTHORITY FOR EDUCATIONAL TELEVISION dba = WKON LAT: 38° 31' 32.0"N

FCC REGISTRATION #: 1050171 WORLDWIDE COMMU LAT: 38° 34' 30.8"N

FCC REGISTRATION #: 1058575 SBA TOWERS, LLC
LAT: 38° 29' 09.0"N
LONG: 84° 35' 10.2"W

FCC REGISTRATION #: 1058582 SBA TOWERS, LLC LAT: 38* 42' 12.0"N

FCC REGISTRATION #: 1206875 H1 STC TWO, LLC
LAT: 38° 42' 18.0"N
LONG: 84° 54' 33.0"W

FCC REGISTRATION #: 1235662

CELLCO PARTNERSHIP
LAT: 38* 32' 36.1"N
LONG: 84* 58' 31.9"W

FCC REGISTRATION #: 1239816 CELLCO PARTNERSHIP LAT: 38° 25' 28.1"N LONG: 84° 52' 11.1"W

FCC REGISTRATION #: 1299088 PI TOWER DEVELOPMENT, LLC c/o LENDLEASE AMERICAS, INC. LAT: 38° 22' 13.6"N

a.k.a. RED OAK RD FCC REGISTRATION #: 1303987 TILLMAN INFRASTRUCTURE, LLC
LAT: 38° 24' 33.4"N

FCC REGISTRATION #: 1304821 M1 UNITI TOWERS, LLC LAT: 38° 32' 26.4"N LONG: 84° 57' 15.5"W

(GRANTED)

FCC REGISTRATION #: 1305293
NEW CINGULAR WIRELESS PCS, LLC
LAT: 38° 33' 01.3"N LONG: 84° 42' 55.4"W

(GRANTED) O1 NEW CINGULAR WIRELESS PCS, LLC LAT: 38° 37' 47.0"N

P1 NEW CINGULAR WIRELESS PCS, LLC LAT: 38* 25' 20.1"N LONG: 84* 57' 54.6"W

a.k.a. ELK LAKE SHORES FCC REGISTRATION #: 1306654
TILLMAN INFRASTRUCTURE, LLC LAT: 38° 30' 03.7"N

(GRANTED) a.k.a. LV KY 22 FCC REGISTRATION #: 1311959
CELLCO PARTNERSHIP LAT: 38° 31' 43.5"N LONG: 84° 47' 57.8"W

CLIENT PROVIDED TOWER SITES

SITE NAME: LV SPARTA S1 LAT: 38" 38" 50.60"N LONG: 84" 50" 00.46"W



PREPARED FOR:

CELLCO NRTNERSHIP

POWER OF DESIGN

11490 BLUEGRASS PARKWAY LOUISVILLE, KY 40299 502-437-5252

ΕX	HI	В	1

REV.	DATE	DESCRIPTION
Α	09.11.19	ISSUED FOR REVIEW
-		

SITE INFORMATION:

LV OLD US 127 RD & KY 845

3100 HWY 127 N OWENTON, KY 40359 OWEN COUNTY

TAX PARCEL NUMBER: 060-00-00-012.00

PROPERTY OWNER: KIM JUETT 2920 HWY 127 N OWENTON, KY 40359

SOURCE OF TITLE: DEED BOOK 234, PAGE 475

POD NUMBER: 18-43097 DRAWN BY: DAP CHECKED BY: MEP SURVEY DATE: 03.03.18 PLAT DATE: 09.11.19

SHEET TITLE:

TOWER GRID MAP

SHEET NUMBER: (1 pages)

C-1

EXHIBIT F



« OE/AAA

Notice of Proposed Construction or Alteration - Off Airport

Add a New Case Off Airport - Desk Reference Guide V_2018 2.1

Add a New Case (Off Airport) for Wind Turbines - Met Towers (with WT Farm) - WT-Barge Crane - Desk Reference Guide V_2018 2.1

Project Name: CELLC-000497782-18

Sponsor: Cellco Partnership

Details for Case: LV Old US 127 road and KY-845 - A

Show Project Summary

Case Status							
ASN:	2018-ASO-25834-OE		Date Accepted:	11/26/2018			
Status:	Work In Progress		Date Determined:				
ty as schoolsta	OPPLICATION CONTROL TO MANUE		Letters:	None			
			Documents:	11/26/2018	OldUS127RdK1	IALE	
Public Comments:	None						
				Project Documer	nts:		
				None			
Construction / Altera	tion Information		Structure Summar	y			
Notice Of:	Construction		Structure Type:	Antenna Tower			
Duration:	Permanent		Structure Name:	LV Old US 127 ro	ad and KY-845	- A	
if Temporary :	Months: Days:		FDC NOTAM:				
Work Schedule - Start:			NOTAM Number:				
Work Schedule - End:			FCC Number:				
	Does the permanent structure require se	name action to the E4.42	Prior ASN:				
To find out, use the Not	ice Criteria Tool. If separate notice is requ	uired, please ensure it is filed.	PHOP ASIN:				
2.5	state the reason in the Description of Proj	oosai,					
State Filing:							
		And the second of the second of the second	2 / 2014 2 14 5				
Structure Details			Proposed Frequen		. for an analysis of a	annia da Id	autifical in the
Latitude:		38° 34' 17.32" N	Select any combination Colo Void Clause Coal				
Longitude:		84° 49' 28.79" W		es, effective 21 Nov 2007, to be evaluated by the FAA with your fil vithin one of the frequency bands listed below, manually input your			
Horizontal Datum:		NAD83					
Site Elevation (SE):		949 (nearest foot) PASSED	proposed frequency(ie		ng the Add Spe	cific Free	quency link.
Structure Height (AGL):		260 (nearest foot)	Add Specific Frequen	High Freq	Freq Unit	ERP	ERP Unit
Current Height (AGL):		(nearest foot)	6	7	GHz	55	dBW
* For notice of alteration	n or existing provide the current	(6 10	11.7	GHz GHz	42 55	dBW dBW
AGL height of the existing Include details in the De			10 17.7	11.7 19.7	GHz GHz	42 55	dBW dBW
Include details in the pr	compiler of Proposal		17.7	19.7	GHz	42	dBW
Minimum Operating Hei	ght (AGL):	(nearest foot)	21.2 21.2	23.6 23.6	GHz GHz	55 42	dBW dBW
	of a crane or construction equipment		614	698	MHZ	1000	W
	ould be listed above as the Additionally, provide the minimum		614 698	698 806	MHz MHz	2000 1000	W
operating height to avoi	id delays if impacts are identified that		806	901	MHz	500	W
	reduced height. If the Structure Height		806 824	824 849	MHz MHz	500 500	W
value in both fields.	height are the same enter the same		851	866	MHz	500	W
			869 896	894 901	MHz MHz	500 500	W
Requested Marking/Ligi	hting:	Dual-red and medium intensity	901	902	MHZ	7	W
	Other:		929 930	932 931	MHz MHz	3500 3500	w
Recommended Marking	/Lighting:		931 932	932 932.5	MHz MHz	3500 17	W dBW
Current Marking/Lighting		N/A Proposed Structure	935	940	MHZ	1000	W
, , , ,	Other:		940 1670	941 1675	MHz MHz	3500 500	W
	Other:	L	1710 1850	1755	MHz MHz	500 1640	W
Nearest City:		Owenton	1850	1910 1990	MHz	1640	W
Nearest State:		Kentucky	1930 1990	1990 2025	MHz MHz	1640 500	W
Description of Location:		3100 Hwy 127 N	2110	2200	MHZ	500	w
100 10 Miles 100 100 100 100 100 100 100 100 100 10	y page upload any certified survey.	Depared 260/ tower If madding/light/ (-	2305 2305	2360 2310	MH2 MH2	2000 2000	W
Description of Proposal:		Proposed 260' tower. If marking/lighting is required, dual/med intensity is requested.	2345 2496	2360 2690	MHz MHz	2000 500	W
		For questions, contact Lauren Bradsher @	2430	2030	1.112	300	
		770-797-1058					

← Previous Back to Search Result Next →



March 8, 2018

POD Project #: 18-20919

CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS

1A Letter

Site Name:

LV Old Us 127 Rd & KY 845

Site Number:

Site Address:

3100 Highway 127 North

Owenton, KY 40359

County:

Owen

USGS Quad Map: Owenton

Site Coordinates:

NAD 83

Latitude:

38° 34′ 17.32″

Longitude:

84° 49' 28.79"

Site Elevation (NAVD88): 949'± AMSL

The horizontal coordinates are per the North American Datum of 1983 (2011) Kentucky State Plane Single Zone. Coordinates are shown as degrees, minutes and seconds which were derived from KDOT VRS RTK Network.

The vertical elevations are per the North American Vertical Datum of 1988, which were derived from KDOT VRS RTK Network.

I hereby certify that the horizontal and vertical locations are accurate to within 1A reporting requirements (20'± horizontally and 3'± feet vertically). The type of GPS survey utilized was network adjusted real time kinematic (KDOT VRS RTK Network) with the orthometric height computed using GEOID12A.

The above-mentioned coordinates were established using "Spectra Precision Epoch 50 receivers" and are tied to the National Geodetic Reference System established by the National Geodetic Survey.

Consultant

Mark E. Patterson, PLS Power of Design Group, LLC 11490 Bluegrass Parkway

Louisville, KY 40299



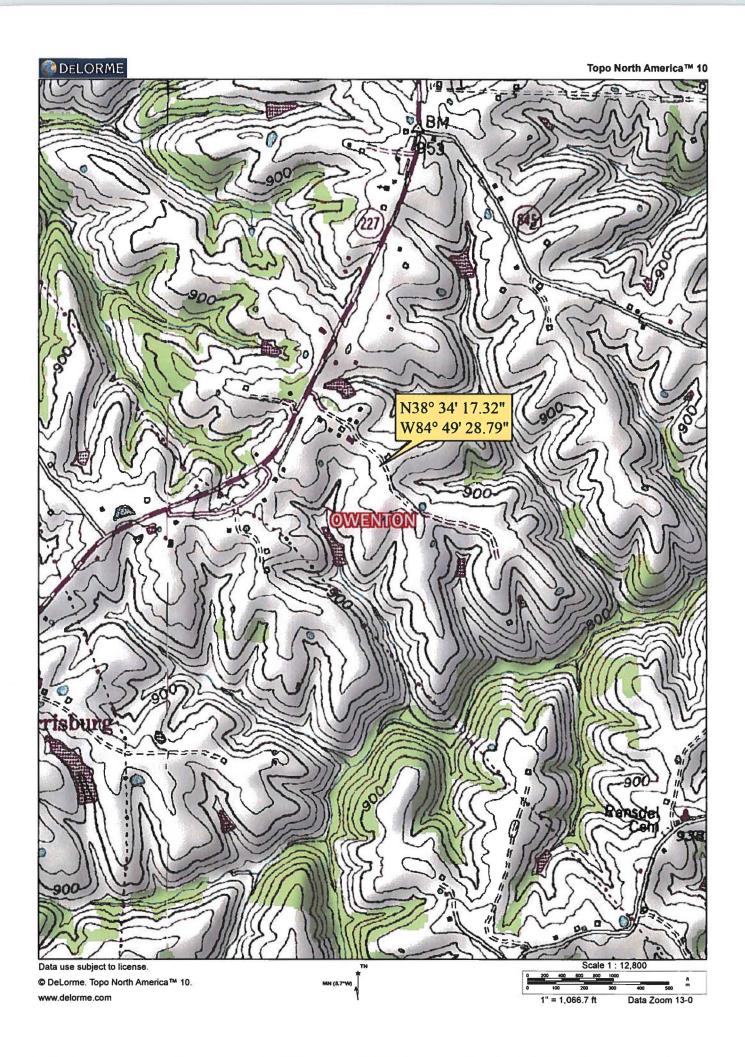


EXHIBIT G



KENTUCKY TRANSPORTATION CABINET

TC 55-2 Rev. 05/2017 Page 2 of 2

KENTUCKY AIRPORT ZONING COMMISSION

APPLI	CATION FOR	PERMIT TO COM	NSTRUCT OR AL	TER A STRUCTU	RE		
APPLICANT (name)		PHONE	FAX	KY AERONAUTICA	L STUDY #		
Verizon Wireless							
ADDRESS (street)		CITY		STATE	ZIP		
5055 North Point Pkwy		Alpharetta		GA	30022		
APPLICANT'S REPRESE	NTATIVE (name)	PHONE	FAX				
Lauren Bradsher		770-797-1058					
ADDRESS (street)		CITY		STATE	ZIP		
APPLICATION FOR	New Construct	ion Alteration	Existing	WORK SCHEDULE			
DURATION Perm	anent 🔲 Tem	porary (months	days)	Start End			
TYPE Crane	Building	MARKING/PAINTIN	G/LIGHTING PREFE	RRED			
🛛 Antenna Tower		Red Lights & Pai	nt White- med	ium intensity 🔲 V	Vhite-high intensity		
	ater Tank ther	Dual- red & med Other	lium intensity white	Dual- red & h	igh intensity white		
LATITUDE		LONGITUDE	20.00	DATUM NAD	83 NAD27		
38°34′17.32″		84 ⁰ 49'28.79"		Other			
NEAREST KENTUCKY		NEAREST KENTUCK	Y PUBLIC USE OR M	The state of the s			
City Owenton County C)wen	811					
SITE ELEVATION (AMSL 949	., feet)	HEIGHT (AGL, feet)	CURRENT (FAA aeronautical study #) 2018-ASO-25834-OE				
OVERALL HEIGHT (site	elevation plus tot	al structure height, j	feet)	PREVIOUS (FAA ae	ronautical study #)		
1209	-			DDELMONE /WV			
DISTANCE (from neares 19.05 NM	с кепсиску ривно	use or willitary airp	ort to structure)	PREVIOUS (KY aero	nauticai stuay #}		
DIRECTION (from neare	est Kantusky nuhli	cuse or Military air	nort to structure)				
112.65 ESE	st Kentucky publi	c use or willicary uni	bort to structure;				
DESCRIPTION OF LOCA	TION (Attach USC	S 7.5 minute avadri	anale man or an airt	ort lavout drawing	with the precise site		
marked and any certifie		io i io i i i i i i i i i i i i i i i i	angle map or an amp	ort layout arawing	martine precise six		
3100 Hwy 127 N	,						
,							
DESCRIPTION OF PROP	OSAL	3 WITCH 05-00M-ANN					
proposed 260' self supp	oort tower						
FAA Form 7460-1 (Has		nstruction or Alterat	ion" been filed with	the Federal Aviation	Administration?)		
CERTIFICATION (I hereb	THE RESERVE THE PERSON NAMED IN THE PERSON NAM	he ahove entries m	ade hy me are true	complete and corre	ert to the hest of		
my knowledge and belie		ine above entires, in	due by me, are true,	complete, and com	et to the best of		
PENALITIES (Persons fa		th KRS 183.861 to 1	83.990 and 602 KAR	050 are liable for fil	nes and/or		
imprisonment as set for							
NAME	TITLE	SIGNATURE		DATE			
Lauren Bradsher	Engineer I	Jamen B	inish	1/16/19			
COMMISSION ACTION		Chairperson		•			
Approved	SIGNATURE			DATE			
Disapproved							
			Company of the Compan	Name of the second second			

EXHIBIT H

Date: August 28, 2019

POD Job Number: 17-15962

GEOTECHNICAL REPORT

LV OLD US 127 RD & KY 845

38° 34′ 17.32″ N 84° 49′ 28.79″ W

3100 Hwy 127 N, Owenton, KY 40359

Prepared For:



Prepared By:





August 28, 2019

Mr. Mike Rerecich Verizon Wireless 2421 Holloway Road Louisville, KY 40299

Re:

Geotechnical Report - PROPOSED 255' SELF-SUPPORT TOWER w/ 5' LIGHTNING ARRESTOR

Site Name: LV OLD US 127 RD & KY 845

Site Address: 3100 Hwy 127 N, Owenton, Owen County, Kentucky

Coordinates: N38° 34' 17.32", W84" 49' 28.79"

POD Project No. 17-15962

Dear Mr. Rerecich:

Attached is our geotechnical engineering report for the referenced project. This report contains our findings, an engineering interpretation of these findings with respect to the available project characteristics, and recommendations to aid design and construction of the tower and equipment support foundations.

We appreciate the opportunity to be of service to you on this project. If you have any questions regarding this report, please contact our office.

Cordially,

Mark Patterson, P.E. Project Engineer

Max Patters

License No.: KY 16300

Copies submitted:

(3) Mr. Mike Rerecich

LV OLD US 127 RD & KY 845 August 28, 2019

LETTER OF TRANSMITTAL

TABLE OF CONTENTS

			<u>Page</u>				
1.	PUR	RPOSE AND SCOPE	1				
2.	PRC	DJECT CHARACTERISTICS	1				
3.	SUB	SURFACE CONDITIONS	1				
4.	FOL	INDATION DESIGN RECOMMENDATIONS	2				
	4.1.	Proposed Tower	2				
	4.1.	1. Drilled Piers	3				
	4.1.	2. Mat Foundation	3				
	4.2.	EQUIPMENT PLATFORM					
	4.3.	EQUIPMENT SLAB	4				
	4.4.	EQUIPMENT BUILDING	4				
	4.5.	DRAINAGE AND GROUNDWATER CONSIDERATIONS	5				
5.	GEN	IERAL CONSTRUCTION PROCEDURES AND RECOMMENDATIONS	5				
	5.1	Drilled Piers	5				
	5.2	FILL COMPACTION	6				
	5.3	CONSTRUCTION DEWATERING	6				
6	FIEL	D INVESTIGATION	7				
7	WA	RRANTY AND LIMITATIONS OF STUDY	7				
•		· ····· · · · · · · · · · · · · · · ·					

APPENDIX

BORING LOCATION PLAN BORING LOGS SOIL SAMPLE CLASSIFICATION

LV OLD US 127 RD & KY 845 August 28, 2019

Geotechnical Report

PROPOSED 255' SELF-SUPPORT TOWER w/ 5' LIGHTNING ARRESTOR

Site Name: LV OLD US 127 RD & KY 845

3100 Hwy 127 N, Owenton, Owen County, Kentucky

N38° 34' 17.32", W84° 49' 28.79"

1. PURPOSE AND SCOPE

The purpose of this study was to determine the general subsurface conditions at the site of the proposed tower by

drilling three borings and to evaluate this data with respect to foundation concept and design for the proposed

tower and shelter. Also included is an evaluation of the site with respect to potential construction problems and

recommendations dealing with quality control during construction.

2. PROJECT CHARACTERISTICS

Verizon is proposing to construct a self-support tower and either an equipment shelter, slab or platform at N38°

34' 17.32", W84° 49' 28.79", 3100 Hwy 127 N, Owenton, Owen County, Kentucky. The site is located in a farm field

next to some greenhouses and a barn in a rural area north of Owenton. The proposed lease area will be 10,000

square feet and will be accessed by an existing concrete and gravel drive off Hwy 127 running east to the site. The

elevation at the proposed tower location is about EL 949 and there is about 6 feet change in elevation across the

proposed lease area. The development will also include a small equipment shelter near the base of the tower. The

proposed tower location is shown on the Boring Location Plan in the Appendix.

3. SUBSURFACE CONDITIONS

The subsurface conditions were explored by drilling three test borings near the base of the proposed tower. The

Geotechnical Soil Test Boring Logs, which are included in the Appendix, describes the materials and conditions

encountered. A sheet defining the terms and symbols used on the boring logs is also included in the Appendix. The

general subsurface conditions disclosed by the test borings are discussed in the following paragraphs.

According to the Kentucky Geological Survey, Kentucky Geologic Map Information Services, the site is underlain by the

Upper Ordovician age Calloway Creek Limestone Formation. This formation consists of limestone with minor shale.

There is medium karst potential for this formation and one sinkhole was mapped with one-quarter mile of the site.

The borings encountered about 6 to 10 inches of topsoil at the existing ground surface. Below the topsoil, the borings

encountered silty clay (CL) of low to medium plasticity that contained a significant amount of highly weathered rock

fragments below about 8 feet to auger refusal depths between 9.3 and 11.6 feet. Auger refusal is defined as the depth

at which the boring can no longer be advanced using the current drilling method. The SPT N-values in the silty clay

1

LV OLD US 127 RD & KY 845 August 28, 2019

were between 9 and over 50 blows per foot (bpf) generally indicating a medium stiff to hard consistency.

The refusal material was cored in Boring 1 from 11.6 to 26.6 feet below the ground surface. Limestone with thin shale partings that was hard, moderately to slightly weathered, light gray to gray was encountered. The recoveries of the cores were 80, 93 and 100 percent with RQD values of 28, 50 and 30 percent. These values generally represent fair quality rock from a foundation support viewpoint.

Observations made at the completion of soil drilling operations indicated the borings to be dry. It must be noted, however, that short-term water readings in test borings are not necessarily a reliable indication of the actual groundwater level. Furthermore, it must be emphasized that the groundwater level is not stationary but will fluctuate seasonally.

Based on the limited subsurface conditions encountered at the site and using Table 1615.1.1 of the 2018 Kentucky Building Code, the site class is considered "C". Seismic design requirements for telecommunication towers are given in section 1622 of the code. A detailed seismic study was beyond the scope of this report.

4. FOUNDATION DESIGN RECOMMENDATIONS

The following design recommendations are based on the previously described project information, the subsurface conditions encountered in our borings, the results of our laboratory testing, empirical correlations for the soil types encountered, our analyses, and our experience. If there is any change in the project criteria or structure location, you should retain us to review our recommendations so that we can determine if any modifications are required. The findings of such a review can then be presented in a supplemental report or addendum.

We recommend that the geotechnical engineer be retained to review the near-final project plans and specifications, pertaining to the geotechnical aspects of the project, prior to bidding and construction. We recommend this review to check that our assumptions and evaluations are appropriate based on the current project information provided to us, and to check that our foundation and earthwork recommendations were properly interpreted and implemented.

4.1. Proposed Tower

Our findings indicate that the proposed self-support can be supported on drilled piers or on a common mat foundation.

LV OLD US 127 RD & KY 845 August 28, 2019

4.1.1. Drilled Piers

The following table summarizes the recommended values for use in analyzing lateral and frictional resistance for the various strata encountered at the test boring. It is important to note that these values are estimated based on the standard penetration test results and soil types and were not directly measured. The all values provided are ultimate values and appropriate factors of safety should be used in conjunction with these values. If the piers will bear deeper than about 26 feet, a deeper boring should be drilled to determine the nature of the deeper material.

Depth Below Ground Surface, feet	0-3	3-8	8 - 11	11 - 26
Ultimate Bearing Pressure (psf)		11,600	23,000	53,000
C Undrained Shear Strength, psf	500	2,000	4,000	10,000
Ø Angle of Internal Friction degrees	0	0	0	0
Total Unit Weight, pcf	120	120	135	135
Soil Modulus Parameter k, pci	30	750	1000	2000
Passive Soil Pressure,		1,350+	2,675 +	6,750+
psf/one foot of depth	-	40(D-3)	45(D-8)	45(D-11)
Side Friction, psf		500	750	1500

Note: D = Depth below ground surface (in feet) to point at which the passive pressure is calculated.

It is important that the drilled piers be installed by an experienced, competent drilled pier contractor who will be responsible for properly installing the piers in accordance with industry standards and generally accepted methods, without causing deterioration of the subgrade. The recommendations contained herein relate only to the soil-pier interaction and do not account for the structural design of the piers.

4.1.2. Mat Foundation

The tower could be supported on a common mat foundation bearing on the silty clay at a minimum of 3 feet can be designed using an allowable soil pressure of 4,000 pounds per square foot may be used. This value may be increased by 30 percent for the maximum edge pressure under transient loads. A friction value of 0.30 may be used between the

LV OLD US 127 RD & KY 845 August 28, 2019

concrete and the silty clay soil. The passive pressures given for the drilled pier foundation may be used to resist lateral forces.

It is important that the mat be designed with an adequate factor of safety with regard to overturning under the maximum design wind load.

4.2. Equipment Platform

An equipment platform may be supported on shallow piers bearing in the natural clay and designed for a net allowable soil pressure of 2,500 pounds per square foot. The piers should bear at a depth of at least 24 inches to minimize the effects of frost action. All existing topsoil or soft natural soil should be removed beneath footings.

4.3. Equipment Slab

A concrete slab supporting the equipment must be supported on at least 6-inch layer of relatively clean granular material such as gravel or crushed stone containing not more than 10 percent material that passes through a No. 4 sieve. This is to help distribute concentrated loads and equalize moisture conditions beneath the slab. Provided that a minimum of 6 in. of granular material is placed below the slab, a modulus of subgrade reaction (k30) of 120 lbs/cu.in. can be used for design of the slab. All existing topsoil or soft natural soil should be removed beneath crushed stone layer.

4.4. Equipment Building

If an equipment building support on a slab is chosen in place of the equipment platform, it may be supported on shallow spread footings bearing in the natural clay soil and designed for a net allowable soil pressure of 2,500 pounds per square foot.

The footings should be at least ten inches wide. If the footings bear on soil, they should bear at a depth of at least 24 inches to minimize the effects of frost action. All existing topsoil or soft natural soil should be removed beneath footings.

The floor slab for the new equipment building can be supported on firm natural soils or on new compacted structural fill. Existing fill may be left in place below the slab if the owner can accept the possibility of greater than normal settlement and cracking. This risk can be reduced if the underlying subgrade is properly proof-rolled and any unstable areas disclosed by the proof-roll are improved as necessary.

LV OLD US 127 RD & KY 845 August 28, 2019

Floor slabs must be supported on at least 4-inch layer of relatively clean granular material such as gravel or crushed stone containing not more than 10 percent material that passes through a No. 4 sieve. This is to help distribute concentrated loads and equalize moisture conditions beneath the slab. Provided that a minimum of 4 in. of granular material is placed below the slab, a modulus of subgrade reaction (k30) of 120 lbs/cu.in. can be used for design of the floor slabs.

4.5. Drainage and Groundwater Considerations

Good site drainage must be provided. Surface run-off water should be drained away from the tower and platform and not allowed to pond. It is recommended that all foundation concrete be placed the same day the excavation is made.

At the time of this investigation, groundwater was not encountered. Therefore, no special provisions regarding groundwater control are considered necessary for shallow foundations. Any seepage should be able to be pumped with sumps.

5. GENERAL CONSTRUCTION PROCEDURES AND RECOMMENDATIONS

It is possible that variations in subsurface conditions will be encountered during construction. Although only minor variations that can be readily evaluated and adjusted for during construction are anticipated, it is recommended the geotechnical engineer, or a qualified representative be retained to perform continuous inspection and review during construction of the soils-related phases of the work. This will permit correlation between the test boring data and the actual soil conditions encountered during construction.

5.1 Drilled Piers

The following recommendations are recommended for drilled pier construction:

- All piers must be poured the same day drilling is completed so that any shale is not allowed to swell. Clean the foundation bearing area so it is nearly level or suitably benched and is free of ponded water or loose material.
- Make provisions for ground water removal from the drilled shaft excavation. While the borings were dry prior to rock coring and significant seepage is not anticipated, the drilled pier contractor should have pumps on hand to remove water in the event seepage into the drilled pier is encountered.

LV OLD US 127 RD & KY 845 August 28, 2019

- Specify concrete slumps ranging from 4 to 7 inches for the drilled shaft construction. These slumps are recommended to fill irregularities along the sides and bottom of the drilled hole, displace water as it is placed, and permit placement of reinforcing cages into the fluid concrete.
- Retain the geotechnical engineer to observe foundation excavations after the bottom of the hole is leveled, cleaned of any mud or extraneous material, and dewatered.
- Install a temporary protective steel casing to prevent side wall collapse, prevent excessive mud and water intrusion in the drilled shaft.
- The protective steel casing may be extracted as the concrete is placed provided a sufficient head of concrete is maintained inside the steel casing to prevent soil or water intrusion into the newly placed concrete.
- Direct the concrete placement into the drilled hole through a centering chute to reduce side flow or segregation.

5.2 Fill Compaction

All engineered fill placed adjacent to and above the tower foundation should be compacted to a dry density of at least 95 percent of the standard Proctor maximum dry density (ASTM D-698). This minimum compaction requirement should be increased to 98 percent for any fill placed below the tower foundation bearing elevation. Any fill placed beneath the tower foundation should be limited to well-graded sand and gravel or crushed stone. The compaction should be accomplished by placing the fill in about 8 inch (or less) loose lifts and mechanically compacting each lift to at least the specified minimum dry density. Field density tests should be performed on each lift as necessary to ensure that adequate moisture conditioning and compaction is being achieved.

Compaction by flooding is not considered acceptable. This method will generally not achieve the desired compaction and the large quantities of water will tend to soften the foundation soils.

5.3 Construction Dewatering

If groundwater is encountered in the shallow foundations, it should be minor and can be handled by conventional dewatering methods such as pumping from sumps.

If groundwater is encountered in the drilled pier excavations, it may be more difficult since pumping directly from the excavations could cause a deterioration of the bottom of the excavation. If the pier excavations are not

LV OLD US 127 RD & KY 845 August 28, 2019

dewatered, concrete should be placed by the tremie method. If groundwater sits on the bottom of the foundation for longer than an hour, the bottom should be cleaned again before the pier is poured.

6 FIELD INVESTIGATION

Three soil test borings were drilled near the base of the existing tower. Split-spoon samples were obtained by the Standard Penetration Test (SPT) procedure (ASTM D1586) in all test borings. The borings encountered auger refusal between 9.3 and 11.6 feet. A sample of the refusal material was cored in Boring 1 from 11.6 to 26.6 feet below the ground surface. The split-spoon samples were inspected and visually classified by a geotechnical engineer. Representative portions of the soil samples were sealed in glass jars and returned to our laboratory.

The boring logs are included in the Appendix along with a sheet defining the terms and symbols used on the logs and an explanation of the Standard Penetration Test (SPT) procedure. The logs present visual descriptions of the soil strata encountered, Unified System soil classifications, groundwater observations, sampling information, laboratory test results, and other pertinent field data and observations.

7 WARRANTY AND LIMITATIONS OF STUDY

Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. This warranty is in lieu of all other warranties, either express or implied. POD Group is not responsible for the independent conclusions, opinions or recommendations made by others based on the field exploration and laboratory test data presented in this report.

A geotechnical study is inherently limited since the engineering recommendations are developed from information obtained from test borings, which depict subsurface conditions only at the specific locations, times and depths shown on the logs. Soil conditions at other locations may differ from those encountered in the test borings, and the passage of time may cause the soil conditions to change from those described in this report.

The nature and extent of variation and change in the subsurface conditions at the site may not become evident until the course of construction. Construction monitoring by the geotechnical engineer or a representative is therefore considered necessary to verify the subsurface conditions and to check that the soils connected construction phases are properly completed. If significant variations or changes are in evidence, it may then be necessary to reevaluate the recommendations of this report. Furthermore, if the project characteristics are altered significantly from those discussed in this report, if the project information contained in this report is incorrect, or if additional information

DocuSign Envelope ID: F07DE840-A688-484E-AA62-41BA4571DFE3

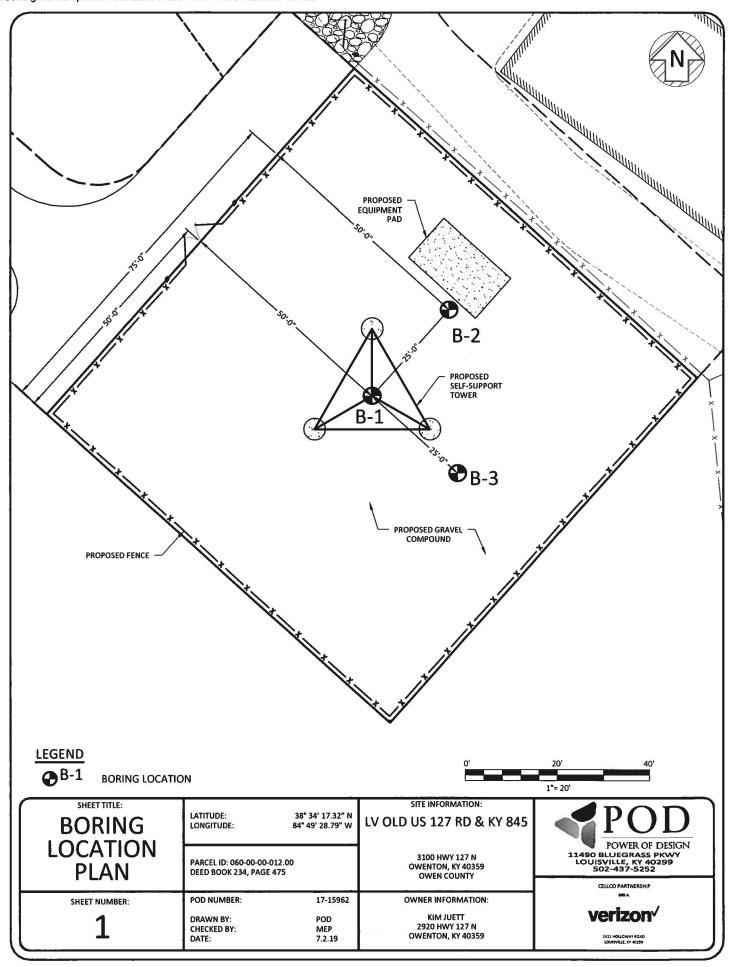
Geotechnical Report

LV OLD US 127 RD & KY 845 August 28, 2019

becomes available, a review must be made by this office to determine if any modification in the recommendations will be required.

APPENDIX

BORING LOCATION PLAN
BORING LOGS
SOIL SAMPLE CLASSIFICATION





Boring Log

Boring: B-1

Page 1 of 1

Owenton, KY Project: LV Old 127 Rd & KY 845 City, State S.F.A. **Boring Date:** 8-Aug-19 **Location: Proposed Tower Center Drill Rig Type:** D - 50 Hammer Type: Auto

Method: Inside Diameter: 4" Groundwater: DRY Weather: Driller: Strata Group Note: About 6 inches of topsoil was encountered at the existing ground surface Depth Rock Quality (RQD,%) Unconfined Compressive Strength, (ksf) Recovery (in) Moisture Content (%) SPT-N value % Fines (clay & silt) Atterberg Limits increment **Blows** per Sample From To £ **Material Description** (ft) (ft) SILTY CLAY (CL) - very stiff, dry, brown 25 0.5 11.6 0 - 1.5 SS 12, 13 12 13% 1.5 - 3 15, 10, 9 2 19, 13% 4.0 light brown-light gray mottled 4 - 5.5 8, 19, 17% 11 6 12 67, 12% 6.5 - 8 SS 11, 17, 50 with limestone and shale fragments 7.9 9 - 10.5 50, 50, 6 11.6 16.5 LIMESTONE with thin SHALE partings hard, moderately to slightly weathered, 11.6-16.6 48 28% light gray to gray 16.6-21.6 50% 56 21.6-26.6 60 30% Boring Terminated at 26.6 feet



Boring Log

Boring: B-2

Page 1 of 1

City, State Project: LV Old 127 Rd & KY 845 Owenton, KY Boring Date

Met	Method: S.F.A. Boring Date:			8-Aug-19						Location: Proposed Tower Center							
Inside Diameter: 4" Drill Rig Type:				D - 50						Hammer Type: Auto							
	ındwat	Weather:															
Driller: Strata Group Note: About 9 inches of topsoil was encountered at the existing ground surface																	
	From (ft)	To (ft)	Mater	ial Description		Sample Depth (ft)	Sample Type		Blows per 6-inch	increment	Recovery (in)	SPT-N value	Rock Quality (RQD,%)	Atterberg Limits	Moisture Content (%)	% Fines (clay & silt)	Unconfined Compressive Strength, (ksf)
	0.8	11.3) - very stiff, dry, brown		0 - 1.5	SS	12,	9,	12	3	21			9%		
	0.0	1.5	- stiff			1.5 - 3	SS	6,	6,	7	3	13,			11%		6.0
		4.0	- slighty moist, li mottled	ght brown- light gray		4 - 5.5	SS	3,	5,	8	16	13,			24%		3.7
		6.5	- hard			6.5 - 8	SS	5,	12,	38	13	50,			11%		6.0
		8.4	- with limestone	and shale fragments		9 - 10.5	F		50,		0	50,					
			Auger Refusal at 11.3 feet														



Boring Log

Boring: B-3

Page 1 of 1

Project: LV Old 127 Rd & KY 845 City, State

Owenton, KY

Method: S.F.A. **Boring Date:** 8-Aug-19 **Location: Proposed Tower Center** D - 50 Inside Diameter: 4" **Drill Rig Type: Hammer Type: Auto**

Weather: Groundwater: DRY Note: About 10 inches of topsoil was encountered at the existing ground surface Driller: Strata Group Sample Depth (ft) Rock Quality (RQD,%) Recovery (in) Moisture Content (%) Unconfined Compressive % Fines (clay & silt) SPT-N value **Blows** per From То **Material Description** (ft) (ft) SILTY CLAY (CL) - very stiff, brown 0 - 1.5 0.9 9.3 3 17 20% 10, 9, 1.5 1.5 - 3 SS 2 11, 19% 5, 6 medium stiff, slighty moist, light brown-4.0 4 - 5.5 5, 5, 4 16 9, 25% 4.0 light gray mottled with limestone and shale fragments 6.5 6.5 - 8 SS 7, 64, 22% 3.5 14, 50 12 Auger Refusal at 9.3 feet

	FIN	IE AND COAI	RSE GRAINED	SOIL INFOR	MATION		
	COARSE GRAINED SOILS FINE GRAINED SOILS PARTICLE SIZE (SANDS & GRAVELS) (SILTS & CLAYS)						
	E			Qu, KSF			
N	Relative Density	<u>N</u>	Consistency	<u>Estimated</u>	Boulders	Greater than 300 mm (12 in)	
0-4	Very Loose	0-1	Very Soft	0-0.5	Cobbles	75 mm to 300 mm (3 to 12 in)	
5-10	Loose	2-4	Soft	0.5-1	Gravel	4.74 mm to 75 mm (3/16 to 3 in)	
11-20	Firm	5-8	Firm	1-2	Coarse Sand	2 mm to 4.75 mm	
21-30	Very Firm	9-15	Stiff	2-4	Medium Sand	0.425 mm to 2 mm	
31-50	Dense	16-30	Very Stiff	4-8	Fine Sand	0.075 mm to 0.425 mm	
Over 50	Very Dense	Over 31	Hard	8+	Silts & Clays	Less than 0.075 mm	

The **STANDARD PENETRATION TEST** as defined by ASTM D 1586 is a method to obtain a disturbed soil sample for examination and testing and to obtain relative density and consistency information. A standard 1.4-inch I.D./2-inch O.D. split-barrel sampler is driven three 6-inch increments with a 140 lb. hammer falling 30 inches. The hammer can either be of a trip, free-fall design, or actuated by a rope and cathead. The blow counts required to drive the sampler the final two increments are added together and designate the N-value defined in the above tables.

DO	CV	DD		3	DT	ICC
RO	CN	PK	O1		ĸП	IΕS

ROCK QUALITY DESIGNATION (RQD)			ROCK HARDNESS		
Percent RQD Quality		Very Hard:	Rock can be broken by heavy hammer blows.		
0-25	Very Poor	Hard:	Rock cannot be broken by thumb pressure, but can be broken by moderate hammer blows.		
25-50	Poor	Moderately	Small pieces can be broken off along sharp edges by considerable		
50-75	Fair	Hard:	hard thumb pressure; can be broken with light hammer blows.		
75-90	Good	Soft:	Rock is coherent but breaks very easily with thumb pressure at sharp edges and crumbles with firm hand pressure.		
90-100	Excellent	Very Soft:	Rock disintegrates or easily compresses when touched; can be hard to very hard soil.		

Recovery =	<u>Length of Rock Core Recovered</u> Length of Core Run	X100	63 REC NQ	Core Diameter BQ NQ	Inches 1-7/16 1-7/8
POD -	Sum of 4 in, and longer Rock Pieces Recovered	¥100	43 RQD	HQ	2-1/2

SYMBOLS

KEY TO MATERIAL TYPES

Length of Core Run

		SOILS		
Group Symbols		Typical Names		
GW		Well graded gravel - sand mixture, little or no fines		
GP		Poorly graded gravels or gravel - sand mixture, little or no fines		
GM		Silty gravels, gravel - sand silt mixtures		
GC		Clayey gravels, gravel - sand - clay mixtures		
sw		Well graded sands, gravelly sands, little or no fines		
SP		Poorly graded sands or gravelly sands, little or no fines		
SM		Silty sands, sand - silt mixtures		
sc		Clayey sands, sand - day mixtures		
ML		Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts		
OL		Organic silts and organic silty clays of low plasticity		
CL		Inorganic clays of low range plasticity, gravelly clays, sandy clays, sifty clays, lean clays		
МН		Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts		
СН		Inorganic clays of high range plasticity, fat clays		

	ROCKS
Symbols	Typical Names
	Limestone or Dolomite
	Shale
	Sandstone

N:	Stand	ard Penetration, BPF			
M:	Moist	ure Content, %			
LL:	Liquid Limit, %				
PI:	Plasti	Plasticity Index, %			
Qp:	Pocke	Pocket Penetrometer Value, TSF			
Qu:		nfined Compressive Strength ated Qu, TSF			
γ	Dry U	nit Weight, PCF			
γ _D : F:	Fines	Content			
	SA	MPLING SYMBOLS			
	SS	Split Spoon Sample			
	9	Relatively Undisturbed Sample			

Rock Core Sample

SOIL PROPERTY SYMBOLS

EXHIBIT I

DIRECTIONS TO WFC SITE:

FROM OWEN COUNTY COURT HOUSE: 100 NORTH THOMAS STREET, OWENTON KY 40359: HEAD NORTH TOWARD BRYAN ST (102 FEET). TURN RIGHT ONTO BRYAN ST (236 FEET). TURN LEFT AT THE 1ST CROSS STREET ONTO US-127 N/N MAIN (3.1 MILES). SITE WILL BE LOCATED ON LEFT (EAST) SIDE OF ROAD.



PREPARED BY: POWER OF DESIGN GROUP, LLC - (502) 437-5252

EXHIBIT J

Prepared by and when recorded return to:

Stephen Lentz Pike Legal Group, PLLC P.O. Box 369 Shepherdsville, KY 40165-0369

Telephone: 502-955-4400 Telefax: 502-543-4410

Attorney for Cellco Partnership d/b/a Verizon Wireless

(Site Name: LV Old US 127 Rd & KY 845)

MEMORANDUM OF LAND LEASE AGREEMENT

This Memorandum of Land Lease Agreement is made this John day of _______, 201 between Kim Juett, single, having an address of 2920 Hwy 127 N., Owenton, KY 40359, hereinafter designated as LESSOR, and Cellco Partnership d/b/a Verizon Wireless, with its principal office located at One Verizon Way, Mail Stop 4AW100, Basking Ridge, New Jersey 07920, hereinafter referred to as "LESSEE". LESSOR and LESSEE are at times collectively referred to hereinafter as the "Parties" or individually as the "Party".

- 1. LESSOR and LESSEE entered into a Land Lease Agreement (the "Agreement") on _______, 2010 for an initial term of five (5) years, commencing on the Commencement Date. The "Commencement Date" shall be the first day of the month after LESSEE begins installation of LESSEE's communications equipment. The Agreement shall automatically be extended for four (4) additional five (5) year terms unless the LESSEE terminates it at the end of the then current term by giving the LESSOR written notice of the intent to terminate at least three (3) months prior to the end of the then current term.
- 2. LESSOR hereby leases to LESSEE a portion of that certain parcel of property (the entirety of LESSOR's property is referred to hereinafter as the "Property"), located at Old US Hwy 127 North, Owenton KY 40359 (Owen County), and being described as a 100' by 100' parcel containing 10,000 square feet, and being part of that real property further described in Deed recorded at Deed Book 234, Page 475 in the Office of the Owen County Clerk, together with the non exclusive right for ingress and egress, seven (7) days a week twenty four (24) hours a day, on foot or

motor vehicle, including trucks, and for the installation and maintenance of utility wires, poles, cables, conduits, and pipes over, under, or along one or more rights of way extending from the nearest public right of way, Old US Hwy 127 N, to the demised premises. The demised premises and rights of way are hereinafter collectively referred to as the "Premises". The Premises are described in Exhibit A attached hereto and made a part hereof, and as shown on the survey attached hereto and incorporated herein as Exhibit B. In the event any public utility is unable to use the aforementioned right of way, LESSOR has agreed to grant an additional right of way either to the LESSEE or to the public utility at no cost to the LESSEE.

- 3. LESSEE has the right of first refusal to purchase the Premises during the initial term and all renewal terms of the Agreement.
- 4. The terms, covenants and provisions of the Agreement, the terms of which are hereby incorporated by reference into this Memorandum, shall extend to and be binding upon the respective executors, administrators, heirs, successors and assigns of LESSOR and LESSEE.

[Signature Page Follows]

IN WITNESS WHEREOF, hereunto and to a duplicate hereof, LESSOR and LESSEE have caused this Memorandum to be duly executed on the date first written hereinabove.

LESSOR:

Kim Juett

Date

LESSEE:
Cellco Partnership d/b/a Verizon Wireless

By:
Printed Name:
Ed Maher

Title:
Director - Network Field Engineering

Date:

STATE OF YY COUNTY OF OWEN
LESSOR ACKNOWLEDGEMENT
On this, the
IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my seal in said County and State on the day and year last above written.
Notary Public My Commission Expires: 4-4-20
COUNTY OF OULIA VAL
LESSEE ACKNOWLEDGEMENT
On this, the Mild day of Mild , Joi before me, the subscriber, a Notary Public, in and for the above state, personally appeared to me, as authorized officer and/or agent of Cellco Partnership d/b/a Verizon Wireless, and in due form of law, acknowledged that he/she is authorized on behalf of said entity to execute all documents pertaining hereto and acknowledged to me that he/she executed the same as his/her voluntary act and deed on behalf of said entity.
IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my seal in said County and State on the day and year last above written.

4

Notary Public
My Commission Expires:

BARBARA MADIGAN EVANS
NOTARY PUBLIC, STATE OF MICHIGAN
County Of Oakland
My Commission Expires 05-10-2020
ACTING IN THE COUNTY OF

EXHIBIT A

(Descrpition of Premises)

Parent Parcel:

Record Owner: Kim Juett

3100 Hwy 127 N, Owenton, Owen County, Kentucky 40359

Owen County PVA Parcel ID: 060-00-00-012.00 (approx. 218 acres)

Deed Book 234, Page 475 - Clerk, Owen County, KY

Memorandum of Land Lease Agreement -LV Old US 127 Rd & KY 845

EXHIBIT B

(Survey)

Memorandum of Land Lease Agreement -LV Old US 127 Rd & KY 845

Exhibit "B"

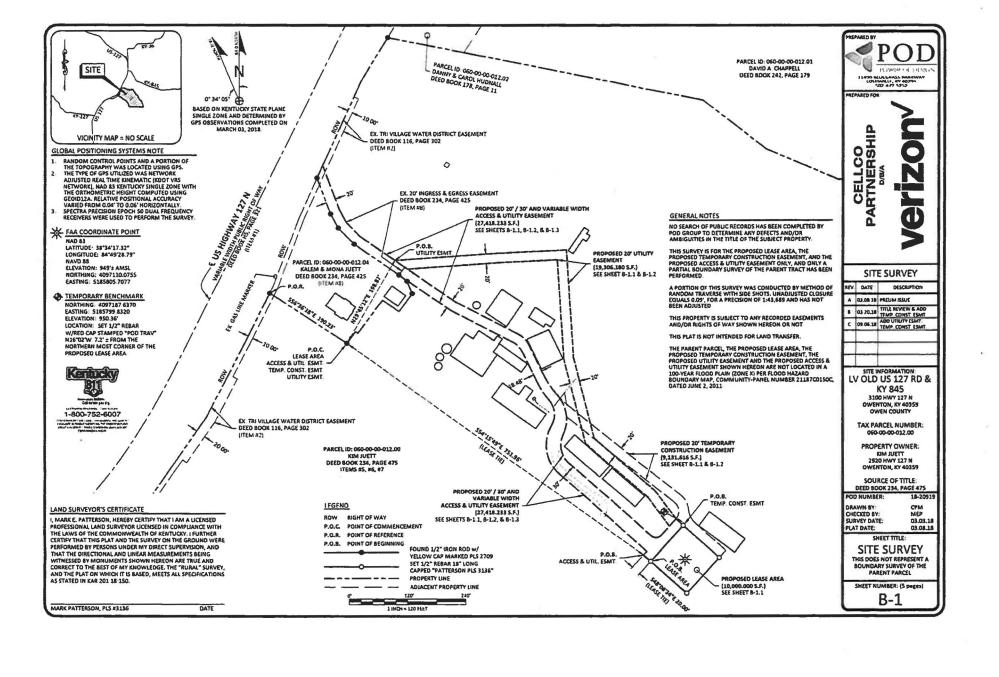


EXHIBIT K

NOTICE LIST

JUETT KIM 2920 HWY 127N OWENTON, KY 40359

JUETT KIMBERLY RAY 2920 HWY 127N OWENTON, KY 40359

JUETT KALEB & MONA 3100 HWY 127N OWENTON, KY 40359

HUDNALL DANNY & CAROL 3180 HWY 127N OWENTON, KY 40359

CHAPPELL DAVID A 3320 HWY 127N OWENTON, KY 40359

PRYOR C F JR 3460 HWY 127N OWENTON, KY 40359

MADDOX BARRY & DEBBIE 885 SWEET OWEN RD OWENTON, KY 40359

MULLINS WARREN J & PEGGY J REVOCABLE LIVING TRUST 3870 HWY 160S HINDMAN KY 41822

COBB BRUCE & CAROLYN 655 HARRIS RIDGE RD OWENTON, KY 40359

FORSEE BRIAN 1300 HWY 127N OWENTON, KY 40359 CAMMACK WM B & ANDREW 310 CLAY ST FRANKFORT, KY 40601

CAMMACK FAMILY TRUST % ANDREW CAMMACK 310 CLAY ST FRANKFORT, KY 40601

EXHIBIT L

EXHIBIT M



VIA CERTIFIED MAIL 7019 2280 00001170 9041

October 31, 2019

Hon. Casey Ellis 100 N. Thomas Street Owenton, KY 40359

> RE: Notice of Proposal to Construct Wireless Communications Facility Kentucky Public Service Commission Docket No. 2019- 00394 Site Name: Old US 127 & KY 845

Mutthew R. Clark
Robert B. Scott
Charles R. Grahn
Frank D. Otte*
John "Bart" Herriman
William W. Gooden**
Michael P. Maxwell
Russell L. Brown**
Jennifer F. Perry
N. Davey Neal
Travis W. Cohron
Maggie L. Sadler
Kristin A. Mellwain

Senior Counsel James C. Clark Thomas Michael Quinn John M. Moses

Land Use Consultant Efizabeth Bentz Williams, AICP

> Raymond J. Grahn (2015) Alex M. Clark (1991) Peter A. Pappas (1986) Thomas M. Quinn (1973) Joseph M. Howard (1964)

> > "Also admitted in Montara vAlso admitted in Kenrucky "Registered Civil Mediator

Dear Judge Ellis:

Cellco Partnership, d/b/a Verizon Wireless has filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at 3100 Highway 127 North, Owenton, KY, 40359 (North Latitude: (38° 34' 17.32", West Longitude 84° 49' 28.79"). The proposed facility will include a 255-foot tall antenna tower, plus a 5-foot lightning arrestor and related ground facilities. This facility is needed to provide improved coverage for wireless communications in the area.

You have a right to submit comments to the PSC or to request intervention in the PSC's proceedings on the application. You may contact the PSC at: Executive Director, Public Service Commission, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2019-00394 in any correspondence sent in connection with this matter.

We have attached a map showing the site location for the proposed tower. Verizon Wireless' radio frequency engineers assisted in selecting the proposed site for the facility, and they have determined it is the proper location and elevation needed to provide quality service to wireless customers in the area. Please feel free to contact us with any comments or questions you may have.

Sincerely,

Kussell L. Brown

Attorney for Applicants

RLB/jdj enclosure

EXHIBIT N

SITE NAME: Old US 127 Rd & KY 845 NOTICE SIGNS

The signs are at least (2) feet by four (4) feet in size, of durable material, with the text printed in black letters at least one (1) inch in height against a white background, except for the word "tower," which is at least four (4) inches in height.

Cellco Partnership, d/b/a Verizon Wireless propose to construct a telecommunications **tower** on this site. If you have questions, please contact Clark, Quinn, Moses, Scott & Grahn, LLP, 320 N. Meridian Street, Indianapolis, IN 46204; 317-637-1321, or the Executive Director, Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2019-00394 in your correspondence.

Cellco Partnership, d/b/a Verizon Wireless propose to construct a telecommunications **tower** on this site. If you have questions, please contact Clark, Quinn, Moses, Scott & Grahn, LLP, 320 N. Meridian Street, Indianapolis, IN 46204; 317-637-1321, or the Executive Director, Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2019-00394 in your correspondence.

EXHIBIT O

VIA EMAIL: mhaines@owentonnewshearld.com

Owenton News Herald 154 West Bryan Street Owenton, Ky. 40359

RE:

Legal Notice Advertisement

Site Name:

Old US 127 Rd & KY 845

Dear Ms. Haines:

Please publish the following legal notice advertisement in the next available edition of the *Owenton News Herald:*

NOTICE

Cellco Partnership, d/b/a Verizon Wireless has filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at 3100 Highway 127 North, Owenton, KY, 40359 (North Latitude: (38° 34' 17.32", West Longitude 84° 49' 28.79"). You may contact the PSC for additional information concerning this matter at: Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2019-00394 in any correspondence sent in connection with this matter.

After this advertisement has been published, please forward a tearsheet copy, affidavit of publication, and invoice to Clark, Quinn, Moses, Scott & Grahn, LLC, 320 N. Meridian Street, Indianapolis, IN 46204 or by email to ebw@clarkquinnlaw.com. Please call me or Elizabeth Bentz Williams, in our offices at (317) 637-1321 if you have any questions. Thank you for your assistance.

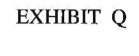
Sincerely

Elizabeth Bentz Williams Clark, Quinn, Moses, Scott & Grahn, LLC

EXHIBIT P

Radio Frequency Design Search Area







Monday, September 9th, 2019.

RE: Proposed Cellco Partnership d/b/a Verizon Wireless Communications Facility

Site Name: LV Old US 127 Rd & KY 845

Type of Tower: 255' Self Support

Location: 3100 Hwy 127 N, Owenton KY 40359

To Whom It May Concern:

As a radio frequency engineer for Verizon Wireless, I am providing this letter to state the need for a Verizon Wireless site called LV Old US 127 Rd & KY 845.

The LV Old US 127 Rd & KY 845 site is proposed with the below objectives:

- 1 Offload 4G traffic from busy site to the south.
- 2 Improve 4G throughput to existing heavy data users.
- 3 Improve 4G network reliability by increasing the amount of time our customers operate on 4G instead of 3G.

Currently the area is experiencing high demand for wireless high-speed data. Growth forecasts have triggered the need for an additional site in the area. The tower is needed to provide all Verizon customers in the area with the best experience on their 4G wireless devices.

Raw Land – Design plans for a new tower would provide tower height of **255'** with a Verizon Wireless Centerline of **250'**. The new structure height was decided upon to best cover the offload area and interact with the existing Verizon sites. If we are limited to building a structure less than the proposed height, another tower would be needed in the vicinity in the near future. In addition, building a structure that is too short can cause existing taller sites to shoot over the proposed site and building a site that is too tall can cause the proposed site to shoot over existing sites. Both situations create a poor experience from a user perspective. The new structure will be placed near the center of the area with high traffic demand and offload the surrounding sites greatly. The new tower design meets stated objectives.

Verizon Wireless cares about the communities as well as the environment and prefers to collocate on existing structures when available. It can be noticed from any map that Verizon Wireless is currently collocated on many existing structures in the area. We prefer collocation due to reduced construction costs, faster deployment, and environment protection. However, Verizon Wireless was unable to find a suitable structure within the center of demand area to collocate the proposed LV Old US 127 Rd & KY 845 site.

Candidate B (38.58546944, -84.82540277) – This site is located too far north of the demand area. Therefore Verizon does not feel this site meets our customer's needs and is not viable.

Verizon Wireless design engineers establish search area criteria in order to effectively meet

verizon[/]

coverage objectives as well as offload existing Verizon cell sites. When met, the criterion also reduces the need for a new site to cover the area in the immediate future. Each cellular site covers a limited area, depending on site configuration and the surrounding terrain. Cell sites are built in an interconnected network; which means each cell site must be located so that their respective coverage areas are contiguous. This provides uninterrupted communications throughout the coverage area.

Since collocation is generally the most cost-effective means for prompt deployment of new facilities, Verizon Wireless makes every effort to investigate the feasibility for using existing towers or other tall structures for collocation when designing a new site or system expansion. However, collocation on an existing tower or tall structure is not always feasible due to location of existing cell sites. Cell sites are placed in a way so they provide smooth hand off to each other and are placed at some distance from each other to eliminate too much overlap. Too much overlap may result in a waste of resources and raise a system capacity overload concern.

This cell site has been designed, and shall be constructed and operated in a manner that satisfies regulations and requirements of all applicable governmental agencies that have been charged with regulating tower specifications, operation, construction, and placement, including the FAA and FCC.

Sincerely,
Javier S: Burgos
RF Engineer, Verizon

Wireless
STATE OF INDIANA

COUNTY OF MAVION

Subscribed and sworn to before me this_

_day of < OPM 2019.

Notary Public

Signature

Drinton

Seynter Behn

County of Residence HAM

My Commission expires:

JENNIFER BEHN
Notary Public, State of Indiana
SEAL
My Commission Expires 9/3/2023

ეა<u>ტ</u> Page **2** of **2**

verizon/

Monday, September 9th, 2019.

RE: LV Old US 127 Rd & KY 845 Zoning Plots

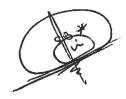
Site Name: LV Old US 127 Rd & KY 845

To Whom It May Concern:

This map is not a guarantee of coverage and may contain areas with no service. This map reflects a depiction of predicted and approximate wireless coverage of the network and is intended to provide a relative comparison of coverage. The depictions of coverage do not guarantee service availability as there are many factors that can influence coverage and service availability. These factors vary from location to location and change over time. The coverage areas may include locations with limited or no coverage. Even within a coverage area shown, there are many factors, including but not limited to, usage volumes, service, outage, and customer's equipment, and terrain, proximity to buildings, foliage, and weather that may impact service.

The proposed site is needed to offload capacity from existing sites. This map reflects the predicted coverage area that will be offloaded from existing sites and transferred to the proposed site.

Javier S. Burgos



RF Engineer, Verizon Wireless



