RECEIVED

APR 0 5 2018

PUBLIC SERVICE COMMISSION

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF NEW CINGULAR WIRELESS PCS, LLC, A DELAWARE LIMITED LIABILITY COMPANY, D/B/A AT&T MOBILITY FOR ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT A WIRELESS COMMUNICATIONS FACILITY IN THE COMMONWEALTH OF KENTUCKY IN THE COUNTY OF CARROLL

) CASE NO.: 2018-00121

SITE NAME: WRIGHTS RIDGE

* * * * * * *

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

New Cingular Wireless PCS, LLC, a Delaware Limited Liability Company, d/b/a AT&T Mobility ("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: New Cingular Wireless PCS, LLC, a Delaware Limited Liability Company, d/b/a AT&T Mobility, having a local address of Meidinger Tower, 462 S. 4th Street, Suite 2400, Louisville, KY 40202.

2. 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.

3. The Certificate of Authority filed with the Kentucky Secretary of State for the Applicant entity was attached to a prior application and is part of the case record for PSC case number 2011-00473 and is hereby incorporated by reference.

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 A**, 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. The WCF will provide a necessary link in the Applicant's communications network that is designed to meet the increasing demands

for wireless services in Kentucky's wireless communications service area. 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 2126 Wrights Ridge Road, Milton Kentucky (38°40'25.13" North latitude, 85°15'33.67" 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 Foster B. Helm pursuant to a Deed recorded at Deed Book 170, Page 435 in the office of the County Clerk. The proposed WCF will consist of a 255-foot tall tower, with a 15-foot lightning arrestor attached at the top, for a total height not to exceed 270-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 B** and **Exhibit C**.

7. A list of utilities, corporations, or persons with whom the proposed WCF is likely to compete is attached as **Exhibit D**.

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 B.

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 C**.

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 Determination of No Hazard to Air Navigation issued by the Federal Aviation Administration ("FAA") is attached as **Exhibit E**.

12. A copy of the Kentucky Airport Zoning Commission ("KAZC") Approval to construct the tower is attached as **Exhibit F**

13. A geotechnical engineering firm has performed soil boring(s) and subsequent geotechnical engineering studies at the WCF site. A copy of the geotechnical engineering report, signed and sealed by a professional engineer registered in the Commonwealth of Kentucky, is attached as **Exhibit G**. The name and address of the geotechnical engineering firm and the professional engineer registered in the Commonwealth of Kentucky who supervised the examination of this WCF site are included as part of this

exhibit.

14. Clear directions to the proposed WCF site from the County seat are attached as **Exhibit H**. The name and telephone number of the preparer of **Exhibit H** 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 I**.

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 C** 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 Don Murdock and the identity and qualifications of each person directly responsible for design and construction of the proposed tower are contained in **Exhibits B & C**.

18. As noted on the Survey attached as part of **Exhibit B**, the surveyor has determined that the site is not within any flood hazard area.

19. **Exhibit B** 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 has been 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 sent by certified mail to each landowner are attached as **Exhibit J** and **Exhibit K**, 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 L**.

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 M**. 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 part of Exhibit M.

23. The general area where the proposed facility is to be located is rural.

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 N**.

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. In addition to expanding and improving voice and data service for AT&T mobile customers, this site will also provide wireless local loop ("WLL") broadband internet service in the subject area. As a participant in the FCC's Connect America Fund Phase II (CAF II) program, AT&T is aggressively deploying WLL service infrastructure to bring expanded internet access to residential and business customers in rural and other underserved

areas. WLL will support internet access at the high speeds required to use and enjoy the most current business, education and entertainment technologies. Broadband service via WLL will be delivered from the tower to a dedicated antenna located at the home or business receiving service and will support downloads at 10 Mbps and uploads at 1 Mbps.

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:

David A. Pike Pike Legal Group, PLLC 1578 Highway 44 East, Suite 6 P. O. Box 369 Shepherdsville, KY 40165-0369 Telephone: (502) 955-4400 Telefax: (502) 543-4410 Email: dpike@pikelegal.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,

Pavid a Pilse

David A. Pike Pike Legal Group, PLLC 1578 Highway 44 East, Suite 6 P. O. Box 369 Shepherdsville, KY 40165-0369 Telephone: (502) 955-4400 Telefax: (502) 543-4410 Email: dpike@pikelegal.com Attorney for New Cingular Wireless PCS, LLC d/b/a AT&T Mobility

LIST OF EXHIBITS

- A FCC License Documentation
- B Site Development Plan:

500' Vicinity Map Legal Descriptions Flood Plain Certification Site Plan Vertical Tower Profile

- C Tower and Foundation Design
- D Competing Utilities, Corporations, or Persons List
- E FAA
- F Kentucky Airport Zoning Commission
- G Geotechnical Report
- H Directions to WCF Site
- I Copy of Real Estate Agreement
- J Notification Listing
- K Copy of Property Owner Notification
- L Copy of County Judge/Executive Notice
- M Copy of Posted Notices and Newspaper Notice Advertisement
- N Copy of Radio Frequency Design Search Area

EXHIBIT A FCC LICENSE DOCUMENTATION

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 Communica Wireless Telecomm RADIO STATION A	unications Bureau		
ATTN: LESLIE WILSO NEW CINGULAR WIR 208 S AKARD ST., RM DALLAS, TX 75202	ELESS PCS, LLC			File Number
FCC Registration Number (FF Grant Date	RN): 0003291192 Effective Date	Expiration Da	te	Print Date
06-02-2015	06-13-2017	06-23-2025		T The Date
Market Number MTA026	ALC: NOT THE PARTY OF THE PARTY	el Block A	Sub-M	arket Designator 15
	Market Louisville-Lexin	and the second		
1st Build-out Date 06-23-2000	2nd Build-out Date 06-23-2005	3rd Build-out D	ate .	4th Build-out Date
authorized in an adjacent foreign km (45 miles) of the United Stat adjacent foreign territory and to	the condition that, in the event tha n territory (Canada/United States) tes/Canada border shall be require ensure continuance of equal acce onditional basis, subject to the outo), future coordination of ed to eliminate any harm ss to the frequencies by	any base station ful interference both countries.	n transmitters within 72 to operations in the
		100		
following conditions: This lic frequencies designated in the license nor the right granted th	mmunications Act of 1934, as am cense shall not vest in the licensee license beyond the term thereof no nereunder shall be assigned or oth S.C. § 310(d). This license is sub	any right to operate the or in any other manner t erwise transferred in vio	station nor any han authorized plation of the Co	right in the use of the herein. Neither the ommunications Act of

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.

the Communications Act of 1934, as amended. See 47 U.S.C. §606.

Call Sign: KNLF251

File Number:

Print Date:

This authorization is subject to the condition that the remaining balance of the winning bid amount will be paid in accordance with Part 1 of the Commission's rules, 47 C.F.R. Part 1.

This license is conditioned upon compliance with the provisions of Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation For Consent to Transfer Control of Licenses and Authorizations, Memorandum Opinion and Order, FCC 04-255 (rel. Oct. 26, 2004).

Spectrum Lease Associated with this License. See Spectrum Leasing Arrangement Letter dated 12/06/2004 and File # 0001918512.

Commission approval of this application and the licenses contained therein are subject to the conditions set forth in the Memorandum Opinion and Order, adopted on December 29, 2006 and released on March 26, 2007, and revised in the Order on Reconsideration, adopted and released on March 26, 2007. See AT&T Inc. and BellSouth Corporation Application for Transfer of Control, WC Docket No. 06-74, Memorandum Opinion and Order, FCC 06-189 (rel. Mar. 26, 2007); AT&T Inc. and BellSouth Corporation, WC Docket No. 06-74, Order on Reconsideration, FCC 07-44 (rel. Mar. 26, 2007).



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.

ATTN: LESLIE WILSO NEW CINGULAR WIR 208 S AKARD ST., RM DALLAS, TX 75202	ELESS PCS, LLC 1016	unications Bureau UTHORIZATION Call Si KNLG2	gn File Number			
FCC Registration Number (FR Grant Date 04-12-2017	Effective Date 06-13-2017	Expiration Date 04-28-2027	Print Date			
Market Number BTA263	Channe		Sub-Market Designator 0			
Market Name Louisville, KY						
1st Build-out Date 04-28-2002	2nd Build-out Date	3rd Build-out Date	4th Build-out Date			
Waivers/Conditions: License renewal granted on a co 10-86, paras. 113 and 126).	nditional basis, subject to the outo	come of FCC proceeding WT E	Docket No. 10-112 (see FCC			
following conditions: This lic frequencies designated in the l license nor the right granted th 1934, as amended. See 47 U.S.	mmunications Act of 1934, as am ense shall not vest in the licensee license beyond the term thereof no nereunder shall be assigned or oth S.C. § 310(d). This license is sub 934, as amended. See 47 U.S.C. §	any right to operate the station or in any other manner than aut erwise transferred in violation of ject in terms to the right of use	nor any right in the use of the horized herein. Neither the of the Communications Act of			
To view the specific geographi under the Market Tab of the lic	operation throughout the entire go c area and spectrum authorized by ense record in the Universal Lice .gov/uls/index.htm?job=home and	y this license, refer to the Spect nsing System (ULS). To view	rum and Market Area information the license record, go to the ULS			

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.

COMMUNE THE COMMUN	Federal Co Wireless RADIO S	Telecon	nmunicat	tions H	Bur	eau	n		
LICENSEE: NEW CI	NGULAR WIRELE	SS PCS, LI	LC			Call KNKQ		File N	lumber
ATTN: LESLIE WILS NEW CINGULAR WI 208 S AKARD ST., RN	RELESS PCS, LLC						CL - (Service Cellular	
DALLAS, TX 75202						Market CMA	449	1	el Block B
FCC Registration Number	(FRN): 000329119	92			l	S		t Designat 0	or
Market Name Kentucky 7 - Trimble		N.	À						
Grant Date 10-26-2010	Effective Date 06-13-2017	- 2012/2010/00/00	iration Dat 0-01-2020	e	Five	e Yr Build-	Out Date	Prin	at Date
Site Information:		P.	6500	2					
Location Latitude	Longitude	(m	ound Eleva eters)		(me	ucture Hgt ters)	F	Antenna St Registratio	
Address: 578 JEPTHA KNC			3.9	R	123		1	043315	
City: SHELBYVILLE Co	unty: SHELBY S	State: KY	Construc	tion De	eadl	ine:			
Antenna: 4 Maximum Transmitting ERP Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 5	0	45 225.000 117.500	90 238.500 43.700	135 229.00 30.900		180 238.200 0.235	225 249.600 15.500	270 254.700 55.000	315 240.500 109.600
Maximum Transmitting ERP Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 6	0	45 225.000 7.300	90 238.500 17.100	135 229.00 13.500		180 238.200 2.100	225 249.600 0.100	270 254.700 0.100	315 240.500 0.100
Maximum Transmitting ERP Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0	45 225.000 0.100	90 238.500 0.200	135 229.00 0.100	00	180 238.200 0.700	225 249.600 2.100	270 254.700 1.700	315 240.500 1.600
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 license 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.

Call Sign: KNKQ255	File	Number:			Pr	int Date:	:	
	gitude 20-21.9 W	(m	ound Elev eters) 2.7	(Structure Hgt (meters) 126.2	to Tip	Antenna St Registratio 1043334	
Address: ROUTE 1 BOX 275 (7627	(8)							
City: Bedford County: TRIMBLE	,	Y Cons	truction D	eadline:				
Antenna: 1 Maximum Transmitting ERP in Watts Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	: 140.820 0 153.500 50.400	45 149.100 49.800	90 159.600 10.000	135 136.600 3.300	180) 133.800 0.300	225 216.300 1.700	270 168.000 14.200	315 176.300 43.400
Antenna: 2 Maximum Transmitting ERP in Watts Azimuth(from true north) Antenna Height AAT (meters)	Contraction of the	49.800 45 ▲149.100	90 159.600	135 136.600	180	225 216.300	270 168.000	315 176.300
Transmitting ERP (watts) Antenna: 3 Maximum Transmitting ERP in Watts	1.500	33.500	168.700	231.500		5.200	1.800	0.700
Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 153.500 3.400	45 149.100 0.800	90 159.600 2.200	135 136.600 7.300	180 133.800 33.800	225 216.300 55.400	270 168.000 62.400	315 176.300 19.500
	gitude	(m	ound Elev eters)		Structure Hgt (meters)	to Tip	Antenna St Registratio	
	09-24.1 W	ANGP	7.8	1	88.4		1043327	
Address: 667 DRIPPINGS SPRING City: CARROLLTON County: C		76271) State: KY	Constr	uction D	Deadline:			
Antenna: 1	140.820		and the second					
Maximum Transmitting ERP in Watts Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 115.900 86.300	45 129.000 143.200	90 149.700 53.200	135 106.300 37.700	Contraction of the second s	225 94.300 18.900	270 103.800 67.000	315 139.500 133.700
Antenna: 2 Maximum Transmitting ERP in Watts	: 140.820				1			
Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 115.900 1.800	45 129.000 39.700	90 149.700 200.000	135 106.300 274.500		225 94.300 6.200	270 103.800 2.200	315 139.500 0.800
Antenna: 3					ANDER			
Maximum Transmitting ERP in Watts	: 140.820							
Maximum Transmitting ERP in Watts Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	: 140.820 0 115.900 3.400	45 129.000 0.536	90 149.700 1.200	135 106.300 5.700	180 80.100 76.900	225 94.300 268.200	270 103.800 195.400	315 139.500 26.800



Call Sign: KNKQ255	File	Number:			Р	rint Date:	:	
LocationLatitude738-12-51.9 N	Longitude 085-22-20.7 W	(m 23	ound Elev eters) 1.0		Structure Hgt (meters) 75.3	to Tip	Antenna St Registratio 1028137	
Address: 8464 SHELBYVILI	LE ROAD (76267))						
City: SIMPSONVILLE Co	unty: SHELBY	State: KY	Constru	iction D	eadline:			
Antenna: 1	110 000							
Maximum Transmitting ERP in Azimuth(from true north)	Watts: 140,820	15	90	135	180	225	270	315
Antenna Height AAT (meters)	75.200	45 68.300	90 76.100	83.000	100.0	93.700	97.300	85.200
Transmitting ERP (watts)	145.900	233.900	96.400	74.000		26.900	118.600	239.300
Antenna: 2	All and a second second	2000,000	,	,				
Maximum Transmitting ERP in Azimuth(from true north)	n Watts: 140.820	15	90	125	190	225	270	315
Antenna Height AAT (meters)	75.200	45 68.300	90 76.100	135 83.000	180 84.900	225 93.700	270 97.300	85.200
Transmitting ERP (watts)	26.600	113.500	136.500	145.50		34.100	42.000	26.000
Antenna: 3	A CONTRACTOR OF THE OWNER OF THE	10.000	100.000	1 10.00		511100	12.000	201000
Maximum Transmitting ERP in Azimuth(from true north)	CONTRACT OF A DESCRIPTION OF A DESCRIPTI	Alline.	00		100			21.5
Antenna Height AAT (meters)	0 75.200	45 68.300	90	135	180 84,900	225 93,700	270 97.300	315 85.200
Transmitting ERP (watts)	32.000	32.700	76.100 28.400	83.000 33.300	0 0 0	129.700	153.100	85.200 96.600
	195	VAR AN						
Location Latitude	Longitude	Gr	ound Elev	ation	Structure Hg	t to Tip	Antenna St	ructure
		(m	eters)		(meters)		Registratio	n No.
8 38-22-31.0 N	085-10-05.6 W	27	1.3		126.2		1000277	
Address: 474 ELM ST (7627	(2)	Bar	AND					
	HENRY State:	KY Co	nstruction	Deadlin	ne:			
			Aller					
Antenna: 1			te var	VED				
Maximum Transmitting ERP in	n Watts: 140.820			A. S. S.				
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters) Transmitting ERP (watts)	131.600	152.000	163.000	134.80		147.100	140.200	134.400
Antenna: 2	157.800	176.000	51.600	28.900	0.400	10.700	59.300	176.000
Maximum Transmitting ERP in	n Watts: 140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters) Transmitting ERP (watts)	131.600	152.000	163.000	134.80		147.100	140.200	134.400
Antenna: 3	14.400	95.600	191.900	199.80	0 125.300	35.900	26.500	9.900
Maximum Transmitting ERP in	watts: 140.820				Call and and	1997		
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	131.600	152.000	163.000	134.80	0 148.900	147.100	140.200	134.400
Transmitting ERP (watts)	27.400	10.600	14.200	31.300	140.600	186.400	210.400	81.400



Call Sign: KNKQ255	File	Number:			Р	rint Date	:	
Location Latitude	Longitude	(m	ound Elev eters)		Structure Hg (meters)	t to Tip	Antenna S Registratio	
13 38-08-31.2 N	085-19-19.9 W	22	2.2		60.7			
Address: 6070 Taylorsville Ro								
City: Shelbyville County: Sl	HELBY State:	KY Cor	istruction	Deadlin	ie:			
Antenna: 1	7. 4.45							
Maximum Transmitting ERP in Azimuth(from true north)		15	00	125	100	225	270	215
Antenna Height AAT (meters)	0 50.200	45 56.600	90 57.700	135 72,400	180 89.400	225 74.700	270 69.900	315 58.800
Transmitting ERP (watts)	147.100	140.500	179.600	98.700		26.000	32.200	47.600
Antenna: 2	ASS THE							
Maximum Transmitting ERP in Azimuth(from true north)	watts: 140.820	45	90	135	180	225	270	315
Antenna Height AAT (meters)	50.200	\$56.600	57.700	72.400		74.700	69,900	58.800
Transmitting ERP (watts)	0.300	1.600	8.200	17.900		22.100	6.400	2.600
Antenna: 3 Monimum Transmitting EDD in	Wetter 140.920	10						
Maximum Transmitting ERP in Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	50.200	56.600	57.700	72.400		74.700	69.900	58.800
Transmitting ERP (watts)	47.600	7.100	4.100	2.700	4.100	33.100	74.900	89.700
Location Latitude	Longitude	STAR A	ound Elev	ation	Structure Hg	t to Tip	Antenna S	
			eters)		(meters)		Registratio	on No.
14 28.07.41.6 M	0.95 11 21 0 11		2.3		61.0			
14 38-07-41.6 N	085-11-21.0 W	24	19.003		0110			
Address: 6515 Mt. Eden Rd (1	114913)	Alter	a start and					
50-07-41.014	114913)	Alter	nstruction	Deadlir				
Address: 6515 Mt. Eden Rd (1 City: Shelbyville County: S	114913)	Alter	a start and	Deadlir				
Address: 6515 Mt. Eden Rd (1 City: Shelbyville County: S Antenna: 1	114913) HELBY State:	Alter	a start and	Deadlir				
Address: 6515 Mt. Eden Rd (1 City: Shelbyville County: S Antenna: 1 Maximum Transmitting ERP in	114913) HELBY State: Watts: 140.820	KY Co	nstruction		1e:		270	
Address: 6515 Mt. Eden Rd (1 City: Shelbyville County: S Antenna: 1 Maximum Transmitting ERP in Azimuth(from true north)	114913) HELBY State: Watts: 140.820 0	KY Con 45	nstruction 90	135	180	225	270	315
Address: 6515 Mt. Eden Rd (1 City: Shelbyville County: S Antenna: 1 Maximum Transmitting ERP in Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	114913) HELBY State: Watts: 140.820	45 36.300	90 47.500	135 68.600	180 78.900	225 83.400 23.000	270 81.300 81.500	315 76.500 162.600
Address: 6515 Mt. Eden Rd (1 City: Shelbyville County: S Antenna: 1 Maximum Transmitting ERP in Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2	114913) HELBY State: Watts: 140.820 0 66.700 105.000	KY Con 45	nstruction 90	135	180 78.900	83.400	81.300	76.500
Address: 6515 Mt. Eden Rd (1 City: Shelbyville County: S Antenna: 1 Maximum Transmitting ERP in Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Maximum Transmitting ERP in	HELBY State: Watts: 140.820 0 66.700 105.000 Watts: 140.820	45 36.300 174.200	90 47.500 64.700	135 68.600 45.800	180 78.900 0.348	83.400 23.000	81.300 81.500	76.500 162.600
Address: 6515 Mt. Eden Rd (1 City: Shelbyville County: S Antenna: 1 Maximum Transmitting ERP in Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Maximum Transmitting ERP in Azimuth(from true north)	114913) HELBY State: Watts: 140.820 0 66.700 105.000 Watts: 140.820 0	45 36.300 174.200 45	90 47.500 64.700 90	135 68.600 45.800	180 78.900 0.348 180	83.40023.000225	81.30081.500270	76.500 162.600 315
Address: 6515 Mt. Eden Rd (1 City: Shelbyville County: S Antenna: 1 Maximum Transmitting ERP in Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Maximum Transmitting ERP in Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	HELBY State: Watts: 140.820 0 66.700 105.000 Watts: 140.820	45 36.300 174.200	90 47.500 64.700	135 68.600 45.800	180 78.900 0.348 180 78.900	83.400 23.000	81.300 81.500	76.500 162.600
Address: 6515 Mt. Eden Rd (1 City: Shelbyville County: S Antenna: 1 Maximum Transmitting ERP in Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Maximum Transmitting ERP in Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 3	HELBY State: Watts: 140.820 0 66.700 105.000 Watts: 140.820 0 66.700 3.100	45 36.300 174.200 45 36.300	90 47.500 64.700 90 47.500	135 68.600 45.800 135 68.600	180 78.900 0.348 180 78.900	83.400 23.000 225 83.400	81.30081.50027081.300	76.500 162.600 315 76.500
Address: 6515 Mt. Eden Rd (1 City: Shelbyville County: S Antenna: 1 Maximum Transmitting ERP in Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Maximum Transmitting ERP in Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 3 Maximum Transmitting ERP in	114913) HELBY State: Watts: 140.820 0 66.700 105.000 Watts: 140.820 0 66.700 3.100 Watts: 140.820	45 36.300 174.200 45 36.300 18.200	90 47.500 64.700 90 47.500 36.700	135 68.600 45.800 135 68.600 41.900	180 78.900 0.348 180 78.900 0.348	83.400 23.000 225 83.400 4.800	81.300 81.500 270 81.300 2.400	76.500 162.600 315 76.500 1.800
Address: 6515 Mt. Eden Rd (1 City: Shelbyville County: S Antenna: 1 Maximum Transmitting ERP in Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Maximum Transmitting ERP in Azimuth(from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 3	HELBY State: Watts: 140.820 0 66.700 105.000 Watts: 140.820 0 66.700 3.100	45 36.300 174.200 45 36.300	90 47.500 64.700 90 47.500	135 68.600 45.800 135 68.600	180 78.900 0.348 180 78.900 0.348 180 78.900 26.800 180	83.400 23.000 225 83.400	81.30081.50027081.300	76.500 162.600 315 76.500



	Number:			Pi	int Date:	:	
Longitude	(me	eters)		(meters)	to Tip	and the second second second	
	24.	5.4		90.2		1030423	
80.	States VV	Consta) dlin			
aty: CARROLL	State: KY	Constr	uction L	Jeadline:			
Watts: 140 820							
0	45	90	135	180	225	270	315
137.100	83.600	102.400	130.000	0 70.400	71.000	91.300	126.200
145.700	137.000	127.800	38.600	48.600	22.000	22.000	108.000
Watts: 140.820							
0	45	90	135	180	225	270	315
100000 V _000	P STATE	102.400			71.000	91.300	126.200
1.300	6.300	85.100	296.80	0 216.300	29.700	3.800	0.600
Watts: 140.820	1923						
0	45	90	135	180	225	270	315
1283	CENTRAL MODEL						126.200
15.500	3.400	0.700	1.000	18.400	147.100	340.700	131.100
Longitude	100 March 100 Ma	a fair that a		0	to Tip		
085-02-15.7 W	24	8.4		80.7		1207331	
	Bar	ANN I					
RROLL State: H	Cons	truction E	eadline	:			
	\$P-	(BS)					
Wetter 140.820			100				
	45	90	135	180	225	270	315
132.700				the second s			103.900
34.900	70.500	83.300	36.800		2.900	2.800	5.200
W-44- 140.020		8	ADV 70	100000			
n Watts: 140.820	45	90	135	180	225	270	315
0 132.700	45 100.900	90 100 500	135 95,100	180 118 800	225 93.600	270 130,200	315 103 900
0		90 100.500 1.100	135 95.100 2.900		225 93.600 252.800	270 130.200 281.000	315 103.900 50.800
0 132.700 5.500	100.900	100.500	95.100	118.800	93.600	130.200	103.900
0 132.700 5.500 h Watts: 140.820	100.900 1.800	100.500 1.100	95.100 2.900	118.800 56.300	93.600 252.800	130.200 281.000	103.900 50.800
0 132.700 5.500	100.900	100.500 1.100 90	95.100 2.900 135	118.800 56.300 180	93.600 252.800 225	130.200 281.000 270	103.900 50.800 315
0 132.700 5.500 n Watts: 140.820 0	100.900 1.800 45	100.500 1.100	95.100 2.900	118.800 56.300 180	93.600 252.800	130.200 281.000	103.900 50.800
0 132.700 5.500 n Watts: 140.820 0 132.700	100.900 1.800 45 100.900	100.500 1.100 90 100.500	95.100 2.900 135 95.100	118.800 56.300 180 118.800	93.600 252.800 225 93.600	130.200 281.000 270 130.200	103.900 50.800 315 103.900
0 132.700 5.500 n Watts: 140.820 0 132.700	100.900 1.800 45 100.900	100.500 1.100 90 100.500	95.100 2.900 135 95.100	118.800 56.300 180 118.800	93.600 252.800 225 93.600	130.200 281.000 270 130.200	103.900 50.800 315 103.900
0 132.700 5.500 h Watts: 140.820 0 132.700 83.300	100.900 1.800 45 100.900	100.500 1.100 90 100.500	95.100 2.900 135 95.100	118.800 56.300 180 118.800	93.600 252.800 225 93.600	130.200 281.000 270 130.200	103.900 50.800 315 103.900
0 132.700 5.500 n Watts: 140.820 0 132.700	100.900 1.800 45 100.900 36.800	100.500 1.100 90 100.500	95.100 2.900 135 95.100 2.900	118.800 56.300 180 118.800 2.800	93.600 252.800 225 93.600	130.200 281.000 270 130.200	103.900 50.800 315 103.900
	$\begin{array}{c} 085-05-53.5 \text{ W} \\ \text{id} (37647) \\ \text{nty: CARROLL} \\ \textbf{i Watts: 140.820} \\ \textbf{0} \\ 137.100 \\ 145.700 \\ \textbf{i Watts: 140.820} \\ \textbf{0} \\ 137.100 \\ 1.300 \\ \textbf{i Watts: 140.820} \\ \textbf{0} \\ \textbf{0} \\ \textbf{0} \\ \textbf{137.100} \\ 1.3.300 \\ \textbf{Longitude} \\ 085-02-15.7 \text{ W} \\ \textbf{ROLL State: F} \\ \textbf{i Watts: 140.820} \\ \textbf{0} \\ 132.700 \\ \end{array}$	$(me \\ 085-05-53.5 W 24: \\ ad (37647) \\ mty: CARROLL State: KY \\ 0 Watts: 140.820 \\ 0 45 \\ 137.100 83.600 \\ 145.700 137.000 \\ 0 Watts: 140.820 \\ 0 45 \\ 137.100 83.600 \\ 1.300 6.300 \\ 0 Watts: 140.820 \\ 0 0 45 \\ 137.100 83.600 \\ 13.300 3.400 \\ 0 0 45 \\ 0 3.400 \\ 0 0 45 \\ 0 3.400 \\ 0 0 45 \\ 0 3.400 \\ 0 0 45 \\ 0 3.400 \\ 0 0 45 \\ 0 3.400 \\ 0 0 45 \\ 0 3.400 \\ 0 0 45 \\ 0 0 3.400 \\ 0 0 0 0 \\ 0 0 0 0 \\ 0 0 0 0 \\ 0 0 0 0 \\ 0 0 0 0 \\ 0 0 0 0 \\ 0 0 0 0 \\ 0 0 0 0 \\ 0 0 0 0 \\ 0 0 0 0 \\ 0 0 0 0 \\ 0 0 0 0 \\ 0 0 0 0 \\ 0 0 0 \\ 0 0 0 0 \\ 0 0 \\ 0 0 0 \\ 0 0 \\ 0 0 0 \\ 0 \\ 0 0 \\ 0 0 \\$	(meters) (meters) (085-05-53.5 W 245.4 ad (37647)) (085-05-53.5 W 245.4 ad (37647)) (085-02-15.7 W 248.4 ad (37647)) (085-02-15.7 W) (085-02-15.7 W) (085-02-15.7 W) (085-02-15.7 W) (085-02-15.7 W)	$\begin{array}{c ccccc} (meters) \\ 085-05-53.5 \ W & 245.4 \\ nd (37647) \\ nty: CARROLL & State: KY & Construction I \\ (Watts: 140.820 & 0 & 135 \\ 137.100 & 83.600 & 102.400 & 130.000 \\ 145.700 & 137.000 & 127.800 & 38.600 \\ 145.700 & 137.000 & 127.800 & 38.600 \\ 1300 & 6.300 & 85.100 & 296.800 \\ 1.300 & 6.300 & 85.100 & 296.800 \\ 1.300 & 6.300 & 85.100 & 296.800 \\ 1.300 & 6.300 & 102.400 & 130.000 \\ 1.300 & 6.300 & 85.100 & 296.800 \\ 1.300 & 6.300 & 0.700 & 1.300 \\ 1.300 & 3.400 & 0.700 & 1.000 \\ \hline \\ Longitude & Ground Elevation \\ (meters) \\ 085-02-15.7 \ W & 248.4 \\ \hline \\ RROLL & State: KY & Construction Deadline \\ \hline \\ 1 \ Watts: 140.820 & 0 & 135 \\ 132.700 & 100.900 & 100.500 & 95,100 \\ \hline \end{array}$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $



Call Sign: KNKQ255

File Number:

Print Date:

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).

Commission approval of this application and the licenses contained therein are subject to the conditions set forth in the Memorandum Opinion and Order, adopted on December 29, 2006 and released on March 26, 2007, and revised in the Order on Reconsideration, adopted and released on March 26, 2007. See AT&T Inc. and BellSouth Corporation Application for Transfer of Control, WC Docket No. 06-74, Memorandum Opinion and Order, FCC 06-189 (rel. Mar. 26, 2007); AT&T Inc. and BellSouth Corporation, WC Docket No. 06-74, Order on Reconsideration, FCC 07-44 (rel. Mar. 26, 2007).



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.

I COMMUNICATION IN THE REAL PROPERTY OF THE REAL PR	Federal Communica Wireless Telecomm		sion	
CONNISSION	RADIO STATION A	UTHORIZATION		
ATTN: LESLIE WILSON NEW CINGULAR WIRE 208 S AKARD ST., RM DALLAS, TX 75202	ELESS PCS, LLC 1016			File Number adio Service PCS Broadband
FCC Registration Number (FR		1		
Grant Date 05-27-2015	Effective Date 06-14-2017	Expiration Dat 06-23-2025	te	Print Date
Market Number MTA026	ACTIVITY OF A	el Block	Sut	-Market Designator 19
	Market Louisville-Lexin			
1st Build-out Date 06-23-2000	2nd Build-out Date 06-23-2005	3rd Build-out Da	ite	4th Build-out Date
Waivers/Conditions: This authorization is subject to th authorized in an adjacent foreign km (45 miles) of the United State adjacent foreign territory and to e	territory (Canada/United States) es/Canada border shall be require), future coordination of a ed to eliminate any harm	any base sta ful interfer	ation transmitters within 72 ence to operations in the

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).

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.

Call Sign: WPOI255

File Number:

Print Date:

This authorization is subject to the condition that the remaining balance of the winning bid amount will be paid in accordance with Part 1 of the Commission's rules, 47 C.F.R. Part 1.

This license is conditioned upon compliance with the provisions of Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation For Consent to Transfer Control of Licenses and Authorizations, Memorandum Opinion and Order, FCC 04-255 (rel. Oct. 26, 2004).

Spectrum Lease Associated with this License. See Spectrum Leasing Arrangement Letter dated 12/06/2004 and File # 0001918558.

The Spectrum Leasing Arrangement, which became effective upon approval of application file number 0001918558, was terminated on 04/14/2005. See file number 0002135370.

Commission approval of this application and the licenses contained therein are subject to the conditions set forth in the Memorandum Opinion and Order, adopted on December 29, 2006 and released on March 26, 2007, and revised in the Order on Reconsideration, adopted and released on March 26, 2007. See AT&T Inc. and BellSouth Corporation Application for Transfer of Control, WC Docket No. 06-74, Memorandum Opinion and Order, FCC 06-189 (rel. Mar. 26, 2007); AT&T Inc. and BellSouth Corporation, WC Docket No. 06-74, Order on Reconsideration, FCC 07-44 (rel. Mar. 26, 2007).



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 Communica Wireless Telecomm RADIO STATION A GULAR WIRELESS PCS, LLC	unications Bureau UTHORIZATION		File Number
ATTN: LESLIE WILSO NEW CINGULAR WIR 208 S AKARD ST., RM DALLAS, TX 75202 FCC Registration Number (FF	ELESS PCS, LLC 1016		VQDI528 Radi	o Service S Broadband
Grant Date 08-17-2015	Effective Date 06-14-2017	Expiration Date 09-06-2025	te	Print Date
Market Number BTA263	Chann	el Block	Sub-M	arket Designator 7
	Market Louisvi			
1st Build-out Date 09-06-2010	2nd Build-out Date	3rd Build-out Da	nte	4th Build-out Date
Waivers/Conditions: License renewal granted on a co 10-86, paras. 113 and 126). Conditions:	onditional basis, subject to the out	come of FCC proceeding	g WT Docket N	No. 10-112 (see FCC
Pursuant to §309(h) of the Confollowing conditions: This lice frequencies designated in the license nor the right granted the 1934, as amended. See 47 U.S.	mmunications Act of 1934, as am cense shall not vest in the licensee license beyond the term thereof n hereunder shall be assigned or oth S.C. § 310(d). This license is sub 934, as amended. See 47 U.S.C.	e any right to operate the or in any other manner the nerwise transferred in vio oject in terms to the right	station nor any han authorized lation of the C	y right in the use of the herein. Neither the communications Act of
To view the specific geographi under the Market Tab of the lic	operation throughout the entire g c area and spectrum authorized b cense record in the Universal Lice c.gov/uls/index.htm?job=home an	y this license, refer to the ensing System (ULS). To	e Spectrum and o view the lice	d Market Area information nse record, go to the ULS



Federal Communications Commission Wireless Telecommunications Bureau

Spectrum Leasing Arrangement

ATTN: REGINALD YOUNGBLOOD NEW CINGULAR WIRELESS PCS, LLC 3300 E RENNER ROAD, B3132 RICHARDSON, TX 75082 Date: 04/03/2018 Reference Number:

This approval allows the Lessee to lease spectrum from the Licensee pursuant to the provisions and requirements of Subpart X of Part 1 of the Commission's Rules, 47 C.F.R. Part 1, and as described in the associated spectrum leasing application or notification.

Type of Lease Arrangement	Lease Term	Lease Identifier
Spectrum Manager Lease	Short Term	L000013756

Lease Grant/Accepted Date	Lease Commencement Date	Lease Expiration Date
11/07/2014	11/01/2014	09/15/2015

Call Sign	Radio Service
KNLG209	CW - PCS Broadband

Lessee Information

0003291192 NEW CINGULAR WIRELESS PCS, LLC Attn: REGINALD YOUNGBLOOD 3300 E RENNER ROAD, B3132 RICHARDSON, TX 75082

Licensee Information

0003291192 NEW CINGULAR WIRELESS PCS, LLC Attn: LESLIE WILSON 208 S AKARD ST., RM 1016 DALLAS, TX 75202

Geographically-L	icensed Services	
Market Number	Market Name	Channel Block
BTA263	Louisville, KY	D

Condition:

This lease may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum associated with this leasing agreement, 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.

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.



Federal Communications Commission Wireless Telecommunications Bureau

Spectrum Leasing Arrangement

ATTN: REGINALD YOUNGBLOOD NEW CINGULAR WIRELESS PCS LLC 3300 E RENNER ROAD, B3132 RICHARDSON, TX 75082 Date: 04/03/2018 Reference Number:

This approval allows the Lessee to lease spectrum from the Licensee pursuant to the provisions and requirements of Subpart X of Part 1 of the Commission's Rules, 47 C.F.R. Part 1, and as described in the associated spectrum leasing application or notification.

Type of Lease Arrangement	Lease Term	Lease Identifier	
Spectrum Manager Lease	Short Term	L000015162	

Lease Grant/Accepted Date	Lease Commencement Date	Lease Expiration Date
03/13/2015	12/23/2014	04/30/2015

Call Sign	Radio Service	
KNLG923	CW - PCS Broadband	

Lessee Information

0003291192 NEW CINGULAR WIRELESS PCS LLC Attn: REGINALD YOUNGBLOOD 3300 E RENNER ROAD, B3132 RICHARDSON, TX 75082

Licensee Information

0001832807 POWERTEL MEMPHIS LICENSES, INC. Attn: FCC REGULATORY COMPLIANCE 12920 SE 38TH ST. BELLEVUE, WA 98006

Geographically-L	icensed Services	
Market Number	Market Name	Channel Block
BTA263	Louisville, KY	F

Condition:

This lease may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum associated with this leasing agreement, 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.

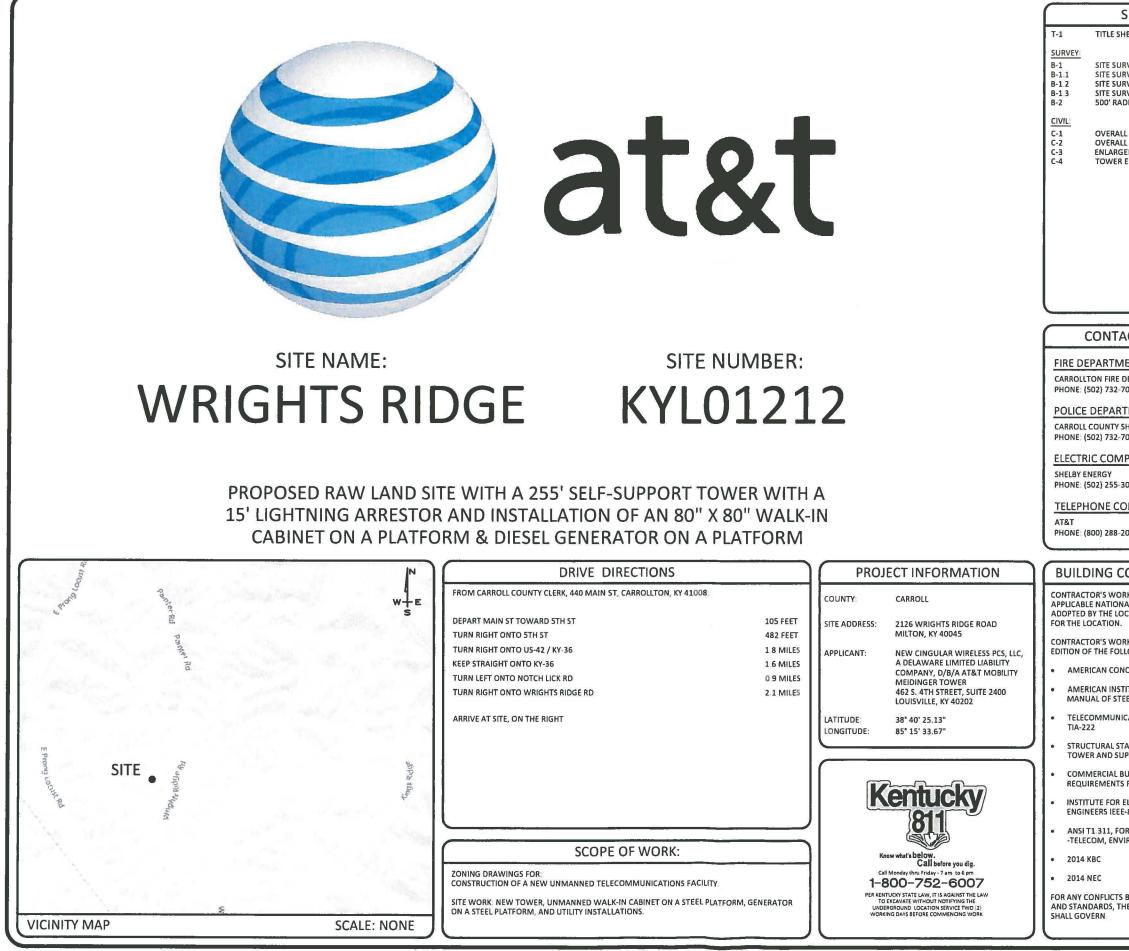
Conditions:

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.

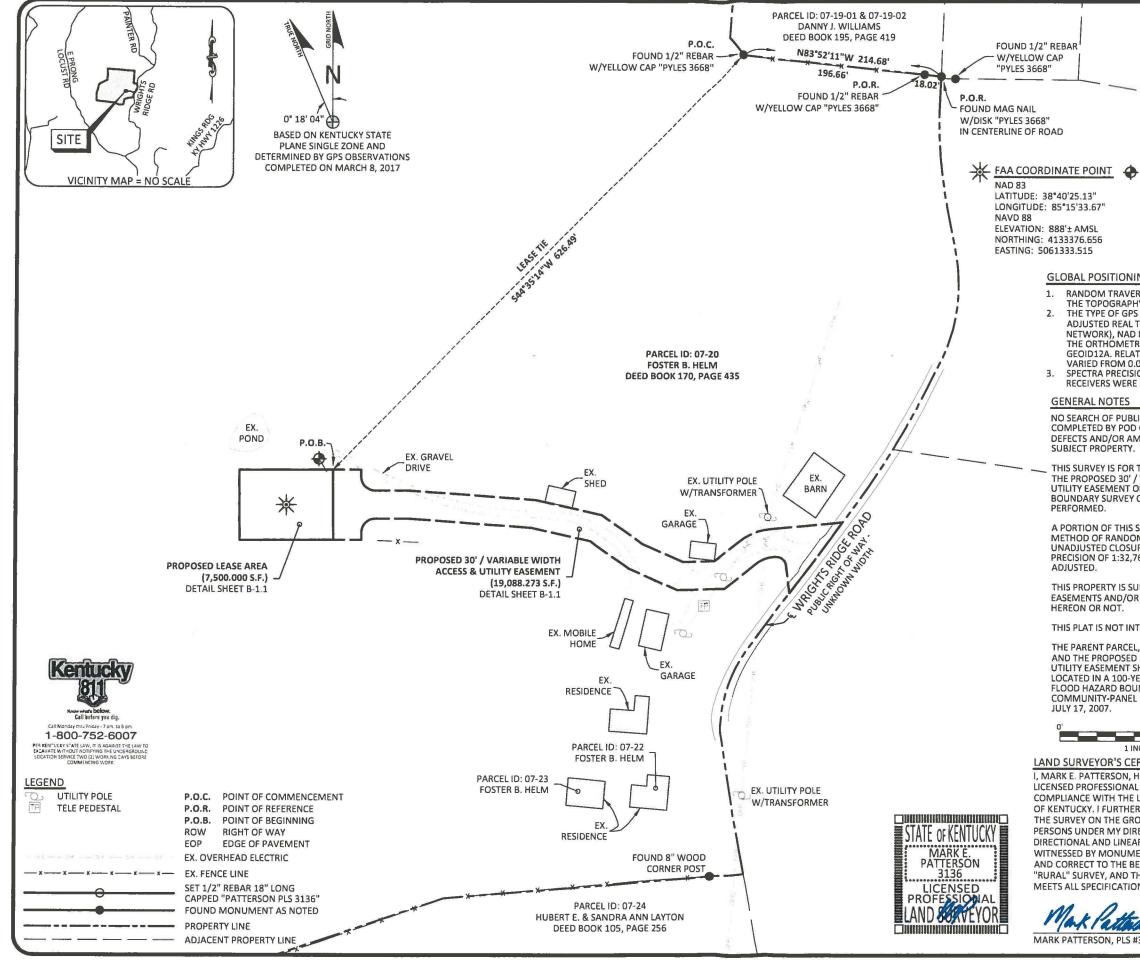
EXHIBIT B

SITE DEVELOPMENT PLAN:

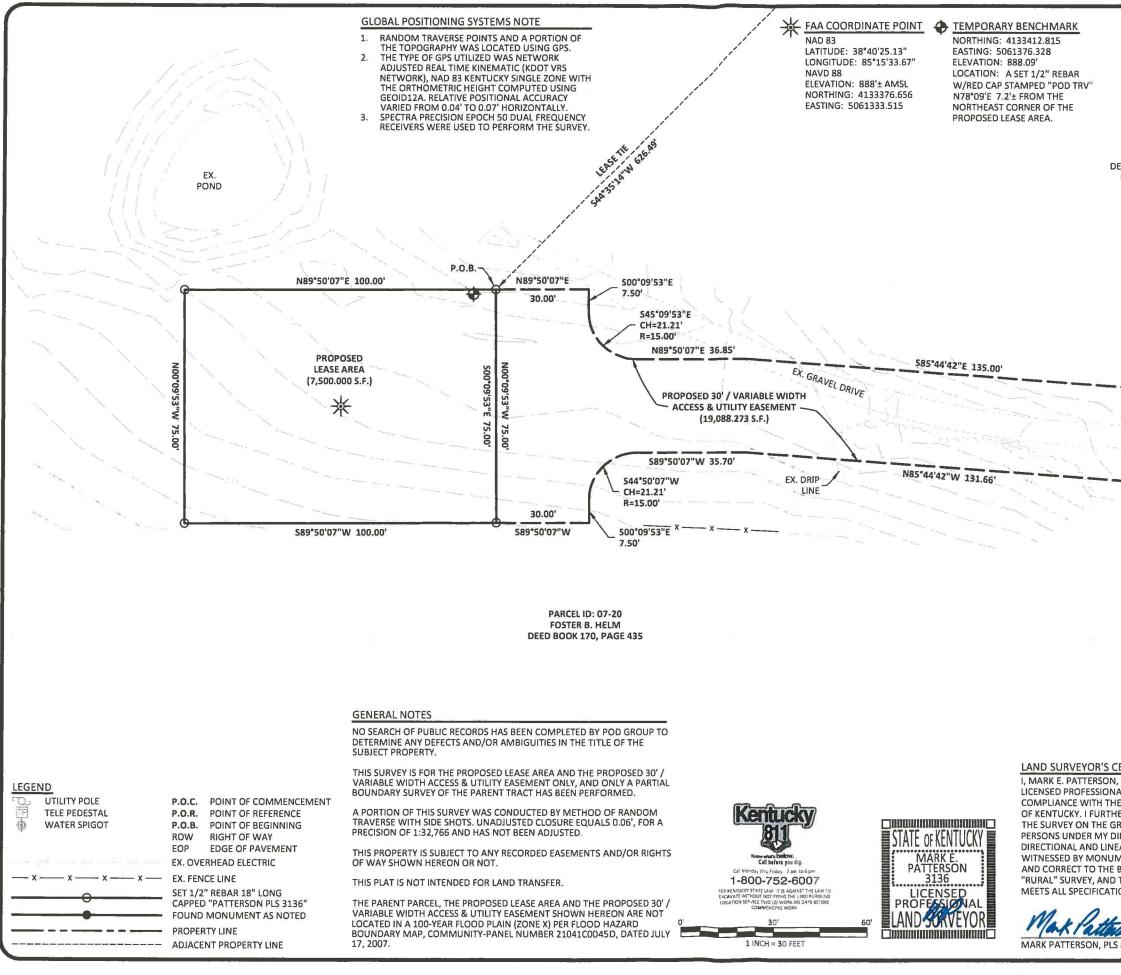
500' VICINITY MAP LEGAL DESCRIPTIONS FLOOD PLAIN CERTIFICATION SITE PLAN VERTICAL TOWER PROFILE



SHEET INDEX	PREF	ARED BY:			11
SHEET & PROJECT INFORMATION		1		DD DE DESIGN	
URVEY URVEY URVEY		11490 BI LOUI 5	UEGRASS P SVILLE, KY 4 02-437-525	ARKWAY 0299 2	
ADIUS AND ABUTTERS MAP	PREF	ARED FO			1
ALL SITE LAYOUT ALL SITE LAYOUT -CONT'D IGED COMPOUND LAYOUT IF ELEVATION	PREF	ARED FOR	-	ec	
				t&t	
	international in	1	OF KEA MARK E. ATTERSO 16.300		
TACT INFORMATION	E	1 Aug	KIAL	E S	
MENT E DEPARTMENT 2-7041			ONAL E	4/2/4	201
RTMENT		7		2	11
Y SHERIFF'S DEPARTMENT 2-7010	ZONING DRAWINGS				
MPANY	REV DATE DESCRIPTION				$\left\ \right\ $
5-3001	A 3.9.18 ISSUED FOR REVIEW			RREVIEW	11
COMPANY	0 4.2.18 ISSUED AS FINALS			FINALS	
3-2020					
CODES AND STANDARDS					
ORK SHALL COMPLY WITH ALL DNAL, STATE AND LOCAL CODES AS LOCAL AUTHORITY HAVING JURISDICTION N.				3	
ORK SHALL COMPLY WITH THE LATEST		SITE	INFORMATI	ON:	1
DNCRETE INSTITUTE 318		WRIC	SHTS R	IDGE	
ISTITUTE OF STEEL CONSTRUCTION TEEL CONSTRUCTION			RIGHTS RIDG TON, KY 40		
NICATIONS INDUSTRY ASSOCIATION			RROLL COUN		$\left\ \right\ $
STANDARDS FOR STEEL ANTENNA SUPPORTING STRUCTURES TIA-601	KYL01212		17-13278	$\ $	
L BUILDING GROUNDING AND BONDING TS FOR TELECOMMUNICATIONS	DRAWN BY: JRS CHECKED BY: MEP		MEP		
R ELECTRICAL AND ELECTRONICS EE-81, IEEE 1100, IEEE C62 41	DAT		HEET TITLE:	3.9.18	$\left\ \right\ $
FOR TELECOM - DC POWER SYSTEMS		TIT	LE SHE	EET	
			PROJE DRMA1		
TS BETWEEN SECTIONS OF LISTED CODES THE MOST RESTRICTIVE REQUIREMENT	SHEET NUMBER: T-1]	

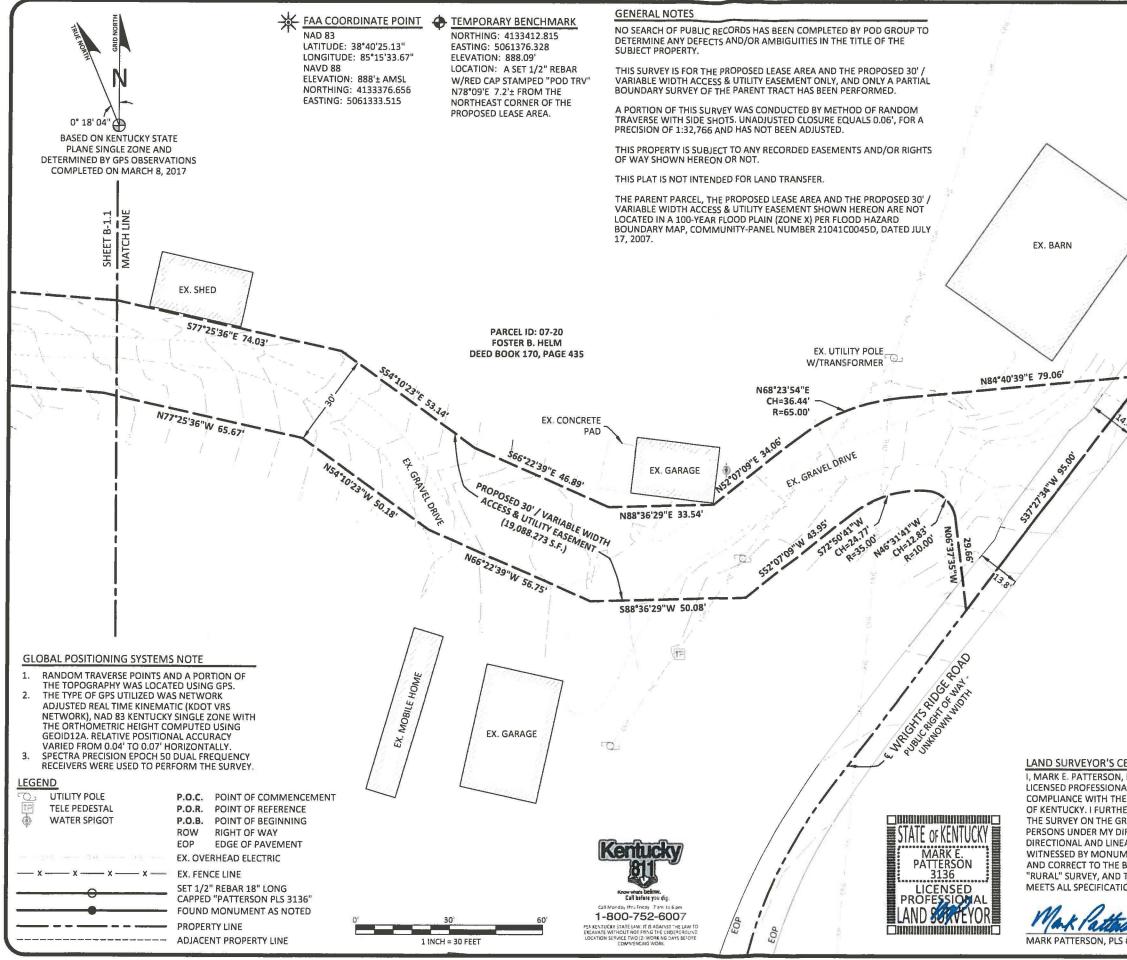


TEMPORARY BENCHMARK NORTHING: 4133412.815 EASTING: 5061376.328 ELEVATION: ASET 1/2" REBAR W/RED CAP STAMPED "POD TRV" N78"09'E 7.2'± FROM THE NORTHEAST CORNER OF THE PROPOSED LEASE AREA. NING SYSTEMS NOTE VERSE POINTS AND A PORTION OF VERSE POINTS AND A PORTION OF PHY WAS LOCATED USING GPS. SPE UTILIZED WAS NETWORK AL TIME KINEMATIC (KDOT VRS AD 83 KENTUCKY SINGLE ZONE WITH ETRIC HEIGHT COMPUTED USING LATIVE POSITIONAL ACCURACY 0.04' TO 0.07' HORIZONTALLY. ISION EPOCH 50 DUAL FREQUENCY REV DA AMBIGUITIES IN THE TITLE OF THE YOR THE PROPOSED LEASE AREA AND D' / VARIABLE WIDTH ACCESS & T ONLY, AND ONLY A PARTIAL EY OF THE PARENT TRACT HAS BEEN DD GROUP TO DETERMINE ANY AMBIGUITIES IN THE TITLE OF THE YOR THE PROPOSED LEASE AREA AND D' / VARIABLE WIDTH ACCESS & T ONLY, AND ONLY A PARTIAL EY OF THE PARENT TRACT HAS BEEN DOM TRAVERSE WITH SIDE SHOTS. SUBJECT TO ANY RECORDED YOR RIGHTS OF WAY SHOWN 2126 INTENDED FOR LAND TRANSFER. CEL, THE PROPOSED LEASE AREA	PODD POWIR OF DESIGN PODE LUGGRASS PAARWAY SUISVILE, EY 40293 Soz 437 5252 OF DR asTec FOR asTec at&t SURVEY TE <u>DESCRIPTION</u> 17 PRELIM ISSUE W/ TITLE		
TEMPORARY BENCHMARK NORTHING: 4133412.815 EASTING: 5061376.328 ELEVATION: 888.09' LOCATION: A SET 1/2" REBAR W/RED CAP STAMPED "POD TRV" N78'09'E 7.2'± FROM THE NORTHEAST CORNER OF THE PROPOSED LEASE AREA. NING SYSTEMS NOTE VERSE POINTS AND A PORTION OF VPHY WAS LOCATED USING GPS. SPS UTILIZED WAS NETWORK AL TIME KINEMATIC (KDOT VRS AD 83 KENTUCKY SINGLE ZONE WITH ETRIC HEIGHT COMPUTED USING LATIVE POSITIONAL ACCURACY O.04' TO 0.07' HORIZONTALLY. CISION EPOCH 50 DUAL FREQUENCY REV DA AMBIGUITIES IN THE TITLE OF THE YOR THE PROPOSED LEASE AREA AND D' / VARIABLE WIDTH ACCESS & DO GROUP TO DETERMINE ANY AMBIGUITIES IN THE TITLE OF THE YON THE PROPOSED LEASE AREA AND D' / VARIABLE WIDTH ACCESS & SUBJECT TO ANY RECORDED YOR RIGHTS OF WAY SHOWN SUBJECT TO ANY RECORDED YOR RIGHTS OF WAY SHOWN SUBJECT TO ANY RECORDED YOR RIGHTS OF WAY SHOWN 2126 YARIABLE WIDTH ACCESS & DOW ARY MAP, JEL NUMBER 21041C0045D, DATED 100' 200' 200' 200' 200' 200' 200' 200' 200' 200' 200' 200' 200' 200' 200' 200'	asTec oror: at&t SURVEY		
NORTHING: 4133412.815 EASTING: 5061376.328 ELEVATION: ASET 1/2" REBAR W/RED CAP STAMPED "POD TRV" N78"09'E 7.2'± FROM THE NORTHEAST CORNER OF THE PROPOSED LEASE AREA. NING SYSTEMS NOTE VERSE POINTS AND A PORTION OF PPHY WAS LOCATED USING GPS. SPS UTILIZED WAS NETWORK AL TIME KINEMATIC (KDOT VRS AD 83 KENTUCKY SINGLE ZONE WITH ETRIC HEIGHT COMPUTED USING LATIVE POSITIONAL ACCURACY 0.04' TO 0.07' HORIZONTALLY. ISION EPOCH 50 DUAL FREQUENCY REE USED TO PERFORM THE SURVEY. S JBLIC RECORDS HAS BEEN DD GROUP TO DETERMINE ANY AMBIGUITIES IN THE TITLE OF THE TONLY, AND ONLY A PARTIAL EY OF THE PROPOSED LEASE AREA AND D' / VARIABLE WIDTH ACCESS & TONLY, AND ONLY A PARTIAL EY OF THE PARENT TRACT HAS BEEN DOM TRAVERSE WITH SIDE SHOTS. SUBJECT TO ANY RECORDED YOR RIGHTS OF WAY SHOWN 2126E INTENDED FOR LAND TRANSFER. CEL, THE PROPOSED LEASE AREA IED 30' / VARIABLE WIDTH ACCESS &	SURVEY TE DESCRIPTION 17 PRELIM ISSUE W/ TITLE		
VERSE POINTS AND A PORTION OF PHY WAS LOCATED USING GPS. SPS UTILIZED WAS NETWORK ALTIME KINEMATIC (KDOT VRS AD 83 KENTUCKY SINGLE ZONE WITH ETRIC HEIGHT COMPUTED USING LATIVE POSITIONAL ACCURACY 0.04' TO 0.07' HORIZONTALLY. ISION EPOCH 50 DUAL FREQUENCY RE USED TO PERFORM THE SURVEY. A 4.1 S 0 4 22 JBLIC RECORDS HAS BEEN DD GROUP TO DETERMINE ANY AMBIGUITIES IN THE TITLE OF THE TY. DR THE PROPOSED LEASE AREA AND D' / VARIABLE WIDTH ACCESS & T ONLY, AND ONLY A PARTIAL EY OF THE PARENT TRACT HAS BEEN DOM TRAVERSE WITH SIDE SHOTS. SURE EQUALS 0.06', FOR A 2,766 AND HAS NOT BEEN SUBJECT TO ANY RECORDED YOR RIGHTS OF WAY SHOWN 2126 INTENDED FOR LAND TRANSFER. CEL, THE PROPOSED LEASE AREA ED 30' / VARIABLE WIDTH ACCESS & T SHOWN HEREON ARE NOT >YEAR FLOOD PLAIN (ZONE X) PER OUNDARY MAP, VEL NUMBER 21041C0045D, DATED 100' 200'	TE DESCRIPTION 17 PRELIM ISSUE W/ TITLE		
ETRIC HEIGHT COMPUTED USING LATIVE POSITIONAL ACCURACY 0.04' TO 0.07' HORIZONTALLY. ISION EPOCH 50 DUAL FREQUENCY RE USED TO PERFORM THE SURVEY. A 4.1 0 4 24 JBLIC RECORDS HAS BEEN DD GROUP TO DETERMINE ANY AMBIGUITIES IN THE TITLE OF THE TY. DR THE PROPOSED LEASE AREA AND D' / VARIABLE WIDTH ACCESS & T ONLY, AND ONLY A PARTIAL EY OF THE PARENT TRACT HAS BEEN US SURVEY WAS CONDUCTED BY DOM TRAVERSE WITH SIDE SHOTS. SURE EQUALS 0.06', FOR A 2,766 AND HAS NOT BEEN SUBJECT TO ANY RECORDED O'R RIGHTS OF WAY SHOWN INTENDED FOR LAND TRANSFER. CEL, THE PROPOSED LEASE AREA ED 30' / VARIABLE WIDTH ACCESS & DEE D'Y VARIABLE WIDTH ACCESS & DEE 100' 200'	TE DESCRIPTION 17 PRELIM ISSUE W/ TITLE		
ISION EPOCH 50 DUAL FREQUENCY A IRE USED TO PERFORM THE SURVEY. A S 0 JBLIC RECORDS HAS BEEN 0 DD GROUP TO DETERMINE ANY AMBIGUITIES IN THE TITLE OF THE YAMBIGUITIES IN THE TITLE OF THE Image: Comparison of the comparison of	17 PRELIM ISSUE W/ TITLE		
S 0 4.24 JBLIC RECORDS HAS BEEN 0 4.24 DD GROUP TO DETERMINE ANY AMBIGUITIES IN THE TITLE OF THE 1 DY ARABIGUITIES IN THE TITLE OF THE 1 DR THE PROPOSED LEASE AREA AND S D' / VARIABLE WIDTH ACCESS & TONLY, AND ONLY A PARTIAL EY OF THE PARENT TRACT HAS BEEN W 2126 15 SURVEY WAS CONDUCTED BY DOM TRAVERSE WITH SIDE SHOTS. SUBLECT TO ANY RECORDED YOR RIGHTS OF WAY SHOWN P SUBJECT TO ANY RECORDED P YOR RIGHTS OF WAY SHOWN 2126 INTENDED FOR LAND TRANSFER. 2126 EL, THE PROPOSED LEASE AREA S ED 30' / VARIABLE WIDTH ACCESS & DEE YONDARY MAP, JUNDARY MAP, JEL NUMBER 21041C0045D, DATED 100'			
JBLIC RECORDS HAS BEEN 0 2.2 JDD GROUP TO DETERMINE ANY AMBIGUITIES IN THE TITLE OF THE 2 Y. DR THE PROPOSED LEASE AREA AND S D' / VARIABLE WIDTH ACCESS & TONLY, AND ONLY A PARTIAL W EY OF THE PARENT TRACT HAS BEEN W 2126 IS SURVEY WAS CONDUCTED BY DOM TRAVERSE WITH SIDE SHOTS. SUBJECT TO ANY RECORDED SUBJECT TO ANY RECORDED P OR RIGHTS OF WAY SHOWN 2126 INTENDED FOR LAND TRANSFER. 2126 EEL, THE PROPOSED LEASE AREA S ED 30' / VARIABLE WIDTH ACCESS & DEE T SHOWN HEREON ARE NOT PER OUNDARY MAP, JUNDBER 21041C0045D, DATED 100' 200'	17 ISSUED AS FINAL		
DD GROUP TO DETERMINE ANY AMBIGUITIES IN THE TITLE OF THE TY. DR THE PROPOSED LEASE AREA AND D' / VARIABLE WIDTH ACCESS & T ONLY, AND ONLY A PARTIAL EY OF THE PARENT TRACT HAS BEEN UNUP THE PARENT TRACT HAS BEEN SURVEY WAS CONDUCTED BY DOM TRAVERSE WITH SIDE SHOTS. SURE EQUALS 0.06', FOR A 2,766 AND HAS NOT BEEN SUBJECT TO ANY RECORDED YOR RIGHTS OF WAY SHOWN 2126 INTENDED FOR LAND TRANSFER. CEL, THE PROPOSED LEASE AREA ED 30' / VARIABLE WIDTH ACCESS & DEE D' YARIABLE WIDTH ACCESS & DEE D' / VARIABLE VIDTH ACCESS & DEE D' / VARIABLE VIDTH ACCESS & DE D' / VARIABLE VIDTH ACCESS & DE D' / VARIABLE VIDTH ACCESS & D' / VARIABLE			
ON THE PROPOSED LEASE AREA AND ON THE PROPOSED LEASE AREA AND O' / VARIABLE WIDTH ACCESS & T ONLY, AND ONLY A PARTIAL EY OF THE PARENT TRACT HAS BEEN VOR THE PARENT TRACT HAS BEEN VOR THE PARENT TRACT HAS BEEN VOR THE PARENT TRACT HAS BEEN SURE EQUALS 0.06', FOR A 2,766 AND HAS NOT BEEN SUBJECT TO ANY RECORDED YOR RIGHTS OF WAY SHOWN 2126 INTENDED FOR LAND TRANSFER. CEL, THE PROPOSED LEASE AREA ED 30' / VARIABLE WIDTH ACCESS & DEE OUNDARY MAP, IEL NUMBER 21041C0045D, DATED			
IS SURVEY WAS CONDUCTED BY DOM TRAVERSE WITH SIDE SHOTS. SURE EQUALS 0.06', FOR A 2,766 AND HAS NOT BEEN TA SUBJECT TO ANY RECORDED P (OR RIGHTS OF WAY SHOWN 21226 INTENDED FOR LAND TRANSFER. CEL, THE PROPOSED LEASE AREA ED 30' / VARIABLE WIDTH ACCESS & DEE 30' / VARIABLE WIDTH ACCESS & DEE 5HOWN HEREON ARE NOT D-YEAR FLOOD PLAIN (ZONE X) PER OUNDARY MAP, IEL NUMBER 21041C0045D, DATED	TE INFORMATION:		
VOR RIGHTS OF WAY SHOWN 2126 INTENDED FOR LAND TRANSFER. CEL, THE PROPOSED LEASE AREA ED 30' / VARIABLE WIDTH ACCESS & T SHOWN HEREON ARE NOT -YEAR FLOOD PLAIN (ZONE X) PER OUNDARY MAP, JEL NUMBER 21041C0045D, DATED 100' 200'	WRIGHTS RIDGE ROAD MILTON, KY 40045 CARROLL COUNTY K PARCEL NUMBER: 07-20		
CEL, THE PROPOSED LEASE AREA ED 30' / VARIABLE WIDTH ACCESS & DEE T SHOWN HEREON ARE NOT -YEAR FLOOD PLAIN (ZONE X) PER OUNDARY MAP, JEL NUMBER 21041C0045D, DATED	ROPERTY OWNER: FOSTER B. HELM WRIGHTS RIDGE ROAD		
ED 30' / VARIABLE WIDTH ACCESS & DEE T SHOWN HEREON ARE NOT D-YEAR FLOOD PLAIN (ZONE X) PER OUNDARY MAP, IEL NUMBER 21041C0045D, DATED	MILTON, KY 40045		
IEL NUMBER 21041C0045D, DATED	OURCE OF TITLE: D BOOK 170, PAGE 435		
	SITE NUMBER: KYLO1212		
1 INCH = 100 FEET	KYL01212		
CERTIFICATE	KYL01212		
N, HEREBY CERTIFY THAT I AM A VAL LAND SURVEYOR LICENSED IN HE LAWS OF THE COMMONWEALTH HER CERTIFY THAT THIS PLAT AND GROUND WERE PERFORMED BY			
DIRECT SUPERVISION, AND THAT THE LEAR MEASUREMENTS BEING IMENTS SHOWN HEREON ARE TRUE E BEST OF MY KNOWLEDGE. THE D THE PLAT ON WHICH IT IS BASED, FIONS AS STATED IN KAR 201 18:150.	UMBER: 17-13280 I BY: DAP D BY: MEP DATE: 3.8.17 ATE: 4.1.17		
4 (2/2010	IMBER: 17-13280 I BY: DAP D BY: MEP DATE: 3.8.17		
4/2/2018	UMBER: 17-13280 I BY: DAP D BY: MEP DATE: 3.8.17 ATE: 4.1.17 SHEET TITLE:		
S #3136 DATE	UMBER: 17-13280 I BY: DAP D BY: MEP DATE: 3.8.17 ATE: 4.1.17 SHEET TITLE: TE SURVEY		



O° 18' 04" DO' 18' 04" BASED ON KENTUCKY STATE PLANE SINGLE ZONE AND ETERMINED BY GPS OBSERVATIONS COMPLETED ON MARCH 8, 2017	PREF	ARED FOR	sTec
		S	URVEY
	REV.	DATE	DESCRIPTION
EX. SHED	Α	4.1.17	PRELIM ISSUE W/ TITLE
577*25'36	0	4.24.17	ISSUED AS FINAL
2			
		CUTE 1	NFORMATION:
N77"25'36"W 65		2126 WR MIL CAR TAX PA PROP FO: 2126 WR MIL SOU DEED BC	CHTS RIDGE IGHTS RIDGE ROAD FON, KY 40045 ROLL COUNTY ARCEL NUMBER: 07-20 ERTY OWNER: STER B. HELM IGHTS RIDGE ROAD FON, KY 40045 RCE OF TITLE: DOK 170, PAGE 435
İ	┝		KYL01212
ERTIFICATE	PO	D NUMB	ER: 17-13280
, HEREBY CERTIFY THAT I AM A AL LAND SURVEYOR LICENSED IN E LAWS OF THE COMMONWEALTH IER CERTIFY THAT THIS PLAT AND ROUND WERE PERFORMED BY	DR/ CHI SUI	AWN BY: ECKED B RVEY DA T DATE:	DAP Y: MEP TE: 3.8.17 4.1.17
IRECT SUPERVISION, AND THAT THE EAR MEASUREMENTS BEING MENTS SHOWN HEREON ARE TRUE BEST OF MY KNOWLEDGE. THE THE PLAT ON WHICH IT IS BASED, IONS AS STATED IN KAR 201 18:150.			E SURVEY
4/2/2018			ET NUMBER:
4/2/2018 #3136 DATE		E	3-1.1 J

DocuSign Envelope ID: 72FDF7BA-FAD8-45E2-B04A-17292CD96F34



REPARED BY PREPARED FOR PUTE ANY DESCRIPTION A 4117 PREPARED FOR PREPARED FOR PR					
REV DATE DESCRIPTION A 4.1.17 PRELIM ISSUE W/ TITLE 0 4.24.17 ISSUED AS FINAL 0 1.117 INFORMATION: WRIGHTS RIDGE ROAD MILTON, KY 40045 CARCEL NUMBER: 07-20 PROPERTY OWNER: FOSTER B. HELM PROPERTY OWNER: FOSTER B. HELM 2126 WRIGHTS RIDGE ROAD MILTON, KY 40045 SOURCE OF TITLE: DEED BOOK 170, PAGE 435 SOURCE OF TITLE: DEED BOOK 170, PAGE 435 SOURCE OF TITLE: DEED BOOK 170, PAGE 435 POD NUMBER: 17-13280 DRAWN BY: DAP CHECKED BY: MEP QAWN BY: DAP CHECKED BY: MEP SHEET TITLE:	60, 600	PREF	PARED FOR Ma		e c
REV DATE DESCRIPTION A 4.1.17 PRELIM ISSUE W/ TITLE 0 4.24.17 ISSUED AS FINAL 0 1.117 INFORMATION: WRIGHTS RIDGE ROAD MILTON, KY 40045 CARCEL NUMBER: 07-20 PROPERTY OWNER: FOSTER B. HELM PROPERTY OWNER: FOSTER B. HELM 2126 WRIGHTS RIDGE ROAD MILTON, KY 40045 SOURCE OF TITLE: DEED BOOK 170, PAGE 435 SOURCE OF TITLE: DEED BOOK 170, PAGE 435 SOURCE OF TITLE: DEED BOOK 170, PAGE 435 POD NUMBER: 17-13280 DRAWN BY: DAP CHECKED BY: MEP QAWN BY: DAP CHECKED BY: MEP SHEET TITLE:					
A 4 1 17 PRELIM ISSUE W/ TITLE 0 4 24 17 ISSUED AS FINAL 0 4 24 17 ISSUED AS FINAL 0 1 1 1 0 4 24 17 ISSUED AS FINAL 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <	1 ; 1	054			
0 4 24 17 ISSUED AS FINAL 0 4 24 17 ISSUED AS FINAL 0 SITE INFORMATION: WRIGHTS RIDGE ROAD MILTON, KY 40045 CARROLL COUNTY TAX PARCEL NUMBER: 07-20 PROPERTY OWNER: FOSTER B. HELM 2126 WRIGHTS RIDGE ROAD MILTON, KY 40045 SOURCE OF TITLE: DEED BOOK 170, PAGE 435 SITE NUMBER: KYL01212 POD NUMBER: KYL01212 DOD NUMBER: KYL01212 POD NUMBER: KYL01212 DAWN BY: DEED BOOK 170, PAGE 435 SURCE OF TITLE: DEED BOOK 170, PAGE 435 SURVEY DATE: SURVEY DATE: SURVEY DATE: SURVEY DATE: SURVEY DATE: SURVEY DATE: SHEET TITLE: SHEET TITLE:	1/	-			
SITE INFORMATION: WRIGHTS RIDGE ROAD MILTON, KY 40045 CARROLL COUNTY TAX PARCEL NUMBER: 07-20 PROPERTY OWNER: FOSTER B. HELM 2126 WRIGHTS RIDGE ROAD MILTON, KY 40045 SOURCE OF TITLE: DEED BOOK 170, PAGE 435 SITE NUMBER: KYL01212 POD NUMBER: 17-13280 DRAWN BY: DAP CHECKED BY: MEP SURVEYOR LICENSED IN E LAWS OF THE COMMONWEALTH LER CERTIFY THAT THS PLAT AND ROUND WERE PERFORMED BY IRECT SUPERVISION, AND THAT THE CAR MEASUREMENTS BEING	/ /	-			
CERTIFICATE POD NUMBER: 17-13280 REREBY CERTIFY THAT I AM A SITE NUMBER: NHTON, PAGE 435 SITE NUMBER: CARSOLI PAGE 435 SITE NUMBER: SURCE OF TITLE: DEED BOOK 170, PAGE 435 SITE NUMBER: KYL01212 POD NUMBER: POD NUMBER: 17-13280 DRAWN BY: DAP CHECKED BY: MEP SURVEY DATE: 3.8.17 PLAT DATE: 4.1.17 SHEET TITLE: SHEET TITLE:	2.9.				
CERTIFICATE POD NUMBER: 17-13280 REREBY CERTIFY THAT I AM A SITE NUMBER: NHTON, PAGE 435 SITE NUMBER: CARSOLI PAGE 435 SITE NUMBER: SURCE OF TITLE: DEED BOOK 170, PAGE 435 SITE NUMBER: KYL01212 POD NUMBER: POD NUMBER: 17-13280 DRAWN BY: DAP CHECKED BY: MEP SURVEY DATE: 3.8.17 PLAT DATE: 4.1.17 SHEET TITLE: SHEET TITLE:	7				
2126 WRIGHTS RIDGE ROAD MILTON, KY 40045 CARROLL COUNTY TAX PARCEL NUMBER: 07-20 PROPERTY OWNER: FOSTER B. HELM 2126 WRIGHTS RIDGE ROAD MILTON, KY 40045 SOURCE OF TITLE: DEED BOOK 170, PAGE 435 SURCE OF TITLE: DEED BOOK 170, PAGE 435 SITE NUMBER: KYL01212 POD NUMBER: LAWS OF THE COMMONWEALTH ER CERTIFY THAT TIS PLAT AND ROUND WERE PERFORMED BY IRECT SUPERVISION, AND THAT THE EAR MEASUREMENTS BEING			SITE I	NFORMATI	ON:
CERTIFICATE HEREBY CERTIFY THAT I AM A AL LAND SURVEYOR LICENSED IN E LAWS OF THE COMMONWEALTH IER CERTIFY THAT THIS PLAT AND ROUND WERE PERFORMED BY IRECT SUPERVISION, AND THAT THE CAR MEASUREMENTS BEING DOT-20 PROPERTY OWNER: FOSTER B. HELM 2126 WRIGHTS RIDGE ROAD MILTON, KY 40045 SOURCE OF TITLE: DEED BOOK 170, PAGE 435 SITE NUMBER: KYL01212 POD NUMBER: 17-13280 DRAWN BY: DAP CHECKED BY: MEP SURVEY DATE: 3.8.17 PLAT DATE: 4.1.17 SHEET TITLE: CONSTRUCTION AND THAT THE CAR MEASUREMENTS BEING		:	2126 WR MIL1	IGHTS RIDG FON, KY 400	ie road 045
ERTIFICATE POD NUMBER: 17-13280 REREBY CERTIFY THAT I AM A SITE NUMBER: KYL01212 POD NUMBER: 17-13280 DRAWN BY: DAP CHECKED BY: MEP SURVEY DATE: 3.8.17 PLAT DATE: 4.1.17 SHEET TITLE: SHEET TITLE:			ΤΑΧ ΡΑ		MBER:
FOSTER B. HELM 2126 WRIGHTS RIDGE ROAD MILTON, KY 40045 SOURCE OF TITLE: DEED BOOK 170, PAGE 435 SITE NUMBER: KYL01212 POD NUMBER: KYL01212 DRAWN BY: DAP CHECKED BY: MEP SURVEYOR LICENSED IN E LAWS OF THE COMMONWEALTH IER CERTIFY THAT THIS PLAT AND PRAWN BY: DAP CHECKED BY: MEP SURVEY DATE: 3.8.17 PLAT DATE: 4.1.17 SHEET TITLE: SHEET TITLE:			PROP		NFR
CERTIFICATE SITE NUMBER: KYL01212 POD NUMBER: 17-13280 J. HEREBY CERTIFY THAT I AM A DRAWN BY: DAP AL LAND SURVEYOR LICENSED IN DRAWN BY: DAP CHECKED BY: MEP SURVEY DATE: 3.8.17 PLAT DATE: 4.1.17 SHEET TITLE: SHEET TITLE:		7	FO3	STER B. HEL	M E ROAD
CERTIFICATE POD NUMBER: 17-13280 , HEREBY CERTIFY THAT I AM A DRAWN BY: DAP AL LAND SURVEYOR LICENSED IN DRAWN BY: DAP CHECKED BY: MEP SURVEY DATE: 3.8.17 PLAT DATE: 4.1.17 PLAT DATE: 4.1.17 SURECT SUPERVISION, AND THAT THE SHEET TITLE: SHEET TITLE:					C124 - 421 - 2042
HEREBY CERTIFY THAT I AM A DRAWN BY: DAP AL LAND SURVEYOR LICENSED IN CHECKED BY: MEP E LAWS OF THE COMMONWEALTH SURVEY DATE: 3.8.17 PC CERTIFY THAT THIS PLAT AND PLAT DATE: 4.1.17 ROUND WERE PERFORMED BY SHEET TITLE: EAR MEASUREMENTS BEING SHEET TITLE:					R:
HEREBY CERTIFY THAT I AM A DRAWN BY: DAP AL LAND SURVEYOR LICENSED IN CHECKED BY: MEP E LAWS OF THE COMMONWEALTH SURVEY DATE: 3.8.17 PC CERTIFY THAT THIS PLAT AND PLAT DATE: 4.1.17 ROUND WERE PERFORMED BY SHEET TITLE: EAR MEASUREMENTS BEING SHEET TITLE:					
AL LAND SURVEYOR LICENSED IN E LAWS OF THE COMMONWEALTH IER CERTIFY THAT THIS PLAT AND ROUND WERE PERFORMED BY IRECT SUPERVISION, AND THAT THE EAR MEASUREMENTS BEING		PO	DNUMB	ER:	17-13280
IRECT SUPERVISION, AND THAT THE SHEET TITLE: AR MEASUREMENTS BEING	AL LAND SURVEYOR LICENSED IN E LAWS OF THE COMMONWEALTH ER CERTIFY THAT THIS PLAT AND	CHI SUI	ECKED BY	6	MEP 3.8.17
BEST OF MY KNOWLEDGE. THE THE PLAT ON WHICH IT IS BASED, IONS AS STATED IN KAR 201 18:150.	IRECT SUPERVISION, AND THAT THE EAR MEASUREMENTS BEING MENTS SHOWN HEREON ARE TRUE BEST OF MY KNOWLEDGE. THE THE PLAT ON WHICH IT IS BASED,				
SHEET NUMBER:	4/2/2010				
4/2/2018 B-1.2		B-1.2			2

LEGAL DESCRIPTIONS

PROPOSED LEASE AREA

THE FOLLOWING IS A DESCRIPTION OF THE PROPOSED LEASE AREA TO BE LEASED FROM THE PROPERTY CONVEYED TO FOSTER B. HELM AS RECORDED IN DEED BOOK 170, PAGE 435, PARCEL ID: 07-20, 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 8, 2017.

COMMENCING AT A FOUND 1/2" REBAR WITH A YELLOW CAP STAMPED "PYLES 3668" IN THE COMMON BOUNDARY CORNER TO THE PROPERTY CONVEYED TO FOSTER B. HELM AS RECORDED IN DEED BOOK 170, PAGE 435, PARCEL ID: 07-20 AND BOUNDARY CORNER TO THE PROPERTY CONVEYED TO DANNY J. WILLIAMS AS RECORDED IN DEED BOOK 195, PAGE 419, FOR REFERENCE SAID REBAR IS N83*52'11"W 214.68' FROM A FOUND MAG NAIL WITH A DISK STAMPED "PYLES 3668" IN THE COMMON BOUNDARY CORNER TO SAID WILLIAMS AND HELM PROPERTY, ALSO BEING IN THE CENTERLINE OF WRIGHT RIDGE ROAD, SAID COMMENCEMENT POINT IS ALSO N83*52'11"W 196.66' FROM A FOUND 1/2" REBAR WITH A YELLOW CAP STAMPED "PYLES 3668" ALONG SAID COMMON LINE; THENCE LEAVING SAID COMMON BOUNDARY CORNER AND TRAVERSING THE LAND OF SAID HELM, S44*35'14"W 626.49' A SET 1/2" REBAR WITH CAP STAMPED "PATTERSON PLS 3136", HEREAFTER REFERRED TO AS A SET IPC, IN THE NORTHEAST CORNER OF THE PROPOSED LEASE AREA AND BEING THE TRUE POINT OF BEGINNING; THENCE 500*09'53"E 75.00' TO A SET IPC; THENCE S89*50'07"W 100.00' TO A SET IPC; THENCE N00°09'53"W 75.00' TO A SET IPC; THENCE N89°50'07"E 100.00' TO THE POINT OF BEGINNING CONTAINING 7,500.000 SQUARE FEET AS PER SURVEY BY MARK PATTERSON, PLS #3136 WITH POWER OF DESIGN GROUP, LLC DATED MARCH 8, 2017

PROPOSED 30' / VARIABLE WIDTH ACCESS & UTILITY EASEMENT

THE FOLLOWING IS A DESCRIPTION OF THE PROPOSED 30' / VARIABLE WIDTH ACCESS & UTILITY EASEMENT TO BE GRENTED FROM THE PROPERTY CONVEYED TO FOSTER B. HELM AS RECORDED IN DEED BOOK 170, PAGE 435, PARCEL ID: 07-20, 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 8, 2017.

COMMENCING AT A FOUND 1/2" REBAR WITH A YELLOW CAP STAMPED "PYLES 3668" IN THE COMMON BOUNDARY CORNER TO THE PROPERTY CONVEYED TO FOSTER B. HELM AS RECORDED IN DEED BOOK 170, PAGE 435, PARCEL ID: 07-20 AND BOUNDARY CORNER TO THE PROPERTY CONVEYED TO DANNY J. WILLIAMS AS RECORDED IN DEED BOOK 195, PAGE 419, FOR REFERENCE SAID REBAR IS N83"52'11"W 214.68" FROM A FOUND MAG NAIL WITH A DISK STAMPED "PYLES 3668" IN THE COMMON BOUNDARY CORNER TO SAID WILLIAMS AND HELM PROPERTY, ALSO BEING IN THE CENTERLINE OF WRIGHT RIDGE ROAD, SAID COMMENCEMENT POINT IS ALSO N83*52'11"W 195.66' FROM A FOUND 1/2" REBAR WITH A YELLOW CAP STAMPED "PYLES 3668" ALONG SAID COMMON LINE: THENCE LEAVING SAID COMMON BOUNDARY CORNER AND TRAVERSING THE LAND OF SAID HELM, S44*35'14"W 626.49' A SET 1/2' REBAR WITH CAP STAMPED "PATTERSON PLS 3136", HEREAFTER REFERRED TO AS A SET IPC, IN THE NORTHEAST CORNER OF THE PROPOSED LEASE AREA AND BEING THE TRUE POINT OF BEGINNING; THENCE LEAVING SAID LEASE AREA, N89*50'07"E 30.00'; THENCE S00°09'53"E 7.50'; THENCE WITH THE CHORD OF A CURVE TO THE LEFT HAVING A RADIUS OF 15.00', S45°09'53"E 21.21'; THENCE S00°09'53"E 7.50'; THENCE WITH THE CHORD OF A CURVE TO THE LEFT HAVING A RADIUS OF 15.00', 545°09'53"E 21.21'; THENCE N89°50'07"E 36.85'; THENCE S85°44'42"E 135.00'; THENCE S77°25'36"E 74.03'; THENCE S54°10'23"E 53.14'; THENCE S66°22'39"E 46.86'; THENCE N88°36'29'E 33.54'; THENCE N52°07'09"E 34.06'; THENCE WITH THE CHORD OF A CURVE TO THE IGHT HAVING A RADIUS OF 65.00', N68°23'54"E 36.44'; THENCE N82°07'09"E 34.06'; THENCE WITH THE CHORD OF A CURVE TO THE IGHT HAVING A RADIUS OF 65.00', N68°23'54"E 36.44'; THENCE N82°07'09"E 34.06'; THENCE WITH THE CHORD OF A CURVE TO THE IGHT HAVING A RADIUS OF 65.00', N68°23'54"E 36.44'; THENCE N84°40'39"E 79.06' TO THE CENTERLINE OF WRIGHTS RIDGE ROAD AND THE EASTERLY BOUNDARY LINE OF SAID HELM PROPERTY; THENCE WITH SAID LINE, S37'27'34"W 95.00'; THENCE LEAVING SAID LINE AND TRAVERSING THE LAND OF HELM, N06°37'35"W 29.66'; THENCE WITH THE CHORD OF A CURVE TO THE LEFT HAVING A RADIUS OF 91.000', N46°31'41"W 12.83'; THENCE WITH THE CHORD OF A COMPOUND CURVE TO THE LEFT HAVING A RADIUS OF 35.00', 572°50'41"W 24.77'; THENCE S52°07'09"W 43.95'; THENCE S88°36'29"W 50.08'; THENCE N66°22'39"W 56.75'; THENCE N54°10'23"W 50.18'; THENCE N77°25'36"W 65.67'; THENCE N85°44'42"W 131.66'; THENCE S89°50'07"W 35.70'; THENCE WITH THE CHORD OF A CURVE TO THE LEFT HAVING A RADIUS OF 15.00', S44°50'07"W 21.21'; THENCE S00°09'53"E 7.50'; THENCE S89°50'07"W 30.00' TO A SET IPC IN THE SOUTHEAST CORNER OF SAID LEASE AREA; THENCE WITH SAID LEASE AREA, N00°09'53"W 75.00' TO THE POINT OF BEGINNING CONTAINING 19,088.273 SQUARE FEET AS PER SURVEY BY MARK PATTERSON, PLS #3136 WITH POWER OF DESIGN GROUP. LLC DATED MARCH & 2017. GROUP, LLC DATED MARCH 8, 2017.

PARENT PARCEL - LEGAL DESCRIPTION - DEED BOOK 170, PAGE 435 (NOT FIELD SURVEYED)

BEGINNING AT A STONE AT THE END OF A STONE FENCE CORNER TO R. B. TAYLOR; THENCE N. 8 1/2 E. 18 POLES TO AN ASH; THENCE N. 71 1/2 E. 19 POLES TO A DOUBLE LOCUST STUMP; THENCE N. 87 3/4 E. 16.5 POLES TO A POINT IN THE CENTER OF WRIGHTS ROAD; THENCE FOLLOWING THE CENTER OF THE ROAD N. 6 1/4 W. 12 POLES N. 35 3/4 E. 20 POLES N. 28 E. 9 POLES N. 4 1/2 W. 15.6 POLES TO A POINT IN THE CENTER OF THE ROAD TO GOBEL SIMMONDS AND CLARENCE HUDSON; THENCE LEAVING THE ROAD N. 85 W. 13.8 POLES TO A LOCUST STUMP; THENCE N. 2 1/4 E. 48 POLES TO A STONE CORNER TO JAS. EGGERTON AND JOHN THOMPSON FARM; THENCE N. 86 1/2 W. 98 POLES TO A STONE CORNER TO THOMPSON AND MOSE JENKINS; THENCE S. 2 E. 22.5 POLES, S. 8 1/2 W. 25.5 POLES TO A DOUBLE WALNUT ON SOUTH SIDE OF BRANCH; THENCE S. 70 W. 18 POLES, S. 64 1/2 W. 15 POLES, S. 38 W. 9 POLES, S. 18 1/2 W. 29 POLES, S. 6 1/2 W. 30 POLES TO AN ASH CORNER TO JENKINS AND R. B. TAYLOR: THENCE S. 86 1/2 E. 109.5 POLES TO THE BEGINNING, CONTAINING 94.4 ACRES.

TITLE OF COMMITMENT

THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY POD GROUP, LLC, AND AS SUCH WE ARE NOT RE INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE (TITLE EVIDENCE, UNRECORDED EASEMENTS, AUGMENTING EASEMENTS, IMPLIED OR PRESCRIPTIVE EASE FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE AND THIS SURVEY WAS COMPLET WORK PREPARED BY STEWART TITLE GUARANTY COMPANY, FOR THE BENEFIT OF AT&T MOBILITY, FILE N EFFECTIVE DATE OF JANUARY 24, 2017 AT 8:00 AM. THE FOLLOWING COMMENTS ARE IN REGARD TO SAI

SCHEDULE B

1. DEFECTS, LIENS, ENCUMBRANCES, ADVERSE CLAIMS OR OTHER MATTERS, IF ANY, CREATED, FIRST APPEARING IN THE PUBLIC RECORDS OR ATTACHING SUBSEQUENT TO THE EFFECTIVE DATE BUT PRIOR TO THE DATE THE PROPOSED INSURED ACQUIRES FOR VALUE OF RECORD THE ESTATE OR INTEREST OR MORTGAGE THEREON COVERED BY THIS COMMITMENT. (POD GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM.)

2. RIGHTS OR CLAIMS OF PARTIES IN POSSESSION NOT SHOWN BY THE PUBLIC RECORDS. (POD GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM.)

3 EASEMENTS OR CLAIMS OF EASEMENTS, NOT SHOWN BY THE PUBLIC RECORDS (POD GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM.)

4. ENCROACHMENTS, OVERLAPS, BOUNDARY LINE DISPUTES, OR OTHER MATTERS WHICH WOULD BE DISCLOSED BY AN ACCURATE SURVEY AND INSPECTION OF THE PREMISES. (POD GROUP, LLC DID NOT PERFORM A BOUNDARY SURVEY, THEREFORE WE DID NOT ADDRESS THIS ITEM.)

5. ANY LIEN OR RIGHT TO A LIEN, FOR SERVICES, LABOR, OR MATERIAL HERETOFORE OR HEREAFTER FURNISHED, IMPOSED BY LAW AND NOT SHOWN BY THE PUBLIC RECORDS (POD GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM.)

6. SUBJECT TO 2017 TAXES, WHICH ARE NOT YET DUE AND PAYABLE (IF APPLICABLE). (POD GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM.)

7. RIGHT OF WAY EASEMENT DATED MARCH 29, 2000, TO SHELBY ENERGY COOPERATIVE, INCORPORATED, OF RECORD IN DEED BOOK D143, PAGE 329, IN THE OFFICE AFORESAID. (EASEMENT AS RECORDED IN D.B. 143, PG. 329 AFFECTS THE PARENT PARCEL BUT CANNOT BE PLOTTED PER DEED. ABOVE GROUND PHYSICAL EVIDENCE LOCATED AT THE TIME OF THE SURVEY ON THE GROUND MAY BE THE EASEMENT AS DESCRIBED IN D143, PAGE 329. EASEMENT MAY AFFECT THE PROPOSED ACCESS AND UTILITY EASEMENT, BUT WILL NOT AFFECT THE PROPOSED LEASE AREA.

8 RIGHT-OF-WAY EASEMENT DATED NOVEMBER 26, 1974, TO SOUTH CENTRAL BELL TELEPHONE COMPANY, OF RECORD IN DEED BOOK D79, PAGE 484, IN THE OFFICE AFORESAID. (EASEMENT AS RECORDED IN D.B. 79, PG. 484, AFFECTS THE PARENT PARCEL BUT CANNOT BE PLOTTED PER DEED. ABOVE GROUND PHYSICAL EVIDENCE LOCATED AT THE TIME OF THE SURVEY ON THE GROUND MAY BE THE EASEMENT AS DESCRIBED IN D.B. 79, PAGE 484. EASEMENT MAY AFFECT THE PROPOSED ACCESS AND UTILITY EASEMENT, BUT WILL NOT AFFECT THE PROPOSED LEASE AREA.)

9. MINERALS OF WHATSOEVER KIND, SUBSURFACE AND SURFACE SUBSTANCES, INCLUDING BUT NOT LIMITED TO COAL, LIGNITE, OIL, GAS, URANIUM, CLAY, ROCK, SAND AND GRAVEL IN, ON, UNDER AND THAT MAY BE PRODUCED FROM THE LAND, TOGETHER WITH ALL RIGHTS, PRIVILEGES, AND IMMUNITIES RELATING THERETO, WHETHER OR NOT APPEARING IN THE PUBLIC RECORDS OR LISTED IN SCHEDULE B. THE COMPANY MAKES NO REPRESENTATION AS TO THE PRESENT OWNERSHIP OF ANY SUCH INTERESTS. THERE MAY BE LEASES, GRANTS, EXCEPTIONS OR RESERVATIONS OF INTERESTS THAT ARE NOT LISTED. (POD GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM.

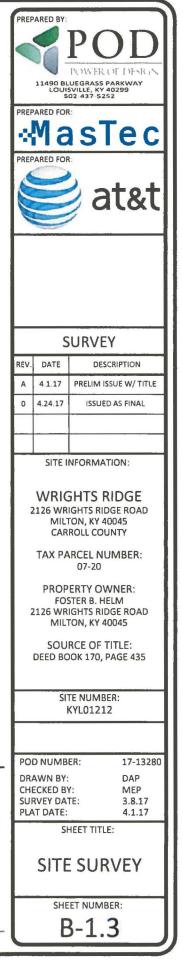


LAND SURVEYOR'S (I, MARK E. PATTERSON, HEREBY CERTIFY THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR LICENSED IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF KENTUCKY. I FURTHER CERTIFY THAT THIS PLAT AND THE SURVEY ON THE GROUND WERE PERFORMED BY PERSONS UNDER MY DIRECT SUPERVISION, AND THAT THE 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

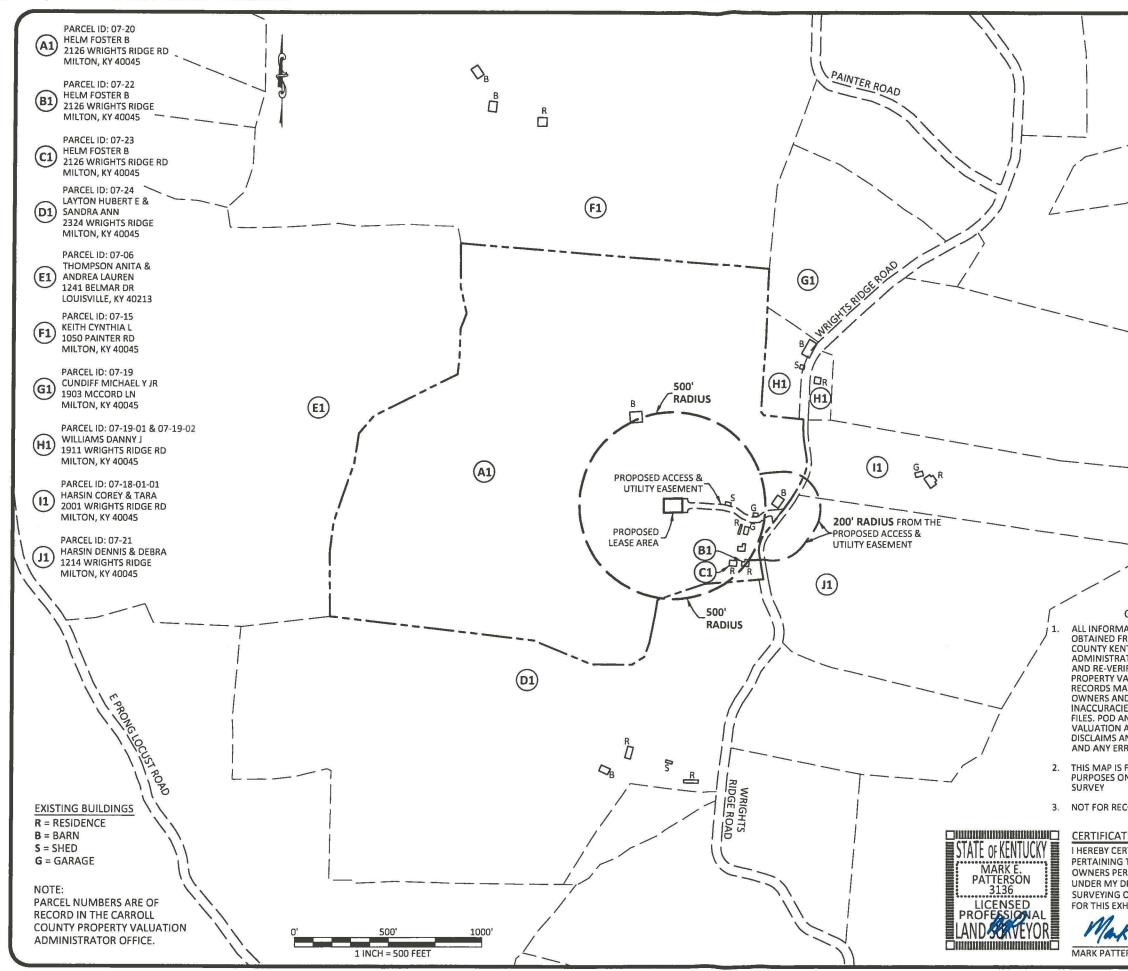


CERTIFICA	TE
-----------	----

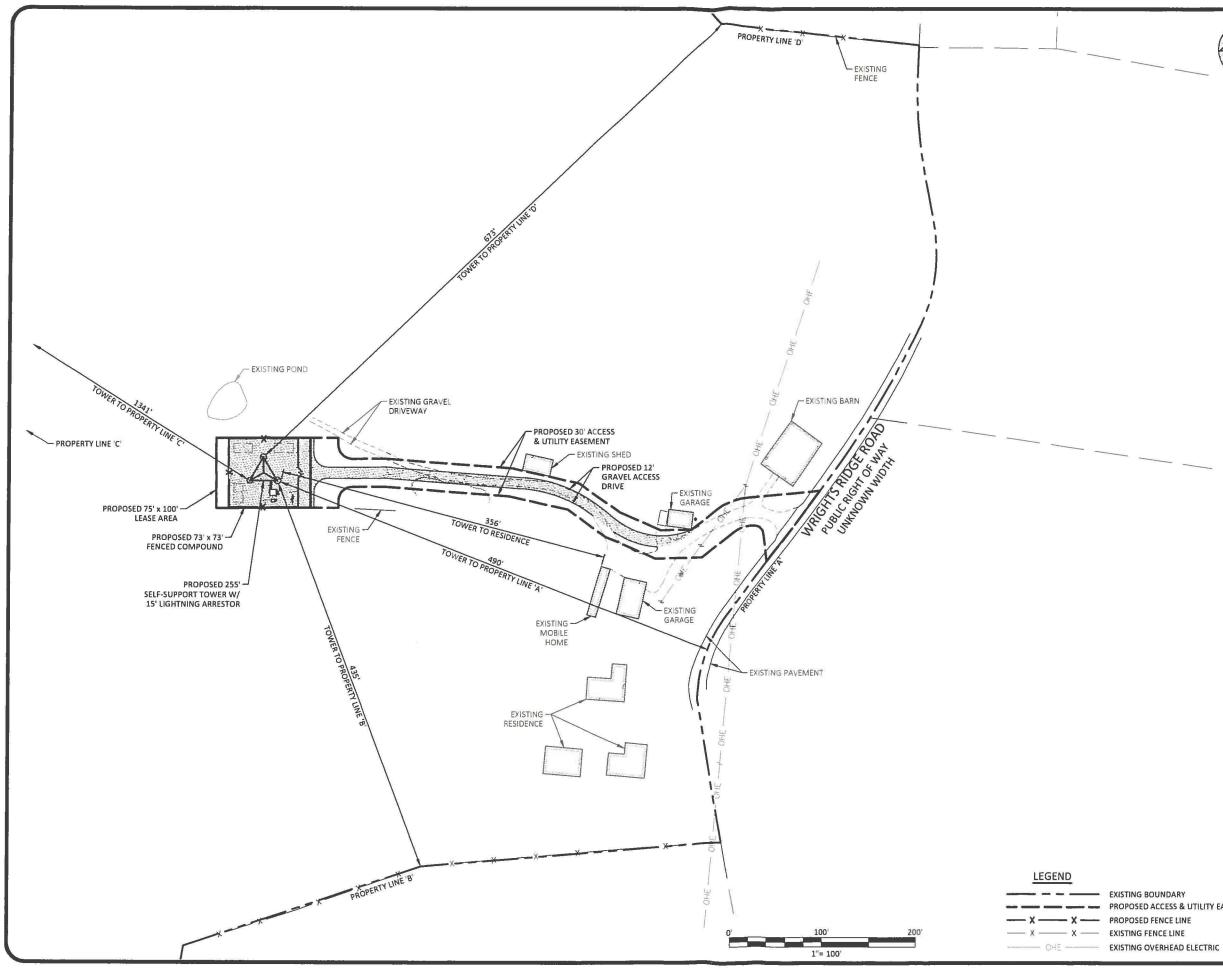
ten	4/2/2018
S #3136	DATE



DocuSign Envelope ID: 72FDF7BA-FAD8-45E2-B04A-17292CD96F34



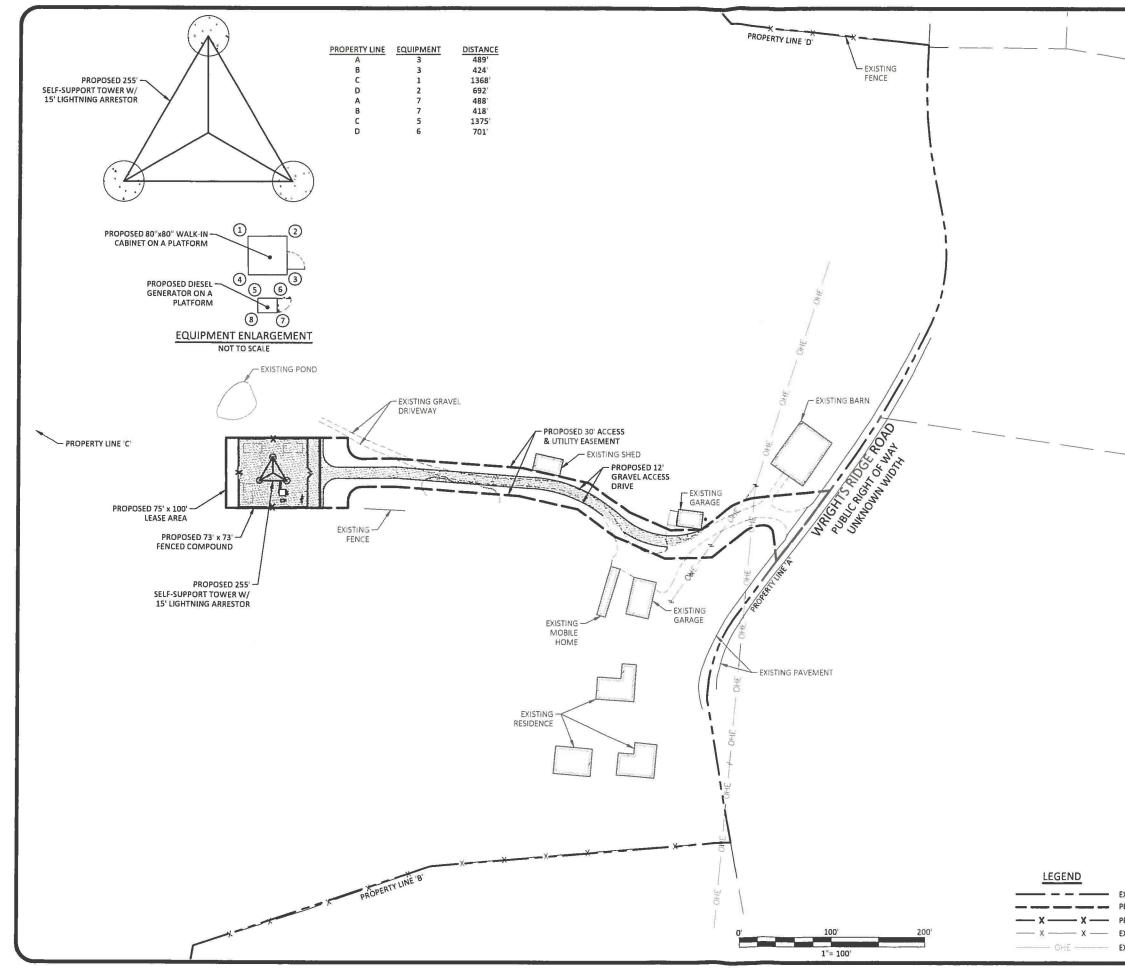
		1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	
	PREF	ARED FOR	PODE POWIR OF DESIGN UUEGRASS PARKWAY SVILLE, KY 40239 SVILLE, KY 40239 SVILLE, KY 40239 SVILLE, KY 40239 SVILLE, KY 40239 SVILLE, KY 40259 SVILLE, KY 4055 SVILLE, KY 4055 SV
		EXHIBIT	
	REV.	DATE	DESCRIPTION
	A	2 23 18	ISSUED FOR REVIEW
	0	4.2.18	ISSUED AS FINAL
		SITE I	NFORMATION:
	WRIGHTS RIDGE 2126 WRIGHTS RIDGE ROAD MILTON, KY 40045 CARROLL COUNTY TAX PARCEL NUMBER:		
GENERAL NOTE: IATION SHOWN HEREON WAS ROM THE RECORDS OF THE CARROLL VTUCKY PROPERTY VALUATION ATION OFFICE ON MARCH 8, 2017 IFIED ON FEBRUARY 23, 2018. THE ALUATION ADMINISTRATION AY NOT REFLECT THE CURRENT	THE CARROLL MILTON, KY 40045 JATION CH 8, 2017 SOURCE OF TITLE: , 2018. THE DEED BOOK 170, PAGE 435 TITON JRRENT THE UPDATING SITE NUMBER: ERTY KYL01212		
ID ADDRESSES DUE TO THE IES AND TIME LAPSE IN UPDATING ND THE COUNTY PROPERTY ADMINISTRATION EXPRESSLY NY WARRANTY FOR THE CONTENT			
RORS CONTAINED IN THEIR FILES			
FOR GENERAL INFORMATIONAL ONLY AND IS NOT A BOUNDARY	PO	DNUMB	ER: 17-13279
CORDING OR PROPERTY TRANSFER.	CHI SUI	AWN BY: ECKED B' RVEY DA' AT DATE:	Y: MEP TE: 3.8.17
TE RTIFY THAT THIS EXHIBIT TO THE ADJOINING PROPERTY R PVA RECORDS WAS PREPARED DIRECT SUPERVISION. NO BOUNDARY OF ANY KIND HAS BEEN PREFORMED)0' R	ADIUS AND TERS MAP
HIBIT. K Patteron 4/2/2018		SHE	ET NUMBER: B-2
ERSON, PLS #3136 DATE			0-2





PREP	ARED BY:			
	11490 BL LOUIS 5	PODE POWER OF DESIGN UEGRASS PARKWAY SVILLE, KY 40299 SVILLE, KY 40299		
PREPARED FOR:				
⊹MasTec				
PREPARED FOR				
😂 at&t				
	MUTUI	OF KENTUM		
MARK E. PATTERSON 16,300 SS/ONAL ENG 4/2/2018 EN PERMIT: 3594				
	Z	ONING		
	DR	AWINGS		
REV	DATE	DESCRIPTION		
A	3.9.18	ISSUED FOR REVIEW		
0	4.2.18	ISSUED AS FINALS		
	SITE	INFORMATION:		
WRIGHTS RIDGE 2126 WRIGHTS RIDGE ROAD MILTON, KY 40045 CARROLL COUNTY				
SITE NUMBER:				
KYL01212 POD NUMBER: 17-13278				
DRAWN BY: CHECKED BY:		JRS MEP 3.9.18		
DATE: 3.9.18 SHEET TITLE:				
OVERALL SITE LAYOUT				
SHEET NUMBER: C-1				

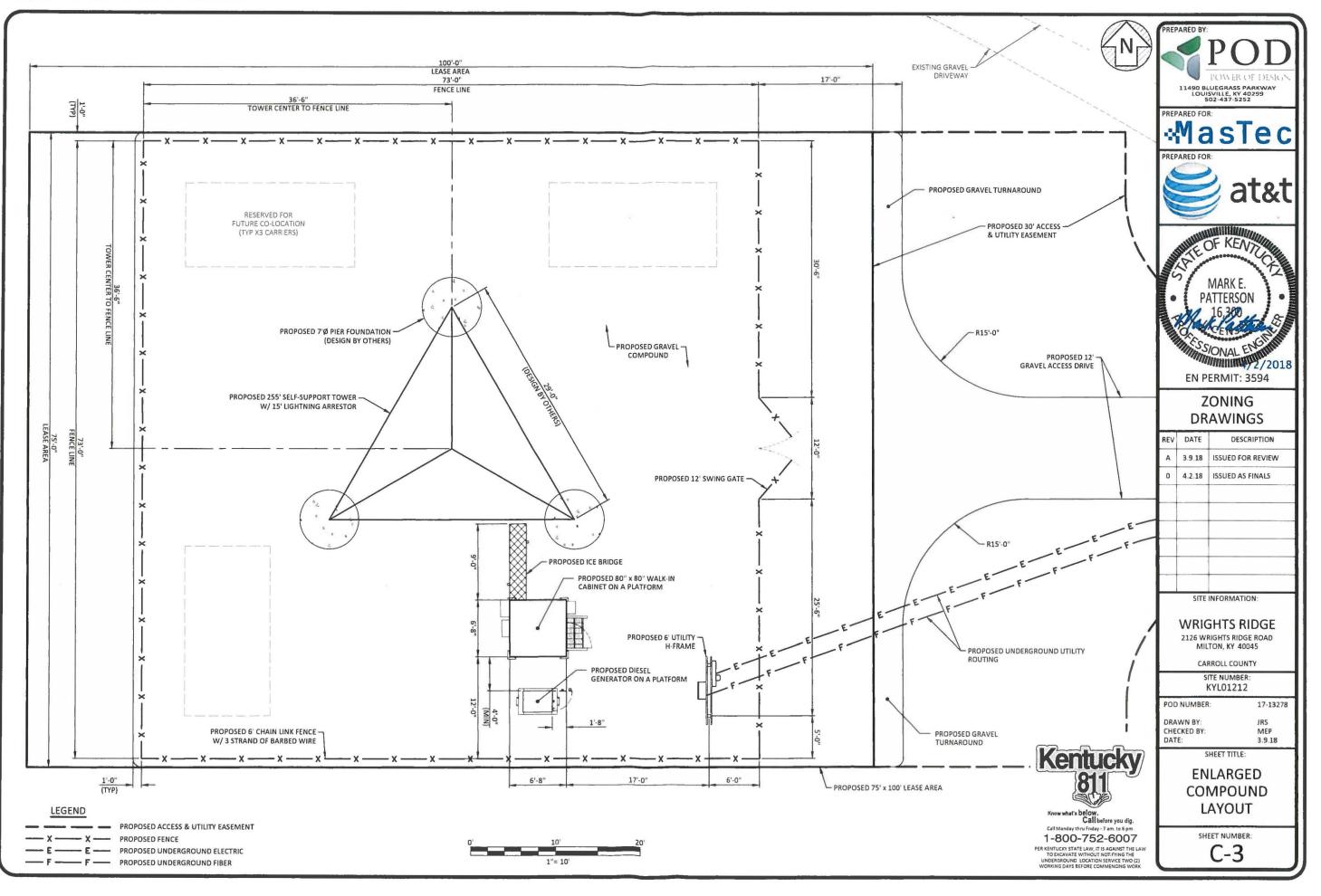
EXISTING BOUNDARY PROPOSED ACCESS & UTILITY EASEMENT - X ---- PROPOSED FENCE LINE — X — EXISTING FENCE LINE



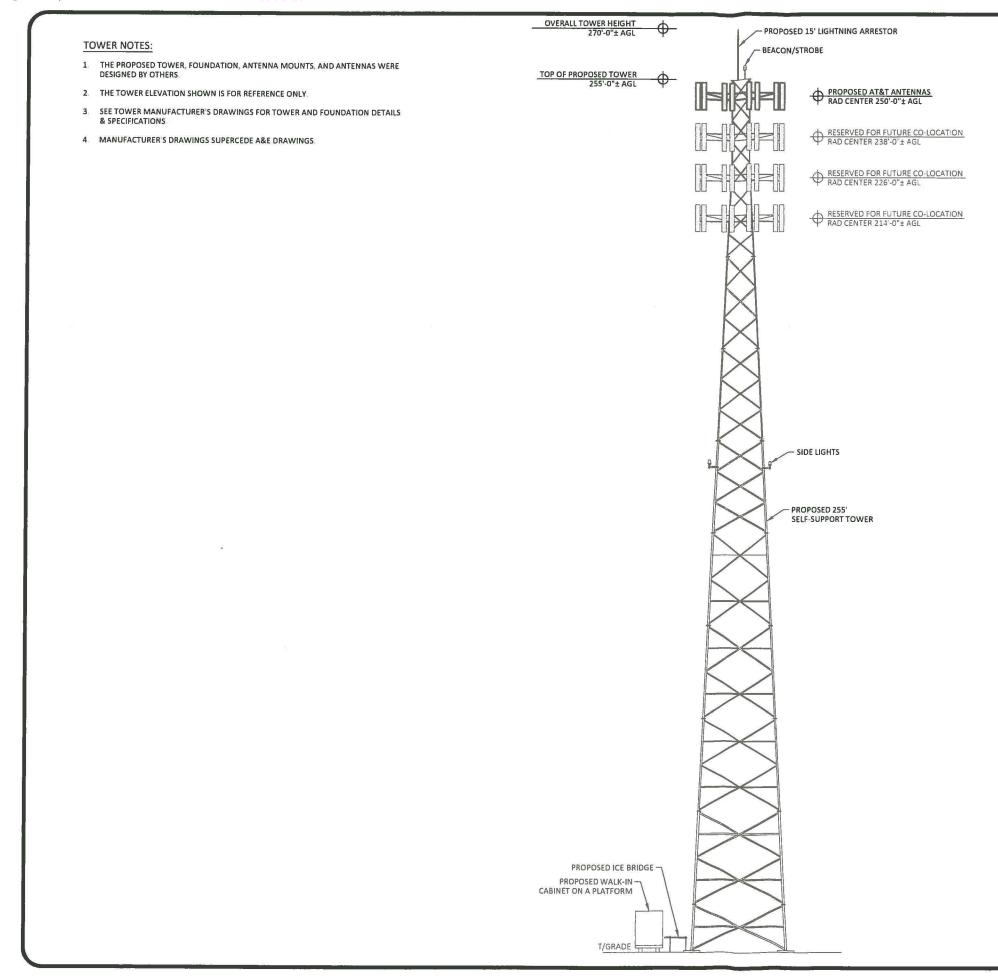


PREPARED BY: POWER OF DESIGN 11490 BLUEGRASS PARKWAY LOUISVILLE, KY 40299 502-437-5252					
PREP	PREPARED FOR:				
Alle	😂 at&t				
MARK E. PATTERSON 16,309 SS/ONAL ENGINE 4/2/201 EN PERMIT: 3594					
ZONING DRAWINGS					
REV	DATE	DESCRIPTION			
Α	3.9.18	ISSUED FOR REVIEW			
	SITE	INFORMATION:			
WRIGHTS RIDGE 2126 WRIGHTS RIDGE ROAD MILTON, KY 40045 CARROLL COUNTY					
SITE NUMBER: KYL01212					
POD NUMBER: 17-13278		17-13278			
		JRS MEP 3.9.18			
SHEET TITLE: OVERALL SITE LAYOUT -CONT'D					
SHEET NUMBER:					

EXISTING BOUNDARY
 PROPOSED ACCESS & UTILITY EASEMENT
 PROPOSED FENCE LINE
 X PROPOSED FENCE LINE
 EXISTING FENCE LINE
 EXISTING OVERHEAD ELECTRIC







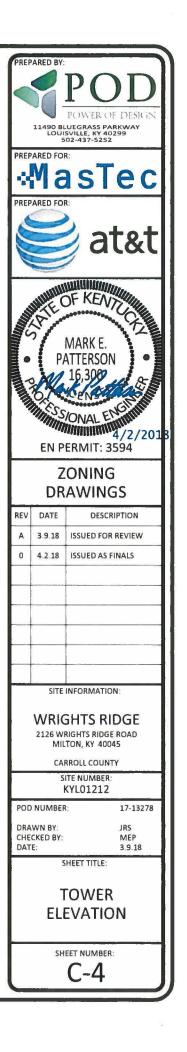


EXHIBIT C TOWER AND FOUNDATION DESIGN



Structural Design Report 255' S3TL Series HD1 Self-Supporting Tower Site: Wright's Ridge, KY Site Number: KYL01212

> Prepared for: AT&T by: Sabre Towers & Poles [™]

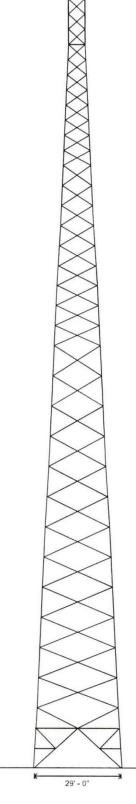
> > Job Number: 405147

March 27, 2018

Tower Profile	1-2
Foundation Design Summary (Option 1)	3
Foundation Design Summary (Option 2)	4
Maximum Leg Loads	5
Maximum Diagonal Loads	6
Maximum Foundation Loads	7
Calculations	8-23



		Σ								255'	
Ð	W	NONE							565		
ц	L 2 X 2 X 3/16	0					5.	11 @ 5'	1375	240'	
ш	L					(1) 5/8"	7'		1900		
D	¥							9,		2421	200'
С	: 3/16						11.	9 @ 6.6667'	3017	180'	
В	L 3 X 3 X 3/16						13'		3211	160'	
	٦	NONE	NONE	NONE	NONE		15'		4305	140'	
.500	_	NO							_	120'	
8.625 OD X .500	-					(1) 3/4"	17'		4615		
8								19'	10'	5173	100'
A	L 4 X 4 X 1/4						21'	12 @ 10'	6207	80'	
							23'		5877	60'	
12.75 OD X .375	L 4 X 4 X 5/16					(2) 5/8"	25'		6556	40'	
12.7	L4X							s	-	20'	
	I	z	٩	σ	×	(2) 3/4"	27'	Я	7231		
Legs	Diagonals	Horizontals	Internals	Sub-Diagonals	Sub-Horizontals	Brace Bolts	Top Face Width	Panel Count/Height	Section Weight	0'	



Base Reactions

Total Fou	indation	Individual F	ooting
Shear (kips)	96.52	Shear (kips)	58.78
Axial (kips)	248.54	Compression (kips)	639
Moment (ft-kips)	15202	Uplift (kips)	560
Torsion (ft-kips)	39.55		

Material List

Display	Value							
A	10.75 OD X .500							
В	8.625 OD X .322							
С	5.563 OD X .500							
D	5.563 OD X .375							
E	4.500 OD X .337							
F	3.500 OD X .300							
G	2.375 OD X .154							
н	L 5 X 3 1/2 X 5/16 (SLV)							
1	L 4 X 3 1/2 X 1/4 (SLV)							
J	L 3 1/2 X 3 X 1/4 (SLV)							
к	L 2 1/2 X 2 1/2 X 1/4							
L	L 2 1/2 X 2 1/2 X 3/16							
М	L 2 X 2 X 1/8							
N	L 4 X 4 X 1/4							
0	L 2 X 2 X 3/16							
P	L 3 X 3 X 1/4							
Q	L 3 X 3 X 3/16							
R	1 @ 13.333'							
S	1 @ 6.667'							

Notes

- 1) All legs are A500 (50 ksi Min. Yield).
- 2) All braces are A572 Grade 50.
- 3) All brace bolts are A325-X.
- 4) The tower model is S3TL Series HD1.
- 5) Transmission lines are to be attached to standard 12 hole waveguide ladders with stackable hangers.
- 6) Azimuths are relative (not based on true north).
- 7) Foundation loads shown are maximums.
- (6) 1 3/4" dia. F1554 grade 105 anchor bolts per leg. Minimum 65.5" embedment from top of concrete to top of nut.
- 9) All unequal angles are oriented with the short leg vertical.
- 10) Weights shown are estimates. Final weights may vary.
- 11) This tower was designed for a basic wind speed of 89 mph with 0" of radial ice, and 30 mph with 3/4" of radial ice, in accordance with ANSI/TIA-222-G, Structure Class II, Exposure Category C, Topographic Category 1.
- 12) The foundation loads shown are factored loads.
- 13) The tower design meets the requirements for an Ultimate Wind Speed of 115 mph (Risk Category II), in accordance with the 2012 International Building Code.
- 14) Tower Rating: 98,58%

	Sabre Communications Corporation	Job	405147	
Sabre Industries	P.O. Box 658	Customer	AT&T	
Towers and Poles	Sioux City, IA 51102-0658 Phone (712) 258-6690 Fax: (712) 279-0814	Site Name	Wright's Ridge,	KY KYL01212
Information contained herein is the sole property of Sabre Communications Corporation, constitutes a		Description	255' S3TL	
	50 and shall not be reproduced, copied or used in whole the prior written consent of Sabre Communications	Date	3/27/2018	By: REB

Designed Appurtenance Loading

Elev	Description Tx-Line		Elev	Description	Tx-Lb
260	(1) Extendible Lightning Rod		226	(1) 208 sq. ft. EPA 4000# (no ice)	(18) 1 5/8
250	(1) 278 sq. ft EPA 6000# (no ice)	(18) 1 5/8"	214	(1) 208 sq. ft. EPA 4000# (no ice)	(18) 1 5/8
238	(1) 208 sq. ft_ EPA_4000# (no lce)	(18) 1 5/8"	-		

Sabre Industries	Sabre Communications Corporation 7101 Southridge Drive P.O. Box 658 Slour City, IA 51102-0658 Press (712) 256-680 Free (712) 756-6814	Job: Customer Site Name	405147 AT&T Wright's Ridge, KY KYL01212
	perty of Secre Communications Corporation, constitues a	Description	255' S3TL
	30 and shell not be reproduced, copied or used in whole the phor written concert of Salare Communications.	Dete	3/27/2018 By REB

.

.

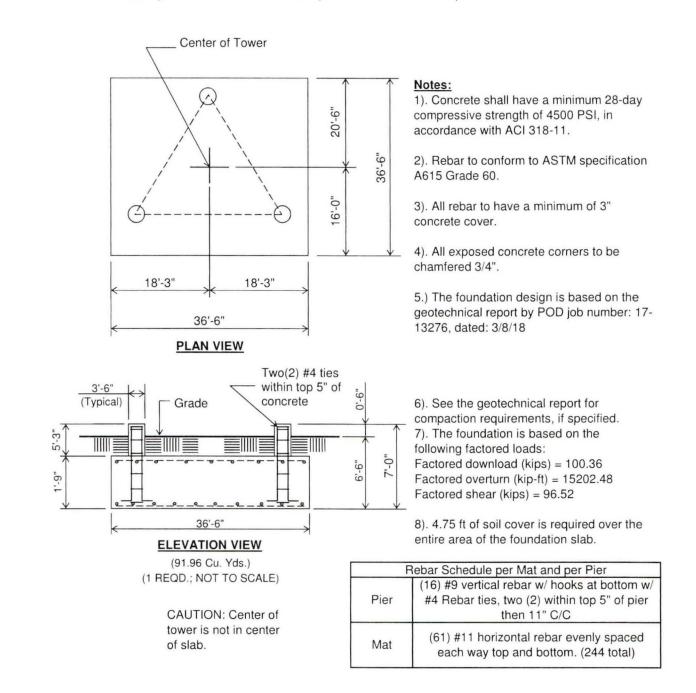
No.: 405147



Date: 3/27/18 By: REB

Customer: AT&T Site: Wright's Ridge, KY KYL01212

255 ft. Model S3TL Series HD1 Self Supporting Tower At 89 mph Wind with no ice and 30 mph Wind with 0.75 in. Ice per ANSI/TIA-222-G.



Information contained herein is the sole property of Sabre Towers & Poles, constitutes a trade secret as defined by Iowa Code Ch. 550 and shall not be reproduced, copied or used in whole or part for any purpose whatsoever without the prior written consent of Sabre Towers & Poles.

7101 Southbridge Dr - P.O. Box 658 - Sioux City, IA 51102-0658 - Phone 712.258.6690 - Fax 712.258.8250

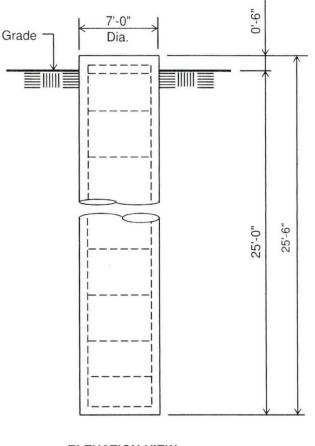
No.: 405147



Date: 3/27/18 By: REB

Customer: AT&T Site: Wright's Ridge, KY KYL01212

255 ft. Model S3TL Series HD1 Self Supporting Tower At 89 mph Wind with no ice and 30 mph Wind with 0.75 in. Ice per ANSI/TIA-222-G.



ELEVATION VIEW

(36.35 Cu. Yds. each) (3 REQUIRED; NOT TO SCALE)

Notes:

1). Concrete shall have a minimum 28-day compressive strength of 4500 PSI, in accordance with ACI 318-11.

2). Rebars to conform to ASTM specification A615 Grade 60.

3). All rebar to have a minimum of 3" concrete cover.

4). All exposed concrete corners to be chamfered 3/4".

5.) The foundation design is based on the geotechnical report by POD job number: 17-13276, dated: 3/8/18

6). See the geotechnical report for drilled pier installation requirements, if specified.

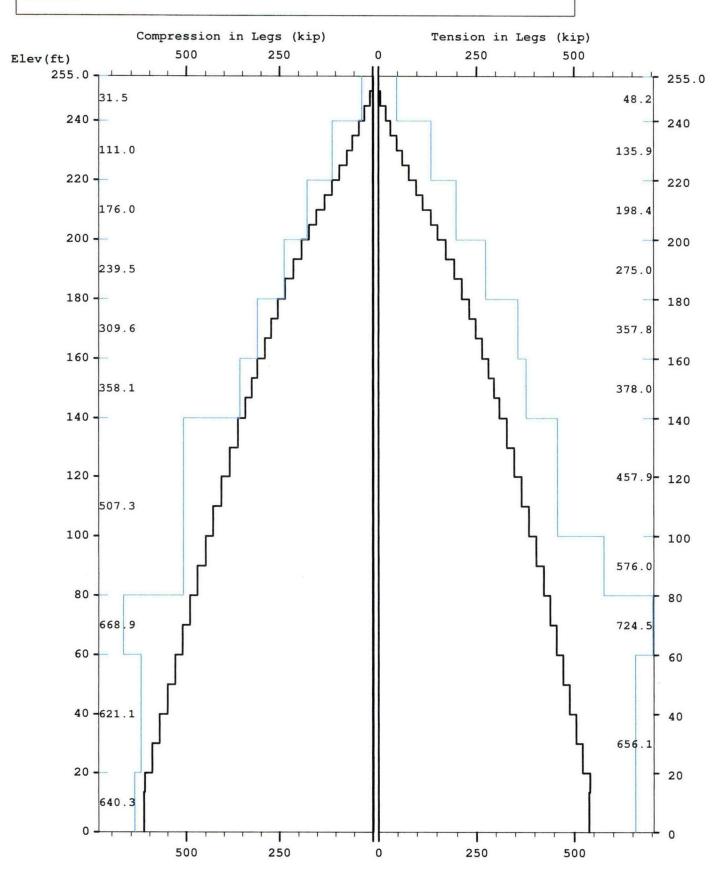
7). The foundation is based on the following factored loads: Factored uplift (kips) = 560 Factored download (kips) = 639 Factored shear (kips) = 59

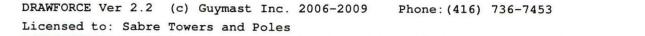
	Rebar Schedule per Pier
Pier	(36) #8 vertical rebar w/#5 ties, two (2) within top 5" of pier then 12" C/C

Information contained herein is the sole property of Sabre Towers & Poles, constitutes a trade secret as defined by Iowa Code Ch. 550 and shall not be reproduced, copied or used in whole or part for any purpose whatsoever without the prior written consent of Sabre Towers & Poles.

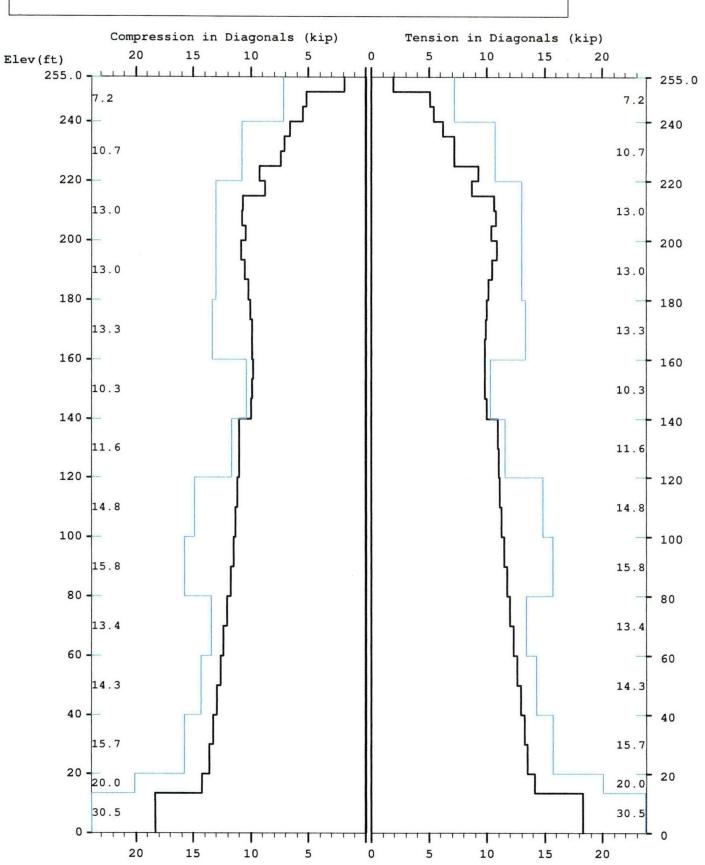


Maximum



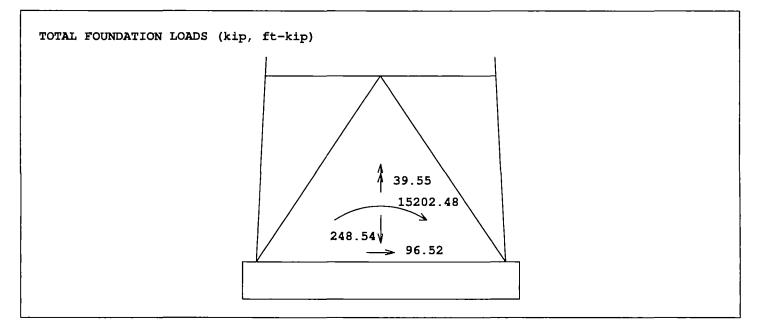


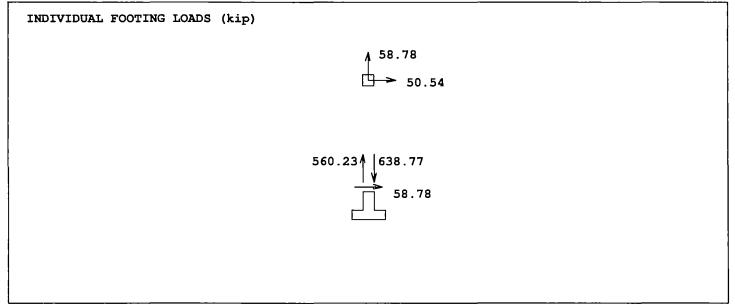
Maximum



Licensed to: Sabre Towers and Poles

Maximum





Latticed Tower Analysis (Unguyed) Processed under license at:					(c)	2015 0	Guymast I	nc. 416-7	36-7453
		und Poles						018 at:	
MAST GE	OMETRY								
PANEL TYPE	NO.OF LEGS	ELEV BOT		LEV.AT TOP				HEIGHT	
*****	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	250 240 235 220 180 160 140 120 100 80 60 40 20 13 0	.00 .00 .00 .00 .00 .00 .00 .00 .00 .00	255.00 250.00 240.00 225.00 220.00 180.00 160.00 140.00 120.00 100.00 80.00 60.00 40.00 20.00 13.33	5.0 5.0 9.0 11.0 13.0 17.0 21.0 21.0 27.0 27.0 29.0	00 00 00 00 00 00 00 00 00 00 00 00 00	5.00 5.00 5.00 7.00 9.00 11.00 13.00 17.00 19.00 21.00 23.00 25.00 27.67	5.00 5.00 5.00 5.00 6.67 6.67 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.30 10.00 10.00 10.30 10.00	
MEMBER	PROPER								
MEN T	IBER IYPE	BOTTOM ELEV ft	TOP ELEV ft	X-SECTN AREA in.sq	RAD: OF GYI	IUS I RAT N in	ELASTIC MODULUS ksi	THERMAL EXPANSN /deg	
	LE LE DI DI DI DI DI DI DI	$\begin{array}{c} 130.00\\ 160.00\\ 140.00\\ 80.00\\ 60.00\\ 240.00\\ 220.00\\ 220.00\\ 200.00\\ 180.00\\ 140.00\\ 120.00\\ 100.00\\ \end{array}$	$\begin{array}{c} 255.00\\ 240.00\\ 220.00\\ 180.00\\ 160.00\\ 140.00\\ 80.00\\ 255.00\\ 240.00\\ 220.00\\ 240.00\\ 220.00\\ 180.00\\ 140.00\\ 120.00\\ 140.00\\ 100.00\\ 40.00\\ 13.33\\ 255.00\\ 240.00\\ 13.33\\ 13.33\\ 13.33\end{array}$	1.075 3.016 4.407 6.111 7.952 8.399 12.763 16.101 14.579 0.484 0.715 0.902 1.812 1.090 1.562 1.812 1.938 2.402 2.559 0.484 0.715 1.938 1.438	0. 0. 0.	787 787 787 787 787 787 787 787 787 787	29000. (29000. (29000. (29000. ().0000117).0000117).0000117).0000117).0000117).0000117).0000117).0000117).0000117).0000117).0000117).0000117).0000117).0000117).0000117).0000117).0000117).0000117).0000117	
FACTOR	ED MEMBI	ER RESIST	ANCES						
BOTTOM ELEV ft	TOP ELEV ft	L COMP kip	EGS TENS kip	DIAGO COMP kip	NALS TENS kip	HOR COMP kip	IZONTALS TENS kip	INT B COMP kip	RACING TENS kip
250.0 240.0 235.0 220.0 200.0 180.0 160.0	255.0 250.0 240.0 235.0 220.0 200.0 180.0	$\begin{array}{r} 31.48\\ 31.48\\ 110.98\\ 110.98\\ 175.98\\ 239.46\\ 309.64 \end{array}$	48.15 48.15 135.90 135.90 198.45 274.95 357.75	7.16 7.16 10.74 10.74 13.03 13.00 13.34	7.16 7.16 10.74 10.74 13.03 13.00 13.34	5.82 0.00 8.46 0.00 0.00 0.00 0.00	5.82 0.00 8.46 0.00 0.00 0.00 0.00	$\begin{array}{c} 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00 \end{array}$	0.00 0.00 0.00 0.00 0.00 0.00 0.00

.

405147

===

===:

						405147			
140.0	160.0	358.08	378.00	10.34	10.34	0.00	0.00	0.00	0.00
120.0	140.0	507.33	457.90	11.62	11.62	0.00	0.00	0.00	0.00
100.0	120.0	507.33	457.90	14.82	14.82	0.00	0.00	0.00	0.00
80.0	100.0	507.33	576.00	15.77	15.77	0.00	0.00	0.00	0.00
60.0	80.0	668.86	724.50	13.43	13.43	0.00	0.00	0.00	0.00
40.0	60.0	621.06	656.10	14.31	14.31	0.00	0.00	0.00	0.00
20.0	40.0	621.06	656.10	15.70	15.70	0.00	0.00	0.00	0.00
13.3	20.0	640.29	656.10	20.02	20.02	0.00	0.00	0.00	0.00
0.0	13.3	640.29	656.10	30.51	30.51	15.60	15.60	7.41	7.41

* Only 3 condition(s) shown in full * Some wind loads may have been derived from full-scale wind tunnel testing

______ _____

LOADING CONDITION A PERSONNEL AND A PERSONNAL AND A PERSONNAL

__

.

89 mph wind with no ice. Wind Azimuth: 0♦

MAST LOADING

LOAD TYPE	ELEV ft	APPLYLOA RADIUS ft	DAT AZI	LOAD AZI	FORCE HORIZ kip	S DOWN kip	MOME VERTICAL ft-kip	NTS TORSNAL ft-kip
с с с с с с	260.0 250.0 238.0 226.0 214.0	$\begin{array}{c} 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00 \end{array}$	$0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0$	$0.0 \\ 0.0 $	0.22 10.00 7.41 7.33 7.24	0.15 7.20 4.80 4.80 4.80	$0.00 \\ $	0.00 0.00 0.00 0.00 0.00 0.00
	$\begin{array}{c} 255.0\\ 250.0\\ 240.0\\ 240.0\\ 235.0\\ 235.0\\ 235.0\\ 225.0\\ 225.0\\ 225.0\\ 225.0\\ 225.0\\ 225.0\\ 220.0\\ 215.0\\ 210.0\\ 200.0\\ 200.0\\ 180.0\\ 160.0\\ 160.0\\ 160.0\\ 160.0\\ 160.0\\ 160.0\\ 160.0\\ 140.0\\ 140.0\\ 140.0\\ 110.0\\ 140.0\\ 110.0\\ 10$	$ \begin{array}{c} 0.00\\ 0.00$	180.0 180.0 42.0 64.4 79.5 83.3 92.0 92.2 89.2 353.1 322.4 32		$\begin{array}{c} 0.07\\ 0.07\\ 0.13\\ 0.13\\ 0.16\\ 0.16\\ 0.17\\ 0.18\\ 0.20\\ 0.22\\ 0.223\\ 0.223\\ 0.223\\ 0.223\\ 0.223\\ 0.223\\ 0.224\\ 0.225\\ 0.26\\ 0.24\\ 0.25\\ 0.26\\ 0.26\\ 0.26\\ 0.26\\ 0.26\\ 0.26\\ 0.26\\ 0.25\\ 0.26\\ 0.26\\ 0.25\\ 0.26\\ 0.25\\ 0.26\\ 0.25\\ 0.26\\ 0.26\\ 0.24\\ 0.24\\ 0.25\\ 0.25\\ 0.26\\ 0.26\\ 0.26\\ 0.24\\ 0.2$	0.04 0.06 0.12 0.12 0.12 0.13 0.15 0.15 0.15 0.20 0.221 0.221 0.226 0.226 0.226 0.226 0.355 0.355 0.355 0.375 0.452 0.452 0.452 0.452 0.452 0.452 0.452 0.455 0.452 0.452 0.455 0.452 0.455 0.452 0.452 0.452 0.455 0.455 0.452 0.455 0.550 0.500 0.	$\begin{array}{c} 0.00\\ 0.06\\ 0.06\\ 0.06\\ 0.06\\ 0.06\\ 0.05\\ 0.05\\ 0.05\\ 0.05\\ 0.05\\ 0.05\\ 0.01\\ 0.02\\$	0.00 0.00 0.10 0.11 0.11 0.11 0.11 0.10 0.06 0.06 0.06 0.06 0.06 0.04 0.02 0.02 0.03 0.03 0.02 0.02 0.02 0.02 0.02

_____ _____ ______

89 mph wind with no ice. Wind Azimuth: 0♦

MAST LOADING

405147

LOAD TYPE	ELEV ft	APPLYLO RADIUS ft	ADAT AZI	LOAD AZI	HORIZ kip	SS DOWN kip	MOME VERTICAL ft-kip	TORSNAL ft-kip
	260.0 250.0 238.0 226.0 214.0	$\begin{array}{c} 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00 \end{array}$	$0.0 \\ 0.0 $	$\begin{array}{c} 0.0\\ 0.0\\ 0.0\\ 0.0\\ 0.0\\ 0.0\end{array}$	0.22 10.00 7.41 7.33 7.24	0.12 5.40 3.60 3.60 3.60	$\begin{array}{c} 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\end{array}$	0.00 0.00 0.00 0.00 0.00
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	$\begin{array}{c} 255.0\\ 250.0\\ 240.0\\ 240.0\\ 235.0\\ 235.0\\ 230.0\\ 225.0\\ 220.0\\ 225.0\\ 220.0\\ 225.0\\ 220.0\\ 225.0\\ 220.0\\ 215.0\\ 200.0\\ 180.0\\ 180.0\\ 180.0\\ 160.0\\ 140.0\\ 140.0\\ 140.0\\ 140.0\\ 140.0\\ 140.0\\ 140.0\\ 140.0\\ 110.0\\ 80.0\\ 40.0\\ 20.0\\ 20.0\\ 13.3\\ 13.3\\ 0.0 \end{array}$	$\begin{array}{c} 0.00\\$	$180.0 \\ 180.0 \\ 42.0 \\ 64.4 \\ 79.5 \\ 83.3 \\ 92.0 \\ 92.0 \\ 89.2 \\ 351.6 \\ 74.9 \\ 322.4 \\ 322.3 \\ 322.3 \\ 322.4 \\ 322.$		0.07 0.13 0.13 0.16 0.16 0.17 0.18 0.20 0.22 0.22 0.22 0.23 0.24 0.24 0.26 0.26 0.26 0.26 0.26 0.25 0.26 0.25 0.25 0.25 0.25 0.25 0.25 0.22 0.25 0.22 0.22 0.22 0.22 0.24 0.22 0.22 0.22 0.22 0.24 0.25 0.26 0.26 0.26 0.26 0.26 0.25 0.26 0.22 0.25 0.22 0.22 0.22 0.22 0.22 0.22 0.22 0.24 0.25 0.26 0.26 0.26 0.26 0.225 0.226 0.224 0.24 0.24	0.03 0.04 0.09 0.09 0.09 0.09 0.10 0.11 0.11 0.13 0.15 0.15 0.15 0.15 0.20 0.221 0.25 0.225 0.221 0.25 0.313 0.313 0.317	0.00 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.03 0.03 0.03 0.03 0.04 0.04 0.04 0.04 0.02	0.00 0.00 0.10 0.10 0.11 0.11 0.11 0.10 0.06 0.06 0.06 0.06 0.06 0.04 0.03 0.03 0.03 0.03 0.03 0.02 0.02 0.02 0.02

30 mph wind with 0.75 ice. Wind Azimuth: 0♦

MAST LOADING

LOAD TYPE	ELEV ft	APPLYLO RADIUS ft	ADAT AZI	LOAD AZI	HORIZ kip	S DOWN kip	MOME VERTICAL ft-kip	NTS TORSNAL ft-kip
с с с с с с с	260.0 250.0 238.0 226.0 214.0	$\begin{array}{c} 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\end{array}$	$0.0 \\ 0.0 $	$0.0 \\ 0.0 $	0.04 1.24 1.49 1.47 1.44	0.30 18.22 12.11 12.07 12.03	$\begin{array}{c} 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00 \end{array}$	0.00 0.00 0.00 0.00 0.00
0 0 0 0 0 0 0 0	255.0 250.0 240.0 240.0 235.0 235.0 230.0 230.0 225.0 225.0 225.0 220.0	$\begin{array}{c} 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\end{array}$	180.0 180.0 42.0 69.8 89.5 89.5 91.0 91.0 86.8 86.8		0.01 0.01 0.01 0.02 0.02 0.02 0.02 0.02	0.18 0.25 0.25 0.39 0.39 0.39 0.42 0.42 0.50	0.00 0.02 0.22 0.20 0.20 0.21 0.21 0.18 0.18 0.18 0.12 0.12	0.00 0.01 0.01 0.01 0.01 0.01 0.01 0.01

•

•

						405147		
D	220.0	0.00	84.3	0.0	0.02	0.55	0.13	0.00
D	215.0	0.00	84.3	0.0	0.02	0.55	0.13	0.00
D	215.0	0.00	345.5	0.0	0.02	0.61	0.05	0.00
D	210.0	0.00	345.5	0.0	0.02	0.61	0.05	0.00
D	210.0	0.00	322.4	0.0	0.02	0.63	0.08	0.00
D	180.0	0.00	321.9	0.0	0.02	0.66	0.08	0.00
D	180.0	0.00	322.4	0.0	0.02	0.70	0.08	0.00
D	160.0	0.00	321.9	0.0	0.02	0.72	0.08	0.00
D	160.0	0.00	322.4	0.0	0.02	0.74	0.08	0.00
D	140.0	0.00	322.0	0.0	0.03	0.76	0.08	0.00
D	140.0	0.00	322.3	0.0	0.02	0.78	0.08	0.00
D	110.0	0.00	322.3	0.0	0.02	0.82	0.08	0.00
D	110.0	0.00	322.3	0.0	0.02	0.84	0.08	0.00
D	80.0	0.00	322.3	0.0	0.02	0.87	0.08	0.00
D	80.0	0.00	322.4	0.0	0.03	0.92	0.07	0.00
D	20.0	0.00	322.3	0.0	0.02	0.96	0.07	0.00
D	20.0	0.00	322.4	0.0	0.02	0.90	0.08	0.00
D	13.3	0.00	322.4	0.0	0.02	0.90	0.08	0.00
D	13.3	0.00	322.4	0.0	0.02	1.19	0.10	0.00
D	0.0	0.00	322.4	0.0	0.02	1.19	0.10	0.00

MAXIMUM TENSION IN MAST MEMBERS (kip) ┉⋼ਸ਼ਗ਼ਗ਼ਗ਼ਗ਼ਗ਼ਗ਼ਸ਼ਸ਼ਗ਼ਸ਼ਗ਼ਖ਼ਸ਼ਜ਼ਗ਼ਗ਼ਗ਼ਸ਼ਗ਼ਗ਼ਗ਼ਜ਼ਗ਼ਗ਼ਗ਼ ==

ELEV ft	LEGS	DIAG	HORIZ	BRACE
255.0		1 07 6	1.23 A	0.00 A
250.0	0.92 s 4.65 M	1,92 G 5,15 н	0.20 G	0.00 A
245.0		5.13 H	0.26 I	0.00 A
240.0	18.16 M		0.56 K	0.00 A
235.0	30.72 M	6.25 м 7.22 н	0.16 A	0.00 A
230.0	46.61 M		0.12 A	0.00 A
225.0	61.91 M	7.22 N	0.06 Y	0.00 A
220.0	78.21 M	9.23 H	0.22 A	0.00 A
215.0	97.13 M	8.75 T	0.04 a	0.00 A
210.0	113.66 M	10.59 т	0.24 A	0.00 A
205.0	134.54 M	10.76 H	0.05 A	0.00 A
200.0	152.26 M	10.36 T	0.20 A	0.00 A
193.3	173.14 M	10.87 т	0.07 A	0.00 A
186,7	193.50 M	10.45 N	0.18 A	0.00 A
180.0	213.78 M	10.18 R	0.07 A	0.00 A
173.3	231.54 M	9.98 X	0.12 A	0.00 A
166.7	249.23 M	9.88 R	0.07 A	0.00 A
160.0	265.23 M	9.82 X	0.10 A	0.00 A
153.3	281.20 M	9.82 R	0.09 A	0.00 A
146.7	295.97 м 	9.86 P	0.09 A	0.00 A
140.0	310.77 M	9.95 P	0.09 A	0.00 A
130.0	327.84 M	10.96 P	0.11 A	0.00 A
120.0	348.23 м	11.01 P	0.08 A	0.00 A
110.0	367.29 M	11.10 P	0.10 A	0.00 A
100.0	386.15 M	11.27 P	0.06 A	0.00 A
90.0	404.12 M	11.47 P	0.09 A	0.00 A
	421.99 M	11.72 P		

			40	5147
80.0			0.06 A	0.00 A
70.0	439 .1 9 M	11.99 P	0.05.4	0.00.
70.0	456.31 M	12.29 P	0.06 A	0.00 A
60.0			0.06 A	0.00 A
	472.99 M	12.60 V		
50.0	489.65 M	12.92 P	0.06 A	0.00 A
40.0	403.03 M	12.92 P	0.05 0	0.00 A
	505.96 M	13.23 V		
30.0		12 52 -	0.08 5	0.00 A
20.0	522.10 M	13.52 P	0.15 A	0.00 A
20.0	540.88 M	14.18 V	0.15 A	0.00 A
13.3			0.84 U	0.00 U
• •	539.70 M	18.28 V	0.00.	
0.0			0.00 A	0.00 A

MAXIMUM COMPRESSION IN MAST MEMBERS (kip)

ELEV ft	LEGS	DIAG	HORIZ	BRACE
255.0	-1.09 A	-1.90 A	-1.24 G	0.00 A
250.0			-0.19 M	0.00 A
245.0	-9.19 G	-5.18 в	-0.18 o	0.00 A
240.0	-22.91 G	-5.52 н	-0.51 Q	0.00 A
235.0	-37.32 G	-6.59 G	-0.10 s	0.00 A
230.0	~55.40 G	-7.10 N	-0.11 S	0.00 A
225.0	-71.48 G	-7.37 н		
	-90.81 G	-9.25 в	-0.02 S	0.00 A
220.0	-110.40 G	-8.78 н	-0.20 s	0.00 A
215.0	-129.89 G	-10.72 G	-0.01 U	0.00 A
210.0	-152.28 G	 -10.75 т	-0.21 s	0.00 A
205.0	-170.80 G	-10.41 H	-0.03 s	0.00 A
200.0			-0.18 s	0.00 A
193.3	-192.80 G	-10.88 B	-0.05 s	0.00 A
186.7	-214.42 G	-10.50 H	-0.16 s	0.00 A
180.0	-236.05 G	-10.19 F	-0.05 s	0.00 A
173.3	-255.19 G	-10.02 F	-0.10 s	0.00 A
166.7	-274.34 G	-9.90 F		0.00 A
	-291.81 G	-9.85 F	-0.06 s	
160.0	-309.32 G	-9.84 L	-0.09 s	0.00 A
153.3	-325.64 G	-9.90 D	-0.08 s	0.00 A
146.7	-342.06 G	-9.96 D	-0.08 s	0.00 A
140.0	-361.26 G	-11.02 J	-0.08 S	0.00 A
130.0	-384.48 G	-11.04 D	-0.10 s	0.00 A
120.0			-0.07 s	0.00 A
110.0	-406.37 G	-11.16 D	-0.08 s	0.00 A
100.0	-428.19 G	-11.31 D	-0.05 s	0.00 A
90.0	-449.16 G	-11.52 D	-0.07 s	0.00 A

405147

	-470.12 G	-11.76]	40.)14/
80.0	-470.12 G		-0.05 s	0.00 A
	-490.59 G	-12.04 D		
70.0	-511.14 G	-12.34 J	-0.05 s	0.00 A
60.0	-JII.14 G	-12.34 J	-0.05 5	0.00 A
	-531.26 G	-12.65 D		
50.0	-551.40 G	-12.97]	-0.05 s	0.00 A
40.0			-0.06 I	0.00 A
	-571.29 G	-13.27 D		
30.0	-591.15 G	-13.56 D	-0.09 A	0.00 A
20.0			-0.13 s	0.00 A
12.2	-613.32 G	-14.25 D	1 01 -	0.00.0
13.3	-614.89 G	-18.33 D	-1.01 C	0.00 O
0.0			0.00 A	0.00 A

FORCE/RESISTANCE RATIO IN LEGS

MAST	LE	G COMPRE	SSION - FORCE/		LEG TENS	ION FORCE/
ELEV	MAX COMP	COMP RESIST	RESIST	MAX TENS	TENS RESIST	RESIST RATIO
255.00	1.09	 31.48	0.03	0.92	48.15	0.02
250.00	9.19	31.48	0.29	4.65	48.15	0.10
245.00	22.91	31.48	0.73	18.16	48.15	0.38
240.00	37.32	110.98	0.34	30.72	135.90	0.23
235.00	55.40	110.98	0.50	46.61	135.90	0.34
230.00						
225.00	71.48	110.98	0.64	61.91	135.90	0.46
220.00	90.81 	110.98	0.82	78.21	135.90	0.58
11 215.00	10.40	175.98	0.63	97.13	198.45	0.49
12	29.89	175.98	0.74	113.66	198.45	0.57
	52.28	175.98	0.87	134.54	198.45	0.68
1	70.80	175.98	0.97	152.26	198.45	0.77
	92.80	239.46	0.81	173.14	274.95	0.63
	 14.42	239.46	0.90	193.50	274.95	0.70
186.67	36.05	239.46	0.99	213.78	274.95	0.78
180.002	 55.19	309.64	0.82	231.54	357.75	0.65
173.33	74.34	309.64	0.89	249.23	357.75	0.70
166.67	91.81	309.64	0.94	265.23	357.75	0.74
160.00	 09.32	358.08	0.94	281.20	378.00	0.74
153.33						
146.67	25.64	358.08	0.91	295.97	378.00	0.78
3- 140.00	42.06	358.08	0.96	310.77	378.00	0.82
3 130.00	61.26 	507.33	0.71	327.84	457.90	0.72
	84.48	507.33	0.76	348.23	457.90	0.76
4	06.37	507.33	0.80	367.29	457.90	0.80
	28.19	507.33	0.84	386.15	457.90	0.84
	49.16	507.33	0.89	404.12	576.00	0.70
90.00 4	 70.12	507.33	0.93	421.99	576.00	0.73

80.00					405147
80.00	59 668.86	0.73	439.19	724.50	0.61
70.00 511. 60.00	14 668.86	0.76	456.31	724.50	0.63
50.00	26 621.06	0.86	472.99	656.10	0.72
551.	40 621.06	0.89	489.65	656.10	0.75
40.00 571. 30.00	29 621.06	0.92	505.96	656.10	0.77
50.00 591. 20.00	15 621.06	0.95	522.10	656.10	0.80
	32 640.29	0.96	540.88	656.10	0.82
614. 0.00	89 640.29	0.96	539.70	656.10	0.82
0.00					

FORCE/RESISTANCE RATIO IN DIAGONALS

MAST	- DIA	G COMPRE	SSION - FORCE/		DIAG TEN	SION FORCE/
ELEV	MAX COMP	COMP RESIST	RESIST RATIO	MAX TENS	TENS RESIST	RESIST RATIO
255.00	 1.90	 7.16	0.27	 1.92	 7.16	0.27
250.00	5.18	7.16	0.72	5.15	7.16	0.72
245.00	5.52	7.16	0.77	5.42	7.16	0.76
240.00	6.59	10.74	0.61	6.25	10.74	0.58
235.00	7.10	10.74	0.66	7.22	10.74	0.67
230.00	7.37	10.74	0.69	7.22	10.74	0.67
225.00	9.25	10.74	0.86	9.23	10.74	0.86
220.00	8.78	13.03	0.67	8.75	13.03	0.67
215.00	10.72	13.03	0.82	10.59	13.03	0.81
210.00	10.72	13.03	0.82	10.76	13.03	0.83
205.00	10.41	13.03	0.80	10.36	13.03	0.80
200.00	10.41	13.00	0.84	10.30	13.00	0.80
193.33	10.88	13.00	0.84	10.87	13.00	0.84
186.67						
180.00	10.19	13.00	0.78	10.18	13.00	0.78
173.33	10.02	13.34	0.75	9.98	13.34	0.75
166.67	9.90	13.34	0.74	9.88	13.34	0.74
160.00	9.85	13.34	0.74	9.82	13.34	0.74
153.33	9.84	10.34	0.95	9.82	10.34	0.95
146.67	9.90	10.34	0.96	9.86	10.34	0.95
140.00	9.96	10.34	0.96	9.95	10.34	0.96
130.00	11.02	11.62	0.95	10.96	11.62	0.94
120.00	11.04	11.62	0.95	11.01	11.62	0.95
110.00	11.16	14.82	0.75	11.10	14.82	0.75
100.00	11.31	14.82	0.76	11.27	14.82	0.76
90.00	11.52	15.77	0.73	11.47	15.77	0.73
80.00	11.76	15.77	0.75	11.72	15.77	0.74
80.00	12.04	13.43	0.90	11.99	13.43	0.89

4	n	ς.	1	Λ	7
Т'	υ.	•	ᆂ	т.	

						405147		
70.00 -	12.34	13.43	0 97	17 79	13 43	0.92		
60.00 -								
50.00 -		14.31				0.88		
40.00 -	12.97					0.90		
30,00 -	13.27	15.70	0.85			0.84		
20.00 -	13.56	15.70	0.86	13.52	15.70	0.86		
13.33 -	14.25	20.02	0.71	14.18	20.02	0.71		
0.00 -	18.33	30.51	0.60	18.28	30.51	0.60		
		JAL FOUNDA	TION LO	DADS: (K	1p)			
		LOAD	COMPONE	ENTS		-	TOTAL	
NORT	TH	EAST	[DOWN	UPLIFT	Г	SHEAR	
58.7	78 G	50.54 K	638	8.77 G	-560.23	3 M	58.78 G	
						E +1		
MAXIMUM		DADS ON FO		JN : (K1	р ок ктр-т ======	===		
	HORIZON	TAL	DOWN	_	(ING	TORSION
NORTH	EAST		_ • ••••		ORTH	EAST		
	<u> </u>				00 F	110-0 0		20.5
96.5 G	-92.1 D	96.5 G	248.5 c	152	02.5 - G	-14578.0 D	15202.5 G	39.6 T
====== Lattice Process	d Tower /	Analysis (license a	(Unguyed it:	d)	(c))2015 Gu	ymast Inc. 4	16-736-745
sabre To	owers and	d Poles				on: 2	7 mar 2018 a	at: 6:39:
**************************************		**************************************	Serv	ice Load	Conditio	Dn **** ********	************* ************************	**********
Some w	ind load:	s may have	e been o	derived	from ful	l-scale	wind tunnel [.]	testing
	CONDITI							
0 mph w	ind with	no ice. W	vind Az	imuth: O	♦			
MAST LO								
LOAD TYPE		PLY.LOAD. RADIUS ft	AT AZI	LOAD AZI	FORCI HORIZ kip	ES DOWN kip	VERTICAL	NTS TORSNAL ft-kip

LUAL	, ELEA	ELEV APPLI.LUAD.AI		LUAD				
TYPE		RADIUS	AZI	AZI	HORIZ	DOWN	VERTICAL	TORSNAL
	ft	ft			kip	kip	ft-kip	ft-kip
с	260.0	0.00	0.0	0.0	0.06	0.13	0.00	0.00
С	250.0	0.00	0.0	0.0	2.84	6.00	0.00	0.00
с	238.0	0.00	0.0	0.0	2.10	4.00	0.00	0.00
С	226.0	0.00	0.0	0.0	2.08	4.00	0.00	0.00
с	214.0	0.00	0.0	0.0	2.06	4.00	0.00	0.00
D	255.0	0.00	180.0	0.0	0.02	0.03	0.00	0.00

D 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	250.0 240.0 240.0 235.0 235.0 225.0 225.0 225.0 220.0 215.0 210.0 210.0 210.0 210.0 210.0 210.0 210.0 210.0 210.0 210.0 210.0 210.0 210.0 210.0 210.0 210.0 210.0 20		180.0 42.0 42.0 64.4 64.4 79.5 83.3 92.0 92.0 89.2 89.2 353.1 322.3 322.2 322.4 321.9 322.4 321.9 322.4 322.3 322.3 322.3 322.3 322.3 322.3 322.4 322.3 322.4 322.4 322.4		0.02 0.04 0.05 0.05 0.05 0.06 0.06 0.06 0.07 0.08 0.08 0.07 0.07 0.07 0.07 0.08 0.07 0.07 0.07 0.07 0.08 0.07 0.07 0.07 0.07 0.07 0.07 0.07 0.08 0.07 0.07 0.07 0.07 0.07 0.08 0.07 0.06 0.08 0.07 0.06 0.08 0.07 0.08 0.07 0.08 0.07 0.08 0.07 0.08 0.07 0.08 0.07 0.08 0.07 0.08 0.07 0.08 0.07 0.08 0.07 0.08 0.07 0.08 0.07 0.08 0.07 0.08	405147 0.03 0.05 0.10 0.10 0.11 0.13 0.15 0.15 0.15 0.16 0.16 0.17 0.17 0.17 0.17 0.20 0.22 0.22 0.22 0.22 0.23 0.28 0.29 0.30 0.31 0.35 0.34 0.35 0.35	0.00 0.05 0.05 0.05 0.05 0.04 0.04 0.04 0.04 0.04 0.04 0.01 0.02	0.00 0.03 0.03 0.03 0.03 0.02 0.02 0.02
	20.0	0.00	322.3	0.0	0.07	0.38	0.02	0.01

MAXIMUM MAST DISPLACEMENTS:

|--|--|

ELEVDEFLECTION ft NORTH EAS			(DEG) EAST	TWIST DEG
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0.502 J 0.497 J 0.479 J 0.470 J 0.470 J 0.457 J 0.423 J 0.409 J 0.393 J 0.376 J 0.376 J 0.376 J 0.376 J 0.376 J 0.377 J 0.378 J 0.378 J 0.297 J 0.281 J 0.264 J 0.248 J 0.248 J 0.248 J 0.248 J 0.248 J 0.248 J 0.248 J 0.216 J 0.168 J 0.152 J 0.168 J 0.105 J 0.067 J 0.067 J 0.054 J 0.054 J 0.026 J 0.018 J 0.000 A	0.029 L 0.029 L 0.029 L 0.027 L 0.026 L 0.025 L 0.024 L 0.021 L 0.021 L 0.021 L 0.019 L 0.018 L 0.017 L 0.016 L 0.014 H 0.014 H 0.014 H 0.012 H 0.012 H 0.012 H 0.010 H 0.009 H 0.009 H 0.009 H 0.009 H 0.009 H 0.008 H 0.007 H 0.006 H 0.005 H 0.004 H 0.004 H 0.004 H 0.004 H 0.002 H 0.002 H 0.001 H

MAXIMUM TENSION IN MAST MEMBERS (kip)

			40	5147
ELEV ft	LEGS	DIAG	HORIZ	BRACE
255.0	0.21 G	 0.56 G	0.35 A	0.00 A
250.0	0.21 G	 1.47 н	0.06 G	0.00 A
245.0			0.10 I	0.00 A
240.0	3.61 A	1.53 B	0.18 K	0.00 A
235.0	6.61 A	1.69 A	0.06 A	0.00 A
230.0	10.44 A	2.10 H	0.04 A	0.00 A
225.0	14.60 A	2.01 B	0.03 A	0.00 A
220.0	18.25 A		0.07 A	0.00 A
215.0	23.47 A	2.48 B	0.01 c	0.00 A
210.0	27.21 A	2.97 Н	0.08 A	0.00 A
205.0	32.69 A	3.06 H	0.02 A	0.00 A
200.0	37.55 A	2.93 H	0.07 A	0.00 A
193.3	43.20 A	3.09 H	0.02 A	0.00 A
186.7	48.70 A	2.96 В	0.06 A	0.00 A
180.0	54.14 A	2.90 L	0.02 A	0.00 A
173.3	58.89 A	2.84 L	0.04 A	0.00 A
166.7	63.58 A	2.82 L	0.02 A	0.00 A
160.0	67.81 A	2.80 L	0.03 A	0.00 A
153.3	72.02 A	2.81 L	0.03 A	0.00 A
146.7	75.89 A	2.82 D	0.03 A	0.00 A
140.0	79.76 A	2.86)	0.03 A	0.00 A
130.0	84.16 A	3.13 D	0.04 A	0.00 A
120.0	89.32 A	3.16 J	0.04 A	
110.0	94.12 A	ت 3.19 c		0.00 A
100.0	98.84 A	3.25 D	0.03 A	0.00 A
	103.30 A	3.31 J	0.02 A	0.00 A
90.0	107.72 A	3.38 D	0.03 A	0.00 A
80.0	111.91 A	3.46 J	0.02 A	0.00 A
70.0	116.01 A	3.55 D	0.02 A	0.00 A
60.0	119.99 A	3.63 J	0.02 A	0.00 A
50.0	123.97 A	3.72 D	0.02 A	0.00 A
40.0	127.80 A	 3.81 ј	0.01 C	0.00 A
30.0	131.53 A	3.89 D	0.02 G	0.00 A
20.0	136.21 A	4.07 J	0.05 A	0.00 A
13.3	134.90 A	5.26 J	0.21 I	C.00 I
0.0			0.00 A	0.00 A

MAXIMUM COMPRESSION IN MAST MEMBERS (kip)

40	5147	

				5147
ELEV	LEGS	DIAG	HORIZ	BRACE
255.0			-0.36 G	0.00 A
250.0	-0.37 A	-0.54 A	-0.05 A	0.00 A
245.0	-4.03 G	-1.49 B	-0.02 c	0.00 A
240.0	-7.99 G	-1.61 H	-0.12 E	0.00 A
235.0	-12.64 G	-1.97 G	-0.01 G	0.00 A
230.0	-18.43 G	-1.99 B	-0.03 G	0.00 A
225.0	-23.20 G	-2.15 B	0.00 A	0.00 A
220.0	-29.59 G	-2.64 B	-0.05 G	0.00 A
215.0	-35.31 G	-2.51 B	0.00 A	0.00 A
210.0	-41.71 G	-3.07 G	-0.05 G	0.00 A
205.0	-48.46 G	-3.05 H	0.00 G	0.00 A
200.0	-53.90 G	-2.98 H	-0.04 G	0.00 A
193.3	-60.41 G	-3.10 в	-0.01 G	0.00 A
186.7	-66.84 G	-3.01 H	-0.04 G	0.00 A
180.0	-73.30 G	-2.92 L	-0.01 G	0.00 A
173.3	-79.07 G	-2.88 L	-0.02 G	0.00 A
166.7	-84.86 G	-2.84 L	-0.01 G	0.00 A
160.0	-90.18 G	-2.83 F	-0.02 G	0.00 A
153.3	-95.52 G	-2.83 L	-0.02 G	0.00 A
146.7	-100.53 G	-2.85 J	-0.02 G	0.00 A
140.0	-105.58 G	-2.87 D	-0.02 G	0.00 A
130.0	-111.55 G	-3.19 J	-0.02 G	0.00 A
120.0	-118.86 G	-3.20 D	-0.02 G	0.00 A
110.0	-125.80 G	-3.24 D	-0.02 G	0.00 A
100.0	-132.74 G	-3.29 J	-0.01 G	0.00 A
90.0	-139.46 G	-3.35 D	-0.02 G	0.00 A
80.0	-146.20 G	-3.42 J	-0.01 G	0.00 A
70.0	-152.84 G	-3.51 D	-0.01 G	0.00 A
60.0	-159.55 G	-3.59 J	-0.01 G	0.00 A
50.0	-166.12 G	-3.68 D	-0.01 G	0.00 A
40.0	-172.69 G	-3.77 J	-0.02 I	0.00 A
30.0	-179.22 G	-3.85 D	-0.03 A	0.00 A
20.0	-185.76 G	-3.93 J	-0.03 G	0.00 A
13.3	-192.80 G	-4.13 D	-0.32 C	0.00 c
0.0	-194.11 G	-5.30 D	0.00 A	0.00 A
-			· ·	

MAXIMUM INDIVIDUAL FOUNDATION LOADS: (kip)

-----LOAD---COMPONENTS-------

TOTAL

NORTH		EAST	DOWN	UPL	405147 .IFT	SHEAR	
17.93	G	15.43 K	201.59	G -140	0.16 A	17.93 G	
MAXIMUM TO			UNDATION :		•		
HC NORTH	RIZONTA EAST @	TOTAL	DOWN	NORTH	OVERTURNI EAST	NG TOTAL @ 0.0	TORSION
27.7 G	26.5 J	27.7 G	83.6 G	4362.7 G	4185.0 ر	4362.7 G	11.2 H

MAT FOUNDATION DESIGN BY SABRE TOWERS & POLES

Tower Description 255' S3TL Series HD1 Customer AT&T Project Number 405147 Date 3/27/2018 Engineer REB

Overall Loads:

Factored Moment (ft-kips) Factored Axial (kips) Factored Shear (kips) Individual Leg Loads: Factored Uplift (kips) Factored Download (kips) Factored Shear (kips)

Width of Tower (ft) Ultimate Bearing Pressure Bearing Φs

Bearing Design Strength (ksf) Water Table Below Grade (ft) Width of Mat (ft) Thickness of Mat (ft) Depth to Bottom of Slab (ft) Bolt Circle Diameter (in) Top of Concrete to Top of Bottom Threads (in) Diameter of Pier (ft) Ht. of Pier Above Ground (ft) Ht. of Pier Below Ground (ft) Quantity of Bars in Mat Bar Diameter in Mat (in) Area of Bars in Mat (in²) Spacing of Bars in Mat (in) Quantity of Bars Pier Bar Diameter in Pier (in) Tie Bar Diameter in Pier (in) Spacing of Ties (in) Area of Bars in Pier (in²) Spacing of Bars in Pier (in) f'c (ksi) fy (ksi) Unit Wt. of Soil (kcf) Unit Wt. of Concrete (kcf) Volume of Concrete (yd³)

-	248.54	
	96.52	
	560.00	
	639.00	
	59.00	

15202.48

29
40.00
0.75
30
999
36.5
1.75
6.5
18

65.5
3.5
0.5
4.75
61
1.41
95.25
7.18
16
1.128
0.5
11
15.99
6.61
4.5
60
0.11
0.15

91.96

Anchor Bolt Count (per leg)	6
Tower eccentric from mat (ft)	= 2.25
Allowable Bearing Pressure (ksf) Safety Factor	20.00 2.00
Max. Factored Net Bearing Pressure (ksf) Minimum Mat Width (ft)	5.80 35.51
Minimum Pier Diameter (ft) Equivalent Square b (ft)	2.83 3.10
Recommended Spacing (in)	6 to 12
Minimum Pier A _c (in ²)	6.93

Minimum Pier A_s (in²) Recommended Spacing (in)

6.93	
5 to 12	

MAT FOUNDATION DESIGN BY SABRE TOWERS & POLES (CONTINUED)

Two-Way Shear:			
Average d (in)	16.59		
φv _c (ksi)	0.228	v _u (ksi)	0.224
$\phi v_{c} = \phi (2 + 4/\beta_{c}) f'_{c}^{1/2}$	0.342		
$\phi v_c = \phi(\alpha_s d/b_o + 2) f'_c^{1/2}$	0.322		
$\phi v_c = \phi 4 f'_c^{1/2}$	0.228		
Shear perimeter, b_{o} (in)	182.03		
β _c	1		
Stability:			
Overturning Design Strength (ft-k)	18381.9	Factored Overturning Moment (ft-k)	15878.1
One-Way Shear:	000.7	V (kipp)	702.0
φV _c (kips) Pier Design:	828.7	V _u (kips)	793.0
Design Tensile Strength (kips)	863.4	Tu (kips)	560.0
ϕV_n (kips)	92.0	V _u (kips)	59.0
$\phi V_{c} = \phi 2(1 + N_{u} / (500 A_{g})) f'_{c}^{1/2} b_{w} d$	30.8	- ((
V_s (kips)	72.0	*** $V_s max = 4 f'_c^{1/2} b_w d$ (kips)	378.7
Maximum Spacing (in)	11.15	(Only if Shear Ties are Required)	0/0.1
Actual Hook Development (in)	15.18	Req'd Hook Development I _{dh} (in)	12.21
		*** Ref. ACI 11.5.5 & 11.5.6.3	
Anchor Bolt Pull-Out:			
$\phi P_c = \phi \lambda (2/3) f'_c^{1/2} (2.8 A_{SLOPE} + 4 A_{FLAT})$		P _u (kips)	560.0
Pier Rebar Development Length (in)	54.56	Required Length of Development (in)	32.72
Flexure in Slab:			
ϕM_n (ft-kips)	6379.7	M _u (ft-kips)	6357.5
a (in) Steel Ratio	3.41 0.01311		
β1	0.825		
Maximum Steel Ratio (pt)	0.0197		
Minimum Steel Ratio	0.0018		
Rebar Development in Pad (in)	107.15	Required Development in Pad (in)	21.49
Condition	1 is OK, 0 Fails		
Minimum Mat Width	1		
Maximum Soil Bearing Pressure Pier Area of Steel			
Pier Shear	1		
Two-Way Shear	1		
Overturning	1		
Anchor Bolt Pull-Out	1		
Flexure	1		
Steel Ratio	1		
Length of Development in Pad	1		
Interaction Diagram Visual Check			
One-Way Shear Hook Development			
Minimum Mat Depth	1		
		1	

DRILLED STRAIGHT PIER DESIGN BY SABRE TOWERS & POLES

Tower Description 255' S3TL Series HD1 Customer Name AT&T Job Number 405147 Date 3/27/2018 Engineer REB

Factored Uplift (kips)	560	Anchor Bolt Count (per leg)	6
Factored Download (kips)	639		
Factored Shear (kips)	59		
Ultimate Bearing Pressure	83		
Bearing Φ s	0.75		
Bearing Design Strength (ksf)	62.25		
Water Table Below Grade (ft)	999		
Bolt Circle Diameter (in)	18		
Top of Concrete to Top			
of Bottom Threads (in)	65.5		
Pier Diameter (ft)	7	Minimum Pier Diameter (ft)	2.83
Ht. Above Ground (ft)	0.5	and a second	
Pier Length Below Ground (ft)	25		
Quantity of Bars	36		
Bar Diameter (in)	1		
Tie Bar Diameter (in)	0.625		
Spacing of Ties (in)	12		
Area of Bars (in ²)	28.27	Minimum Area of Steel (in ²)	27.71
Spacing of Bars (in)	6.61		
f'c (ksi)	4.5		
fy (ksi)	60		
Unit Wt. of Concrete (kcf)	0.15		
Download Friction Φs	0.75		
Uplift Friction Φs	0.75		
Volume of Concrete (yd ³)	36.35		
Skin Friction Factor for Uplift	1	Length to Ignore Download (ft)	
Ignore Bottom Length in Download?		0	
Depth at Bottom of Layer (ft)	Ult. Skin Friction (ksf)	(Ult. Skin Friction)*(Uplift Factor)	γ (kcf)
2	0.10	0.10	0.11
5	0.75	0.75	0.11
25	1.25	1.25	0.11
0	0.00	0.00	0
0	0.00	0.00	0
0	0.00	0.00	0
0	0.00	0.00	0
0	0.00	0.00	0
0	0.00	0.00	0
0	0.00	0.00	0

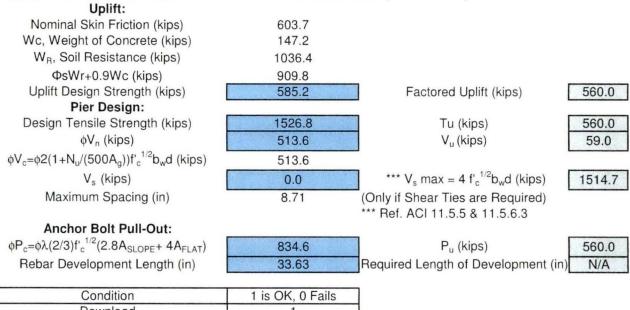
Download:

Factored Net Weight of Concrete (kips) Bearing Design Strength (kips) Skin Friction Design Strength (kips) Download Design Strength (kips)

49.6	
2395.7	
452.7	
2848.4	

Factored Net Download (kips)

DRILLED STRAIGHT PIER DESIGN BY SABRE TOWERS & POLES (CONTINUED)



Condition	1 is OK, 0 Fails
Download	1
Uplift	1
Area of Steel	1
Shear	1
Anchor Bolt Pull-Out	1
Interaction Diagram Visual Check	1



February 2nd, 2018 Kentucky Public Service Commission 211 Sower Blvd. P.O. Box 615 Frankfort, KY 40602-0615

RE: Site Name – Wright's Ridge Proposed Cell Tower 38 40 25.13 North Latitude, 85 15 33.67 West Longitude

Dear Commissioners:

The Project / Construction Manager for the proposed new communications facility will be Don Murdock. His contact information is (615) 207-8280 or <u>Don.Murdock@mastec.com</u>

Don has been in the industry completing civil construction and constructing towers since 2009. He has worked at Mastec Network Solutions since 2009 completing project and construction management on new site build projects.

Thank you,

Don Murdock, Sr. Project Manager – Tennessee/Kentucky Market MasTec Network Solutions (615) 207-8280 EXHIBIT D COMPETING UTILITIES, CORPORATIONS, OR PERSONS LIST Navigation Reports

KY Public Service Commission

Master Utility Search

- Search for the utility of interest by using any single or combination of criteria.
- Enter Partial names to return the closest match for Utility Name and Address/City/Contact entries.

e or ion of	Utility ID	Utility Name	Address/City/Cont	act Utility Type	Status
tial names the closest r Utility d		<u> </u>			▼ Active ▼

Search

	Utility ID	Utility Name	Utility Type	Class	City	State
View	4107900	365 Wireless, LLC	Cellular	D	Atlanta	GA
View	4109300	Access Point, Inc.	Cellular	D	Cary	NC
View	4108300	Air Voice Wireless, LLC	Cellular	A	Bloomfield Hill	MI
View	4110650	Alliant Technologies of KY, L.L.C.	Cellular	с	Morristown	IJ
View	44451184	Alitel Communications, LLC	Cellular	A	Basking Ridge	ΓN
View	4110850	AltaWorx, LLC	Cellular	С	Fairhope	AL
View	4107800	American Broadband and Telecommunications Company	Cellular	с	Toledo	он
View	4108650	AmeriMex Communications Corp.	Cellular	D	Dunedin	FL
View	4105100	AmeriVision Communications, Inc. d/b/a Affinity 4	Cellular	D	Virginia Beach	VA
View	4110700	Andrew David Balholm dba Norcell	Cellular	с	Clayton	WA
View	4108600	BCN Telecom, Inc.	Cellular	D	Morristown	U)
View	4110550	Blue Casa Mobile, LLC	Cellular	D	Santa Barbara	СА
View	4108750	Blue Jay Wireless, LLC	Cellular	С	Carrollton	тх
View	4111050	BlueBird Communications, LLC	Cellular	С	New York	NY
View	4202300	Bluegrass Wireless, LLC	Cellular	A	Elizabethtown	КY
View	4107600	Boomerang Wireless, LLC	Cellular	В	Hiawatha	IA
View	4105500	BulisEye Telecom, Inc.	Cellular	D	Southfield	MI

View		· · ·	Cellular	D		MA
View		Cellco Partnership dba Verizon Wireless	Cellular	A	Basking Ridge	NJ
View	4106600	Cintex Wireless, LLC	Cellular	D	Rockville	MD
View	4111000	ComApp Technologies LLC	Cellular	C	Melrose	MA
View	4111900	Consumer Cellular, Incorporated	Cellular	A	Portland	OR
View	4106400	Credo Mobile, Inc.	Cellular	A	San Francisco	CA
View	4108850	Cricket Wireless, LLC	Cellular	A	San Antonio	тх
View		CTC Communications Corp. d/b/a EarthLink Business I	Cellular	D	Grand Rapids	MI
View	10640	Cumberland Cellular Partnership	Cellular	A	Elizabethtown	КY
View		East Kentucky Network, LLC dba Appalachian Wireless	Cellular	A	Ivel	кү
View		Easy Telephone Service Company dba Easy Wireless	Cellular	D	Ocala	FL
View	4109500	Enhanced Communications Group, LLC	Cellular	D	Bartlesville	ок
View	4110450	Excellus Communications, LLC	Cellular	D	Chattanooga	ΤN
View	4105900	Flash Wireless, LLC	Cellular	С	Concord	NC
Vlew		France Telecom Corporate Solutions L.L.C.	Cellular	D	Oak Hill	VA
View	4109350	Global Connection Inc. of America	Cellular	D	Norcross	GA
View	4102200	Globalstar USA, LLC	Cellular	В	Covington	LA
		Google North America Inc.	Cellular	A	Mountain View	СА
View	33350363	Granite Telecommunications, LLC	Cellular	D	Quincy	MA
View	4106000	GreatCall, Inc. d/b/a Jitterbug	Cellular	A	San Diego	CA
View	10630	GTE Wireless of the Midwest dba Verizon Wireless	Cellular	A	Basking Ridge	LΝ
View	4110600	Horizon River Technologies, LLC	Cellular	с	Atlanta	GA
View	4103100	i-Wireless, LLC	Cellular	A	Newport	KY
View		IM Telecom, LLC d/b/a Infiniti Mobile	Cellular	D	Tulsa	ок
View	22215360	KDDI America, Inc.	Cellular	D	New York	NY
View	10872	Kentucky RSA #1 Partnership	Cellular	A	Basking Ridge	NJ
View	10680	Kentucky RSA #3 Cellular General	Celluiar	A	Elizabethtown	КY
View	10681	Kentucky RSA #4 Cellular General	Cellular	A	Elizabethtown	КY
View	4109750	Konatel, Inc. dba telecom.mobi	Cellular	D	Johnstown	PA
View	4110900	Lunar Labs, Inc.	Cellular	С	Detroit	MI
			0-11-1-1	5	Marrie	IJ
	4107300	Lycamobile USA, Inc.	Cellular	ע	Newark	n u

.

Utility Master Information - Search

View	4100650	Utility Master Information – Search	Cellular	n	Masa	AZ
view			Cellular	<u>ט</u>	Mesa	AZ
View	4202400	New Cingular Wireless PCS, LLC dba AT&T Mobility, PCS	Cellular	Α	San Antonio	TX
View	10900	New Par dba Verizon Wireless	Cellular	A	Basking Ridge	נא
View	4000800	Nextel West Corporation	Cellular	D	Overland Park	KS
View	4001300	NPCR, Inc. dba Nextel Partners	Cellular	D	Overland Park	ĸs
View	4001800	OnStar, LLC	Cellular	A	Detroit	MI
View	4110750	Onvoy Spectrum, LLC	Cellular	С	Plymouth	MN
View	4109050	Patriot Mobile LLC	Cellular	D	Southlake	тх
View	4110250	Plintron Technologies USA LLC	Cellular	D	Bellevue	WA
View	33351182	PNG Telecommunications, Inc. dba PowerNet Global Communications	Cellular	D	Cincinnati	он
View	4202100	Powertel/Memphis, Inc. dba T- Mobile	Cellular	A	Bellevue	WA
View	4107700	Puretalk Holdings, LLC	Cellular	A	Covington	GA
View	4106700	Q Link Wireless, LLC	Cellular	В	Dania	FL
View	4108700	Ready Wireless, LLC	Cellular	В	Hiawatha	IA
View	4110500	Republic Wireless, Inc.	Cellular	D	Raleigh	NC
View	4111100	ROK Mobile, Inc.	Cellular	С	Culver City	CA
View	4106200	Rural Cellular Corporation	Cellular	1	Basking Ridge	נא
View	4108550	Sage Telecom Communications, LLC dba TruConnect	Cellular	D	Los Angeles	СА
View	4109150	SelecTel, Inc. d/b/a SelecTel Wireless	Cellular	D	Freemont	NE
View	4106300	SI Wireless, LLC	Cellular	A	Carbondale	IL
View	4110150	Spectrotel, Inc. d/b/a Touch Base Communications	Cellular	D	Neptune	ΓN
View	4200100	Sprint Spectrum, L.P.	Cellular	A	Atlanta	GA
View	4200500	SprintCom, Inc.	Cellular	A	Atlanta	GA
View	4109550	Stream Communications, LLC	Cellular	D	Dallas	πх
View	4110200	T C Telephone LLC d/b/a Horizon Cellular	Cellular	D	Red Bluff	СА
View	4202200	T-Mobile Central, LLC dba T- Mobile	Cellular	A	Bellevue	WA
View	4002500	TAG Mobile, LLC	Cellular	D	Carrollton	πх
View	4109700	Telecom Management, Inc. dba Pioneer Telephone	Cellular	D	South Portland	ME
View	4107200	Telefonica USA, Inc.	Cellular	D	Miami	FL
View	4108900	Telrite Corporation dba Life Wireless	Cellular		Covington	GA
View	4108450	Tempo Telecom, LLC	Cellular	D	Kansas City	MO
	4109950	The People's Operator USA, LLC	Cellular		New York	NY
View	4109000	Ting, Inc.	Cellular		Toronto	ON

Utility Master Information -- Search

View	4110400	Torch Wireless Corp.	Cellular	D	Jacksonville	FL
View	4103300	Touchtone Communications, Inc.	Cellular	D	Whippany	UJ.
View	4104200	TracFone Wireless, Inc.	Cellular	D	Miami	FL
View	4002000	Truphone, Inc.	Cellular	D	Durham	NC
View	4110300	UVNV, Inc.	Cellular	D	Costa Mesa	CA
View	4105700	Virgin Mobile USA, L.P.	Cellular	A	Atlanta	GA
View	4110800	Visible Service LLC	Cellular	С	Lone Tree	СО
View	4106500	WiMacTel, Inc.	Cellular	D	Palo Alto	CA
View	4110950	Wing Tel Inc.	Cellular	С	New York	NY
View	4109900	Wireless Telecom Cooperative, Inc. dba theWirelessFreeway	Cellular	D	Louisville	КY

•

EXHIBIT E FAA

.



Mail Processing Center Federal Aviation Administration Southwest Regional Office Obstruction Evaluation Group 10101 Hillwood Parkway Fort Worth, TX 76177 Aeronautical Study No. 2017-ASO-20070-OE

Issued Date: 10/27/2017

Dave Cundiff (LA) AT&T 208 S Akard Room 1016 Dallas, TX 75202

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Antenna Tower Wrights Ridge - 13800813				
Location:	Milton, KY				
Latitude:	38-40-25.13N NAD 83				
Longitude:	85-15-33.67W				
Heights:	888 feet site elevation (SE)				
	270 feet above ground level (AGL)				
	1158 feet above mean sea level (AMSL)				

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, a med-dual system - Chapters 4,8(M-Dual),&12.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

At least 10 days prior to start of construction (7460-2, Part 1)

X Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

This determination expires on 04/27/2019 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination does not constitute authority to transmit on the frequency(ies) identified in this study. The proponent is required to obtain a formal frequency transmit license from the Federal Communications Commission (FCC) or National Telecommunications and Information Administration (NTIA), prior to on-air operations of these frequency(ies).

This determination of No Hazard is granted provided the following conditional statement is included in the proponent's construction permit or license to radiate:

Upon receipt of notification from the Federal Communications Commission that harmful interference is being caused by the licencee's (permittee's) transmitter, the licensee (permittee) shall either immediately reduce the power to the point of no interference, cease operation, or take such immediate corrective action as is necessary to eliminate the harmful interference. This condition expires after 1 year of interference-free operation.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (202) 267-0105, or j.garver@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2017-ASO-20070-OE.

Signature Control No: 345499375-347656899 Jay Garver Specialist

Attachment(s) Frequency Data Map(s)

cc: FCC

.

-

•

.

Frequency Data for ASN 2017-ASO-20070-OE

LOW	HIGH	FREQUENCY		ERP
FREQUENCY	FREQUENCY	UNIT	ERP	UNIT
6	7	GHz	55	dBW
6	7	GHz	42	dBW
10	11.7	GHz	55	dBW
10	11.7	GHz	42	dBW
17.7	19.7	GHz	55	dBW
17.7	19.7	GHz	42	dBW
21.2	23.6	GHz	55	dBW
21.2	23.6	GHz	42	dBW
614	698	MHz	1000	W
614	698	MHz	2000	W
698	806	MHz	1000	W
806	901	MHz	500	W
806	824	MHz	500	W
824	849	MHz	500	W
851	866	MHz	500	W
869	894	MHz	500	W
896	901	MHz	500	W
901	902	MHz	7	W
929	932	MHz	3500	W
930	931	MHz	3500	W
931	932	MHz	3500	W
932	932.5	MHz	17	dBW
935	940	MHz	1000	W
940	941	MHz	3500	W
1670	1675	MHz	500	W
1710	1755	MHz	500	W
1850	1910	MHz	1640	W
1850	1990	MHz	1640	W
1930	1990	MHz	1640	W
1990	2025	MHz	500	W
2110	2200	MHz	500	W
2305	2360	MHz	2000	W
2305	2310	MHz	2000	W
2345	2360	MHz	2000	W
2496	2690	MHz	500	W

.

•

.

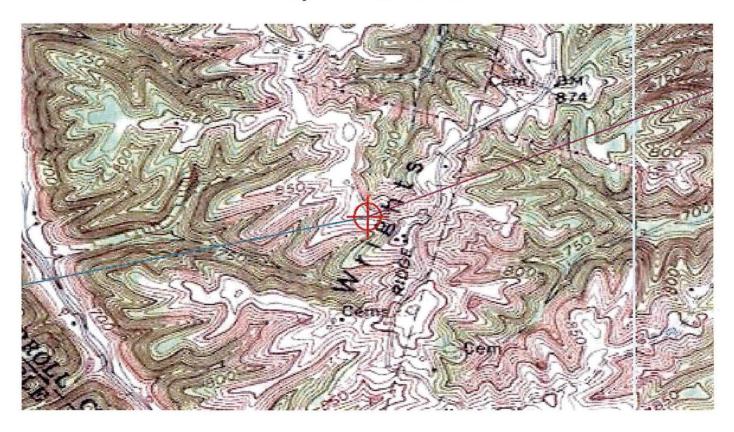


EXHIBIT F KENTUCKY AIRPORT ZONING COMMISSION



KENTUCKY AIRPORT ZONING COMMISSION

MATTHEW BEVIN Governor 421 Buttermilk Pike Covington, KY 41017 www.transportation.ky.gov 859-341-2700

December 28, 2017

APPROVAL OF APPLICATION

APPLICANT: John Monday John Monday 3300 E. Renner Rd B3132 Richardson, TX 75082

SUBJECT: AS-021-LOU-2017-134

STRUCTURE:Antenna TowerLOCATION:Milton, KYCOORDINATES:38° 40' 25.13" N / 85° 15' 33.67" WHEIGHT:270' AGL/1158'AMSL

The Kentucky Airport Zoning Commission has approved your application for a permit to construct 270'AGL/1158'AMSL Antenna Tower near Milton, KY 38° 40' 25.13" N / 85° 15' 33.67" W.

This permit is valid for a period of 18 Month(s) from its date of issuance. If construction is not completed within said 18-Month period, this permit shall lapse and be void, and no work shall be performed without the issuance of a new permit.

A copy of the approved application is enclosed for your files.

Medium Dual Obstruction Lighting is required in accordance with 602 KAR 50:100.

John Houlihan

Administrator



An Equal Opportunity Employer M/F/D



KENTUCKY AIRPORT ZONING COMMISSION

MATTHEW BEVIN Governor 421 Buttermilk Pike Covington, KY 41017 www.transportation.ky.gov 859-341-2700

CONSTRUCTION/ALTERATION STATUS REPORT

December 28, 2017

AERONAUTICIAL STUDY NUMBER: AS-021-LOU-2017-134

John Monday John Monday 3300 E. Renner Rd B3132 Richardson, TX 75082

This concerns the permit which was issued to you by the Kentucky Airport Zoning Commission on December 28, 2017. This permit is valid for a period of 18 Month(s) from its date of issuance. If construction is not completed within the said 18-Month period, this permit shall lapse and be void, and no work shall be performed without the issuance of a new permit. When appropriate, please indicate the status of the project in the place below and return this letter to John Houlihan, Administrator, Kentucky Airport Zoning Commission, 421 Buttermilk Pike, Covington, KY, 41017. 859-341-2700.

STRUCTURE:	Antenna Tower
LOCATION:	Milton, KY
COORDINATES:	38° 40' 25.13" N / 85° 15' 33.67" W
HEIGHT:	270' AGL /1158'AMSL

CONSTRUCTION/ALTERATION STATUS

- 1. The project () is abandoned. () is not abandoned.
- 2. Construction status is as follows: Structure reached its greatest height of ______ft. AGL ______ft. AMSL on ______(date).

Date construction was completed.	
	and the second sec

Type of obstruction marking/painting.
Type of obstruction lighting.
As built coordinates.
Miscellaneous Information.

DATE	

SIGNATURE/TITLE_____



An Equal Opportunity Employer M/F/D

2017-



KENTUCKY TRANSPORTATION CABINET

TC 55-2 Rev. 06/2016 Page 2 of 2

KENTUCKY	AIRPORT	ZONING	COMMISSION
----------	---------	--------	------------

APPLICATION FOR PERMIT TO CONSTRUCT OR ALTER A STRUCTURE												
APPLICANT (name)	PHONE	FAX	KY AERONAUTICAL	STUDY #								
John Monday	855-6 99 -7073	972-907-1131	AS-021- 604	-2017-134								
ADDRESS (street)	CITY		STATE	ZIP								
3300 E. Renner Road, B3132	Richardson		тх	75082								
APPLICANT'S REPRESENTATIVE (name)	PHONE	FAX										
Roy Johnson	502-445-2475	502-222-4266										
ADDRESS (street)	CITY		STATE	ZIP								
3605 Mattingly Road	Buckner		KY	40010								
APPLICATION FOR X New Construct	tion Alteration	Existing	WORK SCHEDULE									
	porary (months	days)	Start End	TBD								
TYPE Crane Building		IG/LIGHTING PREFER	RED									
X Antenna Tower			_	/hite- high intensity								
X Antenna Tower Red Lights & Paint White- medium intensity White- high intensity X Dual- red & medium intensity white Dual- red & high intensity white												
Landfill Other Other												
38 [°] 40′ 25,13″	85 ⁰ 15' 3	3.67 "	Other									
NEAREST KENTUCKY	NEAREST KENTUCK	Y PUBLIC USE OR MI	LITARY AIRPORT									
City ^{Milton} County Carroll	LOU Bowman Fie											
SITE ELEVATION (AMSL, feet)	TOTAL STRUCTURE	HEIGHT (AGL, feet)	CURRENT (FAA aer	onautical study #)								
888	270		2017-ASO-20070-	OE								
OVERALL HEIGHT (site elevation plus total structure height, feet) PREVIOUS (FAA aeronautical study a 1158												
DISTANCE (from nearest Kentucky publi		act to structure)	PREVIOUS (KY aero	noutical study #								
32.81 NM	c use or winitary unp	ion to structure	FREVIOUS (NT DETO									
DIRECTION (from nearest Kentucky pub	lic use or Militanu air	port to structure)										
Northeast	ne use of whitely of	port to structure										
DESCRIPTION OF LOCATION (Attach US	GS 7 5 minute auad	anale man or an air	ort lovout drawing	with the precise site								
marked and any certified survey.)	os 7.5 minute quudi	ungie mup or un airp	on byour arawing	with the precise site								
	ind Quad attached											
	ina Quao attacheo											
DESCRIPTION OF PROPOSAL												
AT&T proposes to construct a 255' cell tov	una udeb o 151 li-bésius	and for on succell hole	ht af 170									
Area proposes to construct a 255 cell tow	ver with a tollighting	rod for an overall neig	nt of 270 .									
FAA Form 7460-1 (Has the "Notice of C	anstruction or Altern	tion" been filed with	the Foderal Aulation	Administration 2								
No X Yes, when? 10/5/17		don beenjied with		(Autom)								
CERTIFICATION (I hereby certify that all	the above entries a	nade hu me are true	complete and corr	ect to the best of								
my knowledge and belief.)	the above entries, h	nude by me, die due,	, complete, und com									
PENALITIES (Persons failing to comply v	with KRS 183 861 to	183 990 and 602 KAR	050 are liable for fi	nes and/or								
imprisonment as set forth in KRS 183.99												
NAME	SIGNATURE		DATE									
Michelle Ward Sr. Real Estate M	gr.	fine word	10/27/17									
COMMISSION ACTION	Chairperson											
FA	KT Zoumsta	IUI, RALL		1217								
Approved SIGNATURE	~		DATE 12 -2									
Disapproved	/											
Y												

EXHIBIT G GEOTECHNICAL REPORT Date: March 8, 2018

GEOTECHNICAL REPORT WRIGHTS RIDGE (KYL01212)

> 38° 40' 25.13" N 85° 15' 33.67" W

2126 Wrights Ridge Rd Milton, KY 40045

Prepared For:



Prepared By:



11490 Bluegrass Parkway | Louisville, Kentucky 40299 | 502.437.5252 POWER OF DESIGN GROUP, LLC



March 8, 2018

Ms. Michelle Ward AT&T 534 Armory Place 4th Floor Louisville, KY 40202

 Re: Geotechnical Report – PROPOSED 255' SELF-SUPPORT TOWER w/ 15' LIGHTNING ARRESTOR Site Name: WRIGHTS RIDGE (KYL01212)
 Site Address: 2126 Wrights Ridge Road, Milton, Carroll County, Kentucky Coordinates: N38° 40' 25.13", W85° 15' 33.67"
 POD Project No. 17-13276

Dear Ms. Ward:

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,

Max Patter

Mark Patterson, P.E. Project Engineer License No.: KY 16300

Copies submitted:

(3) Ms. Michelle Ward



11490 Bluegrass Parkway |Louisville, Kentucky 40299 | 502.437.5252 POWER OF DESIGN GROUP, LLC

LETTER OF TRANSMITTAL

TABLE OF CONTENTS

1.	PUR	POSE AND SCOPE	1
2.	PRO	JECT CHARACTERISTICS	1
3.	SUB	SURFACE CONDITIONS	1
4.	FOU	NDATION DESIGN RECOMMENDATIONS	2
	4.1.	PROPOSED TOWER	3
	4.1.	1. Drilled Piers	3
	4.1.	2. Mat Foundation	4
	4.2.	EQUIPMENT PLATFORM	4
	4.3.	EQUIPMENT SLAB	4
	4.4.	EQUIPMENT BUILDING	5
	4.5.	DRAINAGE AND GROUNDWATER CONSIDERATIONS	5
5.	GEN	ERAL CONSTRUCTION PROCEDURES AND RECOMMENDATIONS	5
	5.1	DRILLED PIERS	6
	5.2	FILL COMPACTION	6
	5.3		7
6	FIEL	D INVESTIGATION	7
7	WA	RRANTY AND LIMITATIONS OF STUDY	8

.

APPENDIX

.

BORING LOCATION PLAN BORING LOG SOIL SAMPLE CLASSIFICATION

WRIGHTS RIDGE March 8, 2018

Geotechnical Report PROPOSED 255' SELF-SUPPORT TOWER w/ 15' LIGHTNING ARRESTOR Site Name: WRIGHTS RIDGE (KYL01212) 2126 Wrights Ridge Road, Milton, Carroll County, Kentucky N38' 40' 25.13", W85' 15' 33.67"

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. 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

AT&T is proposing to construct a 255' self-support tower and either an equipment shelter, slab or platform at N38[•] 40' 25.13", W85[•] 15' 33.67", 2126 Wrights Ridge Road, Milton, Carroll County, Kentucky. The site is located in a field just to the east of a residence and several out buildings along Wrights Ridge Road in a rural area of Carroll County between Milton and Carrollton. The proposed lease area will be 7,500 square feet and will be accessed by an existing gravel road off Wrights Ridge Road then west to the site. The proposed elevation at the tower location is about EL 888 and there is about 8 feet of change in elevation across the proposed lease area. Surface water will run off to the southwest. 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 boring is 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 Drake Formation. The formation is made up of dolomite and limestone and has a low karst potential.

The borings encountered about 4 inches of topsoil at the existing ground surface. Below the topsoil, the borings encountered silty clay (CL) of low plasticity to about 3.5 foot. The SPT N-values in the clay were between 43 to over 50 blows per foot (bpf) indicating a hard consistency. Highly weathered clayshale was encountered below the silty clay to

WRIGHTS RIDGE March 8, 2018

auger refusal depths between 5 and 5.5 feet. Auger refusal is defined as the depth at which the boring can no longer be advanced using the current drilling method.

The refusal material was cored in Boring 1 from 5 to 25 feet below the ground surface. Dolomite that was hard, slightly weathered and olive gray was encountered. The recoveries of the rock cores were 85 to 100 percent and the RQD values were 83 and 93 percent. These values generally represent very good to excellent quality rock from a foundation support viewpoint.

Observations made at the completion of soil drilling operations indicated the boring 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 2013 Kentucky Building Code, the site class is considered "B". 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.

2

WRIGHTS RIDGE March 8, 2018

4.1. Proposed Tower

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

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 25 feet, a deeper boring should be drilled to determine the nature of the deeper material.

Depth Below Ground Surface, feet	0-2	2-5	5-25
Ultimate Bearing Pressure (psf)		13,800	83,0,00
C Undrained Shear Strength, psf	500	2,500	15,000
Ø Angle of Internal Friction degrees	0	0	0
Total Unit Weight, pcf	110	135	135
Soil Modulus Parameter k, pci	30	1000	2000
Passive Soil Pressure, psf/one foot of depth		1,675 + 45(D-2)	10,000 + 45(D-5)
Side Friction, psf	100	750	1250

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

WRIGHTS RIDGE March 8, 2018

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 highly weathered clay shale at least 3 feet in depth can be designed using a net allowable bearing pressure of 6,000 pounds per square foot may be used. For a mat bearing on the hard dolomite at about 5 feet, a net allowable bearing pressure of 20,000 psf can be used. This value may be increased by 30 percent for the maximum edge pressure under transient loads. The friction value can be increased to 0.40 between the concrete and bedrock. 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.

The mat must to found on either soil or bedrock but not both. Soil pockets can be removed and replaced with KY #57 feet if a foundation on rock is chosen.

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 3,000 pounds per square foot. The piers should bear at a depth of at least 30 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 (k) of 130 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.

WRIGHTS RIDGE March 8, 2018

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 3,000 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 30 inches to minimize the effects of frost action. All existing topsoil or soft natural soil should be removed beneath footings.

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 (k) of 130 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:

- □ 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 groundwater was not encountered during the soil drilling, some significant seepage may be encountered. The drilled pier contractor should have pumps on hand to remove water from the drilled pier.
- 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

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.

If groundwater is encountered in the drilled pier excavations, it may be difficult to dewater since pumping directly from the excavations could cause a deterioration of the bottom of the excavation. If the pier excavations are not dewatered, concrete should be placed by the tremie method.

6 FIELD INVESTIGATION

Three soil test boring was drilled near the base of the proposed tower. Split-spoon samples were obtained by the Standard Penetration Test (SPT) procedure (ASTM D1586) in all test borings. The borings encountered auger refusal from about 5 to 5.5 feet. A rock core of the refusal material was taken in Boring 1 from 5 to 25 feet. 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 log is 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 log 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.

WRIGHTS RIDGE March 8, 2018

7 WARRANTY AND LIMITATIONS OF STUDY

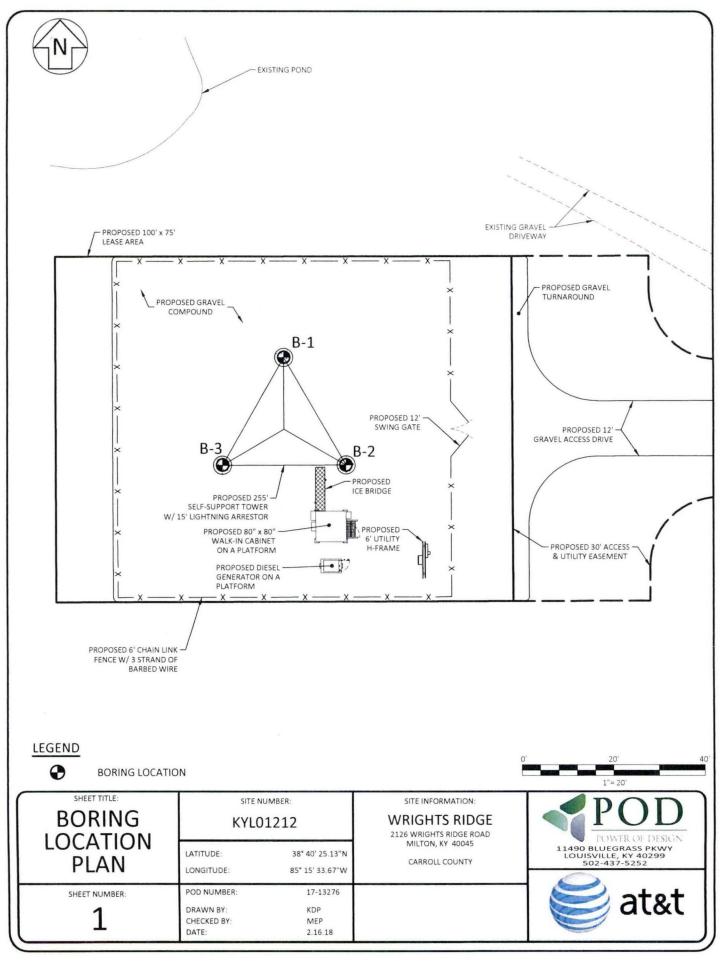
Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. This warranty is in lieu of all other warranties, either express or implied. POD Group is not responsible for 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 log. 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 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 LOG SOIL SAMPLE CLASSIFICATION



P PON		Boring Log				Boring: B-1 Page 1 of 1								
Project:	WER OF DESIGN Wrights Ridge					City,	Sta	te	Milton, KY					
Inside Diameter: 3 1 Groundwater: DRY		Ahou		E - '	750 ATV	Hamn Weath	ner T ner:	уре: А						
Driller: GeoTill En From To (ft) (ft) 0.3 3.5 3.5 5.0 5.0 25.0	gineering Note Material Description SILTY CLAY (CL) - hard, orange tan CLAYSHALE - highly weathered, olive tan DOLOMITE - hard, sligthly weathered, oliv gray Boring Terminated at 25 feet		1-2.5 3.5 -5 5-15	es of ed AL aldues SS RC RC	topsoil was en	Licounter	ed at	the grov Kock Quality 83% 93%	Atterberg	Providence (%)	% Fines (clay & sitt)	Unconfined Compressive Strength,		

	DD DF DESIGN				Bori	ing I	Log	:		Borin Page	g: B-2	
	ights Ridge					City,	Sta	te		Milto	n, KY	
Method: H.S.A.	Boring Date:		13-Feb	18		Locatio	on: I	Propose	d Towe	er		
Inside Diameter: 3 1/4" Groundwater: DRY	Drill Rig Type:		СМ	E - '	750 ATV	Hamn Weath		ype: A	uto			
Driller: GeoTill Engineer	ing Note: A	Abou	t 4 inche	es of	topsoil was en			the grou	und surf	face		
From To (ft) (ft) 0.3 3.5 SILTY (Material Description CLAY (CL) - hard, tan-orange tan		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,
	mottled		1-2.5	SS	5, 8, 35	18	43,					
3.5 5.5 CLAYSH	ALE - highly weathered, olive tan		3.5 -5	SS	50,	5	50,					

P	POWER OF DESIGN Box					Bor	ing l	5	Boring: B-3 Page 1 of 1						
Project:		s Ridge					City,	Sta	te		Milto	n, KY			
Method:	H.S.A.	Boring Date:		13-Feb	-18		Locati	on: I	Propose	d Towe	er				
Inside Diameter: 3 Groundwater: DR		Drill Rig Type:		CM	E - 7	750 ATV	Hamn Weath		ype: A	uto					
Driller: GeoTill E	the second s	Note:	Abou	t 4 inch	es of	topsoil was er		_		ound surface					
From To (ft) (ft)	Mate	rial 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,		
0.3 3.5	SILTY CLAY (0	CL) - hard, tan-orange tan mottled		1-2.5	SS	50,	2	50,							
3.5 5.0	CLAYSHALE - H	nighly weathered, olive tan		3.5 -5	SS	50,	2	50,							
	Auger	Refusal at 5 feet													

COARSE	GRAINED SOILS	FIN	E GRAINED SO	ILS			
(SANDS & GRAVELS)			(SILTS & CLAYS)			PARTICLE SIZE	
				Qu, KSF			
N	Relative Density	<u>N</u>	Consistency	Estimated	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	
tain relative densi 0 lb. hammer fallir	ty and consistency information	A standard	1.4-inch I.D./2-in a trip, free-fall de	nch O.D. split sign, or actua	-barrel sampler is ited by a rope and	ple for examination and testing and driven three 6-inch increments with cathead. The blow counts required les.	
		F	ROCK PROPER	RTIES			
ROCK	QUALITY DESIGNATION (RQI	2)	1	Contract of the local data	ROCK HARD	DNESS	
Percent RQD	Quality	- /	Very Hard:	Rock can b	e broken by heavy	hammer blows.	
			Hard:			imb pressure, but can be broken by	
0-25	Very Poor				ammer blows.		
25-50	Poor		Moderately			ff along sharp edges by considerable	
50-75	Fair		Hard:			broken with light hammer blows.	
75-90	Good		Soft:			rery easily with thumb pressure at the firm hand pressure.	
90-100	Excellent		Very Soft:	1 5		and the second contraction of the second	
30-100	Excellent		very con.	Rock disintegrates or easily compresses when touched; can be hard to very hard soil.			
ecovery =	Length of Rock Core Reco Length of Core Run	vered	NC		Core Diameter BQ NQ HQ	Inches 1-7/16 1-7/8 2-1/2	
ecovery = RQD = <u>Sun</u>			NC 43		BQ	1-7/16	
	Length of Core Run		NC 43	2 RQD	BQ NQ	1-7/16 1-7/8	
	Length of Core Run	es Recovered	X100 NC 43 SYMBOLS	2 RQD	BQ NQ HQ	1-7/16 1-7/8	
	Length of Core Run n of 4 in. and longer Rock Piece Length of Core Run KEY TO MATE	es Recovered	X100 SYMBOLS	RQD	BQ NQ HQ N: S	1-7/16 1-7/8 2-1/2 SOIL PROPERTY SYMBOLS	
RQD = <u>Sun</u>	Length of Core Run n of 4 in. and longer Rock Piece Length of Core Run	es Recovered	X100 NC 43 SYMBOLS	RQD	BQ NQ HQ N: S M: N	1-7/16 1-7/8 2-1/2 SOIL PROPERTY SYMBOLS tandard Penetration, BPF toisture Content, %	
	Length of Core Run n of 4 in. and longer Rock Piece Length of Core Run KEY TO MATE	RIAL TYPES	X100 SYMBOLS ROCKS	RQD	BQ NQ HQ N: S M: N LL: L	1-7/16 1-7/8 2-1/2 SOIL PROPERTY SYMBOLS tandard Penetration, BPF toisture Content, % iquid Limit, %	
RQD = <u>Sun</u> Group Symbols	Length of Core Run n of 4 in. and longer Rock Piece Length of Core Run KEY TO MATE SOILS Typical Names Well graded gravel - sand mixture, little	RIAL TYPES	NC 43 X100 SYMBOLS ROCKS Symbols Typic	RQD	BQ NQ HQ N: S M: M LL: L PI: P	1-7/16 1-7/8 2-1/2 SOIL PROPERTY SYMBOLS Itandard Penetration, BPF Noisture Content, % iquid Limit, % Plasticity Index, %	
RQD = <u>Sun</u> Group Symbols GW	Length of Core Run n of 4 in. and longer Rock Piece Length of Core Run KEY TO MATE SOILS Viell graded gravel - sand mixture, little fines Poorly graded gravels or gravel - sand	RIAL TYPES	X100 SYMBOLS ROCKS Symbols Typica Limeston	RQD	BQ NQ HQ N: S M: M LL: L PI: P Qp: P	1-7/16 1-7/8 2-1/2 SOIL PROPERTY SYMBOLS tandard Penetration, BPF toisture Content, % iquid Limit, % rlasticity Index, % Pocket Penetrometer Value, TSF	
RQD = Sun Group Symbols GW GP	Length of Core Run n of 4 in. and longer Rock Piece Length of Core Run KEY TO MATE SOILS Viell graded gravel - sand mixture, little fines Poorly graded gravels or gravel - sand mixture, little or no fines	RIAL TYPES	X100 SYMBOLS ROCKS Symbols Typica Limeston Shale	RQD B al Names e or Dolomite	BQ NQ HQ N: S M: M LL: L PI: P Qp: P Qu: U	1-7/16 1-7/8 2-1/2 SOIL PROPERTY SYMBOLS Itandard Penetration, BPF Noisture Content, % iquid Limit, % Plasticity Index, %	
RQD = Sun Group Symbols GW GP GM	Length of Core Run n of 4 in. and longer Rock Piece Length of Core Run KEY TO MATE SOILS Viell graded gravel - sand mixture, little fines Poorly graded gravels or gravel - sand mixture, little or no fines Sitty gravels, gravel - sand silt mixtures	RIAL TYPES	X100 SYMBOLS ROCKS Symbols Typica Limeston	RQD B al Names e or Dolomite	BQ NQ HQ N: S M: M LL: L PI: P Qp: P Qu: U Qu: U Qu: U	1-7/16 1-7/8 2-1/2 SOIL PROPERTY SYMBOLS tandard Penetration, BPF toisture Content, % iquid Limit, % Plasticity Index, % Pocket Penetrometer Value, TSF Inconfined Compressive Strength	
RQD = Sun Group Symbols GW GP GM GC	Length of Core Run n of 4 in, and longer Rock Piece Length of Core Run KEY TO MATE SOILS Veil graded gravel - sand mixture, little fines Poorly graded gravel - sand mixture, little fines Sitty gravels, gravel - sand silt mixtures Clayey gravels, gravel - sand - clay mixt	es Recovered	X100 SYMBOLS ROCKS Symbols Typica Limeston Shale	RQD B al Names e or Dolomite	BQ NQ HQ N: S M: M LL: L PI: P Qp: P Qu: U Qu: U Qu: U Ω	1-7/16 1-7/8 2-1/2 SOIL PROPERTY SYMBOLS tandard Penetration, BPF toisture Content, % iquid Limit, % Plasticity Index, % Procket Penetrometer Value, TSF Inconfined Compressive Strength istimated Qu, TSF	
RQD = Sun Group Symbols GW GP GM	Length of Core Run n of 4 in. and longer Rock Piece Length of Core Run KEY TO MATE SOILS Viell graded gravel - sand mixture, little fines Poorly graded gravel - sand mixture, little fines Silty gravels, gravel - sand - clay mixtures (Clayey gravels, gravel - sand - clay mixture) Well graded sands, gravelly sands, little no fines	es Recovered	X100 SYMBOLS ROCKS Symbols Typica Limeston Shale	RQD B al Names e or Dolomite	BQ NQ HQ N: S M: M LL: L PI: P Qp: P Qu: U Qu: U Qu: U Ω: C	1-7/16 1-7/8 2-1/2 SOIL PROPERTY SYMBOLS tandard Penetration, BPF toisture Content, % iquid Limit, % Plasticity Index, % Procket Penetrometer Value, TSF Inconfined Compressive Strength istimated Qu, TSF Pry Unit Weight, PCF	
RQD = Sun Group Symbols GW GP GM GC	Length of Core Run n of 4 in. and longer Rock Piece Length of Core Run KEY TO MATE SOILS Viell graded gravel - sand mixture, little fines Poorly graded gravels or gravel - sand mixture, little or no fines Silty gravels, gravel - sand - clay mixt Well graded sands, gravelly sands, little Well graded sands, gravelly sands, little	es Recovered	X100 SYMBOLS ROCKS Symbols Typica Limeston Shale	RQD B al Names e or Dolomite	BQ NQ HQ N: S M: M LL: L PI: P Qp: P Qu: U Qu: U Qu: U Ω: C	1-7/16 1-7/8 2-1/2 SOIL PROPERTY SYMBOLS tandard Penetration, BPF toisture Content, % iquid Limit, % Pasticity Index, % Procket Penetrometer Value, TSF Inconfined Compressive Strength istimated Qu, TSF Dry Unit Weight, PCF ines Content SAMPLING SYMBOLS	
RQD = Sun Group Symbols GW GP GM GC SW	Length of Core Run n of 4 in. and longer Rock Piece Length of Core Run KEY TO MATE SOILS Veil graded gravel - sand mixture, little fines Poorly graded gravel - sand mixture, little fines Silty gravels, gravel - sand - clay mixtures Clayey gravels, gravel - sand - clay mixture Weil graded sands, gravelly sands, little no fines Poorly graded sands or gravelly sands.	es Recovered	X100 SYMBOLS ROCKS Symbols Typica Limeston Shale	RQD B al Names e or Dolomite	BQ NQ HQ N: S M: M LL: L PI: P Qp: P Qp: P Qu: U E γ D: F F: F	1-7/16 1-7/8 2-1/2 SOIL PROPERTY SYMBOLS tandard Penetration, BPF toisture Content, % iquid Limit, % Plasticity Index, % Procket Penetrometer Value, TSF Inconfined Compressive Strength istimated Qu, TSF Dry Unit Weight, PCF ines Content SAMPLING SYMBOLS	
RQD = Sun Group Symbols GW GP GM GC SW SP	Length of Core Run n of 4 in. and longer Rock Piece Length of Core Run KEY TO MATE SOILS Viell graded gravel - sand mixture, little fines Poorly graded gravel - sand mixtures Silty gravels, gravel - sand silt mixtures Clayey gravels, gravel - sand - clay mixt Well graded sands, gravelly sands, little no fines Poorly graded sands or gravelly sands, or no fines	es Recovered	X100 SYMBOLS ROCKS Symbols Typica Limeston Shale	RQD B al Names e or Dolomite	BQ NQ HQ N: S M: M LL: L PI: P Qp: P Qu: U F: F F: F	1-7/16 1-7/8 2-1/2 SOIL PROPERTY SYMBOLS tandard Penetration, BPF toisture Content, % iquid Limit, % Pasticity Index, % Proceet Penetrometer Value, TSF Inconfined Compressive Strength istimated Qu, TSF Pry Unit Weight, PCF ines Content SAMPLING SYMBOLS Split Spoon Sample	
RQD = Sun Group Symbols GW GP GM GC SW SP SM	Length of Core Run n of 4 in. and longer Rock Piece Length of Core Run KEY TO MATE SOILS Vell graded gravel - sand mixture, little fines Poorly graded gravels or gravel - sand mixture, little or no fines Sitty gravels, gravel - sand - clay mixt Well graded sands, gravelly sands, little no fines Poorly graded sands or gravelly sands, or no fines Sitty sands, sand - sitt mixtures	es Recovered	X100 SYMBOLS ROCKS Symbols Typica Limeston Shale	RQD B al Names e or Dolomite	BQ NQ HQ N: S M: M LL: L PI: P Qp: P Qp: P Qu: U E γ D: F F: F	1-7/16 1-7/8 2-1/2 SOIL PROPERTY SYMBOLS tandard Penetration, BPF toisture Content, % iquid Limit, % Pasticity Index, % Proceet Penetrometer Value, TSF Inconfined Compressive Strength istimated Qu, TSF Pry Unit Weight, PCF ines Content SAMPLING SYMBOLS Split Spoon Sample	
RQD = Sun Group Symbols GW GP GM GP GM GC SW SP SM SP SM SC	Length of Core Run n of 4 in. and longer Rock Piece Length of Core Run KEY TO MATE SOILS Veil graded gravel - sand mixture, little fines Poorly graded gravel - sand mixture, little fines Silty gravels, gravel - sand silt mixtures Clayey gravels, gravel - sand - clay mixt Well graded sands, gravelly sands, little no fines Poorly graded sands or gravelly sands, little no fines Silty sands, sand - clay mixtures Clayey sands, sand - clay mixtures Silty sands, sand - clay mixtures Inorganic silts and very fine sands, roch	es Recovered	X100 SYMBOLS ROCKS Symbols Typica Limeston Shale	RQD B al Names e or Dolomite	BQ NQ HQ N: S M: M LL: L PI: P Qp: P Qu: U F: F F: F	1-7/16 1-7/8 2-1/2 SOIL PROPERTY SYMBOLS tandard Penetration, BPF toisture Content, % iquid Limit, % Pasticity Index, % Procket Penetrometer Value, TSF Inconfined Compressive Strength istimated Qu, TSF Pry Unit Weight, PCF ines Content SAMPLING SYMBOLS Split Spoon Sample Relatively Undisturbed	
RQD = Sun Group Symbols GW GP GM GC SW SP SM SC SM SC ML	Length of Core Run n of 4 in. and longer Rock Piece Length of Core Run KEY TO MATE SOILS SOILS Veil graded gravel - sand mixture, little fines Poorly graded gravels or gravel - sand mixture, little or no fines Sitty gravels, gravel - sand - clay mixt Veil graded sands, gravelly sands, littli no fines Poorly graded sands or gravelly sands, littli no fines Poorly graded sands or gravelly sands, littli no fines Sitty sands, sand - sitt mixtures Clayey sands, sand - clay mixtures Clayey sands, sand - clay mixtures Clayey sands, sand - clay mixtures Inorganic sitts and very fine sands, or claye Organic sitts and organic sitt, clays of I	es Recovered	X100 SYMBOLS ROCKS Symbols Typica Limeston Shale	RQD B al Names e or Dolomite	BQ NQ HQ N: S M: M LL: L PI: P Qp: P Qu: U Qu: U F: F F: F	1-7/16 1-7/8 2-1/2 SOIL PROPERTY SYMBOLS tandard Penetration, BPF toisture Content, % iquid Limit, % Pasticity Index, % tocket Penetrometer Value, TSF Inconfined Compressive Strength Stimated Qu, TSF Pry Unit Weight, PCF ines Content SAMPLING SYMBOLS Split Spoon Sample Relatively Undisturbed Sample	
RQD = Sun Group Symbols GW GP GM GC SW SP SM SC SM SC SM C SC	Length of Core Run n of 4 in. and longer Rock Piece Length of Core Run KEY TO MATE SOILS SOILS Veil graded gravel - sand mixture, little fines Poorly graded gravel - sand mixture, little fines Suity gravels, gravel - sand silt mixtures Clayey gravels, gravel - sand - clay mixt Veil graded sands, gravelly sands, littl no fines Poorly graded sands or gravelly sands, littl no fines Sourd sands - silt mixtures Clayey sands, sand - clay mixtures Inorganic silts and very fine sands, roch flour, silty or claye, fine sands, or claye Organic silts and organic silty clays of I plasticity Inorganic clays of low range plasticty, grave	es Recovered	X100 SYMBOLS ROCKS Symbols Typica Limeston Shale	RQD B al Names e or Dolomite	BQ NQ HQ N: S M: M LL: L PI: P Qp: P Qu: U F: F F: F	1-7/16 1-7/8 2-1/2 SOIL PROPERTY SYMBOLS tandard Penetration, BPF toisture Content, % iquid Limit, % Pasticity Index, % tocket Penetrometer Value, TSF Inconfined Compressive Strength Stimated Qu, TSF Pry Unit Weight, PCF ines Content SAMPLING SYMBOLS Split Spoon Sample Relatively Undisturbed Sample	

EXHIBIT H DIRECTIONS TO WCF SITE

.

.

Site Name: Wrights Ridge Driving Directions to Proposed Tower Site

- 1. Beginning at the offices of the County Judge/Executive located at 440 Main Street, Carrollton, Kentucky.
- 2. Start out going west on Main St toward Court Street.
- 3. Take the 1st left onto Court Street.
- 4. Turn right onto Highland Ave/US-42 W/KY-36. Continue to follow KY-36.
- 5. Turn left onto Notchlick Road.
- 6. Take the 1st right onto Wrights Ridge Road.
- 7. Arrive at 2126 Wrights Ridge Rd, Milton, Kentucky.
- 8. The site coordinates are 38°40'25.13" North latitude, 85°15'33.67" West longitude.



Prepared by: Robert W. Grant Pike Legal Group PLLC 1578 Highway 44 East, Suite 6 P.O. Box 369 Shepherdsville, KY 40165-3069 Telephone: 502-955-4400 or 800-516-4293

EXHIBIT I COPY OF REAL ESTATE AGREEMENT

.

Market: Louisville Cell Site Number: <u>KYL01212</u> Cell Site Name: <u>Wright's Ridge</u> Fixed Asset Number: 13800813

OPTION AND LEASE AGREEMENT

THIS OPTION AND LEASE AGREEMENT ("Agreement"), dated as of the latter of the signature dates below (the "Effective Date"), is entered into by Foster B. Helm, an individual, having a mailing address of 2126 Wrights Ridge Road, Milton, KY 40045 ("Landlord") and New Cingular Wireless PCS, LLC, a Delaware limited liability company, having a mailing address of 575 Morosgo Drive NE, Atlanta, GA 30324 ("Tenant").

BACKGROUND

Landlord owns or controls that certain plot, parcel or tract of land, as described on **Exhibit 1**, together with all rights and privileges arising in connection therewith, located at 2126 Wrights Ridge Road, Milton. KY, 40045 in the County of Carroll, State of Kentucky (collectively, the "**Property**"). Tenant desires to use a portion of the Property in connection with its federally licensed communications business. Landlord desires to grant to Tenant the right to use a portion of the Property in accordance with this Agreement.

The parties agree as follows:

1. OPTION TO LEASE.

(a) Landlord grants to Tenant an option (the "**Option**") to lease a certain portion of the Property containing approximately 10,000 square feet including the air space above such ground space, as described on attached **Exhibit 1** (the "**Premises**"), for the placement of Tenant's Communication Facility.

During the Option Term, and during the term of this Agreement, Tenant and its agents, engineers, (b) surveyors and other representatives will have the right to enter upon the Property to inspect, examine, conduct soil borings, drainage testing, material sampling, radio frequency testing and other geological or engineering tests or studies of the Property (collectively, the "Tests"), to apply for and obtain licenses, permits, approvals, or other relief required of or deemed necessary or appropriate at Tenant's sole discretion for its use of the Premises and include, without limitation, applications for zoning variances, zoning ordinances, amendments, special use permits, and construction permits (collectively, the "Government Approvals"), initiate the ordering and/or scheduling of necessary utilities, and otherwise to do those things on or off the Property that, in the opinion of Tenant, are necessary in Tenant's sole discretion to determine the physical condition of the Property, the environmental history of the Property, Landlord's title to the Property and the feasibility or suitability of the Property for Tenant's Permitted Use, all at Tenant's expense. Tenant will not be liable to Landlord or any third party on account of any pre-existing defect or condition on or with respect to the Property, whether or not such defect or condition is disclosed by Tenant's inspection. Tenant will restore the Property to its condition as it existed at the commencement of the Option Term, reasonable wear and tear and loss by casualty or other causes beyond Tenant's control excepted.

(c) In consideration of Landlord granting Tenant the Option, Tenant agrees to pay Landlord the sum of the sum

no later than five (5) days prior to the expiration date of the Initial Option Term. The Initial Option Term and any Renewal Option Term are collectively referred to as the "Option Term."

(d) The Option may be sold, assigned or transferred at any time by Tenant to an Affiliate (as that term is hereinafter defined) of Tenant or to any third party agreeing to be subject to the terms hereof. Otherwise, the Option may not be sold, assigned or transferred without the written consent of Landlord, such consent not to

be unreasonably withheld, conditioned or delayed. From and after the date the Option has been sold, assigned or transferred by Tenant to an Affiliate or a third party agreeing to be subject to the terms hereof, Tenant shall immediately be released from any and all liability under this Agreement, including the payment of any rental or other sums due, without any further action.

(e) During the Option Term, Tenant may exercise the Option by notifying Landlord in writing. If Tenant exercises the Option then Landlord leases the Premises to Tenant subject to the terms and conditions of this Agreement. If Tenant does not exercise the Option during the Initial Option Term or any extension thereof, this Agreement will terminate and the parties will have no further liability to each other.

(f) If during the Option Term, or during the term of this Agreement the Option is exercised, Landlord decides to subdivide, sell, or change the status of the zoning of the Premises, Property or any of Landlord's contiguous. adjoining or surrounding property (the "Surrounding Property,") or in the event of foreclosure, Landlord shall immediately notify Tenant in writing. Landlord agrees that during the Option Term, or during the Term of this Agreement if the Option is exercised, Landlord shall not initiate or consent to any change in the zoning of the Premises, Property or Surrounding Property or impose or consent to any other use or restriction that would prevent or limit Tenant from using the Premises for the Permitted Use. Any and all terms and conditions of this Agreement that by their sense and context are intended to be applicable during the Option Term shall be so applicable.

2. Tenant may use the Premises for the transmission and reception of PERMITTED USE. communications signals and the installation, construction, maintenance, operation, repair, replacement and upgrade of its communications fixtures and related equipment, cables, accessories and improvements, which may include a suitable support structure, associated antennas, equipment shelters or cabinets and fencing and any other items necessary to the successful and secure use of the Premises (collectively, the "Communication Facility"), as well as the right to test, survey and review title on the Property; Tenant further has the right but not the obligation to add, modify and/or replace equipment in order to be in compliance with any current or future federal, state or local mandated application, including, but not limited to, emergency 911 communication services, at no additional cost to Tenant or Landlord (collectively, the "Permitted Use"). Landlord and Tenant agree that any portion of the Communication Facility that may be conceptually described on Exhibit 1 will not be deemed to limit Tenant's Permitted Use. If Exhibit 1 includes drawings of the initial installation of the Communication Facility, Landlord's execution of this Agreement will signify Landlord's approval of Exhibit 1. For a period of ninety (90) days following the start of construction, Landlord grants Tenant, its subtenants, licensees and sublicensees, the right to use such portions of Landlord's contiguous, adjoining or Surrounding Property as described on Exhibit 1 as may reasonably be required during construction and installation of the Communication Facility. Tenant has the right to install and operate transmission cables from the equipment shelter or cabinet to the antennas, electric lines from the main feed to the equipment shelter or cabinet and communication lines from the Property's main entry point to the equipment shelter or cabinet, and to make other improvements, alterations, upgrades or additions appropriate for Tenant's Permitted Use, including the right to construct a fence around the Premises and undertake any other appropriate means to secure the Premises at Tenant's expense. Tenant has the right to modify, supplement, replace, upgrade, expand the equipment, increase the number of antennas or relocate the Communication Facility within the Premises at any time during the term of this Agreement. Tenant will be allowed to make such alterations to the Property in order to ensure that Tenant's Communication Facility complies with all applicable federal, state or local laws, rules or regulations.

3. TERM.

(a) The initial lease term will be five (5) years (the "Initial Term"), commencing on the effective date of written notification by Tenant to Landlord of Tenant's exercise of the Option (the "Term Commencement Date"). The Initial Term will terminate on the fifth (5^{th}) anniversary of the Term Commencement Date.

(b) This Agreement will automatically renew for four (4) additional five (5) year term(s) (each five (5) year term shall be defined as an "Extension Term"), upon the same terms and conditions unless Tenant

notifies Landlord in writing of Tenant's intention not to renew this Agreement at least sixty (60) days prior to the expiration of the Initial Term or then-existing Extension Term.

(c) Unless (i) Landlord or Tenant notifies the other in writing of its intention to terminate this Agreement at least six (6) months prior to the expiration of the final Extension Term, or (ii) the Agreement is terminated as otherwise permitted by this Agreement prior to the end of the final Extension Term, then upon the expiration of the final Extension Term, then upon the same covenants, terms and conditions for a further term of one (1) year, and for annual terms thereafter ("Annual Term") until terminated by either party by giving to the other written notice of its intention to so terminate at least six (6) months prior to the end of the final Extension Term, this Agreement shall continue in force upon the same covenants, terms and conditions for a further term of one (1) year, and for annual terms thereafter ("Annual Term") until terminated by either party by giving to the other written notice of its intention to so terminate at least six (6) months prior to the end of any such Annual Term. Monthly rental during such Annual Terms shall be equal to the Rent paid for the last month of the final Extension Term. If Tenant remains in possession of the Premises after the termination of this Agreement, then Tenant will be deemed to be occupying the Premises on a month-to-month basis (the "Holdover Term"), subject to the terms and conditions of this Agreement.

(d) The Initial Term, any Extension Terms, any Annual Terms and any Holdover Term are collectively referred to as the Term (the "Term").

4. **RENT.**

(a) Commencing on the first day of the month following the date that Tenant commences construction (the "**Rent Commencement Date**"). Tenant will pay Landlord on or before the fifth (5th) day of each calendar month in advance (the "**Rent**"), at the address set forth above. In any partial month occurring after the Rent Commencement Date, Rent will be prorated. The initial Rent payment will be forwarded by Tenant to Landlord within forty-five (45) days after the Rent Commencement Date.

(b) In year one (1) of each Extension Term, the monthly Rent will increase by over the Rent paid during the previous five (5) year term.

(c) All charges payable under this Agreement such as utilities and taxes shall be billed by Landlord within one (1) year from the end of the calendar year in which the charges were incurred; any charges beyond such period shall not be billed by Landlord, and shall not be payable by Tenant. The foregoing shall not apply to monthly Rent which is due and payable without a requirement that it be billed by Landlord. The provisions of this subsection shall survive the termination or expiration of this Agreement.

5. APPROVALS.

(a) Landlord agrees that Tenant's ability to use the Premises is contingent upon the suitability of the Premises and Property for Tenant's Permitted Use and Tenant's ability to obtain and maintain all Government Approvals. Landlord authorizes Tenant to prepare, execute and file all required applications to obtain Government Approvals for Tenant's Permitted Use under this Agreement and agrees to reasonably assist Tenant with such applications and with obtaining and maintaining the Government Approvals.

(b) Tenant has the right to obtain a title report or commitment for a leasehold title policy from a title insurance company of its choice and to have the Property surveyed by a surveyor of its choice.

(c) Tenant may also perform and obtain. at Tenant's sole cost and expense, soil borings, percolation tests, engineering procedures, environmental investigation or other tests or reports on, over, and under the Property, necessary to determine if Tenant's use of the Premises will be compatible with Tenant's engineering specifications, system, design, operations or Government Approvals.

6. **TERMINATION.** This Agreement may be terminated, without penalty or further liability, as follows:

(a) by either party on thirty (30) days prior written notice, if the other party remains in default under Section 15 of this Agreement after the applicable cure periods:

(b) by Tenant upon written notice to Landlord, if Tenant is unable to obtain or maintain, any required approval(s) or the issuance of a license or permit by any agency, board, court or other governmental authority necessary for the construction or operation of the Communication Facility as now or hereafter intended by Tenant; or if Tenant determines, in its sole discretion that the cost of or delay in obtaining or retaining the same is commercially unreasonable;

(c) by Tenant, upon written notice to Landlord, if Tenant determines, in its sole discretion, due to the title report results or survey results, that the condition of the Premises is unsatisfactory for its intended uses;

(d) by Tenant upon written notice to Landlord for any reason or no reason, at any time prior to commencement of construction by Tenant; or

(e) by Tenant upon sixty (60) days' prior written notice to Landlord for any reason or no reason, so long as Tenant pays Landlord a termination fee equal to three (3) months' Rent, at the then-current rate, provided, however, that no such termination fee will be payable on account of the termination of this Agreement by Tenant under any termination provision contained in any other Section of this Agreement, including the following: 5 Approvals, 6(a) Termination, 6(b) Termination, 6(c) Termination, 6(d) Termination, 11(d) Environmental, 18 Condemnation, or 19 Casualty.

7. INSURANCE.

(a) During the Term. Tenant will carry, at its own cost and expense, the following insurance: (i) workers' compensation insurance as required by law; and (ii) commercial general liability (CGL) insurance with respect to its activities on the Property, such insurance to afford protection of up to

Services Office (ISO) Form CG 00 01 or a substitute form providing substantially equivalent coverage. Tenant's CGL insurance shall contain a provision including Landlord as an additional insured. Such additional insured coverage:

(i) shall be limited to bodily injury, property damage or personal and advertising injury caused, in whole or in part, by Tenant, its employees, agents or independent contractors;

(ii) shall not extend to claims for punitive or exemplary damages arising out of the acts or omissions of Landlord, its employees, agents or independent contractors or where such coverage is prohibited by law or to claims arising out of the gross negligence of Landlord, its employees, agents or independent contractors; and

(iii) shall not exceed Tenant's indemnification obligation under this Agreement, if any.

(b) Notwithstanding the foregoing, Tenant shall have the right to self-insure the coverages required in subsection (a). In the event Tenant elects to self-insure its obligation to include Landlord as an additional insured, the following provisions shall apply (in addition to those set forth in subsection (a)):

(i) Landlord shall promptly and no later than thirty (30) days after notice thereof provide Tenant with written notice of any claim, demand, lawsuit, or the like for which it seeks coverage pursuant to this Section and provide Tenant with copies of any demands, notices, summonses, or legal papers received in connection with such claim, demand, lawsuit, or the like;

(ii) Landlord shall not settle any such claim, demand, lawsuit, or the like without the prior written consent of Tenant; and

(iii) Landlord shall fully cooperate with Tenant in the defense of the claim, demand, lawsuit, or the like.

8. <u>INTERFERENCE.</u>

(a) Prior to or concurrent with the execution of this Agreement, Landlord has provided or will provide Tenant with a list of radio frequency user(s) and frequencies used on the Property as of the Effective Date. Tenant warrants that its use of the Premises will not interfere with those existing radio frequency uses on the Property, as long as those existing radio frequency user(s) operate and continue to operate within their respective frequencies and in accordance with all applicable laws and regulations.

(b) Landlord will not grant, after the date of this Agreement, a lease, license or any other right to any third party, if the exercise of such grant may in any way adversely affect or interfere with the Communication Facility, the operations of Tenant or the rights of Tenant under this Agreement. Landlord will notify Tenant in writing prior to granting any third party the right to install and operate communications equipment on the Property.

(c) Landlord will not, nor will Landlord permit its employees. tenants, licensees, invitees, agents or independent contractors to, interfere in any way with the Communication Facility, the operations of Tenant or the rights of Tenant under this Agreement. Landlord will cause such interference to cease within twenty-four (24) hours after receipt of notice of interference from Tenant. In the event any such interference does not cease within the aforementioned cure period, Landlord shall cease all operations which are suspected of causing interference (except for intermittent testing to determine the cause of such interference) until the interference has been corrected.

(d) For the purposes of this Agreement, "interference" may include, but is not limited to, any use on the Property or Surrounding Property that causes electronic or physical obstruction with, or degradation of, the communications signals from the Communication Facility.

9. INDEMNIFICATION.

(a) Tenant agrees to indemnify, defend and hold Landlord harmless from and against any and all injury. loss, damage or liability (or any claims in respect of the foregoing), costs or expenses (including reasonable attorneys' fees and court costs) arising directly from the installation, use, maintenance, repair or removal of the Communication Facility or Tenant's breach of any provision of this Agreement, except to the extent attributable to the negligent or intentional act or omission of Landlord, its employees, agents or independent contractors.

(b) Landlord agrees to indemnify, defend and hold Tenant harmless from and against any and all injury, loss, damage or liability (or any claims in respect of the foregoing), costs or expenses (including reasonable attorneys' fees and court costs) arising directly from the actions or failure to act of Landlord, its employees or agents, or Landlord's breach of any provision of this Agreement, except to the extent attributable to the negligent or intentional act or omission of Tenant, its employees, agents or independent contractors.

(c) The indemnified party: (i) shall promptly provide the indemnifying party with written notice of any claim, demand, lawsuit, or the like for which it seeks indemnification pursuant to this Section and provide the indemnifying party with copies of any demands, notices, summonses, or legal papers received in connection with such claim, demand, lawsuit, or the like; (ii) shall not settle any such claim, demand. lawsuit, or the like without the prior written consent of the indemnifying party; and (iii) shall fully cooperate with the indemnifying party in the defense of the claim, demand, lawsuit, or the like. A delay in notice shall not relieve the indemnifying party of its indemnity obligation, except (1) to the extent the indemnifying party can show it was prejudiced by the delay; and (2) the indemnifying party shall not be liable for any settlement or litigation expenses incurred before the time when notice is given.

10. WARRANTIES.

(a) Tenant and Landlord each acknowledge and represent that it is duly organized, validly existing and in good standing and has the right, power and authority to enter into this Agreement and bind itself hereto through the party set forth as signatory for the party below.

(b) Landlord represents, warrants and agrees that: (i) Landlord solely owns the Property as a legal lot in fee simple, or controls the Property by lease or license; (ii) the Property is not and will not be encumbered by any liens, restrictions, mortgages, covenants, conditions, easements, leases, or any other agreements of record or not of record, which would adversely affect Tenant's Permitted Use and enjoyment of the Premises under this Agreement; (iii) as long as Tenant is not in default then Landlord grants to Tenant sole, actual, quiet and peaceful use, enjoyment and possession of the Premises without hindrance or ejection by any persons lawfully claiming under Landlord; (iv) Landlord's execution and performance of this Agreement will not violate any laws, ordinances, covenants or the provisions of any mortgage, lease or other agreement binding on Landlord; and (v) if the Property is or becomes encumbered by a deed to secure a debt, mortgage or other security interest, Landlord will provide promptly to Tenant a mutually agreeable subordination, non-disturbance and attornment agreement executed by Landlord and the holder of such security interest.

11. ENVIRONMENTAL.

(a) Landlord represents and warrants that, except as may be identified in Exhibit 11 attached to this Agreement, (i) the Property, as of the date of this Agreement, is free of hazardous substances, including asbestos-containing materials and lead paint, and (ii) the Property has never been subject to any contamination or hazardous conditions resulting in any environmental investigation, inquiry or remediation. Landlord and Tenant agree that each will be responsible for compliance with any and all applicable governmental laws, rules, statutes, regulations, codes, ordinances, or principles of common law regulating or imposing standards of liability or standards of conduct with regard to protection of the environment or worker health and safety, as may now or at any time hereafter be in effect, to the extent such apply to that party's activity conducted in or on the Property.

(b) Landlord and Tenant agree to hold harmless and indemnify the other from, and to assume all duties, responsibilities and liabilities at the sole cost and expense of the indemnifying party for, payment of penalties, sanctions, forfeitures, losses, costs or damages, and for responding to any action, notice, claim, order. summons, citation, directive, litigation, investigation or proceeding ("Claims"). to the extent arising from that party's breach of its obligations or representations under Section 11(a). Landlord agrees to hold harmless and indemnify Tenant from, and to assume all duties, responsibilities and liabilities at the sole cost and expense of Landlord for, payment of penalties, sanctions, forfeitures, losses, costs or damages, costs or damages, and for responding to any Claims, to the extent arising from subsurface or other contamination of the Property with hazardous substances prior to the effective date of this Agreement or from such contamination caused by the acts or omissions of Landlord during the Term. Tenant agrees to hold harmless and indemnify Landlord from, and to assume all duties, responsibilities and indemnify Landlord from, and to assume all duties, responsibilities and liabilities at the sole cost and expense of Landlord during the Term. Tenant agrees to hold harmless and indemnify Landlord from, and to assume all duties, responsibilities and liabilities at the sole cost and expense of Tenant for, payment of penalties, sanctions, forfeitures, losses, costs or damages, and for responding to any Claims, to the extent arising from hazardous substances brought onto the Property by Tenant.

(c) The indemnifications of this Section 11 specifically include reasonable costs, expenses and fees incurred in connection with any investigation of Property conditions or any clean-up, remediation, removal or restoration work required by any governmental authority. The provisions of this Section 11 will survive the expiration or termination of this Agreement.

(d) In the event Tenant becomes aware of any hazardous substances on the Property, or any environmental, health or safety condition or matter relating to the Property, that, in Tenant's sole determination, renders the condition of the Premises or Property unsuitable for Tenant's use, or if Tenant believes that the leasing or continued leasing of the Premises would expose Tenant to undue risks of liability to a government agency or other third party, Tenant will have the right, in addition to any other rights it may have at law or in equity, to terminate this Agreement upon written notice to Landlord.

12. ACCESS. At all times throughout the Term of this Agreement, and at no additional charge to Tenant. Tenant and its employees, agents, and subcontractors, will have twenty-four (24) hour per day, seven (7) day per week pedestrian and vehicular access ("Access") to and over the Property, from an open and improved public road to the Premises. for the installation, maintenance and operation of the Communication Facility and any utilities serving the Premises. As may be described more fully in Exhibit 1. Landlord grants to Tenant an easement for such Access and Landlord agrees to provide to Tenant such codes, keys and other instruments necessary for such Access at no additional cost to Tenant. Upon Tenant's request, Landlord will execute a separate recordable easement evidencing this right. Landlord shall execute a letter granting Tenant Access to the Property substantially in the form attached as Exhibit 12: upon Tenant's request, Landlord shall execute additional letters during the Term. Landlord acknowledges that in the event Tenant cannot obtain Access to the Premises, Tenant shall incur significant damage. If Landlord fails to provide the Access granted by this Section 12, such failure shall be a default under this Agreement. In connection with such default, in addition to any other rights or remedies available to Tenant under this Agreement or at law or equity, Landlord shall pay Tenant, as liquidated damages and not as a penalty, \$500.00 per day in consideration of Tenant's damages until Landlord cures such default. Landlord and Tenant agree that Tenant's damages in the event of a denial of Access are difficult, if not impossible, to ascertain, and the liquidated damages set forth above are a reasonable approximation of such damages.

13. <u>REMOVAL/RESTORATION.</u> All portions of the Communication Facility brought onto the Property by Tenant will be and remain Tenant's personal property and, at Tenant's option, may be removed by Tenant at any time during the Term. Landlord covenants and agrees that no part of the Communication Facility constructed, erected or placed on the Premises by Tenant will become, or be considered as being affixed to or a part of, the Property, it being the specific intention of the Landlord that all improvements of every kind and nature constructed, erected or placed by Tenant on the Premises will be and remain the property of the Tenant and may be removed by Tenant at any time during the Term. Within one hundred twenty (120) days after the termination of this Agreement. Tenant will, to the extent reasonable, restore the Premises to its condition at the commencement of the Agreement, reasonable wear and tear and loss by casualty or other causes beyond Tenant's control excepted. Footings, foundations, and concrete will be removed to a depth of two-foot below grade. Notwithstanding the foregoing, Tenant will not be responsible for the replacement of any trees, shrubs, or other vegetation, nor will Tenant be required to remove from the Premises or the Property any underground utilities.

14. MAINTENANCE/UTILITIES.

(a) Tenant will keep and maintain the Premises in good condition, reasonable wear and tear and damage from the elements excepted. Landlord will maintain and repair the Property and access thereto and all areas of the Premises where Tenant does not have exclusive control, in good and tenantable condition, subject to reasonable wear and tear and damage from the elements. Landlord will be responsible for maintenance of landscaping on the Property, including any landscaping installed by Tenant as a condition of this Agreement or any required permit. Not withstanding the foregoing, Tenant shall be responsible for the construction, maintenance, and upkeep of any Tenant constructed access road installed on the Property to the Communication Facility.

(b) Tenant will be responsible for paying on a monthly or quarterly basis all utilities charges for electricity, telephone service or any other utility used or consumed by Tenant on the Premises. In the event Tenant cannot secure its own metered electrical supply, Tenant will have the right, at its own cost and expense, to submeter from Landlord. When submetering is required under this Agreement, Landlord will read the meter and provide Tenant with an invoice and usage data on a monthly basis. Landlord agrees that it will not include a markup on the utility charges. Landlord further agrees to provide the usage data and invoice on forms provided by Tenant and to send such forms to such address and/or agent designated by Tenant. Tenant will remit payment within forty-five (45) days of receipt of the usage data and required forms. As noted in Section 4(c) above, any utility fee recovery by Landlord is limited to a twelve (12) month period. If Tenant submeters electricity from Landlord, Landlord agrees to give Tenant at least twenty-four (24) hours advance notice of any planned interruptions of said electricity. Landlord acknowledges that Tenant provides a communication service which requires electrical power to operate and must operate twenty-four (24) hours per day, seven (7) days per week. If the interruption is for an extended period of time, in Tenant's reasonable determination, Landlord agrees to allow Tenant the right to bring in a temporary source of power for the duration of the interruption. Landlord will not be responsible for interference with, interruption of or failure, beyond the reasonable control of Landlord, of such services to be furnished or supplied by Landlord.

(c) Landlord hereby grants to any company providing utility or similar services, including electric power and telecommunications. to Tenant an easement over the Property, from an open and improved public road to the Premises, and upon the Premises, for the purpose of constructing, operating and maintaining such lines, wires, circuits, and conduits, associated equipment cabinets and such appurtenances thereto, as such

companies may from time to time require in order to provide such services to the Premises. Upon Tenant's or the service company's request, Landlord will execute a separate recordable easement evidencing this grant, at no cost to Tenant or the service company.

15. DEFAULT AND RIGHT TO CURE.

(a) The following will be deemed a default by Tenant and a breach of this Agreement: (i) nonpayment of Rent if such Rent remains unpaid for more than thirty (30) days after written notice from Landlord of such failure to pay; or (ii) Tenant's failure to perform any other term or condition under this Agreement within forty-five (45) days after written notice from Landlord specifying the failure. No such failure, however, will be deemed to exist if Tenant has commenced to cure such default within such period and provided that such efforts are prosecuted to completion with reasonable diligence. Delay in curing a default will be excused if due to causes beyond the reasonable control of Tenant. If Tenant remains in default beyond any applicable cure period, Landlord will have the right to exercise any and all rights and remedies available to it under law and equity.

(b) The following will be deemed a default by Landlord and a breach of this Agreement: (i) Landlord's failure to provide Access to the Premises as required by Section 12 of this Agreement within twenty-four (24) hours after written notice of such failure; (ii) Landlord's failure to cure an interference problem as required by Section 8 of this Agreement within twenty-four (24) hours after written notice of such failure; or (iii) Landlord's failure to perform any term, condition or breach of any warranty or covenant under this Agreement within forty-five (45) days after written notice from Tenant specifying the failure. No such failure, however, will be deemed to exist if Landlord has commenced to cure the default within such period and provided such efforts are prosecuted to completion with reasonable diligence. Delay in curing a default will be excused if due to causes beyond the reasonable control of Landlord's default and to deduct the costs of such cure from any monies due to Landlord from Tenant, and (ii) any and all other rights available to it under law and equity.

16. ASSIGNMENT/SUBLEASE. Tenant will have the right to assign, sell or transfer its interest under this Agreement, in whole or part, without Landlord's consent, to: (a) Tenant's Alfiliate, (b) to any entity with a net worth of at least Twenty Million Dollars (\$20,000,000) or (c) any entity that acquires all or substantially all of the Tenant's assets in the market as defined by the Federal Communications Commission in which the Property is located. Upon notification to Landlord of such assignment, transfer or sale, Tenant will be relieved of all future performance, liabilities and obligations under this Agreement. Tenant shall have the right to sublease the Premises, in whole or in part, without Landlord's consent. Tenant may not otherwise assign this Agreement without Landlord's consent, Landlord's consent not to be unreasonably withheld. conditioned or delayed.

17. NOTICES. All notices, requests and demands hereunder will be given by first class certified or registered mail, return receipt requested, or by a nationally recognized overnight courier, postage prepaid, to be effective when properly sent and received, refused or returned undelivered. Notices will be addressed to the parties as follows:

If to Tenant: New Cingular Wireless PCS, LLC Attn: Network Real Estate Administration Re: Cell Site #KYL01212; Cell Site Name: Wright's Ridge (KY) Fixed Asset No.: 13800813 575 Morosgo Drive NE Atlanta, GA 30324 With a copy to:

New Cingular Wireless PCS, LLC Attn: Legal Department Re: Cell Site #KYL01212; Cell Site Name: <u>Wright's Ridge (KY)</u> Fixed Asset No.: 13800813 208 S. Akard Street Dallas. TX 75202-4206

The copy sent to the Legal Department is an administrative step which alone does not constitute legal notice.

If to Landlord:	Foster Helm
	2126 Wrights Ridge Road
	Milton, KY 40045

Either party hereto may change the place for the giving of notice to it by thirty (30) days' prior written notice to the other as provided herein.

18. CONDEMNATION. In the event Landlord receives notification of any condemnation proceedings affecting the Property, Landlord will provide notice of the proceeding to Tenant within forty-eight (48) hours. If a condemning authority takes all of the Property, or a portion sufficient, in Tenant's sole determination, to render the Premises unsuitable for Tenant, this Agreement will terminate as of the date the title vests in the condemning authority. The parties will each be entitled to pursue their own separate awards in the condemnation proceeds, which for Tenant will include, where applicable, the value of its Communication Facility, moving expenses, prepaid Rent, and business dislocation expenses. Tenant will be entitled to reimbursement for any prepaid Rent on a prorate basis.

19. CASUALTY. Landlord will provide notice to Tenant of any casualty or other harm affecting the Property within forty-eight (48) hours of the casualty or other harm. If any part of the Communication Facility or Property is damaged by casualty or other harm as to render the Premises unsuitable. in Tenant's sole determination, then Tenant may terminate this Agreement by providing written notice to Landlord, which termination will be effective as of the date of such casualty or other harm. Upon such termination. Tenant will be entitled to collect all insurance proceeds payable to Tenant on account thereof and to be reimbursed for any prepaid Rent on a prorata basis. Landlord agrees to permit Tenant to place temporary transmission and reception facilities on the Property, but only until such time as Tenant is able to activate a replacement transmission facility at another location; notwithstanding the termination of the Agreement, such temporary facilities will be governed by all of the terms and conditions of this Agreement, including Rent. If Landlord or Tenant undertakes to rebuild or restore the Premises and/or the Communication Facility, as applicable, Landlord agrees to permit Tenant to place temporary transmission and reception facilities on the Property at no additional Rent until the reconstruction of the Premises and/or the Communication Facility is completed. If Landlord determines not to rebuild or restore the Property, Landlord will notify Tenant of such determination within thirty (30) days after the casualty or other harm. If Landlord does not so notify Tenant, and Tenant decides not to terminate under this Section, then Landlord will promptly rebuild or restore any portion of the Property interfering with or required for Tenant's Permitted Use of the Premises to substantially the same condition as existed before the casualty or other harm. Landlord agrees that the Rent shall be abated until the Property and/or the Premises are rebuilt or restored, unless Tenant places temporary transmission and reception facilities on the Property.

20. WAIVER OF LANDLORD'S LIENS. Landlord waives any and all lien rights it may have, statutory or otherwise, concerning the Communication Facility or any portion thereof. The Communication Facility shall be deemed personal property for purposes of this Agreement, regardless of whether any portion is deemed real or

personal property under applicable law; Landlord consents to Tenant's right to remove all or any portion of the Communication Facility from time to time in Tenant's sole discretion and without Landlord's consent.

21. <u>TAXES</u>.

(a) Landlord shall be responsible for timely payment of all taxes and assessments levied upon the lands, improvements and other property of Landlord, including any such taxes that may be calculated by the taxing authority using any method, including the income method. Tenant shall be responsible for any taxes and assessments attributable to and levied upon Tenant's leasehold improvements on the Premises if and as set forth in this Section 21. Nothing herein shall require Tenant to pay any inheritance, franchise, income, payroll, excise, privilege, rent, capital stock, stamp, documentary, estate or profit tax, or any tax of similar nature, that is or may be imposed upon Landlord.

(b) In the event Landlord receives a notice of assessment with respect to which taxes or assessments are imposed on Tenant's leasehold improvements on the Premises, Landlord shall provide Tenant with copies of each such notice immediately upon receipt, but in no event later than thirty (30) days after the date of such notice of assessment. If Landlord does not provide such notice or notices to Tenant within such time period, Landlord shall be responsible for payment of the tax or assessment set forth in the notice, and Landlord shall not have the right to reimbursement of such amount from Tenant. If Landlord provides a notice of assessment to Tenant within such time period and requests reimbursement from Tenant as set forth below, then Tenant shall reimburse Landlord for the tax or assessments identified on the notice of assessment from Tenant's leasehold improvements, which has been paid by Landlord. If Landlord seeks reimbursement from Tenant, Landlord shall, no later than thirty (30) days after Landlord's payment of the taxes or assessments for the assessed tax year, provide Tenant with written notice including evidence that Landlord has timely paid same, and Landlord shall provide to Tenant any other documentation reasonably requested by Tenant to allow Tenant to evaluate the payment and to reimburse Landlord.

(c) For any tax amount for which Tenant is responsible under this Agreement. Tenant shall have the right to contest, in good faith, the validity or the amount thereof using such administrative, appellate or other proceedings as may be appropriate in the jurisdiction, and may defer payment of such obligations, pay same under protest, or take such other steps as Tenant may deem appropriate. This right shall include the ability to institute any legal, regulatory or informal action in the name of Landlord, Tenant, or both, with respect to the valuation of the Premises. Landlord shall cooperate with respect to the commencement and prosecution of any such proceedings and will execute any documents required therefor. The expense of any such proceedings shall be borne by Tenant and any refunds or rebates secured as a result of Tenant's action shall belong to Tenant, to the extent the amounts were originally paid by Tenant. In the event Tenant notifies Landlord by the due date for assessment of Tenant's intent to contest the assessment, Landlord shall not pay the assessment pending conclusion of the contest, unless required by applicable law.

(d) Landlord shall not split or cause the tax parcel on which the Premises are located to be split, bifurcated, separated or divided without the prior written consent of Tenant.

(e) Tenant shall have the right but not the obligation to pay any taxes due by Landlord hereunder if Landlord fails to timely do so, in addition to any other rights or remedies of Tenant. In the event that Tenant exercises its rights under this Section 21(e) due to such Landlord default, Tenant shall have the right to deduct such tax amounts paid from any monies due to Landlord from Tenant as provided in Section 15(b), provided that Tenant may exercise such right without having provided to Landlord notice and the opportunity to cure per Section 15(b).

(f) Any tax-related notices shall be sent to Tenant in the manner set forth in Section 17 and, in addition, of a copy of any such notices shall be sent to the following address. Promptly after the Effective Date of this Agreement, Landlord shall provide the following address to the taxing authority for the authority's use in the event the authority needs to communicate with Tenant. In the event that Tenant's tax addresses changes by

notice to Landlord, Landlord shall be required to provide Tenant's new tax address to the taxing authority or authorities.

New Cingular Wireless PCS, LLC Attn: Network Real Estate Administration -- Taxes Re: Cell Site #KYL01212; Cell Site Name: <u>Wr</u>ight's Ridge (**KY**) Fixed Asset No: 13800813 575 Morosgo Drive NE Atlanta, GA 30324

(g) Notwithstanding anything to the contrary contained in this Section 21. Tenant shall have no obligation to reimburse any tax or assessment for which the Landlord is reimbursed or rebated by a third party.

22. SALE OF PROPERTY

(a) Landlord shall not be prohibited from the selling, leasing or use of any of the Property or the Surrounding Property except as provided below.

(b) If Landlord, at any time during the Term of this Agreement, decides to rezone or sell, subdivide or otherwise transfer all or any part of the Premises, or all or any part of the Property or Surrounding Property. to a purchaser other than Tenant. Landlord shall promptly notify Tenant in writing, and such rezoning, sale, subdivision or transfer shall be subject to this Agreement and Tenant's rights hereunder. In the event of a change in ownership, transfer or sale of the Property, within ten (10) days of such transfer, Landlord or its successor shall send the documents listed below in this subsection (b) to Tenant. Until Tenant receives all such documents, Tenant shall not be responsible for any failure to make payments under this Agreement and reserves the right to hold payments due under this Agreement.

- i. Old deed to Property
- ii. New deed to Property
- iii. Bill of Sale or Transfer
- iv. Copy of current Tax Bill
- v. New IRS Form W-9
- vi. Completed and Signed AT&T Payment Direction Form
- vii. Full contact information for new Landlord including phone number(s)

(c) Landlord agrees not to sell, lease or use any areas of the Property or Surrounding Property for the installation, operation or maintenance of other wireless communications facilities if such installation, operation or maintenance would interfere with Tenant's Permitted Use or communications equipment as determined by radio propagation tests performed by Tenant in its sole discretion. Landlord or Landlord's prospective purchaser shall reimburse Tenant for any costs and expenses of such testing. If the radio frequency propagation tests demonstrate levels of interference unacceptable to Tenant, Landlord shall be prohibited from selling, leasing or using any areas of the Property or the Surrounding Property for purposes of any installation, operation or maintenance of any other wireless communications facility or equipment.

(d) The provisions of this Section shall in no way limit or impair the obligations of Landlord under this Agreement, including interference and access obligations.

23. **RENTAL STREAM OFFER.** If at any time after the date of this Agreement, Landlord receives a bona fide written offer from a third party seeking an assignment or transfer of Rent payments associated with this Agreement ("**Rental Stream Offer**"), Landlord shall immediately furnish Tenant with a copy of the Rental Stream Offer. Tenant shall have the right within twenty (20) days after it receives such copy to match the Rental Stream Offer and agree in writing to match the terms of the Rental Stream Offer. Such writing shall be in the form of a contract substantially similar to the Rental Stream Offer. If Tenant chooses not to exercise this right or fails to provide written notice to Landlord within the twenty (20) day period. Landlord may assign the right to receive Rent payments pursuant to the Rental Stream Offer, subject to the terms of this Agreement. If

Landlord attempts to assign or transfer Rent payments without complying with this Section, the assignment or transfer shall be void. Tenant shall not be responsible for any failure to make payments under this Agreement and reserves the right to hold payments due under this Agreement until Landlord complies with this Section.

24. MISCELLANEOUS.

(a) **Amendment/Waiver.** This Agreement cannot be amended, modified or revised unless done in writing and signed by Landlord and Tenant. No provision may be waived except in a writing signed by both parties. The failure by a party to enforce any provision of this Agreement or to require performance by the other party will not be construed to be a waiver, or in any way affect the right of either party to enforce such provision thereafter.

(b) Memorandum/Short Form Lease. Contemporaneously with the execution of this Agreement, the parties will execute a recordable Memorandum or Short Form of Lease substantially in the form attached as **Exhibit 24b**. Either party may record this Memorandum or Short Form of Lease at any time during the Term, in its absolute discretion. Thereafter during the Term of this Agreement, either party will, at any time upon fifteen (15) business days' prior written notice from the other, execute, acknowledge and deliver to the other a recordable Memorandum or Short Form of Lease.

(c) Limitation of Liability. Except for the indemnity obligations set forth in this Agreement, and otherwise notwithstanding anything to the contrary in this Agreement, Tenant and Landlord each waives any claims that each may have against the other with respect to consequential, incidental or special damages, however caused, based on any theory of liability.

(d) **Compliance with Law.** Tenant agrees to comply with all federal, state and local laws, orders, rules and regulations ("Laws") applicable to Tenant's use of the Communication Facility on the Property. Landlord agrees to comply with all Laws relating to Landlord's ownership and use of the Property and any improvements on the Property.

(e) Bind and Benefit. The terms and conditions contained in this Agreement will run with the Property and bind and inure to the benefit of the parties, their respective heirs. executors, administrators, successors and assigns.

(f) Entire Agreement. This Agreement and the exhibits attached hereto, all being a part hereof, constitute the entire agreement of the parties hereto and will supersede all prior offers, negotiations and agreements with respect to the subject matter of this Agreement. Exhibits are numbered to correspond to the Section wherein they are first referenced. Except as otherwise stated in this Agreement, each party shall bear its own fees and expenses (including the fees and expenses of its agents, brokers, representatives, attorneys, and accountants) incurred in connection with the negotiation, drafting, execution and performance of this Agreement and the transactions it contemplates.

(g) Governing Law. This Agreement will be governed by the laws of the state in which the Premises are located, without regard to conflicts of law.

(h) Interpretation. Unless otherwise specified, the following rules of construction and interpretation apply: (i) captions are for convenience and reference only and in no way define or limit the construction of the terms and conditions hereof; (ii) use of the term "including" will be interpreted to mean "including but not limited to"; (iii) whenever a party's consent is required under this Agreement, except as otherwise stated in this Agreement or as same may be duplicative, such consent will not be unreasonably withheld, conditioned or delayed; (iv) exhibits are an integral part of this Agreement and are incorporated by reference into this Agreement; (v) use of the terms "termination" or "expiration" are interchangeable; (vi) reference to a default will take into consideration any applicable notice, grace and cure periods (vii) to the extent there is any issue with respect to any alleged, perceived or actual ambiguity in this Agreement, the ambiguity shall not be resolved on the basis of who drafted the Agreement; (viii) the singular use of words includes the plural where appropriate and (ix) if any provision of this Agreement is held invalid, illegal or unenforceable, the remaining provisions of this Agreement shall remain in full force if the overall purpose of the Agreement is not rendered impossible and the original purpose, intent or consideration is not materially impaired.

(i) Affiliates. All references to "Tenant" shall be deemed to include any Affiliate of New Cingular Wireless PCS, LLC using the Premises for any Permitted Use or otherwise exercising the rights of Tenant

pursuant to this Agreement. "Affiliate" means with respect to a party to this Agreement, any person or entity that (directly or indirectly) controls, is controlled by, or under common control with, that party. "Control" of a person or entity means the power (directly or indirectly) to direct the management or policies of that person or entity, whether through the ownership of voting securities, by contract, by agency or otherwise.

(j) **Survival.** Any provisions of this Agreement relating to indemnification shall survive the termination or expiration hereof. In addition, any terms and conditions contained in this Agreement that by their sense and context are intended to survive the termination or expiration of this Agreement shall so survive.

(k) W-9. As a condition precedent to payment, Landlord agrees to provide Tenant with a completed IRS Form W-9, or its equivalent, upon execution of this Agreement and at such other times as may be reasonably requested by Tenant, including, any change in Landlord's name or address.

(1) **Execution/No Option.** The submission of this Agreement to any party for examination or consideration does not constitute an offer, reservation of or option for the Premises based on the terms set forth herein. This Agreement will become effective as a binding Agreement only upon the handwritten legal execution, acknowledgment and delivery hereof by Landlord and Tenant. This Agreement may be executed in two (2) or more counterparts, all of which shall be considered one and the same agreement and shall become effective when one or more counterparts have been signed by each of the parties. All parties need not sign the same counterpart.

(m) Attorneys' Fees. In the event that any dispute between the parties related to this Agreement should result in litigation, the prevailing party in such litigation shall be entitled to recover from the other party all reasonable fees and expenses of enforcing any right of the prevailing party. including without limitation, reasonable attorneys' fees and expenses. Prevailing party means the party determined by the court to have most nearly prevailed even if such party did not prevail in all matters. This provision will not be construed to entitle any party other than Landlord, Tenant and their respective Affiliates to recover their fees and expenses.

(n) **WAIVER OF JURY TRIAL.** EACH PARTY, TO THE EXTENT PERMITTED BY LAW, KNOWINGLY, VOLUNTARILY AND INTENTIONALLY WAIVES ITS RIGHT TO A TRIAL BY JURY IN ANY ACTION OR PROCEEDING UNDER ANY THEORY OF LIABILITY ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS AGREEMENT OR THE TRANSACTIONS IT CONTEMPLATES.

[SIGNATURES AND ACKNOWLEDGMENTS APPEAR ON NEXT PAGES]

IN WITNESS WHEREOF, the parties have caused this Agreement to be effective as of the last date written below.

"LANDLORD"

Foster B. Helm

By: <u>Hole Allelin</u> Print Name: <u>Foster B. Helm</u> Its: <u>Owner</u> Date: <u>3 - 8 - 17</u>

LANDLORD ACKNOWLEDGMENT

) ss:

STATE OF <u>KENTUCKY</u>)

COUNTY OF CARROLL ____)

On the S day of hulphilded, 2017 before me, personally appeared Foster B. Helm, who acknowledged under oath, that he/she/they is/are the person/officer named in the within instrument, and that he/she/they executed the same in his/her/their stated capacity as the voluntary act and deed of the Landlord for the purposes therein contained.

Notary Public: <u>1210412619</u> <u>164</u> STATE My Commission Expires: <u>12464</u>[2619] AT L.H.

"TENANT" New Cingular Wireless PCS, LLC. a Delaware limited liability company By: AT&T Mobility Corporation Its: Manager

By: Į Print Name: Russell Barakat Its: Area Manager - TN/KY Date: 17

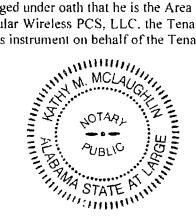
TENANT ACKNOWLEDGMENT

)

STATE OF ALABAMA)

COUNTY OF JEFFERSON

On the $\frac{1}{1}$ day of $\frac{1}{1}$, $\frac{1}{2}$, $\frac{1}{2}$, 2017, before me personally appeared Russell Barakat and acknowledged under oath that he is the Area Manager – TN/KY of AT&T Mobility Corporation, the Manager of New Cingular Wireless PCS, LLC, the Tenant named in the attached instrument, and as such was authorized to execute this instrument on behalf of the Tenant.



i istate .	4 C. 2	•- **	
Notary Public:	i pri la	A. A.L.	1.1.6
My Commissio	n Expires:	10.74 -	シーラレ

EXHIBIT 1

DESCRIPTION OF PREMISES

Page 1 of 2

to the Option and Lease Agreement dated high gamma has had between Foster B. Helm, an individual, as Landlord, and New Cingular Wireless PCS, LLC, a Delaware limited liability company, as Tenant.

The Property is legally described as follows:

DB 170, Pg. 435

Beginning at a stone at the end of a stone fence corner to R. B. Taylor; thence N 8½ E. 18 poles to an Ash; thence N 87 3/4 E. 16.5 poles to a point in the center of Wrights road; thence following the center of the road N. 6½ W. 12 poles N. 35 3/4 E. 20 poles N. 28 E. 9 poles N. 4½ W. 15. 6 poles to a point in the center of the road to Gobel Simmonds and Clarence Hudson; thence leaving the road N. 85 W. 13.8 poles to a Locust Stump; thence N. 2½ E. 48 poles to a stone corner to Jas. Eggerton and John Thompson farm; and Mose Jenkins, thence S. 2 E. 22.5 poles S. 8½ W. 25.5 poles to a double Walnut on south side of branch; thence S. 70 W. 29 poles, S. 64½ W. 15 poles, S. 38 W. 9 poles, S 18½ W. 29 poles, S. 6½ W. 30 poles to an Ash corner to Jenkins and R. B. Taylor; thence S. 86½ E. 109.5 poles to the beginning containing 94.4 acres.

Being the same property conveyed to J. T. Helm by Deed dated May 1936, of record in Deed Book 42, Page 6. J. T. Helm died intestate on January 17, 1968, conveying interests to heirs as set forth in the Affidavit of Descent of record in Deed Book 68, Page 148. The parties inherited the interests of Cora Katherine Ward upon her death on May 1, 1976, in accordance with her Affidavit of Descent of record in Deed Book 88, Page 51. Foster S. Helm, Bennie Helm and James S. Helm purchased the remaining interests of the Cora Katherine Ward heirs by Deed dated August 12, 1978, of record in Deed Book 88, Page 52. Bennie Helm and Foster B. Helm purchased the interest of James S. Helm and Patsy Ruth Helm, husband and wife, by Deed dated September 13, 1988, of record in Deed Book 105, Page 522. All documents are recorded in the Carroll County Court Clerk's Office.

File Evering Lela

المعصوفة فعجو بمنج للتربي العام المالية المراقب والمراجي والم

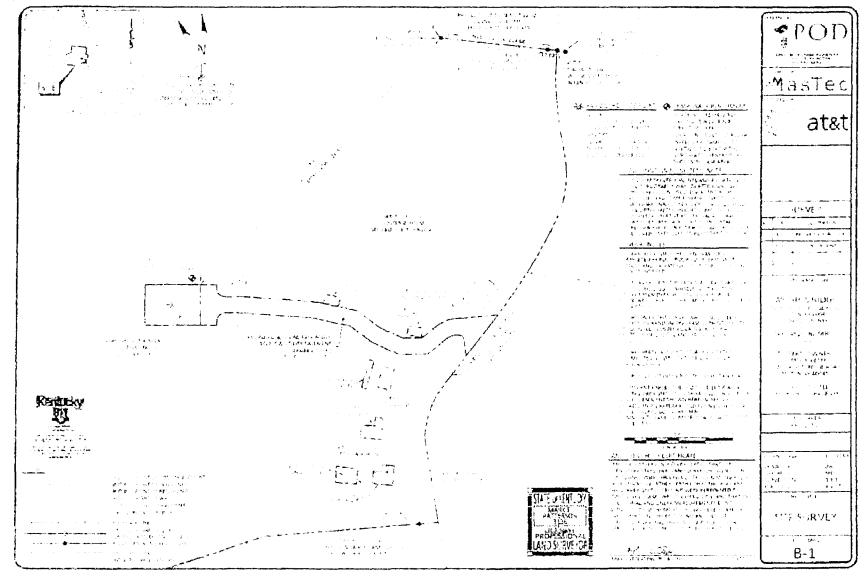


EXHIBIT 11

ENVIRONMENTAL DISCLOSURE

Landlord represents and warrants that the Property, as of the date of this Agreement. is free of hazardous substances except as follows:

1. NONE.

EXHIBIT 12

STANDARD ACCESS LETTER

[FOLLOWS ON NEXT PAGE]

DATE Miller Y, 21,9

Building Staff / Security Staff Landlord, Lessee, Licensee Street Address City, State, Zip

Re: Authorized Access granted to AT&T

Dear Building and Security Staff,

Please be advised that we have signed a lease with AT&T permitting AT&T to install, operate and maintain telecommunications equipment at the property. The terms of the lease grant AT&T and its representatives, employees, agents and subcontractors ("representatives") 24 hour per day, 7 day per week access to the leased area.

To avoid impact on telephone service during the day, AT&T representatives may be seeking access to the property outside of normal business hours. AT&T representatives have been instructed to keep noise levels at a minimum during their visit.

Please grant the bearer of a copy of this letter access to the property and to leased area. Thank you for your assistance.

Destrict Signature

EXHIBIT J NOTIFICATION LISTING

NOTIFICATION LISTING SITE NAME: WRIGHTS RIDGE

HELM FOSTER B 2126 WRIGHTS RIDGE RD MILTON, KY 40045

LAYTON HUBERT E & SANDRA ANN 2324 WRIGHTS RIDGE MILTON, KY 40045

THOMPSON ANITA & ANDREA LAUREN 1241 BELMAR DR LOUISVILLE, KY 40213

KEITH CYNTHIA L 1050 PAINTER RD MILTON, KY 40045

CUNDIFF MICHAEL Y JR 1903 MCCORD LN MILTON, KY 40045

WILLIAMS DANNY J 1911 WRIGHTS RIDGE RD MILTON, KY 40045

HARSIN COREY & TARA 2001 WRIGHTS RIDGE RD MILTON, KY 40045

HARSIN DENNIS & DEBRA 1214 WRIGHTS RIDGE MILTON, KY 40045 EXHIBIT K COPY OF PROPERTY OWNER NOTIFICATION

.



1578 Highway 44 East, Suite 6 P.O. Box 369 Shepherdsville, KY 40165-0369 Phone (502) 955-4400 or (800) 516-4293 Fax (502) 543-4410 or (800) 541-4410

Notice of Proposed Construction of Wireless Communications Facility Site Name: Wrights Ridge

Dear Landowner:

New Cingular Wireless PCS, LLC, a Delaware Limited Liability Company, d/b/a AT&T Mobility has filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at 2126 Wrights Ridge Road, Milton Kentucky (38°40'25.13" North latitude, 85°15'33.67" West longitude). The proposed facility will include a 255-foot tall antenna tower, plus a 15-foot lightning arrestor and related ground facilities. This facility is needed to provide improved coverage for wireless communications in the area.

This notice is being sent to you because the County Property Valuation Administrator's records indicate that you may own property that is within a 500' radius of the proposed tower site <u>or</u> contiguous to the property on which the tower is to be constructed. You have a right to submit testimony to the Kentucky Public Service Commission ("PSC"), either in writing or to request intervention in the PSC's proceedings on the application. 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 2018-00121 in any correspondence sent in connection with this matter.

In addition to expanding and improving voice and data service for AT&T mobile customers, this site will also provide wireless local loop ("WLL") broadband internet service to homes and businesses in the area. WLL will support internet access at the high speeds required to use and enjoy the most current business, education and entertainment technologies.

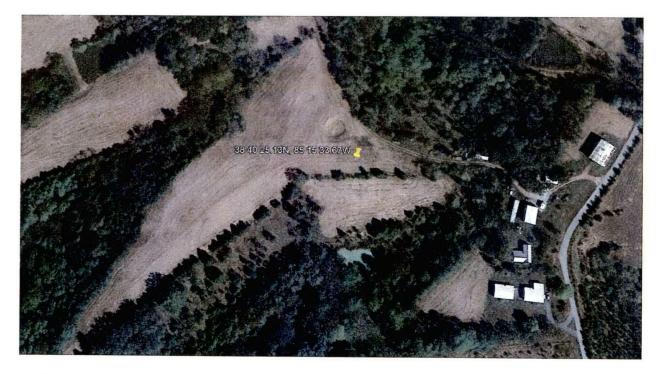
We have attached a map showing the site location for the proposed tower. Applicant's radio frequency engineers assisted in selecting the proposed site for the facility, and they have determined it is the proper location and elevation needed to provide quality service to wireless customers in the area. Please feel free to contact us toll free at (800) 516-4293 if you have any comments or questions about this proposal.

Sincerely, David A. Pike Attorney for Applicant

enclosure

Site Name: Wrights Ridge Driving Directions to Proposed Tower Site

- 1. Beginning at the offices of the County Judge/Executive located at 440 Main Street, Carrollton, Kentucky.
- 2. Start out going west on Main St toward Court Street.
- 3. Take the 1st left onto Court Street.
- 4. Turn right onto Highland Ave/US-42 W/KY-36. Continue to follow KY-36.
- 5. Turn left onto Notchlick Road.
- 6. Take the 1st right onto Wrights Ridge Road.
- 7. Arrive at 2126 Wrights Ridge Rd, Milton, Kentucky.
- 8. The site coordinates are 38°40'25.13" North latitude, 85°15'33.67" West longitude.



Prepared by: Robert W. Grant Pike Legal Group PLLC 1578 Highway 44 East, Suite 6 P.O. Box 369 Shepherdsville, KY 40165-3069 Telephone: 502-955-4400 or 800-516-4293

DocuSign Envelope ID: 72FDF78A-FAD9-45E2-804A-17292CD96F34

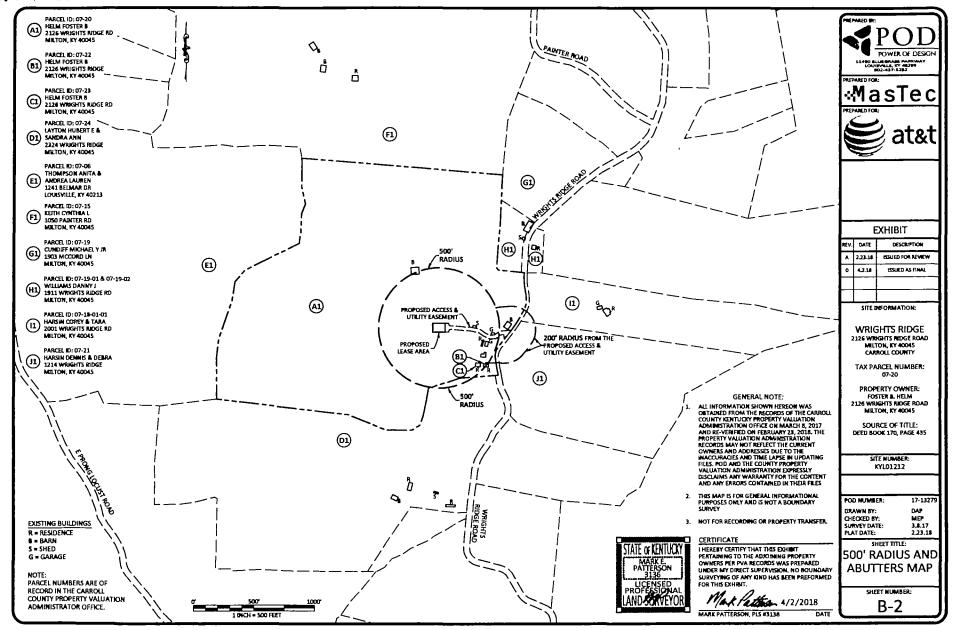


EXHIBIT L COPY OF COUNTY JUDGE/EXECUTIVE NOTICE



1578 Highway 44 East, Suite 6 P.O. Box 369 Shepherdsville, KY 40165-0369 Phone (502) 955-4400 or (800) 516-4293 Fax (502) 543-4410 or (800) 541-4410

VIA CERTIFIED MAIL

Hon. Bobby Lee Westrick County Judge Executive 440 Main Street Carrollton, KY 41008

RE: Notice of Proposal to Construct Wireless Communications Facility Kentucky Public Service Commission Docket No. 2018-00121 Site Name: Wrights Ridge

Dear Judge/Executive:

New Cingular Wireless PCS, LLC, a Delaware Limited Liability Company, d/b/a AT&T Mobility has filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at 2126 Wrights Ridge Road, Milton Kentucky (38°40'25.13" North latitude, 85°15'33.67" West longitude). The proposed facility will include a 255-foot tall antenna tower, plus a 15-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 2018-00121 in any correspondence sent in connection with this matter.

In addition to expanding and improving voice and data service for AT&T mobile customers, this site will also provide wireless local loop ("WLL") broadband internet service to homes and businesses in the area. WLL will support internet access at the high speeds required to use and enjoy the most current business, education and entertainment technologies.

We have attached a map showing the site location for the proposed tower. Applicant's 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, David A. Pike Attorney for Applicant

enclosures

Site Name: Wrights Ridge Driving Directions to Proposed Tower Site

- 1. Beginning at the offices of the County Judge/Executive located at 440 Main Street, Carrollton, Kentucky.
- 2. Start out going west on Main St toward Court Street.
- 3. Take the 1st left onto Court Street.
- 4. Turn right onto Highland Ave/US-42 W/KY-36. Continue to follow KY-36.
- 5. Turn left onto Notchlick Road.
- 6. Take the 1st right onto Wrights Ridge Road.
- 7. Arrive at 2126 Wrights Ridge Rd, Milton, Kentucky.
- 8. The site coordinates are 38°40'25.13" North latitude, 85°15'33.67" West longitude.



Prepared by: Robert W. Grant Pike Legal Group PLLC 1578 Highway 44 East, Suite 6 P.O. Box 369 Shepherdsville, KY 40165-3069 Telephone: 502-955-4400 or 800-516-4293

DocuSign Envelope ID: 72FDF7BA-FAD8-45E2-804A-17292CD96F34

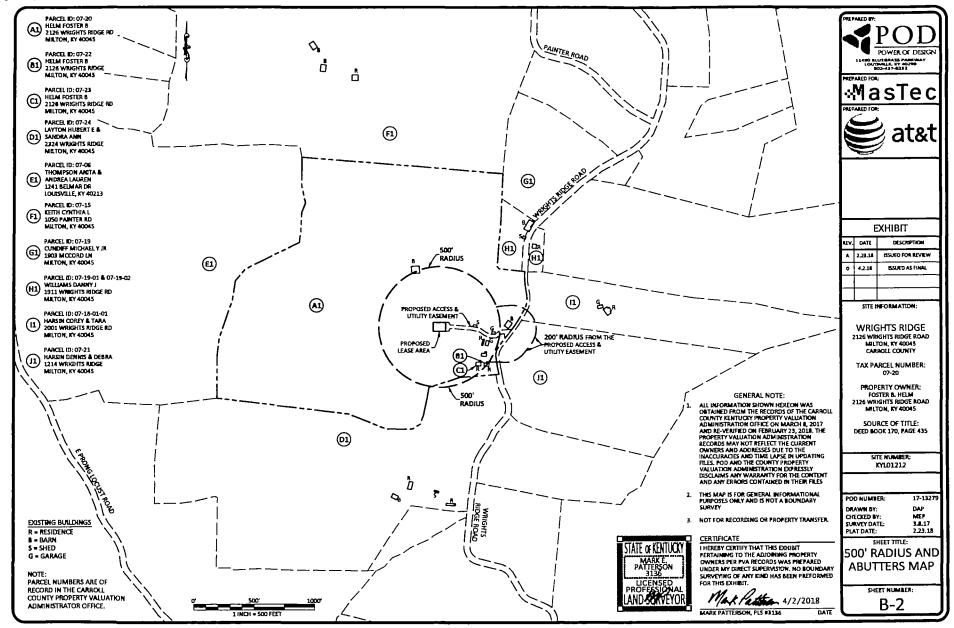


EXHIBIT M COPY OF POSTED NOTICES AND NEWSPAPER NOTICE ADVERTISEMENT

.

SITE NAME: WRIGHT'S RIDGE 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.

New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility proposes to construct a telecommunications **tower** on this site. If you have questions, please contact Pike Legal Group, PLLC, P.O. Box 369, Shepherdsville, KY 40165; telephone: (800) 516-4293, or the Executive Director, Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2018-00121 in your correspondence.

New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility proposes to construct a telecommunications **tower** near this site. If you have questions, please contact Pike Legal Group, PLLC, P.O. Box 369, Shepherdsville, KY 40165; telephone: (800) 516-4293, or the Executive Director, Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2018-00121 in your correspondence.



1578 Highway 44 East, Suite 6 P.O. Box 369 Shepherdsville, KY 40165-0369 Phone (502) 955-4400 or (800) 516-4293 Fax (502) 543-4410 or (800) 541-4410

The News Democrat 122 Sixth Street P.O. Box 60 Carrollton, KY 41008

RE: Legal Notice Advertisement Site Name: Wrights Ridge

Please publish the following legal notice advertisement in the next edition of *The News Democrat*:

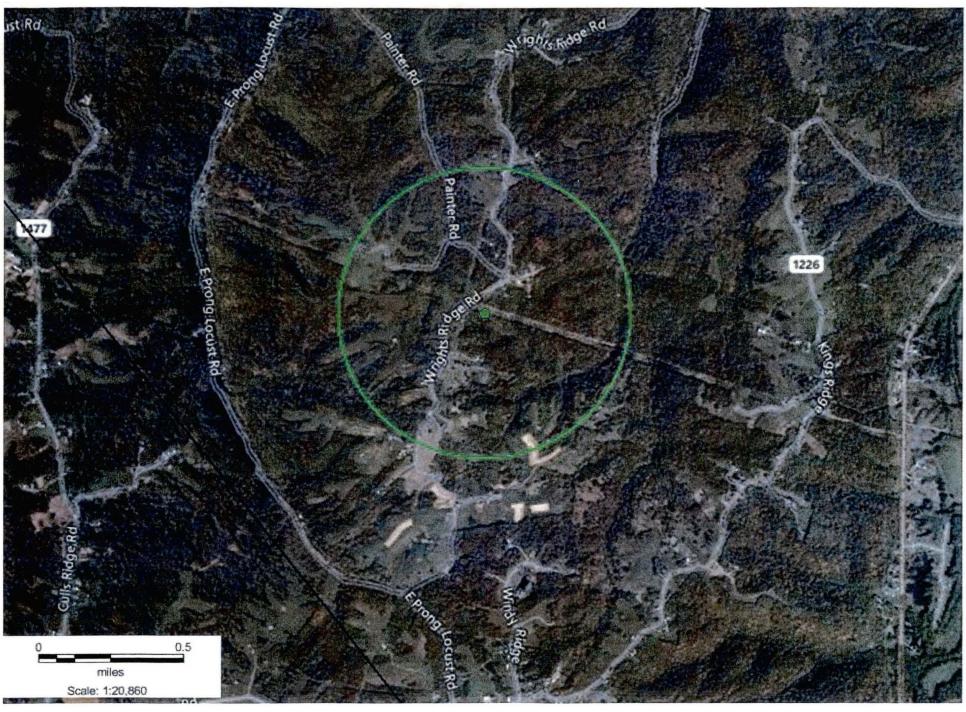
NOTICE

New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility has filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at 2126 Wrights Ridge Road, Milton Kentucky (38°40'25.13" North latitude, 85°15'33.67" West longitude). 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 2018-00121 in any correspondence sent in connection with this matter.

After this advertisement has been published, please forward a tear sheet copy, affidavit of publication, and invoice to Pike Legal Group, PLLC, P. O. Box 369, Shepherdsville, KY 40165. Please call me at (800) 516-4293 if you have any questions. Thank you for your assistance.

Sincerely, Robert W. Grant Pike Legal Group, PLLC EXHIBIT N COPY OF RADIO FREQUENCY DESIGN SEARCH AREA

.



Lat: 38.676272 Lon: -85.254366 Radius: .5 miles Wright's Ridge Search Area