RECEIVED

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

AUG 25 2016

In the Matter of:

PUBLIC SERVICE COMMISSION

THE APPLICATION OF)
PI TOWER DEVELOPMENT, LLC)
AND KENTUCKY RSA NO. 1)
PARTNERSHIP d/b/a VERIZON WIRELESS)
FOR ISSUANCE OF A CERTIFICATE OF PUBLIC) CASE NO.: 2016-00304
CONVENIENCE AND NECESSITY TO CONSTRUCT)
A WIRELESS COMMUNICATIONS FACILITY)
IN THE COMMONWEALTH OF KENTUCKY)
IN THE COUNTY OF MARSHALL)

SITE NAME: KY-GILBERTSVILLE - DAM MARINA

* * * * * * *

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

PI Tower Development LLC, and Kentucky RSA No. 1 Partnership, a Delaware General Partnership, d/b/a Verizon Wireless ("Applicants"), 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 submit 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 Verizon Wireless with wireless communications services.

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

- 1. The complete names and addresses of the Applicants are PI Tower Development, LLC, having an address of 7411 Fullerton Street, Suite 110, Jacksonville, FL 32256 and Kentucky RSA No. 1 Partnership, a Delaware general partnership, d/b/a Verizon Wireless, having an address of 2421 Holloway Road, Louisville, KY 40299.
- 2. Applicants propose construction of an antenna tower for communications services, which is to be located in an area outside the jurisdiction of a planning commission, and Applicants submit 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 issued by the Kentucky Secretary of State for PI Tower Development, LLC and the Certificate of Authorization issued by the Kentucky Secretary of State for Verizon Wireless are attached as part of **Exhibit A**. Both Applicants are in good standing in the state in which they are organized and are authorized to transact business in Kentucky.
- 4. Verizon Wireless operates on frequencies licensed by the Federal Communications Commission ("FCC") pursuant to applicable FCC requirements. A copy of the Verizon Wireless' FCC license to provide wireless services is 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. PI Tower Development, LLC will build, own and manage the tower and tower compound where Verizon Wireless will place its equipment building, antennas, radio electronics equipment and appurtenances.
 - 5. The public convenience and necessity require the construction of the

proposed WCF. The construction of the WCF will bring or improve Verizon Wireless' 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 Verizon Wireless' 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 Verizon Wireless' network design that must be in place to provide adequate coverage to the service area.

6. To address the above-described service needs, Applicants propose to construct a WCF at 364 Sledd Creek Road, Gilbertsville, KY 42044 (36°58'37.27" North latitude, 88°17'10.48" 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 Renia Fehrenbacher pursuant to a Deed recorded at Deed Book 403, Page 127 in the office of the Marshall County Clerk. The proposed WCF will consist of a 188-foot tall tower, with an approximately 3-foot tall lightning arrestor attached at the top, for a total height of 191-feet. The WCF will also include concrete foundations and a shelter or cabinets to accommodate the placement of Verizon Wireless' radio electronics equipment and appurtenant equipment. Verizon Wireless' 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 has also been included as part of **Exhibit B**. As shown on this exhibit, the site has been designed to accommodate the colocation of future antennas.
- 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. Applicants have considered the likely effects of the installation of the proposed WCF on nearby land uses and values and have 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 Verizon Wireless' antennas on an existing structure. When suitable towers or structures exist, Applicants attempt to co-locate on existing structures such as communications towers or other structures capable of supporting Applicants' facilities; however, no other suitable or available co-location site was found to be located in the vicinity of the site. A report detailing Applicant's site selection process for the subject site (including documentation as to why co-location is not possible for this site) is attached as **Exhibit E**.
- 11. A copy of the Determination of No Hazard to Air Navigation issued by the Federal Aviation Administration ("FAA") is attached as **Exhibit F**.

- 12. A copy of the Kentucky Airport Zoning Commission ("KAZC") Approval to construct the tower is attached as **Exhibit G**.
- 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 H**. 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 I**. The name and telephone number of the preparer of **Exhibit I** are included as part of this exhibit.
- 15. Applicants, pursuant to a written agreement, have acquired the right to use the WCF site and associated property rights. A copy of an abbreviated form of the agreement as recorded with the County Clerk is attached as **Exhibit J**.
- 16. Personnel directly responsible for the design and construction of the proposed WCF are well qualified and experienced. The tower and foundation drawings for the proposed tower submitted as part of **Exhibit 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 Robert C. Wood, and the identity and qualifications of each person directly responsible for design and

construction of the proposed tower are contained 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. Applicants have 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 telephone number and 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 K** and **Exhibit L**, respectively.
- 21. Applicants have notified the applicable County Judge/Executive by certified mail, return receipt requested, of the proposed construction. This notice included the PSC docket number under which the application will be processed and informed the County Judge/Executive of his/her right to request intervention. A copy of this notice is attached as **Exhibit M**.

- 22. Notice signs meeting the requirements prescribed by 807 KAR 5:063, Section 1(2) that measure at least 2 feet in height and 4 feet in width and that contain all required language in letters of required height, have been posted, one in a visible location on the proposed site and one on the nearest public road. Such signs shall remain posted for at least two weeks after filing of the Application, and a copy of the posted text is attached as **Exhibit N**. Notice of 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.
- 23. The general area where the proposed facility is to be located is rural with sparse residences.
- 24. The process that was used by Verizon Wireless' 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. Verizon Wireless' 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 Verizon Wireless. 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 O.

- 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. A report prepared by a radio frequency engineer that describes the need for the proposed facility is attached as **Exhibit P**.
- 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) 955-4400 Telefax: (502) 543-4410

Email: dpike@pikelegal.com

WHEREFORE, Applicants 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,

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 Applicants

LIST OF EXHIBITS

A - FCC License Documentation and Corporate Documents

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 - Site Selection Report

F - FAA

G - Kentucky Airport Zoning Commission

H - Geotechnical Report

I - Directions to WCF Site

J - Copy of Real Estate Agreement

K - Notification Listing

L - Copy of Property Owner Notification

M - Copy of County Judge/Executive Notice

N - Copy of Posted Notices

O - Copy of Radio Frequency Design Search Area

P - Radio Frequency Report

EXHIBIT A FCC LICENSE DOCUMENTATION AND CORPORATE DOCUMENTS



COMMONWEALTH OF KENTUCKY ALISON LUNDERGAN GRIMES, SECRETARY OF STATE

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Allson Lundergan Grimes Kentucky Secretary of State Received and Filed: 1/29/2016 11:18 AM Fee Receipt: \$90.00

Business Filings PO Box 718 Frankfort, KY 40602 (502) 564-3490 www.sos.ky.gov	Certificate of Authority (Foreign Business Enti			FBE				
Pursuant to the provisions of KRS 14A a on behalf of the entity named below and	nd KRS 271B, 273, 274,275, 382 and for that purpose, submits the following	386 the undersigned hereb statements;	y applies for authorit	y to transact business in Kentucky				
business t	rust (KRS 388). Imiled liab Inorship (KRS 362).	orporation (KRS 273). [lity company (KRS 275). [ervice corporation (KRS 274). nited liability company (KRS 276).				
. The name of the entity is P1 Towe	r Development LLC at he identical to the name on record with	i the Secretary of State.)						
3. The name of the entity to be used in i	Kentucky is (if applicable):	if "real name" is unavailable	forwar otherwise to	men blank)				
. The state or country under whose law	Delevere							
i. The date of organization is 10/07/2	:015	and the period of duration is	perpetual.					
. The mailing address of the entity's pri		sie are parioe of ecident k	fit test by	ink, the pariod of duration oneidered perpetual.)				
2855 Le Jeune Road, 4th Fl	•	Coral Gables	Florida	33134				
trent Address		City	State	Zip Code				
r. The street address of the entity's registed. 421 West Main Street	stered office in Kentucky is	Frankfort	КY	40601				
treet Address (No P.O. Box Numbers)		City	State	Zip Code				
and the name of the registered agent at t	hal office is Corporation Service	e Company						
. The names and business addresses o			ausčens' prisjess ot č	teueug barneus):				
Yannis Macheras	2855 Le Jeune Road, 4th Floor	Coral Gables	FL	33134				
	Street or P.O. Box	Chy	State	Zip Code				
Kolleen Cobb	2855 Le Jeune Road, 4th Floor		FL	33134				
	Street or P.O. Box 2855 Le Jeune Road, 4th Floor	City Comi Cobles	State FL	Zip Code 33134				
luan (Rusty) Godoy	Street or P.O. Box	COM GADIES	State	Zip Code				
. If a professional service corporation, all the incl one states or territories of the United States or Di	vidual shereholders, not less than one half (42) strict of Columbia to render a professional servi	of the directors, and all of the off	icers other than the secret purposes of the corporatio	tary end treasurar are licensed in one or Cl.				
0. I certify that, as of the date of filing th 1. If a limited partnership, it elects to I	• • •	•	r—	fits formation.				
2. If a limited liability company, check 3. This application will be effective upon the effective date or the delayed effective	box if manager-managed:	and/or time is provided.	_					
I Development Hold	ngs we (member)	en Cobb	(Dela	yed affective date and/or time)				
Igneture of Authorized Representative	<u> </u>	Printed Name & Title		Date				
Corporation Service Comp	any, cons	ent to serve as the register	red agent on behalf o	f the business entity.				
Typo/Print Hame of Registered Agent		eb Reeves	•	·				
Le on Mever	A	ssistant Vice Pres	ident	1-28-16				
Ignatury of Registered Agent	Printed Name	TRIE)	Cate				
09/15)								

COMMONWEALTH OF KENTUCKY TREY GRAYSON SECRETARY OF STATE



0641227.07 Decertish C226

Trey Grayson Secretary of State Received and Filed 08/21/2008 12:05:09 PM Fee Receipt: \$20.00

CERTIFICATE OF ASSUMED NAME

This certifies that the assumed name of			
Verizon Wireless			
has been adopted by See Addendus			
which is the "real name" of product creek one a Domestic General Parinership a Domestic Registered Limited Dability Parinership a Domestic Limited Partnership a Domestic Business Trust a Domestic Corporation a Domestic Limited Dability Company Joint Venture	a Foreign General Partning a Foreign Limited Partning a Foreign Business Trution a Foreign Corporation a Foreign Limited Liability	mited Llabili ersinip st	
organized and existing in the state or country ofDelaware		and \	vhose address is
One Verizon Way	Basking Ridge	Lu	07920
The conflicate of essumed name is executed by NYNEX PCS Toc.	try	, in	Z _p Defa
Jano A. Schepher-Assiotant Secretary Jano 15, 2006	Contract of the same of the sa		

85C-22E (7/M)

(the executed about for trainings)

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



Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY CELLCO PARTNERSHIP 1120 SANCTUARY PKWY, #150 GASA5REG ALPHARETTA, GA 30009-7630

Call Sign KNKN871	File Number
	Service Cellular
Market Numer CMA444	Channel Block B
	Designator

FCC Registration Number (FRN): 0003290673

Market Name Kentucky 2 - Union	The state of the s			
C (D)	Effective Dete	Part de Dat	Fig. V. P. 94 O. (P. (

Grant Date	Effective Date	Expiration Date	Five Yr Build-Out Date	Print Date
08-30-2011	08-20-2013	10-01-2021		
00-30-2011	00 20 2015	10 01 2021		

Site Information:

Location Latitude Longit		(meters)			1000	meters)	t to 11p	Antenna Structure Registration No.		
1	37-30-51.2 N 087-30	0-18.0 W	13	9.9		91.4		1030659		
Addre	ess: 2138 SR 1405			A						
City: S	SLAUGHTERS County: WE	BSTER	State: KY	Constr	uction D	eadline:				
Anten	na: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Anten	na Height AAT (meters)	104.300	99.100	103.400	105.700	89.600	78.600	86.500	103.800	
Transi	mitting ERP (watts)	100.000	100.000	100.000	100.000	100,000	100.000	100 000	100.000	

		Longitude		Ground Elevation (meters)		Structure Hgt to Tip (meters) 90.8		Antenna Structure Registration No. 1030654	
		087-29-17.0 W	Character 5		ġ				
Address:	1369 SAND CUT R	D							
City: Mad	disonville County:	HOPKINS St	ate: KY	Constructi	on Deadl	line:			
Antenna:	5 Azimuth (from tru	e north) 0	45	90	135	180	225	270	315
Antenna	Height AAT (meter	s) 127.800	138.70	0 133.200	133.500	121.500	113,200	123.000	142.10

1.000

0.500

0.500

0.630

Conditions:

Transmitting ERP (watts)

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

30.910

208.970 190.560 12.020

Call Sign: KNKN871	File	Number:			Pi	int Date		
Location Latitude Longi 2 37-16-53.0 N 087-24 Address: 1369 SAND CUT RD	tude 9-17.0 W	(m	round Elev teters) '6.8	(Structure Hgt meters) 00.8	to Tip	Antenna St Registratio 1030654	
City: Madisonville County: HOPK	INS Sta	te: KY	Constructi	on Deadl	ine:			
Antenna: 6 Azimuth (from true north) Antenna Height AAT (meters)	0 127.800	45 138.700	90 133.500	135 133.500	180) 121.500	225 113.200	270 123.000	315 142.100
Transmitting ERP (watts)	0.500	0.540	19.950	190.560	208.940	20.420	1.070	0.500
Antenna: 7 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 127.800 1.000	45 138.700 1.910	90 133,500 1.000	135 133.500 1.000	180 121.500 6.310	225 113.200 213.810		315 142.100 190.560
	1-07.6 W	(m	round Elev neters) 72.2	(Structure Hgt meters) 123.1	to Tip	Antenna St Registratio 1030739	
Address: (Hopson) RT 4 BOX 58 814 City: Princeton County: CALDWE		e: KY (Construction	on Deadli	ne:			
Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters)		45	90	135	180	225	270	315
Transmitting ERP (watts)	135.700 18.030	130.000 88.290	144.600 65.450	143.600 2.610	0.360 0.360	144.500 0.200	138.300 0.200	138.900 0.350
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters) Transmitting ERP (watts)	135.700 0.420	130.000 0.420	144.600 2.640	143.600 89.540	151.900 209.890	144.500 79.800	138.300 0.420	138.900 0.800
Antenna: 4 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters) Transmitting ERP (watts)	135.700 55.210	130.000 1.870	144.600 1.030	143.600 0.840	151.900 1.150	144.500 19.590	138.300 283.140	138.900 381.940
Location Latitude Longi 5 37-19-00.3 N 088-0	tude 4-34.3 W	(n	round Elev neters) 37.4	(Structure Hgt meters) 90.5	to Tip	Antenna St Registratio 1030656	
Address: (Marion) 11 Brairwood Driv City: Marion County: CRITTEND		e: KY C	Construction	n Deadli	ne:			
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters) Transmitting ERP (watts)	162.700 271.010	163.300	176.200 56.170	156.900 1.380		184.500 1.090		175.600 16.570

Call Sign: KNKN871	File 1	Number:			Pr	int Date:		
	1-34.3 W	(m	round Elev eters) 7.4	(Structure Hgt (meters) 90.5	to Tip	Antenna St Registratio 1030656	
Address: (Marion) 11 Brairwood Driv City: Marion County: CRITTENDI		: KY C	onstructio	n Deadli	ine:			
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	162,700	163.300	176.200	156.90		184.500	160.300	175.600
Transmitting ERP (watts)	1.090	1.090	54.770	411.39	0 270.910	18.590	1.090	1.090
Antenna: 4 Azimuth (from true north)	100	45	90	135	180	225	270	315
Antenna Height AAT (meters) Transmitting ERP (watts)	162.700 2.710	163.300 0.550	176.200 0.550	156.90 0.550	0 167.800 2.110	184.500 63.550	160.300 191.830	175.600 63.550
Transmitting ERT (watts)	2.710	0.550	0.550	0.550	2.110	03.330	191.030	05.550
Location Latitude Longi 8 37-19-19.5 N 087-30	tude 0-03.8 W	(m	round Elev neters) 14.5	(Structure Hgt (meters) 99.1	to Tip	Antenna St Registratio 1040639	
Address: 54 W LAKE ST City: Madisonville County: HOPK	NS Stat	te: KY	Constructi	on Dead	line:			
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	97.900	120.000	110.700	105.00		94.900	118.300	102.200
Transmitting ERP (watts)	91.200	87.100	85.110	85.110	89.130	87.100	89.130	89.130
	5-11.5 W	(n 15	round Elev neters) 53.6	A.	Structure Hgt (meters) 121.9	to Tip	Antenna St Registratio 1030655	
Address: (Morganfield) 996 TP LUCK City: Morganfield County: UNION			struction	Deadline	21			
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	130.600	126.500	124.600	100.00	A Control of the control	122.100		122.600
Transmitting ERP (watts)	355.170	248.530	31.970	1.840	0.810	0.810	2.870	89.690
Antenna: 3 Azimuth (from true north) Antenna Height AAT (meters)	V (1000)	45	90	135	180	225	270	315
Transmitting ERP (watts)	130.600 0.890	126.500 27.540	124.600 263.030	100.00 389.05		122.100 5.890	129.400 0.810	122.600 0.810
Antenna: 4 Azimuth (from true north)		45	90	135	180	225	270	315
Antenna Height AAT (meters) Transmitting ERP (watts)	130.600 0.680	126.500 0.680	124.600 0.680	100.00 2.630		122.100 217.250	129.400	122.600 15.150

Call Sign: KNKN871	File Number:	Print Date:

Can Sign. Kivkiva/1	rne	Number:			1.	int Date.		
THE PARTY OF THE P	-10.0 W	(m	round Elev neters) 15.5	(Structure Hgt (meters) 106.7	to Tip	Antenna St Registratio 1040303	
Address: (Calvert City) 641 Jary Johns City: Calvert City County: MARSH		tate: KY	Construc	tion Dea	ıdline:			
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters) Transmitting ERP (watts)	78.900 23.380	77.600 330.300	88.100 378.360	83.000 36.130		85.300 0.970	97.900 0.970	93.100 0.970
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters) Transmitting ERP (watts)	78.900 0.970	77.600 0.970	88.100 0.970	83.000 14.730		85.300 357.480	97.900 49.940	93.100 1.230
Antenna: 4 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters) Transmitting ERP (watts)	78.900 63.740	77.600 2.060	88.100 0.660	83.000 0.660	68.600 0.660	85.300 4.020	97.900 107.530	93.100 274.970
Location Latitude Longit 14 37-36-46.0 N 087-29	ude 0-35.0 W	(n	round Elev neters) 8.0		Structure Hgt (meters)	to Tip	Antenna St Registratio 1034040	
Address: EASTWOOD FERRY ROAL City: SEBREE County: WEBSTER	D	Sept. Comment			91.0 e: 02-23-2006		1034040	
Antenna: 4 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters) Transmitting ERP (watts)	73.800 0.560	88.300 0.200	72.700 0.200	87.800 0.280	81.700 2.400	80.900 42.760	73.100 89.330	79.800 12.910
Antenna: 5 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters) Transmitting ERP (watts)	73.800 55.080	88.300 0.490	72.700 0.200	87.800 0.200	81.700 0.200	80.900 0.200	73.100 0.200	79.800 39.900
Antenna: 6 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 73.800 0.200	45 88.300 0.200	90 72.700 0.200	135 87.800 5.380	180 81.700 97.950	225 80,900 4,910	270 73.100 0.210	315 79.800 0.200

Call Sign: KNKN871 File Number: Print Date:

Location Latitude Longi 16 36-46-54.2 N 088-03 Address: SR 80/US 68 & Trace	tude 3-28.1 W	(m	ound Elev eters) 9.0		ructure Hg eters) 5.5	t to Tip	Antenna St Registratio 1205551	
City: Golden Pond County: TRIGO	State:	KY Con	struction	Deadline:				
Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 165.000 96.610	45 178.000 96.610	90 160.000 96.610	135 175.000 96.610	180 171.000 96.610	225 167.000 96.610	270 177.000 96.610	315 184.000 96.610
Location Latitude Longi	tude		ound Elev		ucture Hg eters)	t to Tip	Antenna St Registratio	
17 37-14-55.1 N 088-24 Address: 738 Mitchell Road City: Burna County: LIVINGSTON	0-42.2 W N State:	17	5.8	103	TO STATE OF THE ST		1231318	
Address: 738 Mitchell Road City: Burna County: LIVINGSTON Antenna: 4 Azimuth (from true north) Antenna Height AAT (meters)	State:	17	5.8	103	3.8	225 163.300 1.990	~	315
Address: 738 Mitchell Road	N State: 0 116.800 50.060	17 KY Con 45 144.900	5.8 nstruction 90 144.500	Deadline: 135	3.8 02-23-2006 180 154.500	225 163.300	270 146.900	315 139.500

Control Points:

Control Pt. No. 2

Address: 500 West Dove Road

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

Waivers/Conditions:

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

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



Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: KENTUCKY RSA NO. 1 PARTNERSHIP

ATTN: REGULATORY KENTUCKY RSA NO. 1 PARTNERSHIP 1120 SANCTUARY PKWY, #150 GASA5REG ALPHARETTA, GA 30009-7630

Call Sign KNKQ306	ellular
-20-201-200-21	Service 'ellular
Market Numer	Channel Block
CMA443	В

FCC Registration Number (FRN): 0001836709

Market Name Kentucky 1 - Fulton

Grant Date	Effective Date	Expiration Date	Five Yr Build-Out Date	Print Date
08-30-2011	10-24-2013	10-01-2021		

Site Information:

Transmitting ERP (watts)

Location	Location Latitude Longi		tude		Ground Elevation (meters)		Structure Hg meters)	t to Tip	Antenna Structure Registration No.		
1	36-20-59.2 N		-12.3 W	98		OTLAK					
	0.68 MILE SOUTH SSITER CORNER		: LAKE	State: Ti			eadline:				
Antenna:	1 Azimuth (from tru	e north)	0	45	90	135	180	225	270	315	
Antenna	Height AAT (meter	s)	148.000	117.000	107.000	117.000	121.000	147.000	149.000	146.000	

4.500

1.500

3.900

38.800

109.600

133.300 103.500 36.500

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.

Call Sign: KNKQ306	File	Number:			Print Date:					
Location Latitude Longit 2 36-45-58.0 N 088-38 Address: 416 Jimtown Road	ude 3-50.0 W	(m	round Elev neters) 43.0		Structure Hgt (meters) 147.8	to Tip	Antenna St Registratio 1043917			
City: MAYFIELD County: GRAVE	S State	e: KY C	onstructio	n Deadl	ine:					
Antenna: 2 Azimuth (from true north)	-0	45	90	135	180	225	270	315		
Antenna Height AAT (meters) Transmitting ERP (watts)	124.300 91.200	120.000 87.100	100.800 85.110	92.100 85.110		103.100 87.100	108.600 89.130	100.800 89.130		
Location Latitude Longit 4 36-54-35.5 N 089-04 Address: (Wickliffe) 353 CR 1307	ude 1-01.6 W	(n	round Elev neters)		Structure Hgt (meters) 121.0	to Tip	Antenna St Registratio 1030662			
City: Bardwell County: CARLISLE	State:	KY Co	nstruction	Deadlin	ie:					
Antenna: 4 Azimuth (from true north)	0	45	90	135	180	225	270	315		
Antenna Height AAT (meters) Transmitting ERP (watts)	107.500 189.230	98.100 48.640	119.800 1.690	96.700 0.930	86.900 0.930	133.300 0.930	130.900 1.810	130.400 52.120		
Antenna: 5 Azimuth (from true north)	0	45	90	135	180	225	270	315		
Antenna Height AAT (meters) Transmitting ERP (watts)	107.500 1.710	98.100 64.860	119.800 368.980	96.700 174.58		133.300 0.930	130.900 0.930	130.400 0.930		
Antenna: 6 Azimuth (from true north)	0	45	90	135	180	225	270	315		
Antenna Height AAT (meters) Transmitting ERP (watts)	107.800 0.350	98.100 0.350	119.800 1.230	96.700 35.330		133.300 35.270	130.900 1.000	130.400 0.350		
Location Latitude Longit 6 36-31-12.4 N 088-50	tude)-41.5 W	(n	round Elev neters) 14.2	vation	Structure Hgt (meters) 122.2	to Tip	Antenna St Registratio 1030665			
Address: (Fulton) 550 Powell Road City: Fulton County: HICKMAN	State: K	Y Cons	truction D	eadline:	4530	Q.				
Antenna: 4 Azimuth (from true north)	0	45	90	135	180	225	270	315		
Antenna Height AAT (meters) Transmitting ERP (watts)	128.200 110.570	122.800 412.100	123.200 98.560	135.20 4.220		157.200 0.920	143.900 0.920	141.700 6.530		
Antenna: 5 Azimuth (from true north)		45	90	135	180	225	270	315		
Antenna Height AAT (meters) Transmitting ERP (watts)	128.200 0.550	122.800 0.550	123.200 0.550	135.20 0.550	00 147.500	157,200 16,430		141.700 0.700		

Call Sign: KNKQ306	File	Number:		Print Date:					
Location Latitude Longit 6 36-31-12.4 N 088-50 Address: (Fulton) 550 Powell Road	ude 0-41.5 W	(m	meters) 144.2		Structure Hgt (meters) 122.2	t to Tip	Antenna St Registratio 1030665		
City: Fulton County: HICKMAN	State: K	Y Const	ruction De	adline:					
Antenna: 6 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	128,200	122.800	123.200	135.20		157.200	143.900	141.700	
Transmitting ERP (watts)	135.480	5.650	2.230	0.920	1.320	5.450	78.640	402.820	
Location Latitude Longit	100	(m	round Elev neters)	ation	Structure Hg (meters)	t to Tip	Antenna Se Registratio		
7 36-38-26.2 N 088-16 Address: (Murray) 1431 Van Cleave R City: Murray County: CALLOWAY	_0500500000		onstruction	Deadli	90.8 ne:		1030663		
Antenna: 4 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	106.900	107.100	115.000	106.9	00 87.400	91.300	86.200	97.500	
Fransmitting ERP (watts)	124.240	6.420	0.560	0.560	0.560	0.830	39.630	251.940	
Antenna: 5 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	106.900	107.100	115.000	106.9	00 87.400	91.300	86.200	97.500	
Transmitting ERP (watts)	3.450	96.460	263.070	57.23	0 1.700	0.560	0.560	0.560	
Antenna: 6 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	106.900	107.100	115.000	106.9	00 87.400	91.300	86.200	97.500	
Γransmitting ERP (watts)	0.370	0.370	0.370	12.73	0 121.110	104.340	9.310	0.370	
Location Latitude Longit 8 37-03-51.4 N 088-57	rude 7-23.6 W	(n	round Elev neters)	ation	Structure Hg (meters) 92.4	t to Tip	Antenna S Registration		
Address: (La Center) 220 RICHARDS	ON LN								
City: LA CENTER County: BALL.	ARD St	ate: KY	Construc	tion De	adline:				
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	85.600	78.400	71.900	66.00	0 65.300	67.000	87.700	96.100	
Transmitting ERP (watts)	2.110	71.430	167.460	63.67	0 0.330	0.640	0.330	0.330	
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	85.600	78.400	71.900	66.00	0 65.300	67.000	87.700	96.100	
Transmitting ERP (watts)	1.230	1.000	1.380	23.44	0 338.840	457.090	66.070	2.240	

Call Sign: KNKQ306

Locatio	Location Latitude Long		·····		Ground Elevation (meters)		Structure Hgt to Tip (meters)		Antenna Structure Registration No.	
8	37-03-51.41	N 088-57	-23.6 W	1	16.4		92.4		1030664	
Address	s: (La Center) 2	220 RICHARDS	ON LN							
City: LA	A CENTER	County: BALLA	ARD St	ate: KY	Construc	ction De	adline:			and the second limited
		2 AV 703								
Antenna	a: 4 Azimuth (1	from true north)	0	45	90	135	180	225	270	315
	a: 4 Azimuth (f a Height AAT		0 85.600	45 78.400	90 71.900	135 66.00	2250 PW0270	225 67.000	270 87.700	315 96.100

File Number:

Print Date:

	on Daniu		700.6		(meters)		(meters)		Registrat	tion No.
10	36-44-0	7.9 N	088-58-29	2.2 W	131.9		92.9		1030723	
Addres	s: 3975 Sta	ate Route	2206							
City: C	LINTON	County	HICKMAN	State: KY	Construction	n Dead	lline:			
Antonr	a. 2 Azimi	uth (from	true north) 0		00	125	190	225	270	215

Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	100.500	101.900	98.900	84.700	107.900	118.900	119.900	100.400
Transmitting ERP (watts)	96.610	96.610	96.610	96.610	96.610	96.610	96.610	96.610

Location Latitude Longit	ude			Structure Hg (meters)	t to Tip	Antenna Structure Registration No.				
11 37-02-00.0 N 088-22	2-10.0 W	10)5.5	Do.	106.7		1040303			
Address: (Calvert City) 641 Jary Johnson Rd. City: Calvert City County: MARSHALL State: KY Construction Deadline:										
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315		
Antenna Height AAT (meters)	78.900	77.600	88.100	83.00	0 68.600	85.300	97.900	93.100		
Transmitting ERP (watts)	23.380	330.300	378.360	36.13	0.970	0.970	0.970	0.970		
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315		
Antenna Height AAT (meters)	78.900	77.600	88.100	83.00	0 68.600	85.300	97.900	93.100		
Transmitting ERP (watts)	0.970	0.970	0.970	14.73	0 240.930	357.480	49.940	1.230		
Antenna: 4 Azimuth (from true north)	0	45	90	135	180	225	270	315		
Antenna Height AAT (meters)	78.900	77.600	88.100	83.00	0 68.600	85.300	97.900	93.100		
Transmitting ERP (watts)	63.740	2.060	0.660	0.660	0.660	4.020	107.530	274.970		

Call Sign: KNKQ306	File	Number:			P	rint Date:	:	
Address: 12201 SR 97	ude -45.2 W	Ground Elevat (meters) 2 W 155.5			Structure Hg (meters) 91.4	to Tip	Antenna Structure Registration No. 1202399	
City: TriCity County: GRAVES	State: KY	Const	ruction De	adline:				
Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 75,100 0,280	45 73.400 4.680	90 74.100 67.610	135 70.100 91.200		225 100.900 0.450	270 74.700 0.250	315 81.300 0.200
Antenna: 3 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	570	45 73.400 0.200	90 74.100 0.200	135 70.100 0.350	180	225 100.900 89.130	270	315 81.300 2.630
Antenna: 4 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 75.100 100.000	45 73.400 38.020	90 74.100 0.200	135 70.100 0.380	180 102.600 0.200	225 100.900 0.200	270 74.700 1.260	315 81.300 42.660
	2-35.2 W	(n	round Ele neters) 04.2		Structure Hg (meters) 63.4	t to Tip	Antenna St Registratio 1200593	
Address: (Paducah West) 4415 Merred City: Paducah County: MCCRACK		te: KY	Construct	ion Deac	dline: 07-08-20	014		
Antenna: 4 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 59.900 24.580	45 55.900 50.820	90 65.200 50.310	135 50.700 19.100		225 34.700 0.330	270 42.800 0.330	315 64.600 1.370
Antenna: 5 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 59.900 0.440	45 55.900 0.440	90 65.200 12.210	135 50.700 76.570		225 34.700 57.980	270 42.800 5.460	315 64.600 0.440
Antenna: 6 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)		45 55.900 0.780	90 65.200 0.440	135 50.700 0.440	180	225 34.700 42.940	270 42.800 108.040	315 64.600 89.900

Call Sign: KNKQ306	File	Number:			Pi	rint Date	:	
Location Latitude Longit 15 36-46-54.2 N 088-03 Address: 14664 Canton Road	tude 3-28.1 W	(m	round Elev neters) 19.0	(1	tructure Hg meters) 26.5	to Tip	Antenna St Registratio 1205551	
City: Golden Pond County: TRIGG	State:	KY Cor	istruction	Deadline:	: 05-19-2006			
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters) Transmitting ERP (watts)	165.000 96.610	178.000 96.610	160.400 96.610	174.500 96.610	170.600 96.610	167.000 96.610	177.000 96.610	183.900 96.610
Location Latitude Longie 16 36-34-03.0 N 089-10 Address: (Hickman site) Holley Street City: Hickman County: FULTON	0-30.9 W	(m 10	round Elev neters) 19.4 truction D	(1 9	tructure Hg meters) 1.4 05-28-2014	t to Tip	Antenna St Registratio 1282534	
Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters) Transmitting ERP (watts)	105.500 141.700	102.800 118.910	96.700 1.140	89.300 0.580	75.700 0.580	68.400 0.580	107.900 0.580	107.300 4.050
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters) Transmitting ERP (watts)	105.500 0.580	102.800 4.050	96.700 141.730	89.300 118.910	75.700 1.140	68.400 0.580	107.900 0.580	107.300 0.580
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters) Transmitting ERP (watts)	105.500 0.460	102.800 0.460	96.700 0.460	89.300 0.460	75.700 0.460	68.400 7.710	107.900 45.610	107.300 24.600
	6-43.7 W	(n 10	round Elev neters) 02.7	(1	tructure Hg meters) 9.1	t to Tip	Antenna S Registratio 1252613	
Address: (Monkey's Eyebrow) 4625 C City: Kevil County: BALLARD	State: KY		uction De	adline: 10	-24-2014	Pa.		
Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 85.900 7.080	45 83.500 125.890	90 90.600 478.630	135 69.600 112.200	180 74.300 4.570	225 84.600	270 86.500 1.000	315 83.200 1.000
Antenna: 2 Azimuth (from true north)			90			1.580		
Antenna Height AAT (meters) Transmitting ERP (watts)	85.900 1.000	45 83.500 1.410	90.600 12.020	135 69.600 213.800	74.300 446.680	225 84.600 64.570	270 86.500 2.820	315 83.200 1.000

Call Sign: KNKQ306 File Number: Print Date:

Location	Latitude	Longitude		round Ele neters)	vation	Structure Hg (meters)	gt to Tip	Antenna St Registratio	The second second second
17	37-10-55.4 N	088-56-43.7 W	1	02.7		99.1		1252613	
Address:	(Monkey's Eyebro	w) 4625 Odgen Col	vin Circle						
City: Kev	il County: BAL	LARD State: KY	Const	ruction De	adline:	10-24-2014			
Antenna:	4 Azimuth (from t	rue north) 0	45	90	135	180	225	270	315
Antenna	Height AAT (met	ers) 85.900	83.500	90.600	69.600	74.300	84.600	86.500	83.200
Transmit	ting ERP (watts)	2,000	2.000	2.000	2.000	2.000	398.110	549,540	4.900

Control Points:

Control Pt. No. 3

Address: 500 W. Dove Rd.

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

Waivers/Conditions:

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



Federal Communications Commission Wireless Telecommunications Bureau

Spectrum Leasing Arrangement

ATTN: REGULATORY KENTUCKY RSA NO. 1 PARTNERSHIP 1120 SANCTUARY PKWY #150 - GASA5REG ALPHARETTA, GA 30009 Date: 08/23/2016 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	Long Term	L000008155

Lease Grant/Accepted Date	Lease Commencement Date	Lease Expiration Date
03/17/2011	03/25/2011	06/13/2019

Call Sign	Radio Service
WQJQ692	WU - 700 MHz Upper Band (Block C)

Lessee Information

0001836709

KENTUCKY RSA NO. 1 PARTNERSHIP

Attn: REGULATORY

1120 SANCTUARY PKWY #150 - GASA5REG

ALPHARETTA, GA 30009

Licensee Information

0003290673

CELLCO PARTNERSHIP Attn: REGULATORY

1120 SANCTUARY PKWY, #150 GASA5REG

ALPHARETTA, GA 30009-7630

Geographically-Licensed Services			
Market Number	Market Name	Channel Block	
REA004	Mississippi Valley	С	

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.

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



Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY CELLCO PARTNERSHIP 1120 SANCTUARY PKWY, #150 GASA5REG ALPHARETTA, GA 30009-7630

Call Sign WQGA718	File Number
Radio	Service
AW - AWS (17	10-1755 MHz and
2110-2	155 MHz)

FCC Registration Number (FRN): 0003290673

Grant Date 11-29-2006	Effective Date 12-11-2015	Expiration Date 11-29-2021	Print Date
Market Number REA004	Chan	nel Block F	Sub-Market Designator
		t Name pi Valley	
st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

This authorization is conditioned upon the licensee, prior to initiating operations from any base or fixed station, making reasonable efforts to coordinate frequency usage with known co-channel and adjacent channel incumbent federal users operating in the 1710-1755 MHz band whose facilities could be affected by the proposed operations. See, e.g., FCC and NTIA Coordination Procedures in the 1710-1755 MHz Band, Public Notice, FCC 06-50, WTB Docket No. 02-353, rel. April 20, 2006.

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.

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Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY CELLCO PARTNERSHIP 1120 SANCTUARY PKWY, #150 GASA5REG ALPHARETTA, GA 30009-7630

Call Sign WQGA960	File Number
Radi	o Service
AW - AWS (17	710-1755 MHz and
2110-2	2155 MHz)

FCC Registration Number (FRN): 0003290673

Grant Date 11-29-2006	Effective Date 03-30-2016	Expiration Date 11-29-2021	Print Date
Market Number BEA072	Chanr	nel Block B	Sub-Market Designator
	Marke Paducah		
st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

This authorization is conditioned upon the licensee, prior to initiating operations from any base or fixed station, making reasonable efforts to coordinate frequency usage with known co-channel and adjacent channel incumbent federal users operating in the 1710-1755 MHz band whose facilities could be affected by the proposed operations. See, e.g., FCC and NTIA Coordination Procedures in the 1710-1755 MHz Band, Public Notice, FCC 06-50, WTB Docket No. 02-353, rel. April 20, 2006.

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.

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



Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY CELLCO PARTNERSHIP 1120 SANCTUARY PKWY, #150 GASA5REG ALPHARETTA, GA 30009-7630

Call Sign WQJQ692	File Number
Radio	Service
WU - 700 MHz U1	oper Band (Block C)

FCC Registration Number (FRN): 0003290673

Grant Date 11-26-2008	Effective Date 05-19-2016	Expiration Date 06-13-2019	Print Date
Market Number REA004	Chann	el Block	Sub-Market Designator
	Market Mississip		
st Build-out Date 06-13-2013	2nd Build-out Date 06-13-2019	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

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

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

Conditions:

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

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

EXHIBIT B

SITE DEVELOPMENT PLAN:

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



PI TOWER DEVELOPMENT LLC 7411 FULLERTON ST, SUITE 110 JACKSONVILLE, FL 32256

NEW 188' MONOPOLE w/3' LIGHTNING ARRESTOR **TOTAL TOWER HEIGHT 191**

PI TOWER DEVELOPMENT LLC SITE KY-GILBERTSVILLE-DAM MARINA

VERIZON WIRELESS SITE

EV KENTUCKY DAM MARINA PROJECT#: 20161367185 MARKET ID: KY RSA 1 LOCATION CODE: 412560

SITE ADDRESS

364 SLEDD CREEK ROAD **GILBERTSVILLE, KY 42044** MARSHALL COUNTY E911 ADDRESS: TBD

TOWER OWNER

PI TOWER DEVELOPMENT LLC 7411 FULLERTON ST. SUITE 110 JACKSONVILLE, FL 32256 CONTACT: ALEJANDRA STINSON PHONE: (513) 259-3673 MOBILE: (513) 259-3673 F-MAIL: ALFIANDRA STINSON@ PARALLELINFRASTRUCTURE.COM

PROPERTY OWNER

RENIA FEHRENBACHER 364 SLEDD CREEK ROAD GILBERTSVILLE, KY 42044 CONTACT: RENIA FEHRENBACHER PHONE: (270) 395-3438

MARSHALL COUNTY SHERIFF'S **52 MAIN STEET BENTON, KY 42025** PHONE: (270) 527-3112

GILBERTSVILLE FIRE PROTECTION GILBERTSVILLE, KY 42044

PHONE: (270) 362-7061 GENERAL INFORMATION

LATITUDE: 36° 58′ 37.27″ N LONGITUDE: 88° 17′ 10.48″ W 1983 (NAD83) ELEVATION: 402.00' AMSL 1988 (NAVD88)

PI TOWER DEVELOPMENT LLC LEASED PREMISES

100'-0" x 100'-0" (10,000 SF)

VERIZON WIRELESS LEASE AREA

12'-0" x 30'-0"

PROJECT TOTAL DISTURBED AREA

(10,000 SF) = (0.23 ACRE (5,900 SF) = (0.14 ACRE) (15,900 SF) = (0.37 ACRE



KY-GILBERTSVILLE-DAM MARINA PIKY017

364 SLEDD CREEK ROAD GILBERTSVILLE, KY 42044 MARSHALL COUNTY

TENANT: KENTUCKY RSA NO. 1 PARTNERSHIP EV KENTUCKY DAM MARINA

FROM MARSHALL COUNTY JUDGE EXECUTIVE'S OFFICE: 1101 MAIN STREET, BENTON, KY 42025: HEAD SOUTH ON MAIN ST TOWARD E 13TH S (0.1 MI). TURN LEFT AT THE 2ND CROSS STREET ONTO E 14TH ST (269 FT). TURN LEFT AT THE 1ST CROSS STREET ONTO POPLAR ST (0.7 MI), TURN RIGHT ONTO US-641 N/MAIN ST (4.0 MI). SLIGHT LEFT ONTO US-641 N/US-68 (0.4 MI). TURN RIGHT ONTO US-641 N (3.8 MI). TURN RIGHT ONTO MC CRACKEN RD (0.2 MI). TURN LEFT ONTO RIDGE RD (1.0 MI). SITE WILL BE LOCATED ON LEFT (WEST) SIDE OF ROAD.

FROM EVANSVILLE MTSO: 800 RUSSELL ROAD CHANDLER. IN 47610: HEAD NORTH ON RUSSELL RD TOWARD GARDNER RD (0.2 MI). TURN LEFT ONTO GARDNER RD (1.6 MI). TURN LEFT ONTO IN-62 (4.2 MI). TURN RIGHT ONTO THE I-164 S RAMP (0.3 MI). MERGE ONTO I-69 S (8.1 MI). TAKE EXIT 0 TO MERGE ONTO US-41 S TOWARD HENDERSON KY (1.0 MI). MERGE ONTO US-41 S (6.1 MI). KEEP LEFT TO STAY ON US-41 S (2.4 MI), KEEP LEFT TO CONTINUE ON PENNYRILE PKWY, FOLLOW SIGNS FOR OWENSBORO (1.1 MI), CONTINUE ONTO 1-69/PENNYRILE PKWY (1.2 MI), CONTINUE ONTO PENNYRILE PKWY (39.1 MI). CONTINUE ONTO I-69/PENNYRILE PKWY (2.2 MI). KEEP RIGHT AT THE FORK TO STAY ON I-69, FOLLOW SIGNS FOR PADUCAH (38.4 MI). TAKE EXIT 68B FOR INTERSTATE 24 W TOWARD PADUCAH (0.3 MI). MERGE ONTO I-24 W/I-69 S (10.5 MI). TAKE EXIT 31 FOR KY-453 TOWARD GRAND RIVERS/SMITHLAND (0.2 MI). TURN LEFT ONTO KY-453 S (1.3 MI). USE THE RIGHT LANE TO TAKE THE RAMP TO US-62 W/US-641 S (0.2 MI), TURN RIGHT ONTO US-62 W/US-641 S (2.5 MI), TAKE THE RAMP ONTO US-641 S (0.3 MI), KEEP LEFT TO STAY ON US-641 S (1.5 MI), TURN LEFT ONTO STATE HWY 1519 (0.7 MI), TURN RIGHT ONTO RIDGE RD (0.2 MI). SITE WILL BE LOCATED ON RIGHT (NORTH) SIDE OF ROAD.

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

IOTE: ALL ITEMS WITHIN THESE CONSTRUCTION DOCUMENTS ARE BY TOWER OWNER'S GENERAL ONTRACTOR AND HIS SUB-CONTRACTORS UNLESS NOTED AS [VZW GC] WHICH SHALL INCLUIDE VERIZON WIRELESS GENERAL CONTRACTOR AND HIS SUB-CONTRACTORS. GENERALLY DESCRIBED BELOW:

INSTALL A NEW TOWER FOUNDATION SYSTEM
INSTALL A NEW 98'X98' FENCED GRAVEL COMPOUND INSTALL A NEW SITE H-FRAME INSTALL A NEW ELECTRICAL SERVICE RUN TO SITE H-FRAME

INSTALL A NEW ELECTRICAL SERVICE RUN TO SITE H-FRAME
INSTALL A NEW GRAVEL ACCESS ORIVE
NO WATER OR SEWAGE SERVICES RUN TO SITE
INSTALL NEW TOWER & SITE GROUNDING SYSTEM
INSTALL NEW YZYY SUBSURRACE GROUNDING SYSTEM
INSTALL NEW 11"-6"x19"-6" CONCRETE EQUIPMENT/GENERATOR PAD INSTALL ELECTRICAL SERVICE CONDUIT WITH PULL TAPES FROM ATS ENCLOSURE STUB-UP TO UTILIT

INSTALL NEW CONDUITS WITH PULL TAPES FROM VZW ATS ENCLOSURE STUB-UP TO EQUIPMENT

INSTALL NEW CONDUITS WITH PULL TAPES FROM MAIN FOUIPMENT CABINET STUB-UP TO GROWTH

CABINET STUB-UP
INSTALL (1) NEW "VERIZON WIRELESS ONLY" FIBER OPTIC CONDUIT WITH PULL TAPE AND TRACER
WIRE FROM VZW EQUIPMENT TO NEW "VERIZON WIRELESS ONLY" HAND HOLE OUTSIDE COMPOU
INSTALL (1) NEW "VERIZON WIRELESS ONLY" FIBER OPTIC CONDUIT WITH PULL TAPE FROM NEW
"VERIZON WIRELESS ONLY" HAND HOLE AND STUB UP AT FUTURE FIBER PEDESTAL LOCATION
PERMANENT ELECTRIC POWER MUST BE AVAILABLE FOR VERIZON WIRELESS AT THE METER BASE

PRIOR TO THE SITE REING RELEASED AS TENANT READY

ERIZON WIRELESS SCOPE (VZW GC):
INSTALL A NEW 11'-6"x14'-9" PREFABRICATED CANOPY ON EXISTING CONCRETE PAD FOUNDATION

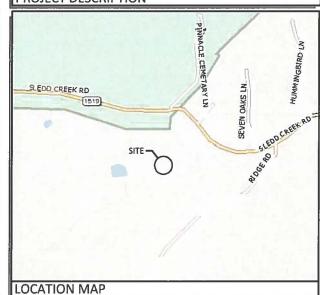
INSTALL VZW 20KW DIESEL GENERATOR ON EXISTING CONCRETE FOUNDATION
INSTALL VZW ICE BRIDGE AND FOUNDATIONS
INSTALL VZW ANTENNA MOUNTING SUPPORT STRUCTURE ON TOWER INSTALL VZW ANTENNAS, LINES, COAX, GPS ANTENNAS AND RADIO FOUIPMENT

INSTALL EXISTING SUBSURFACE GROUND LEADS TO VZW EQUIPMENT & FACILITIES

INSTALL VZW ELECTRIC SERVICE CONDUCTORS FROM UTILITY H-FRAME TO VZW ATS ENCLOSURE INSTALL VZW GENERATOR CIRCUITS FROM VZW ATS & EQUIPMENT ENCLOSURES TO VZW GENERATOR

INSTALL (2) 1-1/4" & (1) 1" INNERDUCTS WITH PULL TAPES AND TRACER WIRE WITHIN OWNER INSTALLED "VERIZON WIRELESS ONLY" FIBER OPTIC CONDUIT

PROJECT DESCRIPTION



ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES

BUILDING CODE STRUCTURAL CODE MECHANICAL CODE FLECTRICAL CODE FIRE/LIFE SAFETY CODE **ENERGY CODE**

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

ARCHITECTURAL

ACCESSIBILITY REQUIREMENTS:

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH THE 2009 IBC BUILDING CODE

APPLICABLE CODES

SURVEYOR

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

ELECTRICAL

WEST KENTUCKY RECC ADDRESS: 1218 W BROADWAY ST MAYFIELD, KY 42066

CONTACT: TBD PHONE: (270) 247-1321 POWER OF DESIGN GROUP, LLC 11490 BLUEGRASS PARKWAY LOUISVILLE, KY 40299 PHONE: (502) 437-5252

ELECTRICAL UTILITY COORDINATION IS NOT FINALIZED. DO NOT PROCEED WITH CONSTRUCTION.

CONSULTANT TEAM



SHEET NUMBER DESCRIPTION T-1 PROJECT INFORMATION, SITE MAPS, SHEET INDEX B-1 TO B-1.5 SURVEY PLAT B-2 500' RADIUS AND ABUTTERS MAP **REVISION LOG** TOWER ELEVATION TOWER ELEVATION CIVIL OVERALL SITE PLAN w/AERIAL OVERLAY C-1 C-1A OVERALL SITE PLAN w/DISTANCES TO PROPERTY LINE C-1B TOWER DISTANCE TO RESIDENTIAL STRUCTURES C-3 C-4 DETAILED SITE PLAN DIMENSIONED SITE PLAN

RECEIVED

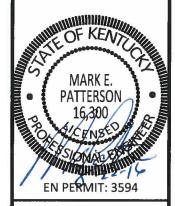
AUG 25 2016

PUBLIC SERVICE COMMISSION





PI TOWER DEVELOPMENT LLC 7411 FULLERTON ST, SUITE 110 JACKSONVILLE, FL 32256



ZONING DRAWINGS

	רוט	AVVIIVOS
REV.	DATE	DESCRIPTION
Α	8.15.16	ISSUED FOR REVIEW
В	8.19.16	OLC COMMENTS
0	8.22.16	ISSUED AS FINAL w/REVISIONS
		WINCANDIONS

SITE INFORMATION KY-GILBERTSVILLE-**DAM MARINA**

364 SLEDD CREEK ROAD **GILBERTSVILLE, KY 42044** MARSHALL COUNTY

TOWER DEVELOPMENT LLC SITE #: PIKY017

VERIZON WIRELESS SITE NAME: EV KENTUCKY DAM MARINA

DRAWN BY CHECKED BY:

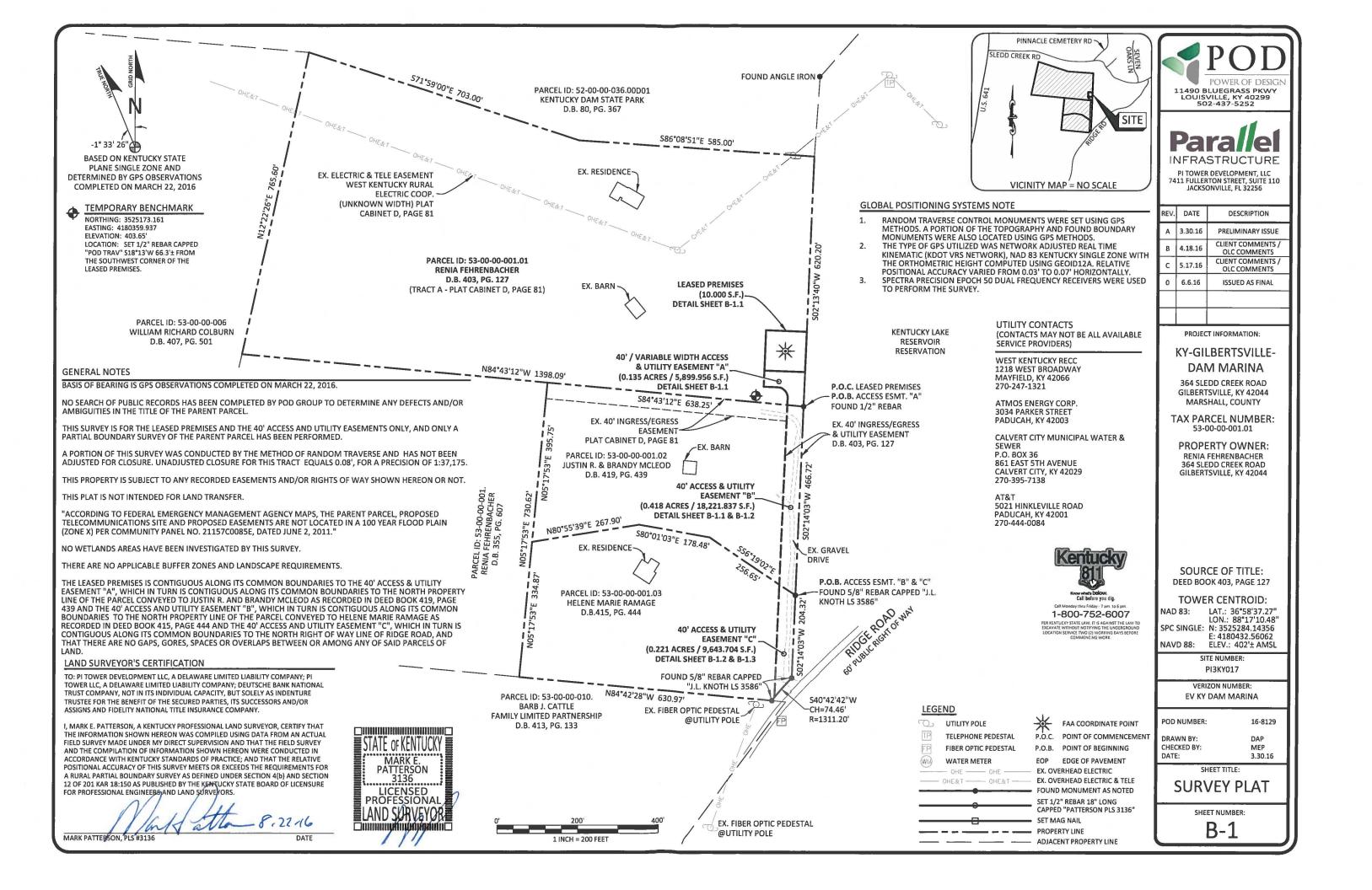
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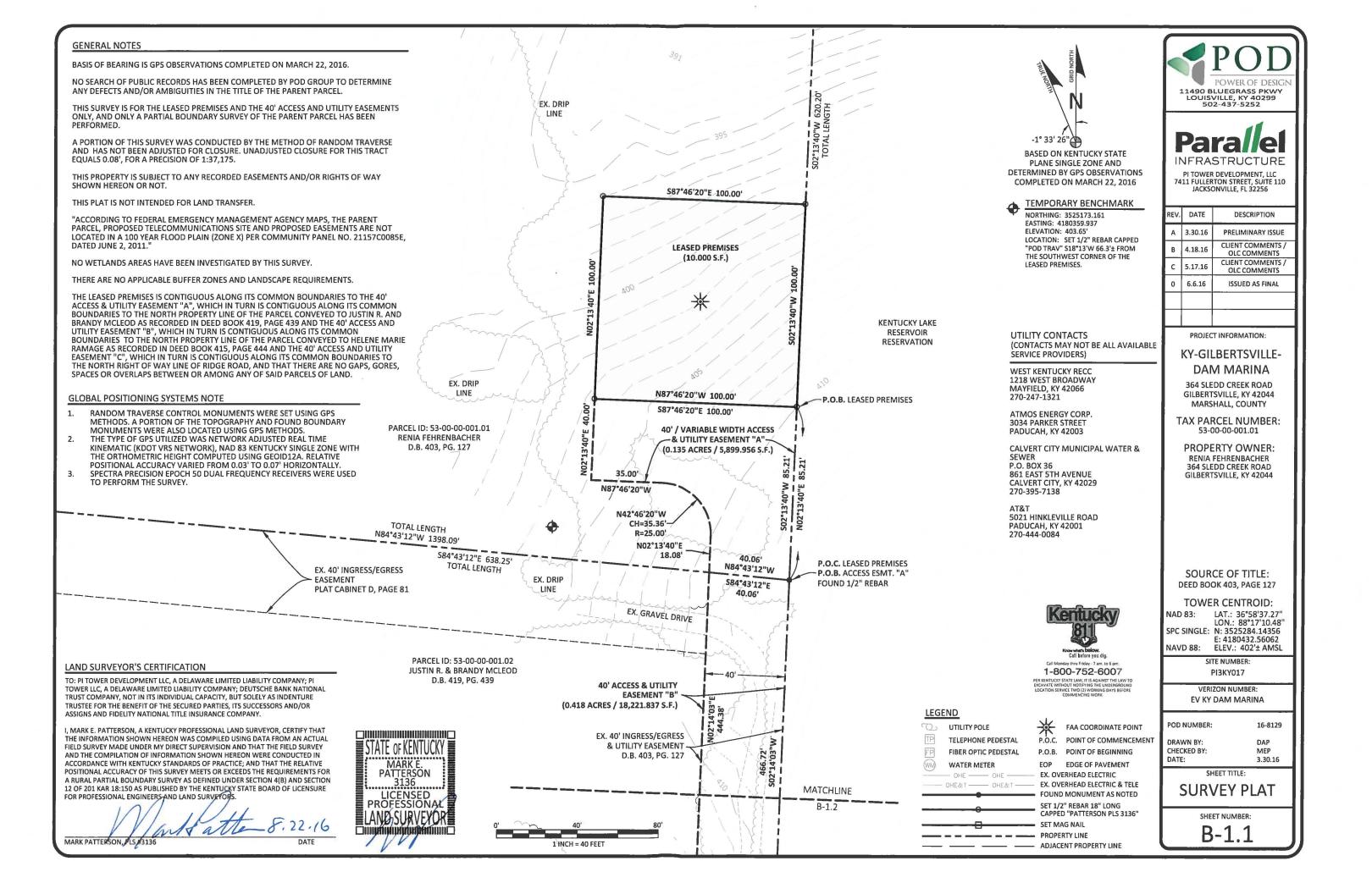
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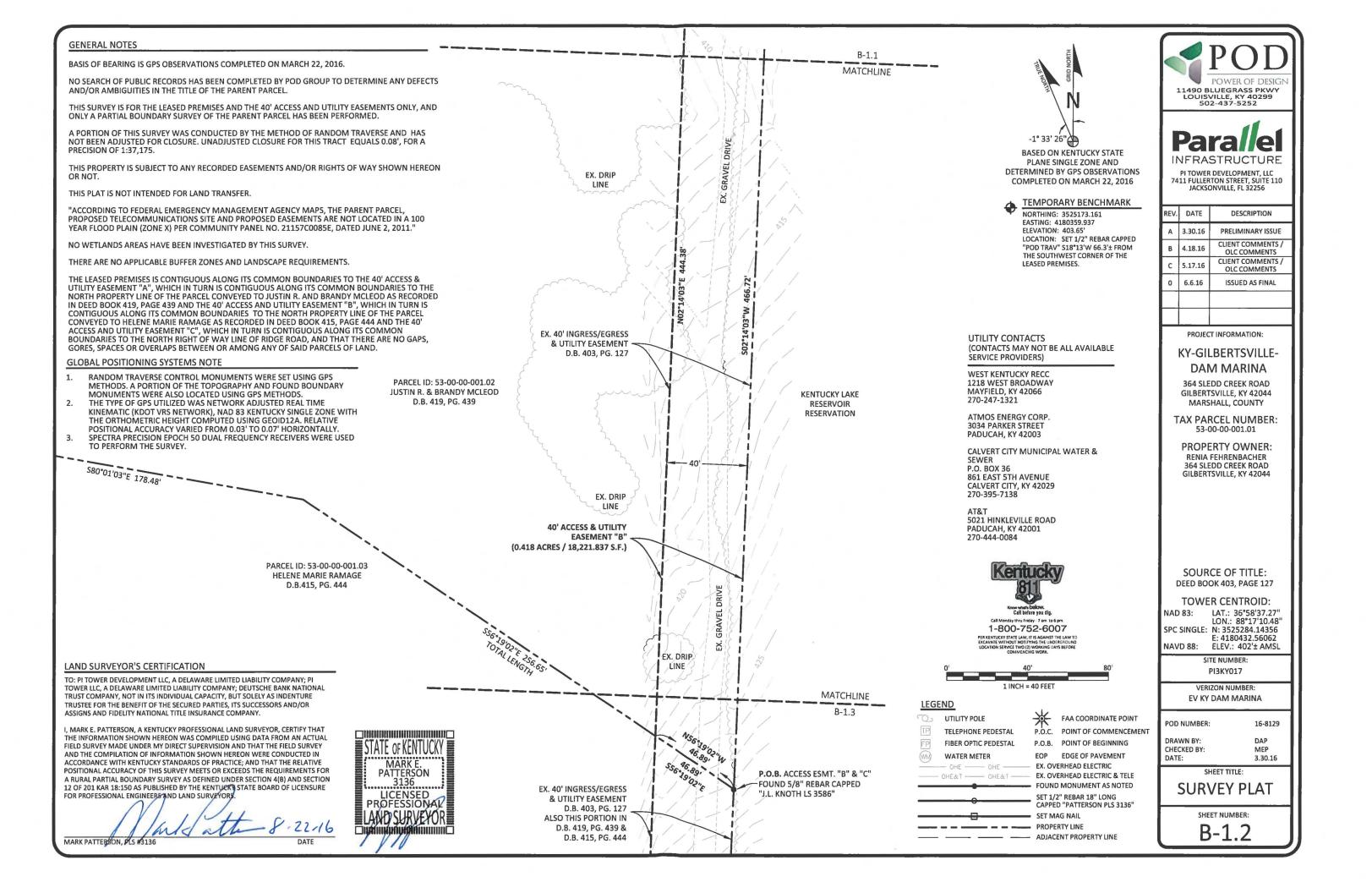
PROJECT INFORMATION. SITE MAPS. SHEET INDEX

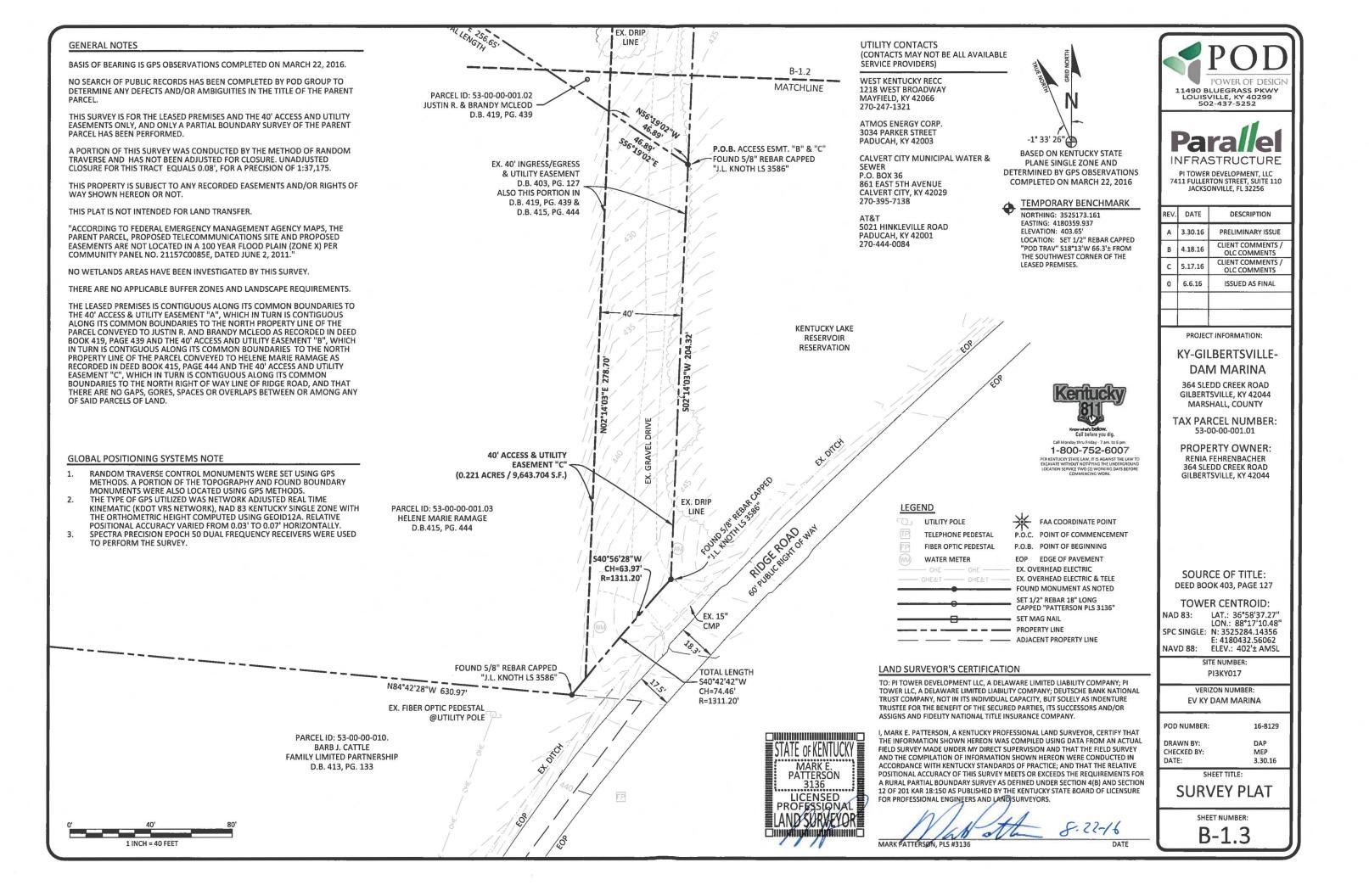
SHEET NUMBER:

T-1









LEGAL DESCRIPTIONS

LEASED PREMISES

THE FOLLOWING IS A DESCRIPTION OF THE LEASED PREMISES, BEING A PART OF THE PARENT PARCEL CONVEYED TO RENIA FEHRENBACHER SET FORTH IN THAT CERTAIN QUITCLAIM DEED, DATED JANUARY 18, 2011, RECORDED JANUARY 21, 2011, IN DEED BOOK 403, PAGE 127 (PARCEL ID: 53-00-00-001.01), ALSO BEING TRACT A OF PLAT CABINET D, PAGE 81, RECORDS OF THE CLERK OF MARSHALL COUNTY, KENTUCKY, 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 22, 2016.

COMMENCING AT A FOUND 1/2" REBAR CORNER TO RENIA FEHRENBACHER (PARCEL ID: 53-00-00-001.01) AS RECORDED IN D.B. 403 PG. 127 AND CORNER TO JUSTIN R. & BRANDY MCLEOD (PARCEL ID: 53-00-00-001.02) AS RECORDED IN D.B. 419, PG. 439 AND IN THE WEST LINE OF KENTUCKY LAKE RESERVOIR RESERVATION, SAID REBAR IS NO2"14'03E 466.72' FROM A FOUND 5/8" REBAR CAPPED "J.L. KNOTH LS 2586" CORNER TO SAID MCLEOD AND HELENE MARIE RAMAGE (PARCEL ID: 53-00-00-001.03) AS RECORDED IN D.B. 415, PG. 444; THENCE WITH THE LINE OF SAID FEHRENBACHER AND KY RESERVOIR NO2"13'40"E 85.21' TO A SET 1/2" REBAR CAPPED "PATTERSON PLS 3136", HEREAFTER REFERRED TO AS A SET "IPC" AND THE TRUE POINT OF BEGINNING OF THE LEASED PREMISES; THENCE LEAVING SAID COMMON LINE AND TRAVERSING THE LANDS OF FEHRENBACHER N87"46'20"W 100.00' TO A SET IPC; THENCE NO2"13'40"E 100.00' TO A SET IPC; THENCE S87"46'20"E 100.00' TO A SET IPC; THENCE S87"46'20"E 100.00' TO A SET IPC IN SAID COMMON LINE STORM ON LINE STORM

40' / VARIABLE WIDTH ACCESS & UTILITY EASEMENT "A"

THE FOLLOWING IS A DESCRIPTION OF THE 40' / VARIABLE WIDTH ACCESS & UTILITY EASEMENT "A", BEING A PART OF THE PARENT PARCEL CONVEYED TO RENIA FEHRENBACHER SET FORTH IN THAT CERTAIN QUITCLAIM DEED, DATED JANUARY 18, 2011, RECORDED JANUARY 21, 2011, IN DEED BOOK 403, PAGE 127 (PARCEL ID: 53-00-001-001), ALSO BEING TRACT A OF PLAT CABINET D, PAGE 81, RECORDS OF THE CLERK OF MARSHALL COUNTY, KENTUCKY, 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 22, 2016.

BEGINNING AT A FOUND 1/2" REBAR CORNER TO RENIA FEHRENBACHER (PARCEL ID: 53-00-00-001.01) AS RECORDED IN D.B. 403 PG. 127 AND CORNER TO JUSTIN R. & BRANDY MCLEOD (PARCEL ID: 53-00-00-001.02) AS RECORDED IN D.B. 419, PG. 439 AND IN THE WEST LINE OF KENTUCKY LAKE RESERVOIR RESERVATION, SAID REBAR IS NO2°14'03E 466.72' FROM A FOUND 5/8" REBAR CAPPED "J.L. KNOTH LS 3586" CORNER TO SAID MCLEOD AND HELENE MARIE RAMAGE (PARCEL ID: 53-00-00-001.03) AS RECORDED IN D.B. 415, PG. 444; THENCE WITH THE LINE OF FEHRENBACHER AND MCLEOD N84*43'12"W 40.06' TO A POINT; THENCE LEAVING SAID COMMON LINE AND TRAVERSING THE LANDS OF FEHRENBACHER N02°13'40"E 18.08' TO A POINT; THENCE WITH THE CHORD OF A CURVE TO THE LEFT HAVING A RADIUS OF 25.00', M42*46'20"W 35.36' TO A POINT; THENCE N02*13'40"E 40.00' TO A SET 1/2" REBAR CAPPED "PATTERSON PLS 3136", HEREAFTER REFERRED TO AS A SET "IPC" AND BEING THE SOUTHWEST CORNER OF THE LEASED PREMISES; THENCE WITH SAID PREMISES S87*46'20"E 100.00' TO A SET 1PC; THENCE LEAVING SAID PREMISES AND WITH THE LINE OF SAID FEHRENBACHER AND KY RESERVOIR S02°13'40"W 85.21' TO THE POINT OF BEGINNING CONTAINING 0.135 ACRES, 5,899.956 SQUARE FEET AS PER SURVEY BY MARK E. PATTERSON, PLS #3136 DATED MARCH 22, 2016.

40' ACCESS & UTILITY EASEMENT "B"

THE FOLLOWING IS A DESCRIPTION OF THE 40' ACCESS & UTILITY EASEMENT "B", BEING A PART OF THE PARENT PARCEL CONVEYED TO JUSTIN R. & BRANDY MCLEOD SET FORTH IN THAT CERTAIN GENERAL WARRANTY DEED, DATED APRIL 8, 2013, RECORDED APRIL 12, 2013, IN DEED BOOK 419, PAGE 439 (PARCEL ID: 53-00-00-001.02), RECORDS OF THE CLERK OF MARSHALL COUNTY, KENTUCKY, 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 22, 2016

BEGINNING AT A FOUND 5/8" REBAR CAPPED "J.L. KNOTH LS 3586" CORNER TO HELENE MARIE RAMAGE (PARCEL ID: 53-00-00-001.03) AS RECORDED IN D.8. 415, PG. 444 AND CORNER TO JUSTIN R. & BRANDY MCLEOD (PARCEL ID: 53-00-00-001.02) AS RECORDED IN D.8. 419, PG. 439 AND IN THE WEST LINE OF KENTUCKY LAKE RESERVOIR RESERVATION, SAID REBAR IS N02°14′03"E 204.32" FROM A FOUND 5/8" REBAR CAPPED "J.L. KNOTH LS 3586" CORNER TO SAID RAMAGE AND IN THE NORTH RIGHT OF WAY OF RIDGE ROAD; THENCE WITH THE LINE OF RAMAGE AND MCLEOD N56°19′02"W 46.89' TO A POINT; THENCE LEAVING SAID LINE AND TRAVERSING THE LANDS OF MCLEOD N02°14′03"E 444.38' TO A POINT IN THE COMMON LINE OF SAID FEHRENBACHER AND MCLEOD; THENCE WITH SAID COMMON LINE S84°43'12"E 40.06' TO A FOUND 1/2" REBAR; THENCE 502°14′03"W 466.72' TO THE POINT OF BEGINNING CONTAINING 0.418 ACRES, 18,221.837 SQUARE FEET AS PER SURVEY BY MARK E. PATTERSON, PLS #3136 DATED MARCH 22, 2016.

40' ACCESS & UTILITY EASEMENT "C"

THE FOLLOWING IS A DESCRIPTION OF THE 40' ACCESS & UTILITY EASEMENT "C", BEING A PART OF THE PARENT PARCEL CONVEYED TO HELENE MARIE RAMAGE SET FORTH IN THAT CERTAIN DEED OF CONVEYANCE, DATED SEPTEMBER 18, 2012, RECORDED SEPTEMBER 21, 2012, IN DEED BOOK 415, PAGE 444 (PARCEL ID: 53-00-00-001.03), RECORDS OF THE CLERK OF MARSHALL COUNTY, KENTUCKY, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE FOLLOWING IS A DESCRIPTION OF AN ACCESS & UTILITY EASEMENT TO BE GRANTED FROM THE PROPERTY OF HELENE MARIE RAMAGE (PARCEL ID: 53-00-00-001.03) AS RECORDED IN D.B. 415, PG. 444, IN THE OFFICE OF THE CLERK OF MARSHALL COUNTY, KENTUCKY, 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 22, 2016.

BEGINNING AT A FOUND 5/8" REBAR CAPPED "J.L. KNOTH LS 3586" CORNER TO HELENE MARIE RAMAGE (PARCEL ID: 53-00-00-001.03) AS RECORDED IN D.B. 415, PG. 444 AND CORNER TO JUSTIN R. & BRANDY MCLEOD (PARCEL ID: 53-00-00-001.02) AS RECORDED IN D.B. 419, PG. 439 AND IN THE WEST LINE OF KENTUCKY LAKE RESERVOIR RESERVATION, SAID REBAR IS SO2*14'03"W 466.72" FROM A FOUND 5/8" REBAR CAPPED "J.L. KNOTH LS 3586" CORNER TO SAID MCLEOD AND CORNER TO RENIA FEHRENBACHER (PARCEL ID: 53-00-00-001.01) AS RECORDED IN D.B. 403 PG. 127; THENCE WITH THE LINE OF RAMAGE AND KY RESERVOIR SO2*14'03"W 204.32' FOUND 5/8" REBAR CAPPED "J.L. KNOTH LS 3586" IN THE NORTH RIGHT OF WAY OF RIDGE ROAD; THENCE WITH SAID RIGHT OF WAY, WITH THE CHORD OF A CURVE TO THE LEFT HAVING A RADIUS OF 1311.20', \$40°56'28"W 63.97' TO A POINT; THENCE LEAVING SAID RIGHT OF WAY NO2*14'03"E 278.70' TO THE COMMON LINE OF RAMAGE AND MCLEOD; THENCE WITH SAID COMMON LINE 556*19'02"E 46.89' TO THE POINT OF BEGINNING CONTAINING 0.221 ACRES, 9,643.704 SQUARE FEET AS PER SURVEY BY MARK E. PATTERSON, PLS #3136 DATED MARCH 22, 2016.

TITLE OF COMMITMENT

THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY POD GROUP, LLC. AND AS SUCH WE ARE NOT RESPONSIBLE FOR THE INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE, UNRECORDED EASEMENTS, AUGMENTING EASEMENTS, IMPLIED OR PRESCRIPTIVE EASEMENTS, OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE. INFORMATION REGARDING THESE MATTERS WERE GAINED FROM FIDELITY NATIONAL TITLE INSURANCE COMPANY, COMMITMENT NO. 22540380, DATED MARCH 9, 2016 AT 8:00 AM. THE FOLLOWING COMMENTS ARE IN REGARD TO SAID COMMITMENT AND THE NUMBERS IN THE COMMENTS CORRESPOND TO THE NUMBERING SYSTEM IN SAID COMMITMENT.

POD GROUP, LLC HAS RECEIVED AND REVIEWED THE TITLE COMMITMENT PREPARED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, DATED EFFECTIVE MARCH 9, 2016, BEING COMMITMENT NO. 22540380 FOR THE PARENT PARCEL, TO DETERMINE THE IMPACTS OF EXISTING TITLE EXCEPTIONS

SCHEDULE B - SECTION II

- DEFECTS, LIENS, ENCUMBRANCES, ADVERSE CLAIMS OR OTHER MATTERS, IF ANY, CREATED, FIRST APPEARING IN THE PUBLIC RECORDS OR ATTACHING SUBSEQUENT TO THE EFFECTIVE DATE HEREOF BUT PRIOR TO THE DATE THE PROPOSED INSURED ACQUIRES FOR VALUE OF RECORD THE ESTATE OR INTEREST OR MORTGAGE THEREON COVERED BY THIS COMMITMENT. (CANNOT BE PLOTTED, THEREFORE POWER OF DESIGN GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM.)
- RIGHTS OR CLAIMS OF PARTIES IN POSSESSION NOT SHOWN BY THE PUBLIC RECORDS. (CANNOT BE PLOTTED, THEREFORE POWER OF DESIGN GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM.)
- 3. EASEMENTS, OR CLAIMS OF EASEMENTS, NOT SHOWN BY THE PUBLIC RECORDS. (CANNOT BE PLOTTED, THEREFORE POWER OF DESIGN GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM.)
- 4. 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. (NOT A SURVEY MATTER, THEREFORE POWER OF DESIGN GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM.)
- ANY ENCROACHMENT, ENCUMBRANCE, VIOLATION, VARIATION, OR ADVERSE CIRCUMSTANCE AFFECTING THE TITLE THAT WOULD BE DISCLOSED BY AN ACCURATE AND COMPLETE LAND SURVEY OF THE LAND. (CANNOT BE PLOTTED, THEREFORE POWER OF DESIGN GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM.)
- TAXES AND SPECIAL ASSESSMENTS WHICH ARE NOT SHOWN AS EXISTING LIENS BY THE PUBLIC RECORDS. (NOT A SURVEY MATTER, THEREFORE POWER OF DESIGN GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM.)
- TAXES FOR THE YEAR 2016 AND SUBSEQUENT YEARS, A LIEN NOT YET DUE AND PAYABLE. (NOT A SURVEY MATTER, THEREFORE POWER OF DESIGN GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM.)
- PLAT RECORDED ON 05/17/2001 IN PLAT CABINET D, PAGE 81. (PLAT IS APPLICABLE TO THE PARENT PARCEL, PARCEL
 ID: 53-00-00-001.01 AND APPLIES TO THE LEASED PREMISES AND THE ACCESS & UTILITY EASEMENT "A".)
- MORTGAGE FROM MONTY MONTY AND RENIA LYNN FEHRENBACHER, GRANTOR(S), IN FAVOR OF U.S. BANK NATIONAL ASSOCIATION, DATED 09/24/2014, AND RECORDED 10/17/2014 IN MORTGAGE BOOK 803, PAGE 17, IN THE ORIGINAL AMOUNT OF \$100,000.00. (MORTGAGE IS APPLICABLE TO THE PARENT PARCEL, PARCEL ID: 53-00-00-001.01 AND APPLIES TO THE LEASED PREMISES AND THE ACCESS & UTILITY EASEMENTS.)

PATTERSON

3136

LICENSED PROFESSIONAL

TE OFKENTUCKY

10. POSSIBLE ROLLBACK TAXES. (NOT A SURVEY MATTER, THEREFORE POWER OF DESIGN GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM.)

LAND SURVEYOR'S CERTIFICATION

TO: PI TOWER DEVELOPMENT LLC, A DELAWARE LIMITED LIABILITY COMPANY; PI TOWER LLC, A DELAWARE LIMITED LIABILITY COMPANY; DEUTSCHE BANK NATIONAL TRUST COMPANY, NOT IN ITS INDIVIDUAL CAPACITY, BUT SOLELY AS INDENTURE TRUSTEE FOR THE BENEFIT OF THE SECURED PARTIES, ITS SUCCESSORS AND/OR ASSIGNS AND FIDELITY NATIONAL TITLE INSURANCE COMPANY.

I, MARK E. PATTERSON, A KENTUCKY PROFESSIONAL LAND SURVEYOR, CERTIFY THAT THE INFORMATION SHOWN HEREON WAS COMPILED USING DATA FROM AN ACTUAL FIELD SURVEY MADE UNDER MY DIRECT SUPERVISION AND THAT THE FIELD SURVEY AND THE COMPILATION OF INFORMATION SHOWN HEREON WERE CONDUCTED IN ACCORDANCE WITH KENTUCKY STANDARDS OF PRACTICE; AND THAT THE RELATIVE POSITIONAL ACCURACY OF THIS SURVEY MEETS OR EXCEEDS THE REQUIREMENTS FOR A RURAL PARTIAL BOUNDARY SURVEY AS DEFINED UNDER SECTION 4(B) AND SECTION 12 OF 201 KAR 18:150 AS PUBLISHED BY THE KENTUCKY STATE BOARD OF LICENSURE FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS.

MARK PATTERSON, PLS #3136

DATE





PI TOWER DEVELOPMENT, LLC 7411 FULLERTON STREET, SUITE 110 JACKSONVILLE, FL 32256

	7 TO STATE OF THE	
REV.	DATE	DESCRIPTION
Α	3.30.16	PRELIMINARY ISSUE
В	4.18.16	CLIENT COMMENTS / OLC COMMENTS
С	5.17.16	CLIENT COMMENTS / OLC COMMENTS
0	6.6.16	ISSUED AS FINAL

PROJECT INFORMATION:

KY-GILBERTSVILLE-DAM MARINA

364 SLEDD CREEK ROAD GILBERTSVILLE, KY 42044 MARSHALL, COUNTY

TAX PARCEL NUMBER: 53-00-00-001.01

PROPERTY OWNER: RENIA FEHRENBACHER 364 SLEDD CREEK ROAD GILBERTSVILLE, KY 42044

SOURCE OF TITLE: DEED BOOK 403, PAGE 127

TOWER CENTROID:

NAD 83: LAT.: 36°58'37.27" LON.: 88°17'10.48' SPC SINGLE: N: 3525284.14356 E: 4180432.56062 NAVD 88: ELEV:: 402'± AMSL

> SITE NUMBER PI3KY017

VERIZON NUMBER: EV KY DAM MARINA

16-8129

DAP

POD NUMB

DRAWN BY: CHECKED BY: DATE:

KED BY: MEP : 3.30.16

SHEET TITLE:

SURVEY PLAT

SHEET NUMBER:

B-1.4

PARENT PARCEL LEGAL DESCRIPTION (NOT FIELD SURVEYED) DEED BOOK 419, PAGE 439

A TRACT OF LAND IN MARSHALL COUNTY KENTUCKY, LYING 1± MILE EASTERLY OF U.S. HIGHWAY 641 AND 0.2± MILES SOUTHERLY OF THE SLEDD CREEK ROAD AND ON THÉ WEST SIDE OF THE RIDGE ROAD AND BETTER DESCRIBED AS

BEGINNING AT THE SOUTHEAST CORNER, A 5/8" IRON PIN, SET IN THE WEST LINE OF THE KENTUCKY LAKE RESERVOIR RESERVATION BOUNDARY, SAID PIN BEING 30.00 FEET WESTERLY OF THE CENTER THE TRAVEL-WAY THE RIDGE ROAD; THENCE: AND WITH THE FAST LINE OF THE KENTUCKY LAKE RESERVOIR RESERVATION BOUNDARY, N2°22'02"E 204.32 FEET TO A 5/8" IRON PIN SET. THE TRUE POINT OF BEGINNING, SAID PIN BEING THE NEWLY ESTABLISHED CORNER OF THE JAMES HUNTER AND JENNIFER COURSEY PROPERTY, (DEED BOOK 359 PAGE 484); THENCE; AND FROM THE TRUE POINT OF BEGINNING AND WITH THE NEW DIVISION LINE WITH COURSEY, N56°11'02"W AND CROSSING THE ORIGINAL BOUNDARY WITH COURSEY AT 231.28 FEET, 256.65 FEET TO A 42" DOUBLE OAK TREE; THENCE; N79°53'03"W 178.48 FEET TO A 5/8" IRON PIN SET; THENCE; S81°03'39"W AND CROSSING THE ORIGINAL BOUNDARY WITH COURSEY AT 190.75 FEET, 267.90 FEET TO A 5/8" IRON PIN, SET IN THE EAST LINE OF THE RENIA LYNN FEHRENBACHER PROPERTY, (DEED BOOK 403 PAGE 127); THENCE; AND WITH THE EAST LINE OF FEHRENBACHER, N5°25'53"E AND PASSING THROUGH THE ORIGINAL CORNER WITH COURSEY AT 15.13 FEET, 395.75 FEET TO AN EXISTING 1/2" IRON PIN FOUND IN THE SOUTH LINE OF ANOTHER FEHRENBACHER PROPERTY, (DEED BOOK 319 PAGE 419); THENCE; AND WITH FEHRENBACHER, S84°35'12"E 638.25 FEET TO A 1/2" IRON PIN, FOUND IN THE WEST BOUNDARY OF THE KENTUCKY LAKE RESERVOIR RESERVATION TRACT; THENCE; AND WITH THE WEST LINE OF THE KENTUCKY LAKE RESERVATION, S02°22'02"W AND PASSING THROUGH THE ORIGINAL CORNER WITH COURSEY AT A 5/8" IRON PIN, SET AT 346.00 FEET, 466.72 FEET TO THE BEGINNING CONTAINING 5.5007 ACRES AND BEING THAT PORTION OF DEED BOOK 359 PAGE 488 AND DEED BOOK 359 PAGE 484 AS SURVEYED BY JAMES L. KNOTH PROFESSIONAL LAND SURVEYOR NO. 3585 ON

THERE IS ALSO A 40 FOOT EASEMENT FOR INGRESS AND EGRESS TO THE RIDGE ROAD AND BETTER DESCRIBED AS

BEGINNING AT THE SOUTHEAST CORNER, A 5/8" IRON PIN, SET IN THE WEST LINE OF THE KENTUCKY LAKE RESERVOIR RESERVATION BOUNDARY, SAID PIN BEING 30.00 FEET WESTERLY OF THE CENTER THE TRAVEL-WAY THE RIDGE ROAD; THENCE; AND AROUND A CURVE TO THE LEFT WITH A RADIUS OF 1,311.20 FEET, AND AN ARC LENGTH OF 63.98 FEET, BUT IS BEST DESCRIBED AS A CHORD WHICH BEARS S41°04'15"W 63.97 FEET TO A POINT; THENCE; N2°22'02"E 278.71 FEET TO A POINT IN THE SOUTH BOUNDARY OF SAID DAVIS, (DEED BOOK 359 PAGE 488); THENCE; AND WITH THE SOUTH LINE OF DAVIS, S56°11'02"E 46.89 FEET TO A 5/8" IRON PIN, SET IN THE WEST BOUNDARY OF THE SAID KENTUCKY LAKE RESERVOIR RESERVATION; THENCE; AND WITH THE RESERVOIR RESERVATION BOUNDARY, S2°22'02"W 204.32 FEET TO THE BEGINNING CONTAINING 0.2214 ACRES AND BEING THAT PORTION OF THE 40 FOOT EASEMENT DESCRIBED IN DEED BOOK 359 PAGE 488 AND DEED BOOK 359 PAGE 484 AS SURVEYED BY JAMES L. KNOTH PROFESSIONAL LAND SURVEYOR NO. 3585 ON AUGUST 7, 2011.

PARENT PARCEL LEGAL DESCRIPTION (NOT FIELD SURVEYED) DEED BOOK 415, PAGE 444

A TRACT OF LAND IN MARSHALL COUNTY KENTUCKY, LYING 1± MILE EASTERLY OF U.S. HIGHWAY 641 AND 0.2± MILES SOUTHERLY OF THE SLEDD CREEK ROAD AND ON THÉ WEST SIDE OF THE RIDGE ROAD AS SHOWN ON SLIDE F-106, AND

BEGINNING AT THE SOUTHEAST CORNER, A 5/8" IRON PIN, SET IN THE WEST LINE OF THE KENTUCKY LAKE RESERVOIR RESERVATION BOUNDARY, SAID PIN BEING 30.00 FEET WESTERLY OF THE CENTER OF THE TRAVELWAY OF RIDGE ROAD; THENCE AROUND A CURVE TO THE LEFT WITH A RADIUS OF 1,311.20 FEET AND AN ARC LENGTH OF 74.47 FEET, BUT BEST DESCRIBED AS CHORD WHICH BEARS S40° 50'56"W 74.46 FEET TO A 5/8 INCH IRON PIN SET 30.00 FEET WESTERLY OF CENTER OF RIDGE ROAD, SAID PIN BEING THE NORTHEAST CORNER OF THE CHARLES AND BARBARA THORN (DEED BOOK 377. PAGE 328): THENCE WITH THE NORTH LINE OF THORN N84°34'28"W 630.97 FEET TO AN EXISTING 1/2 INCH IRON PIN FOUND, SAID PIN BEING THE SOUTHEAST CORNER OF THE RANIA LYNN FEHRENBACHER PROPERTY (DEED BOOK 403 PAGE 127): THENCE WITH THE EAST LINE OF FEHRENBACHER NS°25'53"E 334.87 FEET TO A 5/8 INCH IRON PIN SET, SAID PIN BEING THE NEWLY ESTABLISHED DIVISION CORNER WITH THE ADAM AND LAURA DAVIS PROPERTY (DEED BOOK 359, PAGE 488); THENCE WITH THE NEW DIVISION LINE ESTABLISHED THIS DAY N81°03'39"E, AND CROSSING THE ORIGINAL BOUNDARY LINE WITH DAVIS AT 77.15 FEET, 267.90 FEET TO A 5/8 INCH IRON PIN SET; THENCE S79°53'03"E 178.48 FEET TO A 42 INCH DOUBLE OAK TREE; THENCE S56°11'02"E, AND CROSSING THE ORIGINAL BOUNDARY LINE WITH DAVIS AT 25.37 FEET, 256.65 FEET TO A 5/8 INCH IRON PIN SET IN THE WEST BOUNDARY OF THE SAID KENTUCKY LAKE RESERVOIR RESERVATION: THENCE WITH THE RESERVOIR RESERVATION BOUNDARY S2°22'02"W 204.32 FEET TO THE BEGINNING; CONTAINING 5.5008 ACRES AND BEING THAT PORTION OF DEED BOOK 359, PAGE 488, AND DEED BOOK 359, PAGE 484, AS SURVEYED BY JAMES L. KNOTH PROFESSIONAL LAND SURVEYOR NO. 3585 ON AUGUST 7, 2011.

THIS PROPERTY IS SUBJECT TO A 40-FOOT EASEMENT FOR INGRESS AND EGRESS IN FAVOR OF DEED BOOK 359, PAGE 488, AND DEED BOOK 319, PAGE 419, AND BETTER DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER, A 5/8 INCH IRON PIN, SET IN THE WEST LINE OF THE KENTUCKY LAKE RESERVOIR RESERVATION BOUNDARY, SAID PIN BEING 30.00 FEET WESTERLY OF THE CENTER THE TRAVEL-WAY OF RIDGE ROAD; THENCE AROUND A CURVE TO THE LEFT WITH A RADIUS OF 1,311.20 FEET, AND AN ARC LENGTH OF 63.98 FEET, BUT IS BEST DESCRIBED AS A CHORD WHICH BEARS S41°04'15"W 63.97 FEET TO A POINT; THENCE; N2°22'02"E 278.71 FEET TO A POINT IN THE SOUTH BOUNDARY OF SAID DAVIS, (DEED BOOK 359 PAGE 488); THENCE WITH THE SOUTH LINE OF DAVIS, S56°11'02"E 46.89 FEET TO A 5/8" IRON PIN, SET IN THE WEST BOUNDARY OF THE SAID KENTUCKY LAKE RESERVOIR RESERVOIR RESERVATION BOUNDARY, S2°22'02"W 204.32 FEET TO THE BEGINNING CONTAINING 0.2214 ACRES AND BEING THAT PORTION OF THE 40 FOOT EASEMENT DESCRIBED IN DEED BOOK 359 PAGE 488 AND DEED BOOK 359 PAGE 484 AS SURVEYED BY JAMES L. KNOTH PROFESSIONAL LAND SURVEYOR NO. 3585 ON AUGUST 7, 2011.

PARENT PARCEL LEGAL DESCRIPTION (NOT FIELD SURVEYED) DEED BOOK 403, PAGE 127

BEING A TRACT OF LAND LOCATED ON THE WESTERLY SIDE OF A ROAD KNOWN AS RIDGE ROAD AND JUST SOUTH OF THE SLEDD CREEK ROAD NEAR THE GILBERTSVILLE COMMUNITY OF MARSHALL COUNTY, KENTUCKY, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A ONE-HALF INCH DIAMETER STEEL ROAD THIRTY INCHES LONG WITH A YELLOW PLASTIC CAP STAMPED "FHT ENGRS KRLS 1842" (HEREINAFTER REFERRED TO AS A STEEL ROAD AND CAP) SET WHERE THE SOUTHERLY LINE OF THE HEREIN DESCRIBED TRACT OF LAND INTERSECTS THE EASTERLY LINE OF THE PROPERTY FROM WHICH THIS TRACT IS SUBDIVIDED, SAID EASTERLY LINE ALSO BEING THE WESTERLY LINE OF THE KENTUCKY LAKE RESERVOIR RESERVATION BOUNDARY LINE WITH SAID STEEL ROAD AND CAP BEING LOCATED N. 02° 21' 40" E A DISTANCE OF 671.04 FEET FROM AN ANGLE IRON MARKER FOUND WHERE SAID WESTERLY LINE INTERSECTS THE NORTHERLY RIGHT-OF-WAY LINE OF RIDGE ROAD; THENCE FROM SAID STEEL ROD AND CAP AFORESAID AND THE POINT OF BEGINNING PROCEED N. 84° 3' 12" W. WITH A NEW DIVISION LINE A DISTANCE OF 1,398.09 FEET TO A STEEL ROD AND CAP SET ON THE WESTERLY LINE OF THE PROPERTY FROM WHICH THIS TRACT IS SUBDIVIDED, SAID WESTERLY LINE ALSO BEING THE EASTERLY LINE OF TRACT NO. 4 OF THE PROPERTY DESCRIBED IN DEED BOOK 173, PAGE 86, OF THE MARSHALL COUNTY CLERK 'S OFFICE OWNED BY WILLIAM J. COLBURN, WILLIAM RICHARD COLBURN AND ROBERT H. FLORENCE AS INDICATED THEREIN; THENCE NORTH 12° 30' 26" E ALÓNG AND WITH SAID EASTERLY LINE 765.60 FEET TO A STEEL ROD AND CAP PREVIOUSLY SET AT AN EXISTING FENCE CORNER POST AND ON THE SOUTHERLY BOUNDARY LINE OF THE KENTUCKY DAM VILLAGE STATE RESORT PARK; THENCE S. 71° 51' 00" E. ALONG AND WITH SAID SOUTHERLY LINE 703.00 FEET TO A STEEL ROD AND CAP PREVIOUSLY SET BESIDE A CROSS-TIE POST IN THE LINE OF A FENCE; THENCE S. 86° 00' 51" E. CONTINUING WITH SAID SOUTHERLY LINE 585.00 FEET TO AN ANGLE IRON MARKER FOUND AT T.V.A. CORNER 6-1 ON THE WESTERLY LINE OF THE AFORESAID KENTUCKY LAKE RESERVOIR RESERVATION BOUNDARY LINE; THENCE S. 02° 21' 40" W. WITH SAID WESTERLY LINE, 620.20 FEET TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT

THE AFORESAID TRACT OF LAND CONTAINS 871.887 SQUARE FEET OR 20.016 ACRES AND IS SUBJECT TO THE LIMITATIONS, COVENANTS, RESTRICTIONS AND EASEMENTS SHOWN IN THE DEED FROM USA-TVA TO LUTHER DRAFFEN, AN EASEMENT OF UNKNOWN WIDTH FOR A WEST KENTUCKY RURAL ELECTRIC COOPERATIVE AERIAL ELECTRICAL LINE LOCATED ACROSS THE NORTHERN PORTION OF SAID PROPERTY AND ANY OTHER EASEMENTS, RESTRICTIONS, OR COVENANTS THAT MAY BE OF PUBLIC RECORD

SUBJECT TO AND TOGETHER WITH A FORTY FOOT WIDE PERPETUAL EASEMENT FOR INGRESS, EGRESS, AND UTILITY COMPANY INSTALLATION PURPOSES, SAID EASEMENT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEASTERLY CORNER OF THE AFORESAID 20.016 ACRE TRACT; THENCE S. 02° 21' 40" W. ALONG AND WITH THE EASTERLY LINE OF THE AFORESAID PARENT TRACT, 671.04 FEET TO AN ANGLE IRON MARKER FOUND ON THE NORTHERLY RIGHT-OF-WAY LINE OF RIDGE ROAD ON THE ARC OF A CURVE THAT IS CONCAVE TO THE SOUTHEAST; THENCE WITH SAID NORTHERLY RIGHT-OF-WAY LINE ALONG THE ARC OF A CURVE NON-TANGENT TO THE AFORESAID EASTERLY LINE AND HAVING A RADIUS LENGTH OF 1,368.37 FEET, A CHORD LENGTH OF 63.97 FEET WITH A BEARING ON THE CHORD OF S. 41° 03' 58" W. A DISTANCE OF 63.97 FEET TO THE INTERSECTION WITH THE WESTERLY LINE OF THE HEREIN DESCRIBED EASEMENT; THENCE N. 02° 21' 40" E. LEAVING SAID NORTHERLY RIGHT-OF-WAY LINE AND WITH A LINE NON-TANGENT TO THE AFORESAID CURVE, 723.09 FEET TO THE SOUTHERLY LINE OF THE AFORESAID 20.016 ACRE TRACT; THENCE S. 84° 35′ 12″ E ALONG AND WITH SAID SOUTHERLY LINE, 40.06 FEET TO THE POINT OF BEGINNING AND CONTAINING 27,867 SQUARE FEET OR 0.640 ACRES.

LAND SURVEYOR'S CERTIFICATION

TO: PI TOWER DEVELOPMENT LLC, A DELAWARE LIMITED LIABILITY COMPANY; PI TOWER LLC. A DELAWARE LIMITED LIABILITY COMPANY: DEUTSCHE BANK NATIONAL TRUST COMPANY, NOT IN ITS INDIVIDUAL CAPACITY, BUT SOLELY AS INDENTURE TRUSTEE FOR THE BENEFIT OF THE SECURED PARTIES, ITS SUCCESSORS AND/OR ASSIGNS AND FIDELITY NATIONAL TITLE INSURANCE COMPANY.

TATE OF KENTUCKY PATTERSON 3136 LICENSED PROFESSIONAL

MARK

I, MARK E. PATTERSON, A KENTUCKY PROFESSIONAL LAND SURVEYOR, CERTIFY THAT THE INFORMATION SHOWN HEREON WAS COMPILED USING DATA FROM AN ACTUAL FIELD SURVEY MADE UNDER MY DIRECT SUPERVISION AND THAT THE FIELD SURVEY AND THE COMPILATION OF INFORMATION SHOWN HEREON WERE CONDUCTED IN ACCORDANCE WITH KENTUCKY STANDARDS OF PRACTICE; AND THAT THE RELATIVE POSITIONAL ACCURACY OF THIS SURVEY MEETS OR EXCEEDS THE REQUIREMENTS FOR A RURAL PARTIAL BOUNDARY SURVEY AS DEFINED UNDER SECTION 4(B) AND SECTION 12 OF 201 KAR 18:150 AS PUBLISHED BY THE KENTUCKY STATE BOARD OF LICENSURE FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS.

MARK PATTERSON, PLS #3136

8-22-16





PI TOWER DEVELOPMENT, LLC 7411 FULLERTON STREET, SUITE 110 JACKSONVILLE, FL 32256

REV.	DATE	DESCRIPTION
Α	3.30.16	PRELIMINARY ISSUE
В	4.18.16	CLIENT COMMENTS / OLC COMMENTS
С	5.17.16	CLIENT COMMENTS / OLC COMMENTS
0	6.6.16	ISSUED AS FINAL

PROJECT INFORMATION:

KY-GILBERTSVILLE-DAM MARINA

364 SLEDD CREEK ROAD GILBERTSVILLE, KY 42044 MARSHALL, COUNTY

TAX PARCEL NUMBER: 53-00-00-001.01

PROPERTY OWNER: RENIA FEHRENBACHER 364 SLEDD CREEK ROAD GILBERTSVILLE, KY 42044

SOURCE OF TITLE: DEED BOOK 403, PAGE 127

TOWER CENTROID:

NAD 83: LAT.: 36°58'37.27" LON.: 88°17'10.48" SPC SINGLE: N: 3525284.14356 E: 4180432.56062 NAVD 88: ELEV .: 402'± AMSL

> SITE NUMBER: PI3KY017

VERIZON NUMBER: EV KY DAM MARINA

16-8129

DAP

POD NUMBER:

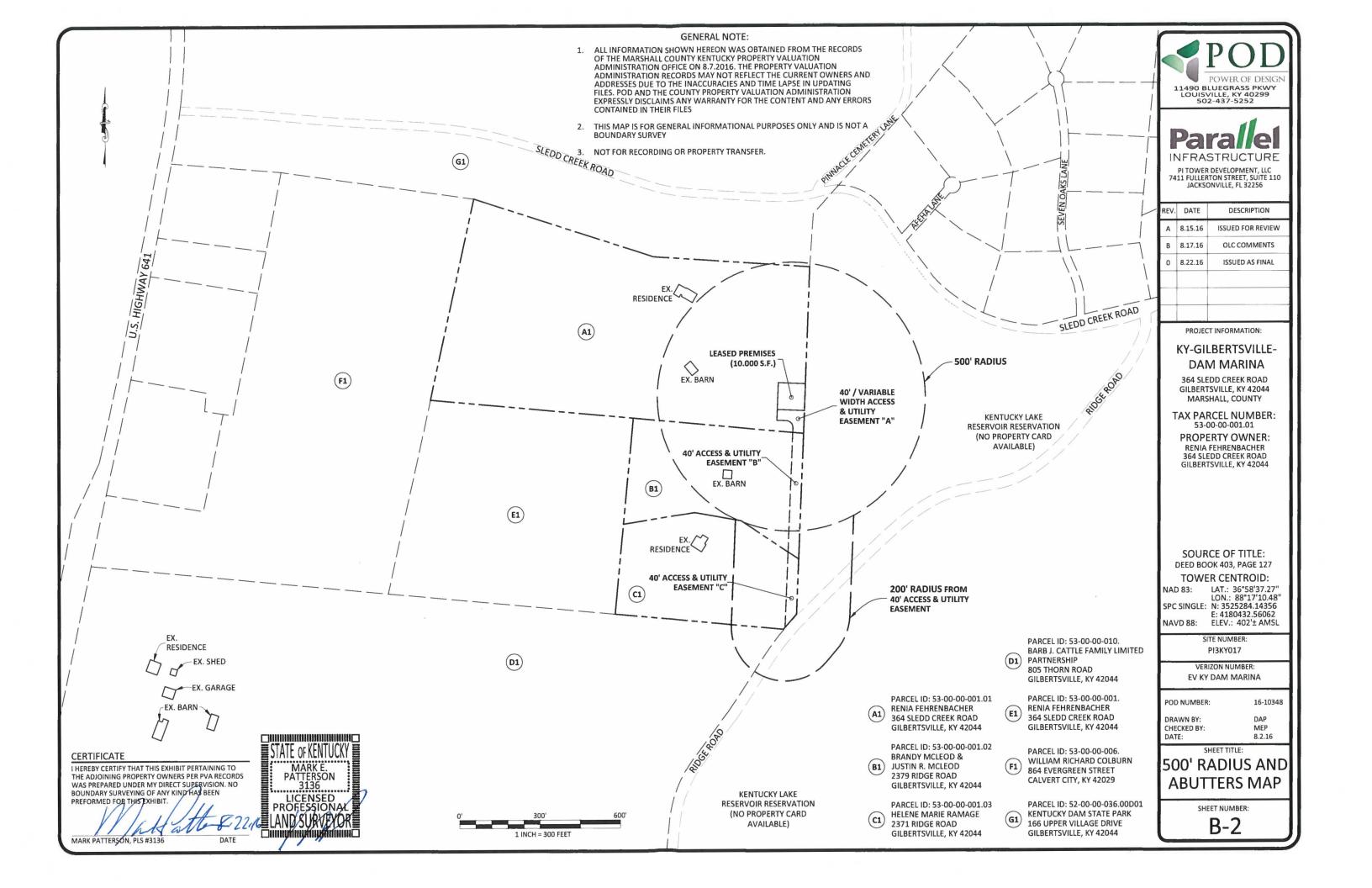
DRAWN BY: CHECKED BY: DATE:

MED 3.30.16

SHEET TITLE:

SURVEY PLAT

SHEET NUMBER:



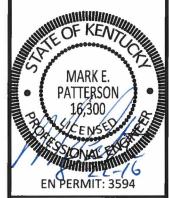
REVISION LOG

MM/DD/YY	SHEET NUMBER & NAME	DESCRIPTION OF REVISION
8/15/2016	ALL SHEETS	ISSUED FOR REVIEW
8/19/2016	T-1, B-2, TE-1, C-1A	OLC COMMENTS
8/22/2016	C-1, C-1A, C-1B	CORRECTED SCALE
8/22/2016	ALL SHEETS	ISSUED AS FINAL
	8/15/2016 8/19/2016 8/22/2016	8/15/2016 ALL SHEETS 8/19/2016 T-1, B-2, TE-1, C-1A 8/22/2016 C-1, C-1A, C-1B





PI TOWER DEVELOPMENT LLC 7411 FULLERTON ST, SUITE 110 JACKSONVILLE, FL 32256



ZONING DRAWINGS

REV.	DATE	DESCRIPTION
Α	8.15.16	ISSUED FOR REVIEW
В	8.19.16	OLC COMMENTS
0	8.22.16	ISSUED AS FINAL W/REVISIONS

SITE INFORMATION: KY-GILBERTSVILLEDAM MARINA

364 SLEDD CREEK ROAD GILBERTSVILLE, KY 42044 MARSHALL COUNTY

PI TOWER DEVELOPMENT LLC SITE #: PIKY017

VERIZON WIRELESS SITE NAME:
EV KENTUCKY DAM MARINA

POD NUMBER:

16-10347

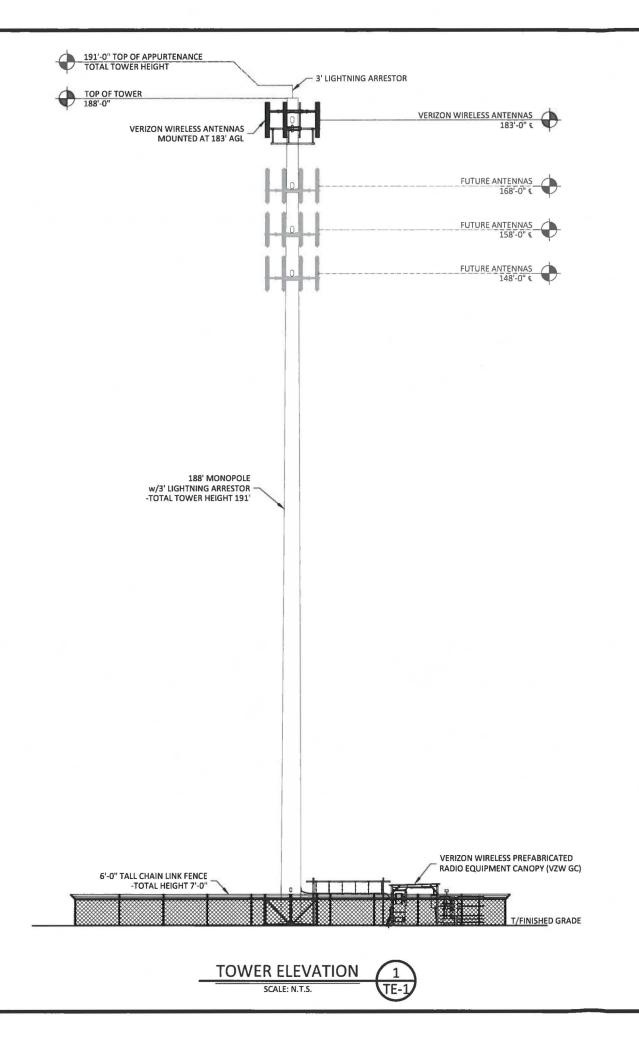
DRAWN BY: CHECKED BY: DATE: POD MEP 08.01.16

SHEET TITLE:

REVISION LOG

SHEET NUMBER:

R-1



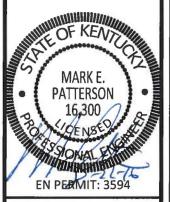
NOTE:

- IT IS THE INSTALLING CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL ANTENNA INFORMATION AGAINST FINAL RADIO ENGINEERING PLAN PROVIDED BY KENTUCKY RSA NO. 1 PARTNERSHIP d/b/a VERIZON WIRELESS (VZW GC)
- 2. MARKING AND LIGHTING ARE NOT REQUIRED.
- FAA FORM 7460-2, PART II IS REQUIRED WITHIN 5 DAYS AFTER CONSTRUCTION REACHES ITS GREATEST HEIGHT.





PI TOWER DEVELOPMENT LLC 7411 FULLERTON ST, SUITE 110 JACKSONVILLE, FL 32256



ZONING DRAWINGS

REV. DATE DESCRIPTION		DESCRIPTION	
Α	8.15.16	ISSUED FOR REVIEW	
В	8.19.16	OLC COMMENTS	
0	8.22.16	ISSUED AS FINAL w/REVISIONS	

KY-GILBERTSVILLE-DAM MARINA

364 SLEDD CREEK ROAD GILBERTSVILLE, KY 42044 MARSHALL COUNTY

PI TOWER DEVELOPMENT LLC
SITE #: PIKY017

VERIZON WIRELESS SITE NAME:
EV KENTUCKY DAM MARINA

POD NUMBER:

DRAWN BY: CHECKED BY: DATE: POD MEP 08.01.16

16-10347

SHEET TITLE:

TOWER ELEVATION

SHEET NUMBER:

TE-1



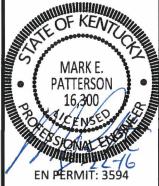
OVERALL SITE PLAN w/AERIAL OVERLAY

1-800-752-6007

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



PI TOWER DEVELOPMENT LLC 7411 FULLERTON ST, SUITE 110 JACKSONVILLE, FL 32256



ZONING **DRAWINGS**

	REV.	DATE	DESCRIPTION
П	Α	8.15.16	ISSUED FOR REVIEW
	В	8.19.16	OLC COMMENTS
	0	8.22.16	ISSUED AS FINAL W/REVISIONS

SITE INFORMATION: **KY-GILBERTSVILLE-**DAM MARINA

364 SLEDD CREEK ROAD GILBERTSVILLE, KY 42044 MARSHALL COUNTY

PI TOWER DEVELOPMENT LLC SITE #: PIKY017

VERIZON WIRELESS SITE NAME: EV KENTUCKY DAM MARINA

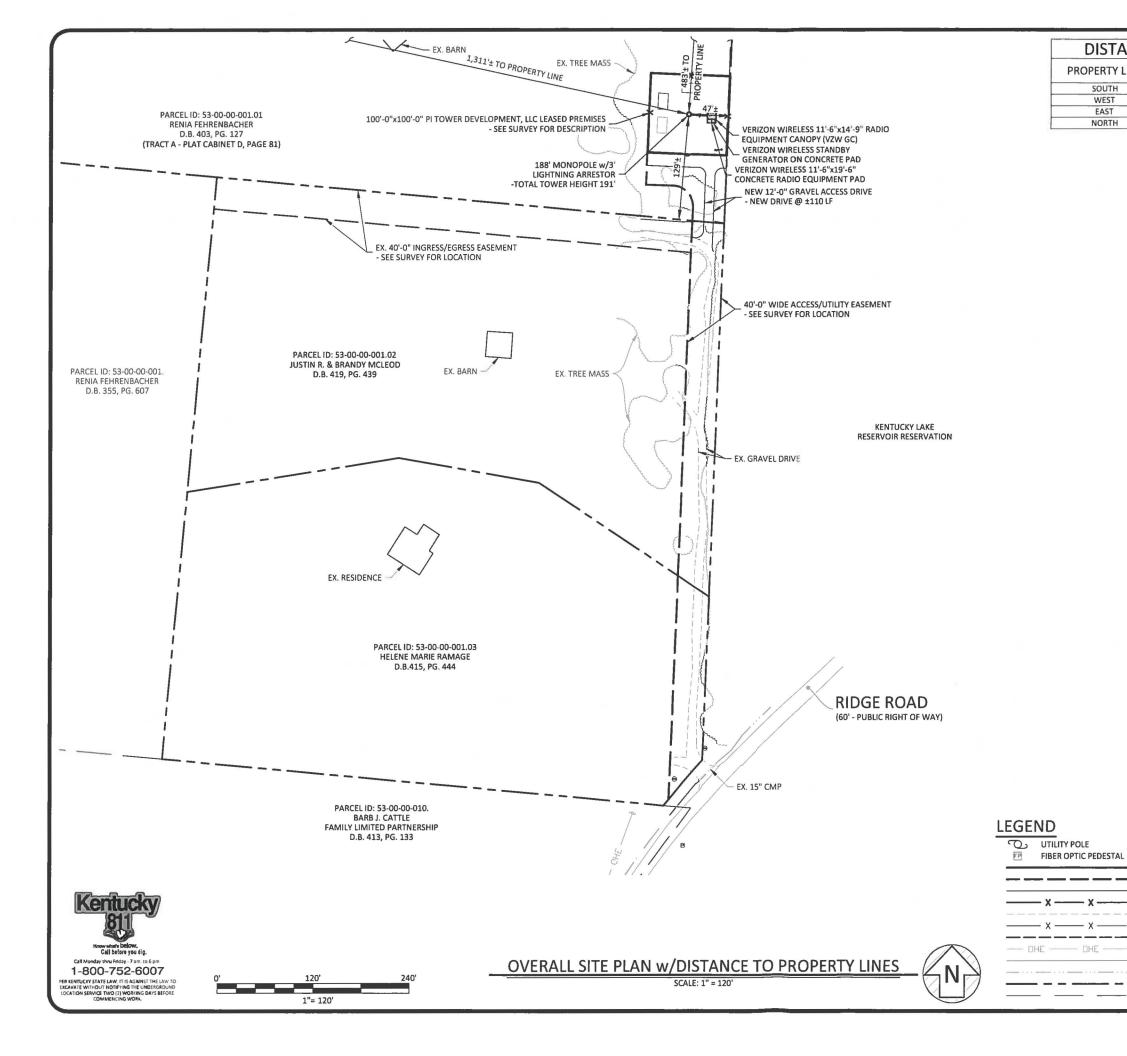
16-10347

POD MEP 08.01.16

SHEET TITLE:

OVERALL SITE PLAN w/AERIAL OVERLAY

SHEET NUMBER:

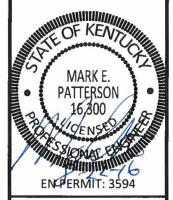


DISTANCE	S TO PROPER	TY LINES
PROPERTY LINE	EQUIPMENT PAD	GENERATOR
SOUTH	123'±	124'±
WEST	1,335'±	1,343'±
EAST	15'±	17'±
NORTH	475'±	491'±





PI TOWER DEVELOPMENT LLC 7411 FULLERTON ST, SUITE 110 JACKSONVILLE, FL 32256



ZONING DRAWINGS

REV.	DATE	DESCRIPTION
А	8.15.16	ISSUED FOR REVIEW
В	8.19.16	OLC COMMENTS
0	8.22.16	ISSUED AS FINAL w/REVISIONS

KY-GILBERTSVILLE-DAM MARINA

364 SLEDD CREEK ROAD GILBERTSVILLE, KY 42044 MARSHALL COUNTY

PI TOWER DEVELOPMENT LLC SITE #: PIKY017

VERIZON WIRELESS SITE NAME: EV KENTUCKY DAM MARINA

POD NUMBER:

16-10347

POD

DRAWN BY: CHECKED BY:

DATE:

TELEPHONE PEDESTAL

WATER METER

PROPOSED LEASE LINE

PROPOSED EASEMENT
PROPOSED GRAVEL

PROPOSED FENCE

EXISTING GRAVEL
EXISTING FENCE

--- EXISTING EASEMENT

EXISTING DITCH

PROPERTY LINE
ADJACENT PROPERTY LINE

EXISTING OVERHEAD ELECTRIC
EXISTING PAVEMENT

0

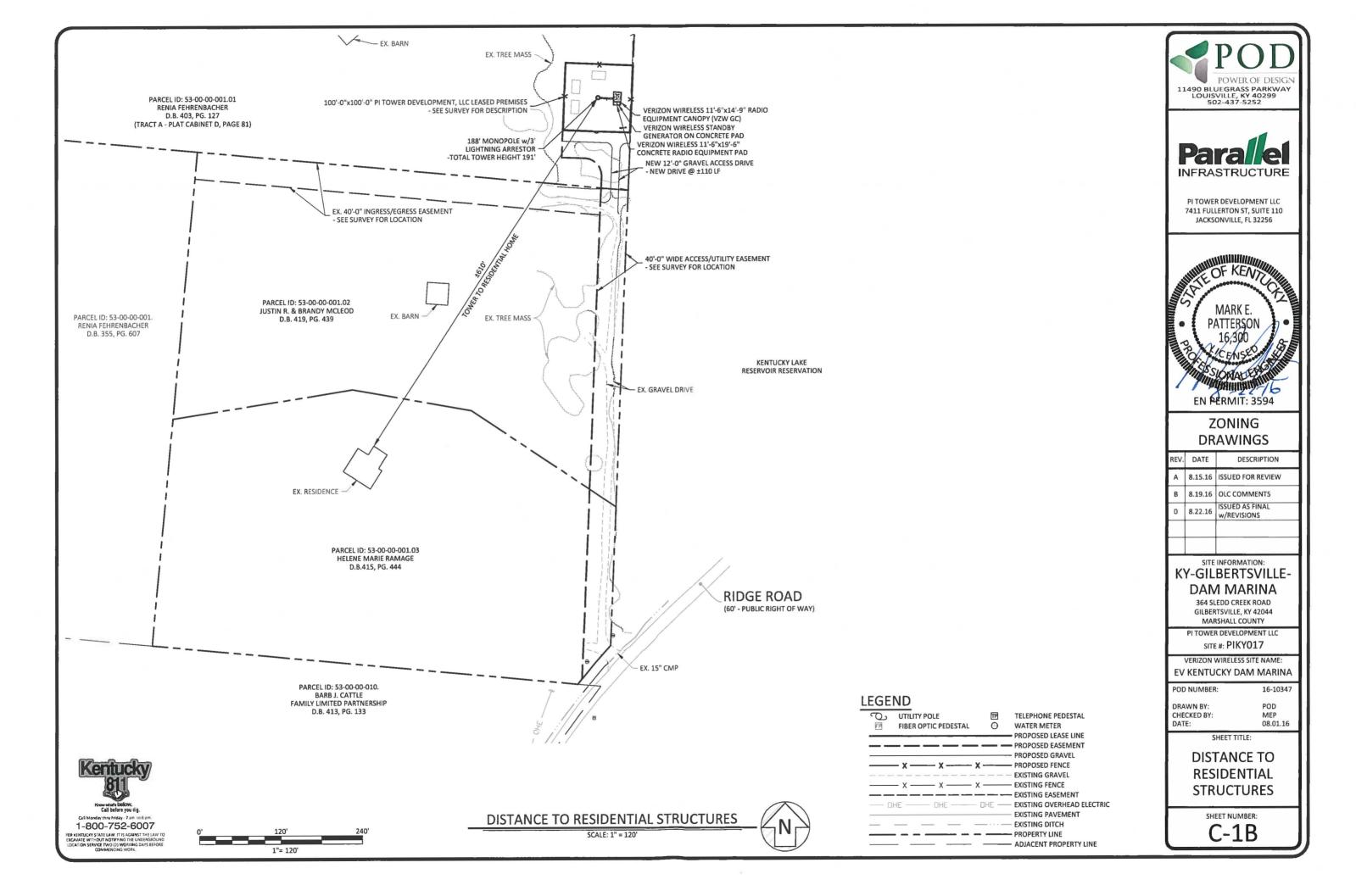
D BY: MEP 08.01.16

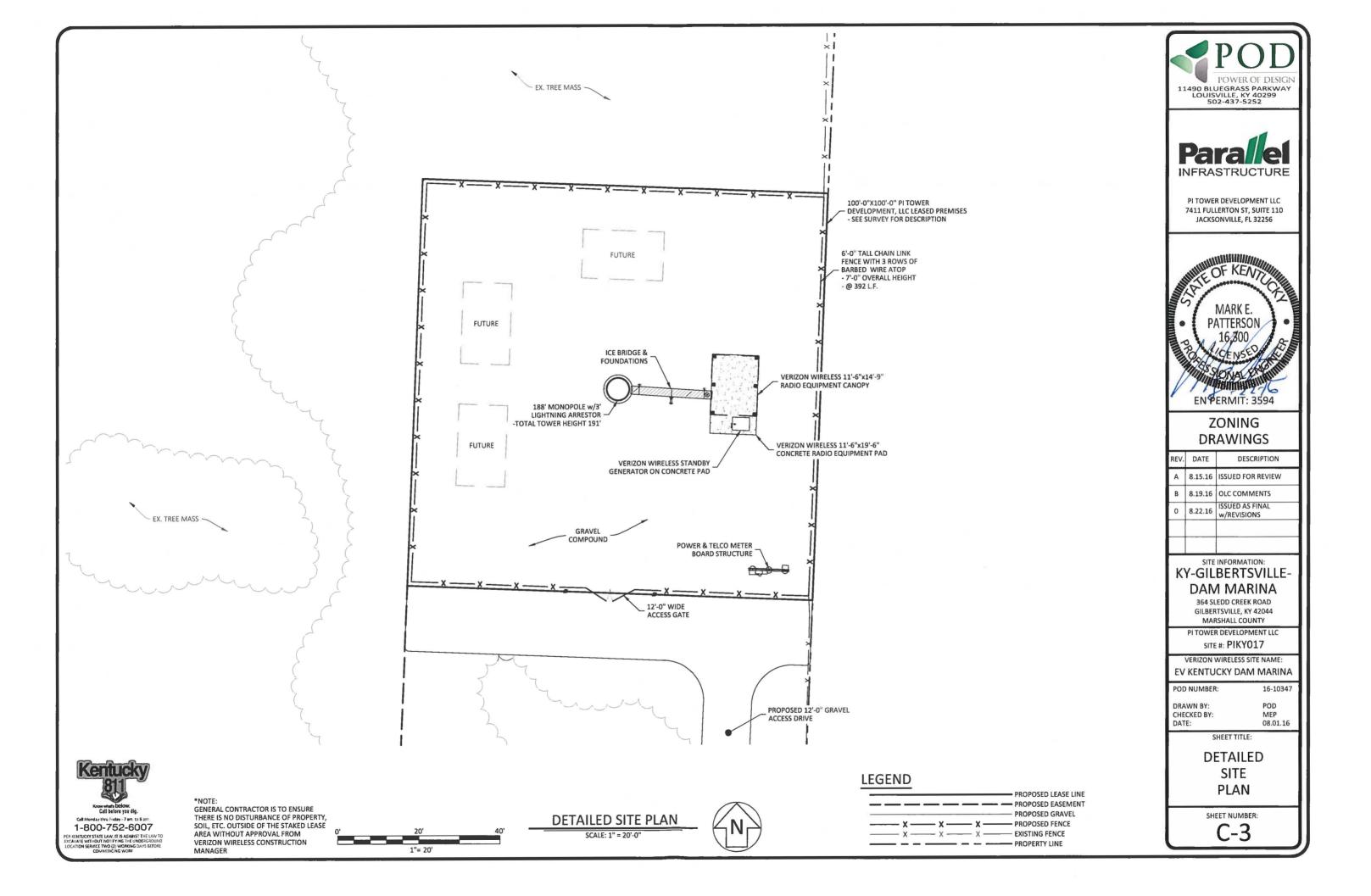
SHEET TITLE:

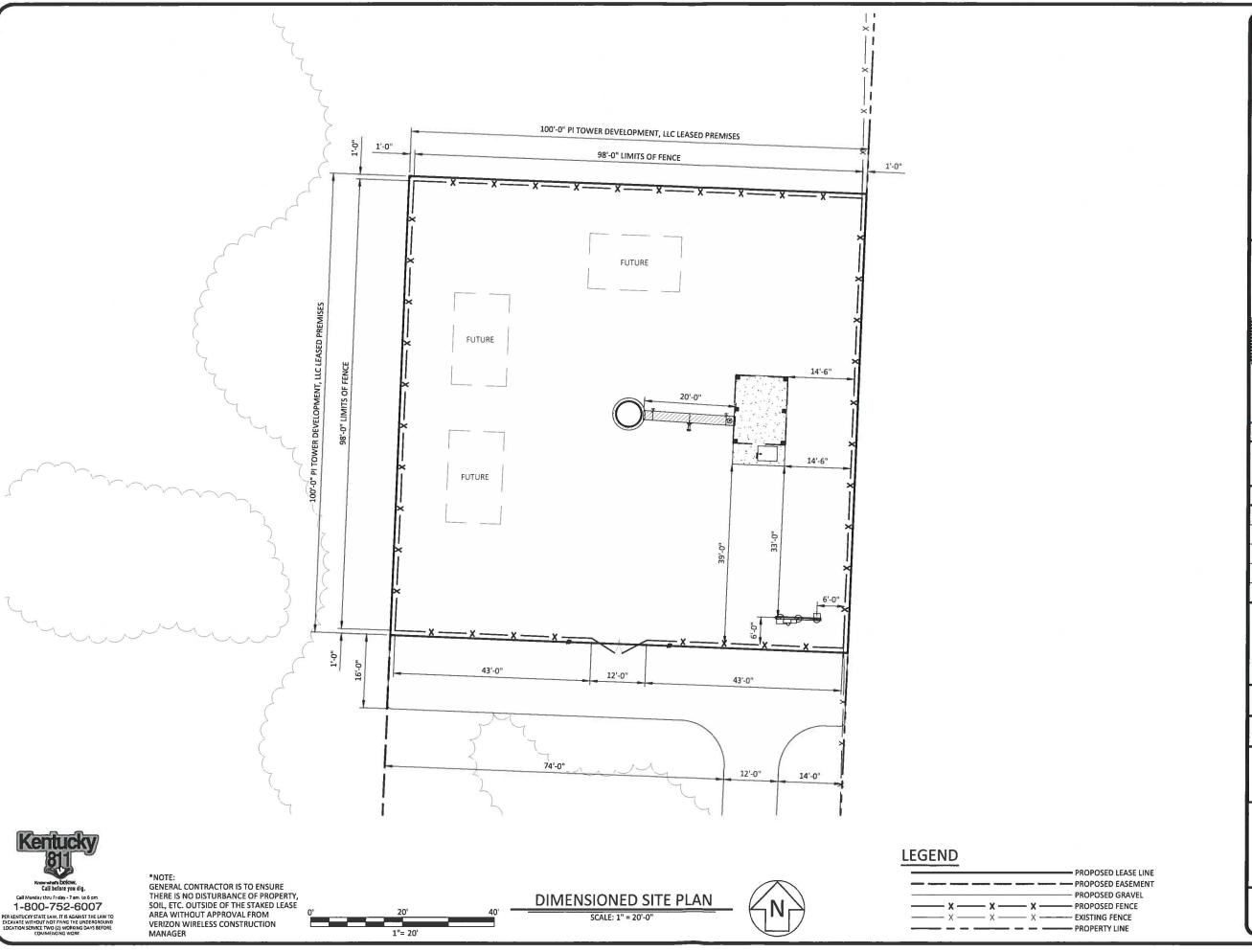
OVERALL SITE PLAN w/DISTANCE TO PROPERTY LINES

SHEET NUMBER:

C-1A











PI TOWER DEVELOPMENT LLC 7411 FULLERTON ST, SUITE 110 JACKSONVILLE, FL 32256



ZONING DRAWINGS

REV.	DATE	DESCRIPTION
Α	8.15.16	ISSUED FOR REVIEW
В	8.19.16	OLC COMMENTS
0	8.22.16	ISSUED AS FINAL W/REVISIONS

SITE INFORMATION: KY-GILBERTSVILLEDAM MARINA

364 SLEDD CREEK ROAD GILBERTSVILLE, KY 42044 MARSHALL COUNTY

PI TOWER DEVELOPMENT LLC
SITE #: PIKY017

VERIZON WIRELESS SITE NAME: EV KENTUCKY DAM MARINA

POD NUMBER:

16-10347

DRAWN BY: CHECKED BY: DATE: POD MEP 08.01.16

SHEET TITLE:

DIMENSIONED SITE PLAN

SHEET NUMBER:

C-4

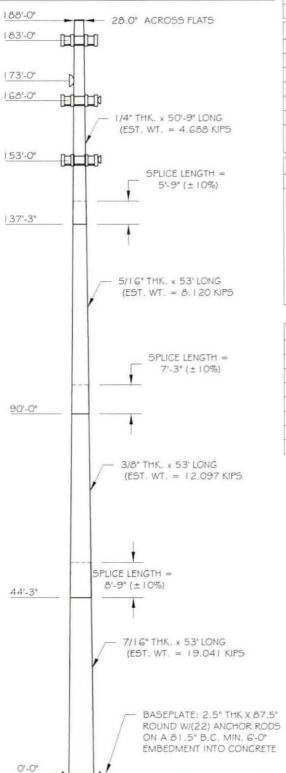
EXHIBIT C TOWER AND FOUNDATION DESIGN



TransAmerican Power Products, Inc.

2427 Kelly Lane Houston, Texas 77066

PH: 281-444-8277 / FX: 281-444-7270



→ 74.0" ACROSS FLATS

Page 1 of 2		Job Number:	23516-383
Eng:		Customer Ref:	TP-14519
MFP		Date:	8/19/2016
Structure:	1.	88-FT MONOPOLE	
Site:	PIKYO I 7 GILBERTSVILLE DAM MARINA		
Location:	MARSHALL CO., N	(Y / 36°58'37.27", -8	8°17'10.48"
Owner:	PI TOW	VER DEVELOPMENT, LL	С
Revision No.:	Revision Date:		

Revision No.: Rev	rision Date:			
	DES	IGN		
Building Code: 20	13 KENTUCKY BUI	LDING	CODE	
Design Standard: A	ANSI/TIA-222-G-2			
Wind Speed Load C	ases: 3-51	EC. GU	STED WIND SE	PEED
Load Case #1: 90	MPH Design Win	MPH Design Wind Speed		
Load Case #2: 30	MPH Wind with 1" Ice Accumulation			
Load Case #3 60	MPH Service Wit	MPH Service Wind Speed		
Structure Class	Exposure Cat.	Торо	ography Cat.	Crest Height
tt:	C		3	140'

EQUIPMENT LIST				
Elev.	Description			
183	(6) AIR-32 + (12) 800-10866 PANEL + (22) RRU/TMA			
183	12-FT PLATFORM WITH HANDRAIL			
173	(1) 8-FT MICROWAVE DISH			
173	MICROWAVE MOUNT			
168	(12) R2V4PX3 I OR PANEL + (28) RRH/RAYCAP + (1) 4' DISH			
168	I 2-FT PLATFORM WITH HANDRAIL			
153	(12) R2V4PX31OR PANEL + (28) RRH/RAYCAP + (1) 4' DISH			
153	12-FT PLATFORM WITH HANDRAIL			

ANTENNA FEED LINES ROUTED ON THE INSIDE OF THE POLE

		STRUCTUR	E PROPER	RTIES				
Cross-S	ection: 18-5	IDED	Taper:	0.2546	5 in/ft			
Shaft St	teel: ASTM AS	572 GR 65	Baseplate	Baseplate Steel: ASTM A572 GR 5				
Anchor I	Rods: 2.25 ir	1. AG15 GR. 75	X 7'-0" LON	G				
Sect.	Length (ft)	Thickness (in)	Splice (ft)	Top Dia. (in)	Bot Dia. (in)			
1	50.75	0.2500	5.75	28.00	40.92			
2	53.00	0.3125	7.25	38.96	52.46			
3	53.00	0.3750	8.75	49.98	63.48			
4	53.00	0.4375	0.00	60.50	74.00			



MICHAEL F. PLAHOVINSAK, P.E. #25466 Sold Proprietur - Independent Depinser 18301 S.R. 161, Plain City, OH 43064 614-398-6250 / mixemstpeng.com

BASE REACTIONS FOR FOUNDATION DESIGN

Moment: 8837 ft-kip

Shear: 67 kip

Axial: 79 kip

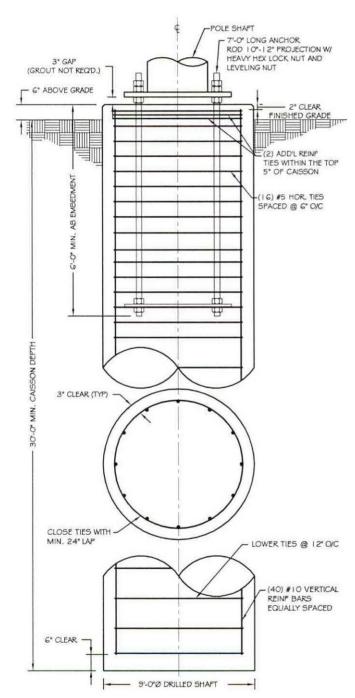


TransAmerican

Power Products, Inc.

2427 Kelly Lane Houston, Texas 77066

PH: 281-444-8277 / FX: 281-444-7270



Page 2 of 2		Job Number:	23516-383						
Eng: MFP		Customer Ref:	TP-14519						
MFP		Date:	8/19/2016						
Structure:	1.8	38-FT MONOPOLE							
Site:	PIKYO 17 GI	LBERTSVILLE DAM MA	RINA						
Location:	MARSHALL CO., K	Y / 36°58'37.27", -8	8°17'10.48"						
Owner:	PLTOW	PI TOWER DEVELOPMENT, LLC							
Revision No.:	Revision Date:								

FOUNDATION NOTES:

- I. ALL FOUNDATION CONCRETE SHALL USE TYPE II CEMENT AND ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS. CONCRETE SHALL HAVE A MAXIMUM WATER/CEMENT RATIO OF 0.46 AND SHALL BE AIR ENTRAINED 6% (±1,5%). ALL CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 318, "THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", LATEST EDITION.
- 2. ALL REINFORCING STEEL SHALL CONFORM TO ASTM AG I 5 VERTICAL BARS SHALL BE GRADE GO, AND TIES OR STIRRUPS SHALL BE A MINIMUM OF GRADE 40. THE PLACEMENT OF ALL REINFORCEMENT SHALL CONFORM TO ACI 3 I 5, "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", LATEST EDITION.
- CAISSON FOUNDATION INSTALLATION SHALL BE IN ACCORDANCE WITH ACI 336, "STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF DRILLED PIERS", LATEST EDITION.
- 4. THE CONTRACTOR SHALL DETERMINE THE MEANS AND METHODS TO SUPPORT THE EXCAVATION DURING CONSTRUCTION. THE CONTRACTOR SHALL READ THE GEOTECHNICAL REPORT AND SHALL CONSULT THE GEOTECHNICAL ENGINEER AS NECESSARY PRIOR TO CONSTRUCTION.
- 5. FOUNDATION DESIGN IS BASED ON GEOTECHNICAL REPORT BY:

ENGINEER: POWER OF DESIGN

REPORT NO .: 16-8131 (DATED 7/29/16)

- 6. ESTIMATED CONCRETE VOLUME = 72 CUBIC YARDS.
- 7. THE FOUNDATION HAS BEEN DESIGNED TO RESIST THE FOLLOWING FACTORED

LOADS

MOMENT: 8837 FT*KIPS SHEAR: 67 KIPS AXIAL: 79 KIPS



MICHAEL F. PLAHOVINSAK, P.E. #25466 Sole Proprietor Insepadant Engines 18301 S.R. 161, Plain City, OH 43064 614-398-6250 / mixe@mfpeng.com

CAISSON FOUNDATION

tnxTower	Јоь 188-ft Monopole - MFP #23516-383	Page 1 of 7
Michael F. Plahovinsak, P.E. 18301 State Route 161	Project PIKY017 Gilbertsville Dam Marina	Date 19:18:44 08/17/16
Plain City, OH 43064 Phone 614-398-6250 FAX: mike@mfpeng.com	TAPP (TP-14519)	Designed by Mike

Tower Input Data

This tower is designed using the TIA-222-G standard.

The following design criteria apply:
Tower is located in Marshall County, Kentucky.

Basic wind speed of 90 mph.

Structure Class II.

Exposure Category C.

Topographic Category 3.

Crest Height 140,00 ft.

Nominal ice thickness of 1 0000 in

Ice thickness is considered to increase with height.

Ice density of 56 pcf.

A wind speed of 30 mph is used in combination with ice.

Temperature drop of 50 °F.

Deflections calculated using a wind speed of 60 mph.

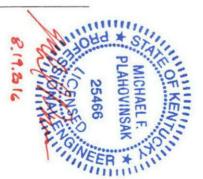
A non-linear (P-delta) analysis was used. Pressures are calculated at each section.

Stress ratio used in pole design is 1.

Local bending stresses due to climbing loads, feedline supports, and appurtenance mounts are not considered

Tapered Pole Section Geometry Section Elevation Section Length Splice Length Top Diameter Bottom Diameter Wall Thickness Bend Radius Pole Grade LI 188.00-137.25 50.75 5.75 A572-65 (65 km) 28:0000 40.9200 0.2500 1.0000 1.2 13725-9000 53.00 7.25 0.3125 1 2500 52.4600 A572-65 (65 km) A572-65 53.00 63.4800 0.3750 (65 km) A572-65 1.4 44.25-0.00 53.00 60.5025 74.0000 0.4375 1.7500 (65 km)

				Tap	ered F	Pole Pr	opertie	s		27.04
Section	Tip Dia.	Arva in²	I in	r in	C	IC in	J m*	It Q	w in	w/t
LT	28.4319	22.0196	2142.2657	9.8513	14.2240	150:6092	4287.3503	11.0119	4.4880	17.952
	41 5513	32:2716	6743.8344	14.4378	20.7874	324 4200	13496.5425	16.1389	6.7619	27.048
1.2	41 0448	38.3297	7231.5115	13.7185	19.7897	365.4174	14472 5385	19,1685	6.3063	20.18
	53.2693	51.7238	17770.3046	18 5124	26.6497	666 8112	35563.9919	25.8668	8.6830	27.785
1.3	52.6330	59.0516	18363 5323	17.6125	25.3938	723 1505	36751.2279	29 5314	8.1378	21 701
	64.4593	75 1107	37789 1352	22 4023	32 2478	1171.8346	75627.9944	37.5625	10.5125	28 033
L4	63.6986	83.4078	38017.8096	21.3231	30.7353	1236.9439	76085 6440	41.7118	9.8784	22.579
	75 1416	102.1507	69838.0124	26.1147	37.5920	1857.7892	139767.919	51.0851	12.2540	28.009



tnxTower	Job	188-ft Monopole - MFP #23516-383	Page 2 of 7
Michael F. Plahovinsak, P.E.	Project	PIKY017 Gilbertsville Dam Marina	Date 19:18:44 08/17/16
Plain City, OH 43064 Phone: 614-398-6250 FAX: mike@mfpeng.com	Client	TAPP (TP-14519)	Designed by Mike

Feed Line/Linear	A	Entered As	A
Feed I line/I linear	Appulitenances	- FINERED AS	AFRA
I CCG LITTO/LITTOGI	Apparteriarioes	Elicol Ca Mo	rtica

Description	Face	Allow Shield	Component Type	Placement	Total Number		Cala	Weigh
	Leg		036633	ſt			st st	plf
1.5/8"	C	No	Inside Pole	183.00 - 0.00	24	No Ice	0.00	0.92
						1/2" Ice	0.00	0.92
						In Ice	0.00	0.92
1.5/8*	C	No	Inside Pole	173.00 - 0.00	2	No fee	0.00	0.92
						1/2-1ce	0.00	0.92
						1" Ice	0.00	0.92
1 5/8"	C	No	Inside Pole	168.00 - 0.00	2.4	No Ice	0.00	0.92
						1/2" Icc	0.00	0.92
						1º Ice	0.00	0.92
1.5/8"	C	No.	Inside Pole	153.00 - 0.00	2.4	No Ice	0.00	0.92
						1/2" Ice	0.00	0.92
						f" lce	0.00	0.92

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral	Azimuth Adjustment	Placement		C _A 4 _A Front	Cala Side	Weight
	Leg		Vert						
			p p	*	fi		ft ²	sr	К
(2) Ericsson AIR 32 w/ mount	Α	From Face	3.00	0.0000	183.00	No Ice	6.42	5.70	0.13
pipe			0.00			1/2" Ice	6.88	6.42	0.18
			0.00			1" Ice	7.35	7.15	0.24
(4) Kathrein 800-10866 w/	A	From Face	3.00	0.0000	183.00	No lee	13.87	9.28	0.11
mount pape			0.00			1/2" Ice	14.60	10.70	0.20
			0.00			I" Ice	15.33	11.97	0.31
(2) Ericsson ATR 32 w/ mount	В	From Face	3.00	0.0000	183.00	No Ice	6.42	5.70	0.13
pipe			0.00			1/2" Ice	6.88	6.42	0.18
(8)(9)			0.00			I" Ice	7.35	7.15	0.24
(4) Kathrem 800-10866 w/	В	From Face	3.00	0.0000	183.00	No Ice	13.87	9.28	0.11
mount pipe			0.00			1/2" Ice	14.60	10.70	0.20
200000000000000000000000000000000000000			0.00			I" Ice	15.33	11.97	0.31
(2) Ericsson AIR 32 w/ mount	C	From Face	3.00	0.0000	183:00	No Ice	6.42	5.70	0.13
pipe			0.00			1/2" Ice	6.88	6.42	0.18
			0.00			I" fee	7.35	7.15	0.24
(4) Kathrem 800-10866 w/	C	From Face	3.00	0.0000	183.00	No Ice	13.87	9.28	0.11
mount pipe			0.00			1/2" Ice	14.60	10.70	0.20
100000000000000000000000000000000000000			0.00			1º Ice	15.33	11.97	0.31
(12) Ericsson RRUS-12	A	From Face	2.00	0.0000	183 00	No Ice	3.14	1.26	0.06
TIA-G			0.00			1/2" Ice	3.92	1.64	0.08
			0.00			I" Ice	4.71	2.02	0.10
(12) Encsson RRU-A2	H	From Face	2.00	0.0000	183.00	No Ice	2.06	0.53	0.02
TIA-G			0.00			1/2" Ice	2.20	0.67	0.03
			0.00			I" Ice	2.83	0.81	0.05
(6) TMA	C	From Face	2.00	0.0000	183.00	No Ice	1.50	1.50	0.05
100,000		-101000-1000	0.00			1/2" Ice	2.00	2.00	0.07
			0.00			I" Ice	3.00	3.00	0.07
(4) Raycap	C	From Face	2.00	0.0000	183.00	No Ice	4 08	2.66	0.03
BxxDC-3315-PF-48	3		0.00			1/2" Ice	4.36	2.90	0.06
10.11.10.			0.00			1" ice	4.64	3.15	0:09
12' Platform w/ Handrail	C	None	, 5.00	0.0000	183 00	No Ice	24.00	24.00	1.80
	-	4,5,5,60		CH CHARLES	The second second	1/2" Ice	26.00	26.00	2.60
						I" Ice	28.00	28 00	3.40

tnxTower	188-ft Monopole - MFP #23516-383	Page 3 of 7
Michael F. Plahovinsak, P.E. 18301 State Route 161	Project PIKY017 Gilbertsville Dam Marina	Date 19:18:44 08/17/16
Plain Cay, OH 43064 Phone: 614-398-6250 FAX: mike@mfpeng.com	Client TAPP (TP-14519)	Designed by Mike

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert	Azimuth Adjustment	Placement		C.A. Front	Ca4a Side	Weight
			fi fi fi		ſ		Jt ²	ſř	K
(4) Argus R2V4PX310R w/ mount pipe	A	From Face	3.00 0.00 0.00	0.0000	168.00	No Ice 1/2" Ice 1" Ice	13.69 14.45 15.27	11.06 12.61 14.18	0.11 0.21 0.33
(8) Lucent RRH2x40-07-43	A	From Face	2.00 0.00 0.00	0.0000	168.00	No lee 1/2" lee 1" lee	1.03 1.23 1.43	2.16 2.55 2.94	0.01 0.02 0.03
(4) Argus R2V4PX310R w/ mount pipe	В	From Face	3.00 0.00 0.00	0.0000	168 00	No lee 1/2" Ice 1" lee	13 69 14 45 15 27	11.06 12.61 14.18	0.11 0.21 0.33
(8) Lucent RRH2x40-07-G	В	From Fase	2.00 0.00 0.00	0.0000	168 00	No Ice 1/2" Ice 1" Ice	1.03	2.16 2.55 2.94	0.01 0.02 0.03
(4) Argus R2 V4PX310R w/ mount pipe	С	From Face	3.00 0.00 0.00	0.0000	168.00	No Ice 1/2" Ice 1" Ice	13 69 14 45 15 27	11.06 12.61 14.18	0.11 0.21 0.33
(8) Lucent RRH2x40-07-G	C	From Face	2.00 0.00 0.00	0.0000	168.00	No Ice 1/2" Ice 1" Ice	1.03 1.23 1.43	2 16 2 55 2 94	0.01 0.02 0.03
4) Raycap DC6-48-60-18-8F Supressor	C	From Face	2.00 0.00 0.00	0.0000	168.00	No Ice 1/2" Ice 1" Ice	1.47 1.67 1.88	1 47 1 67 1 88	0.03 0.05 0.07
12' Platform w/ Handrad	C	None		0.0000	168 00	No Ice 1/2" Ice 1" Ice	24.00 26.00 28.00	24.00 26.00 28.00	1.80 2.60 3.40
***						1 (66	440,100	20.00	3.39
(4) Argus R2V4PX310R w/ mount pipe	A	From Face	3.00 0.00 0.00	0.0000	153.00	No Ice 1/2" Ice 1" Ice	13.69 14.45 15.27	11.06 12.61 14.18	0.11 0.21 0.33
(8) Lucent RRH2x40-07-G	٨	From Face	2.00 0.00	0.0000	153.00	No lce 1/2" lce 1" lce	1.03	2.16 2.55	0.01
(4) Argus R2 V4PX310R w/ mount pipe	В	From Face	3.00 0.00	0.0000	153.00	No lee 1/2" lee	1 43 13.69 14.45	2.94 11.06 12.61	0.03 0.11 0.21
(8) Lucant RRH2x40-07-G	В	From Face	0.00 2.00 0.00	0.0000	153.00	I" Ice No Ice 1/2" Ice 1" Ice	15 27 1 03 1 23 1 43	14.18 2.16 2.55 2.94	0.33 0.01 0.02 0.03
(4) Argus R2 V4PX310R w/ mount pipe	c	From Face	3.00 0.00 0.00	0.0000	153.00	No Ice 1/2" Ice 1" Ice	13 69 14 45 15 27	11.06 12.61 14.18	0.11 0.21 0.33
(8) Lucent RRH2s40-07-G	C	From Face	2 00 0 00 0 00	0.0000	153.00	No Ice 1/2" Ice 1" Ice	1 03 1 23 1 43	2.16 2.55 2.94	0.01 0.02 0.03
4) Raycap DC6-48-60-18-8F Supressor	C	From Face	2.00 0.00 0.00	0.0000	153.00	No Ice 1/2" Ice 1" Ice	1 47 1 67 1 88	1.47 1.67 1.88	0 03 0 05 0.07
12° Platform w/ Handrail	C	None	4144	0 0000	153.00	No Ice 1/2" Ice 1" Ice	24 00 26 00 28 00	24.00 26.00 28.00	1 80 2 60 3 40

tnxTower	Job	188-ft Monopole - MFP #23516-383	Page 4 of 7
Michael F. Plahovinsak, P.E. 18301 State Route 161	Project	PIKY017 Gilbertsville Dam Marina	Date 19:18:44 08/17/16
Plain City, OH 43064 Phone: 614-398-6230 FAX: mike@mfpeng.com	Client	TAPP (TP-14519)	Designed by Mike

					Di	shes					
Description	Face or Leg	Dish Type	Offset Type	Offsets Horz Lateral Vert	Azimuth Adjustment	3 dB Beam Wuldu	Elevation	Outside Diameter		Aperture Area	Weight
				ft		. 4	ft	ft		Jr.	K
8 ft standard	A	Paraboloid w/o	From	1.00	0.0000		173.00	8.00	No Ice	50.27	0.26
		Radome 1	Face	0.00					1/2" Ice	51.32	0.55
				0.00					I" Ice	52.37	0.84
4 ft standard	A	Paraboloid w/o	From	1.00	0.9000		168.00	4.00	No Ice	12.57	0.10
		Radome	Face	0.00					1/2" Ice	13.10	0.18
				0.00					I" fee	13.62	0.25
4 ft standard	A	Paraboloid w/o	From	1.00	0.0000		153.00	4.00	No Ice	12.57	0.10
		Radome	Face	0.00					1/2" Ice	13.10	0.18
				0.00					I" Ice	13.62	0.25

Load Combinations

Comb.	Description	
No.		
1	Dead Only	
2	1.2 Dead+1.6 Wind 0 deg - No Ice	
3	0.9 Dead+1.6 Wind 0 deg - No Ice	
4	1.2 Dead+1.6 Wind 90 deg - No Ice	
5	0.9 Dead+1 6 Wind 90 deg - No Ice	
6	1.2 Dend+1.6 Wind 180 deg - No Ice	
7	0.9 Dead+1.6 Wind 180 deg - No Ice	
8	1.2 Dead+1.0 Ice+1.0 Temp	
9	1.2 Dead+1.0 Wind 0.deg+1.0 Ice+1.0 Temp	
10	1.2 Dead+1.0 Wind 90 deg+1.0 lce+1.0 Temp	
11	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	
12	Dead+Wind 0 deg - Service	
2 3 4 5 6 7 8 9 10 11 12 13	Death Wind 90 deg - Service	
14	Dead+Wind 180 deg - Service	

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-fl	Minor Axi Moment kip-ft
L1	188 - 137.25	Pole	Max Tension	13	0.00	-0.00	0.00
			Max. Compression	N	-71.64	7.96	-0.25
			Max Mx	4	-17.93	-1099.23	-91.77
			Max. My	6	-18.28	-144.63	-1043.54
			Max Vv	4	43.00	-1099.23	-91.77
			Max. Vx	6	41.08	-144.63	-1043.54
			Max. Torque	2			9.27
1.2	137.25 - 90	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	8	-91.50	8.60	-0.28
			Max. Mx	4	-31.74	-3208.17	-252.86
			Max. My	6	-31.97	-403.53	-3064.42
			Max Vv	4	49.27	-3208.17	-252.86
			Max Vx	6	47.35	-403.53	-3064.42
			Max. Torque	2			9.25
1,3	90 - 44 25	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	8	-117.57	8.62	-0.28
			Max. Mx	4	-50.16	-5547.49	407.54
			Max. My	6	-50.28	-652.32	-5318.81

tnxTower	Job 188-ft Monopole - MFP #23516-383	Page 5 of 7
Michael F. Plahovinsak, P.E. 18301 Sunt Route 161	Project PIKY017 Gilbertsville Dam Marina	Date 19:18:44 08/17/16
Plain City, OH 43064 Phone: 614-398-6250 FAX: mike@m/peng.com	Client TAPP (TP-14519)	Designed by Mike

Section No.	Elevation ft	Component	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axii Moment kip-ft
			Max. Vy	4	56.55	-5547.49	-407.54
			Max. Vx	6	54.65	-652.32	-5318.81
			Max Torque	2			9.21
L4	44.25 - 0	Pole	Max Tension	1	0.00	0.00	0.00
			Max Compression	8	-157.36	8.55	-0.28
			Max Mx	4	-79.02	-8817.64	-588.49
			Max. My	6	-79.02	-943.52	-8489.40
			Max Vy	4	66.98	-8817.64	-588.49
			Max. Vx	6	65.14	.943.52	-8489.40
			Max Torque	2			9.19

Maximum Tower Deflections - Service Wind

Section No.	Elevation	Horz. Deflection	Gov. Load	Tilt	Twist
	ft	in	Comb		
LI	188 - 137.25	37.683	13	1.7840	0.0051
1.2	143 - 90	21.575	13	1.52.86	0.0025
1.3	97 25 - 44 25	9 433	13	0.9555	0.0010
1.4	53 - 0	2.713	13	0.4659	0.0004

Critical Deflections and Radius of Curvature - Service Wind

Elevation	Appurtenance	Gov. Load	Deflection	Telt	Twist	Radius of Curvature
fi .		Comb	in		*	n
183.00	(2) Ericsson AIR 12 w/ mount pipe	13	35.804	1.7649	0.0103	44728
173.00	8 ft standard	1.3	32.072	1.7241	0.0090	14909
168.00	4 ft standard	13	30.233	1.7008	0.0083	11181
153.00	4 ft standard	1.3	24.904	1.6115	0.0065	6388

Maximum Tower Deflections - Design Wind

Section Na.	Elevation	Horz. Deflection	Gov. Load	Tilt	Twist
	n	in	Comb.		
1.1	188 - 137.25	152.483	4	7.2420	0.0192
1.2	143 - 90	87.300	4	6.1942	0.0085
L.3	97 25 - 44 25	38 179	4	3.8700	0.0035
1.4	53 - 0	10.981	4	1 8859	0.0014

Critical Deflections and Radius of Curvature - Design Wind

Elevation	Appurtenance	Gov. Load	Deflection	Tilt	Twist	Radiux of Curvature
B		Comb	181	*	*	ji
183.00	(2) Ericsson AIR 32 w/ mount pipe	4	144.877	7.1631	0.0405	11292
173.00	8 ft standard	4	129.776	6.9940	0.0353	3762
168.00	4 ft standard	4	122 334	6.8982	0.0328	2820
153.00	4 ft standard	4	100.769	6.5321	0.0256	1607

tnxTower	Job 188-ft Monopole - MFP #23	16-383 Page 6 of 7
Michael F. Plahovinsak, P.E. 18301 State Route 161	Project PIKY017 Gilbertsville Dam	Marina Date 19:18:44 08/17/16
Plain City, OH 43064 Phone: 614-398-6250 FAV with Conference com-	Client TAPP (TP-14519)	Designed by Mike

			Pol	e Des	ign [Data			
Section Elevation Size L. L. KUr A P_a ΦP_a Ro									
	ft		ft	ft		in"	K	K	6/2.
1.1	188 - 137.25	TP40 92x28x0 25	50.75	0.00	0.0	31.(10)	-17.93	1982.34	0.009
1.2	13725-90(2)	TP52.46x38.9562x0.3125 4.8.2 (1.00 CR) - 2	53.00	0.00	0.0	49.8916	-31.74	3140.65	0.010
1.3	90 - 44.25(3)	TP63 48x49 9878x0 375	53.00	0.00	0.0	72.4595	-50.16	4542.66	0.011
LA	44 25 - 0 (4)	TP74x60.5025x0.4375	53.00	0.00	0.0	102 151	-79 02	6293.65	0.013

	Pole Bending Design Data								
Section No	Elevation	Size	$M_{\rm iot}$	41/m	Rano M.,	λI_{uv}	$\phi \setminus f_{n_{\ell}}$	Ratio M _{aj}	
	ft		kip-ff	ksp-ft	Max	kip-ft	kip-ft	016	
L1	(188+137.25 (1)	TP40 92x28x0 25	1103.06	1600 53	0.689	0.00	1600.53	0.000	
1.2	137.25 - 90 (2)	TP52 46x38 9562x0 3125	3218.12	3253.81	0.989	0.00	3253.81	0.000	
1.3	90 - 44 25 (3)	TP63 48x49 9878x0 375	5562.44	5696.30	0.977	0.00	5696.30	0.000	
1.4	44.25 - 0 (4)	TP74x60 5025x0 4375	8837.25	9538 42	0.926	0.00	9538.42	0.000	

	Pole Shear Design Data								
Section No.	Elevation	Size	Acmat V.	φF.	Ratio V.	Actual T.,	⊕ T _n	Ratio T.	
	n		K	K	φV.	kip-ft	kep-fi	φ7,,	
1.1	188 - 137.25	TP40 92x28x0 25	43.14	991 17	0.044	4.33	3204.97	0.001	
1.2 1.3	137.25 - 90 (2)	TP52.46x38.9562x0.3125	49.40	1570.32	0.031	4.31	6515.57	0.001	
L3	90 - 44.25(3)	TP63.48x49.9878x0.375	56.66	2271.33	0.025	4.30	11406.50	0.000	
L4	44.25 - 0 (4)	TP74x60 5025x0 4375	67.07	3146.83	0.021	4.29	19100.17	0.000	

	Pole Interaction Design Data								
Section No.	Elevation	Rano P*	Ratio M _m	Ratio M _{en}	Ratio V.	Ratio T ₊	Comb. Stress	Allaw Stress	Criteria
	n	6/1.	01 tm	4\1/m	41.	ΦT.	Ratio	Ratio	
1.1	188 - 137 25	0.009	0.689	0.000	0.044	0.001	0.700	1.000	482 V
	(1)						V		130,000
1.2	(37.25 - 90 (2)	0.010	0.989	0.000	0.031	0.001	1:1100	1.000	4.8.2
1.3	90 - 44 25 (3)	110.0	0.977	0.000	0.025	0.000	0.988	1 000	482 V
1.4	44.25 - 0 (4)	0.017	0.926	0.000	0 021	0.000	0 940	1.000	4.8.2 V

tnxTower	188-ft Monopole - MFP #23516-383	Page 7 of 7
Michael F. Plahovinsak, P.E. 18301 State Route 161	Project PIKY017 Gilbertsville Dam Marina	Date 19:18:44 08/17/16
Plain City, OH 43064 Phone: 614-398-6250 FAX: mike@mfpeng.com	TAPP (TP-14519)	Designed by Mike

	Section Capacity Table								
Section No.	Elevation ft	Component Type	Size	Critical Element	P K	eP _{edow} K	% Capacity	Pass Fail	
1.1	188 - 137.25	Pole	TP40.92x28x0.25	I	-17.93	1982.34	70.0	Pass	
1.2	137.25 - 90	Pole	TP52.46x38.9562x0.3125	2	-31.74	3140.65	100.0	Pass	
1.3	90 - 44.25	Pole	TP63 48x49 9878x0 375	3	-50.16	4542.66	98.8	Pass	
L4	44.25-0	Pole	TP74x60.5025x0.4375	4	-79.02	6293.65	94.0	Pass	
							Summary		
						Pole (L2)	100.0	Pass	
						RATING =	100.0	Pass	

Michael F. Plahovinsak, P.E. 18301 State Route 161 W	188-ft monopole - MFP #23516-383	Page BP-G
Plain City, OH 43064 Phone: 614-398-6250	Project PIKY017 Gilbertsville Dam Marina	Date 8/19/2016
email: mike@mfpeng.com	Client TAPP TP-14519	Designed by Mike

Anchor Rod and Base Plate Calculation

ANSI/TIA-222-G-2

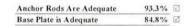
Factored Base	Reactions:	Pole Shape:	Anchor Rods:	Base Plate:
Moment.	8837 ft-kips	18-Sided	(22) 2.25 in A615 GR. 75	2.5 in. x 87.5 in. Round
Shear:	67 kips	Pole Dia. (D f):	Anchor Rods Evenly Spaced	fy = 50 ksi
Avint	70 bine	74.00 in	On a 81 5 in Bolt Circle	

Anchor Rod Calculation According to TIA-222-G section 4.9.9

$\phi =$	0.80 TIA499	The following Internation Equation Shall Be Satisfied:
$I_{\text{bolts}} =$	18266-19 in Moment of Inertia	$\left(P + \frac{V_u}{V_u}\right)$
$P_u =$	237 kips timen Fine	$\left \frac{1}{\eta}\right \leq 1.0$
$V_u =$	3 kips stone Force	♦ R _{nt}
$R_{nt} =$	325 00 kips Namunal Tensale Strength	
$\eta =$	O.50 for detail type (d)	0.933 ≤ 1

Base Plate Calculation According to TIA-222-G

φ =	0.90 TRAT		
$M_{\rm PL} =$	630.4 in-kip rue Monent		
L =	10,6 in Section Length	Calculated Moment vs Facto	red Resistance
Z =	16.5 Plante Section Mediclas	630 43 in-kip ≤	743 in-kip
$M_P =$	825.6 in-kip rusus Moment		
φ M _n =	743 O in-kip Factored Resistance		





Michael F. Plahovinsak, P.E.	lob	188-ft monopole - MFP #23516-383	Page FND
18301 State Route 161 W Plain City, OH 43064	Project	PIKY017 Gilbertsville Dam Marina	Date 8/19/2016
Phone: 614-398-6250 email: mike@mfpeng.com	Client	TAPP TP-14519	Designed by Mike

Caisson Calculation

According to ANSI/TIA-222-G-2

- 1. Foundation overtaining recustance calculated with PLS Causen, for Brom's method for ngid piles. Soil levers modeled after recommendations from the geotechnical report.
- 2. Cohesion strength for the upper 27.ft has been reduced by 50%.
- 3 In lieu of a soil resistance factor fs = 0.75 (TIA-9.4.1) an additional safey fator against soil failure of 1.33 has been applied
- 4. Foundation is designed with a minimum safety factor resisting overturning of 2.0.
- 5. Foundation has been designed with factored loads per TLA-222-G.
- 6. Geotechnical report indicates growndwater was not encountered within the depth of the foundation.

· PIER PROPERTIES	CONCRETE STRENGTH	(ksi) = 4	.00		STEEL ST	RENGTH (kat)	- 60.0
	DIAMETER (ft) =	9.000	DISTANCE FE	OM TOP OF PI	ER TO GROUN	D LEVEL (ft)	- 0.5
. SOIL PROPERTIES	LAYER TYPE THIC		AT TOP OF I			CU KP	P9
		(ft)			of) (pa		(degrees
	1 5	4.00			0.0	1.000	-0.1
	2 C	2.00			0.0 750		
		21.00			5.0 1000		
	4 0	8.00	2	7.00 12	5.0 2000	.0	
** DESIGN (FACTORED)	LOADS AT TOP OF PIER			0 VERTICAL FOR AGAINST S			= 67
· CALCULATED PIER LE	1961N (ft) = 30.50	0					
· CHECK OF SOILS PRO	PERTIES AND ULTIMATE	RESISTING FO	ORCES ALONG	PIER			
TYPE TOP OF LAYER	BELOW TOP OF PIER	THICKNESS	DENSITY	cu	KF	FORCE	A
	(ft)	(ft)	(pcf)	(psf)		(le)	1.5
3	0.50	4.00	0.0		1.000	0.00	3.
c	4.50	2.00	120.0	750.0		108.00	5.
c c	6.50	13.37	125.0	1000.0		962.83	13.
c	19.87	7.63	125.0	1000.0		-549.17	23.
c	27.50	3.00	125.0	2000.0		-432.00	29.
. SHEAR AND HOHENTS	ALONG PIER						
		THE THE ADDIT				TIONAL SAFE	
DISTANCE BELOW TOP		SHEAR ((ft-k)	SHIKAR		HT (Et-
	0.00	119		12245.6		67.2	9184
	3.05	8.9		12519.0		67.2	9389
				12723.4		2.4	9542
	6.10	3					9314
	6.10 9.15	-209		12419.0	-13	96.9	
	9.15 12.20	-209 -428	7	12419.0	- 33	21.6	
	9.15 12.20 15.25	-209 -428 -548	.7	12419.0	- 30	21.6	7352
	9:15 12:20 15:25 18:30	-209 -428 -648 -867	. 1 . 7 . 3	12419.0 11446.2 9803.7 7491.4	- 3: - 4: - 6:	21.6 86.3 51.0	#5#4 7352 561#
	9.15 12.20 15.25 18.30 21.35	-209 -428 -648 -867 -874	1 .7 .3 .9	12419.0 11446.2 9803.7 7491.4 4666.4	- 3: - 4: - 6: - 6:	21.6 86.3 51.0 56.1	7352 5618 3499
	9.15 12.20 15.25 18.30 21.35 24.40	-209 -428 -648 -867	1 .7 .3 .9	12419.0 11446.2 9803.7 7491.4	- 3: - 4: - 6: - 6:	21.6 86.3 51.0	7352 5618 3499 1749
	9.15 12.20 15.25 18.30 21.35 24.40 27.45	-209 -428 -648 -867 -874 -655 -435	1 .7 .3 .9 .8	12419.0 11446.2 9803.7 7491.4 4666.4 2333.2 669.7	- 3: - 4: - 6: - 6: - 4: - 3:	21.6 86.3 51.0 56.1 91.4 26.7	7352 5618 3499 1749 502
	9.15 12.20 15.25 18.30 21.35 24.40	-209 -428 -648 -867 -874 -655	1 .7 .3 .9 .8	12419.0 11446.2 9803.7 7491.4 4666.4 2333.2	- 3: - 4: - 6: - 6: - 4: - 3:	21.6 86.3 51.0 56.1 91.4	7352 5618 3499 1749
** TOTAL REINFORCEMENT	9.15 12.20 15.25 18.30 21.35 24.40 27.45 30.50	-209 -428 -648 -867 -874 -655 -435	1 7 3 9 8 2 6	12419.0 11446.2 9803.7 7491.4 4666.4 2333.2 669.7 -0.0	- 3: - 4: - 6: - 6: - 4: - 3:	21.6 86.3 51.0 56.1 91.4 26.7	7352 5618 3499 1749 502

For Design

0-ft Diameter Caisson x 30.5-ft long (30-ft Embeded with 0.5-ft above grade)
Concrete strength =(000 FSI 8 28 days Estimated Concrete Volume = 72 CY3.

(40) #10 Vertical Rebar. Steel Cross-Section = 50.8 in2



EXHIBIT D COMPETING UTILITIES, CORPORATIONS, OR PERSONS LIST

Navigation

Reports

PSC Home

KY Public Service Commission

Master Utility Search

 Search for the utility of interest by using any single or combination of criteria.

Utility ID

Utility Name

Address/City/Contact Utility Type

Status

Search

 Enter Partial names to return the closest match for Utility Name and Address/City/Contact entries.

▼ Active ▼

	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	44451184	Alltel Communications, LLC	Cellular	A	Basking Ridge	NJ
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	Norfolk	VA
View	4107400	Bandwidth.com, Inc.	Cellular	Α	Raleigh	NC
View	4108600	BCN Telecom, Inc.	Cellular	D	Morristown	נא
View	4108750	Blue Jay Wireless, LLC	Cellular	С	Addison	X
View	4202300	Bluegrass Wireless, LLC	Cellular	Α	Elizabethtown	KY
View	4107600	Boomerang Wireless, LLC	Cellular	D	Hiawatha	ΙA
View	4105600	Budget PrePay, Inc. dba Budget Mobile	Cellular	А	Bossier City	LA
View	4105500	BullsEye Telecom, Inc.	Cellular	D	Southfield	MI
View	4110050	CampusTVs, Inc.	Cellular	D	Weston	MA
View	4100700	Cellco Partnership dba Verizon Wireless	Cellular	A	Basking Ridge	נא
View	4106600	Cintex Wireless, LLC	Cellular	D	Rockville	MD
		Consumer Cellular,				

View	4101900	Incorporated	Cellular	Δ	Portland	OR
VICW	1101500		CCIIUIAI	^	rordana	
		Credit Union Wireless, LLC	Cellular			OR
View	4106400	Credo Mobile, Inc.	Cellular	Α	San Francisco	CA
View		Cricket Wireless, LLC	Cellular	Α	Alpharetta	GA
View		CTC Communications Corp. d/b/a EarthLink Business I	Cellular	D	Grand Rapids	MI
View	10640	Cumberland Cellular Partnership	Cellular	А	Elizabethtown	KY
View		East Kentucky Network, LLC dba Appalachian Wireless	Cellular	Α	Ivel	KY
View		Easy Telephone Service Company dba Easy Wireless	Cellular	D	Ocala	FL
View	4109500	Enhanced Communications Group, LLC	Cellular	D	Bartlesville	ок
View	4105900	Flash Wireless, LLC	Cellular	D	Concord	NC
View		Flatel Wireless, Inc dba Zing PCS	Cellular	D	Royal Palm Bch	FL
View		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
View	4109600	Google North America Inc.	Cellular	D	Mountain View	CA
View	33350363	Granite Telecommunications, LLC	Cellular	D	Quincy	MA
View	4106000	GreatCall, Inc. d/b/a Jitterbug	Cellular	Α	San Diego	CA
View	10630	GTE Wireless of the Midwest dba Verizon Wireless	Cellular	А	Basking Ridge	נא
View	4103100	i-Wireless, LLC	Cellular	Α	Newport	KY
View	4109800	IM Telecom, LLC d/b/a Infiniti Mobile	Cellular	D	Tulsa	ок
View	22215360	KDDI America, Inc.	Cellular	С	New York	NY
View	10872	Kentucky RSA #1 Partnership	Cellular	А	Basking Ridge	נא
View	10680	Kentucky RSA #3 Cellular General	Cellular	Α	Elizabethtown	KY
View	10681	Kentucky RSA #4 Cellular General	Cellular	A	Elizabethtown	KY
View	4109750	Konatel, Inc. dba telecom.mobi	Cellular	D	Johnstown	PA
View	4107300	Lycamobile USA, Inc.	Cellular	D	Newark	ИJ
View	4108800	MetroPCS Michigan, LLC	Cellular	Α	Bellevue	WA
View	4109650	Mitel Cloud Services, Inc.	Cellular	D	Mesa	AZ
View	4109400	NetZero Wireless, Inc.	Cellular	D	Woodland Hills	CA
View	4202400	New Cingular Wireless PCS, LLC dba AT&T Mobility, PCS	Cellular	Α	San Antonio	тх
View	10900	New Par dba Verizon Wireless	Cellular	Α	Basking Ridge	NJ

View	4000800	Nextel West Corporation	Cellular		Overland	KS
		<u> </u>			Park	
view	4104500	Nexus Communications, Inc.	Cellular		Columbus	ОН
View	4001300	NPCR, Inc. dba Nextel Partners	Cellular	Δ 1	Overland Park	KS
View	4001800	OnStar, LLC	Cellular	Α	Detroit	MI
View	4109050	Patriot Mobile LLC	Cellular	D	Southlake	TX
View	4109450	Pix Wireless, LLC	Cellular	D	Boca Raton	FL
View	4110250	Plintron Technologies USA LLC	Cellular	C	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	Α	Dania	FL
View	4108700	Ready Wireless, LLC	Cellular	В	Hiawatha	IA
View	4110350	Regional Strategic Partners LLC	Cellular	С	Buford	GA
View	4106200	Rural Cellular Corporation	Cellular	А	Basking Ridge	NJ
View	4108550	Sage Telecom Communications, LLC	Cellular	D	Dallas	TX
View	4109150	SelecTel, Inc. d/b/a SelecTel Wireless	Cellular	D	Freemont	NE
View	4110000	Senior Tech, LLC d/b/a Snapfon	Cellular	D	Chattanooga	TN
View	4106300	SI Wireless, LLC	Cellular	Α	Carbondale	ΙL
View	4109100	Solavei, LLC	Cellular	С	Bellevue	WA
View	4110150	Spectrotel, Inc. d/b/a Touch Base Communications	Cellular	С	Neptune	נא
View	4200100	Sprint Spectrum, L.P.	Cellular	Α	Atlanta	GA
View	4200500	SprintCom, Inc.	Cellular	Α	Atlanta	GA
View	4109550	Stream Communications, LLC	Cellular	D	Dallas	TX
View	4110200	T C Telephone LLC d/b/a Horizon Cellular	Cellular	С	Red Bluff	CA
View	4202200	T-Mobile Central, LLC dba T- Mobile	Cellular	Α	Bellevue	WA
View	1					
	4002500	TAG Mobile, LLC	Cellular	D	Carrollton	TX
View	4109700	TAG Mobile, LLC Telecom Management, Inc. dba Pioneer Telephone	Cellular Cellular		Carrollton South Portland	ME
View View	<u> </u>	Telecom Management, Inc. dba		D	South	1
	4109700	Telecom Management, Inc. dba Pioneer Telephone	Cellular	D D	South Portland	ME
View	4109700	Telecom Management, Inc. dba Pioneer Telephone Telefonica USA, Inc. Telrite Corporation dba Life	Cellular Cellular	D D D	South Portland Miami	ME FL
View	4109700 4107200 4108900	Telecom Management, Inc. dba Pioneer Telephone Telefonica USA, Inc. Telrite Corporation dba Life Wireless	Cellular Cellular Cellular	D D D	South Portland Miami Covington	ME FL GA
View View View	4109700 4107200 4108900 4108450	Telecom Management, Inc. dba Pioneer Telephone Telefonica USA, Inc. Telrite Corporation dba Life Wireless Tempo Telecom, LLC The People's Operator USA,	Cellular Cellular Cellular Cellular	D D D D	South Portland Miami Covington Kansas City	ME FL GA MO
View View View View	4109700 4107200 4108900 4108450 4109950	Telecom Management, Inc. dba Pioneer Telephone Telefonica USA, Inc. Telrite Corporation dba Life Wireless Tempo Telecom, LLC The People's Operator USA, LLC	Cellular Cellular Cellular Cellular	D D D D A	South Portland Miami Covington Kansas City New York	ME FL GA MO NY
View View View View View View	4109700 4107200 4108900 4108450 4109950 4109000	Telecom Management, Inc. dba Pioneer Telephone Telefonica USA, Inc. Telrite Corporation dba Life Wireless Tempo Telecom, LLC The People's Operator USA, LLC Ting, Inc.	Cellular Cellular Cellular Cellular Cellular Cellular	D D D A C	South Portland Miami Covington Kansas City New York Toronto	ME FL GA MO NY ON

View	4103300	Touchtone Communications, Inc.	Cellular	D	Whippany	נא
View	4104200	TracFone Wireless, Inc.	Cellular	D	Miami	FL
View	4002000	Truphone, Inc.	Cellular	D	Durham	NC
View	4110300	UVNV, Inc.	Cellular	С	Costa Mesa	CA
View	4105700	Virgin Mobile USA, L.P.	Cellular	Α	Atlanta	GA
View	4200600	West Virginia PCS Alliance, L.C.	Cellular	Α	Waynesboro	VA
View	4106500	WiMacTel, Inc.	Cellular	D	Omaha	NE
View	4110100	Windward Wireless LLC	Cellular	С	Suwanee	GA
View	4109900	Wireless Telecom Cooperative, Inc. dba theWirelessFreeway	Cellular	D	Louisville	KY

EXHIBIT E SITE SELECTION REPORT

08/10/2016

Talina R. Mathews Executive Director Kentucky Public Service Commission 211 Sower Boulevard Frankfort, KY 40601

RE: Alternate Site Analysis Report

Uniform Application for a Communications Facility

Applicant: PI Tower Development LLC and Kentucky RSA No. 1 Partnership d/b/a

Verizon Wireless

Site Location: 364 Sledd Creek Rd., Gilbertsville KY

Site Name: Kentucky Dam Marina

Dear Commissioners:

This report is provided to explain the site development process used by the Applicants to identify the site selected for the new wireless communications facility proposed in the accompanying Uniform Application.

PI Tower Development LLC and Verizon Wireless- Site Development Process

Step 1: Problem Identification. Verizon Wireless radio frequency engineers first identified a growing coverage and/or capacity gap in unincorporated Marshall County, Kentucky.

Step 2: Search Area. To help guide the site development team's task of identifying a suitable location for a new wireless communications facility site, Verizon Wireless' radio frequency engineers identified the geographic area where the antenna site must be located in order to close the gap and issued a map (called a Search Area) that identified the general area in which a new site must be located. The Search Area for this site is approximately 1.5 miles from north-to-south and 0.9 miles east-to-west. A map of the search area is below.

Step 3: Co-location Review. The site development team first reviewed the area within the Search Area for a suitable tall structure for co-location. In this case, The North Marshall Water District operates a water tank within the designated search area at (N36° 58' 35.39" W88° 17' 46.26"). The water tank is only approximately 150' tall. Antennas placed at this height will not meet the radio frequency objectives of this project. For this reason, this co-location alternative was removed from consideration for antenna placement. Further, North Marshall Water District representatives did not respond to communications from site acquisition vendors. Two other existing towers were reviewed for co-location. A tower owned by the Tennessee Valley Authority located at N37° 00' 33.00" W88° 14' 56.00" (ASR #1235865) is over two miles outside of the search area. The City of Grand Rivers owns a tower (ASR #1241571) located approximately 2.5 miles outside of the search area at N37° 00' 29.50" W88° 14' 35.90". Antennas placed on these towers will not resolve the existing coverage or capacity gap in this area.

Step 4: Review of the Area's Zoning Classification. Once the site development team determined that there are no available existing tall structures which are technically feasible and suitable for co-location, the team next reviewed local zoning requirements to identify parcels located within the search area that might be suitable from a land use perspective to host an antenna site. In this case, the search area is located outside of the jurisdiction of a planning commission, so there are no local zoning regulations. In the absence of specific zoning regulations, site acquisition vendors searched for large parcels that have ample space to accommodate a telecommunications tower and would have the least intrusive impact on surrounding properties.

Step 5: Preliminary Inspection and Assessment of Suitable Parcels. Once suitably zoned parcels are identified, the site development team visits the parcels and performs a preliminary inspection. The purpose of the preliminary inspection is: (1) to confirm the availability of sufficient land space for the proposed facility; (2) to identify a specific location for the facility on the parcel; (3) to identify any recognized environmental conditions that would disqualify the parcel from consideration; (4) to identify any construction issues that would disqualify the candidate; and, (5) to assess the potential impact of the facility on neighboring properties.

Multiple candidates were considered and ultimately removed from consideration based on site design issues related to difficulties with access or terrain. These candidates include:

```
--Maggie's Jungle Golf LLC (parcel #52-00-00-025.02C00)
```

- N36° 58' 40.08" W88° 17' 55.06"
- --J. Jerod and Associates, Inc. (parcel #53-00-00-009.00C00)
 - N36° 58' 21.42" W88° 17' 57.22"
- --Monty Morehead KY Lake Resort RV Park (parcel #52-00-00-024.01)
 - N36° 58' 49.86" W88° 18' 02.51"

In this instance, a large portion of the search area is owned by the Tennessee Valley Authority and designated for the Kentucky Dam State Park. Per Bill Novak of the Kentucky State Parks Department, towers are not typically allowed on state parks.

Step 6: Candidate Evaluation and Selection. After the preliminary site assessments were performed, the site development team ranked the candidates based on the availability of ground space, topography, applicable environmental conditions, construction feasibility and the potential impact of the facility on neighboring properties.

Towards the south of the search area, the Barb J. Cattle Family Limited Partnership owns a large parcel (parcel #53-00-00-010) spanning from US Highway 641 North to Ridge Road. This is the largest privately owned parcel in the search area. Charles Thorn, on behalf of the Barb J. Cattle Family Limited Partnership, offered a raw land site for consideration. Verizon Wireless considered this parcel for tower placement. Ultimately, this location was removed from consideration based on the availability of a superior candidate.

On the southern edge of the search area, the David W. Reed Revocable Trust owns parcel #53-00-00-019, which is approximately 40 acres in size. David Reed offered a raw land site for consideration. Verizon Wireless considered this candidate, but did not selected it for tower placement based on the availability of a superior candidate.

Renia Fehrenbacher owns approximately 35 acres in the eastern section of the search area between Sledd Creek Road and Ridge Road. Fehrenbacher offered a raw land site for consideration. The proposed site is located in a heavily forested area and will be well screened from surrounding parcels.

Step 7: Leasing and Due Diligence. Once a suitable candidate was selected, lease negotiations were commenced and site due diligence steps were performed, as described below.

Leasehold Due Diligence:

- A Title Report was obtained and reviewed to ensure that there are no limitations on the landowner's capacity to lease and to address any title issues.
- A site survey was obtained to identify the location of parcel features, boundaries, easements and other encumbrances revealed by the title search.
- Review of environmental conditions.

Engineering Due Diligence:

- Utility access identified.
- Grounding plan designed.
- Geotechnical soil analysis performed to determine foundation requirements.
- Foundations designed to meet the Kentucky Building Code lateral and subjacent support requirements.
- Site plan developed.

Federal Regulatory Due Diligence

- Federal Aviation Administration ("FAA")
- Federal Communication Commission ("FCC")

Step 8: Application. Once a lease is obtained and all site due diligence is completed, Verizon Wireless and PI Tower Development LLC prepared and filed the accompanying uniform application to construct, maintain and operate a communications facility.

Conclusion

Applicant's site identification and selection process aims to identify the least intrusive of all the available and technically feasible parcels in a service need area. In this case, the Fehrenbacher parcel offers a well screened site location that will resolve the existing service need.

Sincerely,

· craig|and|associates

Mat Brooks

Site Acquisition Specialist

181 Lanter Lane

Taylorsville, KY 40071

502-354-0274 Office / Fax

502-751-5629 Mobile

Mat.Brooks@caawireless.com

EXHIBIT F FAA



Issued Date: 05/17/2016

Alejandra Stinson Pl Tower Development, LLC - AS 7411 Fullerton St, Suite 110 Jacksonville, FL 32256

** 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 Gilbertsville Dam Marina (Monopole)

Location: Gilbertsville, KY

Latitude: 36-58-37.27N NAD 83

Longitude: 88-17-10.48W

Heights: 402 feet site elevation (SE)

191 feet above ground level (AGL) 593 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(a) met:

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)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 L.

This determination expires on 11/17/2017 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) t

(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 SIG

ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) a

le 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.

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.

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 (718) 553-2611. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-ASO-9747-OE.

Signature Control No: 288043892-292304618

(DNE)

Angelique Eersteling

Technician

Attachment(s) Frequency Data

cc: FCC

Frequency Data for ASN 2016-ASO-9747-OE

LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
698	806	MHz	1000	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
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
1850	1910	MHz	1640	W
1930	1990	MHz	1640	W
2305	2310	MHz	2000	W
2345	2360	MHz	2000	W

EXHIBIT G KENTUCKY AIRPORT ZONING COMMISSION



KENTUCKY AIRPORT ZONING COMMISSION

MATTHEW BEVIN Governor 90 Airport Road, Bldg 400 Frankfort, KY 40601 www.transportation.ky.gov 502 564-4480

June 13, 2016

APPROVAL OF APPLICATION

APPLICANT:

PI Tower Development LLC PI Tower Development LLC 7411 Fullerton St|Suite 110 Jacksonville, FL 32256

SUBJECT: AS-079-M34-2016-033

STRUCTURE: Antenna Tower LOCATION: Gilbertsville, KY

COORDINATES: 36° 58' 37.27" N / 88° 17' 10.48" W

HEIGHT: 191' AGL/593' AMSL

The Kentucky Airport Zoning Commission has approved your application for a permit to construct 191'AGL/593'AMSL Antenna Tower near Gilbertsville, KY 36° 58' 37.27" N / 88° 17' 10.48" 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.

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

John Houlihan Administrator





KENTUCKY AIRPORT ZONING COMMISSION

MATTHEW BEVIN Governor

90 Airport Road, Bldg 400 Frankfort, KY 40601 www.transportation.ky.gov 502 564-4480

CONSTRUCTION/ALTERATION STATUS REPORT

June 13, 2016

2.

AERONAUTICIAL STUDY NUMBER: AS-079-M34-2016-033

PI Tower Development LLC PI Tower Development LLC 7411 Fullerton St|Suite 110 Jacksonville, FL 32256

This concerns the permit which was issued to you by the Kentucky Airport Zoning Commission on June 13, 2016. 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, 90 Airport Road, Bldg 400, Frankfort, KY, 40601, 502 564-4480.

STRUCTURE: Antenna Tower LOCATION: Gilbertsville, KY

COORDINATES: 36° 58' 37.27" N / 88° 17' 10.48" W

1. The project () is abandoned. () is not abandoned.

HEIGHT: 191' AGL /593'AMSL

CONSTRUCTION/ALTERATION STATUS

Construction status is as follows:		
Structure reached its greatest height of	ft. AGL	
ft. AMSL on	(date).	
Date construction was completed.		
Type of obstruction marking/painting.		
Type of obstruction lighting.		
As built coordinates.		
Miscellaneous Information.		
DATE		
SIGNATURE/TITLE		





KENTUCKY TRANSPORTATION CABINET

TC 56-50 Rev. 07/2010 Page 2 of 2

KENTUCKY AIRPORT ZONING COMMISSION

APPLICATION FOR PERMIT TO CONSTRUCT OR ALTER A STRUCTURE

APPLICANT (name)	PHONE	FAX	KY AERONAUTIC		
PI Tower Development, LLC	904-450-4830			134-2016-03	
ADDRESS (street)	CITY		STATE	ZIP	
7411 Fullerton St, Suite 110	Jacksonville		FL	32256	
APPLICANT'S REPRESENTATIVE (name)	Contraction of the second	FAX			
Wireless Applications Corp	425-643-5000	L			
ADDRESS (street)	CITY		STATE	ZIP	
111 108 th Ave NE, Suite 160	Bellevue		WA	98004	
APPLICATION FOR New Construc			WORK SCHEDULE		
	porary (months	days)		End 05/18/2017	
TYPE Crane Building	The state of the s	IG/LIGHTING PREFE			
Antenna Tower	1			White- high intensity	
Power Line Water Tank		and the same of th		high intensity white	
Landfill	1	led Obstruction (The second second second second	the state of the s	
LATITUDE	LONGITUDE		DATUM N	AD83 \[\] NAD27	
36°58'37.27"	088 ⁰ 17'10.48"		Other		
NEAREST KENTUCKY	AND ADDRESS AND ADDRESS OF THE PARTY OF THE	Y PUBLIC USE OR M	ILITARY AIRPORT		
City Gilbertsvillel County Marshall	M34: KENTUCKY DA		Taura		
SITE ELEVATION (AMSL, feet)	TOTAL STRUCTURE HEIGHT (AGL, feet)		The second section of the second seco		
402	191		2016-ASO-9747-OE		
OVERALL HEIGHT (site elevation plus to	tal structure height,	feet)	PREVIOUS (FAA	aeronautical study #)	
593	1.49%				
DISTANCE (from nearest Kentucky publi	c use or Military airp	ort to structure)	PREVIOUS (KY ac	eronautical study #)	
1.934 nm	II				
DIRECTION (from nearest Kentucky pub	iic use or Military air	port to structure)			
342.06 degrees	CC 7.5 1 1		L		
DESCRIPTION OF LOCATION (Attach US	65 7.5 minute quaar	rangie map or an air,	port layout arawir	ig with the precise site	
marked and any certified survey.) Proposed site located at 364 Sledd Cree	k Pond Marchall Co	unti Cilhartavilla V	V 42044		
Proposed site located at 364 Siedd Cree	K ROBU, Marshall Co	unty, Gilbertsville, K	1,42044		
DESCRIPTION OF PROPOSAL					
Proposed site is a 191 ft AGL Monopole	tower including all	antennas and lightni	ing rod		
Toposed site is a 151 te rote monopole	tower, melauning an	ontennas ana ngntin	ing rou.		
FAA Form 7460-1 (Has the "Notice of Co	onstruction or Altera	tion" hoon filed with	the Federal Aviet	ion Administration 3	
No	JISTI ULTON OF AILETU	tion been jued with	the rederal Aviat	ion Administrationr)	
The same and the s	the above entries a	ande hy me are true	complete and co	erect to the hort of	
CERTIFICATION (I hereby certify that all the above entries, made by me, are true, complete, and correct to the best of my knowledge and belief.)					
PENALITIES (Persons failing to comply with KRS 183.861 to 183.990 and 602 KAR 050 are liable for fines and/or					
imprisonment as set forth in KRS 183.990(3). Noncompliance with FAA regulations may result in further penalties.)					
NAME TITLE	CIGNATURE	e with the regulation	DATE	ittler pendicies.	
Ronald W. Lageson, Jr Manager	annem w	Lug- 9.	4/12/2016		
monard vv. Edgeson, st. [manager			4/12/2010		
COMMISSION ACTION Chairperson, KAZC					
	Administrat	tor, KAZC	1 13	16	
Approved SIGNATURE	Lan		DATE 6-13	-/ -/	
Disapproved		Marie Control of the			

EXHIBIT H GEOTECHNICAL REPORT

Date: July 29, 2016 POD Job Number: 16-8131

GEOTECHNICAL REPORT

KY-Gilbertsville-Dam Marina PIKY017

(VZW – EV Kentucky Dam Marina) 36° 58′ 37.27″ N 88° 17′ 10.48″ W

> 364 Sledd Creek Rd, Gilbertsville, KY

> > Prepared For:



For:



Prepared By:





July 29, 2016

Ms. Alejandra Stinson Pl Tower Development , LLC 4601 Touchton Rd Building 300, Suite 3200 Jacksonville, FL 32246

Re:

Geotechnical Report - PROPOSED 188' MONOPOLE TOWER WITH A 3' LIGHTING ARRESTOR

Site Name: KY-Gilbertsville-Dam Marina, PIKY017 (VZW- EV Kentucky Dam Marina)

Site Address: 364 Sledd Creek Road, Gilbertsville, Marshall County, Kentucky

Coordinates: N36° 58' 37.27", W88° 17' 10.48"

POD Project No. 16-8131

Dear Ms. Stinson:

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, shelter and platform 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.

PATTERSON

Cordially,

Mark Patterson, P.E. Project Engineer

Copies submitted:

License No.: KY 16300

(3) Ms. Alejandra Stinson

LETTER OF TRANSMITTAL

TABLE OF CONTENTS

			<u>Page</u>
1.	. PUF	RPOSE AND SCOPE	1
2.	. PRC	DJECT CHARACTERISTICS	1
3.	. SUB	SSURFACE CONDITIONS	1
4.	. FOL	JNDATION DESIGN RECOMMENDATIONS	2
	4.1.	Proposed Tower	2
	4.1.	1. Drilled Piers	3
	4.1.	.2. Mat Foundation	3
	4.2.	EQUIPMENT PLATFORM	4
	4.3.	EQUIPMENT BUILDING	4
	4.4.	DRAINAGE AND GROUNDWATER CONSIDERATIONS	5
5.	. GEN	NERAL CONSTRUCTION PROCEDURES AND RECOMMENDATIONS	5
	5.1	Drilled Piers	5
	5.2	FILL COMPACTION	6
	5.3	Construction Dewatering	6
6	FIEL	LD INVESTIGATION	6
_		RRANTY AND LIMITATIONS OF STUDY	7
•	WΑ	KKANTY AND LIMITATIONS OF STUDY	

APPENDIX

BORING LOCATION PLAN BORING LOG SOIL SAMPLE CLASSIFICATION

Geotechnical Report

PROPOSED 188' MONOPOLE TOWER WITH A 3' LIGHTING ARRESTOR Site Name: KY-Gilbertsville-Dam Marina, PIKY017

(VZW - EV Kentucky Dam Marina)

364 Sledd Creek Road, Gilbertsville, Marshall County, Kentucky N36° 58′ 37.27″, W88° 17′ 10.48″

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 two borings and to evaluate this data with respect to foundation concept and design for the proposed tower and shelter or equipment platform. 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

PI Tower Development, LLC is proposing to construct a 188 foot monopole tower with a 3 foot lighting arrestor and an equipment shelter or platform at N36° 58′ 37.27″, W88° 17′ 10.48″, 364 Sledd Creek Road, Gilbertsville, Marshall County, Kentucky. The site located in a small grass clearing near a wooded area behind a residence. The site is within the Kentucky Lake recreational area with the lake to the north and east of the site. The site will be accessed by an existing gravel road off Ridge Road. The proposed tower elevation is about EL 403 and there is about 14 feet change in elevation across the proposed lease area. Surface water will run off to the northwest. The proposed tower location is shown on the Boring Location Plan in the Appendix.

3. SUBSURFACE CONDITIONS

The subsurface conditions were explored by drilling two 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 are discussed in the following paragraphs.

According to the Kentucky Geological Survey, Kentucky Geologic Map Information Services, the site is underlain by the Clayton and McNairy Formations. These formations are made up of very fine grained sand, clay and silt that weather to brick red. They also contain iron deposits and rock fragments. Continental deposits of gravel and sand are also located very near the site.

The boring encountered about 5 inches of topsoil at the existing ground surface. Below the topsoil, the borings encountered silty clay (CL) of low plasticity. The SPT N-values in the clayey soils were between 5 and 23 blows per foot (bpf) generally indicating a soft to medium stiff consistency in the top 3 feet that became very stiff below 3 feet. Sandy clay (CL) was encountered at about 6 feet. Both borings encountered lenses of material at about 6 feet that appear to

be very hard sand and clay that has become cemented together rather than sandstone. The SPT N-values ranging from 22 to 57 bpf. Both borings were terminated in the sandy clay, Boring 2 at the scheduled depth of 20 feet and Boring 1 at the scheduled depth of 50 feet.

Observations made at the completion of soil drilling operations indicated the borings were 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.

4.1. Proposed Tower

Our findings indicate that the proposed monopole 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 50 feet, a deeper boring should be drilled to determine the nature of the deeper material.

Depth Below Ground Surface, feet	0-3	3-6	6-35	35 - 50
Ultimate Bearing Pressure (psf)		8,300	11,060	14,000
C Undrained Shear Strength, psf	500	1500	2000	2500
Ø Angle of Internal Friction degrees	0	0	0	0
Total Unit Weight, pcf	120	120	125	130
Soil Modulus Parameter k, pci	30	500	500	700
Passive Soil Pressure, psf/one foot of depth		1000 + 40(D-3)	1300 + 43(D-6)	1700 + 45(D-35)
Side Friction, psf		500	600	800

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

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

4.1.2. Mat Foundation

The tower could be supported on a common mat foundation bearing on the silty clay between 3 and 15 can be designed using a ultimate bearing pressure of 8000 pounds per square foot may be used. This value may be increased

by 30 percent for the maximum edge pressure under transient loads. A friction value of 0.30 may be used between the concrete and the clay soil. The passive pressures given for the drilled pier foundation may be used to resist lateral forces.

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

4.2. Equipment Platform

An equipment platform may be supported on shallow piers bearing in the natural silty 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 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.

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

Floor slabs must be supported on at least 4-inch layer of relatively clean granular material such as gravel or crushed stone containing not more than 10 percent material that passes through a No. 4 sieve. This is to help distribute concentrated loads and equalize moisture conditions beneath the slab. Provided that a minimum of 4 in. of granular material is placed below the slab, a modulus of subgrade reaction (k30) of 110 lbs/cu.in. can be used for design of the floor slabs.

4.4. 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. Any seepage should be able to be pumped with sumps. All groundwater must be removed before the shallow foundations are poured.

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 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 insure that adequate moisture conditioning and compaction is being achieved.

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

5.3 Construction Dewatering

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

Some groundwater may be encountered in the drilled pier excavations and 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

Two 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. Boring 1 was terminated at the scheduled depth of 50 feet and Boring 2 was terminated at 20 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.

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.

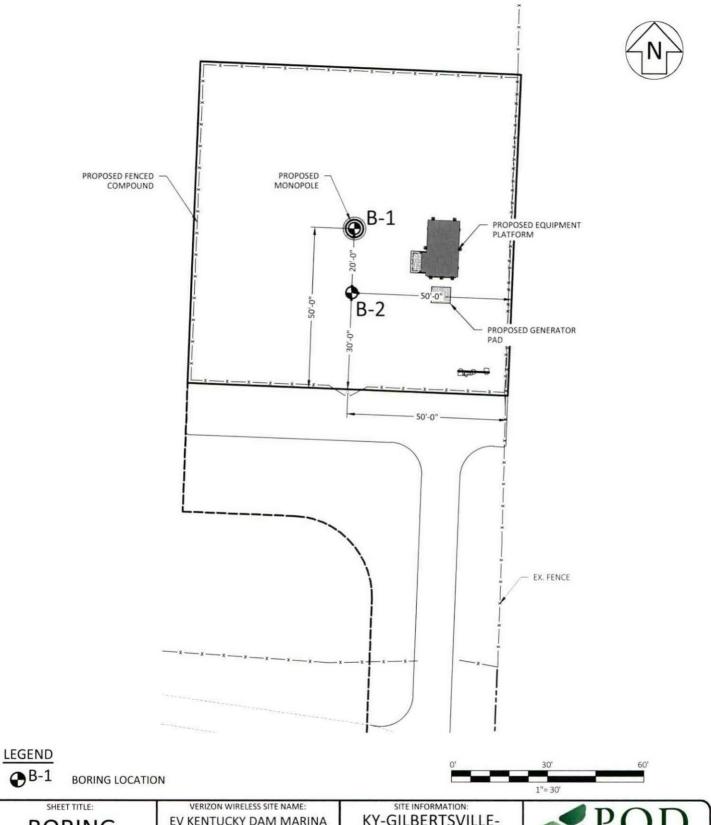
The nature and extent of variation and change in the subsurface conditions at the site may not become evident until the course of construction. Construction monitoring by the geotechnical engineer or a representative is therefore considered necessary to verify the subsurface conditions and to check that 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



EV KENTUCKY DAM MARINA KY-GILBERTSVILLE-**BORING** DAM MARINA LATITUDE: 36° 58' 37.27" N **LOCATION** 88° 17′ 10.48″ W POWER OF DESIGN LONGITUDE: PIKY017 11490 BLUEGRASS PKWY LOUISVILLE, KY 40299 502-437-5252 364 SLEDD CREEK ROAD **PLAN** PARCEL #: 53-00-00-001.01 GILBERTSVILLE, KY 42044 DEED BOOK 403, PAGE 127 MARSHALL COUNTY POD NUMBER: 16-8131 OWNER INFORMATION: SHEET NUMBER: INFRASTRUCTURE RENIA FEHRENBACHER DRAWN BY: POD PI TOWER DEVELOPMENT, LLC 364 SLEDD CREEK ROAD CHECKED BY: MEP 7411 FULLERTON STREET, SUITE 110 JACKSONVILLE, FL 32256 GILBERTSVILLE, KY 42044 7.15.16



Boring Log

Boring: B-1

Page 1 of 1

Project:

Gilbertsville Dam

City, State

Gilbertsville, KY

Method:

H.S.A. Boring Date: 15-Jul-16

Location: Proposed Lease Area

Method. 11.5.A. Doing Date. 15-041-10 Docation. 110-05cd Dease Area							74104										
nside Diameter: 3 1/4" Drill Rig Type:						CI	ME '	750	ATV		Hamn	ier T	ype: A	uto			
Grou	roundwater: DRY										Weath	er:					
Drille	riller: Hoosier Drilling Note: About 5 inches of topsoil was encountered at the ground surface																
	From	То				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, (tsf)
	(ft)	(ft)	Mater	rial Description TOPSOIL	-	ωD	(i)	- 1	9 6 E		₩.5	S	R.F.	EA	≥0	% 0	⊃ 0 0
	0.0	0.5 5.5		(CL) - soft, moist, brown		1-2.5	SS	2,	2,	3	18	5,			25%		
		3.5	- very stiff, brown-l	ight gray mottled		3.5-5	SS	11,	12,	15	14	27,			14%		
	5.5	50.0) - very stiff to hard, red with ray mottleding, some large		6-7.5	SS	40,	50,		4	50,			11%		
				nented sand and clay, trace on deposits		8.5-10	SS	15,	16,	17	18	33,			12%		
						13.5-15	SS	10,	15,	20	18	35,			9%		
						18.5-20	SS	9,	9,	13	14	22,			11%		
						23.5-25	SS	7,	9,	17	18	26,			25%		
						28.5-30	SS	10,	14,	16	18	30,			17%		
						33.5-35	SS	20,	21,	22	18	43,			10%		
						38.5-40	SS	14,	22,	22	18	44,			4%		
						43.5-45	SS	15,	23,	30	18	53,			8%		
						48.5-50	SS	17,	20,	37	15	57,			9%		
			Boring To	erminated at 50 feet													



Boring Log

Boring: B-1

Page 1 of 1

Project:

Groundwater: DRY

Gilbertsville Dam

City, State

Gilbertsville, KY

Method:

H.S.A.

Boring Date:

15-Jul-16

Location: Proposed Lease Area

Inside Diameter: 3 1/4"

Drill Rig Type:

CME 750 ATV

Hammer Type: Auto

Weather:

Driller: Hoosier Drilling

Note: About 5 inches of topsoil was encountered at the ground surface

From To (ft)	Material 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. (tsf)
0.0 0.5	TOPSOIL	1		-										
0.5 6.0	SILTY CLAY (CL) - medium stiff, moist, brown with trace root fibers		1-2.5	ss	2,	3,	3	18	6,			24%		
3.5	- very stiff, brown-light gray mottled		3.5-5	SS	5,	8,	10	18	18,			15%		
6.0 20.0	SANDY CLAY (CL) - very stiff to hard, red with brown and light gray mottleding, some large fragments of cemented sand and clay, trace iron deposits		6-7.5	SS	25,	35,	22	18	57,			10%		
			8.5-10	SS	26,	25,	32	18	57,			13%		
			13.5-15	SS	8,	13,	17	18	30,			10%		
			18.5-20	SS	7,	9,	15	18	24,			12%		

SUIL SAMPLE CLASSIFICATION

COARSE GRAINED SOILS (SANDS & GRAVELS)		FI	NE GRAINED SO (SILTS & CLAYS		PARTIC	LE SIZE
<u>N</u>	Relative Density	N	Consistency	Qu, KSF 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 ir
11-20	Firm	5-8	Firm	1-2	Coarse Sand	2 mm to 4.75 mm
21-30	Very Firm	9-15	Stiff	2-4	Medium Sand	0.425 mm to 2 mm
31-50	Dense	16-30	Very Stiff	4-8	Fine Sand	0.075 mm to 0.425 mm
Over 50	Very Dense	Over 31	Hard	8+	Silts & Clays	Less than 0.075 mm

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

ROCK PROPERTIES

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

1 th (B 1, C B 1			Core Diameter	Inches	
	X100	63 REC	BQ	1-7/16	
Length of Core Run		NQ	NQ	1-7/8	
Sum of 4 in and longer Rock Pieces Recovered	V400	43 RQD	HQ	2-1/2	
	Length of Rock Core Recovered Length of Core Run Sum of 4 in, and longer Rock Pieces Recovered	Length of Core Run X100	Length of Core Run K100 63 REC NQ 43 RQD	Length of Rock Core Recovered X100 63 REC BQ Length of Core Run NQ NQ 43 RQD HQ	

SYMBOLS

KEY TO MATERIAL TYPES

Length of Core Run

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

	ROCKS
Symbols	Typical Names
	Limestone or Dolomite
	Shale
	Sandstone

N:		PROPERTY SYMBOLS rd Penetration, BPF				
M:	Moisture Content, %					
LL:	Liquid I	Liquid Limit, %				
PI:	Plasticity Index, %					
Qp:	Pocket Penetrometer Value, TSF					
Qu:	Unconfined Compressive Strength Estimated Qu, TSF					
γ.	Dry Unit Weight, PCF					
F:	Fines Content					
	SAI	MPLING SYMBOLS				
	SS	Split Spoon Sample				
	Q	Relatively Undisturbed				

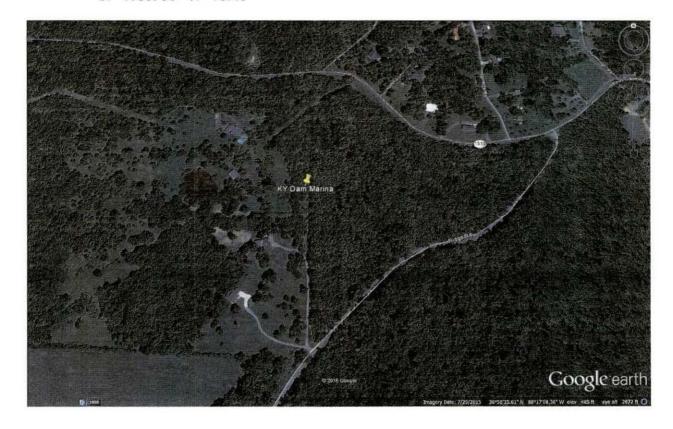
Sample

Rock Core Sample

EXHIBIT I DIRECTIONS TO WCF SITE

Driving Directions to Proposed Tower Site

- Beginning at the Marshall County Judge Executive's Office, located at 1101 Main Street in Benton, KY, head south on Main Street towards 14th Street.
- 2. Turn left onto E. 14th Street and travel approximately 269 feet.
- 3. Turn left onto Poplar Street and travel approximately 0.7 miles.
- 4. Turn right onto US-641 N / Main Street and travel approximately 4.0 miles.
- 5. Make a slight left onto US-641 N / US-68 W and travel approximately 0.4 miles.
- 6. Turn right onto US-641 N and travel approximately 4.9 miles.
- 7. Turn right onto Sledd Creek Road / State Highway 1519 and travel approximately 0.75 miles.
- 8. Turn right onto Ridge Road and travel approximately 0.5 miles to the access drive. The access drive is located off of Ridge Road at 2371 Ridge Road, Gilbertsville, KY.
- 9. The site is located at 364 Sledd Creek Road, Gilbertsville, KY. The site coordinates are
 - a. North 36° 58' 37.27"
 - b. West 88° 17' 10.48"



Prepared by:
Aaron L. Roof
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 J COPY OF REAL ESTATE AGREEMENT

FOR FILING OFFICER Pd. \$ 23.00 Rec. fee \$	STATE OF KENTUCKY, COUNTY OF MARSHALL I, Tim York, Clerk of the County Court for the County and State aforesaid, certify that the foregoing
Site Name: KY-Gilbertsville-Dam Marina	

Site Name; KY-Gilbertsville-Dam Marina Site Number: PIKY017

MEMORANDUM OF GROUND LEASE AGREEMENT

This Memorandum of Ground Lease Agreement is made on June 7th, 2016, by and between Renia Fehrenbacher a/k/a Renia Rogers, an individual, as Lessor, whose mailing address is 364 Sledd Creek Road Gilbertsville, KY 42044 and PI TOWER DEVELOPMENT LLC, a Delaware limited liability company, as Lessee, whose address is 7411 Fullerton Street, Suite 110 Jacksonville, FL 32256.

- 1. Lessor and Lessee are parties to a Ground Lease Agreement dated as of June 7th, 2016 (the "Lease"), the terms and provisions of which are incorporated herein by this reference. The premises covered by the Lease are located in Marshall County, KY, as more fully described in the legal description attached hereto as Exhibit "A" ("Leased Premises").
- 2. Pursuant to the Lease, the Lessor has granted, and by these presents does grant, to the Lessee easements for ingress, egress, utilities, for the duration of the Lease Agreement a more particularly described on Exhibit "A" hereto. The easement rights herein granted include the right and authority of Lessee to grant or assign to third parties all or some of the easement rights granted to Lessee herein.
- 3. The Lease provides for an initial term of five (5) years (the "Initial Term") which commenced on June 7th, 2016. The Lease also provides for five (5) additional five (5) year renewal terms (each, a "Renewal Term"). The Lease shall automatically renew for each such Renewal Term unless Lessee delivers written notice of intent not to renew to Lessor at least thirty (30) days prior to the expiration of the Initial Term, or the Renewal Term then in effect.
- 4. The Lease provides that during the term of the Lease neither Lessor nor any tenant or person or entity claiming by or through Lessor shall be allowed to install or operate a communications facility, including a telecommunications transmission tower, or operate an antenna site leasing business which competes directly or indirectly with Lessee on the lands of Lessor within a radius of five (5) miles of the Leased Premises.
- 5. The Lease provides that during the term of the Lease, in the event that the Lessor receives and desires to accept a bona fide offer to sell and convey the Leased Premises to a third party not related to the Lessor by at least 51% common ownership, then the Lessor shall first provide the Lessee with a written offer to sell and convey the Leased Premises to Lessee upon the same terms and conditions as the offer made by the third party, and Lessee shall have twenty (20) business days in which to accept the offer.
- 6. All of the terms and conditions of the Lease are incorporated herein by reference. In the event of a conflict between the terms hereof and the terms of the Lease, the terms of the Lease shall govern.

IN WITNESS WHEREOF, the parties hereto have executed this Memorandum of Lease as of the date first written above.

	Print Name: Renia Fehrenbacher
Witness: Rebecca M Bone Print Name: Rebecca M Bone	· · · · · · · · · · · · · · · · · · ·
Print Name:	
STATE OF <u>Kentucky</u> COUNTY OF <u>Marshall</u> L. Danna Lovett	a Notary Public of the County and State aforesaid
certify that Renia Fehrenbacher person executed the foregoing instrument. He as identification	ally came before me this day and acknowledged that (s)he She is personally known to me or produced in.
Notary Public Dana Lovett Print Name: Dana Lovett My Commission Expires: 1-5-18	ais W day of May 2014. - {affix notary stamp/seal}

LESSEE:

PI TOWER DEVELOPMENT LLC, a Delaware limited liability company

Witness:	a Delawate limited hability company
Print Name: Sama Carstens Print Name: Leauth Jugar	Print Name: Ron E. Bittner Title: Vice President
STATE OF FLORIDA COUNTY OF I, Joane 10 Lege hereby certify that Jon E. State Development LLC, a Delaware limited liab acknowledged the due execution of the for personally known to me or produced WITNESS any hand and notarial seal Notary Public: Print Name: My Commission Expires: 4-9-2017	ility company, personally appeared before me this day, and regoing instrument on behalf of said company. He/She is as identification.
	JEANETTE JERGER MY COMMISSION # FF 025350 EXPIRES: April 9, 2017 Borded Thru Nobert Public, Lordenwriters

EXHIBIT "A"

LEASED PREMISES AND EASEMENTS

The 100' x 100' Leased Premises and Easement(s) are located in the land legally described as follows:

Being a tract of land located on the westerly side of a road known as Ridge Road and just south of the Sledd Creek Road near the Gilbertsville community of Marshall County, Kentucky, said tract of land being more particularly described as follows:

Beginning at a one-half inch diameter steel road thirty inches long with a yellow plastic cap stamped "FHT ENGRS KRLS 1842" (hereinafter referred to as a steel road and cap) set where the southerly line of the herein described tract of land intersects the easterly line of the property from which this tract is subdivided, said easterly line also being the westerly line of the Kentucky Lake Reservoir Reservation boundary line with said steel road and cap being located N. 02° 21' 40° E a distance of 671.04 feet from an angle iron marker found where said westerly line intersects the northerly right-of-way line of Ridge Road; thence from said steel rod and cap aforesaid and the point of beginning proceed N. 84° 3′ 12" W. with a new division line a distance of 1,398.09 feet to a steel rod and cap set on the westerly line of the property from which this tract is subdivided, said westerly line also being the easterly line of Tract No. 4 of the property described in Deed Book 173, Page 86, of the Marshall County Clerk's Office owned by William J. Colburn, William Richard Colburn and Robert H. Florence as indicated therein; thence North 12° 30' 26" E along and with said easterly line 765.60 feet to a steel rod and cap previously set at an existing fence corner post and on the southerly boundary line of the Kentucky Dam Village State Resort Park; thence S. 71° 51′ 00° E. along and with said southerly line 703.00 feet to a steel rod and cap previously set beside a cross-tie post in the line of a fence; thence S. 86° 00′ 51″ E. continuing with said southerly line 585.00 feet to an angle iron marker found at T.V.A. corner 6-1 on the westerly line of the aforesaid Kentucky Lake Reservoir Reservation boundary line; thence S, 02° 21' 40° W, with said westerly line, 620,20 feet to the point of beginning of the herein described tract:

The aforesaid tract of land contains 871,887 square feet or 20.016 acres and is subject to the limitations, covenants, restrictions and easements shown in the Deed from USA-TVA to Luther Oraffen, an easement of unknown width for a West Kentucky Rural Electric Cooperative Aerial Electrical Line located across the northern portion of said property and any other easements, restrictions, or covenants that may be of public record.

SUBJECT TO AND TOGETHER WITH a forty foot wide perpetual easement for ingress, egress, and utility company installation purposes, said easement being more particularly described as follows:

Beginning at the southeasterly corner of the aforesaid 20.016 acre tract; thence S. 02° 21′ 40° W. along and with the easterly line of the aforesaid parent tract, 671.04 feet to an angle iron marker found on the northerly right-of-way line of Ridge Road on the arc of a curve that is concave to the southeast; thence with said northerly right-of-way line along the arc of a curve non-tangent to the aforesaid easterly line and having a radius length of 1,368.37 feet, a chord length of 63.97 feet with a bearing on the chord of S. 41° 03′ 58″ W. a distance of 63.97 feet to the intersection with the westerly

line of the herein described easement; thence N. 02° 21′ 40° E. leaving said northerly right-of-way line and with a line non-tangent to the aforesaid curve, 723.09 feet to the southerly line of the aforesaid 20.016 acre tract; thence S. 84° 35′ 12° E along and with said southerly line, 40.06 feet to the point of beginning and containing 27,867 square feet or 0.640 acres.

The bearings in this description are based upon a bearing of S. 71° 51′ 00″ E. along the northerly line of the aforesaid 20.016 acre tract as cited in Deed Book 507, Page 182, of the Marshall County Clerk's Office.

The aforesaid property being a portion of the T.V.A. Tract No. XGIR-59 and being a part of the same property conveyed to David Capps as indicated by Master Commissioner's Deed dated November 16, 1998, of record in Deed Book 307, Page 182, of the Marshall County Clerk's Office.

This description was drafted from a boundary line survey and plat of the subject property by Farris, McIntosh & Tremper, Inc., 124 South 31st Street, Paducah Kentucky 42001, under the seal and supervision of Richard G. Davis, Kentucky Professional land Surveyor #1842 on May 25, 2000.

AND 8ENG the same property conveyed to Todd Fehrenbacher and Renia Fehrenbacher from David Capps and Regina D. Capps by Deed dated June 22, 2000 and recorded June 29, 2000 in Deed Book 319, Page 419; AND FURTHER CONVEYED to Renia Lynn Fehrenbacher from Todd Fehrenbacher (a/k/a Cahvin Todd Fehrenbacher) by Quitclaim Deed dated January 18, 2011 and recorded January 24, 2011 in Deed Book 403, Page 127.

Tax Parcel No. 53-00-00-001.01

1004311
Filed on:6/27/2016 8:42:02 AM
Book: MISC Number: 154
Pages: 133 - 137
Tim York Marshall County
Deed 1321-0100

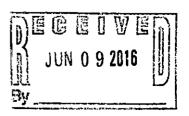


EXHIBIT K NOTIFICATION LISTING

Kentucky Dam Marina Landowner Notice List

Renia Fehrenbacher 364 Sledd Creek Rd. Gilbertsville, KY 42044

Justin R. and Brandy McLeod 2379 Ridge Rd Gilbertsville, KY 42044

Helene Marie Ramage 2371 Ridge Rd Gilbertsville, KY 42044

Barb J. Cattle Family Limited Partnership 805 Thorn Rd. Gilbertsville, KY 42044

William Richard Colburn 864 Evergreen St. Calvert City, KY 42029

Kentucky Dam State Park 166 Upper Village Dr. Gilbertsville, KY 42044

Tennessee Valley Authority 400 West Summit Hill Drive Knoxville, TN 37902

EXHIBIT L 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: Kentucky Dam Marina

Dear Landowner:

PI Tower Development, LLC and Kentucky RSA No. 1 Partnership d/b/a Verizon Wireless filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at 364 Sledd Creek Road, Gilbertsville, KY 42044 (36° 58' 37.27" North latitude, 88° 17' 10.48" West longitude). The proposed facility will include a 188-foot tall antenna tower, plus a 3-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 Marshall County Property Valuation Administrator's records indicate that you may own property that is within a 500' radius of the proposed tower site or 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 2016-00304 in any correspondence sent in connection with this matter.

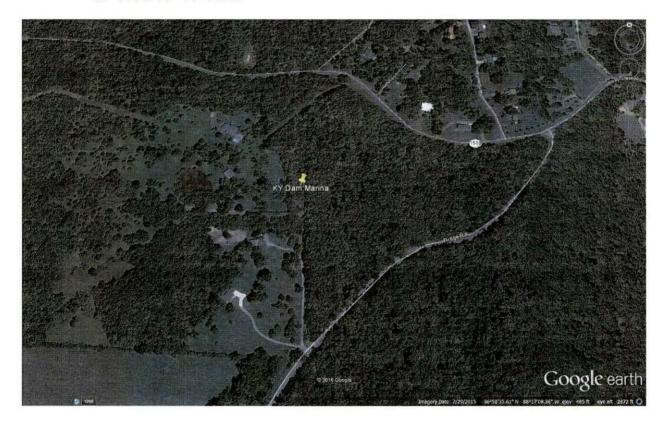
We have attached a map showing the site location for the proposed tower. Verizon Wireless' radio frequency engineers assisted in selecting the proposed site for the facility, and they have determined it is the proper location and elevation needed to provide quality service to wireless customers in the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

Sincerely, David A. Pike Attorney for Applicants

enclosure

Driving Directions to Proposed Tower Site

- Beginning at the Marshall County Judge Executive's Office, located at 1101 Main Street in Benton, KY, head south on Main Street towards 14th Street.
- 2. Turn left onto E. 14th Street and travel approximately 269 feet.
- 3. Turn left onto Poplar Street and travel approximately 0.7 miles.
- 4. Turn right onto US-641 N / Main Street and travel approximately 4.0 miles.
- 5. Make a slight left onto US-641 N / US-68 W and travel approximately 0.4 miles.
- 6. Turn right onto US-641 N and travel approximately 4.9 miles.
- 7. Turn right onto Sledd Creek Road / State Highway 1519 and travel approximately 0.75 miles.
- 8. Turn right onto Ridge Road and travel approximately 0.5 miles to the access drive. The access drive is located off of Ridge Road at 2371 Ridge Road, Gilbertsville, KY.
- 9. The site is located at 364 Sledd Creek Road, Gilbertsville, KY. The site coordinates are
 - a. North 36° 58' 37.27"
 - b. West 88° 17' 10.48"



Prepared by: Aaron L. Roof 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

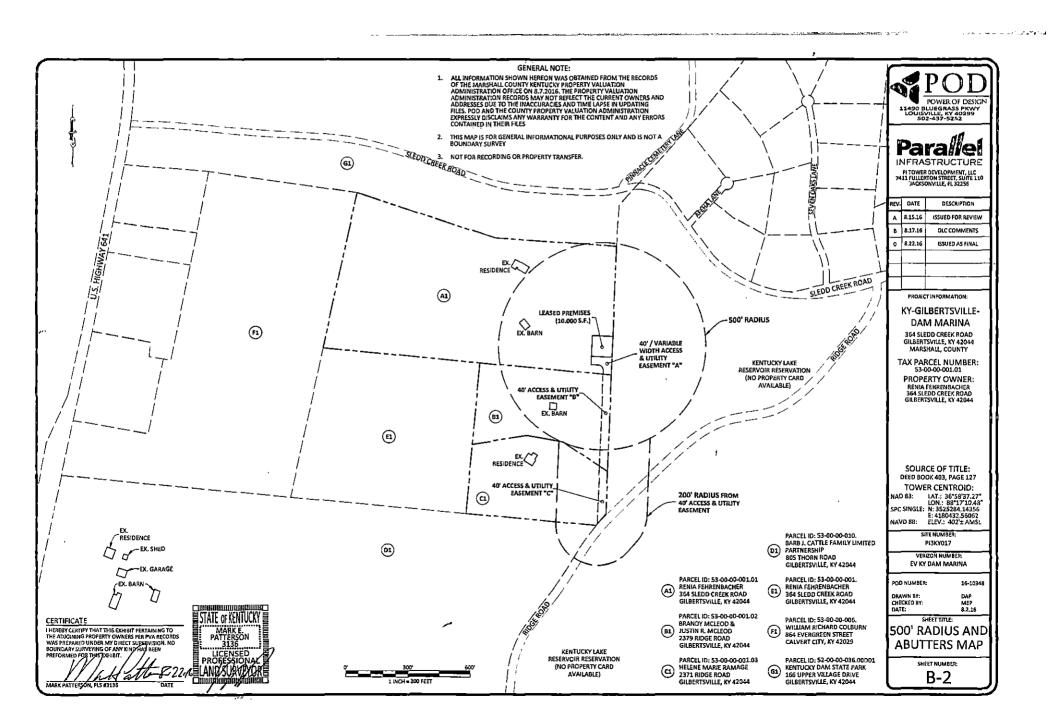


EXHIBIT M COPY OF COUNTY JUDGE/EXECUTIVE NOTICE



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. Kevin Neal 1101 Main Street Benton, KY 42025

RE:

Notice of Proposal to Construct Wireless Communications Facility

Kentucky Public Service Commission Docket No. 2016-00304

Site Name: Kentucky Dam Marina

Dear Judge Neal:

PI Tower Development, LLC and Kentucky RSA No. 1 Partnership d/b/a Verizon Wireless filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at 364 Sledd Creek Road, Gilbertsville, KY 42044 (36° 58' 37.27" North latitude, 88° 17' 10.48" West longitude). The proposed facility will include a 188-foot tall antenna tower, plus a 3-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 2016-00304 in any correspondence sent in connection with this matter.

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

Sincerely, David A. Pike Attorney for Applicants enclosure

Driving Directions to Proposed Tower Site

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- 3. Turn left onto Poplar Street and travel approximately 0.7 miles.
- 4. Turn right onto US-641 N / Main Street and travel approximately 4.0 miles.
- 5. Make a slight left onto US-641 N / US-68 W and travel approximately 0.4 miles.
- 6. Turn right onto US-641 N and travel approximately 4.9 miles.
- 7. Turn right onto Sledd Creek Road / State Highway 1519 and travel approximately 0.75 miles.
- 8. Turn right onto Ridge Road and travel approximately 0.5 miles to the access drive. The access drive is located off of Ridge Road at 2371 Ridge Road, Gilbertsville, KY.
- 9. The site is located at 364 Sledd Creek Road, Gilbertsville, KY. The site coordinates are
 - a. North 36° 58' 37.27"
 - b. West 88° 17' 10.48"



Prepared by: Aaron L. Roof 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

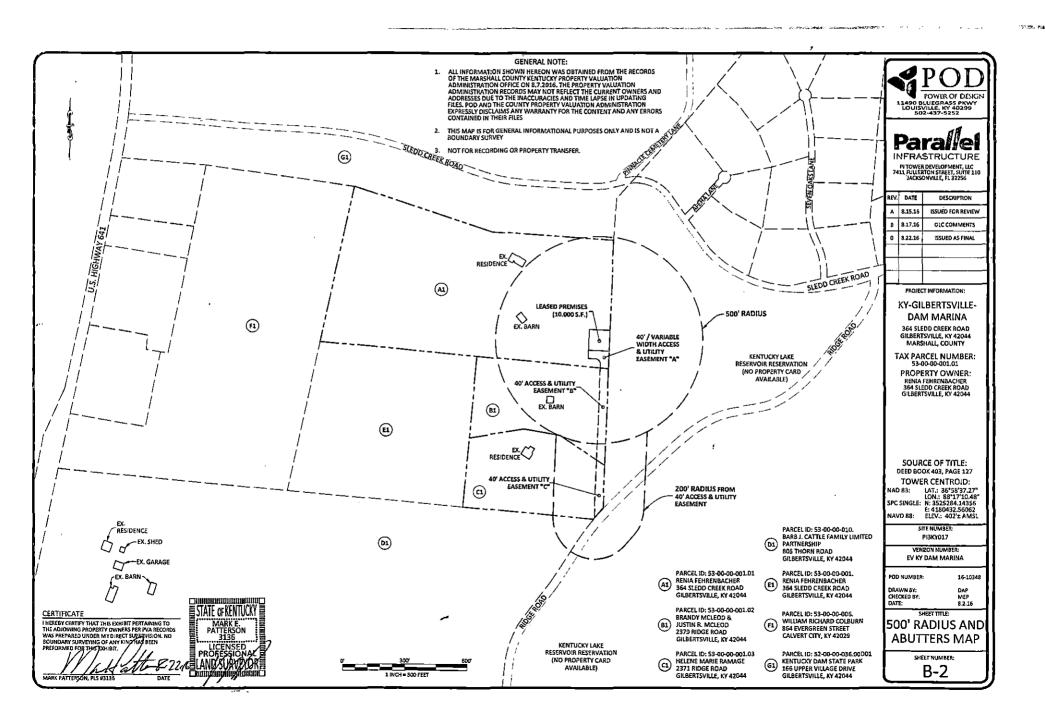


EXHIBIT N COPY OF POSTED NOTICES

SITE NAME: KENTUCKY DAM MARINA 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.

PI Tower Development LLC and Kentucky RSA No. 1 Partnership d/b/a Verizon Wireless propose 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, (800) 516-4293, or the Executive Director, Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2016-00304 in your correspondence.

PI Tower Development LLC and Kentucky RSA No. 1 Partnership d/b/a Verizon Wireless propose 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, (800) 516-4293, or the Executive Director, Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2016-00304 in your correspondence.

VIA TELEPHONE: 270-527-3162 VIA TELEFAX: 270-527-4567

Marshall County Tribune-Courier Attn: Legal Notice Ad Department 100 W. 11th Street Benton, KY 42025

RE: Legal Notice Advertisement

Site Name: Kentucky Dam Marina

Dear Ad Department:

Please publish the following legal notice advertisement in the next edition of *The Marshall County Tribune-Courier*:

NOTICE

Pl Tower Development, LLC and Kentucky RSA No. 1 Partnership d/b/a Verizon Wireless have filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at 364 Sledd Creek Road, Gilbertsville, KY 42044 (36° 58' 37.27" North latitude, 88° 17' 10.48" 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 2016-00304 in any correspondence sent in connection with this matter.

After this advertisement have been published, please forward a tearsheet 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,

Aaron L. Roof Pike Legal Group, PLLC EXHIBIT O
COPY OF RADIO FREQUENCY DESIGN SEARCH AREA





EV Kentucky Dam Marina – New Build SARF Map

EXHIBIT P RADIO FREQUENCY REPORT



August 11, 2016

TO: Talina R. Mathews
Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, KY 40601

RE: Proposed Verizon Communications Facility Site Name: EV KENTUCKY DAM MARINA

Type of Tower: 188' Monopole

Location: 364 Sledd Creek Road, Gilbertsville KY 42044

To Whom It May Concern:

As a radio frequency engineer for Verizon, I am providing this letter to state the need for the Verizon site called EV KENTUCKY DAM MARINA at the total height requested of 191'. The EV KENTUCKY DAM MARINA wireless communications site is necessary to improve coverage and capacity on US-641 from US-62 to Hwy 1422.

The height requested is necessary to provide continuous coverage to other existing network sites, offload for our existing network and gives Verizon the opportunity for growth on a structurally sound facility. The proposed tower would connect to five existing Verizon sites: Barge Island, Draffenville, Calvert City South, Calvert City & Grand Rivers.

Verizon cares about the communities and prefers to collocate on existing structures but no suitable structures were available in the search area of interest. The following existing structure inside the search area was reviewed, but Verizon determined this to not to be adequate for its purpose:

 North Marshall Water District – Water Tank – structure not tall enough to provide desired coverage

The EV KENTUCKY DAM MARINA site will allow Verizon to provide continuous coverage in a portion of Marshall County and along portions of major roadways in its vicinity. The site will provide the quality coverage our customers expect and rely on. Customers will experience access to mobile voice and wireless data services that may have been previously unavailable, and support Homeland Security through enhanced 911 services.

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

RF emission readings at this site in the accessible areas would be well below the applicable limits for FCC Uncontrolled/General Population and FCC Controlled/Occupational environments as outlined in 47

CFR 1.1301 through 1.1319. The site would carry appropriate RF emission signage to the public entering the site area.

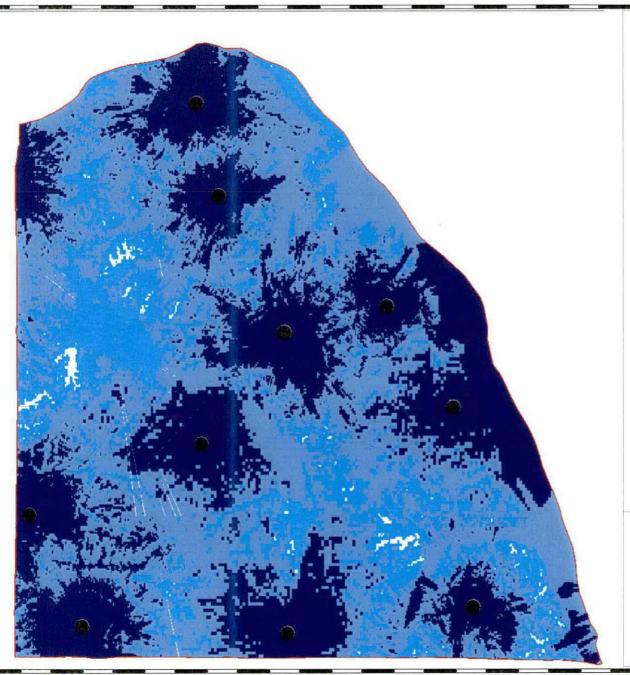
This site would transmit frequencies within the licensed frequency bands and the power limitations set by FCC regulatory authority. The site will go through a complete rigorous regulatory process before it comes on-air to provide service to our customers.

Verizon currently holds multiple FCC licenses in Marshall County in order to provide multiple forms of wireless services to its current and prospective customers.

Sincerely,

Brian P. Robbins

RF Engineer, Verizon



approximate wireless coverage. The coverage areas shown do not guarantee service availability, and may include locations with limited or no coverage. Even within a coverage area, there are many factors, including customer's equipment, terrain, proximity to buildings, foliage, and weather that may impact service. Some of the Coverage Areas include networks run by other carriers, the coverage depicted is based on their information and public sources, and we cannot ensure its accuracy.

4G LTE Core Coverage Area: Access the 4G LTE network within the Coverage Area.

4G LTE Border Coverage Area: Access the 4G LTE network within the Border Coverage Area; certain conditions may cause your service to connect to 3G in this Area.

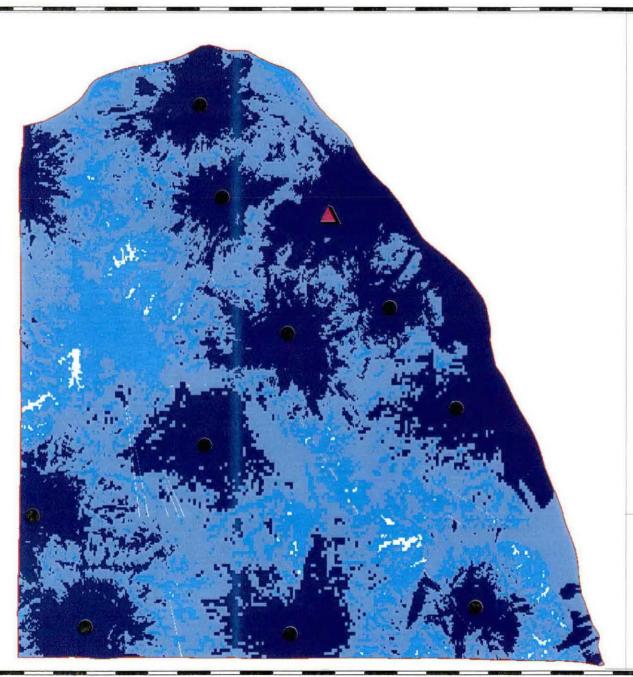
Zoning for Marshall County

Existing Verizon Wireless Coverage

- ▲ Proposed Site
- On Air Site

Coverage

- LTE Core Coverage
- LTE Border Coverage



These coverage maps depict predicted and approximate wireless coverage. The coverage areas shown do not guarantee service availability, and may include locations with limited or no coverage. Even within a coverage area, there are many factors, including customer's equipment, terrain, proximity to buildings, foliage, and weather that may impact service. Some of the Coverage Areas include networks run by other carriers, the coverage depicted is based on their information and public sources, and we cannot ensure its accuracy.

4G LTE Core Coverage Area: Access the 4G LTE network within the Coverage Area.

4G LTE Border Coverage Area: Access the 4G LTE network within the Border Coverage Area; certain conditions may cause your service to connect to 3G in this Area.

Zoning for Marshall County

Proposed Verizon Wireless Coverage

- ▲ Proposed Site
- On Air Site

Coverage

- LTE Core Coverage
- LTE Border Coverage