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**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

PUBLIC SERVICE  
COMMISSION

In the Matter of:

THE APPLICATION OF	)	
NEW CINGULAR WIRELESS PCS, LLC,	)	
A DELAWARE LIMITED LIABILITY COMPANY,	)	
D/B/A AT&T MOBILITY	)	
FOR ISSUANCE OF A CERTIFICATE OF PUBLIC	)	CASE NO.: 2018-00360
CONVENIENCE AND NECESSITY TO CONSTRUCT	)	
A WIRELESS COMMUNICATIONS FACILITY	)	
IN THE COMMONWEALTH OF KENTUCKY	)	
IN THE COUNTY OF WOLFE	)	

SITE NAME: FLAT MARY FN

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

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

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

1. The complete name and address of the Applicant: New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility having a local address of Meidinger Tower, 462 S. 4<sup>th</sup> Street, Suite 2400, Louisville, Kentucky 40202.

2. Applicant proposes construction of an antenna tower for communications services, which is to be located in an area outside the jurisdiction of a planning commission, and Applicant submits this application to the PSC for a certificate of public convenience and necessity pursuant to KRS §§ 278.020(1), 278.040, 278.650, 278.665, and other statutory authority.

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

4. The Applicant operates on frequencies licensed by the Federal Communications Commission ("FCC") pursuant to applicable FCC requirements. A copy of the Applicant's FCC licenses to provide wireless services are attached to this Application or described as part of **Exhibit A**, and the facility will be constructed and operated in accordance with applicable FCC regulations.

5. The public convenience and necessity require the construction of the proposed WCF. The construction of the WCF will bring or improve the Applicant's services to an area currently not served or not adequately served by the Applicant by increasing coverage or capacity and thereby enhancing the public's access to innovative and competitive wireless communications services. The WCF will provide a necessary link in the Applicant's communications network that is designed to meet the increasing demands

for wireless services in Kentucky's wireless communications service area. The WCF is an integral link in the Applicant's network design that must be in place to provide adequate coverage to the service area.

6. To address the above-described service needs, Applicant proposes to construct a WCF at 3302 Ky 15 S, Campton, Kentucky 41301 (37°41'54.945" North latitude, 83°31'10.109" 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 Patrick Glenn Graham pursuant to a Deed recorded at Deed Book 138, Page 541 in the office of the County Clerk. The proposed WCF will consist of a 195-foot tall tower, with an approximately 4-foot tall lightning arrestor attached at the top, for a total height of 199-feet. The WCF will also include concrete foundations and a shelter or cabinets to accommodate the placement of the Applicant's radio electronics equipment and appurtenant equipment. The Applicant's equipment cabinet or shelter will be approved for use in the Commonwealth of Kentucky by the relevant building inspector. The WCF compound will be fenced and all access gate(s) will be secured. A description of the manner in which the proposed WCF will be constructed is attached as **Exhibit B** and **Exhibit C**.

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

8. The site development plan and a vertical profile sketch of the WCF signed and sealed by a professional engineer registered in Kentucky depicting the tower height, as well as a proposed configuration for the antennas of the Applicant has also been included

as part of **Exhibit B**.

9. Foundation design plans signed and sealed by a professional engineer registered in Kentucky and a description of the standards according to which the tower was designed are included as part of **Exhibit C**.

10. Applicant has considered the likely effects of the installation of the proposed WCF on nearby land uses and values and has concluded that there is no more suitable location reasonably available from which adequate services can be provided, and that there are no reasonably available opportunities to co-locate Applicant's antennas on an existing structure. When suitable towers or structures exist, Applicant attempts to co-locate on existing structures such as communications towers or other structures capable of supporting Applicant's facilities; however, no other suitable or available co-location site was found to be located in the vicinity of the site.

11. Documentation confirming that no notice to the Federal Aviation Administration ("FAA") is required for this site is attached as **Exhibit E**.

12. Documentation confirming that a Kentucky Airport Zoning Commission ("KAZC") permit is not required for this site is attached as **Exhibit F**.

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

exhibit.

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

15. Applicant, pursuant to a written agreement, has acquired the right to use the WCF site and associated property rights. A copy of the agreement or an abbreviated agreement recorded with the County Clerk is attached as **Exhibit I**.

16. Personnel directly responsible for the design and construction of the proposed WCF are well qualified and experienced. The tower and foundation drawings for the proposed tower submitted as part of **Exhibit C** bear the signature and stamp of a professional engineer registered in the Commonwealth of Kentucky. All tower designs meet or exceed the minimum requirements of applicable laws and regulations.

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

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

19. **Exhibit B** includes a map drawn to an appropriate scale that shows the location of the proposed tower and identifies every owner of real estate within 500 feet of the proposed tower (according to the records maintained by the County Property Valuation Administrator). Every structure and every easement within 500 feet of the proposed tower or within 200 feet of the access road including intersection with the public street system is

illustrated in **Exhibit B**.

20. Applicant has notified every person who, according to the records of the County Property Valuation Administrator, owns property which is within 500 feet of the proposed tower or contiguous to the site property, by certified mail, return receipt requested, of the proposed construction. Each notified property owner has been provided with a map of the location of the proposed construction, the PSC docket number for this application, the address of the PSC, and has been informed of his or her right to request intervention. A list of the notified property owners and a copy of the form of the notice sent by certified mail to each landowner are attached as **Exhibit J** and **Exhibit K**, respectively.

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

22. Notice signs meeting the requirements prescribed by 807 KAR 5:063, Section 1(2) that measure at least 2 feet in height and 4 feet in width and that contain all required language in letters of required height, have been posted, one in a visible location on the proposed site and one on the nearest public road. Such signs shall remain posted for at least two weeks after filing of the Application, and a copy of the posted text is attached as **Exhibit M**. A legal notice advertisement regarding the location of the proposed facility has been published in a newspaper of general circulation in the county in which the WCF is proposed to be located. A copy of the newspaper legal notice advertisement is attached

as part of **Exhibit M**.

23. The general area where the proposed facility is to be located is rural and heavily wooded. There are no existing residential structures within 500' of the proposed tower location.

24. The process that was used by the Applicant's radio frequency engineers in selecting the site for the proposed WCF was consistent with the general process used for selecting all other existing and proposed WCF facilities within the proposed network design area. Applicant's radio frequency engineers have conducted studies and tests in order to develop a highly efficient network that is designed to handle voice and data traffic in the service area. The engineers determined an optimum area for the placement of the proposed facility in terms of elevation and location to provide the best quality service to customers in the service area. A radio frequency design search area prepared in reference to these radio frequency studies was considered by the Applicant when searching for sites for its antennas that would provide the coverage deemed necessary by the Applicant. A map of the area in which the tower is proposed to be located which is drawn to scale and clearly depicts the necessary search area within which the site should be located pursuant to radio frequency requirements is attached as **Exhibit N**.

25. The tower must be located at the proposed location and proposed height to provide necessary service to wireless communications users in the subject area.

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

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

to:

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



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

Respectfully submitted,



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David A. Pike  
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P. O. Box 369  
Shepherdsville, KY 40165-0369  
Telephone: (502) 955-4400  
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Email: dpike@pikelegal.com  
Attorney for New Cingular Wireless PCS, LLC  
d/b/a AT&T Mobility

## LIST OF EXHIBITS

- A - FCC License Documentation
- B - Site Development Plan:
  - 500' Vicinity Map
  - Legal Descriptions
  - Flood Plain Certification
  - Site Plan
  - Vertical Tower Profile
- C - Tower and Foundation Design
- D - Competing Utilities, Corporations, or Persons List
- E - FAA
- F - Kentucky Airport Zoning Commission
- G - Geotechnical Report
- H - Directions to WCF Site
- I - Copy of Real Estate Agreement
- J - Notification Listing
- K - Copy of Property Owner Notification
- L - Copy of County Judge/Executive Notice
- M - Copy of Posted Notices and Newspaper Notice Advertisement
- N - Copy of Radio Frequency Design Search Area

**EXHIBIT A**  
**FCC LICENSE DOCUMENTATION**

REFERENCE COPY

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



**Federal Communications Commission**  
**Wireless Telecommunications Bureau**

**RADIO STATION AUTHORIZATION**

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

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

<b>Call Sign</b> KNKN841	<b>File Number</b>
<b>Radio Service</b> CL - Cellular	
<b>Market Numer</b> CMA452	<b>Channel Block</b> A
<b>Sub-Market Designator</b> 0	

FCC Registration Number (FRN): 0003291192

<b>Market Name</b> Kentucky 10 - Powell
--------------------------------------------

<b>Grant Date</b> 08-30-2011	<b>Effective Date</b> 08-31-2018	<b>Expiration Date</b> 10-01-2021	<b>Five Yr Build-Out Date</b>	<b>Print Date</b>
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**Site Information:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
5	37-04-39.7 N	082-48-27.8 W	856.5	95.4	1061533
<b>Address:</b> 103 TOWER HILL ROAD (76337)					
<b>City:</b> WHITESBURG <b>County:</b> LETCHER <b>State:</b> KY <b>Construction Deadline:</b>					

**Antenna: 1**

<b>Maximum Transmitting ERP in Watts:</b> 140.820								
Azimuth(from true north)	0	45	90	135	180	225	270	315
<b>Antenna Height AAT (meters)</b>	469.200	417.400	315.300	222.000	132.100	356.800	457.700	492.500
<b>Transmitting ERP (watts)</b>	12.022	8.233	13.016	5.482	3.813	0.108	1.481	5.717

**Antenna: 2**

<b>Maximum Transmitting ERP in Watts:</b> 140.820								
Azimuth(from true north)	0	45	90	135	180	225	270	315
<b>Antenna Height AAT (meters)</b>	469.200	417.400	315.300	222.000	132.100	356.800	457.700	492.500
<b>Transmitting ERP (watts)</b>	0.497	0.110	0.136	2.162	18.537	40.538	17.478	2.020

**Antenna: 3**

<b>Maximum Transmitting ERP in Watts:</b> 140.820								
Azimuth(from true north)	0	45	90	135	180	225	270	315
<b>Antenna Height AAT (meters)</b>	469.200	417.400	315.300	222.000	132.100	356.800	457.700	492.500
<b>Transmitting ERP (watts)</b>	51.423	16.329	8.850	0.158	2.803	14.815	46.596	45.493

**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.

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN841

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
7	37-48-18.3 N	083-50-24.1 W	403.3	106.4	1043803

Address: 3690 Furnace Road (76341)

City: STANTON County: POWELL State: KY Construction Deadline:

Antenna: 1

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	239.600	224.300	179.900	162.000	195.500	176.800	262.600	283.200
Transmitting ERP (watts)	13.906	21.652	8.665	5.943	0.123	2.628	9.451	19.854

Antenna: 2

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	239.600	224.300	179.900	162.000	195.500	176.800	262.600	283.200
Transmitting ERP (watts)	0.562	11.483	60.345	87.582	20.025	2.235	0.703	0.268

Antenna: 3

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	239.600	224.300	179.900	162.000	195.500	176.800	262.600	283.200
Transmitting ERP (watts)	1.261	0.189	0.376	1.717	22.517	83.071	60.872	9.440

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
8	37-25-58.7 N	084-00-12.8 W	422.1	96.6	1043802

Address: 1 MILE NW OF MCKEE (76343)

City: MCKEE County: JACKSON State: KY Construction Deadline:

Antenna: 1

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	139.700	155.200	150.500	131.100	145.400	147.600	127.600	123.400
Transmitting ERP (watts)	26.126	93.835	72.381	11.143	1.397	0.214	0.430	1.977

Antenna: 2

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	139.700	155.200	150.500	131.100	145.400	147.600	127.600	123.400
Transmitting ERP (watts)	0.119	1.588	5.852	12.166	8.174	13.032	5.144	3.553

Antenna: 3

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	139.700	155.200	150.500	131.100	145.400	147.600	127.600	123.400
Transmitting ERP (watts)	17.060	5.344	6.326	3.080	2.938	13.608	19.087	18.277

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN841

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
11	37-43-36.1 N	083-56-30.1 W	428.5	105.2	1041588

Address: 1850 Chestnut Stand Road (76344)  
City: IRVINE County: ESTILL State: KY Construction Deadline:

Antenna: 1  
Maximum Transmitting ERP in Watts: 140.820  
Azimuth(from true north) 0 45 90 135 180 225 270 315  
Antenna Height AAT (meters) 268.100 191.200 185.400 224.200 235.300 293.800 271.800 266.500  
Transmitting ERP (watts) 21.827 35.355 13.530 9.226 0.129 4.117 15.601 31.961

Antenna: 2  
Maximum Transmitting ERP in Watts: 140.820  
Azimuth(from true north) 0 45 90 135 180 225 270 315  
Antenna Height AAT (meters) 268.100 191.200 185.400 224.200 235.300 293.800 271.800 266.500  
Transmitting ERP (watts) 0.672 14.167 72.140 103.407 24.559 2.608 0.888 0.327

Antenna: 3  
Maximum Transmitting ERP in Watts: 140.820  
Azimuth(from true north) 0 45 90 135 180 225 270 315  
Antenna Height AAT (meters) 268.100 191.200 185.400 224.200 235.300 293.800 271.800 266.500  
Transmitting ERP (watts) 1.492 0.235 0.449 2.041 27.595 98.921 76.583 11.514

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
12	37-22-08.0 N	083-00-10.8 W	529.7	108.2	1043800

Address: 792 AMON FINLEY ROAD (76338)  
City: HINDMAN County: KNOTT State: KY Construction Deadline:

Antenna: 1  
Maximum Transmitting ERP in Watts: 140.820  
Azimuth(from true north) 0 45 90 135 180 225 270 315  
Antenna Height AAT (meters) 231.800 219.900 201.700 233.100 202.300 239.000 278.600 245.800  
Transmitting ERP (watts) 345.918 142.771 15.858 3.731 0.807 1.018 16.311 138.097

Antenna: 2  
Maximum Transmitting ERP in Watts: 140.820  
Azimuth(from true north) 0 45 90 135 180 225 270 315  
Antenna Height AAT (meters) 231.800 219.900 201.700 233.100 202.300 239.000 278.600 245.800  
Transmitting ERP (watts) 1.551 31.288 164.802 238.390 59.476 6.231 2.030 0.777

Antenna: 3  
Maximum Transmitting ERP in Watts: 140.820  
Azimuth(from true north) 0 45 90 135 180 225 270 315  
Antenna Height AAT (meters) 231.800 219.900 201.700 233.100 202.300 239.000 278.600 245.800  
Transmitting ERP (watts) 4.316 0.653 1.244 5.580 75.771 271.432 209.105 33.455

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN841

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
13	37-44-34.1 N	083-32-43.4 W	360.0	86.6	1043799

Address: 1726 KY 746 (76340)

City: CAMPTON County: WOLFE State: KY Construction Deadline:

Antenna: 1

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	105.200	129.700	112.600	121.800	158.600	129.600	97.300	142.500
Transmitting ERP (watts)	113.535	44.045	5.001	1.193	0.243	0.337	5.446	43.123

Antenna: 2

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	105.200	129.700	112.600	121.800	158.600	129.600	97.300	142.500
Transmitting ERP (watts)	0.641	12.645	67.380	97.109	22.543	2.584	0.854	0.294

Antenna: 3

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	105.200	129.700	112.600	121.800	158.600	129.600	97.300	142.500
Transmitting ERP (watts)	0.787	0.112	0.226	1.022	13.467	50.517	39.258	5.570

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
14	37-45-19.1 N	083-20-19.6 W	362.7	93.9	1058724

Address: 929 LEE CITY ROAD (76347)

City: LEE CITY County: WOLFE State: KY Construction Deadline:

Antenna: 1

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	160.500	126.900	136.400	100.600	123.400	127.200	118.400	134.900
Transmitting ERP (watts)	105.412	44.973	4.744	1.221	0.238	0.320	5.172	42.213

Antenna: 2

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	160.500	126.900	136.400	100.600	123.400	127.200	118.400	134.900
Transmitting ERP (watts)	0.595	12.504	63.904	97.920	22.073	2.452	0.810	0.293

Antenna: 3

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	160.500	126.900	136.400	100.600	123.400	127.200	118.400	134.900
Transmitting ERP (watts)	1.345	0.215	0.399	1.899	24.230	89.305	69.406	10.402

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN841

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
15	37-11-21.8 N	083-10-57.4 W	577.6	156.1	1204858

Address: 2620 FOURSEAM BUFFALO ROAD (76349)

City: Hazard County: PERRY State: KY Construction Deadline:

Antenna: 1

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	361.100	304.700	308.200	300.700	255.900	299.100	341.500	375.800
Transmitting ERP (watts)	120.607	50.344	5.408	1.326	0.280	0.356	5.726	47.544

Antenna: 2

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	361.100	304.700	308.200	300.700	255.900	299.100	341.500	375.800
Transmitting ERP (watts)	1.079	22.080	114.046	169.090	41.240	4.315	1.412	0.525

Antenna: 3

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	361.100	304.700	308.200	300.700	255.900	299.100	341.500	375.800
Transmitting ERP (watts)	1.561	0.241	0.451	2.076	27.836	99.507	76.454	11.774

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
16	37-12-40.4 N	082-36-36.9 W	716.0	128.0	1222747

Address: 699 LINRAN DRIVE (76350)

City: JENKINS County: LETCHER State: KY Construction Deadline:

Antenna: 1

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	449.600	258.900	252.200	271.800	242.200	295.700	300.600	326.500
Transmitting ERP (watts)	0.562	0.658	0.841	0.365	0.110	0.096	0.097	0.214

Antenna: 2

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	449.600	258.900	252.200	271.800	242.200	295.700	300.600	326.500
Transmitting ERP (watts)	0.390	0.116	0.125	0.832	9.565	30.462	19.683	2.648

Antenna: 3

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	449.600	258.900	252.200	271.800	242.200	295.700	300.600	326.500
Transmitting ERP (watts)	48.868	7.353	1.008	0.183	0.318	2.103	23.291	76.831



Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN841

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
17	37-25-28.5 N	082-56-07.1 W	514.8	93.0	1246019

Address: 6068 EAST HIGHWAY 80 (80850)

City: Hindman County: KNOTT State: KY Construction Deadline:

Antenna: 1

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	232.300	300.300	246.700	186.200	173.800	220.100	214.400	203.300
Transmitting ERP (watts)	93.499	72.680	16.930	6.754	0.249	1.848	15.549	67.492

Antenna: 2

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	232.300	300.300	246.700	186.200	173.800	220.100	214.400	203.300
Transmitting ERP (watts)	2.853	28.250	86.426	109.267	48.855	9.880	5.119	1.857

Antenna: 3

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	232.300	300.300	246.700	186.200	173.800	220.100	214.400	203.300
Transmitting ERP (watts)	6.962	1.659	2.458	7.317	48.522	94.690	98.650	28.609

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
18	37-24-06.7 N	083-54-56.1 W	400.2	93.0	1252879

Address: 664 STATE ROAD 1071 (86076)

City: MCKEE County: JACKSON State: KY Construction Deadline:

Antenna: 1

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	182.900	174.200	158.700	146.400	115.600	116.900	95.600	99.100
Transmitting ERP (watts)	59.149	48.638	10.534	4.195	0.155	1.251	10.442	44.296

Antenna: 2

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	182.900	174.200	158.700	146.400	115.600	116.900	95.600	99.100
Transmitting ERP (watts)	2.874	30.589	89.034	109.683	50.425	10.217	5.307	1.868

Antenna: 3

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	182.900	174.200	158.700	146.400	115.600	116.900	95.600	99.100
Transmitting ERP (watts)	4.331	3.245	3.900	5.785	17.854	17.299	21.960	12.442

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN841

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
19	37-39-54.7 N	083-57-20.9 W	415.1	62.2	1272311

Address: 698 Little Doe Creek Road (109702)

City: Estill County: ESTILL State: KY Construction Deadline:

Antenna: 1

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)

0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	189.600	137.300	216.800	140.600	175.000	209.200	242.000	246.700
Transmitting ERP (watts)	147.672	98.700	12.008	4.052	0.328	0.354	9.692	72.782

Antenna: 2

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)

0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	189.600	137.300	216.800	140.600	175.000	209.200	242.000	246.700
Transmitting ERP (watts)	0.502	21.583	90.846	147.900	51.365	5.484	1.333	0.318

Antenna: 3

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)

0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	189.600	137.300	216.800	140.600	175.000	209.200	242.000	246.700
Transmitting ERP (watts)	8.223	1.146	0.387	4.798	55.608	132.151	134.692	33.348

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
20	37-54-33.3 N	083-55-30.3 W	431.9	78.6	1245218

Address: 2271B BLACK CREEK ROAD (76353)

City: CLAY County: POWELL State: KY Construction Deadline:

Antenna: 1

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)

0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	225.200	233.700	158.700	270.200	295.200	285.300	261.400	231.600
Transmitting ERP (watts)	0.138	2.791	14.890	20.205	4.916	0.538	0.179	0.103

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
21	37-14-49.4 N	083-19-33.9 W	432.8	93.6	1272180

Address: Dogwood Ln (106520)

City: Busy County: PERRY State: KY Construction Deadline:

Antenna: 1

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)

0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	172.100	163.400	158.200	101.100	131.500	140.000	142.300	199.400
Transmitting ERP (watts)	155.239	65.080	4.886	0.516	0.312	0.310	9.765	73.998

Antenna: 2

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)

0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	172.100	163.400	158.200	101.100	131.500	140.000	142.300	199.400
Transmitting ERP (watts)	1.558	22.222	110.717	145.006	30.764	1.939	0.302	0.269

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN841

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
21	37-14-49.4 N	083-19-33.9 W	432.8	93.6	1272180

Address: Dogwood Ln (106520)

City: Busy County: PERRY State: KY Construction Deadline:

Antenna: 3

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	172.100	163.400	158.200	101.100	131.500	140.000	142.300	199.400
Transmitting ERP (watts)	1.049	0.313	0.291	4.476	43.772	139.964	106.333	12.797

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
22	37-10-34.0 N	082-53-47.0 W	576.1	123.4	1252950

Address: 1125 ARTHURS LOOP(85581)

City: Isom County: LETCHER State: KY Construction Deadline:

Antenna: 1

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	235.200	224.500	218.400	188.600	210.000	292.300	197.500	250.000
Transmitting ERP (watts)	197.029	81.390	8.984	2.219	0.445	0.571	9.626	76.319

Antenna: 2

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	235.200	224.500	218.400	188.600	210.000	292.300	197.500	250.000
Transmitting ERP (watts)	0.557	11.226	58.900	88.634	20.717	2.200	0.784	0.268

Antenna: 3

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	235.200	224.500	218.400	188.600	210.000	292.300	197.500	250.000
Transmitting ERP (watts)	2.584	0.390	0.738	3.418	44.259	159.691	132.673	19.036

Control Points:

Control Pt. No. 1

Address: 1650 Lyndon Farms Court

City: LOUISVILLE County: State: KY Telephone Number: (502)329-4700

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).

WE MAKE NO FINDING IN THESE CASES CONCERNING THE ISSUES RAISED IN FOOTNOTE 3 OF LA STAR CELLULAR TELEPHONE COMPANY, 7 FCC Rcd 3762 (1992). THEREFORE, THESE GRANTS OF TRANSFERS/ASSIGNMENTS ARE CONDITIONED ON ANY SUBSEQUENT ACTION THE COMMISSION MAY TAKE C

**Licensee Name:** NEW CINGULAR WIRELESS PCS, LLC

**Call Sign:** KNKN841

**File Number:**

**Print Date:**

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

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**Federal Communications Commission  
Wireless Telecommunications Bureau**

**RADIO STATION AUTHORIZATION**

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

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

<b>Call Sign</b> KNLF251	<b>File Number</b>
<b>Radio Service</b> CW - PCS Broadband	

**FCC Registration Number (FRN):** 0003291192

<b>Grant Date</b> 06-02-2015	<b>Effective Date</b> 08-31-2018	<b>Expiration Date</b> 06-23-2025	<b>Print Date</b>
<b>Market Number</b> MTA026	<b>Channel Block</b> A	<b>Sub-Market Designator</b> 15	
<b>Market Name</b> Louisville-Lexington-Evansvill			
<b>1st Build-out Date</b> 06-23-2000	<b>2nd Build-out Date</b> 06-23-2005	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

**Waivers/Conditions:**

This authorization is subject to the condition that, in the event that systems using the same frequencies as granted herein are authorized in an adjacent foreign territory (Canada/United States), future coordination of any base station transmitters within 72 km (45 miles) of the United States/Canada border shall be required to eliminate any harmful interference to operations in the adjacent foreign territory and to ensure continuance of equal access to the frequencies by both countries.

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

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

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

**Licensee Name:** NEW CINGULAR WIRELESS PCS, LLC

**Call Sign:** KNLF251

**File Number:**

**Print Date:**

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

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

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

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

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNLF251

File Number:

Print Date:

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status
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**Federal Communications Commission  
Wireless Telecommunications Bureau**

**RADIO STATION AUTHORIZATION**

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: CECIL J MATHEW  
NEW CINGULAR WIRELESS PCS, LLC  
208 S AKARD ST., RM 1015  
DALLAS, TX 75202

<b>Call Sign</b> KNLH398	<b>File Number</b>
<b>Radio Service</b> CW - PCS Broadband	

FCC Registration Number (FRN): 0003291192

<b>Grant Date</b> 04-14-2017	<b>Effective Date</b> 08-31-2018	<b>Expiration Date</b> 04-28-2027	<b>Print Date</b>
<b>Market Number</b> BTA252	<b>Channel Block</b> D	<b>Sub-Market Designator</b> 0	
<b>Market Name</b> Lexington, KY			
<b>1st Build-out Date</b> 04-28-2002	<b>2nd Build-out Date</b>	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

**Waivers/Conditions:**

This authorization is subject to the condition that, in the event that systems using the same frequencies as granted herein are authorized in an adjacent foreign territory (Canada/United States), future coordination of any base station transmitters within 72 km (45 miles) of the United States/Canada border shall be required to eliminate any harmful interference to operations in the adjacent foreign territory and to ensure continuance of equal access to the frequencies by both countries.

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

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

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



Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNLH398

File Number:

Print Date:

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status
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**Federal Communications Commission  
Wireless Telecommunications Bureau**

**RADIO STATION AUTHORIZATION**

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: CECIL J MATHEW  
NEW CINGULAR WIRELESS PCS, LLC  
208 S AKARD ST., RM 1015  
DALLAS, TX 75202

<b>Call Sign</b> WPOI255	<b>File Number</b>
<b>Radio Service</b> CW - PCS Broadband	

FCC Registration Number (FRN): 0003291192

<b>Grant Date</b> 05-27-2015	<b>Effective Date</b> 08-31-2018	<b>Expiration Date</b> 06-23-2025	<b>Print Date</b>
<b>Market Number</b> MTA026	<b>Channel Block</b> A	<b>Sub-Market Designator</b> 19	
<b>Market Name</b> Louisville-Lexington-Evansville			
<b>1st Build-out Date</b> 06-23-2000	<b>2nd Build-out Date</b> 06-23-2005	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

**Waivers/Conditions:**

This authorization is subject to the condition that, in the event that systems using the same frequencies as granted herein are authorized in an adjacent foreign territory (Canada/United States), future coordination of any base station transmitters within 72 km (45 miles) of the United States/Canada border shall be required to eliminate any harmful interference to operations in the adjacent foreign territory and to ensure continuance of equal access to the frequencies by both countries.

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

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

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

**Licensee Name:** NEW CINGULAR WIRELESS PCS, LLC

**Call Sign:** WPOI255

**File Number:**

**Print Date:**

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

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

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

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

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

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: WPOI255

File Number:

Print Date:

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status
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**Federal Communications Commission  
Wireless Telecommunications Bureau**

**RADIO STATION AUTHORIZATION**

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

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

<b>Call Sign</b> WQGA823	<b>File Number</b>
<b>Radio Service</b> AW - AWS (1710-1755 MHz and 2110-2155 MHz)	

FCC Registration Number (FRN): 0003291192

<b>Grant Date</b> 11-29-2006	<b>Effective Date</b> 08-31-2018	<b>Expiration Date</b> 11-29-2021	<b>Print Date</b>
<b>Market Number</b> CMA452	<b>Channel Block</b> A	<b>Sub-Market Designator</b> 0	
<b>Market Name</b> Kentucky 10 - Powell			
<b>1st Build-out Date</b>	<b>2nd Build-out Date</b>	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

**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.

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: WQGA823

File Number:

Print Date:

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status
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**Federal Communications Commission  
Wireless Telecommunications Bureau**

**RADIO STATION AUTHORIZATION**

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: CECIL J MATHEW  
NEW CINGULAR WIRELESS PCS, LLC  
208 S AKARD ST., RM 1015  
DALLAS, TX 75202

<b>Call Sign</b> WQGD755	<b>File Number</b>
<b>Radio Service</b> AW - AWS (1710-1755 MHz and 2110-2155 MHz)	

**FCC Registration Number (FRN):** 0003291192

<b>Grant Date</b> 12-18-2006	<b>Effective Date</b> 08-31-2018	<b>Expiration Date</b> 12-18-2021	<b>Print Date</b>
<b>Market Number</b> BEA047	<b>Channel Block</b> C	<b>Sub-Market Designator</b> 9	
<b>Market Name</b> Lexington, KY-TN-VA-WV			
<b>1st Build-out Date</b>	<b>2nd Build-out Date</b>	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

**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.

Grant of the request to update licensee name is conditioned on it not reflecting an assignment or transfer of control (see Rule 1.948); if an assignment or transfer occurred without proper notification or FCC approval, the grant is void and the station is licensed under the prior name.

**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.

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: WQGD755

File Number:

Print Date:

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status
--------	-------------	-------------------	-----------------------	--------

Reference Copy

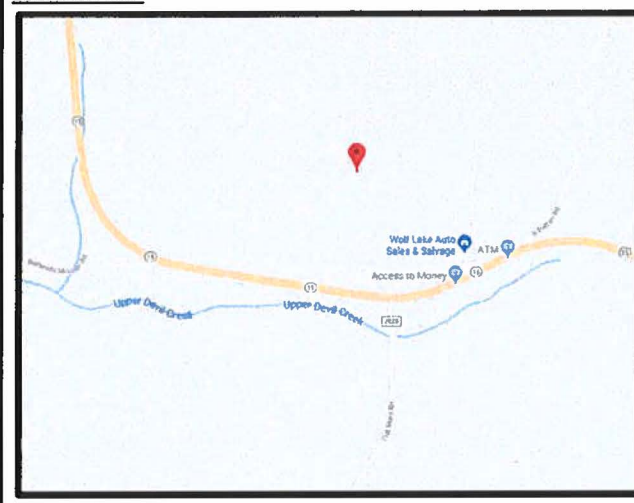


**EXHIBIT B**

**SITE DEVELOPMENT PLAN:**

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

**LOCATION MAP**



**DRIVING DIRECTIONS**

FROM WOLFE COUNTY CIRCUIT COURT CLERK OFFICE  
113 MAIN ST, CAMPTON, KY 41301:

- HEAD SOUTH ON JOHNSON ST TOWARD DRAKE ST 285 FT
- CONTINUE ONTO DRAKE ST 469 FT
- TURN LEFT ONTO KY-15 S 3.3 MI  
PASS BY SAVE-A-LOT (ON THE LEFT IN 0.8 MI)
- DESTINATION WILL BE ON THE LEFT

**BUILDING CODES AND STANDARDS**

CONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION FOR THE LOCATION.

CONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

- AMERICAN CONCRETE INSTITUTE 318
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL OF STEEL CONSTRUCTION
- TELECOMMUNICATIONS INDUSTRY ASSOCIATION TIA-222
- STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWER AND SUPPORTING STRUCTURES TIA-601
- COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS
- INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS IEEE-81, IEEE 1100, IEEE C62.41
- ANSI T1.311, FOR TELECOM - DC POWER SYSTEMS - TELECOM, ENVIRONMENTAL PROTECTION
- 2014 KBC
- 2014 NEC

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN.

SITE NAME:

# FLAT MARY FN

FA #:

## 14397273

PROPOSED RAW LAND SITE WITH A 195' MONOPOLE WITH A 4' LIGHTNING ARRESTOR AND INSTALLATION OF AN 8'x8' SHELTER ON A 8'x14' PAD WITH A GENERATOR

PREPARED FOR:



PREPARED BY:



TOGETHER PLANNING A BETTER TOMORROW  
158 BUSINESS CENTER DRIVE  
BIRMINGHAM, AL 35244  
TEL: 205-252-6985 FAX: 205-320-1504

**PROJECT INFORMATION**

SITE ADDRESS: 3302 KY 15 SOUTH CAMPTON, KY 41301  
 LATITUDE (NAD 83): N 37° 41' 54.945"  
 LONGITUDE (NAD 83): W 83° 31' 10.109"  
 LATITUDE (NAD DECIMAL): N 37.698596°  
 LONGITUDE (NAD DECIMAL): W 83.519475°  
 PARCEL ID: 049-00-00-012.00  
 JURISDICTION: KENTUCKY PUBLIC SERVICE COMMISSION  
 PROPERTY OWNER: GRAHAM, PATRICK GLENN  
 APPLICANT: NEW CINGULAR WIRELESS PCS, LLC  
 A DELAWARE LIMITED LIABILITY COMPANY, D/B/A AT&T MOBILITY MEIDINGER TOWER  
 462 S. 4TH STREET, SUITE 2400 LOUISVILLE, KY 40202  
 ENGINEER: SMW ENGINEERING  
 158 BUSINESS CENTER DRIVE BIRMINGHAM, AL 35244  
 CONTACT: JEREMY SHARIT, PE PHONE: 205-397-6781  
 POWER: TO BE DETERMINED  
 FIBER: FIBER COMPANY AWARDED BY AT&T AT FUTURE TIME, CONSULT CM

**DRAWING INDEX**

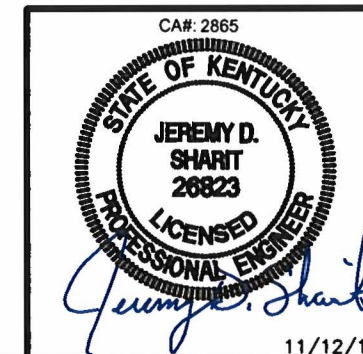
T-1	TITLE SHEET & PROJECT INFORMATION
<b>SURVEY:</b>	
B-1	SITE SURVEY
B-1.1	SITE SURVEY
B-2	500' RADIUS AND ABUTTERS MAP
<b>CIVIL:</b>	
C-1	OVERALL SITE LAYOUT
C-2	OVERALL SITE LAYOUT - CONT'D
C-3	ENLARGED COMPOUND LAYOUT
C-4	TOWER ELEVATION

**SCOPE OF WORK**

ZONING DRAWINGS FOR:  
CONSTRUCTION OF A NEW UNMANNED TELECOMMUNICATIONS FACILITY.  
  
SITE WORK: NEW TOWER UNMANNED WALK-IN CABINET ON A STEEL PLATFORM, GENERATOR ON A STEEL PLATFORM, AND UTILITY INSTALLATIONS.



KENTUCKY ONE-CALL  
STATE WIDE CALL: 811  
CALL BEFORE YOU DIG



SMW #: 18-0661



#	DATE	DESCRIPTION:
0	10/31/18	ISSUED FOR CLIENT REV.
1	11/08/18	ISSUED FOR CLIENT REV.
2	11/12/18	ISSUED FOR CONSTRUCTION

FLAT MARY FN  
TITLE SHEET &  
PROJECT INFORMATION

DESIGNED: JDS  
DRAWN: BMD  
CHECKED: RTB

JOB #: 14397273

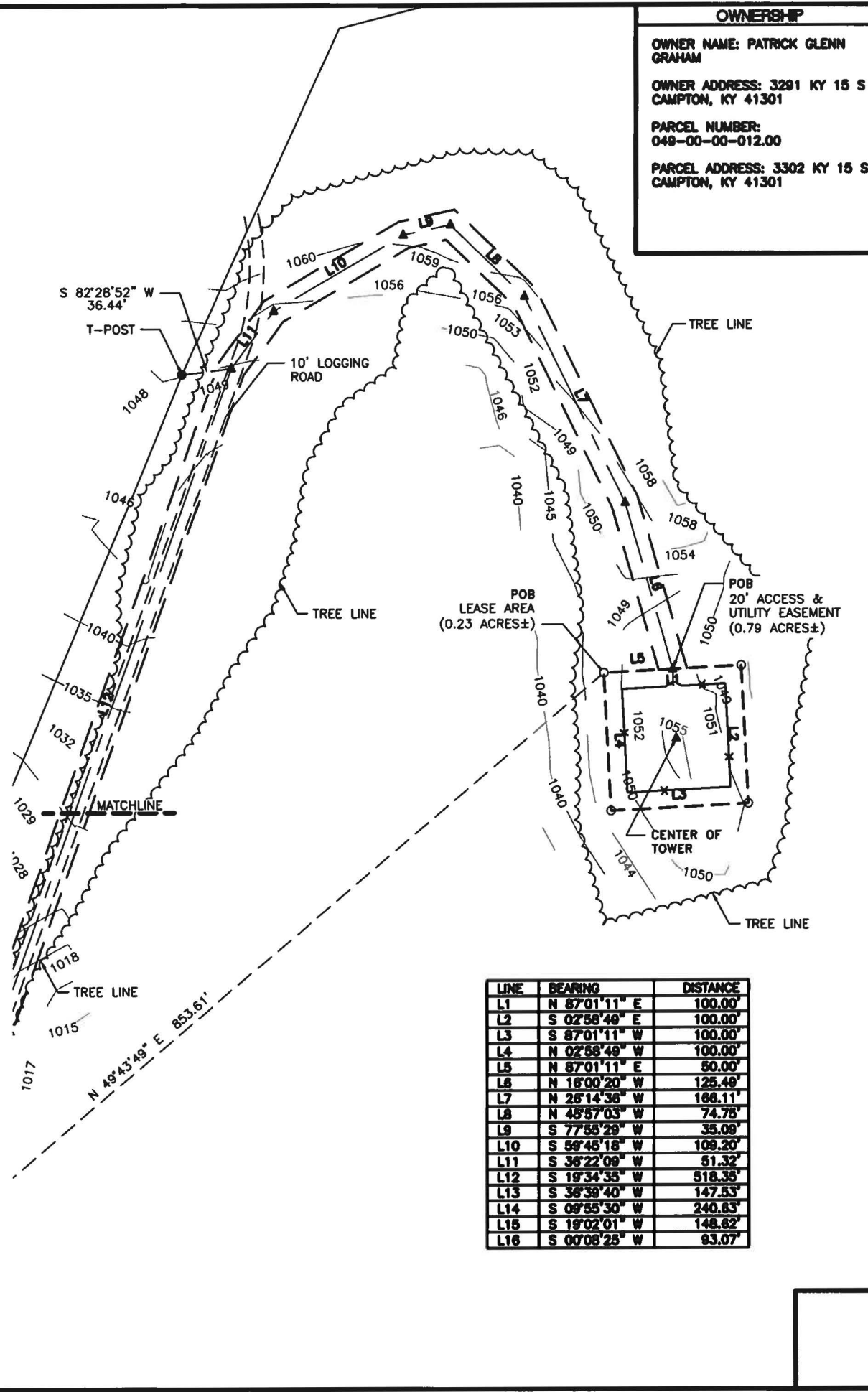
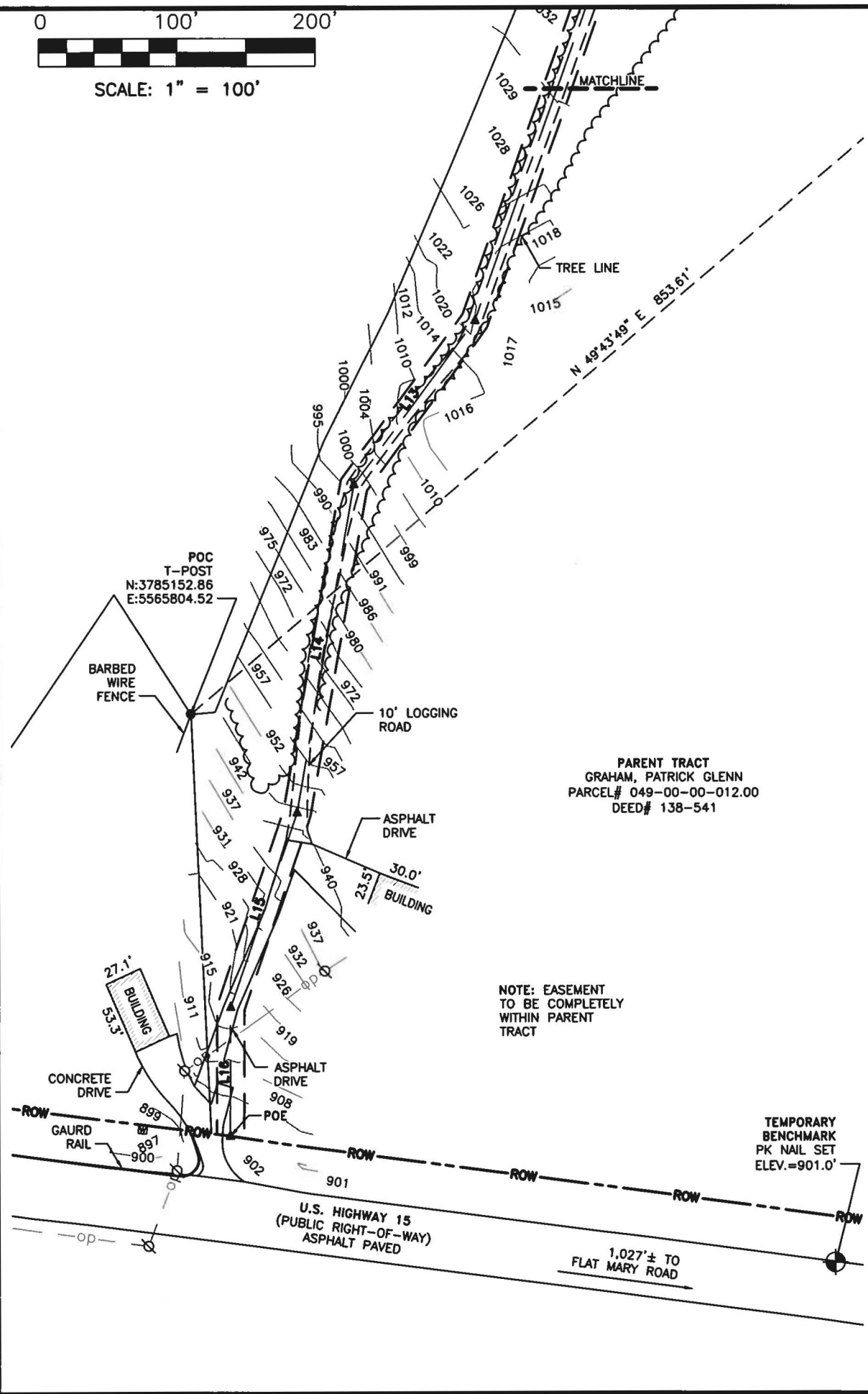
T-1

11/12/18

0 100' 200'



SCALE: 1" = 100'



LINE	BEARING	DISTANCE
L1	N 87°01'11" E	100.00'
L2	S 02°58'49" E	100.00'
L3	S 87°01'11" W	100.00'
L4	N 02°58'49" W	100.00'
L5	N 87°01'11" E	50.00'
L6	N 18°00'20" W	125.49'
L7	N 26°14'36" W	166.11'
L8	N 45°57'03" W	74.75'
L9	S 77°55'29" W	35.09'
L10	S 58°45'18" W	109.20'
L11	S 36°22'09" W	51.32'
L12	S 19°34'35" W	518.35'
L13	S 36°39'40" W	147.53'
L14	S 09°55'30" W	240.63'
L15	S 19°02'01" W	148.62'
L16	S 07°06'25" W	93.07'

**OWNERSHIP**

OWNER NAME: PATRICK GLENN GRAHAM

OWNER ADDRESS: 3291 KY 15 S CAMPTON, KY 41301

PARCEL NUMBER: 049-00-00-012.00

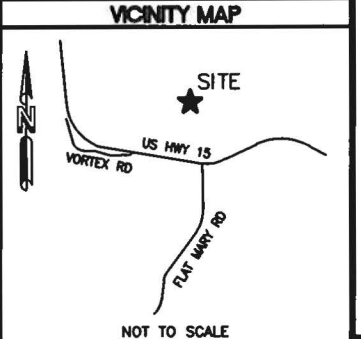
PARCEL ADDRESS: 3302 KY 15 S CAMPTON, KY 41301

**TOWER INFO**

LATITUDE: 37°41'54.945" NORTH  
LONGITUDE: 83°31'10.109" WEST (NAD 83)  
GROUND ELEVATION: 1055.9' ABOVE MEAN SEA LEVEL (NAVD88)

**SMW ENGINEERING GROUP, INC.**  
SURVEYING, PLANNING & DESIGN SERVICES  
SMW #: 18-0661

**at&t**



**KENTUCKY SINGLE ZONE**

GRID NORTH

GRID TO TRUE NORTH CONVERGENCE 1'22"

TRUE NORTH TO MAGNETIC DECLINATION 6°21' W

COMBINED SCALE FACTOR 0.999909735

- LEGEND**
- = 5/8" REBAR SET
  - = FOUND PROPERTY MARKER
  - POB = POINT OF BEGINNING
  - POC = POINT OF COMMENCEMENT
  - POE = POINT OF ENDING
  - ▲ = CALCULATED POINT
  - ⊞ = WATER METER

**DESCRIPTION:**

#	DATE	DESCRIPTION
0	10/31/18	ISSUED FOR CLIENT REV.
1	11/08/18	ISSUED FOR CLIENT REV.
2	11/12/18	ISSUED FOR CONSTRUCTION

**FLOOD NOTE**

By graphic plotting only, the subject property appears to lie in Zone "X" of the Flood Insurance Rate Map Community Panel No. 21237C0135C, which bears an effective date of September 17, 2008 and IS NOT in a special flood hazard area. Zone "X": Areas determined to be outside the 0.2% annual chance floodplain

FLAT MARY FN

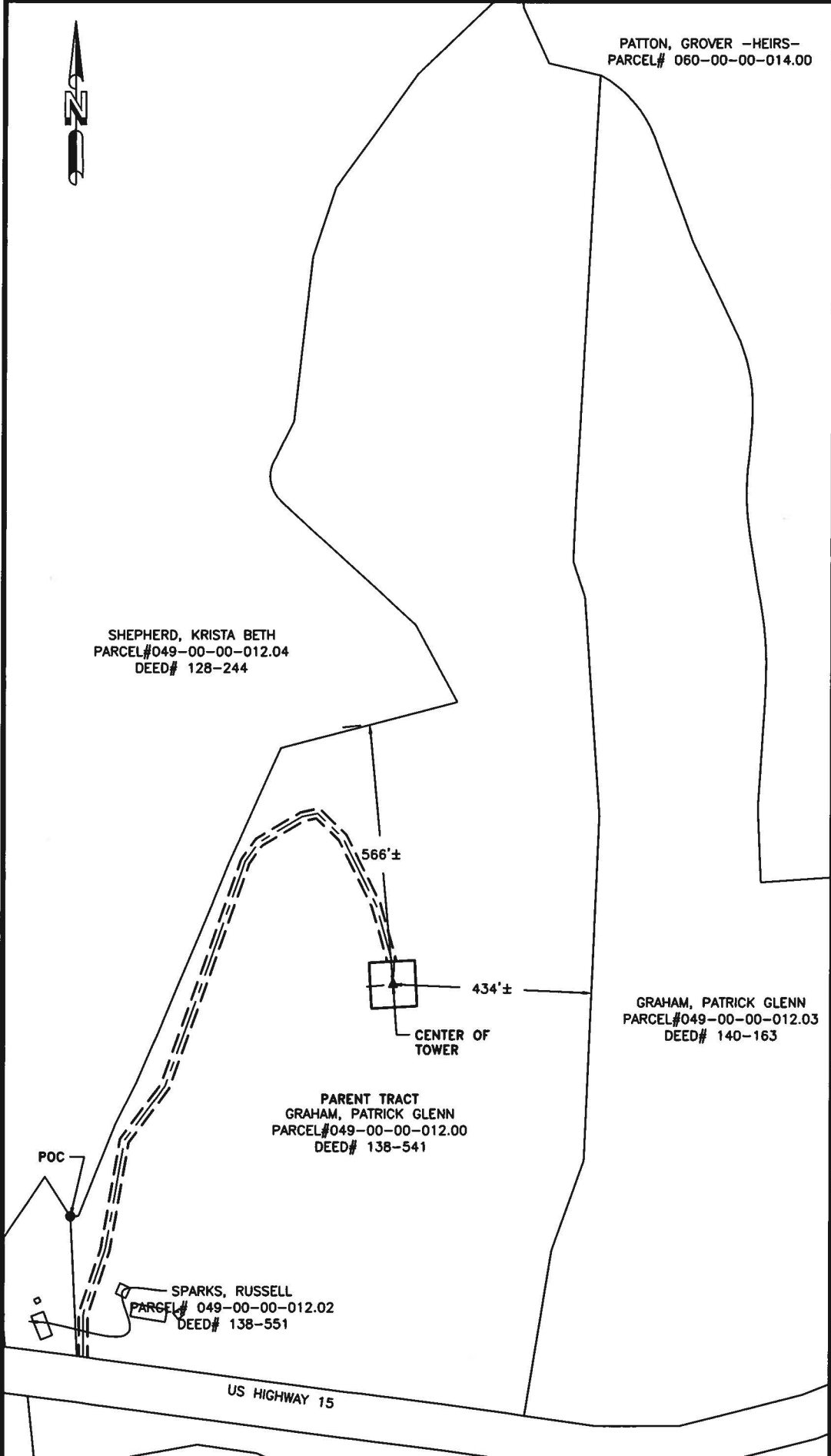
WOLFE COUNTY, KENTUCKY

**FLAT MARY FN**

**SITE SURVEY**

DESIGNED: JDS  
DRAWN: BMD  
CHECKED: RTB  
JOB #: 14397273

**B-1**



**PARENT TRACT (Deed 138-254)**

A tract or parcel of land in the Commonwealth of Kentucky, County of Wolfe, and being more particularly described as follows:

BEGINNING at the right-of-way of New Highway 15 at a drain located on the West side of the right-of-way, straight across New Highway 15 from the beginning point in Tract# 1 above; thence a West course with the center of the drain to the main creek; thence down the center of the main creek a North course to the Grover Patton line; thence with the Grover Patton line an East course to the right-of-way of New Highway 15; thence with the right-of-way of New Highway 15 a south course to a drain, the place of beginning, containing one acre, more or less.

**LEASE AREA**

A portion of the Patrick Glenn Graham tract described in Deed 138-541, Wolfe County, Kentucky, as recorded in the Clerk's County Office of Wolfe County, Kentucky, and being more particularly described as follows:

COMMENCE at a T-post fence corner found marking the most Westerly corner of said Patrick Glenn Graham tract and the Northeasterly corner of the Russell Sparks tract as recorded in Deed# 138-551 in said office and having the Kentucky Single State Plane Coordinates of N:3785152.86, E:5565804.52; Thence N 49°43'49" E a distance of 853.61 feet to a set 5/8" rebar and the POINT OF BEGINNING; Thence N 87°01'11" E a distance of 100.00 feet to a set 5/8" rebar; Thence S 02°58'49" E a distance of 100.00 feet to a set 5/8" rebar; Thence S 87°01'11" W a distance of 100.00 feet to a set 5/8" rebar; Thence N 02°58'49" W a distance of 100.00 feet to the Point of Beginning. Containing 10,000.00 square feet (0.23 acres) of land more or less.

**20' ACCESS & UTILITY EASEMENT**

A portion of the Patrick Glenn Graham tract described in Deed 138-541, Wolfe County, Kentucky, as recorded in the Clerk's County Office of Wolfe County, Kentucky, and being more particularly described as follows:

COMMENCE at a T-post fence corner found marking the most Westerly corner of said Patrick Glenn Graham tract and the Northeasterly corner of the Russell Sparks tract as recorded in Deed# 138-551 in said office and having the Kentucky Single State Plane Coordinates of N:3785152.86, E:5565804.52; Thence N 49°43'49" E a distance of 853.61 feet to a set 5/8" rebar; Thence N 87°01'11" E a distance of 50.00 to the POINT OF BEGINNING of an easement being 20 feet wide and lying 10 feet on each side of the following described centerline; Thence N 16°00'20" W a distance of 125.49 feet to a point; Thence N 26°14'36" W a distance of 166.11 feet to a point; Thence N 45°57'03" W a distance of 74.75 feet to a point; Thence S 77°55'29" W a distance of 35.09 feet to a point; Thence S 59°45'18" W a distance of 109.20 feet to a point; Thence S 36°22'09" W a distance of 51.32 feet to a point; Thence S 19°34'35" W a distance of 518.35 feet to a point; Thence S 36°39'40" W a distance of 147.53 feet to a point; Thence S 09°55'30" W a distance of 240.63 feet to a point; Thence S 19°02'01" W a distance of 148.62 feet to a point; Thence S 00°08'25" W a distance of 93.07 feet more or less to a point on the Northerly right-of-way of U.S. Highway 15 and the Point of Ending. Containing 34,195.1 square feet (0.79 acres) of land more or less.

**PLOTTABLE EXCEPTIONS**

U.S Title Solutions  
File No. 58974-KY1801-5030  
Reference No. FA 14397273  
Date January 30, 2018  
Schedule B

Exception No.	Instrument	Comment
1-4		Standard exceptions. Contain no survey matters.
5.	Instrument No. H-1620	Unable to determine effects, supportive documents lack sufficient data to locate on survey.
6.		Standard exceptions. Contain no survey matters.
7.	Book 132, Page 367	Does not affect the subject lease area or easements and is not shown hereon.

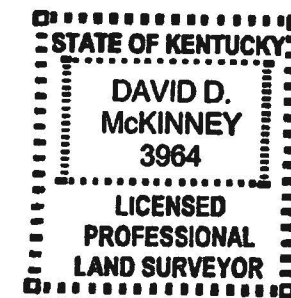
**SURVEYOR'S NOTES**

1. This is a Rawland Tower Survey, made on the ground under the supervision of a Kentucky Registered Land Surveyor. Date of field survey is March 9, 2018.
2. The following surveying instruments were used at time of field visit: Nikon NPL-352, Total Station, Reflectorless and Hiper + Legacy E RTK, GD 1HZ.
3. Bearings are based on Kentucky Single Zone State Plane Coordinates NAD 83 by GPS observation.
4. No underground utilities, underground encroachments or building foundations were measured or located as a part of this survey, unless otherwise shown. Trees and shrubs not located, unless otherwise shown.
5. Benchmark used is a GPS Continuously Operating Reference Station, PID DK3330. Onsite benchmark is as shown hereon. Elevations shown are in feet and refer to NAVD 88.
6. This survey was conducted for the purpose of a Rawland Tower Survey only, and is not intended to delineate the regulatory jurisdiction of any federal, state, regional or local agency, board, commission or other similar entity.
7. Attention is directed to the fact that this survey may have been reduced or enlarged in size due to reproduction. This should be taken into consideration when obtaining scaled data.
8. This Survey was conducted without the benefit of an Abstract Title Search.
9. This survey meets or exceeds the Minimum Standards of Practice as required by the State of Kentucky for a Class A survey as defined by 201 KAR 18:150.
10. Field data upon which this map or plat is based has a closure precision of not less than one-foot in 15,000 feet (1':15,000') and an angular error that does not exceed 10 seconds times the square root of the number of angles turned. Field traverse was not adjusted.
11. This survey is not valid without the original signature and the original seal of a state licensed surveyor and mapper.
12. This survey does not constitute a boundary survey of the Parent Tract. Any parent tract property lines shown hereon are from supplied information and may not be field verified.
13. The Lease Area, and Access and Utility Easement shown hereon was provided by Integristie dated March 19, 2018 in direct correlation with existing monuments and physical evidence found through inspection and may not depict actual rights of occupancy.
14. Per supplied information the site is not subject to any Zoning requirements or restrictions.

**SURVEYOR'S CERTIFICATION**

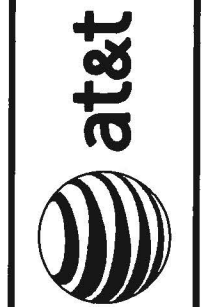
I certify that all parts of this survey and drawing have been completed in accordance with the current requirements of the Standards of Practice for Surveying in the State of Kentucky to the best of my knowledge, information, and belief.

*David D. McKinney*  
 David D. McKinney  
 Kentucky License No. 3964



FLAT MARY FN

WOLFE COUNTY, KENTUCKY



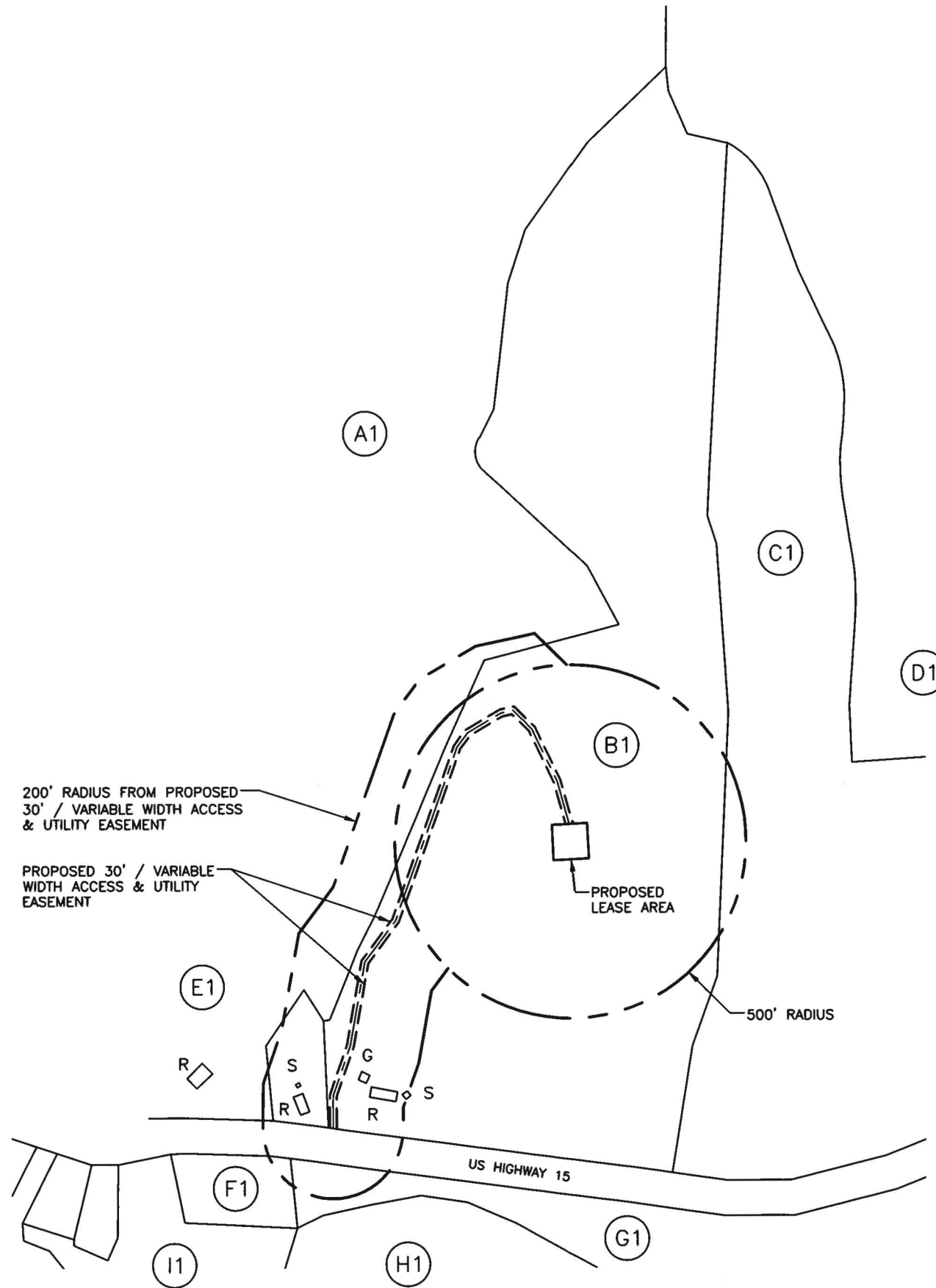
#	DATE	DESCRIPTION
0	10/31/18	ISSUED FOR CLIENT REV.
1	11/08/18	REISSUED FOR CLIENT REV.
2	11/12/18	ISSUED FOR CONSTRUCTION

FLAT MARY FN  
 SITE SURVEY

DESIGNED: JDS  
 DRAWN: BMD  
 CHECKED: RTB

JOB #: 14397273

B-1.1



200' RADIUS FROM PROPOSED  
30' / VARIABLE WIDTH ACCESS  
& UTILITY EASEMENT

PROPOSED 30' / VARIABLE  
WIDTH ACCESS & UTILITY  
EASEMENT

PROPOSED  
LEASE AREA

500' RADIUS

US HIGHWAY 15

**NOTE:**  
INFORMATION COMPILED ON 10/31/18  
INFORMATION SHOWN IS BASED ON THE  
RECORDS OF THE WOLFE COUNTY, KENTUCKY  
PROPERTY VALUATION ADMINISTRATOR

**EXISTING BUILDINGS**  
R = RESIDENCE  
B = BARN  
S = SHED  
G = GARAGE

- (A1) PARCEL ID: 049-00-00-012.04  
SHEPHERD, KRISTA BETH  
PO BOX 996  
CAMPTON, KY 41301
- (B1) PARCEL ID: 049-00-00-012.00  
GRAHAM, PATRICK GLENN  
5 KY 746  
CAMPTON, KY 41301
- (C1) PARCEL ID: 049-00-00-012.03  
GRAHAM, PATRICK GLENN  
33291 KY 15 SOUTH  
CAMPTON, KY 41301
- (D1) PARCEL ID: 060-00-00-014.00  
PATTON, GROVER -HEIRS-  
PATTON, EARL -ADM-  
PO BOX 402  
CAMPTON, KY 41301
- (E1) PARCEL ID: 049-00-00-012.02  
SPARKS, RUSSELL AND LOIS  
135 BACK LANE  
JACKSON, KY 41332
- (F1) PARCEL ID: 049-00-00-012.00  
GRAHAM, PATRICK GLEN  
5 KY 746  
CAMPTON, KY 41301
- (G1) PARCEL ID: 049-00-00-012.05  
GRAHAM, ANDY  
8432 KY 15 SOUTH  
CAMPTON, KY 41301
- (H1) PARCEL ID: 050-00-00-014.01  
TERRILL WILLIAM EDWARD &  
ELIZABETH ELLEN  
2158 ENDO VALLEY  
CINCINNATI, OH 45244
- (I1) PARCEL ID: 050-00-00-009.00  
PATTON, GROVER -HEIRS-  
PATTON, EARL -ADM-  
1634 KY 15 N  
CAMPTON, KY 41301



SMW #: 18-0661

at&t



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2	11/12/18	ISSUED FOR CONSTRUCTION

FLAT MARY FN  
500' RADIUS AND  
ABUTTERS MAP

DESIGNED: JDS  
DRAWN: BMD  
CHECKED: RTB

JOB #: 14397273

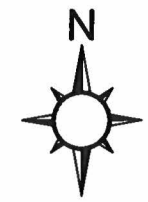


**B-2**

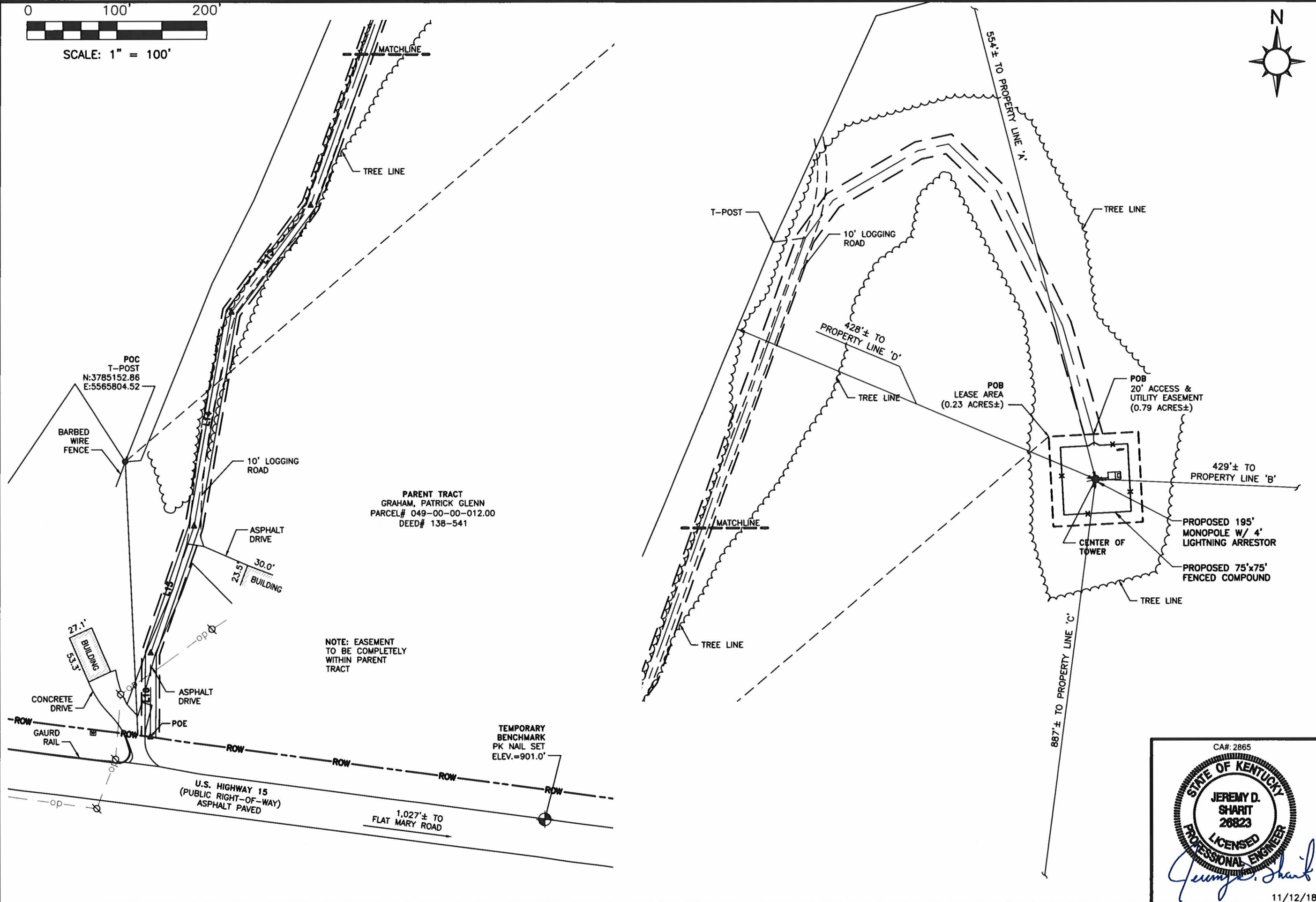
0 100' 200'



SCALE: 1" = 100'



SMW # 18-0661



PARENT TRACT  
GRAHAM, PATRICK GLENN  
PARCEL# 049-00-00-012.00  
DEED# 138-541

NOTE: EASEMENT  
TO BE COMPLETELY  
WITHIN PARENT  
TRACT

TEMPORARY  
BENCHMARK  
PK NAIL SET  
ELEV.=901.0'

#	DATE	DESCRIPTION:
0	10/31/18	ISSUED FOR CLIENT REV.
1	11/08/18	ISSUED FOR CLIENT REV.
2	11/12/18	ISSUED FOR CONSTRUCTION

FLAT MARY FN  
OVERALL SITE LAYOUT

CA#: 2865

JEREMY D. SHART  
26823  
LICENSED PROFESSIONAL ENGINEER

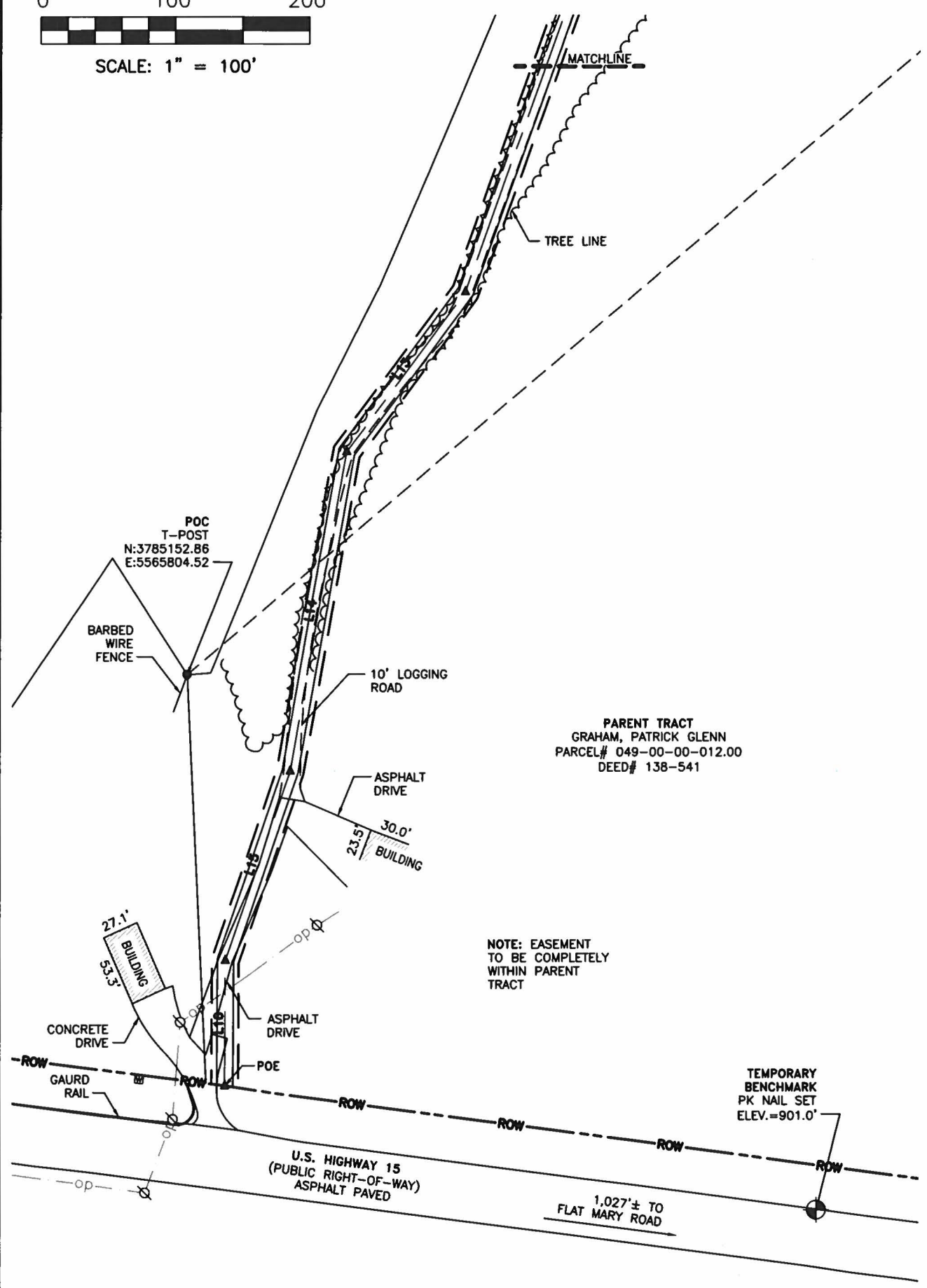
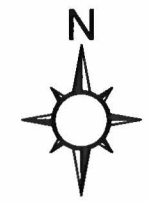
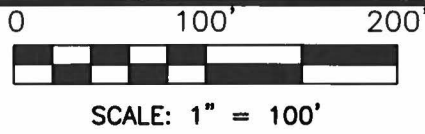
*Jeremy D. Shart*

11/12/18

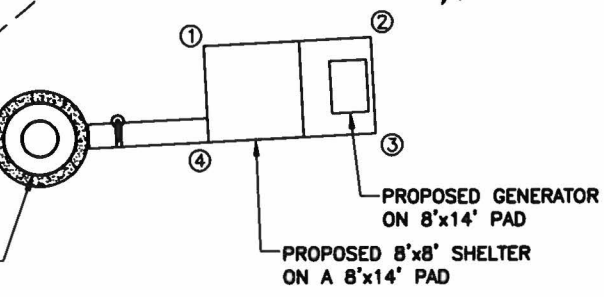
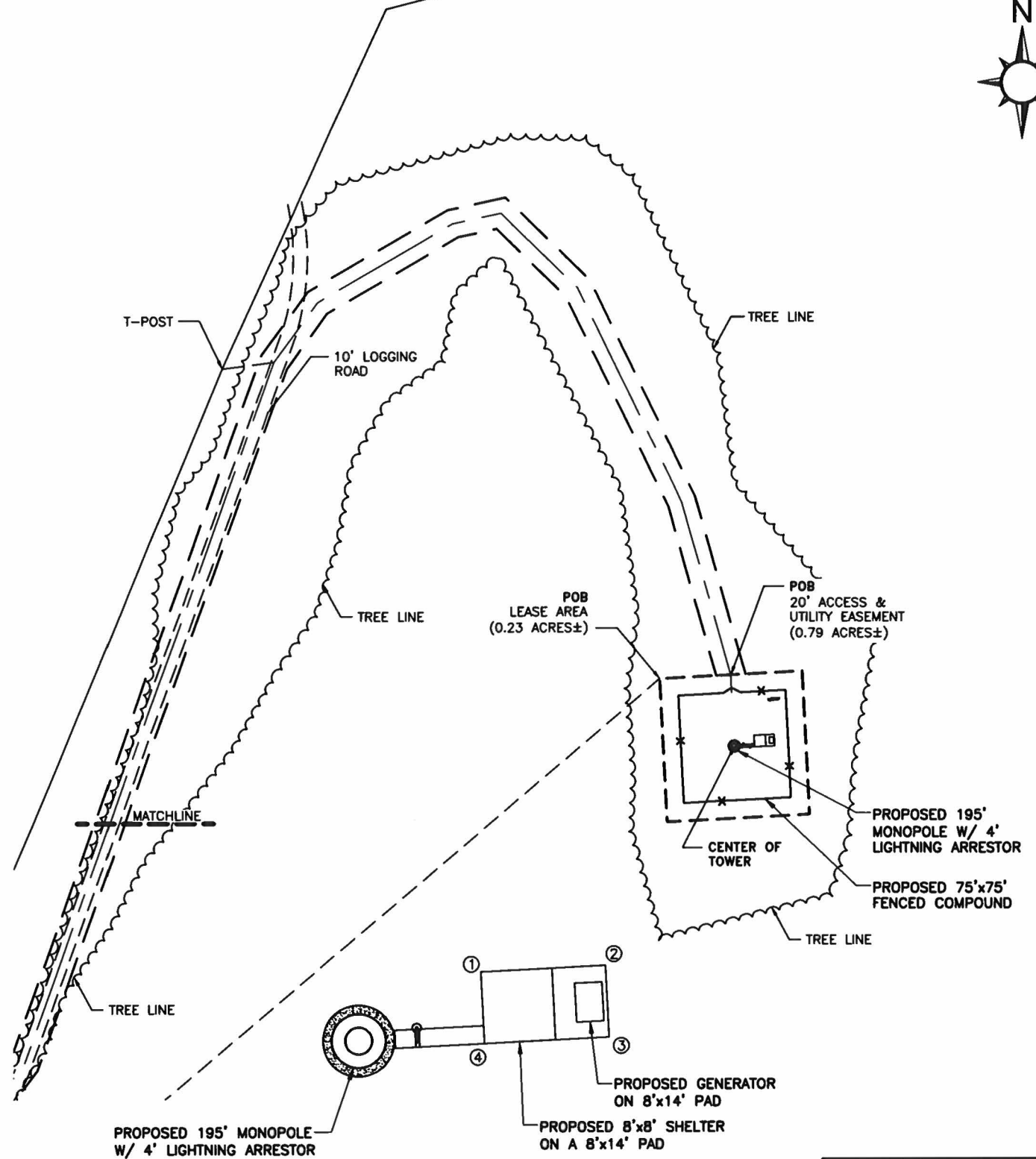
DESIGNED: JDS  
DRAWN: BMD  
CHECKED: RTB

JOB #: 14397273

C-1



PARENT TRACT  
GRAHAM, PATRICK GLENN  
PARCEL# 049-00-00-012.00  
DEED# 138-541



PROPERTY LINE	EQUIPMENT	DISTANCE
D	1	445'±
A	2	555'±
B	3	406'±
C	4	895'±

**ENLARGED EQUIPMENT**  
NOT TO SCALE

CA#: 2865

**JEREMY D. SHARIT**  
26823  
LICENSED PROFESSIONAL ENGINEER

*Jeremy D. Sharit*

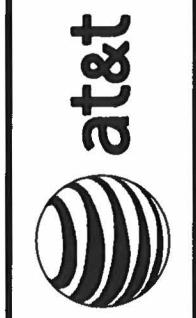
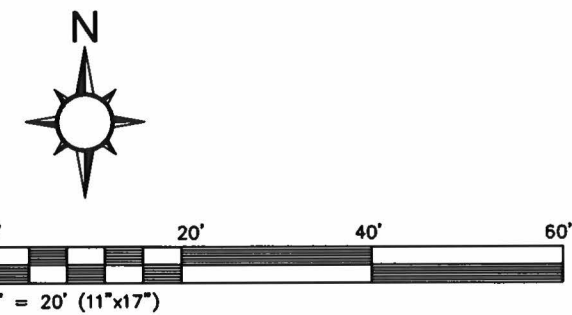
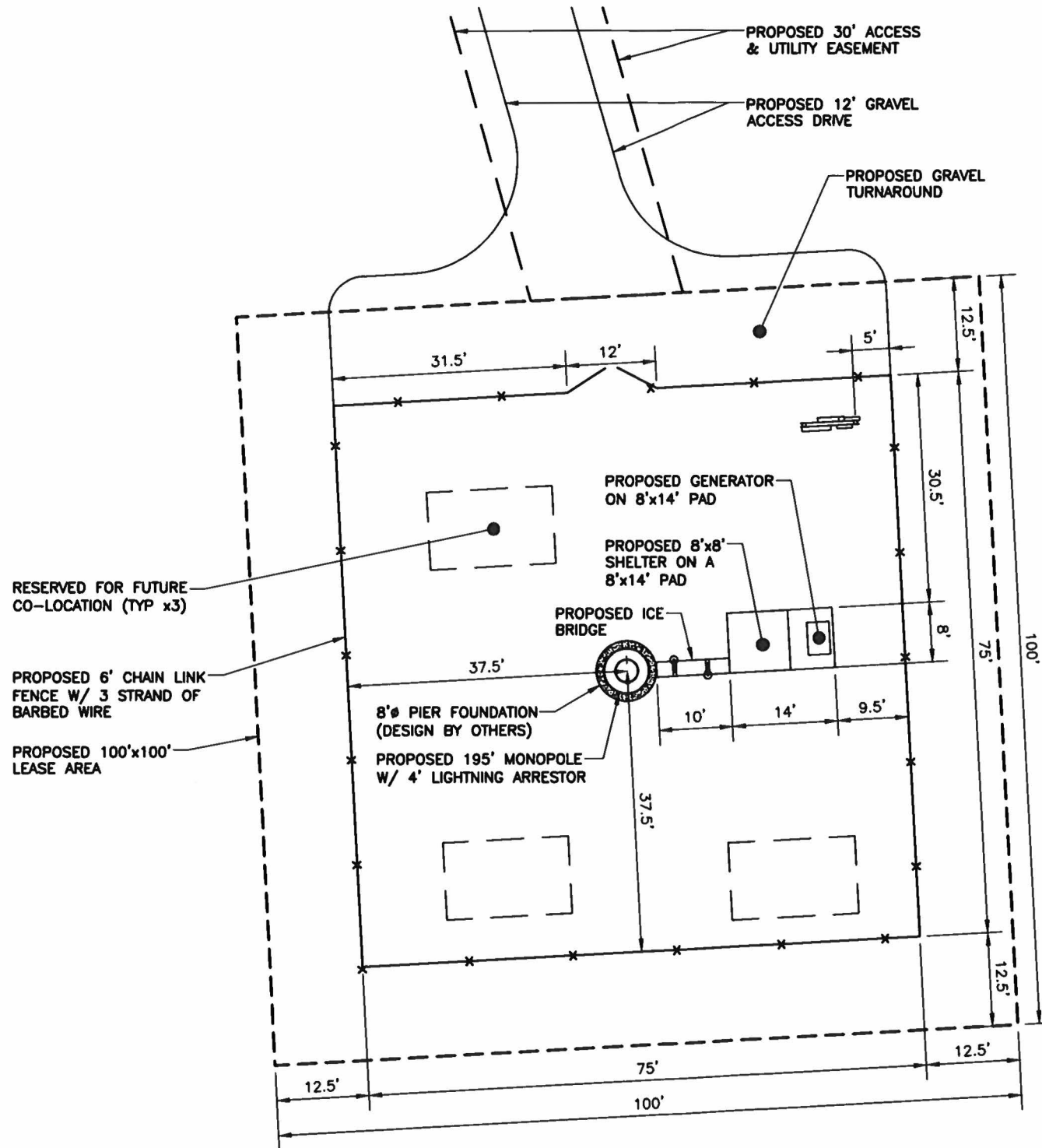
11/12/18

#	DATE	DESCRIPTION:
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1	11/08/18	ISSUED FOR CLIENT REV.
2	11/12/18	ISSUED FOR CONSTRUCTION

FLAT MARY FN  
**OVERALL SITE LAYOUT - CONT'D**

DESIGNED: JDS  
DRAWN: BMD  
CHECKED: RTB  
JOB #: 14397273

EXISTING TREES TO BE REMOVED  
WITHIN COMPOUND AND EASEMENT.  
CONTRACTOR TO FIELD VERIFY  
BEFORE CONSTRUCTION



#	DATE	DESCRIPTION:
0	10/31/18	ISSUED FOR CLIENT REV.
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2	11/12/18	ISSUED FOR CONSTRUCTION

FLAT MARY FN  
**ENLARGED COMPOUND  
LAYOUT**

DESIGNED: JDS  
DRAWN: BMD  
CHECKED: RTB  
JOB #: 14397273

**C-3**

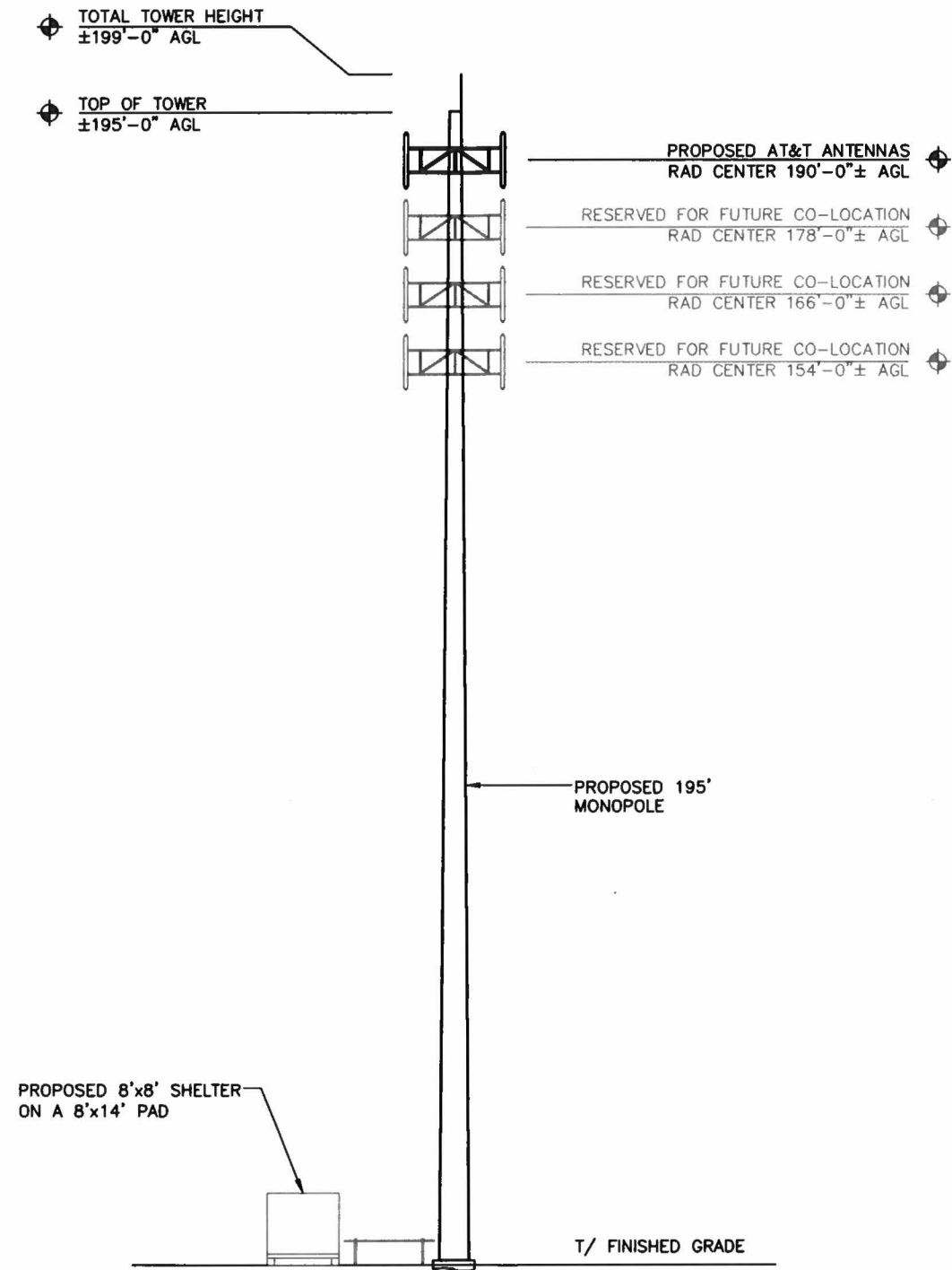
CA#: 2865

*Jeremy D. Shart*  
11/12/18



**TOWER NOTES**

1. THE PROPOSED TOWER, FOUNDATION, ANTENNA MOUNTS AND ANTENNAS WERE DESIGNED BY OTHERS.
2. THE TOWER ELEVATION SHOWN IS FOR REFERENCE ONLY.
3. SEE TOWER MANUFACTURER'S DRAWINGS FOR TOWER AND FOUNDATION DETAILS & SPECIFICATIONS.
4. MANUFACTURER'S DRAWINGS SUPERSEDE A&E DRAWINGS.



#	DATE	DESCRIPTION:
0	10/31/18	ISSUED FOR CLIENT REV.
1	11/08/18	ISSUED FOR CLIENT REV.
2	11/12/18	ISSUED FOR CONSTRUCTION

FLAT MARY FN  
**TOWER ELEVATION**

DESIGNED: JDS  
DRAWN: BMD  
CHECKED: RTB  
JOB #: 14397273

CA#: 2865

*Jeremy D. Sharit*  
11/12/18

**C-4**

**EXHIBIT C**  
**TOWER AND FOUNDATION DESIGN**



October 17<sup>th</sup>, 2018  
Kentucky Public Service Commission  
211 Sower Blvd.  
P.O. Box 615  
Frankfort, KY 40602-0615

RE: Site Name – Flat Mary FN  
Proposed Cell Tower  
37° 41' 54.94" North Latitude, 83° 31' 10.10" West Longitude

Dear Commissioners:

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

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

Thank you,

A handwritten signature in blue ink, appearing to read "Don Murdock".

Don Murdock, Sr. Project Manager – Tennessee/Kentucky Market  
MasTec Network Solutions  
(615) 207-8280



**Structural Design Report**  
195' Monopole  
Site: Flat Mary FN, KY

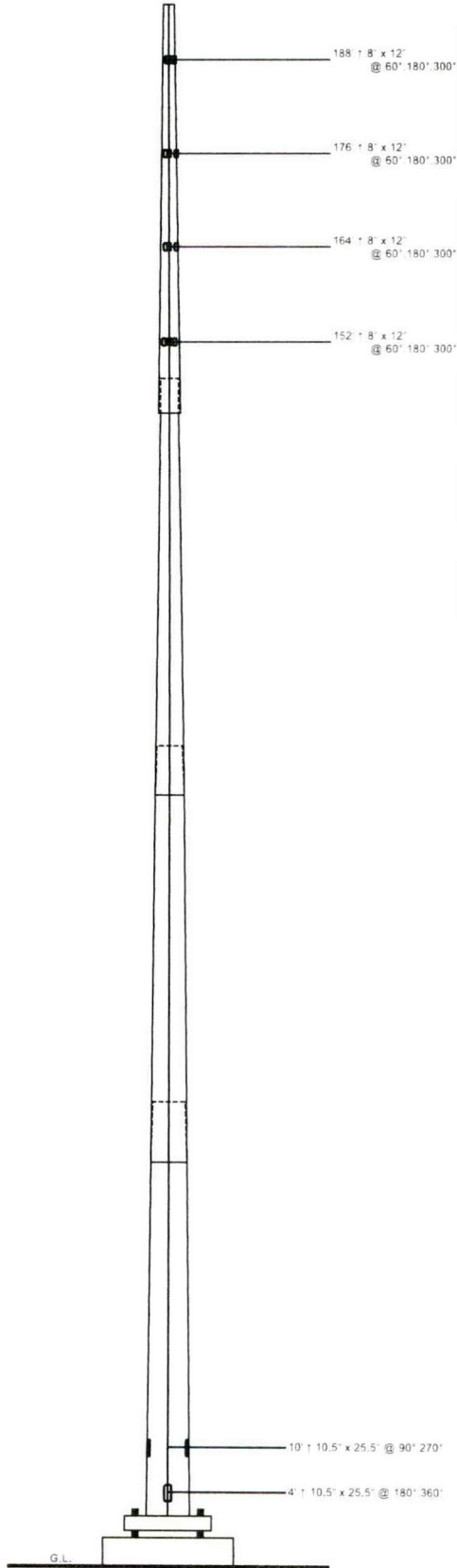
Prepared for: AT&T  
by: Sabre Towers & Poles™

Job Number: 412283  
Revision A  
October 17, 2018

Monopole Profile.....	1
Foundation Design Summary (Option 1).....	2
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Pole Calculations.....	4-14
Foundation Calculations.....	15-24

STATE OF KENTUCKY  
AMY R. HERBST  
24595  
LICENSED PROFESSIONAL ENGINEER  
10/17/18

Length (ft)	53'-3"	53'-6"	53'-6"	18	52'-3"
Number Of Sides	18				
Thickness (in)	3/8"				
Lap Splice (ft)	6'-3"				
Top Diameter (in)	53.21"	41.62"	56.34"	29.63"	17.25"
Bottom Diameter (in)	67.85"	56.34"	44.34"	44.34"	31.62"
Taper (in/ft)	0.275				
Grade	A572-65				
Weight (lbs)	20555	14838	11165	5779	194
Overall Steel Height (ft)	194				



### Designed Appurtenance Loading

Elev	Description	Tx-Line
190	(1) 278 sq. ft. EPA 6000# (no ice)	(18) 1 5/8"
178	(1) 208 sq. ft. EPA 4000# (no ice)	(18) 1 5/8"
166	(1) 208 sq. ft. EPA 4000# (no ice)	(18) 1 5/8"
154	(1) 208 sq. ft. EPA 4000# (no ice)	(18) 1 5/8"

### Load Case Reactions

Description	Axial (kips)	Shear (kips)	Moment (ft-k)	Deflection (ft)	Sway (deg)
3s Gusted Wind	93.21	61.35	9751.04	20.12	12.13
3s Gusted Wind 0.9 Dead	69.97	61.52	9565.8	19.59	11.76
3s Gusted Wind&Ice	142.09	10.05	1774.68	3.91	2.32
Service Loads	77.72	15.62	2479.38	5.28	3.12

### Base Plate Dimensions

Shape	Diameter	Thickness	Bolt Circle	Bolt Qty	Bolt Diameter
Round	81"	2.5"	75.25"	26	2.25"

### Anchor Bolt Dimensions

Length	Diameter	Hole Diameter	Weight	Type	Finish
84"	2.25"	2.625"	3148.6	A615-75	Galv

### Material List

Display	Value
A	4' - 6"

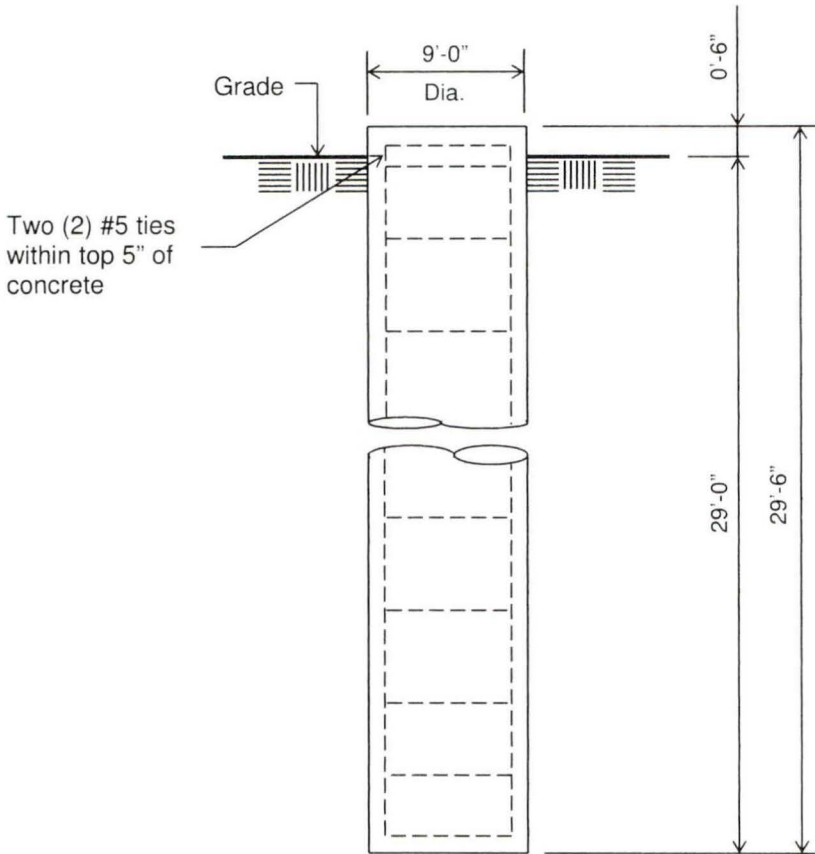
### Notes

- 1) Antenna Feed Lines Run Inside Pole
- 2) All dimensions are above ground level, unless otherwise specified.
- 3) Weights shown are estimates. Final weights may vary.
- 4) The Monopole was designed for a basic wind speed of 89 mph with 0" of radial ice, and 30 mph with 3/4" of radial ice, in accordance with ANSI/TIA-222-G, Structure Class II, Exposure Category C, Topographic Category 1.
- 5) The tower design meets the requirements for an Ultimate Wind Speed of 115 mph (Risk Category II), in accordance with the 2012 International Building Code.
- 6) Full Height Step Bolts
- 7) Tower Rating: 99.8%

	<b>Sabre Communications Corporation</b> 7101 Southbridge Drive P.O. Box 858 Sioux City, IA 51102-0658 Phone: (712) 258-6690 Fax: (712) 279-0814	Job: <b>412283A</b> Customer: AT&T Site Name: Flat Mary FN, KY Description: 195' Monopole Date: 10/17/2018	By: ARH
	<small>Information contained herein is the sole property of Sabre Communications Corporation, constitutes a trade secret as defined by Iowa Code Ch. 550 and shall not be reproduced, copied or used in whole or part for any purpose whatsoever without the prior written consent of Sabre Communications Corporation.</small>		

**Customer: AT&T**  
**Site: Flat Mary FN, KY**

195' Monopole at  
89 mph wind and 30 mph wind with 0.75" ice per ANSI/TIA-222-G.



**Notes:**

- 1) Concrete shall have a minimum 28-day compressive strength of 4,500 psi, in accordance with ACI 318-11.
- 2) Rebar to conform to ASTM specification A615 Grade 60.
- 3) All rebar to have a minimum of 3" concrete cover.
- 4) All exposed concrete corners to be chamfered 3/4".
- 5) The foundation design is based on the geotechnical report by ECA, project no. U3099, dated October 11, 2018.
- 6) See the geotechnical report for drilled pier installation requirements, if specified.
- 7) The foundation is based on the following factored loads:  
Moment = 9,751.04 k-ft  
Axial = 93.21 k  
Shear = 61.35 k

**ELEVATION VIEW**

(69.51 Cu. Yds.)

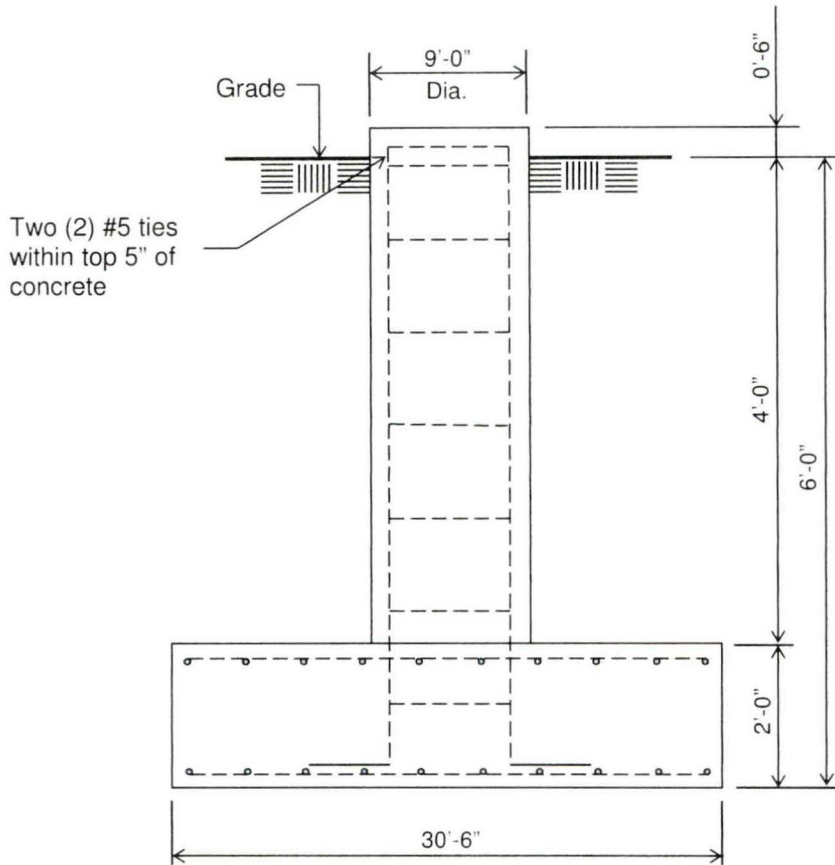
(1 REQUIRED; NOT TO SCALE)

Rebar Schedule for Pier	
Pier	(44) #10 vertical rebar w/ #5 ties, two within top 5" of pier, then 6" C/C

**Customer: AT&T**  
**Site: Flat Mary FN, KY**

195' Monopole at

89 mph wind and 30 mph wind with 0.75" ice per ANSI/TIA-222-G.



**ELEVATION VIEW**

(79.51 Cu. Yds.)

(1 REQUIRED; NOT TO SCALE)

**Notes:**

- 1) Concrete shall have a minimum 28-day compressive strength of 4,500 psi, in accordance with ACI 318-11.
- 2) Rebar to conform to ASTM specification A615 Grade 60.
- 3) All rebar to have a minimum of 3" concrete cover.
- 4) All exposed concrete corners to be chamfered 3/4".
- 5) The foundation design is based on the geotechnical report by ECA, project no. U3099, dated October 11, 2018.
- 6) See the geotechnical report for compaction requirements, if specified.
- 7) 4 ft of soil cover is required over the entire area of the foundation slab.
- 8) The foundation is based on the following factored loads:  
Moment = 9,751.04 k-ft  
Axial = 93.21 k  
Shear = 61.35 k

Rebar Schedule for Pad and Pier	
Pier	(60) #8 vertical rebar w/ hooks at bottom w/ #5 ties, two within top 5" of pier, then 12" C/C
Pad	(64) #9 horizontal rebar evenly spaced each way top and bottom (256 total)

Processed under license at:

Sabre Towers and Poles on: 17 oct 2018 at: 13:26:10  
 =====

195' Monopole / Flat Mary FN, KY

\* All pole diameters shown on the following pages are across corners.  
 See profile drawing for widths across flats.

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ELEV ft	SECTION NAME	No. SIDE	OUTSIDE DIAM in	THICK -NESS in	RESISTANCES ♦*Pn kip	♦*Mn ft-kip	SPLICE TYPE	...OVERLAP... LENGTH ft	RATIO	w/t
194.0	A	18	17.52	0.375	1492.2	510.9				6.3
			30.84	0.375	2652.4	1629.1				
146.2	A/B	18	30.84	0.375	2652.4	1629.1	SLIP	4.50	1.75	
			31.36	0.500	3582.0	2219.9				
141.7	B	18	31.36	0.500	3582.0	2219.9				9.1
			43.27	0.500	4965.0	4283.7				
99.0	B/C	18	43.27	0.500	4965.0	4283.7	SLIP	6.25	1.73	
			44.03	0.500	5053.3	4438.4				
92.7	C	18	44.03	0.500	5053.3	4438.4				13.5
			55.03	0.500	6211.3	6849.9				
53.2	C/D	18	55.03	0.500	6211.3	6849.9	SLIP	7.75	1.68	
			56.21	0.500	6308.0	7108.5				
45.5	D	18	56.21	0.500	6308.0	7108.5				17.8
			68.90	0.500	7246.5	10043.1				
0.0										

=====

SECTION NAME	BASE ELEV ft	BOLTS NUMBER	AT BASE TYPE	OF SECTION DIAM in	STRENGTH ksi	THREADS IN SHEAR PLANE	CALC BASE ELEV ft
A	141.750	0	A325	0.00	92.0	0	141.750
B	92.750	0	A325	0.00	92.0	0	92.750
C	45.500	0	A325	0.00	92.0	0	45.500
D	0.000	0	A325	0.00	92.0	0	0.000

=====

SECTION NAME	No. of SIDES	LENGTH ft	OUTSIDE DIAMETER BOT * in	TOP * in	BEND RAD in	MAT- ERIAL ID	FLANGE.ID BOT	TOP	FLANGE.WELD ..GROUP.ID.. BOT	TOP
A	18	52.25	32.11	17.52	0.000	1	0	0	0	0
B	18	53.50	45.03	30.09	0.000	2	0	0	0	0
C	18	53.50	57.21	42.27	0.000	3	0	0	0	0
D	18	53.25	68.90	54.03	0.000	4	0	0	0	0

\* - Diameter of circumscribed circle

=====



TYPE OF SHAPE	TYPE NO	NO OF ELEM.	ORIENT	HEIGHT	WIDTH	.THICKNESS.		IRREGULARITY	
			& deg	in	in	WEB	FLANGE	PROJECTION, % OF AREA	ORIENT deg
PL	1	1	0.0	32.11	0.38	0.375	0.375	0.00	0.0
PL	2	1	0.0	45.03	0.50	0.500	0.500	0.00	0.0
PL	3	1	0.0	57.21	0.50	0.500	0.500	0.00	0.0
PL	4	1	0.0	68.90	0.50	0.500	0.500	0.00	0.0

& - with respect to vertical

MATERIAL PROPERTIES

MATERIAL TYPE NO.	ELASTIC MODULUS ksi	UNIT WEIGHT pcf	.. STRENGTH ..		THERMAL COEFFICIENT /deg
			Fu ksi	Fy ksi	
1	29000.0	490.0	80.0	65.0	0.00001170
2	29000.0	490.0	80.0	65.0	0.00001170
3	29000.0	490.0	80.0	65.0	0.00001170
4	29000.0	490.0	80.0	65.0	0.00001170

\* only 3 condition(s) shown in full

\* Some concentrated wind loads may have been derived from full-scale wind tunnel testing

LOADING CONDITION A

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

LOADS ON POLE

LOAD TYPE	ELEV ft	APPLY. RADIUS ft	LOAD. AT AZI	LOAD AZI	.....FORCES.....		.....MOMENTS.....	
					HORIZ kip	DOWN kip	VERTICAL ft-kip	TORSNAL ft-kip
C	189.000	0.00	0.0	0.0	0.0000	4.2457	0.0000	0.0000
C	189.000	0.00	0.0	0.0	13.6549	7.2000	0.0000	0.0000
C	177.000	0.00	0.0	0.0	0.0000	3.9761	0.0000	0.0000
C	177.000	0.00	0.0	0.0	10.0773	4.8000	0.0000	0.0000
C	165.000	0.00	0.0	0.0	0.0000	3.7066	0.0000	0.0000
C	165.000	0.00	0.0	0.0	9.9303	4.8000	0.0000	0.0000
C	153.000	0.00	0.0	0.0	0.0000	3.4370	0.0000	0.0000
C	153.000	0.00	0.0	0.0	9.7746	4.8000	0.0000	0.0000
D	194.000	0.00	180.0	0.0	0.0523	0.0930	0.0000	0.0000
D	178.083	0.00	180.0	0.0	0.0523	0.0930	0.0000	0.0000
D	178.083	0.00	180.0	0.0	0.0629	0.1140	0.0000	0.0000
D	162.167	0.00	180.0	0.0	0.0629	0.1140	0.0000	0.0000
D	162.167	0.00	180.0	0.0	0.0730	0.1349	0.0000	0.0000
D	146.250	0.00	180.0	0.0	0.0730	0.1349	0.0000	0.0000
D	146.250	0.00	180.0	0.0	0.0791	0.3418	0.0000	0.0000
D	141.750	0.00	180.0	0.0	0.0791	0.3418	0.0000	0.0000
D	141.750	0.00	180.0	0.0	0.0826	0.2099	0.0000	0.0000
D	127.500	0.00	180.0	0.0	0.0826	0.2099	0.0000	0.0000
D	127.500	0.00	180.0	0.0	0.0903	0.2350	0.0000	0.0000
D	113.250	0.00	180.0	0.0	0.0903	0.2350	0.0000	0.0000
D	113.250	0.00	180.0	0.0	0.0974	0.2600	0.0000	0.0000
D	99.000	0.00	180.0	0.0	0.0974	0.2600	0.0000	0.0000
D	99.000	0.00	180.0	0.0	0.1019	0.5506	0.0000	0.0000
D	92.750	0.00	180.0	0.0	0.1019	0.5506	0.0000	0.0000
D	92.750	0.00	180.0	0.0	0.1035	0.2897	0.0000	0.0000
D	79.583	0.00	180.0	0.0	0.1035	0.2897	0.0000	0.0000
D	79.583	0.00	180.0	0.0	0.1080	0.3129	0.0000	0.0000
D	66.417	0.00	180.0	0.0	0.1080	0.3129	0.0000	0.0000
D	66.417	0.00	180.0	0.0	0.1114	0.3361	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.1114	0.3361	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.1129	0.7034	0.0000	0.0000
D	45.500	0.00	180.0	0.0	0.1129	0.7034	0.0000	0.0000
D	45.500	0.00	180.0	0.0	0.1112	0.3657	0.0000	0.0000
D	34.125	0.00	180.0	0.0	0.1112	0.3657	0.0000	0.0000
D	34.125	0.00	180.0	0.0	0.1095	0.3858	0.0000	0.0000
D	22.750	0.00	180.0	0.0	0.1095	0.3858	0.0000	0.0000
D	22.750	0.00	180.0	0.0	0.1040	0.4059	0.0000	0.0000
D	0.000	0.00	180.0	0.0	0.1051	0.4260	0.0000	0.0000

LOADING CONDITION M

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

LOADS ON POLE

LOAD TYPE	ELEV ft	APPLY. RADIUS ft	LOAD. AT AZI	LOAD AZI	.....FORCES.....		.....MOMENTS.....	
					HORIZ kip	DOWN kip	VERTICAL ft-kip	TORSNAL ft-kip
C	189.000	0.00	0.0	0.0	0.0000	3.1843	0.0000	0.0000
C	189.000	0.00	0.0	0.0	13.6549	5.4000	0.0000	0.0000
C	177.000	0.00	0.0	0.0	0.0000	2.9821	0.0000	0.0000
C	177.000	0.00	0.0	0.0	10.0773	3.6000	0.0000	0.0000
C	165.000	0.00	0.0	0.0	0.0000	2.7799	0.0000	0.0000
C	165.000	0.00	0.0	0.0	9.9303	3.6000	0.0000	0.0000
C	153.000	0.00	0.0	0.0	0.0000	2.5777	0.0000	0.0000
C	153.000	0.00	0.0	0.0	9.7746	3.6000	0.0000	0.0000
D	194.000	0.00	180.0	0.0	0.0523	0.0698	0.0000	0.0000
D	178.083	0.00	180.0	0.0	0.0523	0.0698	0.0000	0.0000
D	178.083	0.00	180.0	0.0	0.0629	0.0855	0.0000	0.0000
D	162.167	0.00	180.0	0.0	0.0629	0.0855	0.0000	0.0000
D	162.167	0.00	180.0	0.0	0.0730	0.1012	0.0000	0.0000
D	146.250	0.00	180.0	0.0	0.0730	0.1012	0.0000	0.0000
D	146.250	0.00	180.0	0.0	0.0791	0.2563	0.0000	0.0000
D	141.750	0.00	180.0	0.0	0.0791	0.2563	0.0000	0.0000
D	141.750	0.00	180.0	0.0	0.0826	0.1574	0.0000	0.0000
D	127.500	0.00	180.0	0.0	0.0826	0.1574	0.0000	0.0000
D	127.500	0.00	180.0	0.0	0.0903	0.1762	0.0000	0.0000
D	113.250	0.00	180.0	0.0	0.0903	0.1762	0.0000	0.0000
D	113.250	0.00	180.0	0.0	0.0974	0.1950	0.0000	0.0000
D	99.000	0.00	180.0	0.0	0.0974	0.1950	0.0000	0.0000
D	99.000	0.00	180.0	0.0	0.1019	0.4129	0.0000	0.0000
D	92.750	0.00	180.0	0.0	0.1019	0.4129	0.0000	0.0000
D	92.750	0.00	180.0	0.0	0.1035	0.2172	0.0000	0.0000
D	79.583	0.00	180.0	0.0	0.1035	0.2172	0.0000	0.0000
D	79.583	0.00	180.0	0.0	0.1080	0.2347	0.0000	0.0000
D	66.417	0.00	180.0	0.0	0.1080	0.2347	0.0000	0.0000
D	66.417	0.00	180.0	0.0	0.1114	0.2521	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.1114	0.2521	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.1129	0.5275	0.0000	0.0000
D	45.500	0.00	180.0	0.0	0.1129	0.5275	0.0000	0.0000
D	45.500	0.00	180.0	0.0	0.1112	0.2743	0.0000	0.0000
D	34.125	0.00	180.0	0.0	0.1112	0.2743	0.0000	0.0000
D	34.125	0.00	180.0	0.0	0.1095	0.2894	0.0000	0.0000
D	22.750	0.00	180.0	0.0	0.1095	0.2894	0.0000	0.0000
D	22.750	0.00	180.0	0.0	0.1040	0.3045	0.0000	0.0000
D	0.000	0.00	180.0	0.0	0.1051	0.3195	0.0000	0.0000

LOADING CONDITION Y

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

LOADS ON POLE

LOAD TYPE	ELEV ft	APPLY. RADIUS ft	LOAD. AT AZI	LOAD AZI	.....FORCES.....		.....MOMENTS.....	
					HORIZ kip	DOWN kip	VERTICAL ft-kip	TORSNAL ft-kip
C	189.000	0.00	0.0	0.0	0.0000	4.2457	0.0000	0.0000
C	189.000	0.00	0.0	0.0	1.6678	17.9218	0.0000	0.0000
C	177.000	0.00	0.0	0.0	0.0000	3.9761	0.0000	0.0000
C	177.000	0.00	0.0	0.0	1.9861	11.9014	0.0000	0.0000
C	165.000	0.00	0.0	0.0	0.0000	3.7066	0.0000	0.0000
C	165.000	0.00	0.0	0.0	1.9484	11.8520	0.0000	0.0000
C	153.000	0.00	0.0	0.0	0.0000	3.4370	0.0000	0.0000
C	153.000	0.00	0.0	0.0	1.9087	11.7993	0.0000	0.0000
D	194.000	0.00	180.0	0.0	0.0081	0.1400	0.0000	0.0000
D	178.083	0.00	180.0	0.0	0.0081	0.1400	0.0000	0.0000
D	178.083	0.00	180.0	0.0	0.0095	0.1701	0.0000	0.0000
D	162.167	0.00	180.0	0.0	0.0095	0.1701	0.0000	0.0000
D	162.167	0.00	180.0	0.0	0.0107	0.1999	0.0000	0.0000
D	146.250	0.00	180.0	0.0	0.0107	0.1999	0.0000	0.0000

D	146.250	0.00	180.0	0.0	0.0115	0.4124	0.0000	0.0000
D	141.750	0.00	180.0	0.0	0.0115	0.4124	0.0000	0.0000
D	141.750	0.00	180.0	0.0	0.0120	0.2839	0.0000	0.0000
D	127.500	0.00	180.0	0.0	0.0120	0.2839	0.0000	0.0000
D	127.500	0.00	180.0	0.0	0.0129	0.3164	0.0000	0.0000
D	113.250	0.00	180.0	0.0	0.0129	0.3164	0.0000	0.0000
D	113.250	0.00	180.0	0.0	0.0138	0.3486	0.0000	0.0000
D	99.000	0.00	180.0	0.0	0.0138	0.3486	0.0000	0.0000
D	99.000	0.00	180.0	0.0	0.0144	0.6441	0.0000	0.0000
D	92.750	0.00	180.0	0.0	0.0144	0.6441	0.0000	0.0000
D	92.750	0.00	180.0	0.0	0.0146	0.3856	0.0000	0.0000
D	79.583	0.00	180.0	0.0	0.0146	0.3856	0.0000	0.0000
D	79.583	0.00	180.0	0.0	0.0151	0.4145	0.0000	0.0000
D	66.417	0.00	180.0	0.0	0.0151	0.4145	0.0000	0.0000
D	66.417	0.00	180.0	0.0	0.0155	0.4429	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.0155	0.4429	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.0156	0.8137	0.0000	0.0000
D	45.500	0.00	180.0	0.0	0.0156	0.8137	0.0000	0.0000
D	45.500	0.00	180.0	0.0	0.0154	0.4771	0.0000	0.0000
D	11.375	0.00	180.0	0.0	0.0143	0.5194	0.0000	0.0000
D	11.375	0.00	180.0	0.0	0.0143	0.5332	0.0000	0.0000
D	0.000	0.00	180.0	0.0	0.0143	0.5332	0.0000	0.0000

=====  
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195' Monopole / Flat Mary FN, KY

=====  
 MAXIMUM POLE DEFORMATIONS CALCULATED(w.r.t. wind direction)  
 =====

MAST ELEV ft	DEFLECTIONS (ft)			ROTATIONS (deg)		
	HORIZONTAL ALONG	ACROSS	DOWN	TILT ALONG	ACROSS	TWIST
194.0	20.12K	-0.04E	3.00K	12.13K	-0.02E	0.010
178.1	16.91K	-0.04E	2.32K	11.92K	-0.02E	0.010
162.2	13.83K	-0.03E	1.70K	11.05K	-0.02E	0.010
146.2	11.03K	-0.03E	1.20K	9.72K	-0.02E	0.000
141.7	10.30L	-0.03E	1.07L	9.39K	-0.02E	0.000
127.5	8.16L	-0.02E	0.75L	8.22L	-0.02E	0.000
113.2	6.29L	-0.02E	0.50L	7.07L	-0.02E	0.000
99.0	4.69L	-0.01E	0.31L	5.97L	-0.02E	0.000
92.7	4.07L	-0.01E	0.25L	5.52L	-0.01E	0.000
79.6	2.93L	-0.01E	0.15L	4.55L	-0.01E	0.000
66.4	1.99L	-0.01E	0.08L	3.65L	-0.01E	0.000
53.2	1.25L	0.00E	0.04L	2.83L	-0.01E	0.000
45.5	0.90L	0.00E	0.03L	2.38L	-0.01E	0.000
34.1	0.49L	0.00E	0.01L	1.72L	0.00E	0.000
22.7	0.21L	0.00E	0.00K	1.11L	0.00E	0.000
11.4	0.05L	0.00E	0.00K	0.53L	0.00E	0.000
0.0	0.00A	0.00A	0.00A	0.00A	0.00A	0.00A

=====  
 MAXIMUM POLE FORCES CALCULATED(w.r.t. to wind direction)  
 =====

MAST	TOTAL	SHEAR.w.r.t.WIND.DIR	MOMENT.w.r.t.WIND.DIR	TORSION
------	-------	----------------------	-----------------------	---------

ELEV ft	AXIAL kip	ALONG kip	ACROSS kip	ALONG ft-kip	ACROSS ft-kip	ft-kip
194.0	-0.01 A	0.00 O	0.00 R	0.01 R	0.00 R	0.00 W
178.1	24.39 AA	14.47 O	0.00 R	-176.50 C	-0.03 C	0.05 O
	24.40 AA	14.48 A	0.01 K	-176.50 C	-0.03 C	0.05 O
162.2	58.54 AA	35.47 A	0.01 K	-648.30 K	-0.16 C	0.17 O
	58.54 AJ	35.47 Q	-0.01 B	-648.33 C	-0.14 C	0.17 O
146.2	76.95 AJ	46.39 Q	-0.01 B	-1369.58 K	0.35 B	0.37 O
	76.95 AA	46.48 M	-0.17 Q	-1370.15 K	0.31 O	0.35 O
141.7	78.81 AA	46.84 M	-0.17 Q	-1604.94 C	-0.62 K	0.48 O
	78.81 AA	46.94 N	0.22 O	-1605.27 K	-0.70 K	0.45 O
127.5	82.85 AA	48.10 N	0.22 O	-2362.20 K	-2.55 O	1.11 O
	82.86 AG	48.23 N	-0.21 E	-2362.21 K	-2.55 O	1.12 O
113.2	87.36 AG	49.51 N	-0.21 E	-3133.92 K	5.27 E	1.65 O
	87.36 AG	49.49 N	0.20 O	-3133.93 K	5.32 E	1.65 O
99.0	92.33 AG	50.87 N	0.20 O	-3920.29 L	8.17 E	2.15 O
	92.33 AG	50.95 N	-0.25 E	-3920.38 L	8.09 E	2.14 O
92.7	96.36 AG	51.58 N	-0.25 E	-4270.21 L	9.68 E	2.33 O
	96.35 AG	51.48 N	0.22 N	-4270.24 K	9.70 E	2.33 O
79.6	101.43 AG	52.83 N	0.22 N	-5016.91 K	11.55 E	2.65 O
	101.43 AG	52.87 M	-0.20 E	-5016.91 K	11.60 E	2.65 O
66.4	106.89 AG	54.29 M	-0.20 E	-5774.31 L	14.31 E	2.88 O
	106.89 AG	54.28 M	-0.22 E	-5774.26 L	14.30 E	2.88 O
53.2	112.72 AG	55.74 M	-0.22 E	-6543.61 L	17.24 E	3.06 O
	112.72 AG	55.74 N	0.24 N	-6543.61 L	17.23 E	3.06 O
45.5	119.03 AG	56.61 N	0.24 N	-7001.77 L	18.55 E	3.16 O
	119.03 AG	56.62 N	0.21 F	-7001.86 L	18.51 E	3.16 O
34.1	124.53 AG	57.88 N	0.21 F	-7680.82 L	20.89 E	3.27 O
	124.53 AG	57.90 N	0.21 F	-7680.79 L	20.90 E	3.27 O
22.7	130.20 AG	59.14 N	0.21 F	-8366.00 L	23.13 E	3.34 O
	130.20 AG	59.15 N	0.22 F	-8366.00 L	23.13 E	3.34 O
11.4	136.03 AG	60.34 N	0.22 F	-9056.26 L	25.48 E	3.39 O
	136.03 AG	60.33 N	0.21 F	-9056.27 L	25.48 E	3.39 O
	142.09 AG	61.52 N	0.21 F	-9751.04 L	27.75 E	3.40 O
base reaction	142.09 AG	-61.52 N	-0.21 F	9751.04 L	-27.75 E	-3.40 O

COMPLIANCE WITH 4.8.2 & 4.5.4

ELEV ft	AXIAL	BENDING	SHEAR + TORSIONAL	TOTAL	SATISFIED	D/t(w/t)	MAX ALLOWED
194.00	0.00A	0.00R	0.00O	0.00R	YES	6.35A	45.2
178.08	0.01AA	0.22C	0.02O	0.22C	YES	8.41A	45.2

	0.01AA	0.22C	0.02A	0.22C	YES	8.41A	45.2
162.17	0.03AA	0.55K	0.03A	0.56B	YES	10.46A	45.2
	0.03AJ	0.55C	0.03Q	0.56C	YES	10.46A	45.2
146.25	0.03AJ	0.84K	0.03Q	0.86K	YES	12.52A	45.2
	0.02AA	0.64K	0.03M	0.65K	YES	8.95A	45.2
141.75	0.02AA	0.69C	0.03M	0.70C	YES	9.39A	45.2
	0.02AA	0.72K	0.03N	0.74K	YES	9.12A	45.2
127.50	0.02AA	0.83K	0.02N	0.85K	YES	10.50A	45.2
	0.02AG	0.83K	0.02N	0.85K	YES	10.50A	45.2
113.25	0.02AG	0.89K	0.02N	0.90K	YES	11.89A	45.2
	0.02AG	0.89K	0.02N	0.90K	YES	11.89A	45.2
99.00	0.02AG	0.91L	0.02N	0.93L	YES	13.27A	45.2
	0.02AG	0.91L	0.02N	0.93L	YES	13.27A	45.2
92.75	0.02AG	0.92L	0.02N	0.93K	YES	13.88A	45.2
	0.02AG	0.96K	0.02N	0.97K	YES	13.52A	45.2
79.58	0.02AG	0.96K	0.02N	0.97K	YES	14.80A	45.2
	0.02AG	0.96K	0.02N	0.97K	YES	14.80A	45.2
66.42	0.02AG	0.95L	0.02N	0.96K	YES	16.08A	45.2
	0.02AG	0.95L	0.02N	0.96K	YES	16.08A	45.2
53.25	0.02AG	0.95L	0.02N	0.97L	YES	17.35A	45.2
	0.02AG	0.95L	0.02N	0.97L	YES	17.35A	45.2
45.50	0.02AG	0.96L	0.02N	0.97L	YES	18.11A	45.2
	0.02AG	0.99L	0.02N	1.00L	YES	17.75A	45.2
34.12	0.02AG	0.98L	0.02N	1.00L	YES	18.86A	45.2
	0.02AG	0.98L	0.02N	1.00L	YES	18.86A	45.2
22.75	0.02AG	0.98L	0.02N	0.99L	YES	19.96A	45.2
	0.02AG	0.98L	0.02N	0.99L	YES	19.96A	45.2
11.37	0.02AG	0.98L	0.02N	0.99L	YES	21.06A	45.2
	0.02AG	0.98L	0.02N	0.99L	YES	21.06A	45.2
0.00	0.02AG	0.97L	0.02N	0.98L	YES	22.17A	45.2

MAXIMUM LOADS ONTO FOUNDATION(w.r.t. wind direction)

DOWN	SHEAR.w.r.t.WIND.DIR	MOMENT.w.r.t.WIND.DIR	TORSION
kip	ALONG kip	ALONG ft-kip	ft-kip
	ACROSS kip	ACROSS ft-kip	
142.09	61.52	-9751.04	3.40
AG	N	L	O
	F	E	

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195' Monopole / Flat Mary FN, KY

\*\*\*\*\*  
 \*\*\*\*\* Service Load Condition \*\*\*\*\*  
 \*\*\*\*\*

\* Only 1 condition(s) shown in full  
 \* Some concentrated wind loads may have been derived from full-scale wind tunnel testing

LOADING CONDITION A =====

60 mph wind with no ice. wind Azimuth: 0°

LOADS ON POLE  
 =====

LOAD TYPE	ELEV ft	APPLY. RADIUS ft	LOAD. AZI	AT AZI	.....FORCES.....		.....MOMENTS.....	
					HORIZ kip	DOWN kip	VERTICAL ft-kip	TORSNAL ft-kip
C	189.000	0.00	0.0	0.0	0.0000	3.5381	0.0000	0.0000
C	189.000	0.00	0.0	0.0	3.4705	6.0000	0.0000	0.0000
C	177.000	0.00	0.0	0.0	0.0000	3.3134	0.0000	0.0000
C	177.000	0.00	0.0	0.0	2.5612	4.0000	0.0000	0.0000
C	165.000	0.00	0.0	0.0	0.0000	3.0888	0.0000	0.0000
C	165.000	0.00	0.0	0.0	2.5238	4.0000	0.0000	0.0000
C	153.000	0.00	0.0	0.0	0.0000	2.8642	0.0000	0.0000
C	153.000	0.00	0.0	0.0	2.4843	4.0000	0.0000	0.0000
D	194.000	0.00	180.0	0.0	0.0133	0.0775	0.0000	0.0000
D	178.083	0.00	180.0	0.0	0.0133	0.0775	0.0000	0.0000
D	178.083	0.00	180.0	0.0	0.0160	0.0950	0.0000	0.0000
D	162.167	0.00	180.0	0.0	0.0160	0.0950	0.0000	0.0000
D	162.167	0.00	180.0	0.0	0.0186	0.1125	0.0000	0.0000
D	146.250	0.00	180.0	0.0	0.0186	0.1125	0.0000	0.0000
D	146.250	0.00	180.0	0.0	0.0201	0.2848	0.0000	0.0000
D	141.750	0.00	180.0	0.0	0.0201	0.2848	0.0000	0.0000
D	141.750	0.00	180.0	0.0	0.0210	0.1749	0.0000	0.0000
D	127.500	0.00	180.0	0.0	0.0210	0.1749	0.0000	0.0000
D	127.500	0.00	180.0	0.0	0.0230	0.1958	0.0000	0.0000
D	113.250	0.00	180.0	0.0	0.0230	0.1958	0.0000	0.0000
D	113.250	0.00	180.0	0.0	0.0247	0.2167	0.0000	0.0000
D	99.000	0.00	180.0	0.0	0.0247	0.2167	0.0000	0.0000
D	99.000	0.00	180.0	0.0	0.0259	0.4588	0.0000	0.0000
D	92.750	0.00	180.0	0.0	0.0259	0.4588	0.0000	0.0000
D	92.750	0.00	180.0	0.0	0.0263	0.2414	0.0000	0.0000
D	79.583	0.00	180.0	0.0	0.0263	0.2414	0.0000	0.0000
D	79.583	0.00	180.0	0.0	0.0275	0.2607	0.0000	0.0000
D	66.417	0.00	180.0	0.0	0.0275	0.2607	0.0000	0.0000
D	66.417	0.00	180.0	0.0	0.0283	0.2801	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.0283	0.2801	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.0287	0.5862	0.0000	0.0000
D	45.500	0.00	180.0	0.0	0.0287	0.5862	0.0000	0.0000
D	45.500	0.00	180.0	0.0	0.0283	0.3048	0.0000	0.0000
D	34.125	0.00	180.0	0.0	0.0283	0.3048	0.0000	0.0000
D	34.125	0.00	180.0	0.0	0.0278	0.3215	0.0000	0.0000
D	22.750	0.00	180.0	0.0	0.0278	0.3215	0.0000	0.0000
D	22.750	0.00	180.0	0.0	0.0264	0.3383	0.0000	0.0000
D	0.000	0.00	180.0	0.0	0.0267	0.3550	0.0000	0.0000

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MAXIMUM POLE DEFORMATIONS CALCULATED(w.r.t. wind direction)

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MAST ELEV ft	.....DEFLECTIONS (ft).....			.....ROTATIONS (deg).....		
	..... HORIZONTAL ALONG	..... ACROSS	..... DOWN	..... TILT ALONG	..... ACROSS	..... TWIST
194.0	5.28C	0.01K	0.21C	3.12C	0.00K	0.00F
178.1	4.41C	0.01K	0.16C	3.07C	0.00K	0.00F
162.2	3.59C	0.01K	0.12C	2.84C	0.00K	0.00F
146.2	2.85C	0.01K	0.08C	2.49C	0.00K	0.00F
141.7	2.66C	0.01K	0.07C	2.41C	0.00K	0.00F
127.5	2.10C	0.01K	0.05C	2.10C	0.00K	0.00F

113.2	1.61C	0.00K	0.03C	1.80C	0.00K	0.00F
99.0	1.20C	0.00K	0.02C	1.52C	0.00K	0.00F
92.7	1.04C	0.00K	0.02C	1.41C	0.00K	0.00F
79.6	0.75C	0.00K	0.01C	1.16C	0.00K	0.00F
66.4	0.51C	0.00K	0.01C	0.93C	0.00K	0.00F
53.2	0.32C	0.00K	0.00C	0.72C	0.00K	0.00F
45.5	0.23C	0.00K	0.00C	0.61C	0.00K	0.00F
34.1	0.13C	0.00K	0.00C	0.44C	0.00K	0.00F
22.7	0.05C	0.00K	0.00C	0.28C	0.00K	0.00F
11.4	0.01C	0.00K	0.00C	0.14C	0.00K	0.00F
0.0	0.00A	0.00A	0.00A	0.00A	0.00A	0.00A

MAXIMUM POLE FORCES CALCULATED(w.r.t. to wind direction)

MAST ELEV ft	TOTAL AXIAL kip	SHEAR.w.r.t. ALONG kip	WIND.DIR ACROSS kip	MOMENT.w.r.t. ALONG ft-kip	WIND.DIR ACROSS ft-kip	TORSION ft-kip
194.0	0.00 A	0.00 K	0.00 L	0.00 I	0.00 I	0.00 I
178.1	10.77 A	3.68 K	0.00 L	-45.62 D	0.01 I	0.00 F
162.2	10.77 E	3.68 E	0.00 H	-45.62 D	0.01 F	0.00 F
146.2	26.68 E	9.02 E	0.00 H	-167.19 D	0.03 F	0.01 F
141.7	26.68 B	9.02 H	0.00 B	-167.19 D	0.03 F	0.01 F
127.5	35.34 B	11.80 H	0.00 B	-352.11 D	0.05 F	0.02 F
113.2	35.34 E	11.86 L	-0.05 C	-352.20 F	0.13 F	0.02 I
99.0	36.62 E	11.95 L	-0.05 C	-412.35 L	0.15 L	0.03 F
92.7	36.64 D	11.97 C	-0.04 C	-412.37 L	0.18 L	0.03 F
79.6	39.13 D	12.27 C	-0.04 C	-605.82 C	0.63 C	0.05 F
66.4	39.13 C	12.25 C	0.04 K	-605.80 C	0.62 C	0.05 F
53.2	41.92 C	12.58 C	0.04 K	-802.15 C	-1.11 K	0.08 F
45.5	41.92 C	12.57 C	0.04 K	-802.14 C	-1.11 K	0.08 F
34.1	45.01 C	12.93 C	0.04 K	-1001.56 C	-1.71 K	0.10 F
194.0	45.01 C	12.94 C	0.04 F	-1001.52 C	-1.76 K	0.10 F
178.1	47.87 C	13.10 C	0.04 F	-1090.32 C	-1.98 K	0.11 F
162.2	47.87 C	13.08 C	0.05 K	-1090.30 C	-2.00 K	0.11 F
146.2	51.05 C	13.42 C	0.05 K	-1279.18 C	-2.65 K	0.13 F
141.7	51.05 C	13.42 C	0.06 K	-1279.17 C	-2.65 K	0.13 F
127.5	54.48 C	13.78 C	0.06 K	-1470.72 C	-3.42 K	0.14 F
113.2	54.48 C	13.78 C	0.06 K	-1470.72 C	-3.42 K	0.14 F
99.0	58.17 C	14.15 C	0.06 K	-1665.19 C	-4.21 K	0.15 F
92.7	58.17 C	14.16 C	0.05 K	-1665.18 C	-4.21 K	0.15 F
79.6	62.71 C	14.38 C	0.05 K	-1781.12 C	-4.57 K	0.16 F
66.4	62.71 C	14.38 C	0.05 K	-1781.12 C	-4.57 K	0.16 F
53.2	66.18 C	14.70 C	0.05 K	-1953.12 C	-5.07 K	0.16 F
45.5	66.18 C	14.70 C	0.04 K	-1953.12 C	-5.08 K	0.16 F

22.7	69.84 C	15.02 C	0.04 K	-2126.94 C	-5.57 K	0.17 F
	69.84 C	15.02 C	0.04 K	-2126.95 C	-5.57 K	0.17 F
11.4	73.73 C	15.32 C	0.04 K	-2302.41 C	-6.05 K	0.17 F
	73.73 C	15.32 C	0.04 K	-2302.41 C	-6.05 K	0.17 F
	77.72 C	15.62 C	0.04 K	-2479.38 C	-6.53 K	0.17 F
base reaction	77.72 C	-15.62 C	-0.04 K	2479.38 C	6.53 K	-0.17 F

COMPLIANCE WITH 4.8.2 & 4.5.4

ELEV ft	AXIAL	BENDING	SHEAR + TORSIONAL	TOTAL	SATISFIED	D/t(w/t)	MAX ALLOWED
194.00	0.00A	0.00I	0.00K	0.00I	YES	6.35A	45.2
178.08	0.01A	0.06D	0.00K	0.06D	YES	8.41A	45.2
	0.01E	0.06D	0.00E	0.06D	YES	8.41A	45.2
162.17	0.01E	0.14D	0.01E	0.15D	YES	10.46A	45.2
	0.01B	0.14D	0.01H	0.15D	YES	10.46A	45.2
146.25	0.01B	0.22D	0.01H	0.23D	YES	12.52A	45.2
	0.01E	0.16F	0.01L	0.17F	YES	8.95A	45.2
141.75	0.01E	0.18L	0.01L	0.19L	YES	9.39A	45.2
	0.01D	0.19L	0.01C	0.20L	YES	9.12A	45.2
127.50	0.01D	0.21C	0.01C	0.22C	YES	10.50A	45.2
	0.01C	0.21C	0.01C	0.22C	YES	10.50A	45.2
113.25	0.01C	0.23C	0.01C	0.24C	YES	11.89A	45.2
	0.01C	0.23C	0.01C	0.24C	YES	11.89A	45.2
99.00	0.01C	0.23C	0.01C	0.24C	YES	13.27A	45.2
	0.01C	0.23C	0.01C	0.24C	YES	13.27A	45.2
92.75	0.01C	0.23C	0.01C	0.24C	YES	13.88A	45.2
	0.01C	0.25C	0.01C	0.26C	YES	13.52A	45.2
79.58	0.01C	0.24C	0.00C	0.25C	YES	14.80A	45.2
	0.01C	0.24C	0.00C	0.25C	YES	14.80A	45.2
66.42	0.01C	0.24C	0.00C	0.25C	YES	16.08A	45.2
	0.01C	0.24C	0.00C	0.25C	YES	16.08A	45.2
53.25	0.01C	0.24C	0.00C	0.25C	YES	17.35A	45.2
	0.01C	0.24C	0.00C	0.25C	YES	17.35A	45.2
45.50	0.01C	0.24C	0.00C	0.25C	YES	18.11A	45.2
	0.01C	0.25C	0.00C	0.26C	YES	17.75A	45.2
34.12	0.01C	0.25C	0.00C	0.26C	YES	18.86A	45.2
	0.01C	0.25C	0.00C	0.26C	YES	18.86A	45.2
22.75	0.01C	0.25C	0.00C	0.26C	YES	19.96A	45.2
	0.01C	0.25C	0.00C	0.26C	YES	19.96A	45.2
11.37	0.01C	0.25C	0.00C	0.26C	YES	21.06A	45.2
	0.01C	0.25C	0.00C	0.26C	YES	21.06A	45.2



0.00      0.01C      0.25C      0.00C      0.26C      YES      22.17A      45.2  
.....

MAXIMUM LOADS ONTO FOUNDATION(w.r.t. wind direction)  
=====

DOWN	SHEAR.w.r.t.WIND.DIR	MOMENT.w.r.t.WIND.DIR	TORSION
kip	ALONG kip	ALONG ft-kip	ft-kip
	ACROSS kip	ACROSS ft-kip	
77.72	15.62	-2479.38	0.17
C	C	C	F

=====

## Round Base Plate and Anchor Rods, per ANSI/TIA 222-G

### Pole Data

Diameter: 67.850 in (flat to flat)  
Thickness: 0.5 in  
Yield (Fy): 65 ksi  
# of Sides: 18 "0" IF Round  
Strength (Fu): 80 ksi

### Reactions

Moment, Mu: 9751.04 ft-kips  
Axial, Pu: 93.21 kips  
Shear, Vu: 61.35 kips

### Anchor Rod Data

Quantity: 26  
Diameter: 2.25 in  
Rod Material: A615  
Strength (Fu): 100 ksi  
Yield (Fy): 75 ksi  
BC Diam. (in): 75.25 BC Override: 119.25

### Anchor Rod Results

Maximum Rod (Pu+ Vu/η): 247.5 Kips  
Allowable  $\Phi \cdot R_{nt}$ : 260.0 Kips (per 4.9.9)  
Anchor Rod Interaction Ratio: **95.2% Pass**

### Plate Data

Diameter (in): 81 Dia. Override: 119.25  
Thickness: 2.5 in  
Yield (Fy): 50 ksi  
Eff Width/Rod: 8.28 in  
Drain Hole: 2.625 in. diameter  
Drain Location: 31.75 in. center of pole to center of drain hole  
Center Hole: 55.5 in. diameter

### Base Plate Results

Base Plate (Mu/Z): 43.7 ksi  
Allowable  $\Phi \cdot F_y$ : 45.0 ksi (per AISC)  
Base Plate Interaction Ratio: **97.1% Pass**

=====  
LFile for Windows, Version 2018-10.003

Analysis of Individual Piles and Drilled Shafts  
Subjected to Lateral Loading Using the p-y Method  
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-----  
Files Used for Analysis  
-----

Path to file locations:  
\Program Files (x86)\Ensoft\Lfile2018\files\

Name of input data file:  
412283A.lp10

Name of output report file:  
412283A.lp10

Name of plot output file:  
412283A.lp10

Name of runtime message file:  
412283A.lp10

-----  
Date and Time of Analysis  
-----

Date: October 17, 2018

Time: 13:36:24

-----  
Problem Title  
-----

Site : Flat Mary FN, KY

Tower : 195' Monopole

Prepared for : AT&T

Job Number : 412283 Revision A

Engineer : ARH

-----  
Program Options and Settings  
-----

Computational Options:  
- Use unfactored loads in computations (conventional analysis)  
Engineering Units Used for Data Input and Computations:  
- US Customary System Units (pounds, feet, inches)

Analysis Control Options:

- Maximum number of iterations allowed = 999  
 - Deflection tolerance for convergence = 1.0000E-05 in  
 - Maximum allowable deflection = 100.0000 in  
 - Number of pile increments = 100

Loading Type and Number of Cycles of Loading:

- Static loading specified
- Use of p-y modification factors for p-y curves not selected
- Analysis uses layering correction (Method of Georgiadis)
- No distributed lateral loads are entered
- Loading by lateral soil movements acting on pile not selected
- Input of shear resistance at the pile tip not selected
- Computation of pile-head foundation stiffness matrix not selected
- Push-over analysis of pile not selected
- Buckling analysis of pile not selected

Output Options:

- Output files use decimal points to denote decimal symbols.
- Report only summary tables of pile-head deflection, maximum bending moment, and maximum shear force in output report file.
- No p-y curves to be computed and reported for user-specified depths
- Print using wide report formats

-----  
 Pile Structural Properties and Geometry  
 -----

Number of pile sections defined = 1  
 Total length of pile = 29.500 ft  
 Depth of ground surface below top of pile = 0.5000 ft

Pile diameters used for p-y curve computations are defined using 2 points.

p-y curves are computed using pile diameter values interpolated with depth over the length of the pile. A summary of values of pile diameter vs. depth follows.

Point No.	Depth Below Pile Head feet	Pile Diameter inches
1	0.000	108.0000
2	29.500	108.0000

Input Structural Properties for Pile Sections:  
 -----

Pile Section No. 1:

Section 1 is a round drilled shaft, bored pile, or CIDH pile  
 Length of section = 29.500000 ft  
 Shaft Diameter = 108.000000 in  
 Shear capacity of section = 0.0000 lbs

-----  
 Ground Slope and Pile Batter Angles  
 -----

Ground Slope Angle = 0.000 degrees  
 = 0.000 radians  
 Pile Batter Angle = 0.000 degrees  
 = 0.000 radians

-----  
 Soil and Rock Layering Information  
 -----

The soil profile is modelled using 6 layers

Layer 1 is stiff clay without free water

Distance from top of pile to top of layer = 0.500000 ft  
 Distance from top of pile to bottom of layer = 4.000000 ft  
 Effective unit weight at top of layer = 115.000000 pcf  
 Effective unit weight at bottom of layer = 115.000000 pcf  
 Undrained cohesion at top of layer = 2000. psf  
 Undrained cohesion at bottom of layer = 2000. psf

Epsilon-50 at top of layer = 0.007000  
 Epsilon-50 at bottom of layer = 0.007000

Layer 2 is stiff clay without free water

Distance from top of pile to top of layer = 4.000000 ft  
 Distance from top of pile to bottom of layer = 6.500000 ft  
 Effective unit weight at top of layer = 120.000000 pcf  
 Effective unit weight at bottom of layer = 120.000000 pcf  
 Undrained cohesion at top of layer = 2500. psf  
 Undrained cohesion at bottom of layer = 2500. psf  
 Epsilon-50 at top of layer = 0.005000  
 Epsilon-50 at bottom of layer = 0.005000

Layer 3 is sand, p-y criteria by Reese et al., 1974

Distance from top of pile to top of layer = 6.500000 ft  
 Distance from top of pile to bottom of layer = 14.000000 ft  
 Effective unit weight at top of layer = 125.000000 pcf  
 Effective unit weight at bottom of layer = 125.000000 pcf  
 Friction angle at top of layer = 35.000000 deg.  
 Friction angle at bottom of layer = 35.000000 deg.  
 Subgrade k at top of layer = 90.000000 pci  
 Subgrade k at bottom of layer = 90.000000 pci

Layer 4 is sand, p-y criteria by Reese et al., 1974

Distance from top of pile to top of layer = 14.000000 ft  
 Distance from top of pile to bottom of layer = 24.000000 ft  
 Effective unit weight at top of layer = 125.000000 pcf  
 Effective unit weight at bottom of layer = 125.000000 pcf  
 Friction angle at top of layer = 35.000000 deg.  
 Friction angle at bottom of layer = 35.000000 deg.  
 Subgrade k at top of layer = 90.000000 pci  
 Subgrade k at bottom of layer = 90.000000 pci

Layer 5 is sand, p-y criteria by Reese et al., 1974

Distance from top of pile to top of layer = 24.000000 ft  
 Distance from top of pile to bottom of layer = 39.000000 ft  
 Effective unit weight at top of layer = 125.000000 pcf  
 Effective unit weight at bottom of layer = 125.000000 pcf  
 Friction angle at top of layer = 38.000000 deg.  
 Friction angle at bottom of layer = 38.000000 deg.  
 Subgrade k at top of layer = 225.000000 pci  
 Subgrade k at bottom of layer = 225.000000 pci

Layer 6 is sand, p-y criteria by Reese et al., 1974

Distance from top of pile to top of layer = 39.000000 ft  
 Distance from top of pile to bottom of layer = 50.500000 ft  
 Effective unit weight at top of layer = 125.000000 pcf  
 Effective unit weight at bottom of layer = 125.000000 pcf  
 Friction angle at top of layer = 38.000000 deg.  
 Friction angle at bottom of layer = 38.000000 deg.  
 Subgrade k at top of layer = 225.000000 pci  
 Subgrade k at bottom of layer = 225.000000 pci

(Depth of the lowest soil layer extends 21.000 ft below the pile tip)

-----  
 Summary of Input Soil Properties  
 -----

Layer	Soil Type	Layer	Effective	Undrained	Angle of	E50	
Layer	Name	Depth	Unit Wt.	Cohesion	Friction	or	kpy
Num.	(p-y Curve Type)	ft	pcf	psf	deg.	krm	pci
-----	-----	-----	-----	-----	-----	-----	-----
1	stiff clay	0.5000	115.0000	2000.	--	0.00700	--
	w/o Free Water	4.0000	115.0000	2000.	--	0.00700	--
2	stiff clay	4.0000	120.0000	2500.	--	0.00500	--

	w/o Free Water	6.5000	120.0000	2500.	--	0.00500	--
3	Sand	6.5000	125.0000	--	35.0000	--	90.0000
	(Reese, et al.)	14.0000	125.0000	--	35.0000	--	90.0000
4	Sand	14.0000	125.0000	--	35.0000	--	90.0000
	(Reese, et al.)	24.0000	125.0000	--	35.0000	--	90.0000
5	Sand	24.0000	125.0000	--	38.0000	--	225.0000
	(Reese, et al.)	39.0000	125.0000	--	38.0000	--	225.0000
6	Sand	39.0000	125.0000	--	38.0000	--	225.0000
	(Reese, et al.)	50.5000	125.0000	--	38.0000	--	225.0000

-----  
 Static Loading Type  
 -----

Static loading criteria were used when computing p-y curves for all analyses.

-----  
 Pile-head Loading and Pile-head Fixity Conditions  
 -----

Number of loads specified = 2

Load No.	Load Type	Condition 1	Condition 2	Axial Thrust Force, lbs	Compute Top y vs. Pile Length
1	1	V = 81800. lbs	M = 156016640. in-lbs	124280.	No
2	1	V = 15620. lbs	M = 29752560. in-lbs	77720.	No

V = shear force applied normal to pile axis  
 M = bending moment applied to pile head  
 y = lateral deflection normal to pile axis  
 S = pile slope relative to original pile batter angle  
 R = rotational stiffness applied to pile head  
 Values of top y vs. pile lengths can be computed only for load types with specified shear loading (Load Types 1, 2, and 3).  
 Thrust force is assumed to be acting axially for all pile batter angles.

-----  
 Computations of Nominal Moment Capacity and Nonlinear Bending Stiffness  
 -----

Axial thrust force values were determined from pile-head loading conditions

Number of Pile Sections Analyzed = 1

Pile Section No. 1:  
 -----

Dimensions and Properties of Drilled Shaft (Bored Pile):  
 -----

Length of Section	=	29.500000	ft
Shaft Diameter	=	108.000000	in
Concrete Cover Thickness	=	3.625000	in
Number of Reinforcing Bars	=	44	bars
Yield Stress of Reinforcing Bars	=	60000.	psi
Modulus of Elasticity of Reinforcing Bars	=	29000000.	psi
Gross Area of Shaft	=	9161.	sq. in.
Total Area of Reinforcing Steel	=	55.737823	sq. in.
Area Ratio of Steel Reinforcement	=	0.61	percent
Edge-to-Edge Bar Spacing	=	5.826822	in
Maximum Concrete Aggregate Size	=	0.750000	in
Ratio of Bar Spacing to Aggregate Size	=	7.77	
Offset of Center of Rebar Cage from Center of Pile	=	0.0000	in

Axial Structural Capacities:  
 -----

Nom. Axial Structural Capacity = $0.85 F_c A_c + F_y A_s$	=	38171.454	kips
Tensile Load for Cracking of Concrete	=	-4195.316	kips
Nominal Axial Tensile Capacity	=	-3344.269	kips

Reinforcing Bar Dimensions and Positions Used in Computations:

Bar Number	Bar Diam. inches	Bar Area sq. in.	X inches	Y inches
1	1.270000	1.266769	49.740000	0.00000
2	1.270000	1.266769	49.233719	7.078740
3	1.270000	1.266769	47.725181	14.013377
4	1.270000	1.266769	45.245095	20.662743
5	1.270000	1.266769	41.843951	26.891474
6	1.270000	1.266769	37.590984	32.572773
7	1.270000	1.266769	32.572773	37.590984
8	1.270000	1.266769	26.891474	41.843951
9	1.270000	1.266769	20.662743	45.245095
10	1.270000	1.266769	14.013377	47.725181
11	1.270000	1.266769	7.078740	49.233719
12	1.270000	1.266769	0.00000	49.740000
13	1.270000	1.266769	-7.078740	49.233719
14	1.270000	1.266769	-14.013377	47.725181
15	1.270000	1.266769	-20.662743	45.245095
16	1.270000	1.266769	-26.891474	41.843951
17	1.270000	1.266769	-32.572773	37.590984
18	1.270000	1.266769	-37.590984	32.572773
19	1.270000	1.266769	-41.843951	26.891474
20	1.270000	1.266769	-45.245095	20.662743
21	1.270000	1.266769	-47.725181	14.013377
22	1.270000	1.266769	-49.233719	7.078740
23	1.270000	1.266769	-49.740000	0.00000
24	1.270000	1.266769	-49.233719	-7.078740
25	1.270000	1.266769	-47.725181	-14.013377
26	1.270000	1.266769	-45.245095	-20.662743
27	1.270000	1.266769	-41.843951	-26.891474
28	1.270000	1.266769	-37.590984	-32.572773
29	1.270000	1.266769	-32.572773	-37.590984
30	1.270000	1.266769	-26.891474	-41.843951
31	1.270000	1.266769	-20.662743	-45.245095
32	1.270000	1.266769	-14.013377	-47.725181
33	1.270000	1.266769	-7.078740	-49.233719
34	1.270000	1.266769	0.00000	-49.740000
35	1.270000	1.266769	7.078740	-49.233719
36	1.270000	1.266769	14.013377	-47.725181
37	1.270000	1.266769	20.662743	-45.245095
38	1.270000	1.266769	26.891474	-41.843951
39	1.270000	1.266769	32.572773	-37.590984
40	1.270000	1.266769	37.590984	-32.572773
41	1.270000	1.266769	41.843951	-26.891474
42	1.270000	1.266769	45.245095	-20.662743
43	1.270000	1.266769	47.725181	-14.013377
44	1.270000	1.266769	49.233719	-7.078740

NOTE: The positions of the above rebars were computed by LPILE

Minimum spacing between any two bars not equal to zero = 5.827 inches between bars 15 and 16.

Ratio of bar spacing to maximum aggregate size = 7.77

Concrete Properties:

Compressive Strength of Concrete	=	4500. psi
Modulus of Elasticity of Concrete	=	3823676. psi
Modulus of Rupture of Concrete	=	-503.115295 psi
Compression Strain at Peak Stress	=	0.002001
Tensile Strain at Fracture of Concrete	=	-0.0001152
Maximum Coarse Aggregate Size	=	0.750000 in

Number of Axial Thrust Force Values Determined from Pile-head Loadings = 2

Number	Axial Thrust Force kips
1	77.720
2	124.280

Summary of Results for Nominal (Unfactored) Moment Capacity for section 1

Moment values interpolated at maximum compressive strain = 0.003 or maximum developed moment if pile fails at smaller strains.

Load No.	Axial Thrust kips	Nominal Mom. Cap. in-kip	Max. Comp. Strain
1	77.720	159410.949	0.00300000
2	124.280	161350.173	0.00300000

Note that the values of moment capacity in the table above are not factored by a strength reduction factor ( $\phi$ -factor).

In ACI 318, the value of the strength reduction factor depends on whether the transverse reinforcing steel bars are tied hoops (0.65) or spirals (0.70).

The above values should be multiplied by the appropriate strength reduction factor to compute ultimate moment capacity according to ACI 318, section 9.3.2.2 or the value required by the design standard being followed.

The following table presents factored moment capacities and corresponding bending stiffnesses computed for common resistance factor values used for reinforced concrete sections.

Axial Load No.	Resist. Factor for Moment	Nominal Moment Cap in-kips	Ult. (Fac) Ax. Thrust kips	Ult. (Fac) Moment Cap in-kips	Bend. Stiff. at Ult Mom kip-in <sup>2</sup>
1	0.65	159411.	50.518000	103617.	4.3713E+09
2	0.65	161350.	80.782000	104878.	4.4326E+09
1	0.70	159411.	54.404000	111588.	4.3563E+09
2	0.70	161350.	86.996000	112945.	4.4131E+09
1	0.75	159411.	58.290000	119558.	4.2112E+09
2	0.75	161350.	93.210000	121013.	4.2714E+09

#### Layering Correction Equivalent Depths of Soil & Rock Layers

Layer No.	Top of Layer Below Pile Head ft	Equivalent Top Depth Below Grnd Surf ft	Same Layer Type As Layer Above	Layer is Rock or is Below Rock Layer	F0 Integral for Layer lbs	F1 Integral for Layer lbs
1	0.5000	0.00	N.A.	No	0.00	201548.
2	4.0000	2.8486	Yes	No	201548.	192226.
3	6.5000	7.8314	No	No	393775.	1273771.
4	14.0000	15.2033	Yes	No	1667546.	2996991.
5	24.0000	22.5044	Yes	No	4664537.	2542177.
6	39.0000	38.5000	No	No	7206714.	N.A.

Notes: The F0 integral of Layer n+1 equals the sum of the F0 and F1 integrals for Layer n. Layering correction equivalent depths are computed only for soil types with both shallow-depth and deep-depth expressions for peak lateral load transfer. These soil types are soft and stiff clays, non-liquefied sands, and cemented c-phi soil.

#### Summary of Pile-head Responses for Conventional Analyses

Definitions of Pile-head Loading Conditions:

Load Type 1: Load 1 = Shear, V, lbs, and Load 2 = Moment, M, in-lbs  
 Load Type 2: Load 1 = Shear, V, lbs, and Load 2 = Slope, S, radians  
 Load Type 3: Load 1 = Shear, V, lbs, and Load 2 = Rot. Stiffness, R, in-lbs/rad.  
 Load Type 4: Load 1 = Top Deflection, y, inches, and Load 2 = Moment, M, in-lbs  
 Load Type 5: Load 1 = Top Deflection, y, inches, and Load 2 = Slope, S, radians

Load Case No.	Load Type	Load 1 Pile-head Load 1	Load 2 Type	Load 2 Pile-head Load 2	Axial Loading lbs	Pile-head Deflection inches	Pile-head Rotation radians	Max Shear in Pile lbs	Max Moment in Pile in-lbs
1	V, lb	81800.	M, in-lb	1.56E+08	124280.	2.0948	-0.01913	-841887.	1.58E+08
2	V, lb	15620.	M, in-lb	2.98E+07	77720.	0.09293	-4.89E-04	-127040.	3.00E+07

Maximum pile-head deflection = 2.0948074348 inches  
 Maximum pile-head rotation = -0.0191316517 radians = -1.096163 deg.

The analysis ended normally.



1807.3.2.1 (2009 IBC, 2012 IBC, & 2015 IBC)

Moment (ft·k)	9,751.04	
Shear (k)	61.35	
Caisson diameter (ft)	9	
Caisson height above ground (ft)	0.5	
Caisson height below ground (ft)	29	
Lateral soil pressure (lb/ft <sup>2</sup> )	418.97	
Ground to application of force, h (ft)	159.44	
Applied lateral force, P (lb)	61,350	
Lateral soil bearing pressure, S <sub>1</sub> (lb/ft)	4,050.00	
Diameter, b (ft)	9	
A	3.94	= (2.34P)/(S <sub>1</sub> b)
Minimum depth of embedment, d (ft)	28.21	= 0.5A [ 1 + ( 1 + ( 4.36h / A ) ) <sup>1/2</sup> ]

## MAT FOUNDATION DESIGN BY SABRE TOWERS & POLES

195' Monopole AT&T Flat Mary FN, KY (412283) 10/17/18 ARH

### Overall Loads:

Factored Moment (ft-kips)	9751.04
Factored Axial (kips)	93.21
Factored Shear (kips)	61.35
Bearing Design Strength (ksf)	11.25
Water Table Below Grade (ft)	999
Width of Mat (ft)	30.5
Thickness of Mat (ft)	2
Depth to Bottom of Slab (ft)	6
Quantity of Bolts in Bolt Circle	26
Bolt Circle Diameter (in)	75.25
Top of Concrete to Top of Bottom Threads (in)	60
Diameter of Pier (ft)	9
Ht. of Pier Above Ground (ft)	0.5
Ht. of Pier Below Ground (ft)	4
Quantity of Bars in Mat	64
Bar Diameter in Mat (in)	1.128
Area of Bars in Mat (in <sup>2</sup> )	63.96
Spacing of Bars in Mat (in)	5.70
Quantity of Bars Pier	60
Bar Diameter in Pier (in)	1
Tie Bar Diameter in Pier (in)	0.625
Spacing of Ties (in)	12
Area of Bars in Pier (in <sup>2</sup> )	47.12
Spacing of Bars in Pier (in)	5.22
f'c (ksi)	4.5
fy (ksi)	60
Unit Wt. of Soil (kcf)	0.125
Unit Wt. of Concrete (kcf)	0.15

Volume of Concrete (yd<sup>3</sup>) 79.51

### Two-Way Shear Action:

Average d (in)	19.872
$\phi v_c$ (ksi)	0.227
$\phi v_c = \phi(2 + 4/\beta_c)f'_c{}^{1/2}$	0.342
$\phi v_c = \phi(\alpha_s d/b_o + 2)f'_c{}^{1/2}$	0.227
$\phi v_c = \phi 4f'_c{}^{1/2}$	0.228
Shear perimeter, b <sub>o</sub> (in)	401.72
$\beta_c$	1

### One-Way Shear:

$\phi V_c$  (kips) 829.4

### Stability:

Overturning Design Strength (ft-k) 11433.0

Max. Net Bearing Press. (ksf) 7.69

Allowable Bearing Pressure (ksf) 5.00

Safety Factor 3.00

Ultimate Bearing Pressure (ksf) 15.00

Bearing  $\Phi_s$  0.75

Minimum Pier Diameter (ft) 7.60

Equivalent Square b (ft) 7.98

Square Pier? (Y/N) N

Recommended Spacing (in) 5 to 12

Minimum Pier A<sub>s</sub> (in<sup>2</sup>) 45.80

Recommended Spacing (in) 5 to 12

v<sub>u</sub> (ksi) 0.198

V<sub>u</sub> (kips) 565.2

Total Applied M (ft-k) 10149.8

**Pier Design:**

$\phi V_n$ (kips)	1069.5	$V_u$ (kips)	61.4
$\phi V_c = \phi 2(1 + N_u / (2000 A_g)) f'_c{}^{1/2} b_w d$	1069.5		
$V_s$ (kips)	0.0	*** $V_s \text{ max} = 4 f'_c{}^{1/2} b_w d$ (kips)	2503.8
Maximum Spacing (in)	6.78	(Only if Shear Ties are Required)	
Actual Hook Development (in)	18.74	Req'd Hook Development $l_{dh}$ (in)	12.17

\*\*\* Ref. To Spacing Requirements ACI 11.5.4.3

**Flexure in Slab:**

$\phi M_n$ (ft-kips)	5324.8	$M_u$ (ft-kips)	5303.9
a (in)	2.74		
Steel Ratio	0.00879		
$\beta_1$	0.825		
Maximum Steel Ratio ( $\rho_t$ )	0.0197		
Minimum Steel Ratio	0.0018		
Rebar Development in Pad (in)	132.14	Required Development in Pad (in)	30.10

Condition	1 is OK, 0 Fails
Maximum Soil Bearing Pressure	1
Pier Area of Steel	1
Pier Shear	1
Interaction Diagram Visual Check	1
Two-Way Shear Action	1
One-Way Shear Action	1
Overtopping	1
Flexure	1
Steel Ratio	1
Length of Development in Pad	1
Hook Development	1

**EXHIBIT D**  
**COMPETING UTILITIES, CORPORATIONS, OR PERSONS LIST**

## KY Public Service Commission

### Master Utility Search

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

	Utility ID	Utility Name	Address/City/Contact	Utility Type	Status
					▼ Active ▼

<a href="#">View</a>	4111300	2600Hz, Inc. dba ZSWITCH	Cellular C	San Francisco CA	
<a href="#">View</a>	4107900	365 Wireless, LLC	Cellular D	Atlanta GA	
<a href="#">View</a>	4109300	Access Point, Inc.	Cellular D	Cary NC	
<a href="#">View</a>	4108300	Air Voice Wireless, LLC	Cellular A	Bloomfield Hill MI	
<a href="#">View</a>	4110650	Alliant Technologies of KY, L.L.C.	Cellular D	Morristown NJ	
<a href="#">View</a>	44451184	Alltel Communications, LLC	Cellular A	Basking Ridge NJ	
<a href="#">View</a>	4110850	AltaWorx, LLC	Cellular D	Fairhope AL	
<a href="#">View</a>	4107800	American Broadband and Telecommunications Company	Cellular D	Toledo OH	
<a href="#">View</a>	4108650	AmeriMex Communications Corp.	Cellular D	Dunedin FL	
<a href="#">View</a>	4105100	AmeriVision Communications, Inc. d/b/a Affinity 4	Cellular D	Virginia Beach VA	
<a href="#">View</a>	4110700	Andrew David Balholm dba Norcell	Cellular D	Clayton WA	
<a href="#">View</a>	4108600	BCN Telecom, Inc.	Cellular D	Morristown NJ	
<a href="#">View</a>	4110550	Blue Casa Mobile, LLC	Cellular D	Santa Barbara CA	
<a href="#">View</a>	4108750	Blue Jay Wireless, LLC	Cellular C	Carrollton TX	
<a href="#">View</a>	4111050	BlueBird Communications, LLC	Cellular C	New York NY	
<a href="#">View</a>	4202300	Bluegrass Wireless, LLC	Cellular A	Elizabethtown KY	
<a href="#">View</a>	4107600	Boomerang Wireless, LLC	Cellular B	Hiawatha IA	

<a href="#">View</a>	4105500	BullsEye Telecom, Inc.	Cellular	D	Southfield	MI
<a href="#">View</a>	4100700	Cellco Partnership dba Verizon Wireless	Cellular	A	Basking Ridge	NJ
<a href="#">View</a>	4106600	Cintex Wireless, LLC	Cellular	D	Rockville	MD
<a href="#">View</a>	4111150	Comcast OTR1, LLC	Cellular	D	Philadelphia	PA
<a href="#">View</a>	4101900	Consumer Cellular, Incorporated	Cellular	A	Portland	OR
<a href="#">View</a>	4106400	Credo Mobile, Inc.	Cellular	B	San Francisco	CA
<a href="#">View</a>	4108850	Cricket Wireless, LLC	Cellular	D	San Antonio	TX
<a href="#">View</a>	10640	Cumberland Cellular Partnership	Cellular	A	Elizabethtown	KY
<a href="#">View</a>	4111200	Dynalink Communications, Inc.	Cellular	C	Brooklyn	NY
<a href="#">View</a>	4101000	East Kentucky Network, LLC dba Appalachian Wireless	Cellular	A	Ivel	KY
<a href="#">View</a>	4002300	Easy Telephone Service Company dba Easy Wireless	Cellular	D	Ocala	FL
<a href="#">View</a>	4109500	Enhanced Communications Group, LLC	Cellular	D	Bartlesville	OK
<a href="#">View</a>	4110450	Excellus Communications, LLC	Cellular	D	Chattanooga	TN
<a href="#">View</a>	4105900	Flash Wireless, LLC	Cellular	C	Concord	NC
<a href="#">View</a>	4104800	France Telecom Corporate Solutions L.L.C.	Cellular	D	Oak Hill	VA
<a href="#">View</a>	4109350	Global Connection Inc. of America	Cellular	D	Norcross	GA
<a href="#">View</a>	4102200	Globalstar USA, LLC	Cellular	B	Covington	LA
<a href="#">View</a>	4109600	Google North America Inc.	Cellular	A	Mountain View	CA
<a href="#">View</a>	33350363	Granite Telecommunications, LLC	Cellular	D	Quincy	MA
<a href="#">View</a>	4106000	GreatCall, Inc. d/b/a Jitterbug	Cellular	A	San Diego	CA
<a href="#">View</a>	10630	GTE Wireless of the Midwest dba Verizon Wireless	Cellular	A	Basking Ridge	NJ
<a href="#">View</a>	4103100	i-Wireless, LLC	Cellular	A	Newport	KY
<a href="#">View</a>	4109800	IM Telecom, LLC d/b/a Infiniti Mobile	Cellular	D	Tulsa	OK
<a href="#">View</a>	22215360	KDDI America, Inc.	Cellular	D	New York	NY
<a href="#">View</a>	10872	Kentucky RSA #1 Partnership	Cellular	A	Basking Ridge	NJ
<a href="#">View</a>	10680	Kentucky RSA #3 Cellular General	Cellular	A	Elizabethtown	KY
<a href="#">View</a>	10681	Kentucky RSA #4 Cellular General	Cellular	A	Elizabethtown	KY
<a href="#">View</a>	4109750	Konatel, Inc. dba telecom.mobi	Cellular	D	Johnstown	PA
<a href="#">View</a>	4111250	Liberty Mobile Wireless, LLC	Cellular	C	Sunny Isles Beach	
<a href="#">View</a>	4111400	Locus Telecommunications, LLC	Cellular	C	Fort Lee	NJ
<a href="#">View</a>	4110900	Lunar Labs, Inc.	Cellular	D	Detroit	MI
<a href="#">View</a>	4107300	Lycamobile USA, Inc.	Cellular	D	Newark	NJ
<a href="#">View</a>	4108800	MetroPCS Michigan, LLC	Cellular	A	Bellevue	WA

<a href="#">View</a>	4109650	Mitel Cloud Services, Inc.	Cellular	D	Mesa	AZ
<a href="#">View</a>	4202400	New Cingular Wireless PCS, LLC dba AT&T Mobility, PCS	Cellular	A	San Antonio	TX
<a href="#">View</a>	10900	New Par dba Verizon Wireless	Cellular	A	Basking Ridge	NJ
<a href="#">View</a>	4000800	Nextel West Corporation	Cellular	D	Overland Park	KS
<a href="#">View</a>	4001300	NPCR, Inc. dba Nextel Partners	Cellular	D	Overland Park	KS
<a href="#">View</a>	4001800	OnStar, LLC	Cellular	A	Detroit	MI
<a href="#">View</a>	4110750	Onvoy Spectrum, LLC	Cellular	D	Plymouth	MN
<a href="#">View</a>	4109050	Patriot Mobile LLC	Cellular	D	Southlake	TX
<a href="#">View</a>	4110250	Plintron Technologies USA LLC	Cellular	D	Bellevue	WA
<a href="#">View</a>	33351182	PNG Telecommunications, Inc. dba PowerNet Global Communications	Cellular	D	Cincinnati	OH
<a href="#">View</a>	4202100	Powertel/Memphis, Inc. dba T- Mobile	Cellular	A	Bellevue	WA
<a href="#">View</a>	4107700	Puretalk Holdings, LLC	Cellular	A	Covington	GA
<a href="#">View</a>	4111350	Q LINK MOBILE LLC	Cellular	C	Dania Beach	FL
<a href="#">View</a>	4106700	Q Link Wireless, LLC	Cellular	B	Dania	FL
<a href="#">View</a>	4108700	Ready Wireless, LLC	Cellular	B	Hiawatha	IA
<a href="#">View</a>	4110500	Republic Wireless, Inc.	Cellular	D	Raleigh	NC
<a href="#">View</a>	4111100	ROK Mobile, Inc.	Cellular	C	Culver City	CA
<a href="#">View</a>	4106200	Rural Cellular Corporation	Cellular	A	Basking Ridge	NJ
<a href="#">View</a>	4108550	Sage Telecom Communications, LLC dba TruConnect	Cellular	D	Los Angeles	CA
<a href="#">View</a>	4109150	SelecTel, Inc. d/b/a SelecTel Wireless	Cellular	D	Freemont	NE
<a href="#">View</a>	4106300	SI Wireless, LLC	Cellular	A	Carbondale	IL
<a href="#">View</a>	4110150	Spectrotel, Inc. d/b/a Touch Base Communications	Cellular	D	Neptune	NJ
<a href="#">View</a>	4200100	Sprint Spectrum, L.P.	Cellular	A	Atlanta	GA
<a href="#">View</a>	4200500	SprintCom, Inc.	Cellular	A	Atlanta	GA
<a href="#">View</a>	4109550	Stream Communications, LLC	Cellular	D	Dallas	TX
<a href="#">View</a>	4110200	T C Telephone LLC d/b/a Horizon Cellular	Cellular	D	Red Bluff	CA
<a href="#">View</a>	4202200	T-Mobile Central, LLC dba T- Mobile	Cellular	A	Bellevue	WA
<a href="#">View</a>	4002500	TAG Mobile, LLC	Cellular	D	Carrollton	TX
<a href="#">View</a>	4109700	Telecom Management, Inc. dba Pioneer Telephone	Cellular	D	South Portland	ME
<a href="#">View</a>	4107200	Telefonica USA, Inc.	Cellular	D	Miami	FL
<a href="#">View</a>	4108900	Telrite Corporation	Cellular	D	Covington	GA
<a href="#">View</a>	4108450	Tempo Telecom, LLC	Cellular	D	Atlanta	GA
<a href="#">View</a>	4109950	The People's Operator USA, LLC	Cellular	D	New York	NY
<a href="#">View</a>	4109000	Ting, Inc.	Cellular	A	Toronto	ON

<a href="#">View</a>	4110400	Torch Wireless Corp.	Cellular	D	Jacksonville	FL
<a href="#">View</a>	4103300	Touchtone Communications, Inc.	Cellular	D	Whippany	NJ
<a href="#">View</a>	4104200	TracFone Wireless, Inc.	Cellular	D	Miami	FL
<a href="#">View</a>	4002000	Truphone, Inc.	Cellular	D	Durham	NC
<a href="#">View</a>	4110300	UVNV, Inc. d/b/a Mint Mobile	Cellular	D	Costa Mesa	CA
<a href="#">View</a>	4105700	Virgin Mobile USA, L.P.	Cellular	A	Atlanta	GA
<a href="#">View</a>	4110800	Visible Service LLC	Cellular	D	Lone Tree	CO
<a href="#">View</a>	4106500	WiMacTel, Inc.	Cellular	D	Palo Alto	CA
<a href="#">View</a>	4110950	Wing Tel Inc.	Cellular	D	New York	NY
<a href="#">View</a>	4109900	Wireless Telecom Cooperative, Inc. dba theWirelessFreeway	Cellular	D	Louisville	KY



**EXHIBIT E**  
**FAA**

\*\*\*\*\*  
\* Federal Airways & Airspace \*  
\* Summary Report: New Construction \*  
\* Antenna Structure \*  
\*\*\*\*\*

Airspace User: Not Identified

File: Flat Mary

Location: Campton, KY

Latitude: 37°-41'-54.94" Longitude: 83°-31'-10.10"

SITE ELEVATION AMSL.....1056 ft.  
STRUCTURE HEIGHT.....199 ft.  
OVERALL HEIGHT AMSL.....1255 ft.  
SURVEY HEIGHT AMSL.....1255 ft.

NOTICE CRITERIA

FAR 77.9(a): NNR (DNE 200 ft AGL)  
FAR 77.9(b): NNR (DNE Notice Slope)  
FAR 77.9(c): NNR (Not a Traverse Way)  
FAR 77.9: NNR FAR 77.9 IFR Straight-In Notice Criteria for JKL  
FAR 77.9: NNR (No Expected TERPS® impact I50)  
FAR 77.9(d): NNR (Off Airport Construction)

NR = Notice Required

NNR = Notice Not Required

PNR = Possible Notice Required (depends upon actual IFR procedure)  
For new construction review Air Navigation Facilities at bottom  
of this report.

Notice to the FAA is not required at the analyzed location and height for  
slope, height or Straight-In procedures. Please review the 'Air  
Navigation'  
section for notice requirements for offset IFR procedures and EMI.

OBSTRUCTION STANDARDS

FAR 77.17(a)(1): DNE 499 ft AGL  
FAR 77.17(a)(2): DNE - Airport Surface  
FAR 77.19(a): DNE - Horizontal Surface  
FAR 77.19(b): DNE - Conical Surface  
FAR 77.19(c): DNE - Primary Surface  
FAR 77.19(d): DNE - Approach Surface  
FAR 77.19(e): DNE - Approach Transitional Surface  
FAR 77.19(e): DNE - Abeam Transitional Surface

VFR TRAFFIC PATTERN AIRSPACE FOR: JKL: JULIAN CARROLL

Type: A RD: 68971.35 RE: 1380.8

FAR 77.17(a)(1): DNE

FAR 77.17(a)(2): DNE - Greater Than 5.99 NM.  
 VFR Horizontal Surface: DNE  
 VFR Conical Surface: DNE  
 VFR Primary Surface: DNE  
 VFR Approach Surface: DNE  
 VFR Transitional Surface: DNE

VFR TRAFFIC PATTERN AIRSPACE FOR: I50: STANTON

Type: A RD: 108412.3 RE: 651  
 FAR 77.17(a)(1): DNE  
 FAR 77.17(a)(2): Does Not Apply.  
 VFR Horizontal Surface: DNE  
 VFR Conical Surface: DNE  
 VFR Primary Surface: DNE  
 VFR Approach Surface: DNE  
 VFR Transitional Surface: DNE

TERPS DEPARTURE PROCEDURE (FAA Order 8260.3, Volume 4)

FAR 77.17(a)(3) Departure Surface Criteria (40:1)  
 DNE Departure Surface

MINIMUM OBSTACLE CLEARANCE ALTITUDE (MOCA)

FAR 77.17(a)(4) MOCA Altitude Enroute Criteria  
 The Maximum Height Permitted is 3000 ft AMSL

PRIVATE LANDING FACILITIES

No Private Landing Facilities Are Within 6 NM

AIR NAVIGATION ELECTRONIC FACILITIES

FAC		ST		DIST		DELTA		GRND	
APCH	IDNT	TYPE	AT	FREQ	VECTOR	(ft)	ELEVA	ST	LOCATION
ANGLE	BEAR								
	KJKL	RADAR WXL	Y		123.36	71516	-197	KY	JACKSON
-.16	AZQ	VOR/DME	I	111.2	146.48	134364	+12	KY	HAZARD
.01									

CFR Title 47, §1.30000-§1.30004

AM STUDY NOT REQUIRED: Structure is not near a FCC licensed AM station.  
 Movement Method Proof as specified in §73.151(c) is not required.  
 Please review 'AM Station Report' for details.

Nearest AM Station: WEKG @ 16750 meters.

05-09-2018  
09:28:59

**EXHIBIT F**  
**KENTUCKY AIRPORT ZONING COMMISSION**

## Cody Knox

---

**From:** Houlihan, John F (KYTC) <John.Houlihan@ky.gov>  
**Sent:** Tuesday, May 08, 2018 12:04 PM  
**To:** Cody Knox  
**Subject:** RE: AT&T KAZC permit determination - Flat Mary FN

No permit is required from the KAZC.

Just a reminder, any construction equipment exceeding 200 feet above ground level will require a Temporary Structure Permit from the KAZC.

Thank you

Kentucky Airport Zoning Commission (KAZC)  
John Houlihan, Administrator  
Department of Highways, District Six  
421 Buttermilk Pike  
Covington, KY 41017  
Office 859-341-2700, Desk 859-341-2707 Ext. 292, Cell 502-330-3955

KAZC webpage: <https://transportation.ky.gov/Aviation/Pages/airportzoning.aspx>

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**From:** Cody Knox <[cknox@integrisite.net](mailto:cknox@integrisite.net)>  
**Sent:** Tuesday, May 08, 2018 12:14 PM  
**To:** Houlihan, John F (KYTC) <[John.Houlihan@ky.gov](mailto:John.Houlihan@ky.gov)>  
**Cc:** GLASGOW, MARIE <[marie.glasgow@mastec.com](mailto:marie.glasgow@mastec.com)>; MILANA, STEVEN <[steven.milana@mastec.com](mailto:steven.milana@mastec.com)>; Wayne Barnett <[wbarnett@integrisite.net](mailto:wbarnett@integrisite.net)>; Roy Johnson <[rjohnson@johnsonpm.com](mailto:rjohnson@johnsonpm.com)>; Matt Hill <[Joseph.Hill2@mastec.com](mailto:Joseph.Hill2@mastec.com)>; Sam Astrahan <[Sam.Astrahan@mastec.com](mailto:Sam.Astrahan@mastec.com)>  
**Subject:** AT&T KAZC permit determination - Flat Mary FN

John,  
AT&T is proposing to construct a new tower per the specifications below. Can you confirm if a KAZC permit is required?

Project Name: Flat Mary FN  
Latitude: 37 41 54.945 N  
Longitude: 83 31 10.109 W  
GE: 1,055.9'  
Tower height including lightning arrestor: 199'  
Overall height: 1,254.9'

Thank you,

Cody Knox  
Integrisite, Inc.  
214 Expo Circle, Suite 4  
West Monroe, LA 71292  
318-355-6599

**EXHIBIT G**  
**GEOTECHNICAL REPORT**





# ENVIRONMENTAL CORPORATION OF AMERICA

ENVIRONMENTAL | GEOTECHNICAL | WETLANDS | ECOLOGY | CULTURAL RESOURCES

## Geotechnical Investigation

### Flat Mary FN

3302 KY 15 South Road  
Campton, Wolfe County, Kentucky

ECA Project No. U3099



### SUBMITTED TO:

SMW Engineering Group, Inc.  
158 Business Center Drive  
Birmingham, AL 35244

### PREPARED BY:

Environmental Corporation of America  
1375 Union Hill Industrial Court, Suite A  
Alpharetta, GA 30004



# ENVIRONMENTAL CORPORATION OF AMERICA

ENVIRONMENTAL | GEOTECHNICAL | WETLANDS | ECOLOGY | CULTURAL RESOURCES

October 11, 2018

SMW Engineering Group, Inc.  
158 Business Center Drive  
Birmingham, AL 35244

Attention: Mr. Jeremy Sharit

**Subject: Geotechnical Investigation Report  
Flat Mary FN  
3302 KY 15 South Road  
Campton, Wolfe County, Kentucky  
ECA Project No. U3099**

Dear Mr. Sharit:

Environmental Corporation of America (ECA) is pleased to submit this report of our geotechnical investigation for the proposed project. Our services were provided as authorized by SMW Engineering Group, Inc., via an email approval dated September 28, 2018.

This report presents a review of the information provided to us, a description of the site and subsurface conditions, and our recommendations. The appendices contain a Site Location Map, a Boring Location Plan, a Boring Log, and Laboratory Testing Results.

## **Purpose and Scope of Work**

The purpose of this investigation was to obtain specific subsurface data at the site and to provide geotechnical-related parameters for the design and construction for the foundations for a monopole tower.

Our scope of work included the following:

- One (1) soil test boring was drilled to a depth of 50 feet below the ground surface (bgs). Figure 1 shows the Site Location Map. Figure 2 shows the Boring Location Plan. Standard penetration tests (SPTs) were conducted to obtain soil samples and SPT N-values, in accordance with ASTM D-1586.
- The depth to groundwater, if any, was measured in the boring after drilling was completed.

- The soil samples were visually classified in accordance with ASTM D-2488 and a boring log was prepared. The soil conditions were evaluated by a registered professional engineer and this geotechnical report was prepared with our recommendations.

Natural moisture content measurements were conducted on selected soil samples in accordance with ASTM D-2216. We have recommended design parameters and settlements based on the SPT N-values, an examination of the soil samples, and our experience with similar soil conditions and structures. Laboratory testing results are shown in Appendix C.

### **Project Information**

We were provided with a project site survey prepared by SMW Engineering Group, Inc., and dated March 19, 2018. The proposed tower would be located at 3302 KY 15 South Road, Campton, Wolfe County, Kentucky. In general, the proposed tower compound would be located within hilly terrain with surface elevations ranging between 1,028 to 1,056 feet Above Mean Sea Level (AMSL) within the proposed 10,000 (100-foot by 100-foot) square foot lease area. The ground surface within the proposed lease area is mostly grass covered.

We understand that plans include constructing a 199-foot tall monopole tower, approximately as shown on Figure 2 in Appendix A. We assume that the equipment building/cabinet will be a pre-fabricated structure supported on a perimeter grade beam, spread footing or turndown slab. The project also includes the construction of a 20-foot wide ingress/egress and utility easement.

### **Field Drilling Work**

The fieldwork was conducted on October 3, 2018. Information obtained from the boring was used to help us evaluate the subsurface conditions and to assist in formulating our recommendations. The site was staked at the time of our site visit.

### **Local Geology and Subsurface Soil Conditions (Boring B-1)**

The geology of the site is best described by the Geological Map of State of Kentucky, Kentucky Geological Survey, and the U.S. Geological Survey, as being within Pikeville Formation with shale, siltstone, and sandstone. The subsurface conditions were explored with one soil test boring, drilled approximately as shown on Figure 2.

In general, from ground surface and extending to the depth full depth drilled of 50 feet below ground surface (bgs), soils encountered consisted of very stiff to very hard sandy Clay to an approximate depth of 6 feet, underlain by very compact dense Weathered Rock fragments with silty Sand (Sandstone) to the explored depth of 50 feet. The soils were classified as CL and Weathered Rock fragments soil/rock types based on the Unified Soil Classification System (USCS) and the Caltrans Soil and Rock Logging, Classification, and Presentation Manual

The N-values are shown on the attached boring log and initially ranged from 17 to over 50 blows per foot (bpf). Natural moisture content ( $WC_N$ ) measurements were conducted on selected soil samples and ranged from 3.0% to 18.3%.

An unconfined compressive strength ( $q_u$ ) measurement of 2.5 tons per square foot (tsf) was reported using the pocket penetrometer test between 3.5 and 6 feet.

### **Groundwater Level Conditions**

A groundwater level was not encountered at the time of drilling (ATD). It should be noted that groundwater level observations made within mostly cohesive soils during drilling could be misleading. It should be anticipated that the groundwater level will fluctuate due to seasonal climatic changes during the year. To determine actual groundwater level measurements, groundwater levels should be measured using observation wells installed for prolonged periods.

### **Foundation Construction Recommendations**

#### Tower Foundations

The subsurface conditions are suitable for the support of the proposed tower using either a shallow foundation system or a deep foundation system.

#### Shallow Foundation System

The proposed tower may be supported using either a pad and pier or a mat foundation, the soils are capable of a maximum net allowable soil bearing pressure ( $q_{ALL}$ ) of 5,000 pounds per square foot (psf) at a minimum depth of foundation ( $D_f$ ) of 6.0 feet below finish grade elevation. Total and differential settlement should be less than 1-inch and 1/2-inch, respectively. The proposed shallow foundation should bear within the existing very compact dense weathered rock fragments with silty sand.

A safety factor (SF) of 3, a wet soil unit weight ( $\gamma_{wet}$ ) of 125 pounds per cubic foot (pcf), and a minimum width (B) of foundation of 20 feet should be considered for soil bearing computations.

**Deep Foundation System**

Based on our review of the subsurface soil conditions encountered in the boring, we offer the following average soil parameters for the design of the new tower.

Depth (feet)	Unit Weight $^*(\gamma_{wet})$ (pcf)	Friction Angle ( $\phi$ ) (deg)	Soil Cohesion ( $S_u$ ) (psf)	$K_p$	Allowable Skin Friction ( $f_s$ ) (psf)	Allowable Bearing Pressure ( $q_{ALL}$ ) (psf)	Soil Modulus $K_H$ (pci)
0-3.5	115	0	2,000	1.00	500	3,500	240
3.5-6	120	0	2,500	1.00	530	4,500	300
6-13.5	125	35	0	3.69	325	5,000	345
13-23.5	125	35	0	3.69	630	7,500	520
23.5-38.5	125	38	0	4.20	1,100	10,000	690
38.5-50	125	38	0	4.20	1,500	12,000	830

A safety factor of 2.0 is used for allowable skin friction ( $f_s$ ). A safety factor of 5.0 is used for allowable soil bearing pressure ( $q_{ALL}$ ).  $^*$ Below the groundwater level designer should consider the buoyant unit weight ( $\gamma_b$ ) =  $\gamma_{wet} - \gamma_{water}$ . For  $K_A$  calculation project designer, should consider  $K_A=1/K_p$ .

The proposed drilled shaft should be design using a combination of soil friction and point bearing forces. Total drilled shaft foundation settlement should be limited to 0.50-inch or approximately 0.60% of the drilled shaft diameter (D). Final shaft diameter (D) and embedment length (L) will depend upon final tower loading conditions. Drilled shaft lateral deflection should not exceed a maximum value of 0.25-inch. ECA recommends placing the bottom of foundation between 24 and 29 feet or deeper, as required by the tower structural loading.

For these foundations ECA recommends a minimum concrete strength ( $f'_c$ ) of 4,000 psi with a corresponding mix design slump between 4 and 8 inches.

As an alternative and based on the existing soil conditions, project designer may consider using multiple drilled piers under a mat foundation. Drilled pier diameter may range from 24 to 36 inches. The following table presents the relationship between the ultimate drilled pier compression load capacity, pile diameter (Diam.), and embedment length (L).

Embedment Length (L) (feet)	Ultimate Drilled Pier Compression Load Capacity Analysis (Kips)		
	Drilled Pier Diameter (Diam.) (inches)		
	24-inches	30-inches	36-inches
40	1,140	1,670	2,290
45	1,295	1,885	2,580
50	1,365	1,985	2,715

Note: A safety factor should be applied to the provided ultimate load.

### Building Foundations

The proposed equipment building can be supported on a perimeter grade beam, spread footing or turndown slab foundation. For the design of the building foundation the soils are capable of a maximum net allowable soil bearing pressure ( $q_{ALL}$ ) of 2,000 psf. A minimum depth of foundation ( $D_f$ ) of 1.5 feet below final grades should be considered. Total and differential settlements should be less than 1/2-inch and 1/4-inch, respectively.

For the design of floor concrete slabs, the designer may consider a modulus of subgrade reaction ( $K_s$ ) of 200 kips/ft<sup>3</sup> or 115 pounds per cubic inch (pci). Bearing pad should be prepared and compacted prior to placing any concrete. Contractors should verify the Fill Placement section of this report.

### Soil Site Class

Based on our site evaluation and the information provided by the International Building Code (2009), to perform a dynamic analysis the clients design engineer should consider that the soils at the site fall under **Very Dense Soil and Soft Rock and Site Class C**.

### Foundation Excavations

A groundwater level was not encountered within the depths drilled. Therefore, prospective contractor *would not need to consider* excavation dewatering.

Since very compact dense weathered rock fragments were encountered at the site, drilled shaft construction should be accomplished using specialized equipment.

To avoid softening of the shallow soils exposed at the foundation bearing level, excavations should not be left open for extended periods prior to placing reinforcing steel and concrete. If rain or freezing weather is expected, excavations should not be completed. Leaving the excavations at least 1-foot above final grade should protect the bearing soils from deterioration.

If the excavation must remain open overnight or if rainfall becomes imminent while the bearing soils are exposed, we recommend that a 2 to 4-inch thick "mud-mat" of "lean" (2,000 psi) concrete be placed on the bearing soils before the placement of reinforcing steel. If the bearing soils are softened by surface water intrusion or exposure, the softened soils must be removed from the foundation excavation bottom immediately prior to placement of concrete.

### Fill Placement

If required, borrow materials for fill, **unless otherwise specified**, should consist of essentially granular material (GM, GP, GM, GC, SW, SP or SM Unified Soil Classification System); A-2-6 or better, AASHTO Classification, as approved by the **Project Geotechnical Engineer**. **In situ soils should not be used as backfill.** These should be free from vegetation and should not contain rocks greater than 6 inches in size. The recommended backfill material should have a plasticity index (PI) equal to or less than 15 ( $PI \leq 15$ ) and a liquid limit less than ( $LL < 40$ ). The recommended backfill should be free from vegetation and should not contain rocks greater than 6 inches in size.

The amount of fill required for this project depends on the planned final grades, but we expect it to be minimal. Any fill or backfill required to attain finished grade should be placed in layers not exceeding 8 to 10-inch thick lifts and compacted to not less than 95% of the Modified Proctor Maximum dry density, as determined by method (ASTM D-1557). The soil moisture content should be close to the optimum moisture content. All required fill should meet the specified compaction criteria.

Field density tests should be conducted at routine intervals as the fill is being placed to verify that adequate compaction is achieved. Prior to placing any new fill, any soft or loose near surface soils should be removed and the area Proof-Rolled with a heavy vehicle or a heavy compaction vibratory roller to confirm that any unsuitable soil conditions have been discovered.

ECA does not know the capability of the surficial soil to support pavements. However, we suggest that the upper soils be replaced by granular fill in areas of heavy traffic to improve the subgrade support capabilities and moisture sensitivity.

### Stability of Excavations

Proposed project excavation depths for foundation construction must not exceed those specified by either local, state or federal safety regulations. At a minimum, excavation safety standards created by OSHA (Occupational and Safety Health Administration) and the OSHA 29 CFR Part 1926 regulation should be enforced. **Project excavations should be sloped as necessary, but in general not steeper than 1.5 to 1 (Horizontal to Vertical) to prevent any possible slope failure.**

### Basis for Recommendations

The subsurface conditions encountered at the boring location is shown on the Boring Log in Appendix B. The Boring Log represents our interpretation of the subsurface conditions based on the field logs and visual examination of field samples by an engineer. The lines designating the interface between various strata on the Boring Log represents the approximate interface locations. In addition, the transition between strata may be gradual. The water level shown on the Boring Log, if any, represents the condition only at the time of our exploration.

The recommendations contained herein are based in part on project information provided to us and only apply to the specific project and site discussed in this report. If the project information section in this report contains incorrect information or if additional information is available, please let us know so that we may review the validity of our recommendations.

Regardless of the thoroughness of a geotechnical investigation, there is always a possibility that conditions between borings will be different from those at specific boring locations and that conditions will not be as anticipated by the designers or contractors. In addition, the construction process may itself alter soil conditions. Therefore, experienced geotechnical personnel should observe and document the construction procedures used and the conditions encountered. Unanticipated conditions and inadequate procedures should be reported to the design team along with timely recommendations to solve the problems created. ECA is best qualified to provide this service based on our familiarity with the project, the subsurface conditions, and the intent of the recommendations and design.

We wish to remind you that we will store the soil samples for 30 days. The samples will then be discarded unless you request otherwise.

We will be happy to discuss our recommendations with you and look forward to providing the additional studies or services necessary to complete this project. We appreciate the opportunity to be of service. Please call us with any questions at (770) 667-2040.

Sincerely,

**Environmental Corporation of America**



Héctor A. Acosta, M.S.C.E., P.E.  
Principal Geotechnical Engineer  
State of Kentucky Reg. No. 31144



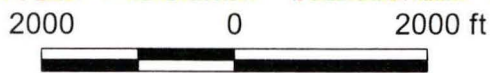
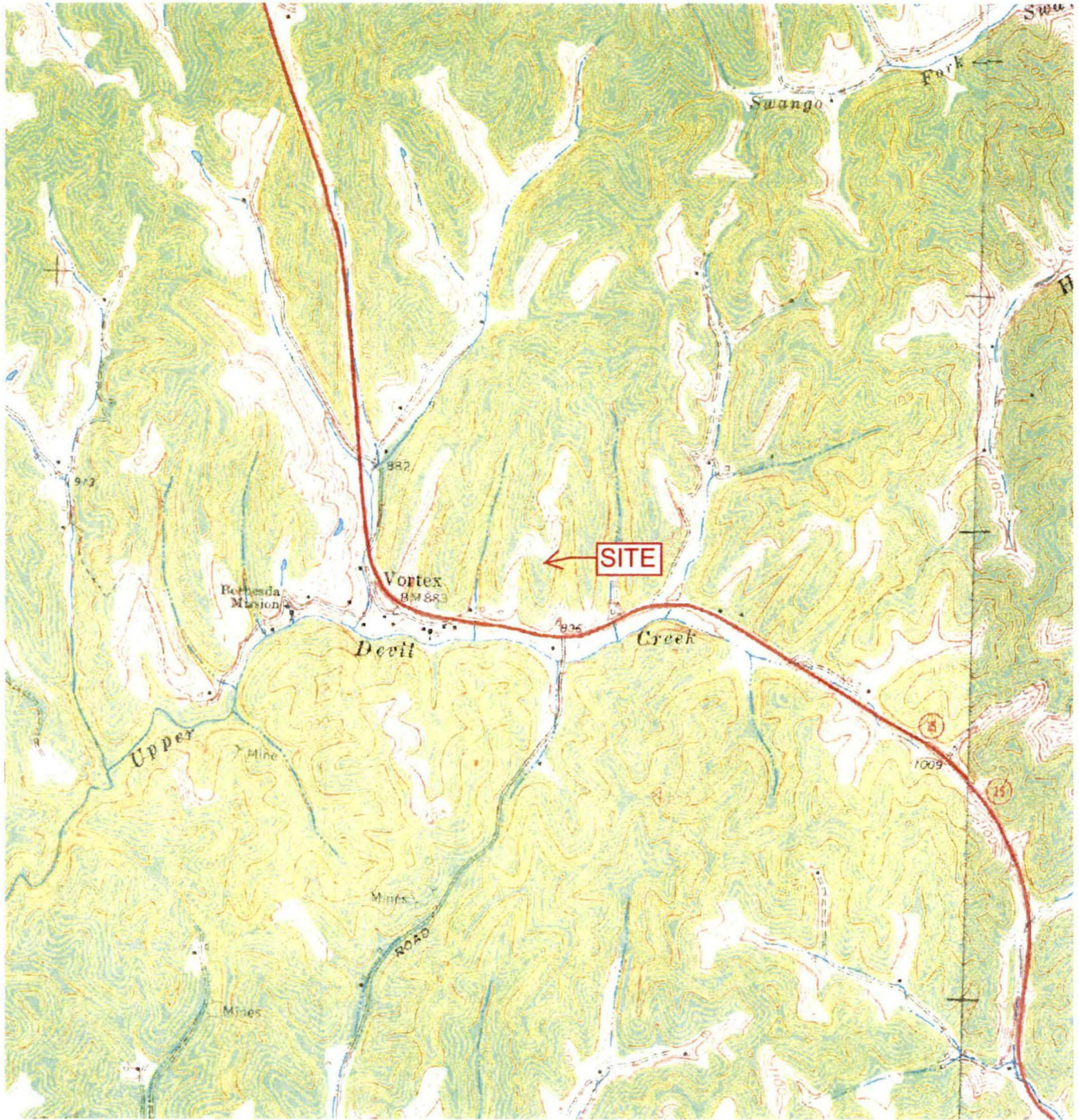
Athulya Balakrishnan  
Project Engineer

- Appendix A Figures
- Appendix B Boring Log
- Appendix C Laboratory Testing Results



# **APPENDIX A**

## Figures



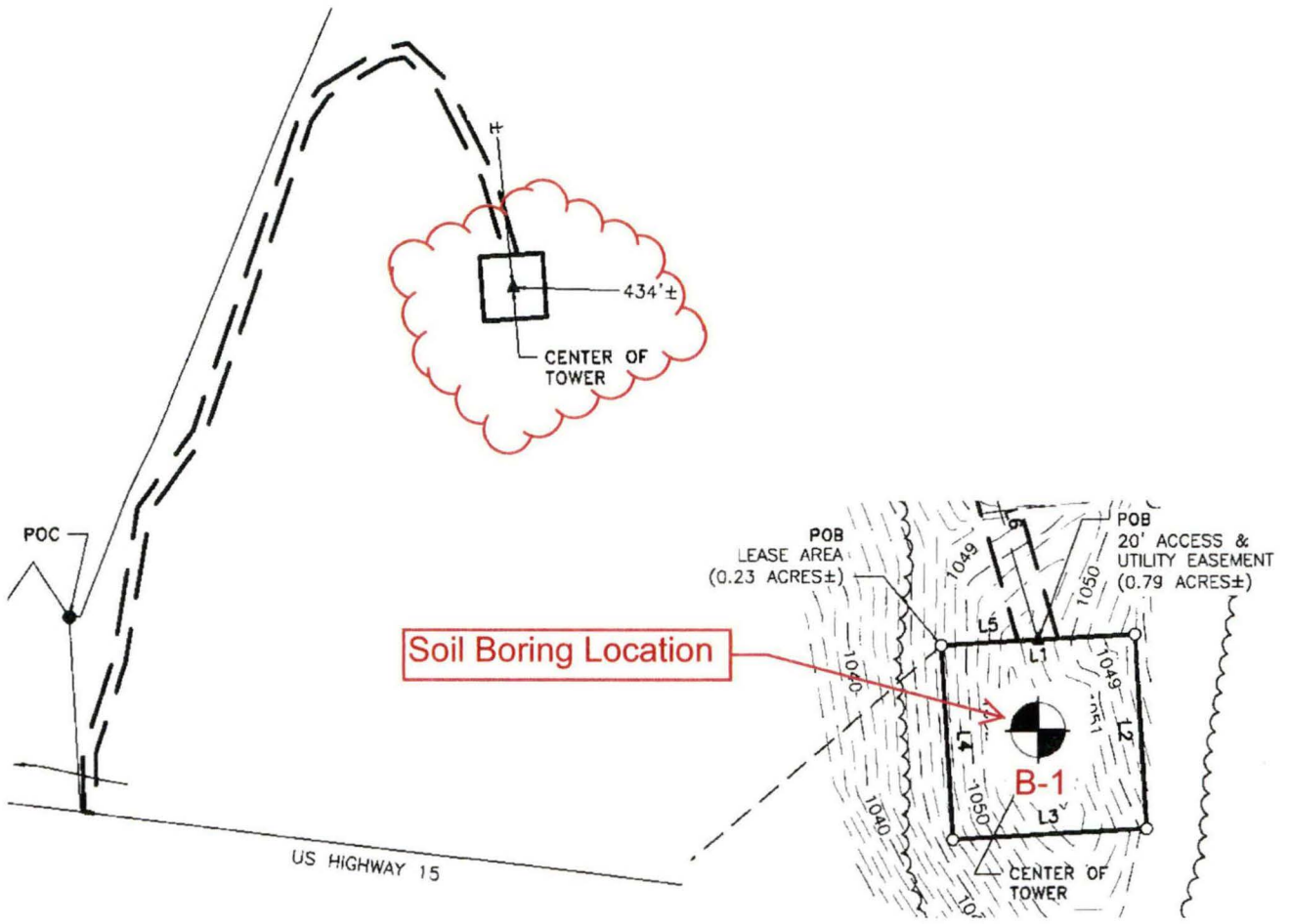
Source: USGS Topographic Map, Campton, KY (1972).



Flat Mary FN  
 3302 KY 15 South Road  
 Campton, Wolfe County, Kentucky  
 Figure 1: Site Location Map

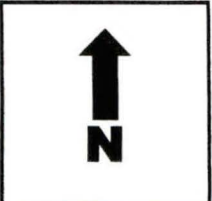


ECA Project No. U3099



Legend: Soil Boring Location

Source: Project site survey prepared by SMW Engineering Group, Inc. and dated 03/19/2018.



Flat Mary FN  
 3302 KY 15 South Road  
 Campton, Wolfe County, Kentucky  
 Figure 2: Boring Location Plan



# **APPENDIX B**

## Boring Log

Project: Flat Mary FN	Environmental Corp of America 1375 Union Hill Industrial Ct. Suite-A Alpharetta, GA 30004 (770) 667-2040	Log of Boring B-1 Sheet 1 of 1
Project Location: Campton, KY		
Project Number: U3099		

Date(s) Drilled: 10/3/2018	Logged By: A. Balakrishnan	Checked By: H. Acosta
Drilling Method: HSA	Drill Bit Size/Type: 2.25 inches	Total Depth of Borehole: 50 feet bgs
Drill Rig Type: B-47	Drilling Contractor: South Drilling	Approximate Surface Elevation: 1,056 feet A.M.S.L.
Groundwater Level and Date Measured: Not Encountered	Sampling Method(s): SPT	Hammer Data: 140 Lbs. Hammer
Borehole Backfill: Cuttings	Location: Campton, Wolfe County, Kentucky	

Depth (feet)	Sample Number	Sample Type	Sampling Resistance, blows/ft	SPT N-Values	Rec (%) / RQD (%)	MATERIAL DESCRIPTION	Material Type	USCS Symbol	Water Content (%)	qu (tsf)	qu (tsf) - Spring Tester	LL (%)	PI (%)
0	1		7-9-8	17		Brown, very stiff sandy Clay, trace roots, damp	CL		-	-			
5	2		6-9-50/1"	50/1"		Same as above, very hard, brown/yellowish brown, damp	CL		18.3	2.5			
	3		50/3"	50/3"		Yellowish brown/brown, very compact dense Weathered Rock fragments with fine silty Sand, dry (Sandstone)			4.4	-			
	4		50/3"	50/3"		Same as above, very compact dense, dry			5.5	-			
	5		50/2"	50/2"		Grey, very compact dense Weathered Rock fragments with fine silty Sand, dry (Sandstone)			4.5	-			
	6		50/2"	50/2"		Same as above, very compact dense, dry			-	-			
	7		50/1"	50/1"		Same as above, very compact dense, dry			3.0	-			
	8		50/2"	50/2"		Same as above, very compact dense, dry			4.2	-			
	9		50/0"	50/0"		Same as above, very compact dense, dry (No Recovery)			-	-			
	10		50/2"	50/2"		Same as above, very compact dense, dry			3.6	-			
	11		50/1"	50/1"		Same as above, very compact dense, dry			-	-			
	12		50/1"	50/1"		Same as above, very compact dense, dry			-	-			
						End of Boring at 50 feet.							

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Project: Flat Mary FN  
 Project Location: Campton, KY  
 Project Number: U3099

Environmental Corp of America  
 1375 Union Hill Industrial Ct. Suite-A  
 Alpharetta, GA 30004  
 (770) 667-2040

Key to Log of Boring  
 Sheet 1 of 1

Depth (feet)	Sample Number	Sample Type	Sampling Resistance, blows/ft.	SPT N-Values	Rec (%) / RQD (%)	MATERIAL DESCRIPTION	Material Type	USCS Symbol	Water Content (%)	qu (tsf)	qu (tsf)-Spring Tester	LL (%)	PI (%)
1	2	3	4	5	6	7	8	9	10	11	12	13	14

**COLUMN DESCRIPTIONS**

- 1** Depth (feet): Depth in feet below the ground surface.
- 2** Sample Number: Sample identification number.
- 3** Sample Type: Type of soil sample collected at the depth interval shown.
- 4** Sampling Resistance, blows/ft: Number of blows to advance driven sampler one foot (or distance shown) beyond seating interval using the hammer identified on the boring log.
- 5** SPT N-Values: SPT N-values
- 6** Rec (%) / RQD (%): Core Recovery (%) and RQD (%)
- 7** MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
- 8** Material Type: Type of material encountered.
- 9** USCS Symbol: Graphic depiction of the subsurface material encountered.
- 10** Water Content (%): Water content of the soil sample, expressed as percentage of dry weight of sample.
- 11** qu (tsf): Unconfined compression test
- 12** qu (tsf)- Spring Tester: Unconfined Compression test value from a spring tester
- 13** LL (%): Liquid Limit, expressed as a water content.
- 14** PI (%): Plasticity Index, expressed as a water content.












**FIELD AND LABORATORY TEST ABBREVIATIONS**

- CHEM: Chemical tests to assess corrosivity
- COMP: Compaction test
- CONS: One-dimensional consolidation test
- LL: Liquid Limit, percent
- PI: Plasticity Index, percent
- SA: Sieve analysis (percent passing No. 200 Sieve)
- UC: Unconfined compressive strength test, Qu, in ksf
- WA: Wash sieve (percent passing No. 200 Sieve)






**MATERIAL GRAPHIC SYMBOLS**

-  Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)
-  Weathered Rock Fragments with silty Sand

**TYPICAL SAMPLER GRAPHIC SYMBOLS**

-  Auger sampler
-  Bulk Sample
-  3-inch-OD California w/ brass rings
-  CME Sampler
-  Grab Sample
-  HQ Rock Core
-  2.5-inch-OD Modified California w/ brass liners
-  NQ Rock Core
-  Pitcher Sample
-  2-inch-OD unlined split spoon (SPT)
-  Shelby Tube (Thin-walled, fixed head)

**OTHER GRAPHIC SYMBOLS**

-  Water level (at time of drilling, ATD)
-  Water level (after waiting)
-  Minor change in material properties within a stratum.
-  Inferred/gradational contact between strata
-  Queried contact between strata

**GENERAL NOTES**

- 1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
- 2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

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# **APPENDIX C**

## Laboratory Testing Results

**APPENDIX C**  
**Laboratory Testing Results**  
**Environmental Corporation of America (ECA)**

Site Name: Flat Mary FN

ECA Project No. U3099

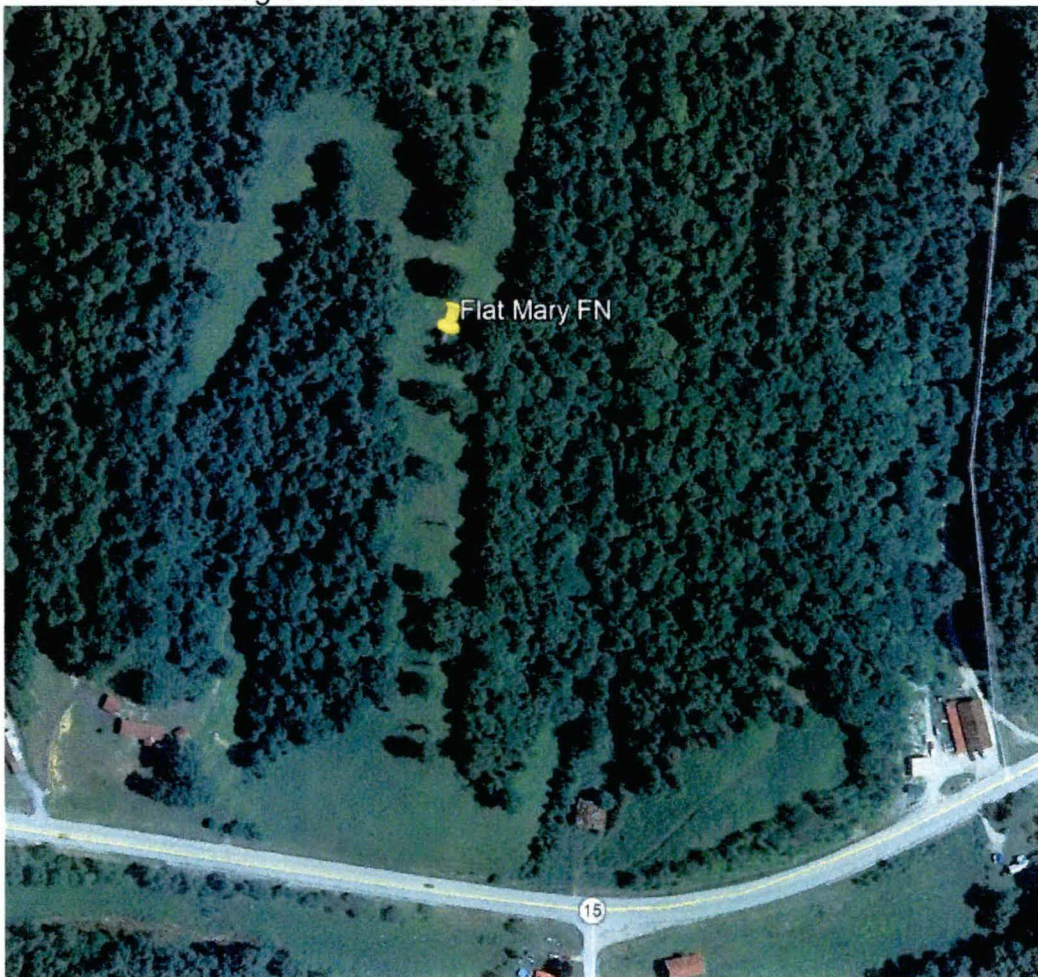
<b>Sample No.</b>	<b>Sample Depth (feet)</b>	<b>Moisture Content (%) ASTM D-2216</b>	<b>Soil Classification ASTM D-2488</b>
2	3.5-6	18.3	CL
3	6-8	4.4	Weathered Rock Fragments
4	8-10	5.5	Weathered Rock Fragments
5	13.5-15	4.5	Weathered Rock Fragments
7	23.5-25	3.0	Weathered Rock Fragments
8	28.5-30	4.2	Weathered Rock Fragments
10	38.5-40	3.6	Weathered Rock Fragments



**EXHIBIT H**  
**DIRECTIONS TO WCF SITE**

## Driving Directions to Proposed Tower Site

1. Beginning at 10 Court Street in Campton, Kentucky, head west on Court Street toward Washington Street and travel approximately 207 feet.
2. Turn left onto Washington Street and travel approximately 190 feet.
3. Turn right onto Main Street and travel approximately 0.1 miles.
4. Continue onto Johnson Street and travel approximately 285 feet.
5. Continue onto Drake Street and travel approximately 469 feet.
6. Turn left onto KY-15 S and travel approximately 3.3 miles.
7. The site is on the left at 3302 KY 15 S in Campton.
8. The site coordinates are:
  - a. North 37 deg 41 min 54.945 sec
  - b. West 83 deg 31 min 10.109 sec



Prepared by:  
Aaron 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 I**  
**COPY OF REAL ESTATE AGREEMENT**

Market: Lexington  
Cell Site Number: 198751  
Cell Site Name: Flat Mary FN  
Fixed Asset Number: 14397273

## OPTION AND LEASE AGREEMENT

THIS OPTION AND LEASE AGREEMENT ("**Agreement**"), dated as of the latter of the signature dates below (the "**Effective Date**"), is entered into by Patrick Glenn Graham, a single man, having a mailing address of 3291 KY 15 South, Campton, KY 41301 ("**Landlord**") and New Cingular Wireless PCS, LLC, a Delaware limited liability company, having a mailing address of 575 Morosgo Drive, 13F, Atlanta, GA 30324 ("**Tenant**").

### BACKGROUND

Landlord owns or controls that certain plot, parcel or tract of land, as described on **Exhibit 1**, together with all rights and privileges arising in connection therewith, located at 3302 KY 15 South, in the County of Wolfe, State of Kentucky (collectively, the "**Property**"). Tenant desires to use a portion of the Property in connection with its federally licensed communications business. Landlord desires to grant to Tenant the right to use a portion of the Property in accordance with this Agreement.

The parties agree as follows:

#### 1. OPTION TO LEASE.

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

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

(c) In consideration of Landlord granting Tenant the Option, Tenant agrees to pay Landlord the sum of [REDACTED] within forty five (45) business days of the Effective Date. The Option will be for an initial term of one (1) year commencing on the Effective Date (the "**Initial Option Term**") and may be renewed by Tenant for an additional one (1) year (the "**Renewal Option Term**") upon written notification to Landlord and the payment of an additional [REDACTED] no later than five (5) days prior to the expiration date of the Initial Option Term. The Initial Option Term and any Renewal Option Term are collectively referred to as the "**Option Term**."

(d) The Option may be sold, assigned or transferred at any time by Tenant to an Affiliate (as that term is hereinafter defined) of Tenant or to any third party agreeing to be subject to the terms hereof. Otherwise,

the Option may not be sold, assigned or transferred without the written consent of Landlord, such consent not to be unreasonably withheld, conditioned or delayed. From and after the date the Option has been sold, assigned or transferred by Tenant to an Affiliate or a third party agreeing to be subject to the terms hereof, Tenant shall immediately be released from any and all liability under this Agreement, including the payment of any rental or other sums due, without any further action.

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

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

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

3. **TERM.**

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

(b) This Agreement will automatically renew for four (4) additional five (5) year term(s) (each five (5) year term shall be defined as an "**Extension Term**"), upon the same terms and conditions unless Tenant notifies Landlord in writing of Tenant's intention not to renew this Agreement at least sixty (60) days prior to the expiration of the Initial Term or then-existing Extension Term.

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

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

4. **RENT.**

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

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

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

5. **APPROVALS.**

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

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

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

6. **TERMINATION.** This Agreement may be terminated, without penalty or further liability, as follows:
- (a) by either party on thirty (30) days prior written notice, if the other party remains in default under Section 15 of this Agreement after the applicable cure periods;
  - (b) by Tenant upon written notice to Landlord, if Tenant is unable to obtain or maintain, any required approval(s) or the issuance of a license or permit by any agency, board, court or other governmental authority necessary for the construction or operation of the Communication Facility as now or hereafter intended by Tenant; or if Tenant determines, in its sole discretion that the cost of or delay in obtaining or retaining the same is commercially unreasonable;
  - (c) by Tenant, upon written notice to Landlord, if Tenant determines, in its sole discretion, due to the title report results or survey results, that the condition of the Premises is unsatisfactory for its intended uses;
  - (d) by Tenant upon written notice to Landlord for any reason or no reason, at any time prior to commencement of construction by Tenant; or
  - (e) by Tenant upon sixty (60) days' prior written notice to Landlord for any reason or no reason, so long as Tenant pays Landlord a termination fee equal to three (3) months' Rent, at the then-current rate, provided, however, that no such termination fee will be payable on account of the termination of this Agreement by Tenant under any termination provision contained in any other Section of this Agreement, including the following: 5 Approvals, 6(a) Termination, 6(b) Termination, 6(c) Termination, 6(d) Termination, 11(d) Environmental, 18 Condemnation, or 19 Casualty.

7. **INSURANCE.**

(a) During the Term, Tenant will carry, at its own cost and expense, the following insurance: (i) workers' compensation insurance as required by law; and (ii) commercial general liability (CGL) insurance with respect to its activities on the Property, such insurance to afford protection of up to [REDACTED] based on Insurance Services Office (ISO) Form CG 00 01 or a substitute form providing substantially equivalent coverage. Tenant's CGL insurance shall contain a provision including Landlord as an additional insured. Such additional insured coverage:

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

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

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

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

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

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

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

**8. INTERFERENCE.**

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

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

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

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

**9. INDEMNIFICATION.**

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

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

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

**10. WARRANTIES.**

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

(b) Landlord represents, warrants and agrees that: (i) Landlord solely owns the Property as a legal lot in fee simple, or controls the Property by lease or license; (ii) the Property is not and will not be encumbered by any liens, restrictions, mortgages, covenants, conditions, easements, leases, or any other agreements of record or not of record, which would adversely affect Tenant's Permitted Use and enjoyment of the Premises under this



Agreement; (iii) as long as Tenant is not in default then Landlord grants to Tenant sole, actual, quiet and peaceful use, enjoyment and possession of the Premises without hindrance or ejection by any persons lawfully claiming under Landlord; (iv) Landlord's execution and performance of this Agreement will not violate any laws, ordinances, covenants or the provisions of any mortgage, lease or other agreement binding on Landlord; and (v) if the Property is or becomes encumbered by a deed to secure a debt, mortgage or other security interest, Landlord will provide promptly to Tenant a mutually agreeable subordination, non-disturbance and attornment agreement executed by Landlord and the holder of such security interest.

#### **11. ENVIRONMENTAL.**

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

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

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

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

**12. ACCESS.** At all times throughout the Term of this Agreement, and at no additional charge to Tenant, Tenant and its employees, agents, and subcontractors, will have twenty-four (24) hour per day, seven (7) day per week pedestrian and vehicular access ("**Access**") to and over the Property, from an open and improved public road to the Premises, for the installation, maintenance and operation of the Communication Facility and any utilities serving the Premises. As may be described more fully in **Exhibit 1**, Landlord grants to Tenant an easement for such Access and Landlord agrees to provide to Tenant such codes, keys and other instruments necessary for such Access at no additional cost to Tenant. Upon Tenant's request, Landlord will execute a separate recordable easement evidencing this right. Landlord shall execute a letter granting Tenant Access to the Property substantially in the form attached as **Exhibit 12**; upon Tenant's request, Landlord shall execute additional letters during the Term. Landlord acknowledges that in the event Tenant cannot obtain Access to the

Premises, Tenant shall incur significant damage. If Landlord fails to provide the Access granted by this Section 12, such failure shall be a default under this Agreement. In connection with such default, in addition to any other rights or remedies available to Tenant under this Agreement or at law or equity, Landlord shall pay Tenant, as liquidated damages and not as a penalty, [REDACTED] in consideration of Tenant's damages until Landlord cures such default. Landlord and Tenant agree that Tenant's damages in the event of a denial of Access are difficult, if not impossible, to ascertain, and the liquidated damages set forth above are a reasonable approximation of such damages.

**13. REMOVAL/RESTORATION.** All portions of the Communication Facility brought onto the Property by Tenant will be and remain Tenant's personal property and, at Tenant's option, may be removed by Tenant at any time during or after the Term. Landlord covenants and agrees that no part of the Communication Facility constructed, erected or placed on the Premises by Tenant will become, or be considered as being affixed to or a part of, the Property, it being the specific intention of Landlord that all improvements of every kind and nature constructed, erected or placed by Tenant on the Premises will be and remain the property of Tenant and may be removed by Tenant at any time during or after the Term. Tenant will repair any damage to the Property resulting from Tenant's removal activities. Any portions of the Communication Facility that Tenant does not remove within one hundred twenty (120) days after the later of the end of the Term and cessation of Tenant's operations at the Premises shall be deemed abandoned and owned by Landlord. However, to the extent required by law, Tenant will remove the above-ground portions of the Communications Facility within such one hundred twenty (120) day period. Notwithstanding the foregoing, Tenant will not be responsible for the replacement of any trees, shrubs or other vegetation.

**14. MAINTENANCE/UTILITIES.**

(a) Tenant will keep and maintain the Premises in good condition, reasonable wear and tear and damage from the elements excepted. Landlord will maintain and repair the Property and access thereto and all areas of the Premises where Tenant does not have exclusive control, in good and tenantable condition, subject to reasonable wear and tear and damage from the elements. Landlord will be responsible for maintenance of landscaping on the Property, including any landscaping installed by Tenant as a condition of this Agreement or any required permit. Tenant agrees to widen and replace Landlord's entire existing paved driveway per Landlord's specifications after construction is complete. P6  
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(b) Tenant will be responsible for paying on a monthly or quarterly basis all utilities charges for electricity, telephone service or any other utility used or consumed by Tenant on the Premises. In the event Tenant cannot secure its own metered electrical supply, Tenant will have the right, at its own cost and expense, to submeter from Landlord. When submetering is required under this Agreement, Landlord will read the meter and provide Tenant with an invoice and usage data on a monthly basis. Landlord agrees that it will not include a markup on the utility charges. Landlord further agrees to provide the usage data and invoice on forms provided by Tenant and to send such forms to such address and/or agent designated by Tenant. Tenant will remit payment within forty-five (45) days of receipt of the usage data and required forms. As noted in Section 4(c) above, any utility fee recovery by Landlord is limited to a twelve (12) month period. If Tenant submeters electricity from Landlord, Landlord agrees to give Tenant at least twenty-four (24) hours advance notice of any planned interruptions of said electricity. Landlord acknowledges that Tenant provides a communication service which requires electrical power to operate and must operate twenty-four (24) hours per day, seven (7) days per week. If the interruption is for an extended period of time, in Tenant's reasonable determination, Landlord agrees to allow Tenant the right to bring in a temporary source of power for the duration of the interruption. Landlord will not be responsible for interference with, interruption of or failure, beyond the reasonable control of Landlord, of such services to be furnished or supplied by Landlord.

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

the service company's request. Landlord will execute a separate recordable easement evidencing this grant, at no cost to Tenant or the service company.

**15. DEFAULT AND RIGHT TO CURE.**

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

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

**16. ASSIGNMENT/SUBLEASE.** Tenant will have the right to assign this Agreement or sublease the Premises and its rights herein, in whole or in part, without Landlord's consent. Upon notification to Landlord of such assignment, Tenant will be relieved of all future performance, liabilities and obligations under this Agreement to the extent of such assignment.

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

If to Tenant:                   New Cingular Wireless PCS, LLC  
                                          Attn: Network Real Estate Administration  
                                          Re: Cell Site #: 198751; Cell Site Name: Flat Mary FN (KY)  
                                          Fixed Asset No.: 14397273  
                                          575 Morosgo Drive, 13F  
                                          Atlanta, GA 30324

With a copy to:                   New Cingular Wireless PCS, LLC  
                                          Attn.: Legal Department  
                                          Re: Cell Site #: 198751; Cell Site Name: Flat Mary FN (KY)  
                                          Fixed Asset No.: 14397273  
                                          208 S. Akard Street  
                                          Dallas, TX 75202-4206

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

If to Landlord: Patrick Graham  
3291 KY 15 South  
Campton, KY 41301

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

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

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

**20. WAIVER OF LANDLORD'S LIENS.** Landlord waives any and all lien rights it may have, statutory or otherwise, concerning the Communication Facility or any portion thereof. The Communication Facility shall be deemed personal property for purposes of this Agreement, regardless of whether any portion is deemed real or personal property under applicable law; Landlord consents to Tenant's right to remove all or any portion of the Communication Facility from time to time in Tenant's sole discretion and without Landlord's consent.

**21. TAXES.**

(a) Landlord shall be responsible for timely payment of all taxes and assessments levied upon the lands, improvements and other property of Landlord, including any such taxes that may be calculated by the taxing authority using any method, including the income method. Tenant shall be responsible for any taxes and assessments attributable to and levied upon Tenant's leasehold improvements on the Premises if and as set forth in this Section 21. Nothing herein shall require Tenant to pay any inheritance, franchise, income, payroll,

excise, privilege, rent, capital stock, stamp, documentary, estate or profit tax, or any tax of similar nature, that is or may be imposed upon Landlord.

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

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

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

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

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

New Cingular Wireless PCS, LLC  
Attn: Network Real Estate Administration -- Taxes  
Re: Cell Site #: 198751; Cell Site Name: Flat Mary FN (KY)  
Fixed Asset No: 14397273  
575 Morosgo Drive, 13F  
Atlanta, GA 30324

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

**22. SALE OF PROPERTY**

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

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

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

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

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

**23. RENTAL STREAM OFFER.** If at any time after the date of this Agreement, Landlord receives a bona fide written offer from a third party seeking an assignment or transfer of Rent payments associated with this Agreement ("**Rental Stream Offer**"). Landlord shall immediately furnish Tenant with a copy of the Rental Stream Offer. Tenant shall have the right within twenty (20) days after it receives such copy to match the Rental Stream Offer and agree in writing to match the terms of the Rental Stream Offer. Such writing shall be in the form of a contract substantially similar to the Rental Stream Offer. If Tenant chooses not to exercise this right or fails to provide written notice to Landlord within the twenty (20) day period, Landlord may assign the right to receive Rent payments pursuant to the Rental Stream Offer, subject to the terms of this Agreement. If Landlord attempts to assign or transfer Rent payments without complying with this Section, the assignment or transfer shall be void. Tenant shall not be responsible for any failure to make payments under this Agreement and reserves the right to hold payments due under this Agreement until Landlord complies with this Section.

**24. MISCELLANEOUS.**

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

party will not be construed to be a waiver, or in any way affect the right of either party to enforce such provision thereafter.

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

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

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

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

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

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

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

(i) **Affiliates.** All references to "Tenant" shall be deemed to include any Affiliate of New Cingular Wireless PCS, LLC using the Premises for any Permitted Use or otherwise exercising the rights of Tenant pursuant to this Agreement. "Affiliate" means with respect to a party to this Agreement, any person or entity that (directly or indirectly) controls, is controlled by, or under common control with, that party. "Control" of a person or entity means the power (directly or indirectly) to direct the management or policies of that person or entity, whether through the ownership of voting securities, by contract, by agency or otherwise.

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

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

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

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

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

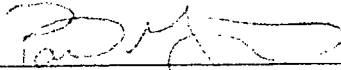
[SIGNATURES APPEAR ON NEXT PAGE]



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

"LANDLORD"

Patrick Glenn Graham

By: 

Print Name: Patrick Glenn Graham

Its: Owner

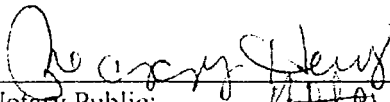
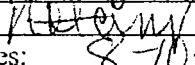
Date: 2-9-18

LANDLORD ACKNOWLEDGMENT

STATE OF KENTUCKY )

COUNTY OF Morgan ) ss:

On the 9 day of July, 2018 before me, personally appeared Patrick Glenn Graham, who acknowledged under oath, that he/she/they is/are the person/officer named in the within instrument, and that he/she/they executed the same in his/her/their stated capacity as the voluntary act and deed of the Landlord for the purposes therein contained.


  
Notary Public:   
My Commission Expires: 8-70-18

"TENANT"

New Cingular Wireless PCS, LLC,  
a Delaware limited liability company

By: AT&T Mobility Corporation

Its: Manager

By: 

Print Name: Bryan Coleman

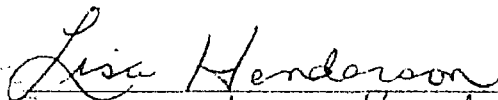
Its: Area Manager - TN/KY

Date: 4/19/2018

TENANT ACKNOWLEDGMENT

STATE OF ALABAMA                    )  
                                                  ) ss:  
COUNTY OF JEFFERSON            )

On the 19<sup>th</sup> day of April, 2018, before me personally appeared Bryan Coleman, and acknowledged under oath that he is the Area Manager – TN/KY of AT&T Mobility Corporation, the Manager of New Cingular Wireless PCS, LLC, the Tenant named in the attached instrument, and as such was authorized to execute this instrument on behalf of the Tenant.

  
Notary Public: Lisa Henderson  
My Commission Expires: 7/9/2018

## EXHIBIT 1

### DESCRIPTION OF PREMISES

Page 1 of 3

to the Option and Lease Agreement dated April 19, 2018, by and between Patrick Glenn Graham, a single man, as Landlord, and New Cingular Wireless PCS, LLC, a Delaware limited liability company, as Tenant.

The Property is legally described as follows:

A tract or parcel of land in the Commonwealth of Kentucky, County of Wolfe, and being more particularly described as follows:

BEGINNING at the right-of-way of New Highway 15 at a drain located on the West side of the right-of-way, straight across New Highway 15 from the beginning point in Tract# 1 above; thence a West course with the center of the drain to the main creek; thence down the center of the main creek a North course to the Grover Patton line; thence with the Grover Patton line an East course the right-of-way of New Highway 15; thence with the right-of-way of New Highway 15 a south course to a drain, the place of beginning, containing one acre, more or less.

The Premises are described and/or depicted as follows:

A portion of the Patrick Glenn Graham tract described in Deed 138-541, Wolfe County, Kentucky, as recorded in the Clerk's County Office of Wolfe County, Kentucky, and being more particularly described as follows:

COMMENCE at a T-post fence corner found marking the most Westerly corner of said Patrick Glenn Graham tract and the Northeasterly corner of the Russell Sparks tract as recorded in Deed# 138-551 in said office and having the Kentucky Single State Plane Coordinates of N:3785152.86, E:5565804.52; Thence N 49°43'49" E a distance of 853.61 feet to a set 5/8" rebar and the POINT OF BEGINNING; Thence N 87°01'11" E a distance of 100.00 feet to a set 5/8" rebar; Thence S 02°58'49" E a distance of 100.00 feet to a set 5/8" rebar; Thence S 87°01'11" W a distance of 100.00 feet to a set 5/8" rebar; Thence N 02°58'49" W a distance of 100.00 feet to the Point of Beginning. Containing 10,000.00 square feet (0.23 acres) of land more or less.

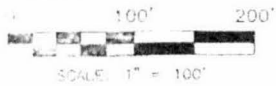
#### 20' ACCESS & UTILITY EASEMENT

A portion of the Patrick Glenn Graham tract described in Deed 138-541, Wolfe County, Kentucky, as recorded in the Clerk's County Office of Wolfe County, Kentucky, and being more particularly described as follows:

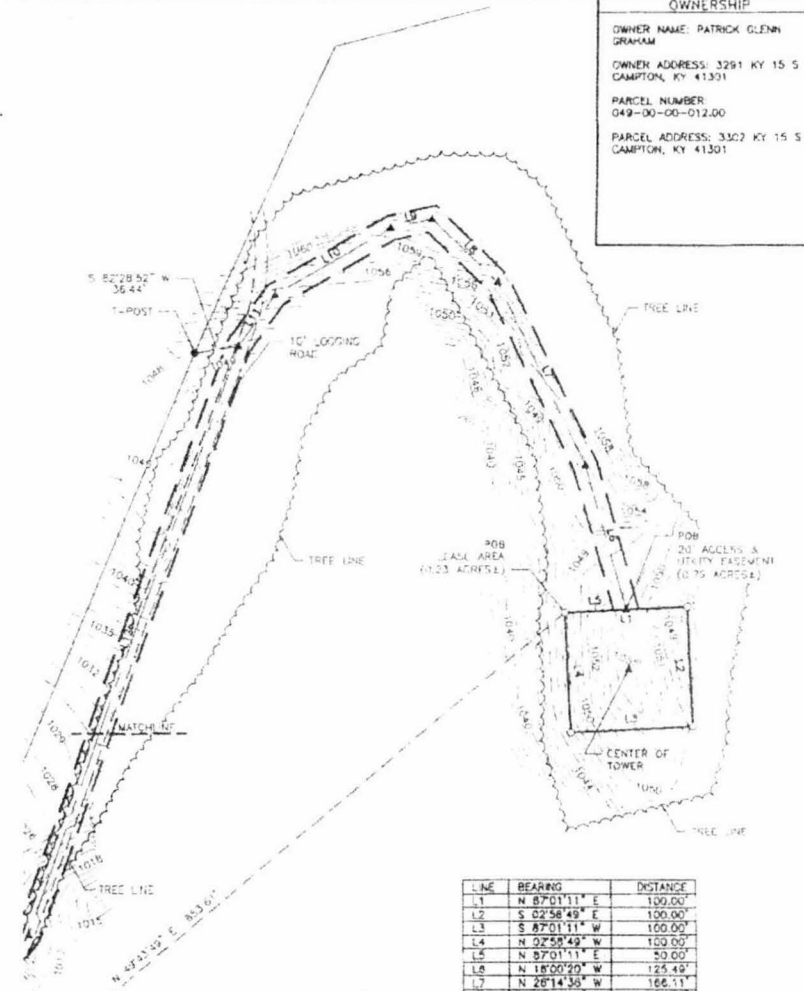
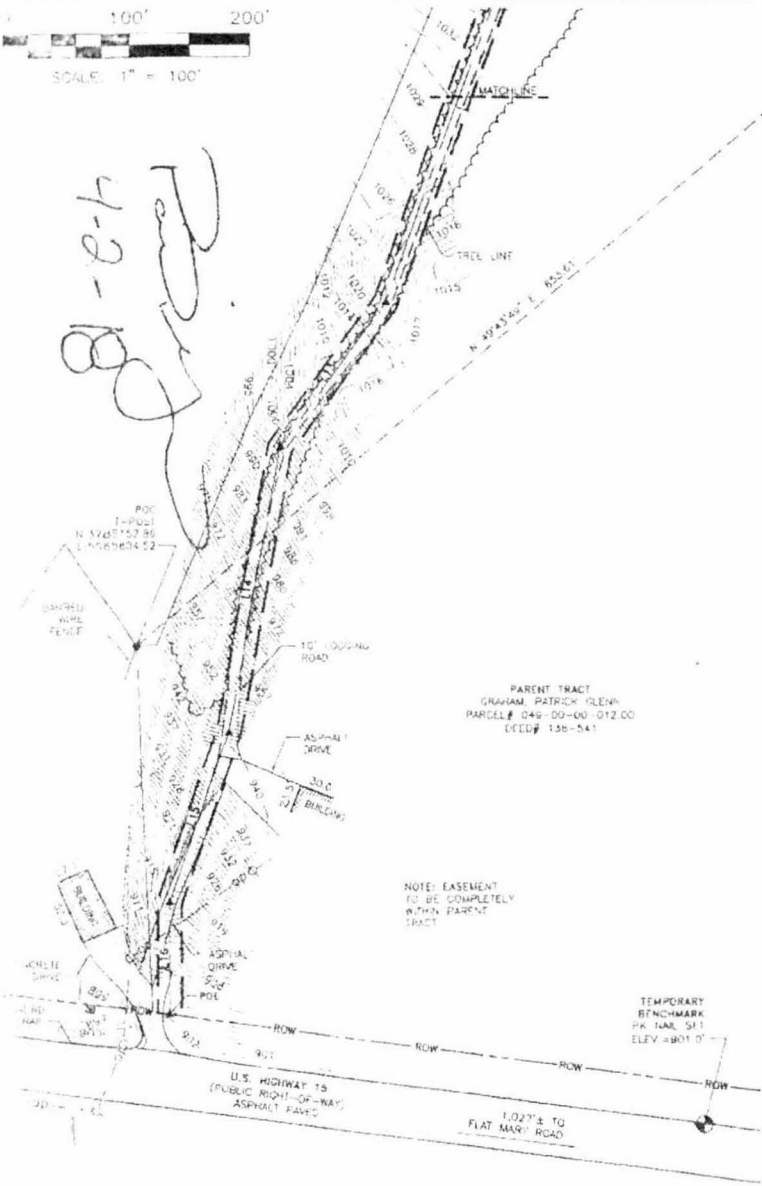
COMMENCE at a T-post fence corner found marking the most Westerly corner of said Patrick Glenn Graham tract and the Northeasterly corner of the Russell Sparks tract as recorded in Deed# 138-551 in said office and having the Kentucky Single State Plane Coordinates of N:3785152.86, E:5565804.52; Thence N 49°43'49" E a distance of 853.61 feet to a set 5/8" rebar; Thence N 87°01'11" E a distance of 50.00 to the POINT OF BEGINNING of an easement being 20 feet wide and lying 10 feet on each side of the following described centerline; Thence N 16°00'20" W a distance of 125.49 feet to a point; Thence N 26°14'36" W a distance of 166.11 feet to a point; Thence N 45°57'03" W a distance of 74.75 feet to a point; Thence S 77°55'29" W a distance of 35.09 feet to a point; Thence S 59°45'18" W a distance of 109.20 feet to a point; Thence S 36°22'09" W a distance of 51.32 feet to a point; Thence S 19°34'35" W a distance of 518.35 feet to a point; Thence S 36°39'40" W a distance of 147.53 feet to a point; Thence S 09°55'30" W a distance of 240.63 feet to a point; Thence S 19°02'01" W a distance of 148.62 feet to a point; Thence S 00°08'25" W a distance of 93.07 feet more or less to a point on the Northerly right-of-way of U.S. Highway 15 and the Point of Ending. Containing 34,195.1 square feet (0.79 acres) of land more or less.

#### Notes:

1. THIS EXHIBIT MAY BE REPLACED BY A LAND SURVEY AND/OR CONSTRUCTION DRAWINGS OF THE PREMISES ONCE RECEIVED BY TENANT
2. ANY SETBACK OF THE PREMISES FROM THE PROPERTY'S BOUNDARIES SHALL BE THE DISTANCE REQUIRED BY THE APPLICABLE GOVERNMENTAL AUTHORITIES.
3. WIDTH OF ACCESS ROAD SHALL BE THE WIDTH REQUIRED BY THE APPLICABLE GOVERNMENTAL AUTHORITIES, INCLUDING POLICE AND FIRE DEPARTMENTS.
4. THE TYPE, NUMBER AND MOUNTING POSITIONS AND LOCATIONS OF ANTENNAS AND TRANSMISSION LINES ARE ILLUSTRATIVE ONLY. ACTUAL TYPES, NUMBERS AND MOUNTING POSITIONS MAY VARY FROM WHAT IS SHOWN ABOVE.



*Handwritten:* 4-2-02



**OWNERSHIP**  
 OWNER NAME: PATRICK GLENN GRAHAM  
 OWNER ADDRESS: 3291 KY 15 S CAMPTON, KY 41301  
 PARCEL NUMBER: 049-00-00-012.00  
 PARCEL ADDRESS: 3302 KY 15 S CAMPTON, KY 41301

**TOWER INFO**  
 LATITUDE: 37°41'54.945" NORTH  
 LONGITUDE: 83°31'10.109" WEST (NAD 83)  
 GROUND ELEVATION: 1055.8' ABOVE MEAN SEA LEVEL (NAVD88)



**KENTUCKY SINGLE ZONE**  
 GRID TO TRUE NORTH CONVERGENCE 1'22"  
 TRUE NORTH TO MAGNETIC DECLINATION 6°21' W  
 COMBINED SCALE FACTOR 0.999995735

- LEGEND**
- = 5/8" REBAR TIE
  - = FORMED PROPERTY CORNER
  - POB = POINT OF BEGINNING
  - POC = POINT OF COMMENCEMENT
  - POE = POINT OF EGRESS
  - ▲ = CALCULATED POINT
  - W = WATER WATER

LINE	BEARING	DISTANCE
L1	N 87°01'11" E	100.00'
L2	S 02°58'49" E	100.00'
L3	S 87°01'11" W	100.00'
L4	N 02°58'49" W	100.00'
L5	N 87°01'11" E	20.00'
L6	N 18°00'00" W	125.53'
L7	N 28°14'38" W	166.11'
L8	N 45°57'03" W	74.72'
L9	S 77°55'28" W	35.09'
L10	S 59°45'18" W	109.20'
L11	S 38°22'09" W	51.32'
L12	S 19°34'35" W	518.35'
L13	S 38°39'40" W	147.53'
L14	S 09°55'30" W	240.63'
L15	S 19°02'01" W	148.62'
L16	S 00°08'25" W	93.07'

STATE OF KENTUCKY  
**DAVID D. MANNEY**  
 5284  
 LICENSED PROFESSIONAL LAND SURVEYOR

FLAT MARY FN  
 WOLFE COUNTY, KENTUCKY

REVISION

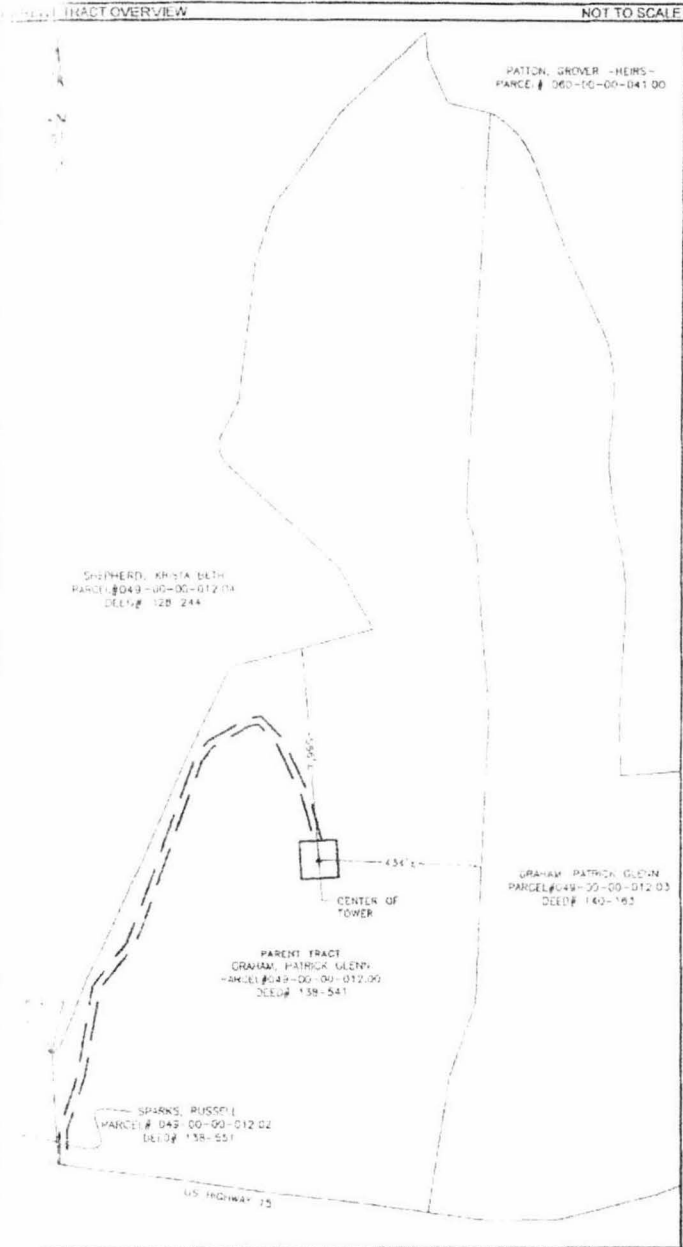
PROJECT NO. 5086

DATE: 04/22/02  
 DRAWN BY: JAM  
 CHECKED BY: JAM  
 DATE: 02/19/03  
 SCALE: 1" = 100'

RAWLAND TOWER SURVEY

**INTEGRISITE**  
 1101 LEXINGTON, VA 21751

SMW Engineering Group Inc.  
 158 Business Center Drive  
 Lexington, KY 40503-3024  
 PH: 202-853-6300  
 www.smgw.com



**PARENT TRACT (Deed 138-254)**

A tract or parcel of land in the Commonwealth of Kentucky, County of Wolfe, and being more particularly described as follows:

**BEGINNING** at the right-of-way of New Highway 15 at a drain located on the West side of the right-of-way, straight across New Highway 15 from the beginning point in Tract # 1 above, thence a West course with the center of the drain to the main creek, thence down the center of the main creek a North course to the Grove Patton line, thence with the Grove Patton line an East course to the right-of-way of New Highway 15, thence with the right-of-way of New Highway 15 a south course to a point, the piece of beginning containing one acre more or less.

**LEASE AREA**

A portion of the Patrick Glenn Graham tract described in Deed 138-541, Wolfe County, Kentucky, as recorded in the Clerk's County Office of Wolfe County, Kentucky, and being more particularly described as follows:

**COMMENCE** at a 1-post fence corner found marking the most Westerly corner of said Patrick Glenn Graham tract and the Northeastern corner of the Russell Sparks tract as recorded in Deed# 138-551 in said office and having the Kentucky Single State Plane Coordinates of N 3785152.85; E 2565804.52; Thence N 494349° E a distance of 853.61 feet to a set 5/8" rebar, thence N 87°01'11" E a distance of 50.00 feet to the POINT OF BEGINNING of an easement being 20 feet wide one lying 10 feet on each side of the following described centerline, thence N 18°00'20" W a distance of 125.49 feet to a point, thence N 26°14'36" W a distance of 166.11 feet to a point, thence N 48°57'04" W a distance of 74.75 feet to a point, thence S 77°50'59" W a distance of 33.09 feet to a point, thence S 59°45'18" W a distance of 109.20 feet to a point, thence S 38°27'09" W a distance of 51.32 feet to a point, thence S 19°34'35" W a distance of 516.35 feet to a point, thence S 39°31'40" W a distance of 147.53 feet to a point, thence S 02°55'36" W a distance of 240.63 feet to a point, thence S 19°02'01" W a distance of 149.92 feet to a point, thence S 00°08'26" W a distance of 93.07 feet more or less to a point on the Northern right-of-way of U.S. Highway 15 and the Point of Ending, Containing 14,193.1 square feet (0.32 acres) of land more or less.

**20' ACCESS & UTILITY EASEMENT**

A portion of the Patrick Glenn Graham tract described in Deed 138-541, Wolfe County, Kentucky, as recorded in the Clerk's County Office of Wolfe County, Kentucky, and being more particularly described as follows:

**COMMENCE** at a 1-post fence corner found marking the most Westerly corner of said Patrick Glenn Graham tract and the Northeastern corner of the Russell Sparks tract as recorded in Deed# 138-551 in said office and having the Kentucky Single State Plane Coordinates of N 3785152.85; E 2565804.52; Thence N 494349° E a distance of 853.61 feet to a set 5/8" rebar, thence N 87°01'11" E a distance of 50.00 feet to the POINT OF BEGINNING of an easement being 20 feet wide one lying 10 feet on each side of the following described centerline, thence N 18°00'20" W a distance of 125.49 feet to a point, thence N 26°14'36" W a distance of 166.11 feet to a point, thence N 48°57'04" W a distance of 74.75 feet to a point, thence S 77°50'59" W a distance of 33.09 feet to a point, thence S 59°45'18" W a distance of 109.20 feet to a point, thence S 38°27'09" W a distance of 51.32 feet to a point, thence S 19°34'35" W a distance of 516.35 feet to a point, thence S 39°31'40" W a distance of 147.53 feet to a point, thence S 02°55'36" W a distance of 240.63 feet to a point, thence S 19°02'01" W a distance of 149.92 feet to a point, thence S 00°08'26" W a distance of 93.07 feet more or less to a point on the Northern right-of-way of U.S. Highway 15 and the Point of Ending, Containing 14,193.1 square feet (0.32 acres) of land more or less.

**PLOTTABLE EXCEPTIONS**

U.S. Title Solutions  
File No. 08974-KR1801-5010  
Reference No. 14-1432973  
Issue January 30, 2018  
Schedule B

Exception No.	Attachment	Comment
1-4		Standard exceptions. Certain no survey matters.
5	Instrument No. 14-1622	Unable to determine effects, supportive documents not sufficient data to create survey.
6		Standard exceptions. Certain no survey matters.
7	Book 132, Page 587	Does not affect the subject lease area or instruments and is not known hereby.

**SURVEYOR'S NOTES**

- This is a Rawlans Tower Survey, made on the ground under the supervision of a Kentucky Registered Land Surveyor, date of field survey, 14 May 2018.
- The following surveying instruments were used at time of field visit: Trimble NP1-502, Total Station, Reflectorless and model 4, Leica; 1 RTR, 10172.
- Bearings are based on Kentucky Single Zone State Plane Coordinates NAD 83 by GPS observation.
- No underground utilities, underground arrangements or building foundations were measured or located as a part of this survey, unless otherwise shown. Press 213 87103 not located, unless otherwise shown.
- Benchmark used is a GPS Continuously Operating Reference Station, RD 143333. Elevation benchmark is as shown herein. Elevation shown use 1 foot and refer to NAVD 83.
- This survey was conducted for the purpose of a Rawlans Tower Survey only, and is not intended to delineate the regulatory jurisdiction of any federal, state, regional or local agency, board, commission or other similar entity.
- Attention is directed to the fact that this survey may have been reduced or enlarged in size due to reproduction. This should be taken into consideration when copying, scaled data.
- This Survey was conducted without the benefit of an Abstract Title Search.
- This survey meets or exceeds the Minimum Standards of Practice as required by the State of Kentucky for a Class A survey, as defined by 201 KAR 18.100.
- Field data upon which this map or plot is based has a closure precision of not less than one-foot in 15,000 feet (1:15,000) and a circular error that does not exceed 10 seconds times the square root of the number of angles turned. Field traverse was not adjusted.
- This survey is not valid without the original signature and the original seal of a state licensed surveyor and mapper.
- This survey does not constitute a boundary survey of the Parent Tract. Any parent tract property lines shown herein are from supplied information and may not be field verified.
- The Lease Area, and Access and Utility Easement shown herein was provided by Integrisite dated March 16, 2018 in direct correlation with existing measurements and physical evidence found through inspection and may not depict actual rights of occupancy.
- The supplied information the site is not subject to any Zoning requirements or restrictions.

**SURVEYOR'S CERTIFICATION**

I certify that all parts of this survey and drawing have been completed in accordance with the Standards of Practice for Surveying in the State of Kentucky to the best of my knowledge, skill and belief.

*David D. McKinney*  
David D. McKinney  
Kentucky License No. 3954



*David D. McKinney*  
42-18

FLAT MARY FN  
WOLFE COUNTY, KENTUCKY

RAWLAND TOWER SURVEY  
INTEGRISITE  
SMW Engineering Group, Inc.  
155 Business Center Drive  
P.O. Box 1000  
P.O. Box 205  
P.O. Box 205  
www.smweng.com

**EXHIBIT 11**

**ENVIRONMENTAL DISCLOSURE**

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

I. NONE.

[Landlord Letterhead]

DATE

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

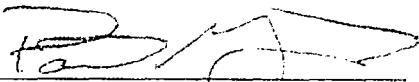
Re: Authorized Access granted to AT&T

Dear Building and Security Staff,

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

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

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

  
\_\_\_\_\_  
Landlord Signature

**EXHIBIT J**  
**NOTIFICATION LISTING**



**Flat Mary FN – Notice List**

Shepherd, Krista Beth  
PO Box 996  
Campton, KY 41301

Graham, Patrick Glenn  
5 KY 746  
Campton, KY 41301

Graham, Patrick Glen  
5 KY 746  
Campton, KY 41301

Graham, Patrick Glenn  
33291 KY 15 South  
Campton, KY 41301

Graham, Patrick Glenn  
3291 KY 15 South  
Campton, KY 41301

Patton, Grover – Heirs –  
Patton, Earl – Adm-  
PO Box 402  
Campton, KY 41301

Sparks, Russell and Lois  
135 Back Lane  
Jackson, KY 41332

Sparks Russell and Lois  
3289 KY 15 South  
Campton, KY 41301

Graham, Andy  
8432 KY 15 South  
Campton, KY 41301

Graham, Andy & Mary  
8432 KY 15 S  
Campton, KY 41301

Graham, Andy & Mary  
8465 Ky 15 S  
Campton, KY 41301

Terrill William Edward & Elizabeth Ellen  
2158 Endo Valley  
Cincinnati, OH 45244

Patton, Grover – Heirs –  
Patton, Earl – Adm-  
1634 KY 15 N  
Campton, KY 41301

Chartier, Betty Jo and Deerwood, Hill  
PO Box 50  
Bondville, VT 05340

**EXHIBIT K**  
**COPY OF PROPERTY OWNER NOTIFICATION**



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

**Notice of Proposed Construction of  
Wireless Communications Facility  
Site Name: Flat Mary FN**

Dear Landowner:

New Cingular Wireless PCS, LLC, a Delaware Limited Liability Company, d/b/a AT&T Mobility has filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at 3302 KY 15 S, Campton, Kentucky 41301 (37°41'54.945" North latitude, 83°31'10.109" West longitude). The proposed facility will include a 195-foot tall antenna tower, plus a 4-foot lightning arrestor and related ground facilities. This facility is needed to provide improved coverage for wireless communications in the area.

This notice is being sent to you because the County Property Valuation Administrator's records indicate that you may own property that is within a 500' radius of the proposed tower site 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 2018-00360 in any correspondence sent in connection with this matter.

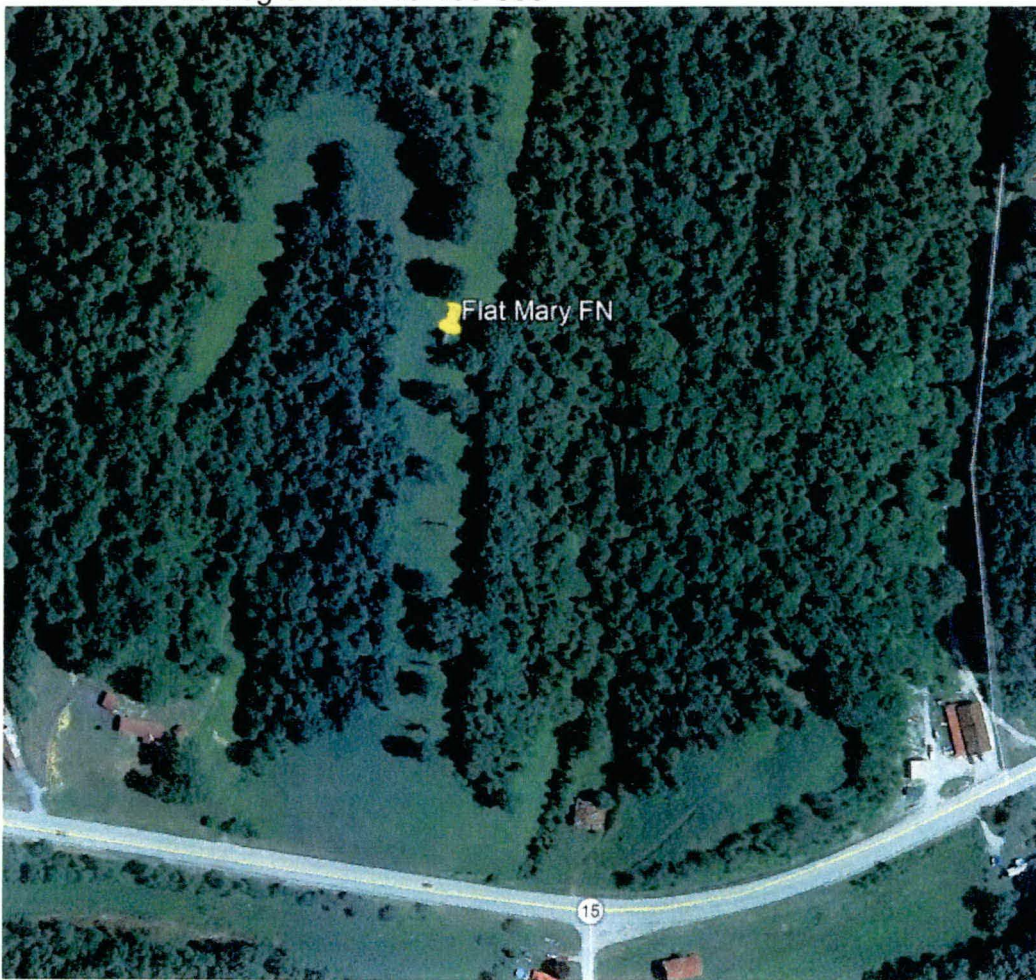
We have attached a map showing the site location for the proposed tower. Applicant's radio frequency engineers assisted in selecting the proposed site for the facility, and they have determined it is the proper location and elevation needed to provide quality service to wireless customers in the area.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

Sincerely,  
David A. Pike  
Attorney for Applicant

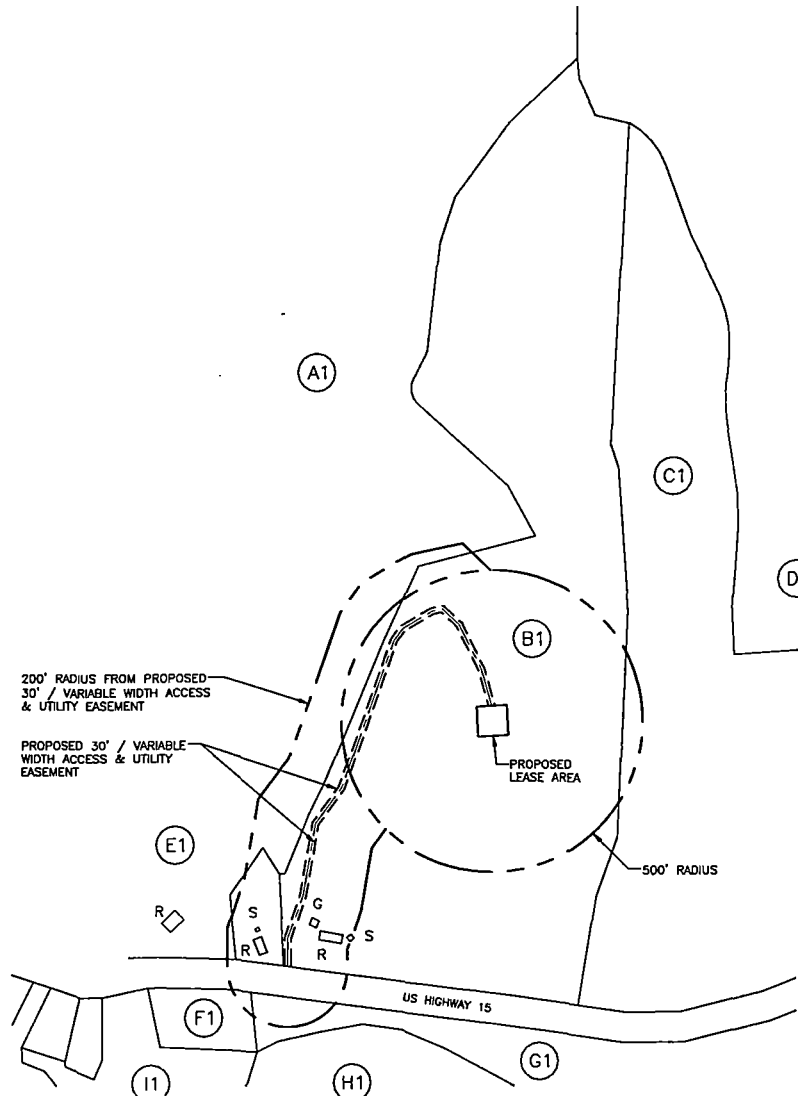
enclosure

## Driving Directions to Proposed Tower Site

1. Beginning at 10 Court Street in Campton, Kentucky, head west on Court Street toward Washington Street and travel approximately 207 feet.
2. Turn left onto Washington Street and travel approximately 190 feet.
3. Turn right onto Main Street and travel approximately 0.1 miles.
4. Continue onto Johnson Street and travel approximately 285 feet.
5. Continue onto Drake Street and travel approximately 469 feet.
6. Turn left onto KY-15 S and travel approximately 3.3 miles.
7. The site is on the left at 3302 KY 15 S in Campton.
8. The site coordinates are:
  - a. North 37 deg 41 min 54.945 sec
  - b. West 83 deg 31 min 10.109 sec



Prepared by:  
Aaron 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



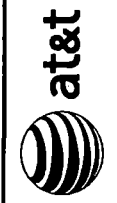
**NOTE:**  
 INFORMATION COMPILED ON 10/31/18  
 INFORMATION SHOWN IS BASED ON THE  
 RECORDS OF THE WOLFE COUNTY, KENTUCKY  
 PROPERTY VALUATION ADMINISTRATOR

**EXISTING BUILDINGS**  
 R = RESIDENCE  
 B = BARN  
 S = SHED  
 G = GARAGE

- (A1) PARCEL ID: 049-00-00-012.04  
SHEPHERD, KRISTA BETH  
PO BOX 996  
CAMPTON, KY 41301
- (B1) PARCEL ID: 049-00-00-012.00  
GRAHAM, PATRICK GLENN  
5 KY 746  
CAMPTON, KY 41301
- (C1) PARCEL ID: 049-00-00-012.03  
GRAHAM, PATRICK GLENN  
33291 KY 15 SOUTH  
CAMPTON, KY 41301
- (D1) PARCEL ID: 060-00-00-014.00  
PATTON, GROVER -HEIRS-  
PATTON, EARL -ADM-  
PO BOX 402  
CAMPTON, KY 41301
- (E1) PARCEL ID: 049-00-00-012.02  
SPARKS, RUSSELL AND LOIS  
135 BACK LANE  
JACKSON, KY 41332
- (F1) PARCEL ID: 049-00-00-012.00  
GRAHAM, PATRICK GLEN  
5 KY 746  
CAMPTON, KY 41301
- (G1) PARCEL ID: 049-00-00-012.05  
GRAHAM, ANDY  
8432 KY 15 SOUTH  
CAMPTON, KY 41301
- (H1) PARCEL ID: 050-00-00-014.01  
TERRILL WILLIAM EDWARD &  
ELIZABETH ELLEN  
2158 ENDO VALLEY  
CINCINNATI, OH 45244
- (I1) PARCEL ID: 050-00-00-009.00  
PATTON, GROVER -HEIRS-  
PATTON, EARL -ADM-  
1634 KY 15 N  
CAMPTON, KY 41301



SMW #: 18-0661



#	DATE	DESCRIPTION
0	10/31/18	ISSUED FOR CLIENT REV.
1	11/08/18	ISSUED FOR CLIENT REV.
2	11/12/18	ISSUED FOR CONSTRUCTION

FLAT MARY FN  
 500' RADIUS AND  
 ABUTTERS MAP

DESIGNED: JDS  
 DRAWN: BMD  
 CHECKED: RTB  
 JOB #: 14397273

B-2

**EXHIBIT L**  
**COPY OF COUNTY JUDGE/EXECUTIVE NOTICE**



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

**VIA CERTIFIED MAIL**

Hon. Dennis Brooks  
County Judge Executive  
10 Court Street  
P.O. Box 429  
Campton, KY 41301

RE: Notice of Proposal to Construct Wireless Communications Facility  
Kentucky Public Service Commission Docket No. 2018-00360  
Site Name: Flat Mary FN

Dear Judge/Executive:

New Cingular Wireless PCS, LLC, a Delaware Limited Liability Company, d/b/a AT&T Mobility has filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at 3302 KY 15 S, Campton, Kentucky 41301 (37°41'54.945" North latitude, 83°31'10.109" West longitude). The proposed facility will include a 195-foot tall antenna tower, plus a 4-foot lightning arrestor and related ground facilities. This facility is needed to provide improved coverage for wireless communications in the area.

You have a right to submit comments to the PSC or to request intervention in the PSC's proceedings on the application. You may contact the PSC at: Executive Director, Public Service Commission, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2018-00360 in any correspondence sent in connection with this matter.

We have attached a map showing the site location for the proposed tower. AT&T Mobility's radio frequency engineers assisted in selecting the proposed site for the facility, and they have determined it is the proper location and elevation needed to provide quality service to wireless customers in the area. Please feel free to contact us with any comments or questions you may have.

Sincerely,  
David A. Pike  
Attorney for Applicant

enclosures

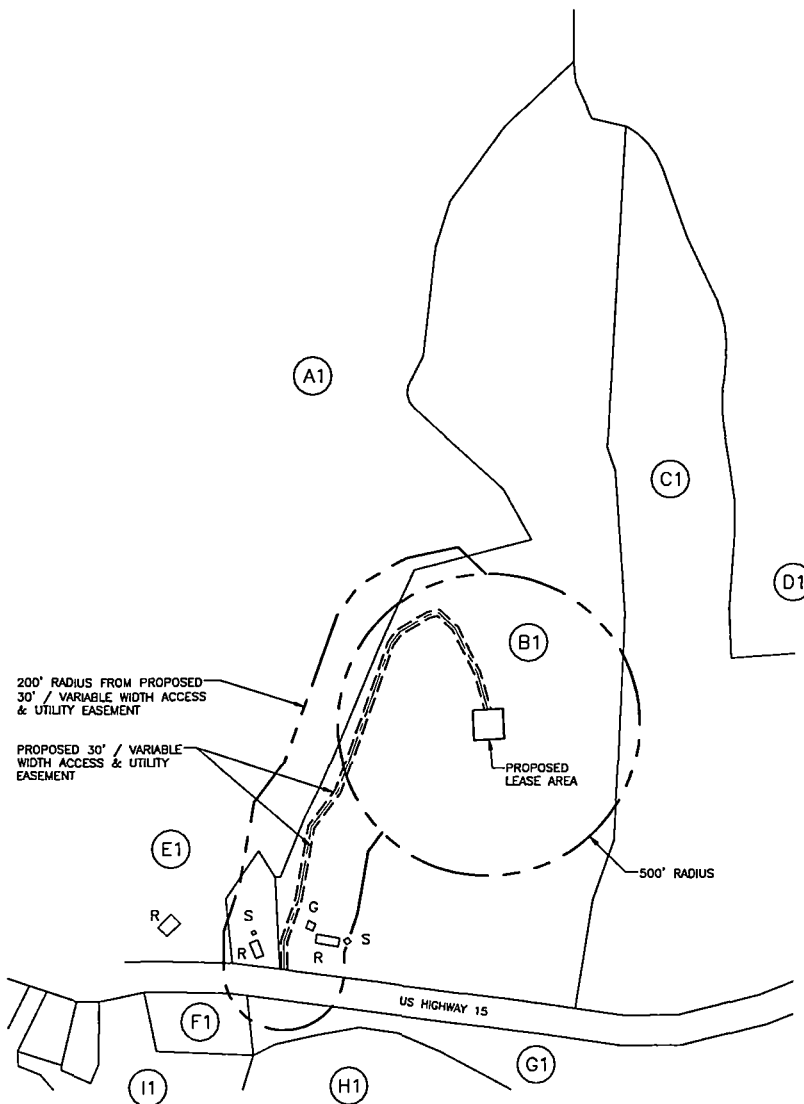


## Driving Directions to Proposed Tower Site

1. Beginning at 10 Court Street in Campton, Kentucky, head west on Court Street toward Washington Street and travel approximately 207 feet.
2. Turn left onto Washington Street and travel approximately 190 feet.
3. Turn right onto Main Street and travel approximately 0.1 miles.
4. Continue onto Johnson Street and travel approximately 285 feet.
5. Continue onto Drake Street and travel approximately 469 feet.
6. Turn left onto KY-15 S and travel approximately 3.3 miles.
7. The site is on the left at 3302 KY 15 S in Campton.
8. The site coordinates are:
  - a. North 37 deg 41 min 54.945 sec
  - b. West 83 deg 31 min 10.109 sec



Prepared by:  
Aaron 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



NOTE:  
 INFORMATION COMPILED ON 10/31/18  
 INFORMATION SHOWN IS BASED ON THE  
 RECORDS OF THE WOLFE COUNTY, KENTUCKY  
 PROPERTY VALUATION ADMINISTRATOR

EXISTING BUILDINGS  
 R = RESIDENCE  
 B = BARN  
 S = SHED  
 G = GARAGE

- (A1) PARCEL ID: 049-00-00-012.04  
SHEPHERD, KRISTA BETH  
PO BOX 996  
CAMPTON, KY 41301
- (B1) PARCEL ID: 049-00-00-012.00  
GRAHAM, PATRICK GLENN  
5 KY 746  
CAMPTON, KY 41301
- (C1) PARCEL ID: 049-00-00-012.03  
GRAHAM, PATRICK GLENN  
33291 KY 15 SOUTH  
CAMPTON, KY 41301
- (D1) PARCEL ID: 060-00-00-014.00  
PATTON, GROVER -HEIRS-  
PATTON, EARL -ADM-  
PO BOX 402  
CAMPTON, KY 41301
- (E1) PARCEL ID: 049-00-00-012.02  
SPARKS, RUSSELL AND LOIS  
135 BACK LANE  
JACKSON, KY 41332
- (F1) PARCEL ID: 049-00-00-012.00  
GRAHAM, PATRICK GLEN  
5 KY 746  
CAMPTON, KY 41301
- (G1) PARCEL ID: 049-00-00-012.05  
GRAHAM, ANDY  
8432 KY 15 SOUTH  
CAMPTON, KY 41301
- (H1) PARCEL ID: 050-00-00-014.01  
TERRILL WILLIAM EDWARD &  
ELIZABETH ELLEN  
2158 ENDO VALLEY  
CINCINNATI, OH 45244
- (I1) PARCEL ID: 050-00-00-009.00  
PATTON, GROVER -HEIRS-  
PATTON, EARL -ADM-  
1634 KY 15 N  
CAMPTON, KY 41301



SMW # 18-0661



#	DATE	DESCRIPTION
0	10/31/18	ISSUED FOR CLIENT REV.
1	11/09/18	ISSUED FOR CLIENT REV.
2	11/12/18	ISSUED FOR CONSTRUCTION

FLAT MARY FN  
 500' RADIUS AND  
 ABUTTERS MAP

DESIGNED: JDS  
 DRAWN: BMD  
 CHECKED: RTB  
 JOB #: 14397273

B-2

**EXHIBIT M  
COPY OF POSTED NOTICES  
AND NEWSPAPER NOTICE ADVERTISEMENT**

**SITE NAME: FLAT MARY FN**  
**NOTICE SIGNS**

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

New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility proposes to construct a telecommunications **tower** on this site. If you have questions, please contact Pike Legal Group, PLLC, P.O. Box 369, Shepherdsville, KY 40165; telephone: (800) 516-4293, or the Executive Director, Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2018-00360 in your correspondence.

New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility proposes to construct a telecommunications **tower** near this site. If you have questions, please contact Pike Legal Group, PLLC, P.O. Box 369, Shepherdsville, KY 40165; telephone: (800) 516-4293, or the Executive Director, Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2018-00360 in your correspondence.

**TELEPHONE: 606-668-3595**

Wolfe County News  
270 Main Street  
Campton, KY 41301

RE: Legal Notice Advertisement  
Site Name: Flat Mary FN

Dear Wolfe County News:

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

**NOTICE**

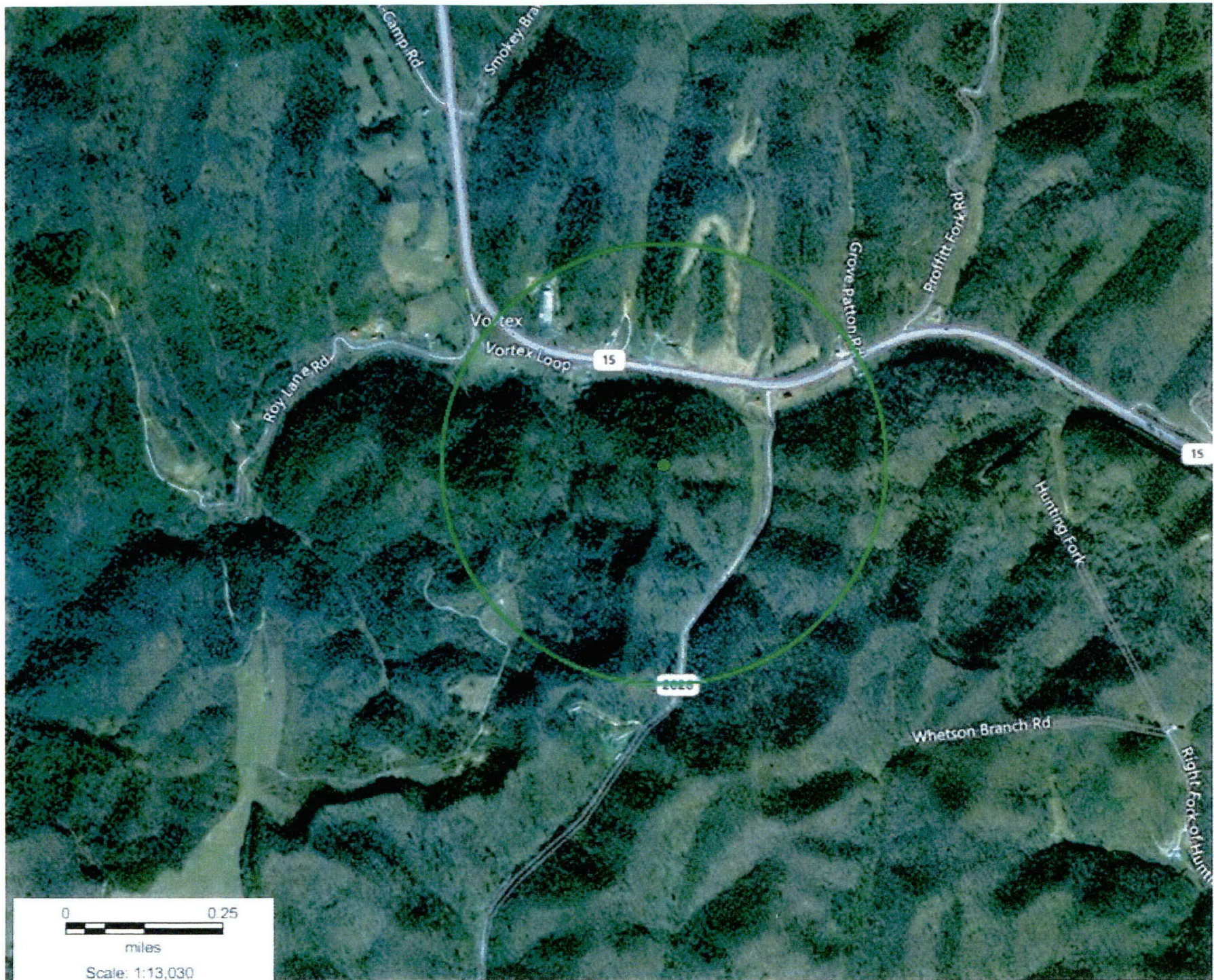
**New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility has filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located on 3302 KY 15 S, Campton, Kentucky 41301 (37°41'54.945" North latitude, 83°31'10.109" West longitude). You may contact the PSC for additional information concerning this matter at: Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2018-00360 in any correspondence sent in connection with this matter.**

After this advertisement has been published, please forward a tearsheet copy, affidavit of publication, and invoice to 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 N**  
**COPY OF RADIO FREQUENCY DESIGN SEARCH AREA**



Lat: 37.694069  
Lon: -83.521526  
Radius: .35 miles

Flat Mary Search Area