## COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

```
THE APPLICATION OF )
NEW CINGULAR WIRELESS PCS, LLC, )
A DELAWARE LIMITED LIABILITY COMPANY, )
D/B/A AT&T MOBILITY )
FOR ISSUANCE OF A CERTIFICATE OF PUBLIC ) CASE NO.: 2019-00376
CONVENIENCE AND NECESSITY TO CONSTRUCT )
A WIRELESS COMMUNICATIONS FACILITY . )
IN THE COMMONWEALTH OF KENTUCKY )
IN THE COUNTY OF ADAIR )
```

SITE NAME: BREEDING FN

## APPLICATION FOR <br> 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. $4^{\text {th }}$ Street, Suite 2400, Louisville, KY 40202.
2. Applicant proposes construction of an antenna tower for communications services, which is to be located in an area outside the jurisdiction of a planning commission, and Applicant submits this application to the PSC for a certificate of public convenience and necessity pursuant to KRS §§ 278.020(1), 278.040, 278.650, 278.665, and other statutory authority.
3. Applicant is a limited liability company organized in the State of Delaware on October 20, 1994.
4. Applicant attests that it is in good standing in the state in which it is organized and further states that it is authorized to transact business in Kentucky.
5. The Certificate of Authority filed with the Kentucky Secretary of State for the Applicant entity is attached as part of Exhibit A pursuant to 807 KAR 5:001: Section 14(3).
6. 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.
7. 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.
8. To address the above-described service needs, Applicant proposes to construct a WCF at 527 Breeding Loop, Breeding, KY 42715 ( $36^{\circ} 57^{\prime} 56.09^{\prime \prime}$ North latitude, $85^{\circ} 25^{\prime} 52.54^{\prime \prime}$ 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 Brandon Harvey pursuant to a Deed recorded at Deed Book 300, Page 703 in the office of the County Clerk. The proposed WCF will consist of a 235 -foot tall tower, with an approximately 5 -foot tall lightning arrestor attached at the top, for a total height of 240 -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.

9. A list of utilities, corporations, or persons with whom the proposed WCF is likely to compete is attached as Exhibit D.
10. 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.
11. 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.
12. 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.
13. A copy of the Determination of No Hazard to Air Navigation issued by the Federal Aviation Administration ("FAA") is attached as Exhibit E.
14. A copy of the application for Kentucky Airport Zoning Commission ("KAZC") Approval to construct the tower is attached as Exhibit F.
15. 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.
16. 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.
17. 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.
18. 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.
19. 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.
20. 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.
21. 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.
22. 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.
23. 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.

24. 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.
25. The general area where the proposed facility is to be located is rural and surrounded by dense wooded tracts. There are not existing residential structures within 500' of the tower's proposed location.
26. 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 $\mathbf{N}$.
27. The tower must be located at the proposed location and proposed height to provide necessary service to wireless communications users in the subject area.
28. All Exhibits to this Application are hereby incorporated by reference as if fully
set out as part of the Application.
29. All responses and requests associated with this Application may be directed to:

David A. Pike

Pike Legal Group, PLLC
1578 Highway 44 East, Suite 6
P. O. Box 369

Shepherdsville, KY 40165-0369
Telephone: (502) 955-4400
Telefax: (502) 543-4410
Email: dpike@pikelegal.com

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

Respectfully submitted,


[^0]
## LIST OF EXHIBITS

| A | - | Certificate of Authority \& 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 |
| 1 | - | 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 <br> CERTIFICATE OF AUTHORITY \& FCC LICENSE DOCUMENTATION 

# Commonwealth of Kentucky Alison Lundergan Grimes, Secretary of State 

Alison Lundergan Grimes Secretary of State
P. O. Box 718
-Frankfort, KY 40602-0718
Certificate of Authorization
(502) 564-3490
http://www.sos.ky.gov

Authentication number: 216299
Visit https://app.sos.ky.gov/ftshow/certvalidate. aspx to authenticate this certificate.

I, Alison Lundergan Grimes, Secretary of State of the Commonwealth of Kentucky, do hereby certify that according to the records in the Office of the Secretary of State,

NEW CINGULAR WIRELESS PCS, LLC
, a limited liability company authorized under the laws of the state of Delaware, is authorized to transact business in the Commonwealth of Kentucky, and received the authority to transact business in Kentucky on October 14, 1999.

I further certify that all fees and penalties owed to the Secretary of State have been paid; that an application for certificate of withdrawal has not been filed, and that the most recent annual report required byeRS 14A.6-010 has been delivered to the Secretary of State,

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal at Frankfort, Kentucky, this $28^{\text {th }}$ day of May, 2019, in the $227^{\text {th }}$ year of the Commonwealth.


Alison Lundergan Grimes:
Secretary of State
Commonwealth of Kentucky
216299/0481848

## 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 Telecómmunications Bureau
RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGUAR WIRELESS PCS, LLC

| Call Sign KNKN666 | File Number |
| :---: | :---: |
| Radio Service CL - Cellular. |  |
| Market Numer CMA447 | Channel Block A. |
| Sub-Market Designator 0 |  |

FCC Registration Number (FRN): 0003291192
0
Market Name
Kentucky 5 - Barren

| $\begin{aligned} & \text { Grant Date } \\ & 08-30-2011 \end{aligned}$ | Effective Date $08-31-2018$ | Expiration Date 10-01-2021 | Five Yr Build-Out Date | Print Date |
| :---: | :---: | :---: | :---: | :---: |

## Site Information:

| Location Latitude |  | Longitude |
| :--- | :--- | :--- |
| 7 | $37-10-00.0 \mathrm{~N}$ | $085-18-37.0 \mathrm{~W}$ |

Address: 1210 Cane Valley Road (94238)
City: Columbia County: ADAIR State: KY Construction Deadline:


## Licensee Name: NEW CINGULAR WIRELESS PCS, LLC



Ground Elevation
(meters)
466.6

| Structure Hgt to Tip <br> (meters) | Antenna Structure <br> Registration No. |
| :--- | :--- |
| 61.0 | 1004214 |

Address: 6565 MORRIS HILL ROAD (87856)
City: MONTICELLO/County; WAYNE State: KY Construction Deadline:
Antenna: 1



City: Monticello County: WAYNE State: KY Construction Deadline:


## Print Date:

| Location Latitude | Longitude |  |
| :--- | :--- | :--- |
| 20 | $37-05-19.7 \mathrm{~N}$ | $084-54-47.3 \mathrm{~W}$ |

Ground Elevation
(meters)
331.6

| Structure Hgt to Tip <br> (meters) | Antenna Structure <br> Registration No. |
| :--- | :--- |
| 106.4 | 1232264 |

Address: 1101 PINE TOP ROAD (86918)
City: RUSSELL SPRINGS County: RUSSELL State: KY Construction Deadline:



File Number:
Print Date:

Longitude
085-08-34.1 W

| Ground Elevation |
| :--- |
| (meters) |
| 350.5 |

Structure Hgt to Tip
(meters)
78.0

Antenna Structure Registration No. 1258265
Address: 127 North/Cross.(Route 6 Box 991) (94257)
City: Albany County: CLINTON State: KY Construction Deadline:

## Antenna: 1

| Maximum Transmitting ERE in Watts: 140.820 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Azimuth(from true north) 45 | 90 | 135 | 180 | 225 | 270 | 315 |
| Antenna Height AAT (meters) 181.800142 .800 | 72.800 | 100.300 | 157.000 | 167.400 | 157.200 | 193.400 |
| Transmitting ERP (watts) 145.107 | 168.768 | 30.884 | 3.418 | 1.072 | 0.669 | 1.670 |
| 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) \& 181.800 142.800 | 72.800 | 100.300 | 157.000 | 167.400 | 157.200 | 193.400 |
| $\underset{\text { Transmitting ERP (watts) }}{\text { Antenna: } 3}$ ( 1.105068 | 14.838 | 36.641 | 44.724 | 30.421 | 5.045 | 2.474 |
| Maximum Transmitting ERP in Watts: 140.820 |  |  |  |  |  |  |
| Azimuth(from true north) ${ }^{\text {a }}$ | 90 | 135 | 180 | 225 | 270 | 315 |
| Antenna Height AAT (meters) $181.800 \% 142.800$ | 72.800 | 100.300 | 157.000 | 167.400 | 157.200 | 193.400 |
| Transmitting ERP (watts) $40.424,4.384)$ | 1.518 | 0.529 | 1.123 | 24.617 | 125.244 | 176.237 |


| Location Latitude | Longitude |  |  | (moters) |
| :--- | :--- | :--- | :--- | :--- |




Address: 403 MARTIN SUBDIVISION (87881)
City: TOMPKINS,VILLE County: MONROE

File Number:
Print Date:

| Ground Elevation | Structure Hgt to Tip <br> (meters) | Antenna Structure <br> Registration No. |
| :--- | :--- | :--- |
| 286.5 | 90.2 | 1065560 |

Antenna: 1

| Maximum Transmitting ERP in Watts: 140.820 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Azimuth(from true north) 45 | 90 | 135 | 180 | 225 | 270 | 315 |
| Antenna Height AAT (meters) 75.300 | 146.800 | 80.100 | 75.200 | 103.200 | 86.800 | 75.200 |
| Transmitting ERP (watts) | 7.417 | 0.800 | 0.553 | 0.537 | 18.630 | 138.505 |
| Maximum Transmitting ERP in Watts: 140.820 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Azimuth(from true north) 45 | 90 | 135 | 180 | 225 | 270 | 315 |
| Antenna Height AAT (meters) $\quad 69.700 \sim 75.300$ | 146.800 | 80.100 | 75.200 | 103.200 | 86.800 | 75.200 |
| Transmitting ERP (watts) $1.721 / 17.109$ | 89.000 | 121.386 | 26.164 | 2.348 | 0.328 | 0.400 |
| Maximum Transmitting ERP in Watts: 140.820 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Azimuth(from true north) 0 | 90 | 135 | 180 | 225 | 270 | 315 |
| Antenna Height AAT (meters) $69.700 \sim 75.300$ | 146.800 | 80.100 | 75.200 | 103.200 | 86.800 | 75.200 |
| Transmitting ERP (watts) $1.247 / 3.7 \times 0.244)$ | 0.229 | 4.118 | 34.693 | 116.367 | 90.021 | 10.295 |

Location Latitude

28 37-21-17.2 N


Structure Hgt to Tip
Antenna Structure (meters) Registration No. 83.8 1220496
Address: 2830 Frenchman's Knob Road (94236)
City: Bonnieville County: HART State: KY Construction Deadline:

Antenna: 1

| Maximum Transmitting ERP in Watts: | 140.820 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Azimuth(from true north) | 0 | 45 |  |  | 180 | 225 | 270 | 315 |
| Antenna Height AAT (meters) | 193.700 | 191.000 | 195.200 | 238.600 | 217.000 | 184.800 | 226.800 | 216.700 |
| Transmitting ERP (watts) | 184.924 | 99.849 | 11.423 | 0.450 | 0.602 | 0.510 | 8.026 | 87.512 |
| Antenna: 2 |  |  |  |  |  |  |  |  |
| Maximum Transmitting ERP in Watts: Azimuth(from true north) | $\begin{gathered} 140.820 \\ \mathbf{0} \end{gathered}$ |  |  | $135$ |  |  |  |  |
| Azimuth(from true north) Antenna Height AAT (meters) | ${ }_{193.700}^{0}$ | 45 | 90 195200 | 135 | 180 | 225 | 270 226800 | 315 |
| Transmitting ERP (watts) | 2.115 | 37.767 | 246.087 | 328.098 | 100:148 | 5.709 | 0.676 | 216.788 |
| Antenna: 3 |  |  | 24.08 |  | 2 | . | 0.676 | 0.78 |
| Maximum Transmitting ERP in Watts: | 140.820 |  |  |  |  |  |  |  |
| Azimuth(from true north) | ${ }_{193}$ | 45 | 90 | 135 | 180 | 225 | 270 | 315 |
| Antenna Height AAT (meters) | 193.700 | 191.000 | 195.200 | 238.600 | 217.000 | 484.800 | 226.800 | 216.700 |
| Transmitting ERP (watts) | 1.310 | 0.350 | 0.339 | 3.061 | + 46.385 | 170.557 | 144.024 | 26.849 |



| Call Sign: KNKN666 . File Number: | File Number: | Print Date: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Location Latitude Longitude Gr  <br>  $37-04-19.5 \mathrm{~N}$  (m <br> 32 37 $084-59-59.4 \mathrm{~W}$ 31 | Ground Elevation (meters) |  | cture $\mathrm{H}_{\mathrm{g}}$ ers) | to Tip | Antenna Structure Registration No. |  |
| Address: 227 Horn Rd (94247) |  |  |  |  |  |  |
| City: Russell Springs County: RUSSELL State: KY | Construction Deadline: |  |  |  |  |  |
| Antenna: 1 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Azimuth(from true north) | 90 | 135 | 180 | 225 | 270 | 315 |
| Antenna Height AAT (meters) $\gg 149.200 \quad 77.200$ | 79.700 | 105.800 | 146.300 | 99.500 | 80.900 | 89.500 |
| Transmitting ERP (watts) $221: 223 \quad 212.121$ | 177.242 | 71.356 | 77.801 | 28.148 | 33.937 | 155.008 |
| Antenna: 2 |  |  |  |  |  |  |
| Maximum Transmitting ERP in Watts: 140.820 |  |  |  |  |  |  |
|  | 90 79700 | 135 | 180 146.300 | 225 | 270 80.900 |  |
|  | 79.700 173.839 | 105.800 236.936 | 146.300 272.788 | 99.500 110.954 | 80.900 36.898 | 89.500 14.156 |
| Antenna: 3 (182) ${ }^{2}$ | 173.839 | 236.936 | 27.788 | 110.954 | 36.898 | 14.156 |
| Maximum Transmitting ERP in Watts: 140.820 - |  |  |  |  |  |  |
| Azimuth(from true north) 0 | 90 | 135 | 180 | 225 | 270 | 315 |
| Antenna Height AAT (meters) $\quad 149.200777 .200$ | 79.700 | 105.800 | 146.300 | 99.500 | 80.900 | 89.500 |
| Transmitting ERP (watts) $68.660 \times 19.848$ | 0.532 | 12.732 | 74.296 | 228.506 | 206.369 | 227.920 |


| Location Latitude | Longitude | Ground Elevation | Structure Hgt to Tip <br> (meters) | Antenna Structure <br> Registration No. |
| :--- | :--- | :--- | :--- | :--- |
| 33 | 36-50-28.6 N | $086-02-47.1 \mathrm{~W}$ | $-225.9)$ | 60.7 |

Address: Austin Tracy Rd (115120)
City: Lucas County: BARREN State: KY Construction Deadline:

| Antenna: 1 <br> Maximum Transmitting ERP in Watts: Azimuth(from true north) | $\begin{gathered} 140.820 \\ 0 \end{gathered}$ | 45 |  | 135 | 180 | 225 | 270 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antenna Height AAT (meters) | 91.800 | 79.300 | 63.800 |  | 95.100 | 66.500 | 80.300 | 112.900 |
| Transmitting ERP (watts) | 79.481 | 128.527 | 48.267 | $34.537 \%$ | 0.275 | 16.613 | 58.629 | 118.330 |
| Antenna: 2 <br> Maximum Transmitting ERP in Watts: Azimuth(from true north) | $\begin{gathered} 140.820 \\ 0 \end{gathered}$ | 45 | 90 | -135 | 180 | 225 | 270 | 315 |
| Antenna Height AAT (meters) | 91.800 | 79.300 | 63.800 | 43.400 | 95.100 | 66.500 | 80.300 | 112.900 |
| Transmitting ERP (watts) Antenna: 3 | 16.424 | 105.957 | 212.448 | 227.867 | 141.232 | ${ }_{41.336}$ | 29.497 | 11.208 |
| Maximum Transmitting ERP in Watts: Azimuth(from true north) | $\begin{gathered} 140.820 \\ 0 \end{gathered}$ | 45 | 90 | 135 | 180 | $225$ | 270 | 315 |
| Antenna Height AAT (meters) | 91.800 | 79.300 | 63.800 | 43.400 | , 95.100 | 66,500 | 80.300 | 112.900 |
| Transmitting ERP (watts) Antenna: 4 | 3.736 | 0.847 | 2.276 | 7.728 | 35.347 | 59.316 | 65.492 | 20.964 |
| Maximum Transmitting ERP in Watts: Azimuth(from true north) | $\begin{gathered} 140.820 \\ 0 \end{gathered}$ | 45 | 90 | 135 | 180 |  | 270 | 315 |
| Antenna Height AAT (meters) | 91.800 | 79.300 | 63.700 | 43.400 | 95.100 | 66.5 | 80.300 | 112.900 |
| Transmitting ERP (watts) Antenna: 5 | 80.215 | 129.717 | 48.867 | 34.856 | 0.278 | 16.76 | 59.174 | 119.427 |
| Maximum Transmitting ERP in Watts: Azimuth(from true north) | $\begin{gathered} 140.820 \\ 0 \end{gathered}$ | 45 | 90 | 135 |  |  |  | 315 |
| Antenna Height AAT (meters) | 91.800 | 79.300 | 63.700 | 43.400 | 95.100 | 66.500 | 80.300 | 112.900 |
| Transmitting ERP (watts) | 16.576 | 106.934 | 215.086 | 229.984 | 142.541 | 41.717 | 29.770 | 11.312 |



Ground Elevation (meters) 225.9

Print Date:

Structure Hgt to Tip
(meters)
60.7

Antenna Structure Registration No.

Address: AustinTracy Rd ( -1.15120 )
City: Lucas County: BARREN State: KY Construction Deadline:

Antenna:

| Maximum Transmitting ERP in Watts: 140.820 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Azimuth(from true north) 0 | 45 | 90 | 135 | 180 | 225 | 270 | 315 |
| Antenna Height AAT (meters) 91.800 | 79.300 | 63.700 | 43.400 | 95.100 | 66.500 | 80.300 | 112.900 |
| Transmitting ERP (watts) | 0.854 | 2.304 | 7.800 | 35.674 | 59.863 | 66.098 | 21.158 |


| Location Latitude | Longitude |
| :--- | :--- | :--- | :--- | :--- | :--- |$\quad$| Ground Elevation |
| :--- | :--- | :--- | :--- |
| (meters) |$\quad$| Structure Hgt to Tip |
| :--- |
| (meters) | | Antenna Structure |
| :--- |
| Registration No. |

Address: 9096 W. Hwy 90 (94262)
City: Monticello County: WAYNE 'State: KY Construction Deadline:


FCC 601-C
Call Sign: KNKN666.

$35 \quad 36-39-45.3 \mathrm{~N} * \quad 084-26-36.2 \mathrm{~W}$
Address: 6135 Hwy 1651 (115765)
City: Pine Knot County MCCREARY State: KY Construction Deadline:


| Location Latitude |  | Longitude, <br> Lequ | Ground Elevation <br> (meters) | Structure Hgt to Tip <br> (meters) | Antenna Structure <br> Registration No. |
| :--- | :--- | :---: | :--- | :--- | :--- |
| 36 | $36-50-27.1 \mathrm{~N}$ | $084-28-44.2 \mathrm{~W}$ | 425.5 | 79.6 | 1233359 |

Address: 165 HWY 90 (114139)
City: Parkers Lake County: MCCREARY State: KY Construction Deadline:



File Number:
Print Date:
Ground Elevation
(meters)
303.9

Structure Hgt to Tip
(meters)
78.0

Antenna Structure Registration No. 1273817

City: Albany County: CLINTON State: KY Construction Deadline:

Antenna: 3

| Maximum Transmitting ERP in Watts: 140.820 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Azimuth(from true north) | 45 | 90 | 135 | 180 | 225 | 270 | 315 |
| Antenna Height AAT (meters) 103.500 | 53.600 | 30.000 | 64.200 | 100.300 | 112.300 | 94.400 | 76.300 |
| Transmitting ERP (watts) 0.327 | 0.106 | 0.101 | 1.174 | 12.741 | 41.443 | 34.130 | 5.644 |





File Number:
Print Date:

| Ground Elevation <br> (meters) | Structure Hgt to Tip <br> (meters) | Antenna Structure <br> Registration No. |
| :--- | :--- | :--- |
| 267.6 | 99.1 | 1224165 |

Address: 1515 EISHER RIDGE ROAD (37620)
City: Horse Cave County:-HART State: KY Construction Deadline:

| Antenna: 1 <br> Maximum Transmitting ERP in Watts: 140.820 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Azimuth(from true north) 45 | 90 | 135 | 180 | 225 | 270 | 315 |
| Antenna Height AAT (meters) 148.700170 .000 | 148.400 | 148.400 | 138.900 | 116.100 | 137.500 | 147.400 |
| Transmitting ERP (watts) Antenna: 2 | 19.855 | 1.861 | 0.214 | 0.322 | 2.056 | 21.126 |
| Maximum Transmitting ERP in Wats: 140.820 |  |  |  |  |  |  |
| Antenna Height AAT (meters) $\quad$ (\% $148.700 \sim 170.000$ |  |  |  |  |  |  |
| Transmitting ERP (watts) <br> 8.514 - 101.153 <br> Antenna: 3 | 307.468 | 229.726 | 25.253 | 1.925 | 0.630 | 0.630 |
| Maximum Transmitting ERP in Watts: 40.820 |  |  |  |  |  |  |
| Azimuth(from true north) | 90 | 135 | 180 | 225 | 270 | 315 |
| Antenna Height AAT (meters) $148.700 / 170.000$ | 148.400 | 148.400 | 138.900 | 116.100 | 137.500 | 147.400 |
| Transmitting ERP (watts) 0.226 (0.222) | 3.795 | 33.295 | 109.116 | 83.424 | 11.320 | 0.928 |



## Control Points:

Control Pt. No. 1
Address: 124 South Keeneland Drive (Suite 103)
City: RICHMOND County: MADISON State: KY Telephone Number: (859)544:4804

Call Sign: KNKN666,
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 ).

File Number:

## Print Date:

 , paras. 113 and

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 licenne.


FCC Registration Number (FRN): 0003291192

| Grant Date $04-12-2017$ | Effective Date $08-31-2018$ | Expiration Date 04-28-2027 | Print Date |
| :---: | :---: | :---: | :---: |
| Market Number BTA263 | Sh |  | Sub-Market Designator 0 |
| Market Náme Louisville, KX |  |  |  |
| 1st Build-out Date $04-28-2002$ | 2nd Build-out Date | 3rdBuild-out Date | 4th Build-out Date |

## Waivers/Conditions:

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


## Conditions:

Pursuant to $\S 309(\mathrm{~h})$ of the Communications Act of 1934 , as amended, 47 U.S.C. $\S 309(\mathrm{~h})$, 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. $\S 310$ (d). This license is subject in terms to the right of use or control-conferred by $\S 706$ of the Communications Act of 1934, as amended. See 47 U.S.C. $\S 606$.

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy vèrsion. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Matket 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



700 MHz Relicensed Area Information:

## Print Date:



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 FCClicense.


FCC Registration Number (FRN): 0003291192 R

| Grant Date | Effective Date |  |
| :---: | :---: | :---: | :---: |
| $00-31-2008$ | Expiration Date | Print Date |
| $06-23-2025$ | $\ddots$ | $\ddots$ |


| Market Number <br> MTA0026 | Channel Block | Sub-Market Designator <br> 19 |
| :---: | :---: | :---: |



## 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 $\S 309(\mathrm{~h})$ of the Communications Act of 1934 , as amended, 47 U.S:C. $\S 309(\mathrm{~h})$, 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. $\S 310$ (d). This license is subject in terms to the right of use or control conferred by $\S 706$ 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, MemorandumOpinion and Order, FCC 06-189 (rel. Mar. 26, 2007); AT\&T Inc. and BellSouth Corporation, WC Docket No. 06-74, Ordeŗon Reconsideration, FCC 07-44 (rel. Mar. 26, 2007).


Licensee Name: NEW CINGULAR WIRELESS PCS, LLC
Call Sign: WPOI255


700 MHz Relicensed Area Information:


## Print Date:

## File Number:

Buildout Notification
Status


FCC 601-MB

## 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 FCClicense.


FCC Registration Number (FRN): 0003291192 =

| Grant Date $08-17-2015$ | Effective Date $08-31-2018$ | Expiration Date 09-06-2025 | Print Date |
| :---: | :---: | :---: | :---: |


| Market Number BTA263 |  | Sub-Market Designator 7 |
| :---: | :---: | :---: |


|  | $\cdots$ | Market Name | $\ddots$ | $\vdots$ |
| :---: | :---: | :---: | :---: | :---: |
|  | $\ddots$ | $\ddots$ | $\ddots$ | $\vdots$ |



License renewal granted on a conditional basis, subject to the outcome of FCC proceeding WT Docket No. 10-1.12 (see.FCC $10-86$, paras. 113 and 126 ).

## Conditions:

Pursuant to $\S 309(\mathrm{~h})$ of the Communications Act of 1934 , as amended, 47 U:S:C. $\S 309(\mathrm{~h})$, thislicense is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any fight 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 violationof the Communications Act of 1934, as amended. See 47 U.S.C. $\S 310$ (d). This license is subject in terms to the right of use or control conferred by $\S 706$ of the Communications Act of 1934, as amended. See 47 U.S.C. 8606.

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


700 MHz Relicensed Area Information: Market


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.


FCC Registration Number (FRN): 0003291192

| Grant Date | Effective Date |  |  |
| :---: | :---: | :---: | :---: |
| $04-11-2017$ | $08-31-2018)$ | Expiration Date | Print Date |


| Market Number <br> BTA263 | Sub-Market Designator |
| :---: | :---: | :---: |



## Conditions:

Pursuant to $\S 309(\mathrm{~h})$ of the Communications Act of 1934, as amended, 47 U.S.C. $\S 309(\mathrm{~h})$, 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. $\S 310$ (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. $\S 606$.


This license may not authorize operation throughout the entire geographic area or spectrum identifiedôn thé hardcoopy yèrsion. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Markel-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.


700 MHz Relicensed Area Information: Market $\quad$ Market Name



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.


FCC Registration Number (FRN): 0003291192


| Dst Build-out Date | and Build-out Date | 3rd/Build-out Date | 4 th Build-out Date |
| :---: | :---: | :---: | :---: |

## Waivers/Conditions:

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

## Conditions:

Pursuant to $\S 309$ (h) of the Communications Act of 1934, as amended, 47 U:S.C. $\S 309(\mathrm{~h})$, this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station no 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 $\S 706$ of the Communications Act of 1934, as amended. See 47 U.S.C. $\S 606$.


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


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 tíeense.


FCC Registration Number (FRN): 0003291192

| Grant Date $12-18-2006$ | Effective Date 08-31-2018 | Expiration Date <br> 12-18-2021 | Print Date |
| :---: | :---: | :---: | :---: |
| Market Number BEA047 |  |  | Sub-Market Designator 9 |



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 $1710-1755 \mathrm{MHz}$ 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, WAB DocketNo: 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 $\S 309(\mathrm{~h})$ of the Communications Act of 1934 , as amended, 47 U:S.C. $\S 309(\mathrm{~h})$, this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any ight 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. $\S 310$ (d). This license is subject in terms to the right of use or control conferred by $\S 706$ of the Communications Act of 1934, as amended. See 47 U.S.C. $\S 606$.

This license may not authorize operation throughout the entire geographic area or spectrum identifiedon 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 yiew 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



700 MHz Relicensed Area Information:

## Market



## Print Date:

 Status

## EXHIBIT B

## SITE DEVELOPMENT PLAN:

## 500' VICINITY MAP <br> LEGAL DESCRIPTIONS FLOOD PLAIN CERTIFICATION <br> SITE PLAN <br> VERTICAL TOWER PROFILE



SITE NAME:

## BREEDING FN

## at\&t

NEW RAW LAND SITE WITH 235' SELF-SUPPORT TOWER W/ 5' LIGHTNING ARRESTOR AND INSTALLATION OF A VERTIV 80" X 80" WALK-IN CABINET \& GENERAC 20KW DIESEL GENERATOR ON A 10'-0" X 17'-0" CONCRETE PAD




CONTACT INFORMATION FIRE DEPARTMENT IREEDNG AREAVOUNTT
PHONE (270) $378-5700$
PO POLICE DEPARTMENT
 PHONE: (270) 432-3271 ELECTRIC COMPANY TAYLOR COUNTR R.E.C.
PHONE: (800) $931-4551$
TELEPHONE COMPANY
ATRT
PHONE: ( 8000 288-2020

BUILDING CODES AND STANDARDS
 AOPDPTEE BT HHO EOCAL AUTHORITY HAVVING UURISDICTION
FOR THE LOCATION. FOR THE LOCATION.
CONTRACTOR'S WORK SHALL COMPIY WITH THE
LATEST EOIION OF THE FOLIOWNG STANDARS

- AmERICAN CONCRETE NSSTTUTE 318

AMERICAN INSTTUUTE Of STEEL LONSTRUCTION
MANUAL OF STEL CONSTRUCTION
manualof stelconstruction
telecommunications industry association
STRUCTURAL STANOARDS FOR STEEL ANTENNA
TOWER AND SUPPORTING STRUCTURES TIA-6O1
COMMERCAL BULIONG GROUNDNG AND BoNOING
REQUIRMENTS For TELECOMMUNICATIONS


2018 kBC

- 2014 NEC
 An Sitanaries
SHALL GOVERN.




 KINEMATIC GLOBALPOSSITIONING SYST.
COMPLTED ON SEPTEMBER 21, 2018 .



 PROPOSED $30^{\prime}$ ACCESS \& UTILITY EASEMENT
 BEARING DATUM USED HEREIN IS BASED UPON KENTUCKY STATE PLANE COORDINATE SYSTEM, SINGLE ZONE, NAD B3, FROM A REAL TIME
KINEMATICGLOBALPSSTIONING SSSTEM OBSERVATION USING THE KENTUCKY TRANSPORTATION CABINET REAL TIME GPS NETWORK COMPLETED ON SEPTEMEER 21, 2018
COMMENCING ATA AOUNO STONE IN THE NORTH LINE OE PROPERTY CONVEEEDTO BRANOON HARVVY AS RECORDED IN DEED BOOK 300, PAGE







LAND SURVEYOR'S CERTIFICATE
I'MARK E. PATTERSON, HEREBY CERTIFY THAT IAM ALCENSED PROFESSIONAL LAND SURVEYOR
ICENSED IN COMPLANCE WTHTH THE LAWS OF THE COMMONWEALTH OF KENTUCKY. I FURTHER LICENSED IN COMPLANCE WTH THE LAWS OF THE COMMONWEALTH OF KENTCCK., FURTHER
CERTIFY THAT THIS PLAT AND THE SURVEY ON THE GROUNO WERE PERFORMED BY PERSONS UNDER
 WITNEESED BY MONUMENTS SHOWN HEREON ARE TRUE AND CARRECT TO THE EBSTO
KNOWLEDGE. THE "RURAL" SURVEY, AND THE PLAT ON WHICH IT IS BASED, MEETS ALL KNOWLEDGE. THE "RURAL" SURVEY, AND THE PAL
SPEIFICATIONS AS STATED IN KAR 201 18:150.
Max lateren
MARK PATTERSON, PLS \#3136
10/8/2019


TITLE OF COMMITMENT (PARCEL ID: 017-00 00-020.00)



## sChedule b

1. TAXES, TAX LIENS, TAX SALES, WATER RATES, SEWER AND ASSESSMENTS SET FORTH IN SCHEDULE HEREIN.

TAXID: 017-00 000020.00
LAND ASSESSMENT: $\$ 33,000.00$
TPORA ASSESSED VALUE: $\$ 33,000.00$
PRROD:2017
PAYMENT STATUS: PAID
TAX AMOUNT: Si89.92
TAX AMOUNT: STB9.92
(NOT ALLNO SURVEY MATTER, THEREFORE POD GROUP, LLC DID NOT EXAMINE OR ADORESS THIS ITEM.)
2. Mortgages returned herein. (-3)- see separate mortgage schedule.
3. ANY STATE OF FACTS WHICH AN ACCURATE SURVEY MIGGT SHOW OR SURVEY EXCEPTIONS SET FORTH HEREIN. (POD GROUP, LLC DID NOT
4. RIGHTS OF TENANATS OR PERSON IN POSSESSION. (RIGHTS ARE NOT A LAND SURVEY MATTER, THEREFORE POD GROUP, LIC DID NOT EXAMINE
judgments, Lens and ucc)
5. (NONE WITHIN PERIOD SEARCHED.)
(COVENANTS/RESTRICTIONS)
6. NONE WITHIN PERIOD SEARCHED
(EASEMENTS AND RIGHTS OF WAY)
7. RIGHT OF WAY EASEMENT BY OTIS REEEE AND GLAOYS REECE TO ADAIR COUNTY WATER DISTRICT, DATED 7/8/1977 RECORDED 10/24/1977 IN
BOOK 163 PAGE 29S. NOTES: IISTRIBUTION PIPELINE. RRIGHT OF WAY EASEMENT AS RECORDED IN BOOK 163, PAGE 295 IS VAGUE AND NON-DESCRIPTIVE, AND THEREFORE COULD NOT BE PLOTTED.)
(Other fled documents)
8. LIS PENDENS BETWEEN TONY HARVEY ET AL AND COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYY DATED 12/11/1997 RECORDED


MORTGAGE SCHEDULE
 488. (MORTGAGEASRREORDD
THE PROPOSED LEASE AREA.)
2. MORTGAGE FOR KENTUCKY MADE B BRANDON NICHOLAS HARVEY AND LAURA ASHLEY HARVEY HUSBAND AND WIFE TO UNITED STATES OF


3. MORTGAGE FOR KENTUCKY MADE BY BRANDON NICHOLAS HARVEY AND LAURA ASHLEY HARVEY HUSBAND AND WIFE TO UNITED STATES OF
 OF $12 / 21 / 2017$ RECORDED $12 / 22 / 2017$ IN $\operatorname{NOOK} 291$ PAGE 39 (MORTGAGE AS RECOROED
PAREEL, THE PROPOSED ACCESS \& UTIITV EASEMENT, ANO THE PROPOSED LEAEE AREA.)

POD
 MasTec


SITE INFORMATION: ${ }_{527}$ BREEDING LOOP S27 REEDNG LOOP
BREDNGG KY Livit
ADAIR COUNTY
TAX PARCEL NUMBER: 017-00 00-020.00

PROPERTY OWNER: | BRAADON AREVEY |
| :--- |
| 245 BREEDNG LOO |
| REDENG |

SOURCE OF TITLE: DB 300, PG 703 SITE NUMBER:
BREEDING





TOWER NOTES:

THE NEW TOWER, FOUNDATION, ANTENNA MOUNTS, AND ANTENNAS WERE
OESIGNED BY OTHERS.
2. the tower elevation shown is for reference only
3. SEE TOWER MANUFACTURER'S ORAWINGS FOR TOWER AND FOUNDATION DETAILS

MANUFACTURER'S DRAWINGS SUPERCEDE A\&E DRAWINGS


## EXHIBIT C

 TOWER AND FOUNDATION DESIGNOctober 21, 2019
Kentucky Public Service Commission
211 Sower Blvd.
P.O. Box 615

Frankfort, KY 40602-0615

RE: Site Name - Breeding FN
Proposed Cell Tower
3657 56.09 North Latitude, -8525 52.54 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

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

Thank you,


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

## Sabre Industries" <br> \section*{Towers and Poles}

Structural Design Report 235' S3TL Series HD1 Self-Supporting Tower
Site: Breeding FN, KY

Prepared for: AT\&T by: Sabre Towers \& Poles ${ }^{\mathrm{TM}}$

Job Number: 445653

October 18, 2019
Tower Profile. ..... 1
Foundation Design Summary (Option 1) ..... 2
Foundation Design Summary (Option 2) ..... 3
Maximum Leg Loads ..... 4
Maximum Diagonal Loads ..... 5
Maximum Foundation Loads ..... 6
Calculations ..... 7-21


235


Designed Appurtenance Loading

| Elev | Description | Tx-Line |
| :--- | :--- | :---: |
| 240 | (1) Extendible Lightning Rod |  |
| 230 | (1) 278 sq. ft. EPA 6000\# (no Ice) | (18) $15 / 8^{\prime \prime}$ |
| 218 | (1) 208 sq. ft. EPA 4000\# (no ice) | (18) $15 / 8^{\prime \prime}$ |
| 206 | (1) 208 sq. ft. EPA 4000\# (no ice) | (18) $15 / 8^{\prime \prime}$ |
| 194 | (1) 208 sq. ft. EPA 4000\# (no ice) | (18) $15 / 8^{\prime \prime}$ |

Design Criteria - ANSI/TIA-222-G

| ASCE 7-16 Ultimate Wind Speed (No Ice) | 105 mph |
| :--- | :---: |
| Wind Speed (Ice) | 30 mph |
| Design Ice Thickness | 1.50 in |
| Structure Class | II |
| Risk Category | II |
| Exposure Category | C |
| Topographic Category | 1 |

Base Reactions

| Total Foundation |  | Individual Footing |  |
| :--- | :--- | :--- | :--- |
| Shear (kips) | 69.29 | Shear (kips) | 43.32 |
| Axial (kips) | 209.2 | Compression (kips) | 510 |
| Moment (ft-kips) | 10422 | Uplift (kips) | 447 |
| Torsion (ft-kips) | -24.38 |  |  |

Material List

| Display |  |
| :--- | :--- |
| A | 2.375 OD $\times .154$ |
| B | $\mathrm{L} 2 \times 2 \times 1 / 8$ |
| C | $\mathrm{L} 2 \times 2 \times 3 / 16$ |
| D | $\mathrm{L} 2 \times 2 \times 1 / 4$ |

## Notes

1) All legs are $A 500$ ( 50 ksi Min. Yield).
2) All braces are A572 Grade 50 .
3) All brace bolts are A325-X.
4) The tower model is S3TL Series HD1.
5) Transmission lines are to be attached to standard 12 hole waveguide ladders with stackable hangers.
6) Azimuths are relative (not based on true north).
7) Foundation loads shown are maximums.
8) All unequal angles are oriented with the short leg vertical.
9) Weights shown are estimates. Final weights may vary.
10) This tower design and, if applicable, the foundation design(s) shown on the following page(s) also meet or exceed the requirements of the 2018 Kentucky Building Code.
11) Tower Rating: $99.21 \%$

| Sabre InduStriEs* $\quad$Sabre Communications Corporation <br> Towers and Poles <br> P.O. Bouthbridge Drive | Job: | 445653 |  |
| :---: | :---: | :---: | :---: |
|  | Customer: | AT\&T |  |
|  | Site Name: | Breeding FN, KY |  |
| Information contained herein is the sole property of Sabre Communications Corporation, constitutes a trade secret as defined by lowa 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. | Description: | 235' S3TL |  |
|  | Date: | 10/18/2019 | By: REB |

Date: 10/18/19

## Customer: AT\&T

Site: Breeding FN, KY
235 ft . Model S3TL Series HD1 Self Supporting Tower


Notes:

1) Concrete shall have a minimum 28 -day compressive strength of $4,500 \mathrm{psi}$, in accordance with $\mathrm{ACI} 318-11$.
2) Rebar to conform to ASTM specification A615 Grade 60.
3) All rebar to have a minimum of $3^{\prime \prime}$ concrete cover.
4) All exposed concrete corners to be chamfered $3 / 4^{\prime \prime}$.
5) The foundation design is based on the geotechnical report by POD project no. 18-28287, dated: 10/8/19.
6) See the geotechnical report for drilled pier installation requirements, if specified.
7) The foundation is based on the following factored loads:

Factored uplift (kips) $=447.00$
Factored download (kips) $=510.00$
Factored shear $(\mathrm{kips})=43.00$
8) The bottom anchor bolt template shall be positioned as closely as possible to the bottom of the anchor bolts.

## ELEVATION VIEW

(26.0 cu. yds.)
(3 REQUIRED; NOT TO SCALE)

| Rebar Schedule per Pier |  |
| :---: | :---: |
| Pier | $(16) ~ \# 10$ vertical rebar w/ \#4 rebar ties, two <br> (2) within top 5" of pier then 12" C/C |
| Anchor Bolts per Leg |  |
| (6) $1.5^{\prime \prime}$ dia. $\times 78^{\prime \prime}$ F1554-105 on a 13.25" B.C. w/ 9.5" |  |
| max. projection above concrete. |  |

## Customer: AT\&T <br> Site: Breeding FN, KY

235 ft . Model S3TL Series HD1 Self Supporting Tower


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 POD project no. 18-28287, dated: 10/8/19.
6) See the geotechnical report for compaction requirements, if specified.
7) The foundation is based on the following factored loads:

Factored download (kips) $=84.91$
Factored overturn $(\mathrm{kip}-\mathrm{ft})=10,422.08$
Factored shear (kips) $=69.29$
8) 4.25 ' of soil cover is required over the entire area of the foundation slab.
9) The bottom anchor bolt template shall be positioned as closely as possible to the bottom of the anchor bolts.

| Rebar Schedule per Mat and per Pier |  |  |
| :---: | :---: | :---: |
| Pier | $(16) ~ \# 9$ vertical rebar w/ hooks at bottom w/ <br> $\# 4$ rebar ties, two (2) within top 5" of pier then <br> $12 " ~ C / C ~$ |  |
| Mat | (54) \#10 horizontal rebar evenly spaced each <br> way top and bottom. (216 total) |  |
| Anchor Bolts per Leg |  |  |
| (6) 1.5" dia. $\times 78$ " F1554-105 on a 13.25" B.C. w/ $9.5^{\prime \prime}$ |  |  |
| max. projection above concrete. |  |  |

Maximum


## Maximum



## TOTAL FOUNDATION LOADS (kip, ft-kip)



INDIVIDUAL FOOTING LOADS (kip)



Processed under license at:
Sabre Towers and Poles on: 18 oct 2019 at: 10:07:36

MAST GEOMETRY ( ft )

| PANEL TYPE | $\begin{gathered} \text { NO.OF } \\ \text { LEGS } \end{gathered}$ | ELEV.AT BOTTOM | ELEV.AT TOP | F.W..AT BOTTOM | $\begin{array}{r} \text { F.W. . AT } \\ \text { TOP } \end{array}$ | TYPICAL PANEL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | HEIGHT |
| X | 3 | 230.00 | 235.00 | 5.00 | 5.00 | 5.00 |
| X | 3 | 220.00 | 230.00 | 5.00 | 5.00 | 5.00 |
| X | 3 | 215.00 | 220.00 | 5.00 | 5.00 | 5.00 |
| X | 3 | 200.00 | 215.00 | 5.00 | 5.00 | 5.00 |
| X | 3 | 195.00 | 200.00 | 5.50 | 5.00 | 5.00 |
| X | 3 | 180.00 | 195.00 | 7.00 | 5.50 | 5.00 |
| x | 3 | 160.00 | 180.00 | 9.00 | 7.00 | 5.00 |
| x | 3 | 140.00 | 160.00 | 11.00 | 9.00 | 6.67 |
| x | 3 | 120.00 | 140.00 | 13.00 | 11.00 | 6.67 |
| x | 3 | 100.00 | 120.00 | 15.00 | 13.00 | 6.67 |
| x | 3 | 80.00 | 100.00 | 17.00 | 15.00 | 10.00 |
| $x$ | 3 | 60.00 | 80.00 | 19.00 | 17.00 | 10.00 |
| x | 3 | 40.00 | 60.00 | 21.00 | 19.00 | 10.00 |
| x | 3 | 20.00 | 40.00 | 23.00 | 21.00 | 10.00 |
| X | 3 | 0.00 | 20.00 | 25.00 | 23.00 | 10.00 |

MEMBER PROPERTIES

| MEMBER <br> TYPE | BOTTOM <br> ELEV <br> ft | TOP <br> ELEV <br> ft | X-SECTN <br> AREA <br> in.sq | RADIUS <br> OF <br> GYRAT <br> in | ELASTIC <br> MODULUS <br> ksi | THERMAL <br> EXPANSN <br> $/ \mathrm{deg}$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| LE | 220.00 | 235.00 | 1.075 | 0.787 | 29000.0 .0000117 |  |
| LE | 200.00 | 220.00 | 3.016 | 0.787 | 29000.0 .0000117 |  |
| LE | 160.00 | 200.00 | 6.111 | 0.787 | 29000.0 .0000117 |  |
| LE | 140.00 | 160000 | 7.952 | 0.787 | 29000.0 .0000117 |  |
| LE | 100.00 | 140.00 | 8.399 | 0.787 | 29000.0 .0000117 |  |
| LE | 0.00 | 10000 | 12.763 | 0.787 | 29000.00000117 |  |
| DI | 220.00 | 235.00 | 0.484 | 0.626 | 29000.0 .0000117 |  |
| DI | 200.00 | 220.00 | 0.938 | 0.626 | 29000.0 .0000117 |  |
| DI | 160.00 | 200.00 | 0.715 | 0.626 | 29000.0 .0000117 |  |
| DI | 120.00 | 160.00 | 0.902 | 0.626 | 29000.0 .0000117 |  |
| DI | 100.00 | 120.00 | 1.090 | 0.626 | 29000.0 .0000117 |  |
| DI | 80.00 | 100.00 | 1.438 | 0.626 | 29000.0 .0000117 |  |
| DI | 40.00 | 80.00 | 1.688 | 0.626 | 29000.0 .0000117 |  |
| DI | 0.00 | 40.00 | 1.938 | 0.626 | 29000.0 .0000117 |  |
| HO | 230.00 | 235.00 | 0.484 | 0.626 | 29000.0 .0000117 |  |
| HO | 215.00 | 220.00 | 0.938 | 0.626 | 29000.0 .0000117 |  |
| HO | 195.00 | 200.00 | 0.715 | 0.626 | 29000.0 .0000117 |  |

FACTORED MEMBER RESISTANCES

| BOTTOM | TOP | LEGS |  | DIAGONALS |  | HORIZONTALS |  | INT | BRACING |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ELEV | ELEV | COMP | TENS | COMP | TENS | COMP | TENS | COMP | TENS |
| $f \mathrm{t}$ | ft | kip | kip | kip | kip | kip | kip | kip | kip |
| 230.0 | 235.0 | 31.48 | 48.15 | 7.16 | 7.16 | 5.82 | 5.82 | 0.00 | 0.00 |
| 220.0 | 230.0 | 31.48 | 48.15 | 7.16 | 7.16 | 0.00 | 0.00 | 0.00 | 0.00 |
| 215.0 | 220.0 | 110.98 | 135.90 | 14.32 | 14.32 | 10.95 | 10.95 | 0.00 | 0.00 |
| 200.0 | 215.0 | 110.98 | 135.90 | 14.32 | 14.32 | 0.00 | 0.00 | 0.00 | 0.00 |
| 195.0 | 200.0 | 254.38 | 274.95 | 10.74 | 10.74 | 8.46 | 8.46 | 0.00 | 0.00 |
| 180.0 | 195.0 | 254.38 | 274.95 | 10.74 | 10.74 | 0.00 | 0.00 | 0.00 | 0.00 |
| 160.0 | 180.0 | 254.38 | 274.95 | 8.19 | 8.19 | 0.00 | 0.00 | 0.00 | 0.00 |
| 140.0 | 160.0 | 309.64 | 357.75 | 9.84 | 9.84 | 0.00 | 0.00 | 0.00 | 0.00 |
| 120.0 | 140.0 | 358.08 | 378.00 | 7.46 | 7.46 | 0.00 | 0.00 | 0.00 | 0.00 |
| 100.0 | 120.0 | 358.08 | 378.00 | 10.34 | 10.34 | 0.00 | 0.00 | 0.00 | 0.00 |
| 80.0 | 100.0 | 507.33 | 457.90 | 9.19 | 9.19 | 0.00 | 0.00 | 0.00 | 0.00 |
| 60.0 | 80.0 | 507.33 | 457.90 | 12.53 | 12.53 | 0.00 | 0.00 | 0.00 | 0.00 |
| 40.0 | 60.0 | 507.33 | 457.90 | 10.73 | 10.73 | 0.00 | 0.00 | 0.00 | 0.00 |
| 20.0 | 40.0 | 507.33 | 457.90 | 13.43 | 13.43 | 0.00 | 0.00 | 0.00 | 0.00 |

0.0
$20.0-50733 \quad 576.00$
14.31
445653
0.00
0.00
0.00
0.00

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

LOADING CONDITION A
105 mph U7timate wind with no ice. Wind Azimuth: Oo


MAST LOADING

| $\begin{aligned} & \text { LOAD } \\ & \text { TYPE } \end{aligned}$ | $\begin{array}{r} \text { ELEV } \\ \mathrm{ft} \end{array}$ | APPLY..LOAD. .AT |  | $\underset{\text { AZI }}{\text { LOAD }}$ | .......FORCES...... .......MOMENTS...... |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | RADIUS | AZI |  | HORIZ | DOWN | VERTICAL | TORSNAL |
|  |  |  |  |  | kip | kip | ft-kip | ft-kip |
| c | 240.0 | 0.00 | 0.0 | 0.0 | 0.23 | 0.12 | 0.00 | 0.00 |
| c | 230.0 | 0.00 | 0.0 | 0.0 | 8.14 | 5.40 | 0.00 | 0.00 |
| C | 218.0 | 0.00 | 0.0 | 0.0 | 6.02 | 3.60 | 0.00 | 0.00 |
| c | 206.0 | 0.00 | 0.0 | 0.0 | 5.95 | 3.60 | 0.00 | 0.00 |
| c | 194.0 | 0.00 | 0.0 | 0.0 | 5.88 | 3.60 | 0.00 | 0.00 |
| D | 235.0 | 0.00 | 180.0 | 0.0 | 0.05 | 0.03 | 0.00 | 0.00 |
| D | 230.0 | 0.00 | 180.0 | 0.0 | 0.05 | 0.03 | 0.00 | 0.00 |
| D | 230.0 | 0.00 | 42.0 | 0.0 | 0.11 | 0.04 | 0.04 | 0.08 |


|  |  | 445653 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D | 220.0 | 0.00 | 42.0 | 0.0 | 0.11 | 0.04 | 0.04 | 0.08 |
| D | 220.0 | 0.00 | 65.8 | 0.0 | 0.13 | 0.09 | 0.04 | 0.09 |
| D | 205.0 | 0.00 | 81.3 | 0.0 | 0.14 | 0.10 | 0.04 | 0.09 |
| D | 205.0 | 0.00 | 102.0 | 0.0 | 0.16 | 0.12 | 0.03 | 0.06 |
| D | 200.0 | 0.00 | 102.0 | 0.0 | 0.16 | 0.12 | 0.03 | 0.06 |
| D | 200.0 | 0.00 | 100.2 | 0.0 | 0.17 | 0.15 | 0.04 | 0.06 |
| D | 195.0 | 0.00 | 100.2 | 0.0 | 0.17 | 0.15 | 0.04 | 0.06 |
| D | 195.0 | 0.00 | 101.7 | 0.0 | 0.17 | 0.15 | 0.00 | 0.04 |
| D | 180.0 | 0.00 | 180.0 | 0.0 | 0.18 | 0.16 | 0.00 | 0.04 |
| D | 180.0 | 0.00 | 180.0 | 0.0 | 0.17 | 0.16 | 0.00 | 0.04 |
| D | 160.0 | 0.00 | 180.0 | 0.0 | 0.18 | 0.16 | 0.00 | 0.04 |
| D | 160.0 | 0.00 | 180.0 | 0.0 | 0.18 | 0.18 | 0.00 | 0.04 |
| D | 140.0 | 0.00 | 180.0 | 0.0 | 0.19 | 0.18 | 0.00 | 0.04 |
| D | 140.0 | 0.00 | 180.0 | 0.0 | 0.19 | 0.19 | 0.00 | 0.04 |
| D | 120.0 | 0.00 | 180.0 | 0.0 | 0.19 | 0.19 | 0.00 | 0.04 |
| D | 120.0 | 0.00 | 180.0 | 0.0 | 0.20 | 0.20 | 0.00 | 0.04 |
| D | 100.0 | 0.00 | 180.0 | 0.0 | 0.20 | 0.21 | 0.00 | 0.04 |
| D | 100.0 | 0.00 | 180.0 | 0.0 | 0.18 | 0.25 | 0.00 | 0.04 |
| D | 60.0 | 0.00 | 180.0 | 0.0 | 0.19 | 0.26 | 0.00 | 0.04 |
| D | 60.0 | 0.00 | 180.0 | 0.0 | 0.18 | 0.26 | 0.00 | 0.03 |
| D | 20.0 | 0.00 | 180.0 | 0.0 | 0.18 | 0.28 | 0.00 | 0.03 |
| D | 20.0 | 0.00 | 180.0 | 0.0 | 0.16 | 0.29 | 0.00 | 0.03 |
| D | 0.0 | 0.00 | 180.0 | 0.0 | 0.16 | 0.29 | 0.00 | 0.03 |

30 mph wind with 1.5 ice. Wind Azimuth: 00

MAST LOADING

| $\begin{aligned} & \text { LOAD } \\ & \text { TYPE } \end{aligned}$ | $\begin{array}{r} \text { ELEV } \\ \mathrm{ft} \end{array}$ | APPLY..LOAD. .AT |  | $\begin{array}{r} \text { LOAD } \\ \text { AZI } \end{array}$ | .. . FORCES...... ...... MOMENTS...... |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | HORIZ | DOWN | VERTICAL | TORSNAL |
| C | 240.0 | 0.00 | 0.0 |  | 0.0 | 0.05 | 0.30 | 0.00 | 0.00 |
| C | 230.0 | 0.00 | 0.0 | 0.0 | 1.21 | 18.13 | 0.00 | 0.00 |
| C | 218.0 | 0.00 | 0.0 | 0.0 | 1.45 | 12.05 | 0.00 | 0.00 |
| C | 206.0 | 0.00 | 0.0 | 0.0 | 1.43 | 12.01 | 0.00 | 0.00 |
| C | 194.0 | 0.00 | 0.0 | 0.0 | 1.41 | 11.96 | 0.00 | 0.00 |
| D | 235.0 | 0.00 | 180.0 | 0.0 | 0.01 | 0.18 | 0.00 | 0.00 |
| D | 230.0 | 0.00 | 180.0 | 0.0 | 0.01 | 0.18 | 0.00 | 0.00 |
| D | 230.0 | 0.00 | 42.0 | 0.0 | 0.01 | 0.25 | 0.22 | 0.01 |
| D | 220.0 | 0.00 | 42.0 | 0.0 | 0.01 | 0.25 | 0.22 | 0.01 |
| D | 220.0 | 0.00 | 68.7 | 0.0 | 0.02 | 0.39 | 0.20 | 0.01 |
| D | 215.0 | 0.00 | 68.7 | 0.0 | 0.02 | 0.39 | 0.20 | 0.01 |
| D | 215.0 | 0.00 | 85.9 | 0.0 | 0.02 | 0.39 | 0.22 | 0.01 |
| D | 210.0 | 0.00 | 85.9 | 0.0 | 0.02 | 0.39 | 0.22 | 0.01 |
| D | 210.0 | 0.00 | 88.0 | 0.0 | 0.02 | 0.41 | 0.20 | 0.01 |
| D | 205.0 | 0.00 | 88.0 | 0.0 | 0.02 | 0.41 | 0.20 | 0.01 |
| D | 205.0 | 0.00 | 102.0 | 0.0 | 0.02 | 0.48 | 0.13 | 0.00 |
| D | 200.0 | 0.00 | 102.0 | 0.0 | 0.02 | 0.48 | 0.13 | 0.00 |
| D | 200.0 | 0.00 | 100.2 | 0.0 | 0.02 | 0.56 | 0.14 | 0.00 |
| D | 195.0 | 0.00 | 100.2 | 0.0 | 0.02 | 0.56 | 0.14 | 0.00 |
| D | 195.0 | 0.00 | 101.7 | 0.0 | 0.02 | 0.58 | 0.03 | 0.00 |
| D | 190.0 | 0.00 | 101.7 | 0.0 | 0.02 | 0.58 | 0.03 | 0.00 |
| D | 190.0 | 0.00 | 180.0 | 0.0 | 0.02 | 0.60 | 0.00 | 0.00 |
| D | 160.0 | 0.00 | 180.0 | 0.0 | 0.02 | 0.62 | 0.00 | 0.00 |
| D | 160.0 | 0.00 | 207.9 | 0.0 | 0.02 | 0.64 | 0.00 | 0.00 |
| D | 140.0 | 0.00 | 180.0 | 0.0 | 0.02 | 0.66 | 0.00 | 0.00 |
| D | 140.0 | 0.00 | 201.4 | 0.0 | 0.02 | 0.68 | 0.00 | 0.00 |
| D | 120.0 | 0.00 | 201.8 | 0.0 | 0.02 | 0.70 | 0.00 | 0.00 |
| D | 120.0 | 0.00 | 201.2 | 0.0 | 0.02 | 0.73 | 0.00 | 0.00 |
| D | 100.0 | 0.00 | 195.1 | 0.0 | 0.02 | 0.74 | 0.00 | 0.00 |
| D | 100.0 | 0.00 | 191.1 | 0.0 | 0.02 | 0.75 | 0.00 | 0.00 |
| D | 60.0 | 0.00 | 194.6 | 0.0 | 0.02 | 0.80 | 0.00 | 0.00 |
| D | 60.0 | 0.00 | 199.8 | 0.0 | 0.02 | 0.79 | 0.00 | 0.00 |
| D | 20.0 | 0.00 | 179.9 | 0.0 | 0.02 | 0.83 | 0.00 | 0.00 |
| D | 20.0 | 0.00 | 180.0 | 0.0 | 0.02 | 0.66 | 0.00 | 0.00 |
| D | 10.0 | 0.00 | 180.0 | 0.0 | 0.02 | 0.66 | 0.00 | 0.00 |
| D | 10.0 | 0.00 | 188.7 | 0.0 | 0.02 | 0.75 | 0.00 | 0.00 |
| D | 0.0 | 0.00 | 188.7 | 0.0 | 0.02 | 0.75 | 0.00 | 0.00 |

MAXIMUM TENSION IN MAST MEMBERS (kip)

445653

| ELEV LEGS DIAG HORIZ BRACE |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 235.0 |  |  | G | 0.98 A |  | 0.00 A |
|  | 0.68 S | 1.57 |  | 0.16 G |  |  |
| 230.0 | 3.58 M | 4.21 |  |  |  | 0.00 A |
| 225.0 |  |  |  | 0.22 I |  | 0.00 A |
| 220.0 | 14.62 M | 4.43 | N |  |  |  |
|  | 26.10 M | 6.40 | M | 0.44 Y |  | 0.00 A |
| 215.0 | 44.11 M | 7.99 | 8 | 0.29 A |  | 0.00 A |
| 210.0 |  |  |  | 0.05 s |  | 0.00 A |
| 205.0 | 63.51 M | 8.68 | N |  |  |  |
|  | 86.76 M | 11.32 | B |  |  | 0.00 A |
| 200.0 | 108.52 M | 7.22 | M | 0.25 |  | 0.00 A |
| 195.0 | 126.30 N |  |  | 0.22 | AA | 0.00 A |
| 190.0 | 126.30 M | 8.37 | B | 0.08 |  | 0.00 A |
|  | 143.99 M | 8.13 | N |  |  |  |
| 185.0 | 161.21 M | 7.73 |  | 0.19 | A | 0.00 A |
| 180.0 | 161.21 |  | B | 0.09 | A | 0.00 A |
| 1750 | 176.02 M | 7.26 | N |  |  |  |
|  | 190.07 M | 7.03 | B |  | A | 0.00 A |
| 170.0 | 202.57 M | 6.74 | N |  | A | 0.00 A |
| 165.0 |  |  |  | $\begin{aligned} & 0.13 \mathrm{~A} \\ & 0.13 \mathrm{~A} \end{aligned}$ |  | 0.00 A |
| 160.0 | 214.57 M | 6.62 | B |  |  | 0.00 A |
|  | 227.11 M | 6.96 | N | 0.12 A |  |  |
| 153.3 | 240.94 M | 6.82 | N | 0.14 |  | 0.00 A |
| 146.7 |  |  |  | 0.11 | A | 0.00 A |
| 140.0 | 253.55 M | 6.68 | N |  |  |  |
|  | 265.72 M | 6.65 | N | $\begin{aligned} & 0.12 \\ & 0.09 \end{aligned}$ |  | 0.00 A |
| 133.3 | 277.07 M | 6.60 | T | $0.10$ |  | 0.00 A |
| 126.7 |  |  |  |  |  | 0.00 A |
| 120.0 | 288.12 M | 6.64 | N | $0.08$ |  | 0.00 A |
| 113.3 | 298.61 M | 6.66 | T | $\begin{aligned} & 0.08 \\ & 0.12 \end{aligned}$ | A |  |
|  | 308.87 M | 6.75 | N | $\begin{aligned} & 0.12 \\ & 0.07 \end{aligned}$ | A | 0.00 A |
| 106.7 | 318.79 M |  |  |  |  | 0.00 A |
| 100.0 | 318.79 M | 6.83 | N | $0.07$ |  | 0.00 A |
| 90.0 | 330.72 M | 7.58 | N | $\begin{aligned} & 0.11 \mathrm{~A} \\ & 0.10 \mathrm{~A} \end{aligned}$ |  |  |
|  | 344.57 M | 7.64 | T | $\begin{aligned} & 0.10 \mathrm{~A} \\ & 0.09 \mathrm{~A} \end{aligned}$ |  | 0.00 A |
| 80.0 | 357.96 M | 7.75 |  |  |  | 0.00 A |
| 70.0 | 357.96 M |  | N | $\begin{aligned} & 0.09 \\ & 0.09 \end{aligned}$ |  | 0.00 A |
| 60.0 | 370.94 M | 7.87 | N | $\begin{aligned} & 0.09 \\ & 0.08 \end{aligned}$ |  |  |
| 50.0 | 383.60 M | 8.02 | N | $\begin{aligned} & 0.08 \\ & 0.08 \end{aligned}$ |  | 0.00 A |
| 50.0 | 395.92 M | 8.17 | T |  |  | 0.00 A |
| 40.0 | 407.97 M | 8.34 | N | 0.07 A |  | 0.00 A |
| 30.0 |  |  |  | 0.07 |  | 0.00 A |
| 20.0 | 419.74 M | 8.52 | N |  |  | 0.00 A |
|  | 431.30 M | 8.68 | N | 0.01 A |  |  |
| 10.0 | 442.53 M | 8.81 | N | 0.06 A0.00 A |  | 0.00 A0.00 A |
| 0.0 |  | --- |  |  |  |  |  |



FORCE/RESISTANCE RATIO IN LEGS


| $\begin{aligned} & \text { MAST } \\ & \text { ELEV } \\ & \mathrm{ft} \end{aligned}$ | $\begin{aligned} & \text { MAX } \\ & \text { COMP } \end{aligned}$ | $\begin{aligned} & \text { COMP } \\ & \text { RESIST } \end{aligned}$ | FORCE/ RESIST RATIO | MAX | $\begin{aligned} & \text { TENS } \\ & \text { RESIST } \end{aligned}$ | 445653 RESIST RATIO |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 235.00 |  |  |  |  |  |  |
|  | 0.85 | 31.48 | 0.03 | 0.68 | 48.15 | 0.01 |
|  | 8.10 | 31.48 | 0.26 | 3.58 | 48.15 | 0.07 |
|  | 19.35 | 31.48 | 0.61 | 14.62 | 48.15 | 0.30 |
| $215.00$ | 32.61 | 110.98 | 0.29 | 26.10 | 135.90 | 0.19 |
|  | 53.01 | 110.98 | 0.48 | 44.11 | 135.90 | 0.32 |
| 210.00 | 73.12 | 110.98 | 0.66 | 63.51 | 135.90 | 0.47 |
| 200.00 | 99.55 | 110.98 | 0.90 | 86.76 | 135.90 | 0.64 |
|  | 121.59 | 254.38 | 0.48 | 108.52 | 274.95 | 0.39 |
| $\begin{aligned} & 195.00 \\ & 190.00 \end{aligned}$ | 142.99 | 254.38 | 0.56 | 126.30 | 274.95 | 0.46 |
|  | 161.69 | 254.38 | 0.64 | 143.99 | 274.95 | 0.52 |
| $\begin{aligned} & 185.00 \\ & 180.00 \end{aligned}$ | 180.00 | 254.38 | 0.71 | 161.21 | 274.95 | 0.59 |
|  | 195.41 | 254.38 | 0.77 | 176.02 | 274.95 | 0.64 |
| 175.00 | 210.45 | 254.38 | 0.83 | 190.07 | 274.95 | 0.69 |
| $\begin{aligned} & 170.00 \\ & 165.00 \end{aligned}$ | 223.65 | 254.38 | 0.88 | 202.57 | 274.95 | 0.74 |
|  | 236.61 | 254.38 | 0.93 | 214.57 | 274.95 | 0.78 |
| $\begin{aligned} & 160.00 \\ & 153.33 \end{aligned}$ | 250.07 | 309.64 | 0.81 | 227.11 | 357.75 | 0.63 |
|  | 265.25 | 309.64 | 0.86 | 240.94 | 357.75 | 0.67 |
| 146.67 | 279.05 | 309.64 | 0.90 | 253.55 | 357.75 | 0.71 |
| $\begin{aligned} & 140.00 \\ & 133.33 \end{aligned}$ | 292.58 | 358.08 | 0.82 | 265.72 | 378.00 | 0.70 |
|  | 305.20 | 358.08 | 0.85 | 277.07 | 378.00 | 0.73 |
| 126.67 | 317.64 | 358.08 | 0.89 | 288.12 | 378.00 | 0.76 |
| . 00 | 329.47 | 358.08 | 0.92 | 298.61 | 378.00 | 0.79 |
| 113.33 | 341.20 | 358.08 | 0.95 | 308.87 | 378.00 | 0.82 |
| 106.67 | 352.54 | 358.08 | 0.98 | 318.79 | 378.00 | 0.84 |
| 100.00 | 366.45 | 507.33 | 0.72 | 330.72 | 457.90 | 0.72 |
| 0.00 | 382.85 | 507.33 | 0.75 | 344.57 | 457.90 | 0.75 |
| 80.00 | 398.87 | 507.33 | 0.79 | 357.96 | 457.90 | 0.78 |
| 70.00 | 414.50 | 507.33 | 0.82 | 370.94 | 457.90 | 0.81 |
| 60.00 | 429.89 | 507.33 | 0.85 | 383.60 | 457.90 | 0.84 |
| 50.00 | 444.99 | 507.33 | 0.88 | 395.92 | 457.90 | 0.86 |
| 40.00 | 459.89 | 507.33 | 0.91 | 407.97 | 457.90 | 0.89 |
| 30.00 | 474.56 | 507.33 | 0.94 | 419.74 | 457.90 | 0.92 |
| 20.00 | 489.10 | 507.33 | 0.96 | 431.30 | 576.00 | 0.75 |
| 10.00 | 503.31 | 507.33 | 0.99 | 442.53 | 576.00 | 0.77 |

FORCE/RESISTANCE RATIO IN DIAGONALS



|  |  |  |  |  |  |
| ---: | :---: | :---: | :---: | :---: | :---: |
| ft | COMP | RESIST | RATIO | TENS | RESIST |
| RATIO |  |  |  |  |  |

MAXIMUM INDIVIDUAL FOUNDATION LOADS: (kip)


|  | LOAD | ONENTS |  | TOTAL |
| :---: | :---: | :---: | :---: | :---: |
| NORTH | EAST | DOWN | UPLIFT | SHEAR |
| 43.32 G | 37.21 K | 509.68 | -447.43 M | 43.32 |

MAXIMUM TOTAL LOADS ON FOUNDATION : (kip \& kip-ft)

| NORTH | RIZON | ----- | DOWN | ---------OVERTURNING- |  |  | TORSION |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | EAST | TOTAL <br> 0.0 |  | NORTH | EAST | $\begin{array}{r} \text { TOTAL } \\ \text { a } 0.0 \end{array}$ |  |
| 69.3 | -66.4 | 69.3 | 209.2 | 10422.1 | 10031.2 | 10422.1 | -24.4 |
| G | P | G | d | G | ] | G | R |

Latticed Tower Analysis (Unguyed) Processed under license at:

Sabre Towers and Poles on: 18 oct 2019 at: 10:08:16





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

60 mph wind with no ice. wind Azimuth: 0*
MAST LOADING

| LOAD | ELEV | APPLY. .LO | AD. . AT | LOAD | FOR |  | .......MO | TS. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TYPE | $f t$ | RADIUS | AZI | AZI | HORIZ | DOWN | VERTICAL | TORSNAL |
| c | 240.0 | 0.00 | 0.0 | 0.0 | 0.08 | 0.13 | 0.00 | 0.00 |
| c | 230.0 | 0.00 | 0.0 | 0.0 | 2.79 | 6.00 | 0.00 | 0.00 |
| c | 218.0 | 0.00 | 0.0 | 0.0 | 2.07 | 4.00 | 0.00 | 0.00 |
| c | 206.0 | 0.00 | 0.0 | 0.0 | 2.04 | 4.00 | 0.00 | 0.00 |
| c | 194.0 | 0.00 | 0.0 | 0.0 | 2.02 | 4.00 | 0.00 | 0.00 |
| D | 235.0 | 0.00 | 180.0 | 0.0 | 0.02 | 0.03 | 0.00 | 0.00 |
| D | 230.0 | 0.00 | 180.0 | 0.0 | 0.02 | 0.03 | 0.00 | 0.00 |
| D | 230.0 | 0.00 | 42.0 | 0.0 | 0.04 | 0.05 | 0.05 | 0.03 |
| D | 220.0 | 0.00 | 42.0 | 0.0 | 0.04 | 0.05 | 0.05 | 0.03 |
| D | 220.0 | 0.00 | 65.8 | 0.0 | 0.05 | 0.11 | 0.05 | 0.03 |
| D | 205.0 | 0.00 | 81.3 | 0.0 | 0.05 | 0.11 | 0.05 | 0.03 |
| D | 205.0 | 0.00 | 102.0 | 0.0 | 0.05 | 0.13 | 0.04 | 0.02 |
| D | 200.0 | 0.00 | 102.0 | 0.0 | 0.05 | 0.13 | 0.04 | 0.02 |
| D | 200.0 | 0.00 | 100.2 | 0.0 | 0.06 | 0.16 | 0.04 | 0.02 |
| D | 195.0 | 0.00 | 100.2 | 0.0 | 0.06 | 0.16 | 0.04 | 0.02 |
| D | 195.0 | 0.00 | 101.7 | 0.0 | 0.06 | 0.17 | 0.01 | 0.02 |
| D | 180.0 | 0.00 | 180.0 | 0.0 | 0.06 | 0.18 | 0.00 | 0.01 |
| D | 180.0 | 0.00 | 180.0 | 0.0 | 0.06 | 0.18 | 0.00 | 0.01 |
| D | 160.0 | 0.00 | 180.0 | 0.0 | 0.06 | 0.18 | 0.00 | 0.01 |
| D | 160.0 | 0.00 | 180.0 | 0.0 | 0.06 | 0.20 | 0.00 | 0.01 |
| D | 140.0 | 0.00 | 180.0 | 0.0 | 0.06 | 0.20 | 0.00 | 0.01 |
| D | 140.0 | 0.00 | 180.0 | 0.0 | 0.07 | 0.21 | 0.00 | 0.01 |
| D | 120.0 | 0.00 | 180.0 | 0.0 | 0.07 | 0.21 | 0.00 | 0.01 |
| D | 120.0 | 0.00 | 180.0 | 0.0 | 0.07 | 0.22 | 0.00 | 0.01 |
| D | 100.0 | 0.00 | 180.0 | 0.0 | 0.07 | 0.23 | 0.00 | 0.01 |
| D | 100.0 | 0.00 | 180.0 | 0.0 | 0.06 | 0.27 | 0.00 | 0.01 |
| D | 60.0 | 0.00 | 180.0 | 0.0 | 0.07 | 0.29 | 0.00 | 0.01 |
| D | 60.0 | 0.00 | 180.0 | 0.0 | 0.06 | 0.29 | 0.00 | 0.01 |
| D | 20.0 | 0.00 | 180.0 | 0.0 | 0.06 | 0.32 | 0.00 | 0.01 |
| D | 20.0 | 0.00 | 180.0 | 0.0 | 0.06 | 0.32 | 0.00 | 0.01 |


|  | 0.0 | 0.00 | 180.0 | 0.0 | 0.06 | 445653 | 0.32 | 0.00 |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |

MAXIMUM MAST DISPLACEMENTS:

| $\begin{array}{r} \text { ELEV } \\ \mathrm{ft} \end{array}$ | NORTH | CTIONS EAST | $\begin{array}{r} (f t)----- \\ \text { DOWN } \end{array}$ |  | --TILTS NORTH | $\begin{array}{r} \text { (DEG) }--- \\ \hline \end{array}$ | $\begin{gathered} \text { TWIST } \\ \text { DEG } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 235.0 | 1.230 g | -1.186 D | D 0.015 | G | 0.688 G | -0.663 D | 0.045 L |
| 230.0 | 1.171 G | -1.129 D | D 0.015 | G | 0.689 G | -0.664 D | 0.045 L |
| 225.0 | 1.109 G | -1.069 D | D 0.014 | G | 0.682 G | -0.658 D | 0.044 L |
| 220.0 | 1.050 G | -1.012 D | D 0.014 | G | 0.664 G | -0.640 D | 0.043 L |
| 215.0 | 0.991 G | -0.956 D | D 0.013 | G | 0.653 G | -0.629 D | 0.042 L |
| 210.0 | 0.935 G | -0.901 D | D 0.013 | G | 0.634 G | -0.611 D | 0.041 L |
| 205.0 | 0.879 G | -0.848 D | D 0.012 | G | 0.607 G | -0.585 D | 0.040 L |
| 200.0 | 0.827 G | -0.797 D | D 0.012 | G | 0.571 G | -0.550 D | 0.038 L |
| 195.0 | 0.776 G | -0.749 D | D 0.011 | G | 0.551 G | -0.531 D | -0.035 F |
| 190.0 | 0.728 G | -0.702 D | D 0.011 | G | 0.530 G | -0.511 D | -0.033 |
| 185.0 | 0.682 G | -0.657 D | D 0.010 | G | 0.508 G | -0.489 D | -0.031 F |
| 180.0 | 0.637 G | -0.615 D | D 0.010 | G | 0.485 G | -0.467 D | -0.029 F |
| 175.0 | 0.595 G | -0.574 D | D 0.010 | G | 0.461 G | -0.445 D | -0.027 F |
| 170.0 | 0.555 G | -0.535 D | D 0.009 | G | 0.437 G | -0.422 D | -0.026 F |
| 165.0 | 0.517 G | -0.498 D | D 0.009 | G | 0.414 G | -0.399 D | -0.024 F |
| 160.0 | 0.481 G | -0.464 D | D 0.009 | G | 0.390 G | -0.376 D | -0.022 F |
| 153.3 | 0.436 G | -0.420 D | D 0.008 | G | 0.365 G | -0.352 D | -0.021 F |
| 146.7 | 0.394 G | -0.380 D | D 0.008 | G | 0.341 G | -0.329 D | -0.019 F |
| 140.0 | 0.354 G | -0.342 D | D 0.007 | G | 0.317 G | -0.306 D | -0.018 F |
| 133.3 | 0.318 G | -0.306 D | D 0.007 | G | 0.295 G | -0.285 D | -0.016 F |
| 126.7 | 0.283 G | -0.273 D | D 0.007 | G | 0.273 G | -0.264 D | -0.015 F |
| 120.0 | 0.252 G | -0.243 D | D 0.006 | G | 0.252 G | -0.243 D | -0.013 F |
| 113.3 | 0.223 G | -0.215 D | D 0.006 | G | 0.230 G | -0.222 D | 0.012 L |
| 106.7 | 0.196 G | -0.189 D | D 0.005 | G | 0.209 G | -0.202 D | 0.011 L |
| 100.0 | 0.172 G | -0.166 D | D 0.005 | G | 0.188 G | -0.182 D | 0.010 L |
| 90.0 | 0.140 G | -0.135 D | D 0.005 | G | 0.168 G | -0.162 D | 0.009 L |
| 80.0 | 0.111 G | -0.107 D | D 0.004 | G | 0.148 G | -0.143 D | 0.007 L |
| 70.0 | 0.086 G | -0.083 D | D 0.004 | G | 0.129 G | -0.124 D | 0.006 L |
| 60.0 | 0.064 G | -0.062 D | D 0.003 | G | 0.109 G | -0.106 D | -0.005 F |
| 50.0 | 0.046 G | -0.044 D | D 0.003 | G | 0.091 G | -0.087 D | -0.004 F |
| 40.0 | 0.030 G | -0.029 D | D 0.002 | G | 0.072 G | -0.069 D | 0.003 L |
| 30.0 | 0.018 G | -0.018 D | D 0.002 | E | 0.054 G | -0.052 D | 0.003 L |
| 20.0 | 0.010 G | -0.009 D | D 0.001 | D | 0.036 G | -0.034 D | 0.002 L |
| 10.0 | 0.003 G | -0.003 D | D 0.001 | E | 0.018 G | -0.017 D | 0.001 L |
| 0.0 | 0.000 A | 0.000 A | A 0.000 | A | 0.000 A | 0.000 A | 0.000 A |

MAXIMUM TENSION IN MAST MEMBERS (kip)

| $\begin{array}{r} \text { ELEV } \\ f t \end{array}$ | LEGS | DIAG |  | HORIZ |  | BRACE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 235.0 |  |  |  | 0.34 | A | 0.00 |
|  | 0.18 G | 0.55 | G |  |  |  |
| 230.0 |  |  |  | 0.06 | G | 0.00 |
| 225.0 | 0.00 A | 1.45 | B | 0.10 | I |  |
|  | 3.57 A | 1.51 | H | 0.10 | 1 | 0.00 |
| 220.0 |  | ---- |  | 0.20 | A | 0.00 |
| 215.0 | 7.01 A | 2.11 | A | 0.13 | A | 0.00 |
|  | 12.51 A | 2.80 | B | 0.13 | A | 0.00 |
| 210.0 |  |  |  | 0.01 | G | 0.00 |
| 205.0 | 19.04 A | 2.95 | H | 0.13 | A | 0.00 |
|  | 26.10 A | 3.90 | B | 0.13 | A | 0.00 |
| 200.0 |  |  |  | 0.02 | I | 0.00 |
| 195.0 | 33.56 A | 2.37 | A | 0.09 | A | 0.00 |
|  | 38.54 A | 2.90 | B | 0.09 | A | 0.00 |
| 190.0 |  |  |  | 0.03 | A | 0.00 |
| 185.0 | 44.32 A | 2.73 | B | 0.08 | A | 0.00 |
|  | 49.93 A | 2.67 | B |  |  |  |
| 180.0 |  |  |  | 0.04 | A | 0.00 |
|  | 54.87 A | 2.46 | B |  |  |  |
| 175.0 | 59.43 A | 2.43 | B | 0.06 | A | 0.00 |
| 170.0 | 59.43 A | 2.43 |  | 0.05 | A | 0.00 |


| 165.0 |  |  | B | 445653 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 0.05 | A | 0.00 | A |
|  | 67.45 A | 2.29 |  |  |  |  |  |
| 160.0 |  |  |  | 0.05 A |  | 0.00 | A |
|  | 71.54 A | 2.37 | B |  | A | 0.00 | A |
| 153.3 | 75.96 A | 2.36 | H | 0.05 A |  |  |  |
| 146.7 |  |  |  | 0.04 | A | 0.00 | A |
|  | 80.03 A | 2.28 | H |  |  |  |  |
| 140.0 | 83.88 A | 230 | H | 0.05 | A | 0.00 | A |
| 133.3 |  |  |  | 0.03 | A | 0.00 | A |
|  | 87.50 A | 2.27 | H |  |  |  |  |
| 126.7 | 90.99 A | 2.30 | B | 0.04 | A | 0.00 | A |
| 120.0 |  |  |  | 0.03 | A | 0.00 | A |
|  | 94.30 A | 2.30 | H |  |  |  |  |
| 113.3 | 97.51 A | 2.34 | B | 0.05 | A | 0.00 | A |
| 106.7 |  |  |  | 0.03 | A | 0.00 | A |
|  | 100.62 A | 2.37 | H | 0.04 |  |  |  |
| 100.0 | 104.29 A | 2.63 | B |  | A | 0.00 | A |
| 90.0 |  | --- |  | 0.04 | A | 0.00 | A |
|  | 108.49 A | 2.65 | H | 0.04 |  |  |  |
| 80.0 | 112.53 A | 2.70 | B |  | A | 0.00 A |  |
| 70.0 |  | 2.75 |  | 0.03 | A | 0.00 A |  |
|  | 116.42 A | 2.75 | H | 0.03 |  |  |  |  |
| 60.0 | 120.19 A | 2.81 | B |  | A | 0.00 A |  |
| 50.0 |  | --- |  | 0.03 | A | 0.00 A |  |
|  | 123.84 A | 2.86 | H |  |  |  |  |  |
| 40.0 | 127.37 A | 2.92 | B | 0.03 | A | 0.00 A |  |
| 30.0 |  |  |  | 0.03 | A | 0.00 A |  |
|  | 130.80 A | 2.98 | H |  |  |  | A |
| 20.0 | 134.14 A | 3.04 | B | 0.00 A | A | 0.00 A |  |
| 10.0 |  |  |  | 0.03 A |  | 0.00 A |  |
|  | 137.36 A | 3.08 | H |  |  |  |  |  |  |

MAXIMUM COMPRESSION IN MAST MEMBERS (kip)


|  |  | 445653 |  |  |
| ---: | :--- | ---: | :--- | :--- |
| 165.0 | -82.13 G | -2.37 B | -0.03 G | 0.00 A |
| 160.0 | -86.80 G | -2.26 B | -0.03 G | 0.00 A |
| 153.3 | -91.61 G | -2.45 B | -0.03 G | 0.00 A |
| 146.7 | -97.14 G | -2.35 H | -0.03 G | 0.00 A |
| 140.0 | -102.14 G | -2.35 H | -0.03 G | 0.00 A |
| 133.3 | -107.10 G | -2.30 H | -0.02 G | 0.00 A |
| 126.7 | -11.72 G | -2.32 B | -0.02 G | 0.00 A |
| 120.0 | -11.32 G | -2.30 H | -0.02 G | 0.00 A |
| 113.3 | -120.70 G | -2.34 B | -0.03 G | 0.00 A |
| 106.7 | -125.07 G | -2.36 H | -0.02 G | 0.00 A |
| 100.0 | -129.30 G | -2.40 B | -0.03 G | 0.00 A |
| 90.0 | -134.56 G | -2.67 H | -0.02 G | 0.00 A |
| 80.0 | -140.81 G | -2.71 G | -0.02 G | 0.00 A |
| 70.0 | -146.96 G | -2.74 H | -0.02 G | 0.00 A |
| 60.0 | -152.98 G | -2.80 G | -0.02 G | 0.00 A |
| 50.0 | -158.94 G | -2.85 H | -0.02 G | 0.00 A |
| 40.0 | -164.81 G | -2.91 G | -0.02 G | 0.00 A |
| 30.0 | -170.63 G | -2.97 H | -0.02 G | 0.00 A |
| 20.0 | -176.38 G | -3.03 G | 0.00 G | 0.00 A |
| 10.0 | -182.11 G | -3.07 H | -0.01 G | 0.00 A |
| 0.0 | -187.72 G | -3.15 G | 0.00 A | 0.00 A |

MAXIMUM INDIVIDUAL FOUNDATION LOADS: (kip)

|  | LOAD- | ONENTS |  | TOTAL |
| :---: | :---: | :---: | :---: | :---: |
| NORTH | EAST | DOWN | UPLIFT | SHEAR |
| 15.87 G | 13.64 K | 190.26 G | -138.74 A | 15.87 |

MAXIMUM TOTAL LOADS ON FOUNDATION : (kip \& kip-ft)


DRILLED STRAIGHT PIER DESIGN BY SABRE TOWERS \& POLES
235' S3TL Series HD1 AT\&T Breeding FN, KY (445653) 10/18/19 REB

| Factored Uplift (kips) Factored Download (kips) Factored Shear (kips) | 447 |
| :---: | :---: |
|  | 510 |
|  | 43 |
| $\begin{gathered} \text { Ultimate Bearing Pressure } \\ \text { Bearing Фs } \\ \text { Bearing Design Strength (ksf) } \end{gathered}$ | 160 |
|  | 0.75 |
|  | 120 |
| Water Table Below Grade (ft) Bolt Circle Diameter (in) | 999 |
|  | 13.25 |
| Top of Concrete to Top |  |
| of Bottom Threads (in) | 65.125 |
| Pier Diameter (ft) | 5.5 |
| H. Above Ground (ft) | 0.5 |
| Pier Length Below Ground (ft) | 29 |
|  | 16 |
| Rebar Diameter (in) | 1.27 |
| Rebar Area (in ${ }^{2}$ ) | 20.27 |
| Rebar Spacing (in) | 11.26 |
| Tie Diameter (in) | 0.5 |
| Tie Spacing (in) | 12 |
| $\mathrm{f}^{\prime} \mathrm{c}(\mathrm{ksi})$ | 4.5 |
| fy (ksi) | 60 |
| Unit Wt. of Concrete (kcf) | 0.15 |
| Volume of Concrete (yd ${ }^{3}$ ) | 25.96 |

Minimum Pier Diameter ( ft )
2.44

Minimum Area of Steel (in ${ }^{2}$ )

| Depth at Bottom of Layer (ft) | Ult. Skin Friction (ksf) | Ult. Skin Friction (Uplift) | $\gamma(\mathrm{kcf})$ |
| :---: | :---: | :---: | :---: |
| 2 | 0.00 | 0.00 | 0.11 |
| 13 | 0.50 | 0.50 | 0.11 |
| 20 | 1.20 | 1.20 | 1.50 |
| 29 |  |  | 0.11 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Length to Ignore Download (ft)

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

Download:
$\Phi_{\mathrm{s}}$, Download Friction
$Q_{f}$, Skin Friction (kips)
$Q_{b}$, End Bearing Strength (kips) Download Design Strength (kips)

| 0.75 |
| :---: |
| 473.4 |
| 3801.3 |
| 3206.1 |


| $\mathrm{W}_{\text {s }}$ (kips) | 75.8 |
| :---: | :---: |
| $\mathrm{W}_{\mathrm{c}}$ (kips) | 105.1 |
| Factored Net Download (kips) | 545.2 |

Uplift (skin friction):
$\Phi_{\mathrm{s}}$, Uplift
$\mathrm{Q}_{\mathrm{f}}$, Skin Friction (kips)
$W_{c}$ (kips)
$\mathrm{W}_{\mathrm{w}}$ (kips)
Uplift Design Strength (kips)

| 0.75 |
| :---: |
| 473.4 |
| 105.1 |
| 0.0 |
| 449.7 |

Factored Uplift (kips)
Uplift (cone):
$\mathrm{W}_{\text {s, cone }}$ (kips)
$W_{w, c o n e}$ (kips)
$\mathrm{W}_{\mathrm{c}}$ (kips)
$\mathrm{W}_{\mathrm{w}, \mathrm{cyl}}$ (kips)
Uplift Design Strength (kips)

| 1397.9 |
| :---: |
| 0.0 |
| 105.1 |
| 0.0 |
| 1352.7 |

Factored Uplift (kips)
447.0

Tension:
Design Tensile Strength (kips)


Tu (kips)
447.0

Shear:

293.6
$V_{u}$ (kips)
43.0

Maximum Spacing (in)
293.6

${ }^{* * *} V_{s} \max =4 f_{c}{ }^{1 / 2} b_{w} d(k i p s)$
935.1

Anchor Bolt Pull-Out:
$\phi P_{c}=\phi \lambda(2 / 3) f_{c}{ }_{c}^{1 / 2}\left(2.8 A_{\text {SLOPE }}+4 A_{\text {FLAT }}\right)$
Rebar Development Length (in)

| 515.2 |
| ---: |
| 39.89 |


| $\mathrm{P}_{\mathrm{u}}$ (kips) |
| :---: | :---: |
| Required Development Length (in)447.0 <br> $N / A$ |


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

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

| 10422.08 |
| :---: |
| 209.20 |
| 69.29 |


| 447.00 |
| :--- |
| 510.00 |
| 43.00 |

Width of Tower (ft)
Ultimate Bearing Pressure Bearing $\Phi$ s

Bearing Design Strength (ksf)
Water Table Below Grade (ft) Width of Mat (ft)
Thickness of Mat (ft)
Depth to Bottom of Slab (ft) Bolt Circle Diameter (in) Top of Concrete to Top of Bottom Threads (in)
Diameter of Pier (ft)
Ht. of Pier Above Ground (ft)
Ht. of Pier Below Ground ( ft ) Quantity of Bars in Mat Bar Diameter in Mat (in) Area of Bars in Mat (in ${ }^{2}$ )
Spacing of Bars in Mat (in) Quantity of Bars Pier Bar Diameter in Pier (in)
Tie Bar Diameter in Pier (in)
Spacing of Ties (in)
Area of Bars in Pier (in ${ }^{2}$ )
Spacing of Bars in Pier (in) $f^{\prime} \mathrm{c}$ (ksi) fy (ksi)
Unit Wt. of Soil (kcf)
Unit Wt. of Concrete (kcf)
Volume of Concrete ( $\mathrm{yd}^{3}$ )

| 25 |
| :---: |
| 9.00 |
| 0.75 |

Tower eccentric from mat $(\mathrm{ft})=$ $\square$

Allowable Bearing Pressure (ksf) Safety Factor
4.50
2.00

Minimum Pier Diameter (ft)
Equivalent Square b (ft)

Recommended Spacing (in)
6 to 12

Minimum Pier $\mathrm{A}_{\mathrm{s}}$ (in ${ }^{2}$ )
Recommended Spacing (in)
5 to 12

## MAT FOUNDATION DESIGN BY SABRE TOWERS \& POLES (CONTINUED)

Two-Way Shear:

Average d (in)
$\phi v_{c}$ (ksi)
$\phi v_{c}=\phi\left(2+4 / \beta_{c}\right) f_{c}{ }^{1 / 2}$
$\phi \mathrm{v}_{\mathrm{c}}=\phi\left(\alpha_{\mathrm{s}} \mathrm{d} / \mathrm{b}_{0}+2\right) \mathrm{f}_{\mathrm{c}}{ }^{1 / 2}$
$\phi v_{c}=\phi 4 f_{c}{ }_{c}^{1 / 2}$
Shear perimeter, $b_{0}$ (in)

## $\beta_{\mathrm{c}}$

Stability:

Overturning Design Strength (ft-k)
One-Way Shear:
$\phi V_{\mathrm{c}}$ (kips)
Pier Design:
Design Tensile Strength (kips)
$\phi V_{n}(k i p s)$
$\phi V_{c}=\phi 2\left(1+N_{N} /\left(500 A_{g}\right)\right) f_{c}^{1 / 2} b_{w} d$
$V_{s}(\mathrm{kips})$
Maximum Spacing (in)
Actual Hook Development (in)
16.73


$$
\mathrm{v}_{\mathrm{u}}(\mathrm{ksi})
$$

0.200
0.342
0.344
0.228
165.66

1


Factored Overturning Moment (ft-k) 10872.5

$$
V_{u}(\text { kips })
$$

626.7

Tu (kips)
V (kips)

| 447.0 |
| :---: |
| 43.0 |


| $\quad{ }^{* * *} V_{s} \max =4 f_{c}^{\prime}{ }^{1 / 2} b_{w} d$ (kips) | 278.2 |
| :--- | :---: |
| (Only if Shear Ties are Required) <br> Req'd Hook Development $I_{d h}$ (in) | 14.12 |

*** Ref. ACI 11.5.5 \& 11.5.6.3
Anchor Bolt Pull-Out:

| $\phi \mathrm{P}_{\mathrm{c}}=\phi \lambda(2 / 3) \mathrm{f}_{\mathrm{c}}{ }^{1 / 2}\left(2.8 \mathrm{~A}_{\text {SLOPE }}+4 \mathrm{~A}_{\text {FLAT }}\right)$ | 153.4 |
| :--- | :--- |
| Pier Rebar Development Length (in) | 54.81 |
|  |  |

Flexure in Slab:
$\phi \mathrm{M}_{\mathrm{n}}$ (ft-kips)
a (in)
Steel Ratio
4726.4
2.75
$\beta_{1}$
0.01048
0.825

| Maximum Steel Ratio $\left(\rho_{\mathrm{t}}\right)$ |  |
| :---: | :---: |
| Minimum Steel Ratio | 0.0197 |
| Rebar Development in Pad (in) | 0.0018 |
|  |  |
|  |  |
|  |  |


| $\mathrm{P}_{\mathrm{u}}$ (kips) | 447.0 |
| :---: | :---: |
| Required Length of Development (in) | 26.12 |
|  |  |
| $\mathrm{M}_{\mathrm{u}}$ (ft-kips) | 4726.2 |

Required Development in Pad (in)
21.11

| Condition | 1 is OK, 0 Fails |
| :---: | :---: |
| Minimum Mat Width | 1 |
| Maximum Soil Bearing Pressure | 1 |
| Pier Area of Steel | 1 |
| Pier Shear | 1 |
| Two-Way Shear | 1 |
| Overturning | 1 |
| Anchor Bolt Pull-Out | 1 |
| Flexure | 1 |
| Steel Ratio | 1 |
| Length of Development in Pad | 1 |
| Interaction Diagram | 1 |
| One-Way Shear | 1 |
| Hook Development | 1 |
| Minimum Mat Depth | 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

Address/City/Contact Utility Type
Status

Utility Name

Name and
Address/City/Contact entries.

|  | $\begin{aligned} & \text { Utility } \\ & \text { ID } \end{aligned}$ | Utility Name | Utility Type | Class | City | State |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| View | 4111300 | 2600Hz, Inc. dba ZSWITCH | Cellular | D | San Francisco | CA |
| View | 4108300 | Air Voice Wireless, LLC | Cellular | B | Bloomfield Hill | MI |
| View | 4110650 | Alliant Technologies of KY, L.L.C. | Cellular | D | Morristown | NJ |
| View | 4445118 | Alltel Corporation d/b/a Verizon Wireless | Cellular | A | Lisle | IL |
| View | 4110850 | AltaWorx, LLC | Cellular | D | Fairhope | AL |
| View | 4107800 | American Broadband and Telecommunications Company | Cellular | D | Toledo | OH |
| View | 4108650 | AmeriMex Communications Corp. | Cellular | D | Dunedin | FL |
| View | 4105100 | AmeriVision Communications, Inc. d/b/a Affinity 4 | Cellular | D | Virginia Beach | VA |
| View | 4110700 | Andrew David Balholm dba Norcell | Cellular | D | Clayton | WA |
| View | 4108600 | BCN Telecom, Inc. | Cellular | D | Morristown | NJ |
| View | 4110550 | Blue Casa Mobile, LLC | Cellular | D | Santa Barbara | CA |
| View | 4111050 | BlueBird Communications, LLC | Cellular | D | New York | NY |
| View | 4202300 | Bluegrass Wireless, LLC | Cellular | A | Elizabethtown | KY |
| View | 4107600 | Boomerang Wireless, LLC | Cellular | B | Hiawatha | IA |
| View | 4105500 | BullsEye Telecom, Inc. | Cellular | D | Southfield | MI |
| View | 4100700 | Cellco Partnership dba Verizon Wireless | Cellular A | A | Basking Ridge | NJ |
|  |  |  |  |  |  |  |


| View | 4106600 | Cintex Wireless, LLC | Cellular | D | Rockville | MD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| View | 4111150 | Comcast OTR1, LLC | Cellular | D | Philadelphia | PA |
| View | 4101900 | Consumer Cellular, Incorporated | Cellular | A | Portland | OR |
| View | 4106400 | Credo Mobile, Inc. | Cellular | A | San Francisco | CA |
| View | 4108850 | Cricket Wireless, LLC | Cellular | A | San Antonio | TX |
| View: | 4111500 | CSC Wireless, LLC d/b/a Altice Wireless | Cellular | C | Long Islañd City | NY |
| View. | 10640 | Cumberland Cellular Partnership | Cellular | A | Elizabethtown | KY |
| View | 4111650 | DataBytes, Inc. | Cellular | C. | Rogers | AR |
| View | 4111200 | Dynalink Communications, Inc. | Cellular | C | Brooklyn | NY |
| View | 4101000 | East Kentucky Network, LLC dba Appalachian Wireless | Cellular | A | Ivel | KY |
| View | 4002300 | Easy Telephone Service Company dba Easy Wireless | Cellular | D | Ocala | FL |
| View. | 4109500 | Enhanced Communications Group, LLC | Cellular | D | Bartlesville | OK |
| View | 4110450 | Excellus Communications, LLC | Cellular | D | Chattanooga | TN |
| View | 4105900 | Flash Wireless, LLC | Cellular | C | Concord | NC |
| View | 4104800 | France Telecom Corporate Solutions L.L.C. | Cellular | D | Oak Hill | VA |
| View | 4109350 | Global Connection Inc. of America | Cellular | D | Norcross | GA |
| View | 4102200 | Globalstar USA, LLC | Cellular | B | Covington | LA |
| View | 4109600 | Google North America Inc. | Cellular | A | Mountain View | CA |
| View | 33350363 | Granite Telecommunications, LLC | Cellular | D | Quincy | MA |
| View | 4106000 | GreatCall, Inc. d/b/a Jitterbug | Cellular | A | San Diego | CA |
| View | 10630 | GTE Wireless of the Midwest dba Verizon Wireless | Cellular | A | Basking Ridge | NJ |
| View | 4111350 | HELLO MOBILE TELECOM LLC | Cellular | D | Dania Beach | FL |
| View | 4103100 | i-Wireless, LLC | Cellular | B | Newport | KY |
| View | 4109800 | IM Telecom, LLC d/b/a Infiniti Mobile | Cellular | D | Tulsa | OK |
| View | 22215360 | KDDI America, Inc. | Cellular | D | New York | NY |
| View | 10872 | Kentucky RSA \#1 Partnership | Cellular | A | Basking Ridge | NJ |
| View | 10680 | Kentucky RSA \#3 Cellular General | Cellular | A | Elizabethtown | KY |
| View | 10681 | Kentucky RSA \#4 Cellular General | Celluar | A | Elizabethtown | KY |
| View | 4111250 | Liberty Mobile Wireless, LLC | Cellular | D | Sunny Isles Beach | FL |
| View | 4111550 | Lingo Telecom of the South, LLC | Cellular | C | Atlanta | GA |
| View | 4111400 | Locus Telecommunications, LLC | Cellular | A | Fort Lee | NJ |
| View | 4110900 | Lunar Labs, Inc. | Cellular | D | Detroit: | MI |
| View | 4107300 | Lycamobile USA, Inc. | Cellular | D | Newark | NJ |


| View | 4108800 | MetroPCS Michigan, LLC | Cellular ${ }^{\text {a }}$ |  | Bellevue | WA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| View | 4111700 | Mint Mobile, LLC | Cellular C | C | Costa Mesa | CA |
| View | 4109650 | Mitel Cloud Services, Inc. | Cellular | D | Mesa | AZ |
| View | 4202400 | New Cingular Wireless PCS, LLC dba AT\&T Mobility, PCS | Cellular | A | San Antonio | TX |
| View | 10900 | New Par dba Verizon Wireless | Cellular | A | Basking Ridge | NJ |
| View | 4000800 | Nextel West Corporation | Cellular | D | Overland Park: | KS |
| View | 4001300 | NPCR, Inc. dba Nextel Partners | Cellular ${ }^{\text {D }}$ | D | Overland Park | KS |
| View | 4001800 | OnStar, LLC | Cellular | A | Detroit | MI |
| View | 4110750 | Onvoy Spectrum, LLC | Cellular | D | Chicago | IL |
| View | 4109050 | Patriot Mobile LLC | Cellular | D | Irving | TX |
| View | 4110250 | Plintron Technologies USA LLC | Cellular | D | Bellevue | WA |
| View | 33351182 | PNG Telecommunications, Inc. dba PowerNet Global Communications | Cellular | D | Cincinnati | OH |
| View | 4202100 | Powertel/Memphis; Inc. dba TMobile | Cellular: | A | Bellevue | WA |
| View | 4107700 | Puretalk Holdings, LLC | Cellular | A | Covington | GA |
| View | 4106700 | Q Link Wireless, LLC | Cellular B | B | Dania | FL |
| View | 4108700 | Ready Wireless, LLC | Cellular | B | Hiawatha | IA |
| View | 4110500 | Republic Wireless, Inc. | Cellular | B | Raleigh | NC |
| View | 4111100 | ROK Mobile, Inc. | Cellular D | D | Culver City | CA |
| View | 4106200 | Rural Cellular Corporation | Cellular | A | Basking Ridge | NJ |
| View, | 4108550 | Sage Telecom Communications, LLC dba TruConnect | Cellular | D | Los Angeles | CA |
| View | 4109150 | SelecTel, Inc. d/b/a SelecTel Wireless | Cellular | D | Freemont | NE |
| View | 4110150 | Spectrotel, Inc. d/b/a Touch Base Communications | Cellular | D | Neptune | NJ |
| View: | 4111450 | Spectrum Mobile, LLC | Cellular | C | St. Louis | MO |
| View | 4200100 | Sprint Spectrum, L.P. | Cellular | A | Atlanta | GA: |
| View | 4200500 | SprintCom, Inc. | Cellular | A | Atlanta | GA |
| View | 4109550 | Stream Communications, LLC | Cellular | D | Dallas | TX |
| View | 4111600 | STX Group LLC dba Twigby | Cellular | C | Murfreesboro | TN |
| View | 4110200 | T C Telephone LLC d/b/a Horizon Cellular | Cellular | D | Red Bluff | CA |
| View | 4202200 | T-Mobile Central, LLC dba TMobile | Cellular | A | Bellevue | WA |
| View: | 4002500 | TAG Mobile, LLC | Cellular | D | Carrollton | TX |
| View | 4109700 | Telecom Management, Inc. dba Pioneer Telephone | Cellular | D | Portland | ME |
| View | 4107200 | Telefonica USA, Inc. | Cellular | D | Miami | FL |
| View | 4108900 | Telrite Corporation | Cellular | D | Covington | GA |
| View | 4108450 | Tempo Telecom, LLC | Cellular | B | Atlanta | GA |
|  |  |  |  |  |  |  |


| View | 4109000 | Ting, Inc. | Cellular | A: | Toronto | ON |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| View | 4110400 | Torch Wireless Corp. | Cellular | D | Jacksonville | FL |
| View | 4103300 | Touchtone Communications, <br> Inc. | Cellular | D: | Whippany | NJ |
| View | 4104200 | TracFone Wireless, Inc. | Cellular | D | Miami | FL |
| View. | 4002000 | Truphone, Inc. | Cellular | D | Durham | NC |
| View | 4110300 | UVNV, Inc. d/b/a Mint. Mobile | Cellular | D: | Costa Mesa | CA |
| View | 4105700 | Virgin Mobile USA, L.P. | Cellular | A | Atlanta | GA |
| View | 4110800 | Visible Service LLC | Cellular | D | Basking <br> Ridge | NJ |
| View | 4106500 | WiMacTel, Inc. | Cellular | D | Palo Alto | CA |
| View | 4110950 | Wing Tel Inc. | Cellular | D | New York | NY |

EXHIBIT E FAA

Mail Processing Center

Issued Date: 06/27/2019
Jeanette Oliver
AT\&T (JO)
208 S Akard St.
Dallas, TX 75202

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

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

| Structure: | Antenna Tower Breeding FN (278315) |
| :--- | :--- |
| Location: | Breeding, KY |
| Latitude: | $36-57-56.09 \mathrm{~N}$ NAD 83 |
| Longitude: | $85-25-52.54 \mathrm{~W}$ |
| Heights: | 1079 feet site elevation (SE) |
|  | 240 feet above ground level (AGL) |
|  | 1319 feet above mean sea level (AMSL) |

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

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 2, Obstruction Marking and Lighting, a med-dual system - Chapters 4,8(MDual),\&12.

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

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

At least 10 days prior to start of construction (7460-2, Part 1)
$\qquad$ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)
This determination expires on 12/27/2020 unless:
(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office. (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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

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

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

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

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

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

If we can be of further assistance, please contact our office at (718) 553-2611, or angelique.eersteling@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2019-ASO-13174-OE.

Signature Control No: 401965346-409959243
Angelique Eersteling
Technician
Attachment(s)
Frequency Data
Map(s)
cc: FCC

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




Page 5 of 5

## EXHIBIT F <br> KENTUCKY AIRPORT ZONING COMMISSION

KENTUCKY TRANSPORTATION CABINET
KENTUCKY AIRPORT ZONING COMMISSION
Rev. 06/2016
Page 2 of 2


## EXHIBIT G

GEOTECHNICAL REPORT

# GEOTECHNICAL REPORT <br> BREEDING FN 

(14365226)
$36^{\circ} 57^{\prime} 56.09^{\prime \prime} \mathrm{N}$
85 ${ }^{\circ}$ 25' 52.54" W

527 Breeding Loop Road, Breeding, KY 42715

Prepared For:
at\&t

Prepared By:


POWER OF DESIGN

POWER OF DESIGN

October 8, 2019

Ms. Michelle Ward
AT\&T
534 Armory Place
$4^{\text {th }}$ Floor
Louisville, KY 40202

## Re: Geotechnical Report - PROPOSED 235' SELF-SUPPORT TOWER w/ 5' LIGHTNING ARRESTOR Site Name: BREEDING FN (14365226)

Site Address: 527 Breeding Loop Road, Breeding, Adair County, Kentucky Coordinates: N36 ${ }^{\circ} 57^{\prime} 56.09^{\prime \prime}$, W85 ${ }^{\circ} 25^{\prime} 52.54^{\prime \prime}$
POD Project No. 18-28287

Dear Ms. Ward:

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

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

## Cordially,

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


Copies submitted: (3) Ms. Michelle Ward
Geotechnical Report
LETTER OF TRANSMITTAL
TABLE OF CONTENTS
Page

1. PURPOSE AND SCOPE ..... 1
2. PROJECT CHARACTERISTICS ..... 1
3. SUBSURFACE CONDITIONS ..... 1
4. FOUNDATION DESIGN RECOMMENDATIONS ..... 2
4.1. Proposed Tower ..... 3
4.1.1. Drilled Piers ..... 3
4.1.2. Mat Foundation ..... 4
4.2. EQUIPMENT PLATFORM ..... 4
4.3. EQUIPMENT SLAB ..... 4
4.4. EQUIPMENT BUILDING ..... 4
4.5. Drainage and Groundwater Considerations ..... 5
5. GENERAL CONSTRUCTION PROCEDURES AND RECOMMENDATIONS ..... 5
5.1 Drilled Piers ..... 5
5.2 Fill Compaction ..... 6
5.3 Construction Dewatering ..... 6
6. FIELD INVESTIGATION ..... 7
7. WARRANTY AND LIMITATIONS OF STUDY ..... 7
APPENDIX
BORING LOCATION PLANBORING LOGSSOIL SAMPLE CLASSIFICATION

Geotechnical Report

PROPOSED 235' SELF-SUPPORT TOWER w/ $\mathbf{5}^{\prime}$ LIGHTNING ARRESTOR Site Name: BREEDING FN (14365226)<br>527 Breeding Loop Road, Breeding, Adair County, Kentucky N36 ${ }^{\circ} 57^{\prime} 56.09^{\prime \prime}$, W85 ${ }^{\circ} 25^{\prime} 52.54^{\prime \prime}$

## 1. PURPOSE AND SCOPE

The purpose of this study was to determine the general subsurface conditions at the site of the proposed tower by drilling three borings and to evaluate this data with respect to foundation concept and design for the proposed tower and shelter. Also included is an evaluation of the site with respect to potential construction problems and recommendations dealing with quality control during construction.

## 2. PROJECT CHARACTERISTICS

AT\&T is proposing to construct a self-support tower and either an equipment shelter, slab or platform at $\mathrm{N} 36^{\circ} 57^{\prime}$ 56.09", W85 ${ }^{\circ} 25^{\prime} 52.54^{\prime \prime}$, 527 Breeding Loop Road, Breeding, Adair County, Kentucky. The site is located in an open farm field just north of the small town of Breeding. The proposed lease area will be 10,000 square feet and will be accessed along a new access road running east from Breeding Loop Road to the proposed lease area. The elevation at the proposed tower location is about EL 1079 and there about 6-feet of change in elevation across the proposed lease area. The development will also include a small equipment shelter near the base of the tower. The proposed tower location is shown on the Boring Location Plan in the Appendix.

## 3. SUBSURFACE CONDITIONS

The subsurface conditions were explored by drilling three test borings near the base of the proposed tower. The Geotechnical Soil Test Boring Logs, which are included in the Appendix, describes the materials and conditions encountered. A sheet defining the terms and symbols used on the boring logs is also included in the Appendix. The general subsurface conditions disclosed by the test borings are discussed in the following paragraphs.

According to the Kentucky Geological Survey, Kentucky Geologic Map Information Services, the site is underlain by the Mississippian age Salem and Warsaw Limestone. This formation consists of limestone with siltstone and sandstone and has a medium karst potential. There are several large sinkholes mapped within about one-half mile of the site. The Adair County area is karst and it is an inherited risk in building in the area.

The borings encountered about 6 inches of topsoil at the existing ground surface. Below the topsoil, the borings encountered silty clay (CL-CH) of medium to high plasticity. The SPT N-values in the clay soil were between 17 to 32 blows per foot (bpf) generally indicating a very stiff consistency. The borings met with auger refusal at depths ranging
from 12.4 to 13.9 feet. Auger refusal is defined as the depth at which the boring can no longer be advanced using the current drilling method.

The refusal material was cored in Boring B-1 from 13.9 to 28.9 feet below the ground surface. Limestone that was moderately hard, weathered and bluish gray that became hard and only slightly weathered at about 20 feet was encountered. The recoveries of the cores were 53,93 and 100 percent with RQD values of 25,76 and 83 percent. These values generally represent fair to good quality rock from a foundation support viewpoint.

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

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

## 4. FOUNDATION DESIGN RECOMMENDATIONS

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

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

### 4.1. Proposed Tower

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

### 4.1.1. Drilled Piers

The following table summarizes the recommended values for use in analyzing lateral and frictional resistance for the various strata encountered at the test boring. It is important to note that these values are estimated based on the standard penetration test results and soil types and were not directly measured. The all values provided are ultimate values and appropriate factors of safety should be used in conjunction with these values. If the piers will bear deeper than about 29 feet, a deeper boring should be drilled to determine the nature of the deeper material.

| Depth Below Ground Surface, feet | 0-2 | 2-13 | 13-20 | 20-29 |
| :---: | :---: | :---: | :---: | :---: |
| Ultimate Bearing Pressure (psf) |  | 11,050 | 83,000 | 160,000 |
| C <br> Undrained Shear Strength, psf | 500 | 2,000 | 15,000 | 30,000 |
| $\emptyset$ <br> Angle of Internal Friction degrees | 0 | 0 | 0 | 0 |
| Total Unit Weight, pcf | 120 | 120 | 135 | 135 |
| Soil Modulus Parameter k, pci | 30 | 1000 | 2000 | 2000 |
| Passive Soil Pressure, psf/one foot of depth |  | $\begin{aligned} & 1,250+ \\ & 40(D-2) \end{aligned}$ | $\begin{aligned} & 10,000+ \\ & 45(D-13) \end{aligned}$ | $\begin{aligned} & 20,000+ \\ & 45(D-20) \end{aligned}$ |
| Side Friction, psf |  | 500 | 1200 | 1500 |

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

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

### 4.1.2. Mat Foundation

The tower could be supported on a common mat foundation bearing on the clay at a minimum of 4 feet can be designed using an allowable soil pressure of 4,500 pounds per square foot may be used. This value may be increased by 30 percent for the maximum edge pressure under transient loads. A friction value of 0.30 may be used between the concrete and the clay soil. The passive pressures given for the drilled pier foundation may be used to resist lateral forces.

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

### 4.2. Equipment Platform

An equipment platform may be supported on shallow piers bearing in the natural clay and designed for a net allowable soil pressure of 3,000 pounds per square foot. The piers should bear at a depth of at least 24 inches to minimize the effects of frost action. All existing topsoil or soft natural soil should be removed beneath footings.

### 4.3. Equipment Slab

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

### 4.4. Equipment Building

If an equipment building support on a slab is chosen in place of the equipment platform, it may be supported on shallow spread footings bearing in the natural clay soil and designed for a net allowable soil pressure of 3,000 pounds per square foot.

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

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

## 4.5. : Drainage and Groundwater Considerations

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

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

## 5. GENERAL CONSTRUCTION PROCEDURES AND RECOMMENDATIONS

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

### 5.1 Drilled Piers

The following recommendations are recommended for drilled pier construction:

All piers must be poured the same day drilling is completed so that any shale is not allowed to swell. Clean the foundation bearing area so it is nearly level or suitably benched and is free of ponded water or loose material.
: Make provisions for ground water removal from the drilled shaft excavation. While the borings were dry prior to rock coring and significant seepage is not anticipated; the drilled pier contractor should have pumps on hand to remove water in the event seepage into the drilled pier is encountered.
\& Specify concrete slumps ranging from 4 to 7 inches for the drilled shaft construction. These slumps äre recommended to fill irregularities along the sides and bottom of the drilled hole, displace water as it is placed, and permit placement of reinforcing cages into the fluid concrete.
\& Retain the geotechnical engineer to observe foundation excavations after the bottom of the hole is leveled, cleaned of any mud or extraneous material, and dewatered.
\& : Install a temporary protective steel casing to prevent șide wall collapse, prevent excessive mud and water intrusion in the drilled shaft.

The protective steel casing may be extracted as the concrete is placed provided a sufficient head of concrete is maintained inside the steel casing to prevent soil or water intrusion into the newly placed conicrete.
\& Direct the concrete placement into the drilled hole through a centering. chute to reduce side flow or segregation.

### 5.2 Fill Compaction

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

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

### 5.3 Construction Dewatering

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

If groundwater is encountered in the drilled pier excavations, it may be more difficult since pumping directly from the excavations could cause a deterioration of the bottom of the excavation. If the pier excavations are not dewatered, concrete should be placed by the termie method. If groundwater sits on the bottom of the foundation for longer than an hour, the bottom should be cleaned again before the pier is poured.

## 6. FIELD INVESTIGATION

Three soil test borings were drilled near the base of the proposed tower. Split-spoon samples were obtained by the Standard Penetration Test (SPT) procedure (ASTM D1586) in all test borings. The borings encountered auger refusal between about 12.4 and 13.9 feet. A sample of the refusal material was cored in Boring B-1 from 13.9 to 28.1 feet below the ground surface. The split-spoon samples were inspected and visually classified by a geotechnical engineer. Representative portions of the soil samples were sealed in glass jars and returned to our laboratory.

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

## 7. WARRANTY AND LIMITATIONS OF STUDY

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

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

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

## APPENDIX

BORING LOCATION PLAN
BORING LOGS
SOIL SAMPLE CLASSIFICATION


POWER OF DESIGN


| Project: Br | Breeding FN |  | City, State | Breeding, KY |
| :---: | :---: | :---: | :---: | :---: |
| Method: S.F. A. | Boring Date: | 4-Oct-19 | Location: Tow |  |
| Inside Diameter: 4" | Drill Rig Type: | D - 50 | Hammer Type |  |
| Groundwater: DRY |  |  | Weather: |  |
| Driller: Strata Group, LLC | Note: About 6 inches of topsoil was encountered at the existing ground surface |  |  |  |



| Project: B | Breeding FN |  | City, State | Breeding, KY |
| :---: | :---: | :---: | :---: | :---: |
| Method: S.F. A. | Boring Date: | 4-Oct-19 | Location: Tow |  |
| Inside Diameter: 4" | Drill Rig Type: | D - 50 | Hammer Type |  |
| Groundwater: DRY |  |  | Weather: |  |
| Driller: Strata Group, LLC | Note: About 6 inches of topsoil was encountered at the existing ground surface |  |  |  |




## EXHIBIT H <br> DIRECTIONS TO WCF SITE

## Driving Directions to Proposed Tower Site

1. Beginning at 424 Public Square \#1, Columbia, KY, head northwest toward Campbellsville St. and travel approximately 240 feet.
2. Exit the traffic circle onto Burkesville Street and travel for approximately 8.4 miles.
3. Continue onto KY-61 and travel approximately 3.9 miles.
4. Turn left onto Breeding Loop / Old Hwy 61 and travel approximately 0.2 miles.
5. The site is on the left at 527 Breeding Loop, Breeding, KY 42715
6. The site coordinates are:
a. North 36 deg 57 min 56.09 sec
b. West $85^{\circ}$ deg 25 min 52.54 sec


Prepared by:
Chris Shouse
Pike Legal Group
1578 Highway 44 East, Suite 6
P.O. Box 396

Shepherdsville, KY 40165-3069
Telephone: 502-955-4400 or 800-516-4293

## EXHIBIT I

## OPTION AND LAND LEASE AGREEMENT

THIS OPTION AND LAND LEASE AGREEMENT ("Agreement"), dated as of the latter of the signature dates below (the "Effective Date"), is entered into by Brandon Harvey and Laura Ashley Harvey, Husband and Wife, having a mailing address of 245 Breeding Loop, Breeding, KY 42715 ("Landlord") and New Cingular Wireless PCS, LLC, a Delaware limited liability company, having a mailing address of 575 Morosgo Drive, 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 527 Breeding Loop, in the County of Adair, State of Kentucky (collectively, the "Property"). 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 grantsis to Tenant an excluṣive 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 a Communication Facility in accordance with the terms of this Agreement.
(b) During the option Term, and during the Term, 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 Teinant'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 Landiord 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 Option may be exercised during an initial term of one (1) year commencing on the Effective Date (the "Initial Option Term") which term 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 one thousand and 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 without the written consent of Landlord. Upon notification to Landlord of such sale, assignment or transfer, Tenant shall immediately be released from any and all liability under this Agreement, including the payment of any rental or other süms due, without any fuirther 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 terims and conditions of this Agreement. If Tenant does not exercise the Option during the Initial Option Term or any extension thereof, then 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 if the Option is exercised, Landlord decides to subdivide, sell, or change the status of the zoning of the Premises or the Property or any of Landlord's conitiguous, adjoining or surrounding property (the "Surrounding Property"), or in the event of a threatened foreclosure on any of the foregoing, Landlord shall immediately notify Tenant in writing. Landlord agrees that during the Option Term, or during the Term if the Option is exercised, Landlord shall not initiate or consent to any change in the zoning of the Premises or the 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 communications fixtures and related equipment, cables, accessories and improvements; which may include a suitable support structure ("Structure"), associated antennas, equipment shelters or cabinets and fencing and any other items necessary to the successful and secure use of the Premises (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 suich portions of the Property 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, install a generator 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 or equipment, install warning signs to make individuals aware of risks, install protective barriers, install any other control measures reasonably required by Tenant's safety procedures or applicable law, and undertake any other appropriate means to secure the Premises or equipment at Tenant's expenise: Tenant has the right to modify, supplement, replace, upgrade, expand the Communication Facility (including, for example, increasing the number of antennas or adding microwave dishes) or relocate the Communication Facility within the Premises at any time during the Term, at Tenant's sole cost, but with no additional rent payable. Tenant will be allowed to make such alterations to the Property in order to ensure that the Communication Facility complies with all applicable federal, state or local laws, rules or regulations.

## 3. TERM.

(a) The initial lease term will be five (5) years (the "Initial Term"), commencing on the effective date of written notification by Tenant to Landlord of Tenant's exercise of the Option (the "Term Commencement Date"). The Initial Term will terminate on the fifth (5th) anniversary of the Term Commencement Date.
(b) This Agreement will automatically renew for seventeen (17) additional five (5) year term(s) (each additional five (5) year term shall be defined as an "Extension Term"), upon the same terms and conditions set
forth herein 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 the 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 Tern, or (ii) the Agreement is terminated as otherwise permitted by this Agreement prior to the end of the final Extension Term, this Agreement shall continue in force upon the same covenants, terms and conditions for a further term of one (1) year, and for annual terms thereafter ("Annual Term") until terminated by either party hereto by giving to the other party hereto written notice of its intention to so terminate at least six (6) months prior to the end of any such Annual Term. Monthly rent 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 "RHoldover 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:"

## 4.: RENT.

(a) Commencing on the first day of the month following the date that Tenant commences construction (the "Rent Commencement Date"). Tenant will nav Landind on or before the fifth (5t) day of each calendar month in advance, (the "Rent"), at the address set forth above. In any partial month occurring after the Rent Commencement Date, the 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) Upoin the commencement of each Extension Term, the monthly Rent will increase by over the Rent paid during the previous five (5) year term.
(c) All charges payable under this Agreement such as utilities and taxes shall be billed by Landlord within one (1) year from the end of the calendar year in which the charges were incurred; any charges beyond such period shall not be billed by Landlord, and shall not be payable by Tenant. The foregoing shall not apply to monthly Rent which is due and payable without a requirement that it be billed by Landlord. The provisions of this subsection shall survive the termination or expiration of this Agreement.

## 5. APPROVALS.

(a): Landlord agreeses that Tenant's ability to use the Premises is contingent upon the suitability of the Premises and Property for the Permitted Use and Tenant's ability to obtain and maintain all Goyernment Approvals. Landlord authorizes Tenant to prepare, execute and file all required applications to obtain Government Approvals for the Permitted Use 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 leäsehold 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 cöst 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, designi, operations or Government Approvals.
6. TERMINATION. This Agreement may be terminated, without penalty or further liability, as follows:
(a) by either party on thiity (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 niotice 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 writtein 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 Agreenent, including the following: Section 5 Approvals, Section 6(a) Termination, Section 6(b) Termination, Section 6(c) Termination, Section 6(d) Termination, Section 11(d) Environmental, Section:18 Condemnation or Section 19 Casualty.
7. INSURANCE. During the Option Term and throughout the Term, Tenant will purchase and maintain in full force and effect such general liability policy as Tenant may deem necessary. Said policy of general liability insurance will at a minimum provide a combined single limit of
Notwithstanding the foregoing, Tenant shall have the right to self-insure such general liability coverage:

## 8. INTERFERENCE.

(a) Prior to or concurrent with the execuition 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 the 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 griant, after the Effective Date, 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, fior 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 Tenan̆t. In the event any sụch 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. INDEMNOFICATION.

(a) Tenant agrees to indemnify, defend and hold Landlord harmless from and against any and all injury, loss, damage or liability, costs or expenses in connection with a third party claim (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 atributable to the negligent or intentional act or omission of Landlord, its employees, invitees, 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, costs or expenses in connection with a third party claim (including reasonable attorneys' fees and court costs) arising directly from the actions or failure to act of Landlord, its employees, invitees, agents or independent contractors, 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 9 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 indeminity 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 incuired before the time when notice is given.

## 10. WARRANTIES.

(a) Each of Tenant and Landlord (to the extent not a natural person) each acknowledge and represent that it is duly organized, validly existing and in good standing and has the right, power, and authority or capacity, as applicable, to enter into this Agreement and bind itself hereto through the party or individual 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) Landlord grants to Tenant sole, actual, quiet and peacefful use, enjoyment and possession of the Premises in accordance with the terms of this Agreement 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, then 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 in the form attached hereto as Exhibit 10(b).

## 11. : ENVIRONMENTAL:

(a) Landlord represents and warrants, except as may be identified in Exhibit 11 attached to this Agreement, (i) the Property, as of the Effective Date, is free of hazardous substances, including asbestoscontaining materials and lead paint, and (ii) the Property has never been subject to any contamination or hazardous conditionis 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 enivironment 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 harmiess 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 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 anid 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 indemnification provisions contained in 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 materials 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, then 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. If Tenant elects to utilize an Unmanned Aircraft System ("CAS") in connection with its installation, construction, monitoring, site audits, inspections, maintenance, repair, modification, or alteration activities at the Property, Landlord hereby grants Tenant, or any UAS operator acting on Tenant's behalf, express permission to fly over the applicable Property and Premises, and consents to the use of audio and video navigation and recording in connection with the use of the UAS. 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 conriection 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, per day in consideration of Tenant's damages until Landlord cures such default. Landlord and Tenant agree that Tenant's damages in the event of a denial of Access are difficult, if not impossible, to ascertain, and the liquidated damages set forth above are a reasonable approximation of such damages.
13. 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. Notwithstanding the foregoing, Tenant will not be responsible for the replacement of any trees, shrubs or other vegetation.

## 14. MAINTENANCE/UTLLITIES.

(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.
(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 sub-metering is required under this Agreement, Landlord will read the meter and
provide Tenant with an invoice and usage data on a monthly basis. Tenant shall reimburse Landlord for such utility usage at the same rate charged to Landlord by the utility service provider. 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 sixty (60) days of receipt of the usage data and required forms. Landlord shall maintain accurate and detailed records of all utility expenses, invoices and payments applicable to Tenant's reimbursement obligations hereunder. Within fifteen (15) days after a request from Tenant, Landlord shall provide copies of such utility billing records to the Tenant in the form of copies of invoices, contracts and canceiled checks. If the utility billing records reflect an overpayment by Tenant, Tenant shall have the right to deduct the amount of such overpayment from any monies due to Landlord from Tenant.
(c) 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 teimporary 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.
(d) Tenant will have the right to install utilities, at Tenant's expense, and to improve present utilities on the Property and the Premises. Landlord hereby grants to any service 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 service companies may from time to time require in order to provide such services to the Premises: Upon Tenant's or service company's request, Landlord will execute a separate recordable easement evidencing this grant, at no coost to Tenant or the service company.

## 15. DEFAULT AND RIGHT TO CURE.

(a) The following will be deemed a default by Tenant and a breach of this Agreement: (i) nonpayment of Renit 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, then 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 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 . 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 demaṇds 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 ündelivered. Notices will be addressed to the parties hereto as follows:

If to Tenant: $\quad$ New Cingular Wireless PCS, LLC<br>Attn: Network Real Estate Administration<br>Re: Cell Site Name: Breeding FN (KY)<br>Fixed Asset:\#: 14365226<br>575 Morosgo Drive<br>Atlanta, Georgia 30324<br>With a copy to: New Cingular Wireless PCS, LLC<br>Attn.: Legal Dept - Network Operations<br>Re: Cell Site Name: Breeding FN (KY)<br>Fixed Asset \#: 14365226<br>208 S. Akard Street<br>Dallas, TX 75202-4206

If to Landlord:

Brandon and Laura Harvey<br>245 Breeding Loop<br>Breeding, KY 42715

Either party hereto may change the place for the giving of notice to it by thirty (30) days' prior written notice to the other party hereto 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 twenty-four (24) hours. If a condemning authority takes all of the Property, or a portion sufficieint, 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 pro rata basis.
19. CASUALTY. Landlord will provide notice to Tenant of any casualty or other harm affecting the Property within twenty-four (24) hours of the casualty or other harm. If any part of the Communication Facility or the 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 pro rata 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 this 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 thiṣ Section 19; 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 (i) all taxes and assessments levied upon the lands, improvements and other property of Landlord including any such taxes that may be calculated by a taxing authority using any method, including the income method, (ii) all sales, use, license, yalue added, documentary, stamp, gross receipts, registration, real estate transfer, conveyance, excise, recording, and other similar taxes and fees imposed in connection with this Agreement, and (iii) all sales, use, license, value added, documentary, stamp, gross receipts, registration, real estate transfer, conveyance, excise, recording, and other similar taxes and fees imposed in connection with a sale of the Property or assignment of Rent payments by Landlord. Tenant shall be responsible for ( $y$ ) 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 and (z) all sales, use, license, value added, documentary, stamp, grọss receipts, registration, real estate transfer, conveyance, excise, recording, and other similar taxes and fees imposed in connection with an assignment of this Agreement or sublease by Tenant. 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 nötices to Tenant in a timely manner and Tenant's rights with respect to such taxes are prejudiced by the delay, Landlord shall reimburse Tenant for any increased costs directly resulting from the delay and 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 Teniant 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 paynient of such obligations, pay same under protest, or take such other steps as permitted by law. 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 Teriant. 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 Landiord 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. Promptly after the Effective Date, Landlord shall provide Tenant's address to the taxing authority for the authority's cuse in the event the authority needs to communicate with Tenant. In the event that Tenant's address changes by notice to Landlord, Landlord shall be required to provide Tenant's new address to the taxing authority or authorities.
(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 may sell the Property or a portion thereof to a third party, provided: (i) the sale is made subject to the terms of this Agreement; and (ii) if the sale does not include the assigument of Landlord's full interest in this Agreement, the purchaser must agree to perform, without requiring compensation from Tenant or any subtenant, any obligation of Landlord under this Agreement, including Landlord's obligation to cooperate with Tenant as provided hereunder.
(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 Section 22(b) to Tenant. Until Tenant receives all such documents, Tenant's failure to make payments under this Agreement shall not be an event of default and Tenant reserves the right to hold payments due under this Agreemenit.

| 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 w̌-9 |
| vi. | Completed and Signed Tenant 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 communication 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 Tenanit 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 Surrounding Property for purposes of any installation, operation or maintenance of any other wireless communication facility or equipinent.
(d) The provisions of this Section 22 shall in no way limitor impair the obligations of Landlord under this Agreement, including interference and access obligations.
23. RIGHT OF FIRST REFUSAL. Notwithstanding the provisions contained in Section 22, if at any time after the Effective Date, Landlord receives a bona fide written offer from a third party seeking any sale, conveyance, assignment or transfer, whether in whole or in part, of any property interest in or related to the Premises, including without limitation any offer seeking an assignment or transfer of the Rent payments associated with this Agreement or an offer to purchase an easement with respect to the Premises ("Offer"), Landlord shall
immediately furnish Tenant with a copy of the Offer. Tenant shall have the right within ninety (90) days after it receives such copy to match the financial terms of the Offer and agree in writing to match such terms of the Offer. Such writing shall be in the form of a contract substantially similar to the Offer but Tenant may assign its rights to a third party. If Tenant chooses not to exercise this right or fails to provide written notice to Landlord within the ninety (90) day period, Landlord may sell, convey, assign or transfer such property interest in or related to the Premises pursuant to the Offer, subject to the terms of this Agreement. If Landlord attempts to sell, convey, assign or transfer such property interest in or related to the Preinises without complying with this Section 23, the sale, conveyance, 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 23. Tenant's failure to exercise the right of first refusal shall not be deemed a waiver of the rights contained in this Section 23 with respect to any future proposed conveyances as described herein.

## 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 of Lease substantially in the form attached as Exhibit 24(b). Either party may record this Memorandum of Lease at any time during the Term, in its absolute discretion. Thereafter during the Term, 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 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 heiris, 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 añd agreements with respect to the subject matter of this Agreement. Exhibits are numbered to correspond to the section wherein they are first referenced. Exicept 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 anid 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 the 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 Cinguilar Wireless PCS, LLC using the Premises for any Permitted Use or otherwise exercising the rights of Tenant pursuant to this Agreement. "Affiliate" means with respect to a party to this Agreement, any person or entity that (directly or indirectly) controls, is controlled by, or under common control with, that party. "Control" of a person or entity means the power (directly or indirectly) to direct the management or policies of that person or entity, whether through the ownership of voting securities, by contract, by agency or otherwise.
(j) Survival: Any provisions of this Agreement relating to indemnification shall survive the termination or expiration hereof. In addition, any terms and conditions contained in this Agreement that by their sense and context are intended to survive the termination or expiration of this Agreement shall so survive.
(k) W-9. As a condition precedent to payment, Landlord agrees to provide Tenant with a completed IRS Form W-9, or its equivalent, upon execution of this Agreement and at such other times as may be reasonably requested by Tenant, including any change in Landlord's name or address.
(1) Execution/No Option. The submission of this Agreement to any party for examination or consideration does not constitute an offer, reservation of or option for the Premises based on the terms set forth herein. This Agreement will become effective as a binding Agreement only upon the handwritten legal execution, acknowledgment and delivery hereof by Landlord and Tenant. This Agreement may be executed in two (2) or more counterparts, all of which shall be considered one and the same agreement and shall become effective when one or more counterparts have been signed by each of the parties. All parties need not sign the same counterpart.
(m) Attorineys' 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 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.
(o) Incidental Fees. Unless specified in this Agreement, no unilateral fees or additional costs or expenses are to be applied by either party to the other party, including review of plaṇs; structural analyses, consents, provision of documents or other communications between the parties.
(p) Further Acts. Upon request, Landlord will cause to be promptly and duly taken, executed, acknowledged and delivered all such further acts, documents, and assurances as Tenant may request from time to time in order to effectuate, carry out and perform all of the terms, provisions and conditions of this Agreement. and all transactions and permitted use contemplated by this Agreement.

IN WITNESS WHEREOF, the parties have caused this Agreement to be effective as of the Effective Date;
"LANDLORD"
Brandon Harvey
By: And Y
Print Name: Brandon Harvey
Date: $3-21 \div 19$
"LANDLORD"
Laura Ashley Harvey

By:
 Print Name: Laura Ashley Harvey

Date:

$$
3-21 \div 19
$$

## "TENANT"

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

By: AT\&T Mobility Corporation
Its: Manager
By:


Print Name: Chris Tharp
Its: Area Manager Network Engineering TN KY Site Acquisition

Date: 4-11-2019
[ACKNOWLEDGMENTS APPEAR ON NEXT PAGE]

## TENANT ACKNOWLEDGMENT

STATE OF Ventura, COUNTY OF

On the day of Mel , 2019, before me personally appeared Chris Tharp, and acknowledged under oath that he is the Area Manager Network Engineering TNKY Site Acquisition 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.


## LANDLORD ACKNOWLEDGMENT



On the $21^{\text {St }}$ day of March, 2019 before me, personally appeared Brandon and Laura Ashley Harvey, who acknowledged under oath, that they are the persons named in the within instrument, and that they executed the same in his/her stated capacity as the voluntary act and deed of the Landlord for the purposes therein contained.

## EXHIBIT 1

## DESCRIPTION OF PROPERTY AND PREMISES


#### Abstract

Page 1 of 2 to the Option and Land Lease Agreement dated  , 2019, by and between Brandon Harvey and Laura Ashley Harvey, Husband and Wife, as Landlord, and New Cingular Wireless PCS, LLC, a Delaware limited liability company, as Tenant.


The Property is legally described as follows:


#### Abstract

BEGINNING at a stone, comer to Roach; thence N 7 E 1155 feet to a stake or stone; thence N8-3/4 W 297 feet to a stake; thence N $321 / 2$ W 718 feet to a stone on Highway \#61; thence N 78 W 1050 feet to a stone in FM Comer line; thence S $51 / 2 \mathrm{~W} 491$ feet to a stone; thence with said Comer line S 75 E 1353 feet to a stone; thence S 16 W 812 leet to a stone in Madis Harvey line near a Beech Spring; thence N 88 W 1451 feet to a stone corner; thence S 7 W 249 feet to a stone comer to Roach; thence N 82 W 297 feet to the beginning, containing $511 / 4$ Acres more or less, but excluding therefrom and not hereby conveyed a 3-3/4 Acre tract described as follows: Beginning at a stone in the Right of Way of Highway \#61, and comer to A H Roach; thence with said Highway N 7 E $6101 / 2$ feet to a stone; thence a new line N 73 E 134 feet to a stone; thence $S 57 \mathrm{E} 85$ feet to a stone; thence $\$ 18$ W 66 feet to a stone; thence S $151 / 4$ E 288 feet to a stone, corner to Madis Harvey; thence with said Harvey line S 7 W 249 feet to a stone comer to A H Roach; thence with sad Roach line N 82 W 297 feet to the beginning, said excepted 3-3/4 Acre Tract described in a Deed from Otis Recce and wife Gladys Recce to Titus Fudge and wife Viola Fudge dated 5 August 1937 and recorded in Deed Book Number 55 at Page 43.


Beginning at a stone in the right of way of Highway $\# 61$ and corner to A. H. Roach thence
with said Highway N. 7 E 610 保 with said Highway N. $7 \mathrm{E} .6101 / 2$ feet to a stone thence new line N 73 E 134 feet to a stone thence S 57 E 85 feet to a stone thence S 18 W 66 feet to a stone thence S $15 \mathrm{l} / 4 \mathrm{E} 288$ feet to a stone corner to Hadis Harvey thence with his line S. 7 W .249 feet to a stone comer to A. H. Roach; thence with his line N 82 W 297 feet to the beginning and containing $33 / 4$
acres more or less.

Being the same property conveyed to Brandon Harvey, single, by Deed from James Brown and Angela Brown, husband and wife, dated fancy to 1,2010 , and recorded in Deed Book 312. , Page 17 , in the Office of the Adar County Court Clerk.

The Premises are described and/or depicted as follows:


84

## EXHIBIT J NOTIFICATION LISTING

HARVEY BRANDON
245 BREEDING LOOP
BREEDING, KY 42715
HARVEY TERRY \& BRENDA
1022 INDEPENDENCE RIDGE ROAD
BREEDING, KY 42715
VERSON ROBIN \& PAUL BELA
8707 BREEDING RD
EDMONTON, KY 42129
ROACH HAL WOOD \& JOHN B ROACH
219 ABERDEEN DRIVE
GREENVILLE, SC 29605-3024
ROACH JOHN B
747 SPRINGDALE RD
STATESVILLE, NC 28677-3433
DAWKINS GREG
4414 WEST PONCA
MCHENRY, IL 60050
FUDGE CARLEY
13054 BURKESVILLE RD
BREEDING, KY 42715
CAMPBELL WILLIAM \& FAITH
480 FIRE DEPT LN
COLUMBIA, KY 42728
FUDGE DANNY O \& MELISSA
13171 BURKESVILLE RD
BREEDING, KY 42715
GIBSON CHARLES-GIBSON-
CLEMMONS-GIBSON JR
GEL DEL
BREEDING KY, 42715
MURLEY BRIAN \& CINDY
915 INDEPENDENCE RIDGE RD
BREEDING KY, 42715
MURLEY BRIAN \& CINDY
915 INDEPENDENCE RIDGE RD
BREEDING KY., 42715

HARVEY BRANDON C/O NOEL HARVEY 571 BREEDING LOOP BREEDING, KY 42715-

## EXHIBIT K COPY OF PROPERTY OWNER NOTIFICATION

# Notice of Proposed Construction of Wireless Communications Facility Site Name: Breeding FN 

Dear Landowner:
New Cingular Wireless PCS, 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 527 Breeding Loop, Breeding, KY 42715 ( $36^{\circ} 57^{\prime} 56.09^{\prime \prime}$ North latitude, $85^{\circ} 25^{\prime} 52.54^{\prime \prime}$ West longitude). The proposed facility will include a 235 -foot tall antenna tower, plus a 5 -foot lightning arrestor and related ground facilities. This facility is needed to provide improved coverage for wireless communications in the area.

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 2019-00376 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
Enclosures

## Driving Directions to Proposed Tower Site

1. Beginning at 424 Public Square \#1, Columbia, KY, head northwest toward Campbellsville St. and travel approximately 240 feet.
2. Exit the traffic circle onto Burkesville Street and travel for approximately 8.4 miles.
3. Continue onto KY-61 and travel approximately 3.9 miles.
4. Turn left onto Breeding Loop / Old Hwy 61 and travel approximately 0.2 miles.
5. The site is on the left at 527 Breeding Loop, Breeding, KY 42715
6. The site coordinates are:
a. North 36 deg 57 min 56.09 sec
b. West $85^{\circ}$ deg 25 min 52.54 sec


Prepared by:
Chris Shouse
Pike Legal Group
1578 Highway 44 East, Suite 6
P.O. Box 396

Shepherdsville, KY 40165-3069
Telephone: 502-955-4400 or 800-516-4293


## EXHIBIT L

COPY OF COUNTY JUDGE/EXECUTIVE NOTICE

VIA CERTIFIED MAIL

Gale B. Cowan<br>County Judge Executive<br>424 Public Square, Suite 1<br>Columbia, KY 42728

## RE: Notice of Proposal to Construct Wireless Communications Facility Kentucky Public Service Commission Docket No. 2019-00376 Site Name: Breeding FN

Dear Judge/Executive:
New Cingular Wireless PCS, 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 527 Breeding Loop, Breeding, KY 42715 ( $36^{\circ} 57^{\prime} 56.09^{\prime \prime}$ North latitude, $85^{\circ} 25^{\prime} 52.54^{\prime \prime}$ West longitude). The proposed facility will include a 235 -foot tall antenna tower, plus a 5 -foot lightning arrestor and related ground facilities. This facility is needed to provide improved coverage for wireless communications in the area.

You have a right to submit comments to the PSC or to request intervention in the PSC's proceedings on the application. You may contact the PSC at: Executive Director, Public Service Commission, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2019-00376 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 424 Public Square \#1, Columbia, KY, head northwest toward Campbellsville St. and travel approximately 240 feet
2. Exit the traffic circle onto Burkesville Street and travel for approximately 8.4 miles.
3. Continue onto KY-61 and travel approximately 3.9 miles.
4. Turn left onto Breeding Loop / Old Hwy 61 and travel approximately 0.2 miles.
5. The site is on the left at 527 Breeding Loop, Breeding, KY 42715
6. The site coordinates are:
a. North 36 deg 57 min 56.09 sec
b. West $85^{\circ}$ deg 25 min 52.54 sec


Prepared by:
Chris Shouse
Pike Legal Group
1578 Highway 44 East, Suite 6
P.O. Box 396

Shepherdsville, KY 40165-3069
Telephone: 502-955-4400 or 800-516-4293


## EXHIBIT M

COPY OF POSTED NOTICES AND NEWSPAPER NOTICE ADVERTISEMENT

## SITE NAME: BREEDING 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 201900376 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 201900376 in your correspondence.

## Dear Adair Progress:

Please publish the following legal notice advertisement in the next edition of The Adair Progress:

## 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 527 Breeding Loop, Breeding, KY 42715 ( $36^{\circ} 57^{\prime} 56.09^{\prime \prime}$ North latitude, $85^{\circ}$ 25' 52.54" 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 2019-00376 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,
Chris Shouse
Pike Legal Group, PLLC


Lat: $\mathbf{3 6 . 9 6 9 9 4 4}$


[^0]:    David A. Pike
    Pike Legal Group, PLLC
    1578 Highway 44 East, Suite 6
    P. O. Box 369

    Shepherdsville, KY 40165-0369
    Telephone: (502) 955-4400
    Telefax: (502) 543-4410
    Email: dpike@pikelegal.com
    Attorney for New Cingular Wireless PCS, LLC d/b/a AT\&T Mobility

