COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:
THE APPLICATION OF ..... )
NEW CINGULAR WIRELESS PCS, LLCFOR ISSUANCE OF A CERTIFICATE OF PUBLIC
CONVENIENCE AND NECESSITY TO CONSTRUCT ..... )
A WIRELESS COMMUNICATIONS FACILITY ..... )
IN THE COMMONWEALTH OF KENTUCKY ..... )CASE NO.: 2014-00088

SITE NAME: EAST POINT

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

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

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

1. The complete name and address of the Applicant: New Cingular Wireless

PCS, LLC, a Delaware limited liability company, d/b/a AT\&T Mobility, having a local address of 601 West Chestnut Street, Louisville, Kentucky 40203.
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 $\S \S 278.020(1), 278.040,278.650,278.665$, and other statutory authority.
3. The Certificate of Authority filed with the Kentucky Secretary of State for the Applicant entity was attached to a prior application and is part of the case record for PSC case number 2011-00473 and is hereby incorporated by reference. AT\&T Mobility is in good standing in the state in which it is organized and is authorized to transact business in Kentucky.
4. The Applicant operates on frequencies licensed by the Federal Communications Commission ("FCC") pursuant to applicable FCC requirements. A copy of the Applicant's FCC license to provide wireless services is attached to this Application or described as part of Exhibit A, and the facility will be constructed and operated in accordance with applicable FCC regulations.
5. The public convenience and necessity require the construction of the proposed WCF. The construction of the WCF will bring or improve the Applicant's services to an area currently not served or not adequately served by the Applicant by increasing coverage or capacity and thereby enhancing the public's access to innovative and competitive wireless communications services. The WCF will provide a necessary link in
the Applicant's communications network that is designed to meet the increasing demands for wireless services in Kentucky's wireless communications service area. The WCF is an integral link in the Applicant's network design that must be in place to provide adequate coverage to the service area.
6. To address the above-described service needs, Applicant proposes to construct a WCF at 613 Ford's Gap Road, Auxier, KY $41602\left(37^{\circ} 44^{\prime} 04.76^{\prime \prime}\right.$ North latitude, $82^{\circ} 46^{\prime} 27.89^{\prime \prime}$ 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 Roger D. and Sharon Collins pursuant to Deeds recorded at Deed Book 491, Page 695 and Deed Book 595, Page 147 in the office of the Floyd County Clerk. The proposed WCF will consist of a 255 -foot tall tower, with an approximately 10 -foot tall lightning arrestor attached at the top, for a total height of 265 -feet. The WCF will also include concrete foundations and a shelter or cabinets to accommodate the placement of the Applicant's radio electronics equipment and appurtenant equipment. The Applicant's equipment cabinet or shelter will be approved for use in the Commonwealth of Kentucky by the relevant building inspector. The WCF compound will be fenced and all access gate(s) will be secured. A description of the manner in which the proposed WCF will be constructed is attached as Exhibit B and Exhibit C.
7. A list of utilities, corporations, or persons with whom the proposed WCF is likely to compete is attached as Exhibit D, along with a map of suitable scale showing the location of the proposed new construction as well as the location of any like facilities located anywhere within the map area, along with a map key showing the owner of such
other facilities.
8. The site development plan and a vertical profile sketch of the WCF signed and sealed by a professional engineer registered in Kentucky depicting the tower height, as well as a proposed configuration for the antennas of the Applicant has also been included as part of Exhibit B.
9. Foundation design plans signed and sealed by a professional engineer registered in Kentucky and a description of the standards according to which the tower was designed are included as part of Exhibit C.
10. Applicant has considered the likely effects of the installation of the proposed WCF on nearby land uses and values and has concluded that there is no more suitable location reasonably available from which adequate services can be provided, and that there are no reasonably available opportunities to co-locate Applicant's antennas on an existing structure. When suitable towers or structures exist, Applicant attempts to co-locate on existing structures such as communications towers or other structures capable of supporting Applicant's facilities; however, no other suitable or available co-location site was found to be located in the vicinity of the site. A report detailing Applicant's site selection process for the subject site (including documentation as to why co-location is not possible for this site) is attached as Exhibit E.
11. A copy of the Application for Determination of No Hazard to Air Navigation issued by the Federal Aviation Administration ("FAA") is attached as Exhibit F.
12. A copy of the Application for Kentucky Airport Zoning Commission ("KAZC") Approval to construct the tower is attached as Exhibit G.
13. A geotechnical engineering firm has performed a preliminary geotechnical report on the WCF site. A copy of the preliminary geotechnical engineering report, signed and sealed by a professional engineer registered in the Commonwealth of Kentucky, is attached as Exhibit H. Additionally, a letter signed and stamped by a professional engineer registered in the Commonwealth of Kentucky is attached as Exhibit H. The letter describes the impossibility of conducting a full geotechnical investigation without clearing trees and grading the land. The name and address of the geotechnical engineering firm and the professional engineer registered in the Commonwealth of Kentucky who supervised the examination of this WCF site are included as part of this exhibit.
14. Clear directions to the proposed WCF site from the County seat are attached as Exhibit I. The name and telephone number of the preparer of Exhibit I are included as part of this exhibit.
15. Applicant, pursuant to a written agreement, has acquired the right to use the WCF site and associated property rights. A copy of the agreement or an abbreviated agreement recorded with the County Clerk is attached as Exhibit J.
16. Personnel directly responsible for the design and construction of the proposed WCF are well qualified and experienced. The tower and foundation drawings for the proposed tower submitted as part of Exhibit $\mathbf{C}$ bear the signature and stamp of a professional engineer registered in the Commonwealth of Kentucky. All tower designs meet or exceed the minimum requirements of applicable laws and regulations.
17. The Construction Manager for the proposed facility is Tommy Bailey, and the identity and qualifications of each person directly responsible for design and construction of
the proposed tower are contained Exhibits B \& C.
18. As noted on the Survey attached as part of Exhibit B, the surveyor has determined that the site is not within any flood hazard area.
19. Exhibit B includes a map drawn to a scale of no less than 1 inch equals 200 feet that shows the location of the proposed tower and identifies every owner of real estate within 500 feet of the proposed tower (according to the records maintained by the County Property Valuation Administrator). Every structure and every easement within 500 feet of the proposed tower or within 200 feet of the access road including intersection with the public street system is illustrated in Exhibit B.
20. Applicant has notified every person who, according to the records of the County Property Valuation Administrator, owns property which is within 500 feet of the proposed tower or contiguous to the site property, by certified mail, return receipt requested, of the proposed construction. Each notified property owner has been provided with a map of the location of the proposed construction, the telephone number and address of the PSC, and has been informed of his or her right to request intervention. A list of the notified property owners and a copy of the form of the notice sent by certified mail to each landowner are attached as Exhibit $\mathbf{K}$ and Exhibit L, respectively.
21. Applicant has notified the applicable County Judge/Executive by certified mail, return receipt requested, of the proposed construction. This notice included the PSC docket number under which the application will be processed and informed the County Judge/Executive of his/her right to request intervention. A copy of this notice is attached as Exhibit M.
22. Notice signs meeting the requirements prescribed by 807 KAR 5:063, Section 1(2) that measure at least 2 feet in height and 4 feet in width and that contain all required language in letters of required height, have been posted, one in a visible location on the proposed site and one on the nearest public road. Such signs shall remain posted for at least two weeks after filing of the Application, and a copy of the posted text is attached as Exhibit N. Legal notice 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.
23. The general area where the proposed facility is to be located is rural and contains large tracts of land.
24. The process that was used by the Applicant's radio frequency engineers in selecting the site for the proposed WCF was consistent with the general process used for selecting all other existing and proposed WCF facilities within the proposed network design area. Applicant's radio frequency engineers have conducted studies and tests in order to develop a highly efficient network that is designed to handle voice and data traffic in the service area. The engineers determined an optimum area for the placement of the proposed facility in terms of elevation and location to provide the best quality service to customers in the service area. A radio frequency design search area prepared in reference to these radio frequency studies was considered by the Applicant when searching for sites for its antennas that would provide the coverage deemed necessary by the Applicant. A map of the area in which the tower is proposed to be located which is drawn to scale and clearly depicts the necessary search area within which the site should be located pursuant
to radio frequency requirements is attached as Exhibit O.
25. All Exhibits to this Application are hereby incorporated by reference as if fully set out as part of the Application.
26. 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
Patrick W. Turner
General Attorney-Kentucky
AT\&T Kentucky
1600 Williams Street
Suite 5200
Columbia, South Carolina 29201
Telephone: (803) 401-2900
Telefax: (803) 254-1731
Email: pt1285@att.com

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

Respectfully submitted,

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

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

## LIST OF EXHIBITS

A - FCC License Documentation
B - Site Development Plan:
$500^{\prime}$ Vicinity Map
Legal Descriptions
Flood Plain Certification
Site Plan
Vertical Tower Profile
C - Tower and Foundation Design
D - Competing Utilities, Corporations, or Persons List and Map of Like Facilities in Vicinity

E - Co-location Report
F - FAA
G - Kentucky Airport Zoning Commission
H - Geotechnical Report
I - Directions to WCF Site
J - Copy of Real Estate Agreement
K - Notification Listing
L - Copy of Property Owner Notification
M - Copy of County Judge/Executive Notice
N - Copy of Posted Notices
O - Copy of Radio Frequency Design Search Area

## EXHIBIT A

FCC LICENSE DOCUMENTATION

ULS License

## Cellular License - KNKN861 - NEW CINGULAR WIRELESS PCS, LLC

| Call Sign | KNKN861 | Radio Service | CL-Cellular |
| :---: | :---: | :---: | :---: |
| Status | Active | Auth Type | Regular |
| Market |  |  |  |
| Market | CMA451 - Kentucky 9-Elliott | Channel Block | A |
| Submarket | 0 | Phase | 2 |
| Dates |  |  |  |
| Grant | 08/30/2011 | Expiration | 10/01/2021 |
| Effective | 12/10/2012 | Cancellation |  |

## Five Year Buildout Date

02/04/1997

## Control Points

11650 Lyndon Farms Court, LOUISVILLE, KY P: (502)329-4700

2
707 CONCORD ROAD, KNOXVILLE, TN

Licensee
FRN 0003291192 Type Limited Liability Company

## Licensee

NEW CINGULAR WIRELESS PCS, LLC P:(972)234-7003
2200 N. Greenville Ave, 1W F:(972)301-6893
Richardson, TX 75082 E:FCCMW@att.com
ATTN Reginald Youngblood

## Contact

AT\&T MOBILITY LLC P:(202)457-2055
Michael P Goggin
F:(202)457-3073
1120 20th Street, NW - Suite 1000
Washington, DC 20036
ATTN Michael P. Goggin
E:michael.p.goggin@att.com

## Ownetship and Quallications

Radio Service Type Mobile
Regulatory Status Common Carrier Interconnected Yes

## Alien Ownership

The Applicant answered "No" to each of the Alien Ownership questions.

## Basic Qualifications

The Applicant answered "No" to each of the Basic Qualification questions.

Demographics
Race
Ethnicity Gender

## PCS Broadband License - KNLF235 - New Cingular Wireless PCS, LLC

| Call Sign | KNLF235 | Radio Service | CW - PCS Broadband |
| :--- | :--- | :--- | :--- |
| Status | Active | Auth Type | Regular |
| Market |  |  |  |
| Market | MTA018 - Cincinnati-Dayton | Channel Block | A |
| Submarket | 15 | Associated | $001850.00000000-$ |
|  |  | Frequencies | 001865.00000000 |
|  |  | $(M H z)$ | $001930.0000000-$ |
|  |  |  | 001945.00000000 |

## Dates

| Grant | $07 / 18 / 2005$ |
| :--- | :--- |
| Effective | $11 / 24 / 2012$ |

## Buildout Deadlines

1st 06/23/2000
Expiration 06/23/2015
Cancellation

## Notification Dates

1st 07/03/2000
2nd
05/16/2005

Licensee
FRN 0003291192 Type Limited Liability Company

## Licensee

New Cingular Wireless PCS, LLC
2200 N. Greenville Ave, 1W
Richardson, TX 75082
ATTN Reginald Youngblood

P:(972)234-7003
F:(972)301-6893
E:FCCMW@att.com

P:(202)457-2055
F:(202)457-3073
E:michael.p.goggin@att.com

Ownership and Qualtications
Radio Service Type Mobile
Regulatory Status Common Carrier Interconnected Yes

## Alien Ownership

The Applicant answered "No" to each of the Alien Ownership questions.

## Basic Qualifications

The Applicant answered "No" to each of the Basic Qualification questions.

## Tribal Land Bidding Credits

This license did not have tribal land bidding credits.

## EXHIBIT B

## SITE DEVELOPMENT PLAN:

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




(A) PARCEL \# O43-00-00-037.01
ROGER D AND SHARON COLINS


PARCEL \# O43-00-00-037.00
ROGER AND SHARON COLLIN
(B) ROGER AND SHARON C
613 FORDS GAP RD
AUXIR


AUXIER, KY 41502
D.B. 524, PG. 025
D.B. 524, PG. 025
No ZONiNG

PARCEL \# O43-00-00-036.00
DOYLE \& TERESA MUSIC
(D) 2202 BRANDONLN CONYERS, GA 30
D.B. 397 , PG. 475 PARCEL \# 043-00-00-038.01
Z2 REFERENCE ONL
CURRY CEMETARY
(ㄷ)
CURRY CEMETARY
PRETONBURE, KY 41653
 NOZONING




( ${ }^{\circ}$
 and jozosincPARCEL \#O43-OO-00-026.00
FREDDIE L MILIISON NEWSOME33 RIDGEEIIEW
AUXIER, KY 460
D. 8.530 . PG. 447 D.B. 530. PG.
NO ZONiNG

GENERAL NOTE:

1. ALL INFORMATION SHOWN HEREON WAS OBTAINED FROM THE
RECORDS OF THE FLOYD COUNTY KENTUCKY PROPERTY VALUATIO

 DUE TOTHE INACCURACIES AND TIME LAPSE IN UPDATING FLLES. TH DISCLAMS ANY WARRANTY FOR THE CONTENT AND ANY ERRORS
CONTAINED NTHEIR

$$
-
$$

THIS MAP IS FOR GENERAL
NOTA BOUNDARY SURVEY

POD

$\qquad$

SURVEY

| REV. | DATE | Description |
| :---: | :---: | :---: |
|  |  |  |


| 1 | 03.06.14 | PVA UPDATE |
| :--- | :--- | :--- |
|  |  |  |



EAST POINT


SITE NUMEER:

| POD NUMBER: | 13-8874 |
| :---: | :---: |
| DRAWN BY: CHECKED BY | NAR <br> MEP |

500' RADIUS \& ABUTTER'S MAP

## SITE PLAN NOTES

1. THE PROPOSED DEVELOPMMNT IS FOR A 235 FOO
SELF-SUPPORT TOWER AND MULTPLE EOUPMENT LOCATONS. THE LOCATINN IS 513 FORD'S GAP ROAD,
AUXER, KY 41602 . AUXIER, KY 41602

 WATER SANTTARY SEWER AND WASTE COLECTIONS
SERCESARE NOT REOURED FOR THE PROPOSED ELOPMEN
2. Centerline of proposed tower geographic

LATTUDE: $37^{\circ} \cdot 44^{\prime} .04 .76^{\prime \prime} \mathrm{N}$
LONGITUDE: $82{ }^{46}{ }^{46} 27.89^{\circ} \mathrm{W}$
4. REMOVE AlL VEGETATION, CleAN AND GRUB LEAS area ( Mere roureb).
5. ANISH GRADNG TO PROMDE EFFECTVE DRANAGE MTH
A SLOPE OF NO LESS THAN ONE EIGHTH INCH (1/8") PER OISTANCE OF SIX FEET ( $6^{\prime}$ ) IN ALL DIRECTONS.
6. LOCATE ALL
CONSTRUCTON.
7. COMPOUND FINISHED SURFACE to be fenced

$$
\begin{aligned}
& \begin{array}{|c|}
\hline \text { UNDERGROUND UTILITI } \\
\hline \text { CALL } 2 \text { WORKNG DA'SS }
\end{array} \\
& \text { BEFORE YOU DIG } \\
& \text { ПЕNANA 1-800-382-5544 } \\
& \begin{array}{l}
\text { KENTUCKY } 1-800 \text {-752 } \\
\text { OR DAL } 811
\end{array} \\
& \text { UTLUTES PROTECTON SERVIVE }
\end{aligned}
$$




SITE PLAN NOTES




CENTELLINE OF PROPOSSED TOWER GEOGRAPHIC LOCATONS:

RENOVE AL vegtation, clean and crub lease
5. ENISH GRAING TT Provioe efective drannas wth Sill DISTANEE OF SIX FEET (6) (N) ALL DRECTONS.
6. LOCATE ALL U.G. UTLITES PRIOR TO ANY CONSTRUCTION. Compound finished surface to be fencen


GRAPHIC SCALE







## EXHIBIT C

TOWER AND FOUNDATION DESIGN

STRUCTURES

Westower Communications

Attn: John Boud

SUBJECT: Valmont File \# 244570
Model V-27.0 X $255^{\prime}$ Self Supporting Tower
Site Name: East Point, Site ID KYALU6164, KY

Thank you for your inquiry concerning tower design codes and practices as they relate to your requested tower designs.

Valmont Structures has been designing and building guyed and self-supporting towers and monopoles since the early 1950's. During this time, we have sold thousands of towers ranging in height from as little as $50^{\prime}$ high to in excess of 1400 '. These towers were individually engineered to accommodate the loading requirements imparted by the design wind speed, ice considerations, antenna loading, and other factors dictated by the national code requirements existing at the time the tower was built.

The ANSI/TIA-222-G Standard represents the latest refinement of specific minimum requirements for tower engineers and manufacturers to follow to help assure that the tower structure and its foundations are designed to meet the most realistic conditions for local weather while assuring that the tower is designed to stringent factors of safety. This tower is designed to 90 MPH (no ice) and 30 MPH ( $1 / 2^{\prime \prime}$ ice) per ANSI/TIA-222-G with Class II, Topographical category 1, Exposure criteria C and a Crest height of 0 feet.

We are aware of few documented instances of a self supporting tower or monopole failure. Self supporting towers and monopoles can be designed such that the most common mode of failure is in the upper middle region of the tower, with the upper portion of the tower remaining connected and "bending and bowing over" against the base of the tower or pole. The fact that the wind is normally greater on the upper portion of the structure contributes to the likelihood of this type of failure. This particular Tower has a theoretical failure at the tower midpoint or above. The predicted mode of wind induced failure would be a buckling of the tower legs at or above the tower midpoint with the top sections of the tower folding over on to the intact base sections. This would then affect a "zero fall zone" at ground level.

Including myself, our site has three licensed Professional Engineers covering a total of 49 states. Valmont Structures is an AISC approved shop. All Valmont Structures welders are AWS and CWB qualified. Our total design, engineer and build process has been quality audited by our customers including public utilities, telephone companies, government agencies, and of course AISC.

We trust the above and the attached will be helpful to you. If you should need anything else, please let us know at your convenience.

Sincerely,

William R. Heiden III Manager of Engineering Ext. \#5243


## MESTOWER <br> COMWIUNICATIONS

March 1, 2014
Kentucky Public Service Commission
211 Sower Blvd.
P.O. Box 615

Frankfort, KY 40602-0615
RE: Site Name: East Point
Proposed Cell Tower
37-44-4.76 North Latitude, 82-46-27.89 West Longitude

## Dear Commissioners:

The Project / Construction Manager for the proposed new communications facility will be Tommy Bailey. His contact information is (606) 316-6620 or tbailey@westower.com.

Tommy has been in the industry doing civil construction and constructing towers since 1983. He started in the industry with Andrew Corporation building MCI microwave sites across the US. He's worked for Southwest Bell, Cell One and AT\&T. He has erected approximately fifty (50) cellular communications facilities and built over 1,000 civil sites for various carriers, nationwide.

He was also co-owner of EWS in Bastrop, TX for four (4) years installing radio equipment for T-Mobile and AT\&T.

Thank you,


John Boud
Site Acquisition Manager: Kentucky Market 10400 Linn Station Rd., Suite 225, Louisville, KY 40223
jboud@westower.com | 559.790.8855 (mobile)
www.westower.com


|  | $\begin{aligned} & \text { WESTOWER COMM. } \\ & \text { EAST POINT, KY } \\ & -27.0 \times 255^{\prime} \\ & \hline-20 \end{aligned}$ |  |
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|  | APPROVED/ENC. \| 1 S S $^{1 / 22 / 2 / 2014}$ | valmont ${ }^{\text {F }}$ |
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| (ersem |  | ${ }_{\text {PaCE }}^{252819}$ |


| V-SERIES LEG SECTION DATA 140'-255' ELEVATION |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SECTION |  |  | LEG |  |  |  |  |  |  |  |  | DIAGONAL ERACE |  |  |  |  |  |  |  | $\frac{\text { Hor }}{19 T Y}$ |
|  | LENGTH | $\text { * } \begin{gathered} * \\ \text { WEIGHT } \end{gathered}$ | $\begin{aligned} & \text { NOM } \\ & \text { sIze } \end{aligned}$ | WALL | GRADE | CLIMEING |  | NON-CLIMB |  | CONNECT BOLT+ |  | PART NUMEER ** |  |  | ANGLE |  | CONNECT BOLT |  | $\begin{aligned} & \text { CENTER } \\ & \text { SPACER } \end{aligned}$ |  |
| \# |  |  |  |  |  | QTY | PART\# | QTY | PART\# | diam | LENGTH | \#1 | \#2 | \#3 | FACE | тнIck | diam | LENGTH |  |  |
| v-5.0 | $15^{\prime}$ | 734* | 2-1/2" | 0.203 | A572-50 | 1 | 226169 | 2 | 226170 | 3/4" | 3-1/2" | 227077 | 227077 | 227077 | $2^{\prime \prime}$ | 1/8' | 3/4* | 2-1/4" | 116467 |  |
| V-5.0 | $20^{\circ}$ | 1285\# | $4^{\prime \prime}$ | 0.237 | A572-50 | 1 | 226184 | 2 | 226185 | 3/4" | 3-1/2" | 227113 | 227113 | 227113 | $2^{\prime \prime}$ | 3/16" | 3/4* | 2-1/4* | 116467 |  |
| v-7.0 | $20^{\circ}$ | 1609\# | $5^{\prime \prime}$ | 0.258 | A572-50 | 1 | 226200 | 2 | 226201 | 3/4" | 3-1/2" | 226190 | 226189 | 231342 | $2^{\prime \prime}$ | $3 / 16^{\prime \prime}$ | 3/4* | 2-1/4* | 116467 |  |
| $v-9.0$ | $20^{\circ}$ | 1752\# | $5^{\prime \prime}$ | 0.258 | A572-50 | 3 | 226192 |  |  | 3/4" | 3-1/2* | 226196 | 226195 | 231344 | $2^{\prime \prime}$ | 3/16* | 3/4* | 2-1/4" | 116467 |  |
| v -11.0 | $20^{\circ}$ | 2200\% | $6^{\prime \prime}$ | 0.280 | A572-50 | 3 | 226206 |  |  | 3/4" | 3-1/2" | 225038 | 22503 | 23 | 2-1/2" | 3/16" | 3/4* | 2-1/4" | 116467 |  |
| v -13. O | $20^{\circ}$ | 2490\# | $6^{\prime \prime}$ | 0.280 | A572-50] | 3 | 229377 |  |  | $1^{\prime \prime}$ | 4-3/4* | 227341 | 226209 | 231349 | 2-1/2" | $3 / 16^{\circ}$ | 3/4* | 2-1/4* | 116467 |  |
| + AT BOTTOM OF SECTION <br> * the weights listed are theoretical. the actual weights will vary. all weights should be confirmed in the field prior to erection. <br> ** panels are numbered beginning at the top of the section. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |




|  | KDOWN | S | ON DIAG | AL | A ( | LEG | WITH | LE | GLES) | 0 ' | 100' | EL |  |
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| SECTION |  | DIAGONAL PART \# |  |  | DIAG ANGLE |  | DIAG END BOLT |  | DIAG CENTER \& SPACER BOLT |  | CENTER <br> PLATE | SPACER |  |
| \# | MODEL | UPPER | LOWER | LONG | FACE | THICK | DIAM | LENGTH | DIAM | LENGTH | PART \# | PART \# | \#* |
| 5 | U-19.0 | 215288 | 215292 | 215364 | 3" | 3/16" | 7/8" | 2-1/2" | $5 / 8 "$ | 2-1/4" | 211833 | 104291 | 7 |
| 4 | U-21.0 | 215295 | 215299 | 215368 | 3" | 3/16" | 7/8" | 2-1/2" | 5/8" | 2-1/4" | 211833 | 104291 | 8 |
| 3 | U-23. 0 | 215303 | 215307 | 215372 | 3" | 3/16" | 7/8" | 2-1/2" | 5/8" | 2-1/4" | 211833 | 104291 | 8 |
| 2 | U-25.0 | 215311 | 215315 | 215376 | 3" | 3/16" | 7/8" | 2-1/2" | 5/8" | 2-1/4" | 211833 | 104291 | 8 |
| 1 | U-27. 0 | 215320 | 215324 | 215380 | 3-1/2" | 1/4" | 7/8" | 2-1/2" | 5/8" | 2-1/4" | 211833 | 104291 | 8 |
|  | QUANTIT | IS PER | PNEL | ER FA | USE | 1 LOCK | ASHER | JNDER | H P | N NUT |  |  |  |



William R. Heiden DI, KY Professional Engineer \# 22430

|  | WESTOWER COMM. EAST POINT, KY V-27.0 X 255 ' |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | APPROVED/ENG. | M_S | 1/22/2014 | valmont $\sqrt{ }$ <br> $\begin{array}{ll}\text { 1-877-467-4763 } & \text { Plymouth, IN } \\ \text { 1-888-880-9191 } & \text { Salem, OR }\end{array}$ <br> STRUCTURES |  |  |  |
|  | APPROVED/FOUND. | N/A |  |  |  |  |  |
|  | COPYRIGHT 2014 |  |  |  |  |  |  |
|  | DRAWN BY | SKK |  | $\begin{aligned} & \text { DRAWING No. } \\ & 252819 \\ & \text { PAGE } \end{aligned}$ | 3 | OF 10 |  |
| From: F1015940. DFT - 01/21/2014 17: 43Printed from 252819_03@@. DWG - 01/21/2014 17:45 @ 01/22/2014 14:50 | ENG. File NO. A-244570-  <br> ARCHIVE F-1015940 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

TYPICAL BREAKDOWN SECTION ASSEMBLY (12" LEG WITH DOUBLE ANGLES) $0^{\prime}-100^{\prime}$ ELEVATION
DIAGONAL END BOLTS - SEE
DIAGONAL TABLE ON PAGE 3 FOR SIZE. NO FLAT WASHER REQUIRED.
"UPPER" DIAGONAL BRACES
(BACK TO BACK ANGLES) - SEE
TABLE ON PG. 3 FOR PART \#.

"LONG" DIAGONAL BRACE (BACK TO BACK ANGLES) - SEE TABLE ON PG. 3 FOR PART \#.
INTERMEDIATE DIAGONAL BOLTS WITH SPACER - SEE TABLE ON PG. 3 FOR SIZE, SPACER PART \# AND NUMBER OF LOCATIONS PER PANEL ON EACH FACE. USE 1 SPACER PER BOLT. SEE DRAWING \# 214823 FOR DETAILS.
diagonal center plate SEE DIAGONAL TABLE ON PAGE 3 FOR PART \# AND BOLT SIZE.
"LOWER" DIAGONAL BRACES
(BACK TO BACK ANGLES) - SEE
TABLE ON PG. 3 FOR PART \#.


LEG CONNECTION - SEE TABLE ON PAGE 3 FOR BOLT SIZE. USE 1 LOCK WASHER AND 1 FLAT WASHER UNDER EACH PLAIN NUT FOR LEG CONNECTION.

## ATTENTION ERECTOR:

1. EXTRA CARE MUST BE TAKEN WHEN STANDING BREAKDOWN LEG SECTIONS FROM A FLAT "ASSEMBLY" POSITION ON THE GROUND TO AN UPRIGHT POSITION FOR STACKING. POOR RIGGING AND/OR LIFTING PROCEDURES MAY DAMAGE THE ANGLE BRACES AND/OR BREAKDOWN LEGS. IT IS THE RESPONSIBILTY OF THE TOWER CONTRACTOR TO ENSURE BREAKDOWN LEGS AND ANGLES ARE NOT DAMAGED DURING THE TOWER ASSEMBLY AND ERECTION.
2. WHEN LIFTING ("FLYING") SINGLE PANEL TOWER SECTIONS TO PLACE THEM ON PREVIOUSLY ERECTED SECTIONS, A MINIMUM OF TWO (2) FULL SECTIONS (TYPICALLY 40') MUST BE ASSEMBLED TOGETHER TO PROVIDE ADEQUATE STABILITY TO THE TOWER LEGS AND ANGLE BRACES. IT IS THE RESPONSIBILTY OF THE TOWER CONTRACTOR TO ENSURE BREAKDOWN LEGS AND ANGLES ARE NOT DAMAGED DURING THE TOWER ASSEMBLY AND ERECTION.


3. TOWER DESIGN CONFORMS TO STANDARD TIA-222-G UTILIZING AN 90 MPH 3-SEC GUST basic Wind SPEED WITH a STRUCTURE CLASS OF II, TOPOGRAPHIC CATEGORY OF 1 AND EXPOSURE C CRITERIA WITH NO ICE.
(解 RADIAL ICE
4. NO TWIST AND SWAY LIMITATIONS SPECIFIED OR USED FOR THIS TOWER.
5. MATERIAL: (A) SOLID RODS TO ASTM A572 GRADE 50. (B) ANGLES TO ASTM A36. (C) PIPE TO ASTM A500 GRADE B. (D) STEEL PLATES TO ASTM A36. (E) CONNECTION BOLTS TO ASTM A325 OR ASTM A449 (FU=120 KSI AND FY=92 KSI) AND ANCHOR BOLTS TO ASTM F1554 (Fu=150 KSI AND Fy=105 KSI). (F) TOWER Leg PIPE TO BE ASTM A500 gRade b/C WITH 50ksi min. yield streng h
6. BASE REACTIONS PER TIA-222-G FOR 90 MPH BASIC WIND SPEED WITH NO ICE (REACTIONS INCLUDE TIA-222-G LOAD FACTORS): TOTAL WEIGHT = G8. O KIPS. MAXIMUM COMPRESSION $=432.0 \mathrm{KIPS}$ PER LEG. MOMENT $=9578.0 \mathrm{KIP-FT}$. MAXIMUM UPLIFT $=378.0 \mathrm{KIPS}$ PER LEG. MAXIMUM SHEAR $=65.0$ KIPS TOTAL.
7. BASE REACTIONS PER TIA-222-G FOR 30 MPH BASIC WIND SPEED WITH O. 50" RADIAL ICE (REACTIONS INCLUDE TIA-222-G LOAD FACTORS): TOTAL WEIGHT =
8. 0 KIPS. MOMENT $=1092.0$ KIP-FT. MAXIMUM SHEAR $=7.0 \mathrm{KIPS}$ TOTAL. 169. O KIPS. MOMENT $=1092.0 \mathrm{KIP-FT}$. MAXIMUM SHEAR $=7.0 \mathrm{KIPS}$ TOTAL.
9. FINISH: ALL BOLTS ARE GALVANIZED IN ACCORDANCE WITH ASTMA153 (HOT DIPPED) OR ASTM B695 CLASS 50 (MECHANICAL). ALL OTHER STRUCTURAL MATERIALS ARE GALVANIZED IN ACCORDANCE WITH ASTM123.
10. ANTENNAS: 250' - (3) SBNH-1D6565C, (3) SBNH-1D8585C (ANDREW PANELS), (9) ERICSSON RRU11, (3) ANDREW E15ZD1P13, (3) RAYCAP DC6-48-60-18-F AND (3) RAYCAP DC2-48-60-0-9F WITH (12) $1-5 / 8^{\prime \prime}$ AND (2) $1 / 2^{\prime \prime}$ LINES ASSUMED

240 ' - (3) SBNH-1D6565C, (3) SBNH-1DB585C (ANDREW PANELS), (9) ERICSSON RRU11, (3) ANDREW E15Z01P13, (3) RAYCAP DC6-48-60-18-F AND (3) RAYCAP DC2-48-60-0-9F WITH (12) $1-5 / 8^{\prime \prime}$ AND (2) $1 / 2^{\prime \prime}$ LINES ASSUMED

230' - (3) SBNH-1D6565C, (3) SBNH-1DB585C (ANDREW PANELS), (9) ERICSSON RRU11, (3) ANDREW E15ZO1P13, (3) RAYCAP DC6-48-60-18-F AND

220 - (3) SBNH-1D6565C, (3) SENH-1D8585C (ANDREW PANELS), (9) ERICSSON RRU11, (3) ANDREW E15ZO1P13, (3) RAYCAP DC6-48-60-18-F AND
NOTE: (A) ELEVATIONS ARE TO THE BOTTOM OF THE ANTENNAS EXCEPT FOR MICROWAVE DISHES, WHICH ARE TO THE CENTERLINE. (B) ALL TRANSMISSION LINES MUST BE PLACED ON PIROD SUPPLIED LINE BRACKETS.
8. REMOVE FOUNDATION TEMPLATE PRIOR TO ERECTING TOWER. INSTALL BASE SECTION WITH MINIMUM OF 2" CLEARANCE ABOVE CONCRETE. SEE BASE SECTION PLACEMENT PAGE FOR MORE INFORMATION. PACK NON-SHRINK STRUCTURAL GROUT UNDER BASE SECTION AFTER LEVELING TOWER.
9. MIN. WELDS $5 / 16^{n}$ UNLESS OTHERWISE SPECIFIED. ALL WELDING TO CONFORM TO AWS D1. 1 SPECIFICATIONS .
. THIS drawing does not indicate the method of construction. the contractor shall supervise and direct the work and he shall be solely RESPONSIBLE FOR ALL CONSTRUCTION MEANS, SEQUENCES AND PROCEDURES.
11. all bolts and nuts must be in place before the adjoining sections are installed.
12. ALL Structural bolts are to be tightened to a snug tight condition as defined by aisc specification unless otherwise noted.
13. ATTENTION TOWER ERECTOR: COAT ALL BOLT ASSEMBLIESTHAT USE PIN LOCK NUTS WITH ZINC RICH COLD GALVANIZING COMPOUND AFTER FINAL TIGHTNENING.
14. TIA-222-G GROUNDING FOR TOWER
15. based on the loading listed above, this tower has a theoretical failure point at tower midpoint or above for an effective "zero fall zone" at GROUND LEVEL.



## FOUNDATION NOTES

1. ULTIMATE SOIL PRESSURE ASSUMED TO BE 5000 PSF. ULTIMATE PASSIVE PRESSURE ASSUMED TO BE 450 LB PCF. THE PURCHASER \& OWNER/CONTRACTOR MUST VERIFY THAT THE ACTUAL SITE SOIL PARAMETERS MEET OR EXCEED THE ASSUMED SOIL PARAMETERS PER THIS NOTE AND/OR SHOULD OBTAIN A SOIL REPORT TO DETERMINE THE SOIL CONDI SUR AT THE SITE. FIONS ENCOUNTERED FOR THE ACTUAL SUBSURFACE CONDITIONS ENCOUNTERED.
2. CONCRETE TO BE 4000 PSI - 28 DAYS. REINFORCING BAR TO CONFORM TO ASTM AG15 GRADE GO SPECIFICATIONS. CONCRETE INSTALLATION TO CONFORM TO ACI-318 (2008) BUILDING REQUIREMENTS FOR REINFORCED CONCRETE ALL CONCRETE TO BE PLACED AGAINST UNDISTURBED EARTH FREE OF WATER AND ALL FOREIGN OBJECTS AND MATERIALS. A MINIMUM OF THREE INCHES OF CONCRETE SHALL COVER ALL REINFORCEMENT. WELDING OF REBAR NOT PERMITTED.
3. A COLD JOINT IS PERMISSIBLE UPON CONSULTATION WITH PIROD. ALL COLD JOINTS SHALL BE COATED WITH BONDING AGENTS PRIOR TO SECOND POUR.
4. ALL FILL SHOULD 日E PLACED IN LOOSE LEVEL LIFTS OFNO MORE THAN $12^{\prime \prime}$ THICK. FILL MATERIALS SHOULD BE CLEAN AND FREE OF ORGANIC AND FROZEN MATERIALS OR ANY OTHER DELETERIOUS MATERIALS. COMPACT FILL TO $97 \%$ OF STANDARD PROCTOR MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM DE9B.
5. BENDING, STRAIGHTENING OR REALIGNING (HOT OR COLD) OF THE ANCHOR BOLTS BY ANY METHOD IS PROHIBITED.
6. CROWN TOP OF FOUNDATION FOR PROPER DRAINAGE.
7. In the absence of a geotechnical report, the following presumptive soil parameters were used: an ultimate bearing pressure of 50oo psf, a COHESION OF 1000 PSF, A SOIL UNIT WEIGHT OF 110 PCF, AN ANGLE OF INTERNAL FRICTION OF O DEGREES AND NO GROUNDWATER ENCOUNTERED. THESE SOIL PARAMETERS ARE IN COMPLIANCE WITH THE REQUIREMENTS OF ANSI/TIA-222-G-2005 AND CAN BE FOUND IN ANNEX F OF THIS STANDARD.


William R. Heiden III, KY Professional Engineer \# 22430






## EXHIBIT D

COMPETING UTILITIES, CORPORATIONS, OR PERSONS LIST AND MAP OF LIKE FACILITIES IN VICINITY

License Search

## Search Results

Speciffed Search
State $=$ Kentucky
County = FLOYD
Radio Service = CL, CW
Status = Active
Matches 1 - 8 (of 8 )
PA $=$ Pending Application(s)
$T \mathrm{~T}=$ Termination Pending
$L=$ Lease

| $\begin{gathered} \text { Call } \\ \text { Sign/Lease } \\ \text { ID } \end{gathered}$ | Name | FRN | Radio Service | Status | Expiration Date |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 KNKN861 | NEW CINGULAR W IRELESS PCS, LLC | 0003291192 | CL | Active | 10/01/2021 |
| 2 KNKN880 | East Kentucky Network, LLC d/b/a Appalachian Wireless | 0001786607 | CL | Active | 10/01/2021 |
| 3 KNLF235 | New Cingular Wireless PCS, LLC | 0003291192 | CW | Active | 06/23/2015 |
| 4 KNLF960 | T-Mobile License LLC | 0001565449 | CW | Active | 04/28/2017 |
| 5 KNLH614 | SPRINTCOM, INC. | 0002315950 | CW | Active | 04/28/2017 |
| 6 KNLH615 | SPRINTCOM, INC. | 0002315950 | CW | Active | 04/28/2017 |
| 7 WPOH986 | West Virginia PCS Alliance, L.C. | 0002049328 | CW | Active | 06/23/2015 |
| 8 WPOK570 | East Kentucky Network, LLC d/b/a Appalachian Wireless | 0001786607 | CW | Active | 09/29/2019 |
| $\begin{gathered} \text { Call } \\ \text { Sign/Lease } \\ \text { ID } \end{gathered}$ | Name | FRN | Radio Service | Status | Expiration Date |



## EXHIBIT E

CO-LOCATION REPORT

April 4, 2014

Kentucky Public Service Commission<br>211 Sower Blvd<br>PO Box 615<br>Frankfort, KY 40602

RE: Alternate Site Analysis Report
Uniform Application for a Communications Facility
Applicant: AT\&T Mobility
Site Location: 631 Fords Gap Road, Auxier, KY
Site Name: East Point
Dear Commissioners:

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

## AT\&T Mobility Site Development Process

Step 1: Problem Identification. AT\&T Mobility radio frequency engineers first identified a growing coverage and/or capacity gap in the Auxier area, within Floyd County.

Step 2: Search Ring. To help guide the site development team's task of identifying a suitable location for a new wireless communications facility site, AT\&T Mobility's radio frequency engineers identified the geographic area where the antenna site must be located in order to close the gap and issued a map (called a Search Ring) that identified the general area in which a new site must be located. In this instance, the search ring was designed for an antenna site to be constructed within an area just west of Auxier, with fairly severe ground elevation changes within the search ring. This topographic variation of just under 600' within the ring required that we focus our search on property located at the higher elevations in order to make the site work. Certain areas of the search ring were also limited by navigable airspace restrictions, keeping the search near the very ring center.

Step 3: Co-location Review. The site development team first reviewed the area within the Search Ring for a suitable tall structure for co-location. In this case, we approached Appalachian Wireless regarding an existing tower they own just outside the ring to the west. Appalachian's Manager of Technical Operations Mike Johnson declined to lease space to AT\&T based on future modifications to the site currently being contemplated by the company. There are no other tall structures within the ring.

Step 4: Review of the Area's Zoning Classification. Once the site development team determined that there are no available existing tall structures which are technically feasible and suitable for co-location, the team next reviewed local zoning requirements to identify parcels located within the search area that might be suitable from a land use perspective to host an antenna site. In this case, zoning did not play a part in establishing the proposed tower location. The Floyd County Judge Executive's Office confirmed prior to our evaluation phase that no zoning was in effect in the area under review.

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

In our focus on locating a suitable site at or near the highest elevation in the area, a common characteristic was uncovered; nearly all the properties which contained higher elevation land were separated from existing roadways and other access by a piece of land at a lower elevation owned by a separate owner. We were able to locate two (2) properties which contained land at an acceptable elevation and appeared to have direct access to an existing right of way, and where the owner was willing to consider leasing land to AT\&T.

The first candidate was a wholly undeveloped parcel located off Fords Gap Road. Upon further evaluation of the property during a site visit, it was determined that the ownerproposed access to the higher-elevation rear of the property would need to run though an existing cemetery. Even if AT\&T was willing to consider this access route, the road was simply too narrow and could not be developed further. Without an alternate route being available on the property, we were forced to rule it out.

An adjacent property located at 613 Fords Gap Road did meet AT\&T's needs for access to an existing right of way, and allowed the company to achieve the necessary elevation for coverage. Although a new access road is required, the route chosen in consultation with the owner follows an existing grade to the rear of the property and removes the smallest diameter trees from any possible route. Utilities are also expected to follow this access route.

Step 6: Candidate Evaluation and Selection. After the preliminary site assessments were performed, the site development team was left with a single viable candidate, and pursued that location.

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

## Leasehold Due Diligence:

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


## Engineering Due Diligence:

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


## Environmental Due Diligence:

A Phase I Environmental Site Assessment ("ESA") investigation was performed to establish the pre-existing types and amounts of contamination at a site, and to establish that the leaseholder is innocent of liability for the costs of performing environmental cleanup work that might arise from pollution or contamination of the site caused by a third party.

In addition to performing a Phase 1 ESA, the site was also evaluated for potential impacts under the National Environmental Policy Act (NEPA), submitted to the State Historic Preservation Office for review of potential impacts to historic structures or districts, and submitted to the registered Tribal Historic Preservation Office so that registered Native American nations had the opportunity to review potential impacts on native religious, ceremonial, or cultural resources.

## Federal Regulatory Approvals

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

In this case, all but one (1) property could be ruled out for topographic variation, construction and/or leasing issues.

Step 8: Application. Once a lease is obtained and all site due diligence is completed, AT\&T Mobility prepared and filed the accompanying uniform application to construct, maintain and operate a communications facility.

## Conclusion

Applicant's site identification and selection process aims to identify the least intrusive of all the technically feasible parcels in a service need area. In this case, AT\&T focused their efforts on a property which would minimize the impact to surrounding areas, existing foliage and shorten the required access road as much as possible.

Sincerely,


John Boud
Site Acquisition Manager: Kentucky Market
10400 Linn Station Rd., Suite 225, Louisville, KY 40223
jboud@westower.com | 559.790.8855 (mobile)
www.westower.com


## EXHIBIT F FAA

## ** 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 East Point |
| :--- | :--- |
| Location: | Auxier, KY |
| Latitude: | $37-44-04.76 \mathrm{~N}$ NAD 83 |
| Longitude: | $82-46-27.89 \mathrm{~W}$ |
| Heights: | 885 feet site elevation (SE) |
|  | 265 feet above ground level (AGL) <br>  |

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 marked/lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, a med-dual system - Chapters 4,8(M-Dual),\&12.

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 I)
$\qquad$ Within 5 days after the construction reaches its greatest height (7460-2, Part II)
This determination expires on 06/03/2015 unless:
(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 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 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.

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

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

If we can be of further assistance, please contact our office at (847) 294-8084. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-ASO-8861-OE.

Signature Control No: 198760649-202895173
Carole Bernacchi
Technician
Attachment(s)
Frequency Data
cc: FCC

| LOW <br> FREQUENCY | HIGH <br> FREQUENCY | FREQUENCY <br> UNIT | ERP <br> ERP | ENIT |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| 698 | 806 | MHz | W |  |
| 806 | 824 | MHz | 500 | W |
| 824 | 849 | MHz | 500 | W |
| 851 | 866 | MHz | 500 | W |
| 869 | 894 | MHz | 500 | W |
| 896 | 901 | MHz | 500 | W |
| 901 | 902 | MHz | 7 | W |
| 930 | 931 | MHz | 3500 | W |
| 931 | 932 | MHz | 3500 | W |
| 932 | 932.5 | MHz | 17 | dBW |
| 935 | 940 | MHz | 1000 | W |
| 940 | 941 | MHz | 3500 | W |
| 1850 | 1910 | MHz | 1640 | W |
| 1930 | 1990 | MHz | 1640 | W |
| 2305 | 2310 | MHz | 2000 | W |
| 2345 | 2360 | MHz | 2000 | W |

## EXHIBIT G <br> KENTUCKY AIRPORT ZONING COMMISSION

## APPLICATION FOR PERMIT TO CONSTRUCT OR ALTER A STRUCTURE




## EXHIBIT H

GEOTECHNICAL REPORT


ENVIRONMENTAL CORPORATION OF AMERICA

ENVIRONMENTAL | GEOTECHNICAL | WETLANDS | ECOLOGY | CULTURAL RESOURCES

April 3, 2014
WesTower Communications
10400 Linn Station Road
Suite 225
Louisville, Kentucky 40223

## Attention: Mr. John Boud

Subject: Geotechnical Investigation
AT\&T Site (East Point)
613 Fords Gap Road
Auxier, Floyd County, Kentucky
ECA Project Number: P1328
Dear Mr. Boud:
Environmental Corporation of America (ECA) was authorized on September, 2013 to complete the Geotechnical Investigation for the subject Property. We were provided with a survey of the subject Property dated September 4, 2013. The Property is located in a heavily wooded area south of Fords Gap Road. The Property includes a proposed 100 -foot by 100 -foot lease area located in a heavily wooded area and a proposed approximate 535 -foot long by 30 -foot wide access/utility easement. The proposed easement would extend through the heavily wooded area in a southwesterly direction off Fords Gap Road until reaching the proposed lease area.

Due to existing dense vegetation and steep terrain along the proposed access/utility easement, it would not be possible for a geotechnical drill rig to access the center of the lease area. In order to complete the requested Geotechnical Investigation, tree clearing and considerable grading activities would be necessary.

Please let us know if you have questions or concerns.
Sincerely yours,
Environmental Corporation of America
Anz )(. Willnci
Go Michelle Taylor
Project Manager

## ENVIRONMENTAL CORPORATION OF AMERICA

ENVIRONMENTAL | GEOTECHNICAL \| WETLANDS \| ECOLOGY | CULTURAL RESOURCES

## Preliminary Geotechnical Investigation

AT\&T Site EAST POINT<br>613 Fords Gap<br>Auxier, Floyd County, KY<br>ECA Project No. P-1328



## SUBMITTED TO:

WesTower Communications
10400 Linn Station Road, Suite 225 Louisville, KY 40223

## PREPARED BY:

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

# ENVIRONMENTAL CORPORATION OF AMERICA 

WesTower Communications<br>10400 Linn Station Road, Suite 225<br>Louisville, KY 40223<br>Attention: Mr. John Boud<br>Subject: Report of Preliminary Geotechnical Investigation AT\&T Site EAST POINT<br>613 Fords Gap<br>Auxier, Floyd County, KY<br>ECA Project No. P-1328

Dear Mr. Boud:
Environmental Corporation of America (ECA) is pleased to submit this report of our Preliminary Geotechnical Investigation for the proposed project. Our services were provided as authorized verbally on November 19, 2013.

This report presents a review of the information provided to us, a description of the site and subsurface conditions, and our recommendations. The appendices contain a USGS Topographic Map and USDA Web Soil Survey map and Soil Descriptions for mapped soil types.

## Purpose and Scope of Work

The purpose of this effort was to evaluate the likely site conditions so that preliminary foundation design plans can be prepared. No soil borings or testing has been conducted for this report. A final Geotechnical Investigation including borings should be conducted for the proposed tower.

## Project Information

We were provided with a survey of the Property dated September 4, 2013. The Property is located in a wooded area south of Fords Gap on a residential tract. We understand that plans call for a new 255 -foot tall self-supporting lattice tower on the site, approximately as shown on Figure 1.

Mr. Boud
Page 2

## Estimated Site and Subsurface Conditions

The topography leading up to the proposed compound is very steep and wooded. The elevation at the proposed tower location is about 885 feet AMSL. We noted scattered exposed rock outcrops and boulders along the proposed access during our previous site visit. Nearby, there are exposed massive highway cut slopes exhibiting near surface sound rock.

The soil survey shows six potential soil types near the proposed tower location. Descriptions of these soil types are attached. In summary, the general soil profile descriptions include sandstone, shale, or siltstone occurring at depths of from 2 to 6-1/2 feet.

## Recommendations

Based on the anticipated shallow bedrock, the tower will likely be supported on a shallow mat (pad and pier) foundation system. Groundwater will not likely be encountered in foundation excavations. The rock types should easily be able to support nominal bearing pressures of at least 10 kips per square foot.

We appreciate the opportunity to be of service. Please call us with any questions at (770) 6672040.

Sincerely, Environmental Congoration of America



Kelby Williams, EIT Project Engineer

Appendix A Figure 1 - Topographic Map and Site Survey
Appendix B Soil Survey and Soil Descriptions

## APPENDIX A

## Topographic Map and Site Survey

Source: USGS Topographic Quandrangle Map, 7.5 Minute Series, Paintsville, KY (1992), Prestonburg, KY (1992), and Lancer, KY (1992).
AT\&T Site (East Point)


## APPENDIX B

## Soil Survey and Soil Descriptions



## MAP LEGEND

| Area of interest (AOI) |  | E | Spoil Area |
| :---: | :---: | :---: | :---: |
| $\square$ | Area of Interest (AOI) | d | Stony Spot |
| Solls |  | 18 | Very Stany Spot |
|  | Soil Map Unit Polygons | (1) | Wet Spot |
| 0 | Soil Map Unit Lines |  |  |
|  |  | $\Delta$ | Other |
| [ | Soil Map Unit Points | - | Special Line Features |
| Special Point Features |  |  |  |
| (0) | Blowout | Water Features |  |
|  |  | $\cdots$ | Streams and Canals |
| 8 | Borrow Pit | Transportation |  |
| \% | Clay Spot |  |  |
| 8 | Clay Spot | H+ | Rails |
| $\bigcirc$ | Closed Depression | - | Interstate Highways |
| \% | Gravel Pit | (2) | US Routes |
| ** | Gravelly Spot | $\square$ | Major Roads |
| 9 | Landfill | $\cdots$ | Local Roads |
| A | Lava Flow | Background |  |
| 4. | Marsh or swamp | - | Aerial Photography |
| 9 | Mine or Quarry |  |  |
| c) | Miscellaneous Water |  |  |
| (D) | Perennial Water |  |  |
| $*$ | Rock Outcrop |  |  |
| $\pm$ | Saline Spot |  |  |
| \% ${ }^{\circ}$ | Sandy Spot |  |  |
| = | Severely Eroded Spot |  |  |
| 0 | Sinkhole |  |  |
| 3 | Slide or Slip |  |  |
| 居 | Sodic Spot |  |  |

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

> Warning: Soil Map may not be valid at this scale.
> Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Floyd and Johnson Counties, Kentucky Survey Area Data: Version 8, Sep 16, 2012

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 4, 2011-Oct 6, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

| Floyd and Johnson Counties, Kentucky (KY639) |  |  |  |
| :---: | :---: | :---: | :---: |
| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
| DgF | Dekalb-Gilpin-Marrowbone complex, 20 to 80 percent slopes, very stony | 3.9 | 14.0\% |
| FsF | Fedscreek-Shelocta complex, 20 to 50 percent slopes | 2.7 | 9.6\% |
| HkF | Hazleton-Fedscreek-Kimper complex, 30 to 80 percent slopes, very stony | 21.4 | 76.4\% |
| Totals for Area of Interest |  | 28.0 | 100.0\% |

## Established Series

Rev. WRK-ART
05/2004

## DEKALB SERIES

The Dekalb series consists of moderately deep, excessively drained soils formed in material weathered from gray and brown acid sandstone in places interbedded with shale and graywacke. Slope ranges from 0 to 80 percent. Permeability is rapid. Mean annual precipitation is about 48 inches and mean annual air temperature is about 53 degrees $F$.

TAXONOMIC CLASS: Loamy-skeletal, siliceous, active, mesic Typic Dystrudepts
TYPICAL PEDON: Dekalb cobbly sandy loam in a wooded area of Hazleton and Dekalb soils, 25 to 75 percent slopes, extremely stony on an east facing slope at 1700 feet elevation. (Colors are for moist soil unless otherwise noted.)

Oi--0 to 1 inches; slightly decomposed leaves and twigs.
Oe--1 to 3 inches; moderately decomposed mat of roots and leaves.
A-3 to 5 inches; very dark gray (10YR 3/1) very cobbly sandy loam; weak fine granular structure; loose, nonsticky, nonplastic; many fine and medium roots; 40 percent angular sandstone cobbles and channers; very strongly acid; clear smooth boundary.(1 to 8 inches thick)

E--5 to 9 inches; pale brown (10YR 6/3) cobbly sandy loam; weak fine granular structure; friable, nonsticky, nonplastic; many medium and fine roots; 30 percent angular sandstone cobbles and channers; very strongly acid; clear smooth boundary.(0 to 7 inches thick)

Bw1--9 to 20 inches; yellowish brown (10YR 5/4) cobbly sandy loam; weak fine and medium subangular blocky structure; friable, nonsticky, nonplastic; common medium and fine roots; 35 percent angular sandstone cobbles and channers; very strongly acid; gradual smooth boundary.

Bw2--20 to 30 inches; yellowish brown (10YR 5/6) very cobbly sandy loam; weak medium subangular blocky structure; friable, nonsticky, nonplastic; common fine roots; 50 percent angular sandstone cobbles and channers; strongly acid; gradual wavy boundary. ( 15 to 30 inches thick)

C--30 to 34 inches; yellowish brown (10YR 5/4) extremely cobbly sandy loam; single grained; loose, nonsticky, nonplastic; few fine roots; 90 percent angular sandstone cobbles and channers; strongly acid; clear wavy boundary. (0 to 10 inches thick)

R--34 inches; light yellowish brown (10YR 6/4) and gray (10YR 5/1) slightly weathered sandstone bedrock; 4 to 40 inches between fractures with minimal displacement; bedrock inclination 5 to 30 degrees. Excavation difficulty, extremely high. Excavation via pick is nearly impossible. Backhoe excavation by a $50-80 \mathrm{hp}$ tractor cannot be made in a reasonable time.

TYPE LOCATION: Fulton County, Pennsylvania; in Licking Creek Township, 0.9 miles north of the intersection of US 30 and Pennsylvania Township route T428, 1000 feet west of T428; USGS Hustontown topographic quadrangle; lat. 40 degrees 1 minutes 32 seconds N . and long. 78 degrees 6 minutes 47 seconds W .

RANGE IN CHARACTERISTICS: Solum thickness and depth to bedrock range from 20 to 40 inches. Flat, subangular or angular, sandstone fragments, 1 to 10 inches across increase with depth and range from 10 to 60 percent in individual horizons of the solum and from 50 to 90 percent or more in the C horizon. The amount of rock fragments typically increases with depth. Weighted average rock fragment content ranges from 35 to 75 percent in the particle-size control section. Cobbly, channery, and very stony phases are common. Reaction ranges from extremely through strongly acid where unlimed. Illite, kaolinite, and vermiculite are common clay minerals.

The A horizon has hue of 10 YR , value of 2 or 3 , and chroma of 1 or 2 . If cultivated, an Ap horizon has hue of 10YR, value of 4 , and chroma of 2 to 4 . It is loam fine sandy loam or sandy loam. Structure is weak very fine or fine granular.

The E horizon has hue of 10 YR , value of 5 or 6 , and chroma of 1 to 4 . Texture and structure are similar to the A horizon.

Some pedons have a BA horizon with hue of 10 YR , value of 4 or 5 , and chroma of 3 or 4. It is loam, sandy loam, or fine sandy loam.

The B horizon has hue of 7.5 YR or 10 YR , value of 4 to 8 , and chroma of 4 to 8 . It is loam, fine sandy loam, or sandy loam. Average clay content typically is between 6 to 15 percent but ranges up to 18 percent in the particle-size control section. Structure is weak to moderate, fine or coarse subangular blocky.

The BC horizon, where present, has hue of 7.5 YR or 10YR, value of 5 to 8 and chroma of 4 to 8 . It is sandy loam, fine sandy loam, or loam in the fine- earth fraction.

The C horizon has hue of 7.5 YR or 10 YR , value of 5 or 6 , and chroma of 4 to 8 . Texture is sandy loam or loamy sand in the fine-earth fraction. Bedrock is gray to brown sandstone of varying hardness and is commonly fractured without displacement.

COMPETING SERIES: The Hazleton and Wallen soils are in the same family. Hazleton soils are deeper than 40 inches to bedrock. Wallen soils allow more silt textures in the solum.

The Hailey, Lehew and soils are in related families. Hailey soils formed in residuum from cherty limestone. Lehew soils have hue of 5YR or redder in the B horizon. Marbleyard soils have rock fragments dominantly of quartzite and metasandstone.

GEOGRAPHIC SETTING: Dekalb soils are on nearly level to very steep, uplands and ridges. Slopes are usually convex with gradients of 0 to 80 percent. The regolith weathered from gray and brown acid sandstone in places interbedded with shale and graywacke. The climate is humid temperate with mean annual rainfall of 36 to 60 inches and mean annual air temperature of 47 to 59 degrees F . The growing season ranges from 110 to 180 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the competing Hazleton along with the Buchanan, Clymer, Cookport, Ernest, Gilpin, Laidig, and Ramsey series. Buchanan, Cookport, Ernest, and Laidig soils have fragipans. Clymer and Gilpin soils have argillic horizons. Ramsey soils have bedrock within 20 inches.

DRAINAGE AND PERMEABILITY: Well drained to somewhat excessively drained. The potential for surface runoff is negligible to high. Permeability is rapid.

USE AND VEGETATION: Most Dekalb soils are in forests of mixed oaks, maple, and some white pine and hemlock. Smaller areas have been cleared for cultivation and pasture.

DISTRIBUTION AND EXTENT: Southern New York, Pennsylvania, Maryland, Ohio, West Virginia, Virginia, Kentucky, Tennessee, and Georgia. The series is of large extent.

## MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: <br> Morgantown, West Virginia

SERIES ESTABLISHED: Fort Payne Area, Alabama, 1903.
REMARKS: Diagnostic horizons and features recognized in this pedon are:

1. Ochric epipedon - the zone from the surface of the soil to a depth of about 9 inches (A and E horizon).
2. Cambic horizon - the zone from 9 to 30 inches (Bw horizon).

The Type location was changed from Clinton County, Pennsylvania to Fulton County, Pennsylvania.

ADDITIONAL DATA: Data from characterization sample S58Pa-18-6 were used as a basis for this description.

National Cooperative Soil Survey
U.S.A.

# Established Series <br> Rev. WRK-LER-AWD-ART <br> 07/2004 <br> <br> GILPIN SERIES 

 <br> <br> GILPIN SERIES}

The Gilpin series consists of moderately deep, well drained soils formed in residuum of nearly horizontal interbedded shale, siltstone, and some sandstone of the Allegheny Plateau. They are on gently sloping to steep, convex, dissected uplands. Slope ranges from 0 to 70 percent. Permeability is moderate. Mean annual precipitation is 43 inches, and mean annual air temperature is 51 degrees F .

TAXONOMIC CLASS: Fine-loamy, mixed, active, mesic Typic Hapludults
TYPICAL PEDON: Gilpin channery silt loam on a 3 percent northwest facing slope in cropland. (Colors are for moist soil unless otherwise noted.)

Ap--0 to 8 inches; dark grayish brown (10YR 4/2) channery silt loam; weak fine granular structure; friable, slightly sticky and slightly plastic; 20 percent rock fragments of subangular siltstone and shale; moderately acid; abrupt smooth boundary.(6 to 10 inches thick)

Bt1--8 to 13 inches; yellowish brown (10YR 5/4) channery silt loam; weak fine and medium subangular blocky structure; friable, slightly sticky and slightly plastic; few distinct clay films on faces of peds and in pores; 25 percent rock fragments of subangular siltstone and shale; moderately acid; gradual wavy boundary.

Bt2--13 to 24 inches; yellowish brown (10YR 5/6) channery silt loam; moderate medium subangular blocky structure; friable, slightly sticky and moderately plastic; few distinct clay films on faces of peds and in pores; 30 percent rock fragments of subangular siltstone and shale; very strongly acid; clear wavy boundary. (Combined thickness of the Bt horizon is 12 to 26 inches.)

C--24 to 30 inches; brown (10YR 5/3) extremely channery loam; massive; friable, slightly sticky and slightly plastic; few faint clay films and common prominent black coatings on fragments; 60 percent rock fragments of subangular siltstone and shale; very strongly acid; clear wavy boundary. ( 0 to 10 inches thick)

R--30 inches; light olive brown (2.5Y 5/4) fractured, thin bedded, shale and siltstone with silt and clay coatings in fractures; strongly acid.

TYPE LOCATION: Indiana County, Pennsylvania; North Mahoning Township, about $1 / 2$ mile southeast of Marchand, on hilltop 500 feet east of Township Road 660. U.S.G.S. Marion Center Topographic Quadrangle. Lat. 40 degrees, 51 minutes, 18 seconds, N. and Long. 79 degrees, 1 minute, 7 seconds W; NAD 1927.

RANGE IN CHARACTERISTICS: Solum thickness ranges from 18 to 36 inches. Fractured, bedded and rippable bedrock is at depths of 20 to 40 inches. Rock fragments are mostly angular to subangular channers of shale, siltstone and sandstone and comprise 5 to 40 percent of individual horizons of the solum and 30 to 90 percent of the C horizon. The rock fragment content is less than 35 percent, by volume in the upper 20 inches of the argillic horizon. Reaction ranges from strongly to extremely acid throughout unless limed.

The Ap has hue of 10 YR or 2.5 Y with value of 3 to 5 , and chroma of 2 to 4 . Dry values are 6 or 7 . The A horizon, where present, has hue of 10 YR or 2.5 Y with value of 2 to 4 , and chroma of 1 to 3 . Thickness for the A horizon ranges from 2 to 5 inches. The texture of the Ap or A horizon is silt loam or loam in the fine earth fraction.

Some pedons have E, BE, or BA horizons. These horizons range from 0 to 6 inches thick and have hue of 7.5 YR or 10 YR , value of 4 to 6 , and chroma of 5 to 3 . Texture is silt loam or loam in the fine earth fraction.

The Bt horizon has hue of 7.5 YR to 2.5 Y , value of 4 to 6 , and chroma of 4 to 8 . Colors tend to become redder with depth. Textures are silt loam, loam, clay loam, or silty clay loam in the fine-earth fraction. Clay films on ped faces, pores and on rock fragments are few or common and faint or distinct.

Some pedons have a BC horizon with colors and textures similar to the C horizon.
The C horizon has hue of 7.5 YR to 2.5 Y , value of 3 to 5 , and chroma of 2 to 6 . Texture is silt loam, loam or silty clay loam in the fine-earth fraction.

Some pedons have a Cr horizon.
The R horizon is horizontal interbedded shale, siltstone or fine grained sandstone.
COMPETING SERIES: The Bedington, Clymer, Edgemont, Edneytown, Gladstone, Joana, Millstone, Pigeonroost, Rayne, Shelocta, Syenite and Wist (T) series are in the
same family. Bedington, Clymer, Edgemont, Joanna, Rayne, Shelocta and Wist (T) soils have bedrock at more than 40 inches. Edneytown soils have a Cr horizon at more than 60 inches. Gladstone soils have granitic gneiss bedrock at 60 inches or more. Millstone soils have bedrock deeper than 80 inches. Pigeonroost soils have a Cr horizon within a 20 to 40 inch depth. Syenite soils have coarse fragments of granite in the control section.

The following series were competing under the old classification. They may compete after they are updated to the 9th Edition of Keys to Soil Taxonomy. The Albemarle, Arendtsville, Bucks, Butano, Chester, Elsinboro, Eubanks, Ezel, Freehold, Leedsville, Meadowville, Nixon, Pineville, and Quakertown competed under the old classification. Of these only Butano soils have bedrock at a depth of 20 to 40 inches. Bertano soils occur in the costal range of mountains of central eastern California with humid mesothermal climate.

GEOGRAPHIC SETTING: Gilpin soils are on nearly level to very steep, convex, dissected uplands with slopes of 0 to 70 percent. They developed in residuum weathered from nearly horizontal, interbedded gray and brown acid siltstone, shale and sandstone. The climate is humid temperate with an average annual rainfall of 36 to 50 inches, average annual air temperatures of 46 to 57 degrees F., and a growing season of 120 to 180 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the Berks, Blairton, Clymer, Dekalb, Muskingum, Rayne, Shelocta, Upshur, Weikert, Wellston, Westmoreland and Wharton soils. Blairton, Cavode, Ernest and Wharton soils have redoximorphic features in the subsoil. Berks and Muskingum soils do not have argillic horizons. Shelocta, Rayne and Wellston soils are more than 40 inches to rock. Upshur soils have finer textures. Weikert soils have bedrock at 20 inches or less.

DRAINAGE AND PERMEABILITY: Well drained. The potential for surface runoff is negligible to high. The permeability is moderate.

USE AND VEGETATION: Gilpin soils are mainly used for cropland and pasture. Wooded areas are in mixed hardwoods, mainly oaks.

DISTRIBUTION AND EXTENT: Pennsylvania, West Virginia, Ohio, Kentucky, Maryland, New York, North Carolina, Tennessee, Virginia and Indiana. The series is of large extent.

## MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE:

Morgantown, West Virginia
SERIES ESTABLISHED: Indiana County, Pennsylvania, 1931.
REMARKS: Diagnostic horizons and features recognized in this pedon are:
a. Ochric epipedon - the zone from the surface of the soil to a depth of 8 inches (Ap horizon).
b. Argillic horizon - the zone from 8 to 24 inches ( Bt horizon).

The clay mineralogy is mixed, with illite dominant and kaolinite and vermiculite in lesser quantities.

This series is mapped extensively in many states and MLRA's. Data available indicates CEC of superactive, active, and semiactive. Weighted average supports a CEC of active.

ADDITIONAL DATA: Characterization sample S61PA-32-56 is from Type Location, and was used as the basis for placing this series in the active CEC class. Also available is S61PA-32-54.

[^0]
## Established Series

JAK:JMR:JDM
05/2008

## MARROWBONE SERIES

The Marrowbone series consists of moderately deep, well drained soils that formed in loamy residuum or colluvium weathered from interbedded sandstone and siltstone. They are located on hillslopes, mountainsides, nose slopes and ridgetop crests. Slopes range from 8 to 120 percent, but are dominantly 30 to 90 percent.

TAXONOMIC CLASS: Coarse-loamy, mixed, semiactive, mesic Typic Dystrudepts
TYPICAL PEDON: Marrowbone fine sandy loam - on a 44 percent south facing slope under mixed hardwoods at 1,480 feet elevation. (Colors are for moist soil unless otherwise stated).

0i--1 to 0 inch; loose, undecomposed hardwood leaf litter; moderately acid; abrupt wavy boundary. ( 0 to 2 inches thick)

A--0 to 5 inches; brown (10YR 4/3) fine sandy loam; moderate medium granular structure; very friable; common fine to coarse roots; 10 percent sandstone fragments; moderately acid; clear smooth boundary. (3 to 7 inches thick)

Bw1--5 to 10 inches; brown (7.5YR 4/4) loam; moderate medium subangular blocky structure; friable; few fine and medium roots; few thin discontinuous brown (10YR $4 / 3$ ) organic coatings on faces of peds; 5 percent sandstone fragments; strongly acid; clear smooth boundary.

Bw2--10 to 17 inches; strong brown (7.5YR 5/6) fine sandy loam; moderate medium subangular blocky structure; friable; few fine and medium roots; 10 percent sandstone fragments; very strongly acid; clear smooth boundary.

Bw3--17 to 23 inches; strong brown (7.5YR 5/6) loam; moderate medium subangular blocky structure; friable; few fine and medium roots; very thin discontinuous silt coatings on faces of peds; 10 percent sandstone fragments; very strongly acid; clear
smooth boundary. (Combined thickness of the Bw horizon is 17 to 25 inches)
BC--23 to 28 inches; yellowish brown (10YR 5/6) channery loam; common medium distinct strong brown (7.5YR $5 / 6$ ) and light yellowish brown ( $2.5 \mathrm{Y} 6 / 4$ ) lithochromic mottles; weak medium subangular blocky structure; friable; 20 percent sandstone fragments; strongly acid; abrupt wavy boundary. ( 0 to 8 inches thick)

R--28 inches; olive ( $5 \mathrm{Y} 5 / 3$ ) sandstone.
TYPE LOCATION: Pike County, Kentucky, about 7.3 miles south of the community of Zebulon; 1000 yards east of the confluence of Raccoon Creek and Morris Branch in the head of Raccoon Creek on a south facing hill slope; 37 degrees, 28 minutes, 37 seconds N. Latitude and 82 degrees, 23 minutes, 06 seconds, W. Longitude; USGS Millard Quadrangle; NAD 83.

RANGE IN CHARACTERISTICS: Thickness of the solum and depth to rock ranges from 20 to 40 inches. Rock fragments, mostly sandstone or siltstone channers and flagstones, make up 0 to 15 percent of the surface layer and from 0 to 50 percent of individual horizons, but average less than 35 percent in the particle-size control section. Surface stones range from .01 to 15 percent and are commonly associated with sandstone rock outcrops that make up from .1 to 50 percent of mapped areas. Reaction commonly ranges from very strongly acid to moderately acid throughout the profile, but may range from slightly acid to neutral in the upper 10 inches.

The A horizon has hue of 7.5 YR to 2.5 Y , value of 3 to 5 , and chroma of 2 to 4 . Fineearth texture is fine sandy loam, sandy loam, loam, or silt loam. Structure is weak or moderate, fine or medium granular.

The B horizon has hue of 7.5 YR to 2.5 Y , value of 4 to 6 , and chroma of 3 to 8 . Fineearth texture is fine sandy loam, sandy loam, loam, or rarely silt loam. Structure is weak or moderate, fine through coarse subangular blocky or angular blocky. Lithochromic mottles in shades of brown, yellow, or red and in the lower part shades of gray, are common but not required. Neither are the thin silt coatings or clay films.

The C horizon, where present, has hue of 7.5 YR to 2.5 Y , value of 4 to 6 , and chroma of 3 to 8 . Fine-earth texture is loamy sand, loamy fine sand, fine sandy loam, sandy loam, loam, silt loam, clay loam, or sandy clay loam. Lithochromic mottles in shades of brown, yellow, red or gray are in some pedons. Silt coatings and clay films are in some pedons. A Cr horizon is in some pedons on more exposed locations or in areas with relatively soft bedrock.

The R horizon is commonly unweathered sandstone or siltstone, but grades to more fractured and weathered conditions on some landforms.

COMPETING SERIES: These are the Bannertown, Cheshire, Devotion, Ditney, Fedscreek, Maymead, Mine Run (T) and Tipsaw series. Bannertown soils are somewhat excessively drained and formed in residuum weathered form felsic metamorphic or igneous parent materials. Cheshire soils are very deep and formed in supraglacial till on uplands. Devotion soils formed in residuum weathered from felsic to intermediate metamorphic or igneous rock with paralithic contact. Ditney soils formed in residuum affected by soil creep that weathered from metasedimentary rock such as arkose, metagraywacke, metasandstone or quartzite. Fedscreek soils are deep and formed in colluvium. Maymead soils are very deep, formed in colluvium and contain coarse fragments of feldspathic quartzite, graywacke and arkosic sandstone. The tentative Mine Run Series is somewhat excessively drained and formed in residuum weathered from metamonzonite and gneiss. The Tipsaw series is exclusively over paralithic contact with moderately cemented sandstone interbedded with siltstone and shale.

GEOGRAPHIC SETTING: Marrowbone soils are mostly on southern and western hill slopes, mountain sides, nose slopes or narrow ridgetop crests. Slopes are dominantly 30 to 90 percent, but range from 8 to 120 percent. These soils formed in loamy residuum or creeping colluvium weathered from strongly acid through neutral Pennsylvanian aged sandstone or siltstone. Elevation ranges from 800 to about 4,000 feet. Mean annual temperature ranges from 53 to 57 degrees $F$. with a mean of 56 degrees. The mean annual precipitation ranges from 40 to 49 inches with a mean of about 43 inches.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the Berks, Cloverlick, Cutshin, Dekalb, Fedscreek, Gilpin, Guyandotte, Handshoe, Highsplint, Kimper, Latham, Muskingum, Pineville, Rayne, Sharondale and Shelocta series. Berks, Dekalb, Gilpin, Rayne and Muskingum soils are on ridgetop positions adjacent to or above the Marrowbone soils. All of these soils are moderately deep with the exception of Rayne, which is deep. Berks and Dekalb soils are loamy-skeletal; Gilpin, Muskingum and Rayne soils are fine-loamy; and Latham soils are fine. Gilpin, Latham and Rayne soils have argillic horizons. Cloverlick, Cutshin, Fedscreek, Guyandotte, Handshoe, Highsplint, Kimper, Pineville and Shelocta soils are on lower hill slopes and mountain sides. All of these series are deep or very deep. Cloverlick, Guyandotte, Handshoe, Highsplint and Sharondale soils are loamy-skeletal and Cutshin, Kimper, Pineville and Shelocta soils are fine-loamy. Cloverlick, Cutshin, Kimper and Guyandotte soils have umbric surface layers and Sharondale soils have
mollic surface layers. Pineville and Shelocta soils have argillic horizons.
DRAINAGE AND PERMEABILITY: Well drained. Permeability is moderate or moderately rapid and runoff ranges from low to medium on slopes less than 20 percent and from medium to high on slopes greater than 20 percent.

USE AND VEGETATION: Most areas are in secondary growth deciduous forest with mixed stands of white oak, black oak, scarlet oak, chestnut oak, red maple, American beech, shortleaf pine and Virginia pine. Less sloping areas are used for pasture and as sites for homes and gardens.

DISTRIBUTION AND EXTENT: Marrowbone soils are in the AlleghenyCumberland Plateau of eastern Kentucky and West Virginia with possible similar areas in Ohio, Virginia, Indiana and Tennessee. The area is estimated to be of large extent, about 250,000 acres.

## MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: <br> Morgantown, West Virginia

SERIES ESTABLISHED: Pike County, Kentucky; 1985. Source of the name is a small community in Pike County.

REMARKS: Diagnostic horizons recognized in this pedon are:
Ochric epipedon - 0 to 5 inches (A).
Cambic horizon - 5 to 23 inches (Bw); and 23 to 28 inches (BC).
ADDITIONAL DATA: Characterization sample S83KY-195-017 by NSSL.
Supplemental data for pedons S83KY-195-014, S82KY-195-018, and S83KY-195016.

[^1]
## Established Series

JAK:JMR:JDM
05/2008

## FEDSCREEK SERIES

The Fedscreek series consists of deep and very deep, well drained soils formed in loamy colluvium weathered from sandstone, siltstone, and shale. Permeability is moderately rapid. These soils are on hill slopes, mountain sides, benches, foot slopes, and in drainage ways. Slope ranges from 8 to 90 percent, but are dominantly 25 to 70 percent. Mean annual precipitation is about 43 inches and the mean annual temperature is about 56 degrees F .

TAXONOMIC CLASS: Coarse-loamy, mixed, semiactive, mesic Typic Dystrudepts
TYPICAL PEDON: Fedscreek channery loam on a 67 percent southwest facing slope under mixed hardwoods (white oak dominant) at 1,520 feet elevation. (Colors are for moist soil unless otherwise stated.)

0--1 to 0 inch; undecomposed hardwood leaf litter; very strongly acid; abrupt smooth boundary. (0 to 3 inches thick)

A--0 to 4 inches; brown (10YR 4/3) channery loam; moderate medium granular structure; very friable; common medium roots; 15 percent sandstone fragments; very strongly acid; abrupt smooth boundary. ( 1 to 7 inches thick)

BA--4 to 8 inches; yellowish brown (10YR 5/4) channery silt loam; moderate medium subangular blocky structure; friable; few fine and medium roots; 15 percent sandstone fragments; very strongly acid; clear smooth boundary. (2 to 6 inches thick)

Bw1--8 to 16 inches; yellowish brown (10YR 5/6) channery loam; moderate medium subangular blocky structure; friable; few fine to coarse roots; 15 percent sandstone fragments; very strongly acid; gradual smooth boundary.

Bw2--16 to 30 inches; yellowish brown (10YR 5/6) channery loam; moderate medium angular blocky structure; friable; few fine to coarse roots; 20 percent
sandstone fragments; very strongly acid; clear smooth boundary.
Bw3--30 to 40 inches; strong brown (7.5YR 5/6) channery loam; moderate medium angular blocky structure; firm; few fine to coarse roots; 25 percent sandstone fragments; very strongly acid; clear smooth boundary.

Bw4--40 to 48 inches; strong brown (7.5YR 5/6) channery loam; moderate medium angular blocky structure; firm; few fine and medium roots; few thin discontinuous strong brown (7.5YR 4/6) coatings on faces of peds; 25 percent sandstone fragments; very strongly acid; clear smooth boundary. (Combined thickness of the Bw horizon is 37 to 50 inches.).

C1--48 to 60 inches; brown (7.5YR 5/4) very channery loam; massive; firm; few medium roots; very few thin discontinuous strong brown (7.5YR 4/6) coatings on fractured surfaces and rock fragments; 35 percent sandstone fragments; very strongly acid; clear smooth boundary.

C2--60 to 65 inches; dark yellowish brown (10YR 4/6) channery silt loam with few medium distinct light yellowish brown ( $2.5 \mathrm{Y} 6 / 4$ ) lithochromic mottles; massive; firm; 30 percent sandstone fragments; very strongly acid; abrupt smooth boundary. ( 0 to 20 inches thick or more)

R--65 inches; interbedded sandstone and siltstone.
TYPE LOCATION: Pike County, Kentucky; about 1 mile east of the confluence of Slones Fork and Morris Branch in the head of Raccoon Creek; about 7.2 miles south of the community of Zebulon; 37 degrees, 28 minutes, 38 seconds N. Latitude and 82 degrees, 23 minutes, 15 seconds W. Longitude; USGS Millard Quadrangle; NAD 1983.

RANGE IN CHARACTERISTICS: Thickness of solum and depth to bedrock ranges from 40 to 72 inches. Rock fragments, mostly sandstone channers and flagstones, range from 5 to 60 percent in individual horizons, but average less than 35 percent in the particle-size control section. Reaction commonly ranges from very strongly to moderately acid throughout the profile, except for a few places where reaction ranges to slightly acid in the A horizon.

The A horizon has hue of 7.5 YR to 2.5 Y , value of 3 to 5 and chroma of 2 to 4 . Fineearth texture is sandy loam, loam, or silt loam. Structure is weak or moderate, fine or medium granular.

The $B$ horizon has hue of 7.5 YR to 2.5 Y , value of 4 to 6 and chroma of 3 to 8 . Fineearth texture is sandy loam, loam or silt loam. Structure is weak or moderate fine through coarse subangular blocky or angular blocky. Some pedons have lithochromic mottles in shades of brown, yellow, or red and in the lower part shades of gray. Thin clay or silt coatings are not present in all pedons.

The C horizon has hue of 7.5 YR to 2.5 Y , value of 4 to 6 and chroma of 3 to 8 . fineearth texture is sandy loam, loam, clay loam, silt loam, or silty clay loam. Some pedons have lithochromic mottles in shades of brown, yellow, red, or gray. Thin clay or silt coatings are not present in all pedons. A thin Cr horizon is present in some pedons.

The R horizon is interbedded sandstone or siltstone and less commonly shale.
COMPETING SERIES: These are the Bannertown, Cheshire, Devotion, Ditney, Marrowbone, Maymead, Mine Run (T) and Tipsaw series. The Bannertown, Devotion, Ditney, Marrowbone, Mine Run and Tipsaw series are moderately deep over bedrock. Bannertown soils are somewhat excessively drained and formed in residuum weathered form felsic metamorphic or igneous parent materials. Cheshire soils formed in supraglacial till on uplands. Devotion soils formed in residuum weathered from felsic to intermediate metamorphic or igneous rock with paralithic contact. Ditney soils formed in residuum affected by soil creep that weathered from metasedimentary rock such as arkose, metagraywacke, metasandstone or quartzite. Marrowbone soils formed in residuum weathered from interbedded sandstone and siltstone. Maymead soils formed in colluvium deposited by local alluvium and contain fragments of feldspathic quartzite, graywacke and arkosic sandstone. The tentative Mine Run Series is somewhat excessively drained and formed in residuum weathered from metamonzonite and gneiss. The Tipsaw series is exclusively over paralithic contact with moderately cemented sandstone interbedded with siltstone and shale.

GEOGRAPHIC SETTING: Fedscreek soils are on hill slopes, mountain sides, benches, foot slopes and in drainage ways. They are most commonly on south and west facing slopes with warm aspect, but some areas are downslope from sandstone escarpments. Slopes are dominantly 25 to 75 percent, but range from 8 to 90 percent. These soils formed in loamy colluvium dominated by strongly acid through neutral Pennsylvanian aged sandstone, siltstone and shale. Elevation ranges from 600 to 4,000 feet and local relief differences ranges from 600 to 2,500 feet. Mean annual temperature ranges from 53 to 59 degrees F . and the mean annual precipitation ranges from 40 to 49 inches.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the Berks, Dekalb, Gilpin, Handshoe, Jefferson, Kimper, Latham, Marrowbone, Muskingum, Pineville, Rayne, Sharondale and Shelocta series. Berks, Dekalb, Handshoe and Sharondale soils are loamy-skeletal; Gilpin, Jefferson, Kimper, Muskingum, Pineville, Rayne and Shelocta soils are fine-loamy; and Latham soils are fine. In addition, Gilpin, Jefferson, Latham, Pineville, Rayne and Shelocta soils have argillic horizons; Jefferson soils have mixed mineralogy, Kimper soils have dark surface layers; Sharondale soils have mollic surface layers; and Berks, Dekalb, Gilpin, Latham, Marrowbone and Muskingum soils are moderately deep to bedrock.

DRAINAGE AND PERMEABILITY: Well drained. Permeability is moderately rapid in the solum and moderate or moderately rapid in the substratum. Runoff is low in areas of less than 20 percent slope and medium above 20 percent.

USE AND VEGETATION: Most areas are in secondary growth hardwood forest with mixed stands of white oak, American Beech, mockernut hickory, pignut hickory, black oak, sugar maple, sassafras, red maple, chestnut oak, Virginia pine, and flowering dogwood. Less sloping areas are used for pasture and as sites for houses or gardens.

DISTRIBUTION AND EXTENT: Fedscreek soils are in the Allegheny-Cumberland Plateau of eastern Kentucky with possible similar areas in West Virginia, Virginia, and eastern Tennessee. The area is estimated to be of large extent, about 200,000 acres.

## MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Morgantown, West Virginia

SERIES ESTABLISHED: Pike County, Kentucky; 1985. Source of the name is a small community in Pike County.

REMARKS: Fedscreek soils were mostly mapped as Jefferson or Shelocta soils in the past.
Diagnostic horizons recognized in this pedon are:
Ochric epipedon - 0 to 4 inches (A).
Cambic horizon - 4 to 48 inches (BA, Bw).
ADDITIONAL DATA: Characterization sample S83KY-195-018 by NSSL.
Supplement data for pedons S83KY-195-011 and reference samples S82KY-195-8, $9,10,11,19,20,21$, and 22.
National Cooperative Soil Survey
U.S.A.

## Established Series

Rev. EAW-AWD-ART
05/2002

## HAZLETON SERIES

The Hazleton series consists of deep and very deep, well drained soils formed in residuum of acid gray, brown or red sandstone on uplands. Slope ranges from 0 to 80 percent. Permeability is moderately rapid to rapid. Mean annual precipitation is about 48 inches. Mean annual air temperature is about 51 degrees F .

TAXONOMIC CLASS: Loamy-skeletal, siliceous, active, mesic Typic Dystrudepts
TYPICAL PEDON: Hazleton sandy loam, very stony, from an area of Hazleton channery sandy loam, 0 to 3 percent slopes, in hardwood forest at an elevation of 1880 feet.. (Colors for moist soil unless otherwise stated.)

Oe--0 to 2 inches; dark reddish brown (5YR 2/2) partially decayed forest litter; abrupt wavy boundary. ( 1 to 2 inches thick)

E--2 to 4 inches; dark gray (10YR 4/1) sandy loam; weak fine granular structure; very friable, nonsticky, nomplastic; common fine and medium roots; 5 percent rock fragments; very strongly acid; abrupt wavy boundary. (0 to 9 inches thick)

Bhs--4 to 6 inches; dark reddish brown (5YR 3/3) sandy loam; weak medium granular structure; very friable, nonsticky, slightly plastic; common fine and medium roots; 5 percent rock fragments; very strongly acid; abrupt wavy boundary.

Bs--6 to 8 inches; yellowish red (5YR 4/6) channery sandy loam; weak very fine granular structure; very friable, nonsticky, nonplastic; common fine and medium roots; 15 percent rock fragments; very strongly acid; clear wavy boundary.

Bw1--8 to 17 inches; reddish yellow (7.5YR 6/6) very channery sandy loam; weak fine subangular blocky structure; very friable, nonsticky, nonplastic; common medium and coarse roots; 40 percent rock fragments; very strongly acid; gradual wavy boundary.

Bw2--17 to 24 inches; strong brown (7.5YR 5/6) very channery sandy loam; weak fine subangular blocky structure; friable, nonsticky, nonplastic; common medium roots; 45 percent rock fragments; very strongly acid; gradual wavy boundary.

Bw3--24 to 34 inches; reddish yellow (7.5YR 6/8) extremely channery sandy loam; weak fine subangular blocky structure; friable, nonsticky, nonplastic; few fine roots; 60 percent rock fragments; very strongly acid; gradual wavy boundary. (Combined thickness of the B horizon is 24 to 39 inches.)

C--34 to 58 inches; reddish yellow (7.5YR 6/6) extremely channery coarse sandy loam; massive; friable, nonsticky, nonplastic; 60 percent rock fragments; very strongly acid; diffuse wavy boundary. ( 13 to 22 inches thick)

R--58 to 72 inches; yellowish brown (10YR 5/6) sandstone. Excavation difficulty is high. Excavation by a tile spade is difficult but easily done by pick using over-thehead swing.

TYPE LOCATION: Warren County, Pennsylvania; Watson Township, 0.5 mile southeast of the intersection of S.R. 3005 and Hearts Content Road (S.R. 2002), 500 feet west of road. USGS Cobham, PA topographic quadrangle; Latitude 41 degrees, 43 minutes, 19.2 seconds N , Longitude 79 degrees, 15 minutes, 31.2 seconds W . (NAD 83)

RANGE IN CHARACTERISTICS: Solum thickness ranges from 25 to 50 inches. Depth to lithic contact ranges from 40 to 80 inches. Rock fragments of angular sandstone, dominantly less than 10 inches in size, range from 5 to 70 percent in individual horizons of the solum and from 35 to 80 percent in the C horizon. Boulders, stones, flags and channers cover about 5 to 60 percent of the surface of some pedons. The control section averages less than 18 percent clay. Reaction ranges from strongly acid through extremely acid throughout where unlimed.

The A horizon has hue of 10 YR , value of 2 to 4 , and chroma of 1 to 4 . The Ap horizon, where present, has hue of 10 YR , value of 2 to 4 , and chroma of 1 to 4 . The A or Ap horizon is fine sandy loam, sandy loam, or loam in the fine-earth fraction.

The E horizon has hue of 10 YR , value of 4 or 5 and chroma of 1 to 4 . It is fine sandy loam, sandy loam, or loam in the fine- earth fraction.

The B horizon has hue of 10 YR to 5 YR , value of 3 to 6 , and chroma of 3 to 8 . The B horizon has more than 40 percent sand. The upper part of the B horizon is sandy loam
or loam in the fine-earth fraction, and the lower part may range from loam to loamy sand in the fine-earth fraction. Structure is weak or moderate, fine to coarse subangular blocky, but can be granular in the Bhs horizon.

The C horizon has hue of 5 YR to 2.5 Y , value of 3 to 6 , and chroma of 3 to 8 . It ranges from loam to loamy sand in the fine-earth fraction.

COMPETING SERIES: Dekalb and Wallen are the only other series in this family. They both have lithic contact 20 to 40 inches below the surface.

Lehew, Marbleyard, and Hailey are in related families. Lehew and Marbleyard have lithic contact 20 to 40 inches below the surface. Hailey soils formed in cherty limestone residuum and are in a higher cation exchange activity class.

The Sherando and Varilla series may become competitors as their classification is updated to the eighth edition of Soil Taxonomy. Sherando soils formed in water sorted materials. Varilla soils formed in colluvium.

GEOGRAPHIC SETTING: Hazleton soils developed in residuum from acid gray, brown, or red sandstone and are found on summits, shoulders, and the upper third of backslopes. Slopes are usually convex with gradients of 0 to 80 percent.. The mean annual precipitation ranges from 36 to 60 inches, and the mean annual air temperature ranges from 47 to 55 degrees F . The average annual frost free season is 110 to 180 days.

GEOGRAPHICALLY ASSOCIATED SOILS: The competing Dekalb and Lehew soils and the Clymer, Cookport Edgemont, and Leetonia soils are on the same landscape. Buchanan, Gilpin, Laidig, and Rayne soils are nearby. Buchanan, Cookport, and Laidig soils have fragipans. Gilpin soils have bedrock within 40 inches. Clymer, Edgemont, and Rayne soils have argillic horizons. Leetonia soils have spodic horizons.

DRAINAGE AND PERMEABILITY: Well drained. The potential for surface runoff potential is neglegible to high. Permeability is moderately rapid to rapid.

USE AND VEGETATION: Most Hazleton soils are in woodland of mixed oaks, maple, cherry and occasional conifers. Some areas have been cleared for pasture and cropland.

DISTRIBUTION AND EXTENT: Kentucky, Maryland, New Jersey, Pemnsylvania,

West Virginia, Virginia and possibly Ohio. MLRA's 124, 126, 127, 147, 148. The series is of large extent.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE:
Morgantown, West Virginia
SERIES ESTABLISHED: Carbon County, Pennsylvania, 1960.
REMARKS: The Hazleton series was in a mixed mineralogy family until 1995.
Diagnostic horizons and features recognized in this pedon are:

1. Ochric epipedon - the zone from the surface of the soil to a depth of 8 inches $(\mathrm{E}$, Bhs, and Bs horizons).
2. Cambic horizon - the zone from 8 to 34 inches (Bw horizon).
3. Loamy-skeletal feature - greater than 35 percent by volume weighted average rock fragments in the particle-size control section.

ADDITIONAL DATA: Laboratory data is available on the typifying pedon, Pennsylvania State University sample number S1967-PA-062-001(1-11).

National Cooperative Soil Survey
U.S.A.

## KIMPER SERIES

The Kimper series consists of deep and very deep, well drained soils formed in loamy colluvium or colluvium and residuum weathered from sandstone, siltstone and shale. Permeability is moderate to moderately rapid. These sloping to very steep soils are mostly on mountain sides. Slopes range from 5 to 95 percent, but are dominantly 30 to 75 percent.

TAXONOMIC CLASS: Fine-loamy, mixed, semiactive, mesic Humic Dystrudepts
TYPICAL PEDON: Kimper very channery loam - on a concave 55 percent north facing slope under mixed hardwoods (yellow poplar dominant) at 1,560 feet elevation. (Colors are for moist soil unless otherwise stated.)
$0-5$ to 0 centimeters ( 2 to 0 inches); undecomposed leaf litter; very slightly acid. ( 0 to 3 inches thick.)

A--0 to 20 centimeters ( 0 to 8 inches); very dark brown (10YR $2 / 2$ ) very channery loam; dark brown ( $10 \mathrm{YR} 3 / 3$ ) dry; moderate fine and medium granular structure; very friable; common fine and medium roots; 40 percent sandstone fragments; slightly acid; clear smooth boundary. (6 to 9 inches thick.)

BA--20 to 33 centimeters ( 8 to 13 inches); brown (10YR 4/3) channery loam; weak medium subangular blocky structure; friable; common fine to coarse roots; 30 percent sandstone fragments; strongly acid; clear smooth boundary. (0 to 6 inches thick).

Bw1-- 33 to 69 centimeters ( 13 to 27 inches); yellowish brown (10YR 5/4) channery loam; moderate medium subangular blocky structure; friable; few fine roots; 25 percent sandstone fragments; strongly acid; clear smooth boundary.

Bw2--69 to 104 centimeters ( 27 to 41 inches); dark yellowish brown (10YR 4/4) channery loam; moderate medium subangular blocky structure; friable; 25 percent sandstone fragments; moderately acid; clear smooth boundary.

Bw3--104 to 132 centimeters ( 41 to 52 inches); dark yellowish brown (10YR 4/4) very channery loam; weak medium subangular blocky structure; friable; 40 percent sandstone fragments; few thin discontinuous coatings on faces of peds and on rock surfaces; moderately acid; clear smooth boundary. (Combined thickness of the Bw horizon is 34 to 51 inches.)

C1--132 to 163 centimeters ( 52 to 64 inches); brown (10YR 4/3) very channery fine sandy loam; massive; firm; few thin discontinuous coatings on fracture surfaces and on rock surfaces; 40 percent sandstone fragments; 2 percent coal fragments ( 2 mm to one-half inch in length); moderately acid; clear smooth boundary.

C2--163 to 191 centimeters ( 64 to 75 inches); brown (10YR 4/3) very channery loam; massive; firm; few thin discontinuous coatings on fracture surfaces, in pores, and on rock surfaces; 50 percent sandstone fragments; 2 percent coal fragments ( 2 mm to one-half inch in length); moderately acid; clear smooth boundary. (Combined thickness of the C horizon is 0 to 40 inches.)

R--191 centimeters ( 75 inches); hard sandstone bedrock.
TYPE LOCATION: Pike County, Kentucky; on a north facing mountainside about 2,500 feet southeast of the confluence of Henroost Fork and Dicks Fork near the headwaters of Feds Creek; 4.6 miles east of the community of Fedscreek; 37 degrees, 25 minutes, 00 seconds N . Latitude and 82 degrees, 10 minutes, 41 seconds W . Longitude; USGS Jamboree Quadrangle; NAD 83.

RANGE IN CHARACTERISTICS: Thickness of the solum ranges from 40 to more than 60 inches and depth to bedrock ranges from 48 to 100 inches or more. Rock fragments, mostly sandstone channers, range from 5 to 60 percent in individual horizons, but the 10 to 40 inch particle-size control section averages less than 35 percent. Coverage of surface stones ranges from 0 to 15 percent. Reaction ranges from extremely acid to neutral in the A horizon and from very strongly to moderately acid in the B and C horizon.

The A and BA horizons have hue of 7.5 YR to 2.5 Y , value of 2 to 4 and chroma of 1
to 4 , but to a depth of 7 inches after mixing have value, moist, of 3 or less, dry, 5 or less. Fine-earth texture is silt loam, loam, silty clay loam, sandy loam or fine sandy loam.

The Bw horizon has hue of 7.5 YR to 2.5 Y , and value of 4 or 5 and chroma of 3 to 6 . Fine-earth texture is silt loam, loam, sandy loam, silty clay loam, or clay loam. Some pedons have lithochromic mottles in shades of brown, yellow, black, red or gray in the lower part.

The C horizon has hue of 7.5 YR to 2.5 Y , value of 4 to 6 and chroma of 2 to 8 . Fineearth texture is silt loam, silty clay loam, loam, clay loam, fine sandy loam, or sandy loam. Some pedons are variegated without dominant hue or chroma. Other pedons have thin Cr horizons directly overlying bedrock.

Bedrock is unweathered sandstone, siltstone or shale.
COMPETING SERIES: There are no other series in the same family. The Cloverlick series is is in a closely related loamy-skeletal family.

GEOGRAPHIC SETTING: Kimper soils are mostly in coves and on foot slopes and benches of mountain sides with cool aspects. Slopes range from 5 to 95 percent, but are dominantly 30 to 75 percent. Kimper soils formed in loamy colluvium moved downslope from soils weathered from Pennsylvanian aged strata dominated by strongly acid to neutral sandstone, siltstone, and shale. Elevation ranges from 800 to 4,000 feet and local relief differences ranges from 600 to 2,500 feet. Near the type location, annual temperature ranges from 53 to 57 degrees F with a mean of 56 degrees. Annual precipitation ranges from 40 to 49 inches with a mean of about 43 inches.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the Berks, Cloverlick, Cutshin, Dekalb, Fedscreek, Gilpin, Guyandotte, Handshoe, Highsplint, Jefferson, Latham, Marrowbone, Muskingum, Pineville, Rayne, Sharondale and Shelocta series. Gilpin, Jefferson, Latham, Pineville, Rayne and Shelocta soils have argillic horizons. Cutshin and Guyandotte soils have umbric epipedons. Sharondale soils have mollic epipedons. Berks, Cloverlick, Dekalb, Guyandotte, Handshoe, Highsplint and Sharondale soils are loamy-skeletal. Fedscreek and Marrowbone soils are coarseloamy. Latham soils are fine. Berks, Dekalb, Gilpin, Latham, Marrowbone and Muskingum soils are moderately deep to bedrock. Jefferson soils have siliceous mineralogy.

DRAINAGE AND PERMEABILITY: Well drained. Permeability is moderate or moderately rapid. Runoff ranges from low to medium on slopes less than 20 percent and from medium to high on slopes greater than 20 percent.

USE AND VEGETATION: Most areas are in secondary growth hardwood forests with mixed stands of yellow poplar, American basswood, white ash, cucumber tree, northern red oak, black walnut, black locust and umbrella magnolia. Less sloping areas are used as pasture and sites for houses and gardens.

DISTRIBUTION AND EXTENT: Kimper soils are in the Cumberland-Allegheny Plateau of eastern Kentucky with possible similar areas in Virginia, West Virginia, and eastern Tennessee. The area is estimated to be of large extent, about 150,000 acres.

## MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: <br> Morgantown, West Virginia

SERIES ESTABLISHED: Pike County, Kentucky; 1985. Source of the name is a small community in Pike County.

REMARKS: The Kimper soils were mostly mapped as Shelocta soil in the past. Diagnostic horizons and features recognized in this pedon are:
Ochric epipedon (Umbric intergrade): 0 to 8 inches (A)
Cambic horizon: 8 to 52 inches (BA, Bw)
ADDITIONAL DATA: Characterization samples S83KY-195-12, S83KY-195-001 and S84KY-95-6. Samples S83-195-019, S83KY-195-023, and S85KY-13-6 are similar soils and Reference samples S82KY-195-14, 15, 16, 17, 23, and 24.

[^2]
## EXHIBIT I

DIRECTIONS TO WCF SITE

Driving Directions to Proposed Tower Site:

1. Beginning at the Floyd County Justice, located at 127 S. Lake Drive in Prestonsburg, KY, head northwest toward Elm Lane.
2. Turn right to remain on S . Lake Drive and travel approximately 1.3 miles.
3. Continue onto KY-3 N / KY-321N and travel approximately 3.9 miles.
4. Turn right to remain on $\mathrm{KY}-3 \mathrm{~N} / \mathrm{KY}-321 \mathrm{~N}$ and travel approximately 1.0 mile.
5. Turn left onto John CC Mayo Avenue and travel approximately 0.6 miles.
6. Continue onto Church Street and travel approximately 207 feet.
7. Continue onto Railroad Street and travel approximately 0.2 miles.
8. Continues onto Fords Gap Road and travel approximately 0.7 miles. The site will be on the left.
9. site coordinates are
a. 37 deg 44 min 04.76 sec N
b. 82 deg 46 min 27.89 sec W


Prepared by:
Aaron L. Roof
Pike Legal Group PLLC
1578 Highway 44 East, Suite 6
PO Box 369
Shepherdsville, KY 40165-0369
Telephone: 502-955-4400 or 800-516-4293

EXHIBIT J COPY OF REAL ESTATE AGREEMENT


## MEMORANDUM OF LEASE

## Prepared by: <br> Kit Nickel <br> PBM Wireless <br> 13714 Smoker Ridge Overlook <br> Carmel, IN 46033

## Return to:

New Cingular Wireless PCS, LLC
Attn: Network Real Estate Administration
575 Morosgo Drive NE,
Suite 13-F West Tower,
Atlanta, GA 30324

Re: Cell Site \# KYALU6164; Cell Site Name: EAST POINT
Fixed Asset \# 12568771
State: KENTUCKY
County: FLOYD

## MEMORANDUM <br> OF <br> LEASE

This Memorandum of Lease is entered into on this /st day of October, 2013, by and between ROGER COLLINS AND SHARON COLLINS, HUSBAND AND WIFE, having a mailing address of 613 FORDS GAP ROAD, AUXIER, KY 41602 (hereinafter referred to as "Landlord") and New Cingular Wireless PCS, LLC, a Delaware limited liability company, having a mailing address of 575 Morosgo Drive NE, Suite 13F West Tower, Atlanta, Ga 30324 (hereinafter referred to as "Tenant").

1. Landlord and Tenant entered into a certain Option and Lease Agreement ("Agreement") on the List day of October_, 2013, for the purpose of installing, operating and maintaining a communications facility and other improvements. All of the foregoing is set forth in the Agreement.
2. The initial lease term will be five (5) years commencing on the effective date of written notification by Tenant to Landlord of Tenant's exercise of its option, with four (4) successive five (5) year options to renew.
3. The portion of the land being leased to Tenant and associated easements are described in Exhibit 1 annexed hereto.
4. This Memorandum of Lease is not intended to amend or modify, and shall not be deemed or construed as amending or modifying, any of the terms, conditions or provisions of the Agreement, all of which are hereby ratified and affirmed. In the event of a conflict between the provisions of this Memorandum of Lease and the provisions of the Agreement, the provisions of the Agreement shall control. The Agreement shall be binding upon and inure to the benefit of the parties and their respective heirs, successors, and assigns, subject to the provisions of the Agreement.

IN WITNESS WHEREOF, the parties have executed this Memorandum of Lease as of the day and year first above written.
"LANDLORD"

[ACKNOWLEDGMENTS APPEAR ON THE NEXT PAGE]

## TENANT ACKNOWLEDGMENT



- On the 1 ste day of October , 2013 before me personally appeared Terry R.' Kilghpre, s and acknowledged under oath that he/she is the Area Mgr. Const. \& Engrg. of AT\&T Mobility Corporation, the Manager of New Cingular Wireless PCS, LLC, the Tenant named in the attached instrument, and as suduluditapyhorized to execute this instrument on behalf of the Tenant.


On the 9 day of Sept. , 2013 before me, personally appeared Roger and Sharon Collins, who acknowledged under oath, that they are the persons named in the within instrument, and that they executed the same in their stated capacity as the voluntary act and deed of the Landlord for the purposes therein contained.


Notary Public: $\qquad$
My Commission Expires: 03-04-2016

## EXHIBIT 1

## DESCRIPTION OF PREMISES

## Page 1 of 3

to the Option and Lease Agreement dated 6 tor 1,2013 , by and between ROGER COLLINS AND SHARON COLLINS, 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:
of land, lying in Hoyd_County, Kentucky and described as follows;
attached with map extibit $A$
Stathog atiron pipe rummeg south $237^{\circ}$ for 132 ft to iron pipe
Derics inwong south $205^{\circ}$ for 30 an to ron pipe
Thence moning south $432^{\circ}$ for Sol ft. to iron pipe at Big Rock
Thence [umuing west $275^{\circ}$ for 177 ft to old fence line with riblon
Thexe rumug noth $41^{\circ}$ for 161 it to lighok worth g riblan
Thense luring north $32^{\circ}$ for 133 ft to su cak tree with o ribbun
Thence rumbing noth $20^{\circ}$ for 188 A followng fince line to liwion
Dience ruming north $2^{\circ}$ for 439 ft to ron pupe
Thence uming east $118^{\circ}$ foy 160 ft to ribbon
Theme wonnog north $80^{\circ}$ foy 194 ft fullowg divenay back
to the stontres pont
Ecisment to Roger and Sham Collosi from Miogge Collins
Property to the Conciete. Preperty to the conciete.
Being (a part of) the same land conveyed to Grantor Willard K Collins and Maggie R Collins and being recorded in Deed Book 187 Page 91 in the office of the Floyd County Clerk.

## EXHIBIT 1

## DESCRIPTION OF PREMISES

## Page 2 of 3

to the Option and Lease Agreement dated $\qquad$ , 20, by and between ROGER COLLINS AND SHARON COLLINS, HUSBAND AND WIFE, as Landlord, and New Cingular Wireless PCS, LLC, a Delaware limited liability company, as Tenant.

Legal description continued

Beginning at the edge of Fords Gap Road and said property, W 280 degrees for 515.7 ft . to an old fence line: hence East 120 degrees for 94.6 ft . following the old fence line; hence South 185 degress up the hill for 149.9 ft . still following the fence line to an iron pipe where it joins the property of Roger and Sharon Collins; hence following Roger and Sharon Collins property line East 118 degrees for 160 ft . to their driveway; hence North 80 degrees for 194 ft , following Roger Collins' concrete driveway; then crossing where the blacktop and concrete driveway meets; hence Northeast 40 degrees for 147.8 ft .
Being (a part of) the same land conveyed to grantor by_Waggil Collins and being of record in Deed Book $\frac{544}{4}$ page $\frac{455}{484}$ in the office of the Floyd County Clerk.

Will NN 486

## EXHIBIT 1

## DESCRIPTION OF PREMISES

## Page 3 of 3

to the Option and Lease Agreement dated $\qquad$ , 20 , by and between ROGER COLLINS AND SHARON COLLINS, HUSBAND AND WIFE, as Landlord, and New Cingular Wireless PCS, LLC, a Delaware limited liability company, as Tenant.

The Premises are described and/or depicted as follows:


Notes:

1. THIS EXHIBIT MAY BE REPIACED BY A I AND SURVEY AND/OR CONSTRUCTION DRAWINGS OF TIIE PREMISES ONCE RECEIVED BY TENANT.
2. any setback of the premises from the property's boundaries shall be the distance requred by the APPLICABLE GOVERNMENTAL AUTIORITES.
3. Width of access road shall be the width required by the applicabif governmental authorities, including OOLICE AND FIRE DEPARTMENTS
4. TIIE TYPE, NUMBER AND MOUNTING POSITIONS AND LOCATIONS OF antennas and transmission lines are: lllustrative only. actual. types, numbers and mounitng positions may vary from wiat is shown above.

EXHIBIT K NOTIFICATION LISTING

## East Point Landowner Notice Listing

Roger D. \& Sharon Collins 613 Fords Gap
Auxier, KY 41602
Roger \& Sharon Collins
613 Fords Gap
Auxier, KY 41602
William \& April Marsillett
734 Fords Gap
Auxier, KY 41602
Doyle \& Teresa Music
2202 Brandon Lane
Conyers, GA 30094
ZZ Reference Only Curry Cemetary
Prestonsburg, KY 41653
Ellis Curry
54 Brackett Lane
Melvin, KY 41650
Travis Owen Chapman
721 Fords Gap
Auxier, KY 41602
Freddie L. \& Millison Newsome
33 Ridgeview
Auxier, KY 41602

## EXHIBIT L <br> COPY OF PROPERTY OWNER NOTIFICATION

1578 Highway 44 East, Suite 6
P.O. Box 369

Shepherdsville, KY 40165-0369
Phone (502) 955-4400 or (800) 516-4293
Fax (502) 543-4410 or (800) 541-4410

## Notice of Proposed Construction of Wireless Communications Facility Site Name: East Point

Dear Landowner:
New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT\&T Mobility has filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at 613 Ford's Gap Road, Auxier, KY 41602 ( $37^{\circ} 44^{\prime} 04.76^{\prime \prime}$ North latitude, $82^{\circ} 46^{\prime} 27.89^{\prime \prime}$ West longitude). The proposed facility will include a 255 -foot tall antenna tower, plus a 10 -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 Floyd 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 2014-00088 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 toll free at (800) 516-4293 if you have any comments or questions about this proposal.

## Sincerely,

David A. Pike
Attorney for AT\&T Mobility
enclosure

Driving Directions to Proposed Tower Site:

1. Beginning at the Floyd County Justice, located at 127 S. Lake Drive in Prestonsburg, KY, head northwest toward Elm Lane.
2. Turn right to remain on S . Lake Drive and travel approximately 1.3 miles.
3. Continue onto KY-3 N/KY-321N and travel approximately 3.9 miles.
4. Turn right to remain on KY-3 N/KY-321 N and travel approximately 1.0 mile.
5. Turn left onto John CC Mayo Avenue and travel approximately 0.6 miles.
6. Continue onto Church Street and travel approximately 207 feet.
7. Continue onto Railroad Street and travel approximately 0.2 miles.
8. Continues onto Fords Gap Road and travel approximately 0.7 miles. The site will be on the left.
9. site coordinates are
a. 37 deg 44 min 04.76 sec N
b. 82 deg 46 min 27.89 sec W


Prepared by:
Aaron L. Roof
Pike Legal Group PLLC
1578 Highway 44 East, Suite 6
PO Box 369
Shepherdsville, KY 40165-0369
Telephone: 502-955-4400 or 800-516-4293


EXHIBIT M
COPY OF COUNTY JUDGE/EXECUTIVE NOTICE

## VIA CERTIFIED MAIL

Hon. R.D. "Doc" Marshall
Floyd County Judge Executive
149 S. Central Avenue
Prestonburg, KY 41653-0789

## RE: Notice of Proposal to Construct Wireless Communications Facility Kentucky Public Service Commission Docket No. 2014-00088 Site Name: East Point

Dear Judge Marshall:
New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT\&T Mobility has filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at 613 Ford's Gap Road, Auxier, Kentucky 41602 ( $37^{\circ} 44^{\prime} 04.76^{\prime \prime}$ North latitude, $82^{\circ} 46^{\prime} 27.89^{\prime \prime}$ West longitude). The proposed facility will include a 255 -foot tall antenna tower, plus a 10 -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 2014-00088 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 AT\&T Mobility
enclosure

Driving Directions to Proposed Tower Site:

1. Beginning at the Floyd County Justice, located at 127 S. Lake Drive in Prestonsburg, KY, head northwest toward Elm Lane.
2. Turn right to remain on S. Lake Drive and travel approximately 1.3 miles.
3. Continue onto $\mathrm{KY}-3 \mathrm{~N} / \mathrm{KY}-321 \mathrm{~N}$ and travel approximately 3.9 miles.
4. Turn right to remain on KY-3 N/KY-321 N and travel approximately 1.0 mile.
5. Turn left onto John CC Mayo Avenue and travel approximately 0.6 miles.
6. Continue onto Church Street and travel approximately 207 feet.
7. Continue onto Railroad Street and travel approximately 0.2 miles.
8. Continues onto Fords Gap Road and travel approximately 0.7 miles. The site will be on the left.
9. site coordinates are
a. 37 deg 44 min 04.76 sec N
b. $82 \mathrm{deg} 46 \mathrm{~min} 27.89 \mathrm{sec} W$


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Telephone: 502-955-4400 or 800-516-4293


## EXHIBIT N COPY OF POSTED NOTICES

1578 Highway 44 East, Suite 6
P.O. Box 369

Shepherdsville, KY 40165-0369
Phone (502) 955-4400 or (800) 516-4293
Fax (502) 543-4410 or (800) 541-4410

VIA TELEFAX: 606-886-3603
The Floyd County Times
Attn: Jamie VanHoose
263 S. Central Avenue
P.O. Box 390

Prestonsburg, KY 41653
RE: Legal Notice Advertisement Site Name: East Point

Dear Jamie:

Please publish the following legal notice advertisement in the next edition of The Floyd County Times:

NOTICE
New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT\&T Mobility has filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at 613 Ford's Gap Road, Auxier, Kentucky 41602 ( $37^{\circ} 44^{\prime} 04.76^{\prime \prime}$ North latitude, $82^{\circ} 46$ '27.89" 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 2014-00088 in any correspondence sent in connection with this matter.

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

Sincerely,

Aaron L. Roof<br>Pike Legal Group, PLLC

# SITE NAME: EAST POINT 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 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 (800) 516-4293, or the Executive Director, Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, Kentucky 40602. Please refer to docket number Case No. 2014-00088 in your correspondence.

New Cingular Wireless PCS, LLC 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 (800) 516-4293, or the Executive Director, Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, Kentucky 40602. Please refer to docket number Case No. 2014-00088 in your correspondence.

## EXHIBIT O

COPY OF RADIO FREQUENCY DESIGN SEARCH AREA



[^0]:    National Cooperative Soil Survey U.S.A.

[^1]:    National Cooperative Soil Survey U.S.A.

[^2]:    National Cooperative Soil Survey U.S.A.

