COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF	)	
NEW CINGULAR WIRELESS PCS, LLC	)	
FOR ISSUANCE OF A CERTIFICATE OF PUBLIC	)	CASE NO.: 2014-00074
CONVENIENCE AND NECESSITY TO CONSTRUCT	)	
A WIRELESS COMMUNICATIONS FACILITY	)	
IN THE COMMONWEALTH OF KENTUCKY	)	
IN THE COUNTY OF MORGAN	)	

SITE NAME: INDEX

* * * * * * *

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 §§ 278.020(1), 278.040, 278.650, 278.665, and other statutory authority.

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

4. The Applicant operates on frequencies licensed by the Federal Communications Commission ("FCC") pursuant to applicable FCC requirements. A copy of the Applicant's FCC 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 2140 Highway 460, West Liberty, KY 41472 (37° 53' 33.996" North latitude, 83° 17' 14.131" 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 Sarah G. Fannin, Robin Fannin and Farrell Fannin pursuant to a Deed recorded at Deed Book 173, Page 113 in the office of the Morgan 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 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 soil boring(s) and subsequent geotechnical engineering studies at the WCF site. A copy of the geotechnical engineering

report, signed and sealed by a professional engineer registered in the Commonwealth of Kentucky, is attached as **Exhibit H**. The name and address of the geotechnical engineering firm and the professional engineer registered in the Commonwealth of Kentucky who supervised the examination of this WCF site are included as part of this exhibit.

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

15. 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 and a copy of the Deed to the site parcel are attached as **Exhibit J**.

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

17. The Construction Manager for the proposed facility is 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 an appropriate scale that shows the location of the proposed tower and identifies every owner of real estate within 500 feet of the proposed tower (according to the records maintained by the County Property Valuation Administrator). Every structure and every easement within 500 feet of the proposed tower or within 200 feet of the access road including intersection with the public street system is illustrated in **Exhibit B**.

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

21. 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**. The applicant has requested publication of legal notice regarding the location of the proposed facility 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 on a mountaintop. No residential structures are located within a 500-foot radius of the proposed tower location.

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

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

PCS Broadband License - WPOI255 - NEW CINGULAR WIRELESS PCS, LLC

Call Sign	WPOI255	Radio Service	CW - PCS Broadband
Status	Active	Auth Type	Regular
Market			
Market	MTA026 - Louisville-Lexington-Evansvill	Channel Block	A
Submarket	19	Associated Frequencies (MHz)	001850.00000000-001865.00000000 001930.00000000-001945.00000000
Dates			
Grant	07/07/2005	Expiration	06/23/2015
Effective	11/24/2012	Cancellation	
Buildout Deadlines			
1st	06/23/2000	2nd	06/23/2005
Notification Dates			
1st	07/07/2000	2nd	02/17/2005

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

Contact

AT&T MOBILITY LLC
Michael P Goggin
1120 20th Street, NW - Suite 1000
Washington, DC 20036
ATTN Michael P. Goggin

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

Ownership and Qualifications

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.

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

1	1650 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
2200 N. Greenville Ave, 1W
Richardson, TX 75082
ATTN Reginald Youngblood

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

Contact

AT&T MOBILITY LLC
Michael P Goggin
1120 20th Street, NW - Suite 1000
Washington, DC 20036
ATTN Michael P. Goggin

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

Ownership and Qualifications

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

EXHIBIT B

SITE DEVELOPMENT PLAN:

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

INDEX

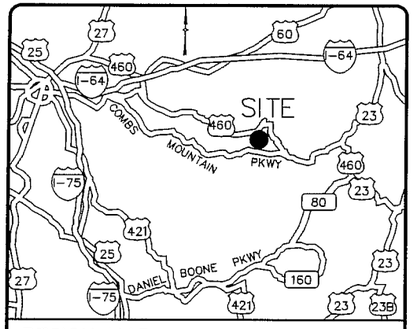
SITE ID: KYALU6170

2140 HWY 460
MORGAN COUNTY
WEST LIBERTY, KENTUCKY 41472

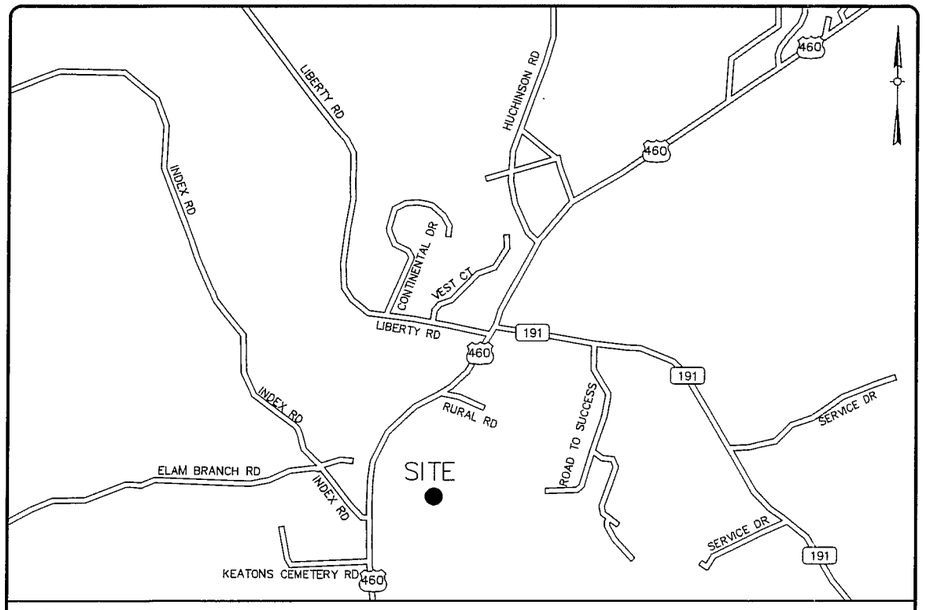
PROPOSED 255' SELF-SUPPORT
WITH MULTIPLE EQUIPMENT LOCATIONS

UTILITY PROTECTION NOTE

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE UTILITY PROTECTION CENTER, WHICH WAS ESTABLISHED TO PROVIDE ACCURATE LOCATIONS OF UNDERGROUND UTILITIES. THE CONTRACTOR SHALL NOTIFY THE UTILITY PROTECTION CENTER 48 HOURS IN ADVANCE OF ANY CONSTRUCTION ON THIS PROJECT. ALL NEW SERVICE AND GROUNDING TRENCHES PROVIDE A WARNING TAPE @ 12 INCHES ABOVE THE UNDERGROUND INSTALLATION (SEE NEC 300.5).



REGION MAP SCALE: NONE



VICINITY MAP SCALE: NONE

BTM Engineering, Inc.
3001 TAYLOR SPRINGS DRIVE
LOUISVILLE, KENTUCKY 40220
(502) 459-8402 PHONE
(502) 459-8427 FAX

DESIGN ENGINEERS

BTM Engineering, Inc.
3001 TAYLOR SPRINGS DRIVE
LOUISVILLE, KENTUCKY 40220
(502) 459-8402 PHONE
(502) 459-8427 FAX

SURVEYOR

DIRECTIONS FROM COUNTY SEAT: FROM WEST LIBERTY AT THE CORNER OF US 460 (MAIN ST) AND US 460/SR 7 (PRESTONSBURG AVE), PROCEED SOUTH ON US 460 (MAIN ST) APRX 2.5 MILES TO ACCESS RD AND TURN LEFT. FOLLOW ACCESS RD TO SITE APRX .30 MILES ON THE RIGHT.

DIRECTIONS FROM WINCHESTER AT&T MTSO: STARTING AT 3800 CORPORATE DR WINCHESTER, KY, PROCEED TO THE COMBS MOUNTAIN PKWY FOR APRX 56.5 MILES TO EXIT 57 (SR 191/205) AND TURN LEFT. PROCEED ON SR 191/205 APRX 9.0 MILES TO US 460 AND TURN RIGHT. CONTINUE ON US 460 APRX 2.20 MILES TO ACCESS RD AND TURN RIGHT. FOLLOW ACCESS RD TO SITE APRX .30 MILES ON THE RIGHT.

DIRECTIONS TO SITE

AT&T _____

WESTOWER _____ CONSTRUCTION MANAGER

WESTOWER _____ SITE ACQUISITION

SIGNATURE BOX

SITE NAME
INDEX

SITE ID NUMBER
KYALU6170

SITE ADDRESS
2140 HWY 460
WEST LIBERTY, KY 41472

1A COORDINATES
LAT: 37° 53' 33.996"
LONG: 83° 17' 14.131"
ELEV: ±1029.0 (NAVD 88)

PROPERTY OWNER
SARAH G, ROBIN & FARRELL FANNIN
2140 HWY 460
WEST LIBERTY, KY 41472
PHONE: (606) 743-3343

APPLICANT
AT&T
601 W. CHESTNUT ST. 1 EAST
LOUISVILLE, KENTUCKY 40203
CONTACT: MICHELLE WARD
PHONE: (502) 779-5950

TAX MAP NUMBER
N/A

PARCEL NUMBER
089-00-00-017.00

SOURCE OF TITLE
DEED BOOK 173, PAGE 113

LEASE AREA
4,000 SF

PROJECT INFORMATION

SHT NO.	DESCRIPTION
T-1	TITLE SHEET
C-1	500' RADIUS VICINITY MAP
C-1A	500' RADIUS VICINITY MAP
C-2	COMMUNICATIONS SITE SURVEY
C-2A	COMMUNICATIONS SITE SURVEY
Z-2	OVERALL SITE PLAN
Z-2A	OVERALL SITE PLAN-DIMENSIONS
Z-3	SITE LAYOUT
Z-4	AT&T SHELTER LAYOUT
Z-5	NORTH/SOUTH TOWER ELEVATIONS
Z-6	EAST/WEST TOWER ELEVATIONS

SHEET INDEX

POLICE DEPARTMENT
PHONE: (606) 743-9935 MORGAN CO SHERIFF

FIRE DEPARTMENT
PHONE: (100) 100-1000 WHITE OAK VOL FD

ELECTRIC COMPANY
LICKING RIVER RECC
CONTACT: CUSTOMER SERVICE
PHONE: (606) 743-3179

TELEPHONE COMPANY
MOUNTAIN TELEPHONE COMPANY
CONTACT: CUSTOMER SERVICE
PHONE: (606) 743-3121

CONTACT INFORMATION

B at&t

WESTOWER COMMUNICATIONS

BTM Engineering, Inc.
3001 TAYLOR SPRINGS DRIVE
LOUISVILLE, KENTUCKY 40220
(502) 459-8402 PHONE
(502) 459-8427 FAX

STATE OF KENTUCKY
PHILIP G. HEID
29820
LICENSED PROFESSIONAL ENGINEER

SITE NAME: INDEX

SITE ID NUMBER: KYALU6170

SITE ADDRESS: 2140 HWY 460
WEST LIBERTY, KY 41472

LATITUDE: 37° 53' 33.996" N
LONGITUDE: 83° 17' 14.131" W

TAX MAP NUMBER: N/A

PARCEL NUMBER: 089-00-00-017.00

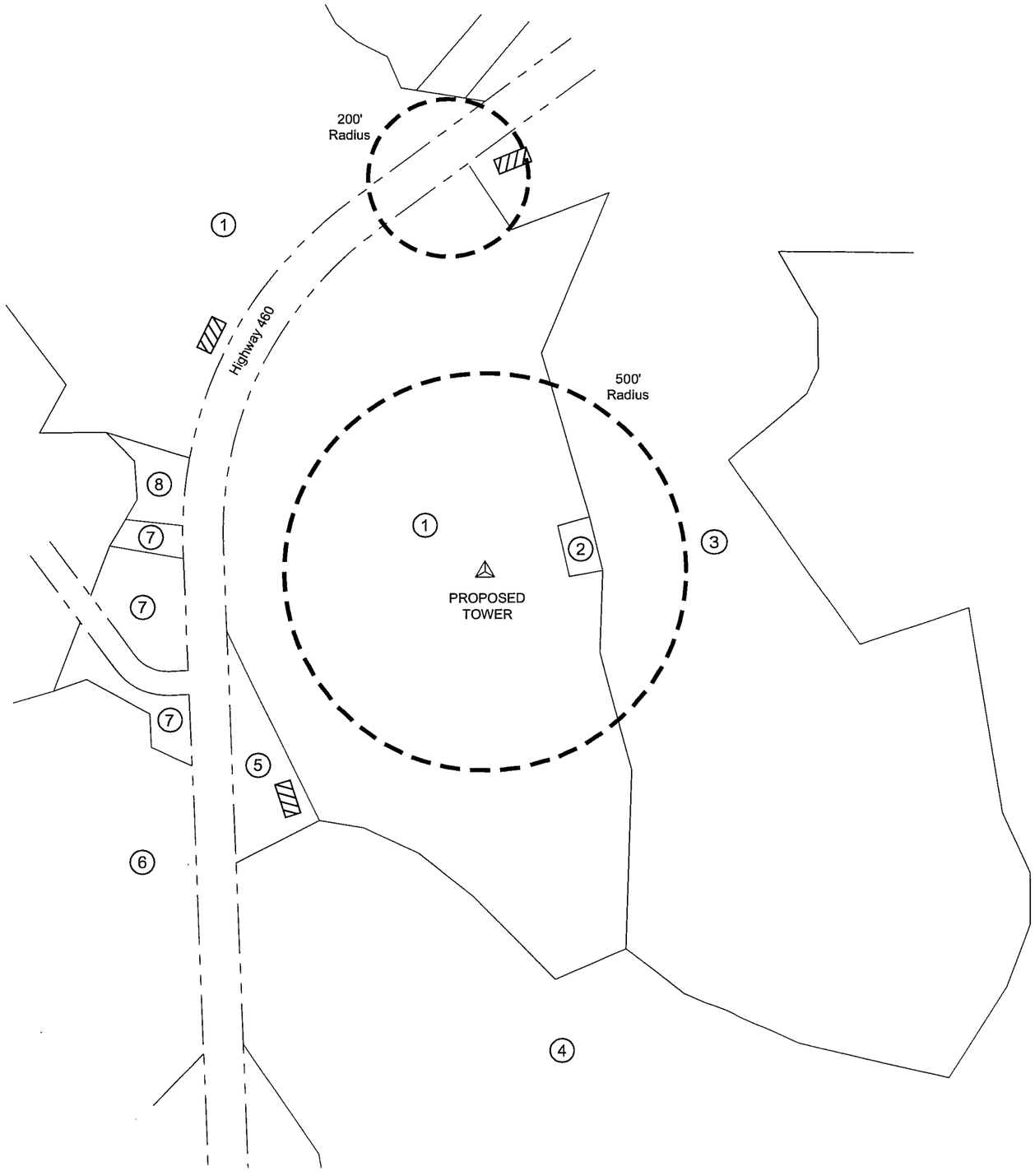
SOURCE OF TITLE: DEED BOOK 173, PAGE 113

PROPERTY OWNER: SARAH G, ROBIN, & FARRELL FANNIN
2140 HWY 460
WEST LIBERTY, KY 41472
CONTACT: SARAH FANNIN
PHONE: (606) 743-3343

NO	REVISION/ISSUE	DATE
1	ISSUE FOR COMMENT	09/12/13
2	REISSUE FOR COMMENT	12/02/13
3	REISSUE FOR COMMENT	12/16/13
4	REISSUE FOR COMMENT	01/06/14
5	ISSUE FOR ZONING	02/18/14
6	REISSUE FOR ZONING	02/21/14

TITLE: TITLE SHEET

SHEET: T-1



THIS MAP IS FOR GENERAL INFORMATIONAL PURPOSES ONLY AND IS NOT A BOUNDARY SURVEY

GENERAL NOTE:

All information shown hereon was obtained from records of the Morgan County, Kentucky, Property Valuation Administration Office on 2/19/2014. The Property Valuation Administration records may not reflect the current owners and address due to the inaccuracies and time lapse in updating files. The Morgan County Property Valuation Administration expressly disclaims any warranty for the content and any errors contained in their files.

NORTH BASED ON PVA MAP

APPROXIMATE GRAPHIC SCALE

300 0 150 300

1 INCH = 300 FT.

at&t

WESTOWER COMMUNICATIONS

3001 TAYLOR SPRINGS DRIVE
LOUISVILLE, KENTUCKY 40220
(502) 459-8402 PHONE
(502) 459-8427 FAX

STATE of KENTUCKY
GEORGE BRIAN WYATT
2328
LICENSED PROFESSIONAL LAND SURVEYOR

SITE NAME: INDEX

SITE I.D.: KYALU6170

SITE ADDRESS: 2140 HIGHWAY 460, WEST LIBERTY MORGAN COUNTY, KENTUCKY 41472

LEASE AREA: 4000 SF

PROPERTY OWNER: SARAH G., ROBIN & FARRELL FANNIN 2140 HIGHWAY 460 WEST LIBERTY, KY 41472

PARCEL NUMBER: 069-00-00-017.00

SOURCE OF TITLE: DEED BOOK 173 PAGE 113

LATITUDE: 37° 53' 33.996" N
LONGITUDE: 83° 17' 14.131" W

NO.	REVISION/ISSUE	DATE
1		
2		
3		
4		
5		

TITLE: 500' RADIUS VICINITY MAP

SHEET: C-1

THIS MAP IS FOR GENERAL
INFORMATIONAL PURPOSES ONLY
AND IS NOT A BOUNDARY SURVEY

GENERAL NOTE:

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(1) PARCEL NUMBER: 089-00-00-017.00
Sarah, Robin & Farrell Fannin
2140 Highway 460
West Liberty, Kentucky 41472

(2) PARCEL NUMBER: 089-00-00-017.01
Appalachian Wireless East KY Network
101 Technology Trail
Ivel, Kentucky 41642

(3) PARCEL NUMBER: 089-00-00-025.00
Samuel Long
P.O. Box 456
West Liberty, Kentucky 41472

(4) PARCEL NUMBER: 089-00-00-021.00
Alex Goodpaster & Hillary Murray
437 Henry Clay Boulevard
Lexington, Kentucky 40502

(5) PARCEL NUMBER: 089-00-00-016.01
Sarah & Robin Fannin
2140 Highway 460
West Liberty, Kentucky 41472

(6) PARCEL NUMBER: 089-00-00-019.00
William G. Holbrook DVM
P.O. Box 66
West Liberty, Kentucky 41472

(7) PARCEL NUMBER: 089-00-00-016.00
Sharlene Copas & Walter & George Elam
3832 Highway 711
West Liberty, Kentucky 41472

(8) PARCEL NUMBER: 089-00-00-016.00
David Stacy
2144 Highway 460
West Liberty, Kentucky 41472

at&t

WESTOWER COMMUNICATIONS

3001 TAYLOR SPRINGS DRIVE
LOUISVILLE, KENTUCKY 40220
(502) 459-8402 PHONE
(502) 459-8427 FAX

STATE of KENTUCKY
GEORGE BRIAN WYATT
2328
LICENSED PROFESSIONAL LAND SURVEYOR

SITE NAME: INDEX

SITE I.D.: KYALU6170

SITE ADDRESS: 2140 HIGHWAY 460, WEST LIBERTY
MORGAN COUNTY, KENTUCKY 41472

LEASE AREA: 4000 SF

PROPERTY OWNER:
SARAH G., ROBIN & FARRELL FANNIN
2140 HIGHWAY 460
WEST LIBERTY, KY 41472

PARCEL NUMBER: 089-00-00-017.00

SOURCE OF TITLE:
DEED BOOK 173 PAGE 113

LATITUDE: 37° 53' 33.996" N
LONGITUDE: 83° 17' 14.131" W

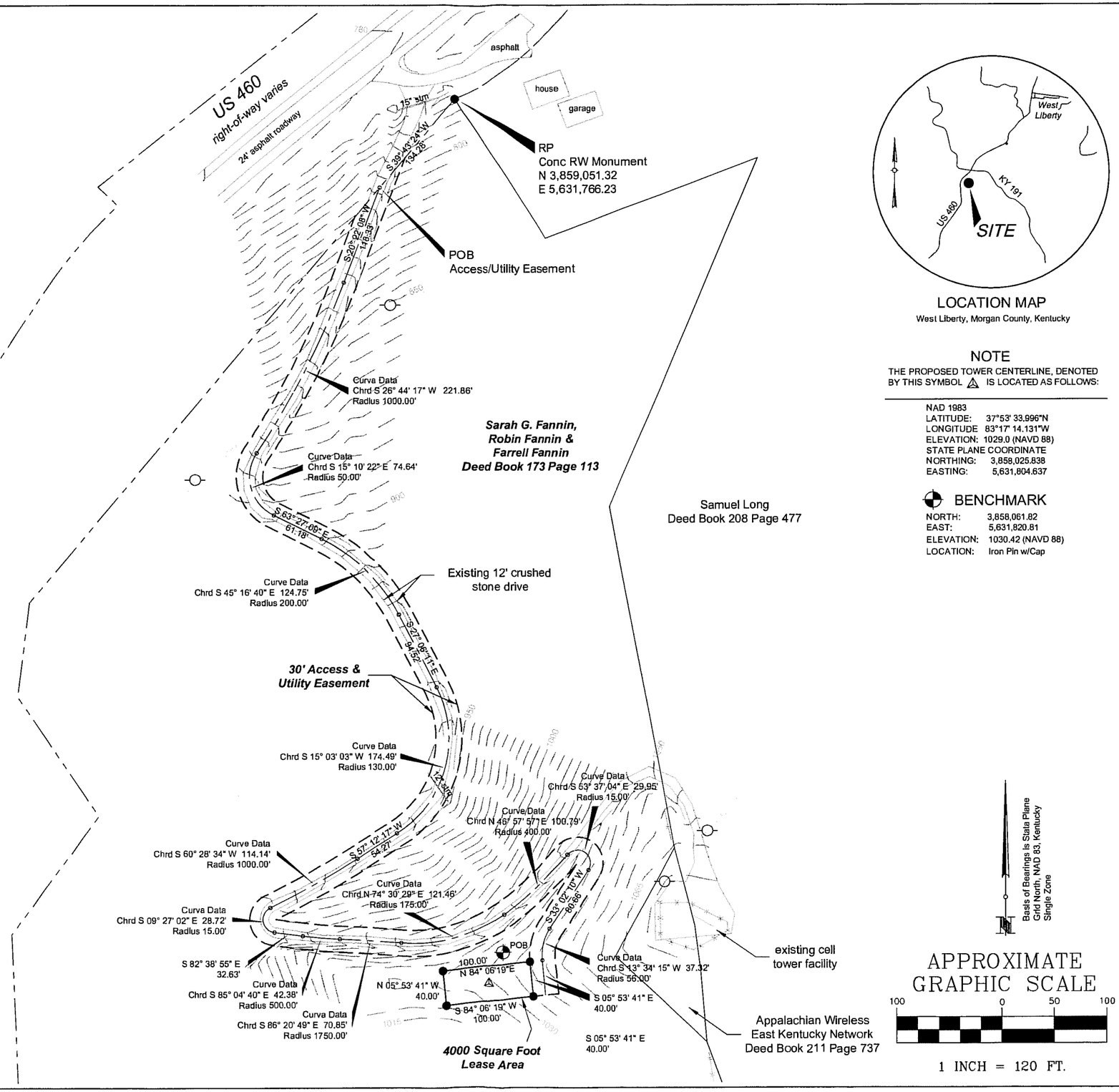
NO.	REVISION/ISSUE	DATE
1		
2		
3		
4		
5		

TITLE:
500' RADIUS
VICINITY MAP

SHEET:
C-1A

LEGEND

- LEASE AREA LINE
- ACCESS EASEMENT LINE
- PROPERTY LINE
- OHU — OVERHEAD UTILITIES
- UTILITY POLE
- SET #5 REBAR WITH CAP STAMPED "G. BRIAN WYATT PLS #2328" UNLESS OTHERWISE NOTED
- RP — REFERENCE POINT
- POB — POINT OF BEGINNING



LOCATION MAP
West Liberty, Morgan County, Kentucky

NOTE

THE PROPOSED TOWER CENTERLINE, DENOTED BY THIS SYMBOL ⚠ IS LOCATED AS FOLLOWS:

NAD 1983
LATITUDE: 37°53' 33.996"N
LONGITUDE 83°17' 14.131"W
ELEVATION: 1029.0 (NAVD 88)
STATE PLANE COORDINATE
NORTHING: 3,858,025.838
EASTING: 5,631,804.637

BENCHMARK

NORTH: 3,858,061.82
EAST: 5,631,820.81
ELEVATION: 1030.42 (NAVD 88)
LOCATION: Iron Pin w/Cap

Basis of Bearings Is State Plane
Grid North, NAD 83, Kentucky
Single Zone

APPROXIMATE
GRAPHIC SCALE

100 0 50 100

1 INCH = 120 FT.

NOTE

This communications site survey is subject to all existing easements, restrictions, exceptions, servitude's, rights of way and prior leases whether shown hereon or not. A title report may reveal easements or other defects whether shown hereon or not.

FLOOD PLAIN CERTIFICATION

According to Flood Insurance Rate Map (FIRM) Map No. 21175C0170C, dated August 19, 2008, the Lease Area is situated in Zone X and does not appear to be in a flood hazard area.

LAND SURVEYORS CERTIFICATE

I hereby certify that this Communications Site Survey was made under my supervision, and that the angular and linear measurements as witnessed by monuments shown hereon are true and correct to the best of my knowledge and belief. This plat does not represent a boundary survey and is not intended for land transfer.

at&t

WESTOWER COMMUNICATIONS

3001 TAYLOR SPRINGS DRIVE
LOUISVILLE, KENTUCKY 40220
(502) 459-8402 PHONE
(502) 459-8427 FAX

STATE of KENTUCKY
GEORGE BRIAN WYATT
2328
LICENSED PROFESSIONAL LAND SURVEYOR

SITE NAME: INDEX

SITE I.D.: KYALU6170

SITE ADDRESS:
2140 HIGHWAY 460, WEST LIBERTY
MORGAN COUNTY, KENTUCKY 41472

LEASE AREA: 4000 SF

PROPERTY OWNER:
SARAH G., ROBIN & FARRELL FANNIN
2140 HIGHWAY 460
WEST LIBERTY, KY 41472

PARCEL NUMBER: 069-00-00-017.00

SOURCE OF TITLE:
DEED BOOK 173 PAGE 113

LATITUDE: 37° 53' 33.996" N
LONGITUDE: 83° 17' 14.131" W

NO.	REVISION/ISSUE	DATE
1		
2		
3		
4		
5		

TITLE:
COMMUNICATIONS SITE SURVEY

SHEET:
C-2

LEGAL DESCRIPTIONS

These are the descriptions of a Lease Area for telecommunications equipment, and an Access/Utility easement, located on the tract of land conveyed to Sarah G. Fannin, Robin Fannin, and Farrell Fannin by deed of record in Deed Book 173 at Page 113 in the Office of the County Clerk of Morgan County, Kentucky and further described as follows:

DESCRIPTION OF GRANTOR'S TRACT

As recorded in Deed Book 173 at page 113, in the Office of the County Clerk of Morgan County, Kentucky.

Beginning at the mouth of Little Caney creek; thence up Little Caney creek with its meanders to the line and land of Bill Elam (formerly Kola Noble); thence with the line of Bill Elam to the line of Kola Noble; thence with Kola Noble's line to the line of J.T. Thomas' thence with J.T. Thomas' line to the Lewis Henry line; thence with Lewis Henry's line around to Big Caney Creek just above the ford opposite Isaac Henry's (now Henry's Heirs) line; thence down Big Caney creek with its meanders to the place of beginning, containing 40 acres, more or less, and to contain and include all of the land in the above described boundary with the exception of two lots that have been previously deeded to S.S. Oldfield and wife, of Index, Kentucky.

There is excepted from the foregoing described tract of land a tract of land heretofore conveyed by Stella D. Fannin and others to L. CLifford Long and Aleene F. Long, by deed dated October 19, 1956, and recorded in Deed Book 93, Page 204, Morgan County COurt Clerk's records, and reference is hereby made to said deed of conveyance for a more particular description of the portion of land excepted from the above described tract.

DESCRIPTION OF ACCESS/UTILITY EASEMENT

NOTE: All bearings and distances are based on grid north Kentucky State Plane Coordinate System Single Zone NAD 1983

The right to use for Access and Utilities, to the below-described Telecommunications Lease Area, an easement, the centerline of which is described as follows:

Beginning, for reference, at a point in the Grantor's northerly property line, as recorded in Deed Book 173 at Page 113 in the Morgan County Court Clerk's Office, said point being the northwesterly corner of the Samuel Long tract, as recorded in Deed Book 208 at Page 477 in the aforesaid Clerk's office, and further being a found concrete right-of-way marker located in the southeasterly line of Highway 460, having NAD 83 Single Zone coordinates of: North 3,859,051.32 and East 5,631,766.23; thence running with the aforesaid line of US 460, South 39 degrees 43 minutes 24 seconds West, a distance of 134.28 feet to the TRUE POINT OF BEGINNING in the centerline of the 30-foot wide Access/Utility Easement herein described; thence on, over and across lands of the grantor for the following nineteen (19) calls: 1) South 20 degrees 22 minutes 08 seconds West, a distance of 118.33 feet to a point; 2) with a curve to the right of radius 1000.00 feet, the chord of which bears South 26 degrees 44 minutes 17 seconds West, a distance of 221.86 feet to a point; 3) with a curve to the left of radius 50.00 feet, the chord of which bears South 15 degrees 10 minutes 22 seconds East, a distance of 74.64 feet to a point; 4) South 63 degrees 27 minutes 09 seconds East, a distance of 61.18 feet to a point; 5) with a curve to the right of radius 200.00 feet, the chord of which bears South 45 degrees 16 minutes 40 seconds East, a distance of 124.75 feet to a point; 6) South 27 degrees 06 minutes 11 seconds East, a distance of 94.52 feet to a point; 7) with a curve to the right of radius 130.00 feet, the chord of which bears South 15 degrees 03minutes 03 seconds West, a distance of 174.49 feet; 8) South 57 degrees 12 minutes 17 seconds West, a distance of 54.27 feet to a point; 9) with a curve to the right of radius 1000.00 feet, the chord of which bears South 60 degrees 28 minutes 34 seconds West, a distance of 114.14 feet to a point; 10) with a curve to the left of radius 15.00 feet, the chord of which bears South 09 degrees 27 minutes 02 seconds East, a distance of 28.72 feet; 11) South 82 degrees 38 minutes 55 seconds East, a distance of 32.63 feet to a point; 12) with a curve to the left of radius 500.00 feet, the chord of which bears South 85 degrees 04 minutes 40 seconds, a distance of 42.38 feet to a point; 13) with a curve to the right of radius 1750.00 feet, the chord of which bears South 86 degrees 20 minutes 49 seconds East, a distance of 70.85 feet to a point; 14) with a curve to the left of radius 175.00 feet, the chord of which bears North 74 degrees 30 minutes 29 seconds East, a distance of 121.46 feet to a point; 15) with a curve to the left of radius 400.00 feet, the chord of which bears North 46 degrees 57 minutes 57 seconds East, a distance of 100.79 feet to a point; 16) with a curve to the right of radius 15.00 feet, the chord of which bears South 53 degrees 37 minutes 04 seconds East, a distance of 29.95 feet to a point; 17) South 33 degrees 02 minutes 10 seconds West, a distance of 80.66 feet to a point; 18) with a curve to the left of radius 56.00 feet, the chord of which bears South 13 degrees 34 minutes 15 seconds West, a distance of 37.32 feet to a point; 19) South 05 degrees 53 minutes 41 seconds East, a distance of 40.00 feet to a point.

DESCRIPTION OF LEASE AREA FOR TELECOMMUNICATIONS EQUIPMENT

NOTE: All bearings and distances are based on grid north Kentucky State Plane Coordinate System Single Zone NAD 1983

A Lease Area for telecommunications equipment, described as follows:

Beginning at a point in the Grantor's tract, as recorded in Deed Book 173 at Page 113 in the Morgan County Court Clerk's Office, said point being a set iron pin with cap stamped G. Brian Wyatt PLS 2328, having NAD 83 Single Zone coordinates of: North 3,858,050.87 and East 5,631,849.82; thence South 05 degrees 53 minutes 41 seconds East, a distance of 40.00 feet to a set iron pin; thence South 84 degrees 06 minutes 19 seconds West, a distance of 100.00 feet to a set iron pin; thence North 05 degrees 53 minutes 41 seconds West, a distance of 40.00 feet to a set iron pin; thence North 84 degrees 06 seconds 19 seconds East, passing the centerline terminus of the 30-foot wide Access and Utility Easement at 40.45 feet, in all a distance of 100.00 feet to a point, containing 4000 square feet, or 0.092 acres.

at&t

WESTOWER COMMUNICATIONS

3001 TAYLOR SPRINGS DRIVE
LOUISVILLE, KENTUCKY 40220
(502) 459-8402 PHONE
(502) 459-8427 FAX

STATE of KENTUCKY
GEORGE BRIAN WYATT
2328
LICENSED PROFESSIONAL LAND SURVEYOR

SITE NAME: INDEX

SITE I.D.: KYALU6170

SITE ADDRESS: 2140 HIGHWAY 460, WEST LIBERTY
MORGAN COUNTY, KENTUCKY 41472

LEASE AREA: 4000 SF

PROPERTY OWNER:
SARAH G., ROBIN & FARRELL FANNIN
2140 HIGHWAY 460
WEST LIBERTY, KY 41472

PARCEL NUMBER: 089-00-00-017.00

SOURCE OF TITLE: DEED BOOK 173 PAGE 113

LATITUDE: 37° 53' 33.996" N
LONGITUDE: 83° 17' 14.131" W

NO.	REVISION/ISSUE	DATE
1		
2		
3		
4		
5		

TITLE:
COMMUNICATIONS SITE SURVEY

SHEET:
C-2A

SITE PLAN NOTES

1. THE PROPOSED DEVELOPMENT IS FOR A 255 FOOT SELF-SUPPORT TOWER AND MULTIPLE EQUIPMENT LOCATIONS. THE LOCATION IS 2140 HWY 460, WEST LIBERTY, KY 41472.

2. THE TOWER WILL BE ACCESSED BY A PROPOSED STABILIZED DRIVE FROM AN EXISTING GRAVEL ROADWAY (HWY 460) WHICH IS A PUBLIC RIGHT OF WAY. WATER, SANITARY SEWER, AND WASTE COLLECTIONS SERVICES ARE NOT REQUIRED FOR THE PROPOSED DEVELOPMENT.

3. CENTERLINE OF PROPOSED TOWER GEOGRAPHIC LOCATIONS:
   LATITUDE: 37° 53' 33.996"N
   LONGITUDE: 83° 17' 14.131"W

4. REMOVE ALL VEGETATION, CLEAN AND GRUBB LEASE AREA (WHERE REQUIRED).

5. FINISH GRADING TO PROVIDE EFFECTIVE DRAINAGE WITH A SLOPE OF NO LESS THAN ONE EIGHTH INCH (1/8") PER FOOT FLOWING AWAY FROM EQUIPMENT FOR A MINIMUM DISTANCE OF SIX FEET (6') IN ALL DIRECTIONS.

6. LOCATE ALL U.G. UTILITIES PRIOR TO ANY CONSTRUCTION.

7. COMPOUND FINISHED SURFACE TO BE FENCED

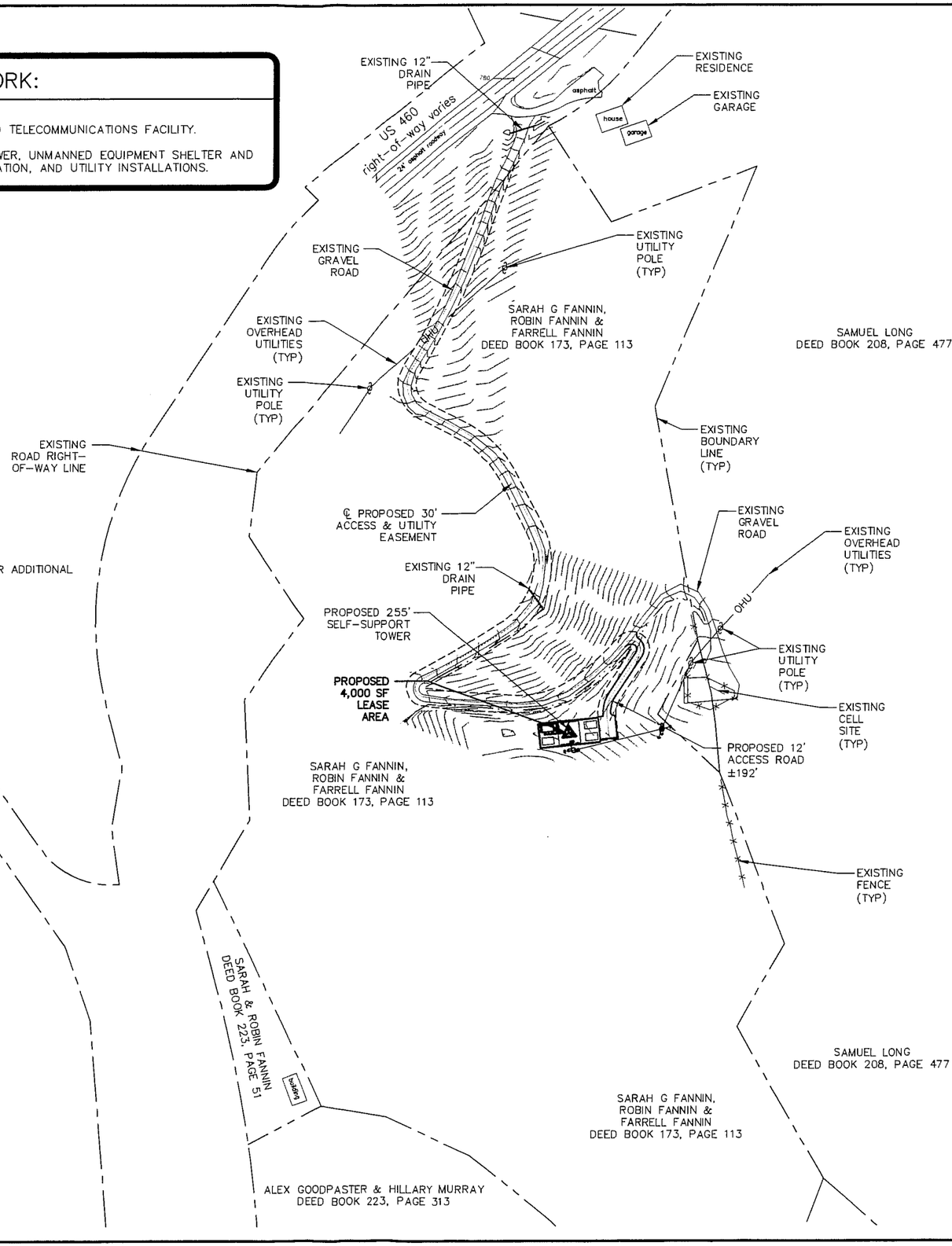
SCOPE OF WORK:

CONSTRUCTION DRAWINGS FOR:
CONSTRUCTION OF A NEW UNMANNED TELECOMMUNICATIONS FACILITY.

SITE WORK: NEW SELF-SUPPORT TOWER, UNMANNED EQUIPMENT SHELTER AND GENERATOR ON A CONCRETE FOUNDATION, AND UTILITY INSTALLATIONS.

UNDERGROUND UTILITIES
CALL 2 WORKING DAYS
BEFORE YOU DIG
INDIANA 1-800-382-5544
KENTUCKY 1-800-752-6007
OR DIAL 811
UTILITIES PROTECTION SERVICE
NON-MEMBERS MUST CALL DIRECTLY

NOTE: SEE SURVEY SHEETS C-1 AND C-1A FOR ADDITIONAL OWNER INFORMATION.



LEGEND

——E——	EXISTING OVERHEAD ELECTRIC
——T——	EXISTING OVERHEAD TELEPHONE
——UE——	EXISTING UNDERGROUND ELECTRIC
——UT——	EXISTING UNDERGROUND TELEPHONE
—UE— —UE—	PROPOSED UNDERGROUND ELECTRIC
—UT— —UT—	PROPOSED UNDERGROUND TELEPHONE
	FENCE LINE
	POWER POLE
TELE PED	TELEPHONE PEDESTAL
WV	WATER VALVES
	FIRE HYDRANTS
	BOLLARDS
GV	GAS VALVES

GRAPHIC SCALE

200 0 100 200

1 INCH = 200 FT.

at&t

WESTOWER COMMUNICATIONS

BTM Engineering, Inc.
3001 TAYLOR SPRINGS DRIVE
LOUISVILLE, KENTUCKY 40220
(502) 459-8402 PHONE
(502) 459-8427 FAX

STATE OF KENTUCKY
PHILIP G. HEID
29820
LICENSED PROFESSIONAL ENGINEER

SITE NAME: INDEX

SITE ID NUMBER: KYALU6170

SITE ADDRESS: 2140 HWY 460 WEST LIBERTY, KY 41472

LATITUDE: 37° 53' 33.996" N
LONGITUDE: 83° 17' 14.131" W

TAX MAP NUMBER: N/A

PARCEL NUMBER: 089-00-00-017.00

SOURCE OF TITLE: DEED BOOK 173, PAGE 113

PROPERTY OWNER: SARAH G, ROBIN, & FARRELL FANNIN
2140 HWY 460
WEST LIBERTY, KY 41472
CONTACT: SARAH FANNIN
PHONE: (606) 743-3343

NO	REVISION/ISSUE	DATE
1	ISSUE FOR COMMENT	09/12/13
2	REISSUE FOR COMMENT	12/02/13
3	REISSUE FOR COMMENT	12/16/13
4	REISSUE FOR COMMENT	01/06/14
5	ISSUE FOR ZONING	02/18/14
6	REISSUE FOR ZONING	02/21/14

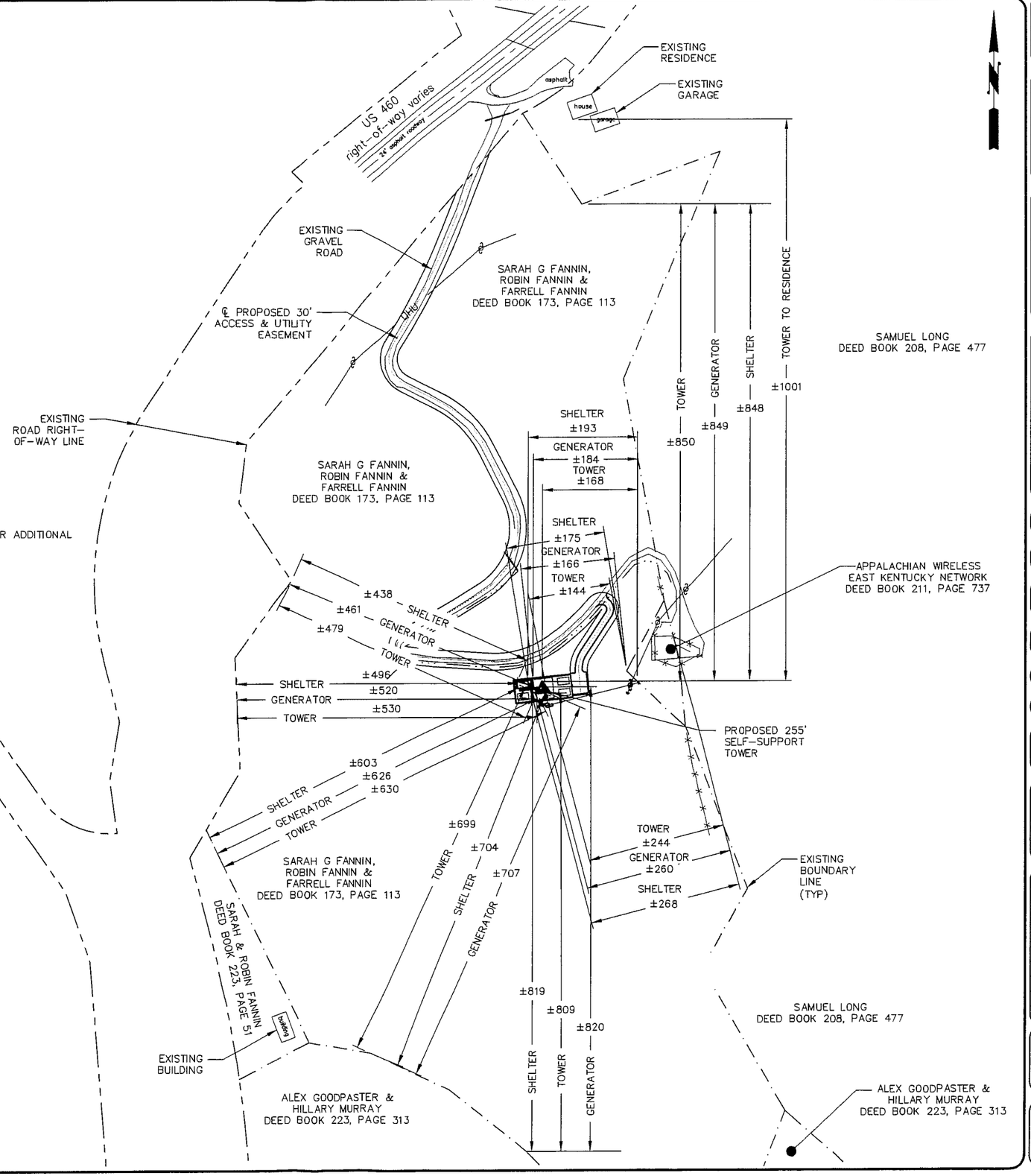
TITLE: OVERALL SITE LAYOUT

SHEET: Z-2

SCOPE OF WORK:

CONSTRUCTION DRAWINGS FOR:
CONSTRUCTION OF A NEW UNMANNED TELECOMMUNICATIONS FACILITY.

SITE WORK: NEW SELF-SUPPORT TOWER, UNMANNED EQUIPMENT SHELTER AND GENERATOR ON A CONCRETE FOUNDATION, AND UTILITY INSTALLATIONS.



NOTE: SEE SURVEY SHEETS C-1 AND C-1A FOR ADDITIONAL OWNER INFORMATION.

LEGEND

- E — EXISTING OVERHEAD ELECTRIC
- T — EXISTING OVERHEAD TELEPHONE
- UE — EXISTING UNDERGROUND ELECTRIC
- UT — EXISTING UNDERGROUND TELEPHONE
- UE — UE — PROPOSED UNDERGROUND ELECTRIC
- UT — UT — PROPOSED UNDERGROUND TELEPHONE
- FENCE LINE
- POWER POLE
- TELE. PED — TELEPHONE PEDESTAL
- WATER VALVES
- FIRE HYDRANTS
- BOLLARDS
- GV — GAS VALVES

GRAPHIC SCALE

200 0 100 200

1 INCH = 200 FT.

at&t

WESTOWER COMMUNICATIONS

BTM Engineering, Inc.
3001 TAYLOR SPRINGS DRIVE
LOUISVILLE, KENTUCKY 40220
(502) 459-8402 PHONE
(502) 459-8427 FAX

2/21/14

STATE OF KENTUCKY
PHILIP G. HEID
29820
LICENSED PROFESSIONAL ENGINEER

SITE NAME: INDEX

SITE ID NUMBER: KYALU6170

SITE ADDRESS: 2140 HWY 460
WEST LIBERTY, KY 41472

LATITUDE: 37° 53' 33.996" N
LONGITUDE: 83° 17' 14.131" W

TAX MAP NUMBER: N/A

PARCEL NUMBER: 089-00-00-017.00

SOURCE OF TITLE: DEED BOOK 173, PAGE 113

PROPERTY OWNER: SARAH G, ROBIN, & FARRELL FANNIN
2140 HWY 460
WEST LIBERTY, KY 41472
CONTACT: SARAH FANNIN
PHONE: (606) 743-3343

NO	REVISION/ISSUE	DATE
1	ISSUE FOR COMMENT	09/12/13
2	REISSUE FOR COMMENT	12/02/13
3	REISSUE FOR COMMENT	12/16/13
4	REISSUE FOR COMMENT	01/06/14
5	ISSUE FOR ZONING	02 /14
6	REISSUE FOR ZONING	02/../14

TITLE: OVERALL SITE LAYOUT-DIMENSIONS

SHEET: Z-2A

SITE PLAN NOTES

1. THE PROPOSED DEVELOPMENT IS FOR A 255 FOOT SELF-SUPPORT TOWER AND MULTIPLE EQUIPMENT LOCATIONS. THE LOCATION IS 2140 HWY 460, WEST LIBERTY, KY 41472.

2. THE TOWER WILL BE ACCESSED BY A PROPOSED STABILIZED DRIVE FROM AN EXISTING GRAVEL ROADWAY (HWY 460) WHICH IS A PUBLIC RIGHT OF WAY. WATER, SANITARY SEWER, AND WASTE COLLECTIONS SERVICES ARE NOT REQUIRED FOR THE PROPOSED DEVELOPMENT.

3. CENTERLINE OF PROPOSED TOWER GEOGRAPHIC LOCATIONS:
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   LONGITUDE: 83° 17' 14.131"W

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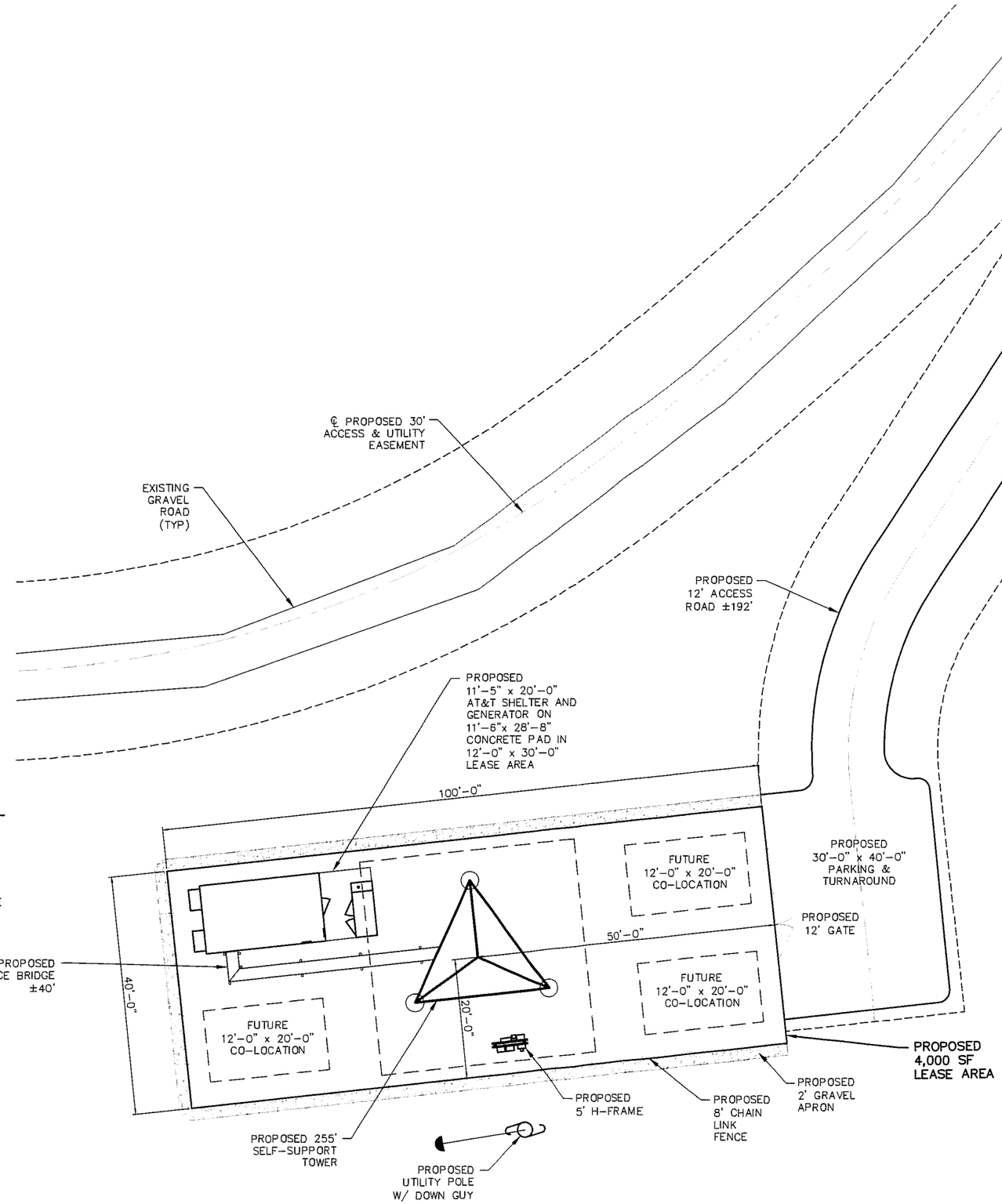


LEGEND

——E——	EXISTING OVERHEAD ELECTRIC
——T——	EXISTING OVERHEAD TELEPHONE
——UE——	EXISTING UNDERGROUND ELECTRIC
——UT——	EXISTING UNDERGROUND TELEPHONE
—UE— —UE—	PROPOSED UNDERGROUND ELECTRIC
—UT— —UT—	PROPOSED UNDERGROUND TELEPHONE
·····	FENCE LINE
	POWER POLE
TELE. PED	TELEPHONE PEDESTAL
	WATER VALVES
	FIRE HYDRANTS
	BOLLARDS
GV	GAS VALVES

GRAPHIC SCALE
10 5 0 5 10 20 40
(IN FEET)
1 inch = 20 ft.

at&t

WESTOWER COMMUNICATIONS

BTM Engineering, Inc.
3001 TAYLOR SPRINGS DRIVE
LOUISVILLE, KENTUCKY 40220
(502) 459-8402 PHONE
(502) 459-8427 FAX

2/21/14

STATE OF KENTUCKY
PHILIP G. HEID
29820
LICENSED PROFESSIONAL ENGINEER

SITE NAME: INDEX

SITE ID NUMBER: KYALU6170

SITE ADDRESS: 2140 HWY 460 WEST LIBERTY, KY 41472

LATITUDE: 37° 53' 33.996" N
LONGITUDE: 83° 17' 14.131" W

TAX MAP NUMBER: N/A

PARCEL NUMBER: 089-00-00-017.00

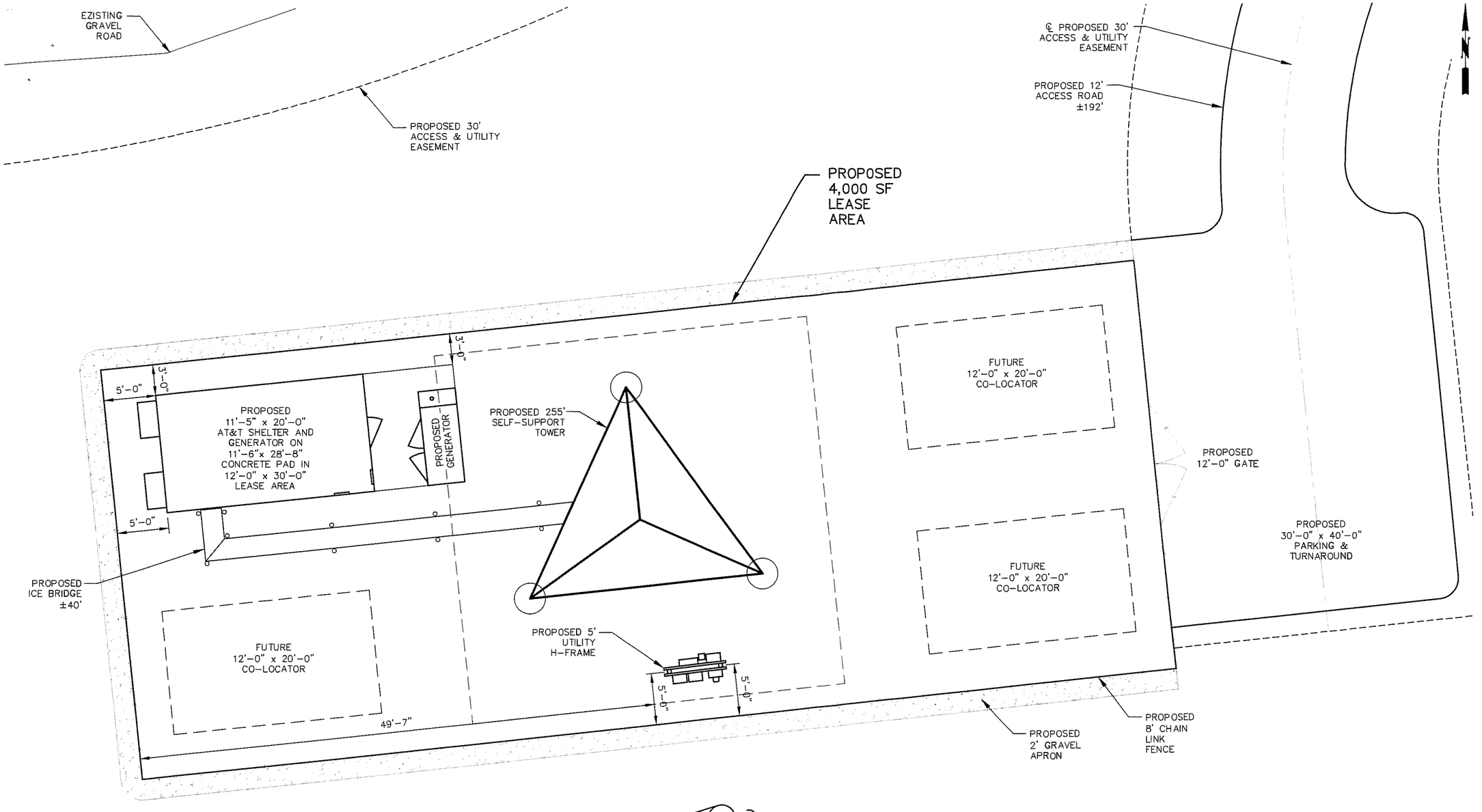
SOURCE OF TITLE: DEED BOOK 173, PAGE 113

PROPERTY OWNER: SARAH G, ROBIN, & FARRELL FANNIN
2140 HWY 460
WEST LIBERTY, KY 41472
CONTACT: SARAH FANNIN
PHONE: (606) 743-3343

NO	REVISION/ISSUE	DATE
1	ISSUE FOR COMMENT	09/12/13
2	REISSUE FOR COMMENT	12/02/13
3	REISSUE FOR COMMENT	12/16/13
4	REISSUE FOR COMMENT	01/06/14
5	ISSUE FOR ZONING	02/18/14
6	REISSUE FOR ZONING	02/21/14

TITLE: SITE LAYOUT

SHEET: Z-3



LEGEND

- E — EXISTING OVERHEAD ELECTRIC
- T — EXISTING OVERHEAD TELEPHONE
- UE — EXISTING UNDERGROUND ELECTRIC
- UT — EXISTING UNDERGROUND TELEPHONE
- UE — UE — PROPOSED UNDERGROUND ELECTRIC
- UT — UT — PROPOSED UNDERGROUND TELEPHONE
- X — FENCE LINE
- POWER POLE
- TELE. PED — TELEPHONE PEDESTAL
- WATER VALVES
- FIRE HYDRANTS
- BOLLARDS

GRAPHIC SCALE

10 5 0 10 20

1 inch = 10 ft

at&t

WESTOWER COMMUNICATIONS

BTM Engineering, Inc.
3001 TAYLOR SPRINGS DRIVE
LOUISVILLE, KENTUCKY 40220
(502) 459-8402 PHONE
(502) 459-8427 FAX

2/21/14

STATE OF KENTUCKY
PHILIP G. HEID
29820
LICENSED PROFESSIONAL ENGINEER

SITE NAME: INDEX

SITE ID NUMBER: KYALU6170

SITE ADDRESS: 2140 HWY 460 WEST LIBERTY, KY 41472

LATITUDE: 37° 53' 33.996" N
LONGITUDE: 83° 17' 14.131" W

TAX MAP NUMBER: N/A

PARCEL NUMBER: 089-00-00-017.00

SOURCE OF TITLE: DEED BOOK 173, PAGE 113

PROPERTY OWNER: SARAH G, ROBIN, & FARRELL FANNIN
2140 HWY 460
WEST LIBERTY, KY 41472
CONTACT: SARAH FANNIN
PHONE: (606) 743-3343

NO	REVISION/ISSUE	DATE
1	ISSUE FOR COMMENT	09/12/13
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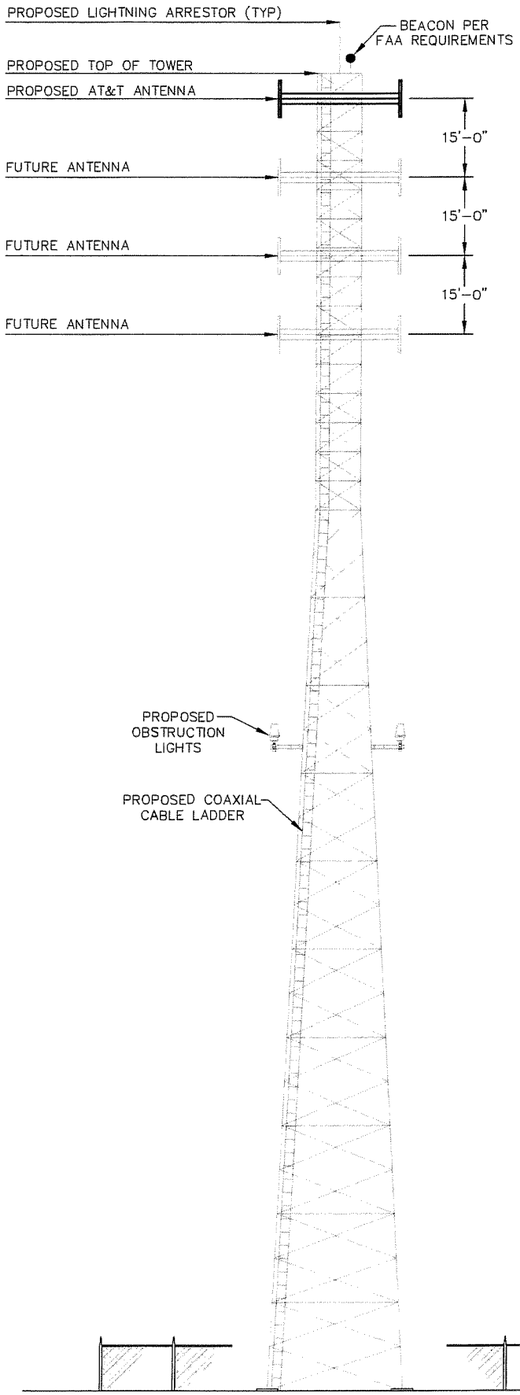
3	REISSUE FOR COMMENT	12/16/13
4	REISSUE FOR COMMENT	01/06/14
5	ISSUE FOR ZONING	02/18/14
6	REISSUE FOR ZONING	02/21/14

TITLE: AT&T SHELTER LAYOUT

SHEET: Z-4

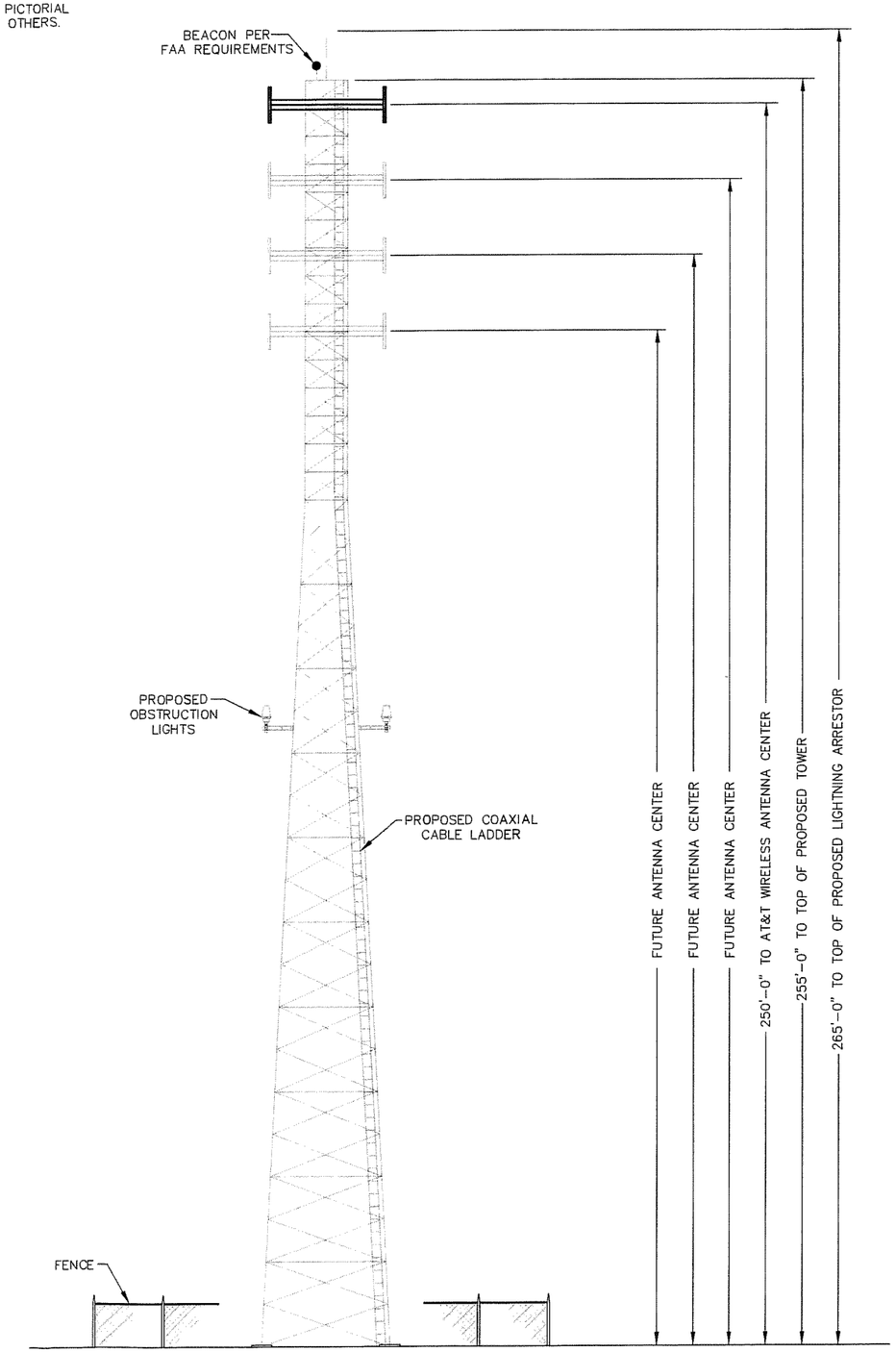


NORTH ELEVATION

NOT TO SCALE

NOTE:

THE ELEVATIONS SHOWN ON THIS SHEET ARE FOR PICTORIAL PURPOSES ONLY. THIS DESIGN WAS PRDVIDED BY OTHERS. REFER TO TOWER PLANS FOR TOWER DESIGN.



SOUTH ELEVATION

NOT TO SCALE

at&t

WESTOWER COMMUNICATIONS

BTM Engineering, Inc.
3001 TAYLOR SPRINGS DRIVE
LOUISVILLE, KENTUCKY 40220
(502) 459-8402 PHONE
(502) 459-8427 FAX

2/21/14

STATE OF KENTUCKY
PHILIP G. HEID
29820
LICENSED
PROFESSIONAL ENGINEER

SITE NAME: INDEX

SITE ID NUMBER: KYALU6170

SITE ADDRESS: 2140 HWY 460
WEST LIBERTY, KY 41472

LATITUDE: 37° 53' 33.996" N
LONGITUDE: 83° 17' 14.131" W

TAX MAP NUMBER: N/A

PARCEL NUMBER: 089-00-00-017.00

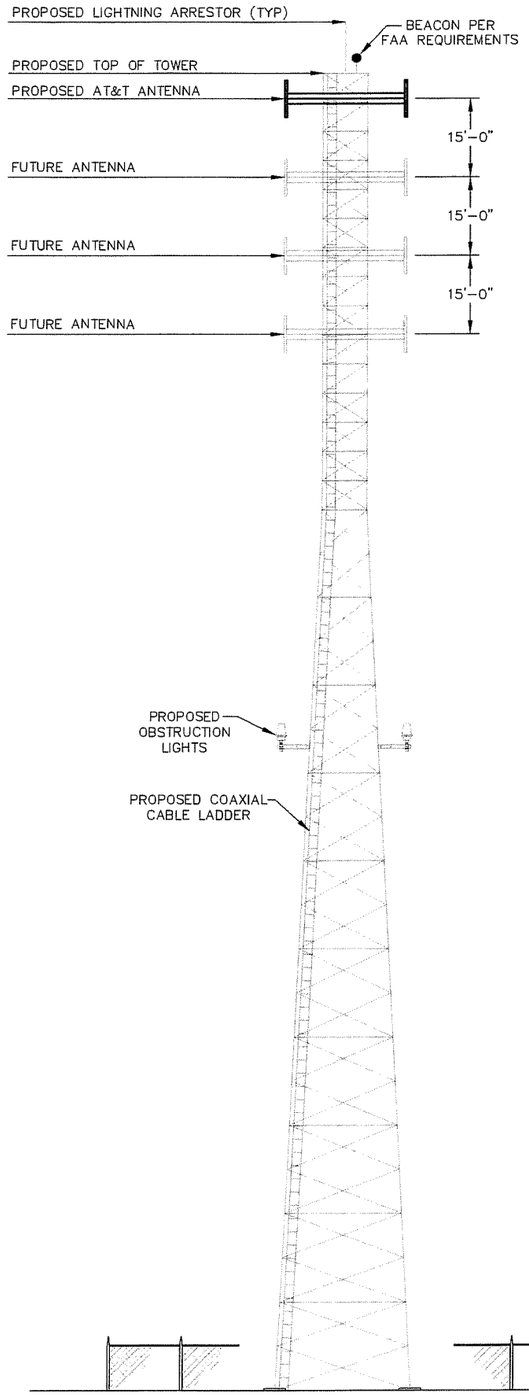
SOURCE QF TITLE: DEED BOOK 173, PAGE 113

PROPERTY OWNER: SARAH G, ROBIN, & FARRELL FANNIN
2140 HWY 460
WEST LIBERTY, KY 41472
CONTACT: SARAH FANNIN
PHONE: (606) 743-3343

NO	REVISION/ISSUE	DATE
1	ISSUE FOR COMMENT	09/12/13
2	REISSUE FOR COMMENT	12/02/13
3	REISSUE FOR COMMENT	12/16/13
4	REISSUE FOR COMMENT	01/06/14
5	ISSUE FOR ZONING	02/18/14
6	REISSUE FOR ZONING	02/21/14

TITLE: NORTH/SOUTH TOWER ELEVATIONS

SHEET: Z-5

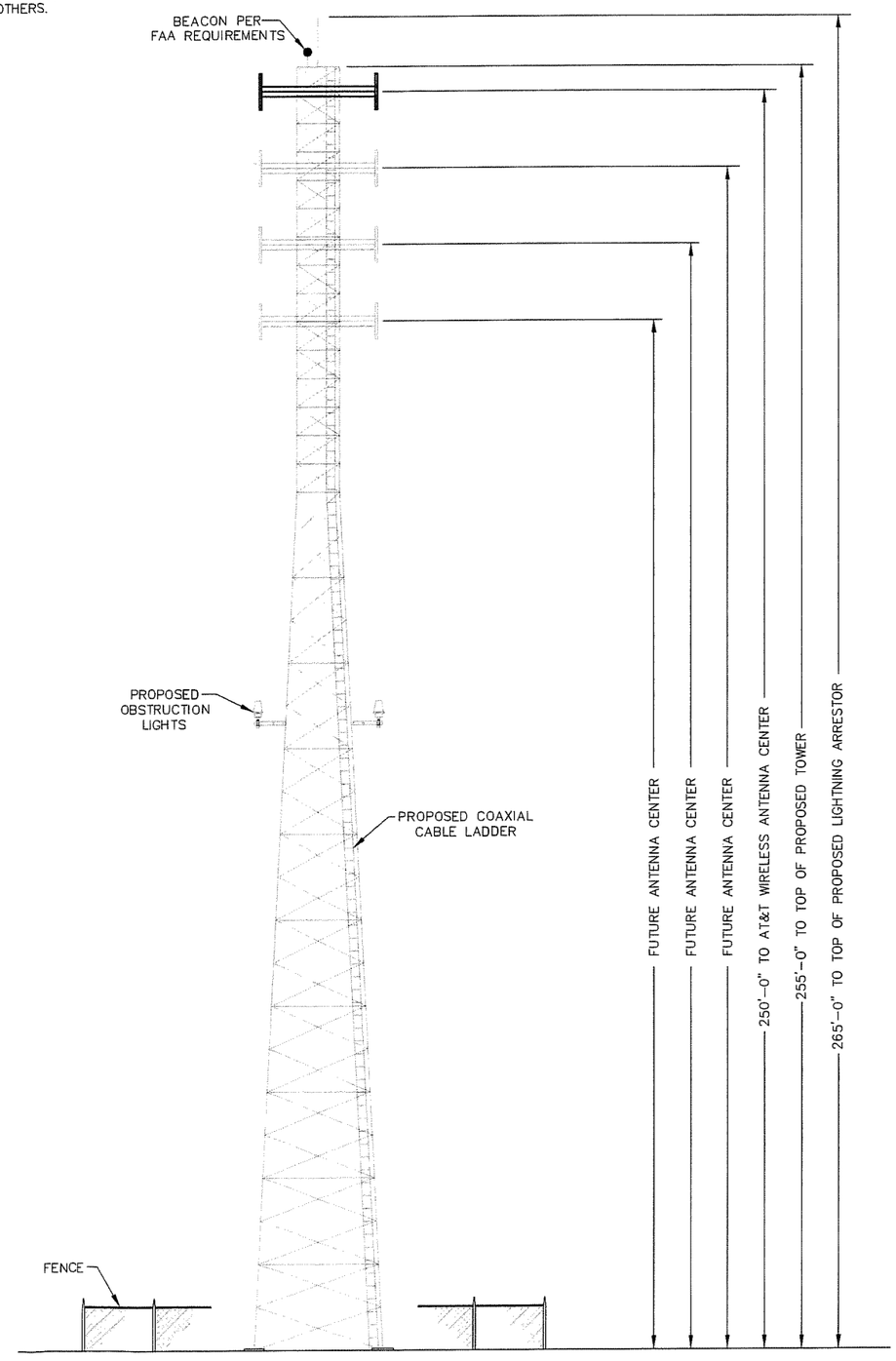


EAST ELEVATION

NOT TO SCALE

NOTE:

THE ELEVATIONS SHOWN ON THIS SHEET ARE FOR PICTORIAL PURPOSES ONLY. THIS DESIGN WAS PROVIDED BY OTHERS. REFER TO TOWER PLANS FOR TOWER DESIGN.



WEST ELEVATION

NOT TO SCALE

at&t

WESTOWER COMMUNICATIONS

BTM Engineering, Inc.
3001 TAYLOR SPRINGS DRIVE
LOUISVILLE, KENTUCKY 40220
(502) 459-8402 PHONE
(502) 459-8427 FAX

STATE OF KENTUCKY
PHILIP G. HEID
29820
LICENSED PROFESSIONAL ENGINEER

SITE NAME: INDEX

SITE ID NUMBER: KYALU6170

SITE ADDRESS: 214D HWY 460 WEST LIBERTY, KY 41472

LATITUDE: 37° 53' 33.996" N
LONGITUDE: 83° 17' 14.131" W

TAX MAP NUMBER: N/A

PARCEL NUMBER: 089-00-00-017.00

SOURCE OF TITLE: DEED BOOK 173, PAGE 113

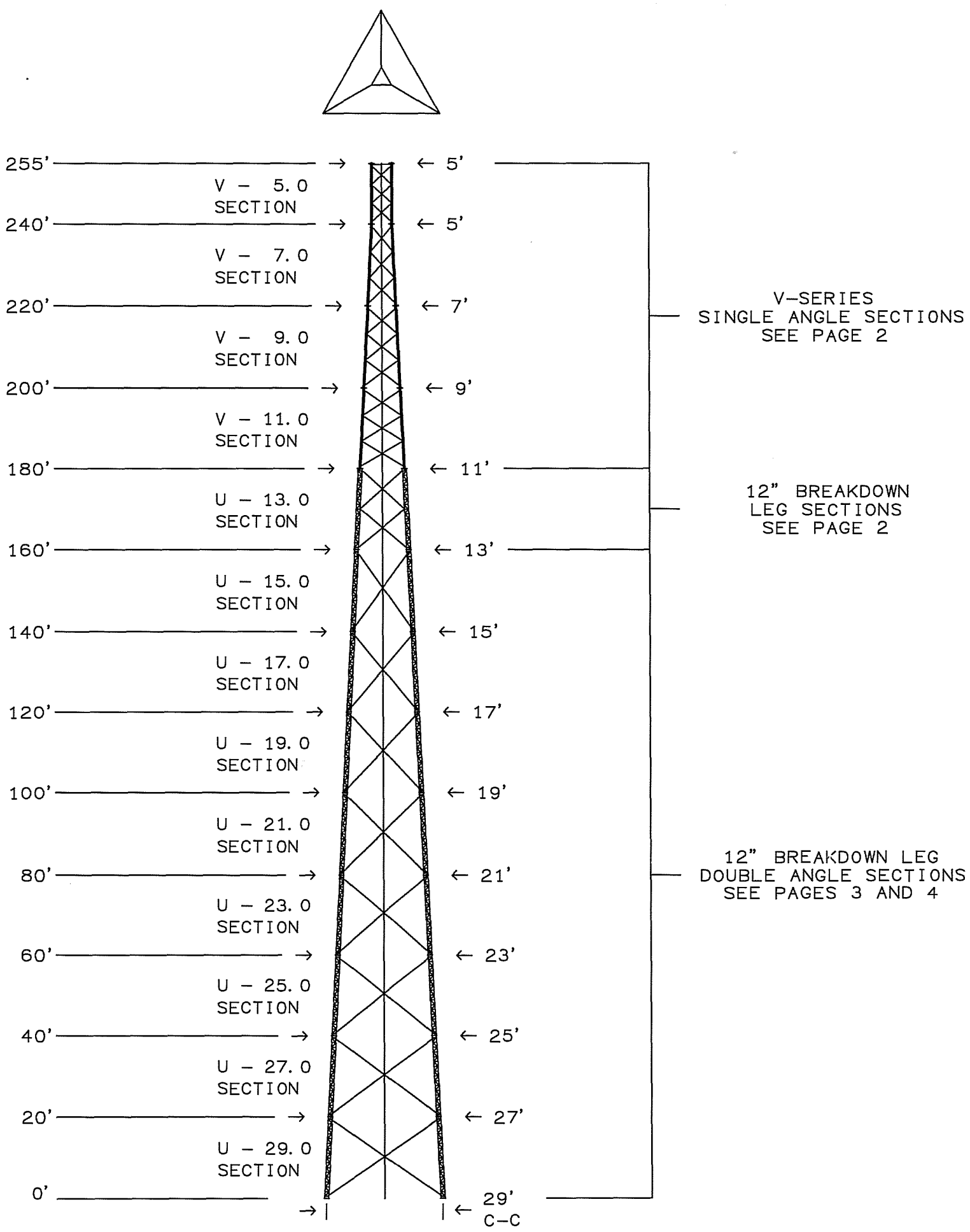
PROPERTY OWNER: SARAH G, ROBIN, & FARRELL FANNIN
2140 HWY 460
WEST LIBERTY, KY 41472
CONTACT: SARAH FANNIN
PHONE: (606) 743-3343

NO	REVISION/ISSUE	DATE
1	ISSUE FOR COMMENT	09/12/13
2	REISSUE FOR COMMENT	12/02/13
3	REISSUE FOR COMMENT	12/16/13
4	REISSUE FOR COMMENT	01/06/14
5	ISSUE FOR ZONING	02/18/14
6	REISSUE FOR ZONING	02/21/14

TITLE: EAST/WEST TOWER ELEVATIONS

SHEET: Z-6

EXHIBIT C
TOWER AND FOUNDATION DESIGN



STATE OF KENTUCKY
WILLIAM R. HEIDEN III
No. 22430
LICENSED PROFESSIONAL ENGINEER

DEC 1 1 2013

William R. Heiden III, KY Professional Engineer # 22430

AMERICAN TOWER CORP.
#282100 INDEX, KY
V-29.0 X 255'

REV	DESCRIPTION OF REVISIONS	INI	DATE
A	ADDED FOUNDATIONS	MS	12/11/2013

VALMONT STRUCTURES IS A DIVISION OF VALMONT INDUSTRIES, INC. ENGINEERING PROVIDED BY PIROD, INC., WHOLLY OWNED BY VALMONT INDUSTRIES, INC.

From: F1015796.DFT - 12/03/2013 09:15
Printed from 252261_01@A.DWG - 12/03/2013 09:17 @ 12/11/2013 10:06

KENTUCKY C.O.A. 1542		
APPROVED/ENG.	M_S	12/11/2013
APPROVED/FOUND.	N/A	
COPYRIGHT 2013		
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ARCHIVE	F-1015796	

valmont STRUCTURES
1-877-467-4763 Plymouth, IN
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DRAWING NO. 252261

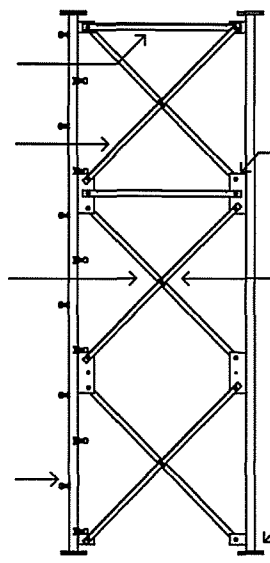
V-SERIES LEG SECTION DATA 180' - 255' ELEVATION

SECTION			LEG									DIAGONAL BRACE								HOR
#	LENGTH	* WEIGHT	NOM SIZE	WALL	GRADE	CLIMBING QTY	CLIMBING PART#	NON-CLIMB QTY	NON-CLIMB PART#	CONNECT BOLT+ DIAM	CONNECT BOLT+ LENGTH	PART NUMBER ** #1	PART NUMBER ** #2	PART NUMBER ** #3	ANGLE FACE	ANGLE THICK	CONNECT BOLT DIAM	CONNECT BOLT LENGTH	CENTER SPACER	QTY
V- 5.0	15'	1013#	4"	0.237	A572-50	1	228175	2	228176	3/4"	3-1/2"	227077	227077	227077	2"	1/8"	3/4"	2-1/4"	116467	1
V- 7.0	20'	1609#	5"	0.258	A572-50	1	226200	2	226201	3/4"	3-1/2"	226190	226189	231342	2"	3/16"	3/4"	2-1/4"	116467	
V- 9.0	20'	1861#	5"	0.258	A572-50	3	226192			3/4"	3-1/2"	225035	225034	231345	2-1/2"	3/16"	3/4"	2-1/4"	116467	
V-11.0	20'	2390#	6"	0.280	A572-50	3	229377			1"	4-3/4"	225038	225037	231347	2-1/2"	3/16"	3/4"	2-1/4"	116467	

\+ AT BOTTOM OF SECTION
* THE WEIGHTS LISTED ARE THEORETICAL. THE ACTUAL WEIGHTS WILL VARY. ALL WEIGHTS SHOULD BE CONFIRMED IN THE FIELD PRIOR TO ERECTION.
** PANELS ARE NUMBERED BEGINNING AT THE TOP OF THE SECTION.

HORIZONTAL DATA		
HORIZ HT	IN SEC#	HORIZ PART#
255	V- 5.0	227584

TYPICAL V-SERIES SECTION ASSEMBLY 180' - 255' ELEVATION

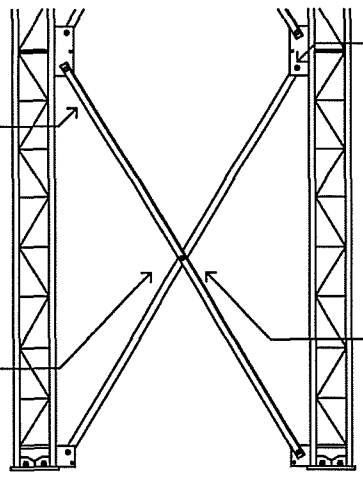


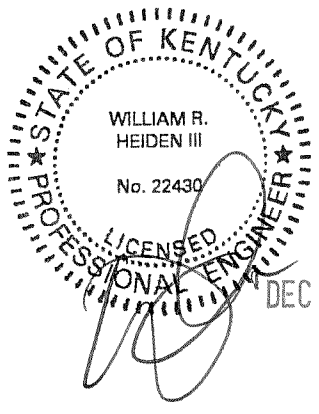
BREAKDOWN SECTION DATA (12" LEG) 160' - 180' ELEVATION

SEC #	SECTION LENGTH	LEG SIZE	LEG PART#	TOP DIAG PART#	BOT DIAG PART#	DIAGONAL ANGLE FACE	DIAGONAL ANGLE THICK	SECTION WEIGHT	LEG CONNECT+ DIAM	LEG CONNECT+ LENGTH	DIAG CONNECT DIAM	DIAG CONNECT LENGTH
U-13.0	20'	1- 3/4"	229588	105575	105577	3"	5/16"	3468#	1"	4-3/4"	1 "	2-1/4"

* THE WEIGHTS LISTED ARE THEORETICAL. THE ACTUAL WEIGHTS WILL VARY. ALL WEIGHTS SHOULD BE CONFIRMED IN THE FIELD PRIOR TO ERECTION.
\+ USE 1 FLAT WASHER UNDER EACH LOCK WASHER FOR LEG CONNECTION ONLY.

TYPICAL BREAKDOWN SECTION ASSEMBLY (12" LEG) 160' - 180' ELEVATION





William R. Heiden III, KY Professional Engineer # 22430

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AMERICAN TOWER CORP.
#282100 INDEX, KY
V-29.0 X 255'

KENTUCKY C.O.A. 1542		
APPROVED/ENG.	M_S	12/11/2013
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BREAKDOWN SECTION LEG DATA (12" LEG WITH DOUBLE ANGLES) 0' – 160' ELEVATION

SECTION				LEG		LEG CONNECT @ BOTTOM+		
#	MODEL	LENGTH	WEIGHT*	SIZE	PART #	DIAM	LENGTH	#
8	U-15.0	20'	4545#	2 "	208332	1"	4-3/4"	12
7	U-17.0	20'	5237#	2- 1/4 "	208334	1"	4-3/4"	12
6	U-19.0	20'	5916#	2- 1/2 "	208335	1"	4-3/4"	12
5	U-21.0	20'	6016#	2- 1/2 "	208335	1"	4-3/4"	12
4	U-23.0	20'	6899#	2- 3/4 "	208337	1"	4-3/4"	12
3	U-25.0	20'	7007#	2- 3/4 "	208337	1"	4-3/4"	12
2	U-27.0	20'	8421#	3 "	208336	1-1/4"	5"	12
1	U-29.0	20'	8211#	3 "	208338			

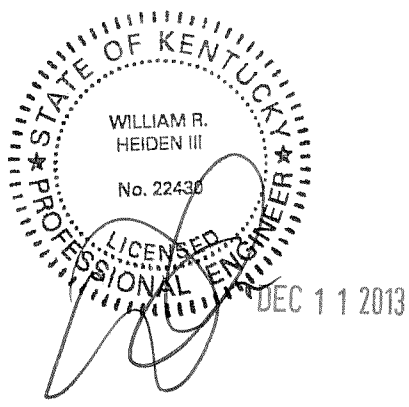
* THE WEIGHTS LISTED ARE THEORETICAL. THE ACTUAL WEIGHTS WILL VARY. ALL WEIGHTS SHOULD BE CONFIRMED IN THE FIELD PRIOR TO ERECTION.

\+ QTY IS PER LEG. USE 1 LOCK WASHER AND 1 FLAT WASHER UNDER EACH PLAIN NUT.

BREAKDOWN SECTION DIAGONAL DATA (12" LEG WITH DOUBLE ANGLES) 0' – 160' ELEVATION

SECTION		DIAGONAL PART #			DIAG ANGLE		DIAG END BOLT		DIAG CENTER & SPACER BOLT		CENTER PLATE	SPACER	
#	MODEL	UPPER	LOWER	LONG	FACE	THICK	DIAM	LENGTH	DIAM	LENGTH	PART #	PART #	#*
8	U-15.0	215273	215277	215358	3-1/2"	1/4"	7/8"	2-1/2"	5/8"	2-1/4"	211833	104291	5
7	U-17.0	215281	215285	215362	3-1/2"	1/4"	7/8"	2-1/2"	5/8"	2-1/4"	211833	104291	6
6	U-19.0	215289	215293	215365	3-1/2"	1/4"	7/8"	2-1/2"	5/8"	2-1/4"	211833	104291	7
5	U-21.0	215296	215300	215369	3-1/2"	1/4"	7/8"	2-1/2"	5/8"	2-1/4"	211833	104291	8
4	U-23.0	215304	215308	215373	3-1/2"	1/4"	7/8"	2-1/2"	5/8"	2-1/4"	211833	104291	8
3	U-25.0	215312	215316	215377	3-1/2"	1/4"	7/8"	2-1/2"	5/8"	2-1/4"	211833	104291	8
2	U-27.0	215321	215325	215381	4"	1/4"	7/8"	2-1/2"	5/8"	2-1/4"	211833	104291	8
1	U-29.0	215328	215331	215384	4"	1/4"	7/8"	2-1/2"	5/8"	2-1/4"	211833	104291	8

* QUANTITY IS PER PANEL PER FACE. USE 1 LOCK WASHER UNDER EACH PLAIN NUT.



William R. Heiden III, KY Professional Engineer # 22430

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AMERICAN TOWER CORP.
#282100 INDEX, KY
V-29.0 X 255'

KENTUCKY C.O.A. 1542		
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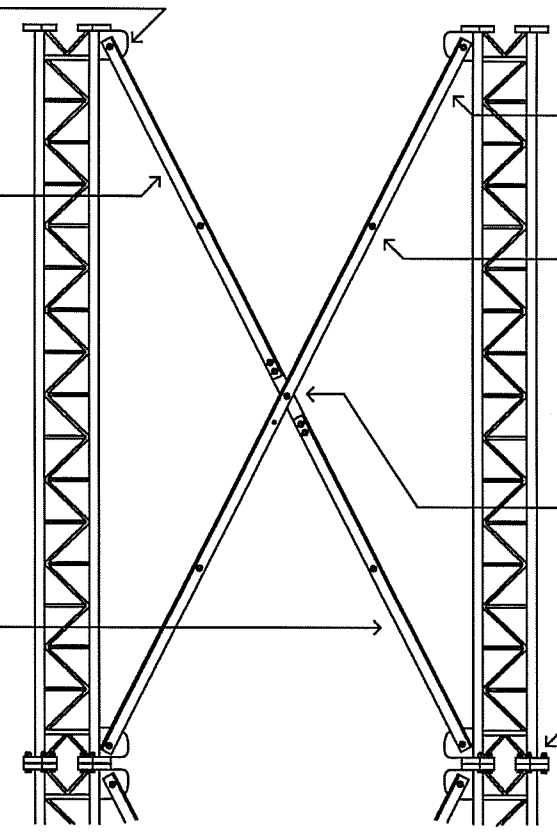
TYPICAL BREAKDOWN SECTION ASSEMBLY (12" LEG WITH DOUBLE ANGLES) 0' – 160' ELEVATION



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 #.

"LOWER" 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 #.

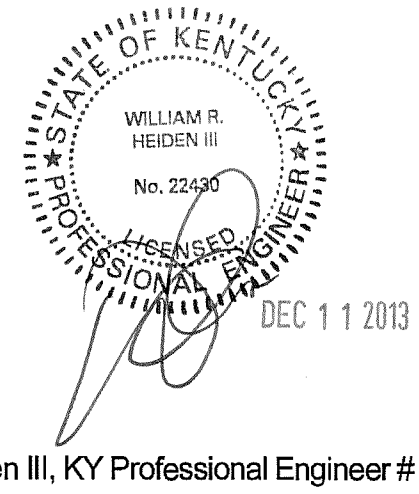
INTERMEDIATE DIAGONAL BOLTS WITH SPACER – SEE TABLE ON PG. 3 FOR SIZE, SPACER PART # AND NUMBER OF LOCATIONS PER PANEL ON EACH FACE. USE 1 SPACER PER BOLT. SEE DRAWING # 214823 FOR DETAILS.

DIAGONAL CENTER PLATE – SEE DIAGONAL TABLE ON PAGE 3 FOR PART # AND BOLT SIZE.

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.



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AMERICAN TOWER CORP.
#282100 INDEX, KY
V-29.0 X 255'

KENTUCKY C.O.A. 1542		
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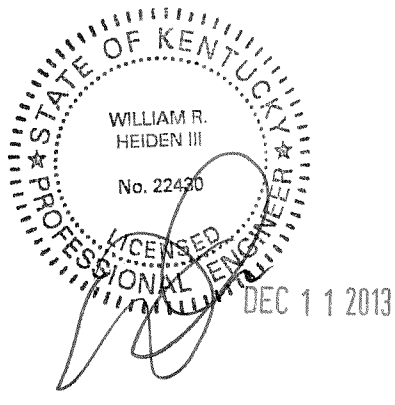
DRAWING NO. 252261

GENERAL NOTES

1. 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 3 AND EXPOSURE C CRITERIA WITH NO ICE.
   TOWER DESIGN CONFORMS TO STANDARD TIA-222-G UTILIZING AN 30 MPH 3-SEC GUST BASIC WIND SPEED WITH A STRUCTURE CLASS OF II, TOPOGRAPHIC CATEGORY OF 3 AND EXPOSURE C CRITERIA WITH .75" RADIAL ICE.
   CREST HEIGHT OF 240 FEET
2. NO TWIST AND SWAY LIMITATIONS SPECIFIED OR USED FOR THIS TOWER.
3. 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 STRENGTH
4. BASE REACTIONS PER TIA-222-G FOR 90 MPH BASIC WIND SPEED WITH NO ICE (REACTIONS INCLUDE TIA-222-G LOAD FACTORS): TOTAL WEIGHT = 107.0 KIPS. MAXIMUM COMPRESSION = 782.0 KIPS PER LEG. MOMENT = 18730.0 KIP-FT. MAXIMUM UPLIFT = 698.0 KIPS PER LEG. MAXIMUM SHEAR = 142.0 KIPS TOTAL.
5. BASE REACTIONS PER TIA-222-G FOR 30 MPH BASIC WIND SPEED WITH 0.75" RADIAL ICE (REACTIONS INCLUDE TIA-222-G LOAD FACTORS): TOTAL WEIGHT = 331.0 KIPS. MOMENT = 2204.0 KIP-FT. MAXIMUM SHEAR = 16.0 KIPS TOTAL.
6. 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.
7. ANTENNAS: 255'-135 SQ. FT. AREA WITH 3,000# WITH ICE/115 SQ. FT. AREA WITH 2,000# NO ICE AND (18) 1-5/8" LINES.
   245'-135 SQ. FT. AREA WITH 3,000# WITH ICE/115 SQ. FT. AREA WITH 2,000# NO ICE AND (18) 1-5/8" LINES.
   235'-135 SQ. FT. AREA WITH 3,000# WITH ICE/115 SQ. FT. AREA WITH 2,000# NO ICE AND (18) 1-5/8" LINES.
   225'-135 SQ. FT. AREA WITH 3,000# WITH ICE/115 SQ. FT. AREA WITH 2,000# NO ICE AND (18) 1-5/8" LINES.
   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" UNLESS OTHERWISE SPECIFIED. ALL WELDING TO CONFORM TO AWS D1.1 SPECIFICATIONS .
10. 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. TOWER LIGHTING SUPPLIED BY OTHERS.



William R. Heiden III, KY Professional Engineer # 22430

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AMERICAN TOWER CORP.
#282100 INDEX, KY
V-29.0 X 255'

KENTUCKY C.O.A. 1542		
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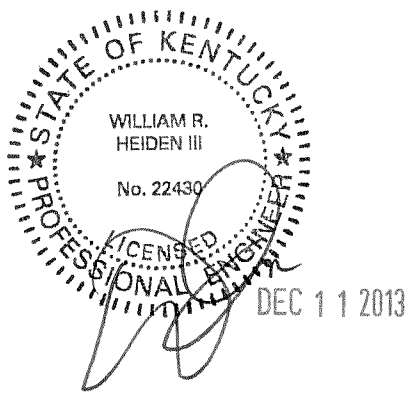
DRAWING NO. 252261

FOUNDATION NOTES

1. ULTIMATE SOIL PRESSURE ASSUMED TO BE 5000 PSF. ULTIMATE PASSIVE PRESSURE ASSUMED TO BE 400 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 CONDITIONS AT THE SITE. FOUNDATION DESIGN MODIFICATIONS MAY BE REQUIRED IN THE EVENT THE ASSUMED SOIL PARAMETERS ARE NOT APPLICABLE FOR THE ACTUAL SUBSURFACE CONDITIONS ENCOUNTERED.
2. CONCRETE TO BE 4000 PSI @ 28 DAYS. REINFORCING BAR TO CONFORM TO ASTM A615 GRADE 60 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 BE PLACED IN LOOSE LEVEL LIFTS OFNO MORE THAN 12" 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 D698.
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 5000 PSF, A COHESION OF 1000 PSF, A SOIL UNIT WEIGHT OF 110 PCF, AN ANGLE OF INTERNAL FRICTION OF 0 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

REV	DESCRIPTION OF REVISIONS	INI	DATE
A	ADDED FOUNDATIONS	MS	12/11/2013

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AMERICAN TOWER CORP.
#282100 INDEX, KY
V-29.0 X 255'

KENTUCKY C.O.A. 1542			
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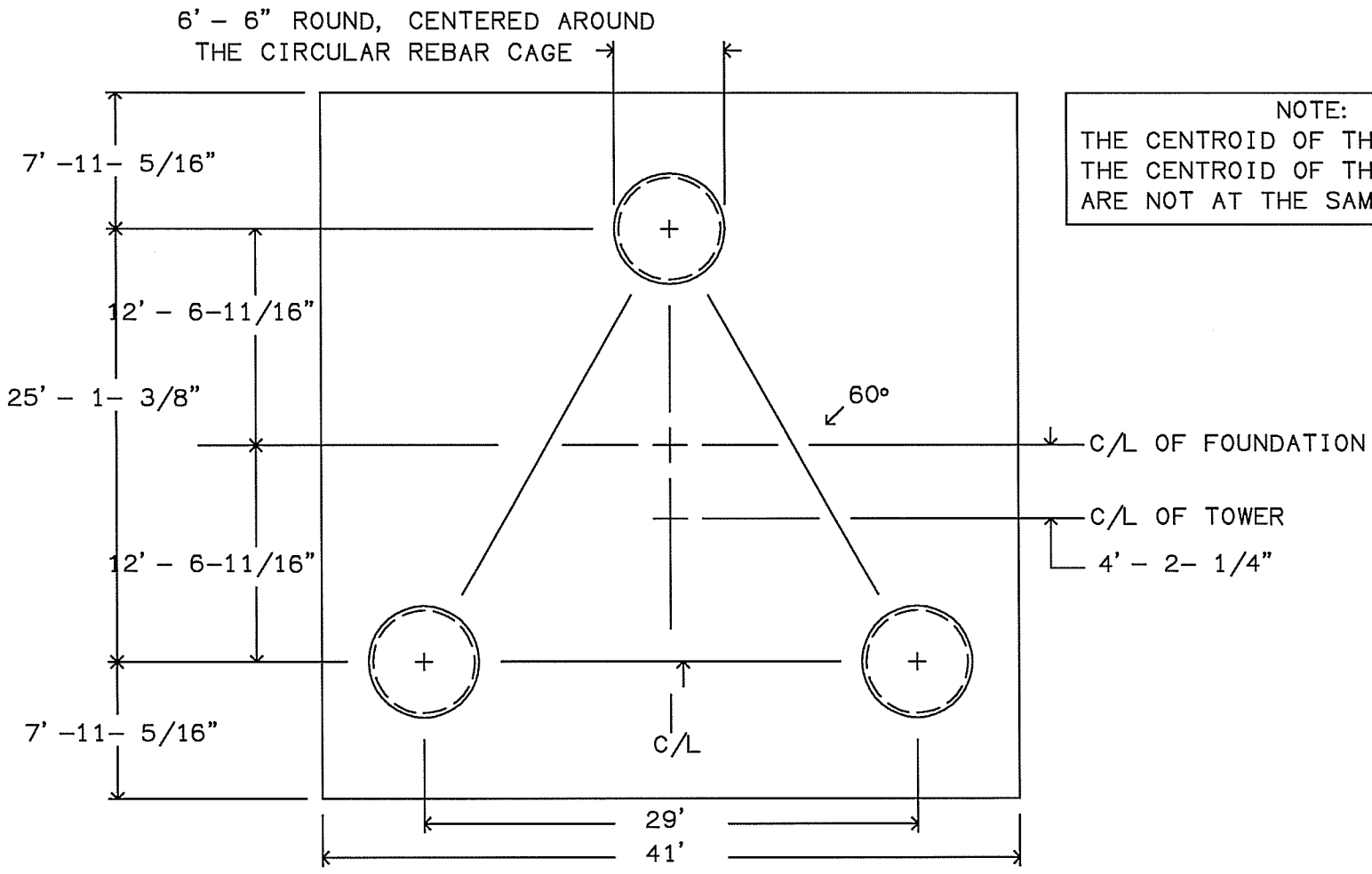
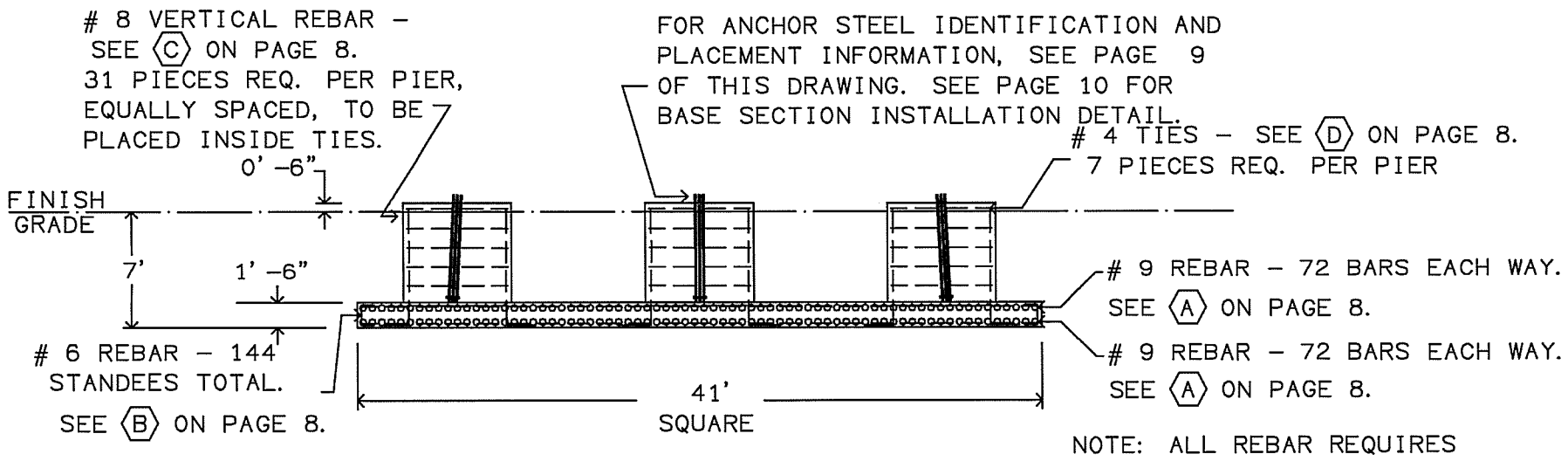
DRAWING NO. 252261
PAGE 6 OF 10



NOTE:
THE CENTROID OF THE TOWER AND THE CENTROID OF THE FOUNDATION ARE NOT AT THE SAME POINT!

NOTE: THE FOUNDATIONS DEPICTED ON THIS DRAWING WERE DESIGNED PER ASSUMED SOIL PARAMETERS. ALTHOUGH, IT IS OUR EXPECTATION THAT THE SOIL WILL EXHIBIT SUFFICIENT STRENGTH TO COMPLY WITH THE ASSUMED STRENGTHS, IT IS POSSIBLE THAT THE SOIL MAY NOT EXHIBIT THE REQUIRED STRENGTHS. THEREFORE, IT IS HIGHLY RECOMMENDED THAT THE ASSUMED PROPERTIES BE CONFIRMED BY A GEOTECHNICAL ENGINEER VIA A SOIL REPORT OR AN ON-SITE INSPECTION DURING INSTALLATION.



NOTE: ALL REBAR REQUIRES
MIN. 3" CONCRETE COVERAGE

TOWER FOUNDATION

115.5 CUBIC YARDS CONCRETE REQUIRED

FOR INSTALLATION SPECIFICATIONS AND ADDITIONAL INFORMATION, SEE PAGE 6 OF THIS DRAWING.

STATE OF KENTUCKY
WILLIAM R. HEIDEN III
No. 22430
LICENSED PROFESSIONAL ENGINEER
DEC 1 1 2013

William R. Heiden III, KY Professional Engineer # 22430

REV	DESCRIPTION OF REVISIONS	INI	DATE
A	ADDED FOUNDATIONS	MS	12/11/2013

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AMERICAN TOWER CORP.
#282100 INDEX, KY
V-29.0 X 255'

KENTUCKY C.O.A. 1542			
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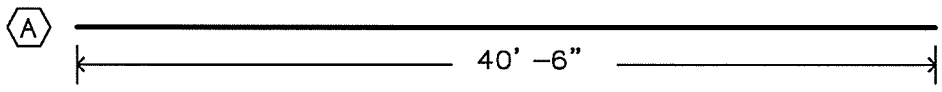
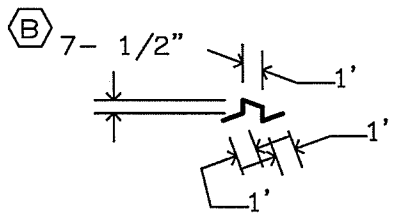
DRAWING NO. 252261
PAGE 7 OF 10

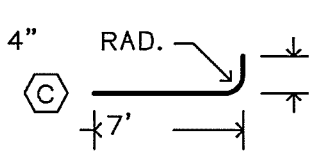


9 REBAR - 288 PIECES REQ. TOTAL
APPROX WT = 137.7# EACH, 39658# TOTAL

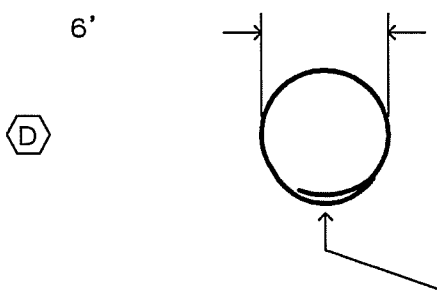
REBAR SUPPORTS MAY CONSIST OF ANY ACCEPTABLE MEANS OF SECURELY SUPPORTING THE TOP REINFORCEMENT GRID ABOVE THE BOTTOM REINFORCEMENT GRID WHILE MAINTAINING A SEPARATION OF 1' (OUTSIDE REBAR TO OUTSIDE REBAR).



6 REBAR - 144 PIECES REQUIRED TOTAL
TYPE 26 STANDEE PLACED BETWEEN REBAR GRIDS ON NOMINAL 4' SPACING THROUGHOUT
APPROX UNBENT LENGTH = 4' - 2- 5/8"
APPROX WT = 6.3# EACH, 907# TOTAL



8 REBAR - 93 PIECES REQUIRED TOTAL
APPROX UNBENT LENGTH = 8' - 7- 3/8"
APPROX WT = 23.0# EACH, 2139# TOTAL



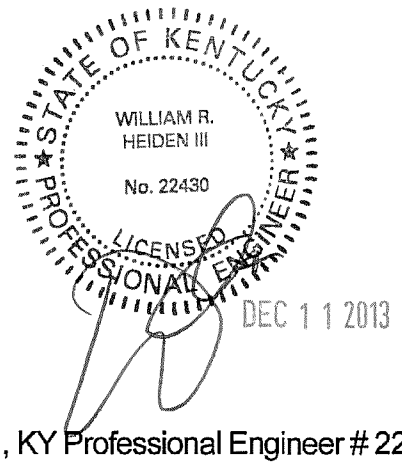
4 REBAR - 21 PIECES REQUIRED TOTAL
APPROX UNBENT LENGTH = 20' - 4- 3/4"
APPROX WT = 13.6# EACH, 286# TOTAL

LAP DIMENSION: 1' - 6- 1/2"
PLACE CIRCULAR TIES SO THAT LAPS ON ADJACENT TIES ARE 180 DEGREES APART. PLACE ONE TIE AT TOP OF PAD AND TWO TIES AT TOP OF PIER REBAR. EQUALLY SPACE REMAINING TIES ALONG PIER.

NOTE: THE FOUNDATIONS DEPICTED ON THIS DRAWING WERE DESIGNED PER ASSUMED SOIL PARAMETERS. ALTHOUGH, IT IS OUR EXPECTATION THAT THE SOIL WILL EXHIBIT SUFFICIENT STRENGTH TO COMPLY WITH THE ASSUMED STRENGTHS, IT IS POSSIBLE THAT THE SOIL MAY NOT EXHIBIT THE REQUIRED STRENGTHS. THEREFORE, IT IS HIGHLY RECOMMENDED THAT THE ASSUMED PROPERTIES BE CONFIRMED BY A GEOTECHNICAL ENGINEER VIA A SOIL REPORT OR AN ON-SITE INSPECTION DURING INSTALLATION.

REBAR DETAIL

TOTAL APPROX REBAR WEIGHT = 42990#
REINFORCING BAR TO CONFORM TO
ASTM A615 GRADE 60 SPECIFICATIONS.



William R. Heiden III, KY Professional Engineer # 22430

REV	DESCRIPTION OF REVISIONS	INI	DATE
A	ADDED FOUNDATIONS	MS	12/11/2013

VALMONT STRUCTURES IS A DIVISION OF VALMONT INDUSTRIES, INC. ENGINEERING PROVIDED BY PIROD, INC., WHOLLY OWNED BY VALMONT INDUSTRIES, INC.

From: F1015796.DFT - 12/11/2013 09:01
Printed from 252261_08@A.DWG * 12/11/2013 09:37 @ 12/11/2013 10:06

AMERICAN TOWER CORP.
#282100 INDEX, KY
V-29.0 X 255'

KENTUCKY C.O.A. 1542			
APPROVED/ENG.	M_S	12/11/2013	
APPROVED/FOUND.	M_S	12/11/2013	
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ENG. FILE NO. A-239816-			
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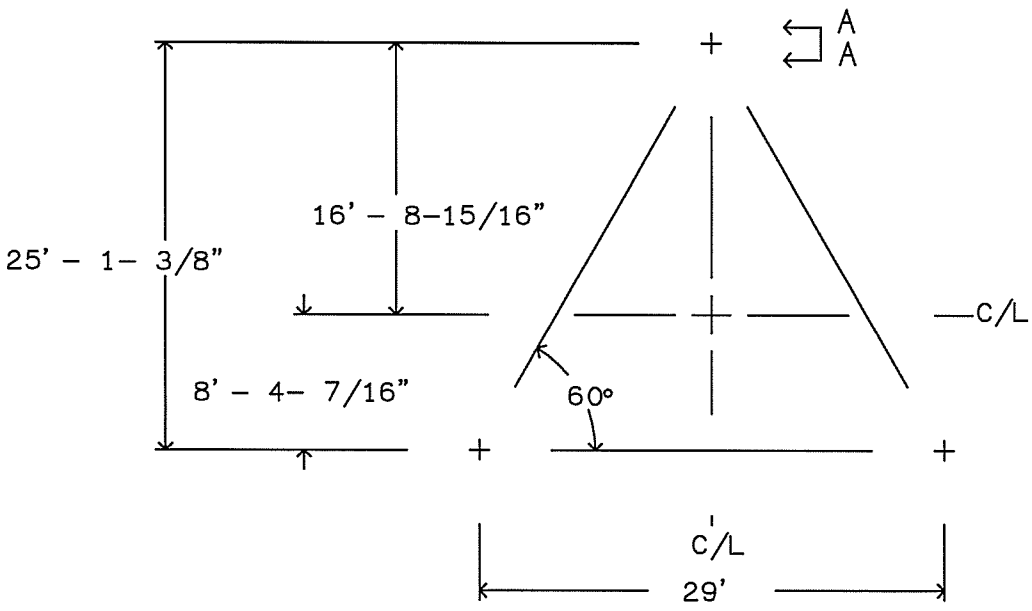
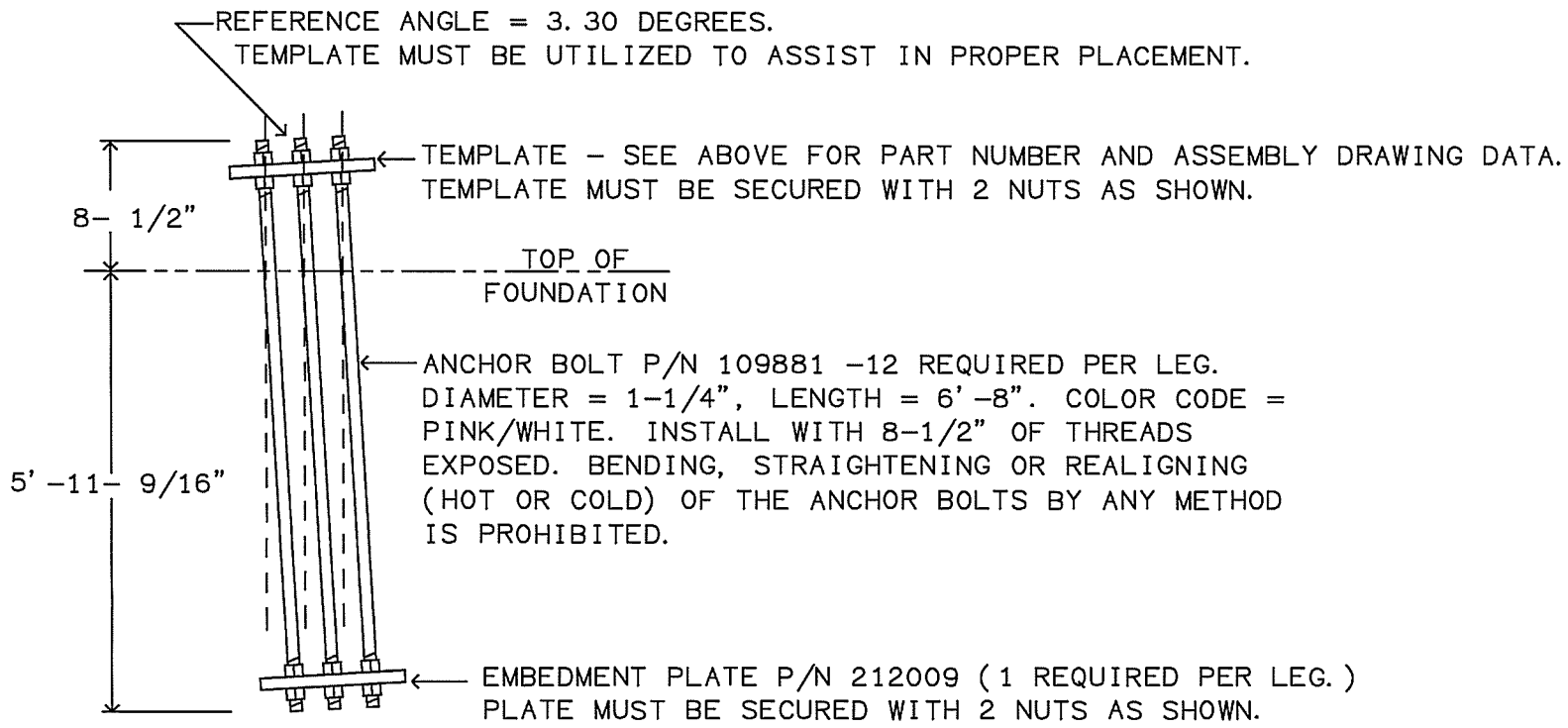
DRAWING NO. 252261
PAGE 8 OF 10



TOWER ANCHOR STEEL PLACEMENT – TOP VIEW

TEMPLATE ASSEMBLY P/N 216165 INCLUDES CORNER PLATE P/N 211904, IS REQUIRED FOR INSTALLATION AND MUST BE PLACED AS SHOWN. SEE DRAWING # 211875 FOR TEMPLATE ASSEMBLY DETAILS. SEE PAGE 7 FOR TOWER C/L LOCATION RELATIVE TO THE FOUNDATION LAYOUT. TEMPLATE PLACEMENT +/– 3". EACH LEG MUST BE CENTERED IN PIER WITHIN +/– 10% OF PIER DIAMETER. TEMPLATE MUST BE LEVEL +/– 1 DEGREE. INSTALL TEMPLATE WITH SUFFICIENT SPACE BENEATH (2" MINIMUM) TO PERMIT FINISHING OF CONCRETE AND TO FACILITATE TEMPLATE REMOVAL PRIOR TO TOWER ERECTION.

SEE PAGE 10 FOR BASE SECTION INSTALLATION DETAIL.



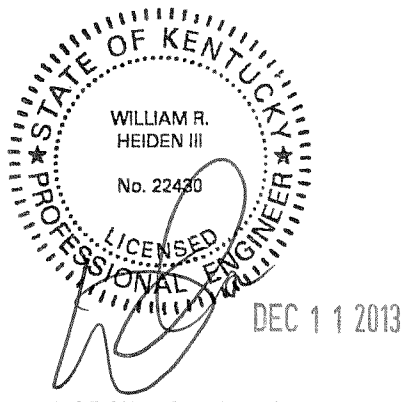
VIEW A – A – ANCHOR BOLT INSTALLATION DETAIL (NOT TO SCALE)

ATTENTION CONTRACTOR INSTALLING THE ANCHOR BOLTS!

1–1/4" DIAMETER ANCHOR BOLTS FOR TAPERED TOWER.

VERIFY THE PART NUMBERS AND SIZES FOR ALL COMPONENTS ON THIS PAGE AND PAGE 10.

IF THERE ARE ANY DISCREPANCIES, PLEASE NOTIFY PIROD, INC. PRIOR TO INSTALLATION!!



William R. Heiden III, KY Professional Engineer # 22430

REV	DESCRIPTION OF REVISIONS	INI	DATE
A	ADDED FOUNDATIONS	MS	12/11/2013

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From: F1015796.DFT – 12/11/2013 09:01
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AMERICAN TOWER CORP.
#282100 INDEX, KY
V–29.0 X 255'

KENTUCKY C.O.A. 1542			
APPROVED/ENG.	M_S	12/11/2013	
APPROVED/FOUND.	M_S	12/11/2013	
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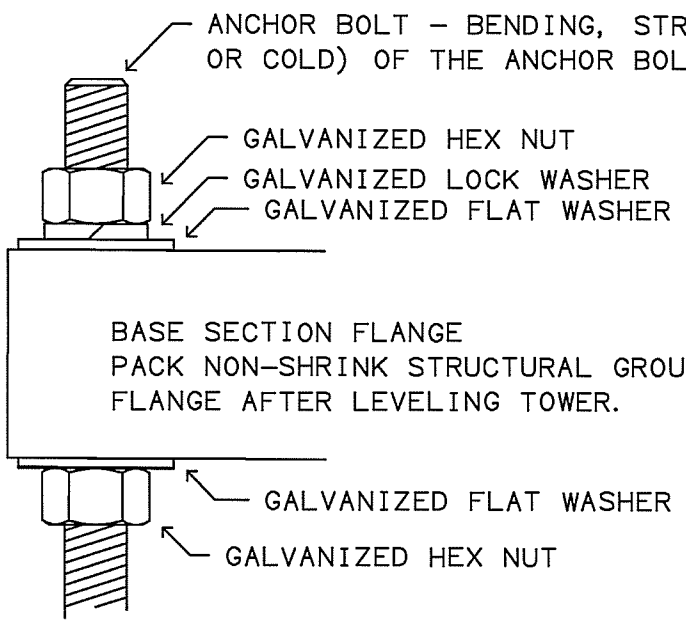
DRAWING NO. 252261



BASE SECTION INSTALLATION DETAIL

William R. Heiden III, KY Professional Engineer # 22430

			AMERICAN TOWER CORP. #282100 INDEX, KY V-29.0 X 255'
			KENTUCKY C.O.A. 1542
A	ADDED FOUNDATIONS	MS	12/11/2013
REV	DESCRIPTION OF REVISIONS	INI	DATE
VALMONT STRUCTURES IS A DIVISION OF VALMONT INDUSTRIES, INC. ENGINEERING PROVIDED BY PIROD, INC., WHOLLY OWNED BY VALMONT INDUSTRIES, INC.			
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ARCHIVE	F-1015796	

valmont STRUCTURES
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1-888-880-9191 Salem, OR

DRAWING NO. 252261

WESTOWER COMMUNICATIONS

February 5, 2014

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

RE: Site Name: Index
Proposed Cell Tower
37-53-33.996 North Latitude, 83-17-14.131 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
WesTower Communications
10400 Linn Station Road, Suite 225
Louisville, Kentucky 40223
559.790.8855 Mobile
jboud@westower.com

valmont
STRUCTURES

December 3, 2013

American Tower Corp.

Attn: Mr. Ron Rohr

SUBJECT: Valmont File #239816 Model V-29.0 x 255' Self Supporting Tower
Site: #282100 Index – Index, 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 form as little as 50' 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 present National Tower code, the TIA-222-G, represents the latest refinement of specific minimum requirements for tower engineers and manufacturers to follow to help assure that the tower structure and its foundation are designed to meet the most realistic conditions for local weather while assuring that the tower is designed to stringent factors of safety.

The TIA-222-G code incorporates an escalating wind factor based on tower height. If 90 MPH 3 second gust is the basic design wind speed at the 10 meter height, then per the specification, this speed is then increased in stages up the tower. "Meeting the code" implies that the design will have all of the code requirements for safety factors intact at the wind speed specified. Thus, the ultimate survival speed would be considerably higher.

While failure is extremely rare in any kind of tower, it is especially so for self supported towers and monopoles. In fact, only if a tower or monopole were subjected to a direct hit from a tornado or the severest of hurricanes would failure be predicted, and then usually only if hit by flying debris.

We are aware of only a very 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.

Communicotions Division, Volmont Industries, Inc.
1545 Pidco Drive Plymouth, Indiona 46563-4005 USA
574-936-4221 Fox 574-936-6796 www.valmont.com

valmont
STRUCTURES

This particular Tower is designed such that its first point of predicted failure is in the region above the 180' level. The predicted mode of wind induced failure would be a buckling of the tower legs above the 180' level 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.

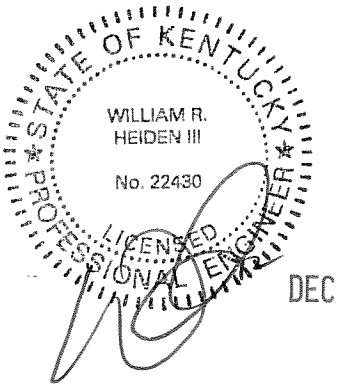
As Chief Engineer of the company and a registered P.E. in 49 states, I oversee all engineering and application of our towers. I am a graduate engineer from Purdue University and am assisted by other registered professional engineers on our staff.

Valmont Structures is an AISC approved shop. All Valmont Structures welders are AWS and CWB qualified. Mathematical and physical tests are performed routinely on tower sections and designs as required. 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 Heiden, P.E.
Senior Engineer
Ext. #5243



DEC 0 3 2013

ms13

UNIT BASE FOUNDATION SUMMARY

ATC
Index, KY

V- 29.0 255 V 2.0
A- 239816

Foundation Dimensions		
Pad width, W:	41.0	ft
Depth, D:	7.0	ft
Ext. above grade, E:	0.5	ft
Pier diameter, d_i:	6.5	ft
Pad thickness, T:	1.50	ft
Depth neglected, N:	7.0	ft
Volume, V_c:	115.51	cy

Reinforcement Design		
pad, m_p:	72	bars *
size, s_p:	9	
vertical, m_c:	31	verticals
size, s_c:	8	6' cage
ties, m_t:	7	ties
size, s_t:	4	w/ overlap

* Rebar to be equally spaced, both ways, top & bottom

* Use standees to support top rebar above bottom rebar in mat

Soil Information Per:
Assumed as Clay Per TIA-222-G Annex F.

Soil Parameters		
Soil unit weight, γ:	110	pcf
Ultimate Bearing, B_c:	5.000	ksf
Cohesion, C_o:	1.000	ksf
Friction angle, φ:	0.0	degrees
Ult. Passive P., P_p:	0.396	pcf
Base sliding, μ:	0.20	
Seismic Zone:	1	
Water at:	none	ft

Anchor Steel Selection		
Part Number, P/N:	109881	Dia = 1.25" Length = 80"

Material Properties		
Steel tensile str, F_y:	60000	psi
Conc. Comp. str, F'_c:	4000	psi
Conc. Density, δ:	150	pcf
Clear cover, cc:	3.00	in

Backfill Compaction		
Lift thickness:	12	in
Compaction:	97	%
Standard Proctor:	ASTM	D698

Tower design conforms to the following:

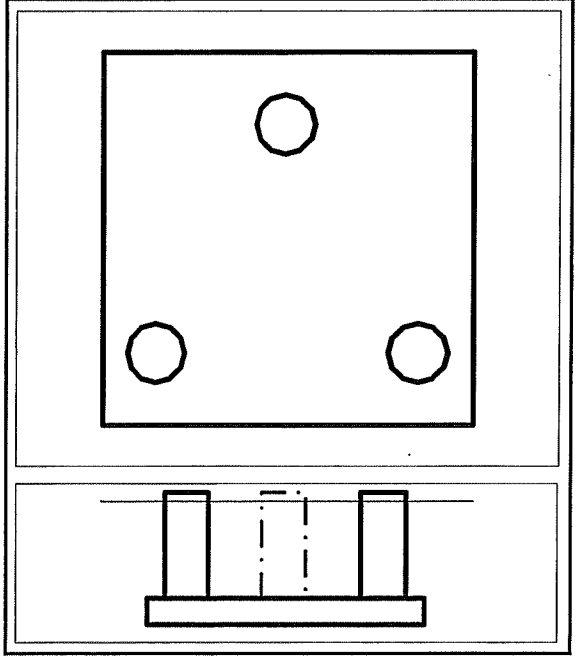
* *1997 Uniform Building Code (UBC)*
* *2000 & 2003 International Building Code (IBC)*
* *ANSI TIA-222-G*
* *Building Code Requirements for Reinforced Concrete (ACI 318-05)*

Note: The centroid of the tower is offset from the centroid of the foundation

Foundation Loading

Load Case 1		stress ratio: 99.6%	mark up: 0.4%
Shear (total), S:	142.00 kips	x 1.004 =	142.57 kips
Moment, M:	18730.00 ft-kips	x 1.004 =	18804.92 ft-kips
Compression/Leg, C:	782.00 kips	x 1.004 =	785.13 kips
Uplift/Leg, U:	698.00 kips	x 1.004 =	700.79 kips
Tower Weight, W_t:	107.00 kips	=	107.00 kips
Load Case 2		stress ratio: 99.6%	mark up: 0.4%
Shear (total), S:	142.00 kips	x 1.004 =	142.57 kips
Moment, M:	18730.00 ft-kips	x 1.004 =	18804.92 ft-kips
Compression/Leg, C:	782.00 kips	x 1.004 =	785.13 kips
Uplift/Leg, U:	698.00 kips	x 1.004 =	700.79 kips
Tower Weight, W_t:	107.00 kips	=	107.00 kips

Views of Foundation (not to scale)



STATE OF KENTUCKY
WILLIAM R. HEIDEN III
No. 22430
LICENSED PROFESSIONAL ENGINEER

DEC 1 1 2013

Additional Notes:

* No foundation modifications listed.
* See attached "Foundation Notes" for further information.

UNIT BASE FOUNDATION SUMMARY

ATC
Index, KY

V- 29.0 255 v 2.0
A- 239816

Foundation Dimensions		
Pad width, W:	41.0	ft
Depth, D:	7.0	ft
Ext. above grade, E:	0.5	ft
Pier diameter, d_i:	6.5	ft
Pad thickness, T:	1.50	ft
Depth neglected, N:	7.0	ft
Volume, V_o:	115.51	cy

Reinforcement Design		
pad, $m_{\_p}$:	72	bars *
size, $s_{\_p}$:	9	
vertical, $m_{\_c}$:	31	verticals
size, $s_{\_c}$:	8	6' cage
ties, $m_{\_t}$:	7	ties
size, $s_{\_t}$:	4	w/ overlap

* Rebar to be equally spacad, both ways, top & bottom

* Usa standees to support top reber above bottom rabar in met

Soil Information Per:
Assumed as Clay Per TIA-222-G Annex F.

Soil Parameters		
Soil unit weight, γ:	110	pcf
Ultimate Bearing, B_c:	5.000	ksf
Cohesion, C_a	1.000	ksf
Friction angle, ϕ	0.0	degrees
Ult. Passive P., P_p:	0.396	pcf
Base sliding, μ:	0.20	
Seismic Zone:	1	
Water at:	none	ft

Anchor Steel Selection		
Part Number, P/N:	109881	Dia = 1.25" Length = 80"

Material Properties		
Steel tensile str, F_y:	60000	psi
Conc. Comp. str, F'_c:	4000	psi
Conc. Density, δ:	150	pcf
Clear cover, cc:	3.00	in

Backfill Compaction		
Lift thickness:	12	in
Compaction:	97	%
Standard Proctor:	ASTM	D698

Tower design conforms to the following:

* *1997 Uniform Building Code (UBC)*
* *2000 & 2003 International Building Code (IBC)*
* *ANSI TIA-222-G*
* *Building Code Requirements for Reinforced Concrete (ACI 318-05)*

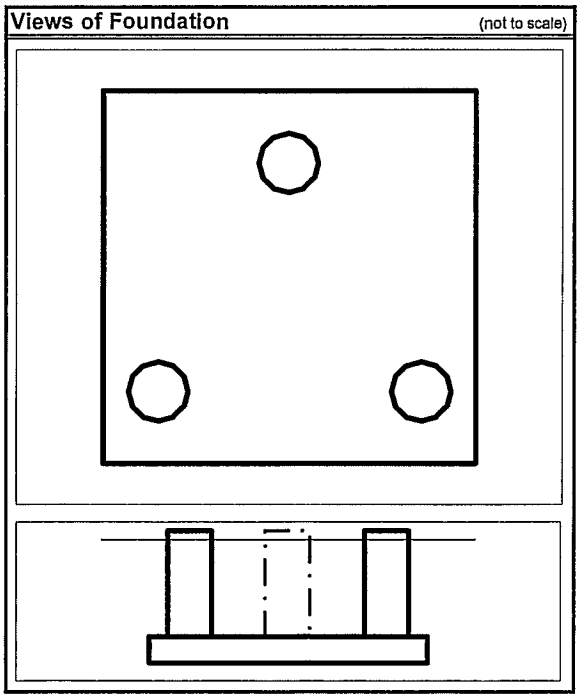
Note: The centroid of the tower is offset from the centroid of the foundation

Foundation Loading

Load Case 1

Load Case 2	stress ratio: 99.6%		mark up: 0.4%
Shear (total), S:	142.00 kips	x 1.004 =	142.57 kips
Moment, M:	18730.00 ft-kips	x 1.004 =	18804.92 ft-kips
Compression/Leg, C:	782.00 kips	x 1.004 =	785.13 kips
Uplift/Leg, U:	698.00 kips	x 1.004 =	700.79 kips
Tower Weight, W_t:	107.00 kips	=	107.00 kips

Views of Foundation (not to scale)



Additional Notes:

* No foundation modifications listed.
* See attached "Foundation Notes" for further information.

FOUNDATION NOTES

1 IN THE ABSENCE OF A GEOTECHNICAL REPORT, THE FOLLOWING PRESUMPTIVE SOIL PARAMETERS WERE USED: AN ULTIMATE BEARING PRESSURE OF 5000 PSF, A COHESION OF 1000 PSF, A SOIL UNIT WEIGHT OF 110 PCF, AN ANGLE OF INTERNAL FRICTION OF 0 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.

UNIT BASE FOUNDATION (Load Case 2)

ATC **V- 29.0 255** v 2.0
Index, KY **A- 239816**

Reactions		stress ratio	99.6%	mark up:	0.4%
Shear, S:	142.00 kips	x 1.004 =	142.57 kips		
Moment, M:	18730.00 ft-kips	x 1.004 =	18804.92 ft-kips		
Compression / leg, C:	782.00 kips	x 1.004 =	785.13 kips		
Uplift / leg, U:	698.00 kips	x 1.004 =	700.79 kips		
Tower weight, W_t:	107.00 kips	=	107.00 kips		

Soil per: Assumed as Clay Per TIA-222-G Annex F.

Ultimate bearing: 5.000 ksf
Ultimate Pp: 0.396 kcf

Load Case 2 = 0.9*D + 1.0*Dg + 1.6*Wo

Physical Parameters:

Concrete volume:	$V = T * W^2 + 3 * (di^2 / 4 * \pi) * (D + E - T)$	$V =$	115.5	cy
Concrete weight:	$W_c = V * \delta$	$W_c =$	467.8	kips
Soil weight:	$W_s = (D - T) * (W^2 - 3 * (di^2 / 4 * \pi)) * \gamma$	$W_s =$	956.8	kips
Total weight:	$P = Wc + Ws + Wt$	$P =$	1531.60	kips

Passive Pressure:

Pp coefficient:	$K_p = TAN(45 + \varphi / 2)^2$	$K_p =$	1.000	
	$P_{pn} = Kp * \gamma * N + 2 * Co * \sqrt{(Kp)}$	$P_{pn} =$	2.770	ksf
	$P_{pt} = Kp * \gamma * (D - T) + 2 * Co * \sqrt{(Kp)}$	$P_{pt} =$	2.605	ksf
	$P_{pb} = Kp * \gamma * D + 2 * Co * \sqrt{(Kp)}$	$P_{pb} =$	2.770	ksf
	$P_{ptop} = IF(N < (D - T), Ppt, Ppn)$	$P_{ptop} =$	2.8	ksf
	$Pp' = (Pptop + Ppb) / 2$	$Pp' =$	2.770	ksf
Shear area:	$T_{pp} = 0$	$T_{pp} =$	0.0	ft
	$A_{pp} = Tpp * W$	$A_{pp} =$	0.00	ft^2
Shear Capacity:	$S_{actual} = (Pp' * App + \mu * P) * \varphi r$	$S_{actual} =$	229.740	kips
φr = 0.75				

Check	S_{actual} =	229.74	kips	>=	S =	142.57	kips	OK

Overturning Moment Resistance at Toe:

Wt of soil wedge:	$W_{sw} = D * (D * TAN(\varphi)) / 2 * W * \gamma$	$W_{sw} =$	0.0	kips
Dist. from leg to edge:	$O = (W - 0.866 * w') / 2$	$O =$	7.943	ft
Additional offset of Wt:	$O_a = (2 / 3 * 0.866 * w' + O) - W / 2$	$O_a =$	4.186	ft
Resisting moments:	$M_{rwt} = P * W / 2 - Wt * Oa$	$M_{rwt} =$	30949.87	ft-kips
	$M_{rp} = Pp' * App * (D - N) / 3$	$M_{rp} =$	0.00	ft-kips
	$M_{rsw} = Wsw * (W + D * TAN(\varphi) / 3)$	$M_{rsw} =$	0.00	ft-kips
Total resisting:	$M_{rt} = (Mrwt + Mrp + Mrsw) * \varphi r$	$M_{rt} =$	23212.40	ft-kips
φr = 0.75				
Total overturning:	$M_o = M + S * (D + E)$	$M_o =$	19874.18	ft-kips

Check	M_{rt} =	23212.40	ft-kips	>=	M_o =	19874.18	ft-kips	OK

Bearing Resistance due to Pressure Distribution:

Area of mat:	$area = W^2$	area =	1681.0	ft^2
Section moduius:	$SM = W^3 / 6$	SM =	11486.8	ft^3
Factored total weight:	$P' = Wt + 0.9 * (Wc + Ws)$	P' =	1389.1	kip
Pressure exerted:	$P_{pos} = P' / area + Mo / SM$	$P_{pos} =$	2.557	ksf
	$P_{neg} = P' / area - Mo / SM$	$P_{neg} =$	-0.904	ksf

Note: The stress resultant is NOT within the kern. Bearing area has been adjusted below.

Load eccentricity:	$e_c = Mo / P'$	$e_c =$	14.31	ft
	$P_{adj} = 2 * P' / (3 * W * (W / 2 - ec))$	$P_{adj} =$	3.6	ksf
Adj. applied pressure:	$q_a = IF(Pneg >= 0, Ppos, Padj)$	$q_a =$	3.647	ksf
φr = 0.75				

Check	q_a =	3.647	ksf	<=	$B_c * \varphi r$ =	3.750	ksf	OK

Concrete Shear Strength:

One way beam action at d_1 from tower

Effective depth:	$d_c = T - cc - db\_p / 2$	$d_c =$	14.436	in
Factored Intensity:	$q_s = C / area$	$q_s =$	0.467	ksf
Required shear:	$V_{n1} = qs * (O - di / 2 - dc) * W / \varphi s$	$V_{n1} =$	89.11	kips
φs = 0.75 [ACI 9.3.2.3]				
Available shear:	$V_{c1} = 2 * \sqrt{(F'c)} * W * dc$	$V_{c1} =$	898.40	kips
[ACI 12.2.4]				

Check	V_{c1} =	898.40	kips	>=	V_{n1} =	89.11	kips	OK

Two way beam action at d_i / 2 from tower

Perimeter:	Po = (di + dc) * π					P_o =	24.20	ft	
Required shear:	V_{n2} = qs / φs * (area - (di + dc)² * π / 4)					V_{n2} =	1017.82	kips	
φs = 0.75 [ACI 9.3.2.3]									
Available shear:	V_{c2} = 4 * √(F'c) * Po * dc					V_{c2} =	1060.54	kips	
[ACI 12.2.2]									
	Check	V_{c2} =	1060.54	kips	>=	V_{n2} =	1017.82	kips	OK

Column Compression Capacity:

Compression reaction:	P_c = φc * 0.8 * F'c * (di² / 4 * π)					P_o =	9939.0	kips	
φc = 0.65 [ACI 9.3.2.2]									
	Check	P_c =	9938.99	kips	>=	C =	785.13	kips	OK

Pier Reinforcement:

Cross-sectional area:	A_g = di² * π / 4					A_g =	4778.36	in^2	
Min. area of steel [pier]:	A_{st_c} = Ag * 0.005					A_{st_c} =	23.89	in^2	
[ACI 10.9.1] & [ACI 10.8.4]									
Cage circle:	d_a = di - 2 * cc					d_a =	72.00	in	
Rebar:	$s_{\_c}$ = 8			d_{b_c} =	1 in				
	$m_{\_c}$ = 31			A_{b_c} =	0.79 in^2				
	A_{s_c} = Ab_c * m_c					A_{s_c} =	24.49	in^2	
	Check	A_{s_c} =	24.49	in^2	>=	A_{st_c} =	23.89	in^2	OK
Actual moment:	M_{max} = (D - T + E) * S / 2					M_{max} =	427.70	ft-kips	
Pier moment capacity:	M_{allow} *per Maxmomnt.xls (see attached)*					M_{allow} =	775.25	ft-kips	
	Check	M_{allow} =	775.25	ft-kips	>=	M_{max} =	427.70	ft-kips	OK
Bar separation:	B_{s_c} = (do * π) / m_c - db_c					B_{s_c} =	6.30	in	
	Check	11	>=	B_{s_c} =	6.30 in		>=	4.5"	OK

Vertical Rebar Development Length:

Reinforcement location:	ψ_{t_c} = if the space under the rebar > 12 in, use 1.3, else use 1.0					ψ_{t_c} =	1.3		
[ACI 12.2.4]									
Epoxy coating:	ψ_{e_c} = if epoxy-coated bars are not used, use 1.0; but if epoxy-coated					ψ_{e_c} =	1.0		
[ACI 12.2.4]	bars are used, then if Bs < 6 * db or cc < 3 * db, use 1.5, else 1.2								
Max term:	$\psi_t\psi_{e\_c}$ = the product of ψt & ψe, need not be taken larger than 1.7					$\psi_t\psi_{e\_c}$ =	1.3		
[ACI 12.2.4]									
Reinforcement size:	ψ_{s_c} = if the bar size is 6 or less, then use 0.8, else use 1.0					ψ_{s_c} =	1		
[ACI 12.2.4]									
Light weight concrete:	$\lambda_{\_c}$ = if lightwieght concrete is used, 1.3, else use 1.0					$\lambda_{\_c}$ =	1.0		
[ACI 12.2.4]									
Spacing/cover:	$c_{\_c}$ the smaller of: half the bar spacing or the concrete edge distace					$c_{\_c}$ =	3.50	in	
[ACI 12.2.4]									
Transverse bars:	k_{tr_c} = 0 in (per simplification)					k_{tr_c} =	0	in	
[ACI 12.2.3]									
Max term:	$c_{\_c}'$ = MIN(2.5, (c_c + ktr_c) / db_c)					$c_{\_c}'$ =	2.500		
[ACI 12.2.3]									
Excess reinforcement:	R_c = Mmax / Mallow					$R_{\_c}$ =	0.55		
[ACI 12.2.5]									
Development (tensile):	L_{dt_c}' = (3 / 40) * (Fy / √(F'c)) * (ψtψe_c * ψs_c * λ_c * R_c / c_c') * db_c					L_{dt_c}' =	20.41	in	
[ACI 12.2.2]									
Minimum length:	L_{d_min} = 12 inches					L_{d_min} =	12.0	in	
[ACI 12.2.1]									
Development length:	L_{dt_c} = MAX(Ld_min, Ldt'_c)					L_{dt_c} =	20.41	in	
Development (comp.):	L_{dc_c}' = 0.02 * db_c * Fy * R_c / √(F'c)					L_{dc_c}' =	10.47	in	
[ACI 12.3.2]									
	L_{dc_c}'' = 0.0003 * db_c * Fy * R_c					L_{dc_c}'' =	9.93	in	
Development length:	L_{dc_c} = MAX(8, Ldc'_c, Ldc"_c)					L_{dc_c} =	10.47	in	
Length available in pier:	L_{vc} = D - T + E - cc					L_{vc} =	69.0	in	
	Check	L_{vc} =	69.0	in	>=	L_{dt_c} =	20.4	in	OK
	Check	L_{vc} =	69.0	in	>=	L_{dc_c} =	10.5	in	OK
Length available in pad:	L_{vp} = T - cc					L_{vp} =	15.0	in	
	Check	L_{vp} =	15.0	in	>=	L_{dt_c} =	20.4	in	HOOKS
	Check	L_{vp} =	15.0	in	>=	L_{dc_c} =	10.5	in	OK

Vertical Rebar Hook Ending:

Bar size & clear cover: [ACI 12.5.3]	α_h if the bar size <= 11 and side cc >= 2.5", use 0.7, else use 1.0				ψ_{t_h} =	0.7		
Epoxy coating: [ACI 12.5.2]	β_h if epoxy-coated bars are used, use 1.2, else use 1.0				ψ_{e_h} =	1.0		
Light weight concrete: [ACI 12.5.2]	λ_h if lightwieght concrete is used, 1.3, else use 1.0				$\lambda_{\_h}$ =	1.0		
Development (hook): [ACI 12.5.2]	L_{dh}' = 0.02 * ψt_h * ψe_h * λ_h * Fy / √(F'c) * db_c				L_{dh}' =	13.3	in	
Minimum length: [ACI 12.5.1]	L_{dh_min} the larger of: 8 * db or 6 in				L_{dh_min} =	8.0	in	
Development length:	L_{dh} = MAX(Ldh_min, Ldh')				L_{dh} =	13.3	in	
	Check	L_{vp} =	15.0	in >=	L_{dh} =	13.3	in	OK
Hook tail length:	L_{h_tail} 12 * db beyond the bend radius				L_{h_tail} =	16.0	in	
Length available in pad:	L_{h_pad} = (W - w' - di) / 2				L_{h_pad} =	33	in	
	Check	L_{h_pad} =	33.0	in >=	L_{dh_tail} =	16.0	in	OK

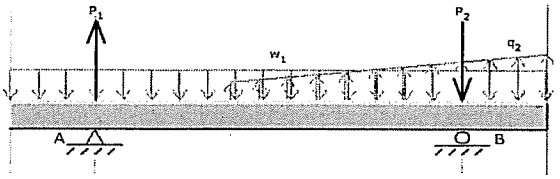
Pier Ties:

Minimum size: [ACI 7.10.5.1]	$s_{\_t\_min}$ =IF(s_c <= 10, 3, 4)				$s_{\_t\_min}$ =	3		
z factor:	z = 0.5 If the seismic zone is less than 2, else 1.0				z =	0.5		
Tie parameters:	$s_{\_t}$ = 4			d_{b_t} =	0.5	in		
	$m_{\_t}$ = 7			A_{b_t} =	0.2	in^2		
Allowable tie spacing:								
per vertical rebar [ACI 7.10.5.2] & [ACI 21.3.3.2]	$B_{s\_t\_max1}$ = 8 / z * db_c				$B_{s\_t\_max1}$ =	16	in	
per tie size [ACI 7.10.5.2] & [ACI 21.3.3.2]	$B_{s\_t\_max2}$ = 24 / z * db_t				$B_{s\_t\_max2}$ =	24	in	
per pier diameter [ACI 7.10.5.2] & [ACI 21.3.3.2]	$B_{s\_t\_max3}$ = di / (4 * z^2)				$B_{s\_t\_max3}$ =	78	in	
per seismic zone [ACI 7.10.5.2] & [ACI 21.3.3.2]	$B_{s\_t\_max4}$ = 12" in active seismic zones, else 18"				$B_{s\_t\_max4}$ =	18	in	
	$B_{s\_t\_max}$ = MIN(Bs_t_max1, Bs_t_max2, Bs_t_max3, Bs_t_max4)				$B_{s\_t\_max}$ =	16	in	
	$m_{\_t\_min}$ = (D - T + E) / Bs_t_max + 2				$m_{\_t\_min}$ =	6.5		
	Check	$m_{\_t}$ =	7.0	>=	$m_{\_t\_min}$ =	6.5		OK

Anchor Steel:

A/S parameters:	P_{as} = 109881			L_{as} =	80	in		
	d_{as} = 1.25 in			E_{as} =	71.50	in		
Development available:	L_{das} *per Anchor Bolts (see attached)*					L_{das} =	43.50	in
Required development:	L_{das_min} *per Anchor Bolts (see attached)*					L_{das_min} =	20.41	in
	Check	L_{das} =	43.50	in >=		L_{das_min} =	20.41	in OK
To bottom rebar grid:	E_{as_max} =D + E - cc - 2 * db_p					E_{as_max} =	84.744	in
	Check	E_{as} =	71.50	in <=		E_{as_max} =	84.74	in OK
To top rebar grid:	rebar @ = D + E - T + cc					rebar @	75.00	in
	Check	75 + 6 In >=		E_{as} =	71.50	in or <=	75 in	OK
Min. cage dia:	d_{o_min} *per ancsteel.xls (see attached)*					d_{o_min} =	36.20	In
	Check	d_o =	72.00	in >=		d_{o_min} =	36.20	in OK

Pad Reactions:



MDSolids Geometry Input (Option 1)

Total Beam Length:	B_{L2_1} =W	B_{L2_1}=	41	ft
Location of Left Support:	S_{L2_1} =O	S_{L2_1}=	7.943	ft
Location of Right Support:	S_{R2_1} =W-O	S_{R2_1}=	33.06	ft

MDSolids Geometry Input (Option 2)

Total Beam Length:	B_{L2_2} =W	B_{L2_2}=	41.0	ft
Location of Left Support:	S_{L2_2} =(W - w\) / 2	S_{L2_2}=	6.00	ft
Location of Right Support:	S_{R2_2} =S_{L1_2} + w\	S_{R2_2}=	35.00	ft

MDSolids Load Input (Option 1 & Option 2)

Uplift:	P_{2_1} =U	P_{2_1}=	700.8	kips
Compression:	P_{2_2} =C	P_{2_2}=	785.13	kips
Weight of Overburden: (Distributed)	w_{2_1} =0.9 * (W_c + W_s) / W	w_{2_1}=	31.27	klf
	Applied over the beam starting at 0' and ending at W=41ft.			
Distributed Soil Pressure: (Linearly Increasing)	q_{2_2L} =0	q_{2_2L}=	0.00	klf
	q_{2_2R} =q_a * W	q_{2_2R}=	149.53	klf
	This linearly increasing load is applied from e=14.31ft to W=41ft			

MDSolids Design Result

Option 1:	M_{max2_1} =M_{max2_1} (Max. Moment calculated from MDsolids for Option 1)	M_{max2_1}=	3263.00	ft*kips
Option 2:	M_{max2_2} =M_{max2_2} (Max. Moment calculated from MDsolids for Option 2)	M_{max2_2}=	1927.00	ft*kips
Max moment:	M_{maxp} =Max(Mmax2_1,Mmax2_2)	M_{maxp}=	3263.00	ft*kips
Required moment: φt = 0.9 [ACI 9.3.2.1]	M_n = Mmaxp / φt	M_n =	3625.56	ft*kips

Pad Reinforcement:

	β = IF(F'c <= 4000, 0.85, IF(F'c >= 8000, 0.65, 0.85 - (F'c - 4000) * 0.05))					β =	0.85		
Effective width:	W_e = w' * 0.866 + di					W_e =	31.614	ft	
	A_{st_p}' = Mn / (0.9 * Fy * dc)					A_{st_p}' =	55.810	in^2	
	a_p = Ast_p' * Fy / (β * F'c * We)					a_p =	2.60	in	
Required steel:	$A_{st\_p\_st}$ = Mn / (Fy * (dc - ap / 2)) * (W / We)					$A_{st\_p\_st}$ =	71.578	in^2	
Shrinkage:	ρ_{sh} = IF(Fy >= 60000, 0.0018, 0.002)					ρ_{sh} =	0.0018		
	$A_{st\_p\_sh}$ = psh * W * T / 2					$A_{st\_p\_sh}$ =	7.970	in^2	
	A_{st_p} = MAX(Ast_p_st, Ast_p_sh)					A_{st_p} =	71.578	in^2	
Rebar:	s_p = 9	*Equally spaced, top and*		d_{b_p} =	1.128	in			
	m_p = 72	*bottom, both directions.*		A_{b_p} =	1	in^2			
	A_{s_p} = Ab_p * m_p					A_{s_p} =	72.00	in^2	
	Check	A_{s_p} =	72.00	in^2	>=	A_{st_p} =	71.58	in^2	OK
Bar separation:	B_{s_p} = (W - 2 * cc - db_p) / (m_p - 1) - db_p					B_{s_p} =	5.70	in	
	Check	10.87	>=	B_{s_p} =	5.70	in	>=	4.5"	OK

Pad Development Length:

Reinforcement location: *[ACI 12.2.4]*	ψ_{t_p} = if the space under the rebar > 12 in, use 1.3, else use 1.0	ψ_{t_p} =	1		
Epoxy coating: *[ACI 12.2.4]*	ψ_{s_p} = if epoxy-coated bars are not used, use 1.0; but if epoxy-coated bars are used, then if Bs < 6 * db or cc < 3 * db, use 1.5, else 1.2	ψ_{e_p} =	1.0		
Max term: *[ACI 12.2.4]*	$\psi_t\psi_{e\_p}$ = the product of ψt & ψe, need not be taken larger than 1.7	$\psi_t\psi_{e\_p}$ =	1		
Reinforcement size: *[ACI 12.2.4]*	ψ_{s_p} = if the bar size is 6 or less, then use 0.8, else use 1.0	ψ_{s_p} =	1		
Light weight concrete: *[ACI 12.2.4]*	λ_p = if lightwieght concrete is used, 1.3, else use 1.0	λ_p =	1.0		
Spacing/cover: *[ACI 12.2.4]*	c_p = the smaller of: half the bar spacing or the concrete edge distace	c_p =	3.56	in	
Transverse bars: *[ACI 12.2.3]*	k_{tr_p} = 0 in (per simplification)	k_{tr_p} =	0	in	
Max term: *[ACI 12.2.3]*	c_p' = MIN(2.5, (c_p + ktr_p) / db_p)	c_p' =	2.500		
Excess reinforcement: *[ACI 12.2.5]*	R_p = Ast_p / As_p	R_p =	0.99		
Development (tensile): *[ACI 12.2.2]*	L_d = (3 / 40) * (Fy / √(F'c)) * ψtψe_p * ψs_p * λ_p * R_p * db_p / c_p'	L_{dp}' =	31.9	in	
Minimum length: *[ACI 12.2.1]*	L_{d_min} = 12 inches	L_{d_min} =	12.0	in	
Development length:	L_{dp} = MAX(Ld_min, Ldp')	L_{dp} =	31.9	in	
Length available in pad:	L_{pad} = (W / 2 - w' / 2) - cc	L_{pad} =	69.0	in	
	Check L_{pad} = 69.00 in >=	L_{dp} =	31.92	in	OK

THIS SPREADSHEET IS SET UP FOR A MAXIMUM OF 56 BARS.
MAXIMUM FACTORED MOMENT OF A CIRCULAR SECTION

Loading (negative for compression)		
Axial load =	700.79	kips

Foundation		
Concrete		
Pier diameter =	6.50	ft
Pier area =	4778.4	in^2
Reinforcement		
Clear cover =	3.00	in
Cage diameter =	5.92	ft
Bar size =	8	
Bar diameter =	1.000	in
Bar area =	0.785	in^2
Number of bars =	31	

Material Strengths		
Concrete compressive strength =	4000	psi
Reinforcement yield strength =	60000	psi
Modulus of elasticity =	29000	ksi
Reinforcement yield strain =	0.00207	(per ACI 10.3.5 - OK)
Limiting compressive strain =	0.003	

Seismic	
Seismic Zone =	1
Are hooks required?	no

Minimum Area of Steel

Required area of steel =	23.89	in^2	
Actual area of steel =	24.35	in^2	OK
Bar spacing =	6.30	in	

Axial Loading

Load factor =	1.00	
Reduction factor =	0.65575	(per ACI 9.3.1 & 2)
Factored axial load =	1068.69	kips

Neutral Axis

Distance from extreme edge to neutral axis =	3.92	in	
Equivalent compression zone factor =	0.85		(per ACI 10.2.7.3)
Distance from extreme edge to Equivalent compression zone factor =	3.33	in	
Distance from centroid to neutral axis =	35.08	in	

Compression Zone

Area of steel in compression zone =	0.00	in^2	
Angle from centroid of pier to intersection of equivalent compression zone and edge of pier =	23.86	deg	
Area of concrete in compression =	70.73	in^2	
Force in concrete = 0.85 * f'c * Acc =	240.48	kips	(per ACI 10.3.6.2)
Total reinforcement forces =	-1309.17	kips	
Factored axial load =	1068.69	kips	
Force in concrete =	-240.48	kips	
Sum of the forces in concrete =	0.00	kips	OK

Maximum Moment

First moment of the concrete area in compression about the centoid =			2617.33	in^3
Distance between centroid of concrete in compression and centroid of pier =			37.01	in
Moment of concrete in compression =	8898.91	in-kips		
Total reinforcement moment =	5287.91	in-kips		
Nominal moment strength of column =	14186.81	in-kips		
Factored moment strength of column =	9302.96	in-kips	775.25	ft-kips

Maximum allowable moment of the pier =	775.25	ft-kips

Individual Bars

Bar #	Angle from first bar (deg)	Distance to centroid (in)	Distance to neutral axis (in)	Distance to equivalent comp. zone (in)	Strain	Area of steel in compression (in^2)	Axial force (kips)	Moment (in-kips)
1	0.00	0.00	-35.08	-35.67	-0.02684	0.00	-47.12	0.00
2	11.61	7.15	-27.93	-28.52	-0.02137	0.00	-47.12	-336.75
3	23.23	14.00	-21.08	-21.67	-0.01613	0.00	-47.12	-659.72
4	34.84	20.28	-14.80	-15.39	-0.01132	0.00	-47.12	-955.67
5	46.45	25.73	-9.35	-9.94	-0.00715	0.00	-47.12	-1212.50
6	58.06	30.13	-4.95	-5.54	-0.00379	0.00	-47.12	-1419.70
7	69.68	33.29	-1.79	-2.38	-0.00137	0.00	-31.17	-1037.58
8	81.29	35.09	0.01	-0.58	9E-06	0.00	0.21	7.23
9	92.90	35.45	0.38	-0.21	0.00029	0.00	6.55	232.07
10	104.52	34.37	-0.71	-1.30	-0.00054	0.00	-12.41	-426.43
11	116.13	31.87	-3.21	-3.79	-0.00245	0.00	-47.12	-1501.94
12	127.74	28.07	-7.01	-7.59	-0.00536	0.00	-47.12	-1322.89
13	139.35	23.12	-11.96	-12.54	-0.00915	0.00	-47.12	-1089.68
14	150.97	17.23	-17.85	-18.44	-0.01366	0.00	-47.12	-811.86
15	162.58	10.63	-24.45	-25.04	-0.01871	0.00	-47.12	-500.80
16	174.19	3.59	-31.49	-32.08	-0.02409	0.00	-47.12	-169.24
17	185.81	-3.59	-38.67	-39.26	-0.02959	0.00	-47.12	169.24
18	197.42	-10.63	-45.71	-46.29	-0.03497	0.00	-47.12	500.80
19	209.03	-17.23	-52.31	-52.90	-0.04002	0.00	-47.12	811.86
20	220.65	-23.12	-58.20	-58.79	-0.04453	0.00	-47.12	1089.68
21	232.26	-28.07	-63.15	-63.74	-0.04832	0.00	-47.12	1322.89
22	243.87	-31.87	-66.95	-67.54	-0.05122	0.00	-47.12	1501.94
23	255.48	-34.37	-69.45	-70.03	-0.05313	0.00	-47.12	1619.49
24	267.10	-35.45	-70.53	-71.12	-0.05396	0.00	-47.12	1670.75
25	278.71	-35.09	-70.17	-70.76	-0.05368	0.00	-47.12	1653.61
26	290.32	-33.29	-68.37	-68.96	-0.05231	0.00	-47.12	1568.76
27	301.94	-30.13	-65.21	-65.79	-0.04989	0.00	-47.12	1419.70
28	313.55	-25.73	-60.81	-61.40	-0.04652	0.00	-47.12	1212.50
29	325.16	-20.28	-55.36	-55.95	-0.04235	0.00	-47.12	955.67
30	336.77	-14.00	-49.08	-49.67	-0.03755	0.00	-47.12	659.72
31	348.39	-7.15	-42.22	-42.81	-0.03231	0.00	-47.12	336.75

DEVELOPMENT LENGTH CHECK OF PIER REINFORCEMENT

Foundation:	Pier diameter =	6.5	ft	Cover between side of pier and cage =	3.00	in.
	Cage diameter =	6	ft	Cover between top of pier and cage =	3.00	in.
	Rebar size =	9		Compressive strength of concrete =	4000	psi
	Number of bars =	72		Rebar yield strength =	60000	psi
	Clear spacing =	5.70	in.			
	Are there hooks?	n				
	Check Compression?	n				
Anchor Steel:	Part number:	109881		Actual Bending Moment =	427.70	ft-kips
	Embedment length =	71.5	in.	Allowable Bending Moment =	775.25	ft-kips
	Bolt Diameter =	1.25"		Excess Reinforcement Ratio =	0.552	
Anchor Plate:	Part number:	212009				
	Plate width =	22	in.			

Required development length (compression) =	999.00	in.	
Required development length (tension) =	37.00	in.	
Required development length (tension) =	20.41	in.	(reduced)
Available development length =	43.500	in.	

OK

The length available in the pier for the development of the vertical reinforcement exceeds the required length (ACI 318-02, section 12.2).

CHECK EMBEDMENT PLATE CLEARANCE IN THE PIER

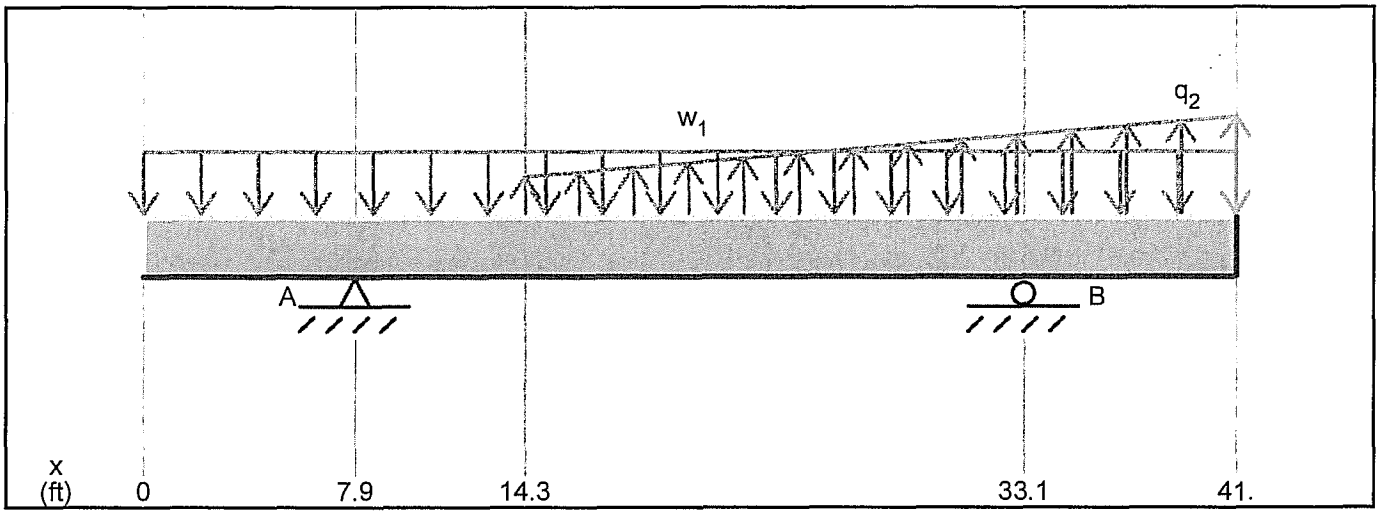
Foundation:	Pier diameter =	6.5	ft	Cover between side of pier and cage =	3.00	in.
	Cage diameter =	6	ft	Minimum cover between A/S and cage =	3.00	in.
Anchor Steel:	Part number:	109881		Angle of anchor steel in foundation =	3.3	degrees
	Embedment length =	71.5	in.			
Anchor Plate:	Part number:	212009				
	Largest plate width =	22.00	in.			
	Bolt Diameter =	1.25	in.			

Minimum cage diameter =	36.20	in.
Actual cage diameter =	72	in.

OK

The available space exceeds the minimum cage diameter required for anchor steel installed in the pier at an angle.

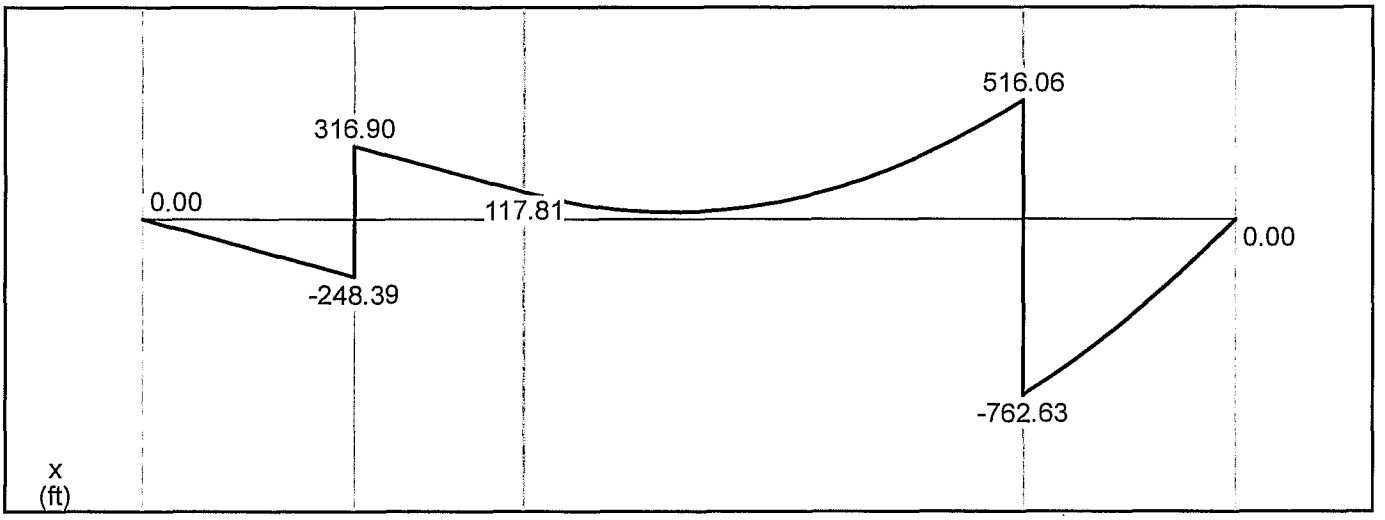
LC2- Option 1



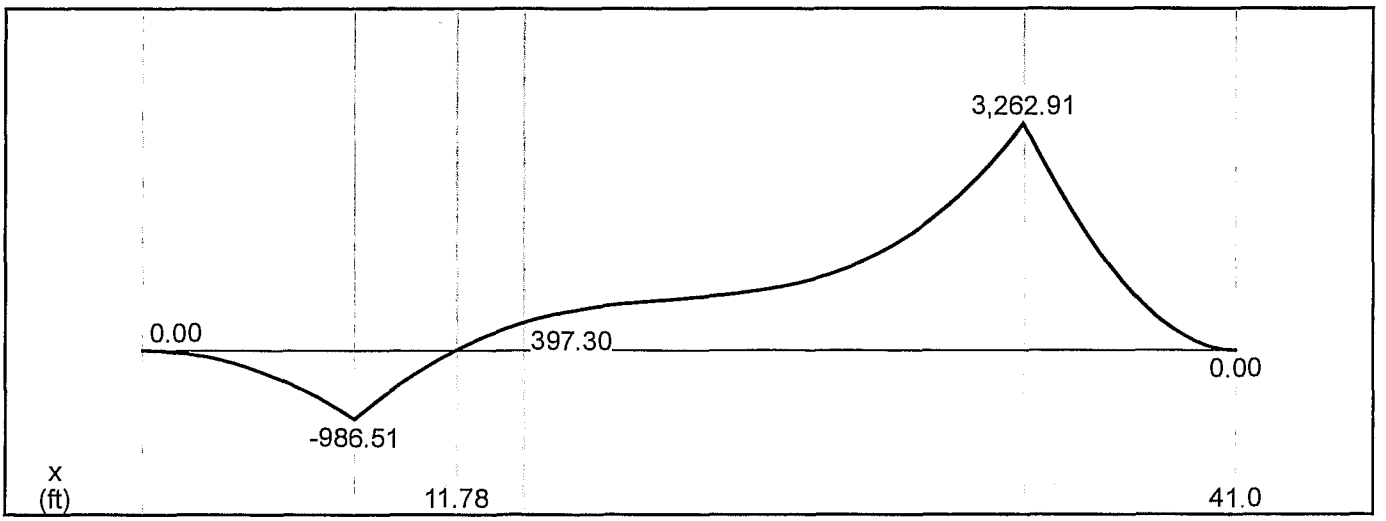
Load Diagram

w_1 = 31.27 kip/ft (down)
q_2 = 0.0 to 149.53 kip/ft (up)

A_y = 565.28 kip (up)
B_y = 1,278.69 kip (down)

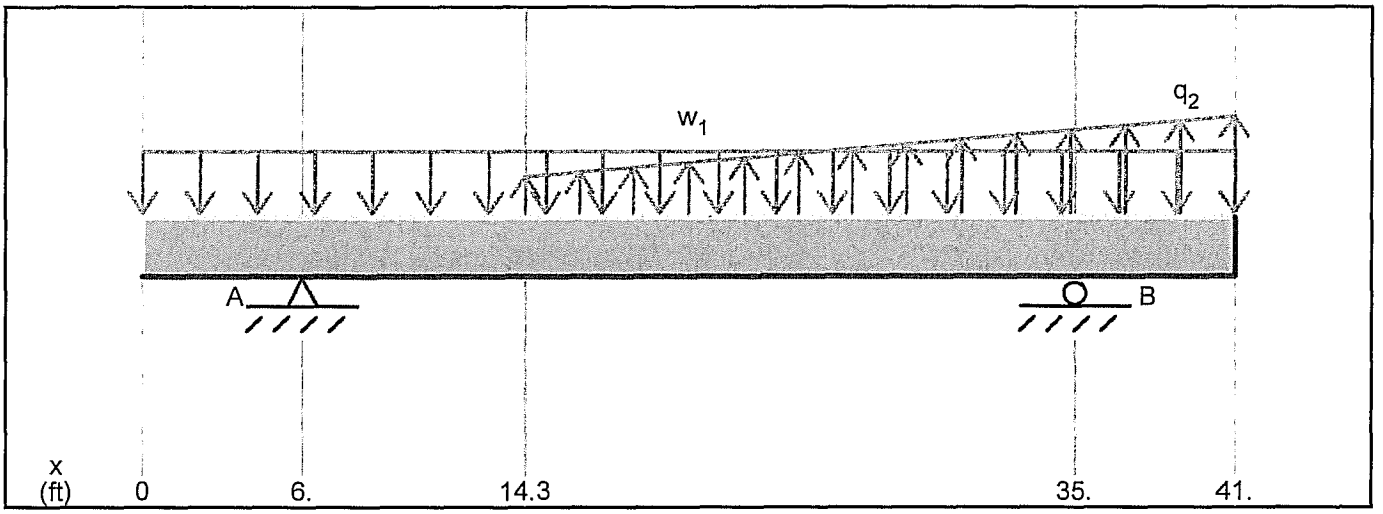


Shear Diagram (kip)



Moment Diagram (kip-ft)

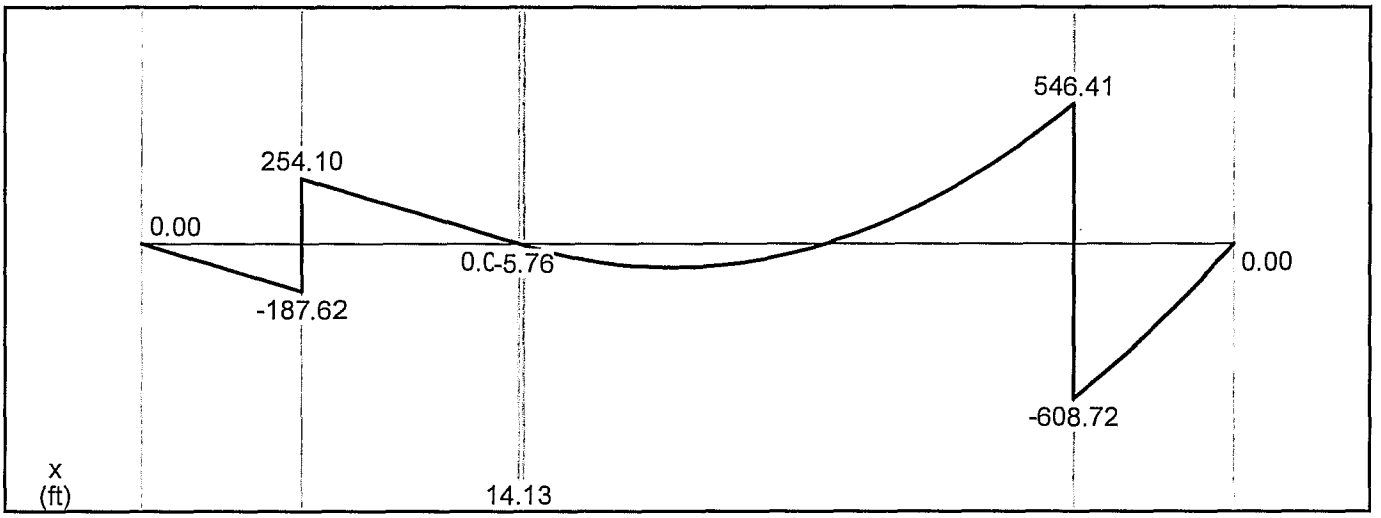
LC2- Option 2



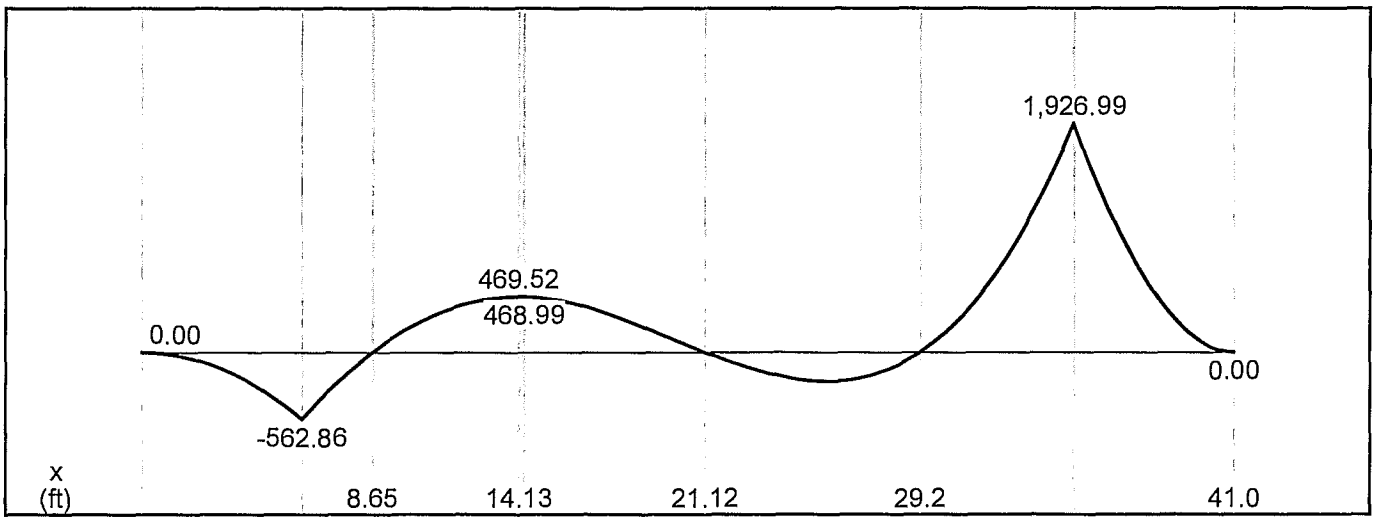
Load Diagram

w_1 = 31.27 kip/ft (down)
q_2 = 0.0 to 149.53 kip/ft (up)

A_y = 441.72 kip (up)
B_y = 1,155.12 kip (down)



Shear Diagram (kip)

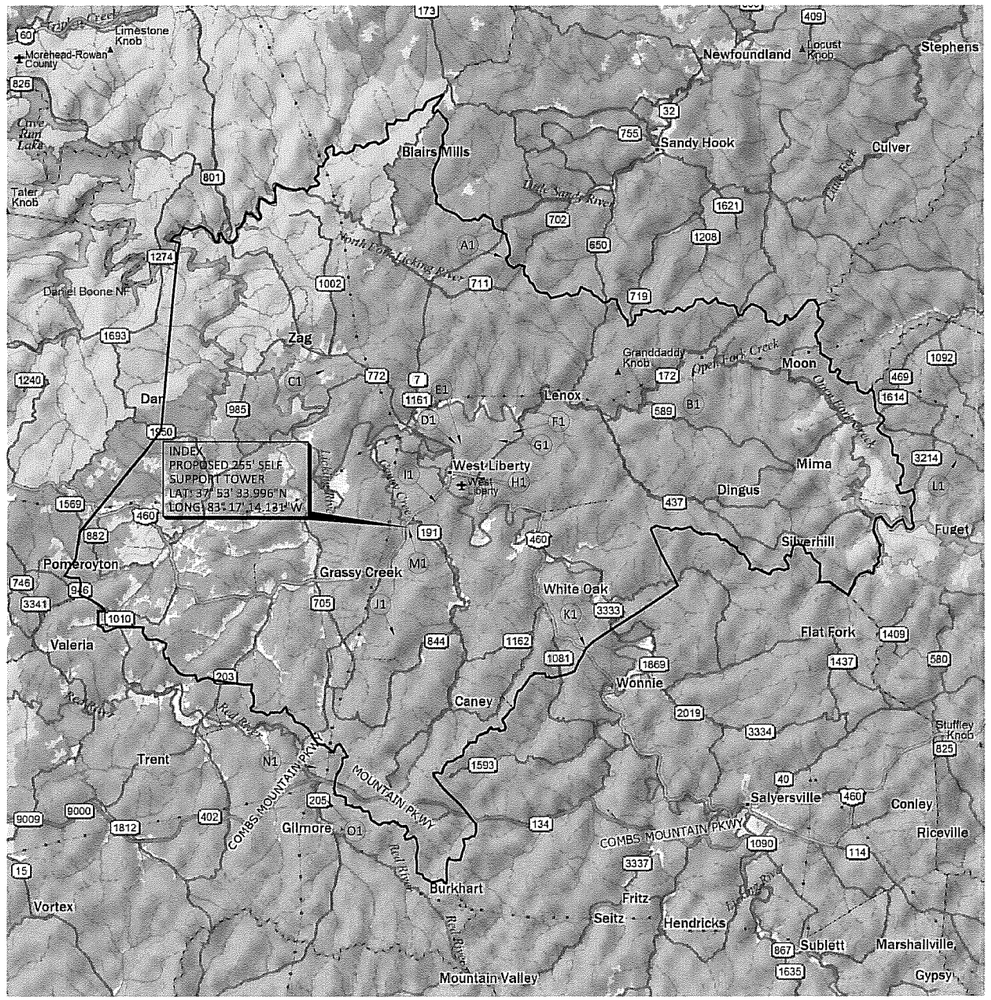


Moment Diagram (kip-ft)

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

D

N
W E
S



NOTE: TOWERS DEPICTED ARE ALL KNOWN TOWER SITES REGISTERED WITH THE FEDERAL COMMUNICATIONS COMMISSION IN MORGAN COUNTY, KENTUCKY.

USGS 7.5 MINUTE QUADRANGLE: WEST LIBERTY, KY

MORGAN COUNTY, KENTUCKY

AT&T SITE NAME: INDEX

EXISTING TOWER LEGEND

(A1) FCC REGISTRATION #: 1262573
LAT: N38° 01' 53.90"
LONG: W83° 13' 34.40"

(B1) FCC REGISTRATION #: 1284909
LAT: N37° 58' 29.90"
LONG: W83° 06' 16.00"

(C1) FCC REGISTRATION #: 1065266
LAT: N37° 58' 26.00"
LONG: W83° 20' 25.00"

(D1) FCC REGISTRATION #: 1202082
LAT: N37° 56' 11.00"
LONG: W83° 15' 22.00"

(E1) FCC REGISTRATION #: 1043797
LAT: N37° 56' 10.70"
LONG: W83° 15' 13.40"

(F1) FCC REGISTRATION #: 1044500
LAT: N37° 56' 31.30"
LONG: W83° 13' 13.60"

(G1) FCC REGISTRATION #: 1208944
LAT: N37° 56' 24.00"
LONG: W83° 13' 41.00"

(H1) FCC REGISTRATION #: 1218293
LAT: N37° 55' 23.30"
LONG: W83° 15' 17.60"

(I1) FCC REGISTRATION #: 1218290
LAT: N37° 54' 23.30"
LONG: W83° 16' 12.60"

(J1) FCC REGISTRATION #: 1233725
LAT: N37° 50' 19.10"
LONG: W83° 17' 44.40"

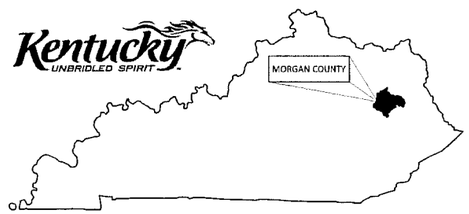
(K1) FCC REGISTRATION #: 1264771
LAT: N37° 49' 59.90"
LONG: W83° 10' 25.00"

(L1) FCC REGISTRATION #: 1201236
LAT: N37° 55' 40.00"
LONG: W82° 56' 04.00"

(M1) FCC REGISTRATION #: 1265239
LAT: N37° 53' 34.60"
LONG: W83° 17' 11.20"

(N1) FCC REGISTRATION #: 1280603
LAT: N37° 46' 17.90"
LONG: W83° 20' 44.40"

(O1) FCC REGISTRATION #: 1058724
LAT: N37° 45' 19.10"
LONG: W83° 20' 19.60"



POD
POWER OF DESIGN
4500 OLD LAGRANGE ROAD
BUCKNER, KY 40010
502-437-5252

WESTOWER COMMUNICATIONS

at&t

COUNTY TOWER MAP

REV.	DATE	DESCRIPTION

SITE INFORMATION:

INDEX

2140 HIGHWAY 460
WEST LIBERTY, KY 41472
COUNTY: MORGAN

SITE NUMBER:
KYALU6170

POD NUMBER:	13-1452
DRAWN BY:	DAP
CHECKED BY:	MEP
DATE:	12.13.13

SHEET TITLE:

TOWER GRID MAP

SHEET NUMBER:
C-1

License Search

Search Results

Specified Search

State = **Kentucky**
County = **MORGAN**
Radio Service = **CL, CW**
Status = **Active**

Matches **1**- **10** (of **10**)

PA = Pending Application(s)
TP = Termination Pending
L = Lease

	Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date
1	KNKN861	NEW CINGULAR WIRELESS 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	KNLF252	WIRELESSCO, L.P.	0002316545	CW	Active	06/23/2015
4 PA	KNLH256	Cellco Partnership	0003290673	CW	Active	04/28/2017
5 PA	KNLH398	Powertel Memphis Licenses, Inc.	0001832807	CW	Active	04/28/2017
6	KNLH399	Powertel Memphis Licenses, Inc.	0001832807	CW	Active	04/28/2017
7	WPOI255	NEW CINGULAR WIRELESS PCS, LLC	0003291192	CW	Active	06/23/2015
8	WQCS428	Cellco Partnership	0003290673	CW	Active	05/13/2015
9	WQCX683	T-Mobile License LLC	0001565449	CW	Active	06/20/2015
10 PA	WQDI527	Cricket License Company, LLC	0018402123	CW	Active	09/06/2015

Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date

EXHIBIT E
CO-LOCATION REPORT

February 17, 2014

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

RE: Alternate Site Analysis Report
Uniform Application for a Communications Facility
Applicant: AT&T Mobility
Site Location: 2140 Hwy 460 W, West Liberty, KY
Site Name: Index

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 West Liberty general area, within Morgan 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 southwest of West Liberty, with major ground elevation changes within the search ring. This variation of roughly 300' within the ring required that we focus our search on property located at the higher elevations in order to make the site work.

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 owned in the center of the ring. 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 Morgan 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.

Step 6: Candidate Evaluation and Selection. After the preliminary site assessments were performed, the site development team reviewed the candidate based to evaluate the availability of ground space, topography, applicable environmental conditions, construction feasibility and the potential impact of the facility on neighboring properties. In this case, the sole workable property did meet the requirements for a new tower site.

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.

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 with existing access and utility runs eliminating the need to cut a new road and utility route into a heavily forested hillside area.

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

WESTOWER COMMUNICATIONS

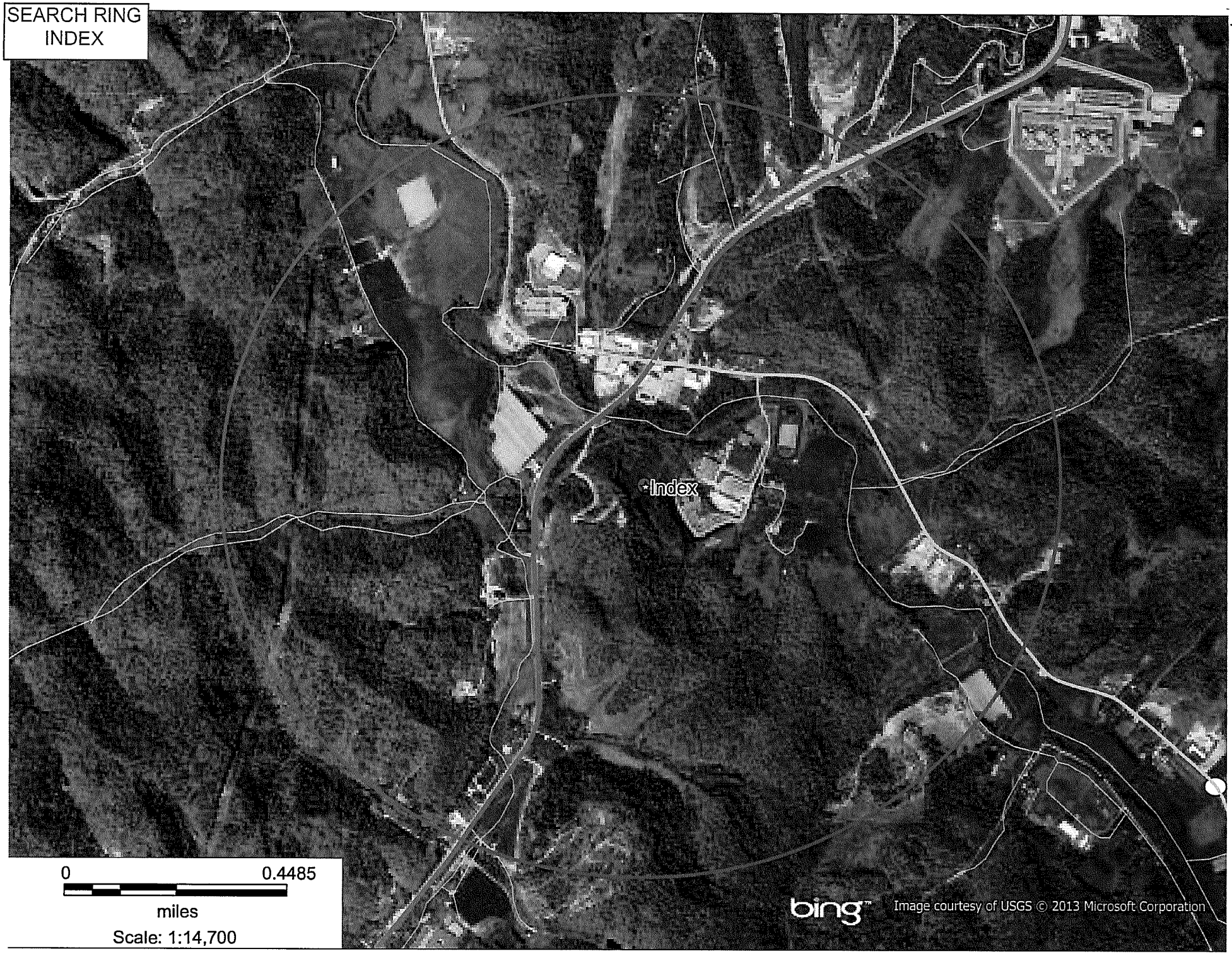

SEARCH RING
INDEX
Index
0
0.4485
miles
Scale: 1:14,700
bing
Image courtesy of USGS © 2013 Microsoft Corporation

EXHIBIT F
FAA

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76137

Aeronautical Study No.
2013-ASO-7380-OE

Issued Date: 11/15/2013

JOHN E. MONDAY (MC)
AT&T MOBILITY
2200 N. Greenville Ave, 1W
Richardson, TX 75082

**** 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 Index
Location:	West Liberty, KY
Latitude:	37-53-34.05N NAD 83
Longitude:	83-17-14.62W
Heights:	1028 feet site elevation (SE)
	265 feet above ground level (AGL)
	1293 feet above mean sea level (AMSL)

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

As a condition to this Determination, the structure is 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)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

This determination expires on 05/15/2015 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.

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

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power 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-7380-OE.

Signature Control No: 196798506-201894253 (DNE)
Carole Bernacchi
Technician

Attachment(s)
Frequency Data

cc: FCC

Frequency Data for ASN 2013-ASO-7380-OE

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

EXHIBIT G
KENTUCKY AIRPORT ZONING COMMISSION

KENTUCKY TRANSPORTATION CABINET

TC 56-50
Rev. 07/2010

KENTUCKY AIRPORT ZONING COMMISSION

APPLICATION FOR PERMIT TO CONSTRUCT OR ALTER A STRUCTURE

APPLICANT (*name*) AT&T	**PHONE** 502-779-5951	**FAX**	**KY AERONAUTICAL STUDY #**	
ADDRESS (*street*) 601 W. Chestnut	**CITY** Louisville		**STATE** KY	**ZIP** 40203
APPLICANT'S REPRESENTATIVE (*name*) Kit Nickel	**PHONE** 614-582-8825	**FAX** 614-583-9148		
ADDRESS (*street*) 3173 Deanpark Drive	**CITY** Hilliard		**STATE** OH	**ZIP** 43026
APPLICATION FOR ☒ New Construction ☐ Alteration ☐ Existing **DURATION** ☐ Permanent ☐ Temporary (*months* *days*)			**WORK SCHEDULE** Start End	
TYPE ☐ Crane ☐ Building ☒ Antenna Tower ☐ Power Line ☐ Water Tank ☐ Landfill ☐ Other	**MARKING/PAINTING/LIGHTING PREFERRED** ☐ Red Lights & Paint ☐ White- medium intensity ☐ White- high intensity ☒ Dual- red & medium intensity white ☐ Dual- red & high intensity white ☐ Other			
LATITUDE 37°53'33.996"	**LONGITUDE** 83°17'14.131"		**DATUM** ☒ NAD83 ☐ NAD27 ☐ Other	
NEAREST KENTUCKY City West Liberty County Morgan	**NEAREST KENTUCKY PUBLIC USE OR MILITARY AIRPORT**			
SITE ELEVATION (AMSL, *feet*) 1029.0	**TOTAL STRUCTURE HEIGHT** (AGL, *feet*) 265'		**CURRENT** (*FAA aeronautical study #*)	
OVERALL HEIGHT (*site elevation plus total structure height, feet*) 1294.0			**PREVIOUS** (*FAA aeronautical study #*)	
DISTANCE (*from nearest Kentucky public use or Military airport to structure*)			**PREVIOUS** (*KY aeronautical study #*)	
DIRECTION (*from nearest Kentucky public use or Military airport to structure*)				

DESCRIPTION OF LOCATION (*Attach USGS 7.5 minute quadrangle map or an airport layout drawing with the precise site marked and any certified survey.*)
Approximately 2.0 miles southwest of West Liberty, KY

DESCRIPTION OF PROPOSAL
AT&T is proposing to construct a 255' self-supporting tower, with lightning rod of up to 10', for a total height of 265'. This application is to revise the total height to 265'.

FAA Form 7460-1 (*Has the "Notice of Construction or Alteration" been filed with the Federal Aviation Administration?*)
☐ No ☐ Yes, when?

CERTIFICATION (*I hereby certify that all the above entries, made by me, are true, complete, and correct to the best of my knowledge and belief.*)
PENALITIES (*Persons failing to comply with KRS 183.861 to 183.990 and 602 KAR 050 are liable for fines and/or imprisonment as set forth in KRS 183.990(3). Noncompliance with FAA regulations may result in further penalties.*)

NAME	**TITLE**	**SIGNATURE**	**DATE**
Kit Nickel	Agent for AT&T		11-22-2013

COMMISSION ACTION

☐ Chairperson, KAZC
☐ Administrator, KAZC

☐ Approved
☐ Disapproved

SIGNATURE

DATE

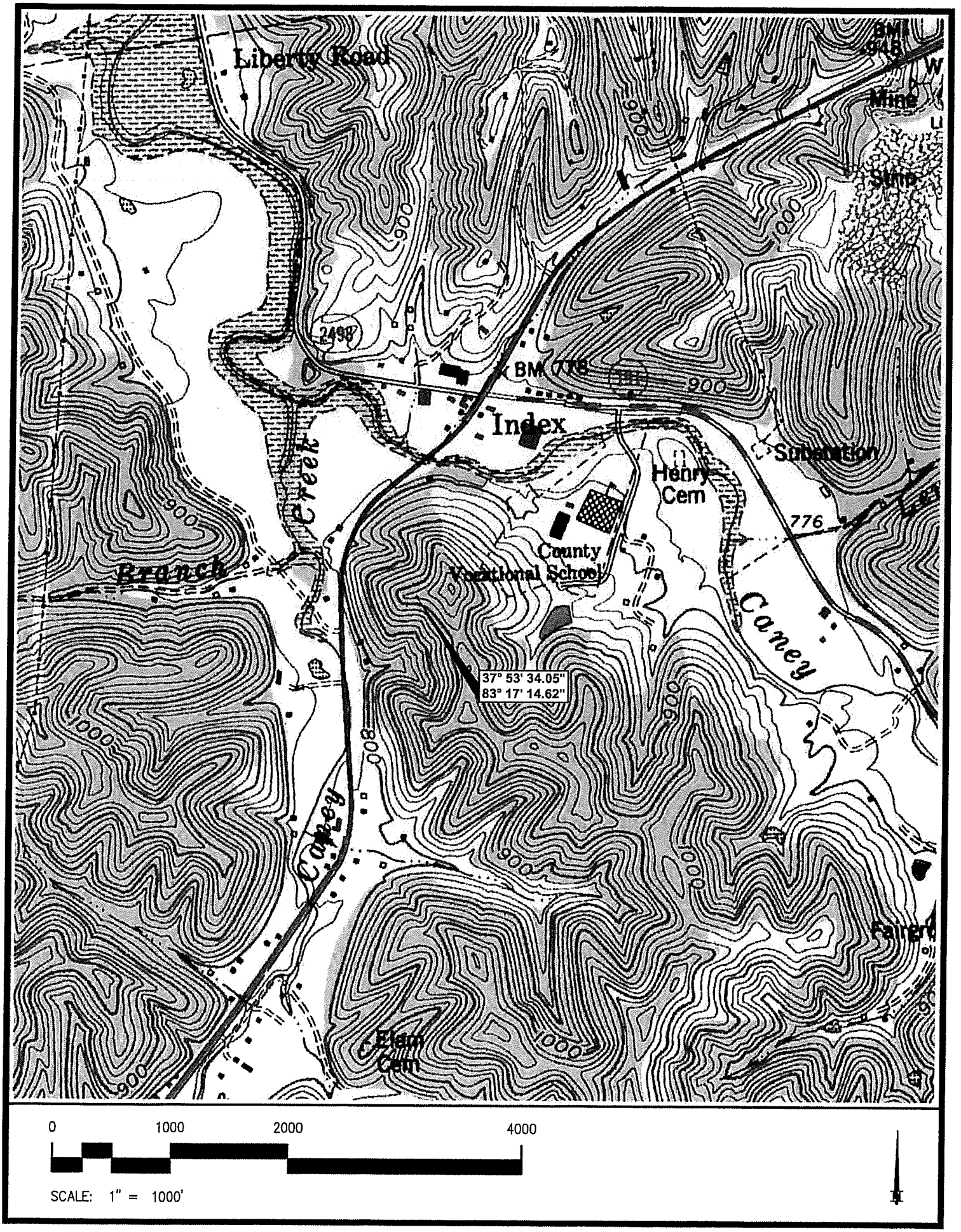

Liberty Road
BM 948
Mine
Strip
2498
BM 778
Index
Creek
Henry Cem
Subsation
776
County Vocational School
Caney
Branch
37° 53' 34.05"
83° 17' 14.62"
Cakey
Elam Cem
Fairgrd
0
1000
2000
4000
SCALE: 1" = 1000'

EXHIBIT H
GEOTECHNICAL REPORT

ENVIRONMENTAL CORPORATION OF AMERICA

ENVIRONMENTAL | GEOTECHNICAL | WETLANDS | ECOLOGY | CULTURAL RESOURCES

Geotechnical Investigation

AT&T Site (Index)

2140 Highway 460 W
West Liberty, Kentucky
Morgan County

ECA Project No. P1247

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

March 4, 2014

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

Attention: Mr. John Boud

Subject: **Report of Geotechnical Investigation**
AT&T Site INDEX
2140 Highway 460 W
West Liberty, Morgan County, Kentucky
ECA Project No. P1247

Dear Mr. Boud:

Environmental Corporation of America (ECA) is pleased to submit this report of our investigation for the proposed project. Our services were provided as authorized via purchase order dated October 1, 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 Boring Location Plan and a Boring Log.

Purpose and Scope of Work

The purpose of this exploration was to obtain specific subsurface data at the site and to provide geotechnical-related design parameters and construction recommendations for the proposed tower.

Our scope of work included the following:

- Due to very steep terrain, our ATV drill rig could not access the proposed tower and level up to facilitate drilling. Therefore, two hand auger borings were drilled to a depth of 5.7 and 5.9 feet below the ground surface (bgs). Figure 1 shows the approximate boring locations.

- The depth to groundwater, if any, was measured in the borings after drilling was completed.

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

No physical testing of soil samples has been conducted to calculate site specific bearing capacities or settlements. We have recommended design parameters and settlements based on an examination of the soil samples, and our experience with similar soil conditions and structures.

Project Information

We were provided with an undated survey of the Property by BTM Engineering. The Property is located in a wooded area.

We understand that plans call for the construction of a 255-foot self-supporting lattice tower on the site. We assume that the equipment building/cabinets will be pre-fabricated structures supported on a turned-down slab foundation.

Site Conditions

The fieldwork was conducted on February 25, 2014. Information obtained from the borings was used to help us evaluate the subsurface conditions and to assist in formulating our recommendations.

Subsurface Conditions

The subsurface conditions were explored with two borings drilled approximately as shown on Figure 1. Several rock outcroppings were noted at the project site. The ground surface at the tower center slopes about 20 percent.

The boring encountered sandy silt and gravel overlying apparent bedrock at approximately 5.9 feet. The soil classified as ML soil type based on the Unified Soil Classification System (USCS). Auger refusal was encountered in boring B-1 at 5.9 feet and in boring B-1A at 5.7 feet. It is possible that the material at 5.9 feet represents a boulder; however, based on our observations, solid rock is very close to the surface. In order to drill deeper, coring would be needed. Also, significant clearing and leveling of the tower center would be needed.

Groundwater was not present in the borings at the time of completion.

Recommendations

Tower Foundations: The subsurface conditions are suitable for support of the tower using a mat foundation. Due to the shallow depth to bedrock, a caisson foundation would not be feasible.

For a mat foundation design, we recommend the foundation base be supported on the apparent rock surface. If bearing on weathered rock, a net allowable bearing pressure of 8 ksf may be used. Other soil parameters that may be needed are as follows:

Cohesion	1500 psf
Angle of internal friction	0^o
Unit weight of soil	115 pcf

Total and differential settlement should be less than 1-inch and ½-inch, respectively. Due to the shallow rock, it may be necessary to excavate some depth of the rock to accommodate a below-ground foundation pad, or raise the ground surface and the tower foundation to provide sufficient concrete mass and overturning resistance, and/or use rock anchors.

Groundwater should not be encountered in a mat foundation excavation.

Building Foundations: The proposed equipment cabinet(s) can be supported on a spread footing foundation. A maximum allowable net bearing pressure of 2.0 kips per ft^2 should be used to design the building/cabinet foundation. Total and differential settlements should be less than 1/2-inch and 1/4-inch, respectively.

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

If the excavation must remain open overnight or if rainfall becomes imminent while the bearing soils are exposed, we recommend that a 2 to 4-inch thick "mud-mat" of "lean" (2000 psi) concrete be placed on the bearing soils before the placement of reinforcing steel. If the bearing soils are softened by surface water intrusion or exposure, the softened soils must be removed from the foundation excavation bottom immediately prior to placement of concrete.

Fill Placement: The amount of fill required for this project depends on the planned final grades, but we expect it to be minimal. Any required fill should be placed in maximum 8-inch thick lifts. The soil moisture content should be close to the optimum moisture content. The soil should be compacted to at least 98% of the maximum dry density, as determined by the standard Proctor method (ASTM D-698).

In areas supporting floor slabs or pavements, the upper 18 inches of fill should be compacted to 100% of the standard Proctor density. As no laboratory testing has been conducted, we do not know the capability of the surficial soil to support pavements. However, we suggest that the upper soils be replaced by granular fill in areas of heavy traffic to improve the subgrade support capabilities and moisture sensitivity.

Field density tests should be conducted at routine intervals, as the fill is being placed, to verify that adequate compaction is achieved.

Prior to placing any new fill, any soft or loose near surface soils should be removed and the area proofrolled with a heavy vehicle to confirm that any unsuitable soil conditions have been discovered.

Basis for Recommendations

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

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

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

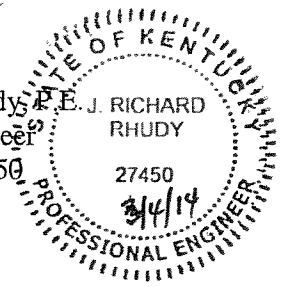
We wish to remind you that we will store the soil samples for 30 days. The samples will then be discarded unless you request otherwise.

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

Sincerely,
Environmental Corporation of America

Kelby Williams, EIT
Project Engineer

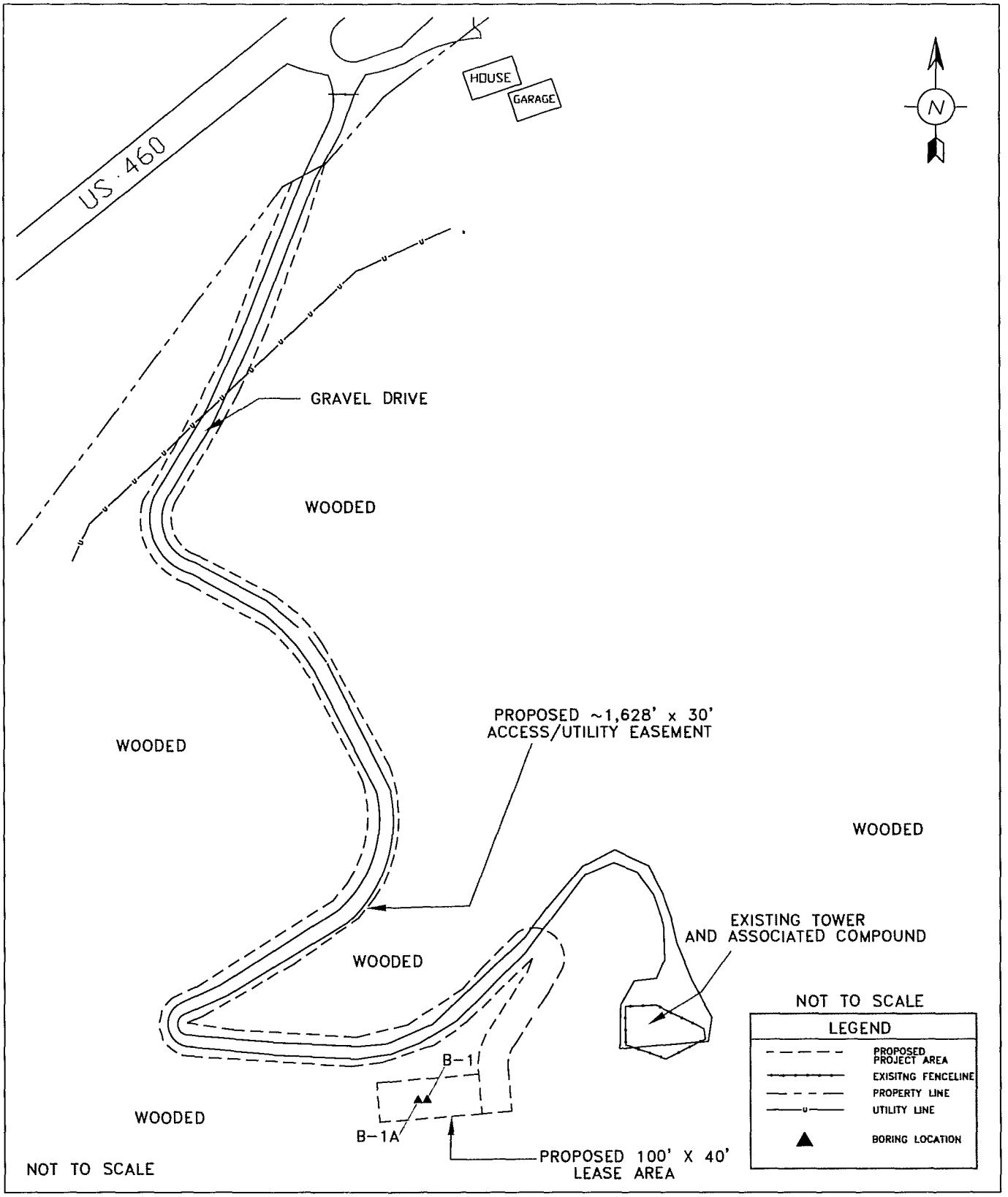
J. Richard Rhudy, P.E.
Principal Engineer
KY Reg. # 27450



Appendix A Boring Location Plan
Appendix B Boring Log

APPENDIX A

Boring Location Plan



AT&T Site KYALU6170 (Index)

2140 US Highway 460W
West Liberty, Morgan County, Kentucky

Figure 1: Boring Location Plan

SOURCE: 9/18/13 ECA Site Visit and Site Survey	DRAWN BY: JLD/KLW DATE: 3/3/2014 FILE NAME: F:\%\P1247.dwg

ECA Project # P1247

APPENDIX B

Boring Log

Project: AT&T Site (Index)

City, State West Liberty, Kentucky

Client: Westower

ECA Job No: P1247

Log of Boring: B-1/B-1A

Drill Date: February 25, 2014

Field Rep: Tyler

Elevation (ft)	Depth	SUBSURFACE PROFILE: Symbol	SUBSURFACE PROFILE: Description	SAMPLE: Blow Counts (per ft)	SAMPLE: SPT Values (blows/ft) 10 20 30 40	SAMPLE: Remarks	Water depth
0	0		Ground Surface				
			Very dense tan sandy SILT (ML) with gravel				
-5.9	5		Boring Terminated			Auger refusal at 5.9 feet Boring B-1A Offset 5 feet west Auger refusal at 5.7 feet	
	10						
	15						
	20						
	25						
	30						
	35						
	40						

Drilled By: Tri-State Drilling

Borehole Size: 3" OD

Drill Method: Hand Auger

Depth to Water: N/A

Total Depth: 5.9 ft

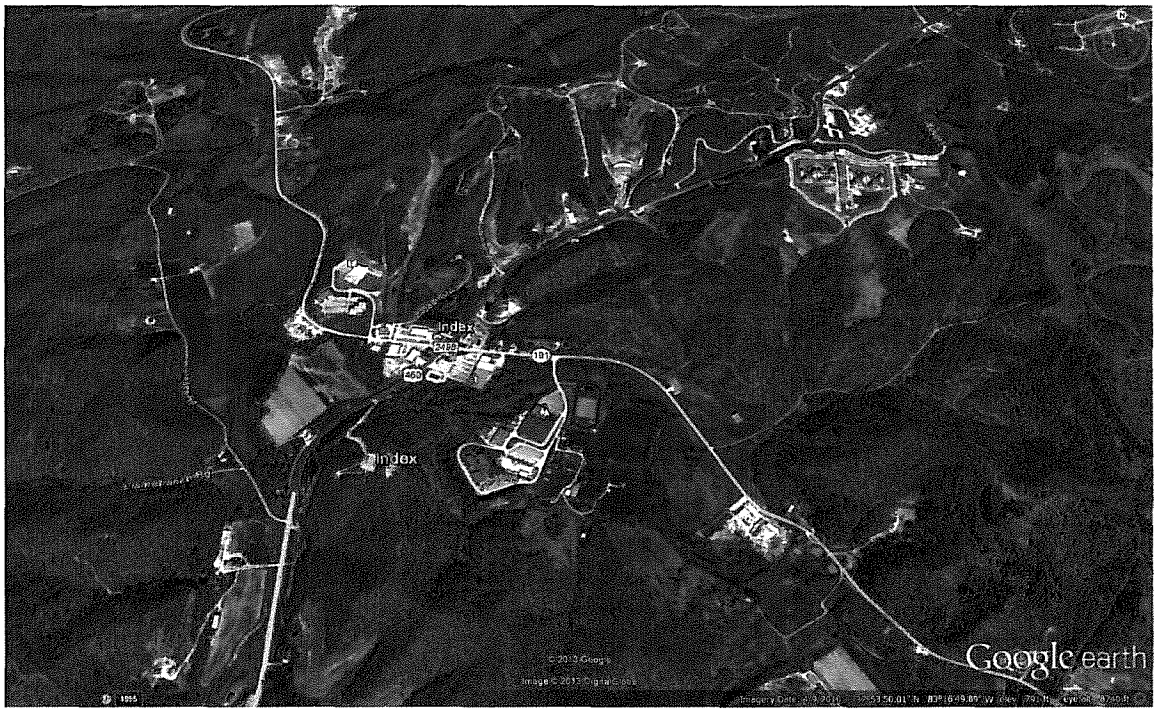
Sheet: 1 of 1

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

EXHIBIT I
DIRECTIONS TO WCF SITE

Driving Directions to Proposed Tower Site:

1. Beginning at the offices of the Morgan County Clerk, located at 450 Prestonburg Street in West Liberty, KY, head southwest toward KY-7/ US-460.
2. Turn right onto KY-7 North / US-460 West.
3. Turn left onto US-460W/Main Street and travel for 2.8 miles.
4. Site is on the left.
5. site coordinates are
    a. 37 deg 53 min 33.996 sec N
    b. 83 deg 17 min 14.131 sec W



Prepared by:
Robert W. Grant
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 AND DEED TO THE SITE PARCEL

2900 pd

LODGED FOR RECORD
MORGAN COUNTY CLERK
JAN 24 2014
TIME: 3:30 PM
RANDY WILLIAMS, CLERK

MEMORANDUM OF LEASE

Prepared by:
Kit Nickel
PBM Wireless
13714 Smokey Ridge Overlook
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 # KYALU6170; Cell Site Name: INDEX
Fixed Asset # 12568763
State: KENTUCKY
County: MORGAN

MEMORANDUM
OF
LEASE

This Memorandum of Lease is entered into on this 15th day of October, 2013, by and between SARAH GEORGE FANNIN, UNMARRIED, ROBIN FANNIN, UNMARRIED, ERMA FANNIN, UNMARRIED, FARRELL FANNIN, UNMARRIED AND KELLY KRISTEN FANNIN KOENIG AND CHRIS KOENIG, HUSBAND AND WIFE, having a mailing address of 2140 HWY 460 W, WEST LIBERTY, KY 41472 (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 13-F 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 15th 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"

SARAH GEORGE FANNIN, UNMARRIED, ROBIN FANNIN, UNMARRIED, ERMA FANNIN, UNMARRIED, FARRELL FANNIN, UNMARRIED AND KELLY KRISTEN FANNIN KOENIG AND CHRIS KOENIG, HUSBAND AND WIFE

By: _____
Print Name: Sarah George Fannin
Its: Owner
Date: 9-28-13

By: _____
Print Name: Robin Fannin
Its: Owner
Date: 9-28-13

By: _____
Print Name: Farrell Fannin
Its: Owner
Date: 9-28-13

By: _____
Print Name: Erma Fannin
Its: Owner
Date: 9-28-13

|SIGNATURES CONTINUE ON NEXT PAGE|

By: Kelly Kristen Fannin Koenig
Print Name: Kelly Kristen Fannin Koenig
Its: Owner
Date: 9/30/2013

By: Chris Koenig
Print Name: Chris Koenig
Its: Owner
Date: 9/30/2013

"TENANT"

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

By: Terry R. Kilgore
Print Name: Terry R. Kilgore
Its: Area Manager, C&E
Date: 10/5/13

[ACKNOWLEDGMENTS APPEAR ON THE NEXT PAGE]

LANDLORD ACKNOWLEDGMENT

STATE OF Kentucky)
) ss:
COUNTY OF Morgan)

On the 28 day of September, 2013 before me, personally appeared Farrell Fannin, who acknowledged under oath, that he/she is the person/officer named in the within instrument, and that he/she executed the same in his/her stated capacity as the voluntary act and deed of the Landlord for the purposes therein contained.

Notary Public: Harry Fannin
My Commission Expires: 4-19-2014

LANDLORD ACKNOWLEDGMENT

STATE OF Kentucky)
) ss:
COUNTY OF Morgan)

On the 28 day of September, 2013 before me, personally appeared Erma Fannin, who acknowledged under oath, that he/she is the person/officer named in the within instrument, and that he/she executed the same in his/her stated capacity as the voluntary act and deed of the Landlord for the purposes therein contained.

Notary Public: Harry Fannin
My Commission Expires: 4-19-2014

LANDLORD ACKNOWLEDGMENT

STATE OF Missouri)
) ss:
COUNTY OF Greene)

On the 30th day of September 2013 before me, personally appeared Kelly Kristen Fannin Koenig and Chris Koenig, 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.

DIANA ROYSTON
Notary Public - Notary Seal
State of Missouri
Commissioned for Greene County
My Commission Expires: December 11, 2016
Commission Number: 12408220

Notary Public: Diana Royston
My Commission Expires: 12-11-2016

TENANT ACKNOWLEDGMENT

STATE OF Georgia)
) ss:
COUNTY OF Fulton)

On the 15th day of October, 2013, before me personally appeared Terry R. Kilgore, and acknowledged under oath that he/she is the Area Manager, C&E of AT&T Mobility Corporation, the Manager of New Cingular Wireless PCS, LLC, the Tenant named in the attached instrument, and as such was authorized to execute this instrument on behalf of the Tenant.

Notary Public: Daphne Robertson
My Commission Expires: 7/5/15

DAPHNE ROBERTSON NOTARY PUBLIC FULTON COUNTY, GEORGIA MY COMMISSION EXPIRES JULY 5, 2015

LANDLORD ACKNOWLEDGMENT

STATE OF Kentucky)
) ss:
COUNTY OF Morgan)

On the 28 day of September, 2013 before me, personally appeared Sarah George Fannin, who acknowledged under oath, that he/she is the person/officer named in the within instrument, and that he/she executed the same in his/her stated capacity as the voluntary act and deed of the Landlord for the purposes therein contained.

Notary Public: Harry Frisch
My Commission Expires: 4-19-2014

LANDLORD ACKNOWLEDGMENT

STATE OF Kentucky)
) ss:
COUNTY OF Morgan)

On the 28 day of September, 2013 before me, personally appeared Robin Fannin, who acknowledged under oath, that he/she is the person/officer named in the within instrument, and that he/she executed the same in his/her stated capacity as the voluntary act and deed of the Landlord for the purposes therein contained.

Notary Public: Harry Frisch
My Commission Expires: 4-19-2014

EXHIBIT 1

DESCRIPTION OF PREMISES

to the Option and Lease Agreement dated October 15, 2013, by and between SARAH GEORGE FANNIN, UNMARRIED, ROBIN FANNIN, UNMARRIED, ERMA FANNIN, UNMARRIED, FARRELL FANNIN, UNMARRIED AND KELLY KRISTEN FANNIN KOENIG AND CHRIS KOENIG, 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:

Beginning at the mouth of Little Caney creek; thence up Little Caney creek with its meanders to the line and land of Bill Elam (formerly Kola Noble); thence with the line of Bill Elam to the line of Kola Noble; thence with Kola Noble's line to the line of J.T. Thomas' thence with J.T. Thomas' line to the Lewis Henry line; thence with Lewis Henry's line around to Big Caney Creek just above the ford opposite Isaac Henry's (now Henry's Heirs) line; thence down Big Caney creek with its meanders to the place of beginning, containing 40 acres, more or less, and to contain and include all of the land in the above described boundary with the exception of two lots that have been previously deeded to S.S. Oldfield and wife, of Index, Kentucky.

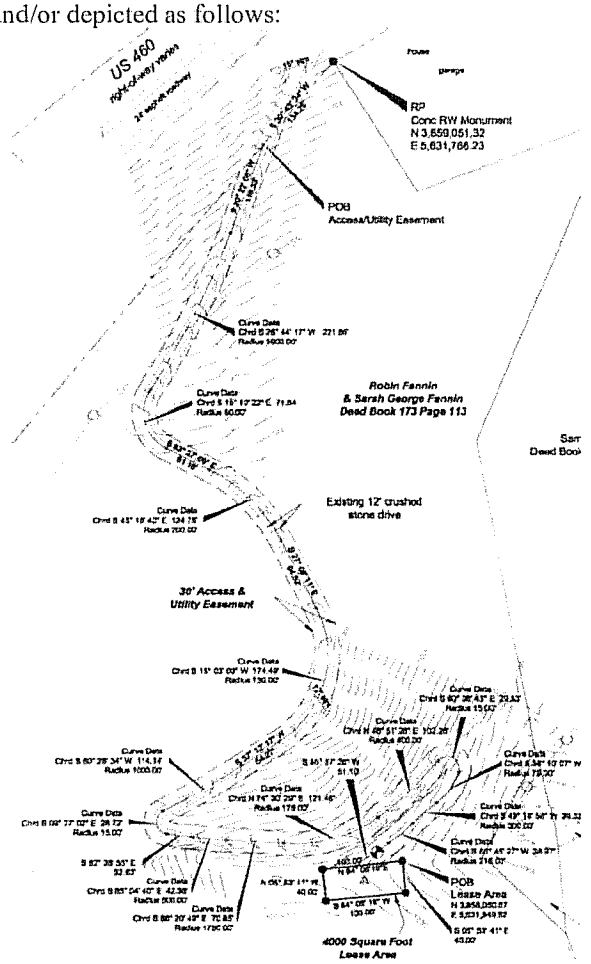
There is excepted from the foregoing described tract of land a tract of land heretofore conveyed by Stella D. Fannin and others to L. Clifford Long and Aleene F. Long, by deed dated October 19, 1956, and recorded in Deed Book 93, Page 204, Morgan County Court Clerk's records, and reference is hereby made to said deed of conveyance for a more particular description of the portion of land excepted from the above described tract.

EXHIBIT 1

DESCRIPTION OF PREMISES

to the Option and Lease Agreement dated October 15, 2013, by and between SARAH GEORGE FANNIN, UNMARRIED, ROBIN FANNIN, UNMARRIED, ERMA FANNIN, UNMARRIED, FARRELL FANNIN, UNMARRIED AND KELLY KRISTEN FANNIN KOENIG AND CHRIS KOENIG, 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 REPLACED BY A LAND SURVEY AND/OR CONSTRUCTION DRAWINGS OF THE PREMISES ONCE RECEIVED BY TENANT.
2. ANY SETBACK OF THE PREMISES FROM THE PROPERTY'S BOUNDARIES SHALL BE THE DISTANCE REQUIRED BY THE APPLICABLE GOVERNMENTAL AUTHORITIES.
3. WIDTH OF ACCESS ROAD SHALL BE THE WIDTH REQUIRED BY THE APPLICABLE GOVERNMENTAL AUTHORITIES, INCLUDING POLICE AND FIRE DEPARTMENTS.
4. THE TYPE, NUMBER AND MOUNTING POSITIONS AND LOCATIONS OF ANTENNAS AND TRANSMISSION LINES ARE ILLUSTRATIVE ONLY. ACTUAL TYPES, NUMBERS AND MOUNTING POSITIONS MAY VARY FROM WHAT IS SHOWN ABOVE.

STATE OF KENTUCKY
COUNTY OF MORGAN

I, Randy Williams, Clerk Morgan County for the county and state aforesaid do hereby certify that the foregoing was on the 24th day of Jan 20 14 lodged for record, whereupon the foregoing and this certificate have been duly recorded in my office.
Given under my hand this the 31st day of Jan 20 14
Randy Williams, Clerk
BY: _____ D.C.

KY Land Lease
Version 5 30 2012

Misc BK 57 Page 155

INDEX

9-14-96 12:10PM DEED

BK 173 / PG 113

THIS DEED OF CONVEYANCE made and entered into this 14th day of September 1996, by and between **GEORGE FANNIN AND ERMA FANNIN,** husband and wife, of HC 68, Box 295, West Liberty, Ky 41472, parties of the first part, and **ROBIN FANNIN,** of 1809 Williamsburg Road, Lexington, Ky 40504, and **SARAH GEORGE FANNIN,** of Route 1, Box 220, West Liberty, Ky 41472, parties of the second part.

WITNESSETH: For and in consideration of the love and affection the first parties have for the parties of the second part, their children, and for the further consideration that the second parties do hereby agree and obligate themselves to provide the first parties with a home, food and clothing for as long as they shall live all of which is a good and valuable consideration, the receipt of which is hereby fully acknowledged, the parties of the first part do hereby grant, bargain, sell and convey unto the parties of the second part, jointly and equally, for their joint lives with remainder in fee simple absolute unto the survivor of them, as joint tenants with right of survivorship and not as tenants in common, his or her heirs and assigns, forever, all of the first parties right, title and interest in and to the following described tract or parcel of land, situate, lying and being in the State of Kentucky, County of Morgan, on the waters of Little Caney Creek, and Big Caney Creek, and further bounded and described as follows, to-wit:

BEGINNING at the mouth of Little Caney creek; thence up Little Caney creek with its meanders to the line and

land of Bill Elam (formerly Kola Noble); thence with the line of Bill Elam to the line of Kola Noble; thence with Kola Noble's line to the line of J. T. Thomas' thence with J. T. Thomas's line to the Lewis Henry line; thence with Lewis Henry's line around to Big Caney Creek just above the ford opposite Isaac Henry's (now Henry's Heirs) line; thence down Big Caney creek with its meanders to the place of beginning, containing 40 acres, more or less, and to contain and include all of the land in the above described boundary with the exception of tow lots that have been previously deeded to S.S. Oldfield and wife, of Index, Kentucky.

THERE IS EXCEPTED from the foregoing described tract of land a tract of land heretofore conveyed by Stella D. Fannin and others to L. Clifford Long and Aleene F. Long, by deed dated October 19, 1956, and recorded in Deed Book 93, Page 204, Morgan County Court Clerk's records, and reference is hereby made to said deed of conveyance for a more particular description of the portion of land excepted from the above described tract.

Being the same land conveyed to Farrell Fannin and George Fannin, by Myrl E. Fannin, single, by Deed dated August 30, 1991, and recorded in Deed Book 155, Page 775, Morgan County Court Clerk's Records.

PROVIDED, HOWEVER, this conveyance is made subject to all existing restriction, stipulations and easements of record, including the subsurface oil, gas and mineral rights, leased, reserved or outstanding in third parties if any.

TO HAVE AND TO HOLD the same together with all appurtenances thereunto belonging unto the parties of the second part, jointly and equally, for their natural lives with remainder in fee simple absolute unto the survivor of them, as joint tenants with right of survivorship and not as tenants in common, his or her heirs and assigns, forever, with covenant of GENERAL WARRANTY.

CONSIDERATION CERTIFICATE

We, GEORGE FANNIN AND ERMA FANNIN, Grantors and

ROBIN FANNIN AND SARAH GEORGE FANNIN, Grantees do hereby certify, pursuant to KRS Chapter 382, that the property herein conveyed is transferred without monetary consideration. We further certify that the full estimated fair cash value of the property herein conveyed is $55,000.00.

IN WITNESS WHEREOF, the parties hereunto set their hands on the day and year first above written.

George F. Fannin
GEORGE FANNIN, GRANTOR

Erma Fannin
ERMA FANNIN, GRANTOR

Robin Fannin
ROBIN FANNIN, GRANTEE

Sarah Fannin
SARAH GEORGE FANNIN, GRANTEE

STATE OF KENTUCKY)
: Sct.
COUNTY OF MORGAN)

The foregoing Deed from **GEORGE FANNIN AND ERMA FANNIN,** to **ROBIN FANNIN AND SARAH GEORGE FANNIN,** and Consideration Certificate was produced, subscribed, acknowledged and sworn to before me by **GEORGE FANNIN AND ERMA FANNIN,** Grantors, this 14 day of September, 1996.

My commission expires 6/1/98.

Shirley Gevedon
NOTARY PUBLIC

STATE OF KENTUCKY)
: Sct.
COUNTY OF Morgan)

The foregoing Consideration Certificate

was produced, subscribed, acknowledged and sworn to before me by **ROBIN FANNIN,** Grantee, this 14 day of September, 1996.

My commission expires 6/1/98.

Shirley Henedon
NOTARY PUBLIC

STATE OF KENTUCKY)
: Sct.
COUNTY OF MORGAN)

The foregoing Consideration Certificate was produced, subscribed, acknowledged and sworn to before me by **SARAH GEORGE FANNIN,** Grantee, this 14 day of September, 1996.

My commission expires 6/1/98.

Shirley Henedon
NOTARY PUBLIC

MAP #_____ PARCEL #_____
This instrument prepared, without opinion of title or accuracy of description to the parties, by:

HON. EDWARD C. KEETON, JR.
ATTORNEY AT LAW
P. O. BOX 398
WEST LIBERTY, KY. 41472

STATE OF KENTUCKY } SCT.
COUNTY OF MORGAN }

I, Janis C. Williams, Clerk Morgan County for the county and state aforesaid do hereby certify that the foregoing Deed was on the 14 day of Sept, 1996 lodged for record, whereupon the foregoing and this certificate have been duly recorded in my office.
Given under my hand this the 17 day of Sept, 1996

Janis C. Williams CLERK
BY: Roberta M Potter D.C.

EXHIBIT K
NOTIFICATION LISTING

LANDOWNER NOTICE LIST FOR INDEX

Sarah G. Fannin, Robin Fannin & Farrell Fannin
2140 Hwy 460 W
West Liberty, KY 41472

Appalachian Wireless East Kentucky Network
101 Technology Trail
Ivel, KY 41642

Samuel Long
P.O. Box 456
West Liberty, KY 41472

Alex Goodpaster & Hillary Murray
437 Henry Clay Blvd
Lexington, KY 40502

Sarah Fannin & Robin Fannin
2140 Hwy 460 W
West Liberty, KY 41472

William G. Holbrook, DVM
P.O. Box 66
West Liberty, KY 41472

Sharlene Copas & Walter & George Elam
c/o George Elam
3832 Hwy 711
West Liberty, KY 41472

David Stacy
2144 Hwy 460 W
West Liberty, KY 41472

EXHIBIT L
COPY OF PROPERTY OWNER NOTIFICATION

PIKE
LEGAL

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: Index

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 2140 Highway 460, West Liberty, Kentucky 41472 (37°53'33.996" North latitude, 83°17'14.131" West longitude). The proposed facility will include a 250-foot tall antenna tower, plus a 6-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 Morgan 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 2014-00074 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.

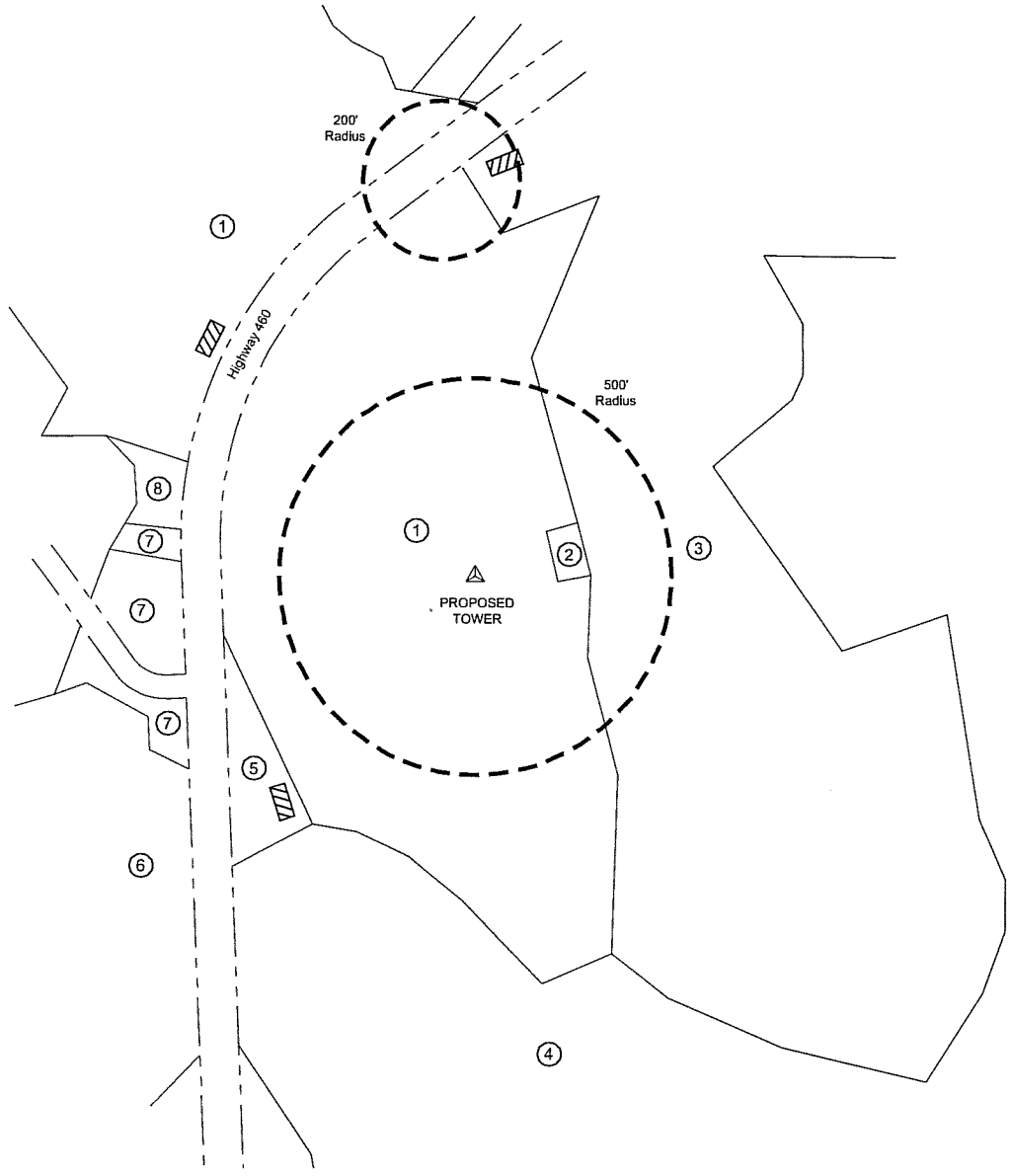
Sincerely,
David A. Pike
Attorney for AT&T Mobility

enclosure

Driving Directions to Proposed Tower Site:

1. Beginning at the offices of the Morgan County Clerk, located at 450 Prestonburg Street in West Liberty, KY, head southwest toward KY-7/ US-460.
2. Turn right onto KY-7 North / US-460 West.
3. Turn left onto US-460W/Main Street and travel for 2.8 miles.
4. Site is on the left.
5. site coordinates are
    a. 37 deg 53 min 33.996 sec N
    b. 83 deg 17 min 14.131 sec W

Prepared by:
Robert W. Grant
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



THIS MAP IS FOR GENERAL INFORMATIONAL PURPOSES ONLY AND IS NOT A BOUNDARY SURVEY

GENERAL NOTE:

All information shown hereon was obtained from records of the Morgan County, Kentucky, Property Valuation Administration Office on 2/19/2014. The Property Valuation Administration records may not reflect the current owners and address due to the inaccuracies and time lapse in updating files. The Morgan County Property Valuation Administration expressly disclaims any warranty for the content and any errors contained in their files.

NORTH BASED ON PVA MAP

APPROXIMATE GRAPHIC SCALE

300 0 150 300

1 INCH = 300 FT.

at&t

WESTOWER COMMUNICATIONS

BTM ENGINEERING, INC.
3001 TAYLOR SPRINGS DRIVE
LOUISVILLE, KENTUCKY 40220
(502) 459-8402 PHONE
(502) 459-8427 FAX

STATE of KENTUCKY
GEORGE BRIAN WYATT
2328
LICENSED PROFESSIONAL LAND SURVEYOR

SITE NAME: INDEX

SITE I.D.: KYALU6170

SITE ADDRESS: 2140 HIGHWAY 460, WEST LIBERTY MORGAN COUNTY, KENTUCKY 41472

LEASE AREA: 4000 SF

PROPERTY OWNER: SARAH G., ROBIN & FARRELL FANNIN 2140 HIGHWAY 460 WEST LIBERTY, KY 41472

PARCEL NUMBER: 089-00-00-017.00

SOURCE OF TITLE: DEED BOOK 173 PAGE 113

LATITUDE: 37° 53' 33.996" N
LONGITUDE: 83° 17' 14.131" W

NO.	REVISION/ISSUE	DATE
1		
2		
3		
4		
5		

TITLE: 500' RADIUS VICINITY MAP

SHEET: C-1

THIS MAP IS FOR GENERAL INFORMATIONAL PURPOSES ONLY AND IS NOT A BOUNDARY SURVEY

GENERAL NOTE:

All information shown hereon was obtained from records of the Morgan County, Kentucky, Property Valuation Administration Office on 2/19/2014. The Property Valuation Administration records may not reflect the current owners and address due to the inaccuracies and time lapse in updating files. The Morgan County Property Valuation Administration expressly disclaims any warranty for the content and any errors contained in their files.

(1) PARCEL NUMBER: 089-00-00-017.00
Sarah, Robin & Farrell Fannin
2140 Highway 460
West Liberty, Kentucky 41472

(2) PARCEL NUMBER: 089-00-00-017.01
Appalachian Wireless East KY Network
101 Technology Trail
Ivel, Kentucky 41642

(3) PARCEL NUMBER: 089-00-00-025.00
Samuel Long
P.O. Box 456
West Liberty, Kentucky 41472

(4) PARCEL NUMBER: 089-00-00-021.00
Alex Goodpaster & Hillary Murray
437 Henry Clay Boulevard
Lexington, Kentucky 40502

(5) PARCEL NUMBER: 089-00-00-016.01
Sarah & Robin Fannin
2140 Highway 460
West Liberty, Kentucky 41472

(6) PARCEL NUMBER: 089-00-00-019.00
William G. Holbrook DVM
P.O. Box 66
West Liberty, Kentucky 41472

(7) PARCEL NUMBER: 089-00-00-016.00
Sharlene Copas & Walter & George Elam
3832 Highway 711
West Liberty, Kentucky 41472

(8) PARCEL NUMBER: 089-00-00-016.00
David Stacy
2144 Highway 460
West Liberty, Kentucky 41472

at&t

WESTOWER COMMUNICATIONS

BTM ENGINEERING, INC.
3001 TAYLOR SPRINGS DRIVE
LOUISVILLE, KENTUCKY 40220
(502) 459-8402 PHONE
(502) 459-8427 FAX

STATE of KENTUCKY
GEORGE BRIAN WYATT
2328
LICENSED PROFESSIONAL LAND SURVEYOR

SITE NAME: INDEX

SITE I.D.: KYALU6170

SITE ADDRESS: 2140 HIGHWAY 460, WEST LIBERTY MORGAN COUNTY, KENTUCKY 41472

LEASE AREA: 4000 SF

PROPERTY OWNER: SARAH G., ROBIN & FARRELL FANNIN 2140 HIGHWAY 460 WEST LIBERTY, KY 41472

PARCEL NUMBER: 089-00-00-017.00

SOURCE OF TITLE: DEED BOOK 173 PAGE 113

LATITUDE: 37° 53' 33.996" N
LONGITUDE: 83° 17' 14.131" W

NO.	REVISION/ISSUE	DATE
1		
2		
3		
4		
5		

TITLE: 500' RADIUS VICINITY MAP

SHEET: C-1A

EXHIBIT M
COPY OF COUNTY JUDGE/EXECUTIVE NOTICE

PIKE
LEGAL

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

VIA CERTIFIED MAIL

Hon. Tim Conley
Morgan County Judge Executive
450 Prestonsburg Street
West Liberty, KY 41472

RE: Notice of Proposal to Construct Wireless Communications Facility
Kentucky Public Service Commission Docket No. 2014-00074
Site Name: Index

Dear Judge Conley:

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 2140 Highway 460, West Liberty, Kentucky 41472 (37°53'33.996" North latitude, 83°17'14.131" West longitude). The proposed facility will include a 250-foot tall antenna tower, plus a 6-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 2014-00074 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.

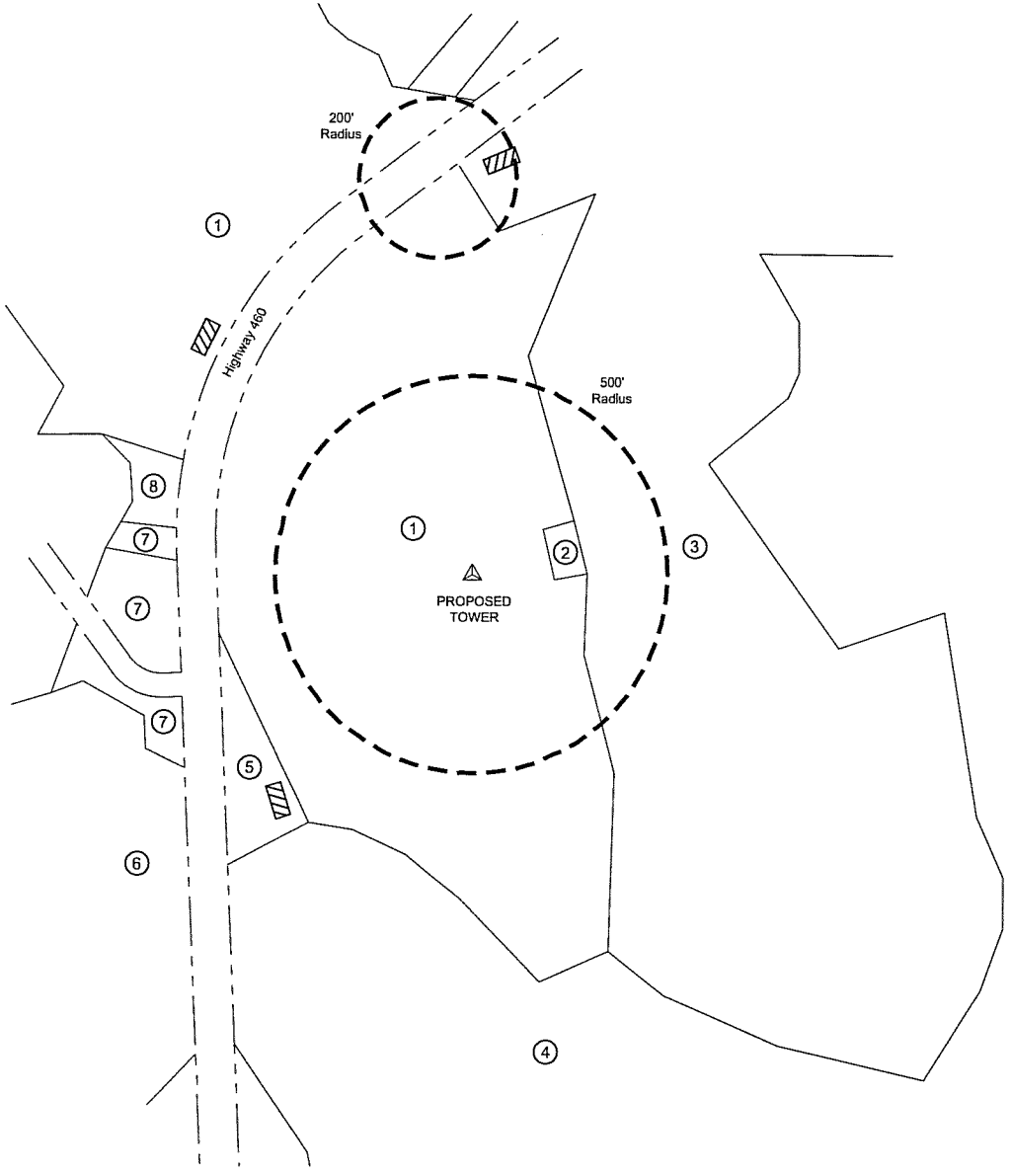
Sincerely,

David A. Pike
Attorney for AT&T Mobility
enclosure

Driving Directions to Proposed Tower Site:

1. Beginning at the offices of the Morgan County Clerk, located at 450 Prestonburg Street in West Liberty, KY, head southwest toward KY-7/ US-460.
2. Turn right onto KY-7 North / US-460 West.
3. Turn left onto US-460W/Main Street and travel for 2.8 miles.
4. Site is on the left.
5. site coordinates are
    a. 37 deg 53 min 33.996 sec N
    b. 83 deg 17 min 14.131 sec W

Prepared by:
Robert W. Grant
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



THIS MAP IS FOR GENERAL INFORMATIONAL PURPOSES ONLY AND IS NOT A BOUNDARY SURVEY

GENERAL NOTE:

All information shown hereon was obtained from records of the Morgan County, Kentucky, Property Valuation Administration Office on 2/19/2014. The Property Valuation Administration records may not reflect the current owners and address due to the inaccuracies and time lapse in updating files. The Morgan County Property Valuation Administration expressly disclaims any warranty for the content and any errors contained in their files.

NORTH BASED ON PVA MAP

APPROXIMATE GRAPHIC SCALE

300 0 150 300

1 INCH = 300 FT.

at&t

WESTOWER COMMUNICATIONS

BTM ENGINEERING, INC.
3001 TAYLOR SPRINGS DRIVE
LOUISVILLE, KENTUCKY 40220
(502) 459-8402 PHONE
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STATE of KENTUCKY
GEORGE BRIAN WYATT
2328
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SITE NAME: INDEX

SITE I.D.: KYALU6170

SITE ADDRESS: 2140 HIGHWAY 460, WEST LIBERTY MORGAN COUNTY, KENTUCKY 41472

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PROPERTY OWNER: SARAH G., ROBIN & FARRELL FANNIN 2140 HIGHWAY 460 WEST LIBERTY, KY 41472

PARCEL NUMBER: 089-00-00-017.00

SOURCE OF TITLE: DEED BOOK 173 PAGE 113

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TITLE: 500' RADIUS VICINITY MAP

SHEET: C-1

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(1) PARCEL NUMBER: 089-00-00-017.00
Sarah, Robin & Farrell Fannin
2140 Highway 460
West Liberty, Kentucky 41472

(2) PARCEL NUMBER: 089-00-00-017.01
Appalachian Wireless East KY Network
101 Technology Trail
ivel, Kentucky 41642

(3) PARCEL NUMBER: 089-00-00-025.00
Samuel Long
P.O. Box 456
West Liberty, Kentucky 41472

(4) PARCEL NUMBER: 089-00-00-021.00
Alex Goodpaster & Hillary Murray
437 Henry Clay Boulevard
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SHEET: C-1A

EXHIBIT N
COPY OF POSTED NOTICES

SITE NAME: INDEX
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. 2014-00074 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. 2014-00074 in your correspondence.

PIKE
LEGAL

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: 606-743-3565

The Licking Valley Courier
Attn: Greg Kinner
142 Prestonsburg Street
P.O. Box 187
West Liberty, KY 41472

RE: Legal Notice Advertisement
Site Name: Index

Dear Jamie:

Please publish the following legal notice advertisement in the next edition of *The Licking Valley Courier*:

NOTICE

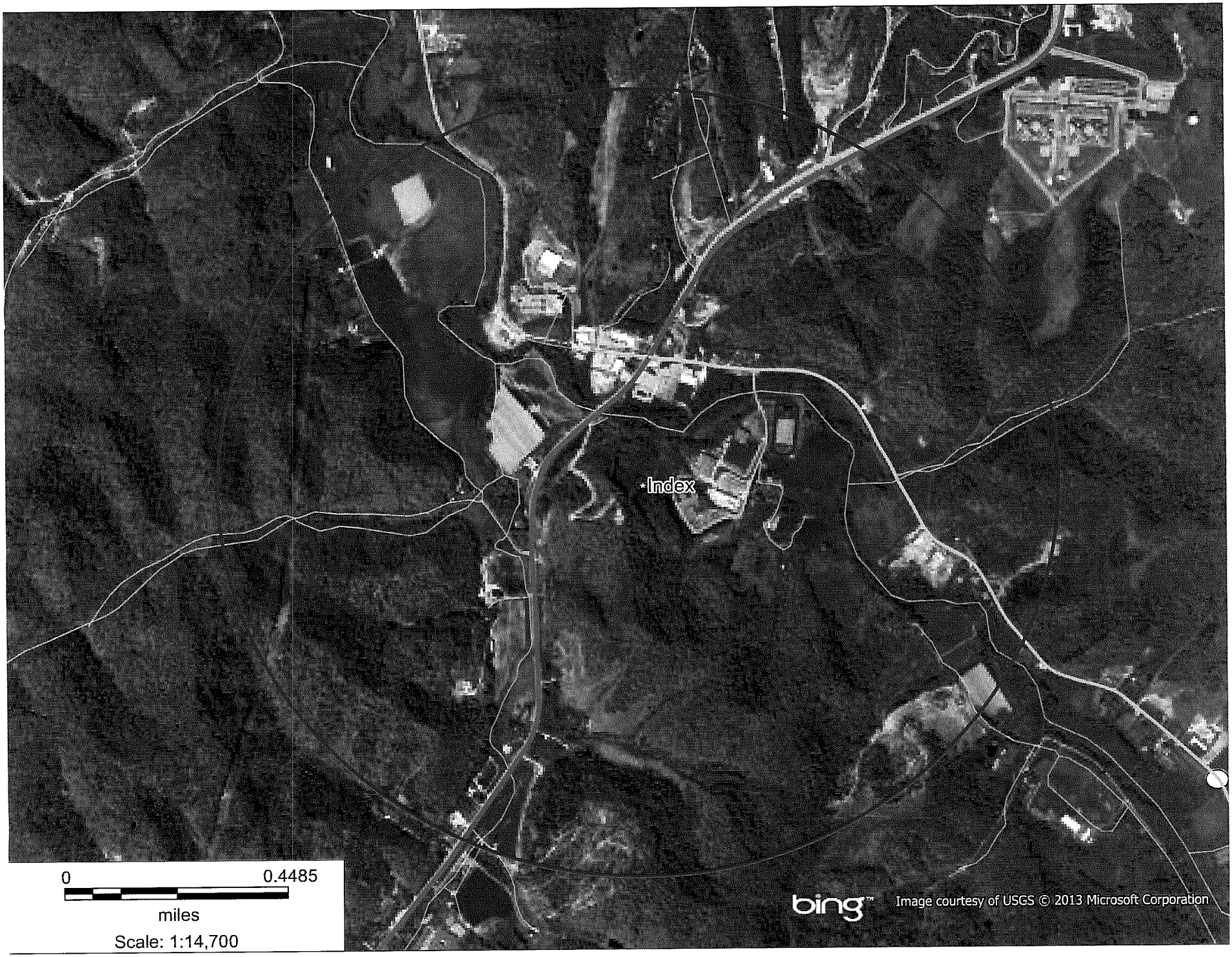
New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility has filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at 2140 Highway 460, West Liberty, Kentucky 41472 (37°53'33.996" North latitude, 83°17'14.131" 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 2014-00074 in any correspondence sent in connection with this matter.

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

Sincerely,

Aaron L. Roof
Pike Legal Group, PLLC

EXHIBIT O
COPY OF RADIO FREQUENCY DESIGN SEARCH AREA


Index
0
0.4485
miles
Scale: 1:14,700
bing
Image courtesy of USGS © 2013 Microsoft Corporation