ClarkQuinn
Clark, Quinn, Moses, Scott & Grahn, LLP

February 2, 2021

Kentucky Public Service Commission
Attn: Ms. Renee Smith
Division of Filing
211 Sower Boulevard
Frankfort, KY 40602

RE: Application to Construct Wireless Communications Facility
Docket No. Docket No. 2021- 00030
Site Name: Siler

Dear Ms. Smith:

On behalf of our clients, Cellco Partnership, d/b/a Verizon Wireless and Harmoni Towers LLC we are submitting an original and five copies of an Application for Certificate of Public Convenience and Necessity to Construct a Wireless Communication Facility.

Please contact me or Elizabeth Bentz Williams if you require any future documentation or have any questions concerning this application.

Sincerely,

Russell L. Brown
Attorney for Verizon Wireless

RLB/jdj
enclosures

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF	)	
CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS	)	
AND HARMONI TOWERS, LLC FOR ISSUANCE OF A	)	
CERTIFICATE OF PUBLIC	)	CASE NO. 2021-00030
CONVENIENCE AND NECESSITY TO CONSTRUCT	)	
A WIRELESS COMMUNICATIONS FACILITY	)	
IN THE COMMONWEALTH OF KENTUCKY	)	
IN THE COUNTY OF KNOX	)	

SITE NAME: SILER

* * * * * * *

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

Cellco Partnership, d/b/a Verizon Wireless and Harmoni Towers, LLC ("Co-Applicants"), by counsel, pursuant to (i) KRS §§278.020, 278.040, 278.650, 278.665, and other statutory authority, and the rules and regulations applicable thereto, and (ii) the Telecommunications Act of 1996, respectfully submit this Application requesting issuance of a Certificate of Public Convenience and Necessity ("CPCN") from the Kentucky Public Service Commission ("PSC") to construct, maintain, and operate a Wireless Communications Facility ("WCF") to serve the customers of the Applicant with wireless communications services.

In support of this Application, Co-Applicants respectfully provide and states the following information:

1. The complete name and address of the Co-Applicants:

   a. Cellco Partnership, d/b/a Verizon Wireless, having a local address of 2421 Holloway Road, Louisville, KY 40299.

b. Harmoni Towers, LLC (amended from Uniti Towers, LLC), having a local address of 306 West Main St., Suite 512, Frankfort, KY 40601.

2. Co-Applicant

a. Cellco Partnership, d/b/a Verizon Wireless is a Delaware general partnership and a copy of the Amended Certificate of Assumed Name is on file with the Secretary of State of Commonwealth of Kentucky is included as part of **Exhibit A.**

b. Harmoni Towers, LLC is a Delaware Limited Liability Company and a copy of the Certificate of Authority is on file with the Secretary of State of Commonwealth of Kentucky is included as part of **Exhibit A**.

3. Co-Applicants propose construction of an antenna tower for communications services, which is to be located in an area outside the jurisdiction of a planning commission, and 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.

4. The Co-Applicant, Cellco Partnership, d/b/a Verizon Wireless operates on frequencies licensed by the Federal Communications Commission ("FCC") pursuant to applicable FCC requirements. A copy of the Applicant's FCC licenses to provide wireless services are attached to this Application or described as part of **Exhibit B**, 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 Co-Applicants' services to an area currently not served or not adequately served by the Co-Applicants by increasing coverage or

capacity and thereby enhancing the public's access to innovative and competitive wireless communications services. A statement from Co-Applicant Cellco Partnership, d/b/a Verizon Wireless RF Design Engineer outlining said need is attached as **Exhibit P**. 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 Expresso Lane, Corbin, KY, 40701 (North Latitude: (36° 57' 17.11", West Longitude 84° 02' 12.53"), 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 Bobby L. Philpot and Linda K. Philpot pursuant to a Deed recorded at Deed Book 414, Page 151 in the office of the County Clerk. The proposed WCF will consist of a 255-foot tall tower, with an approximately 5-foot tall lightning arrestor attached at the top, for a total height of 260-feet. The WCF will also include concrete foundations and a shelter or cabinets to accommodate the placement of the Co-Applicants' radio electronics equipment and appurtenant equipment. The Co-Applicants' 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 C** and **Exhibit D**.

7. 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 C**.

8. 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 D**.

9. Co-Applicants have 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 Co-Applicants' antennas on an existing structure. When suitable towers or structures exist, Co-Applicants attempt to co-locate on existing structures such as communications towers or other structures capable of supporting Co-Applicants' facilities; however, no other suitable or available co-location site was found to be located in the vicinity of the site.

10. A copy of the Determination of No Hazard to Air Navigation issued by the Federal Aviation Administration ("FAA") is attached as **Exhibit E**.

12. A copy of the Kentucky Airport Zoning Commission ("KAZC") Approval to construct the tower is attached as **Exhibit F**.

13. A geotechnical engineering report was performed at the WCF site by Power of Design, Louisville, KY, dated September 18, 2020, and is attached as **Exhibit G**. The name and address of the geotechnical engineering firm and the professional engineer registered in Kentucky who prepared the report are included as part of **Exhibit G**.

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

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

16. Personnel directly responsible for the design and construction of the proposed WCF are well qualified and experienced. The tower and foundation drawings for the proposed tower submitted as part of **Exhibit D** 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 Billy Waldridge and the identity and qualifications of each person directly responsible for design and construction of the proposed tower are contained in **Exhibits C & D**.

18. As noted on the Survey attached as part of **Exhibit C**, the surveyor has determined that the tower site and access easement are not within any flood hazard area per Flood Hazard Boundary Map, Community Panel Number 21121C0083F, Dated March 16, 2015.

19. **Exhibit C** 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 C**.

20. Co-Applicants have notified every person who, according to the records of the County Property Valuation Administrator, owns property which is within 500 feet of the proposed tower or contiguous to the site property, by certified mail, return receipt requested, of the proposed construction. Each notified property owner has been provided with a map of the

location of the proposed construction, the PSC docket number for this application, the address of the PSC, and will be 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 to be sent by certified mail to each landowner are attached as **Exhibit J** and **Exhibit K**, respectively.

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

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

23. The general area where the proposed facility is to be located is undeveloped and removed a significant distance from any residential structures. The nearest residential structure is 337’ feet from the proposed tower site.

24. The process that was used by the Co-Applicant Cellco Partnership, d/b/a Verizon Wireless’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. Co-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 Co-Applicant when searching for sites for its antennas that would provide the coverage deemed necessary by the Co-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. The tower must be located at the proposed location and proposed height to provide necessary service to wireless communications users in the subject area, as set out and documented in the RF Design Engineers' Statement of Need and Propagation Maps attached as **Exhibit P**. The proposed tower will expand and improve voice and data service for Verizon Wireless customers.

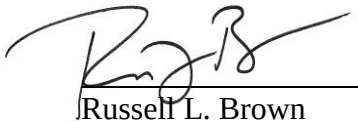
26. All Exhibits to this Application are hereby incorporated by reference as if fully set out as part of the Application.

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

Russell L. Brown
Clark, Quinn, Moses, Scott & Grahn, LLP
320 North Meridian Street, Suite 1100
Indianapolis, IN 46204
Phone: (317) 637-1321
FAX: (317) 687-2344
Email: rbrown@clarkquinnlaw.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,



Russell L. Brown
Clark, Quinn, Moses, Scott & Grahn, LLP
320 North Meridian Street, Suite 1100
Indianapolis, IN 46204
Phone: (317) 637-1321 / FAX: (317) 687-2344
Email: rbrown@clarkquinnlaw.com
Attorney for Cellco Partnership d/b/a Verizon Wireless

LIST OF EXHIBITS

A Applicant Entity

B FCC License Documentation

C Site Development Plan:

500' Vicinity Map Legal Descriptions
Flood Plain Certification Site Plan
Vertical Tower Profile

D Tower and Foundation Design

E FAA

F KAZC Approval

G Geotechnical Report

H Directions to WCF Site

I Copy of Real Estate Agreement

J Notification Listing

K Copy of Property Owner Notification

L Copy of County Judge/Executive notice

M Copy of Posted Notices

N Copy of Newspaper Legal Notice Advertisement

O Copy of Radio Frequency Design Search Area

P Copy of RF Design Engineer State of Need and Propagation Maps

EXHIBIT A

A

COMMONWEALTH OF KENTUCKY
TREY GRAYSON
SECRETARY OF STATE

Secretary of State
Received and Filed
08/21/2008 12:06:09 PM
Fee Receipt: $20.00

CERTIFICATE OF ASSUMED NAME

This certifies that the assumed name of

Verizon Wireless

(Name under which the business will be conducted)

has been adopted by See Addendum

(Full name of entity)

which is the "real name" of (YOU MUST CHECK ONE)

- [ ] a Domestic General Partnership
- [ ] a Domestic Registered Limited Liability Partnership
- [ ] a Domestic Limited Partnership
- [ ] a Domestic Business Trust
- [ ] a Domestic Corporation
- [ ] a Domestic Limited Liability Company
- [ ] a Joint Venture
- [x] a Foreign General Partnership
- [ ] a Foreign Registered Limited Liability Partnership
- [ ] a Foreign Limited Partnership
- [ ] a Foreign Business Trust
- [ ] a Foreign Corporation
- [ ] a Foreign Limited Liability Company

organized and existing in the state or country of Delaware, and whose address is

One Verizon Way (Street address, P.O.) Basking Ridge (City) NJ (State) 07920 (Zip Code)

The certificate of assumed name is executed by

NYNEX PCS Inc.

(Signature)

Jane A. Schapker-Asslstant Secretary

(Full name and title)

June 15, 2006

(Date)

(Signature)

(Full name and title)

(Date)

SOS-228 (7/98)

(See attached sheet for instructions)

0641227.07 dcornish
AMD

Alison Lundergan Grimes
Kentucky Secretary of State
Received and Filed:
1/22/2013 1:43 PM
Fee Receipt: $20.00

COMMONWEALTH OF KENTUCKY
ELAINE N. WALKER, SECRETARY OF STATE

Division of Business Filings Business Filings PO Box 718 Frankfort, KY 40602 (502) 564-3490 www.sos.ky.gov	Amended Certificate of Assumed Name (Domestic or Foreign Business Entity)	AAN

Pursuant to the provisions of KRS 365, the undersigned applies to amend the certificate of assumed name and, for that purpose, submits the following statement:

1. The assumed name is Verizon Wireless
(The name must be identical to the name on record with the Secretary of State.)

2. The certificate of assumed name was filed with the Secretary of State on: 6/21/2006

3 The current principal office address (if any) is:

One Verizon Way	Basking Ridge	NJ	07920
Street Address or Post Office Box Numbers	City	State	Zip

4. The principal office address is hereby changed to:

Street Address or Post Office Box Numbers	City	State	Zip

5. This application will be effective upon filing, unless a delayed effective date and/or time is provided. The effective date or the delayed effective date cannot be prior to the date the application is filed. The date and/or time is _____.
(Delayed effective date and/or time)

6. The changes in the identity of the partners are as follows: See Addendum for current partners

I declare under penalty of perjury under the laws of Kentucky that the forgoing is true and correct.
GTE Wireless Incorporated

Jane A. Schapker	Jana A. Schapker	Assistant Secretary	1/21/2012
Signature of Applicant	Printed Name	Title	Date

(04/11)

Addendum

The full name of the Partnership is Cellco Partnership, a Delaware general partnership composed of the following partners:

General Partners of Cellco Partnership	*Address*
Bell Atlantic Mobile Systems LLC	One Verizon Way Basking Ridge, NJ 07920
GTE Wireless Incorporated	One Verizon Way Basking Ridge, NJ 07920
PCS Nucleus, L.P.	Denver Place South Tower 999-18th Street, Suite 1750 Denver, CO 80202
JV PartnerCo, LLC	Denver Place South Tower 999-18th Street, Suite 1750 Denver, CO 80202

FRANKLIN COUNTY
A120 PG445

ADI 2

0972004.06 mstratton ADD

Alison Lundergan Grimes
Kentucky Secretary of State
Received and Filed:
1/3/2017 3:10 PM
Fee Receipt: $90.00

COMMONWEALTH OF KENTUCKY
ALISON LUNDERGAN GRIMES, SECRETARY OF STATE

Division of Business Filings Business Filings PO Box 718 Frankfort, KY 40602 (502) 564-3490 www.sos.ky.gov	Certificate of Authority (Foreign Business Entity)	FBE

Pursuant to the provisions of KRS 14A and KRS 271B, 273, 274,275, 362 and 386 the undersigned hereby applies for authority to transact business in Kentucky on behalf of the entity named below and, for that purpose, submits the following statements:

1. The entity is a : ☐ profit corporation (KRS 271B). ☐ nonprofit corporation (KRS 273). ☐ professional service corporation (KRS 274). ☐ business trust (KRS 386). ☑ limited liability company (KRS 275). ☐ professional limited liability company (KRS 275). ☐ limited partnership (KRS 362).

2. The name of the entity is Uniti Towers LLC.
(The name must be identical to the name on record with the Secretary of State.)

3. The name of the entity to be used in Kentucky is (if applicable): _____.
(Only provide if "real name" is unavailable for use; otherwise, leave blank.)

4. The state or country under whose law the entity is organized is Delaware.

5. The date of organization is 12/2/2015 and the period of duration is _____.
(If left blank, the period of duration is considered perpetual.)

6. The mailing address of the entity's principal office is

10802 Executive Center Drive, Benton Building, Suite 300	Little Rock	AR	72211
Street Address	City	State	Zip Code

7. The street address of the entity's registered office in Kentucky is

306 West Main Street - Suite 512	Frankfort	KY	40601
Street Address (No P.O. Box Numbers)	City	State	Zip Code

and the name of the registered agent at that office is C T Corporation System.

8. The names and business addresses of the entity's representatives (secretary, officers and directors, managers, trustees or general partners):

Name	Street or P.O. Box	City	State	Zip Code
Daniel L. Heard	10802 Executive Center Drive, Benton Building, Suite 300	Little Rock	AR	72211
Kenneth Gunderman	10802 Executive Center Drive, Benton Building, Suite 300	Little Rock	AR	72211
Mark A. Wallace	10802 Executive Center Drive, Benton Building, Suite 300	Little Rock	AR	72211

9. If a professional service corporation, all the individual shareholders, not less than one half (1/2) of the directors, and all of the officers other than the secretary and treasurer are licensed in one or more states or territories of the United States or District of Columbia to render a professional service described in the statement of purposes of the corporation.

10. I certify that, as of the date of filing this application, the above-named entity validly exists under the laws of the jurisdiction of its formation.

11. If a limited partnership, it elects to be a limited liability limited partnership. Check the box if applicable: ☐

12. If a limited liability company, check box if manager-managed: ☐

13. This application will be effective upon filing, unless a delayed effective date and/or time is provided.
The effective date or the delayed effective date cannot be prior to the date the application is filed. The date and/or time is _____.
(Delayed effective date and/or time)

Signature of Authorized Representative	Keith Harvey, VP - Deputy General Counsel Printed Name & Title	12/30/2016 Date

I, C T Corporation System, consent to serve as the registered agent on behalf of the business entity.
Type/Print Name of Registered Agent

Signature of Registered Agent	Tristan Emrich Printed Name	Assistant Secretary Title	12/30/2016 Date

(09/15)

Delaware

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY "UNITI TOWERS LLC" IS DULY FORMED UNDER THE LAWS OF THE STATE OF DELAWARE AND IS IN GOOD STANDING AND HAS A LEGAL EXISTENCE SO FAR AS THE RECORDS OF THIS OFFICE SHOW, AS OF THE THIRTIETH DAY OF DECEMBER, A.D. 2016.

AND I DO HEREBY FURTHER CERTIFY THAT THE ANNUAL TAXES HAVE BEEN PAID TO DATE.

Jeffrey W. Bullock, Secretary of State

5896640 8300

SR# 20167345793

You may verify this certificate online at corp.delaware.gov/authver.shtml

Authentication: 203613650

Date: 12-30-16

DOCUMENT NO: 454352
RECORDED:January 04,2017 01:08:00 PM
TOTAL FEES: $11.00
COUNTY CLERK: JEFF HANCOCK
DEPUTY CLERK: STARLA HAEBERLIN
COUNTY: FRANKLIN
BOOK: A120 PAGES: 445 - 446

Delaware

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "UNITI TOWERS LLC", CHANGING ITS NAME FROM "UNITI TOWERS LLC" TO "HARMONI TOWERS LLC", FILED IN THIS OFFICE ON THE EIGHTEENTH DAY OF SEPTEMBER, A.D. 2020, AT 5:13 O`CLOCK P.M.

5896640 8100
SR# 20207362106

Authentication: 203694142
Date: 09-21-20

You may verify this certificate online at corp.delaware.gov/authver.shtml

State of Delaware
Secretary of State
Division of Corporations
Delivered 05:13 PM 09/18/2020
FILED 05:13 PM 09/18/2020
SR 20207362106 - File Number 5896640

CERTIFICATE OF AMENDMENT
TO
CERTIFICATE OF FORMATION
OF
UNITI TOWERS LLC

The undersigned, being duly authorized to execute and file this Certificate of Amendment to Certificate of Formation for the purpose of amending the Certificate of Formation pursuant to the Section 18-202 of the Limited Liability Company Act of the State of Delaware, does hereby certify as follows:

FIRST

The name of the limited liability company is Uniti Towers LLC (the "Company").

SECOND

Paragraph 1 of the Certificate of Formation of the Company is hereby deleted in its entirety and amended to read in full as follows:

FIRST: The name of the limited liability company is Harmoni Towers LLC (the "Company").

IN WITNESS WHEREOF, the undersigned has duly executed this Certificate of Amendment to Certificate of Formation as of the 18th day of September, 2020.

HARMONI TOWERS HOLDINGS LLC
Its: Sole Member

By: */s/ Chester Dawes*
Name: Chester Dawes
Its: Chief Financial Officer

EXHIBIT B

UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION
ANTENNA STRUCTURE REGISTRATION

OWNER: Cellco Partnership

FCC Registration Number (FRN): 0003290673

ATTN: Network Regulatory **Cellco Partnership** **5055 North Point Pkwy** **NP2NE Network Engineering** **Alpharetta, GA 30022**	**Antenna Structure Registration Number** **1316664** **Issue Date** **10/20/2020**
Location of Antenna Structure **Poplar Grove** **Corbin, KY 40701** **County: KNOX**	**Ground Elevation (AMSL)** **377.9 meters** **Overall Height Above Ground (AGL)** **79.2 meters**
Latitude **36- 57- 17.1 N** **Longitude** **084- 02- 12.5 W** **NAD83**	**Overall Height Above Mean Sea Level (AMSL)** **457.1 meters**
Center of Array Coordinates **N/A**	**Type of Structure** **LTOWER** **Lattice Tower**
Painting and Lighting Requirements: **FAA Chapters 4, 8, 12** **Paint and Light in Accordance with FAA Circular Number 70/7460-1L** **Conditions:**	

This registration is effective upon completion of the described antenna structure and notification to the Commission. **YOU MUST NOTIFY THE COMMISSION WITHIN 24 HOURS OF COMPLETION OF CONSTRUCTION OR CANCELLATION OF YOUR PROJECT, please file FCC Form 854.** To file electronically, connect to the antenna structure registration system by pointing your web browser to http://wireless.fcc.gov/antenna. Electronic filing is recommended. You may also file manually by submitting a paper copy of FCC Form 854. Use purpose code "NT" for notification of completion of construction; use purpose code "CA" to cancel your registration.

The Antenna Structure Registration is not an authorization to construct radio facilities or transmit radio signals. It is necessary that all radio equipment on this structure be covered by a valid FCC license or construction permit.

You must immediately provide a copy of this Registration to all tenant licensees and permittees sited on the structure described on this Registration (although not required, you may want to use Certified Mail to obtain proof of receipt), and *display* your Registration Number at the site. See reverse for important information about the Commission's Antenna Structure Registration rules.

You must comply with all applicable FCC obstruction marking and lighting requirements, as set forth in Part 17 of the Commission's Rules (47 C.F.R. Part 17). These rules include, but are not limited to:

Posting the Registration Number: The Antenna Structure Registration Number must be displayed in a conspicuous place so that it is readily visible near the base of the antenna structure. Materials used to display the Registration Number must be weather-resistant and of sufficient size to be easily seen at the base of the antenna structure. Exceptions exist for certain historic structures. See 47 C.F.R. 17.4(g)-(h).

Inspecting lights and equipment: The obstruction lighting must be observed at least every 24 hours in order to detect any outages or malfunctions. Lighting equipment, indicators, and associated devices must be inspected at least once every three months.

Reporting outages and malfunctions: When any top steady-burning light or a flashing light (in any position) burns out or malfunctions, the outage must be reported to the nearest FAA Flight Service Station, unless corrected within 30 minutes. The FAA must again be notified when the light is restored. The owner must also maintain a log of these outages and malfunctions.

Maintaining assigned painting: The antenna structure must be repainted as often as necessary to maintain good visibility.

Complying with environmental rules: If you certified that grant of this registration would not have a significant environmental impact, you must nevertheless maintain all pertinent records and be ready to provide documentation supporting this certification and compliance with the rules, in the event that such information is requested by the Commission pursuant to 47 C.F.R. 1.1307(d).

Updating information: The owner must notify the FCC of proposed modifications to this structure; of any change in ownership; or, within 30 days of dismantlement of the structure.

You can find additional information at *[insert link]* or by calling (877) 480-3201 (TTY 717-338-2824).

EXHIBIT C

LV SILER

KYLEX2072

EXPRESSO LANE
CORBIN, KY 40701
KNOX COUNTY

TENANT: CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS
"LV SILER"

HARMONI TOWERS
10801 EXECUTIVE CENTER DR.
SHANNON BUILDING, SUITE 100
LITTLE ROCK, AR 72211

NEW 255' SELF SUPPORT w/5' LIGHTNING ARRESTOR
TOTAL TOWER HEIGHT 260'

FROM KNOX COUNTY CIRCUIT COURT: 401 COURT SQUARE #202, BARBOURVILLE, KY 40906: HEAD NORTHWEST ON COURT SQUARE TOWARD N MAIN ST (200 FEET). TURN RIGHT ONTO N MAIN ST (0.3 MILES). TURN RIGHT ONTO KY-1487/MANCHESTER ST (1.2 MILES). TURN LEFT ONTO CUMBERLAND GAP PKWY (9.5 MILES). KEEP RIGHT TO STAY ON CUMBERLAND GAP PKWY (1.9 MILES). TURN RIGHT ONTO N KENTUCKY 830 N (0.5 MILES). TURN LEFT ONTO ESPRESSO LN (92 FEET). SITE WILL BE LOCATED AT END OF ROAD.

FROM LOUISVILLE MTSO: 2421 HOLLOWAY ROAD LOUISVILLE, KY 40299: HEAD SOUTH ON HOLLOWAY RD TOWARD PLANTSIDE DR (0.1 MILES). TURN LEFT AT THE 1ST CROSS STREET ONTO PLANTSIDE DR (0.9 MILES). USE THE LEFT 2 LANES TO TURN LEFT ONTO BLANKENBAKER PKWY (0.7 MILES). USE THE RIGHT LANE TO TAKE THE RAMP ONTO I-64 E (0.3 MILES). MERGE ONTO I-64 E (63.6 MILES). KEEP RIGHT AT THE FORK TO CONTINUE ON I-75 S (82.2 MILES). TAKE EXIT 29 FOR US-25E TOWARD CORBIN/BARBOURVILLE/US-25 (0.3 MILES). USE THE LEFT 2 LANES TO TURN LEFT ONTO CUMBERLAND GAP PKWY/US-25 E S (4.7 MILES). TURN LEFT ONTO N KENTUCKY 830 N (0.6 MILES). TURN LEFT ONTO ESPRESSO LN. SITE WILL BE LOCATED AT END OF ROAD.

PROJECT SUMMARY

HARMONI TOWERS LLC SITE
LV SILER
SITE #: KYLEX2072

VERIZON WIRELESS SITE
LV SILER
PROJECT#: 20191964286
LOCATION CODE: 493689

SITE ADDRESS
EXPRESSO LANE
CORBIN, KY 40701
KNOX COUNTY
E911 ADDRESS: TBD

TOWER OWNER
HARMONI TOWERS LLC
10801 EXECUTIVE CENTER DR.
SHANNON BUILDING, SUITE 100
LITTLE ROCK, AR 72211
CONTACT: TIM DUDLEY
PHONE: (817) 812-9443
E-MAIL: DUDLEY@HARMONITOWERS.COM

PROPERTY OWNER
BOBBY L. & LINDA K. PHILPOT
899 STANDARD AVE
CORBIN, KY 40701
CONTACT: BOBBY PHILPOT
PHONE: (606) 521-9430
E-MAIL: BOBPHILPOT14@GMAIL.COM

POLICE
KNOX COUNTY SHERIFF
401 COURT SQUARE #105
BARBOURVILLE, KY 40906
PHONE: (606) 546-3181

FIRE
WEST KNOX VOLUNTEER FIRE DEPARTMENT
90 GLOUCESTER AVE
CORBIN, KY 40701
PHONE: (606) 528-1700

GENERAL INFORMATION
LATITUDE : 36° 57' 17.11" N
LONGITUDE : 84° 02' 12.53" W
1983 (NAD83)
ELEVATION : 1240'± AMSL
1988 (NAVD88)

HARMONI TOWERS LLC LEASE AREA
10,000 SF

VERIZON WIRELESS LEASE AREA
12'-0" x 25'-0"
(300 SF)

PROJECT TOTAL DISTURBED AREA
COMPOUND: (10,000 SF) = (0.23 ACRE)
ACCESS DRIVE: (7,263 SF) = (0.16 ACRE)
UTILITY: (366 SF) = (0.01 ACRE)
GROSS AREA: (17,629 SF) = (0.40 ACRE)

PROJECT DESCRIPTION

NOTE: ALL ITEMS WITHIN THESE CONSTRUCTION DOCUMENTS ARE BY TOWER OWNER'S GENERAL CONTRACTOR AND HIS SUB-CONTRACTORS UNLESS NOTED AS (VZW GC) WHICH SHALL INCLUDE VERIZON WIRELESS GENERAL CONTRACTOR AND HIS SUB-CONTRACTORS. GENERALLY DESCRIBED BELOW:

HARMONI TOWERS LLC SCOPE:
- REMOVE ±232' OF EXISTING ELECTRIC FENCE
- INSTALL ±96' ELECTRIC FENCE (TO MATCH EXISTING)
- REMOVE EXISTING FOUNDATION
- REMOVE EXISTING CMU BUILDING
- INSTALL A NEW 255' SELF SUPPORT w/ 5' LIGHTNING ROD (TOTAL 260')
- INSTALL A NEW TOWER FOUNDATION SYSTEM
- INSTALL A NEW 70'x60' FENCED GRAVEL COMPOUND
- INSTALL A NEW SITE H-FRAME
- INSTALL NEW TOWER LIGHTING AND TOWER LIGHTING CONTROLLER
- INSTALL A NEW ELECTRICAL SERVICE RUN TO SITE H-FRAME
- INSTALL A NEW GRAVEL ACCESS DRIVE
- NO WATER OR SEWAGE SERVICES RUN TO SITE
- INSTALL NEW TOWER & SITE GROUNDING SYSTEM
- INSTALL NEW VZW SUBSURFACE GROUNDING SYSTEM
- INSTALL A NEW 11'-6"x19'-6" CONCRETE EQUIPMENT PAD
- INSTALL ELECTRICAL SERVICE CONDUIT WITH PULL TAPES FROM ILC ENCLOSURE STUB-UP WITHIN VZW EQUIPMENT PAD TO UTILITY H-FRAME
- INSTALL NEW CONDUITS WITH PULL TAPES FROM VZW ILC ENCLOSURE STUB-UPS TO EQUIPMENT ENCLOSURE STUB-UPS WITHIN VZW EQUIPMENT PAD
- INSTALL NEW CONDUITS WITH PULL TAPES FROM RF CABINET TO OVP H-FRAME LIT FIBER LOCATION
- INSTALL (1) NEW "VERIZON WIRELESS ONLY" FIBER OPTIC CONDUIT WITH PULL TAPE AND TRACER WIRE FROM VZW EQUIPMENT TO NEW "VERIZON WIRELESS ONLY" 24" x 36" HAND HOLE OUTSIDE COMPOUND
- INSTALL (1) NEW "VERIZON WIRELESS ONLY" FIBER OPTIC CONDUIT WITH PULL TAPE AND TRACER WIRE FROM NEW "VERIZON WIRELESS ONLY" 24" x 36" HAND HOLE OUTSIDE COMPOUND TO NEW "VERIZON WIRELESS ONLY" 36" x 60" HAND HOLE AT ROW
- INSTALL (1) NEW "VERIZON WIRELESS ONLY" FIBER OPTIC CONDUIT WITH PULL TAPE FROM NEW "VERIZON WIRELESS ONLY" 24" x 36" HAND HOLE OUTSIDE COMPOUND AND STUB UP AT FUTURE FIBER PEDESTAL LOCATION
- PERMANENT ELECTRIC POWER MUST BE AVAILABLE FOR VERIZON WIRELESS AT THE METER BASE PRIOR TO THE SITE BEING RELEASED AS TENANT READY.

VERIZON WIRELESS SCOPE (VZW GC):
- INSTALL A NEW 11'-6"x14'-0" PREFABRICATED CANOPY ON EXISTING CONCRETE PAD FOUNDATION
- INSTALL VZW ICE BRIDGE AND FOUNDATIONS
- INSTALL VZW ANTENNA MOUNTING SUPPORT STRUCTURE ON TOWER
- INSTALL VZW ANTENNAS, LINES, COAX, GPS ANTENNA AND RADIO EQUIPMENT
- INSTALL EXISTING SUBSURFACE GROUND LEADS TO VZW EQUIPMENT & FACILITIES
- INSTALL VZW ELECTRIC SERVICE CONDUCTORS FROM UTILITY H-FRAME TO VZW ILC ENCLOSURE
- INSTALL CIRCUITS FROM VZW ILC TO VZW EQUIPMENT ENCLOSURES
- INSTALL NEW OUTDOOR OVP AND CABLING H-FRAME SUPPORT
- INSTALL (2) 1-1/4" & (1) 1" INNERDUCTS WITH PULL TAPES AND TRACER WIRE WITHIN OWNER INSTALLED "VERIZON WIRELESS ONLY" FIBER OPTIC CONDUITS

APPLICABLE CODES

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

BUILDING CODE	2018 KENTUCKY BUILDING CODE
STRUCTURAL CODE	TIA/EIA-222 - REVISION G (INCLUDES ADDENDUM #2)
MECHANICAL CODE	2012 INTERNATIONAL MECHANICAL CODE (IMC 2012)
PLUMBING CODE	KENTUCKY STATE PLUMBING CODE (815 KAR CHAP. 20)
ELECTRICAL CODE	2014 NATIONAL ELECTRICAL CODE (NEC) - NFPA 70
FIRE/LIFE SAFETY CODE	2012 INTERNATIONAL FIRE CODE (2012 IFC)
ENERGY CODE	2012 INTERNATIONAL ENERGY CODE (COMMERCIAL)
GAS CODE	2009 NATIONAL FUEL GAS CODE (NFPA 54)

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

CONSULTANT TEAM

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

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

ELECTRICAL
CUMBERLAND VALLEY ELECTRIC, INC.
ADDRESS: 6219 OLD HWY 25
GRAY, KY 40734
CONTACT: TBD
PHONE: (800) 513-2677
EMAIL: CONTACT@CUMBERLANDVALLEY.COOP

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

SHEET NUMBER	DESCRIPTION
T-1	PROJECT INFORMATION, SITE MAPS, SHEET INDEX
B-1 TO B-1.2	SITE SURVEY
B-2	500' RADIUS AND ABUTTERS MAP
R-1	REVISION LOG
TOWER ELEVATION	
TE-1	TOWER ELEVATION
CIVIL	
C-1	OVERALL SITE PLAN w/AERIAL OVERLAY
C-1A	OVERALL SITE PLAN
C-3	DETAILED SITE PLAN
C-4	DIMENSIONED SITE PLAN

VICINITY MAP

LOCATION MAP

AERIAL

POD
POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

HARMONI TOWERS
10801 EXECUTIVE CENTER DR.
SHANNON BUILDING, SUITE 100
LITTLE ROCK, AR 72211

01/20/2021

STATE OF KENTUCKY
MARK E. PATTERSON
16,300
LICENSED
PROFESSIONAL ENGINEER

EN PERMIT: 3594

ZONING DRAWINGS

REV.	DATE	DESCRIPTION
A	1.8.21	ISSUED FOR REVIEW
0	1.20.21	ISSUED AS FINAL

SITE INFORMATION:
LV SILER
EXPRESSO LANE
CORBIN, KY 40701
KNOX COUNTY

HARMONI TOWERS LLC SITE NUMBER:
KYLEX2072

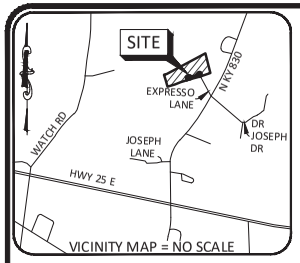
VERIZON WIRELESS SITE NAME:
LV SILER

POD NUMBER: 19-40556

DRAWN BY: POD
CHECKED BY: MEP
DATE: 01.05.21

SHEET TITLE:
PROJECT INFORMATION, SITE MAPS, SHEET INDEX

SHEET NUMBER:
T-1



GENERAL NOTES

NO SEARCH OF PUBLIC RECORDS HAS BEEN COMPLETED BY POD GROUP TO DETERMINE ANY DEFECTS AND/OR AMBIGUITIES IN THE TITLE OF THE SUBJECT PROPERTY.

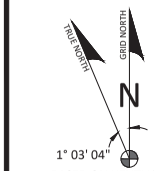
THIS SURVEY IS FOR THE PROPOSED LEASE AREA, THE PROPOSED 20' / VARIABLE WIDTH ACCESS & UTILITY EASEMENT AND THE PROPOSED 15' UTILITY EASEMENT ONLY, AND ONLY A PARTIAL BOUNDARY SURVEY OF THE PARENT TRACT HAS BEEN PERFORMED.

A PORTION OF THIS SURVEY WAS CONDUCTED BY METHOD OF RANDOM TRAVERSE WITH SIDE SHOTS. UNADJUSTED CLOSURE EQUALS 0.05', FOR A PRECISION OF 1:35,840 AND HAS NOT BEEN ADJUSTED.

THIS PROPERTY IS SUBJECT TO ANY RECORDED EASEMENTS AND/OR RIGHTS OF WAY SHOWN HEREON OR NOT.

THIS PLAT IS NOT INTENDED FOR LAND TRANSFER.

THE PARENT PARCEL, THE PROPOSED LEASE AREA, THE PROPOSED 20' / VARIABLE WIDTH ACCESS & UTILITY EASEMENT AND THE PROPOSED 15' UTILITY EASEMENT SHOWN HEREON ARE NOT LOCATED IN A 100-YEAR FLOOD PLAIN (ZONE X) PER FLOOD HAZARD BOUNDARY MAP, COMMUNITY-PANEL NUMBER 21121C0083F, DATED MARCH 16, 2015.



BASED ON KENTUCKY STATE PLANE SINGLE ZONE AND DETERMINED BY GPS OBSERVATIONS COMPLETED ON MAY 22, 2019.

PARCEL ID: 011-30-00-011.000
LEE, LULA, HENRY, FARRIS, SUDIE & GEORGE READ AND EDGAR CHILDERS AND CLARENCE DESARN
DEED BOOK 72, PAGE 579

PETROLEUM EXPLORATION, INC
DEED BOOK 135, PAGE 265

PARCEL ID: 011-30-00-002.01
ERIC MICHAEL & VICTORIA L. FREDERICK
DEED BOOK 390 , PAGE 320

PARCEL ID: 011-30-00-005.00
STARLA PARTIN
BOOK CD7, PAGE 283

PARCEL ID: 011-30-00-010.00
BOBBY L. & LINDA K. PHILPOT
DEED BOOK 414, PAGE 151

FAA COORDINATE POINT
NAD 83
LATITUDE: 36° 57' 17.11"
LONGITUDE: -84° 02' 12.53"
NAVD 88
ELEVATION: 1240'± AMSL
NORTHING: 3,511,704.686
EASTING: 5,421,840.901

TEMPORARY BENCHMARK
NORTHING: 3,511,650.992
EASTING: 5,421,863.209
ELEVATION: 1,237.05'
LOCATION:FOUND 1/2" REBAR W/YELLOW CAP "RMF PLS 3051" N18°57'E 5.6'± FROM THE SOUTHEAST CORNER OF THE PROPOSED LEASE AREA.

Kentucky 811
Know what's below. Call before you dig.
Call Monday thru Friday - 7 a.m. to 6 p.m.
1-800-752-6007
PER KENTUCKY STATE LAW, IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

EX. DRIP LINE (TYP.)
EX. BARN
P.O.B. UTILITY EASEMENT
EX. BLOCK BUILDING
EX. FOUNDATION
EOG
EOG
PROPOSED 15' UTILITY EASEMENT (366.271 S.F.) DETAIL SHEET B-1.1
EX. UTILITY POLE W/ TRANSFORMER
P.O.B. ACCESS & UTILITY EASEMENT
PROPOSED 20' / VARIABLE WIDTH ACCESS & UTILITY EASEMENT (7,263.067 S.F.) DETAIL SHEET B-1.1
EX. GATE
OHE&T
OHE&T
PROPOSED LEASE AREA (10,000.000 S.F.) DETAIL SHEET B-1.1
EX. DIRT ROAD
END OF EXPRESSO LANE PUBLIC RIGHT OF WAY PER KNOX COUNTY JUDGE EXECUTIVE
EX. UTILITY POLE W/ TRANSFORMER
P.O.B. LEASE AREA
P.O.R. TIE **N81°48'45"E 192.20'**
EXPRESSO LANE
(FORMERLY KNOWN AS RIDGE RD)
PUBLIC RIGHT OF WAY PER KRS 178.025
P.O.C. FOUND 1/2" REBAR W/YELLOW CAP "RMF PLS 3051"
PARCEL ID: 011-30-00-006.00
JONATHAN D. & SHIRLEY CURRY
DEED BOOK 348, PAGE 508
PARCEL ID: 011-30-00-007.00
JONATHAN D. & SHIRLEY CURRY
DEED BOOK 339, PAGE 108
P.O.R. FOUND 1/2" REBAR W/YELLOW CAP "RMF PLS 3051"
P.O.R. TIE **N80°15'11"E 236.35'**
P.O.R. TIE **N74°47'36"E 32.16'**
FOUND IRON T-POST
PARCEL ID: 011-30-00-008.00
CLARA O ELLISON
EX. GRAVEL DRIVE
ROW
EOG
ROW
EX. BARN
PARCEL ID: 011-30-00-015.00
EDWARD GREER & PATRICIA ELIZABETH LOCKHART
DEED BOOK 150, PAGE 134

GLOBAL POSITIONING SYSTEMS NOTE
1. RANDOM CONTROL POINTS AND A PORTION OF THE TOPOGRAPHY WAS LOCATED USING GPS.
2. THE TYPE OF GPS UTILIZED WAS NETWORK ADJUSTED REAL TIME KINEMATIC (KDOT VRS NETWORK), NAD 83 KENTUCKY SINGLE ZONE WITH THE ORTHOMETRIC HEIGHT COMPUTED USING GEOID12A. RELATIVE POSITIONAL ACCURACY VARIED FROM 0.03' TO 0.08' HORIZONTALLY.
3. SPECTRA PRECISION EPOCH 50 DUAL FREQUENCY RECEIVERS WERE USED TO PERFORM THE SURVEY.

0' 100' 200'
1 INCH = 100 FEET

LEGEND
P.O.C.	POINT OF COMMENCEMENT
P.O.R.	POINT OF REFERENCE
P.O.B.	POINT OF BEGINNING
ROW	RIGHT OF WAY
EOG	EDGE OF GRAVEL
	UTILITY POLE
	GUY ANCHOR
GM	GAS LINE MARKER
G G G G G	EX. GAS LINE
OHE&T OHE&T	EX. OVERHEAD ELECTRIC & TELEPHONE
	SET 1/2" REBAR 18" LONG CAPPED "PATTERSON PLS 3136"
	FOUND MONUMENT AS NOTED
	PROPERTY LINE
	ADJACENT PROPERTY LINE
x x x x	EX. FENCE

STATE OF KENTUCKY
MARK E. PATTERSON
3136
LICENSED PROFESSIONAL LAND SURVEYOR

LAND SURVEYOR'S CERTIFICATE
I, MARK E. PATTERSON, HEREBY CERTIFY THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR LICENSED IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF KENTUCKY. I FURTHER CERTIFY THAT THIS PLAT AND THE SURVEY ON THE GROUND WERE PERFORMED BY PERSONS UNDER MY DIRECT SUPERVISION, AND THAT THE DIRECTIONAL AND LINEAR MEASUREMENTS BEING WITNESSED BY MONUMENTS SHOWN HEREON ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. THE "RURAL" SURVEY, AND THE PLAT ON WHICH IT IS BASED, MEETS ALL SPECIFICATIONS AS STATED IN KAR 201 18:150.

Mark Patterson 01/19/2021
MARK PATTERSON, PLS #3136 DATE

PREPARED BY:
POD
POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

PREPARED FOR:
CELLCO PARTNERSHIP D/B/A verizon

SITE SURVEY

REV.	DATE	DESCRIPTION
A	2.11.20	PRELIM ISSUE WITH TITLE
0	1.19.21	ISSUED AS FINAL

SITE INFORMATION:
LV SILER
EXPRESSO LANE
CORBIN, KY 40701
KNOX COUNTY

TAX PARCEL NUMBER:
011-30-00-010.00

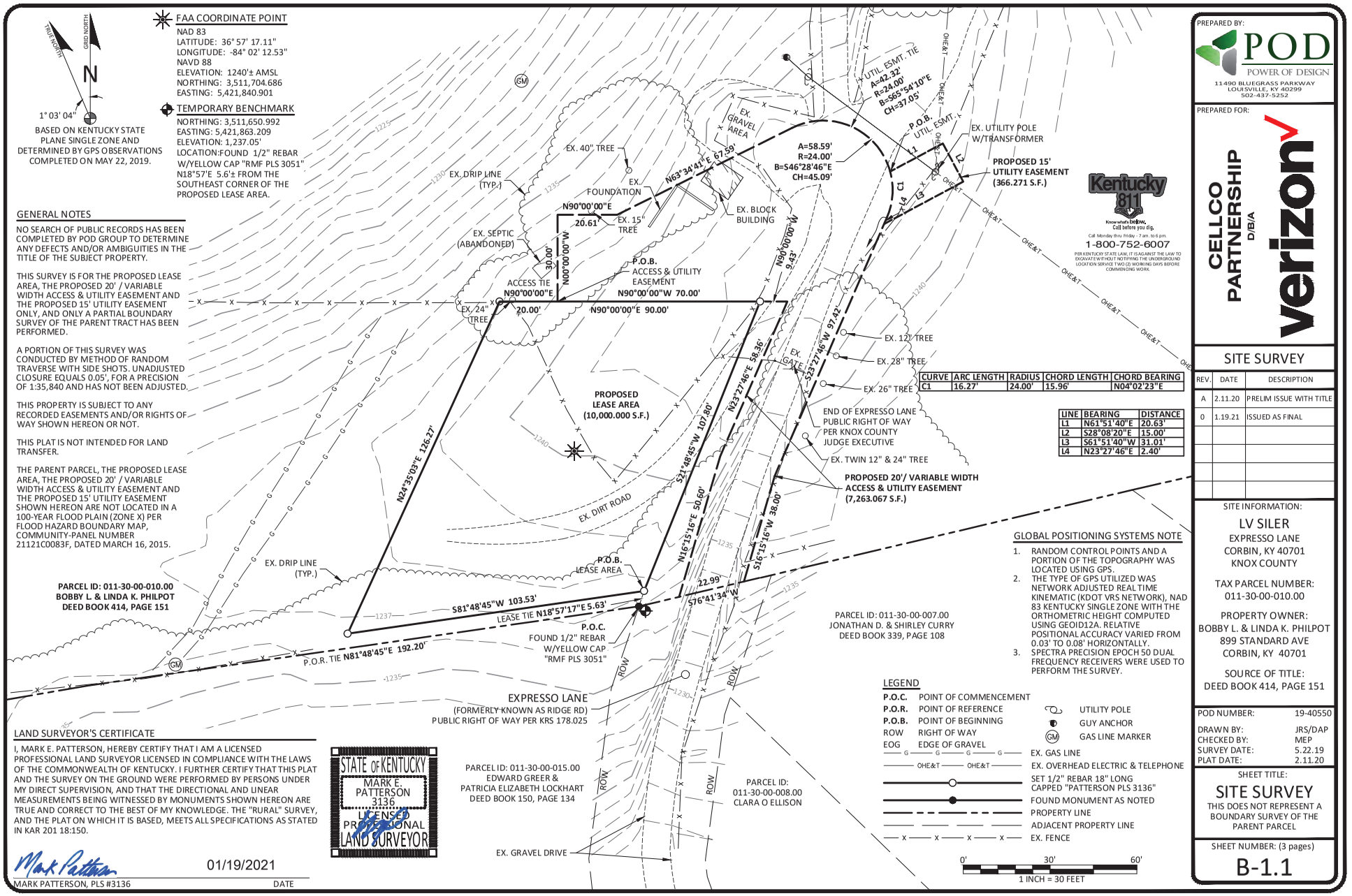
PROPERTY OWNER:
BOBBY L. & LINDA K. PHILPOT
899 STANDARD AVE
CORBIN, KY 40701

SOURCE OF TITLE:
DEED BOOK 414, PAGE 151

POD NUMBER:	19-40550
DRAWN BY:	JRS/DAP
CHECKED BY:	MEP
SURVEY DATE:	5.22.19
PLAT DATE:	2.11.20

SHEET TITLE:
SITE SURVEY
THIS DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARENT PARCEL

SHEET NUMBER: (3 pages)
B-1



PREPARED BY:
POD
POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

PREPARED FOR:
CELLCO PARTNERSHIP D/B/A verizon

SITE SURVEY

REV.	DATE	DESCRIPTION
A	2.11.20	PRELIM ISSUE WITH TITLE
0	1.19.21	ISSUED AS FINAL

SITE INFORMATION:
LV SILER
EXPRESSO LANE
CORBIN, KY 40701
KNOX COUNTY

TAX PARCEL NUMBER:
011-30-00-010.00

PROPERTY OWNER:
BOBBY L. & LINDA K. PHILPOT
899 STANDARD AVE
CORBIN, KY 40701

SOURCE OF TITLE:
DEED BOOK 414, PAGE 151

POD NUMBER:	19-40550
DRAWN BY:	JRS/DAP
CHECKED BY:	MEP
SURVEY DATE:	5.22.19
PLAT DATE:	2.11.20

SHEET TITLE:
SITE SURVEY
THIS DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARENT PARCEL

SHEET NUMBER: (3 pages)
B-1.1

LEGAL DESCRIPTIONS

PROPOSED LEASE AREA

THE FOLLOWING IS A DESCRIPTION OF THE PROPOSED LEASE AREA ON THE PROPERTY CONVEYED TO BOBBY L. & LINDA K. PHILPOT AS RECORDED IN THE OFFICE OF THE CLERK OF KNOX COUNTY, KENTUCKY IN DEED BOOK 414, PAGE 151, PARCEL ID: 011-30-00-010.00, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARING DATUM USED HEREIN IS BASED UPON KENTUCKY STATE PLANE COORDINATE SYSTEM, SINGLE ZONE, NAD 83, FROM A REAL TIME KINEMATIC GLOBAL POSITIONING SYSTEM OBSERVATION USING THE KENTUCKY TRANSPORTATION CABINET REAL TIME GPS NETWORK COMPLETED ON MAY 22, 2019.

COMMENCING AT A FOUND 1/2" REBAR WITH YELLOW CAP "RMF PLS 3051" IN THE WEST LINE OF EXPRESSO LANE, AT THE COMMON CORNER OF THE PROPERTY CONVEYED TO BOBBY LEE & LINDA KAY PHILPOT AS RECORDED IN DEED BOOK 404, PAGE 671 AND CORNER TO THE PROPERTY CONVEYED TO EDWARD GREER & PATRICIA ELIZABETH LOCKHART AS RECORDED IN DEED BOOK 150, PAGE 134, FOR REFERENCE SAID REBAR IS N74°47'36"E 32.16', N80°15'11"E 236.35' AND N81°48'45"E 192.20' FROM A FOUND 1/2" REBAR WITH YELLOW CAP "RMF PLS 3051", BEING THE COMMON CORNER OF SAID PHILPOT AND SAID LOCKHART PROPERTY; THENCE TRAVERSING THE LAND OF SAID PHILPOT, N18°57'17"E 5.63' TO A SET 1/2" REBAR 18" LONG CAPPED "PATTERSON PLS 3136" HEREAFTER REFERRED TO AS A "SET IPC", IN THE SOUTHEAST CORNER OF THE PROPOSED LEASE AREA AND BEING **THE TRUE POINT OF BEGINNING**; THENCE S81°48'45"W 103.53' TO A "SET IPC"; THENCE N24°35'03"E 126.27' TO A "SET IPC"; THENCE N90°00'00"E 90.00' TO A "SET IPC"; THENCE S21°48'45"W 107.80' TO THE POINT OF BEGINNING CONTAINING 10,000.000 SQUARE FEET AS PER SURVEY BY MARK E. PATTERSON, PLS #3136 DATED MAY 22, 2019.

PROPOSED 20' / VARIABLE WIDTH ACCESS & UTILITY EASEMENT

THE FOLLOWING IS A DESCRIPTION OF THE PROPOSED 20' / VARIABLE WIDTH ACCESS & UTILITY EASEMENT ON THE PROPERTY CONVEYED TO BOBBY L. & LINDA K. PHILPOT AS RECORDED IN THE OFFICE OF THE CLERK OF KNOX COUNTY, KENTUCKY IN DEED BOOK 414, PAGE 151, PARCEL ID: 011-30-00-010.00, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARING DATUM USED HEREIN IS BASED UPON KENTUCKY STATE PLANE COORDINATE SYSTEM, SINGLE ZONE, NAD 83, FROM A REAL TIME KINEMATIC GLOBAL POSITIONING SYSTEM OBSERVATION USING THE KENTUCKY TRANSPORTATION CABINET REAL TIME GPS NETWORK COMPLETED ON MAY 22, 2019.

COMMENCING AT A FOUND 1/2" REBAR WITH YELLOW CAP "RMF PLS 3051" IN THE WEST LINE OF EXPRESSO LANE, AT THE COMMON CORNER OF THE PROPERTY CONVEYED TO BOBBY LEE & LINDA KAY PHILPOT AS RECORDED IN DEED BOOK 404, PAGE 671 AND CORNER TO THE PROPERTY CONVEYED TO EDWARD GREER & PATRICIA ELIZABETH LOCKHART AS RECORDED IN DEED BOOK 150, PAGE 134, FOR REFERENCE SAID REBAR IS N74°47'36"E 32.16', N80°15'11"E 236.35' AND N81°48'45"E 192.20' FROM A FOUND 1/2" REBAR WITH YELLOW CAP "RMF PLS 3051", BEING THE COMMON CORNER OF SAID PHILPOT AND SAID LOCKHART PROPERTY; THENCE TRAVERSING THE LAND OF SAID PHILPOT, N18°57'17"E 5.63' TO A SET 1/2" REBAR 18" LONG CAPPED "PATTERSON PLS 3136" HEREAFTER REFERRED TO AS A "SET IPC", IN THE SOUTHEAST CORNER OF THE PROPOSED LEASE AREA; THENCE WITH SAID LEASE AREA FOR THE NEXT THREE CALLS, S81°48'45"W 103.53' TO A "SET IPC"; THENCE N24°35'03"E 126.27' TO A "SET IPC"; THENCE N90°00'00"E 20.00' TO **THE TRUE POINT OF BEGINNING**; THENCE LEAVING SAID LEASE AREA, N00°00'00"W 30.00'; THENCE N90°00'00"E 20.61'; THENCE N63°34'41"E 67.59'; THENCE ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 24.00', ARC LENGTH OF 58.59', THE CHORD OF WHICH BEARS S46°28'46"E 45.09'; THENCE S23°27'46"W 97.42'; THENCE S16°15'16"W 38.00' TO THE COMMON LINE OF SAID PHILPOT AND THE BEING THE NORTH LINE OF THE PROPERTY CONVEYED TO JONATHAN D. & SHIRLEY CURRY AS RECORDED IN DEED BOOK 339, PAGE 108; THENCE WITH THE LINE OF SAID PHILPOT AND CURRY, S76°41'34"W 22.99'; THENCE LEAVING SAID LINE AND TRAVERSING THE LAND OF SAID PHILPOT, N16°15'16"E 50.60'; THENCE N23°27'46"E 58.36'; THENCE N90°00'00"W 9.43'; THENCE N90°00'00"W 70.00' TO THE POINT OF BEGINNING CONTAINING 7,263.067 SQUARE FEET AS PER SURVEY BY MARK E. PATTERSON, PLS #3136 DATED MAY 22, 2019.

PROPOSED 15' UTILITY EASEMENT

THE FOLLOWING IS A DESCRIPTION OF THE PROPOSED 15' UTILITY EASEMENT ON THE PROPERTY CONVEYED TO BOBBY L. & LINDA K. PHILPOT AS RECORDED IN THE OFFICE OF THE CLERK OF KNOX COUNTY, KENTUCKY IN DEED BOOK 414, PAGE 151, PARCEL ID: 011-30-00-010.00, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARING DATUM USED HEREIN IS BASED UPON KENTUCKY STATE PLANE COORDINATE SYSTEM, SINGLE ZONE, NAD 83, FROM A REAL TIME KINEMATIC GLOBAL POSITIONING SYSTEM OBSERVATION USING THE KENTUCKY TRANSPORTATION CABINET REAL TIME GPS NETWORK COMPLETED ON MAY 22, 2019.

COMMENCING AT A FOUND 1/2" REBAR WITH YELLOW CAP "RMF PLS 3051" IN THE WEST LINE OF EXPRESSO LANE, AT THE COMMON CORNER OF THE PROPERTY CONVEYED TO BOBBY LEE & LINDA KAY PHILPOT AS RECORDED IN DEED BOOK 404, PAGE 671 AND CORNER TO THE PROPERTY CONVEYED TO EDWARD GREER & PATRICIA ELIZABETH LOCKHART AS RECORDED IN DEED BOOK 150, PAGE 134, FOR REFERENCE SAID REBAR IS N74°47'36"E 32.16', N80°15'11"E 236.35' AND N81°48'45"E 192.20' FROM A FOUND 1/2" REBAR WITH YELLOW CAP "RMF PLS 3051", BEING THE COMMON CORNER OF SAID PHILPOT AND SAID LOCKHART PROPERTY; THENCE TRAVERSING THE LAND OF SAID PHILPOT, N18°57'17"E 5.63' TO A SET 1/2" REBAR 18" LONG CAPPED "PATTERSON PLS 3136" HEREAFTER REFERRED TO AS A "SET IPC", IN THE SOUTHEAST CORNER OF THE PROPOSED LEASE AREA; THENCE WITH SAID LEASE AREA FOR THE NEXT THREE CALLS, S81°48'45"W 103.53' TO A "SET IPC"; THENCE N24°35'03"E 126.27' TO A "SET IPC"; THENCE N90°00'00"E 20.00'; THENCE LEAVING SAID LEASE AREA, N00°00'00"W 30.00'; THENCE N90°00'00"E 20.61'; THENCE N63°34'41"E 67.59'; THENCE ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 24.00', ARC LENGTH OF 42.32', THE CHORD OF WHICH BEARS S65°54'10"E 37.05' TO **THE TRUE POINT OF BEGINNING**; THENCE N61°51'40"E 20.63'; THENCE S28°08'20"E 15.00'; THENCE S61°51'40"W 31.01'; THENCE N23°27'46"E 2.40'; THENCE ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 24.00', ARC LENGTH OF 16.27', THE CHORD OF WHICH BEARS N04°02'23"E 15.96' TO THE POINT OF BEGINNING CONTAINING 366.271 SQUARE FEET AS PER SURVEY BY MARK E. PATTERSON, PLS #3136 DATED MAY 22, 2019.

PARENT PARCEL (DEED BOOK 414, PAGE 151)

A CERTAIN TRACT OF LAND BEING EAST OF THE CITY OF CORBIN IN KNOX COUNTY, KENTUCKY ON THE WATERS OF THE HAZEL FORK AND STONY FORK AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: UNLESS STATED OTHERWISE, ANY MONUMENT REFERRED TO HEREIN AS AN "IRON PIPE AND CAP" IS A SET 1/2" IRON REBAR PIN, 18" IN LENGTH, WITH A YELLOW PLASTIC CAP STAMPED "RMF 3051". ALL BEARINGS AND/OR COORDINATES HEREIN REFER GRID NORTH OF THE KENTUCKY SINGLE ZONE, STATE PLANE COORDINATE SYSTEM.

BEGINNING AT AN IRON PIN AND CAP SET AT A FALLEN WIRE FENCE INTERSECTION, BEING WEST OF KY.830 AND APPROXIMATELY 305' EAST OF EXPRESSO LANE, CORNER OF STARLA PARTIN (M.COMM BK.7, PG.283) AND JONATHON & SHIRLEY CURRY (DB.348, PG.508), BEING AT OR NEAR STATE PLANE COORDINATES OF N=3511726.62, E=5422190.39; THENCE WITH THE CURRY LINE, S 77°14'48" W, 160.61' TO A FOUND IRON PIN W/CAP STAMPED "EG 3276", CORNER OF JONATHON & SHIRLEY CURRY (DB.339, PG. 108); THENCE WITH CURRY LINE, S 76°43'19" W, 174.68' CROSSING EXPRESSO LANE AT END OF CURRY LINE AND WITH THE EDWARD & PATRICIA LOCKHART ESTATE (DB.150, PG.134) TO AN IRON PIN AND CAP AT A WIRE FENCE; THENCE WITH FENCE AND LOCKHART ESTATE LINE, S 81°50'40" W, 192.20' TO AN IRON PIN AND CAP; THENCE, S 80°17'06" W, 236.35' TO A FOUND IRON T-POST; THENCE, S 74°49'3 L" W, 32.16' TO AN IRON PIN AND CAP; THENCE, S 79°51 '52" W, 110.42' TO AN IRON PIN AND CAP; THENCE, S 72°35'31" W, 174.62' TO AN IRON PIN AND CAP; THENCE, S 83°28'30'' W, 65.60' TO AN IRON PIN AND CAP; THENCE, S 77°41 '37' W, 168.09' TO AN IRON PIN AND CAP; THENCE CONTINUING WITH LOCKHART AND FALLEN WIRE FENCE, N 8°59'09" W, 201.68' TO AN IRON PIN AND CAP; THENCE, N 11°53'15" W, 159.47' TO A POINT IN A BRANCH, CORNER OF JOHN & KAREN SIZEMORE (DB.403, PG.381), WITNESSED BY AN IRON PIN AND CAP SET 4.0' FROM CORNER IN PRECEDING LINE; THENCE WITH THE SIZEMORE LINE AND BRANCH, N 29°02'54" E, 5.22' TO A POINT; THENCE, N 75°16'47'' E, 21.50' TO A 16"WHITE OAK, W/3 HACKS; THENCE LEAVING BRANCH, N 83°21 '59" E, 55.42' TO AN IRON PIN AND CAP, CORNER OF DAVID C. HENSLEY (DB.265, PG.198); THENCE WITH THE HENSLEY LINE, N 67°57'00" E, 1287.00', CROSSING OLD "RIDGE ROAD" AT 992' TO AN IRON PIN AND CAP, CORNER OF PETROLEUM EXPLORATION, INC. (DB.135, PG.265); THENCE WITH THEIR LINE AND FALLEN WIRE FENCE, S 7°37'05"£, 310' FEET, THEN WITH THE STARLA PARTIN LINE FOR A TOTAL OF 594.00' TO THE POINT OF BEGINNING, CONTAINING 14.192 ACRES, MORE OR LESS, ACCORDING TO A SURVEY BY RICHARD M. FREDERICK, PLS #3051 ON MAY 20, 2016, AND THE SAME PROPERTY CONVEYED TO BOBBY L. PHILPOT & LINDA K. PHILPOT BY DEED FROM ALMA ASHER ALLEN, DATED AUGUST 22, 2014, RECORDED IN DEED BOOK 404, PG.671 IN THE KNOX COUNTY CLERK'S OFFICE, BARBOURVILLE, KENTUCKY.

REPORT OF TITLE (PARCEL ID: 011-30-00-010.00)

THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY POD GROUP, LLC. AND AS SUCH WE ARE NOT RESPONSIBLE FOR THE INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE, UNRECORDED EASEMENTS, AUGMENTING EASEMENTS, IMPLIED OR PRESCRIPTIVE EASEMENTS, OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE. INFORMATION REGARDING THESE MATTERS WERE GAINED FROM HIGH STREET TITLE COMPANY INC., PREPARED FOR VERIZON WIRELESS, DATED MAY 6, 2019 AT 8:00 AM. THE FOLLOWING COMMENTS ARE IN REGARD TO SAID COMMITMENT AND THE NUMBERS IN THE COMMENTS CORRESPOND TO THE NUMBERING SYSTEM IN SAID POLICY.

UNREALEASED MORTGAGES OF RECORD:
MORTGAGE DATED AUGUST 22, 2014 AND RECORDED ON AUGUST 26, 2014 IN BOOK 415, PAGE 653 IN FAVOR OF WHITAKER BANK, INC. IN THE AMOUNT OF $45,000.00. (MORTGAGE AS RECORDED IN BOOK 415, PAGE 653, AFFECTS THE PARENT TRACT, THE PROPOSED LEASE AREA AND THE PROPOSED ACCESS & UTILITY EASEMENT.)

GENERAL JUDGEMENT SEARCH:
(POD GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM)

TAXES:
TAX INFORMATION AS TO: PARCEL NUMBER: 011-30-00-010.00; BILL NUMBER 13720, ASSESSED VALUE:$22,400.00, AMOUNT: $262.92, PAID 11/1/18
(NOT A LAND SURVEYING MATTER, THEREFORE POD GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM)

OTHER LIENS / DOCUMENTS OF RECORD:
(POD GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM)

LAND SURVEYOR'S CERTIFICATE

STATE OF KENTUCKY
MARK E. PATTERSON
3136
LICENSED PROFESSIONAL LAND SURVEYOR

I, MARK E. PATTERSON, HEREBY CERTIFY THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR LICENSED IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF KENTUCKY. I FURTHER CERTIFY THAT THIS PLAT AND THE SURVEY ON THE GROUND WERE PERFORMED BY PERSONS UNDER MY DIRECT SUPERVISION, AND THAT THE DIRECTIONAL AND LINEAR MEASUREMENTS BEING WITNESSED BY MONUMENTS SHOWN HEREON ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. THE "RURAL" SURVEY, AND THE PLAT ON WHICH IT IS BASED, MEETS ALL SPECIFICATIONS AS STATED IN KAR 201 18:150.

Mark Patterson — 01/19/2021
MARK PATTERSON, PLS #3136 — DATE

PREPARED BY:
POD
POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

PREPARED FOR:
CELLCO PARTNERSHIP
D/B/A
verizon

SITE SURVEY

REV.	DATE	DESCRIPTION
A	2.11.20	PRELIM ISSUE WITH TITLE
0	1.19.21	ISSUED AS FINAL

SITE INFORMATION:
LV SILER
EXPRESSO LANE
CORBIN, KY 40701
KNOX COUNTY

TAX PARCEL NUMBER:
011-30-00-010.00

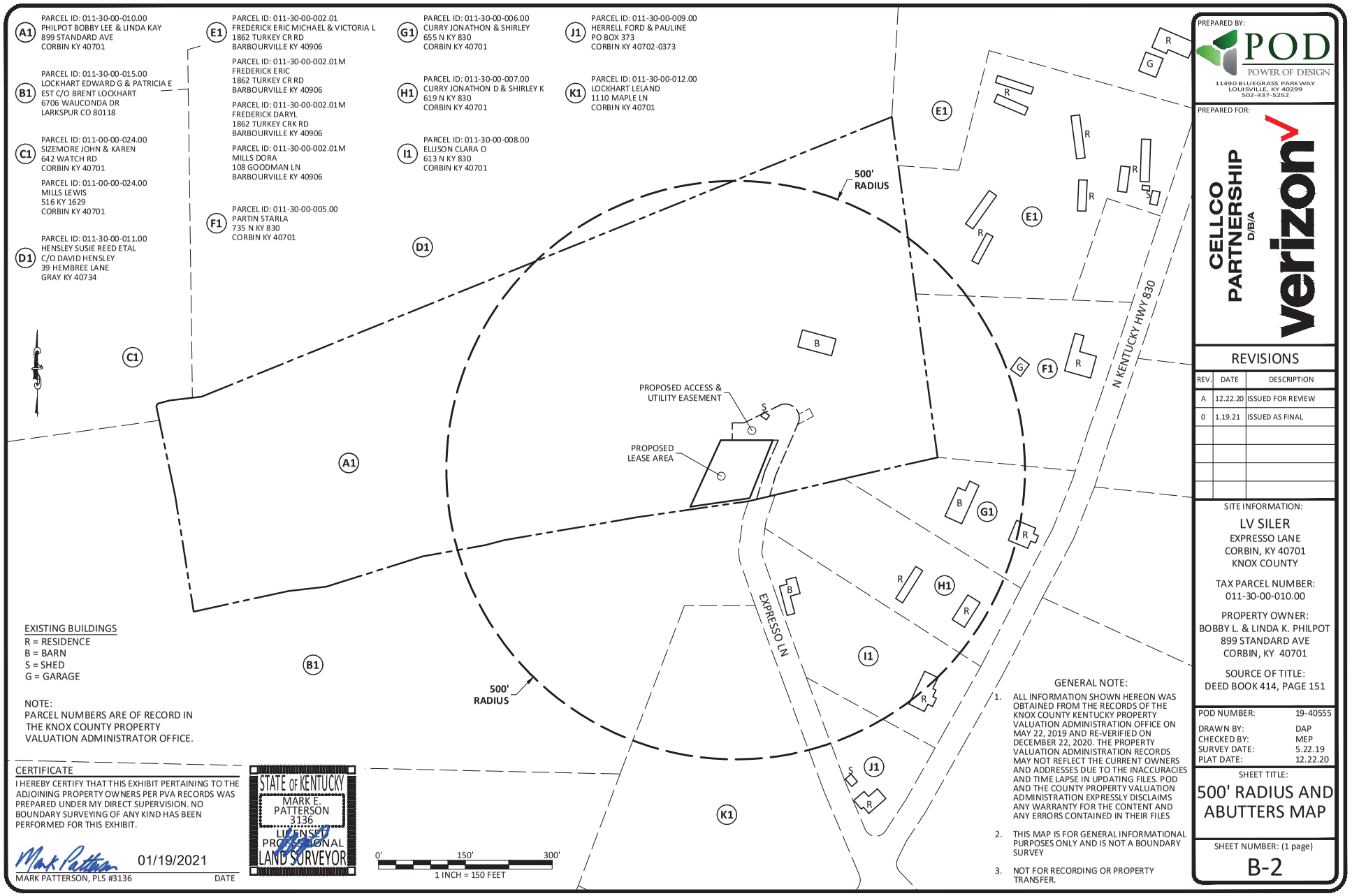
PROPERTY OWNER:
BOBBY L. & LINDA K. PHILPOT
899 STANDARD AVE
CORBIN, KY 40701

SOURCE OF TITLE:
DEED BOOK 414, PAGE 151

POD NUMBER:	19-40550
DRAWN BY:	JRS/DAP
CHECKED BY:	MEP
SURVEY DATE:	5.22.19
PLAT DATE:	2.11.20

SHEET TITLE:
SITE SURVEY
THIS DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARENT PARCEL

SHEET NUMBER: (3 pages)
B-1.2



PREPARED BY:
POD
POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

PREPARED FOR:
CELLCO PARTNERSHIP D/B/A verizon

REVISIONS

REV.	DATE	DESCRIPTION
A	12.22.20	ISSUED FOR REVIEW
0	1.19.21	ISSUED AS FINAL

SITE INFORMATION:
LV SILER
EXPRESSO LANE
CORBIN, KY 40701
KNOX COUNTY

TAX PARCEL NUMBER:
011-30-00-010.00

PROPERTY OWNER:
BOBBY L. & LINDA K. PHILPOT
899 STANDARD AVE
CORBIN, KY 40701

SOURCE OF TITLE:
DEED BOOK 414, PAGE 151

POD NUMBER:	19-40555
DRAWN BY:	DAP
CHECKED BY:	MEP
SURVEY DATE:	5.22.19
PLAT DATE:	12.22.20

SHEET TITLE:
500' RADIUS AND ABUTTERS MAP

SHEET NUMBER: (1 page)
B-2

REVISION LOG

REV *	MM/DD/YY	SHEET NUMBER	DESCRIPTION OF REVISION
A	1/8/2021	ALL SHEETS	ISSUED FOR REVIEW
0	1/20/2021	ALL SHEETS	ISSUED AS FINAL

POD
POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

HARMONI TOWERS

10801 EXECUTIVE CENTER DR.
SHANNON BUILDING, SUITE 100
LITTLE ROCK, AR 72211

01/20/2021

STATE OF KENTUCKY
MARK E. PATTERSON
16300
LICENSED
PROFESSIONAL ENGINEER

EN PERMIT: 3594

ZONING DRAWINGS

REV.	DATE	DESCRIPTION
A	1.8.21	ISSUED FOR REVIEW
0	1.20.21	ISSUED AS FINAL

SITE INFORMATION:
LV SILER

EXPRESSO LANE
CORBIN, KY 40701
KNOX COUNTY

HARMONI TOWERS LLC SITE NUMBER:
KYLEX2072

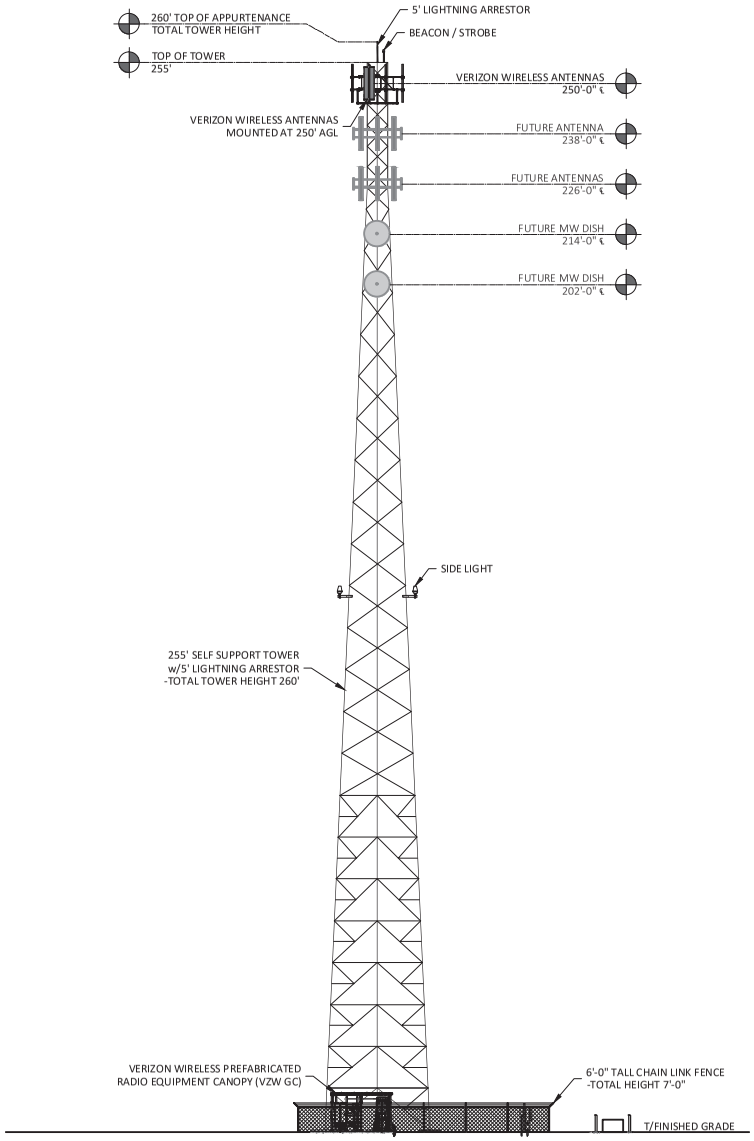
VERIZON WIRELESS SITE NAME:
LV SILER

POD NUMBER: 19-40556

DRAWN BY: POD
CHECKED BY: MEP
DATE: 01.05.21

SHEET TITLE:
REVISION LOG

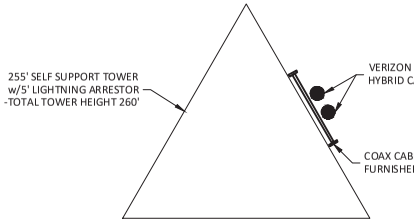
SHEET NUMBER:
R-1



TOWER ELEVATION 1/TE-1
SCALE: N.T.S.

NOTE:

1. IT IS THE INSTALLING CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL ANTENNA INFORMATION AGAINST FINAL RADIO ENGINEERING PLAN PROVIDED BY CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS (VZW GC)
2. ALL TOWER LIGHTING SHALL BE INSTALLED AS REQUIRED BY THE FEDERAL AVIATION ADMINISTRATION AND RECOMMENDED BY THE USFWS INTERIM GUIDELINES (2000) FOR LIGHTING OF TOWERS OVER 200' IN HEIGHT.



COAX PLAN
SCALE: N.T.S.

N

POD
POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

HARMONI TOWERS
10801 EXECUTIVE CENTER DR.
SHANNON BUILDING, SUITE 100
LITTLE ROCK, AR 72211

01/20/2021

STATE OF KENTUCKY
MARK E. PATTERSON
15,300
LICENSED
PROFESSIONAL ENGINEER

EN PERMIT: 3594

ZONING DRAWINGS

REV.	DATE	DESCRIPTION
A	1.8.21	ISSUED FOR REVIEW
0	1.20.21	ISSUED AS FINAL

SITE INFORMATION:
LV SILER

EXPRESSO LANE
CORBIN, KY 40701
KNOX COUNTY

HARMONI TOWERS LLC SITE NUMBER:
KYLEX2072

VERIZON WIRELESS SITE NAME:
LV SILER

POD NUMBER:	19-40556
DRAWN BY:	POD
CHECKED BY:	MEP
DATE:	01.05.21

SHEET TITLE:
TOWER ELEVATION

SHEET NUMBER:
TE-1

POD
POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

HARMONI TOWERS

10801 EXECUTIVE CENTER DR.
SHANNON BUILDING, SUITE 100
LITTLE ROCK, AR 72211

01/20/2021

STATE OF KENTUCKY
MARK E. PATTERSON
16300
LICENSED
PROFESSIONAL ENGINEER

EN PERMIT: 3594

ZONING DRAWINGS

REV.	DATE	DESCRIPTION
A	1.8.21	ISSUED FOR REVIEW
0	1.20.21	ISSUED AS FINAL

SITE INFORMATION:
LV SILER

EXPRESSO LANE
CORBIN, KY 40701
KNOX COUNTY

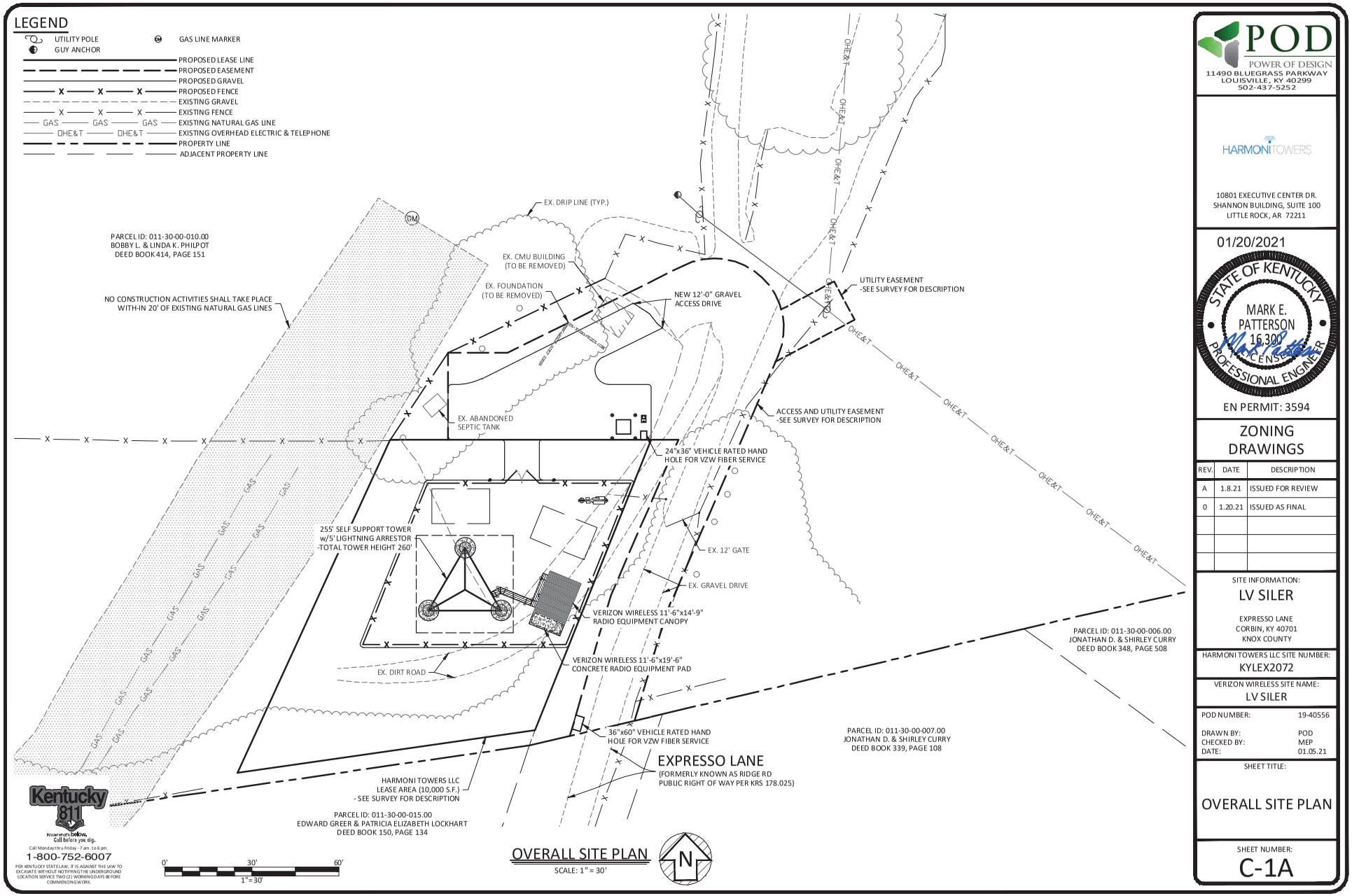
HARMONI TOWERS LLC SITE NUMBER:
KYLEX2072

VERIZON WIRELESS SITE NAME:
LV SILER

POD NUMBER:	19-40556
DRAWN BY:	POD
CHECKED BY:	MEP
DATE:	01.05.21

SHEET TITLE:
OVERALL SITE PLAN W/AERIAL OVERLAY

SHEET NUMBER:
C-1



POD
POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

HARMONI TOWERS
10801 EXECUTIVE CENTER DR.
SHANNON BUILDING, SUITE 100
LITTLE ROCK, AR 72211

01/20/2021

STATE OF KENTUCKY
MARK E. PATTERSON
16300
LICENSED
PROFESSIONAL ENGINEER

EN PERMIT: 3594

ZONING DRAWINGS

REV.	DATE	DESCRIPTION
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KNOX COUNTY

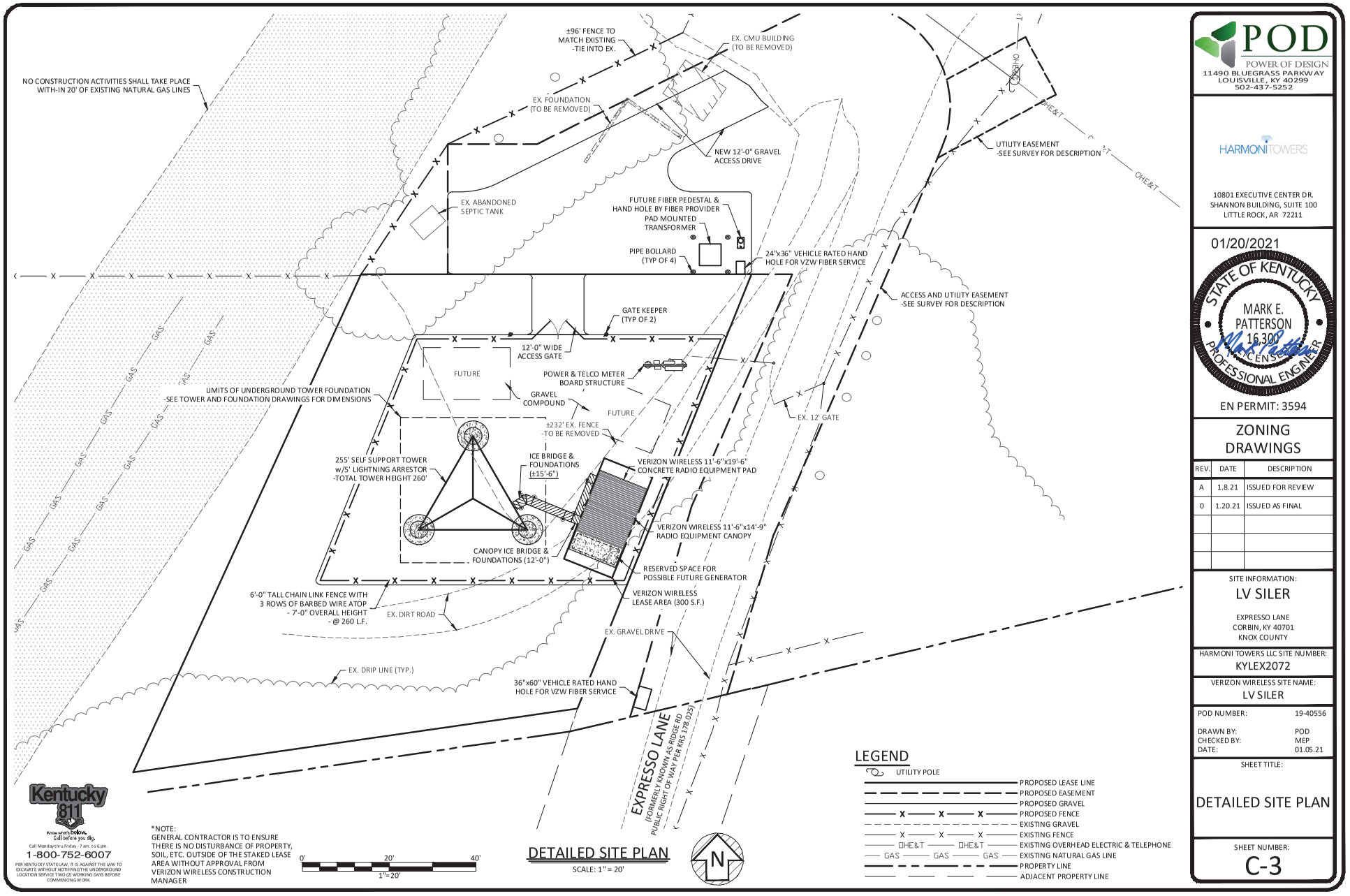
HARMONI TOWERS LLC SITE NUMBER:
KYLEX2072

VERIZON WIRELESS SITE NAME:
LV SILER

POD NUMBER:	19-40556
DRAWN BY:	POD
CHECKED BY:	MEP
DATE:	01.05.21

SHEET TITLE:
OVERALL SITE PLAN

SHEET NUMBER:
C-1A



Kentucky 811
Know what's below. Call before you dig.
Call Monday thru Friday - 7 am. to 6 pm.
1-800-752-6007
PER KENTUCKY STATE LAW, IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

*NOTE:
GENERAL CONTRACTOR IS TO ENSURE THERE IS NO DISTURBANCE OF PROPERTY, SOIL, ETC. OUTSIDE OF THE STAKED LEASE AREA WITHOUT APPROVAL FROM VERIZON WIRELESS CONSTRUCTION MANAGER

0' 20' 40'
1"=20'

DETAILED SITE PLAN
SCALE: 1" = 20'

POD
POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

HARMONI TOWERS
10801 EXECUTIVE CENTER DR.
SHANNON BUILDING, SUITE 100
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01/20/2021
STATE OF KENTUCKY
MARK E. PATTERSON
16300
LICENSED
PROFESSIONAL ENGINEER
EN PERMIT: 3594

ZONING DRAWINGS

REV.	DATE	DESCRIPTION
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0	1.20.21	ISSUED AS FINAL

SITE INFORMATION:
LV SILER
EXPRESSO LANE
CORBIN, KY 40701
KNOX COUNTY

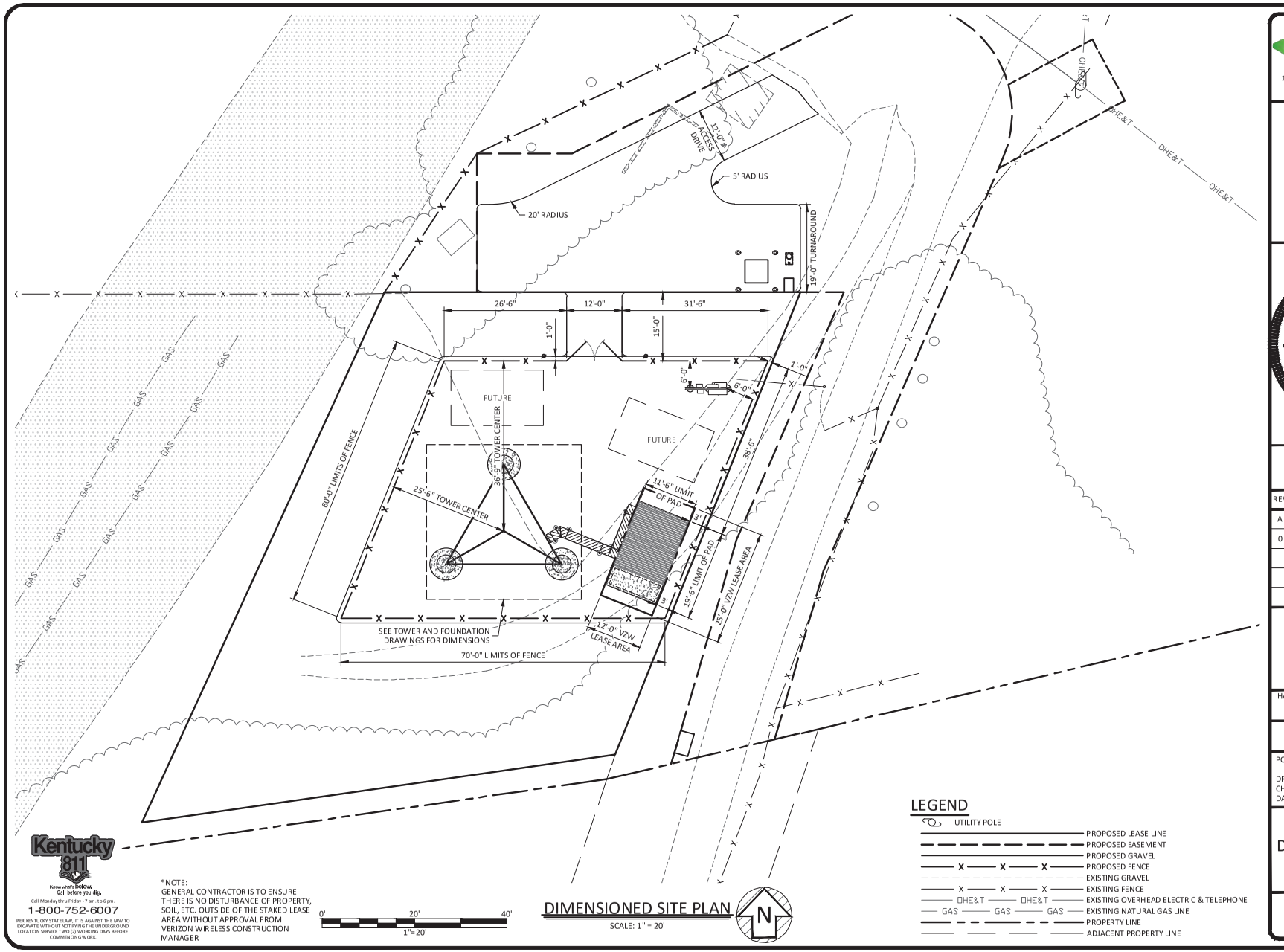
HARMONI TOWERS LLC SITE NUMBER:
KYLEX2072

VERIZON WIRELESS SITE NAME:
LV SILER

POD NUMBER: 19-40556
DRAWN BY: POD
CHECKED BY: MEP
DATE: 01.05.21

SHEET TITLE:
DETAILED SITE PLAN

SHEET NUMBER:
C-3



DIMENSIONED SITE PLAN

SCALE: 1" = 20'

0' 20' 40'

1"=20'

N

LEGEND

- UTILITY POLE
- PROPOSED LEASE LINE
- PROPOSED EASEMENT
- PROPOSED GRAVEL
- PROPOSED FENCE
- EXISTING GRAVEL
- EXISTING FENCE
- EXISTING OVERHEAD ELECTRIC & TELEPHONE
- EXISTING NATURAL GAS LINE
- PROPERTY LINE
- ADJACENT PROPERTY LINE

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

HARMONI TOWERS
10801 EXECUTIVE CENTER DR.
SHANNON BUILDING, SUITE 100
LITTLE ROCK, AR 72211

01/20/2021

STATE OF KENTUCKY
MARK E. PATTERSON
16,300
LICENSED
PROFESSIONAL ENGINEER

EN PERMIT: 3594

ZONING DRAWINGS

REV.	DATE	DESCRIPTION
A	1.8.21	ISSUED FOR REVIEW
0	1.20.21	ISSUED AS FINAL

SITE INFORMATION:
LV SILER

EXPRESSO LANE
CORBIN, KY 40701
KNOX COUNTY

HARMONI TOWERS LLC SITE NUMBER:
KYLEX2072

VERIZON WIRELESS SITE NAME:
LV SILER

POD NUMBER: 19-40556

DRAWN BY: POD
CHECKED BY: MEP
DATE: 01.05.21

SHEET TITLE:
DIMENSIONED SITE PLAN

SHEET NUMBER:
C-4

EXHIBIT D

Sabre Industries™
INNOVATION DELIVERED

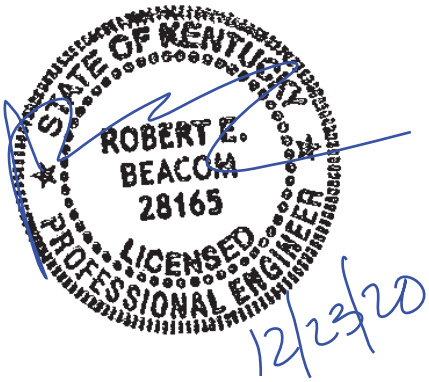
Structural Design Report

255' S3TL Series HD1 Self-Supporting Tower
Site: LV Siler, KY

Prepared for: Harmony Towers and Verizon Wireless
by: Sabre Industries ™

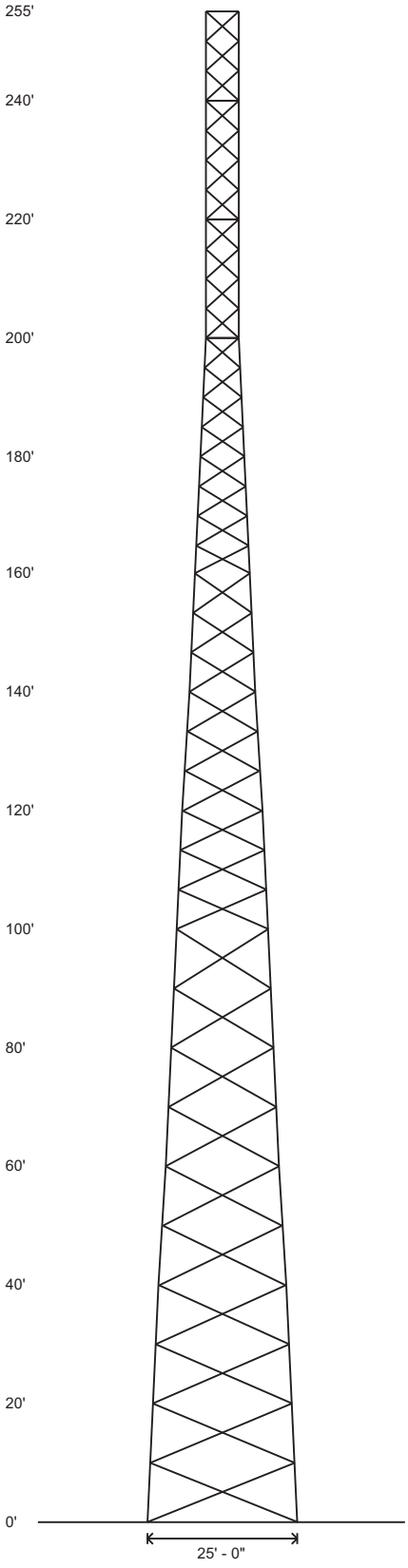
Job Number: 21-3798-JAC

December 23, 2020



Digitally Signed By Robert Beacom
DN: c=US, st=Texas, l=Alvarado, o=SABRE INDUSTRIES, INC., cn=Robert Beacom, email=rebeacom@sabreindustries.com Date: 2020.12.23 09:44:09

Legs	8.625 OD X .500				8.625 OD X .322		5.563 OD X .500		5.563 OD X .375				A				B	
Diagonals	L 4 X 4 X 1/4		L 3 1/2 X 3 1/2 X 1/4		L 3 X 3 X 3/16	C	L 2 X 2 X 3/16	L 2 X 2 X 1/8	L 2 X 2 X 1/4				L 2 X 2 X 3/16				D	
Horizontals	NONE								D	NONE	E	NONE	F	NONE	D			
Brace Bolts	(2) 5/8"		(1) 3/4"				(1) 5/8"											
Top Face Width	23'	21'	19'	17'	15'	13'	11'	9'	7'	5'								
Panel Count/Height	10 @ 10'					9 @ 6.6667'				19 @ 5'								
Section Weight	5313	5013	4654	4518	3930	3211	2933	2640	2315	1881	2101		1319				565	



Designed Appurtenance Loading

Elev	Description	Tx-Line
250		(6) 1 1/2"
250	(1) 40,000 sq. in. antenna loading (below top)	(9) 1 5/8"
238		(6) 1 1/2"
238	(1) 30,000 sq. in. antenna loading (below top)	(9) 1 5/8"
226		(6) 1 1/2"
226	(1) 30,000 sq. in. antenna loading (below top)	(9) 1 5/8"
214	(2) Leg Dish Mount	
214	(2) 6' Solid Dish W/ Radome	(2) 1 5/8"
202	(2) Leg Dish Mount	
202	(2) 6' Solid Dish W/ Radome	(2) 1 5/8"

Design Criteria - ANSI/TIA-222-H

Wind Speed (No Ice)	105 mph
Wind Speed (Ice)	30 mph
Design Ice Thickness	1.50 in
Risk Category	II
Exposure Category	C
Topographic Factor Procedure	Method 1 (Simplified)
Topographic Category	3
Crest Height	110 ft
Ground Elevation	1229 ft

Base Reactions

Total Foundation		Individual Footing	
Shear (kips)	74.68	Shear (kips)	45.88
Axial (kips)	185.56	Compression (kips)	508
Moment (ft-kips)	10439	Uplift (kips)	447
Torsion (ft-kips)	36.76		

Material List

Display	Value
A	3.500 OD X .300
B	2.375 OD X .154
C	L 2 1/2 X 2 1/2 X 3/16
D	L 2 X 2 X 1/8
E	L 2 X 2 X 1/4
F	L 2 X 2 X 3/16

Notes

1) All legs are A500 (50 ksi Min. Yield).
2) All braces are A572 Grade 50.
3) All brace bolts are A325-X.
4) The tower model is S3TL Series HD1.
5) Transmission lines are to be attached to standard 12 hole waveguide ladders with stackable hangers.
6) Azimuths are relative (not based on true north).
7) Foundation loads shown are maximums.
8) All unequal angles are oriented with the short leg vertical.
9) Weights shown are estimates. Final weights may vary.
10) This tower design and, if applicable, the foundation design(s) shown on the following page(s) also meet or exceed the requirements of the 2015 International Building Code.
11) Tower Rating: 98.95%

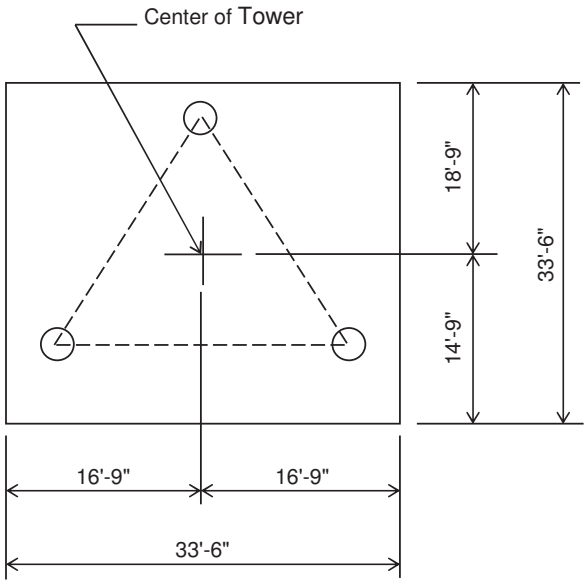
Sabre Industries™
INNOVATION DELIVERED

Sabre Industries
7101 Southbridge Drive
P.O. Box 658
Sioux City, IA 51102-0658
Phone: (712) 258-6690
Fax: (712) 279-0814

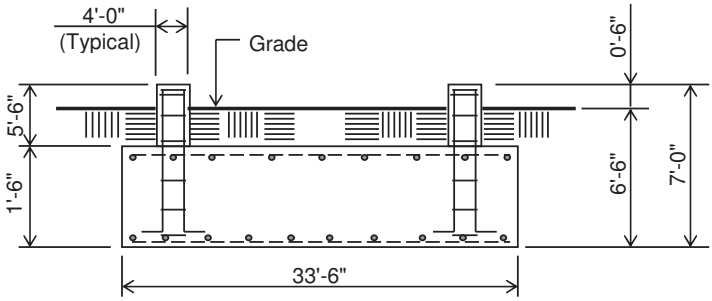
Job:	**21-3798-JAC**
Customer:	Harmony Towers and Verizon Wireless
Site Name:	LV Siler, KY
Description:	255' S3TL
Date:	12/23/2020 By: REB

No.: 21-3798-JAC
Date: 12/23/2020
By: DO

Customer: Harmony Towers and Verizon Wireless
Site: LV Siler, KY
255 ft. Model S3TL Series HD1 Self Supporting Tower



PLAN VIEW



ELEVATION VIEW

(70.0 cu. yds.)
(1 REQD.; NOT TO SCALE)

CAUTION: Center of tower is not in center of slab.

Notes:

1) Concrete shall have a minimum 28-day compressive strength of 4,500 psi, in accordance with ACI 318-14.
2) Rebar to conform to ASTM specification A615 Grade 60.
3) All rebar to have a minimum of 3" concrete cover.
4) All exposed concrete corners to be chamfered 3/4".
5) The foundation design is based on the geotechnical report by POD Project No: 19-40552, Date: 09/18/2020
6) See the geotechnical report for compaction requirements, if specified.
7) 5' of soil cover is required over the entire area of the foundation slab.
8) The bottom anchor bolt template shall be positioned as closely as possible to the bottom of the anchor bolts.

Rebar Schedule per Mat and per Pier	
Pier	(24) #7 vertical rebar w/ hooks at bottom w/ #4 rebar ties, two (2) within top 5" of pier then 4" C/C
Mat	(54) #10 horizontal rebar evenly spaced each way top and bottom. (216 total)
Anchor Bolts per Leg	
(6) 1.5" dia. x 78" F1554-105 on a 13.25" B.C. w/ 9.5" max. projection above concrete.	

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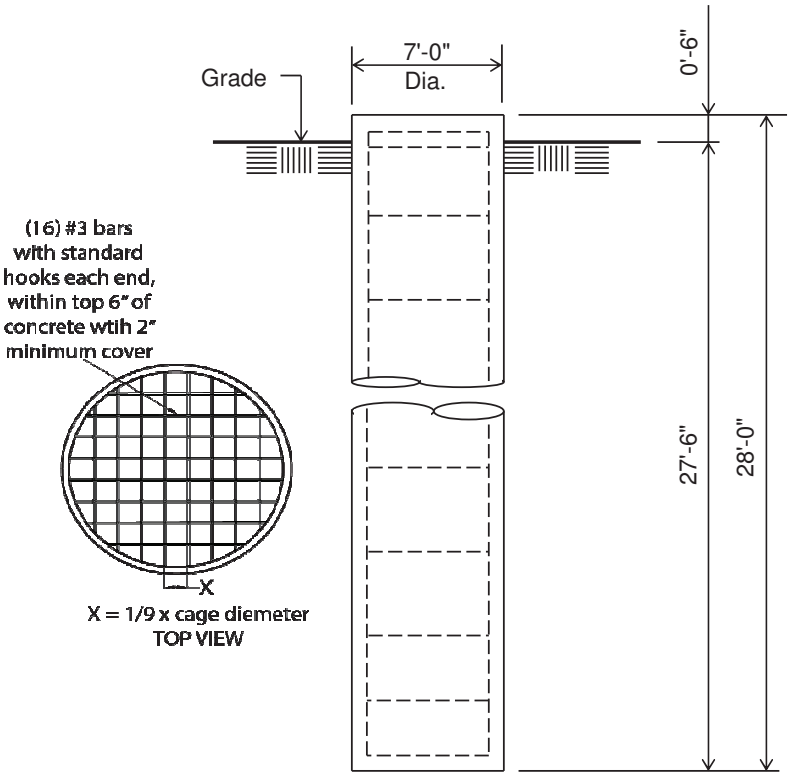
No.: 21-3798-JAC
Date: 12/23/2020
By: DO

Customer: Harmony Towers and Verizon Wireless
Site: LV Siler, KY
255 ft. Model S3TL Series HD1 Self Supporting Tower



ELEVATION VIEW
(39.9 cu. yds.)
(3 REQUIRED; NOT TO SCALE)

Notes:

1) Concrete shall have a minimum 28-day compressive strength of 4,500 psi, in accordance with ACI 318-14.
2) Rebar to conform to ASTM specification A615 Grade 60.
3) All rebar to have a minimum of 3" concrete cover.
4) All exposed concrete corners to be chamfered 3/4".
5) The foundation design is based on the geotechnical report by POD Project No: 19-40552, Date: 09/18/2020
6) See the geotechnical report for drilled pier installation requirements, if specified.
7) The bottom anchor bolt template shall be positioned as closely as possible to the bottom of the anchor bolts.

Rebar Schedule per Pier	
Pier	(22) #10 vertical rebar w/ #5 ties, two (2) within top 5" of pier then 12" C/C
Anchor Bolts per Leg	
(6) 1.5" dia. x 78" F1554-105 on a 13.25" B.C. w/ 9.5" max. projection above concrete.	

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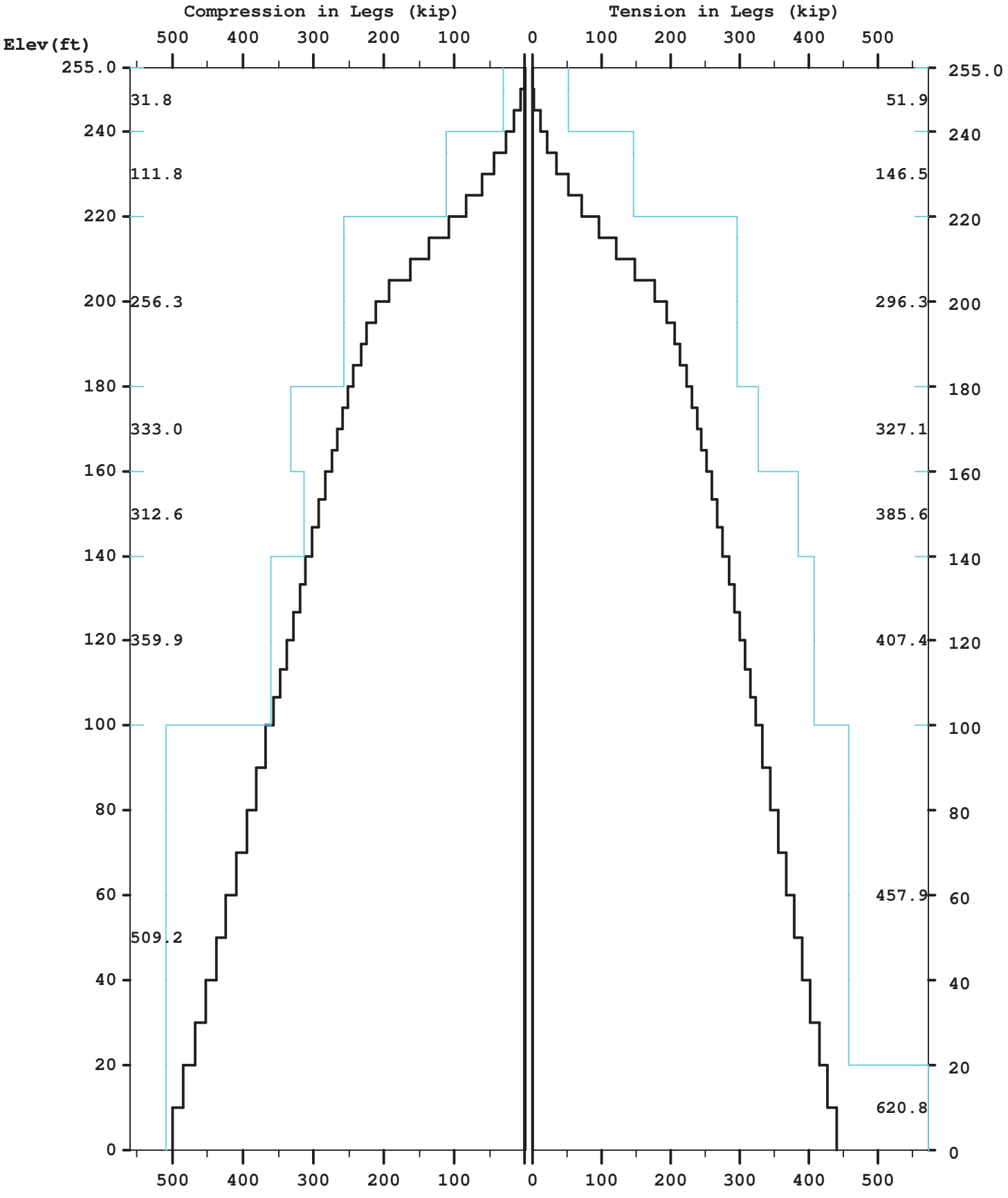
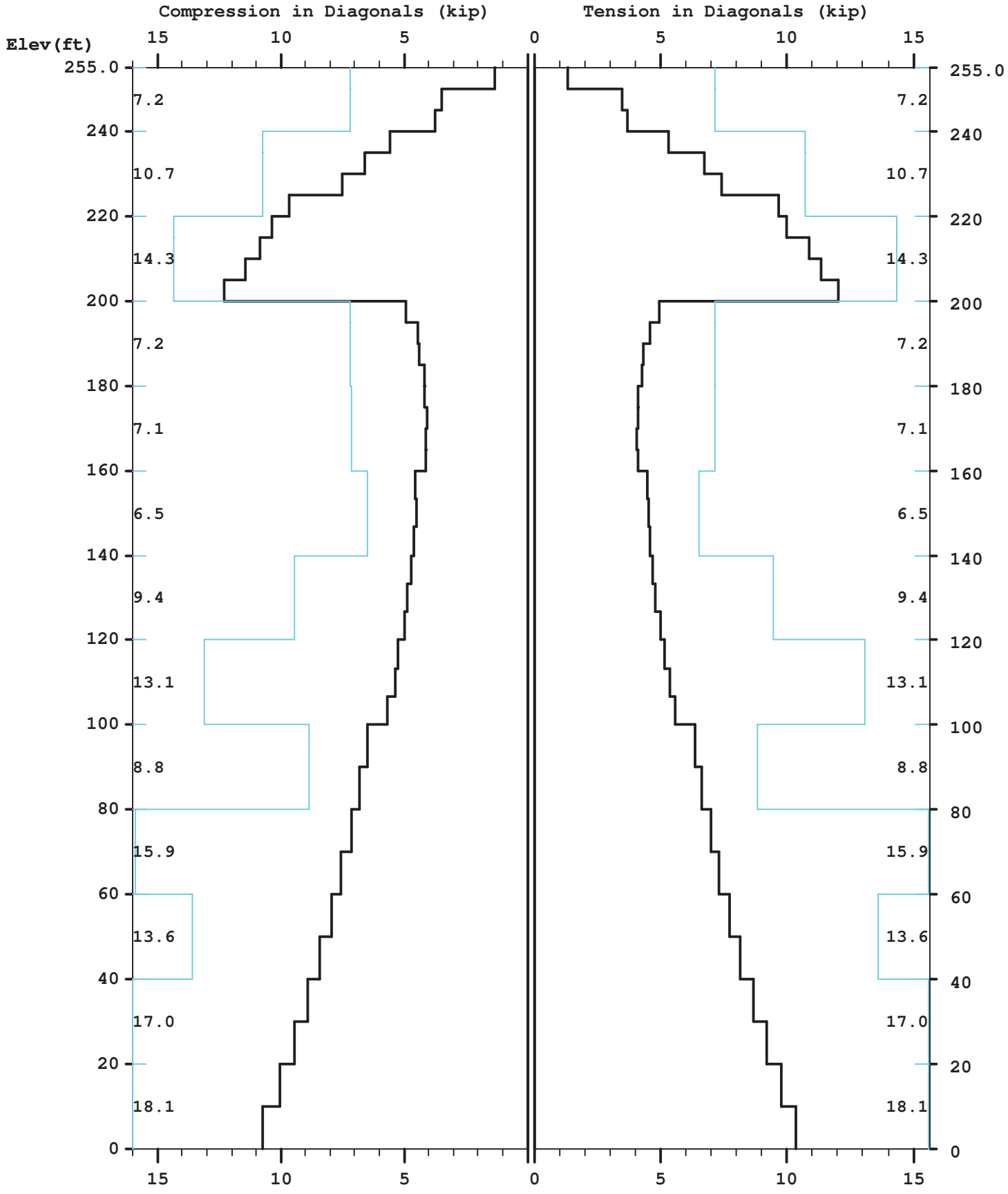
Maximum

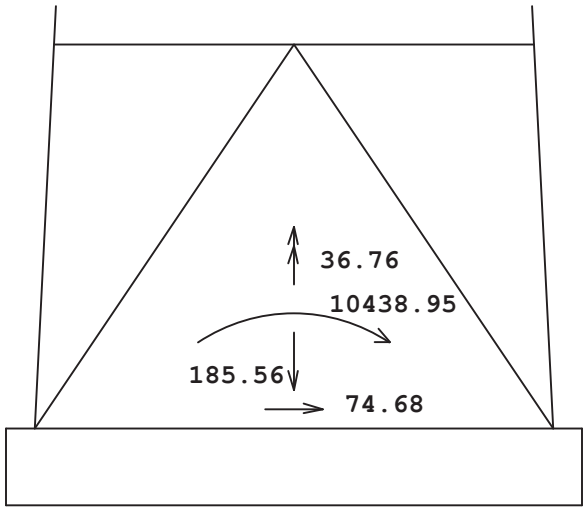

Compression in Legs (kip)
Tension in Legs (kip)
Elev(ft)
500 400 300 200 100 0 100 200 300 400 500
255.0
240
220
200
180
160
140
120
100
80
60
40
20
0
31.8
111.8
256.3
333.0
312.6
359.9
509.2
51.9
146.5
296.3
327.1
385.6
407.4
457.9
620.8

Maximum

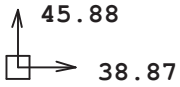

Compression in Diagonals (kip)
Tension in Diagonals (kip)
Elev(ft)
15
10
5
0
255.0
240
220
200
180
160
140
120
100
80
60
40
20
0
7.2
10.7
14.3
7.2
7.1
6.5
9.4
13.1
8.8
15.9
13.6
17.0
18.1

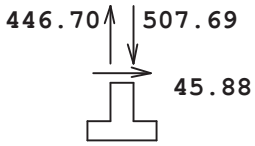
Maximum

TOTAL FOUNDATION LOADS (kip, ft-kip)



INDIVIDUAL FOOTING LOADS (kip)





Latticed Tower Analysis (Unguyed) (c)2017 Guymast Inc. 416-736-7453
Processed under license at:

Sabre Towers and Poles on: 22 dec 2020 at: 9:54:10

MAST GEOMETRY (ft)

PANEL TYPE	NO.OF LEGS	ELEV.AT BOTTOM	ELEV.AT TOP	F.W..AT BOTTOM	F.W..AT TOP	TYPICAL PANEL HEIGHT
X	3	250.00	255.00	5.00	5.00	5.00
X	3	240.00	250.00	5.00	5.00	5.00
X	3	235.00	240.00	5.00	5.00	5.00
X	3	220.00	235.00	5.00	5.00	5.00
X	3	215.00	220.00	5.00	5.00	5.00
X	3	200.00	215.00	5.00	5.00	5.00
X	3	195.00	200.00	5.50	5.00	5.00
X	3	180.00	195.00	7.00	5.50	5.00
X	3	160.00	180.00	9.00	7.00	5.00
X	3	140.00	160.00	11.00	9.00	6.67
X	3	120.00	140.00	13.00	11.00	6.67
X	3	100.00	120.00	15.00	13.00	6.67
X	3	80.00	100.00	17.00	15.00	10.00
X	3	60.00	80.00	19.00	17.00	10.00
X	3	40.00	60.00	21.00	19.00	10.00
X	3	20.00	40.00	23.00	21.00	10.00
X	3	0.00	20.00	25.00	23.00	10.00

MEMBER PROPERTIES

MEMBER TYPE	BOTTOM ELEV ft	TOP ELEV ft	X-SECTN AREA in.sq	RADIUS OF GYRAT in	ELASTIC MODULUS ksi	THERMAL EXPANSN /deg
LE	240.00	255.00	1.075	0.787	29000.	0.0000117
LE	220.00	240.00	3.016	0.787	29000.	0.0000117
LE	180.00	220.00	6.111	0.787	29000.	0.0000117
LE	140.00	180.00	7.952	0.787	29000.	0.0000117
LE	100.00	140.00	8.399	0.787	29000.	0.0000117
LE	0.00	100.00	12.763	0.787	29000.	0.0000117
DI	240.00	255.00	0.484	0.626	29000.	0.0000117
DI	220.00	240.00	0.715	0.626	29000.	0.0000117
DI	200.00	220.00	0.938	0.626	29000.	0.0000117
DI	160.00	200.00	0.484	0.626	29000.	0.0000117
DI	140.00	160.00	0.715	0.626	29000.	0.0000117
DI	120.00	140.00	0.902	0.626	29000.	0.0000117
DI	80.00	120.00	1.090	0.626	29000.	0.0000117
DI	40.00	80.00	1.688	0.626	29000.	0.0000117
DI	0.00	40.00	1.938	0.626	29000.	0.0000117
HO	250.00	255.00	0.484	0.626	29000.	0.0000117
HO	235.00	240.00	0.715	0.626	29000.	0.0000117
HO	215.00	220.00	0.938	0.626	29000.	0.0000117
HO	195.00	200.00	0.484	0.626	29000.	0.0000117

FACTORED MEMBER RESISTANCES

BOTTOM ELEV ft	TOP ELEV ft	LEGS COMP kip	LEGS TENS kip	DIAGONALS COMP kip	DIAGONALS TENS kip	HORIZONTALS COMP kip	HORIZONTALS TENS kip	INT BRACING COMP kip	INT BRACING TENS kip
250.0	255.0	31.84	51.90	7.16	7.16	7.16	7.16	0.00	0.00
240.0	250.0	31.84	51.90	7.16	7.16	0.00	0.00	0.00	0.00
235.0	240.0	111.82	146.47	10.74	10.74	10.72	10.72	0.00	0.00
220.0	235.0	111.82	146.47	10.74	10.74	0.00	0.00	0.00	0.00
215.0	220.0	256.32	296.33	14.32	14.32	13.88	13.88	0.00	0.00
200.0	215.0	256.32	296.33	14.32	14.32	0.00	0.00	0.00	0.00
195.0	200.0	256.32	296.33	7.16	7.16	7.16	7.16	0.00	0.00
180.0	195.0	256.32	296.33	7.16	7.16	0.00	0.00	0.00	0.00
160.0	180.0	332.98	327.10	7.13	7.13	0.00	0.00	0.00	0.00
140.0	160.0	312.59	385.58	6.51	6.51	0.00	0.00	0.00	0.00

120.0	140.0	359.86	407.40	9.45	9.45	0.00	0.00	0.00	0.00
100.0	120.0	359.86	407.40	13.10	13.10	0.00	0.00	0.00	0.00
80.0	100.0	509.22	457.90	8.84	8.84	0.00	0.00	0.00	0.00
60.0	80.0	509.22	457.90	15.88	15.88	0.00	0.00	0.00	0.00
40.0	60.0	509.22	457.90	13.59	13.59	0.00	0.00	0.00	0.00
20.0	40.0	509.22	457.90	17.02	17.02	0.00	0.00	0.00	0.00
0.0	20.0	509.22	620.80	18.13	18.13	0.00	0.00	0.00	0.00

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

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LOADING CONDITION A ==========

105 mph wind with no ice. Wind Azimuth: 0◆ PL - 0

MAST LOADING

LOAD TYPE	ELEV ft	APPLY..LOAD..AT RADIUS ft	AZI	LOAD AZI	.....FORCES..... HORIZ kip	DOWN kip	.....MOMENTS..... VERTICAL ft-kip	TORSNAL ft-kip
C	250.0	0.00	0.0	0.0	6.73	7.20	0.00	0.00
C	238.0	0.00	0.0	0.0	5.01	4.80	0.00	0.00
C	226.0	0.00	0.0	0.0	4.97	4.80	0.00	0.00
D	255.0	0.00	180.0	0.0	0.06	0.04	0.00	0.00
D	250.0	0.00	180.0	0.0	0.06	0.04	0.00	0.00
D	250.0	0.00	42.0	0.0	0.11	0.05	0.04	0.08
D	240.0	0.00	42.0	0.0	0.11	0.05	0.04	0.08
D	240.0	0.00	57.4	0.0	0.13	0.11	0.05	0.09
D	225.0	0.00	72.7	0.0	0.14	0.11	0.06	0.10
D	225.0	0.00	99.2	0.0	0.14	0.12	0.06	0.10
D	220.0	0.00	99.2	0.0	0.14	0.12	0.06	0.10
D	220.0	0.00	99.6	0.0	0.16	0.18	0.06	0.10
D	205.0	0.00	103.8	0.0	0.15	0.17	0.06	0.10
D	205.0	0.00	104.3	0.0	0.15	0.17	0.06	0.09
D	200.0	0.00	104.3	0.0	0.15	0.17	0.06	0.09
D	200.0	0.00	98.3	0.0	0.17	0.17	0.06	0.08
D	180.0	0.00	105.1	0.0	0.17	0.17	0.05	0.07
D	180.0	0.00	91.9	0.0	0.17	0.19	0.08	0.08
D	160.0	0.00	96.5	0.0	0.18	0.19	0.07	0.08
D	160.0	0.00	87.8	0.0	0.17	0.20	0.09	0.09
D	140.0	0.00	90.4	0.0	0.18	0.20	0.08	0.09
D	140.0	0.00	84.2	0.0	0.19	0.22	0.10	0.10
D	120.0	0.00	86.3	0.0	0.20	0.22	0.09	0.09
D	120.0	0.00	81.7	0.0	0.21	0.23	0.12	0.10
D	100.0	0.00	83.3	0.0	0.22	0.24	0.11	0.10
D	100.0	0.00	79.8	0.0	0.21	0.28	0.13	0.11
D	80.0	0.00	80.8	0.0	0.21	0.28	0.12	0.11
D	80.0	0.00	78.2	0.0	0.23	0.31	0.14	0.12
D	60.0	0.00	79.0	0.0	0.24	0.31	0.14	0.12
D	60.0	0.00	76.9	0.0	0.25	0.32	0.16	0.13
D	40.0	0.00	77.5	0.0	0.25	0.32	0.15	0.13
D	40.0	0.00	75.8	0.0	0.28	0.34	0.17	0.15
D	20.0	0.00	76.3	0.0	0.28	0.34	0.16	0.14
D	20.0	0.00	74.9	0.0	0.31	0.35	0.19	0.18
D	10.0	0.00	74.9	0.0	0.31	0.35	0.19	0.18
D	10.0	0.00	75.3	0.0	0.32	0.35	0.18	0.16
D	0.0	0.00	75.3	0.0	0.32	0.35	0.18	0.16

ANTENNA LOADING

.....ANTENNA..... TYPE	ELEV ft	AZI	ATTACHMENT RAD ft	AZI	.....ANTENNA FORCES..... AXIAL kip	SHEAR kip	GRAVITY kip	TORSION ft-kip
STD+R	214.0	0.0	4.4	0.0	0.72	0.00	0.24	0.00
STD+R	214.0	180.0	4.4	120.0	-0.58	0.00	0.24	0.00
STD+R	202.0	0.0	4.4	0.0	0.72	0.00	0.24	0.00
STD+R	202.0	180.0	4.4	120.0	-0.57	0.00	0.24	0.00

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LOADING CONDITION k ==========

105 mph wind with no ice. Wind Azimuth: 0◆ PL - 0

MAST LOADING
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LOAD TYPE	ELEV ft	APPLY..LOAD..AT RADIUS ft	AZI	LOAD AZI	.....FORCES..... HORIZ kip	DOWN kip	.....MOMENTS..... VERTICAL ft-kip	TORSNAL ft-kip
C	250.0	0.00	0.0	0.0	6.73	5.40	0.00	0.00
C	238.0	0.00	0.0	0.0	5.01	3.60	0.00	0.00
C	226.0	0.00	0.0	0.0	4.97	3.60	0.00	0.00
D	255.0	0.00	180.0	0.0	0.06	0.03	0.00	0.00
D	250.0	0.00	180.0	0.0	0.06	0.03	0.00	0.00
D	250.0	0.00	42.0	0.0	0.11	0.04	0.03	0.08
D	240.0	0.00	42.0	0.0	0.11	0.04	0.03	0.08
D	240.0	0.00	57.4	0.0	0.13	0.08	0.04	0.09
D	225.0	0.00	72.7	0.0	0.14	0.08	0.04	0.10
D	225.0	0.00	99.2	0.0	0.14	0.09	0.05	0.10
D	220.0	0.00	99.2	0.0	0.14	0.09	0.05	0.10
D	220.0	0.00	99.6	0.0	0.16	0.13	0.05	0.10
D	205.0	0.00	103.8	0.0	0.15	0.13	0.05	0.10
D	205.0	0.00	104.3	0.0	0.15	0.13	0.04	0.09
D	200.0	0.00	104.3	0.0	0.15	0.13	0.04	0.09
D	200.0	0.00	98.3	0.0	0.17	0.13	0.05	0.08
D	180.0	0.00	105.1	0.0	0.17	0.12	0.04	0.07
D	180.0	0.00	91.9	0.0	0.17	0.14	0.06	0.08
D	160.0	0.00	96.5	0.0	0.18	0.15	0.05	0.08
D	160.0	0.00	87.8	0.0	0.17	0.15	0.07	0.09
D	140.0	0.00	90.4	0.0	0.18	0.15	0.06	0.09
D	140.0	0.00	84.2	0.0	0.19	0.16	0.08	0.10
D	120.0	0.00	86.3	0.0	0.20	0.17	0.07	0.09
D	120.0	0.00	81.7	0.0	0.21	0.18	0.09	0.10
D	100.0	0.00	83.3	0.0	0.22	0.18	0.08	0.10
D	100.0	0.00	79.8	0.0	0.21	0.21	0.10	0.11
D	80.0	0.00	80.8	0.0	0.21	0.21	0.09	0.11
D	80.0	0.00	78.2	0.0	0.23	0.23	0.11	0.12
D	60.0	0.00	79.0	0.0	0.24	0.24	0.10	0.12
D	60.0	0.00	76.9	0.0	0.25	0.24	0.12	0.13
D	40.0	0.00	77.5	0.0	0.25	0.24	0.11	0.13
D	40.0	0.00	75.8	0.0	0.28	0.25	0.13	0.15
D	20.0	0.00	76.3	0.0	0.28	0.26	0.12	0.14
D	20.0	0.00	74.9	0.0	0.31	0.26	0.14	0.18
D	10.0	0.00	74.9	0.0	0.31	0.26	0.14	0.18
D	10.0	0.00	75.3	0.0	0.32	0.26	0.13	0.16
D	0.0	0.00	75.3	0.0	0.32	0.26	0.13	0.16

ANTENNA LOADING
===============

.....ANTENNA..... TYPE	ELEV ft	AZI	ATTACHMENT RAD ft	AZI	.....ANTENNA FORCES..... AXIAL kip	SHEAR kip	GRAVITY kip	TORSION ft-kip
STD+R	214.0	0.0	4.4	0.0	0.72	0.00	0.18	0.00
STD+R	214.0	180.0	4.4	120.0	-0.58	0.00	0.18	0.00
STD+R	202.0	0.0	4.4	0.0	0.72	0.00	0.18	0.00
STD+R	202.0	180.0	4.4	120.0	-0.57	0.00	0.18	0.00

==========

LOADING CONDITION AU ==========

30 mph wind with 1.5 ice. Wind Azimuth: 0◆ PL - 0

MAST LOADING
============

LOAD TYPE	ELEV ft	APPLY..LOAD..AT RADIUS ft	AZI	LOAD AZI	.....FORCES..... HORIZ kip	DOWN kip	.....MOMENTS..... VERTICAL ft-kip	TORSNAL ft-kip
C	250.0	0.00	0.0	0.0	0.75	12.73	0.00	0.00
C	238.0	0.00	0.0	0.0	0.57	8.47	0.00	0.00

C	226.0	0.00	0.0	0.0	0.57	8.46	0.00	0.00
D	255.0	0.00	180.0	0.0	0.01	0.18	0.00	0.00
D	250.0	0.00	180.0	0.0	0.01	0.18	0.00	0.00
D	250.0	0.00	42.0	0.0	0.01	0.24	0.20	0.01
D	240.0	0.00	42.0	0.0	0.01	0.24	0.20	0.01
D	240.0	0.00	59.7	0.0	0.02	0.36	0.20	0.01
D	235.0	0.00	59.7	0.0	0.02	0.36	0.20	0.01
D	235.0	0.00	70.9	0.0	0.02	0.35	0.21	0.01
D	230.0	0.00	70.9	0.0	0.02	0.35	0.21	0.01
D	230.0	0.00	77.2	0.0	0.02	0.36	0.21	0.01
D	225.0	0.00	77.2	0.0	0.02	0.36	0.21	0.01
D	225.0	0.00	99.8	0.0	0.02	0.41	0.23	0.01
D	220.0	0.00	99.8	0.0	0.02	0.41	0.23	0.01
D	220.0	0.00	99.8	0.0	0.02	0.50	0.23	0.01
D	215.0	0.00	99.8	0.0	0.02	0.50	0.23	0.01
D	215.0	0.00	101.6	0.0	0.02	0.47	0.24	0.01
D	205.0	0.00	102.0	0.0	0.02	0.47	0.24	0.01
D	205.0	0.00	102.3	0.0	0.02	0.48	0.21	0.01
D	200.0	0.00	102.3	0.0	0.02	0.48	0.21	0.01
D	200.0	0.00	95.2	0.0	0.02	0.52	0.21	0.00
D	195.0	0.00	95.2	0.0	0.02	0.52	0.21	0.00
D	195.0	0.00	97.4	0.0	0.02	0.49	0.20	0.00
D	190.0	0.00	97.4	0.0	0.02	0.49	0.20	0.00
D	190.0	0.00	99.6	0.0	0.02	0.50	0.19	0.00
D	185.0	0.00	99.6	0.0	0.02	0.50	0.19	0.00
D	185.0	0.00	101.9	0.0	0.02	0.50	0.18	0.00
D	180.0	0.00	101.9	0.0	0.02	0.50	0.18	0.00
D	180.0	0.00	89.1	0.0	0.02	0.53	0.25	0.00
D	160.0	0.00	92.5	0.0	0.02	0.55	0.22	0.00
D	160.0	0.00	84.5	0.0	0.02	0.54	0.29	0.01
D	146.7	0.00	85.9	0.0	0.02	0.54	0.28	0.01
D	146.7	0.00	87.3	0.0	0.02	0.55	0.26	0.01
D	140.0	0.00	87.3	0.0	0.02	0.55	0.26	0.01
D	140.0	0.00	81.2	0.0	0.02	0.60	0.34	0.01
D	120.0	0.00	83.3	0.0	0.02	0.62	0.31	0.01
D	120.0	0.00	78.6	0.0	0.03	0.66	0.38	0.01
D	100.0	0.00	80.2	0.0	0.03	0.67	0.35	0.01
D	100.0	0.00	76.8	0.0	0.02	0.67	0.43	0.01
D	90.0	0.00	76.8	0.0	0.02	0.67	0.43	0.01
D	90.0	0.00	77.7	0.0	0.03	0.68	0.40	0.01
D	80.0	0.00	77.7	0.0	0.03	0.68	0.40	0.01
D	80.0	0.00	75.2	0.0	0.03	0.74	0.48	0.01
D	70.0	0.00	75.2	0.0	0.03	0.74	0.48	0.01
D	70.0	0.00	75.9	0.0	0.03	0.75	0.45	0.01
D	60.0	0.00	75.9	0.0	0.03	0.75	0.45	0.01
D	60.0	0.00	73.8	0.0	0.03	0.76	0.53	0.01
D	50.0	0.00	73.8	0.0	0.03	0.76	0.53	0.01
D	50.0	0.00	74.5	0.0	0.03	0.77	0.50	0.01
D	40.0	0.00	74.5	0.0	0.03	0.77	0.50	0.01
D	40.0	0.00	72.8	0.0	0.03	0.82	0.57	0.01
D	30.0	0.00	72.8	0.0	0.03	0.82	0.57	0.01
D	30.0	0.00	73.3	0.0	0.03	0.83	0.55	0.01
D	20.0	0.00	73.3	0.0	0.03	0.83	0.55	0.01
D	20.0	0.00	73.3	0.0	0.03	0.69	0.29	0.01
D	10.0	0.00	73.3	0.0	0.03	0.69	0.29	0.01
D	10.0	0.00	72.5	0.0	0.04	0.78	0.49	0.01
D	0.0	0.00	72.5	0.0	0.04	0.78	0.49	0.01

ANTENNA LOADING
==========

.....ANTENNA.....			ATTACHMENT		.....ANTENNA FORCES.....			
TYPE	ELEV ft	AZI	RAD ft	AZI	AXIAL kip	SHEAR kip	GRAVITY kip	TORSION ft-kip
STD+R	214.0	0.0	4.4	0.0	0.06	0.00	0.82	0.00
STD+R	214.0	180.0	4.4	120.0	-0.05	0.00	0.82	0.00
STD+R	202.0	0.0	4.4	0.0	0.06	0.00	0.82	0.00
STD+R	202.0	180.0	4.4	120.0	-0.05	0.00	0.82	0.00

==========
MAXIMUM ANTENNA AND REFLECTOR ROTATIONS:
==========

ELEV ft	AZI deg	TYPE *	.....BEAM DEFLECTIONS (deg)..... ROLL	YAW	PITCH	TOTAL
214.0	0.0	STD+R	-2.084 S	0.210 v	-1.888 b	1.898 J
214.0	180.0	STD+R	2.084 S	0.210 v	1.888 b	1.898 J

202.0	0.0	STD+R	-1.877	S	0.195	v	-1.693	b	1.703 J
202.0	180.0	STD+R	1.877	S	0.195	v	1.693	b	1.703 J

MAXIMUM TENSION IN MAST MEMBERS (kip)

ELEV ft	LEGS	DIAG	HORIZ	BRACE
255.0	----------		0.89 k	0.00 A
	0.79 AC	1.32 S		
250.0	----------		0.14 S	0.00 A
	2.19 k	3.44 D		
245.0	----------		0.19 Y	0.00 A
	11.30 k	3.68 n		
240.0	----------		0.28 AV	0.00 A
	20.86 k	5.31 n		
235.0	----------		0.22 A	0.00 A
	35.63 k	6.74 V		
230.0	----------		0.01 AD	0.00 A
	52.21 k	7.40 n		
225.0	----------		0.24 A	0.00 A
	71.68 k	9.64 D		
220.0	----------		1.94 Y	0.00 A
	95.43 k	10.00 AF		
215.0	----------		0.36 A	0.00 A
	122.00 k	10.88 P		
210.0	----------		0.10 AC	0.00 A
	147.89 k	11.37 z		
205.0	----------		0.39 A	0.00 A
	176.86 k	12.02 z		
200.0	----------		2.15 AC	0.00 A
	195.40 k	4.95 w		
195.0	----------		0.42 A	0.00 A
	206.67 k	4.57 R		
190.0	----------		0.02 A	0.00 A
	214.47 k	4.29 w		
185.0	----------		0.28 A	0.00 A
	223.46 k	4.24 R		
180.0	----------		0.05 A	0.00 A
	230.67 k	4.10 AB		
175.0	----------		0.16 A	0.00 A
	238.39 k	4.11 R		
170.0	----------		0.12 A	0.00 A
	245.09 k	4.06 AB		
165.0	----------		0.12 A	0.00 A
	252.13 k	4.12 R		
160.0	----------		0.12 A	0.00 A
	259.40 k	4.47 AB		
153.3	----------		0.16 A	0.00 A
	268.10 k	4.53 R		
146.7	----------		0.11 A	0.00 A
	276.05 k	4.56 AB		
140.0	----------		0.12 A	0.00 A
	284.19 k	4.69 R		
133.3	----------		0.09 A	0.00 A
	291.90 k	4.80 AB		
126.7	----------		0.10 A	0.00 A
	299.80 k	4.98 R		
120.0	----------		0.08 A	0.00 A
	307.43 k	5.15 AB		
113.3	----------		0.12 A	0.00 A
	315.24 k	5.36 R		
106.7	----------		0.07 A	0.00 A
	322.94 k	5.57 AB		
100.0	----------		0.11 A	0.00 A
	332.57 k	6.37 AB		
90.0	----------		0.09 A	0.00 A
	344.09 k	6.63 AB		
80.0	----------		0.09 A	0.00 A
	355.66 k	6.96 R		
70.0	----------		0.08 A	0.00 A
	367.23 k	7.32 AB		
60.0	----------		0.08 A	0.00 A
	378.98 k	7.73 R		
50.0	----------		0.07 A	0.00 A
	390.86 k	8.16 AB		
40.0	----------		0.07 A	0.00 A
	402.94 k	8.65 R		

30.0	----------	0.06 A	0.00 A
	415.24 k 9.17 AB		
20.0	----------	0.01 A	0.00 A
	427.86 k 9.76 R		
10.0	----------	0.06 A	0.00 A
	440.75 k 10.37 AB		
0.0	----------	0.00 A	0.00 A

MAXIMUM COMPRESSION IN MAST MEMBERS (kip)

ELEV ft	LEGS	DIAG	HORIZ	BRACE
255.0	----------		-0.90 S	0.00 A
	-0.89 A	-1.29 k		
250.0	----------		-0.13 k	0.00 A
	-6.61 S	-3.48 D		
245.0	----------		-0.11 q	0.00 A
	-15.92 S	-3.76 V		
240.0	----------		-0.02 y	0.00 A
	-27.32 S	-5.58 S		
235.0	----------		-0.14 AC	0.00 A
	-44.24 S	-6.61 n		
230.0	----------		-0.03 B	0.00 A
	-61.64 S	-7.50 V		
225.0	----------		-0.16 AC	0.00 A
	-84.10 S	-9.65 V		
220.0	----------		-1.67 AC	0.00 A
	-108.06 S	-10.38 D		
215.0	----------		-0.31 AC	0.00 A
	-136.61 S	-10.82 z		
210.0	----------		-0.11 A	0.00 A
	-163.11 S	-11.42 P		
205.0	----------		-0.34 AC	0.00 A
	-193.16 S	-12.32 P		
200.0	----------		-2.38 A	0.00 A
	-212.56 S	-4.95 S		
195.0	----------		-0.37 AC	0.00 A
	-225.02 S	-4.45 AB		
190.0	----------		-0.02 AC	0.00 A
	-233.16 S	-4.39 R		
185.0	----------		-0.25 AC	0.00 A
	-243.07 S	-4.18 AB		
180.0	----------		-0.04 AC	0.00 A
	-250.85 S	-4.18 R		
175.0	----------		-0.14 AC	0.00 A
	-259.46 S	-4.08 AB		
170.0	----------		-0.10 AC	0.00 A
	-266.82 S	-4.13 R		
165.0	----------		-0.11 AC	0.00 A
	-274.74 S	-4.10 AB		
160.0	----------		-0.10 AC	0.00 A
	-282.85 S	-4.54 R		
153.3	----------		-0.14 AC	0.00 A
	-292.71 S	-4.52 R		
146.7	----------		-0.09 AC	0.00 A
	-301.70 S	-4.61 R		
140.0	----------		-0.11 AC	0.00 A
	-311.03 S	-4.69 R		
133.3	----------		-0.08 AC	0.00 A
	-319.89 S	-4.86 S		
126.7	----------		-0.09 AC	0.00 A
	-329.04 S	-4.98 R		
120.0	----------		-0.07 AC	0.00 A
	-337.90 S	-5.23 S		
113.3	----------		-0.11 AC	0.00 A
	-347.04 S	-5.38 R		
106.7	----------		-0.06 AC	0.00 A
	-356.06 S	-5.65 S		
100.0	----------		-0.09 AC	0.00 A
	-367.49 S	-6.48 U		
90.0	----------		-0.08 AC	0.00 A
	-381.31 S	-6.81 S		
80.0	----------		-0.08 AC	0.00 A

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          -395.31 S      -7.14 U
     70.0 ---------------------          -0.07 AC      0.00 A
          -409.45 S      -7.55 S
     60.0 ---------------------          -0.07 AC      0.00 A
          -423.84 S      -7.95 U
     50.0 ---------------------          -0.06 AC      0.00 A
          -438.41 S      -8.41 S
     40.0 ---------------------          -0.06 AC      0.00 A
          -453.31 S      -8.92 U
     30.0 ---------------------          -0.05 AC      0.00 A
          -468.55 S      -9.47 S
     20.0 ---------------------           0.00 AC      0.00 A
          -484.21 S     -10.03 U
     10.0 ---------------------          -0.05 AC      0.00 A
          -500.20 S     -10.75 S
      0.0 ---------------------           0.00 A       0.00 A
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FORCE/RESISTANCE RATIO IN LEGS
==============================

MAST ELEV ft	-- LEG COMPRESSION - MAX COMP	COMP RESIST	FORCE/ RESIST RATIO	---- LEG TENSION --- MAX TENS	TENS RESIST	FORCE/ RESIST RATIO
255.00						
	0.89	31.84	0.03	0.79	51.90	0.02
250.00						
	6.61	31.84	0.21	2.19	51.90	0.04
245.00						
	15.92	31.84	0.50	11.30	51.90	0.22
240.00						
	27.32	111.82	0.24	20.86	146.47	0.14
235.00						
	44.24	111.82	0.40	35.63	146.47	0.24
230.00						
	61.64	111.82	0.55	52.21	146.47	0.36
225.00						
	84.10	111.82	0.75	71.68	146.47	0.49
220.00						
	108.06	256.32	0.42	95.43	296.33	0.32
215.00						
	136.61	256.32	0.53	122.00	296.33	0.41
210.00						
	163.11	256.32	0.64	147.89	296.33	0.50
205.00						
	193.16	256.32	0.75	176.86	296.33	0.60
200.00						
	212.56	256.32	0.83	195.40	296.33	0.66
195.00						
	225.02	256.32	0.88	206.67	296.33	0.70
190.00						
	233.16	256.32	0.91	214.47	296.33	0.72
185.00						
	243.07	256.32	0.95	223.46	296.33	0.75
180.00						
	250.85	332.98	0.75	230.67	327.10	0.71
175.00						
	259.46	332.98	0.78	238.39	327.10	0.73
170.00						
	266.82	332.98	0.80	245.09	327.10	0.75
165.00						
	274.74	332.98	0.83	252.13	327.10	0.77
160.00						
	282.85	312.59	0.90	259.40	385.58	0.67
153.33						
	292.71	312.59	0.94	268.10	385.58	0.70
146.67						
	301.70	312.59	0.97	276.05	385.58	0.72
140.00						
	311.03	359.86	0.86	284.19	407.40	0.70
133.33						
	319.89	359.86	0.89	291.90	407.40	0.72
126.67						
	329.04	359.86	0.91	299.80	407.40	0.74
120.00						
	337.90	359.86	0.94	307.43	407.40	0.75
113.33						
	347.04	359.86	0.96	315.24	407.40	0.77

106.67						
	356.06	359.86	0.99	322.94	407.40	0.79
100.00						
	367.49	509.22	0.72	332.57	457.90	0.73
90.00						
	381.31	509.22	0.75	344.09	457.90	0.75
80.00						
	395.31	509.22	0.78	355.66	457.90	0.78
70.00						
	409.45	509.22	0.80	367.23	457.90	0.80
60.00						
	423.84	509.22	0.83	378.98	457.90	0.83
50.00						
	438.41	509.22	0.86	390.86	457.90	0.85
40.00						
	453.31	509.22	0.89	402.94	457.90	0.88
30.00						
	468.55	509.22	0.92	415.24	457.90	0.91
20.00						
	484.21	509.22	0.95	427.86	620.80	0.69
10.00						
	500.20	509.22	0.98	440.75	620.80	0.71
0.00						

FORCE/RESISTANCE RATIO IN DIAGONALS
==========

MAST ELEV ft	- DIAG COMPRESSION - MAX COMP	COMP RESIST	FORCE/ RESIST RATIO	--- DIAG TENSION -- MAX TENS	TENS RESIST	FORCE/ RESIST RATIO
255.00						
	1.29	7.16	0.18	1.32	7.16	0.18
250.00						
	3.48	7.16	0.49	3.44	7.16	0.48
245.00						
	3.76	7.16	0.52	3.68	7.16	0.51
240.00						
	5.58	10.74	0.52	5.31	10.74	0.49
235.00						
	6.61	10.74	0.62	6.74	10.74	0.63
230.00						
	7.50	10.74	0.70	7.40	10.74	0.69
225.00						
	9.65	10.74	0.90	9.64	10.74	0.90
220.00						
	10.38	14.32	0.72	10.00	14.32	0.70
215.00						
	10.82	14.32	0.76	10.88	14.32	0.76
210.00						
	11.42	14.32	0.80	11.37	14.32	0.79
205.00						
	12.32	14.32	0.86	12.02	14.32	0.84
200.00						
	4.95	7.16	0.69	4.95	7.16	0.69
195.00						
	4.45	7.16	0.62	4.57	7.16	0.64
190.00						
	4.39	7.16	0.61	4.29	7.16	0.60
185.00						
	4.18	7.16	0.58	4.24	7.16	0.59
180.00						
	4.18	7.13	0.59	4.10	7.13	0.58
175.00						
	4.08	7.13	0.57	4.11	7.13	0.58
170.00						
	4.13	7.13	0.58	4.06	7.13	0.57
165.00						
	4.10	7.13	0.57	4.12	7.13	0.58
160.00						
	4.54	6.51	0.70	4.47	6.51	0.69
153.33						
	4.52	6.51	0.69	4.53	6.51	0.70
146.67						
	4.61	6.51	0.71	4.56	6.51	0.70
140.00						
	4.69	9.45	0.50	4.69	9.45	0.50
133.33						
	4.86	9.45	0.51	4.80	9.45	0.51

126.67						
	4.98	9.45	0.53	4.98	9.45	0.53
120.00						
	5.23	13.10	0.40	5.15	13.10	0.39
113.33						
	5.38	13.10	0.41	5.36	13.10	0.41
106.67						
	5.65	13.10	0.43	5.57	13.10	0.43
100.00						
	6.48	8.84	0.73	6.37	8.84	0.72
90.00						
	6.81	8.84	0.77	6.63	8.84	0.75
80.00						
	7.14	15.88	0.45	6.96	15.88	0.44
70.00						
	7.55	15.88	0.48	7.32	15.88	0.46
60.00						
	7.95	13.59	0.59	7.73	13.59	0.57
50.00						
	8.41	13.59	0.62	8.16	13.59	0.60
40.00						
	8.92	17.02	0.52	8.65	17.02	0.51
30.00						
	9.47	17.02	0.56	9.17	17.02	0.54
20.00						
	10.03	18.13	0.55	9.76	18.13	0.54
10.00						
	10.75	18.13	0.59	10.37	18.13	0.57
0.00						

MAXIMUM INDIVIDUAL FOUNDATION LOADS: (kip)
==========

LOAD---COMPONENTS				TOTAL
NORTH	EAST	DOWN	UPLIFT	SHEAR
45.88 S	38.87 e	507.69 S	-446.70 k	45.88 S

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

HORIZONTAL			DOWN	OVERTURNING			TORSION
NORTH	EAST	TOTAL @ 0.0		NORTH	EAST	TOTAL @ 0.0	
74.7 S	-64.8 J	74.7 S	185.6 AZ	10439.0 S	9176.7 b	10439.0 S	36.8 AT

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Latticed Tower Analysis (Unguyed) (c)2017 Guymast Inc. 416-736-7453
Processed under license at:

Sabre Towers and Poles on: 22 dec 2020 at: 9:54:40
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****
********** Service Load Condition **********
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* Only 1 condition(s) shown in full
* Some wind loads may have been derived from full-scale wind tunnel testing

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LOADING CONDITION A ==========

60 mph wind with no ice. Wind Azimuth: 0◆ PL - 0

MAST LOADING
============

LOAD TYPE	ELEV ft	APPLY..LOAD..AT RADIUS ft	AZI	LOAD AZI	......FORCES...... HORIZ kip	DOWN kip	.....MOMENTS..... VERTICAL ft-kip	TORSNAL ft-kip
C	250.0	0.00	0.0	0.0	2.20	6.00	0.00	0.00
C	238.0	0.00	0.0	0.0	1.64	4.00	0.00	0.00
C	226.0	0.00	0.0	0.0	1.62	4.00	0.00	0.00
D	255.0	0.00	180.0	0.0	0.02	0.03	0.00	0.00
D	250.0	0.00	180.0	0.0	0.02	0.03	0.00	0.00
D	250.0	0.00	42.0	0.0	0.03	0.05	0.04	0.03
D	240.0	0.00	42.0	0.0	0.03	0.05	0.04	0.03
D	240.0	0.00	57.4	0.0	0.04	0.09	0.04	0.03
D	225.0	0.00	72.7	0.0	0.05	0.09	0.05	0.03
D	225.0	0.00	99.2	0.0	0.05	0.10	0.05	0.03
D	220.0	0.00	99.2	0.0	0.05	0.10	0.05	0.03
D	220.0	0.00	99.6	0.0	0.05	0.15	0.05	0.03
D	205.0	0.00	103.8	0.0	0.05	0.14	0.05	0.03
D	205.0	0.00	101.8	0.0	0.05	0.14	0.05	0.03
D	180.0	0.00	102.3	0.0	0.06	0.14	0.05	0.02
D	180.0	0.00	91.9	0.0	0.06	0.16	0.06	0.03
D	160.0	0.00	96.5	0.0	0.06	0.16	0.05	0.03
D	160.0	0.00	87.8	0.0	0.06	0.17	0.07	0.03
D	140.0	0.00	90.4	0.0	0.06	0.17	0.07	0.03
D	140.0	0.00	84.2	0.0	0.07	0.18	0.08	0.03
D	120.0	0.00	86.3	0.0	0.07	0.18	0.08	0.03
D	120.0	0.00	81.7	0.0	0.07	0.20	0.10	0.03
D	100.0	0.00	83.3	0.0	0.08	0.20	0.09	0.03
D	100.0	0.00	79.8	0.0	0.07	0.23	0.11	0.04
D	80.0	0.00	80.8	0.0	0.07	0.23	0.10	0.04
D	80.0	0.00	78.2	0.0	0.08	0.26	0.12	0.04
D	60.0	0.00	79.0	0.0	0.08	0.26	0.11	0.04
D	60.0	0.00	76.9	0.0	0.09	0.26	0.13	0.04
D	40.0	0.00	77.5	0.0	0.09	0.27	0.13	0.04
D	40.0	0.00	75.8	0.0	0.10	0.28	0.14	0.05
D	20.0	0.00	76.3	0.0	0.10	0.29	0.14	0.05
D	20.0	0.00	74.9	0.0	0.10	0.29	0.16	0.06
D	0.0	0.00	75.3	0.0	0.11	0.29	0.15	0.05

ANTENNA LOADING
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.....ANTENNA..... TYPE	ELEV ft	AZI	ATTACHMENT RAD ft	AZI	.....ANTENNA FORCES..... AXIAL kip	SHEAR kip	GRAVITY kip	TORSION ft-kip
STD+R	214.0	0.0	4.4	0.0	0.24	0.00	0.20	0.00
STD+R	214.0	180.0	4.4	120.0	-0.19	0.00	0.20	0.00
STD+R	202.0	0.0	4.4	0.0	0.23	0.00	0.20	0.00
STD+R	202.0	180.0	4.4	120.0	-0.19	0.00	0.20	0.00

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MAXIMUM MAST DISPLACEMENTS:
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ELEV ft	------DEFLECTIONS (ft)----- NORTH	EAST	DOWN	--TILTS (DEG)--- NORTH	EAST	TWIST DEG
255.0	1.522 S	1.369 b	0.017 S	0.802 S	0.733 b	0.069 J
250.0	1.452 S	1.305 b	0.017 S	0.802 S	0.733 b	0.069 J
245.0	1.381 S	1.240 b	0.016 S	0.798 S	0.729 b	0.069 J
240.0	1.311 S	1.177 b	0.015 S	0.784 S	0.716 b	0.070 J
235.0	1.242 S	1.114 b	0.015 S	0.775 S	0.707 b	0.070 J
230.0	1.174 S	1.052 b	0.014 S	0.760 S	0.693 b	0.070 J
225.0	1.108 S	0.991 b	0.013 S	0.739 S	0.673 b	0.070 J
220.0	1.043 S	0.932 b	0.013 S	0.710 S	0.645 b	0.069 J
215.0	0.981 S	0.876 b	0.012 S	0.692 S	0.628 b	0.069 J
210.0	0.921 S	0.821 b	0.012 S	0.668 S	0.605 b	0.067 J
205.0	0.861 S	0.768 b	0.011 S	0.639 S	0.578 b	0.065 J
200.0	0.806 S	0.718 b	0.011 S	0.605 S	0.546 b	0.063 J
195.0	0.754 S	0.671 b	0.010 S	0.570 S	0.513 b	0.056 J
190.0	0.705 S	0.627 b	0.010 S	0.537 S	0.483 b	0.051 J
185.0	0.659 S	0.585 b	0.009 S	0.504 S	0.453 b	0.047 J
180.0	0.616 S	0.547 b	0.009 S	0.474 S	0.425 b	0.042 J
175.0	0.574 S	0.510 b	0.009 S	0.451 S	0.404 b	0.038 J
170.0	0.535 S	0.475 b	0.008 S	0.429 S	0.384 b	0.035 J
165.0	0.498 S	0.442 b	0.008 S	0.408 S	0.365 b	0.031 J

160.0	0.463	S	0.410	b	0.008	S	0.387	S	0.346	b	0.028 J
153.3	0.418	S	0.370	b	0.007	S	0.360	S	0.322	b	0.025 J
146.7	0.377	S	0.334	b	0.007	S	0.335	S	0.298	b	0.023 J
140.0	0.339	S	0.300	b	0.007	S	0.310	S	0.276	b	0.020 J
133.3	0.304	S	0.269	b	0.006	S	0.286	S	0.255	b	0.019 J
126.7	0.271	S	0.239	b	0.006	S	0.264	S	0.235	b	0.017 h
120.0	0.241	S	0.213	b	0.006	S	0.242	S	0.215	b	0.016 h
113.3	0.213	S	0.188	b	0.005	S	0.221	S	0.196	b	0.015 h
106.7	0.188	S	0.166	b	0.005	S	0.200	S	0.178	b	0.014 h
100.0	0.165	S	0.146	b	0.005	S	0.180	S	0.159	b	0.012 h
90.0	0.134	S	0.118	b	0.004	S	0.160	S	0.142	b	0.011 h
80.0	0.107	S	0.094	b	0.004	S	0.141	S	0.125	b	0.009 h
70.0	0.083	S	0.073	b	0.003	S	0.123	S	0.109	b	0.008 h
60.0	0.062	S	0.055	b	0.003	S	0.104	S	0.092	b	0.007 h
50.0	0.045	S	0.039	b	0.003	S	0.086	S	0.076	b	0.006 h
40.0	0.030	S	0.026	b	0.002	S	0.069	S	0.061	b	0.005 h
30.0	0.018	S	0.016	b	0.002	L	0.051	S	0.045	b	0.003 h
20.0	0.010	S	0.008	b	0.001	L	0.034	S	0.030	b	0.002 h
10.0	0.003	S	-0.003	J	0.001	L	0.017	S	0.015	b	0.001 h
0.0	0.000	A	0.000	A	0.000	A	0.000	A	0.000	A	0.000 A

MAXIMUM ANTENNA AND REFLECTOR ROTATIONS:

ELEV ft	AZI deg	TYPE *	.....BEAM DEFLECTIONS (deg)..... ROLL	YAW	PITCH	TOTAL
214.0	0.0	STD+R	-0.687 S	0.069 J	-0.623 b	0.626 J
214.0	180.0	STD+R	0.687 S	0.069 J	0.623 b	0.626 J
202.0	0.0	STD+R	-0.619 S	0.064 J	-0.559 b	0.562 J
202.0	180.0	STD+R	0.619 S	0.064 J	0.559 b	0.562 J

MAXIMUM TENSION IN MAST MEMBERS (kip)

ELEV ft	LEGS	DIAG	HORIZ	BRACE
255.0	----------	----------	0.29 A	0.00 A
	0.23 S	0.44 S		
250.0	----------	----------	0.05 S	0.00 A
	0.00 A	1.13 V		
245.0	----------	----------	0.08 Y	0.00 A
	2.24 A	1.19 D		
240.0	----------	----------	0.14 g	0.00 A
	4.83 A	1.67 V		
235.0	----------	----------	0.10 A	0.00 A
	9.03 A	2.25 D		
230.0	----------	----------	0.00 A	0.00 A
	14.29 A	2.40 V		
225.0	----------	----------	0.10 A	0.00 A
	19.78 A	3.16 D		
220.0	----------	----------	0.71 Y	0.00 A
	27.59 A	3.18 V		
215.0	----------	----------	0.14 A	0.00 A
	35.79 A	3.63 P		
210.0	----------	----------	0.03 G	0.00 A
	44.25 A	3.71 P		
205.0	----------	----------	0.14 A	0.00 A
	53.53 A	3.92 P		
200.0	----------	----------	0.62 G	0.00 A
	59.48 A	1.55 M		
195.0	----------	----------	0.15 A	0.00 A
	62.86 A	1.53 R		
190.0	----------	----------	0.01 A	0.00 A
	65.37 A	1.37 M		
185.0	----------	----------	0.10 A	0.00 A
	68.10 A	1.41 R		
180.0	----------	----------	0.02 A	0.00 A
	70.36 A	1.33 R		
175.0	----------	----------	0.06 A	0.00 A
	72.70 A	1.37 R		
170.0	----------	----------	0.04 A	0.00 A
	74.77 A	1.33 R		
165.0	----------	----------	0.04 A	0.00 A
	76.89 A	1.37 R		
160.0	----------	----------	0.04 A	0.00 A
	79.12 A	1.47 R		

153.3	----------	0.06 A	0.00 A
	81.74 A 1.51 R		
146.7	----------	0.04 A	0.00 A
	84.15 A 1.50 R		
140.0	----------	0.05 A	0.00 A
	86.59 A 1.57 R		
133.3	----------	0.03 A	0.00 A
	88.91 A 1.60 R		
126.7	----------	0.04 A	0.00 A
	91.27 A 1.67 R		
120.0	----------	0.03 A	0.00 A
	93.57 A 1.73 R		
113.3	----------	0.04 A	0.00 A
	95.90 A 1.81 R		
106.7	----------	0.02 A	0.00 A
	98.21 A 1.88 R		
100.0	----------	0.04 A	0.00 A
	101.06 A 2.16 R		
90.0	----------	0.03 A	0.00 A
	104.45 A 2.25 R		
80.0	----------	0.03 A	0.00 A
	107.82 A 2.37 R		
70.0	----------	0.03 A	0.00 A
	111.18 A 2.49 R		
60.0	----------	0.03 A	0.00 A
	114.58 A 2.64 R		
50.0	----------	0.03 A	0.00 A
	118.04 A 2.78 R		
40.0	----------	0.03 A	0.00 A
	121.53 A 2.95 R		
30.0	----------	0.02 A	0.00 A
	125.10 A 3.13 R		
20.0	----------	0.00 A	0.00 A
	128.75 A 3.34 R		
10.0	----------	0.02 A	0.00 A
	132.50 A 3.54 R		
0.0	----------	0.00 A	0.00 A

MAXIMUM COMPRESSION IN MAST MEMBERS (kip)

ELEV ft	LEGS	DIAG	HORIZ	BRACE
255.0	----------		-0.30 S	0.00 A
	-0.32 A	-0.42 A		
250.0	----------		-0.04 A	0.00 A
	-3.43 S	-1.15 V		
245.0	----------		-0.01 G	0.00 A
	-6.52 S	-1.26 D		
240.0	----------		0.00 A	0.00 A
	-10.76 S	-1.90 S		
235.0	----------		-0.02 S	0.00 A
	-16.88 S	-2.13 D		
230.0	----------		-0.02 B	0.00 A
	-22.75 S	-2.49 V		
225.0	----------		-0.03 S	0.00 A
	-30.90 S	-3.17 V		
220.0	----------		-0.47 S	0.00 A
	-38.75 S	-3.50 D		
215.0	----------		-0.08 S	0.00 A
	-48.57 S	-3.49 P		
210.0	----------		-0.04 A	0.00 A
	-57.31 S	-3.78 P		
205.0	----------		-0.09 S	0.00 A
	-67.39 S	-4.07 P		
200.0	----------		-0.86 A	0.00 A
	-73.90 S	-1.69 S		
195.0	----------		-0.10 S	0.00 A
	-78.27 S	-1.43 R		
190.0	----------		0.00 S	0.00 A
	-81.00 S	-1.48 R		
185.0	----------		-0.07 S	0.00 A
	-84.46 S	-1.36 R		
180.0	----------		-0.01 S	0.00 A

	-87.14 S	-1.41 R		
175.0	----------		-0.04 S	0.00 A
	-90.18 S	-1.35 R		
170.0	----------		-0.03 S	0.00 A
	-92.76 S	-1.39 R		
165.0	----------		-0.03 S	0.00 A
	-95.57 S	-1.35 R		
160.0	----------		-0.03 S	0.00 A
	-98.43 S	-1.53 R		
153.3	----------		-0.04 S	0.00 A
	-101.96 S	-1.51 R		
146.7	----------		-0.03 S	0.00 A
	-105.16 S	-1.55 R		
140.0	----------		-0.03 S	0.00 A
	-108.53 S	-1.57 R		
133.3	----------		-0.02 S	0.00 A
	-111.73 S	-1.64 R		
126.7	----------		-0.03 S	0.00 A
	-115.06 S	-1.68 R		
120.0	----------		-0.02 S	0.00 A
	-118.29 S	-1.77 S		
113.3	----------		-0.03 S	0.00 A
	-121.64 S	-1.82 R		
106.7	----------		-0.02 S	0.00 A
	-124.95 S	-1.92 S		
100.0	----------		-0.03 S	0.00 A
	-129.17 S	-2.20 U		
90.0	----------		-0.02 S	0.00 A
	-134.32 S	-2.32 S		
80.0	----------		-0.02 S	0.00 A
	-139.56 S	-2.44 U		
70.0	----------		-0.02 S	0.00 A
	-144.90 S	-2.58 S		
60.0	----------		-0.02 S	0.00 A
	-150.32 S	-2.72 U		
50.0	----------		-0.02 S	0.00 A
	-155.82 S	-2.87 S		
40.0	----------		-0.02 S	0.00 A
	-161.44 S	-3.05 U		
30.0	----------		-0.01 S	0.00 A
	-167.21 S	-3.23 S		
20.0	----------		0.00 S	0.00 A
	-173.13 S	-3.43 U		
10.0	----------		-0.01 S	0.00 A
	-179.16 S	-3.67 S		
0.0	----------		0.00 A	0.00 A

MAXIMUM INDIVIDUAL FOUNDATION LOADS: (kip)
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LOAD---COMPONENTS				TOTAL
NORTH	EAST	DOWN	UPLIFT	SHEAR
16.13 S	13.69 e	182.00 S	-134.21 A	16.13 S

MAXIMUM TOTAL LOADS ON FOUNDATION : (kip & kip-ft)
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HORIZONTAL			DOWN	OVERTURNING			TORSION
NORTH	EAST	TOTAL @ 0.0		NORTH	EAST	TOTAL @ 0.0	
25.0 S	21.8 b	25.0 S	63.8 L	3479.7 S	3067.9 b	3479.7 S	12.0 h

Leg Connection Details												
Bottom Elevation (ft)	Top Elevation (ft)	Pipe Dimensions	Top Splice					Bottom Splice/Base				
			Bolt Qty.	Bolt Dia. (in)	Bolt Circle (in)	Plate Thickness (in)	Plate Dia. (in)	Bolt Qty.	Bolt Dia. (in)	Bolt Circle (in)	Plate Thickness (in)	Plate Dia. (in)
240	255	2.375 OD X .154						6	0.75	6.50	0.75	8.50
220	240	3.500 OD X .300	6	0.75	6.50	1.00	8.50	6	1.00	9.00	1.25	11.50
200	220	5.563 OD X .375	6	1.00	9.00	1.25	11.50	6	1.00	9.00	1.25	11.50
180	200	5.563 OD X .375	6	1.00	9.00	1.25	11.50	6	1.00	9.00	1.25	11.50
160	180	5.563 OD X .500	6	1.00	9.00	1.25	11.50	6	1.00	9.00	1.25	11.50
140	160	5.563 OD X .500	6	1.00	9.00	1.25	11.50	6	1.25	12.50	1.75	15.75
120	140	8.625 OD X .322	6	1.25	12.50	1.50	15.75	6	1.25	12.50	1.50	15.75
100	120	8.625 OD X .322	6	1.25	12.50	1.50	15.75	6	1.25	12.50	1.50	15.75
80	100	8.625 OD X .500	6	1.25	12.50	1.50	15.75	6	1.25	12.50	1.50	15.75
60	80	8.625 OD X .500	6	1.25	12.50	1.50	15.75	6	1.25	12.50	1.50	15.75
40	60	8.625 OD X .500	6	1.25	12.50	1.50	15.75	6	1.25	12.50	1.50	15.75
20	40	8.625 OD X .500	6	1.25	12.50	1.50	15.75	6	1.25	12.50	1.50	15.75
0	20	8.625 OD X .500	6	1.25	12.50	1.50	15.75	6	1.50	13.25	1.75	17.00

Diagonal Bracing Connection Details								
Bottom Elevation (ft)	Top Elevation (ft)	Angle Shape	Bolt Qty.	Bolt Dia. (in)	Bolt End Distance (in)	Bolt Spacing (in)	Gage Distance From Heel (in)	Gusset Plate Thickness (in)
240	255	L 2 X 2 X 1/8	1	0.625	1.500		1.125	0.375
220	240	L 2 X 2 X 3/16	1	0.625	1.500		1.125	0.375
200	220	L 2 X 2 X 1/4	1	0.625	1.500		1.125	0.375
180	200	L 2 X 2 X 1/8	1	0.625	1.500		1.125	0.375
160	180	L 2 X 2 X 1/8	1	0.625	1.500		1.125	0.375
140	160	L 2 X 2 X 3/16	1	0.625	1.500		1.125	0.375
120	140	L 2 1/2 X 2 1/2 X 3/16	1	0.625	1.500		1.375	0.375
100	120	L 3 X 3 X 3/16	1	0.750	1.500		1.750	0.375
80	100	L 3 X 3 X 3/16	1	0.750	1.625		1.750	0.375
60	80	L 3 1/2 X 3 1/2 X 1/4	1	0.750	1.625		1.750	0.375
40	60	L 3 1/2 X 3 1/2 X 1/4	1	0.750	1.625		1.750	0.375
20	40	L 4 X 4 X 1/4	1	0.750	1.625		2.000	0.375
0	20	L 4 X 4 X 1/4	2	0.625	1.625	2.1250	2.000	0.500

MAT FOUNDATION DESIGN BY SABRE INDUSTRIES

255' S3TL Series HD1 Harmony Towers and Verizon Wireless LV Siler, KY (21-3798-JAC) 2020-12-23 DO

Overall Loads:			
Factored Moment (ft-kips)	10438.95		
Factored Axial (kips)	185.56		
Factored Shear (kips)	74.68		
Individual Leg Loads:		Tower eccentric from mat (ft)=	2
Factored Uplift (kips)	447.00		
Factored Download (kips)	508.00		
Factored Shear (kips)	46.00		
Width of Tower (ft)	25	Allowable Bearing Pressure (ksf)	**5.00**
Ultimate Bearing Pressure	10.00	Safety Factor	**2.00**
Bearing Φs	0.75		
Bearing Design Strength (ksf)	7.5	Max. Factored Net Bearing Pressure (ksf)	3.59
Water Table Below Grade (ft)	**999**		
Width of Mat (ft)	33.5	Minimum Mat Width (ft)	31.33
Thickness of Mat (ft)	1.5		
Depth to Bottom of Slab (ft)	6.5		
Bolt Circle Diameter (in)	13.25		
Effective Anchor Bolt Embedment	65.125		
Diameter of Pier (ft)	4	Minimum Pier Diameter (ft)	2.44
Ht. of Pier Above Ground (ft)	0.5	Equivalent Square b (ft)	3.54
Ht. of Pier Below Ground (ft)	5		
Quantity of Bars in Mat	54		
Bar Diameter in Mat (in)	1.27		
Area of Bars in Mat (in^2)	68.41		
Spacing of Bars in Mat (in)	7.45	Recommended Spacing (in)	6 to 12
Quantity of Bars Pier	24		
Bar Diameter in Pier (in)	0.875		
Tie Bar Diameter in Pier (in)	0.5		
Spacing of Ties (in)	4		
Area of Bars in Pier (in2)	14.43	Minimum Pier A_s (in^2)	9.05
Spacing of Bars in Pier (in)	5.24	Recommended Spacing (in)	5 to 12
f'c (ksi)	4.5		
fy (ksi)	60		
Unit Wt. of Soil (kcf)	0.11		
Unit Wt. of Concrete (kcf)	0.15		
Volume of Concrete (yd^3)	70.03		

MAT FOUNDATION DESIGN BY SABRE INDUSTRIES (CONTINUED)

Two-Way Shear:

Average d (in)	13.73		
ϕv_c (ksi)	0.201	v_u (ksi)	0.167
$\phi v_c = \phi(2 + 4/\beta_c)f'_c{}^{1/2}$	0.302		
$\phi v_c = \phi(\alpha_s d/b_o+2)f'_c{}^{1/2}$	0.223		
$\phi v_c = \phi 4f'_c{}^{1/2}$	0.201		
Shear perimeter, b_o (in)	225.08		
β_c	1		

Stability:

Overturning Design Strength (ft-k)	13958.6	Factored Overturning Moment (ft-k)	10961.7

One-Way Shear:

ϕV_c (kips)	555.4	V_u (kips)	538.1

Pier Design:

Design Tensile Strength (kips)	779.3	Tu (kips)	447.0

Shear:

ϕ	0.75		
V_c (kips)	125.1		
V_s (kips)	226.2	$V_{s,max}$ (kips)	989.2
ϕV_n (kips)	263.5	V_u (kips)	46.0
Maximum Spacing (in)	9.76	(Only if Shear Ties are Required)	
Actual Hook Development (in)	12.46	Req'd Hook Development l_{dh} (in) - Tension	10.96
		Req'd Hook Development l_{dc} (in) - Compression	11.81

Anchor Bolt Pull-Out:

$N_{ua} / \phi N_n$	0.69	$V_{ua} / \phi V_n$	0.14
Pier Rebar Development Length (in)	52.72	Required Length of Development (in)	23.48

Flexure in Slab:

ϕM_n (ft-kips)	3815.6	M_u (ft-kips)	3786.5
a (in)	2.67		
Steel Ratio	0.01239		
β_1	0.825		
Maximum Steel Ratio (ρ_t)	0.0197		
Minimum Steel Ratio	0.0018		

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

DRILLED STRAIGHT PIER DESIGN BY SABRE INDUSTRIES

255' S3TL Series HD1 Harmony Towers and Verizon Wireless LV Siler, KY (21-3798-JAC) 2020-12-23 DO

Factored Uplift (kips)	447
Factored Download (kips)	508
Factored Shear (kips)	46
Ultimate Bearing Pressure	75
Bearing ϕ_s	0.75
Bearing Design Strength (ksf)	56.25
Water Table Below Grade (ft)	999
Bolt Circle Diameter (in)	13.25
Effective Anchor Bolt Embedment	65.125
Pier Diameter (ft)	7
Ht. Above Ground (ft)	0.5
Pier Length Below Ground (ft)	27.5
Quantity of Bars	22
Bar Diameter (in)	1.27
Area of Bars (in^2)	27.87
Spacing of Bars (in)	10.74
Tie Bar Diameter (in)	0.625
Spacing of Ties (in)	12
f'_c (ksi)	4.5
f_y (ksi)	60
Unit Wt. of Concrete (kcf)	0.15
Volume of Concrete (yd^3)	39.91

Minimum Pier Diameter (ft): 2.44

Minimum Area of Steel (in^2): 27.71

Length to ignore download (ft): 0

Ignore bottom length in download? ☐

Depth at Bottom of Layer (ft)	Ult. Skin Friction (ksf)	(Ult. Skin Friction)*(Uplift Factor)	γ (kcf)
3	0.00	0.00	0.11
6	0.30	0.30	0.11
13	0.60	0.60	0.11
22	0.75	0.75	0.11
28	1.20	1.20	0.11

DRILLED STRAIGHT PIER DESIGN BY SABRE INDUSTRIES (CONTINUED)

Download:			
Φ_s, Download Friction	0.75		
Q_f, Skin Friction (kips)	405.7	W_s (kips)	116.4
Q_b, End Bearing Strength (kips)	2886.3	W_c (kips)	161.6
Download Design Strength (kips)	2469.1	Factored Net Download (kips)	562.3
Uplift (skin friction):			
Φ_s, Uplift (friction)	0.75		
Q_f, Skin Friction (kips)	405.7		
W_c (kips)	161.6		
W_w (kips)	0.0		
Uplift Design Strength (kips)	449.8	Factored Uplift (kips)	447.0
Uplift (cone):			
Φ_s, Uplift (cone)	0.75		
$W_{s,cone}$ (kips)	1326.6		
$W_{w,cone}$ (kips)	0.0		
W_c (kips)	161.6		
$W_{w,cyl}$ (kips)	0.0		
Uplift Design Strength (kips)	1140.5	Factored Uplift (kips)	447.0
Tension:			
Design Tensile Strength (kips)	1504.9	T_u (kips)	447.0
Shear:			
ϕ	0.75		
V_c (kips)	635.2		
V_s (kips)	206.2	$V_{s,max}$ (kips)	3029.3
ϕV_n (kips)	631.0	V_u (kips)	46.0
Anchor Bolt Pull-Out:			
$N_{ua} / \phi N_n$	0.68	$V_{ua} / \phi V_n$	0.14
Rebar Development Length (in)	40.34	Required Length of Development (in)	34.08

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

EXHIBIT E

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2020-ASO-10986-OE

Issued Date: 05/13/2020

Network Regulatory
Cellco Partnership
5055 North Point Pkwy
NP2NE Network Engineering
Alpharetta, GA 30022

**** 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 LV SILER - C-15501841
Location:	Corbin, KY
Latitude:	36-57-17.11N NAD 83
Longitude:	84-02-12.53W
Heights:	1240 feet site elevation (SE)
	260 feet above ground level (AGL)
	1500 feet above mean sea level (AMSL)

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

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

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

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

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

This determination expires on 11/13/2021 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, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

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

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

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

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

If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-ASO-10986-OE.

Signature Control No: 436686135-439811152 (DNE)
Stephanie Kimmel
Specialist

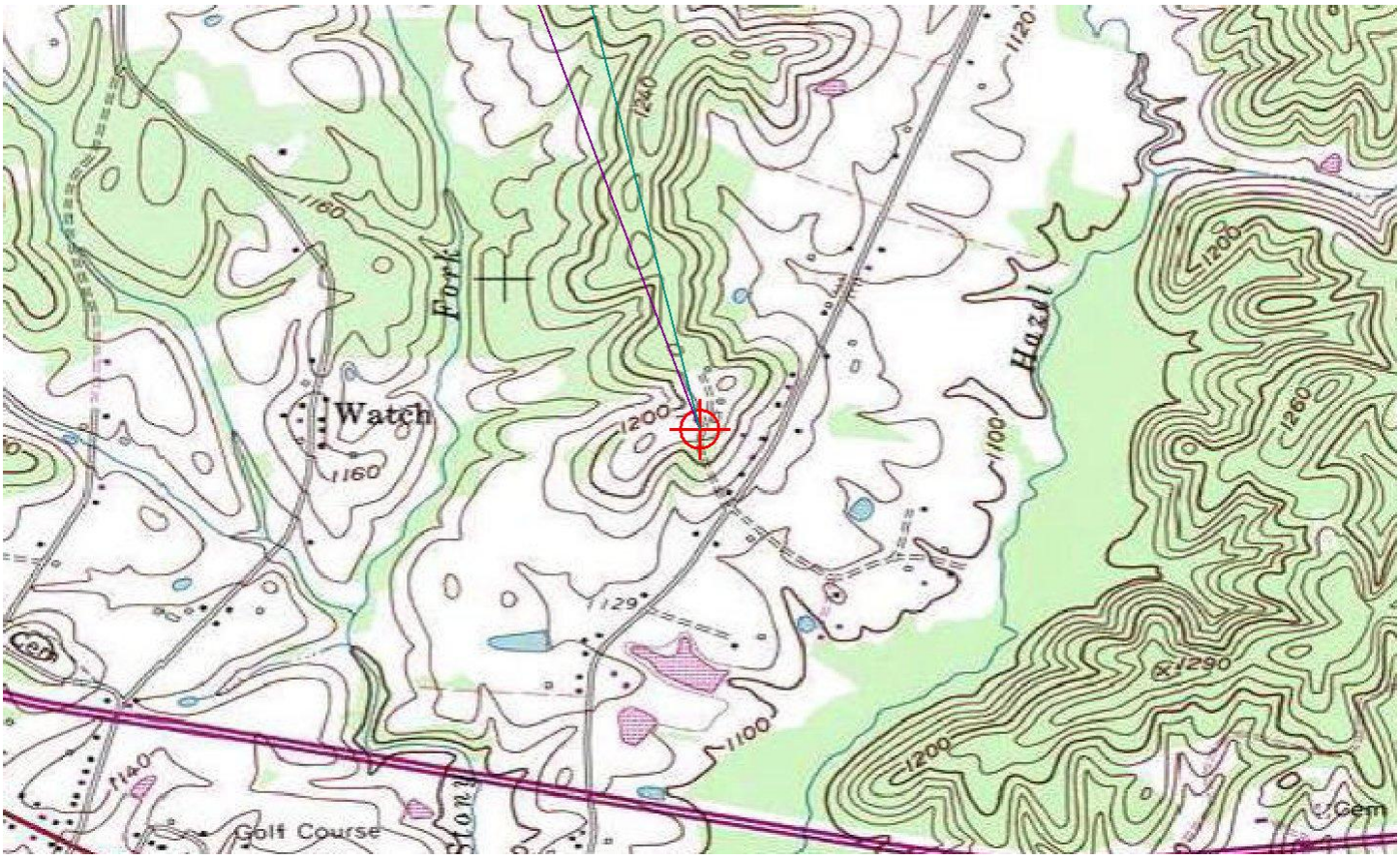
Attachment(s)
Frequency Data
Map(s)

cc: FCC

Frequency Data for ASN 2020-ASO-10986-OE

LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
6	7	GHz	55	dBW
6	7	GHz	42	dBW
10	11.7	GHz	55	dBW
10	11.7	GHz	42	dBW
17.7	19.7	GHz	55	dBW
17.7	19.7	GHz	42	dBW
21.2	23.6	GHz	55	dBW
21.2	23.6	GHz	42	dBW
614	698	MHz	2000	W
614	698	MHz	1000	W
698	806	MHz	1000	W
806	824	MHz	500	W
806	901	MHz	500	W
824	849	MHz	500	W
851	866	MHz	500	W
869	894	MHz	500	W
896	901	MHz	500	W
901	902	MHz	7	W
929	932	MHz	3500	W
930	931	MHz	3500	W
931	932	MHz	3500	W
932	932.5	MHz	17	dBW
935	940	MHz	1000	W
940	941	MHz	3500	W
1670	1675	MHz	500	W
1710	1755	MHz	500	W
1850	1990	MHz	1640	W
1850	1910	MHz	1640	W
1930	1990	MHz	1640	W
1990	2025	MHz	500	W
2110	2200	MHz	500	W
2305	2360	MHz	2000	W
2305	2310	MHz	2000	W
2345	2360	MHz	2000	W
2496	2690	MHz	500	W
27500	28350	MHz	75	dBm
29100	29250	MHz	75	dBm
31000	31225	MHz	75	dBm
31225	31300	MHz	75	dBm
38600	40000	MHz	75	dBm

Verified Map for ASN 2020-ASO-10986-OE



TOPO Map for ASN 2020-ASO-10986-OE

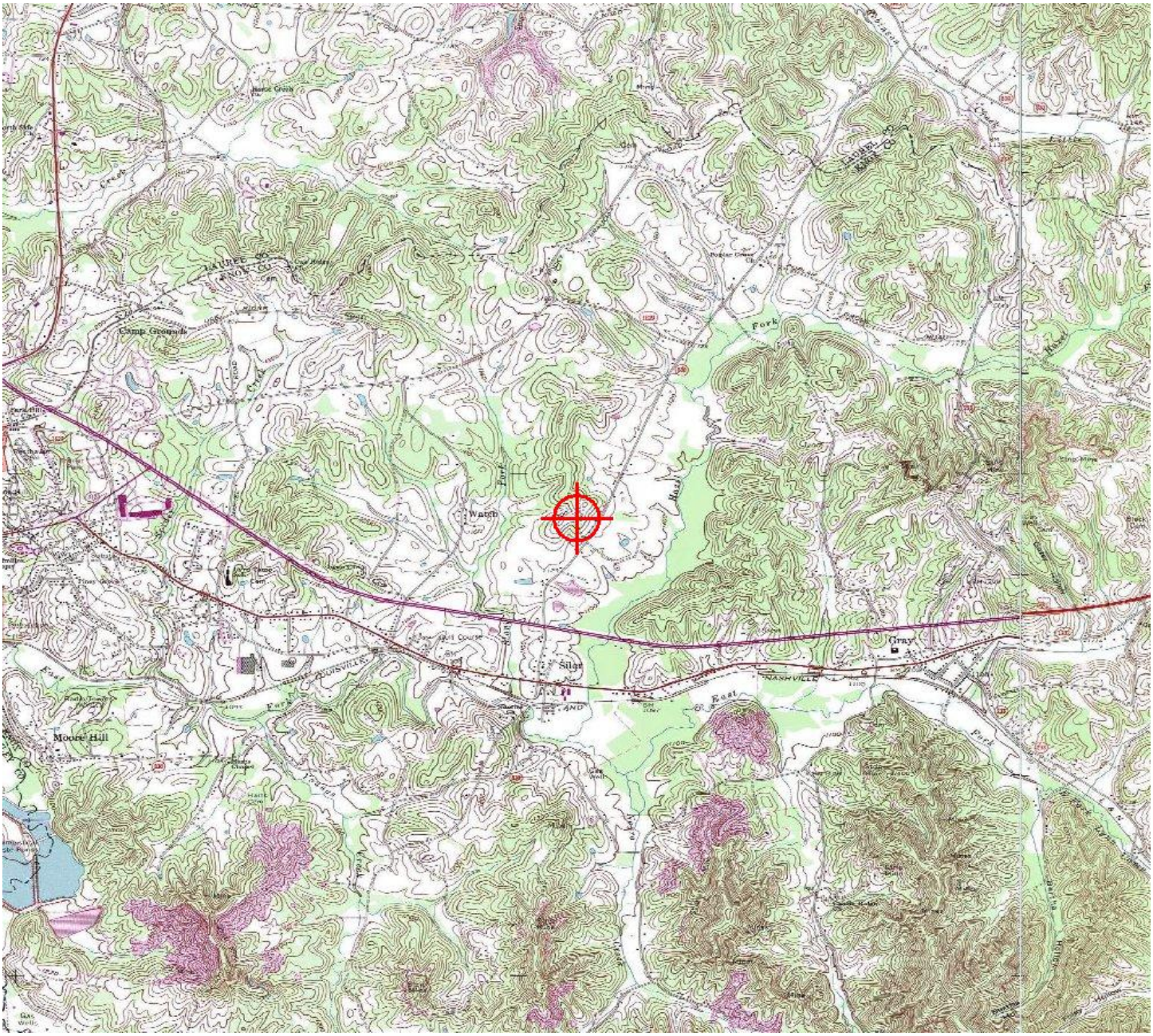


EXHIBIT F

KENTUCKY AIRPORT ZONING COMMISSION

ANDY BESHEAR
Governor

Office of Audits, 200 Mero Street, 4th floor
Frankfort, KY 40622
www.transportation.ky.gov
502-782-4043

JIM GRAY
Secretary

APPROVAL OF APPLICATION

October 15, 2020

APPLICANT
Verizon Wireless
Brendan Q. Johnson
5055 North Point Parkway
Alpharetta, GA 30022

SUBJECT: AS-KNOX-LOZ-2020-112

STRUCTURE:	Antenna Tower
LOCATION:	Corbin, KY
COORDINATES:	36° 57' 17.11" N / 84° 2' 12.53" W
HEIGHT:	260' AGL/1500' AMSL

The Kentucky Airport Zoning Commission has approved your application for a permit to construct 260' AGL/1500' AMSL Antenna Tower near Corbin, KY 36° 57' 17.11" N / 84° 2' 12.53" W.

This permit is valid for a period of 18 Month(s) from its date of issuance. If construction is not completed within said 18-Month period, this permit shall lapse and be void, and no work shall be performed without the issuance of a new permit.

Medium Dual Obstruction Lighting Required.

Randall S. Royer
Randall S. Royer, Executive Director
Office of Audits
Acting Administrator
Randall.Royer@ky.gov
Jason.Salazar-Munoz@ky.gov

EXHIBIT G

Date: September 18, 2020

POD Job Number: 19-40552

GEOTECHNICAL REPORT

LV SILER

36° 57’ 17.11” N
84° 02’ 12.53” W

Expresso Lane,
Corbin, KY 40701

Prepared For:

verizon

Prepared By:

POD
POWER OF DESIGN

11490 Bluegrass Parkway | Louisville, Kentucky 40299 | 502.437.5252
POWER OF DESIGN GROUP, LLC

POD
POWER OF DESIGN

September 18, 2020

Ms. Shannon Dodge
Lodge Distribution Site

Re: Geotechnical Report – **PROPOSED 255' SELF-SUPPORT TOWER w/ 5' LIGHTNING ARRESTOR**
Site Name: **LV SILER**
Site Address: Expresso Lane, Corbin, Knox County, Kentucky
Coordinates: N36˚ 57' 17.11", W84˚ 02' 12.53"
POD Project No. 19-40552

Dear Ms. Dodge:

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

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

Cordially,

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

Copies submitted: (3) Ms. Shannon Dodge

LETTER OF TRANSMITTAL

TABLE OF CONTENTS

APPENDIX

Geotechnical Report
PROPOSED 255' SELF-SUPPORT TOWER w/ 5' LIGHTNING ARRESTOR
Site Name: **LV SILER**
Expresso Lane, Corbin, Knox County, Kentucky
N36° 57' 17.11", W84° 02' 12.53"

1. PURPOSE AND SCOPE

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

2. PROJECT CHARACTERISTICS

Verizon is proposing to construct a self-support tower and either an equipment shelter, slab, or platform at N36° 57' 17.11", W84° 02' 12.53", Expresso Lane, Corbin, Knox County, Kentucky. The site is located in an open field near tree stands between a residence and barn in a rural residential area on the east side of Corbin. The proposed lease area will be an irregularly shaped 10,000 square foot area and will be accessed from a new access road off Expresso Lane west to the site. The proposed elevation at the tower location is about EL 1240 and there is about 5- feet of change in elevation across the proposed lease area. The proposed tower location is shown on the Boring Location Plan in the Appendix.

3. SUBSURFACE CONDITIONS

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

According to the Kentucky Geological Survey, Kentucky Geologic Map Information Services, the site is underlain by the Middle Pennsylvanian age Pikeville Formation of mixed clastics of sandstone, siltstone, shale and coal. The formation is non-karst.

The borings encountered about 2 inches of topsoil at the existing ground surface. Below the topsoil, the borings encountered silty clay (CL) of low plasticity. The SPT N-values in the clay soil were between 9 and 26 blows per foot (bpf) generally indicating a medium stiff to very stiff consistency. As high as 1.5 feet below the ground surface,

significant amounts of sandstone fragments were encountered in the silty clay. Borings 1 and 2 encountered clayshale at about 6.5 feet and highly weathered shale at 9 feet. The borings met with auger refusal at depths ranging from 8.8 to 13.2 feet. Auger refusal is defined as the depth at which the boring can no longer be advanced using the current drilling method.

The refusal material was cored in Boring B-1 from 13.2 to 28.2 feet below the ground surface. Siltstone with clayshale that was soft, weathered, and tan and gray was encountered. At about 22 feet, sandstone that was hard, moderately weathered and light gray was encountered. The recoveries of the cores were 63, 95 and 88 percent with RQD values of 28, 55 and 40 percent. These values generally represent fair to good quality rock from a foundation support viewpoint.

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

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

4. FOUNDATION DESIGN RECOMMENDATIONS

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

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

4.1. Proposed Tower

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

4.1.1. Drilled Piers

The following table summarizes the recommended values for use in analyzing lateral and frictional resistance for the various strata encountered at the test boring. It is important to note that these values are estimated based on the standard penetration test results and soil types and were not directly measured. The all values provided are ultimate values and appropriate factors of safety should be used in conjunction with these values. If the piers will bear deeper than about 28 feet, a deeper boring should be drilled to determine the nature of the deeper material.

Depth Below Ground Surface, feet	0 – 3	3 – 6	6 - 13	13 - 22	22 – 28
Ultimate Bearing Pressure (psf)		8,300	16,600	27,600	75,000
C Undrained Shear Strength, psf	500	1,500	3,000	4,000	15,000
Ø Angle of Internal Friction degrees	0	0	0	0	0
Total Unit Weight, pcf	120	120	125	135	135
Soil Modulus Parameter k, pci	30	500	750	750	2000
Passive Soil Pressure, psf/one foot of depth		1,000 + 40(D-3)	2,000 + 40(D-6)	2,700 + 45(D-13)	10,000 + 45(D-22)
Side Friction, psf		300	600	750	1200

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

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

4.1.2. Mat Foundation

The tower could be supported on a common mat foundation bearing on the clayshale at least 6 feet in depth can be designed using a net allowable bearing pressure of 5,000 pounds per square foot may be used. This value may be increased by 30 percent for the maximum edge pressure under transient loads. The friction value can be increased to 0.32 between the concrete and clayshale. The passive pressures given for the drilled pier foundation may be used to resist lateral forces.

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

4.2. Equipment Platform

An equipment platform may be supported on shallow piers bearing in the silty clay at about 3 feet and designed for a net allowable soil pressure of 2,500 pounds per square foot. All existing soil should be removed beneath footings.

4.3. Equipment Slab

A concrete slab supporting the equipment must be supported on at least 6-inch layer of relatively clean granular material such as gravel or crushed stone containing not more than 10 percent material that passes through a No. 4 sieve. This is to help distribute concentrated loads and equalize moisture conditions beneath the slab. Provided that a minimum of 6 in. of granular material is placed below the slab, a modulus of subgrade reaction (k) of 110 lbs/cu.in. can be used for design of the slab. All existing topsoil or soft natural soil should be removed beneath crushed stone layer.

4.4. Equipment Building

If an equipment building support on a slab is chosen in place of the equipment platform, it may be supported on shallow spread footings bearing in the silty clay and designed for a net allowable soil pressure of 2,500 pounds per square foot.

The footings should be at least ten inches wide. The spread footings must found on bedrock not soil. Soil pockets can be removed and replaced with a small, angular, free draining stone.

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

4.5. Drainage and Groundwater Considerations

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

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

5. GENERAL CONSTRUCTION PROCEDURES AND RECOMMENDATIONS

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

5.1 Drilled Piers

The following recommendations are recommended for drilled pier construction:

- Clean the foundation bearing area so it is nearly level or suitably benched and is free of ponded water or loose material.
- Make provisions for ground water removal from the drilled shaft excavation. While groundwater was not encountered during the soil drilling, some significant seepage may be encountered. The drilled pier contractor should have pumps on hand to remove water from the drilled pier.
- Specify concrete slumps ranging from 4 to 7 inches for the drilled shaft construction. These slumps are recommended to fill irregularities along the sides and bottom of the drilled hole,

displace water as it is placed, and permit placement of reinforcing cages into the fluid concrete.

- Retain the geotechnical engineer to observe foundation excavations after the bottom of the hole is leveled, cleaned of any mud or extraneous material, and dewatered.

- Install a temporary protective steel casing to prevent side wall collapse, prevent excessive mud and water intrusion in the drilled shaft.

- The protective steel casing may be extracted as the concrete is placed provided a sufficient head of concrete is maintained inside the steel casing to prevent soil or water intrusion into the newly placed concrete.

- Direct the concrete placement into the drilled hole through a centering chute to reduce side flow or segregation.

5.2 Fill Compaction

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

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

5.3 Construction Dewatering

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

If groundwater is encountered in the drilled pier excavations, it may be difficult to dewater since pumping directly from the excavations could cause a deterioration of the bottom of the excavation. If the pier excavations are not dewatered, concrete should be placed by the termie method.

6 FIELD INVESTIGATION

Three soil test borings were drilled at the base of the proposed tower. Split-spoon samples were obtained by the Standard Penetration Test (SPT) procedure (ASTM D1586) in all test borings. The borings encountered auger refusal at depths between 8.8 and 13.2 feet. A rock core of the refusal material was taken in Boring B-1 from 13.2 to 28.2 feet. The split-spoon samples were inspected and visually classified by a geotechnical engineer. Representative portions of the soil samples were sealed in glass jars and returned to our laboratory.

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

7 WARRANTY AND LIMITATIONS OF STUDY

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

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

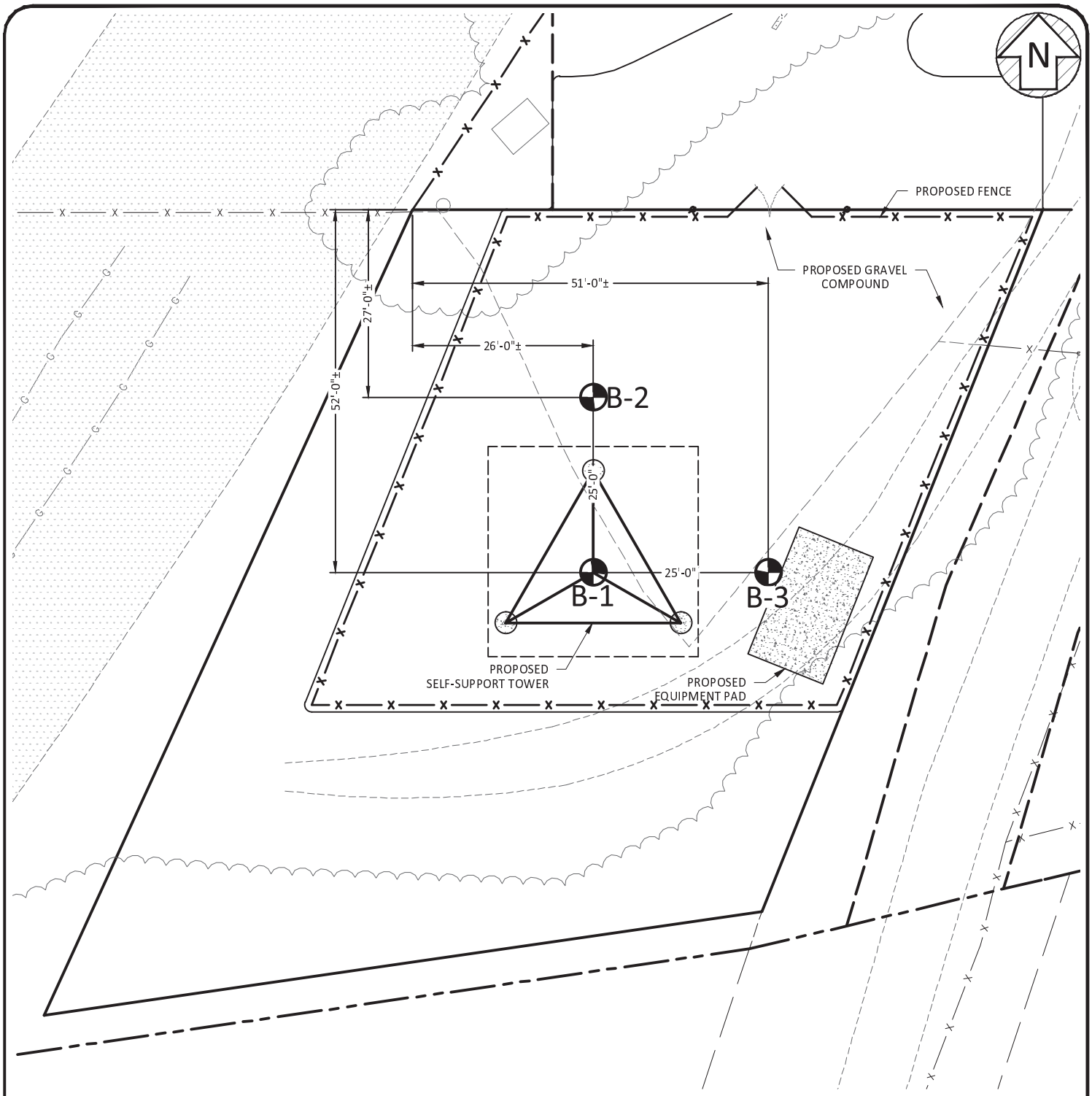
The nature and extent of variation and change in the subsurface conditions at the site may not become evident until the course of construction. Construction monitoring by the geotechnical engineer or a representative is therefore considered necessary to verify the subsurface conditions and to check that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

APPENDIX

BORING LOCATION PLAN

BORING LOGS

SOIL SAMPLE CLASSIFICATION



LEGEND

B-1 BORING LOCATION

0' 20' 40'

1"= 20'

SHEET TITLE:

BORING LOCATION PLAN

SHEET NUMBER:

1

LATITUDE: 36° 57′ 17.11″ N
LONGITUDE: 84° 02′ 12.53″ W

TAX PARCEL NUMBER: 011-30-00-010.00
DEED BOOK 414, PAGE 151

POD NUMBER: 19-40552

DRAWN BY: POD
CHECKED BY: MEP
DATE: 9.1.20

SITE INFORMATION:

LV SILER

EXPRESSO LANE
CORBIN, KY 40701
KNOX COUNTY

OWNER INFORMATION:

BOBBY L. & LINDA K. PHILPOT
899 STANDARD AVE
CORBIN, KY 40701

POD
POWER OF DESIGN
11490 BLUEGRASS PKWY
LOUISVILLE, KY 40299
502-437-5252

CELLCO PARTNERSHIP
D/B/A
verizon

POD
POWER OF DESIGN

Boring Log

Boring: B-1

Project: LV Siler **City, State** Corbin, KY

Method: S.F.A.	**Boring Date:** 8-Sep-20	**Location:** Proposed Tower Center
Inside Diameter: 4"	**Drill Rig Type:** D-50 (ATV)	**Hammer Type:** Auto
Groundwater: DRY		**Weather:**
Driller: Strata Group, LLC	**Note:** About 2 inches of topsoil were encountered at the existing ground surface	

From (ft)	To (ft)	Material Description	Sample Depth (ft)	Sample Type	Blows per 6-inch increment	Recovery (in)	SPT-N value	Rock Quality (RQD,%)	Atterberg Limits	Moisture Content (%)	% Fines (clay & silt)	Unconfined Compressive Strength, (ksf)
0.1	6.5	SILTY CLAY (CL) - medium stiff, light brown	0 - 1.5	SS	4, 4, 5	10	9,			22%		4.5
	1.5	- very stiff, trace sandstone fragments	1.5 - 3	SS	3, 6, 5	6	11,			24%		2.2
			4 - 5.5	SS	3, 5, 6	8	11,			21%		2.2
6.5	9.0	CLAYSHALE - very highly weathered, tan-light gray	6.5-8	SS	5, 6, 9	8	15,			24%		5.1
9.0	13.2	SHALE - highly weathered, black	9-10.5	SS	10, 50,	4	50,					
13.2	22.0	SILTSTONE with CLAYSHALE - soft, weathered, tan and gray	13.2-18.2	RC		38		28%				
			18.2-23.2	RC		57		55%				
22.0	28.2	SANDSTONE - hard, moderately weathered, light gray	23.2-28.2	RC		53		40%				
		Boring Terminated at 28.2 feet										

POD
POWER OF DESIGN

Boring Log

Boring: B-2

Project: LV Siler **City, State** Corbin, KY

Method: S.F.A. **Boring Date:** 8-Sep-20 **Location:** 25' North of Proposed Tower Center

Inside Diameter: 4" **Drill Rig Type:** D-50 (ATV) **Hammer Type:** Auto

Groundwater: DRY **Weather:**

Driller: Strata Group, LLC **Note:** About 2 inches of topsoil were encountered at the existing ground surface

From (ft)	To (ft)	Material Description	Sample Depth (ft)	Sample Type	Blows per 6-inch increment	Recovery (in)	SPT-N value	Rock Quality (RQD,%)	Atterberg Limits	Moisture Content (%)	% Fines (clay & silt)	Unconfined Compressive Strength, (ksf)
0.1	6.5	SILTY CLAY (CL) - medium stiff, light brown	0 - 1.5	SS	3, 4, 5		9,			23%		3.8
	1.5	- very stiff with sandstone fragments	1.5 - 3	SS	7, 8, 9		17,			22%		
			4 - 5.5	SS	10, 12, 14		26,			12%		3.7
6.5	9.0	CLAYSHALE - very highly weathered, tan-light gray	6.5-8	SS	10, 11, 15		26,			21%		6.0
9.0	9.2	SHALE - highly weathered, black	9-9.2	SS	50,		50,					
		Auger Refusal at 9.2 feet										

POD
POWER OF DESIGN

Boring Log

Boring: B-3

Project: LV Siler **City, State** Corbin, KY

Method: S.F.A.	**Boring Date:** 8-Sep-20	**Location:** 25' East of Proposed Tower Center
Inside Diameter: 4"	**Drill Rig Type:** D-50 (ATV)	**Hammer Type:** Auto
Groundwater: DRY		**Weather:**
Driller: Strata Group, LLC	**Note:** About 2 inches of topsoil were encountered at the existing ground surface	

From (ft)	To (ft)	Material Description	Sample Depth (ft)	Sample Type	Blows per 6-inch increment	Recovery (in)	SPT-N value	Rock Quality (RQD,%)	Atterberg Limits	Moisture Content (%)	% Fines (clay & silt)	Unconfined Compressive Strength, (ksf)
0.1	8.8	SILTY CLAY (CL) - medium stiff, light brown	0 - 1.5	SS	4, 4, 6		10,			19%		
	1.5	- very stiff, tan and light gray	1.5 - 3	SS	8, 7, 9		16,			18%		4.2
	4.0	- with sandstone fragments	4 - 5.5	SS	9, 8, 11		19,			20%		
			6.5-8	SS	50,		50,					
		Auger Refusal at 8.8 feet										

SOIL SAMPLE CLASSIFICATION

FINE AND COARSE GRAINED SOIL INFORMATION

COARSE GRAINED SOILS (SANDS & GRAVELS)

N	Relative Density
0-4	Very Loose
5-10	Loose
11-20	Firm
21-30	Very Firm
31-50	Dense
Over 50	Very Dense

FINE GRAINED SOILS (SILTS & CLAYS)

N	Consistency	Qu, KSF Estimated
0-1	Very Soft	0-0.5
2-4	Soft	0.5-1
5-8	Firm	1-2
9-15	Stiff	2-4
16-30	Very Stiff	4-8
Over 31	Hard	8+

PARTICLE SIZE

Boulders	Greater than 300 mm (12 in)
Cobbles	75 mm to 300 mm (3 to 12 in)
Gravel	4.74 mm to 75 mm (3/16 to 3 in)
Coarse Sand	2 mm to 4.75 mm
Medium Sand	0.425 mm to 2 mm
Fine Sand	0.075 mm to 0.425 mm
Silts & Clays	Less than 0.075 mm

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

ROCK PROPERTIES

ROCK QUALITY DESIGNATION (RQD)

Percent RQD	Quality
0-25	Very Poor
25-50	Poor
50-75	Fair
75-90	Good
90-100	Excellent

ROCK HARDNESS

Very Hard:	Rock can be broken by heavy hammer blows.
Hard:	Rock cannot be broken by thumb pressure, but can be broken by moderate hammer blows.
Moderately Hard:	Small pieces can be broken off along sharp edges by considerable hard thumb pressure; can be broken with light hammer blows.
Soft:	Rock is coherent but breaks very easily with thumb pressure at sharp edges and crumbles with firm hand pressure.
Very Soft:	Rock disintegrates or easily compresses when touched; can be hard to very hard soil.

$$\text{Recovery} = \frac{\text{Length of Rock Core Recovered}}{\text{Length of Core Run}} \times 100$$

$$\text{RQD} = \frac{\text{Sum of 4 in. and longer Rock Pieces Recovered}}{\text{Length of Core Run}} \times 100$$

63 REC
NQ
43 RQD

Core Diameter	Inches
BQ	1-7/16
NQ	1-7/8
HQ	2-1/2

SYMBOLS

KEY TO MATERIAL TYPES

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

ROCKS	
Symbols	Typical Names
	Limestone or Dolomite
	Shale
	Sandstone

SOIL PROPERTY SYMBOLS

N:	Standard Penetration, BPF
M:	Moisture Content, %
LL:	Liquid Limit, %
PI:	Plasticity Index, %
Qp:	Pocket Penetrometer Value, TSF
Qu:	Unconfined Compressive Strength Estimated Qu, TSF
γ_D:	Dry Unit Weight, PCF
F:	Fines Content

SAMPLING SYMBOLS

SS	Split Spoon Sample
UD	Relatively Undisturbed Sample
Core 1	Rock Core Sample

EXHIBIT H

DIRECTIONS TO WFC SITE:

FROM KNOX COUNTY CIRCUIT COURT: 401 COURT SQUARE #202, BARBOURVILLE, KY 40906: HEAD NORTHWEST ON COURT SQUARE TOWARD N MAIN ST (200 FEET). TURN RIGHT ONTO N MAIN ST (0.3 MILES). TURN RIGHT ONTO KY-1487/MANCHESTER ST (1.2 MILES). TURN LEFT ONTO CUMBERLAND GAP PKWY (9.5 MILES). KEEP RIGHT TO STAY ON CUMBERLAND GAP PKWY (1.9 MILES). TURN RIGHT ONTO N KENTUCKY 830 N (0.5 MILES). TURN LEFT ONTO ESPRESSO LN (92 FEET). SITE WILL BE LOCATED AT END OF ROAD.

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

EXHIBIT I

Site Name: LV Siler
Site ID: 493689

LAND LEASE AGREEMENT

This Land Lease Agreement (the "Agreement") made this 3 day of August 2020, between **Bobby Lee Philpot and Linda Kay Philpot**, with an address of 899 Standard Avenue, Corbin Kentucky 40701, hereinafter designated LESSORS and **Cellco Partnership** d/b/a Verizon Wireless with its principal offices at One Verizon Way, Mail Stop 4AW100, Basking Ridge, New Jersey 07920 (telephone number 866-862-4404180, hereinafter designated LESSEE. LESSOR and LESSEE are at times collectively referred to hereinafter as the "Parties" or individually as the "Party."

WITNESSETH

In consideration of the mutual covenants contained herein and intending to be legally bound hereby, the Parties hereto agree as follows:

1. GRANT. In accordance with this Agreement, LESSOR hereby grants to LESSEE the right to install, maintain and operate communications equipment ("Use") upon the Premises (as hereinafter defined), which are a part of that real property owned, leased or controlled by LESSOR off of Poplar Grove, Corbin, Kentucky (the "Property"). The Property is legally described on Exhibit "A" attached hereto and made a part hereof. The Premises are a portion of the Property and are approximately ten thousand 10,000 square feet, and are shown in detail on Exhibit "B" attached hereto and made a part hereof. LESSEE may survey the Premises. Upon completion, the survey shall replace Exhibit "B" in its entirety.

2. INITIAL TERM. This Agreement shall be effective as of the date of execution by both Parties ("Effective Date"). The initial term of the Agreement shall be for 5 years beginning on the Commencement Date (as hereinafter defined). The "Commencement Date" shall be the first day of the month after LESSEE begins installation of LESSEE's communications equipment. The parties agree to acknowledge the Commencement Date in writing.

3. EXTENSIONS. This Agreement shall automatically be extended for 4 additional 5 year terms unless LESSEE terminates it at the end of the then current term by giving LESSOR written notice of the intent to terminate at least 3 months prior to the end of the then current term. The initial term and all extensions shall be collectively referred to herein as the "Term".

4. RENTAL.

(a). Rental payments shall begin on the Commencement Date and be due at a total annual rental of [redacted], to be paid in equal monthly installments on the first day of the month, in advance, to LESSOR at 899 Standard Avenue, Corbin, Kentucky 40701 or to such other person, firm, or place as LESSOR may, from time to time, designate in writing at least 30 days in advance of any rental payment date by notice given in accordance with Paragraph 20 below. LESSOR and LESSEE acknowledge and agree that the initial rental payment may not be delivered by LESSEE until at least 60 days after the Commencement Date. Upon agreement of the Parties,

LESSEE may pay rent by electronic funds transfer and in such event, LESSOR agrees to provide to LESSEE bank routing information for such purpose upon request of LESSEE. The annual rental for each five-year extension term shall be equal to one hundred five percent (105%) of the annual rental payable with respect to the immediately preceding five-year term.

(b). For any party to whom rental payments are to be made, LESSOR or any successor in interest of LESSOR hereby agrees to provide to LESSEE (i) a completed, current version of Internal Revenue Service Form W-9, or equivalent; (ii) complete and fully executed state and local withholding forms if required; and (iii) other documentation to verify LESSOR's or such other party's right to receive rental as is reasonably requested by LESSEE. Rental shall accrue in accordance with this Agreement, but LESSEE may not deliver rental payments for up to 90 days after the requested documentation has been received by LESSEE.

5. ACCESS. LESSEE shall have the non-exclusive right of ingress and egress from a public right-of-way, 7 days a week, 24 hours a day, over the Property to and from the Premises for the purpose of installation, operation and maintenance of LESSEE's communications equipment over or along a ___ foot wide right-of-way ("Easement"), which shall be depicted on Exhibit "B". LESSEE may use the Easement for the installation, operation and maintenance of wires, cables, conduits and pipes for all necessary electrical, telephone, fiber and other similar support services. In the event it is necessary, LESSOR agrees to grant LESSEE or the provider the right to install such services on, through, over and/or under the Property, provided the location of such services shall be reasonably approved by LESSOR. Notwithstanding anything to the contrary, the Premises shall include such additional space sufficient for LESSEE's radio frequency signage and/or barricades as are necessary to ensure LESSEE's compliance with Laws (as defined in Paragraph 27).

6. CONDITION OF PROPERTY. LESSOR shall deliver the Premises to LESSEE in a condition ready for LESSEE's Use and clean and free of debris. LESSOR represents and warrants to LESSEE that as of the Effective Date, the Premises is (a) in compliance with all Laws; and (b) in compliance with all EH&S Laws (as defined in Paragraph 24).

7. IMPROVEMENTS. The communications equipment including, without limitation, the tower structure, antennas, conduits, fencing and other screening, and other improvements shall be at LESSEE's expense and installation shall be at the discretion and option of LESSEE. LESSEE shall have the right to replace, repair, add or otherwise modify its communications equipment, tower structure, antennas, conduits, fencing and other screening, or other improvements or any portion thereof and the frequencies over which the communications equipment operates, whether or not any of the communications equipment, antennas, conduits or other improvements are listed on any exhibit.

8. GOVERNMENT APPROVALS. LESSEE's Use is contingent upon LESSEE obtaining all of the certificates, permits and other approvals (collectively the "Government Approvals") that may be required by any Federal, State or Local authorities (collectively, the "Government Entities") as well as a satisfactory soil boring test, environmental studies, or any other due diligence LESSEE chooses that will permit LESSEE's Use. LESSOR shall cooperate with LESSEE in its effort to obtain such approvals and shall take no action which would adversely affect the status of the Property with respect to LESSEE's Use.

9. TERMINATION. LESSEE may, unless otherwise stated, immediately terminate this Agreement upon written notice to LESSOR in the event that (i) any applications for such Government Approvals should be finally rejected; (ii) any Government Approval issued to LESSEE is canceled, expires,

lapses or is otherwise withdrawn or terminated by any Government Entity; (iii) LESSEE determines that such Government Approvals may not be obtained in a timely manner; (iv) LESSEE determines any structural analysis is unsatisfactory; (v) LESSEE, in its sole discretion, determines the Use of the Premises is obsolete or unnecessary; (vii) with 3 months prior notice to LESSOR, upon the annual anniversary of the Commencement Date; or (viii) at any time before the Commencement Date for any reason or no reason in LESSEE's sole discretion.

10. INDEMNIFICATION. Subject to Paragraph 11, each Party and/or any successor and/or assignees thereof, shall indemnify and hold harmless the other Party, and/or any successors and/or assignees thereof, against (i) any and all claims of liability or loss from personal injury or property damage resulting from or arising out of the negligence or willful misconduct of the indemnifying Party, its employees, contractors or agents, except to the extent such claims or damages may be due to or caused by the negligence or willful misconduct of the other Party, or its employees, contractors or agents, and (ii) reasonable attorney's fees, expense, and defense costs incurred by the indemnified Party. Where a claim is the result of the concurrent acts of the Parties, each Party shall be liable under this Paragraph 10 to the extent of its fault or liability therefor. The indemnified Party will provide the indemnifying Party with prompt, written notice of any claim that is subject to the indemnification obligations in Paragraph 10. The indemnified Party will cooperate appropriately with the indemnifying Party in connection with the indemnifying Party's defense of such claim. The indemnifying Party shall defend any indemnified Party, at the indemnified Party's request, against any claim with counsel reasonably satisfactory to the indemnified Party. The indemnifying Party shall not settle or compromise any such claim or consent to the entry of any judgment without the prior written consent of each indemnified Party and without an unconditional release of all claims by each claimant or plaintiff in favor of each indemnified Party. All indemnification obligations shall survive the termination or expiration of this Agreement.

11. INSURANCE. The Parties agree that at their own cost and expense, each will maintain *commercial general liability insurance with limits of $2,000,000 for bodily injury (including death) and* property damage each occurrence. The Parties agree to include the other Party as an additional insured as their interests may appear under this Agreement. The Parties hereby waive and release any and all rights of action for negligence against the other which may hereafter arise on account of damage to the Premises or the Property, resulting from any fire, or other casualty which is insurable under "Causes of Loss – Special Form" property damage insurance or for the kind covered by standard fire insurance policies with extended coverage, regardless of whether or not, or in what amounts, such insurance is now or hereafter carried by the Parties, even if any such fire or other casualty shall have been caused by the fault or negligence of the other Party. These waivers and releases shall apply between the Parties and they shall also apply to any claims under or through either Party as a result of any asserted right of subrogation. All such policies of insurance obtained by either Party concerning the Premises or the Property shall waive the insurer's right of subrogation against the other Party.

12. LIMITATION OF LIABILITY. Except for indemnification pursuant to Paragraphs 10 and 24, a violation of Paragraph 29, or a violation of law, neither Party shall be liable to the other, or any of their respective agents, representatives, or employees for any lost revenue, lost profits, diminution in value of business, loss of technology, rights or services, loss of data, or interruption or loss of use of service, incidental, punitive, indirect, special, trebled, enhanced or consequential damages, even if advised of the possibility of such damages, whether such damages are claimed for breach of contract, tort

(including negligence), strict liability or otherwise, unless applicable law forbids a waiver of such damages.

13. INTERFERENCE.

(a). LESSEE agrees that LESSEE will not cause interference that is measurable in accordance with industry standards to LESSOR's equipment. LESSOR agrees that LESSOR and other occupants of the Property will not cause interference that is measurable in accordance with industry standards to the then existing equipment of LESSEE.

(b). Without limiting any other rights or remedies, if interference occurs and continues for a period in excess of 48 hours following notice to the interfering party via telephone to LESSEE'S Network Operations Center (at (800) 621-2622) or to LESSOR at ((606) 521-9430), the interfering party shall or shall require any other user to reduce power or cease operations of the interfering equipment until the interference is cured.

(c). The Parties acknowledge that there will not be an adequate remedy at law for noncompliance with the provisions of this Paragraph and therefore the Parties shall have the right to equitable remedies such as, without limitation, injunctive relief and specific performance.

14. REMOVAL AT END OF TERM. Upon expiration or within 90 days of earlier termination, LESSEE shall remove LESSEE's Communications Equipment (except footings) and restore the Premises to its original condition, reasonable wear and tear and casualty damage excepted. LESSOR agrees and acknowledges that the communications equipment shall remain the personal property of LESSEE and LESSEE shall have the right to remove the same at any time during the Term, whether or not said items are considered fixtures and attachments to real property under applicable laws. If such time for removal causes LESSEE to remain on the Premises after termination of the Agreement, LESSEE shall pay rent in accordance with Paragraph 15.

15. HOLDOVER. If LESSEE holds over after the expiration or earlier termination of the Term, then this Agreement shall continue on a month to month basis at the then existing monthly rental rate or the existing monthly pro-rata basis if based upon a longer payment term, until the removal of the communications equipment is completed.

16. RIGHT OF FIRST REFUSAL. If at any time after the Effective Date, LESSOR receives an offer or letter of intent from any person or entity that is in the business of owning, managing or operating communications facilities or is in the business of acquiring landlord interests in agreements relating to communications facilities, to purchase fee title, an easement, a lease, a license, or any other interest in the Premises or any portion thereof or to acquire any interest in this Agreement, or an option for any of the foregoing, LESSOR shall provide written notice to LESSEE of said offer ("LESSOR's Notice"). LESSOR's Notice shall include the prospective buyer's name, the purchase price being offered, any other consideration being offered, the other terms and conditions of the offer, a description of the portion of and interest in the Premises and/or this Agreement which will be conveyed in the proposed transaction, and a copy of any letters of intent or form agreements presented to LESSOR by the third party offeror. LESSEE shall have the right of first refusal to meet any bona fide offer of sale or transfer on the terms and conditions of such offer or by effectuating a transaction with substantially equivalent financial terms. If LESSEE fails to provide written notice to LESSOR that LESSEE intends to meet such bona fide

offer within 60 days after receipt of LESSOR's Notice, LESSOR may proceed with the proposed transaction in accordance with the terms and conditions of such third party offer, in which event this Agreement shall continue in full force and effect and the right of first refusal described in this Paragraph shall survive any such conveyance to a third party. If LESSEE provides LESSOR with notice of LESSEE's intention to meet the third party offer within 60 days after receipt of LESSOR's Notice, then if LESSOR's Notice describes a transaction involving greater space than the Premises, LESSEE may elect to proceed with a transaction covering only the Premises and the purchase price shall be pro-rated on a square footage basis. Further, LESSOR acknowledges and agrees that if LESSEE exercises this right of first refusal, LESSEE may require a reasonable period of time to conduct due diligence and effectuate the closing of a transaction on substantially equivalent financial terms of the third party offer. LESSEE may elect to amend this Agreement to effectuate the proposed financial terms of the third party offer rather than acquiring fee simple title or an easement interest in the Premises. For purposes of this Paragraph, any transfer, bequest or devise of LESSOR's interest in the Property as a result of the death of LESSOR, whether by will or intestate succession, or any conveyance to LESSOR's family members by direct conveyance or by conveyance to a trust for the benefit of family members shall not be considered a sale for which LESSEE has any right of first refusal.

17. RIGHTS UPON SALE. Should LESSOR, at any time during the Term, decide (i) to sell or otherwise transfer all or any part of the Property, or (ii) to grant to a third party by easement or other legal instrument an interest in and to any portion of the Premises, such sale, transfer, or grant of an easement or interest therein shall be under and subject to this Agreement and any such purchaser or transferee shall recognize LESSEE's rights hereunder. In the event that LESSOR completes any such sale, transfer, or grant described in this Paragraph without executing an assignment of the Agreement whereby the third party agrees in writing to assume all obligations of LESSOR under this Agreement, then LESSOR shall not be released from its obligations to LESSEE under this Agreement, and LESSEE shall have the right to look to LESSOR and the third party for the full performance of the Agreement.

18. LESSOR'S TITLE. LESSOR covenants that LESSEE, on paying the rent and performing the covenants herein, shall peaceably and quietly have, hold and enjoy the Premises. LESSOR represents and warrants to LESSEE as of the Effective Date and covenants during the Term that LESSOR has full authority to enter into and execute this Agreement and that there are no liens, judgments, covenants, easement, restrictions or other impediments of title that will adversely affect LESSEE's Use.

19. ASSIGNMENT. Without any approval or consent of the other Party, this Agreement may be sold, assigned or transferred by either Party to (i) any entity in which the Party directly or indirectly holds an equity or similar interest; (ii) any entity which directly or indirectly holds an equity or similar interest in the Party; or (iii) any entity directly or indirectly under common control with the Party. LESSEE may assign this Agreement to any entity which acquires all or substantially all of LESSEE's assets in the market defined by the FCC in which the Property is located by reason of a merger, acquisition or other business reorganization without approval or consent of LESSOR. As to other parties, this Agreement may not be sold, assigned or transferred without the written consent of the other Party, which such consent will not be unreasonably withheld, delayed or conditioned. No change of stock ownership, partnership interest or control of LESSEE or transfer upon partnership or corporate dissolution of either Party shall constitute an assignment hereunder. LESSEE may sublet the Premises in LESSEE's sole discretion.

20. NOTICES. Except for notices permitted via telephone in accordance with Paragraph 13, all notices hereunder must be in writing and shall be deemed validly given if sent by certified mail,

return receipt requested or by commercial courier, provided the courier's regular business is delivery service and provided further that it guarantees delivery to the addressee by the end of the next business day following the courier's receipt from the sender, addressed as follows (or any other address that the Party to be notified may have designated to the sender by like notice):

LESSOR: Bobby Lee Philpot and Linda Kay Philpot
899 Standard Avenue
Corbin, Kentucky 40701

LESSEE: Cellco Partnership
d/b/a Verizon Wireless
180 Washington Valley Road
Bedminster, New Jersey 07921
Attention: Network Real Estate

Notice shall be effective upon actual receipt or refusal as shown on the receipt obtained pursuant to the foregoing.

21. SUBORDINATION AND NON-DISTURBANCE. Within 15 days of the Effective Date, LESSOR shall obtain a Non-Disturbance Agreement (as defined below) from existing mortgagee(s), ground lessors and master lessors, if any, of the Property. At LESSOR's option, this Agreement shall be subordinate to any future master lease, ground lease, mortgage, deed of trust or other security interest (a "Mortgage") by LESSOR which from time to time may encumber all or part of the Property; provided, however, as a condition precedent to LESSEE being required to subordinate its interest in this Agreement to any future Mortgage covering the Property, LESSOR shall obtain for LESSEE's benefit a non-disturbance and attornment agreement for LESSEE's benefit in the form reasonably satisfactory to LESSEE, and containing the terms described below (the "Non-Disturbance Agreement"), and shall recognize LESSEE's rights under this Agreement. The Non-Disturbance Agreement shall include the encumbering party's ("Lender's") agreement that, if Lender or its successor-in-interest or any purchaser of Lender's or its successor's interest (a "Purchaser") acquires an ownership interest in the Property, Lender or such successor-in-interest or Purchaser will honor all of the terms of the Agreement. Such Non-Disturbance Agreement must be binding on all of Lender's participants in the subject loan (if any) and on all successors and assigns of Lender and/or its participants and on all Purchasers. In return for such Non-Disturbance Agreement, LESSEE will execute an agreement for Lender's benefit in which LESSEE (1) confirms that the Agreement is subordinate to the Mortgage or other real property interest in favor of Lender, (2) agrees to attorn to Lender if Lender becomes the owner of the Property and (3) agrees to accept a cure by Lender of any of LESSOR's defaults, provided such cure is completed within the deadline applicable to LESSOR. In the event LESSOR defaults in the payment and/or other performance of any mortgage or other real property interest encumbering the Property, LESSEE, may, at its sole option and without obligation, cure or correct LESSOR's default and upon doing so, LESSEE shall be subrogated to any and all rights, titles, liens and equities of the holders of such mortgage or other real property interest and LESSEE shall be entitled to deduct and setoff against all rents that may otherwise become due under this Agreement the sums paid by LESSEE to cure or correct such defaults.

22. DEFAULT. It is a "Default" if (i) either Party fails to comply with this Agreement and does not remedy the failure within 30 days after written notice by the other Party or, if the failure cannot reasonably be remedied in such time, if the failing Party does not commence a remedy within the allotted 30 days and diligently pursue the cure to completion within 90 days after the initial written

notice, or (ii) LESSOR fails to comply with this Agreement and the failure interferes with LESSEE's Use and LESSOR does not remedy the failure within 5 days after written notice from LESSEE or, if the failure cannot reasonably be remedied in such time, if LESSOR does not commence a remedy within the allotted 5 days and diligently pursue the cure to completion within 15 days after the initial written notice. The cure periods set forth in this Paragraph 22 do not extend the period of time in which either Party has to cure interference pursuant to Paragraph 13 of this Agreement.

23. REMEDIES. In the event of a Default, without limiting the non-defaulting Party in the exercise of any right or remedy which the non-defaulting Party may have by reason of such default, the non-defaulting Party may terminate this Agreement and/or pursue any remedy now or hereafter available to the non-defaulting Party under the Laws or judicial decisions of the state in which the Property is located. Further, upon a Default, the non-defaulting Party may at its option (but without obligation to do so), perform the defaulting Party's duty or obligation. The costs and expenses of any such performance by the non-defaulting Party shall be due and payable by the defaulting Party upon invoice therefor. If LESSEE undertakes any such performance on LESSOR's behalf and LESSOR does not pay LESSEE the full amount within 30 days of its receipt of an invoice setting forth the amount due, LESSEE may offset the full amount due against all fees due and owing to LESSOR under this Agreement until the full amount is fully reimbursed to LESSEE.

24. ENVIRONMENTAL. LESSEE shall conduct its business in compliance with all applicable laws governing the protection of the environment or employee health and safety ("EH&S Laws"). LESSEE shall indemnify and hold harmless the LESSOR from claims to the extent resulting from LESSEE's violation of any applicable EH&S Laws or to the extent that LESSEE causes a release of any regulated substance to the environment. LESSOR shall indemnify and hold harmless LESSEE from all claims resulting from the violation of any applicable EH&S Laws or a release of any regulated substance to the environment except to the extent resulting from the activities of LESSEE. The Parties recognize that LESSEE is only leasing a small portion of the Property and that LESSEE shall not be responsible for any environmental condition or issue except to the extent resulting from LESSEE's specific activities and responsibilities. In the event that LESSEE encounters any hazardous substances that do not result from its activities, LESSEE may relocate its facilities to avoid such hazardous substances to a mutually agreeable location or, if LESSEE desires to remove at its own cost all or some the hazardous substances or materials (such as soil) containing those hazardous substances, LESSOR agrees to sign any necessary waste manifest associated with the removal, transportation and/or disposal of such substances.

25. CASUALTY. If a fire or other casualty damages the Property or the Premises and impairs LESSEE's Use, rent shall abate until LESSEE'S Use is restored. If LESSEE's Use is not restored within 45 days, LESSEE may terminate this Agreement.

26. CONDEMNATION. If a condemnation of any portion of the Property or Premises impairs LESSEE's Use, LESSEE may terminate this Agreement. LESSEE may on its own behalf make a claim in any condemnation proceeding involving the Premises for losses related to LESSEE's communications equipment, relocation costs and, specifically excluding loss of LESSEE's leasehold interest, any other damages LESSEE may incur as a result of any such condemnation.

27. APPLICABLE LAWS. During the Term, LESSOR shall maintain the Property in compliance with all applicable laws, EH&S Laws, rules, regulations, ordinances, directives, covenants, easements, consent decrees, zoning and land use regulations, and restrictions of record, permits, building codes, and the requirements of any applicable fire insurance underwriter or rating bureau, now in effect or

which may hereafter come into effect (including, without limitation, the Americans with Disabilities Act and laws regulating hazardous substances) (collectively "Laws"). LESSEE shall, in respect to the condition of the Premises and at LESSEE's sole cost and expense, comply with (i) all Laws relating solely to LESSEE's specific and unique nature of use of the Premises; and (ii) all building codes requiring modifications to the Premises due to the improvements being made by LESSEE in the Premises. It shall be LESSOR's obligation to comply with all Laws relating to the Property, without regard to specific use (including, without limitation, modifications required to enable LESSEE to obtain all necessary building permits).

28. TAXES.

(a). LESSOR shall invoice and LESSEE shall pay any applicable transaction tax (including sales, use, gross receipts, or excise tax) imposed on the LESSEE and required to be collected by the LESSOR based on any service, rental space, or equipment provided by the LESSOR to the LESSEE. LESSEE shall pay all personal property taxes, fees, assessments, or other taxes and charges imposed by any Government Entity that are imposed on the LESSEE and required to be paid by the LESSEE that are directly attributable to the LESSEE's equipment or LESSEE's use and occupancy of the Premises. Payment shall be made by LESSEE within 60 days after presentation of a receipted bill and/or assessment notice which is the basis for such taxes or charges. LESSOR shall pay all ad valorem, personal property, real estate, sales and use taxes, fees, assessments or other taxes or charges that are attributable to LESSOR's Property or any portion thereof imposed by any Government Entity.

(b). LESSEE shall have the right, at its sole option and at its sole cost and expense, to appeal, challenge or seek modification of any tax assessment or billing for which LESSEE is wholly or partly responsible for payment. LESSOR shall reasonably cooperate with LESSEE at LESSEE's expense in filing, prosecuting and perfecting any appeal or challenge to taxes as set forth in the preceding sentence, including but not limited to, executing any consent, appeal or other similar document. In the event that as a result of any appeal or challenge by LESSEE, there is a reduction, credit or repayment received by the LESSOR for any taxes previously paid by LESSEE, LESSOR agrees to promptly reimburse to LESSEE the amount of said reduction, credit or repayment. In the event that LESSEE does not have the standing rights to pursue a good faith and reasonable dispute of any taxes under this paragraph, LESSOR will pursue such dispute at LESSEE's sole cost and expense upon written request of LESSEE.

29. NON-DISCLOSURE. The Parties agree this Agreement and any information exchanged between the Parties regarding the Agreement are confidential. The Parties agree not to provide copies of this Agreement or any other confidential information to any third party without the prior written consent of the other or as required by law. If a disclosure is required by law, prior to disclosure, the Party shall notify the other Party and cooperate to take lawful steps to resist, narrow, or eliminate the need for that disclosure.

30. SIMILAR TERMS AND CONDITIONS. LESSOR represents and warrants that the rent, benefits and terms and conditions granted to LESSEE by LESSOR hereunder are now and shall be, during the Term, no less favorable than the rent, benefits and terms and conditions for substantially the same or similar tenancies or licenses granted by LESSOR to other parties. If at any time during the Term LESSOR shall offer more favorable rent, benefits or terms and conditions for substantially the same or similar tenancies or licenses as those granted hereunder, then LESSOR shall, within 30 days after the

effective date of such offering, notify LESSEE of such fact and offer LESSEE the more favorable offering. If LESSEE chooses, the parties shall then enter into an amendment that shall be effective retroactively to the effective date of the more favorable offering, and shall provide the same rent, benefits or terms and conditions to LESSEE. LESSEE shall have the right to decline to accept the offering. LESSOR's compliance with this requirement shall be subject, at LESSEE's option, to independent verification.

31. MISCELLANEOUS. This Agreement contains all agreements, promises and understandings between the LESSOR and the LESSEE regarding this transaction, and no oral agreement, promises or understandings shall be binding upon either the LESSOR or the LESSEE in any dispute, controversy or proceeding. This Agreement may not be amended or varied except in a writing signed by all Parties. This Agreement shall extend to and bind the heirs, personal representatives, successors and assigns hereto. The failure of either party to insist upon strict performance of any of the terms or conditions of this Agreement or to exercise any of its rights hereunder shall not waive such rights and such party shall have the right to enforce such rights at any time. The performance of this Agreement shall be governed, interpreted, construed and regulated by the laws of the state in which the Premises is located without reference to its choice of law rules. Except as expressly set forth in this Agreement, nothing in this Agreement shall grant, suggest or imply any authority for one Party to use the name, trademarks, service marks or trade names of the other for any purpose whatsoever. LESSOR agrees to execute a Memorandum of this Agreement, which LESSEE may record with the appropriate recording officer. The provisions of the Agreement relating to indemnification from one Party to the other Party shall survive any termination or expiration of this Agreement.

[Signature page follows. The remainder of this page is intentionally blank.]

IN WITNESS WHEREOF, the Parties hereto have set their hands and affixed their respective seals the day and year first above written.

LESSOR:

Bobby Lee Philpot

Bobby L. Philpot

Linda Kay Philpot

Linda Kay Philpot

WITNESS

Date: 3-25-20

LESSEE:

Cellco Partnership d/b/a Verizon Wireless

By:

Name: **Ed Maher**

Its: ~~**Director - Network Field Engineering**~~

WITNESS

Date: 8/3/20

Brianne Schippling

BRIANNE SCHIPPLING
NOTARY PUBLIC, STATE OF MI
COUNTY OF OAKLAND
MY COMMISSION EXPIRES Jun 19, 2026
ACTING IN COUNTY OF

EXHIBIT "A"

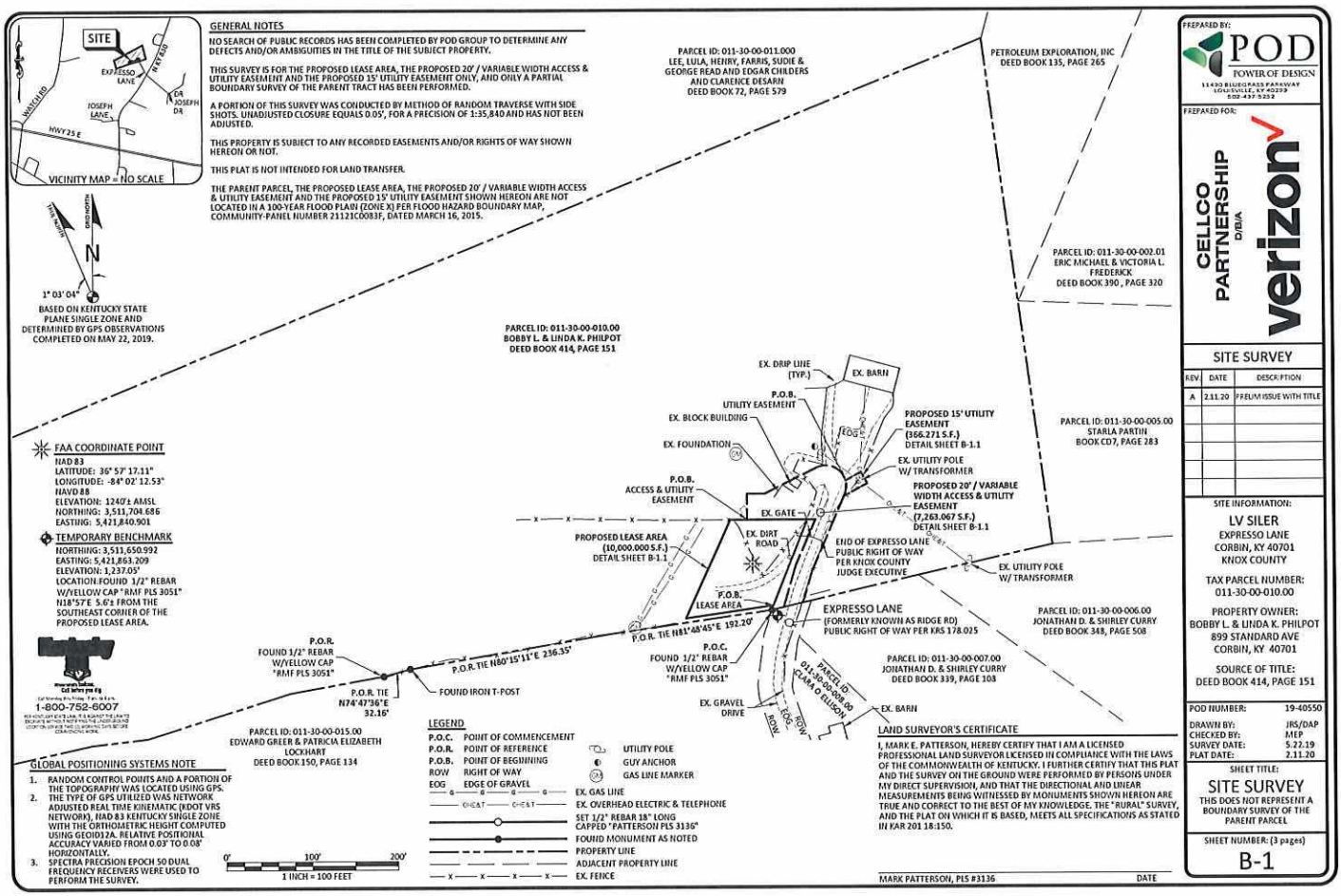
DESCRIPTION OF PROPERTY

Beginning on a black oak, Elijah Harris corner and the beginning corner of Lot #1 and the line of Lot No. 1 S 75 W 78 poles to a bunchy of maples and black gums, corner to Lot No. 1, N 4 W 20 poles to a stake in Allen Gamble's line, N 87 E 6 poles to a white oak, Gamble's corner; thence N 67 E 78 poles to three red oaks at Elijah Harris fence and in the line of said Harris; thence with the same S 82 E 36 poles to the beginning. There is to be a road for right of way through Lot No. 1 of the Hensley Division where the old road now runs along the top of the spur to the county road, W.A. Campbell now lives.

Being the same real property conveyed to Bobby Lee Philpot and wife, Linda Kay Philpot, by deed from Alma Lee Asher Allen, dated August 22, 2014, of record in Deed Book No. 404, Page 671, Knox County Court Clerk's Office.

EXHIBIT "B"

SITE PLAN OF THE PREMISES



PREPARED BY:
POD
POWER OF DESIGN
11400 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-499-5252

PREPARED FOR:
CELLCO PARTNERSHIP D/B/A verizon

SITE SURVEY

REV.	DATE	DESCRIPTION
A	2.11.20	PRELIM ISSUE WITH TITLE

SITE INFORMATION:
LV SILER
EXPRESSO LANE
CORBIN, KY 40701
KNOX COUNTY

TAX PARCEL NUMBER:
011-30-00-010.00

PROPERTY OWNER:
BOBBY L. & LINDA K. PHILPOT
899 STANDARD AVE
CORBIN, KY 40701

SOURCE OF TITLE:
DEED BOOK 414, PAGE 151

POD NUMBER:	19-40550
DRAWN BY:	JRS/DAP
CHECKED BY:	MEP
SURVEY DATE:	5.22.19
PLAT DATE:	2.11.20

SHEET TITLE:
SITE SURVEY
THIS DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARENT PARCEL

SHEET NUMBER: (3 pages)
B-1

FAA COORDINATE POINT
NAD 83
LATITUDE: 36° 57' 17.11"
LONGITUDE: -84° 02' 12.53"
NAVD 88
ELEVATION: 1240'± AMSL
NORTHING: 3,511,704.686
EASTING: 5,421,840.901

TEMPORARY BENCHMARK
NORTHING: 3,511,650.992
EASTING: 5,421,863.209
ELEVATION: 1,237.05'
LOCATION:FOUND 1/2" REBAR W/YELLOW CAP "RMF PLS 3051" N18°57'E 5.6'± FROM THE SOUTHEAST CORNER OF THE PROPOSED LEASE AREA.

TRUE NORTH / GRID NORTH — N — 1° 03' 04"

BASED ON KENTUCKY STATE PLANE SINGLE ZONE AND DETERMINED BY GPS OBSERVATIONS COMPLETED ON MAY 22, 2019.

GENERAL NOTES

NO SEARCH OF PUBLIC RECORDS HAS BEEN COMPLETED BY POD GROUP TO DETERMINE ANY DEFECTS AND/OR AMBIGUITIES IN THE TITLE OF THE SUBJECT PROPERTY.

THIS SURVEY IS FOR THE PROPOSED LEASE AREA, THE PROPOSED 20' / VARIABLE WIDTH ACCESS & UTILITY EASEMENT AND THE PROPOSED 15' UTILITY EASEMENT ONLY, AND ONLY A PARTIAL BOUNDARY SURVEY OF THE PARENT TRACT HAS BEEN PERFORMED.

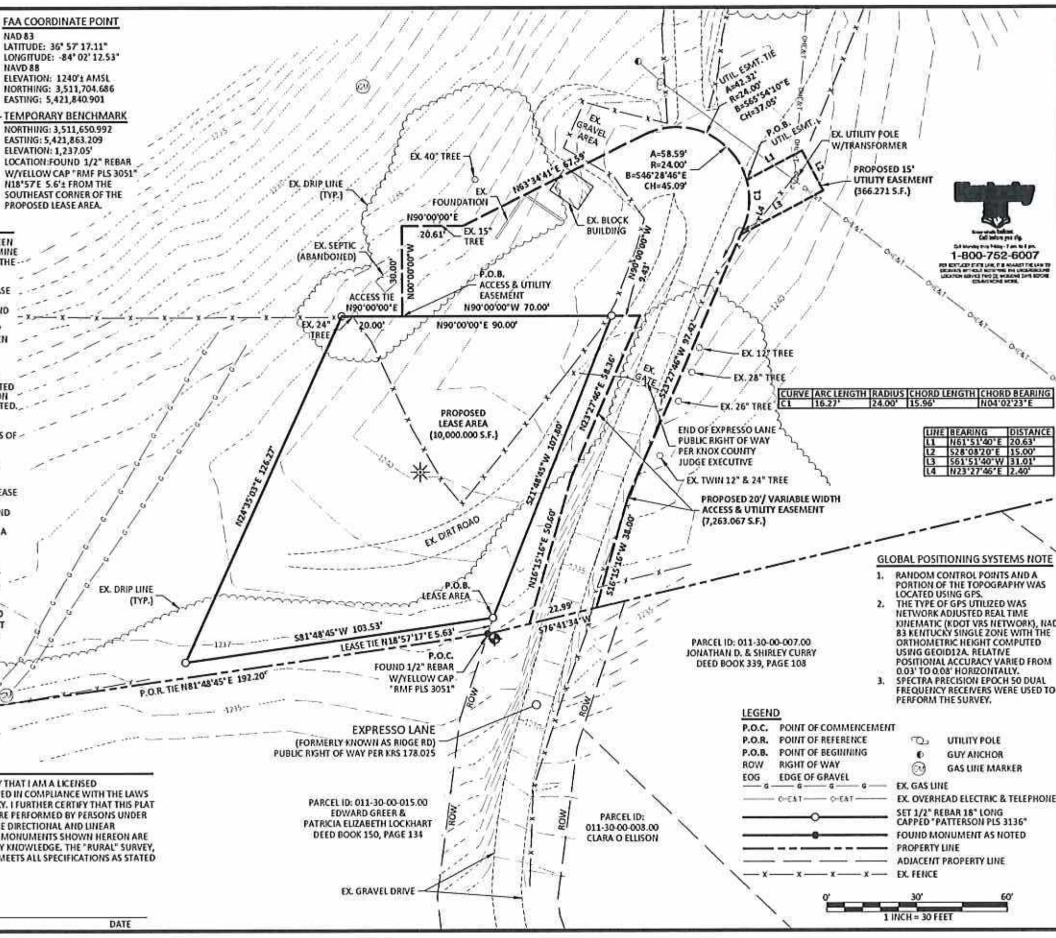
A PORTION OF THIS SURVEY WAS CONDUCTED BY METHOD OF RANDOM TRAVERSE WITH SIDE SHOTS. UNADJUSTED CLOSURE EQUALS 0.05', FOR A PRECISION OF 1:35,840 AND HAS NOT BEEN ADJUSTED.

THIS PROPERTY IS SUBJECT TO ANY RECORDED EASEMENTS AND/OR RIGHTS OF WAY SHOWN HEREON OR NOT.

THIS PLAT IS NOT INTENDED FOR LAND TRANSFER.

THE PARENT PARCEL, THE PROPOSED LEASE AREA, THE PROPOSED 20' / VARIABLE WIDTH ACCESS & UTILITY EASEMENT AND THE PROPOSED 15' UTILITY EASEMENT SHOWN HEREON ARE NOT LOCATED IN A 100-YEAR FLOOD PLAIN (ZONE X) PER FLOOD HAZARD BOUNDARY MAP, COMMUNITY-PANEL NUMBER 21121C0083F, DATED MARCH 16, 2015.

PARCEL ID: 011-30-00-010.00
BOBBY L. & LINDA K. PHILPOT
DEED BOOK 414, PAGE 151



CURVE	ARC LENGTH	RADIUS	CHORD LENGTH	CHORD BEARING
C1	16.27'	24.00'	15.96'	N04°02'23"E

LINE	BEARING	DISTANCE
L1	N61°51'40"E	20.63'
L2	S28°08'20"E	15.00'
L3	S61°51'40"W	31.01'
L4	N23°27'46"E	2.40'

GLOBAL POSITIONING SYSTEMS NOTE

1. RANDOM CONTROL POINTS AND A PORTION OF THE TOPOGRAPHY WAS LOCATED USING GPS.
2. THE TYPE OF GPS UTILIZED WAS NETWORK ADJUSTED REAL TIME KINEMATIC (KDOT VRS NETWORK), NAD 83 KENTUCKY SINGLE ZONE WITH THE ORTHOMETRIC HEIGHT COMPUTED USING GEOID12A. RELATIVE POSITIONAL ACCURACY VARIED FROM 0.03' TO 0.08' HORIZONTALLY.
3. SPECTRA PRECISION EPOCH 50 DUAL FREQUENCY RECEIVERS WERE USED TO PERFORM THE SURVEY.

LEGEND

P.O.C. POINT OF COMMENCEMENT
P.O.R. POINT OF REFERENCE
P.O.B. POINT OF BEGINNING
ROW RIGHT OF WAY
EOG EDGE OF GRAVEL
UTILITY POLE
GUY ANCHOR
GAS LINE MARKER
EX. GAS LINE
EX. OVERHEAD ELECTRIC & TELEPHONE
SET 1/2" REBAR 18" LONG CAPPED "PATTERSON PLS 3136"
FOUND MONUMENT AS NOTED
PROPERTY LINE
ADJACENT PROPERTY LINE
EX. FENCE

0' 30' 60'
1 INCH = 30 FEET

LAND SURVEYOR'S CERTIFICATE

I, MARK E. PATTERSON, HEREBY CERTIFY THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR LICENSED IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF KENTUCKY. I FURTHER CERTIFY THAT THIS PLAT AND THE SURVEY ON THE GROUND WERE PERFORMED BY PERSONS UNDER MY DIRECT SUPERVISION, AND THAT THE DIRECTIONAL AND LINEAR MEASUREMENTS BEING WITNESSED BY MONUMENTS SHOWN HEREON ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. THE "RURAL" SURVEY, AND THE PLAT ON WHICH IT IS BASED, MEETS ALL SPECIFICATIONS AS STATED IN KAR 201 18:150.

MARK PATTERSON, PLS #3136 DATE

PREPARED BY:
POD
POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

PREPARED FOR:
CELLCO PARTNERSHIP D/B/A verizon

SITE SURVEY

REV.	DATE	DESCRIPTION
A	2.11.20	PRELIM ISSUE WITH TITLE

SITE INFORMATION:
LV SILER
EXPRESSO LANE
CORBIN, KY 40701
KNOX COUNTY

TAX PARCEL NUMBER:
011-30-00-010.00

PROPERTY OWNER:
BOBBY L. & LINDA K. PHILPOT
899 STANDARD AVE
CORBIN, KY 40701

SOURCE OF TITLE:
DEED BOOK 414, PAGE 151

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DRAWN BY: JRS/DAP
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SURVEY DATE: 5.22.19
PLAT DATE: 2.11.20

SHEET TITLE:
SITE SURVEY
THIS DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARENT PARCEL

SHEET NUMBER: (3 pages)
B-1.1

LEGAL DESCRIPTIONS

PROPOSED LEASE AREA

THE FOLLOWING IS A DESCRIPTION OF THE PROPOSED LEASE AREA ON THE PROPERTY CONVEYED TO BOBBY L. & LINDA K. PHILPOT AS RECORDED IN THE OFFICE OF THE CLERK OF KNOX COUNTY, KENTUCKY IN DEED BOOK 414, PAGE 151, PARCEL ID: 011-30-00-010.00, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARING DATUM USED HEREIN IS BASED UPON KENTUCKY STATE PLANE COORDINATE SYSTEM, SINGLE ZONE, NAD 83, FROM A REAL TIME KINEMATIC GLOBAL POSITIONING SYSTEM OBSERVATION USING THE KENTUCKY TRANSPORTATION CABINET REAL TIME GPS NETWORK COMPLETED ON MAY 22, 2019.

COMMENCING AT A FOUND 1/2" REBAR WITH YELLOW CAP "RMF PLS 3051" IN THE WEST LINE OF EXPRESSO LANE, AT THE COMMON CORNER OF THE PROPERTY CONVEYED TO BOBBY LEE & LINDA KAY PHILPOT AS RECORDED IN DEED BOOK 404, PAGE 671 AND CORNER TO THE PROPERTY CONVEYED TO EDWARD GREER & PATRICIA ELIZABETH LOCKHART AS RECORDED IN DEED BOOK 150, PAGE 134, FOR REFERENCE SAID REBAR IS N74°47'36"E 32.16', N80°15'11"E 236.35' AND N81°48'45"E 192.20' FROM A FOUND 1/2" REBAR WITH YELLOW CAP "RMF PLS 3051", BEING THE COMMON CORNER OF SAID PHILPOT AND SAID LOCKHART PROPERTY; THENCE TRAVERSING THE LAND OF SAID PHILPOT, N18°57'17"E 5.63' TO A SET 1/2" REBAR 18" LONG CAPPED "PATTERSON PLS 3136" HEREAFTER REFERRED TO AS A "SET IPC", IN THE SOUTHEAST CORNER OF THE PROPOSED LEASE AREA AND BEING **THE TRUE POINT OF BEGINNING**; THENCE S81°48'45"W 103.53' TO A "SET IPC"; THENCE N24°35'03"E 126.27' TO A "SET IPC"; THENCE N90°00'00"E 90.00' TO A "SET IPC"; THENCE S21°48'45"W 107.80' TO THE POINT OF BEGINNING CONTAINING 10,000.000 SQUARE FEET AS PER SURVEY BY MARK E. PATTERSON, PLS #3136 DATED MAY 22, 2019.

PROPOSED 20' / VARIABLE WIDTH ACCESS & UTILITY EASEMENT

THE FOLLOWING IS A DESCRIPTION OF THE PROPOSED 20' / VARIABLE WIDTH ACCESS & UTILITY EASEMENT ON THE PROPERTY CONVEYED TO BOBBY L. & LINDA K. PHILPOT AS RECORDED IN THE OFFICE OF THE CLERK OF KNOX COUNTY, KENTUCKY IN DEED BOOK 414, PAGE 151, PARCEL ID: 011-30-00-010.00, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

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PROPOSED 15' UTILITY EASEMENT

THE FOLLOWING IS A DESCRIPTION OF THE PROPOSED 15' UTILITY EASEMENT ON THE PROPERTY CONVEYED TO BOBBY L. & LINDA K. PHILPOT AS RECORDED IN THE OFFICE OF THE CLERK OF KNOX COUNTY, KENTUCKY IN DEED BOOK 414, PAGE 151, PARCEL ID: 011-30-00-010.00, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARING DATUM USED HEREIN IS BASED UPON KENTUCKY STATE PLANE COORDINATE SYSTEM, SINGLE ZONE, NAD 83, FROM A REAL TIME KINEMATIC GLOBAL POSITIONING SYSTEM OBSERVATION USING THE KENTUCKY TRANSPORTATION CABINET REAL TIME GPS NETWORK COMPLETED ON MAY 22, 2019.

COMMENCING AT A FOUND 1/2" REBAR WITH YELLOW CAP "RMF PLS 3051" IN THE WEST LINE OF EXPRESSO LANE, AT THE COMMON CORNER OF THE PROPERTY CONVEYED TO BOBBY LEE & LINDA KAY PHILPOT AS RECORDED IN DEED BOOK 404, PAGE 671 AND CORNER TO THE PROPERTY CONVEYED TO EDWARD GREER & PATRICIA ELIZABETH LOCKHART AS RECORDED IN DEED BOOK 150, PAGE 134, FOR REFERENCE SAID REBAR IS N74°47'36"E 32.16', N80°15'11"E 236.35' AND N81°48'45"E 192.20' FROM A FOUND 1/2" REBAR WITH YELLOW CAP "RMF PLS 3051", BEING THE COMMON CORNER OF SAID PHILPOT AND SAID LOCKHART PROPERTY; THENCE TRAVERSING THE LAND OF SAID PHILPOT, N18°57'17"E 5.63' TO A SET 1/2" REBAR 18" LONG CAPPED "PATTERSON PLS 3136" HEREAFTER REFERRED TO AS A "SET IPC", IN THE SOUTHEAST CORNER OF THE PROPOSED LEASE AREA; THENCE WITH SAID LEASE AREA FOR THE NEXT THREE CALLS, S81°48'45"W 103.53' TO A "SET IPC"; THENCE N24°35'03"E 126.27' TO A "SET IPC"; THENCE N90°00'00"E 20.00'; THENCE LEAVING SAID LEASE AREA, N00°00'00"W 30.00'; THENCE N90°00'00"E 20.61'; THENCE N63°34'41"E 67.59'; THENCE ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 24.00', ARC LENGTH OF 42.32', THE CHORD OF WHICH BEARS S65°54'10"E 37.05' TO THE TRUE POINT OF BEGINNING; THENCE N61°51'40"E 20.63'; THENCE S28°08'20"E 15.00'; THENCE S61°51'40"W 31.01'; THENCE N23°27'46"E 2.40'; THENCE ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 24.00', ARC LENGTH OF 16.27', THE CHORD OF WHICH BEARS N04°02'23"E 15.96' TO THE POINT OF BEGINNING CONTAINING 366.273 SQUARE FEET AS PER SURVEY BY MARK E. PATTERSON, PLS #3136 DATED MAY 22, 2019.

PARENT PARCEL (DEED BOOK 414, PAGE 151)

A CERTAIN TRACT OF LAND BEING EAST OF THE CITY OF CORBIN IN KNOX COUNTY, KENTUCKY ON THE WATERS OF THE HAZEL FORK AND STONY FORK AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: UNLESS STATED OTHERWISE, ANY MONUMENT REFERRED TO HEREIN AS AN "IRON PIPE AND CAP" IS A SET 1/2" IRON REBAR PIN, 18" IN LENGTH, WITH A YELLOW PLASTIC CAP STAMPED "RMF 3051". ALL BEARINGS AND/OR COORDINATES HEREIN REFER GRID NORTH OF THE KENTUCKY SINGLE ZONE, STATE PLANE COORDINATE SYSTEM.

BEGINNING AT AN IRON PIN AND CAP SET AT A FALLEN WIRE FENCE INTERSECTION, BEING WEST OF KY.830 AND APPROXIMATELY 305' EAST OF EXPRESSO LANE, CORNER OF STARLA PARTIN (M.COMM BK.7, PG.283) AND JONATHON & SHIRLEY CURRY (DB.348, PG.508), BEING AT OR NEAR STATE PLANE COORDINATES OF N=3511726.62, E=5422190.39; THENCE WITH THE CURRY LINE, S 77°14'48" W, 160.61' TO A FOUND IRON PIN W/CAP STAMPED "EG 3276", CORNER OF JONATHON & SHIRLEY CURRY (DB.339, PG. 108); THENCE WITH CURRY LINE, S 76°43'19" W, 174.68' CROSSING EXPRESSO LANE AT END OF CURRY LINE AND WITH THE EDWARD & PATRICIA LOCKHART ESTATE (DB.150, PG.134) TO AN IRON PIN AND CAP AT A WIRE FENCE; THENCE WITH FENCE AND LOCKHART ESTATE LINE, S 81°50'40" W, 192.20' TO AN IRON PIN AND CAP; THENCE, S 80°17'06" W, 236.35' TO A FOUND IRON T-POST; THENCE, S 74°49'3 L" W, 32.16' TO AN IRON PIN AND CAP; THENCE, S 79°51 '52" W, 110.42' TO AN IRON PIN AND CAP; THENCE, S 72°35'31" W, 174.62' TO AN IRON PIN AND CAP; THENCE, S 81°28'30" W, 65.60' TO AN IRON PIN AND CAP; THENCE, S 77°41 '37" W, 168.09' TO AN IRON PIN AND CAP; THENCE CONTINUING WITH LOCKHART AND FALLEN WIRE FENCE, N 8°59'09" W, 201.68' TO AN IRON PIN AND CAP; THENCE, N 11°53'15" W, 159.47' TO A POINT IN A BRANCH, CORNER OF JOHN & KAREN SIZEMORE (DB.403, PG.381), WITNESSED BY AN IRON PIN AND CAP SET 4.0' FROM CORNER IN PRECEDING LINE; THENCE WITH THE SIZEMORE LINE AND BRANCH, N 29°02'54" E, 5.22' TO A POINT; THENCE, N 75°16'47" E, 21.50' TO A 16"WHITE OAK, W/3 HACKS; THENCE LEAVING BRANCH, N 83°21 '59" E, 55.42' TO AN IRON PIN AND CAP, CORNER OF DAVID C. HENSLEY (DB.265, PG.198); THENCE WITH THE HENSLEY LINE, N 67°57'00" E, 1287.00', CROSSING OLD "RIDGE ROAD" AT 992' TO AN IRON PIN AND CAP, CORNER OF PETROLEUM EXPLORATION, INC. (DB.135, PG.265); THENCE WITH THEIR LINE AND FALLEN WIRE FENCE, S 7°37'05" E, 310' FEET, THEN WITH THE STARLA PARTIN LINE FOR A TOTAL OF 594.00' TO THE POINT OF BEGINNING, CONTAINING 14.192 ACRES, MORE OR LESS, ACCORDING TO A SURVEY BY RICHARD M. FREDERICK, PLS #3051 ON MAY 20, 2016, AND THE SAME PROPERTY CONVEYED TO BOBBY L. PHILPOT & LINDA K. PHILPOT BY DEED FROM ALMA ASHER ALLEN, DATED AUGUST 22, 2014, RECORDED IN DEED BOOK 404, PG.671 IN THE KNOX COUNTY CLERK'S OFFICE, BARBOURVILLE, KENTUCKY.

REPORT OF TITLE (PARCEL ID: 011-30-00-010.00)

THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY POD GROUP, LLC. AND AS SUCH WE ARE NOT RESPONSIBLE FOR THE INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE, UNRECORDED EASEMENTS, AUGMENTING EASEMENTS, IMPLIED OR PRESCRIPTIVE EASEMENTS, OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE. INFORMATION REGARDING THESE MATTERS WERE GAINED FROM HIGH STREET TITLE COMPANY INC., PREPARED FOR VERIZON WIRELESS, DATED MAY 6, 2019 AT 8:00 AM. THE FOLLOWING COMMENTS ARE IN REGARD TO SAID COMMITMENT AND THE NUMBERS IN THE COMMENTS CORRESPOND TO THE NUMBERING SYSTEM IN SAID POLICY.

UNREALEASED MORTGAGES OF RECORD:
MORTGAGE DATED AUGUST 22, 2014 AND RECORDED ON AUGUST 26, 2014 IN BOOK 415, PAGE 653 IN FAVOR OF WHITAKER BANK, INC. IN THE AMOUNT OF $65,000.00. (MORTGAGE AS RECORDED IN BOOK 415, PAGE 653, AFFECTS THE PARENT TRACT, THE PROPOSED LEASE AREA AND THE PROPOSED ACCESS & UTILITY EASEMENT.)

GENERAL JUDGEMENT SEARCH:
(POD GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM)

TAXES:
TAX INFORMATION AS TO: PARCEL NUMBER: 011-30-00-010.00, BILL NUMBER 13720, ASSESSED VALUE:$22,400.00, AMOUNT: $262.92, PAID 11/1/18
(NOT A LAND SURVEYING MATTER, THEREFORE POD GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM)

OTHER LIENS / DOCUMENTS OF RECORD:
(POD GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM)

LAND SURVEYOR'S CERTIFICATE

I, MARK E. PATTERSON, HEREBY CERTIFY THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR LICENSED IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF KENTUCKY. I FURTHER CERTIFY THAT THIS PLAT AND THE SURVEY ON THE GROUND WERE PERFORMED BY PERSONS UNDER MY DIRECT SUPERVISION, AND THAT THE DIRECTIONAL AND LINEAR MEASUREMENTS BEING WITNESSED BY MONUMENTS SHOWN HEREON ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. THE "RURAL" SURVEY, AND THE PLAT ON WHICH IT IS BASED, MEETS ALL SPECIFICATIONS AS STATED IN KAR 201 18:150.

MARK PATTERSON, PLS #3136 DATE

PREPARED BY:
POD
POWER OF DESIGN
11400 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

PREPARED FOR:
CELLCO PARTNERSHIP D/B/A verizon

SITE SURVEY

REV.	DATE	DESCRIPTION
A	2.11.20	PREIUM ISSUE WITH TITLE

SITE INFORMATION:
LV SILER
EXPRESSO LANE
CORBIN, KY 40701
KNOX COUNTY

TAX PARCEL NUMBER:
011-30-00-010.00

PROPERTY OWNER:
BOBBY L. & LINDA K. PHILPOT
899 STANDARD AVE
CORBIN, KY 40701

SOURCE OF TITLE:
DEED BOOK 414, PAGE 151

POD NUMBER:	19-40550
DRAWN BY:	JRS/DAP
CHECKED BY:	MEP
SURVEY DATE:	5.22.19
PLAT DATE:	2.11.20

SHEET TITLE:
SITE SURVEY
THIS DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARENT PARCEL

SHEET NUMBER: (3 pages)
B-1.2

EXHIBIT J

NOTICE LIST

PHILPOT BOBBY LEE & LINDA KAY
899 STANDARD AVE
CORBIN KY 40701

LOCKHART EDWARD G & PATRICIA E
EST C/O BRENT LOCKHART
6706 WAUCONDA DR
LARKSPUR CO 80118

SIZEMORE JOHN & KAREN
642 WATCH RD
CORBIN KY 40701

HENSLEY SUSIE REED ETAL
C/O DAVID HENSLEY
39 HEMBREE LANE
GRAY KY 40734

FREDERICK ERIC MICHAEL & VICTORIA L
1862 TURKEY CR RD
BARBOURVILLE KY 40906

MILLS LEWIS
516 KY 1629
CORBIN KY 40701

FREDERICK ERIC
1862 TURKEY CR RD
BARBOURVILLE KY 40906

FREDERICK DARYL
1862 TURKEY CRK RD
BARBOURVILLE KY 40906

MILLS DORA
108 GOODMAN LN
BARBOURVILLE KY 40906

PARTIN STARLA
735 N KY 830
CORBIN KY 40701

CURRY JONATHON & SHIRLEY
655 N KY 830
CORBIN KY 40701

CURRY JONATHON D & SHIRLEY K
619 N KY 830
CORBIN KY 40701

ELLISON CLARA O
613 N KY 830
CORBIN KY 40701

HERRELL FORD & PAULINE
PO BOX 373
CORBIN KY 40702-0373

LOCKHART LELAND
1110 MAPLE LN
CORBIN KY 40701

EXHIBIT K

February 2, 2021

Notice of Proposed Construction of
Wireless Communications Facility
Site Name: Siler

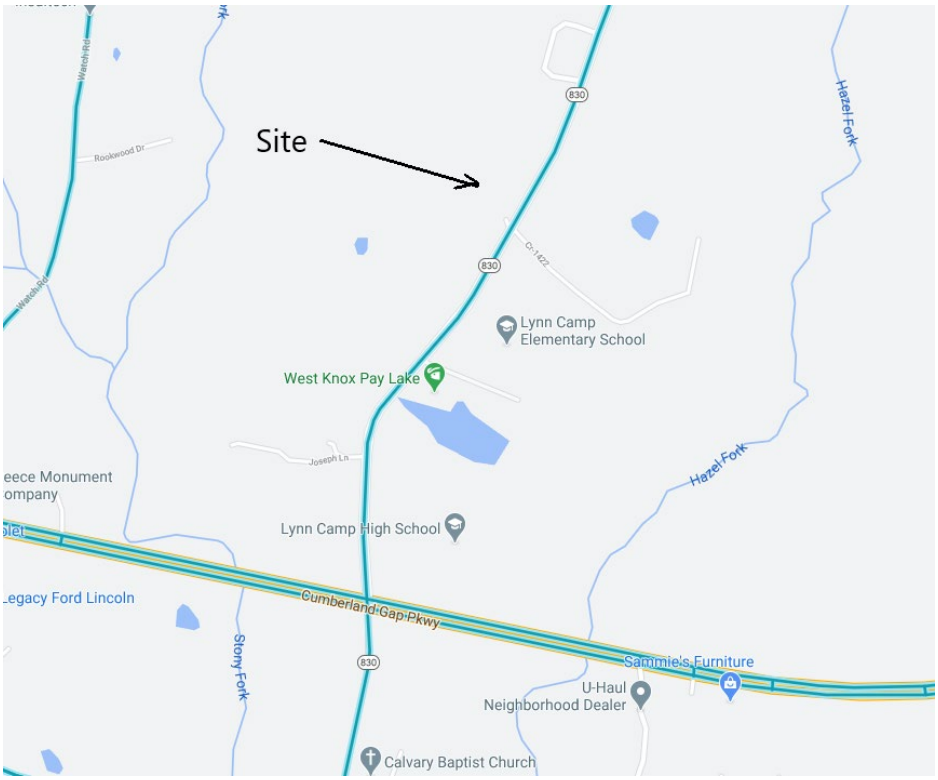
Cellco Partnership, d/b/a Verizon Wireless and Horvath V, LLC have filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at Expresso Lane, Corbin, KY, 40701 (North Latitude: (36° 57' 17.11", West Longitude 84° 02' 12573"). The proposed facility will include a 255-foot tall antenna tower, plus a 5-foot lightning arrestor and related ground facilities. This facility is needed to provide improved coverage for wireless communications in the area.

This notice is being sent to you because the County Property Valuation Administrator's records indicate that you may own property that is within a 500' radius of the proposed tower site or contiguous to the property on which the tower is to be constructed. You have a right to submit testimony to the Kentucky Public Service Commission ("PSC"), either in writing or to request intervention in the PSC's proceedings on the application. You may contact the PSC for additional information concerning this matter at: Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2021-00030 in any correspondence sent in connection with this matter.

We have attached a map showing the site location for the proposed tower. Applicant's radio frequency engineers assisted in selecting the proposed site for the facility, and they have determined it is the proper location and elevation needed to provide quality service to wireless customers in the area. Please feel free to contact us at 317-637-1321 if you have any comments or questions about this proposal.

Sincerely,
Russell L. Brown

Attorney for Applicant
RLB/jdj
enclosure



Site Location

Aerial Map of Site

EXHIBIT L

ClarkQuinn
Clark, Quinn, Moses, Scott & Grahn, LLP

VIA CERTIFIED MAIL

February 2, 2020

Hon. Mike Mitchell
401 Court Street, Suite 6
Barbourville, KY 40906

RE: Notice of Proposal to Construct Wireless Communications Facility
Kentucky Public Service Commission Docket No. 2021- 00030
Site Name: Piney Road

Dear Judge Mitchell:

Cellco Partnership, d/b/a Verizon Wireless and Harmoni Towers, LLC have filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at Expresso Lane, Corbin, KY, 40701 (North Latitude: (36° 57' 17.11", West Longitude 84° 02' 12.53"). The proposed facility will include a 255-foot tall antenna tower, plus a 5-foot lightning arrestor and related ground facilities. This facility is needed to provide improved coverage for wireless communications in the area.

You have a right to submit comments to the PSC or to request intervention in the PSC's proceedings on the application. You may contact the PSC at: Executive Director, Public Service Commission, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2021-00030 in any correspondence sent in connection with this matter.

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

Sincerely,

Russell L. Brown
Attorney for Applicants

RLB/jdj
enclosure

EXHIBIT M

SITE NAME: Siler
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.

Cellco Partnership, d/b/a Verizon Wireless and Harmoni Towers, LLC propose to construct a telecommunications **tower** on this site. If you have questions, please contact Clark, Quinn, Moses, Scott & Grahn, LLP, 320 N. Meridian Street, Indianapolis, IN 46204; 317-637-1321, or the Executive Director, Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2021-00030 in your correspondence.

Cellco Partnership, d/b/a Verizon Wireless and Harmoni Towers, LLC propose to construct a telecommunications **tower** on this site. If you have questions, please contact Clark, Quinn, Moses, Scott & Grahn, LLP, 320 N. Meridian Street, Indianapolis, IN 46204; 317-637-1321, or the Executive Director, Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2021-00030 in your correspondence.

EXHIBIT N

VIA EMAIL: jbenfield@corbinnewsjournal.com

Corbin News Journal
215 N Main St.
Corbin, KY 40701

RE: Legal Notice Advertisement
Site Name: Siler

Dear Ms. Benfield:

Please publish the following legal notice advertisement in the next available edition of the *Corbin News Journal:*

NOTICE

Cellco Partnership, d/b/a Verizon Wireless and Harmoni Towers, LLC has filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at Expresso Lane, Corbin, KY, 40701 (North Latitude: 36° 57' 17.11"; West Longitude 84° 02' 12.53"). 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 2021-00030 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 Clark, Quinn, Moses, Scott & Grahn, LLC, 320 N. Meridian Street, Indianapolis, IN 46204 or by email to ebw@clarkquinnlaw.com. Please call me or Elizabeth Bentz Williams, in our offices at (317) 637-1321 if you have any questions. Thank you for your assistance.

Sincerely

Elizabeth Bentz Williams
Clark, Quinn, Moses, Scott & Grahn, LLC

EXHIBIT O

Radio Frequency Design Search Area

EXHIBIT P

verizon

Friday, Sep 18th, 2020

RE: Proposed Cellco Partnership d/b/a Verizon Wireless Communications Facility
Site Name: **LV SILER**
Type of Tower: 255' Self Support
Location: Near Expresso Lane Corbin, KY 40701 Knox County

To Whom It May Concern:

As a radio frequency engineer for Verizon Wireless, I am providing this letter to state the need for a Verizon Wireless site called **LV SILER**.

The **LV SILER** site is proposed with the below objectives:

1 To offload existing demand and traffic of existing VzW sites in this area.
2 Improve 4G throughput to existing heavy data users.
3 Improve 4G network reliability by increasing the amount of time our customers operate on 4G instead of 3G.

Currently the area is experiencing high demand for wireless high-speed data. Growth forecasts have triggered the need for an additional site in the area. The tower is needed to provide all Verizon customers in the area with the best experience on their 4G wireless devices.

Raw Land – Design plans for a new tower would provide overall tower height of **255'** with a Verizon Wireless Centerline of **250'**. The new structure height was decided upon to best cover the offload area and interact with the existing Verizon sites. If we are limited to building a structure less than the proposed height, another tower would be needed in the vicinity in the near future. In addition, building a structure that is too short can cause existing taller sites to shoot over the proposed site and building a site that is too tall can cause the proposed site to shoot over existing sites. Both situations create a poor experience from a user perspective. The new structure will be placed near the center of the area with high traffic demand and offload the surrounding sites greatly. The new tower design meets stated objectives.

Verizon Wireless cares about the communities as well as the environment and prefers to collocate on existing structures when available. It can be noticed from any map that Verizon Wireless is currently collocated on many existing structures in the area. We prefer collocation due to reduced construction costs, faster deployment, and environment protection. However, Verizon Wireless was unable to find a suitable structure within the center of demand area to collocate the proposed **LV SILER** site.

Appalachian Wireless (FCC ID: 1258493**)** –Site is located far Southwest of the demand area and outside the demand search ring. Therefore Verizon does not feel this site meets our customer's needs and is not viable.

verizon

Verizon Wireless design engineers establish search area criteria in order to effectively meet coverage objectives as well as offload existing Verizon cell sites. When met, the criterion also reduces the need for a new site to cover the area in the immediate future. Each cellular site covers a limited area, depending on site configuration and the surrounding terrain. Cell sites are built in an interconnected network; which means each cell site must be located so that their respective coverage areas are contiguous. This provides uninterrupted communications throughout the coverage area.

Since collocation is generally the most cost-effective means for prompt deployment of new facilities, Verizon Wireless makes every effort to investigate the feasibility for using existing towers or other tall structures for collocation when designing a new site or system expansion. However, collocation on an existing tower or tall structure is not always feasible due to location of existing cell sites. Cell sites are placed in a way so they provide smooth hand off to each other and are placed at some distance from each other to eliminate too much overlap. Too much overlap may result in a waste of resources and raise a system capacity overload concern.

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

Sincerely,

FAIZ MOHAMMED
RF Engineer, Verizon Wireless

STATE OF INDIANA

COUNTY OF Hendricks

Subscribed and sworn to before me this 6 day of January, 2021.

Notary Public

JENNIFER R. ROBERTS
Marion County
My Commission Expires
July 20, 2025

Signature

Printed Jennifer R Roberts

County of Residence Marion

My Commission expires:
07/20/2025

verizon

Friday, 18th, 2020.

RE: Knox County Zoning Plots

Site Name: SILER

To Whom It May Concern:

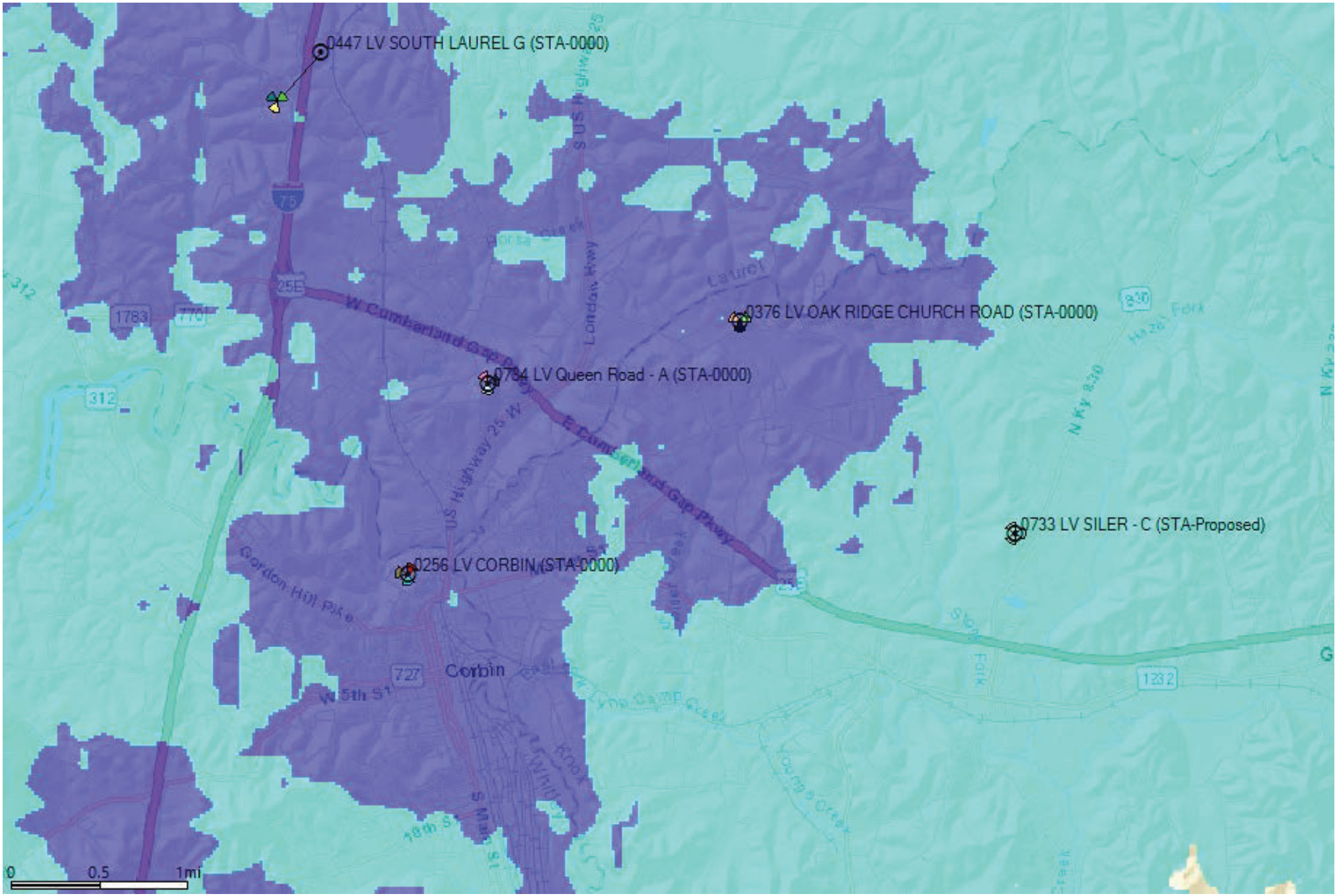
This map is not a guarantee of coverage and may contain areas with no service. This map reflects a depiction of predicted and approximate wireless coverage of the network and is intended to provide a relative comparison of coverage. The depictions of coverage do not guarantee service availability as there are many factors that can influence coverage and service availability. These factors vary from location to location and change over time. The coverage areas may include locations with limited or no coverage. Even within a coverage area shown, there are many factors, including but not limited to, usage volumes, service, outage, and customer's equipment, and terrain, proximity to buildings, foliage, and weather that may impact service.

The proposed site is needed to offload capacity from existing sites. This map reflects the predicted coverage area that will be offloaded from existing sites and transferred to the proposed site.

Sincerely,

Faiz Mohammed
RF Engineer, Verizon Wireless

Current Coverage without SILER



Coverage with the Proposed SILER