BEFORE THE
BOURBON COUNTY JOINT PLANNING COMMISSION

In the Matter of:

CONSTRUCTION OF A WIRELESS COMMUNICATIONS FACILITY IN PARIS, BOUBRON COUNTY, KENTUCKY

CASE NO. _____

SITE NAME: LV PARIS DT

* * * * * * * * *

APPLICATION FOR
CONSTRUCTION OF A WIRELESS COMMUNICATIONS FACILITY

TowerCo 2013, LLC, a Delaware limited liability company ("Applicant"), by counsel, pursuant to the Kentucky Revised Statutes, the City of Paris Zoning Ordinance, and the rules and regulations applicable thereto, and pursuant to the Telecommunications Act of 1996, respectfully submits this Application requesting approval from the Bourbon County Joint Planning Commission ("Planning Commission") to construct, maintain, and operate a cellular tower facility ("Facility") to serve the customers of Verizon Wireless with wireless communications services.

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

1. The complete name and address of the Applicant is TowerCo 2013, LLC, a Delaware limited liability company, having an address of 5000 Valleystone Drive, Cary, North Carolina, 27519.

2. Applicant proposes construction of a monopole tower for communications services, which is to be located within the jurisdiction of the Planning Commission. Thus, Applicant submits the instant application.

3. The Certificate of Formation for TowerCo 2013, LLC and Certificate of Authority are attached hereto as **Exhibit A**. The Applicant is in good standing in the state of Delaware and is authorized to transact business in the Commonwealth of Kentucky.

4. Verizon Wireless operates on frequencies licensed by the Federal Communications Commission ("FCC") pursuant to applicable FCC requirements, and the facility will be constructed and operated in accord with the applicable FCC regulations. Applicant will build, own, and manage the tower and tower compound where Verizon Wireless will place its equipment, building, antennas, and equipment. Appropriate evidence of the Applicant's licensure with the FCC are attached hereto as **Exhibit O**.

5. The public convenience and necessity require the construction of the proposed Facility. The construction of the Facility will improve Verizon Wireless' services to an area currently not served or inadequately served by Verizon Wireless by increasing coverage and capacity, and thus enhancing access to wireless communication. The Facility will link with other Verizon Wireless sites in and around the general area, and will provide continuous coverage to other existing network sites, as well as provide an offload for the existing network, and would give Verizon Wireless an opportunity to grow their network and provide consistent coverage in Bourbon County and central Kentucky. Documentation concerning the need for this tower is attached hereto as **Exhibit P**.

6. To accommodate the needs and opportunities described, *supra*, the Applicant proposes to construct a Facility on United States Highway 68 (a/k/a Main Street), Paris, Kentucky (coordinates N38° 12' 54.78", W84° 14' 40.85") on land located wholly within Bourbon County. The property where the Facility is to be located is owned by Nan S. McClain and Sherry B. Rankin, pursuant to a Deed recorded in Deed Book

203, Page 343 located in the office of the Bourbon County Clerk. The Facility will consist of a 196-foot tall monopole, with an approximately 3-foot tall lightning arrestor on the top of the Facility, for a total height of 199 feet. The Facility will also include concrete foundations and a shelter or cabinets to accommodate the placement of Verizon Wireless' equipment. Such shelter or cabinet will be inspected by the relevant authorities and certified for use prior to occupancy. The Facility will be fenced and all access to the Facility secured. A description of the manner in which the Facility will be constructed is attached hereto as **Exhibit B**.

7. The site development plan and a vertical profile sketch of the Facility, signed and sealed by a professional engineer registered in Kentucky, depicting the tower, its height, and its proposed configuration for the antennas is attached hereto as **Exhibit C**. This Facility has been designed to permit future co-location.

8. Foundation and design plans sealed by a professional engineer registered in Kentucky and a description of the standards according to which the Facility has been designed are included with **Exhibit C**.

10. The Applicant has considered the likely effects of the installation of the proposed Facility on nearby land uses and values and have 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 Verizon Wireless' antennas on an existing structure. No suitable or available co-location site was found to be located in the vicinity of the proposed Facility.

11. A copy of the Determination of No Hazard to Air Navigation issued by the Federal Aviation Administration is attached hereto as **Exhibit D**.

12. A copy of the Kentucky Airport Zoning Commission Approval to construct the tower is attached hereto as **Exhibit E**.

13. A geotechnical engineering firm has performed soil boring and subsequent geotechnical engineering studies at the Facility site. A copy of the geotechnical engineering report, signed and sealed by a professional engineer registered in the Commonwealth of Kentucky, along with the identifying information for the engineer, is attached hereto as **Exhibit F**.

14. Clear directions to the proposed Facility from the County seat, along with the name and telephone number of the preparer, are attached hereto as **Exhibit G**.

15. The Applicant, pursuant to a written agreement with the landowner, have acquired the right to use the Facility site and associated property rights. A copy of this agreement is attached hereto as **Exhibit H**.

16. Personnel directly responsible for the design and construction of the proposed Facility are qualified and experienced. The tower design and drawings bear the stamp of a professional engineer registered in the Commonwealth of Kentucky. All tower designs meet or exceed the minimum requirements of applicable law.

17. The Construction Manager for the Facility is Amanda Adams, and the identity and qualifications of each person directly responsible for design and construction of the tower are included in the attached supporting materials.

18. The Facility is presently located within a potential flood hazard area. However, a LOMA has been filed with FEMA, with relevant documentation attached as **Exhibit N**. In the event the LOMA is not approved, the Applicant will apply for a special use permit in accord with local regulation.

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

20. The Applicant has notified every person who, according to the records maintained by the Bourbon County Property Valuation Administrator, owns property which is within 500 feet of the proposed Facility 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 contact information for the Planning Commission, and has been informed of her or his right to participate in the hearing regarding this matter. A list of the notified property owners is attached hereto as **Exhibit I**. A copy of the form of the notice sent by certified mail is attached hereto as **Exhibit J**.

21. Applicants have notified the Bourbon Judge/Executive and the Bourbon County Fiscal Court by certified mail, return receipt requested, of the proposed construction. A copy of these notices are attached as **Exhibit K**. A courtesy copy has also been provided to the Mayor of the City of Paris and the Paris Board of Commissioners.

22. Notice signs meeting the requirements of 807 KAR 5:063 Section 1 and the Zoning Ordinance that measure at least 2 feet in height and 4 feet in width and that contain all required verbiage in letters of the required size and 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 this Application, and a copy of the text of these signs is attached hereto as **Exhibit L**. Notice of the location of the proposed facility has been published in a newspaper of general circulation in Bourbon County, proof of which is also attached as **Exhibit L**.

23. The general area where the facility is to be located is behind a two-story warehouse in a mixed industrial-commercial area near Stoner Creek.

24. The process that was used by Verizon Wireless' radio frequency ("RF") engineers in selecting the site for the Facility was consistent with the general process used for selecting all other existing and proposed Facilities within the proposed network design area. Verizon Wireless' RF engineers have conducted studies and tests in order to develop an appropriate network 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. An RF design search area prepared in reference to these RF studies was considered by the Applicant when searching for sites for its antennas that would provide the coverage deemed necessary by Verizon Wireless. 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 RF requirements is attached hereto as **Exhibit M**.

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

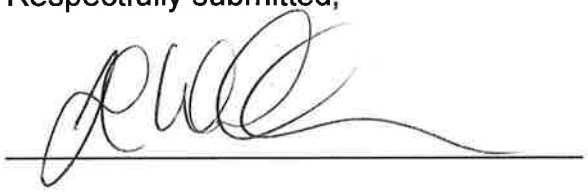
26. All Exhibits are hereby incorporated by reference as if fully set forth herein as part of the Application.

27. Any and all responses and requests related to or associated with this Application may be directed to:

W. Brent Rice
Jacob C. Walbourn
McBrayer, McGinnis, Leslie & Kirkland, PLLC
201 East Main Street, Suite 900
Lexington, Kentucky 40507
(859) 231-8780 (phone)
(859) 231-6518 (fax)
brice@mmlk.com
jwalbourn@mmlk.com

WHEREFORE, the Applicant respectfully requests that the Planning Commission accept this Application for filing, and having met all relevant legal requirements, grant all appropriate permissions to construct and operate the Facility at the location described herein.

Respectfully submitted,



W. Brent Rice
Jacob C. Walbourn
McBrayer, McGinnis, Leslie & Kirkland, PLLC
201 East Main Street, Suite 900
Lexington, Kentucky 40507
(859) 231-8780 (phone)
(859) 231-6518 (fax)
brice@mmlk.com
jwalbourn@mmlk.com

LIST OF EXHIBITS

Exhibit A	Corporate Documents
Exhibit B	Site Plan/Construction Detail
Exhibit C	Structural Design
Exhibit D	FAA No Hazard Letter
Exhibit E	KAZC Letter
Exhibit F	Geotechnical Report
Exhibit G	Directions from County Seat
Exhibit H	Memorandum of Lease Option
Exhibit I	Property Owner Notice List Documents
Exhibit J	Copies of Notice Letters
Exhibit K	Copy of Letters to Judge-Executive and Fiscal Court
Exhibit L	Notice Sign Language
Exhibit M	SARF/Search Ring
Exhibit N	LOMA Information
Exhibit O	FCC Licensure
Exhibit P	Need Documentation

EXHIBIT
A

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 FORMATION OF "TOWERCO 2013 LLC", FILED IN THIS OFFICE ON THE THIRD DAY OF OCTOBER, A.D. 2012, AT 11:56 O'CLOCK A.M.

Jeffrey W. Bullock, Secretary of State

5222115 8100

121094457

AUTHENTICATION: 9891223

DATE: 10-03-12

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

State of Delaware
Secretary of State
Division of Corporations
Delivered 12:20 PM 10/03/2012
FILED 11:56 AM 10/03/2012
SRV 121094457 - 5222115 FILE

CERTIFICATE OF FORMATION

OF

TOWERCO 2013 LLC

This Certificate of Formation of TowerCo 2013 LLC is being duly executed and filed by a natural authorized person, to form a limited liability company under the Delaware Limited Liability Company Act.

FIRST. The name of the limited liability company formed hereby is TowerCo 2013 LLC (the "Company").

SECOND. The address of the registered office and the name and the address of the registered agent of the Company required to be maintained by Section 18-104 of the Delaware Limited Liability Company Act is United Corporate Services, Inc., 874 Walker Road, Suite C, City of Dover, County of Kent, Delaware 19904.

Dated: October 3, 2012

By: _____
Name: Shelby E. Cohen
Title: Authorized Person

BOOK: A96 PAGES: 307 - 307
DOCUMENT NO: 403156
RECORDED: June 14, 2013 09:01:00 AM
TOTAL FEES: $11.00
COUNTY CLERK: GUY ZEIGLER
DEPUTY CLERK: PATSY MCKNESNEY
COUNTY: FRANKLIN COUNTY

FRANKLIN COUNTY
A96 PG307

0859822.06 mstratton ADD

Alison Lundergan Grimes
Kentucky Secretary of State
Received and Filed:
6/12/2013 2:58 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 Kentu 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 2
☐ limited partnership (KRS 362).

2. The name of the entity is TowerCo 2013 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 October 2, 2012 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

5000 Valleystone Drive	Cary	NC	27519
Street Address	City	State	Zip Code

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

421 West Main Street	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 UCS of Kentucky, Inc.

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
TowerCo Finance 2013 LLC - Member	5000 Valleystone Drive	Cary	NC	27519
Daniel Hunt - Secretary/CFO	5000 Valleystone Drive	Cary	NC	27519

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 secreti 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. 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)

Daniel Hunt	Daniel Hunt, Secretary/CFO	6/11/13
Signature of Authorized Representative	Printed Name & Title	Date

I, UCS of Kentucky, Inc., consent to serve as the registered agent on behalf of the business entity.
Type/Print Name of Registered Agent

Michael A. Barr	Michael A. Barr	President	6/11/13
Signature of Registered Agent	Printed Name	Title	Date

(01/12)

EXHIBIT B

KENTUCKY ONE-CALL

To utilize the KYOC services and comply with Alabama Law. Excavators need to call Alabama One-Call at least 48 hours, excluding weekends and holidays, prior to commencing work.
1-800-752-0007 (Toll-free) or 811
(normal airtime charges may apply)

NOTICE TO CONTRACTORS

SHOULD ARTIFACTS, ARCHAEOLOGICAL FEATURES OR HUMAN SKELETAL REMAINS BE ENCOUNTERED DURING PROJECT ACTIVITIES: STOP WORK IMMEDIATELY AND CONTACT THE TOWERCO FIELD CONSTRUCTION MANAGER FOR INSTRUCTIONS.

GENERAL NOTES:

1. THE CONTRACTOR SHALL SUPERVISE AND DIRECT ALL WORK, USING HIS BEST SKILL AND ATTENTION. HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES, AND SEQUENCES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
2. THE CONTRACTOR SHALL VISIT THE JOB SITE TO REVIEW THE SCOPE OF WORK AND EXISTING JOB SITE CONDITIONS INCLUDING, BUT NOT LIMITED TO MECHANICAL, ELECTRICAL SERVICE, AND OVERALL COORDINATION.
3. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO SUBMITTING HIS BID. ANY DISCREPANCIES, CONFLICTS, OR OMISSIONS, ETC... SHALL BE REPORTED TO TOWERCO BEFORE PROCEEDING WITH WORK.
4. THE CONTRACTOR SHALL PROTECT ALL AREAS FROM DAMAGE WHICH MAY OCCUR DURING CONSTRUCTION. ANY DAMAGE TO NEW AND EXISTING CONSTRUCTION, STRUCTURE, OR EQUIPMENT SHALL BE IMMEDIATELY REPAIRED OR REPLACED TO THE SATISFACTION OF THE TENANT OR BUILDING OWNER, OR OWNER'S REPRESENTATIVE AT THE EXPENSE OF THE CONTRACTOR.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR, AND SHALL REPLACE OR REMEDY ANY FAULTY, IMPROPER, OR INFERIOR MATERIALS OR WORKMANSHIP OR ANY DAMAGE WHICH SHALL APPEAR WITHIN ONE YEAR AFTER THE COMPLETION AND ACCEPTANCE OF THE WORK UNDER THIS CONTRACT.
6. THE CONTRACTOR TO REMOVE ALL RUBBISH AND WASTE MATERIALS ON A REGULAR BASIS, AND SHALL EXERCISE STRICT CONTROL OVER JOB CLEANING THROUGHOUT CONSTRUCTION, INCLUDING FINAL CLEAN-UP UPON COMPLETION OF WORK. ALL AREAS ARE TO BE LEFT IN A BROOM CLEAN CONDITION AT THE END OF EACH DAY.
7. THE CONTRACTOR SHALL SAFEGUARD THE OWNER'S PROPERTY DURING THE CONSTRUCTION AND SHALL REPLACE ANY DAMAGE PROPERTY OF THE OWNER TO ORIGINAL CONDITION OR BETTER.
8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES, WHETHER SHOWN HEREON OR NOT, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSES FOR REPAIR OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGED IN CONJUNCTION WITH THE EXECUTION OF WORK.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE SITE WHILE THE JOB IS PROGRESS AND UNTIL JOB IS COMPLETE.
10. THE CONTRACTOR DURING CONSTRUCTION SHALL PROVIDE TEMPORARY WATER, POWER, AND TOILET FACILITIES AS REQUIRED BY THE CITY OR GOVERNING AGENCY.
11. ALL CONSTRUCTION WORK SHALL CONFORM TO THE LATEST APPLICABLE BUILDING CODES, ALONG WITH THE GOVERNING RESTRICTIVE CODES.
12. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL COMPLY WITH ALL LOCAL CODE REGULATIONS AND STATE DEPARTMENT OF INDUSTRIAL REGULATIONS AND DIVISION OF INDUSTRIAL SAFETY (OSHA) REQUIREMENTS. REFER TO THE CODES SECTIONS OF THIS SHEET.
13. THE CONTRACTOR SHALL OBTAIN AND PAY FOR PERMITS, LICENSES, AND INSPECTIONS NECESSARY FOR PERFORMANCE OF THE WORK AND INCLUDE THOSE IN THE COST OF THE WORK TO THE OWNER.
14. FIGURED DIMENSIONS HAVE PRECEDENCE OVER DRAWING SCALE. AND DETAIL DRAWINGS HAVE PRECEDENCE OVER SMALL SCALE DRAWINGS. CHECK ACCURACY OF ALL DIMENSIONS IN THE FIELD. UNLESS SPECIFICALLY NOTED, DO NOT FABRICATE ANY MATERIALS OFF SITE, OR DO ANY CONSTRUCTION UNTIL THE ACCURACY OF DRAWING DIMENSIONS HAS BEEN VERIFIED AGAINST ACTUAL FIELD DIMENSIONS.
15. CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY CONFLICTS OR DISCREPANCIES WITH IN THE CONTRACT DOCUMENTS WITH THE CONSTRUCTION DOCUMENTS AND THE FIELD CONDITIONS PRIOR TO EXECUTING THE WORK IN QUESTION.
16. CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER IF DETAILS CONSIDERED UNSOUND, UNSAFE, NOT WATERPROOF, OR NOT WITHIN CUSTOMARY TRADE PRACTICE. IF WORK IS PERFORMED, IT WILL BE ASSUMED THAT THERE IS NO OBJECTION TO THE DETAIL. DETAILS ARE INTENDED TO SHOW THE END RESULT OF THE DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB CONDITIONS, AND SHALL BE INCLUDED AS PART OF THE WORK.
17. EXISTING ELEVATIONS AND LOCATIONS TO BE JOINED SHALL BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION. IF THEY DIFFER FROM THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT SO THAT MODIFICATIONS CAN BE MADE BEFORE PROCEEDING WITH THE WORK.
18. ALL SYMBOLS AND ABBREVIATIONS USED ON THE DRAWINGS ARE CONSIDERED CONSTRUCTION STANDARDS. IF THE CONTRACTOR HAS QUESTIONS REGARDING THEIR EXACT MEANING, THE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
19. CONTRACTOR SHALL PROVIDE ALL NECESSARY BLOCKING, BACKING, FRAMING, HANGERS, OR OTHER SUPPORT FOR ALL OTHER ITEMS REQUIRING THE SAME.
20. CITY APPROVED PLANS SHALL BE KEPT IN A PLAN BOX AND SHALL NOT BE USED BY WORKMEN. ALL CONSTRUCTION SETS SHALL REFLECT THE SAME INFORMATION. THE CONTRACTOR SHALL ALSO MAINTAIN IN GOOD CONDITION, ONE COMPLETE SET OF PLANS WITH ALL OF THE REVISIONS, ADDENDA, AND CHANGE ORDERS ON THE PREMISE AT ALL TIMES. THESE ARE TO BE UNDER THE CARE OF THE JOB SUPERINTENDENT.
21. ALL CONDUIT AND CABLE RUNS ARE DRAWN DIAGRAMMATICALLY. CONTRACTOR SHALL RUN CONDUITS AND CABLES IN THE BEST POSSIBLE ROUTE, FOLLOWING THE DRAWINGS AS TO SUPPORT AND EQUIPMENT.

Kentucky 811

SITE DEVELOPMENT PLANS FOR TowerCo

SITE NAME: EAST PARIS
TOWERCO SITE #: KY0062
E911 ADDRESS: EAST MAIN STREET PARIS, KENTUCKY 40361

SITE INFORMATION:

LATITUDE: N 38° 12' 54.78"

LONGITUDE: W 84° 14' 40.85"

GROUND ELEV.: 806.34'

TOWER TYPE: 196' MONOPOLE

ZONING JURISDICTION: BOURBON COUNTY

FLOOD ZONE: X

PARCEL I.D.: 036-10-12-14-00

CODES:

ALL CONSTRUCTION SHALL COMPLY WITH THE LATEST ADOPTED EDITION OF THE:
1.1 INDUSTRIAL CODE (ANSI)
1.2 OCCUPATIONAL SAFETY AND HEALTH STANDARDS (OSHA)
1.3 NATIONAL ELECTRICAL CODE 2009
1.4 INTERNATIONAL BUILDING CODE 2009
1.5 ANSI/TIA-222-G-2 CODE 2009

SCOPE OF WORK:

1. THE ENTIRE AREA SHALL BE IDENTIFIED AND EXISTING CONDITIONS DOCUMENTED BY COMMENCEMENT. DOCUMENTATION SHALL CONSIST OF A WRITTEN AND PHOTOGRAPHIC REPORT.
2. CONTRACTOR TO INSTALL 196' MONOPOLE.
3. CONTRACTOR TO GRADE SITE ELEVATION.
4. CONTRACTOR TO INSTALL 50'x50' WOOD FENCE COMPOUND.
5. CONTRACTOR TO INSTALL 7' UTILITY EQUIPMENT/RACK AND MAKE UTILITY CONNECTIONS.
6. CONTRACTOR TO INSTALL LANDSCAPE.
7. PROPOSED T-MOBILE (1) HYBRID CABLE
8. CONTRACTOR TO INSTALL 12' GRAVEL ROAD AND GRAVEL PARKING AREA
9. TREES & BRUSH TO BE CLEARED WITHIN EASEMENTS.

VICINITY MAP
NOT TO SCALE

DIRECTIONS:

FROM LOUISVILLE TAKE I-64 EAST TOWARDS LEXINGTON. TAKE EXIT 113 AND TURN LEFT ON US 27/US 68. GO APPROX. 15 MILES AND TURN LEFT INTO THE EMPTY PARKING LOT ACROSS FROM BOURBON MOTOR COMPANY (CAR LOT).

PERMITTING INFORMATION:

ZONING:
PARIS - BOURBON COUNTY JOINT PLANNING OFFICE
301 MAIN STREET
PARIS, KY 40361
PHONE: (859) 269-8021

BUILDING:
PARIS - BOURBON COUNTY JOINT PLANNING OFFICE
301 MAIN STREET
PARIS, KY 40361
PHONE: (859) 987-2150

UTILITIES:

TELCO:
CITY OF PARIS COMBINED UTILITIES
525 HIGH STREET
PARIS, KENTUCKY 40361
CONTACT: CUSTOMER SERVICE
PHONE: (859) 987-2110

POWER:
CITY OF PARIS COMBINED UTILITIES
525 HIGH STREET
PARIS, KENTUCKY 40361
CONTACT: CUSTOMER SERVICE
PHONE: (859) 987-2110

PROPERTY OWNER:

MILTON SHEELER ENTERPRISES, INC.
427 MAIN STREET
PARIS, KY 40361
PHONE: (859) 987-4000

TOWER OWNER:

TowerCo

5000 VALLEYSTONE DRIVE
CARY, NORTH CAROLINA 27519
CONTACT: AMY ADAMS - DIRECTOR OF OPERATIONS
PHONE: (919) 653-5710
SITE NAME: EAST PARIS
SITE#: KY0062

ENGINEER:

HARDY ENGINEERING, INC.

209 LINDEN STREET
TRUSSVILLE, ALABAMA 35173
CONTACT: TIM HARDY
PHONE: (205) 655-1427
MOBILE: (205) 222-7563

STATE OF KENTUCKY
TIMOTHY L. HARDY
20374
REGISTERED PROFESSIONAL ENGINEER

REGISTERED PROFESSIONAL ENGINEER SEAL

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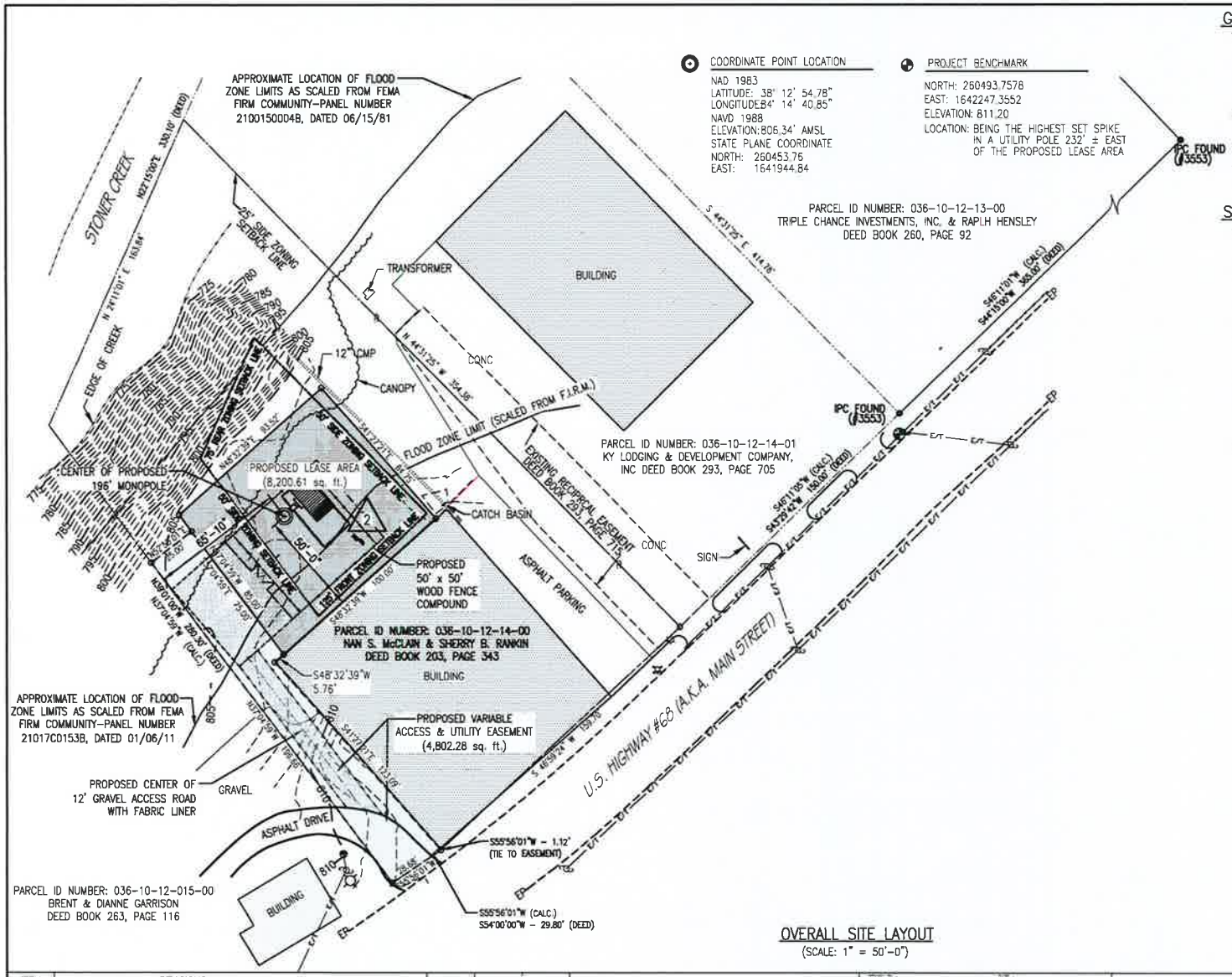


COORDINATE POINT LOCATION

NAD 1983
LATITUDE: 38° 12' 54.78"
LONGITUDE:84° 14' 40.85"
NAVD 1988
ELEVATION: 806.34' AMSL
STATE PLANE COORDINATE
NORTH: 260453.76
EAST: 1641944.84

PROJECT BENCHMARK

NORTH: 260493.7578
EAST: 1642247.3552
ELEVATION: 811.20
LOCATION: BEING THE HIGHEST SET SPIKE IN A UTILITY POLE 232' ± EAST OF THE PROPOSED LEASE AREA

GENERAL NOTES:

1. ALL EXISTING AND REQUIRED COUNTY RIGHT-OF-WAY AND EASEMENTS ARE SHOWN ON THE CONSTRUCTION PLANS. STRUCTURES SUCH AS WALLS, SIGNS, FENCES, BUILDINGS, ETC. OR PLANTS SUCH AS TREES OR SHURBS SHALL NOT BE PLACED IN THE RIGHT-OF-WAYS OR EASEMENTS WITHOUT PROPER APPROVAL FROM BOURBON COUNTY.
2. OTHER THAN SHOWN ON APPROVED PLANS, GRADING OPERATIONS INVOLVING CUTTING OR FILLING SHALL NOT BE ALLOWED WITHIN BOURBON COUNTY RIGHT-OF-WAYS AND EASEMENTS.
3. THE OWNER OR DEVELOPER SHALL PROVIDE THE CONTRACTOR WITH EXECUTED PERMITS FOR COMMUNITY IDENTIFICATION SIGNS, (IF REQUIRED) AND LANDSCAPING, (IF REQUIRED) TO BE PLACED IN BOURBON COUNTY RIGHT-OF-WAYS OR EASEMENTS.

STANDARD SITE DEVELOPMENT NOTES:

1. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH BOURBON COUNTY REGULATIONS.
2. CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR CONSTRUCTION & MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS DURING CONSTRUCTION FOR PROTECTION OF ADJACENT PROPERTIES, ROADWAYS, AND WATERWAYS.
3. CONTRACTOR AND/OR DEVELOPER ARE RESPONSIBLE FOR PROVIDING SITE FREE OF DRAINAGE PROBLEMS.
4. CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR MAINTAINING A PROPER TRAFFIC CONTROL PLAN FOR PUBLIC SAFETY ADJACENT TO CONSTRUCTION SITE. THE TRAFFIC CONTROL PLAN MUST BE IN ACCORDANCE WITH LATEST (MUTCD) EDITION.
5. ALL UTILITIES WITHIN ROADWAY SHALL BE BACKFILLED WITH STONE.

OVERALL SITE LAYOUT

(SCALE: 1" = 50'-0")

STATE OF KENTUCKY
TIMOTHY L. HARDY
20374
REGISTERED
PROFESSIONAL ENGINEER

REGISTERED PROFESSIONAL ENGINEER SEAL

ITEM	REVISIONS	BY	CHK. BY	DATE
1	REVISED VERIZON EQUIPMENT FROM A SHELTER TO A PLATFORM & ADDED A GENERATOR WITH PAD	RMN	TLH	11-1-16
2	REVISED VERIZON EQUIPMENT	RMN	TLH	09-10-16

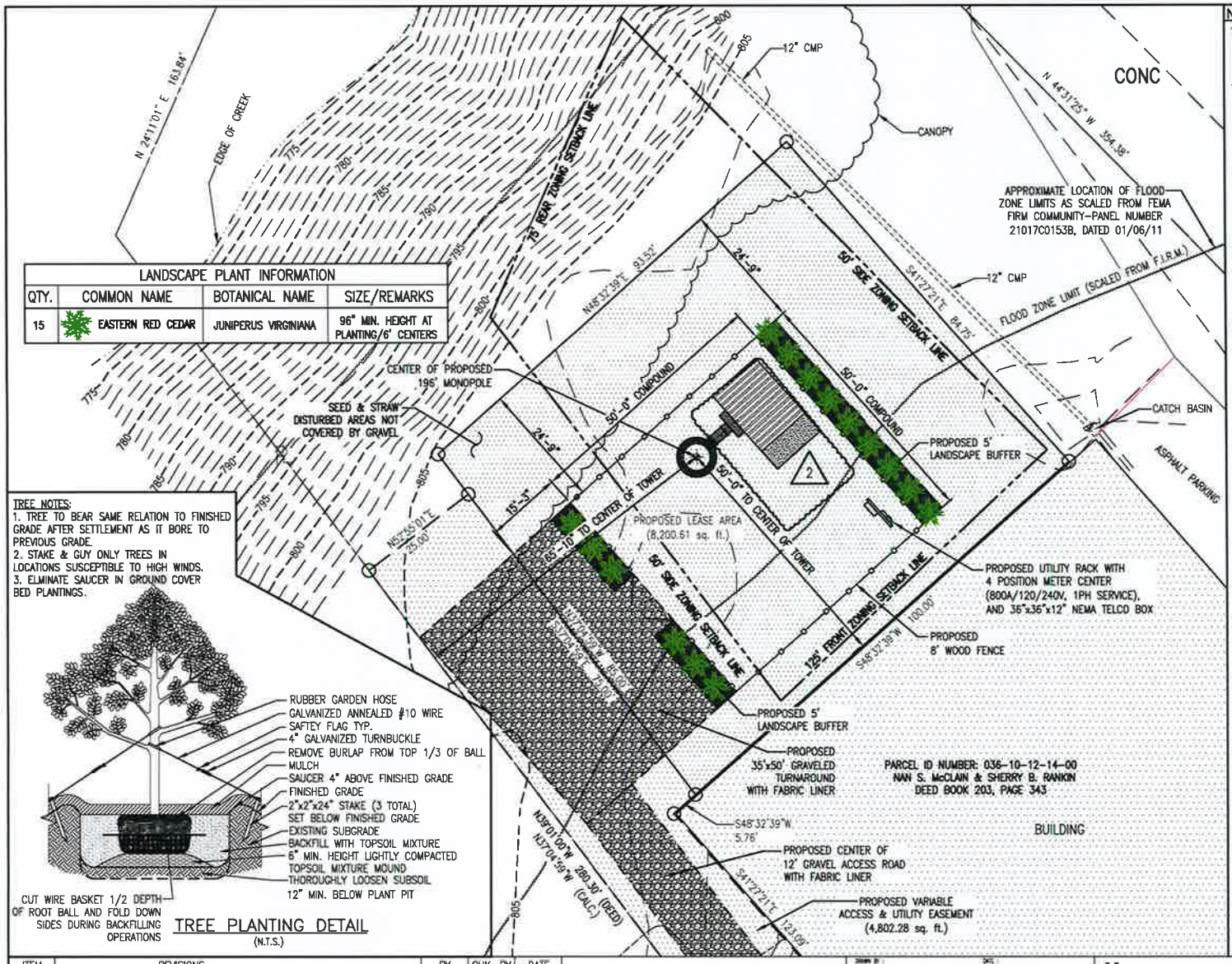
TowerCo
5000 VALLEYSTONE DRIVE
CARY, NORTH CAROLINA 27519

DRAWN BY: R.M. NACCARI DATE: 11-1-16
CHECKED BY: T.L. HARDY DATE: 11-1-16
APPROVED BY: DATE:

HARDY ENGINEERING, INC.
ENGINEERING AND CONSULTING
209 LINDEN STREET, P.O. BOX 708
TRUSSVILLE, AL 35173
PHONE: (205) 655-1427 FAX: (205) 661-9027

DWG. NAME: OVERALL SITE LAYOUT
KY0062 SITE: EAST PARIS
PARIS, KENTUCKY
FOR
TOWERCO

DWG. No: KY0062_C1 SCALE: AS SHOWN REV. No: C1



LANDSCAPE PLANT INFORMATION

QTY.	COMMON NAME	BOTANICAL NAME	SIZE/REMARKS
15	EASTERN RED CEDAR	JUNIPERUS VIRGINIANA	96" MIN. HEIGHT AT PLANTING/6' CENTERS

TREE NOTES:
1. TREE TO BEAR SAME RELATION TO FINISHED GRADE AFTER SETTLEMENT AS IT BORE TO PREVIOUS GRADE.
2. STAKE & GUY ONLY TREES IN LOCATIONS SUSCEPTIBLE TO HIGH WINDS.
3. ELMINATE SAUCER IN GROUND COVER BED PLANTINGS.

TREE PLANTING DETAIL
(N.T.S.)

NOTES:
1. BOUNDARY AND PROPOSED SITE FEATURES ARE BASED ON THE SURVEY. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND THIS DRAWING.
2. CONTRACTOR SHALL FURNISH ALL MATERIALS FOR ELECTRICAL SERVICE AS FOLLOWS:
   a. 800 AMP INCOMING TO MULTI-TENANT METER CENTER.
   b. 200 AMP FROM MULTI-METER CENTER TO VERIZON UTILITY RACK.
3. GROUNDING OF ANTENNAS MOUNTS, COAX, AND EQUIPMENT SHALL BE IN ACCORDANCE WITH T-MOBILE WIRELESS SPECIFICATIONS.
4. ANY MATERIALS STORED ON SITE SHALL BE STORED IN CLOSED OR COVERED CONTAINERS AND ALL EXCESS WASTE MATERIALS WILL BE PROPERLY DISPOSED OF.
5. ALL HARDWARE TO BE STAINLESS STEEL, **NO PLATED METAL TO BE USED.**
6. CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR CONSTRUCTION & MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS DURING CONSTRUCTION FOR PROTECTION OF ADJACENT PROPERTIES, ROADWAYS, AND WATERWAYS.
7. CONTRACTOR AND/OR DEVELOPER ARE RESPONSIBLE FOR PROVIDING SITE FREE OF DRAINAGE PROBLEMS.
8. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A PROPER TRAFFIC CONTROL PLAN FOR PUBLIC SAFETY ADJACENT TO CONSTRUCTION SITE. THE TRAFFIC CONTROL PLAN MUST BE IN ACCORDANCE **WITH KYTC DESIGN STANDARDS AND SPECIFICATIONS.**
9. SEEDING & MULCHING OF THE SITE SHALL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER COMPLETION OF THE SITE DEVELOPMENT. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING & MAINTAINING AN ADEQUATE COVER OF VEGETATION OVER THE SITE FOR ONE YEAR PERIOD. **ONE YEAR GUARANTEE REQUIRED ON TREES AND SHRUBS.**

DETAILED SITE LAYOUT WITH LANDSCAPE
(SCALE: 1" = 20'-0")

STATE OF KENTUCKY
TIMOTHY L. HARDY
20374
REGISTERED PROFESSIONAL ENGINEER

REGISTERED PROFESSIONAL ENGINEER SEAL

ITEM	REVISIONS	BY	CHK. BY	DATE
1	REVISED VERIZON EQUIPMENT FROM A SHELTER TO A PLATFORM & ADDED A GENERATOR WITH PAD	RMN	TLH	11-1-16
2	REVISED VERIZON EQUIPMENT	RMN	TLH	09-10-18

TowerCo
5000 VALLEYSTONE DRIVE
CARY, NORTH CAROLINA 27519

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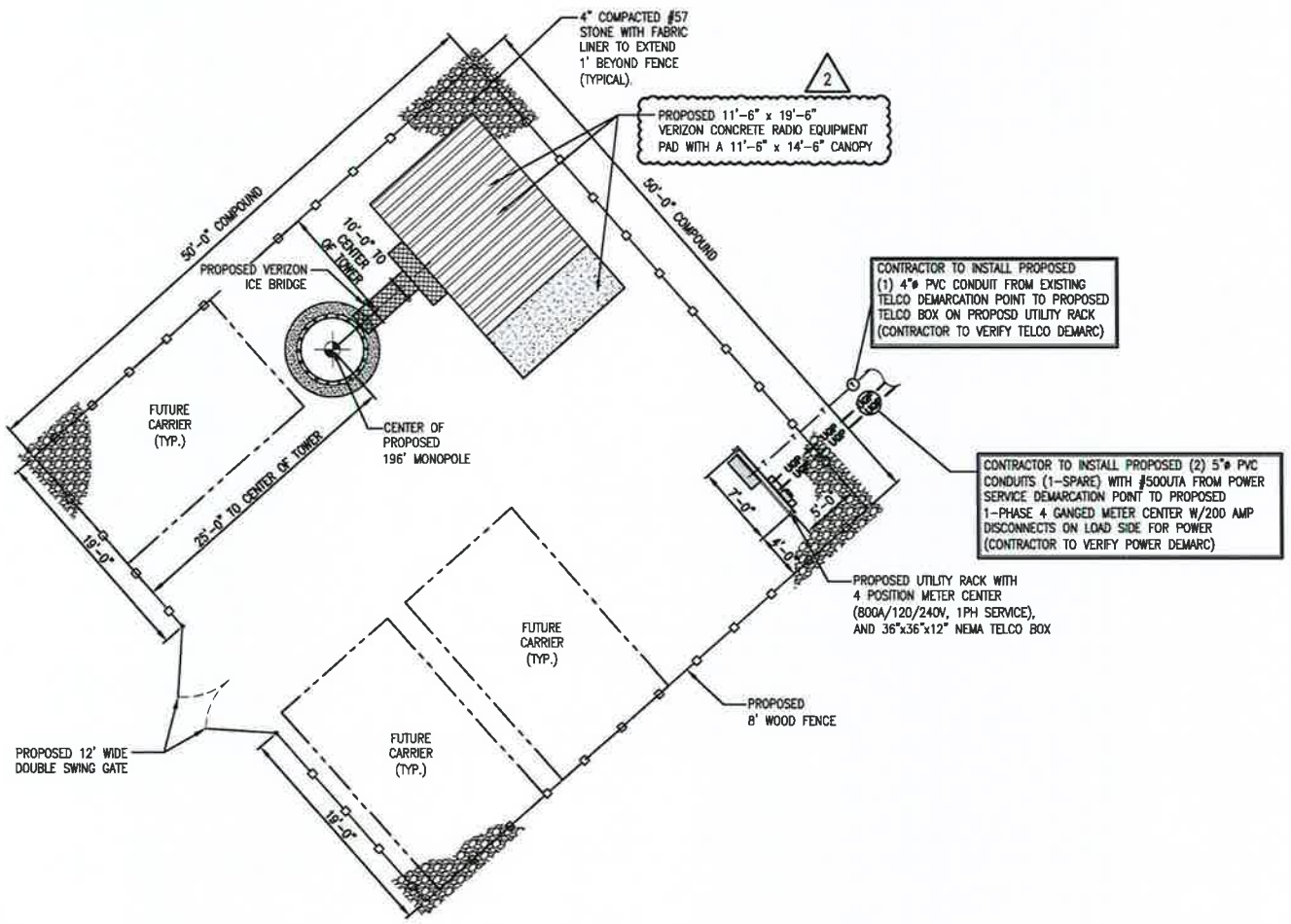
TRUSSVILLE, AL 35173
PHONE: (205) 655-1427 FAX: (205) 661-9027

DWG. NAME: DETAILED SITE LAYOUT W/ LANDSCAPE
KY0062 SITE: EAST PARIS
PARIS, KENTUCKY
FOR
TOWERCO

JOB NO.: KY0062_C1.1 | SCALE: AS SHOWN | DWG. NO.: C1.1



COMPOUND LAYOUT
(SCALE: 1" = 10'-0")

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STATE OF KENTUCKY
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20374
REGISTERED
PROFESSIONAL ENGINEER

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2	REVISED VERIZON EQUIPMENT	RMN	TLH	09-10-16

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CARY, NORTH CAROLINA 27519

DESIGN BY: R.M. NACCARI DATE: 11-1-16
CHECKED BY: T.L. HARDY DATE: 11-1-16
APPROVED BY: DATE:

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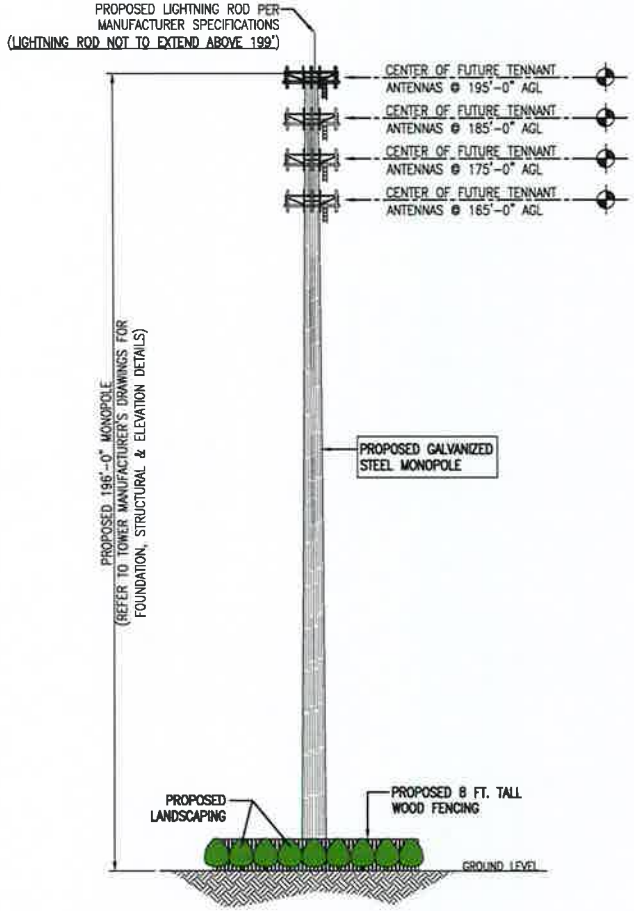
TRUSSVILLE, AL 35173
PHONE: (205) 655-1427 FAX: (205) 661-9027

DRG. TITLE: COMPOUND LAYOUT
KY0062 SITE: EAST PARIS
PARIS, KENTUCKY
FOR
TOWERCO

DRG. No.: KY0062_C1.2 SCALE: AS SHOWN DRG. No.: C1.2



MONOPOLE ELEVATION
(SCALE: 1" = 30'-0")

STATE OF KENTUCKY
TIMOTHY L. HARDY
20374
REGISTERED
PROFESSIONAL ENGINEER

REGISTERED PROFESSIONAL ENGINEER SEAL

ITEM	REVISIONS	BY	CHK. BY	DATE

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5000 VALLEYSTONE DRIVE
CARY, NORTH CAROLINA 27519

DRAWN BY: R.M. NACCARI DATE: 11-1-16
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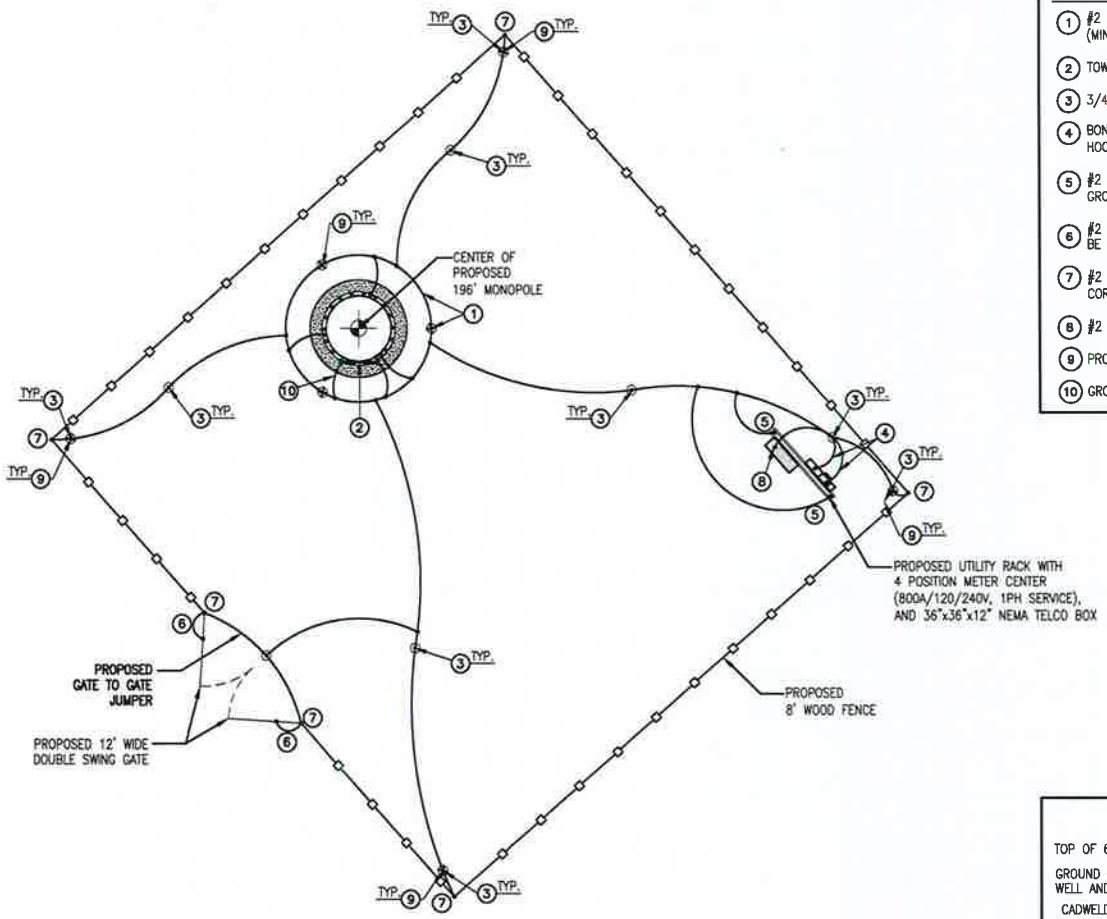
TRUSSVILLE, AL 35173
PHONE: (205) 655-1427 FAX: (205) 661-9027

DWG. NAME: TOWER ELEVATION
KY0062 SITE: EAST PARIS
PARIS, KENTUCKY
FOR
TOWERCO

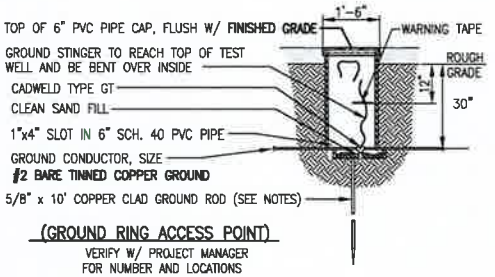
DWG. No. KY0062_C2 | SCALE: AS SHOWN | SHT. No. C2



GROUNDING LAYOUT
(SCALE: 1" = 10'-0")

CALL-OUT NOTES:

1. #2 AWG SOLID BARE COPPER TOWER GROUND RING. INSTALL (3) GROUND RODS (MIN.) SPACED 11 FT. (MIN.). MAINTAIN 2 FT. (MIN.) FROM EDGE OF TOWER FOUNDATION.
2. TOWER BOTTOM GROUND BAR. TOWER GROUND BARS SHALL BE COPPER. **(REFER TO SHEET G2 FOR DETAIL)**
3. 3/4"ø x 10 FT. COPPER CLAD GROUND ROD(S). GROUND RODS TO BE PLACED APPROX. EVERY 20'.
4. BOND GPS ANTENNAS, DISCONNECT SWITCH, MISCELLANEOUS METALLIC EQUIPMENT, CONDUITS AND ANY MISCELLANEOUS LIFTING HOOKS TO GROUND RING W/ #2 AWG SOLID BARE TINNED COPPER WIRE.
5. #2 AWG SOLID BARE TINNED COPPER WIRE FROM ICE-BRIDGE/H-FRAME SUPPORT POST TO TOWER GROUND RING OR EQUIPMENT GROUND RING (TYP.)
6. #2 WELDING CABLE JUMPER TO GATE PIPE CONNECTOR. GROUNDING CABLE SHALL BE ATTACHED IN A MANNER WERE IT WILL NOT BE SUBJECTED TO STRAIN WHICH MAY CAUSE DAMAGE WHEN GATE IS FULLY OPENED.
7. #2 AWG SOLID BARE TINNED COPPER WIRE FROM TOWER/EQUIPMENT, PAD/PLATFORM GROUND RING TO FENCE POST. BOND CORNER FENCE POST (TYP.)
8. #2 AWG SOLID BARE TINNED COPPER WIRE TO TELCO DEMARCATION STUB UP LOCATION (ALLOW 6 FT. SLACK)
9. PROVIDE GROUND RING ACCESS POINT FOR FUTURE CARRIERS (CONTRACTOR TO VERIFY W/ TOWERCO).
10. GROUND TOWER GROUND RING TO TOWER GROUND BAR (30" BELOW GRADE, TYP.).



(GROUND RING ACCESS POINT)
VERIFY W/ PROJECT MANAGER FOR NUMBER AND LOCATIONS

NOT TO SCALE

LEGEND

⊙ GROUND ROD	#2 AWG BARE TINNED COPPER WIRE (SITE/TOWER GROUNDING)	• CADWELD CONNECTION
⊕ GROUND RING ACCESS POINT	#2 AWG BARE TINNED COPPER WIRE (SHELTER/EQUIPMENT GROUND RING	■ COMPRESSION/MECHANICAL CONNECTION

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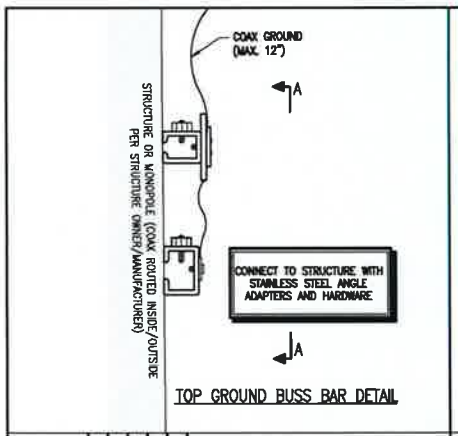
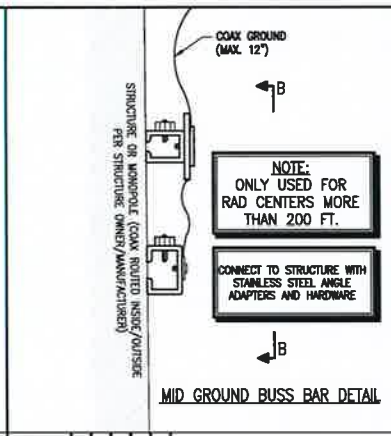
PHONE: (205) 655-1427 FAX: (205) 661-9027

DWG. NAME: GROUNDING LAYOUT
KY0062 SITE: EAST PARIS
PARIS, KENTUCKY
FOR
TOWERCO

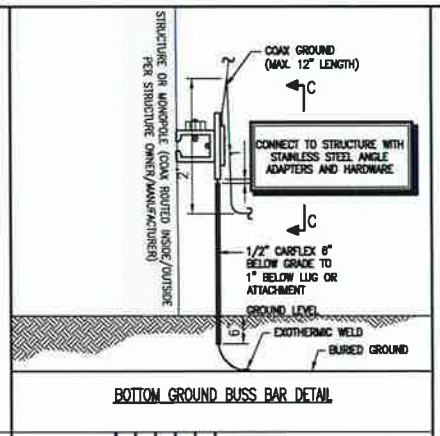
JOB NO. KY0062_G1 | SCALE: AS SHOWN | DWG. NO. G1



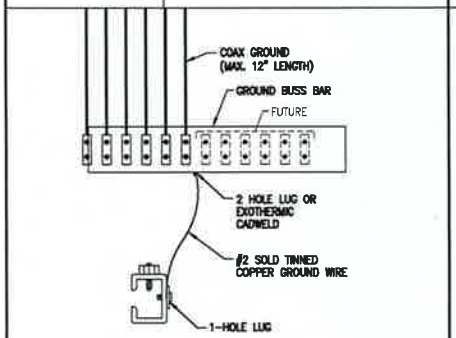
TOP GROUND BUSS BAR DETAIL



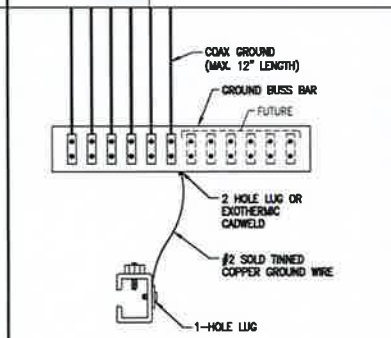
MID GROUND BUSS BAR DETAIL



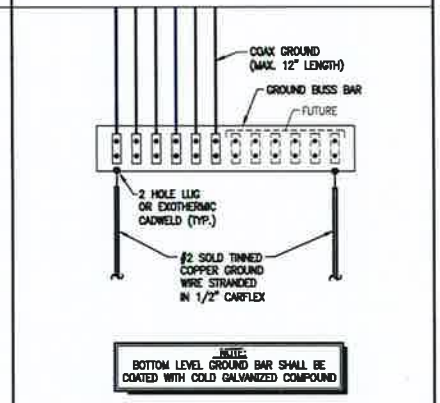
BOTTOM GROUND BUSS BAR DETAIL



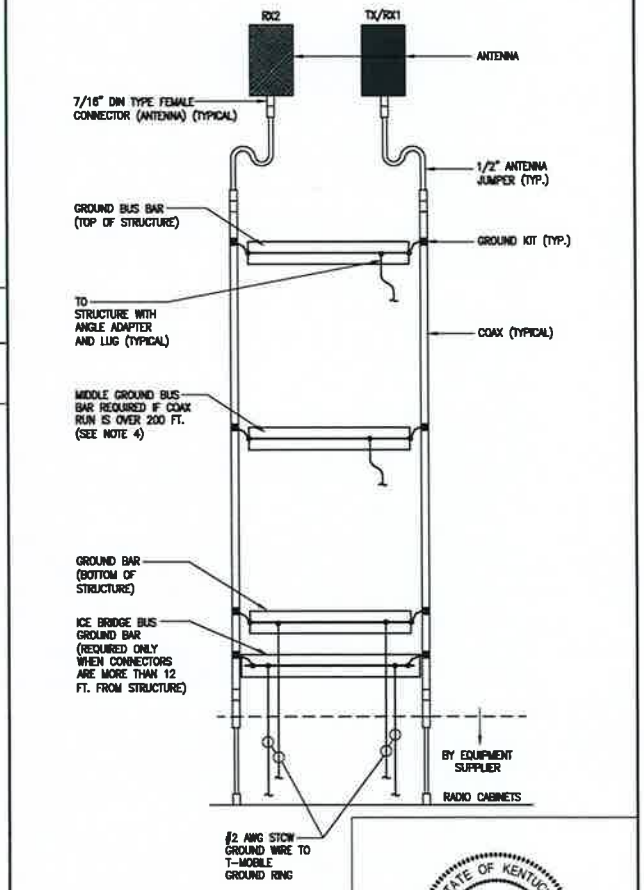
SECTION A-A



SECTION B-B



SECTION C-C



TYPICAL ANTENNA SECTOR WIRING DIAGRAM

CELL SITE GROUNDING INSTALLATION NOTES AND DETAILS:

1. ALL METAL CONDUIT FOR GROUNDING DOWN CONDUCTORS SHALL BE BONDED TO THE GROUND SYSTEM AT BOTH ENDS.
2. KOPR-SHIELD ANTI-OXIDATION COMPOUND SHALL BE USED ON ALL CONNECTIONS.
3. ALL UNDERGROUND GROUNDING CONNECTIONS SHALL BE MADE USING THE CADWELD PROCESS.
4. ALL BOLTED GROUNDING CONNECTIONS SHALL BE INSTALLED WITH A ⅜" STAINLESS STEEL FLAT WASHER AND A LOCK WASHER UNDER THE NUT WITH THREADS EXPOSED BEYOND THE NUT. HARDWARE FOR BOLTED CONNECTIONS SHALL BE MINIMUM OF ⅜" DIAMETER AND SHALL BE STAINLESS STEEL.
5. MANUFACTURED STANDARD BUS BARS (CGBE AND MGB) SHALL BE FURNISHED BY TOWERCO AND INSTALLED BY THE CONTRACTOR. DO NOT USE SHOP FABRICATED OR FIELD MODIFIED BUS BARS.
6. ALL GROUNDING WIRES SHALL BE INSTALLED WITHOUT LOOPS AND SHARP BEND RADIUS.
7. FERROUS METAL CLIPS WHICH COMPLETELY SURROUND THE GROUNDING CONDUCTOR SHALL NOT BE USED. CLIPS OF THE FOLLOWING MATERIALS AND TYPES MAY BE USED TO FASTEN AND SUPPORT GROUNDING CONDUCTORS.

NOT TO SCALE

STATE OF KENTUCKY
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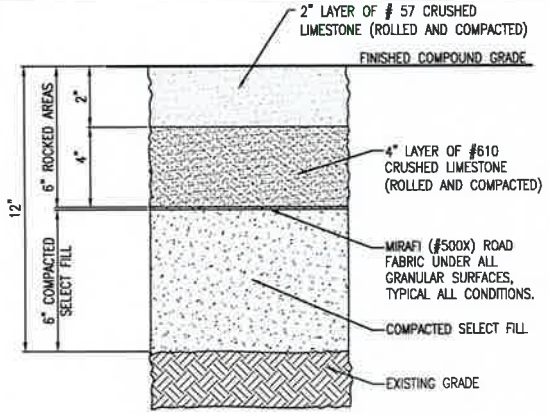
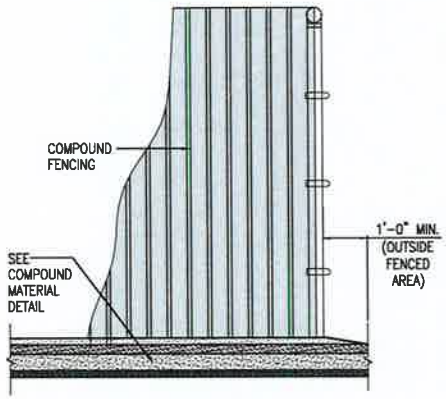
DWG. NAME: STRUCTURE GROUND DETAILS
KY0062 SITE: EAST PARIS
PARIS, KENTUCKY
FOR
TOWERCO

JOB NO: KY0062_G2 | SCALE: AS SHOWN | DWG. NO: G2



COMPOUND AREA MATERIAL

NOT TO SCALE



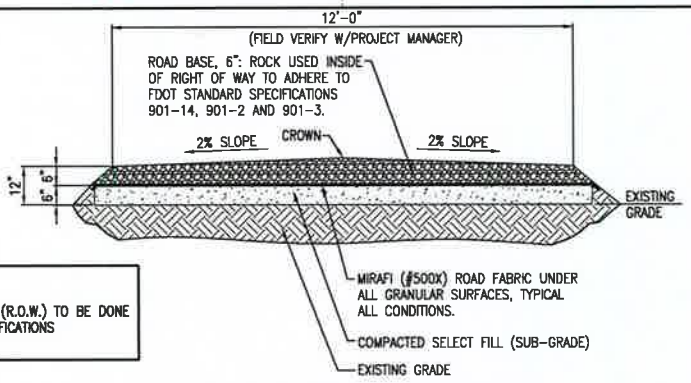
COMPOUND CORNER PROFILE (TYPICAL)

NOT TO SCALE

COMPOUND MATERIAL NOTES:

1.) ROLL AND COMPACT ALL ROCKED AREAS.

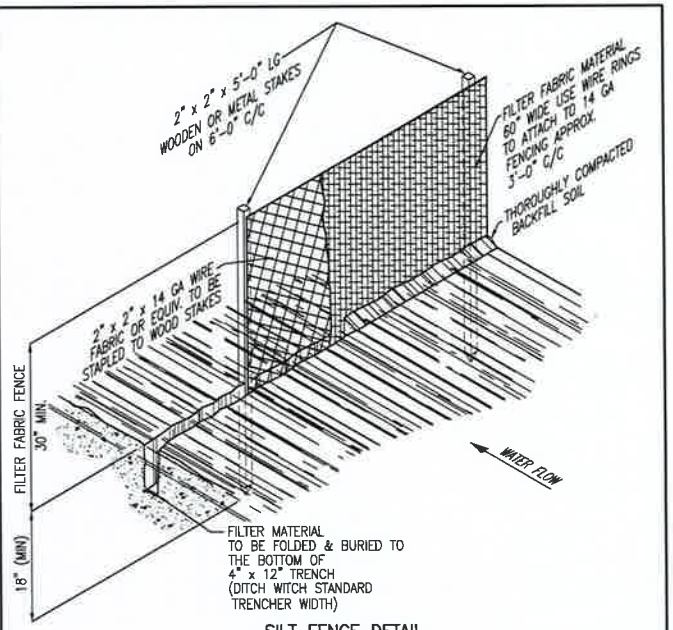
2.) SUITABLE FILL MATERIAL SHALL BE COMPACTED IN PLACE AT AN ELEVATION OF 6" ABOVE EXISTING OR SURROUNDING GRADE BEFORE FABRIC AND ROCK IS PUT IN PLACE.



NOTE:
ALL WORK WITHIN THE RIGHT OF WAY (R.O.W.) TO BE DONE BY KYTC 2013 STANDARDS AND SPECIFICATIONS

GRAVEL TURNAROUND & ACCESS ROAD

NOT TO SCALE



SILT FENCE DETAIL

NOT TO SCALE

NOTES:

1. SILT FENCE SHOULD BE INSPECTED AFTER EACH RAINFALL AND SEDIMENT DEPOSITS MUST BE REMOVED WHEN THEY REACH 1/4 THE HEIGHT OF THE FENCE.
2. FABRIC SHALL RETAIN 85% OF SOIL, BASED ON SIEVE ANALYSIS, BUT NOT TO BE FINER THAN OPENING SIZE 70.

REGISTERED PROFESSIONAL ENGINEER SEAL

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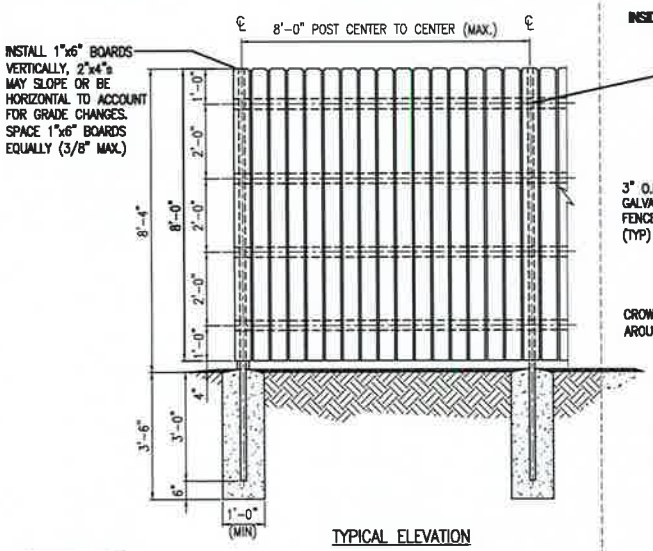
DWG. NAME: SITE DETAILS
KY0062 SITE: EAST PARIS
PARIS, KENTUCKY
FOR
TOWERCO

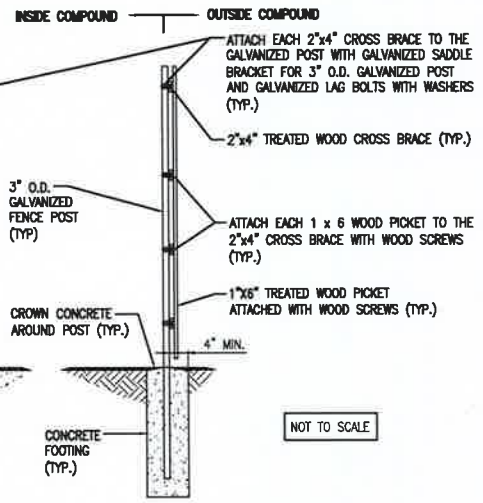
CAD No. KY0062_D1 SCALE: AS SHOWN DWG. No. D1



TYPICAL ELEVATION

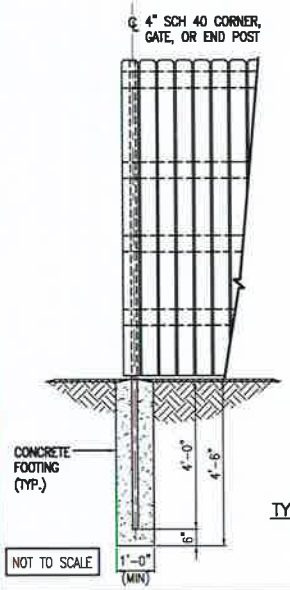
OUTSIDE COMPOUND

NOT TO SCALE



NOT TO SCALE

TYPICAL WOOD FENCE/STEEL POST



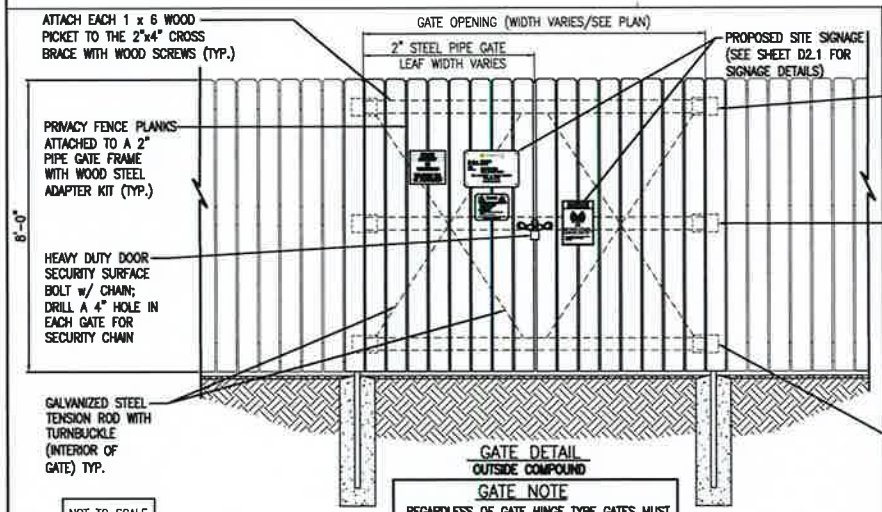
NOT TO SCALE

TYPICAL WOOD FENCING/STEEL POST CORNER DETAIL

TYPICAL WOOD FENCING NOTES

1. FENCE CONSTRUCTION TO BE CONDUCTED IN ACCORDANCE WITH LOCAL DESIGN CODES.
2. ALL WOOD FENCE RAILS TO BE NO. 2 PINE CCA PRESSURE TREATED LUMBER. FENCE TO BE NATURAL BROWN IN COLOR.
3. PICKETS TO BE 7/8" THICK NO. 1 SPRUCE OR CCA PRESSURE TREATED PINE.
4. POSTS TO BE 3" O.D. GALVANIZED STEEL, GATE POST AND CORNER POST TO BE 4" O.D. GALVANIZED STEEL.
5. ALL HARDWARE TO BE HOT DIP GALVANIZED. NO PLATED MATERIAL SHALL BE ALLOWED.
6. ALL BOARDS SHALL BE SCREWED IN WITH WOOD SCREWS TO SECURE WOOD. NAILS ARE NOT PERMITTED.
7. WHERE NEW FENCE POST FOUNDATIONS ARE TO BE INSTALLED OVER OTHER FOUNDATION STRUCTURES, THE FENCE POST AND THE FOUNDATION SHALL BE CAST IN PLACE ON TOP OF EXISTING FOUNDATIONS. MINIMUM FENCE POST FOUNDATION DEPTH SHALL BE 3'-0"

NOTE:
METAL BRACKETS ATTACH TO POST AND WOOD ATTACHES TO BRACKETS. ADAPTER KIT CONSIST OF GALVANIZED BRACKETS, LAG BOLTS AND WASHERS PRE-APPROVED BY C-SPIRE



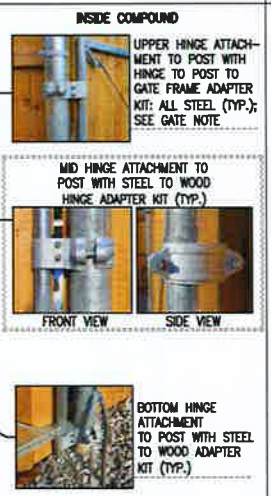
NOT TO SCALE

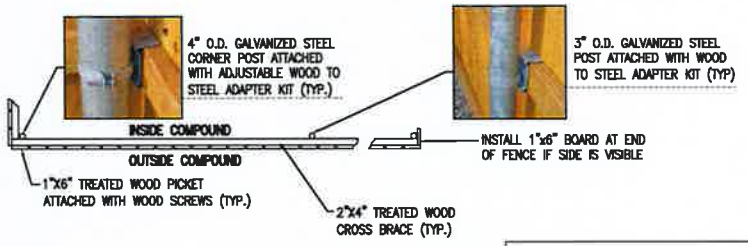
GATE DETAIL

OUTSIDE COMPOUND

GATE NOTE

REGARDLESS OF GATE HINGE TYPE GATES MUST OPEN OUT TO NINETY DEGREES (90°) MINIMUM.





PLAN VIEW

NOT TO SCALE

STATE OF KENTUCKY
TIMOTHY L. HARDY
20374
REGISTERED PROFESSIONAL ENGINEER

REGISTERED PROFESSIONAL ENGINEER SEAL

ITEM	REVISIONS	BY	CHK. BY	DATE

TowerCo

5000 VALLEYSTONE DRIVE
CARY, NORTH CAROLINA 27519

DRAWN BY: R.M. NACCARI DATE: 11-1-16

CHECKED BY: T.L. HARDY DATE: 11-1-16

APPROVED BY: DATE:

HARDY ENGINEERING, INC.

ENGINEERING AND CONSULTING
209 LINDEN STREET, P.O. BOX 708
TRUSSVILLE, AL 35173
PHONE: (205) 655-1427 FAX: (205) 661-9027

DWG NAME: COMPOUND FENCING DETAILS

KY0062 SITE: EAST PARIS
PARIS, KENTUCKY
FOR
TOWERCO

DWG NO: KY0062_D2 SCALE: AS SHOWN DWG NO: D2

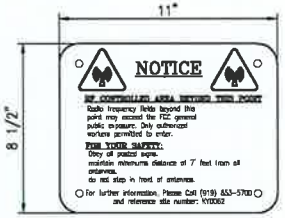
SIGNAGE DETAIL 1

SIGNAGE DETAIL 2

NOTE:

SIGNS TO BE MOUNTED ON THE OUTSIDE OF ACCESS GATE TO THE PROPOSED/EXISTING COMPOUND.

SIGNAGE DETAIL 3



EMERGENCY SIGN
(WHITE METAL SIGN W/ BLACK LETTERING)

SIGNAGE DETAIL 4

REGISTERED PROFESSIONAL ENGINEER SEAL

ITEM	REVISIONS	BY	CHK. BY	DATE

TowerCo
5000 VALLEYSTONE DRIVE
CARY, NORTH CAROLINA 27519

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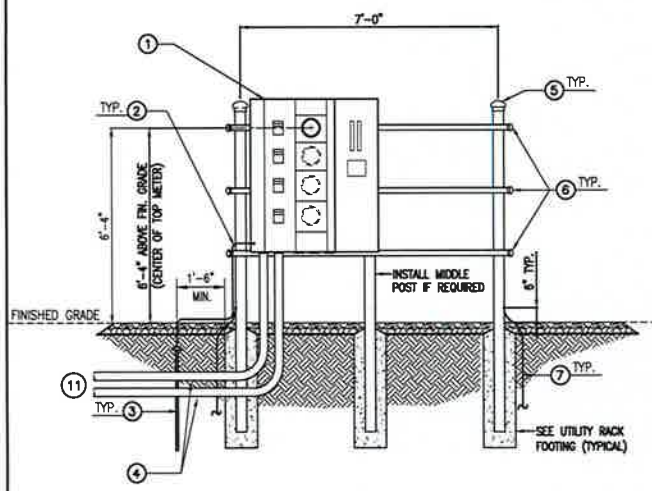
209 LINDEN STREET, P.O. BOX 708
TRUSSVILLE, AL 35173
PHONE: (205) 655-1427 FAX: (205) 661-9027

DWG. TITLE: SIGNAGE DETAILS

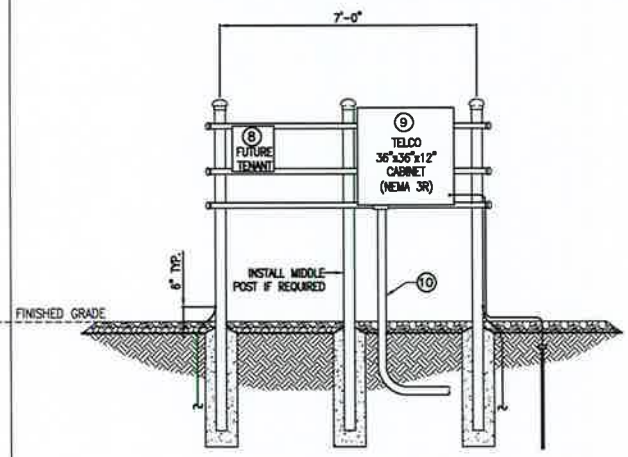
KY0062 SITE: EAST PARIS
PARIS, KENTUCKY
FOR
TOWERCO

DWG. NO. KY0062_D2.1 | SCALE: AS SHOWN | SHT. NO. D2.1



MULTI-TENANT ELECTRIC UTILITY RACK (FRONT)

NOT TO SCALE



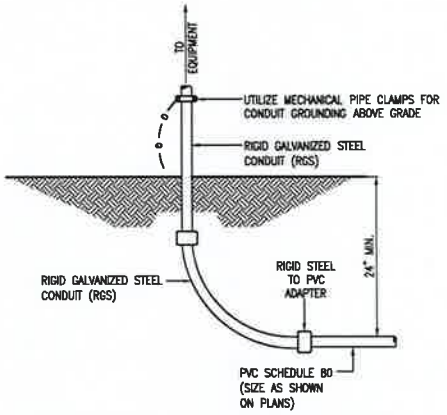
MULTI-TENANT ELECTRIC UTILITY RACK (REAR)

NOT TO SCALE

NOTES:

1.) ALL UNDERGROUND CONDUIT EXCEPT RIGID METALLIC SHALL BE SCHEDULE 80.

2.) ALL CONDUIT SHALL BE SUPPORTED WITH UNISTRUT AND STRAPS @ UTILITY RACK.



UNDERGROUND CONDUIT STUB-UP DETAIL

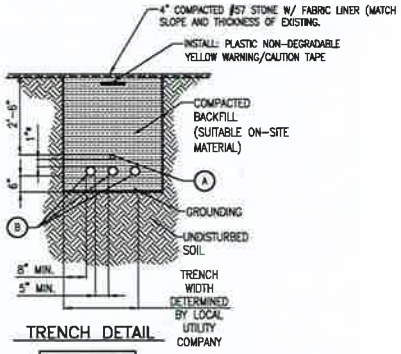
NOT TO SCALE

UTILITY RACK & SERVICE POLE LEGEND

1	4 POSITION METER CENTER (800A/120/240V, 1PH SERVICE)
2	#2 SOLID BARE TINNED COPPER GROUND WIRE IN 1" CONDUIT BETWEEN ELECTRICAL SERVICE ENTRANCE GROUND ROD AND GROUND LUG IN MULTI-TENANT METER CENTER (SERVICE GROUND)
3	3/4"ø x 10'-0" LONG COPPERCLAD ELECTRICAL STEEL SERVICE ENTRANCE GROUND ROD
4	ELECTRIC SERVICE CONDUCTORS IN (2) 5" CONDUITS TO SERVICE POLE/PAD MOUNTED TRANSFORMER
5	3-1/2" O.D. GALVANIZED STEEL POST AND METAL CAP (TYPICAL)
6	END CAP ALL ENDS. ZINC COATED "UNISTRUT" HOT DIP GALVANIZED, FIELD DRESS RAW ENDS OF CUT UNISTRUT WITH ZINC COATING, EXTEND PAST POST FOR U-BOLT ATTACHMENT (TYPICAL)
7	#2 SOLID BARE TINNED COPPER GROUND WIRE TO TOWER GROUND RING (TYPICAL)
8	FUTURE TENANT TELCO BOX (NEMA 3R)
9	TELCO 36"x36"x12" CABINET (NEMA 3R)
10	4" CONDUIT TO TELCO PEDESTAL/DEMARCATION
11	FINAL CONNECTION BY LOCAL POWER COMPANY

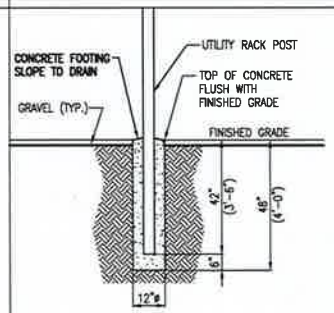
(A) TELCO CONDUIT
(B) POWER CONDUITS

* CONDUIT SIZE, TYPE, QUANTITY AND SEPARATION DIMENSION TO BE DETERMINED BY LOCAL UTILITY COMPANY HAVING JURISDICTION



TRENCH DETAIL

NOT TO SCALE



GROUNDING NOT SHOWN THIS VIEW

UTILITY RACK FOOTING

NOT TO SCALE

TYPICAL OF ALL VIEWS

STATE OF KENTUCKY
TIMOTHY L. HARDY
20374
REGISTERED PROFESSIONAL ENGINEER

REGISTERED PROFESSIONAL ENGINEER SEAL

ITEM	REVISIONS	BY	CHK. BY	DATE

TowerCo
5000 VALLEYSTONE DRIVE
CARY, NORTH CAROLINA 27519

DRAWN BY: R.M. NACCARI DATE: 11-1-16
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209 LINDEN STREET, P.O. BOX 708
TRUSSVILLE, AL 35173
PHONE: (205) 655-1427 FAX: (205) 661-9027

DWG. NAME: ELECTRICAL DETAILS
KY0062 SITE: EAST PARIS
PARIS, KENTUCKY
FOR
TOWERCO

DWG. NO. KY0062_E1 | SCALE: AS SHOWN | DWG. NO. E1

ELECTRICAL SPECIFICATION NOTES

ELECTRICAL AND TELCO SERVICE NOTES:

1. SERVICE POWER TO SITE SHALL BE 800 AMP 120/240VAC, 60HZ, SINGLE PHASE.

2. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY BEFORE THE START OF CONSTRUCTION. POWER & TELEPHONE CONDUIT SHALL BE PROVIDED AND INSTALLED PER UTILITY REQUIREMENTS.

3. REFER TO MANUFACTURER'S DRAWINGS FOR COMPLETE INTERNAL WIRING AND ARRANGEMENT OF POWER PEDESTAL AND INTERNAL TELCO TERMINAL BLOCK.

4. ALL SERVICE EQUIPMENT AND INSTALLATIONS SHALL COMPLY WITH THE N.E.C. AND UTILITY COMPANY AND LOCAL CODE REQUIREMENTS.

5. ALL CONDUIT ELL'S TO BE 90 RIGID GALVANIZED STEEL (GRS) FOR CONDUITS LARGER THAN 1".

6. ALL EXPOSED CONDUIT TO BE GRS OR SCH. 80 PVC UNLESS OTHERWISE NOTED.

7. UNLESS NOTED OTHERWISE, USE GRS OR SCHEDULE 80 PVC CONDUIT ABOVE GRADE & GRS OR SCHEDULE 40 PVS CONDUIT BELOW GRADE. TRANSITIONS BETWEEN GRS OR SCH. 80 PVS CONDUIT & GRS OR SCH. 40 PVS CONDUIT SHALL BE MADE W/ GRS CONDUIT ELL'S OR 90'S ALL CONDUITS 1" OR LARGER BELOW GRADE. UNDERGROUND CONDUITS SHALL BE @ A MIN. OF 24" BELOW ROUGH GRADE. (CONDUITS NOT CROSSING ACCESS GATES OR VEHICLE ACCESS ROADS).

8. CONNECT NEUTRAL TERMINAL IN DISCONNECTING DEVICE TO GROUND ROD.

9. NOALOX IS TO BE USED FOR DISSIMILAR METAL CONNECTIONS. ONLY STAINLESS STEEL OR PLASTIC IS TO BE USED NEXT TO GALVANIZED STEEL.

10. ALL UNUSED CONDUIT ENDS WILL BE TURNED UP AND CAPPED TO PREVENT DEBRIS FROM ENTERING THE CONDUIT CAUSING BLOCKAGE TO CABLE.

11. CONTRACTOR TO INSTALL PULLSTRINGS IN ANY UNUSED CONDUIT.

12. POWER & TELCO: IN CASES WHERE CONDUIT BENDS EXCEED 360° INSTALL A WEATHERPROOF 13"x24" TRAFFIC RATED PULLBOX W/ LIGHTWEIGHT CONCRETE COVER FLUSH W/ GRADE.

13. LABELING: ALL ENCLOSURES TO BE LABELED "TOWERCO" USING BLACK LETTERING ON WHITE TAPE. TAPE TO BE PERMANENT UV AND WEATHER RESISTANT AND A MIN. OF 3/4" WIDE.

14. ALL TRANSITIONS AT ALL CONCRETE PADS OR EQUIPMENT PLATFORMS OR EQUIPMENT PLATFORMS OR EQUIPMENT PLATFORMS OR EQUIPMENT PLATFORMS TO BE MADE WITH METAL LBs.

15. 3. ALL GROUNDING AND ELECTRICAL TRENCHES ARE TO BE COMPACTED TO A FIRM AND STABLE CONDITION.

16. CONDUIT ROUTINGS ARE SCHEMATIC, CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.

17. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND CONDUIT INSTALLATION SO AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT.

GROUNDING NOTES:

1. LUGS SHALL BE ATTACHED TO BUSSES USING BOLTS, NUTS AND LOCK/FLAT WASHERS. NO WASHERS ARE TO BE ALLOWED BETWEEN THE ITEMS BEING GROUNDED.

2. SURFACE CONNECTIONS SHALL BE MADE TO BARE METAL. PAINTED SURFACES SHALL BE FILED TO ENSURE PROPER CONTACT. APPLY NON-OXIDIZING AGENT TO CONNECTIONS.

3. GROUND CONDUCTOR RUNS SHALL BE STRAIGHT AS POSSIBLE, WITH AN 8 INCH MINIMUM RADIUS FOR #6 CONDUCTORS AND 12" FOR #2 AND LARGER CONDUCTORS.

4. HARDWARE (I.E. NUTS, BOLTS, WASHERS, ETC.) IS TO BE STAINLESS STEEL.

5. GROUND COAXIAL CABLES AT POINT SHOWN ON GROUNDING RISER DIAGRAM WITH MANUFACTURER'S GROUNDING KITS.

6. ALL GROUND CONNECTIONS UNDERGROUND SHALL BE EXOTHERMIC WELD; ABOVE GROUND CAN BE MECHANICAL OR EXOTHERMIC CONNECTIONS.

7. GROUND RING, COMPRISED OF #2 BARE TINNED SOLID RADIAL COPPER CONDUCTOR, SHALL HAVE A MINIMUM DISTANCE OF 24" FROM THE STRUCTURE AND BE BURIED A MINIMUM OF 30" BELOW GRADE.

8. CADWELD GROUND RODS TO GROUND RING. RODS TO BE 3/4"ø x 10'-0" COPPER CLAD STEEL WITH COPPER JACKET OF NOT LESS TAN 0.01 INCHES THICK. THE TOP OF GROUND ROD SHALL EXTEND NO MORE THAN 6 INCHES ABOVE THE BOTTOM OF THE TRENCH. GROUND ACCESS POINTS SHALL BE PLACED ON TOP OF GROUND ROD (TYP.)

9. INTERCONNECT OUTDOOR EQUIPMENT GROUND RING AND TOWER GROUND RING WITH EXOTHERMIC WELD.

10. INSTALL GROUNDING KIT. BOND COAXIAL CABLE OUTER CONDUCTOR TO GROUNDING CONDUCTOR.

11. INSTALL GROUND RODS ON GROUND RING AT NOT LESS THAN 11' INTERVALS. BOND GROUND RODS TO FENCE POSTS AT CORNER POSTS AND GATE POSTS.

12. ALL GROUNDING SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE (NEC) AND THE LATEST EDITION OF NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 780, APPROVED BY LOCAL AUTHORITY.

13. ALL CONDUCTOR CONNECTIONS SHALL UTILIZE AN ANTI-OXIDANT COMPOUND. A COPPER (COPPER COLORED) BASED COMPOUND SHALL BE USED ON ALL COPPER TO COPPER CONNECTIONS. A ZINC BASED (GRAY COLORED) COMPOUND SHALL BE USED ON ALL COPPER TO STEEL CONNECTIONS.

14. GROUND WIRES SHALL BE #2 BARE TINNED SOLID COPPER CONDUCTOR FOR BONDING CONNECTIONS UNLESS OTHERWISE NOTED ON PLANS.

15. DOCUMENT GROUND RING INSTALLATION AND CONNECTIONS WITH PHOTOGRAPHS PRIOR TO BACKFILLING SITE. PRESENT PHOTO ARCHIVE AT SITE "PUNCH LIST" WALK TO TOWERCO REPRESENTATIVE.

16. THE ENTIRE SYSTEM SHALL BE SOLIDLY GROUNDED USING PROPERLY BONDED GROUND CONDUCTORS. RECEPTACLES AND EQUIPMENT BRANCH CIRCUITS SHALL BE GROUNDED WITH EQUIPMENT GROUNDING CONDUCTOR RUN IN THE CIRCUIT'S CONDUIT.

17. PERFORM THE GROUND RESISTANCE TEST ON EACH RING PRIOR TO BONDING THE RINGS TOGETHER IN (2) PLACES USING THE THREE POINT FALL METHOD. TEST AND VERIFY THAT IMPEDANCE DOES NOT EXCEED 5 OHMS TO THE GROUND. THE REPORT SHALL BE SENT TO TOWERCO, LLC REPRESENTATIVE AND INCLUDED IN ALL CLOSE-OUT DOCUMENTS.

18. GROUND BUS BARS @ GROUND LEVEL SHALL BE COATED WITH COLD GALVANIZING COMPOUND.

19. ENCLOSURE GROUNDS ARE LOCATED ON THE LOWER LEFT SIDE OF THE ENCLOSURE.

ELECTRICAL NOTES:

1. IF CONDUIT RUNS HAVE MORE THAN (4)-90° TURNS, THEN THE CONTRACTOR MUST INSTALL PULL BOXES AS NEEDED.

2. CONTRACTOR SHALL CORE DRILL THROUGH SHELTER WALL AND PROVIDE WEATHERPROOFING FOR ALL CONDUITS THAT DON'T HAVE A PENETRATION.

3. ALL EQUIPMENT INSTALLED ON THE H-FRAMES SHALL MAINTAIN A MINIMUM OF 3'-0" CLEARANCE TO ALL FENCES.

4. ALL UNDERGROUND CONDUIT INSTALLED UNDER VEHICLE ACCESS ROADS AND CROSSING CONFINES OF ACCESS GATE AREA SHALL BE 42" BELOW ROUGH GRADE.

5. MAINTAIN MINIMUM 12" SEPARATION BETWEEN POWER, TELEPHONE AND PIPING. ALL CONDUIT/PIPING SHALL BE BURIED MINIMUM 24" BELOW ROUGH GRADE.

6. SIGNAL WIRING SHALL BE CAT-5.

7. WIRING DEVICES AND EQUIPMENT SHALL BE UL LISTED AND SPECIFICATION GRADE.

8. FUSES ARE NOT ALLOWED; CIRCUIT BREAKERS ONLY.

9. ALL CONDUIT CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE 2005 (NFPA 70).

10. UNLESS THE SERVING UTILITY REQUIRES OTHERWISE: THE SERVICE ENTRANCE HEAD ON THE UTILITY POLE IS TO BE 18 FT. ABOVE FINISHED GRADE w/ 3/4" GALVANIZED EYE-BOLT 1-0" ABOVE WEATHERHEAD.

GENERAL NOTES:

1. OBTAIN PERMITS AND PAY FEES RELATED TO ELECTRICAL WORK PERFORMED ON THIS PROJECT. DELIVER COPIES OF ALL PERMITS TO TOWERCO REPRESENTATIVE.

2. SCHEDULE AND ATTEND INSPECTIONS RELATED TO ELECTRICAL WORK REQUIRED BY JURISDICTION HAVING AUTHORITY. CORRECT AND PAY FOR ANY WORK REQUIRED TO PASS ANY FAILED INSPECTION.

3. REDLINED AS-BUILTS ARE TO BE DELIVERED TO TOWERCO REPRESENTATIVE.

4. FURNISH AND INSTALL THE COMPLETE ELECTRICAL SERVICE, CABLE TRAY, TELCO CONDUIT AND GROUNDING SYSTEMS.

5. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE BUILDING CODES AND LOCAL ORDINANCES, INSTALLED IN A NEAT MANNER AND SHALL BE SUBJECT TO APPROVAL BY TOWERCO, LLC REPRESENTATIVE.

6. CONDUCT A PRE-CONSTRUCTION SITE VISIT AND VERIFY EXISTING SITE CONDITIONS AFFECTING THIS WORK, REPORT ANY OMISSIONS OR DISCREPANCIES FOR CLARIFICATION PRIOR TO THE START OF CONSTRUCTION.

7. PROTECT ADJACENT STRUCTURES AND FINISHES FROM DAMAGE. REPAIR TO ORIGINAL CONDITION ANY DAMAGED AREA.

8. REMOVE DEBRIS ON A DAILY BASIS. DEBRIS NOT REMOVED IN A TIMELY FASHION WILL BE REMOVED BY OTHERS AND THE RESPONSIBLE SUBCONTRACTOR SHALL BE CHARGED ACCORDINGLY. REMOVAL OF DEBRIS SHALL HE COORDINATED WITH TOWERCO, LLC'S REPRESENTATIVE. DEBRIS SHALL BE REMOVED FROM THE PROPERTY AND DISPOSED OF LEGALLY. USE OF THE PROPERTY'S DUMPSTER IS PROHIBITED.

9. ALL CONSTRUCTION SHALL BE INSPECTED AND APPROVED BY LOCAL AUTHORITIES.

10. MATERIALS SHALL BE NEW AND CONFORM TO THE APPLICABLE STANDARDS ESTABLISHED FOR EACH ITEM BY THE ORGANIZATIONS LISTED BELOW:
- -AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)
- -UNDERWRITERS LABORATORY (UL)
- -NATIONAL ELECTRICAL MANUFACTURING ASSOCIATION (NEMA)
- -AMERICAN STANDARDS ASSOCIATION (ASA).

REGISTERED PROFESSIONAL ENGINEER SEAL

ITEM	REVISIONS	BY	CHK. BY	DATE

TowerCo
5000 VALLEYSTONE DRIVE
CARY, NORTH CAROLINA 27519

DRAWN BY: R.M. NACCARI DATE: 11-1-16
CHECKED BY: T.L. HARDY DATE: 11-1-16
APPROVED BY: DATE:

HARDY ENGINEERING, INC.
ENGINEERING AND CONSULTING
209 LINDEN STREET, P.O. BOX 708
TRUSSVILLE, AL 35173
PHONE: (205) 655-1427 FAX: (205) 661-9027

DWG. NAME: ELECTRICAL SPECIFICATION NOTES
KY0062 SITE: EAST PARIS
PARIS, KENTUCKY
FOR
TOWERCO

DWG. NO: KY0062_E2 | SCALE: AS SHOWN | SHEET NO: E2

EXHIBIT C

Sabre Industries™
Towers and Poles

Structural Design Report

196' Monopole
Site: East Paris, KY
Site Number: KY0062

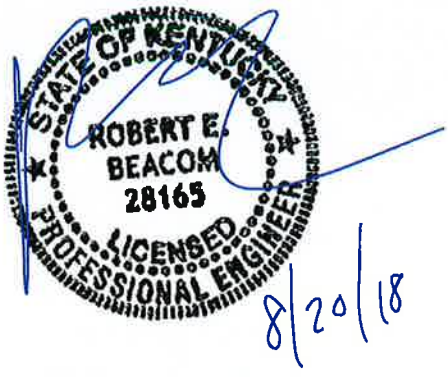
Prepared for: TOWERCO LLC
by: Sabre Towers & Poles ™

Job Number: 19-1271-JDS Opt. 2

August 20, 2018

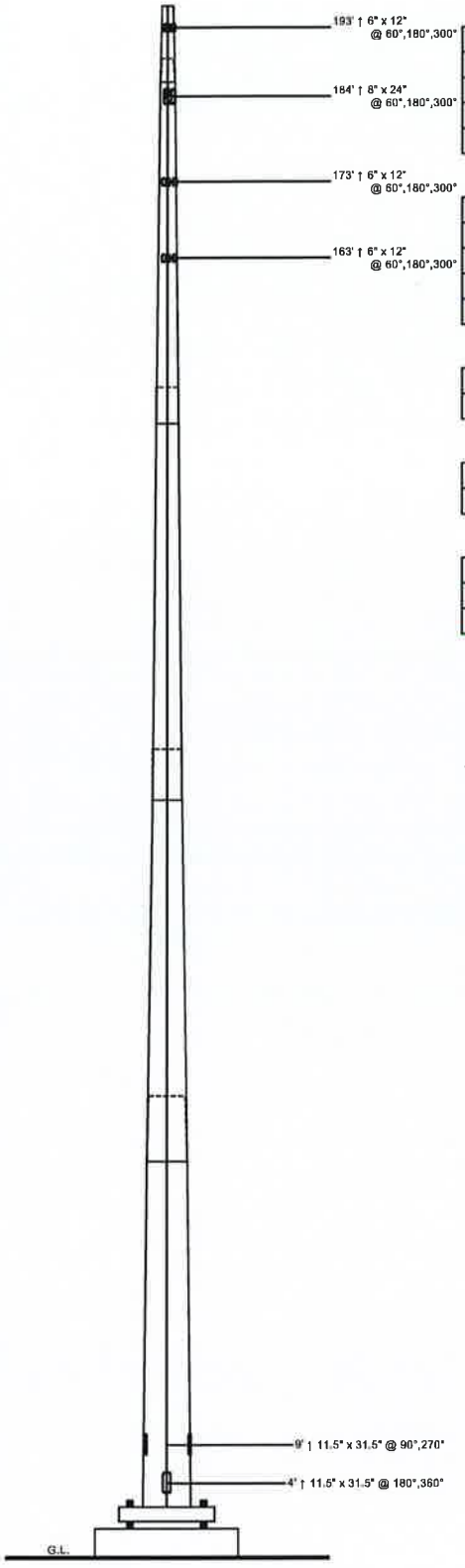
Monopole Profile 1

Pole Calculations 2-13



8/20/18

Length (ft)	10'-0"	47'-6"	53'-6"	53'-6"	53'-3"
Number Of Sides			18		
Thickness (in)	1/4"	3/8"	7/16"	1/2"	
Lap Splice (ft)	B	A	6' - 6"	8' - 6"	
Top Diameter (in)	17.5"	19.11"	31.22"	44.5"	57.17"
Bottom Diameter (in)	20.51"	33.4"	47.33"	60.6"	73.19"
Taper (in/ft)			0.301		
Grade			A572-65		
Weight (lbs)	626	5647	10405	13963	22198
Overall Steel Height (ft)			195		



Designed Appurtenance Loading

Elev	Description	Tx-Line
195	(1) 208 sq. ft. EPA 4000# (no ice)	(12) 1 5/8"
185	(1) 208 sq. ft. EPA 4000# (no ice)	(15) 1 5/8"
175	(1) 208 sq. ft. EPA 4000# (no ice)	(12) 1 5/8"
165	(1) 208 sq. ft. EPA 4000# (no ice)	(12) 1 5/8"

Load Case Reactions

Description	Axial (kips)	Shear (kips)	Moment (ft-k)	Deflection (ft)	Sway (deg)
3s Gusted Wind	87.42	59.74	9483.41	18.35	11.82
3s Gusted Wind 0.9 Dead	65.28	59.45	9275.38	17.83	11.44
3s Gusted Wind&Ice	133.54	10.7	1921.79	4.07	2.63
Service Loads	72.57	15.12	2398.04	4.78	3.03

Base Plate Dimensions

Shape	Diameter	Thickness	Bolt Circle	Bolt Qty	Bolt Diameter
Round	86.25"	2.5"	80.5"	24	2.25"

Anchor Bolt Dimensions

Length	Diameter	Hole Diameter	Weight	Type	Finish
84"	2.25"	2.625"	2906.4	A615-75	Galv

Material List

Display	Value
A	4' - 9"
B	3' - 0"

Notes

1) Antenna Feed Lines Run Inside Pole
2) All dimensions are above ground level, unless otherwise specified.
3) Weights shown are estimates. Final weights may vary.
4) The Monopole was designed for a basic wind speed of 89 mph with 0" of radial ice, and 30 mph with 3/4" of radial ice, in accordance with ANSI/TIA-222-G, Structure Class II, Exposure Category C, Topographic Category 1.
5) The tower design meets the requirements for an Ultimate Wind Speed of 115 mph (Risk Category II), in accordance with the 2012 International Building Code.
6) Full Height Step Bolts
7) Tower Rating: 100%

Sabre Industries
Towers and Poles

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

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Job:	19-1271-JDS Opt. 2
Customer:	TOWERCO LLC
Site Name:	East Paris, KY KY0062
Description:	196' Monopole
Date:	8/20/2018 By: REB

(USA 222-G) - Monopole Spatial Analysis (c)2015 Guymast Inc.

Tel:(416)736-7453 Fax:(416)736-4372 Web:www.guymast.com

Processed under license at:

Sabre Towers and Poles on: 20 aug 2018 at: 15:56:02

196' Monopole / East Paris, KY

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

POLE GEOMETRY

ELEV ft	SECTION NAME	No. SIDE	OUTSIDE DIAM in	THICK -NESS in	RESISTANCES ♦*Pn kip	♦*Mn ft-kip	SPLICE TYPE	...OVERLAP... LENGTH ft	RATIO	w/t
195.0										
			17.77	0.250	1016.9	358.5				
	A	18								10.6
			19.90	0.250	1140.7	451.8				
188.0										
			19.90	0.250	1140.7	451.8				
	A/B	18					SLIP	3.00	1.80	
			20.33	0.375	1736.9	694.2				
185.0										
			20.33	0.375	1736.9	694.2				
	B	18								7.6
			32.46	0.375	2793.3	1807.8				
145.2										
			32.46	0.375	2793.3	1807.8				
	B/C	18					SLIP	4.75	1.74	
			33.17	0.438	3324.9	2192.0				
140.5										
			33.17	0.438	3324.9	2192.0				
	C	18								11.4
			46.06	0.438	4601.9	4244.3				
98.2										
			46.06	0.438	4601.9	4244.3				
	C/D	18					SLIP	6.50	1.68	
			47.18	0.438	4685.2	4428.7				
91.7										
			47.18	0.438	4685.2	4428.7				
	D	18								17.0
			58.92	0.438	5467.7	6478.6				
53.2										
			58.92	0.438	5467.7	6478.6				
	D/E	18					SLIP	8.50	1.71	
			60.66	0.500	6658.4	8108.5				
44.7										
			60.66	0.500	6658.4	8108.5				
	E	18								19.3
			74.32	0.500	7591.4	11362.0				
0.0										

POLE ASSEMBLY

SECTION NAME	BASE ELEV ft	BOLTS AT BASE OF SECTION NUMBER	TYPE	DIAM in	STRENGTH ksi	THREADS IN SHEAR PLANE	CALC BASE ELEV ft
A	185.000	0	A325	0.00	92.0	0	185.000
B	140.500	0	A325	0.00	92.0	0	140.500
C	91.750	0	A325	0.00	92.0	0	91.750
D	44.750	0	A325	0.00	92.0	0	44.750
E	0.000	0	A325	0.00	92.0	0	0.000

POLE SECTIONS

SECTION	No.of	LENGTH	OUTSIDE.DIAMETER	BEND	MAT-	FLANGE.ID	FLANGE.WELD

NAME	SIDES		BOT *	TOP *	RAD	ERIAL ID	BOT	TOP	..GROUP.ID.. BOT	TOP
		ft	in	in	in					
A	18	10.00	20.83	17.77	0.250	1	0	0	0	0
B	18	47.50	33.92	19.40	0.375	2	0	0	0	0
C	18	53.50	48.06	31.71	0.438	3	0	0	0	0
D	18	53.50	61.53	45.18	0.438	4	0	0	0	0
E	18	53.25	74.32	58.05	0.500	5	0	0	0	0

* - Diameter of circumscribed circle

MATERIAL TYPES

TYPE OF SHAPE	TYPE NO	NO OF ELEM.	ORIENT & deg	HEIGHT in	WIDTH in	.THICKNESS. WEB in	FLANGE in	IRREGULARITY .PROJECTION. % OF AREA	ORIENT deg
PL	1	1	0.0	20.83	0.25	0.250	0.250	0.00	0.0
PL	2	1	0.0	33.92	0.38	0.375	0.375	0.00	0.0
PL	3	1	0.0	48.06	0.44	0.438	0.438	0.00	0.0
PL	4	1	0.0	61.54	0.44	0.438	0.438	0.00	0.0
PL	5	1	0.0	74.32	0.50	0.500	0.500	0.00	0.0

& - With respect to vertical

MATERIAL PROPERTIES

MATERIAL TYPE NO.	ELASTIC MODULUS ksi	UNIT WEIGHT pcf	.. STRENGTH .. Fu ksi	Fy ksi	THERMAL COEFFICIENT /deg
1	29000.0	490.0	80.0	65.0	0.00001170
2	29000.0	490.0	80.0	65.0	0.00001170
3	29000.0	490.0	80.0	65.0	0.00001170
4	29000.0	490.0	80.0	65.0	0.00001170
5	29000.0	490.0	80.0	65.0	0.00001170

* Only 3 condition(s) shown in full

LOADING CONDITION A

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

LOADS ON POLE

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	194.000	0.00	0.0	0.0	10.2726	4.8000	0.0000	0.0000
C	193.000	0.00	0.0	0.0	0.0000	2.8904	0.0000	0.0000
C	184.000	0.00	0.0	0.0	0.0000	3.4445	0.0000	0.0000
C	184.000	0.00	0.0	0.0	10.1594	4.8000	0.0000	0.0000
C	174.000	0.00	0.0	0.0	0.0000	2.6058	0.0000	0.0000
C	174.000	0.00	0.0	0.0	10.0413	4.8000	0.0000	0.0000
C	164.000	0.00	0.0	0.0	0.0000	2.4561	0.0000	0.0000
C	164.000	0.00	0.0	0.0	9.9176	4.8000	0.0000	0.0000
D	195.000	0.00	180.0	0.0	0.0503	0.0593	0.0000	0.0000
D	188.000	0.00	180.0	0.0	0.0503	0.0593	0.0000	0.0000
D	188.000	0.00	180.0	0.0	0.0540	0.1579	0.0000	0.0000
D	185.000	0.00	180.0	0.0	0.0540	0.1579	0.0000	0.0000
D	185.000	0.00	180.0	0.0	0.0587	0.1054	0.0000	0.0000
D	171.750	0.00	180.0	0.0	0.0587	0.1054	0.0000	0.0000
D	171.750	0.00	180.0	0.0	0.0683	0.1245	0.0000	0.0000

D	158.500	0.00	180.0	0.0	0.0683	0.1245	0.0000	0.0000
D	158.500	0.00	180.0	0.0	0.0774	0.1437	0.0000	0.0000
D	145.250	0.00	180.0	0.0	0.0774	0.1437	0.0000	0.0000
D	145.250	0.00	180.0	0.0	0.0833	0.3357	0.0000	0.0000
D	140.500	0.00	180.0	0.0	0.0833	0.3357	0.0000	0.0000
D	140.500	0.00	180.0	0.0	0.0874	0.1950	0.0000	0.0000
D	126.417	0.00	180.0	0.0	0.0874	0.1950	0.0000	0.0000
D	126.417	0.00	180.0	0.0	0.0957	0.2188	0.0000	0.0000
D	112.333	0.00	180.0	0.0	0.0957	0.2188	0.0000	0.0000
D	112.333	0.00	180.0	0.0	0.1034	0.2426	0.0000	0.0000
D	98.250	0.00	180.0	0.0	0.1034	0.2426	0.0000	0.0000
D	98.250	0.00	180.0	0.0	0.1085	0.5157	0.0000	0.0000
D	91.750	0.00	180.0	0.0	0.1085	0.5157	0.0000	0.0000
D	91.750	0.00	180.0	0.0	0.1107	0.2721	0.0000	0.0000
D	78.917	0.00	180.0	0.0	0.1107	0.2721	0.0000	0.0000
D	78.917	0.00	180.0	0.0	0.1156	0.2938	0.0000	0.0000
D	66.083	0.00	180.0	0.0	0.1156	0.2938	0.0000	0.0000
D	66.083	0.00	180.0	0.0	0.1192	0.3155	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.1192	0.3155	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.1210	0.7095	0.0000	0.0000
D	44.750	0.00	180.0	0.0	0.1210	0.7095	0.0000	0.0000
D	44.750	0.00	180.0	0.0	0.1196	0.3949	0.0000	0.0000
D	33.562	0.00	180.0	0.0	0.1196	0.3949	0.0000	0.0000
D	33.562	0.00	180.0	0.0	0.1178	0.4166	0.0000	0.0000
D	22.375	0.00	180.0	0.0	0.1178	0.4166	0.0000	0.0000
D	22.375	0.00	180.0	0.0	0.1118	0.4382	0.0000	0.0000
D	0.000	0.00	180.0	0.0	0.1134	0.4599	0.0000	0.0000

LOADING CONDITION M

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

LOADS ON POLE

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	194.000	0.00	0.0	0.0	10.2726	3.6000	0.0000	0.0000
C	193.000	0.00	0.0	0.0	0.0000	2.1678	0.0000	0.0000
C	184.000	0.00	0.0	0.0	0.0000	2.5834	0.0000	0.0000
C	184.000	0.00	0.0	0.0	10.1594	3.6000	0.0000	0.0000
C	174.000	0.00	0.0	0.0	0.0000	1.9544	0.0000	0.0000
C	174.000	0.00	0.0	0.0	10.0413	3.6000	0.0000	0.0000
C	164.000	0.00	0.0	0.0	0.0000	1.8420	0.0000	0.0000
C	164.000	0.00	0.0	0.0	9.9176	3.6000	0.0000	0.0000
D	195.000	0.00	180.0	0.0	0.0503	0.0445	0.0000	0.0000
D	188.000	0.00	180.0	0.0	0.0503	0.0445	0.0000	0.0000
D	188.000	0.00	180.0	0.0	0.0540	0.1184	0.0000	0.0000
D	185.000	0.00	180.0	0.0	0.0540	0.1184	0.0000	0.0000
D	185.000	0.00	180.0	0.0	0.0587	0.0791	0.0000	0.0000
D	171.750	0.00	180.0	0.0	0.0587	0.0791	0.0000	0.0000
D	171.750	0.00	180.0	0.0	0.0683	0.0934	0.0000	0.0000
D	158.500	0.00	180.0	0.0	0.0683	0.0934	0.0000	0.0000
D	158.500	0.00	180.0	0.0	0.0774	0.1077	0.0000	0.0000
D	145.250	0.00	180.0	0.0	0.0774	0.1077	0.0000	0.0000
D	145.250	0.00	180.0	0.0	0.0833	0.2518	0.0000	0.0000
D	140.500	0.00	180.0	0.0	0.0833	0.2518	0.0000	0.0000
D	140.500	0.00	180.0	0.0	0.0874	0.1463	0.0000	0.0000
D	126.417	0.00	180.0	0.0	0.0874	0.1463	0.0000	0.0000
D	126.417	0.00	180.0	0.0	0.0957	0.1641	0.0000	0.0000
D	112.333	0.00	180.0	0.0	0.0957	0.1641	0.0000	0.0000
D	112.333	0.00	180.0	0.0	0.1034	0.1819	0.0000	0.0000
D	98.250	0.00	180.0	0.0	0.1034	0.1819	0.0000	0.0000
D	98.250	0.00	180.0	0.0	0.1085	0.3867	0.0000	0.0000
D	91.750	0.00	180.0	0.0	0.1085	0.3867	0.0000	0.0000
D	91.750	0.00	180.0	0.0	0.1107	0.2041	0.0000	0.0000
D	78.917	0.00	180.0	0.0	0.1107	0.2041	0.0000	0.0000
D	78.917	0.00	180.0	0.0	0.1156	0.2204	0.0000	0.0000
D	66.083	0.00	180.0	0.0	0.1156	0.2204	0.0000	0.0000
D	66.083	0.00	180.0	0.0	0.1192	0.2367	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.1192	0.2367	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.1210	0.5321	0.0000	0.0000
D	44.750	0.00	180.0	0.0	0.1210	0.5321	0.0000	0.0000

D	44.750	0.00	180.0	0.0	0.1196	0.2962	0.0000	0.0000
D	33.562	0.00	180.0	0.0	0.1196	0.2962	0.0000	0.0000
D	33.562	0.00	180.0	0.0	0.1178	0.3124	0.0000	0.0000
D	22.375	0.00	180.0	0.0	0.1178	0.3124	0.0000	0.0000
D	22.375	0.00	180.0	0.0	0.1118	0.3287	0.0000	0.0000
D	0.000	0.00	180.0	0.0	0.1134	0.3449	0.0000	0.0000

LOADING CONDITION Y

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

LOADS ON POLE

LOAD TYPE	ELEV ft	APPLY..LOAD..AT RADIUS ft	AZI	LOAD AZI	.....FORCES..... HORIZ kip	DOWN kip	.....MOMENTS..... VERTICAL ft-kip	TORSNAL ft-kip
C	194.000	0.00	0.0	0.0	2.0365	11.9664	0.0000	0.0000
C	193.000	0.00	0.0	0.0	0.0000	2.8904	0.0000	0.0000
C	184.000	0.00	0.0	0.0	0.0000	3.4445	0.0000	0.0000
C	184.000	0.00	0.0	0.0	2.0072	11.9288	0.0000	0.0000
C	174.000	0.00	0.0	0.0	0.0000	2.6058	0.0000	0.0000
C	174.000	0.00	0.0	0.0	1.9769	11.8893	0.0000	0.0000
C	164.000	0.00	0.0	0.0	0.0000	2.4561	0.0000	0.0000
C	164.000	0.00	0.0	0.0	1.9452	11.8477	0.0000	0.0000
D	195.000	0.00	180.0	0.0	0.0078	0.1044	0.0000	0.0000
D	188.000	0.00	180.0	0.0	0.0078	0.1044	0.0000	0.0000
D	188.000	0.00	180.0	0.0	0.0083	0.2062	0.0000	0.0000
D	185.000	0.00	180.0	0.0	0.0083	0.2062	0.0000	0.0000
D	185.000	0.00	180.0	0.0	0.0089	0.1578	0.0000	0.0000
D	171.750	0.00	180.0	0.0	0.0089	0.1578	0.0000	0.0000
D	171.750	0.00	180.0	0.0	0.0101	0.1852	0.0000	0.0000
D	158.500	0.00	180.0	0.0	0.0101	0.1852	0.0000	0.0000
D	158.500	0.00	180.0	0.0	0.0113	0.2124	0.0000	0.0000
D	145.250	0.00	180.0	0.0	0.0113	0.2124	0.0000	0.0000
D	145.250	0.00	180.0	0.0	0.0121	0.4099	0.0000	0.0000
D	140.500	0.00	180.0	0.0	0.0121	0.4099	0.0000	0.0000
D	140.500	0.00	180.0	0.0	0.0126	0.2731	0.0000	0.0000
D	126.417	0.00	180.0	0.0	0.0126	0.2731	0.0000	0.0000
D	126.417	0.00	180.0	0.0	0.0136	0.3050	0.0000	0.0000
D	112.333	0.00	180.0	0.0	0.0136	0.3050	0.0000	0.0000
D	112.333	0.00	180.0	0.0	0.0146	0.3365	0.0000	0.0000
D	98.250	0.00	180.0	0.0	0.0146	0.3365	0.0000	0.0000
D	98.250	0.00	180.0	0.0	0.0152	0.6150	0.0000	0.0000
D	91.750	0.00	180.0	0.0	0.0152	0.6150	0.0000	0.0000
D	91.750	0.00	180.0	0.0	0.0155	0.3746	0.0000	0.0000
D	78.917	0.00	180.0	0.0	0.0155	0.3746	0.0000	0.0000
D	78.917	0.00	180.0	0.0	0.0161	0.4024	0.0000	0.0000
D	66.083	0.00	180.0	0.0	0.0161	0.4024	0.0000	0.0000
D	66.083	0.00	180.0	0.0	0.0165	0.4296	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.0165	0.4296	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.0167	0.8275	0.0000	0.0000
D	44.750	0.00	180.0	0.0	0.0167	0.8275	0.0000	0.0000
D	44.750	0.00	180.0	0.0	0.0165	0.5147	0.0000	0.0000
D	11.187	0.00	180.0	0.0	0.0153	0.5603	0.0000	0.0000
D	11.187	0.00	180.0	0.0	0.0154	0.5752	0.0000	0.0000
D	0.000	0.00	180.0	0.0	0.0154	0.5752	0.0000	0.0000

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

MAST ELEV ft	DEFLECTIONS (ft) HORIZONTAL ALONG	HORIZONTAL ACROSS	DOWN	ROTATIONS (deg) TILT ALONG	TILT ACROSS	TWIST
195.0	18.35A	0.08W	2.60A	11.82A	0.05W	-0.01C
188.0	16.97A	0.07W	2.32A	11.74A	0.05W	-0.01C
185.0	16.38A	0.07W	2.20A	11.67A	0.05W	-0.01C
171.7	13.85A	0.06W	1.69A	11.08A	0.05W	-0.01C
158.5	11.47A	0.05W	1.25A	10.09A	0.04W	0.01K
145.2	9.34A	0.04W	0.90A	8.87A	0.04W	0.01K
140.5	8.64A	0.03X	0.79A	8.47A	0.03W	0.01K
126.4	6.74A	0.03X	0.53A	7.25A	0.03W	0.00K
112.3	5.12A	0.02X	0.34A	6.11A	0.03W	0.00K
98.2	3.76A	0.02X	0.21A	5.06A	0.02X	0.00K
91.7	3.22A	0.01X	0.16A	4.61A	0.02X	0.00K
78.9	2.29A	0.01X	0.10A	3.74A	0.02X	0.00K
66.1	1.55A	0.01X	0.05A	2.94A	0.01X	0.00K
53.2	0.97A	0.00X	0.03A	2.21A	0.01X	0.00K
44.7	0.67A	0.00X	0.01A	1.82A	0.01X	0.00K
33.6	0.37A	0.00X	0.01A	1.31A	0.01X	0.00K
22.4	0.16A	0.00X	0.00A	0.84A	0.00X	0.00K
11.2	0.04A	0.00X	0.00AI	0.41A	0.00X	0.00K
0.0	0.00A	0.00A	0.00A	0.00A	0.00A	0.00A

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

MAST ELEV ft	TOTAL AXIAL kip	SHEAR.w.r.t.WIND.DIR ALONG kip	ACROSS kip	MOMENT.w.r.t.WIND.DIR ALONG ft-kip	ACROSS ft-kip	TORSION ft-kip
195.0	0.02 B	-0.01 O	0.01 I	0.04 I	0.02 I	0.00 I
	15.59 AC	10.63 I	0.01 I	-69.14 I	-0.06 C	-0.05 W
188.0	15.59 AA	10.97 A	0.16 R	-69.70 E	0.15 F	-0.08 C
	16.21 AA	11.13 A	0.16 R	-105.52 F	-0.34 R	-0.06 X
185.0	16.21 AI	11.02 D	0.20 W	-105.47 A	-0.46 R	-0.08 W
	48.17 AI	31.99 D	0.20 W	-438.37 A	-2.74 W	-0.57 C
171.7	48.17 AI	32.07 A	-0.12 O	-438.35 A	-2.74 W	-0.58 C
	64.92 AI	42.88 A	-0.12 O	-977.46 A	-4.52 W	-1.04 C
158.5	64.92 AB	42.87 A	0.12 W	-977.44 A	-4.51 W	-1.05 C
	67.73 AB	43.88 A	0.12 W	-1612.51 A	-6.36 W	-1.37 C
145.2	67.73 AD	43.90 A	0.14 W	-1612.60 A	-6.23 W	-1.34 C
	69.68 AD	44.29 A	0.14 W	-1843.71 A	-6.97 W	1.53 K
140.5						

	69.68 Z	44.29 A	0.21 X	-1843.42 A	-7.14 W	1.53 K
	73.52 Z	45.51 A	0.21 X	-2538.62 A	-10.14 W	1.93 K
126.4						
	73.52 AI	45.55 A	0.26 X	-2538.64 A	-10.10 W	1.93 K
	77.82 AI	46.89 A	0.26 X	-3249.28 A	-13.60 W	2.36 K
112.3						
	77.82 AI	46.88 A	0.24 X	-3249.21 A	-13.58 W	2.36 K
	82.56 AI	48.33 A	0.24 X	-3975.20 A	-16.94 W	2.71 K
98.2						
	82.56 AI	48.31 A	0.26 X	-3975.14 A	-16.91 W	2.70 K
	86.55 AI	49.02 A	0.26 X	-4315.84 A	-18.68 W	2.86 K
91.7						
	86.55 AI	49.04 D	0.28 X	-4315.75 A	-18.48 W	2.86 K
	91.36 AI	50.46 D	0.28 X	-4998.29 A	-21.16 W	3.17 K
78.9						
	91.36 AI	50.42 A	0.24 X	-4998.34 A	-21.20 W	3.17 K
	96.52 AI	51.90 A	0.24 X	-5694.32 A	-23.46 X	3.41 K
66.1						
	96.52 AI	51.92 A	0.25 X	-5694.30 A	-23.47 W	3.41 K
	102.03 AI	53.45 A	0.25 X	-6403.40 A	-26.70 X	3.59 K
53.2						
	102.03 AI	53.47 D	0.25 X	-6403.39 A	-26.71 X	3.59 K
	109.07 AI	54.50 D	0.25 X	-6880.40 A	-28.86 X	3.69 K
44.7						
	109.07 AI	54.55 D	0.26 X	-6880.42 A	-28.84 X	3.69 K
	114.91 AI	55.89 D	0.26 X	-7517.97 A	-31.81 X	3.80 K
33.6						
	114.91 AI	55.89 D	0.23 X	-7517.99 A	-31.82 X	3.80 K
	120.92 AI	57.21 D	0.23 X	-8164.76 A	-34.44 X	3.87 K
22.4						
	120.92 AI	57.20 D	0.25 X	-8164.76 A	-34.45 X	3.87 K
	127.11 AI	58.46 D	0.25 X	-8820.24 A	-37.22 X	3.91 K
11.2						
	127.11 AI	58.47 D	0.24 X	-8820.22 A	-37.22 X	3.91 K
	133.54 AI	59.74 D	0.24 X	-9483.41 A	-39.93 X	3.93 K
base reaction	133.54 AI	-59.74 D	-0.24 X	9483.41 A	39.93 X	-3.93 K

COMPLIANCE WITH 4.8.2 & 4.5.4

ELEV ft	AXIAL	BENDING	SHEAR + TORSIONAL	TOTAL	SATISFIED	D/t(w/t)	MAX ALLOWED
195.00							
	0.00B	0.00I	0.000	0.00I	YES	10.58A	45.2
	0.01AC	0.15I	0.02I	0.16I	YES	12.07A	45.2
188.00							
	0.01AA	0.10E	0.01A	0.11E	YES	7.46A	45.2
	0.01AA	0.14F	0.01A	0.15F	YES	7.88A	45.2
185.00							
	0.01AI	0.15A	0.01D	0.16A	YES	7.65A	45.2
	0.02AI	0.44A	0.03D	0.45A	YES	9.52A	45.2
171.75							
	0.02AI	0.44A	0.03A	0.45A	YES	9.52A	45.2
	0.03AI	0.71A	0.04A	0.72A	YES	11.40A	45.2
158.50							
	0.03AB	0.71A	0.04A	0.72A	YES	11.40A	45.2
	0.02AB	0.89A	0.03A	0.91A	YES	13.27A	45.2

145.25	0.02AD	0.77A	0.03A	0.78A	YES	11.12A	45.2
	0.02AD	0.80A	0.03A	0.82A	YES	11.70A	45.2
140.50	0.02Z	0.84A	0.03A	0.85A	YES	11.40A	45.2
	0.02Z	0.90A	0.02A	0.92A	YES	13.11A	45.2
126.42	0.02AI	0.90A	0.02A	0.92A	YES	13.11A	45.2
	0.02AI	0.93A	0.02A	0.94A	YES	14.81A	45.2
112.33	0.02AI	0.93A	0.02A	0.94A	YES	14.81A	45.2
	0.02AI	0.94A	0.02A	0.95A	YES	16.52A	45.2
98.25	0.02AI	0.94A	0.02A	0.95A	YES	16.52A	45.2
	0.02AI	0.94A	0.02A	0.95A	YES	17.31A	45.2
91.75	0.02AI	0.97A	0.02D	0.99A	YES	16.96A	45.2
	0.02AI	0.98A	0.02C	0.99A	YES	18.52A	45.2
78.92	0.02AI	0.98A	0.02A	0.99A	YES	18.52A	45.2
	0.02AI	0.99A	0.02C	1.00A	YES	20.07A	45.2
66.08	0.02AI	0.99A	0.02C	1.00A	YES	20.07A	45.2
	0.02AI	0.99A	0.02C	1.00A	YES	21.63A	45.2
53.25	0.02AI	0.83A	0.02C	0.84A	YES	18.71A	45.2
	0.02AI	0.83A	0.02C	0.84A	YES	19.61A	45.2
44.75	0.02AI	0.85A	0.02C	0.86A	YES	19.30A	45.2
	0.02AI	0.85A	0.02C	0.86A	YES	20.49A	45.2
33.56	0.02AI	0.85A	0.02C	0.86A	YES	20.49A	45.2
	0.02AI	0.84A	0.02C	0.85A	YES	21.67A	45.2
22.37	0.02AI	0.84A	0.02C	0.85A	YES	21.67A	45.2
	0.02AI	0.84A	0.02C	0.85A	YES	22.86A	45.2
11.19	0.02AI	0.84A	0.02C	0.85A	YES	22.86A	45.2
	0.02AI	0.83A	0.02C	0.85A	YES	24.05A	45.2
0.00							

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

DOWN	SHEAR.w.r.t.WIND.DIR ALONG	ACROSS	MOMENT.w.r.t.WIND.DIR ALONG	ACROSS	TORSION
kip	kip	kip	ft-kip	ft-kip	ft-kip
133.54	59.74	0.24	-9483.41	-39.93	3.93
AI	D	X	A	X	K

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

* Only 1 condition(s) shown in full

LOADING CONDITION A

60 mph wind with no ice. Wind Azimuth: 0♦

LOADS ON POLE

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	194.000	0.00	0.0	0.0	2.6108	4.0000	0.0000	0.0000
C	193.000	0.00	0.0	0.0	0.0000	2.4086	0.0000	0.0000
C	184.000	0.00	0.0	0.0	0.0000	2.8704	0.0000	0.0000
C	184.000	0.00	0.0	0.0	2.5821	4.0000	0.0000	0.0000
C	174.000	0.00	0.0	0.0	0.0000	2.1715	0.0000	0.0000
C	174.000	0.00	0.0	0.0	2.5520	4.0000	0.0000	0.0000
C	164.000	0.00	0.0	0.0	0.0000	2.0467	0.0000	0.0000
C	164.000	0.00	0.0	0.0	2.5206	4.0000	0.0000	0.0000
D	195.000	0.00	180.0	0.0	0.0128	0.0494	0.0000	0.0000
D	188.000	0.00	180.0	0.0	0.0128	0.0494	0.0000	0.0000
D	188.000	0.00	180.0	0.0	0.0137	0.1316	0.0000	0.0000
D	185.000	0.00	180.0	0.0	0.0137	0.1316	0.0000	0.0000
D	185.000	0.00	180.0	0.0	0.0149	0.0879	0.0000	0.0000
D	171.750	0.00	180.0	0.0	0.0149	0.0879	0.0000	0.0000
D	171.750	0.00	180.0	0.0	0.0173	0.1038	0.0000	0.0000
D	158.500	0.00	180.0	0.0	0.0173	0.1038	0.0000	0.0000
D	158.500	0.00	180.0	0.0	0.0197	0.1197	0.0000	0.0000
D	145.250	0.00	180.0	0.0	0.0197	0.1197	0.0000	0.0000
D	145.250	0.00	180.0	0.0	0.0212	0.2798	0.0000	0.0000
D	140.500	0.00	180.0	0.0	0.0212	0.2798	0.0000	0.0000
D	140.500	0.00	180.0	0.0	0.0222	0.1625	0.0000	0.0000
D	126.417	0.00	180.0	0.0	0.0222	0.1625	0.0000	0.0000
D	126.417	0.00	180.0	0.0	0.0243	0.1823	0.0000	0.0000
D	112.333	0.00	180.0	0.0	0.0243	0.1823	0.0000	0.0000
D	112.333	0.00	180.0	0.0	0.0263	0.2021	0.0000	0.0000
D	98.250	0.00	180.0	0.0	0.0263	0.2021	0.0000	0.0000
D	98.250	0.00	180.0	0.0	0.0276	0.4297	0.0000	0.0000
D	91.750	0.00	180.0	0.0	0.0276	0.4297	0.0000	0.0000
D	91.750	0.00	180.0	0.0	0.0281	0.2267	0.0000	0.0000
D	78.917	0.00	180.0	0.0	0.0281	0.2267	0.0000	0.0000
D	78.917	0.00	180.0	0.0	0.0294	0.2448	0.0000	0.0000
D	66.083	0.00	180.0	0.0	0.0294	0.2448	0.0000	0.0000
D	66.083	0.00	180.0	0.0	0.0303	0.2629	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.0303	0.2629	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.0308	0.5912	0.0000	0.0000
D	44.750	0.00	180.0	0.0	0.0308	0.5912	0.0000	0.0000
D	44.750	0.00	180.0	0.0	0.0304	0.3291	0.0000	0.0000
D	33.562	0.00	180.0	0.0	0.0304	0.3291	0.0000	0.0000
D	33.562	0.00	180.0	0.0	0.0299	0.3472	0.0000	0.0000
D	22.375	0.00	180.0	0.0	0.0299	0.3472	0.0000	0.0000
D	22.375	0.00	180.0	0.0	0.0284	0.3652	0.0000	0.0000
D	0.000	0.00	180.0	0.0	0.0288	0.3832	0.0000	0.0000

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

MAST ELEV ft	.....DEFLECTIONS (ft)..... HORIZONTAL ..... ALONG	ACROSS	DOWN	.....ROTATIONS (deg)..... TILT ..... ALONG	ACROSS	TWIST
195.0	4.78A	-0.02C	0.18D	3.03A	-0.01B	0.00C
188.0	4.41A	-0.02C	0.16D	3.01A	-0.01B	0.00C

185.0	4.25A	-0.02C	0.15D	2.99A	-0.01B	0.00C
171.7	3.58A	-0.01C	0.12D	2.83A	-0.01B	0.00C
158.5	2.95A	-0.01C	0.09D	2.58A	0.01F	0.00C
145.2	2.39A	-0.01C	0.06D	2.26A	-0.01C	0.00C
140.5	2.21A	-0.01C	0.05D	2.16A	-0.01C	0.00C
126.4	1.72A	-0.01C	0.04D	1.84A	-0.01C	0.00C
112.3	1.30A	0.00C	0.02D	1.55A	-0.01C	0.00C
98.2	0.96A	0.00C	0.02D	1.28A	0.00C	0.00C
91.7	0.82A	0.00C	0.01D	1.17A	0.00C	0.00C
78.9	0.58A	0.00C	0.01D	0.95A	0.00C	0.00C
66.1	0.39A	0.00C	0.00D	0.74A	0.00C	0.00C
53.2	0.25A	0.00C	0.00D	0.56A	0.00C	0.00C
44.7	0.17A	0.00C	0.00D	0.46A	0.00C	0.00C
33.6	0.09A	0.00C	0.00D	0.33A	0.00C	0.00C
22.4	0.04A	0.00C	0.00D	0.21A	0.00C	0.00C
11.2	0.01A	0.00C	0.00L	0.10A	0.00C	0.00C
0.0	0.00A	0.00A	0.00A	0.00A	0.00A	0.00A

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

MAST ELEV ft	TOTAL AXIAL kip	SHEAR.w.r.t.WIND.DIR ALONG kip	ACROSS kip	MOMENT.w.r.t.WIND.DIR ALONG ft-kip	ACROSS ft-kip	TORSION ft-kip
195.0	0.00 H	0.00 B	0.00 F	0.01 E	0.01 F	0.00 F
	6.75 A	2.70 B	0.00 F	-17.90 D	-0.01 F	0.00 K
188.0	6.76 B	2.76 A	-0.03 H	-17.91 K	0.05 L	0.00 F
	7.15 B	2.80 A	-0.03 H	-27.20 I	0.06 H	0.01 K
185.0	7.15 C	2.76 A	-0.06 I	-27.20 A	-0.07 I	0.01 K
	21.36 C	8.09 A	-0.06 I	-112.43 A	0.69 I	-0.03 B
171.7	21.36 C	8.12 A	-0.05 B	-112.43 A	0.69 I	-0.03 B
	28.78 C	10.87 A	-0.05 B	-250.37 A	1.33 B	-0.07 B
158.5	28.78 C	10.87 A	-0.05 B	-250.37 A	1.34 B	-0.07 B
	30.37 C	11.13 A	-0.05 B	-412.26 A	2.04 B	-0.10 B
145.2	30.37 C	11.11 L	-0.04 L	-412.28 A	2.10 B	-0.10 B
	31.69 C	11.21 L	-0.04 L	-470.76 A	2.24 B	-0.11 B
140.5	31.69 C	11.23 A	-0.06 C	-470.65 A	2.29 B	-0.11 B
	33.98 C	11.54 A	-0.06 C	-646.76 A	2.74 B	-0.12 C
126.4	33.98 L	11.53 A	-0.06 C	-646.75 A	2.73 B	-0.12 C
	36.55 L	11.87 A	-0.06 C	-825.97 A	2.93 B	-0.15 C
112.3	36.55 L	11.87 A	-0.05 C	-825.96 A	2.94 B	-0.15 C
	39.39 L	12.24 A	-0.05 C	-1008.73 A	3.45 C	-0.18 C

98.2	39.39 L	12.25 A	-0.07 C	-1008.79 A	3.44 C	-0.18 C
	42.19 L	12.43 A	-0.07 C	-1094.57 A	3.91 C	-0.19 C
91.7	42.19 L	12.41 A	-0.06 C	-1094.55 A	3.92 C	-0.19 C
	45.10 L	12.77 A	-0.06 C	-1266.30 A	4.73 C	-0.21 C
78.9	45.10 L	12.77 A	-0.06 C	-1266.31 A	4.72 C	-0.21 C
	48.24 L	13.15 A	-0.06 C	-1441.40 A	5.45 C	-0.22 C
66.1	48.24 L	13.15 A	-0.06 C	-1441.40 A	5.44 C	-0.22 C
	51.61 L	13.54 A	-0.06 C	-1619.85 A	6.19 C	-0.23 C
53.2	51.61 L	13.54 A	-0.06 C	-1619.86 A	6.19 C	-0.23 C
	56.64 L	13.80 A	-0.06 C	-1740.12 A	6.69 C	-0.24 C
44.7	56.64 L	13.80 A	-0.06 C	-1740.14 A	6.70 C	-0.24 C
	60.32 L	14.14 A	-0.06 C	-1900.91 A	7.33 C	-0.24 C
33.6	60.32 L	14.14 A	-0.06 C	-1900.89 A	7.33 C	-0.24 C
	64.20 L	14.48 A	-0.06 C	-2064.27 A	7.97 C	-0.25 C
22.4	64.20 L	14.47 A	-0.06 C	-2064.27 A	7.97 C	-0.25 C
	68.34 L	14.79 A	-0.06 C	-2230.01 A	8.60 C	-0.25 C
11.2	68.34 L	14.80 A	-0.05 C	-2230.00 A	8.60 C	-0.25 C
	72.57 L	15.12 A	-0.05 C	-2398.04 A	9.20 C	-0.25 C
base reaction	72.57 L	-15.12 A	0.05 C	2398.04 A	-9.20 C	0.25 C

COMPLIANCE WITH 4.8.2 & 4.5.4

ELEV ft	AXIAL	BENDING	SHEAR + TORSIONAL	TOTAL	SATISFIED	D/t(w/t)	MAX ALLOWED
195.00	0.00H	0.00E	0.00B	0.00E	YES	10.58A	45.2
	0.01A	0.04D	0.00B	0.05D	YES	12.07A	45.2
188.00	0.00B	0.03K	0.00A	0.03K	YES	7.46A	45.2
	0.00B	0.04I	0.00A	0.04I	YES	7.88A	45.2
185.00	0.00C	0.04A	0.00A	0.04A	YES	7.65A	45.2
	0.01C	0.11A	0.01A	0.12A	YES	9.52A	45.2
171.75	0.01C	0.11A	0.01A	0.12A	YES	9.52A	45.2
	0.01C	0.18A	0.01A	0.19A	YES	11.40A	45.2
158.50	0.01C	0.18A	0.01A	0.19A	YES	11.40A	45.2
	0.01C	0.23A	0.01A	0.24A	YES	13.27A	45.2
145.25	0.01C	0.20A	0.01E	0.21A	YES	11.12A	45.2
	0.01C	0.21A	0.01E	0.21A	YES	11.70A	45.2
140.50	0.01C	0.21A	0.01A	0.22A	YES	11.40A	45.2
	0.01C	0.23A	0.01A	0.24A	YES	13.11A	45.2
126.42	0.01L	0.23A	0.01A	0.24A	YES	13.11A	45.2

	0.01L	0.24A	0.01A	0.24A	YES	14.81A	45.2
112.33							
	0.01L	0.24A	0.01A	0.24A	YES	14.81A	45.2
	0.01L	0.24A	0.01A	0.25A	YES	16.52A	45.2
98.25							
	0.01L	0.24A	0.01A	0.25A	YES	16.52A	45.2
	0.01L	0.24A	0.01A	0.25A	YES	17.31A	45.2
91.75							
	0.01L	0.25A	0.01A	0.26A	YES	16.96A	45.2
	0.01L	0.25A	0.01A	0.26A	YES	18.52A	45.2
78.92							
	0.01L	0.25A	0.01A	0.26A	YES	18.52A	45.2
	0.01L	0.25A	0.01A	0.26A	YES	20.07A	45.2
66.08							
	0.01L	0.25A	0.01A	0.26A	YES	20.07A	45.2
	0.01L	0.25A	0.00A	0.26A	YES	21.63A	45.2
53.25							
	0.01L	0.21A	0.00A	0.22A	YES	18.71A	45.2
	0.01L	0.21A	0.00A	0.22A	YES	19.61A	45.2
44.75							
	0.01L	0.21A	0.00A	0.22A	YES	19.30A	45.2
	0.01L	0.21A	0.00A	0.22A	YES	20.49A	45.2
33.56							
	0.01L	0.21A	0.00A	0.22A	YES	20.49A	45.2
	0.01L	0.21A	0.00A	0.22A	YES	21.67A	45.2
22.37							
	0.01L	0.21A	0.00A	0.22A	YES	21.67A	45.2
	0.01L	0.21A	0.00A	0.22A	YES	22.86A	45.2
11.19							
	0.01L	0.21A	0.00A	0.22A	YES	22.86A	45.2
	0.01L	0.21A	0.00A	0.22A	YES	24.05A	45.2
0.00							

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

DOWN	SHEAR.w.r.t.WIND.DIR ALONG	ACROSS	MOMENT.w.r.t.WIND.DIR ALONG	ACROSS	TORSION
kip	kip	kip	ft-kip	ft-kip	ft-kip
72.57	15.12	-0.05	-2398.04	9.20	-0.25
L	A	C	A	C	C

Sabre Industries™
Towers and Poles

SO#: 19-1271-JDS Opt. 2
Site Name: East Paris, KY
Date: 8/20/2018

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

Pole Data

Diameter:	73.190	in (flat to flat)
Thickness:	0.5	in
Yield (Fy):	65	ksi
# of Sides:	18	"0" IF Round
Strength (Fu):	80	ksi

Reactions

Moment, Mu:	9483.41	ft-kips
Axial, Pu:	87.42	kips
Shear, Vu:	59.74	kips

Anchor Rod Data

Quantity:	24		
Diameter:	2.25	in	
Rod Material:	A615		
Strength (Fu):	100	ksi	
Yield (Fy):	75	ksi	
BC Diam. (in):	80.5	BC Override:	

Anchor Rod Results

Maximum Rod (Pu+ Vu/η):	244.2 Kips	
Allowable Φ*Rnt:	260.0 Kips	(per 4.9.9)
Anchor Rod Interaction Ratio:	**93.9%** Pass	

Plate Data

Diameter (in):	86.25	Dia. Override:	
Thickness:	2.5	in	
Yield (Fy):	50	ksi	
Eff Width/Rod:	9.68	in	
Drain Hole:	2.625	in. diameter	
Drain Location:	34.5	in. center of pole to center of drain hole	
Center Hole:	61	in. diameter	

Base Plate Results

Base Plate (Mu/Z):	36.9 ksi	
Allowable Φ*Fy:	45.0 ksi	(per AISC)
Base Plate Interaction Ratio:	**81.9%** Pass	

EXHIBIT D

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

Aeronautical Study No.
2017-ASO-4174-OE
Prior Study No.
2007-ASO-1938-OE

Issued Date: 09/26/2018

Chad Doherty
TowerCo 2013 LLC
5000 Valleystone Dr
Cary, NC 27519

**** Extension ****

A Determination was issued by the Federal Aviation Administration (FAA) concerning:

Structure:	Antenna Tower KY0062 East Paris - Tower (Monopole)
Location:	Paris, KY
Latitude:	38-12-54.78N NAD 83
Longitude:	84-14-40.85W
Heights:	807 feet site elevation (SE)
	199 feet above ground level (AGL)
	1006 feet above mean sea level (AMSL)

In response to your request for an extension of the effective period of the determination, the FAA has reviewed the aeronautical study in light of current aeronautical operations in the area of the structure and finds that no significant aeronautical changes have occurred which would alter the determination issued for this structure.

Accordingly, pursuant to the authority delegated to me, the effective period of the determination issued under the above cited aeronautical study number is hereby extended and will expire on 03/26/2020 unless otherwise extended, revised, or terminated by this office. You must adhere to all conditions identified in the original determination.

This extension issued in accordance with 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77, concerns the effect of the 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 extension will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (718) 553-2611, or angelique.eersteling@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2017-ASO-4174-OE.

Signature Control No: 322585780-386094427 (EXT)
Angelique Eersteling
Technician

Attachment(s)
Additional Information
Map(s)

cc: FCC

Additional information for ASN 2017-ASO-4174-OE

All conditions previously cited in the original FAA determination will remain in effect.

TOPO Map for ASN 2017-ASO-4174-OE

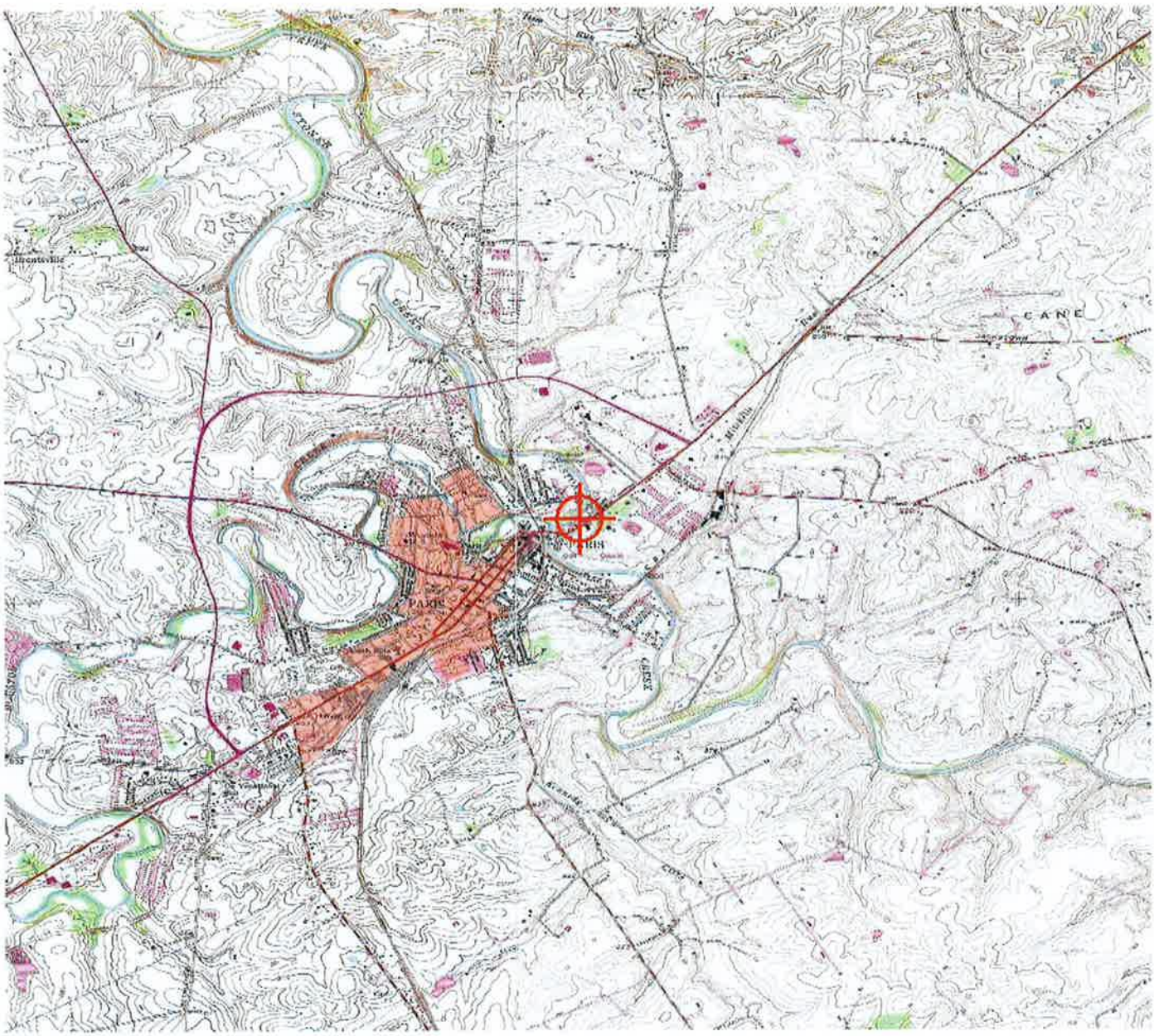

EXHIBIT E

Chad Doherty

From: Houlihan, John F (KYTC) <John.Houlihan@ky.gov>
Sent: Friday, August 03, 2018 8:38 AM
To: Chad Doherty
Subject: RE: Request for KY Airport Zoning Commission (KAZC) Approval for a 229' Temp Crane (TowerCo ID: KY0062 / East Paris)

The 199' tower does not require a permit from the KAZC, the tower does not exceed 200 feet above ground level and is located beyond the 20,000 foot horizontal jurisdictional distance from the Georgetown and Cynthiana Airports. Thank you

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

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

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From: Chad Doherty <cdoherty@towerco.com>
Sent: Thursday, August 02, 2018 4:28 PM
To: Houlihan, John F (KYTC) <John.Houlihan@ky.gov>
Cc: Amanda Adams <AAdams@towerco.com>
Subject: RE: Request for KY Airport Zoning Commission (KAZC) Approval for a 229' Temp Crane (TowerCo ID: KY0062 / East Paris)
Importance: High

Hello John,
Back in May of 2017, you provided the attached KAZC approval that would allow TowerCo to operate a 226' Temp Crane that will be used to construct a 199' Monopole Tower. The tower itself did not require KAZC approval. Only the crane since it was over 200'

We are currently working through zoning applications/approvals and the zoning would like us to submit something to them showing that KAZC also has no objection to the tower.

Would you be able to provide something that we can present to zoning showing KAZC has no objection to the tower? I have also attached the FAA DNH for Tower in case you needed to see it.

Note: We are still approximately a year away of constructing the tower. Once we get within 4 months, I will request for you to amend the dates & times on the Temp Permit for the Crane as we discussed below.

EXHIBIT F

Date: **October 29, 2014**

Amanda Adams
TowerCo
5000 Valleystone Drive
Cary, NC 27519
Office: (919) 469-5559

Tower Engineering Professionals, Inc.
326 Tryon Road
Raleigh, NC 27603
(919) 661-6351
Geotech@tepgroup.net

Subject: **Subsurface Exploration Report**

TowerCo Designation:	**Site Number:**	KY0062
	Site Name:	East Paris
Engineering Firm Designation:	**TEP Project Number:**	57808.25425
Site Data:	**East Main Street, Paris, KY 40361 (Bourbon County)** **Latitude N38 ° *12' 54.78"*, Longitude W84 ° *14' 40.85"*** **196 Foot - Proposed Monopole Tower**	

Dear Ms. Adams,

Tower Engineering Professionals, Inc. is pleased to submit this **"Subsurface Exploration Report"** to evaluate subsurface conditions in the tower area as they pertain to providing support for the tower foundation.

This report has been prepared in accordance with generally accepted geotechnical engineering practice for specific application to this project. The conclusions in this report are based on the applicable standards of TEP's practice in this geographic area at the time this report was prepared. No other warranty, express or implied, is made.

TEP assumes the current ground surface elevation; tower location and subsequent centerline provided are correct and are consistent with the elevation and centerline to be used for construction of the structure. Should the ground surface elevation be altered and/or the tower location be moved or shifted TEP should be contacted to determine if additional borings are necessary.

The analyses and recommendations submitted herein are based, in part, upon the data obtained from the subsurface exploration. The soil conditions may vary from what is represented in the boring log. While some transitions may be gradual, subsurface conditions in other areas may be quite different. Should actual site conditions vary from those presented in this report, TEP should be provided the opportunity to amend its recommendations as necessary.

We at *Tower Engineering Professionals, Inc.* appreciate the opportunity of providing our continuing professional services to you and TowerCo. If you have any questions or need further assistance on this or any other projects please give us a call.

Report Prepared/Reviewed by: Stephen W. Nickerson, E.I.T. / John D. Longest, P.E.

Respectfully submitted by:

Andrew T. Haldane, P.E.

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1) PROJECT DESCRIPTION

Based on the preliminary drawings, it is understood a monopole communications tower will be constructed at the referenced site. The structure loads will be provided by the tower manufacturer.

2) SITE EXPLORATION

The field exploration included the performance of one soil test boring (B-1) to the auger refusal depth of 14.7 feet (bgs) adjacent to the staked centerline of the proposed monopole tower. The boring was performed by an ATV mounted drill rig using continuous flight hollow stem augers to advance the hole. Split-spoon samples and Standard Penetration Resistance Values (N-values) were obtained in accordance with ASTM D 1586 at a frequency of four samples in the top 10 feet and one sample thereafter to auger refusal.

The Split-spoon samples were transported to the TEP laboratory where they were classified by a Geotechnical Engineer in general accordance with the Unified Soil Classification System (USCS), using visual-manual identification procedures (ASTM D 2488).

Diamond-bit core drilling procedures were used to help determine the character and continuity of the rock in boring B-1. The core drilling procedures were in accordance with ASTM Specification D-2113. Rock core samples of the materials penetrated were protected and retained in a swivel-mounted inner tube of the core barrel. Upon completion of the drill run, the core barrel was brought to the surface and samples removed and placed in standard boxes. The samples were classified by a Geotechnical Engineer and the "Recovery" and "Rock Quality Designation" were determined.

The "Recovery" is the ratio of the sample length obtained to the length drilled, expressed as a percent. The "Rock Quality Designation" (RQD) is the percent of the recovered rock samples in lengths of four or more inches, compared to the total length of the core run. This designation is generally applied to samples of NWX size (2-1/8 inch diameter) or larger and to samples described as moderately hard or harder. The percent recovery and RQD are related to rock soundness and continuity. Generalized rock descriptions, percent recovery, and the RQD value are shown on the boring log.

A Boring Location Plan showing the approximate boring location, a Boring Log presenting the subsurface information obtained and a brief guide to interpreting the boring log are included in the Appendix.

3) SITE CONDITIONS

The site is located off of East Main Street in Paris, Bourbon County, Kentucky. The proposed tower and compound are to be located adjacent to an existing building. The ground topography is lightly sloping.

4) SUBSURFACE CONDITIONS

The following description of subsurface conditions is brief and general. For more detailed information, the individual Boring Log contained in Appendix B - Boring Log may be consulted.

4.1) Soil

The USCS classification of the materials encountered in the boring include Fill-CH, Fill-SP, Fill-SC and Limestone. The Standard Penetration Resistance ("N" Values) recorded in the materials ranged from 35 blows per foot to 50 blows per 0 inches of penetration.

4.2) Rock

Limestone was encountered at a depth of 14.7 feet (bgs) in the boring. Refusal of auger advancement was encountered at a depth of 14.7 feet (bgs) in the boring.

4.3) Subsurface Water

Subsurface water was not encountered in the boring at the time of drilling. It should be noted the subsurface water level will fluctuate during the year, due to seasonal variations and construction activity in the area.

4.4) Frost

The TIA frost depth for Bourbon County Kentucky is 20 inches.

4.5) Fill

Man placed fill materials were encountered to a depth of 12.7 feet (bgs). Fill materials were identified containing debris such as grass and wood fragments.

5) TOWER FOUNDATION DESIGN

Based on the boring data, it is the opinion of TEP that a single drilled shaft can be used to support the new tower. The following presents TEP's conclusions and recommendations regarding the foundation type.

5.1) Shallow Foundation

A Shallow foundation is not recommended for this site. See Section 5.2) for drilled shaft foundation design parameters. Refer to section 7 for shallow foundation construction considerations, should they be necessary for auxiliary buildings or lightly loaded structures at the site.

Table 1 – Rock Parameters – Boring B-1

Depth		Rock	Recovery (%)	Rock Quality Designation (%)	Unconfined Compressive Strength (psi)	Grout/Rock[1,2] Bond Stress (psi)	Effective Unit Weight (pcf)
Top	Bottom						
14.7	19.7	Limestone	100	13	-	-	130
19.7	21	Limestone	100	54	9380	450	130
21	24.7	Limestone	100	54	7330	450	130

Notes:
1) These values should be considered ultimate rock parameters. A minimum factor of safety of 4 should be utilized
2) The rock encountered is not considered competent, see section 5.2 for design recommendations

5.2) Rock Anchor Foundations

A rock anchor foundation cannot be utilized at the reference site. Rock anchor design considerations are being provided should they become necessary for foundation installation. The rock anchors should consist of high strength grouted rock bolts (tensioned anchors). The anchors should extend into the competent rock and have the embedment necessary to resist the applied loads. Group effects can cause significant reductions in calculated resistance. Considerations for group effects should be given for rock anchor designs that utilize multiple closely spaced anchors. Competent rock was not encountered at the time of the exploration. Rock competency is typically estimated based on compressive strength of the intact rock, RQD value, joint spacing, condition of the joints, and ground water conditions.

Embedment depths for cement grout bonded rock anchors are often determined by using the rock cone method. Unlike a mechanical anchor, a bonded anchor must include a bond length in the embedment depth. The bond length allows the applied tensile load to be transferred to the surrounding rock. Therefore the embedment depth of a pre-stressed bonded rock anchor is made up of the free-stress length and the bond length.

Bond resistance values are typically estimated from the unconfined compressive strength of the rock. However, design values obtained from laboratory tests on small specimens should be adjusted to account for scale effects. For bond resistance values, TEP recommends an ultimate value of 450 psi be used for design. TEP recommends that a factor of safety of 4 be utilized given the limited extent of the boring. The bond resistance value should be applied to rock that is considered competent. Rock samples with near 100% recovery, RQD values greater than 75%, slightly rough to very rough rock surfaces and joint gaps less than 1 mm can be considered competent. TEP recommends that 50% of all rock anchor or a minimum of 4 be proof loaded to 80% of their design load to verify their adequacy.

5.3) Drilled Shaft Foundation

The following values may be used for design of a drilled shaft foundation. TEP recommends the side frictional and lateral resistance values developed in the top section of the caisson for a depth equal to the half the diameter of the caisson or the frost depth, whichever is greater, be neglected in the calculations. The values are based on the current ground surface elevation.

Table 2 – Drilled Shaft Foundation Analysis Parameters

Depth		Soil	Static Bearing[1] (psf)	Side Frictional Resistance[2] (psf)	Cohesion[3] (psf)	Friction Angle[3] (degrees)	Effective Unit Weight (pcf)
Top	Bottom						
0	3.5	Fill-CH	0	0	-	-	110
3.5	6	Fill-CH	0	0	-	-	110
6	8.5	Fill-SP	0	0	-	-	110
8.5	12.7	Fill-SC	0	0	-	-	110
12.7	14.7	Fill-SC	0	0	-	-	110
14.7	19.7	Limestone[4]	68000	480	-	45	130
19.7	25	Limestone[4]	80000	650	-	45	130
25	30	Limestone[4,5]	80000	820	-	45	130
30	35	Limestone[4,5,6]	80000	940	-	45	68
35	40	Limestone[4,5]	80000	1030	-	45	68

Notes:

1) The bearing values provided are net allowable with a minimum factor of safety of 2. Bearing may be increased by 1/3 for transient loading (e.g. wind or earthquake loading). If the bearing depth of the foundation is less than 5 diameters below the ground surface the bearing values listed in Table 1 – Shallow Foundation Analysis Parameters should be utilized
2) The side frictional resistance values provided are allowable with a minimum factor of safety of 2. Side frictional resistance values may be increased by 1/3 for transient loading (e.g. wind or earthquake loading)
3) These values should be considered ultimate soil parameters
4) Due to the highly fractured nature of the rock sample cohesion of the rock cannot be relied upon for strength parameters. Indicated layers have been evaluated as a granular material
5) Soil values for this layer were calculated based off the assumption that materials remain consistent through this layer. Materials should be verified by a Geotechnical Engineer during excavation
6) Subsurface water was not encountered. Subsurface water level is assumed to be approximately 30 feet based on the elevation of Stoner Creek to the north of the site.

6) SOIL RESISTIVITY

Soil resistivity was performed at the TEP laboratory in accordance with ASTM G187-05 (Standard Test Method for Measurement of Soil Resistivity Using the Two Electrode Soil Box Method). Test results indicated a result of 2,800 ohms/cm.

7) CONSTRUCTION CONSIDERATIONS - SHALLOW FOUNDATION

7.1) Excavation

The boring data indicates excavation to the expected subgrade level for the shallow foundation will extend through sand and clay with some rock fragments. A large tracked excavator should be able to remove the materials with moderate difficulty. Due to the unknown size of rock fragments, a large tracked excavator with rock teeth and/or a pneumatic hammer may be necessary to remove the materials with moderate difficulty. TEP anticipates the depth to the surface of the rock will vary outside of the boring location.

Excavations should be sloped or shored in accordance with local, state and federal regulations, including OSHA (29 CFR Part 1926) excavation trench safety standards. It is the responsibility of the contractor for site safety. This information is provided as a service and under no circumstance should TEP be assumed responsible for construction site safety.

7.2) Foundation Evaluation/Subgrade Preparation

After excavation to the design elevation for the footing, the materials should be evaluated by a Geotechnical Engineer or a representative of the Geotechnical Engineer prior to reinforcement and concrete placement. This evaluation should include probing, shallow hand auger borings and dynamic cone penetrometer testing (ASTM STP-399) to help verify that suitable residual material lies directly under the foundation and to determine the need for any undercut and replacement of unsuitable materials. Loose surficial material should be compacted in the excavation prior to reinforcement and concrete placement to stabilize surface soil that may have become loose during the excavation process. TEP recommends a 6-inch layer of compacted crushed stone be placed just after excavation to aid in surface stability.

7.3) Rock Anchor Installation

Rock anchor materials verification and installation should be evaluated by a Geotechnical Engineer or a representative of the Geotechnical Engineer during installation to verify compliance with materials manufacturer and foundation design specifications.

7.4) Fill Placement and Compaction

Backfill materials placed above the shallow foundation to the design subgrade elevation should not contain more than 5 percent by weight of organic matter, waste, debris or any otherwise deleterious materials. To be considered for use, backfill materials should have a maximum dry density of at least 100 pounds per cubic foot as determined by standard Proctor (ASTM D 698), a Liquid Limit no greater than 40, a Plasticity Index no greater than 20, a maximum particle size of 4 inches, and 20 percent or less of the material having a particle size between 2 and 4 inches. Because small handheld or walk-behind compaction equipment will most likely be used, backfill should be placed in thin horizontal lifts not exceeding 6 inches (loose).

Fill placement should be monitored by a qualified Materials Technician working under the direction of a Geotechnical Engineer. In addition to the visual evaluation, a sufficient amount of in-place field density tests should be conducted to confirm the required compaction is being attained.

7.5) Reuse of Excavated Soil

TEP does not recommend the use of fat clay and soils with debris as backfill. A suitable borrow source that meets the above requirements should be identified prior to construction.

If variability in the subsurface materials is encountered, a representative of the Geotechnical Engineer should verify that the design parameters are valid during construction. Modification to the design values presented above may be required in the field.

8) CONSTRUCTION CONSIDERATIONS - DRILLED SHAFTS

Based on TEP's experience a conventional drilled shaft rig (Hughes Tool LDH or equivalent) can be used to excavate to the auger refusal depth of TEP's boring. An earth auger can typically penetrate the materials encountered to the auger refusal depth of the boring with moderate to severe difficulty. Materials below the auger refusal depth will require a coring bit or roller-bit to remove the material. Special excavation equipment may be necessary for a shaft greater that 60-inches in diameter. If hole collapse is encountered during construction, the design and geotechnical engineers should be contacted immediately to make any necessary adjustments.

The following are general procedure recommendations in drilled shaft construction using the "dry" method:

1) Drilling equipment should have cutting teeth to result in a hole with little or no soil smeared or caked on the sides; a spiral like corrugated side should be produced. The shaft diameter should be at least equal to the design diameter for the full depth.

2) The drilled shaft should be drilled to satisfy a plumbness tolerance of 1.5 to 2 percent of the length and an eccentricity tolerance of 2 to 3 inches from plan location.

3) Refer to Section 4.3 for subsurface water information. Water will fluctuate during the year and during rain events. Any subsurface water should be removed by pumping, leaving no more than 3 inches in the bottom of the shaft excavation.

4) A removable steel casing should be installed in the shaft for the entire depth to prevent caving of the excavation sides due to soil relaxation. Loose soils in the bottom of the shaft should be removed.

5) The drilled shaft should be evaluated by the Geotechnical Engineer or their representative to confirm suitable end bearing conditions and to verify the proper diameter and bottom cleanliness. The shaft should be evaluated immediately prior to and during concrete operations.

6) The drilled shaft should be concreted as soon as practical after excavation to reduce the deterioration of the supporting soils due to caving and subsurface water intrusion.

7) The slump of the concrete is critical for the development of side shear resistance. TEP recommends a concrete mix having a slump of 6 to 8 inches be used with the minimum compressive strength specified by the structural engineer. A mix design incorporating super plasticizer will likely be required to obtain this slump.

8) The concrete may be allowed to fall freely through the open area in the reinforcing steel cage provided it is not allowed to strike the reinforcing steel or the casing prior to reaching the bottom of the shaft excavation.

9) The protective steel casing should be extracted as concrete is placed. A head of concrete should be maintained above the bottom of the casing to prevent soil and water intrusion into the concrete below the casing.

The contractor may elect to utilize the "slurry" method for shaft construction. The following are general procedure recommendations in drilled shaft construction using the "slurry" method:

1) Slurry drilled shafts are constructed by conventional caisson drill rigs excavating beneath a drilling mud slurry. Typically, the slurry is introduced into the excavation after the groundwater table has been penetrated and/or the soils on the sides of the excavation are observed to be caving-in. When the design shaft depth is reached, fluid concrete is placed through a tremie pipe at the bottom of the excavation.

2) The slurry level should be maintained at a minimum of 5 feet or one shaft diameter, whichever is greater, above the subsurface water level.

3) Inspection during excavation should include verification of plumbness, maintenance of sufficient slurry head, monitoring the specific gravity, pH and sand content of the drilling slurry, and monitoring any changes in the depth of the excavation between initial approval and prior to concreting.

4) A removable steel casing should be installed in the shaft for the entire depth to prevent caving of the excavation sides due to soil relaxation. Loose soils in the bottom of the shaft should be removed.

5) The specific gravity or relative density of the drilling mud slurry should be monitored from the initial mixing to the completion of the excavation. An increase in the specific gravity or density of the drilling slurry by as much as 10 percent is indicative of soil particles settling out of the slurry onto the bottom of the excavation. This settling will result in a reduction of the allowable bearing capacity of the bottom of the drilled shaft.

6) After approval, the drilled shaft should be concreted as soon as practical using a tremie pipe.

7) For slurry drilled shafts, the concrete should have a 6 to 8 inch slump prior to discharge into the tremie. The bottom of the tremie should be set at about one tremie pipe diameter above the excavation. A closure flap at the bottom of the tremie should be used, or a sliding plug introduced into the tremie before the concrete, to reduce the potential for the concrete being contaminated by the slurry. The bottom of the tremie must be maintained in concrete during placement, which should be continuous.

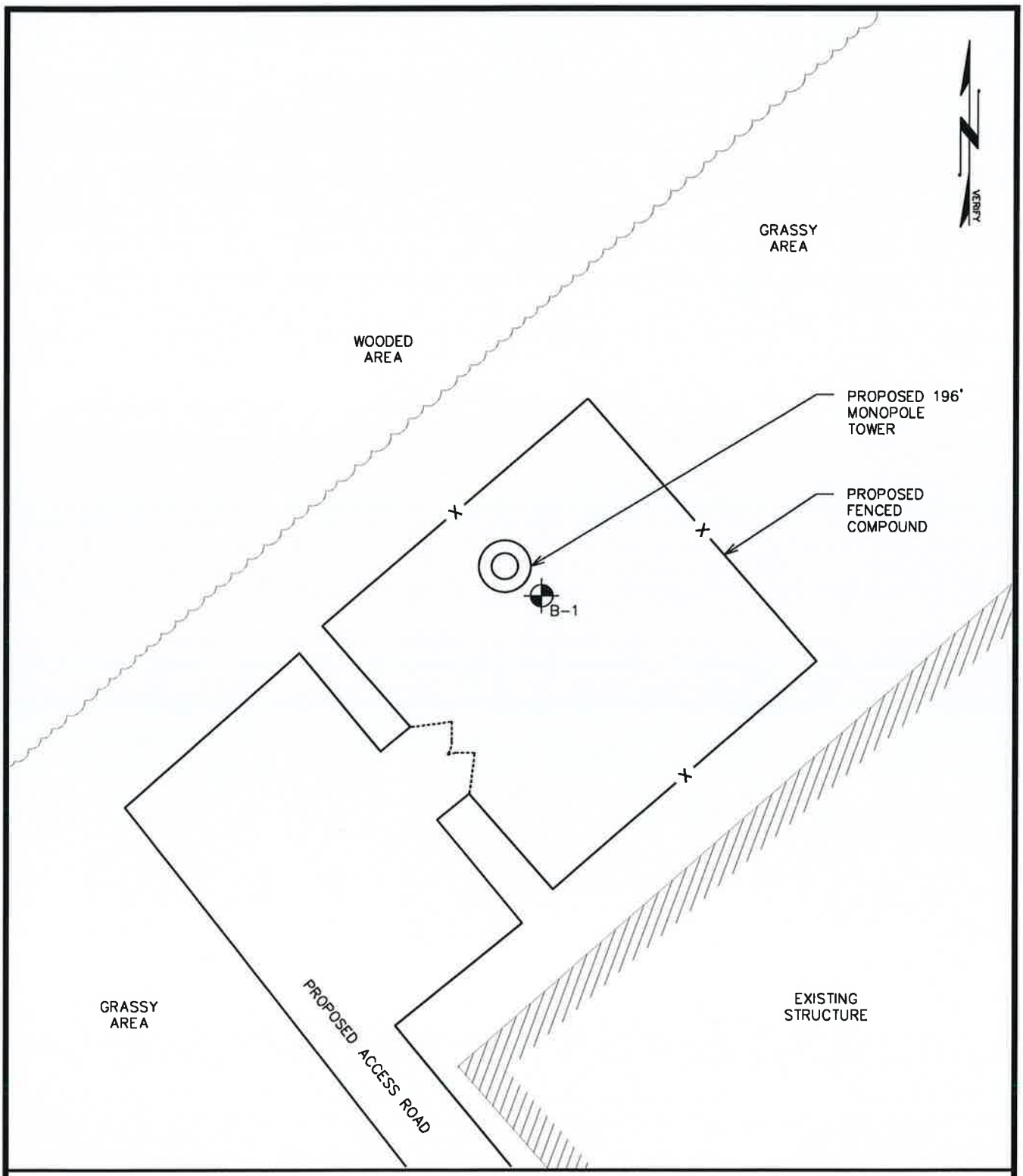
8) The protective steel casing should be extracted as concrete is placed. A head of concrete should be maintained above the bottom of the casing to prevent soil and water intrusion into the concrete below the casing.

9) Additional concrete should be placed via the tremie causing the slurry to overflow from the excavation in order to reduce the likelihood of slurry pockets remaining in the drilled shaft.

If variability in the subsurface materials is encountered, a representative of the Geotechnical Engineer should verify that the design parameters are valid during construction. Modification to the design values presented above may be required in the field.

APPENDIX A

BORING LAYOUT



BORING LAYOUT

SCALE: N.T.S.

PREPARED BY:
TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603
(919) 661-6351
www.tepgroup.net

PREPARED FOR:
TowerCo
5000 VALLEYSTONE DRIVE
CARY, NC 27519
(919) 469-5559

PROJECT INFORMATION:
EAST PARIS
SITE #: KY0062
EAST MAIN STREET
PARIS, KY 40361
(BOURBON COUNTY)

REVISION: 0
TEP JOB #: 57808.25425
SHEET NUMBER:
C-1

APPENDIX B

BORING LOG

Tower Engineering Professionals, Inc.
326 Tryon Road
Raleigh, NC 27603
Telephone: 919-661-6351
Email: Geotech@tepgroup.net

Key to Soil Symbols and Terms

TERMS DESCRIBING CONSISTENCY OR CONDITION

COARSE-GRAINED SOILS (major portions retained on No. 200 sieve): includes (1) clean gravel and sands and (2) silty or clayey gravels and sands. Condition is rated according to relative density as determined by laboratory tests or standard penetration resistance tests.

Descriptive Terms	SPT Blow Count
Very Loose	< 4
Loose	4 to 10
Medium Dense	11 to 30
Dense	31 to 50
Very Dense	> 50

FINE-GRAINED SOILS (major portions passing on No. 200 sieve): includes (1) inorganic and organic silts and clays (2) gravelly, sandy, or silty clays, and (3) clayey silts. Consistency is rated according to shearing strength, as indicated by penetrometer readings, SPT blow count, or unconfined compression tests.

Descriptive Terms	SPT Blow Count
Very Soft	< 2
Soft	2 to 4
Medium Stiff	5 to 8
Stiff	9 to 15
Very Stiff	16 to 30
Hard	> 30

GENERAL NOTES

1. Classifications are bases on the Unified Soil Classification System and include consistency, moisture, and color. Field descriptions have been modified to reflect results of laboratory tests where deemed appropriate.

2. Surface elevations are based on topographic maps and estimated locations and should be considered approximate.

3. Descriptions on these boring logs apply only at the specific boring locations and at the time the borings were made. They are not guaranteed to be representative of subsurface condition at other locations or times.

	Group Symbols	Typical Names
	GW	Well-graded gravels, gravel-sand mixtures, little or no fines
	GP	Poorly-graded gravels, little or no fines/sands
	GM	Silty gravels, gravel-sand-silt mixtures
	GC	Clayey gravels, gravel-sand-silt mixtures
	SW	Well-graded sands, gravelly sands, little or no fines
	SP	Poorly-graded sands, little or no fines/sands/gravels
	SM	Silty sands, sand-silt mixtures
	SC	Clayey sands, sand-clay mixtures
	ML	Inorganic silts and very fine sands, rock floor, silty or clayey fine sands or clayey silts with slight plasticity
	CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
	OL	Organic silts and organic silty clays of low plasticity
	MH	Inorganic silts, micaceous or distomaceous fine sandy or silty soils, elastic silts
	CH	Inorganic clays of high plasticity, fat clays
	OH	Organic clays of medium to high plasticity, organic silts
	PT	Peat and other highly organic soils

Sampler Symbols

- Split Spoon
- Standard Penetration Test (SPT)
- Pushed Shelby Tube
- Auger Cuttings
- Grab Sample
- Dynamic Cone Penetrometer
- Hand Auger
- Rock Core

Log Abbreviations

ATD - At Time of Drilling
AD - After Drilling
EOD - End of Drilling
RMR - Rock Mass Rating
WOH - Weight of Hammer
WOR - Weight of Rod
REC - Rock Core Recovery
RQD - Rock Quality Designation

Tower Engineering Professionals, Inc.
326 Tryon Road
Raleigh NC 27603
Telephone: 919-661-6351
Email: Geotech@tepgroup.net

LOG OF BORING B-1

PROJECT	SITE ID:	TEP NO.:
East Paris	KY0062	57808.25425

DATE STARTED	DRILLING METHOD	HOLE SIZE	CITY, STATE
10/17/2014	Hollow Stem Auger	3 1/4in	Paris, Kentucky

DATE COMPLETE	HAMMER WEIGHT/FALL	HAMMER TYPE	TOTAL DEPTH	DRILL RIG TYPE
10/17/2014	140lbs / 30in	Auto Hammer	24.7 FT	CME-550

GROUND EL.	LOGGED BY	CHECKED BY	BACKFILL	DEPTH/EL. GROUNDWATER
806.0	TAD	MJN	Cuttings	Not Encountered

BORING LOCATION: Adjacent to the centerline of the proposed tower

SAMPLE NUMBER	SAMPLE LENGTH (INCHES)	BLOW COUNTS (N) / REC% / RQD%	ELEVATION (FEET)	DEPTH (FEET)	DESCRIPTION AND CLASSIFICATION	REMARKS	POCKET PEN TSF	UNCONFINED STRENGTH, PSF	UNIT WEIGHT PCF
					0.0-3.5: Fill - Hard, brown, fat CLAY (CH), trace sand, trace silt, little fine to coarse gravel, trace roots, moist				
S1	18	6-15-20 (35)				Driller Note: Asphalt and concrete materials encountered to a depth of 12.7 feet (bgs).	1		
			802.5						
S2	0	50/0"			3.5-6.0: No Recovery	Driller Note: Refusal on fill			
				5					
			800.0						
S3	18	30-25-10 (35)			6.0-8.5: Fill - Dense, black, fine to coarse, poorly graded SAND (SP), little silt, little fine to coarse gravel, trace particulate organics, moist				
			797.5						
S4	8	21-50/2"			8.5-12.7: Fill - Very dense, brown and gray, clayey SAND (SC), trace silt, some rock fragments, moist	Driller Note: Refusal on fill			
				10					
			793.3						
S5	2	50/2"			12.7-14.7: Fill - Very dense, brown and gray, clayey SAND (SC), trace silt, some rock fragments, trace grass, trace wood fragments, moist	Driller Note: Top of rock at 12.7 feet (bgs), Weathered Limestone and Shale			
			791.3						
				15	14.7-19.7: Auger Refusal at 14.7 feet Light gray, moderately weathered, fine grained, intensely fractured, LIMESTONE, moist				
RC1	60	100 / 13							
			786.3						
				20	19.7-24.7: highly fractured Unconfined Compressive Strength: 9380 psi at 21 feet (bgs) Unconfined Compressive Strength: 7330 psi at 23 feet (bgs)				
RC2	60	100 / 54							
			781.3						
				25	24.7: Rock Core Terminated				

* Where elevations have not been provided in site documents, they have been estimated from available online sources.

EXHIBIT G

Directions prepared by:

Jacob C. Walbourn
McBrayer, McGinnis, Leslie & Kirkland, PLLC
(859) 231-8780

From the Bourbon County Courthouse (301 Main Street, Paris, Kentucky 40361):

1. Travel northwest on Main Street approximately 3/10ths of 1 mile to 93 East Main Street. The site is behind the two story warehouse building on the left.

EXHIBIT H

OPTION AND GROUND LEASE AGREEMENT

THIS OPTION AND GROUND LEASE AGREEMENT ("Agreement") is effective as of the latter of the signature dates below by and between Nan S. Kendall, a married woman, and Sherry B. Rankin, a married woman (collectively, "Optionor") and TOWERCO II LLC, a Delaware limited liability company ("Optionee").

I. OPTION TO LEASE

1. Grant of Option. Optionor is the owner of a parcel or parcels of real property located in the county of Bourbon, State of Kentucky, as more particularly described in **Exhibit A** annexed hereto (the "Parent Parcel"). For good and valuable consideration and the mutual promises herein set forth, Optionor hereby gives and grants unto Optionee and its assigns, an exclusive and irrevocable option ("Option") to lease a certain portion or portions of the Parent Parcel (the "Property"), together with easements for ingress, egress and utilities for the duration of this Agreement (collectively, the "Easement"). The Property together with the Easement is collectively the "Premises" and are more particularly described and/or depicted on **Exhibit B** attached hereto. Optionor agrees and acknowledges that Optionee may at Optionee's sole cost and expense have a metes and bounds survey prepared of the Premises and that the legal description of the Premises as shown on the survey shall thereafter become the legal description of the Premises. Any assignment of this Option that is entered into by Optionor or Optionee shall be subject to the provisions of this Agreement. Optionee may assign this Agreement without the consent of Optionor.

2. Option Initial Term. The initial term of this Option shall be for twelve (12) months from the date this Option is executed by Optionee ("Option Initial Term").

3. Consideration for Option. Consideration for the Initial Term of the Option granted hereunder shall be [redacted] ("Option Consideration").

4. Extension of Option. This Option can be extended at the discretion of Optionee for one (1) additional period(s) of twelve (12) months ("Option Renewal Term") by Optionee paying to Optionor the additional consideration of [redacted] ("Option Extension Consideration") prior to the expiration of the Option Initial Term.

5. Optionor's Representations and Warranties. As an inducement for Optionee to enter into and be bound by the terms of this Option, Optionor represents and warrants to Optionee and Optionee's successors and assigns that Optionor (i) has good and marketable title to the Premises, (ii) has the authority to enter into and be bound by the terms of this Option, (iii) to the best of Optionor's knowledge, there are no pending or threatened lawsuits, administrative actions (including bankruptcy or insolvency proceedings), suits, claims or causes of action against Optionor or which may otherwise affect the Premises, and (iv) the Premises are not presently subject to an option, lease, agreement or other contract which may adversely affect Optionor's ability to fulfill its obligations under this Option. Optionor covenants and agrees that it shall not grant an option or enter into any contract which will adversely affect Optionee's Intended Use (as defined in paragraph 10 below) of the Premises until this Option expires or is terminated by Optionee. The representations and warranties of Optionor shall survive the exercise of the Option and the termination or expiration of the term of this Agreement.

6. Taxes. Optionor shall pay any ad valorem taxes or other special assessment taxes attributable to the Premises during the Option.

7. Inspections and Investigations. Optionor hereby grants to Optionee, its officers, agents, employees and independent contractors the right and privilege to enter upon the Premises at any time after the date of this Option, to perform or cause to be performed test borings of the soil, environmental audits, engineering studies and to conduct a survey of the Premises. Optionor shall provide Optionee with any necessary keys or access codes to the Premises if needed for ingress and egress, and Optionee shall not unreasonably interfere with Optionor's use of the Premises in conducting these activities.

8. Further Acts. Optionor shall cooperate with Optionee in executing any documents necessary to protect Optionee's rights under this Option or Optionee's use of the Premises and to take such action as Optionee may reasonably require to effect the intent of this Option. Optionor hereby irrevocably appoints Optionee or Optionee's agent as Optionor's agent to file applications on behalf of Optionor with federal, state and local governmental authorities which applications relate to Optionee's intended use of the Premises including but not limited to land use and zoning applications.

II. LEASE AGREEMENT

9. Exercise of Option. Upon the tender of written notice of Optionee's intent to exercise the Option, the terms of this Agreement applying to the lease of the Premises shall govern the relationship of the parties and this Agreement shall thereafter be referred to as the "Lease," Optionor shall thereafter be referred to as Lessor and Optionee shall thereafter be referred to as Lessee. The date of the written notice to exercise the Option shall constitute the commencement date of the Lease ("Commencement Date").

10. Use. The Premises may be used by Lessee and Lessee's tenants and licensees for the transmission and receipt of wireless communication signals in any and all frequencies, the construction, maintenance, operation, subleasing and licensing of towers, antennas, and buildings, and related facilities and activities, and for any other uses which are incidental thereto ("Intended Use"). Lessee and its sublessees and licensees shall have access to the Premises twenty-four (24) hours a day, seven (7) days a week. Lessor agrees to cooperate with Lessee in obtaining, at Lessee's expense, all licenses and permits required for Lessee's use of the Premises (the "Governmental Approvals"). Lessor further agrees to cooperate with Lessee in executing and delivering any documents requested by Lessee to obtain Government Approvals necessary for its Intended Use. In the event that Lessee's Intended Use of the Premises is actually or constructively prohibited then, in addition to any other remedies available to Lessee, Lessee shall have the option to terminate this Lease with notice to Lessor.

11. Initial Term. The term of this Lease shall be five (5) years commencing on the Commencement Date and terminating on the fifth (5^{th}) anniversary of the Commencement Date ("Initial Term").

12. Renewal Terms. Lessee shall have the right to extend this Lease for ten (10) additional five (5) year terms ("Renewal Terms"). Each Renewal Term shall be on the same terms and conditions as set forth in this Lease except that Rent shall increase as provided in paragraph 13. This Lease shall automatically be renewed for each successive Renewal Term unless Lessee notifies Lessor in writing of Lessee's intention not to renew the Lease at least thirty (30) days prior to the expiration of the Initial Term or the Renewal Term which is then in effect.

13. Consideration. During the Initial Term, Lessee shall pay Lessor the monthly sum of [redacted] ("Rent"). Rent shall be payable on the first day of each month in advance to Lessor at Lessor's address as specified in paragraph 24 below. Rent shall be increased on the commencement of each Renewal Term by [redacted] over the Rent payable during the immediately preceding term. Lessee shall be entitled to withhold payment of the Rent until such time as Lessor executes and delivers a completed W-9 form to Lessee setting forth Lessor's federal

tax identification number. Lessor acknowledges that the foregoing is a reasonable requirement in order to allow Lessee to comply with its legal requirements. Lessor agrees to accept payment of the Rent by direct deposit into its designated account via an electronic funds transfer and shall promptly execute and deliver to Lessee a completed authorization agreement together with such other information as Lessee may require. If this Lease is terminated at a time other than on the anniversary of the Commencement Date, Rent shall be prorated as of the date of termination and all Rent paid in advance of the termination date shall be refunded to Lessee. In the event that Lessee makes an overpayment of Rent or any other fee or charges to Lessor during the Initial Term or any Renewal Term of this Lease, Tenant may, but shall not be obligated to, treat any such overpayment as prepaid Rent and apply such amount as a credit against any future Rent, fee, or sum due to the Lessor. Lessor agrees to accept payment via electronic funds

14 Improvements; Utilities; Access.

(a) Lessee shall have the right, at Lessee's sole cost and expense, to erect and maintain on the Premises improvements, personal property and facilities necessary or desired for its Intended Use (collectively the "Improvements"). The Improvements shall remain the exclusive property of the Lessee throughout the term and after the termination of this Lease. Lessee may construct, alter, demolish, reconstruct, restore, replace, supplement, modify and reconfigure the Improvements at any time during the Initial Term or any Renewal Term of this Lease. Lessee shall repair any damage to the Parent Parcel caused by its construction activities at the Premises within thirty (30) days of such damage.

Lessee shall remove all of the above-ground portions of the Improvements (including but not limited to the tower) not later than one hundred eighty (180) days following any termination of this Lease and shall restore the Premises to the condition in which it existed as of the Commencement Date, reasonable wear and tear and casualty excluded. Lessor grants Lessee the right to clear all trees, undergrowth, or other obstructions and to trim, cut, and keep trimmed and cut all tree limbs which may interfere with or fall upon the Improvements or Premises. Lessor grants Lessee a non-exclusive easement in, over, across and through other real property owned by Lessor as reasonably required for construction, installation, maintenance, and operation of the Improvements.

(b) Lessee shall have the right to install power, telecommunications, cables, conduit, and any other utilities, including cabinets, vaults and improvements directly related to such utilities, on the Property, at Lessee's expense, and to improve present utilities on the Premises (including but not limited to the installation of emergency power generators). Lessee shall have the right to permanently place utilities on (or to bring utilities across or under) the Premises and the Improvements. In the event that utilities necessary to serve the equipment of Lessee or the equipment of Lessee's licensee(s) or sublessee(s) cannot be located within the Premises, Lessor agrees to cooperate with Lessee and to act reasonably in allowing the location of utilities on the Parent Parcel or other real property owned by Lessor without requiring additional compensation from Lessee or Lessee's licensee(s) or sublessee(s). Lessor shall, upon Lessee's request, execute within fifteen (15) days a separate written easement to the utility company providing the service or Lessee in a form which may be filed of record evidencing this right.

(c) Lessor grants to Lessee, its officers, agents, employees, sublessees, licensees and their independent contractors, the right and privilege to enter upon the Premises and the Parent Tract, to perform or cause to be performed test borings of the soil, environmental audits, engineering studies and to conduct a survey of the Premises and all or part of the Parent Tract. Lessor grants Lessee and its sublessees and licensees a license to use such portion of Lessor's property contiguous to the Premises on a temporary basis as reasonably required during the Term or any Renewal Term of this Lease for the construction, installation, maintenance or removal of the Improvements, including access for construction machinery and equipment, storage of construction materials and equipment and staging areas.

(d) Lessor represents and warrants to Lessee that Lessee shall at all times during this Lease enjoy ingress, egress and access from the Premises twenty-four (24) hours a day, seven (7) days a week to an open and improved public road which presently exists and which shall be adequate to service the Premises and the Improvements. If no such public road exists or ceases to exist in the future, Lessor will grant an exclusive easement to Lessee, Lessee's sublessees and assigns so that Lessee may, at its own expense, construct a suitable private access drive to the Premises and the Improvements. To the degree such access is across other property owned by Lessor, Lessor shall execute an easement within fifteen (15) days of evidencing this right and Lessor shall maintain access to the Easement in a free and open condition so that no interference is caused to Lessee by other lessees, licensees, invitees or agents of the Lessor which may utilize the Easement.

15. Termination. Except as otherwise provided herein, this Lease may be terminated, without any penalty or further liability upon written notice as follows:

(a) By either party upon a default of any covenant or term hereof by the other party which default is not cured within sixty (60) days of receipt of written notice of default (without, however, limiting any other rights available to the parties pursuant to any other provisions hereof); provided, that if the defaulting party commences good faith efforts to cure the default within such period the cure period may be extended upon mutual agreement, in writing, of the parties hereto;

(b) Upon thirty (30) days' written notice by Lessee to Lessor if (i) Lessee is unable to obtain or maintain any license, permit or other Governmental Approval necessary for the construction and operation of the Improvements or Lessee's business or (ii) Lessee's Intended Use of the Premises is actually or constructively interfered with; or

(c) By Lessee for any reason upon written notice from Lessee to Lessor.

16. Subleases. Lessee at its sole discretion shall have the right, without the consent of or notice to Lessor, to license, sublease or otherwise allow the occupancy of all or a portion of the Premises and the Improvements. Lessee's licensee(s) and sublessee(s) shall be entitled to modify the tower and Improvements, and erect and install additional improvements and personal property on the Premises and Improvements, including but not limited to antennas, dishes, cabling, utilities, emergency or back up power, generators, and equipment shelters. Lessee's licensee(s) and sublessee(s) shall be entitled to all rights of ingress and egress to the Premises, the right to install utilities on the Premises and the right to use the Premises for the Intended Use as if said licensee or sublessee were the Lessee under this Lease.

17. Taxes. Lessee shall pay any personal property taxes assessed on the Improvements. Lessor shall pay when due all real property taxes and all other fees and assessments attributable to the Premises. In the event that Lessor fails to pay when due any taxes affecting the Premises or the Easement, Lessee shall have the right but not the obligation to pay such taxes and deduct the full amount of the taxes paid by Lessee on Lessor's behalf from future payments of Rent. Lessor agrees to provide to Lessee a copy of any notice, assessment or billing relating to any real or personal property taxes for which Lessee is responsible under this Lease within thirty (30) days of receipt of same by Lessor. Lessee shall have no obligation to make payment of any real or personal property taxes until Lessee has received notice, assessment or billing relating to such payment in accordance herewith. Lessee shall have the right, at its sole option, and at its sole cost and expense, to appeal, challenge or seek modification of any real or personal property tax assessment or billing for which Lessee is wholly or partly responsible for payment under this Lease. Lessor shall reasonably cooperate with Lessee in filing, prosecuting and perfecting any appeal or challenge to real or personal property taxes as set forth herein, including but not limited to executing consent to appeal or other similar document.

18. Damage or Destruction. If the Premises or the Improvements are destroyed or damaged so as to hinder the effective use of the Improvements in Lessee's judgment, Lessee may elect to terminate this Lease as of the date of the damage or destruction by so notifying the Lessor..

19. Condemnation. If a condemning authority takes all of the Premises, or a portion sufficient in Lessee's determination, to render the Premises in the opinion of Lessee unsuitable for the use which Lessee was then making of the Premises, this Lease shall terminate the earlier of (i) the date title vests in the condemning authority or (ii) the date the condemning authority takes possession of the Premises or a portion of it. Lessor and Lessee shall share in the condemnation proceeds in proportion to the values of their respective interests in the Premises (which for Lessee shall include, where applicable, the value of its Improvements, moving expenses, prepaid rent, lost business, goodwill, and business relocation expenses). A sale of all or part of the Premises to a purchaser with the power of eminent domain in the face of the exercise of eminent domain power shall be treated as a taking by condemnation for the purposes of this paragraph. Except as provided in this paragraph, generally applicable condemnation law will apply in the event of a condemnation.

20. Insurance. Lessee, at Lessee's sole cost and expense, shall procure and maintain on the Premises and on the Improvements, bodily injury and property damage insurance with a combined single limit of at least One Million and 00/100 Dollars ($1,000,000.00) per occurrence. Such insurance shall insure, on an occurrence basis, against liability of Lessee, its employees and agents arising out of or in connection with Lessee's use of the Premises and Improvements. Lessor, at Lessor's sole cost and expense, shall procure and maintain on the Parent Parcel, bodily injury and property damage insurance with a combined single limit of at least One Million Dollars ($1,000,000) per occurrence. Such insurance shall insure, on an occurrence basis, against liability of Lessor, its employees and agents arising out of or in connection with Lessor's use, occupancy and maintenance of the Parent Parcel.

21. Interference. Lessor shall not, nor shall Lessor permit its lessees, licensees, invitees or agents, to use any portion of the Parent Parcel or adjacent real property owned or controlled by Lessor in any way which interferes with Lessee's Intended Use of the Premises. Such interference shall be deemed a material breach of this Lease by Lessor and Lessor shall have the responsibility to immediately terminate such interference. In the event such interferenceis not immediately rectified, Lessor acknowledges that continuing interference will cause irreparable injury to Lessee, and Lessee shall have the right, in addition to any other rights that it may have at law or in equity, to bring an action to enjoin such interference or to terminate this Lease with notice to Lessor.

22. Environmental Compliance. Lessor represents, warrants and agrees (1) that neither Lessor nor, to Lessor's knowledge, any third party has used, generated, stored or disposed of, or permitted the use, generation, storage or disposal of, any contaminants, oils, asbestos, PCBs, hazardous substances or wastes as defined by federal, state or local environmental laws, regulations or administrative orders or other materials the removal of which is required or the maintenance of which is prohibited, regulated or penalized by any federal, state or local government authority ("Hazardous Materials") on, under, about or within the Parent Parcel and/or Easement in violation of any law or regulation, and (2) that Lessor will not, and will not permit any third party to use, generate, store or dispose of any Hazardous Materials on, under, about or within the Parent Parcel and/or Easement in violation of any law or regulation. Lessee agrees that it will not use, generate, store or dispose of any Hazardous Material on, under, about or within the Premises in violation of any law or regulation. This Lease shall at the option of Lessee terminate and be of no further force or effect if Hazardous Materials are discovered to exist on the Parent Parcel and/or Easement through no fault of Lessee after Lessee takes possession of the Premises and Lessee shall be entitled to a refund of all the consideration paid in advance to Lessor under this Lease.

23. Environmental Indemnities.

(a) Lessor, its heirs, grantees, successors, and assigns shall indemnify, defend, reimburse and hold harmless Lessee from and against any and all environmental damages arising from the presence of Hazardous Materials upon, about or beneath the Parent Parcel and/or Easement, or migrating to or from the Parent Parcel and/or Easement, or arising in any manner whatsoever out of the violation of any environmental requirements pertaining to the Parent Parcel and/or Easement and any activities thereon, which conditions exist or existed prior to or at the time of the execution of this Lease or which may occur at any time in the future through no fault of Lessee.

(b) Lessee, its heirs, grantees, successors, and assigns shall indemnify, defend, reimburse and hold harmless Lessor from and against environmental damages caused by the presence of Hazardous Materials on the Premises arising solely as the result of Lessee's activities after the execution of this Lease.

(c) Notwithstanding the obligation of Lessor to indemnify Lessee pursuant to this Lease, Lessor shall, upon demand of Lessee, and at Lessor's sole cost and expense, promptly take all actions to remediate the Parent Parcel and/or Easement which are required by any federal, state or local governmental agency or political subdivision or which are reasonably necessary to mitigate environmental damages or to allow full economic use of the Premises, which remediation is necessitated from the presence upon, about or beneath the Parent Parcel and/or Easement of a Hazardous Material. Such actions shall include but not be limited to the investigation of the environmental condition of the Parent Parcel and/or Easement, the preparation of any feasibility studies, reports or remedial plans, and the performance of any cleanup, remediation, containment, operation, maintenance, monitoring or actions necessary to restore the Parent Parcel and/or Easement to the condition existing prior to the introduction of Hazardous Material upon, about or beneath the Parent Parcel and/or Easement notwithstanding any lesser standard of remediation allowable under applicable law or governmental policies.

(d) The duties and indemnifications in this paragraph shall survive expiration or earlier termination of this Lease.

24. Notices. All notices, requests, demands and other communications hereunder shall be in writing and shall be deemed given if personally delivered or mailed, certified mail, return receipt requested, or via a nationally recognized overnight delivery service to the following addresses or to such other addresses as may be specified in writing at any time during the term of this Lease:

If to Lessor, to:

Name: Nan Kendall
Address: 411 Clintonville Road
Paris, KY 40361
Phone: (859) 987-8879
Email: nskendall@bellsouth.net

If to Lessee, to:

TowerCo II LLC
5000 Valleystone Drive
Cary, North Carolina 27519
Attn: Property Management
Site ID #: KY0020

25. Title and Quiet Enjoyment. Lessor warrants and represents that (i) it has the full right, power, and authority to execute this Lease; (ii) it has good and marketable fee simple title to the Premises free and clear of any liens and encumbrances or mortgages; (iii) there are no easements, licenses, rights, covenants or restrictions on use related to or affecting the Premises which will interfere with Lessee's Intended Use of the Premises; and (iv) the execution of this Lease by Lessor will not cause a breach or an event of default of any other agreement(s) to which Lessor is a party, and (v) the Premises constitutes a legal lot that may be leased without the need for any subdivision or platting approval. Lessor covenants that it shall comply with all applicable laws, regulations and requirements related to the Property and that Lessee shall have the quiet enjoyment of the Premises during the term of this Lease. Lessor shall indemnify Lessee from and against any loss, cost, expense or damage including attorneys fees associated with a breach of the foregoing covenants. In the event that Lessor fails to keep the Premises free and clear of any liens and encumbrances, Lessee shall have the right but not the obligation to satisfy such lien or encumbrance and deduct the full amount paid by Lessee on Lessor's behalf from future installments of Rent. Lessor agrees to indemnify and hold harmless Lessee from any and all claims and/or notices of non-compliance brought against Lessor for any breach by Lessor of this warranty, and Lessor agrees to allow Lessee to continue to quietly enjoy the use of Lessor's Property while Lessor remedies any such non-compliance. Should Lessee's use of the Property become compromised due to any breach of the warranty and covenants contained in this paragraph, Lessor acknowledges that Lessee shall be substantially harmed and Lessee will seek to recover from Lessor any damages Lessee may sustain.

26. Occurrence of Lessor Default. The covenants, representations and conditions in this Agreement are mutual and dependent. Upon the occurrence of any breach or nonperformance of any representation, warranty, covenant, agreement or undertaking made by Lessor in this Agreement ("Default"), Lessee shall have the option to pursue any one or more of the following remedies without notice or demand: (a) Lessee, may, at its sole election, terminate the Lease; (b) Lessee, may, without being obligated and without waiving the Default, cure the Default, whereupon Lessor shall pay to Tenant, upon demand, all costs expenses, and disbursements incurred by Tenant to cure the Default. Tenant shall be permitted to offset said costs, expenses and disbursements incurred by Tenant against Rent or any other amounts due or becoming due by Tenant to Landlord under this Lease; or (c) Tenant shall be entitled to pursue any and all other rights or remedies available at law or equity, including specific performance of this Lease, with respect to Landlord's default.

27. Assignment. Upon written notice to Lessee, Lessor is permitted to transfer this Lease only in connection with the sale of the Parent Parcel and only on the following conditions: (a) the acquiring party must and will assume in writing all of the rights and obligations of Lessor under this Lease on and after the date of purchase of the Parent Parcel and (b) Lessor must retain no rights or obligations under the Lease after the date of sale of the Parent Parcel (a "Lessor Permitted Assignment"). Other than a Lessor Permitted Assignment, Lessor is prohibited from assigning, selling or otherwise transferring the Lease in whole or in part and Lessor is prohibited from granting any third party an easement or other real property interest in the Premises. Lessee may assign this Lease without the consent of or notice to Lessor. From and after the date this Lease has been sold, assigned or transferred by Lessee to a third party agreeing to be subject to the terms hereof, Lessee shall immediately be released from any and all liability under this Lease, including the payment of any rental or other sums due, without any further action. Additionally, Lessee may mortgage or grant a security interest in this Lease and the Improvements, and may assign this Lease and the Improvements to any such mortgagees or holders of security interests including their successors and assigns (hereinafter collectively referred to as "Secured Parties"). If requested, Lessor shall execute such consent to leasehold financing as may reasonably be required by Secured Parties. Lessor agrees to notify Lessee and Lessee's Secured Parties simultaneously of any default by Lessee and to give Secured Parties the same right to cure any default as Lessee except that the cure period for any Secured Party shall not be less than ten (10) days after the receipt of the default notice If a termination, disaffirmance or rejection of the Lease pursuant to any laws (including

any bankruptcy or insolvency laws) by Lessee shall occur, or if Lessor shall terminate this Lease for any reason, Lessor will give to the Secured Parties prompt notice thereof and Lessor will give the Secured Parties the right to enter upon the Premises during a thirty (30)-day period commencing upon the Secured Party's receipt of such notice for the purpose of removing any Improvements. Lessor acknowledges that the Secured Parties shall be third-party beneficiaries of this Lease.

28. Successors and Assigns. This Lease shall run with the Premises and shall be binding upon and inure to the benefit of the parties, their respective heirs, successors, personal representatives and assigns.

29. Waiver of Lessor's Lien. Lessor hereby waives any and all lien rights it may have, statutory or otherwise, in and to the Improvements or any portion thereof, regardless of whether or not same is deemed real or personal property under applicable laws.

30. Waiver of Incidental and Consequential Damages. Lessor will not assert any claim whatsoever against Lessee for loss of anticipatory profits or any other indirect, special, incidental or consequential damages incurred by Lessor as a result of the construction, maintenance, operation or use of the Premises by Lessee or its agents, licensees' or sublessees'.

31. Liability and Indemnity. Lessee shall indemnify and hold Lessor harmless from all claims (including reasonable attorneys' fees, costs and expenses of defending against such claims) arising from the negligence or willful misconduct of Lessee or Lessee's agents or employees in or about the Property. Lessor shall indemnify and hold Lessee harmless from all claims (including reasonable attorneys' fees, costs and expenses of defending against such claims) arising from the negligence or willful misconduct of Lessor or Lessor's agents, employees, lessees, invitees, contractors or other tenants occurring in or about the Parent Parcel. The duties described herein survive termination of this Lease.

32. Right of First Refusal; Sale of the Premises. If Lessor elects, during the term of the Option or during the Initial Term or any Renewal Terms of the Lease, (i) to sell or otherwise transfer to a third party all or any portion of the Premises, whether separately or as part of a larger parcel of which the Premises is a part, or (ii) to grant to a third party by easement, or other legal instrument, an interest in and to any portion of the Property for any purpose relating to operating and maintaining communications facilities or the management thereof, with or without an assignment of this agreement to such third party (including but not limited to assignments of rental streams associated with this agreement), Lessee shall have the right of first refusal to meet any bona fide offer of sale, assignment, or any other transfer on the same terms and conditions as such offer. Lessor shall immediately provide the Lessee with a copy of the bona fide offer together with a notice a notice describing the offer in sufficient detail. If Lessee fails to accept such bond fide offer within thirty (30) days after receipt of the foregoing, Lessor may sell or grant the easement or interest in the Property in accordance with the terms of such bona fide offer.

33. Miscellaneous.

(a) The substantially prevailing party in any litigation arising hereunder shall be entitled to its reasonable attorney's fees and court costs, including appeals, if any.

(b) Each party agrees to furnish to the other, within ten (10) days after request, such truthful estoppel information as the other may reasonably request.

(c) This Lease constitutes the entire agreement and understanding of the parties with respect to the subject matter of this Lease, and supersedes all offers, negotiations and other agreements.

There are no representations or understandings of any kind not set forth herein. Any amendments to said Lease must be in writing and executed by the parties.

(d) If either party is represented by a real estate broker in this transaction, that party shall be fully responsible for any fees due such broker and shall hold the other party harmless from any claims for commission by such broker.

(e) Lessor agrees to cooperate with Lessee in executing any documents necessary to protect Lessee's rights under this Lease or Lessee's use of the Premises, including but not limited to affidavits relating to title curative measures and subordination and non disturbance agreements and to take any further action which Lessee may reasonably require as to effect the intent of this Lease.

(f) This Lease shall be construed in accordance with the laws of the state in which the Premises is situated.

(g) If any term of this Lease is found to be void or invalid, such invalidity shall not affect the remaining terms of this Lease, which shall continue in full force and effect.

(h) Upon request of Lessee, Lessor shall promptly execute and deliver to Lessee such documents as Lessee requests to evidence Lessee's rights in the Premises, including a memorandum of option and a memorandum of lease and/or amendments thereto. Lessee may file such documents of record in the property records in the county in which the Premises are located.

(i) Lessee may obtain title insurance on its interest in the Premises and Easement, and Lessor shall cooperate by executing documentation required by the title insurance company. In the event the Premises is encumbered by a mortgage or deed of trust, Lessor agrees to obtain and furnish, within thirty (30) days written request by Lessee, a non-disturbance agreement to the effect that Lessee and Lessee's sublessees or licensees will not be disturbed in the occupancy of the Premises by any foreclosure; provided that the rights and interests of Lessee under this Lease shall be subject and subordinate to such mortgage or deed of trust.

(j) Lessor hereby irrevocably appoints Lessee or Lessee's agent as Lessor's agent to file applications on behalf of Lessor with federal, state and local governmental authorities which applications relate to Lessee's Intended Use of the Premises including but not limited to land use and zoning applications.

(k) This Lease may be executed in two or more counterparts, all of which shall be considered one and the same agreement and shall become effective when one or more counterparts have been signed by the each of the parties, it being understood that all parties need not sign the same counterpart and that scanned or electronically reproduced copies of this Agreement shall have the same force and effect as originals.

(l) Lessor will not, during the term of this Lease together with any extensions thereof, enter into any other lease, license, or other agreement for a similar purpose as set forth herein, on or adjacent to the Property.

(m) In any case where the approval or consent of one party hereto is required, requested or otherwise to be given under this Lease, such party shall not unreasonably condition, delay or withhold its approval or consent.

34. Confidentiality. Lessor shall not disclose to any third party the Option Consideration or Rent payable by Lessee under this Lease and shall treat such information as confidential, except that Lessor may disclose such information to prospective buyers, prospective or existing lenders, to Lessor's affiliates and attorneys, or as may be required by law or as may be necessary for the enforcement of Lessor's rights under this Lease. Lessor acknowledges that the disclosure of such information to any other parties may cause Lessee irreparable harm, and in the event of such disclosure, as an additional remedy, Lessee shall have the right to terminate this Lease upon giving thirty (30) days written notice thereof to Lessor.

[SIGNATURES BEGIN ON NEXT PAGE]

IN WITNESS WHEREOF, Optionor and Optionee have executed this Agreement and Lease as of the date affixed to their signatures below.

OPTIONOR/LESSOR:

Nan S. Kendall and Sherry B. Rankin

By: Nan S. Kendall
Name: Nan S. Kendall
Date: 7-5-11

By: Sherry B. Rankin
Name: Sherry B. Rankin
Date: 7-5-11

State of Kentucky
County of Boone

Before me, Ethel S. Wilson the undersigned, a Notary Public for the State, personally appeared Nan S. Kendall, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument, the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal, this 5th day of July, 2011.

Signature Ethel S. Wilson

NOTARY SEAL

My commission expires: 4-7-2014

State of Kentucky

County of Bourbon

Before me, Ethel S. Welsh the undersigned, a Notary Public for the State, personally appeared Sherry B. Rankin, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument, the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal, this 5th day of July, 2011

Signature Ethel S. Welsh

NOTARY SEAL

My commission expires: 4-7-2014

OPTIONEE/LESSEE:

TOWERCO II LLC

By: _____
Name: Richard Byrne
Title: President & CEO
Date: 7/8/2011

State of North Carolina

County of Wake

Before me, Kristen Elise Fienberg the undersigned, a Notary Public for the State, personally appeared Richard Byrne who is the President & CEO of TowerCo II LLC, a Delaware limited liability company, personally known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument, the entity upon behalf of which he acted, executed the instrument.

WITNESS my hand and official seal, this 8th day of July, 2011.

Signature _____

NOTARY SEAL

My commission expires: 4-16-2016

KRISTEN ELISE FIENBERG NOTARY PUBLIC WAKE COUNTY, NC

EXHIBIT "A"

DESCRIPTION OF PARENT PARCEL

The Parent Parcel is described and/or depicted as follows:

Being all of Parcel 2, consisting of 1.248 acres, as shown on that certain Plat of Survey for Milton Sheerer Enterprises, Inc. and being of record in the Office of the Bourbon County Court Clerk in Plat Cabinet C, at Slide 303.

Tax ID: 036-10-12-014.00

EXHIBIT "B"

DESCRIPTION OR DEPICTION OF PREMISES

An approximately 8,200 square foot portion of the Parent Parcel, together with easements for ingress, egress and utilities described or depicted as follows. Exact legal description to be determined by survey.

PROPOSED LEASE AREA:

Beginning at an IPC with a cap stamped "#3553" found on the Northwest right of way of U.S. Highway #68 (A.K.A. Main Street) at the Southeast corner of the property conveyed to Milton Sheeler Enterprises, Inc. in Deed Book 203, Page 343 in the Office of the Clerk of Bourbon County, Kentucky, said IPC being S 46°11'01" W – 365.00' from an IPC with a cap stamped "#3553" found on said Northwest right of way; thence S 46°11'01" W – 138.00'; thence S 45°00'00" W – 171.70'; thence S 55°56'01" W – 1.12' to a set #5 rebar with a cap stamped "FSTAN #3282"; thence N 41°27'21" W – 123.09' to a set #5 rebar with a cap stamped "FSTAN #3282"; thence N 48°32'39" E – 5.76' to a set #5 rebar with a cap stamped "FSTAN #3282" and the TRUE POINT OF BEGINNING of the Proposed Lease Area; thence N 37°04'59" W – 85.00' to a set #5 rebar with a cap stamped "FSTAN #3282"; thence N 48°32'39" E – 93.52' to a set #5 rebar with a cap stamped "FSTAN #3282"; thence S 41°27'21" E – 84.75' to a set #5 rebar with a cap stamped "FSTAN #3282"; thence S 48°32'39" W – 100.00' to the true point of beginning, containing 8,200.61 square feet as per survey by Frank L. Sellinger, II, PLS No. 3282 with FS/Tan Land Surveyors & Consulting Engineers, dated March 28, 2007, and revised April 5, 2007.

PROPOSED ACCESS AND UTILITY EASEMENT:

Beginning at an IPC with a cap stamped "#3553" found on the Northwest right of way of U.S. Highway #68 (A.K.A. Main Street) at the Southeast corner of the property conveyed to Milton Sheeler Enterprises, Inc. in Deed Book 203, Page 343 in the Office of the Clerk of Bourbon County, Kentucky, said IPC being S 46°11'01" W – 365.00' from an IPC with a cap stamped "#3553" found on said Northwest right of way; thence S 46°11'01" W – 138.00'; thence S 45°00'00" W – 171.70'; thence S 55°56'01" W – 1.12' to a set #5 rebar with a cap stamped "FSTAN #3282" and the TRUE POINT OF BEGINNING of the Proposed Variable Access & Utility Easement; thence S 55°56'01 W – 28.68' to a set #5 rebar with a cap stamped "FSTAN #3282"; thence N 37°04'59" W – 196.66' to a set #5 rebar with a cap stamped "FSTAN #3282"; thence N 52°55'01" E – 25.00' to a set #5 rebar with a cap stamped "FSTAN #3282"; thence S 37°04'59" E – 75.00' to a set #5 rebar with a cap stamped "FSTAN #3282"; thence S 48°32'39" W – 5.76' to a set #5 rebar with a cap stamped "FSTAN #3282"; thence S 41°27'21" E – 123.09' to the true paint of beginning, containing 4,802.28 square feet as per survey by Frank L. Sellinger, PLS No. 3282 with FS/Tan Land Surveyors & Consulting Engineers, dated March 28, 2007, and revised April 5, 2007.

Note: At Lessee's option, Lessee may replace this Exhibit with an exhibit setting forth the legal description of the Premises, or an as-built drawing depicting the site. Any visual or textual representation of the Improvements (as defined in the Lease) and facilities is illustrative only, and does not limit the rights of Lessee as provided for in the Lease. Without limiting the generality of the foregoing:

1. The Premises may be setback from the boundaries of Lessor's property as required by the applicable governmental authorities.
2. The access road's width may be modified as required by governmental authorities, including police and fire departments.
3. The locations of any access and utility easements are illustrative only. Actual locations may be determined by Lessee and/or the servicing utility company in compliance with local laws and regulations.

FIRST AMENDMENT TO OPTION AND GROUND LEASE AGREEMENT

THIS FIRST AMENDMENT TO OPTION AND GROUND LEASE AGREEMENT ("Amendment") is entered into as of the later of the signature dates below by and between NAN S. KENDALL, a married woman, and SHERRY B. RANKIN, a married woman ("Lessor") and TOWERCO IV LLC, a Delaware limited liability company ("Lessee").

RECITALS

A. Lessor and Lessee (successor in interest to TowerCo 2013 LLC) are parties to that certain Option and Ground Lease Agreement dated March 25, 2014 (the "Agreement"), for the Premises, which is a portion of the Land located in the County of Bourbon, State of Kentucky, as more particularly described in the Agreement.

B. The Agreement has an Option Initial Term of twelve (12) months with one (1) additional Option Renewal Term of twelve (12) months, and Lessor and Lessee desire to amend the term of the Agreement to provide for an additional Option Renewal Term, and provide for certain other changes as more particularly set forth herein.

NOW, THEREFORE, for and in consideration of the promises and mutual covenants herein contained and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereby agree to amend the Agreement as follows:

1. ***Extension of Option.*** Paragraph 4 of the Agreement is amended by deleting the first sentence in its entirety and replacing it with the following:

> "This Option can be extended at the discretion of Optionee for two (2) additional periods of twelve (12) months each (each an "Option Renewal Term") by Optionee paying to Optionor the additional consideration of ("Option Extension Consideration") prior to the expiration of the then existing term of this Option."

2. ***Agreement in Full Force.*** Except as expressly amended hereby, all terms and conditions of the Agreement shall remain in full force and effect, and, in the event of any inconsistencies between this Amendment and the terms of the Agreement, the terms set forth in this Amendment shall govern and control. The covenants, representations and conditions in the Agreement are mutual and dependent.

3. ***Recording of Agreement.*** Lessor agrees to promptly execute and deliver to Lessee a memorandum of the Agreement in recordable format upon request of Lessee.

4. ***Counterparts.*** This Amendment may be executed in one or more counterparts which shall be construed together as one document.

5. ***Defined Terms.*** Unless otherwise defined, all defined terms used in this Amendment shall have the meanings ascribed to them under the Agreement.

6. ***Successors and Assigns.*** Upon full execution by Lessee and Lessor, this Amendment (i) shall be binding upon and shall inure to the benefit of each of the parties and their respective successors, assigns, receivers and trustees; and (ii) may be modified or amended only by a written agreement executed by each of the parties.

7. ***Non-Binding Until Fully Executed.*** This Amendment is for discussion purposes only and does not constitute a formal offer by either party. This Amendment is not and will not be binding on either party until and unless it is fully executed by both parties.

8. ***Recitals.*** The recitals at the beginning of this Amendment are incorporated in and made a part of this Amendment.

[SIGNATURES APPEAR ON THE FOLLOWING PAGE]

IN WITNESS WHEREOF, the parties have executed this Amendment as of the later of the signature dates below.

LESSOR:
NAN S. KENDALL, a married woman, and SHERRY B. RANKIN, a married woman

By: Nan S. Kendall
Name: Nan S. Kendall
Title: Owner
Date: 2-26-16

By: Sherry B. Rankin
Name: Sherry B. Rankin
Title: Owner
Date: 2-26-16

LESSEE:
TOWERCO IV LLC, a Delaware limited liability company

By: Daniel Hunt
Name: Daniel Hunt
Title: VP & CFO
Date: 3/2/16

SECOND AMENDMENT TO OPTION AND GROUND LEASE AGREEMENT

THIS SECOND AMENDMENT TO OPTION AND GROUND LEASE AGREEMENT ("Second Amendment") is entered into as of the later of the signature dates below by and between NAN S. KENDALL, a married woman, and SHERRY B. RANKIN, a married woman ("Lessor") and TOWERCO IV LLC, a Delaware limited liability company ("Lessee").

RECITALS

A. Lessor and Lessee (successor in interest to TowerCo 2013 LLC) are parties to that certain Option and Ground Lease Agreement dated March 25, 2014, as amended by that certain First Amendment to Option and Ground Lease Agreement dated March 2, 2016 (as amended, the "Agreement"), for the Premises, which is a portion of the Land located in the County of Bourbon, State of Kentucky, as more particularly described in the Agreement.

B. The Agreement has an Option Initial Term of twelve (12) months with two (2) additional Option Renewal Terms of twelve (12) months, and Lessor and Lessee desire to amend the term of the Agreement to provide for an additional Option Renewal Term, and provide for certain other changes as more particularly set forth herein.

NOW, THEREFORE, for and in consideration of the promises and mutual covenants herein contained and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereby agree to amend the Agreement as follows:

1. ***Extension of Option.*** In addition to the Option Renewal Terms presently set forth in the Agreement, the parties hereby agree that the Option can be extended at the discretion of Optionee for one (1) additional period of twelve (12) months (an "Additional Option Renewal Term") by paying to Optionor the additional consideration of
prior to the expiration of the then existing Option Renewal Term.

Subject to the terms of the Agreement, the final expiration date of the Option would be **March 24, 2018.**

2. ***Subleases.*** Paragraph 16 of the Agreement is amended by deleting the paragraph in its entirety and replacing it with the following:

> "16. Subleases. Lessee at its sole discretion shall have the right, without the consent of or notice to Lessor, to license, sublease or otherwise allow the occupancy of all or a portion of the Premises and the Improvements. If Lessee licenses or subleases a portion of the Premises to a third party for the purpose of sending and receiving telecommunications signals (each such grant a "Sublease") then Lessee agrees to pay to Lessor, as additional rent, an amount equal to per month ("Co-Location Rent") under the following conditions: (i) Lessee shall only be required to pay the Co-Location Rent where the Sublease is with a major wireless carrier; and (ii) Lessee shall not be required to pay Lessor the Co-Location Rent for the first or initial Sublease

("Anchor Tenant"). In the event the Anchor Tenant vacates the Premises, Lessee shall have the right to substitute the Anchor Tenant with an existing sublessee or licensee who shall become the new Anchor Tenant. The Co-Location Rent for each such Sublease shall commence beginning on the first day of the month following the commencement date of each Sublease and continue through the term of that respective Sublease. That portion of the Rent attributable to the Co-Location Rent shall terminate on the date each Sublease terminates or expires, whichever is earlier, and Rent thereafter shall be reduced by an amount equal to the Co-Location Rent for each such Sublease as of the date of such expiration or termination. Lessee shall have no obligation to pay that portion of the Rent attributable to the Co-Location Rent for each Sublease unless Lessee actually receives the rent payment due under each respective Sublease. Lessee shall have sole discretion as to whether, and on what terms, to enter into, amend or terminate any such Sublease, and there shall be no express or implied obligation of Lessee to do so nor is Lessor a third party beneficiary of any Sublease. Lessee's licensee(s) and sublessee(s) shall be entitled to modify the tower and Improvements, and erect and install additional improvements and personal property on the Premises and Improvements, including but not limited to antennas, dishes, cabling, utilities, emergency or back up power, generators, and equipment shelters. Lessee's licensee(s) and sublessee(s) shall be entitled to all rights of ingress and egress to the Premises, the right to install utilities on the Premises and the right to use the Premises for the Intended Use as if said licensee or sublessee were the Lessee under this Lease.

3. ***Agreement in Full Force.*** Except as expressly amended hereby, all terms and conditions of the Agreement shall remain in full force and effect, and, in the event of any inconsistencies between this Second Amendment and the terms of the Agreement, the terms set forth in this Second Amendment shall govern and control. The covenants, representations and conditions in the Agreement are mutual and dependent.

4. ***Recording of Agreement.*** Lessor agrees to promptly execute and deliver to Lessee a memorandum of the Agreement in recordable format upon request of Lessee.

5. ***Counterparts.*** This Second Amendment may be executed in one or more counterparts which shall be construed together as one document.

6. ***Defined Terms.*** Unless otherwise defined, all defined terms used in this Second Amendment shall have the meanings ascribed to them under the Agreement.

7. ***Successors and Assigns.*** Upon full execution by Lessee and Lessor, this Second Amendment (i) shall be binding upon and shall inure to the benefit of each of the parties and their respective successors, assigns, receivers and trustees; and (ii) may be modified or amended only by a written agreement executed by each of the parties.

8. ***Non-Binding Until Fully Executed.*** This Second Amendment is for discussion purposes only and does not constitute a formal offer by either party. This Second Amendment is not and will not be binding on either party until and unless it is fully executed by both parties.

9. ***Recitals.*** The recitals at the beginning of this Second Amendment are incorporated in and made a part of this Second Amendment.

[SIGNATURES APPEAR ON THE FOLLOWING PAGE]

IN WITNESS WHEREOF, the parties have executed this Second Amendment as of the later of the signature dates below.

LESSOR:
NAN S. KENDALL, a married woman, and SHERRY B. RANKIN, a married woman

By: Nan S. Kendall
Name: Nan S. Kendall
Title: Owner
Date: 2-14-17

By: Sherry B Rankin
Name: Sherry B. Rankin
Title: Owner
Date: 2-14-17

LESSEE:
TOWERCO IV LLC, a Delaware limited liability company

By: Daniel Hunt
Name: Daniel Hunt
Title: VP & CFO
Date: 2/15/17

EXHIBIT
I

SHEET 1

S1/1 – VICINITY AND 500' STRUCTURAL MAP

S1/2 – ABUTTING PROPERTY OWNERS

S1/3 – U.S.G.S. QUAD MAP

SHEET 2

S2/1 – PROPOSED LEASE AREA

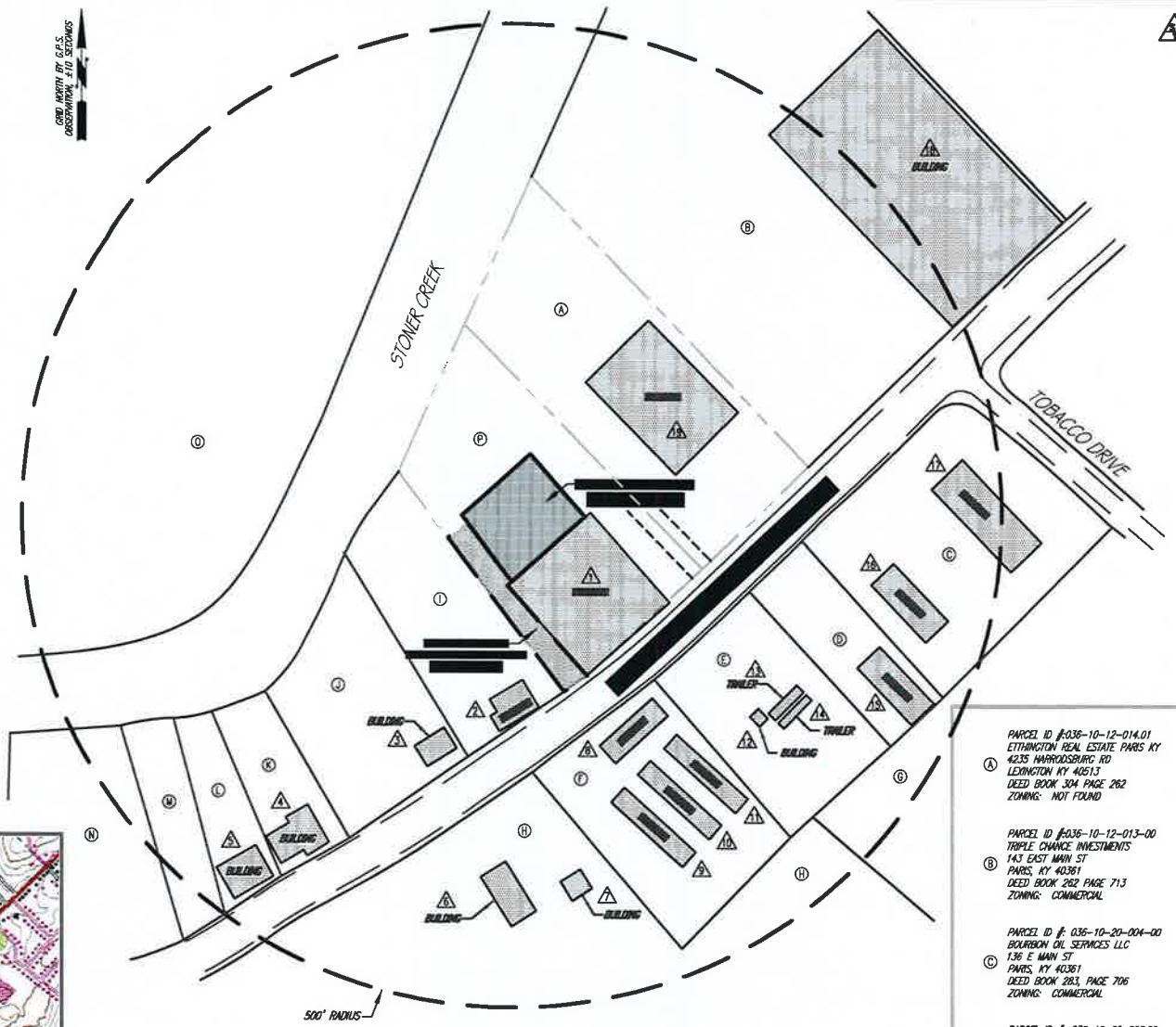
S2/2 – LEGAL DESCRIPTIONS

S2/3 – FLOOD ZONE DATA

TOWER TO STRUCTURE DIST.	
1	50'±
2	160'±
3	220'±
4	360'±
5	420'±
6	350'±
7	360'±
8	230'±
9	290'±
10	280'±
11	270'±
12	310'±
13	330'±
14	340'±
15	380'±
16	370'±
17	420'±
18	450'±
19	148'±

S1/3 QUAD MAP
SCALE: 1"=2000'

U.S.G.S. 7 1/2 MINUTE QUAD MAP OF PARIS, KY.



* ADJOINING LAND OWNERS LISTED ARE BASED ON PROPERTY VALUATION ADMINISTRATION ("PVA") RECORDS ISSUED BY A REPRESENTATIVE FROM BOURBON COUNTY, TO BE IN COMPLIANCE WITH ALL STATUTORY AND REGULATORY REQUIREMENTS BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION AND FOR TELECOMMUNICATION USE ONLY.

0' 120' 240'
(IN FEET)
SCALE: 1" = 120'

S1/1

Ⓐ PARCEL ID #:036-10-12-014.01
ETTHINGTON REAL ESTATE PARIS KY
4235 HARRODSBURG RD
LEXINGTON KY 40513
DEED BOOK 304 PAGE 262
ZONING: NOT FOUND

Ⓑ PARCEL ID #:036-10-12-013-00
TRIPLE CHANCE INVESTMENTS
143 EAST MAIN ST
PARIS, KY 40361
DEED BOOK 262 PAGE 713
ZONING: COMMERCIAL

Ⓒ PARCEL ID #: 036-10-20-004-00
BOURBON OIL SERVICES LLC
136 E MAIN ST
PARIS, KY 40361
DEED BOOK 283, PAGE 706
ZONING: COMMERCIAL

Ⓓ PARCEL ID #: 036-10-20-003.00
MATTOX MOTORS INC
1065 CRESTWOOD HEIGHTS
PARIS, KY 40361
DEED BOOK 304, PAGE 732
ZONING: COMMERCIAL

Ⓔ PARCEL ID #:036-10-20-002.00
A & A OWENS LLC
124 CATHY DR
PARIS, KY 40361
DEED BOOK 301, PAGE 611
ZONING: COMMERCIAL

Ⓕ PARCEL ID #: 036-10-20-001.00
HUTCHISON BO
80 E MAIN ST
PARIS, KY 40361
DEED BOOK 269, PAGE 280
ZONING: COMMERCIAL

Ⓖ PARCEL ID #:036-10-20-005.00
MCCLINTOCK MARY K
676 CANE RIDGE RD
PARIS, KY 40361
DEED BOOK 287 PAGE 732
ZONING: RESIDENTIAL

Ⓗ PARCEL ID #:036-10-11-006.00
STONER CREEK PARTNERS LLC
PO BOX 188
PARIS KY 40362
DEED BOOK 300, PAGE 18
ZONING: COMMERCIAL

Ⓘ PARCEL ID #:036-10-12-015.00
GARRISON BRENT & DIANNE
1135 KARLA DR
PARIS, KY 40361
DEED BOOK 263, PAGE 116
ZONING: COMMERCIAL

Ⓙ PARCEL ID #:036-10-12-016.00
GADDIS MARCUS D
21 ARDERY PLACE
PARIS, KY 40361
DEED BOOK 231 PAGE 722
ZONING: NOT FOUND

Ⓚ PARCEL ID #:036-10-12-017-00
CHARLES T WOODALL
209 SETTLERS TRACE
RICHMOND, KY 40475-7947
DEED BOOK 204, PAGE 13
ZONING: RESIDENTIAL

Ⓛ PARCEL ID #:036-10-12-018-00
CHARLES T & JULIA R WOODALL
209 SETTLERS TRACE
RICHMOND, KY 40475-7947
DEED BOOK 230, PAGE 632
ZONING: RESIDENTIAL

Ⓜ PARCEL ID #:036-10-12-019-00
HATTON FRANK
108 HOPEWELL
PARIS, KY 40361
DEED BOOK 308, PAGE 237
ZONING: RESIDENTIAL

Ⓝ PARCEL ID #:036-10-12-020-00
PLOI LLC
1323 GEORGETOWN RD
PARIS, KY 40361
DEED BOOK 261, PAGE 244
ZONING: RESIDENTIAL

Ⓞ PARCEL ID #:036-10-09-005.00
CITY OF PARIS
525 HIGH ST
PARIS, KY 40361
DEED BOOK NOT FOUND
ZONING: RESIDENTIAL

Ⓟ PARCEL ID #:036-10-12-014.00
KENDALL NAN S & RANKIN SHERRY B
411 CLINTONVILLE RD
PARIS, KY 40361
DEED BOOK 280, PAGE 539
ZONING: COMMERCIAL

TowerCo

FSTan
F.S. Land Company
T. Alan Neal Company
Land Surveyors and Consulting Engineers
PO Box 17548 2313/2319 Colmar Drive Louisville, KY 40217
Phone: (502) 636-5866 (502) 636-5111
Fax: (502) 635-2353

"SITE SURVEY"

SITE NUMBER: 9LV1276

SITE NAME: EAST PARIS

SITE ADDRESS: EAST MAIN STREET PARIS, KY 40361

PROPOSED T-MOBILE LEASE AREA: 8,200.61 sq. ft.

PROPERTY OWNER: KENDALL, NAN S & RANKIN SHERRY 427 MAIN STREET PARIS, KY 40361

PARCEL ID NUMBER: 036-10-12-014-00

SOURCE OF TITLE: DEED BOOK 203, PAGE 343

DWG BY: DJG

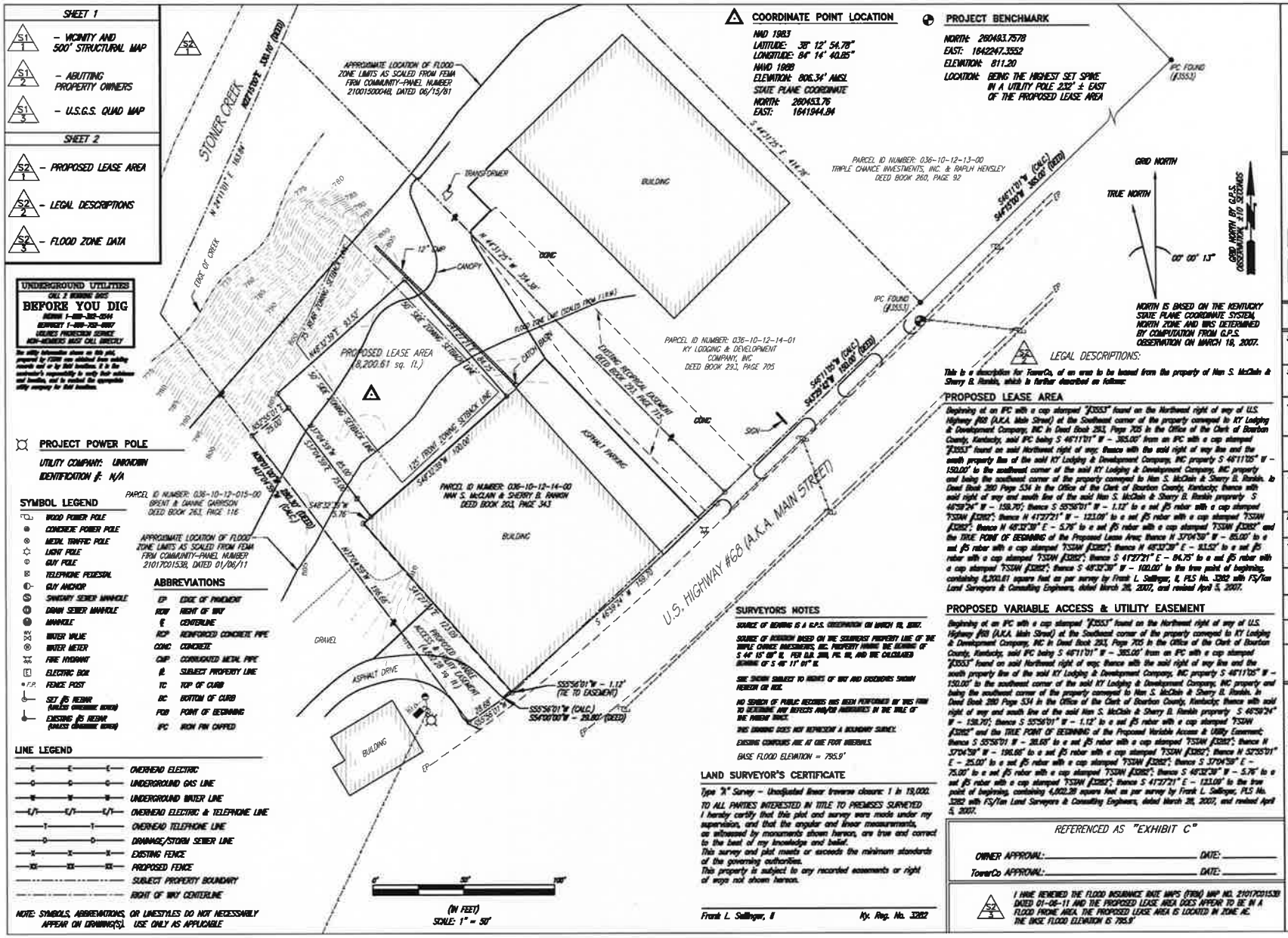
CHKD BY: FSII

DATE: 10.16.18

FSTAN PROJECT NO.: 18-10184

REVISIONS:

C1



COORDINATE POINT LOCATION

NAD 1983
LATITUDE: 38° 12' 54.78"
LONGITUDE: 84° 14' 40.85"
NAVD 1988
ELEVATION: 806.34' AMSL
STATE PLANE COORDINATE
NORTH: 260453.76
EAST: 1641944.84

PROJECT BENCHMARK

NORTH: 260493.7578
EAST: 1642247.3552
ELEVATION: 811.20
LOCATION: BEING THE HIGHEST SET SPIKE IN A UTILITY POLE 232' ± EAST OF THE PROPOSED LEASE AREA

SURVEYORS NOTES

SOURCE OF BEARING IS A G.P.S. OBSERVATION ON MARCH 16, 2007.

SOURCE OF BEARING BASED ON THE SOUTHERLY PROPERTY LINE OF THE TRIPLE CHANCE INVESTORS, INC. PROPERTY HAVING THE BEARING OF S 44° 15' 07" W, PER D.B. 260, PG. 92, AND WAS CALCULATED BEARING OF S 46° 11' 01" W.

SEE SHOWN SUBJECT TO RIGHTS OF WAY AND EASEMENTS SHOWN HEREON OR NOT.

NO SEARCH OF PUBLIC RECORDS HAS BEEN PERFORMED BY THIS FIRM TO DETERMINE ANY DEFECTS AND/OR ENCUMBRANCES IN THE TITLE OF THE SUBJECT TRACT.

THIS DRAWING DOES NOT REPRESENT A BOUNDARY SURVEY.

EXISTING CONTOURS ARE AT ONE FOOT INTERVALS.

BASE FLOOD ELEVATION = 795.9'

LAND SURVEYOR'S CERTIFICATE

Type "A" Survey – Unadjusted linear traverse closure: 1 in 19,000.

TO ALL PARTIES INTERESTED IN TITLE TO PREMISES SURVEYED
I hereby certify that this plat and survey were made under my supervision, and that the angular and linear measurements, as witnessed by monuments shown hereon, are true and correct to the best of my knowledge and belief.
This survey and plat meets or exceeds the minimum standards of the governing authorities.
This property is subject to any recorded easements or right of ways not shown hereon.

Frank L. Sellinger, II — Ky. Reg. No. 3282

LEGAL DESCRIPTIONS:

This is a description for TowerCo, of an area to be leased from the property of Ian S. McClain & Sherry B. Rankin, which is further described as follows:

PROPOSED LEASE AREA

Beginning at an IPC with a cap stamped "J3553" found on the Northwest right of way of U.S. Highway #68 (A.K.A. Main Street) at the Southeast corner of the property conveyed to KY Lodging & Development Company, INC in Deed Book 293, Page 705 in the Office of the Clerk of Bourbon County, Kentucky, said IPC being S 46°11'01" W – 385.00' from an IPC with a cap stamped "J3553" found on said Northeast right of way; thence with the said right of way line and the south property line of the said KY Lodging & Development Company, INC property S 46°11'05" W – 150.00' to the southeast corner of the said KY Lodging & Development Company, INC property and being the southeast corner of the property conveyed to Ian S. McClain & Sherry B. Rankin in Deed Book 260 Page 534 in the Office of the Clerk of Bourbon County, Kentucky; thence with said right of way and south line of the said Ian S. McClain & Sherry B. Rankin property S 46°58'24" W – 159.70'; thence S 55°56'01" W – 1.12' to a set #5 rebar with a cap stamped "FSTAN #3282"; thence N 41°27'21" W – 123.09' to a set #5 rebar with a cap stamped "FSTAN #3282"; thence N 48°32'39" E – 5.76' to a set #5 rebar with a cap stamped "FSTAN #3282" and the TRUE POINT OF BEGINNING of the Proposed Lease Area; thence N 37°04'39" W – 85.00' to a set #5 rebar with a cap stamped "FSTAN #3282"; thence N 48°32'39" E – 93.52' to a set #5 rebar with a cap stamped "FSTAN #3282"; thence S 41°27'21" E – 84.75' to a set #5 rebar with a cap stamped "FSTAN #3282"; thence S 48°32'39" W – 100.00' to the true point of beginning, containing 8,200.61 square feet as per survey by Frank L. Sellinger, II, PLS No. 3282 with FS/Tan Land Surveyors & Consulting Engineers, dated March 28, 2007, and revised April 5, 2007.

PROPOSED VARIABLE ACCESS & UTILITY EASEMENT

Beginning at an IPC with a cap stamped "J3553" found on the Northwest right of way of U.S. Highway #68 (A.K.A. Main Street) at the Southeast corner of the property conveyed to KY Lodging & Development Company, INC in Deed Book 293, Page 705 in the Office of the Clerk of Bourbon County, Kentucky, said IPC being S 46°11'01" W – 385.00' from an IPC with a cap stamped "J3553" found on said Northeast right of way; thence with the said right of way line and the south property line of the said KY Lodging & Development Company, INC property S 46°11'05" W – 150.00' to the southeast corner of the said KY Lodging & Development Company, INC property and being the southeast corner of the property conveyed to Ian S. McClain & Sherry B. Rankin in Deed Book 260 Page 534 in the Office of the Clerk of Bourbon County, Kentucky; thence with said right of way and south line of the said Ian S. McClain & Sherry B. Rankin property S 46°58'24" W – 159.70'; thence S 55°56'01" W – 1.12' to a set #5 rebar with a cap stamped "FSTAN #3282" and the TRUE POINT OF BEGINNING of the Proposed Variable Access & Utility Easement; thence S 55°56'01" W – 28.68' to a set #5 rebar with a cap stamped "FSTAN #3282"; thence N 37°04'39" W – 196.66' to a set #5 rebar with a cap stamped "FSTAN #3282"; thence N 52°55'01" E – 25.00' to a set #5 rebar with a cap stamped "FSTAN #3282"; thence S 37°04'39" E – 75.00' to a set #5 rebar with a cap stamped "FSTAN #3282"; thence S 48°32'39" W – 5.76' to a set #5 rebar with a cap stamped "FSTAN #3282"; thence S 41°27'21" E – 123.09' to the true point of beginning, containing 4,642.28 square feet as per survey by Frank L. Sellinger, II, PLS No. 3282 with FS/Tan Land Surveyors & Consulting Engineers, dated March 28, 2007, and revised April 5, 2007.

REFERENCED AS "EXHIBIT C"

OWNER APPROVAL: _____ DATE: _____

TowerCo APPROVAL: _____ DATE: _____

S2/3 I HAVE REVIEWED THE FLOOD INSURANCE RATE MAPS (FIRM) MAP NO. 21017C0153D DATED 01-06-11 AND THE PROPOSED LEASE AREA DOES APPEAR TO BE IN A FLOOD PRONE AREA. THE PROPOSED LEASE AREA IS LOCATED IN ZONE AE. THE BASE FLOOD ELEVATION IS 795.9'

TowerCo

FS/tan
Land Surveyors
1012 S 4th Street, Suite 101
Louisville, KY 40203
Phone: (502) 636-5111
Fax: (502) 636-5283

"SITE SURVEY"

SITE NUMBER: SLV1276
SITE NAME: EAST PARIS
SITE ADDRESS: EAST MAIN STREET PARIS, KY 40361
PROPOSED TOWERCO LEASE AREA: 8,200.61 sq. ft.
PROPERTY OWNER: IAN S. McCLAIN & SHERRY B. RANKIN 427 MAIN STREET PARIS, KY 40361
PARCEL ID NUMBER: 036-10-12-014-00
SOURCE OF TITLE: DEED BOOK 260, PAGE 534
DRAWN BY: DJG
CHKD BY: FSI
DATE: 03.28.07
FSTAN PROJECT NO.: 07-4384

REVISIONS:
LEASE AREA – 04.05.07
NEW FLOOD MAP – 07.24.14
REVISE OWNERS – 08.19.14
ADD TITLE NOTES – 08.21.14
FINAL – 08.21.14
UPDATE SURVEY – 08.09.18

C2

EXHIBIT
J

PARIS CELL TOWER - 500'/ABUTTERS LIST

Name	Address	City	State	Zip
Ethington Real Estate Paris KY	4235 Harrodsburg Road	Lexington	KY	40513
Triple Chance Investments	143 East Main Street	Paris	KY	40361
Bourbon Oil Services LLC	136 East Main Street	Paris	KY	40361
Mattox Motors Inc.	1065 Crestwood Heights	Paris	KY	40361
A & A Owens LLC	124 Cathy Drive	Paris	KY	40361
Bo Hutchison	80 E Main Street	Paris	KY	40361
Mary K. McClintock	676 Cane Ridge Road	Paris	KY	40361
Stoner Creek Partners LLC	PO Box 188	Paris	KY	40361
Brent and Dianne Garrison	1135 Karla Drive	Paris	KY	40361
Marcus D. Gaddis	21 Ardery Place	Paris	KY	40361
Charles T. Woodall	209 Settlers Trace	Richmond	KY	40475
Charles T. and Julia Woodall	209 Settlers Trace	Richmond	KY	40475
Frank Hatton	108 Hopewell	Paris	KY	40361
PLOI LLC	1323 Georgetown Rd	Paris	KY	40361
City of Paris	525 High Street	Paris	KY	40361
Nan Kendall and Sherry Rankin	411 Clintonville Road	Paris	KY	40361

JACOB C. WALBOURN
jwalbourn@mmlk.com

McBRAYER

201 EAST MAIN STREET, SUITE 900
LEXINGTON, KY 40507
859.231.8780 EXT. 102

November 15, 2018

Via Certified Mail
Ethington Real Estate Paris KY
4235 Harrodsburg Road
Lexington KY 40513

Re: Notice of TowerCo 2013, LLC ("Applicant") to Adjacent Landowners of its Application before the Bourbon County Joint Planning Commission to Construct a Cellular Tower Facility at 93 East Main Street, Paris, Bourbon County, Kentucky

Dear Property Owner:

TowerCo 2013, LLC has applied to the Bourbon County Joint Planning Commission to construct a 196' monopole tower and an approximately 3-foot tall lighting arrestor and related improvements, to be located at 93 East Main Street, Paris, Bourbon County, Kentucky. The proposed Facility will, on its installation, allow for co-location of multiple carriers, which will eliminate the need for additional facilities in the area. A map showing the location of the proposed new facility is enclosed. This notice is forwarded to you because you own property within five-hundred feet (500') of the proposed facility, or property contiguous to it.

There is a crucial need to upgrade wireless cell services for existing covered customers in this area, and to expand capacity to serve future customers. Additionally, this facility is crucial to providing wireless communications ability, including the ability to contact emergency services, for users living in or travelling in this area. Our client's representatives have attempted to select a site that addresses the service deficit while minimizing the impact on adjacent properties.

Your comments regarding the proposed application are invited by the Bourbon County Joint Planning Commission, as well as the Applicant. You may submit comments related to consideration of this application. You may contact the Planning Commission by writing to the Bourbon County Joint Planning Commission, 525 High Street, Room 112, Paris, Kentucky 40361 or by calling 859-987-2150. Please refer to the Application of TowerCo 2013 in any correspondence. You may contact the undersigned if we can assist in any way.

Sincerely,

McBrayer, McGinnis, Leslie & Kirkland, PLLC

Jacob C. Walbourn
W. Brent Rice
Counsel for TowerCo 2013, LLC

Enclosure 4818-6478-2947, v. 1

JACOB C. WALBOURN
jwalbourn@mmlk.com

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201 EAST MAIN STREET, SUITE 900
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Triple Chance Investments
143 East Main Street
Paris KY 40361

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LEXINGTON, KY 40507
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November 15, 2018

Via Certified Mail
Bourbon Oil Services LLC
136 East Main Street
Paris KY 40361

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November 15, 2018

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1065 Crestwood Heights
Paris KY 40361

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November 15, 2018

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A & A Owens LLC
124 Cathy Drive
Paris KY 40361

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November 15, 2018

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Bo Hutchison
80 E Main Street
Paris KY 40361

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