

W. DAVID DENTON
J. RONALD JACKSON, MBA, CPA
WILLIAM E. PINKSTON
LISA H. EMMONS
GLENN D. DENTON *
JACKIE M. MATHENY, JR.
ANN R. MYRE
HOLLY M. HOMRA
ALEXANDER D. BLACKWELL *

* Also Licensed to Practice in Illinois



PADUCAH BANK BUILDING
555 JEFFERSON STREET
SUITE 301
P.O. BOX 969
PADUCAH, KY 42002-0969

PHONE (270) 450-8253
FAX (270) 450-8259
www.dentonfirm.com

July 12, 2019

VIA FEDERAL EXPRESS
TRACKING NO: 775722919060

GWEN R PINSON
KENTUCKY PUBLIC SERVICE COMMISSION
211 SOWER BLVD
FRANKFORT KY 40601

RECEIVED

JUL 15 2019

PUBLIC SERVICE
COMMISSION

**Re: *The Application of SBA Towers IX, LLC, a Delaware Limited Liability Company, for
Issuance of a Certificate of Public Convenience and Necessity to Construct a Wireless
Communications Facility
Site Name: Shopville Relo
Case No.: 2019-00149***

Dear Ms. Pinson:

Enclosed please find one (1) original and five (5) copies of the SBA Towers, IX, LLC Application for Certificate of Public Convenience and Necessity to Construct a Wireless Communications Facility in regard to the above case number. Also enclosed is a flash drive containing a PDF of the application including exhibits and other PDFs required.

If you have any questions or comments, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to be "LH Emmons", written in a cursive style.

Lisa H. Emmons

219172

RECEIVED

JUL 15 2019

PUBLIC SERVICE
COMMISSION

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

| | | |
|---|---|----------------------|
| THE APPLICATION OF |) | |
| SBA TOWERS IX, LLC, A DELAWARE LIMITED |) | |
| LIABILITY COMPANY, |) | |
| FOR ISSUANCE OF A CERTIFICATE OF PUBLIC |) | |
| CONVENIENCE AND NECESSITY TO CONSTRUCT |) | CASE NO.: 2019-00149 |
| A WIRELESS COMMUNICATIONS FACILITY |) | |
| IN THE COMMONWEALTH OF KENTUCKY |) | |
| IN THE COUNTY OF PULASKI |) | |

SITE NAME: SHOPVILLE RELO

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

SBA Towers IX, LLC (hereinafter "SBA"), a Delaware limited liability company, by and through the undersigned counsel, pursuant to (i) KRS § 278.020, 278.040, 278.650, 278.665, and other statutory authority, and the rules and regulations applicable thereto, and (ii) the Telecommunications Act of 1996, respectfully submits this Application requesting issuance of a Certificate of Public Convenience and Necessity ("CPCN") from the Kentucky Public Service Commission ("PSC") to construct, maintain, and operate a Wireless Communications Facility ("WCF") to serve customers of **Cellco Partnership** (d/b/a Verizon Wireless Communications Facility; a/k/a Rural Cellular Corp and hereinafter "Verizon Wireless") and **Sprint Spectrum L.P.** (a/k/a Nextel West Corporation; a/k/a Clearwire Spectrum Holding III, LLC; a/k/a Sprint Spectrum Realty Company, LLC and hereinafter "Sprint Spectrum L.P."), with wireless communications services within Pulaski County, Kentucky.

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

1. As required by 807 KAR 5:001 § 14(1) and 807 KAR 5:063 § 1(1)(a), SBA Towers IX, LLC, states as follows:

a. The full name, mailing address and electronic mail address of the applicant:
SBA Towers IX, LLC, a Delaware limited liability company, 8051 Congress Avenue, Boca Raton, Florida, 33487, jross@sbsite.com (Jessica Ross, Project Manager, Relocations).

b. Facts on which the Application is based, with a request for the order, authorization, permission, or certificate desired and a reference to the particular law requiring or providing for the information: As a result of a Kentucky Transportation Cabinet (“KYTC”) project for improvement and widening of KY Highway 461 from KY Highway 80 to Buck Creek Bridge, (please see “**Exhibit A**”), in Pulaski County, Kentucky, SBA will be required to remove an existing WCF which is currently serving the customers of Verizon Wireless and Sprint Spectrum L.P. SBA proposes to build a new WCF, including a self-support 305 foot tower (309 foot in total overall when accounting for the antenna), for cellular telecommunications services and/or personal communications services, which is to be located in an area outside the jurisdiction of a planning commission. SBA proposes to first build the new WCF to facilitate the relocation of current tenants, ensure no interruption in cell coverage, and ensure no interruption in coverage for emergencies / E911. After the completion of the construction of the proposed new WCF, then SBA will be required to remove the existing WCF. The public convenience and necessity require the construction and operation of the proposed new WCF. SBA submits this Application to the PSC seeking a Certificate of Public Convenience and Necessity to construct and operate the WCF, pursuant to KRS § 278.020 (1), 278.650, 278.665, and other statutory and regulatory authority.

c. SBA states it has filed the original and five (5) copies of this Application with the PSC.

2. Pursuant to 807 KAR 5:001 § 14(3), SBA states as follows: SBA, is a Delaware limited liability company, organized on July 29, 2015. SBA's Articles of Organization (Certificate of Formation) are attached as "**Exhibit B.**" SBA's Certificate of Good Standing from the Delaware Secretary of State is attached as "**Exhibit C.**" SBA is authorized to transact business in the Commonwealth of Kentucky. SBA's Certificate of Authority to transact business in the Commonwealth of Kentucky is attached and included in "**Exhibit C.**"

3. Pursuant to 807 KAR 5:001 § 15(2)(a), SBA states as follows: The public convenience and necessity require the construction and operation of the proposed WCF. The construction of the proposed new WCF will allow SBA and its tenants, Verizon Wireless and Sprint Spectrum L.P., to continue to provide wireless communications services to the area which will not be served, or adequately served, once the KYTC completes the highway improvement project. The proposed new WCF will improve upon SBA's structure and services and allow for its tenants to increase coverage area and/or capacity and thereby enhance the public's access to innovative and competitive wireless communications services. The proposed new WCF will provide a necessary link in currently existing communications networks and is designed to meet the increasing demands for wireless cellular services and wireless high speed data services in Kentucky's wireless communications service area.

Additionally, a statement of need from Verizon Wireless' RF Design Engineer and coverage maps depicting the coverage with the current tower, coverage without the current tower and coverage with the proposed tower are attached as "**Exhibit D.**" A statement of need from Sprint Spectrum L.P.'s RF Design Engineer and coverage maps are attached as "**Exhibit E.**"

4. Pursuant to 807 KAR 5:001 § 15(2)(b), SBA states as follows: SBA's Application to the Kentucky Airport Zoning Commission (KAZC) for Permit to Construct or Alter a Structure is attached as "**Exhibit F.**" (*SBA's Application to the KAZC was considered at the KAZC meeting on June 13, 2019*). Email correspondence from the Kentucky Airport Zoning Commission confirming verbal approval to start construction is included in "**Exhibit F.**" SBA's Federal Aviation Administration filing and the Federal Aviation Administration's Determination of No Hazard to Air Navigation are included in "**Exhibit F.**" Additionally, SBA states that it has communicated with the proper Pulaski County officials and (as advised by same) will obtain the necessary construction and electrical permits from the proper Pulaski County public authorities at the time of approval to construct the new WCF.

5. Pursuant to 807 KAR 5:001 § 15(2)(c), SBA states as follows: To address the above-referenced service needs, SBA proposes to construct a new WCF in Pulaski County, Kentucky. A general description of the proposed location of the new WCF, route, or routes of the new construction is attached as "**Exhibit G.**"

A full legal description of the proposed location for the construction of the proposed new WCF is included in the controlling Deed for the parent tract of the proposed location, which is attached as "**Exhibit H.**" SBA submits the certified latitude, longitude, and elevation coordinates attached hereto as "**Exhibit I.**"

Additionally, a full description of the proposed location, route or routes of the new construction, including a description of the manner in which same will be constructed is attached as "**Exhibit J**" which consists of site plans and drawings of the locations, equipment and facilities. A vertical profile sketch of the tower, signed and sealed by a professional engineer

registered in Kentucky, indicating the height of the tower and the placement of all antennas is attached in “**Exhibit K.**”

Also, see Memorandum of Option and Land Lease, attached hereto as “**Exhibit L,**” which contains a depiction of the parent tract, with reference to PVA Parcel ID number; and depiction of the proposed location for the construction of the proposed WCF, including a depiction of routes of the new construction.

SBA submits that the proposed new construction will not compete with any public utilities, corporations or persons. Additionally, please see “**Exhibit D**” and “**Exhibit E**” regarding not competing with any public utilities, corporations or persons.

6. Pursuant to 807 KAR 5:001 § 15 (2)(d)1, SBA states as follows: Maps depicting the location or route of the proposed construction are attached in “**Exhibit J.**” Maps depicting currently existing like facilities of Verizon Wireless located within the map area are attached in “**Exhibit D.**” Also maps depicting currently existing like facilities of Sprint Spectrum L.P., are attached in “**Exhibit E.**” Additionally, see exhibits attached hereto and incorporated herein.

7. Pursuant to 807 KAR 5:001 § 15(2)(d)2, SBA states as follows: Plans and specifications and drawings of the proposed plant, equipment and facilities are attached hereto as “**Exhibit J.**” Additionally, please see “**Exhibit K.**”

8. Pursuant to 807 KAR 5:063 § 1(1)(b), SBA states as follows: SBA’s Application to the Kentucky Airport Zoning Commission (KAZC) for Permit to Construct or Alter a Structure is attached as “**Exhibit F.**” (*SBA’s Application to the KAZC was considered at the KAZC meeting on June 13, 2019*). Email correspondence from the Kentucky Airport Zoning Commission confirming verbal approval to start construction is included in “**Exhibit F.**” SBA’s

Federal Aviation Administration filing and the Federal Aviation Administration's Determination of No Hazard to Air Navigation are included in "**Exhibit F.**"

9. Pursuant to 807 KAR 5:063 § 1(1)(c), SBA states as follows: SBA's Application to the Federal Communications Commission is attached as "**Exhibit M.**" SBA anticipates a decision as to authorization from the FCC on or about August 30, 2019.

Verizon Wireless' application(s) to and/or authorization(s) / license(s) from the Federal Communications Commission are attached as "**Exhibit N.**"

Sprint Spectrum L.P.'s, applications(s) to and/or authorization(s) / license(s) from the Federal Communications Commission are attached as "**Exhibit O.**"

10. Pursuant to 807 KAR 5:063 § 1(1)(d), SBA states as follows: A geotechnical investigation report, signed and sealed by a professional engineer registered in Kentucky, that includes boring logs, foundation design recommendations and a finding as to the proximity of the proposed site to flood hazard areas is attached as "**Exhibit P.**"

Additionally, as noted in the site plans and drawings included in "**Exhibit J**" (specifically, see Zoning Plan found at "**Exhibit J,**" Sheet Z-1), the engineer has determined that the site is not within any flood hazard area.

11. Pursuant to 807 KAR 5:063 § 1(1)(e), SBA states as follows: A copy of the clear direction from the county seat to the proposed site, including highway numbers or street names, and the telephone number of the preparer of the directions is attached as "**Exhibit Q.**"

12. Pursuant to 807 KAR 5:063 § 1(1)(f), SBA states as follows: A copy of the Memorandum of Option and Land Lease is attached as "**Exhibit L.**"

13. Pursuant to 807 KAR 5:063 § 1(1)(g), SBA states as follows: The identity and qualifications of each person directly responsible for the design and construction of the proposed WCF are attached as “**Exhibit R.**”

14. Pursuant to 807 KAR 5:063 § (1)(1)(h), SBA states as follows: SBA’s site development plan or survey, signed and sealed by a professional engineer registered in Kentucky, that shows the proposed location of the tower and all easements and existing structures within 500 feet of the site on the property on which the tower will be located and all easements and existing structures within 200 feet of the access drive, including the intersection with the public street system, is attached as “**Exhibit J.**”

15. Pursuant to 807 KAR 5:063 § (1)(1)(i), SBA states as follows: A vertical profile sketch of the tower, signed and sealed by a professional engineer registered in Kentucky, indicating the height of the tower and the placement of all antennas is attached in “**Exhibit K.**” Additional plans regarding the vertical profile sketch of the tower, indicating the height of the tower and the proposed configuration and placement of all antennas are included in “**Exhibit J.**”

16. Pursuant to 807 KAR 5:063 § (1)(1)(j), SBA states as follows: The tower and foundation design plans and a description of the standard according to which the tower was designed, signed and sealed by a professional engineer registered in Kentucky, are attached as “**Exhibit J.**” Additionally see “**Exhibit K.**”

17. Pursuant to 807 KAR 5:063 § (1)(1)(k), SBA states as follows: A map, drawn to scale no less than 1 inch equals 200 feet, that identifies every structure and every owner of real estate within 500 feet of the proposed tower is attached in “**Exhibit J.**” (see Sheet Z-1)

18. Pursuant to 807 KAR 5:063 § 1(1)(l) and K.R.S. 278.665(2), SBA states as follows: SBA has notified every person who, according to the records of the Pulaski County

Property Valuation Administrator, owns property which is within 500 feet of the proposed tower, by certified mail, return receipt requested, of the proposed construction. Additionally, SBA has notified every person who, according to the records of the Pulaski County Property Valuation Administrator, owns property contiguous to the parent tract where the proposed tower will be located, by certified mail, return receipt requested, of the proposed construction. Please see **“Exhibit S.”**

Each notified property owner has been provided with a map of the location of the proposed construction, the address of the PSC, the Commission docket number under which this Application will be processed, and has been informed of his or her right to request intervention.

SBA states that a review of the Pulaski County Property Valuation Administration (PVA) records reveal two tracts of land contiguous to the far western end of the parent tract. However, the PVA records indicate “No information is available.” Additional investigation and research with the PVA further revealed a Plat recorded of record in the PVA’s office which listed the owner of the two tracts of land to be the “Commonwealth of Kentucky” deed not found. A copy of the map included with the notification letter and a copy of the plat included with the notification letter to the Commonwealth of Kentucky, Division of Real Properties is included in **“Exhibit S.”**

19. Pursuant to 807 KAR 5:063 § 1(1)(m), SBA states as follows: A list of the property owners who received the legal / public notice, together with copies of the certified letters certified mail and return receipts are attached as **“Exhibit S.”**

20. Pursuant to 807 KAR 5:063 § 1(1)(n), SBA states as follows: SBA has notified the Pulaski County Judge Executive by certified mail, return receipt requested, of the proposed construction. This notice included the address of the PSC, the Commission docket number under

which this Application will be processed, and informed the Pulaski County Judge Executive of his right to request intervention. Please see “**Exhibit S.**”

21. Pursuant to 807 KAR 5:063 § 1(1)(o), SBA states as follows: A copy of the notice sent to the Pulaski County Judge Executive is included in “**Exhibit S.**”

22. Pursuant to 807 KAR 5:063 § 1(1)(p), SBA states as follows: SBA posted two written public notice signs, at least 2’ x 4’, one in a visible location on the proposed site and one on the nearest public road have been, and the public notice signs shall remain, posted for at least two weeks after the Application has been filed.

Additionally, SBA states the public notice signs meet the requirements prescribed in 807 KAR 5:063 § 1(2)(a)(b)(c). The public notice signs measure at least 2 feet in height and 4 feet in width and contain all required letters of required height. In both posted public notice signs the word “tower” is printed in letters at least four (4) inches high. A copy of the public notice signs is attached as “**Exhibit T.**”

23. Pursuant to 807 KAR 5:063 § 1(1)(q), SBA states as follows: SBA published notice of the location of the proposed construction in a newspaper of general circulation in the county (Pulaski) in which the construction is proposed. A copy of the published notice is attached as “**Exhibit U.**”

24. Pursuant to 807 KAR 5:063 § 1(1)(r), SBA states as follows: A brief description of the character of the general area in which the WCF is proposed to be constructed, which includes the existing land use for the specific property is attached as “**Exhibit G.**”

25. Pursuant to 807 KAR 5:063 § 1(1)(s), SBA states as follows: SBA has considered the likely effects of the installation on nearby land uses and values and concluded that there is no more suitable location reasonably available from which adequate service to the area

can be provided. In the present instance, the KYTC's highway improvement project will result in the removal of an existing SBA WCF (and tower), and SBA proposes to first replace same with a new WCF including a 305 foot tower (309 foot in total overall when accounting for the antenna). In further support of same please see "**Exhibit D** and **Exhibit E.**"

SBA carefully evaluated locations within the search area and determined that the proposed site selected had a similar elevation to the existing tower. The location of the proposed new tower is supported by elevation and constructability. SBA's tenants have radio frequency engineers that have conducted studies and tests in order develop a highly efficient network that is designed to handle voice and data traffic in the service area. The radio frequency engineers have determined the proposed site to be an optimum area for the placement of the proposed tower facilities and the location will provide the best quality service to the public. The proposed site was ultimately chosen because of the increased elevation, existing access road off Kentucky Highway 80, SBA Construction approval and SBA Field approval.

26. Pursuant to 807 KAR 5:063 § 1(1)(t), SBA states as follows: A search map of the area in which the tower is proposed to be located, that is drawn to scale and that clearly depicts the search area in which a site should, pursuant to radio frequency requirements, be located is attached as "**Exhibit V.**"

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

28. All correspondence, communications, responses and requests associated with this Application may be directed to:

Hon. Lisa H. Emmons, Denton Law Firm, P. O. Box 969, Paducah, Kentucky 42002-0969, 270-450-8253, lemmons@dentonfirm.com and John Pace, Denton Law Firm, P. O. Box 969, Paducah, Kentucky 42002-0969, 270-450-8253, jpace@dentonfirm.com.

WHEREFORE, SBA Towers IX, LLC respectfully requests the Commission to enter an order:

1. Granting a certificate of public convenience and necessity to construct the WCF and tower at the location set forth herein, Pulaski County, Kentucky; and
2. Granting all other relief as appropriate.

Respectfully submitted,

DENTON LAW FIRM, PLLC
P.O. Box 969
Paducah, KY 42002-0969
Tel. No.: (270) 450-8253
Fax No.: (270) 450-8259
lemmons@dentonfirm.com

By: 
Lisa H. Emmons

ATTORNEYS FOR SBA TOWERS IX, LLC

**COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

**THE APPLICATION OF)
SBA TOWERS IX, LLC, A DELAWARE LIMITED)
LIABILITY COMPANY,)
FOR ISSUANCE OF A CERTIFICATE OF PUBLIC)
CONVENIENCE AND NECESSITY TO CONSTRUCT) CASE NO.: 2019-00149
A WIRELESS COMMUNICATIONS FACILITY)
IN THE COMMONWEALTH OF KENTUCKY)
IN THE COUNTY OF PULASKI)**

SITE NAME: SHOPVILLE RELO

**LIST OF EXHIBITS
TO
APPLICATION FOR CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY
FOR CONSTRUCTION OF A WIRELESS COMMUNICATIONS FACILITY**

| | |
|-----------|---|
| Exhibit A | Kentucky Transportation Cabinet ROW Plans |
| Exhibit B | SBA's Articles of Organization (Certificate of Formation) |
| Exhibit C | SBA's Certificate of Good Standing; and Certificate of Authority to Transact business in the Commonwealth of Kentucky |
| Exhibit D | Verizon Wireless' Statement of Need and coverage maps |
| Exhibit E | Sprint Spectrum L.P.'s Statement of Need and coverage maps |
| Exhibit F | SBA's Application to the Kentucky Airport Zoning Commission; Kentucky Airport Zoning Commission's confirmation correspondence; SBA's Federal Aviation Administration filing; and Federal Aviation Administration's Determination of No Hazard to Air Navigation |
| Exhibit G | General Description of proposed location |
| Exhibit H | Deed re: parent tract |

| | |
|-----------|---|
| Exhibit I | Certified latitude, longitude, and elevation coordinates |
| Exhibit J | Site Development Plan and Drawings, including, but not limited to: 500' Vicinity Map 200' Access Drive Map Flood Plain Certification Site Plans and Specifications and Drawings of the proposed site, WCF, equipment and facilities |
| Exhibit K | Tower and Foundation Design |
| Exhibit L | Memorandum of Option and Land Lease |
| Exhibit M | SBA's Application to the Federal Communications Commission |
| Exhibit N | Verizon Wireless' Federal Communications Commission licenses |
| Exhibit O | Sprint Spectrum L. P.'s Federal Communications Commission licenses |
| Exhibit P | Geotechnical Investigation Report |
| Exhibit Q | Directions to proposed WCF site from Pulaski County seat |
| Exhibit R | Identity and Qualifications of each person directly responsible for design and construction of the proposed WCF and tower |
| Exhibit S | Property Owner / Contiguous Property Owner List and Notification; Pulaski County Judge Executive Notification Certified Mail Return Receipt cards Vicinity / Site Map Plat Map recorded with Pulaski County PVA |
| Exhibit T | Posted Public Notice Signs |
| Exhibit U | Newspaper Notice Publication |
| Exhibit V | Search Area Map |

EXHIBIT

A

| COUNTY OF | ITEM NO. | SHEET NO. |
|-----------|--------------------|-----------|
| PULASKI | 8-59-25 8-59-26 | R100 |

FOR INCLUSION WITH REVISION NO. 2



- P
28 DENNIS AKER
- P
29 ROBERT W. MURDOCH
- P
30 MARY LOU HENDERLIGHT
& BILLYE JUNE COMBS
- P
31 PULASKI PROPERTIES II, LLC
- P
89 RUSSELL HOLTZCLAW
- P
70 BILLY PATRICK TODD REVOCABLE
LIVING TRUST
- P
300 GREG HANSFORD &
SHEILA HANSFORD
- P
307 CUMBERLAND LAKE SHELL INC.

STA. 142+27.90
KY80 BACK/KY461 AHEAD
STA. 713+88.54
NORTHERN BYPASS BACK/
KY80 AHEAD

STA. 679+25.00
BEGIN RIGHT OF WAY

STA. 742+86.32
END RIGHT OF WAY

STA. 110+65.35
BEGIN RIGHT OF WAY

Revised r/w

- P
17 PHELPS FAMILY TRUST
- P
18 NICK A. COOLEY
- P
19 RUBY PHELPS
- P
21 GREG HANSFORD & SHEILA HANSFORD

- P
22 CUMBERLAND LAKE SHELL INC.
AND HUGH & JANICE BROCK
- P
23 HOGUE MYERS PROPERTIES, LLC
- P
24 KLD, LLC
- P
25 FLAT LICK PROPERTIES, INC.
- P
27 NATHAN D. & EMILY ELDRIDGE

RIGHT OF WAY PLANS

RIGHT OF WAY STRIP MAP
STA. 105+00 TO STA. 175+00

SCALE: 1"=300'

FILE NAME: G:\KORV\033_04\PHASE 11\CA\PLAN\RDW\STRIPMAP.DGN
 USER: cysing DATE PLOTTED: March 10, 2019
 E-SHEET NAME: MicroStation v8.11.8.459

EXHIBIT

B

Delaware

PAGE 1

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 "SBA TOWERS IX, LLC", FILED IN THIS OFFICE ON THE TWENTY-NINTH DAY OF JULY, A.D. 2015, AT 4:27 O'CLOCK P.M.

5794230 8100

151110136

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




Jeffrey W. Bullock, Secretary of State
AUTHENTICATION: 2600931

DATE: 07-29-15

State of Delaware
Secretary of State
Division of Corporations
Delivered 04:27 PM 07/29/2015
FILED 04:27 PM 07/29/2015
SRV 151110136 - 5794230 FILE

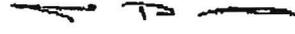
CERTIFICATE OF FORMATION

OF

SBA TOWERS IX, LLC

1. Name. The name of the Company is SBA Towers IX, LLC.
2. Registered Office. The address of the registered office of the Company in the State of Delaware is: c/o Corporate Creations Network, Inc., 3411 Silverside Road, Rodney Building, Suite 104, New Castle County, Wilmington, Delaware 19810.
3. Registered Agent. The name and address of the registered agent of the Company in the State of Delaware are: Corporate Creations Network, Inc., 3411 Silverside Road, Rodney Building, Suite 104, New Castle County, Wilmington, Delaware 19810.
4. Effectiveness. This Certificate of Formation shall become effective upon filing.

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Formation on this 29 day of July, 2015.

By: 
Name: Thomas P. Hunt
Authorized Person

EXHIBIT

C

Delaware

Page 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY "SBA TOWERS IX, LLC" IS DULY FORMED UNDER THE LAWS OF THE STATE OF DELAWARE AND IS IN GOOD STANDING AND HAS A LEGAL EXISTENCE SO FAR AS THE RECORDS OF THIS OFFICE SHOW, AS OF THE THIRTIETH DAY OF MAY, A.D. 2019.

AND I DO HEREBY FURTHER CERTIFY THAT THE SAID "SBA TOWERS IX, LLC" WAS FORMED ON THE TWENTY-NINTH DAY OF JULY, A.D. 2015.

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



5794230 8300

SR# 20194897880

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


Jeffrey W. Bullock, Secretary of State

Authentication: 202925438

Date: 05-30-19

Commonwealth of Kentucky
Alison Lundergan Grimes, Secretary of State

L902
1058774.06
Alison Lundergan Grimes
Secretary of State
Received and Filed
5/15/2019 12:09:25 PM
Fee receipt: \$90.00

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

Certificate of Authority
Foreign Business Entity

FBE

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

1. The entity is a **profit** limited liability company.
2. The name of the entity is **SBA Towers IX, LLC**.
3. The name of the entity to be used in Kentucky is **SBA Towers IX, LLC**.
4. The state or country under whose law the entity is organized is **Delaware**.
5. The date of organization is **7/29/2015**.
6. The mailing address of the entity's principal office is **8051 Congress Avenue, Boca Raton, FL 33487**.
7. The street address of the entity's registered office in Kentucky is **101 North Seventh Street, Louisville, KY 40202** and the name of the registered agent in that office is **Corporate Creations Network Inc.**
8. The names and business addresses of the entity's representatives:
9. I certify that, as of the date of filing of this application, the above-named entity validly exists under the laws of the jurisdiction of its formation.
10. This application will be effective on filing.

Signature of Authorized Representative:
Rafael Rosillo

I, **Corporate Creations Network Inc.**, consent to serve as the Registered Agent on behalf of the business entity.

Signature of Registered Agent or individual signing on behalf of the company serving as Registered Agent:

Michael Reinhold

EXHIBIT

D



Thursday, June 6th, 2019

RE: Proposed Celco Partnership d/b/a Verizon Wireless Communications Facility
Site Name: **LV SHOPVILLE Relo**
Type of Tower: 309' Self Support
Location: Near HWY 80, Somerset, KY 42503

To Whom It May Concern:

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

The **LV SHOPVILLE Relo** site is proposed with the below objectives:

- 1 Replace the existing demand and traffic of Shopville to the relocation tower.
- 2 Offload 4G traffic from busy sites to the North East and South west.
- 3 Improve 4G throughput to existing heavy data users.

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

Raw Land – Design plans for a new tower would provide overall tower height of **309'** with a Verizon Wireless Centerline of **225'**. The new structure height was decided upon to best cover the offload area and interact with the existing Verizon sites. If we are limited to building a structure less than the proposed height, another tower would be needed in the vicinity in the near future. In addition, building a structure that is too short can cause existing taller sites to shoot over the proposed site and building a site that is too tall can cause the proposed site to shoot over existing sites. Both situations create a poor experience from a user perspective. The new structure will be placed near the center of the area with high traffic demand and offload the surrounding sites greatly. The new tower design meets stated objectives.

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

ATC (FCC ID: 1279127) –Site is located too far southwest of the demand area and 300 yards close to existing Verizon Site Big Knob G (37° 08' 17.0" N, 84° 32' 08.0" W) whose FCC ID is 1042206. Therefore Verizon does not feel this site meets our customer's needs and is not viable.



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

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

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

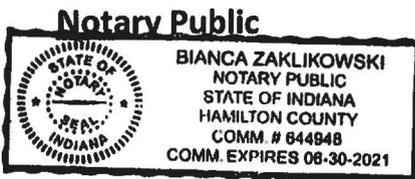
Sincerely,
Faiz Mohammed.

RF Engineer, Verizon

Wireless
STATE OF INDIANA

COUNTY OF Hamilton

Subscribed and sworn to before me this 7th day of June, 2019.



Signature Bianca Zaklikowski

Printed Bianca Zaklikowski

County of Residence Hamilton

My Commission expires: 6/30/2021



Thursday, June 6th, 2019.

RE: Pulaski County Zoning Plots

Site Name: Shopville

To Whom It May Concern:

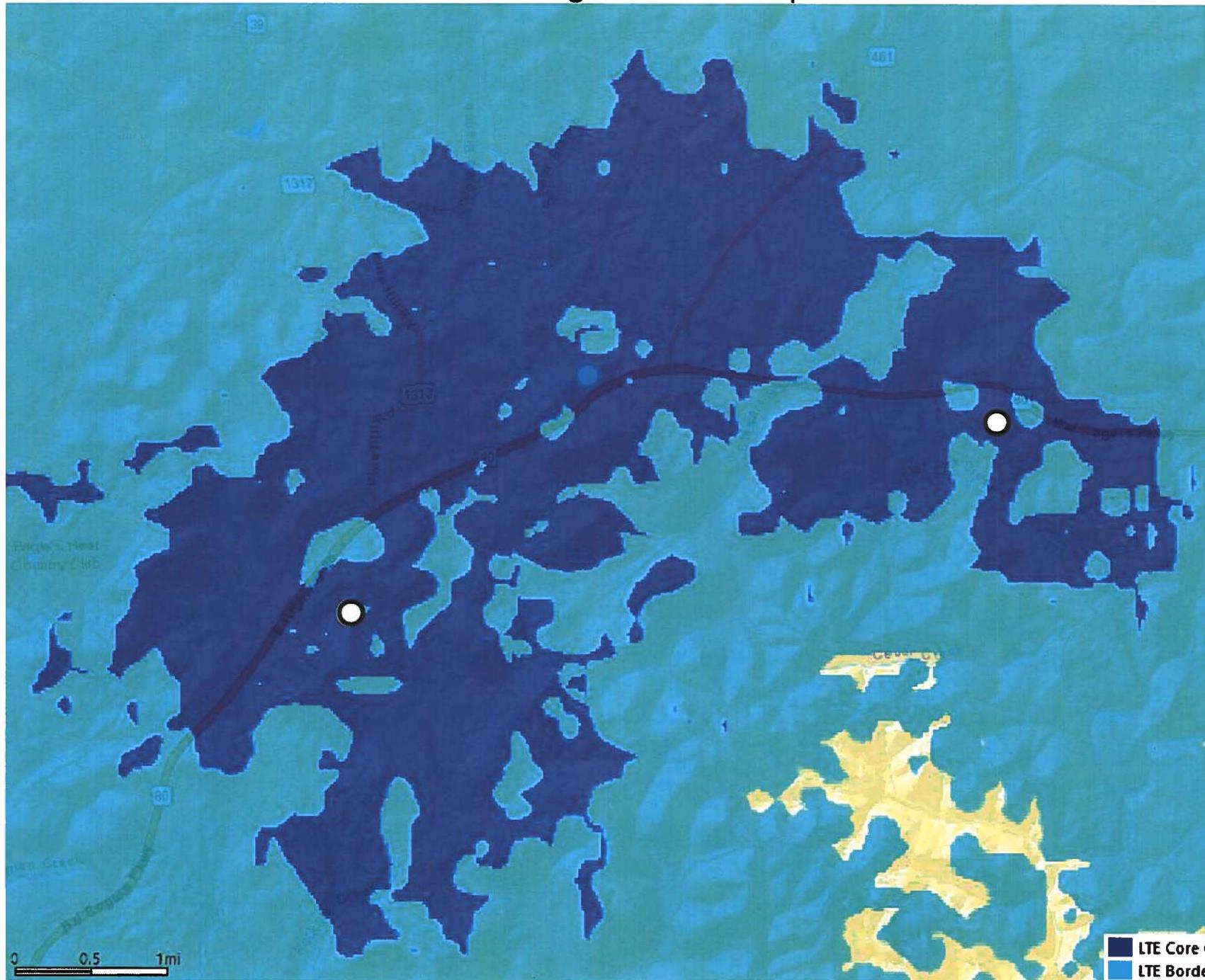
This map is not a guarantee of coverage and may contain areas with no service. This map reflects a depiction of predicted and approximate wireless coverage of the network and is intended to provide a relative comparison of coverage. The depictions of coverage do not guarantee service availability as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

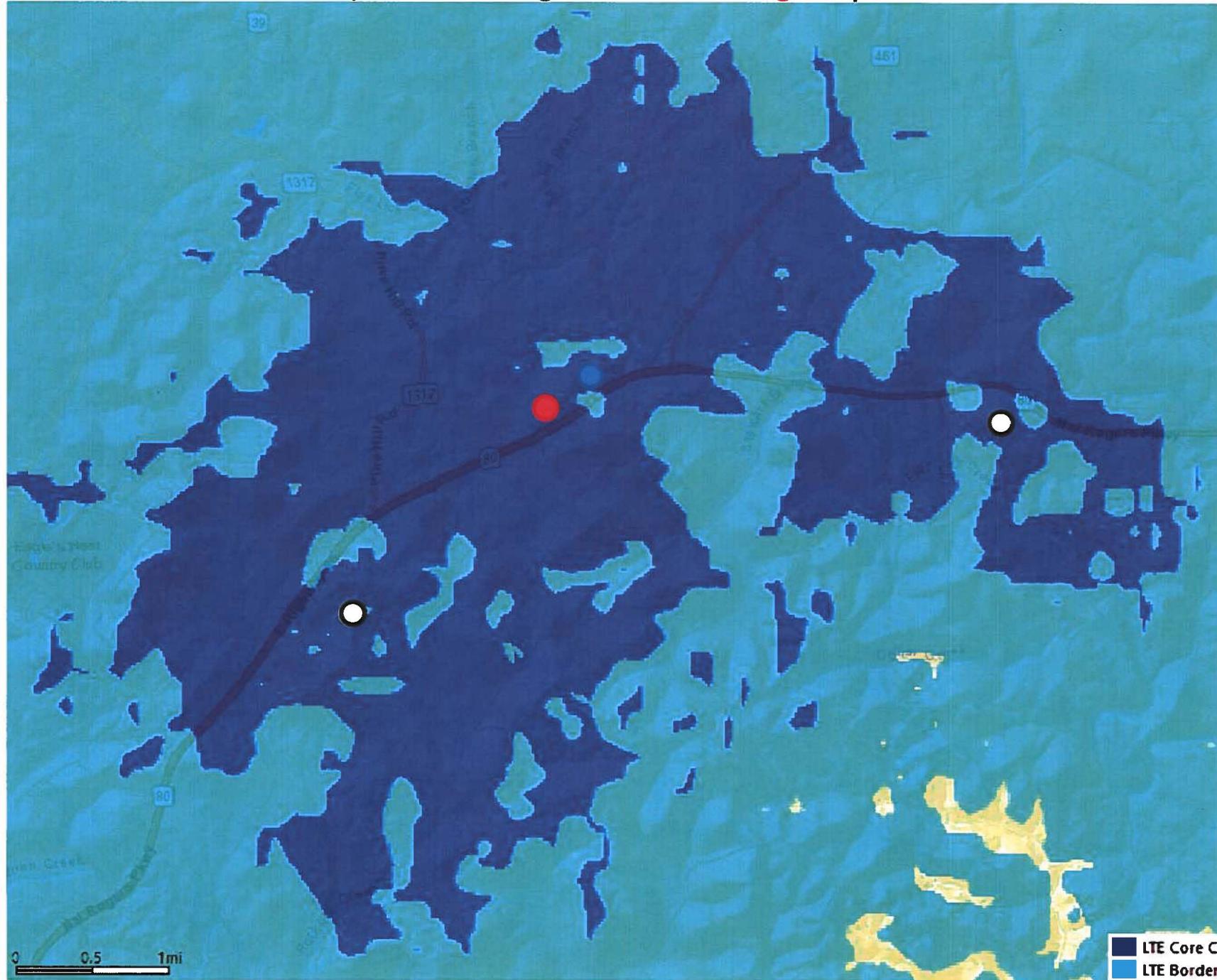
The proposed site is needed to offload capacity from existing sites. This map reflects the predicted coverage area that will be offloaded from existing sites and transferred to the proposed site.

Sincerely
Faiz Mohammed

RF Engineer, Verizon Wireless

| | |
|-----------------------------|---|
| Legend: | |
| Existing Verizon Sites |  |
| Current Shopville location |  |
| Proposed Shopville location |  |
| County Border |  |





EXHIBIT

E



June 4, 2019

RE: Proposed Relocation for Sprint Wireless Communications Facility

Sprint Site Name: Hansford Relo
Sprint Site ID: LV25XC702
SBA Site Name: Shopville Relo
SBA Site ID: KY22841-S

To Whom It May Concern:

As a radio frequency engineer for Sprint, I am providing this letter to state the need for the relocation of the Sprint Wireless site called **Hansford**.

The current Hansford site covers the following objectives:

1. Offloads – LV54XC700 and LV72XC536 in Somerset, KY
2. Coverage – Shopville, KY, Barnesburg, KY
3. Improve – 4G throughput for the above towns

The Hansford Relocation site is proposed with the below objectives:

1. Offload 800 MHz traffic from LV54XC700 and LV72XC536
2. Improve 4G throughput
3. Cover – Same locations
4. Add 800 MHz service to above locations

Currently the area is experiencing high demand for wireless high-speed data. The relocation tower is needed to continue to provide Sprint customers in the area with the best experience on their wireless devices.

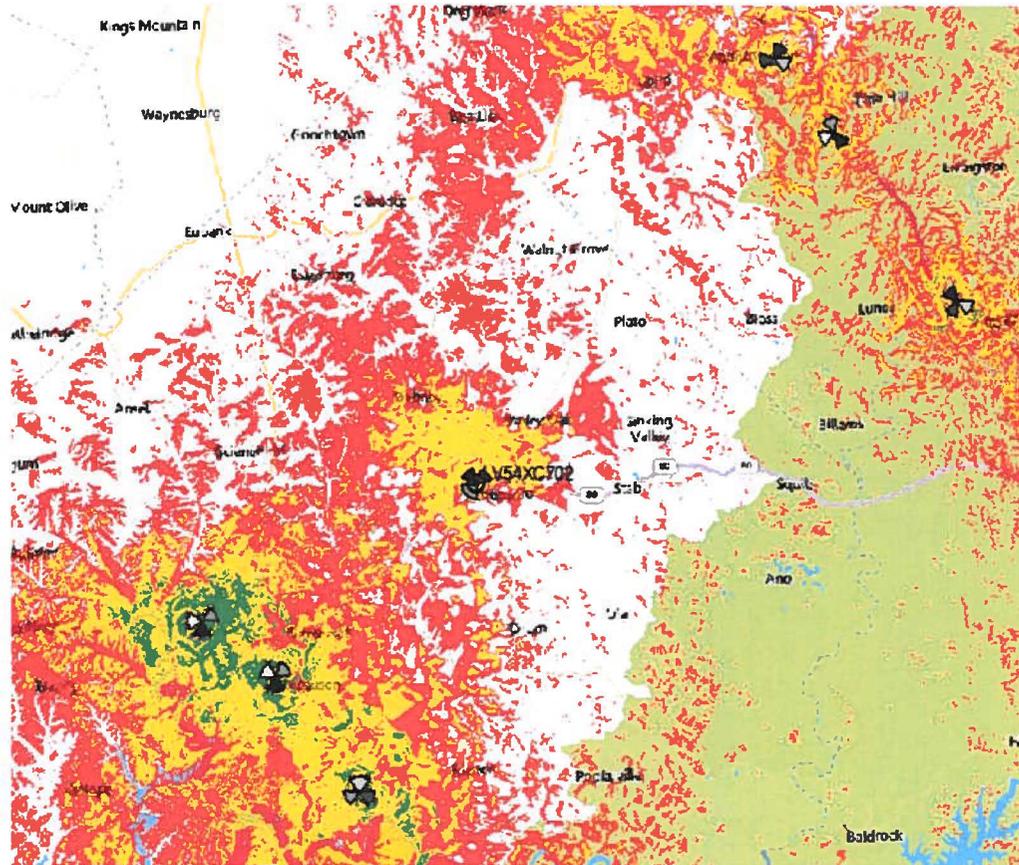
Design plans for a new tower would provide an antenna height of 252'. Competing towers almost 2 miles away that are too far away to meet coverage objectives. The proposed new tower will be placed near the existing location and meets stated objectives. Cell sites are placed in such away, so they can provide a smooth hand off to each other. They also need to be placed in a way to eliminate too much overlap.

Sprint RF Engineer signature:

Mark McCalla

#MoveForward

Current Coverage with LV54XC702

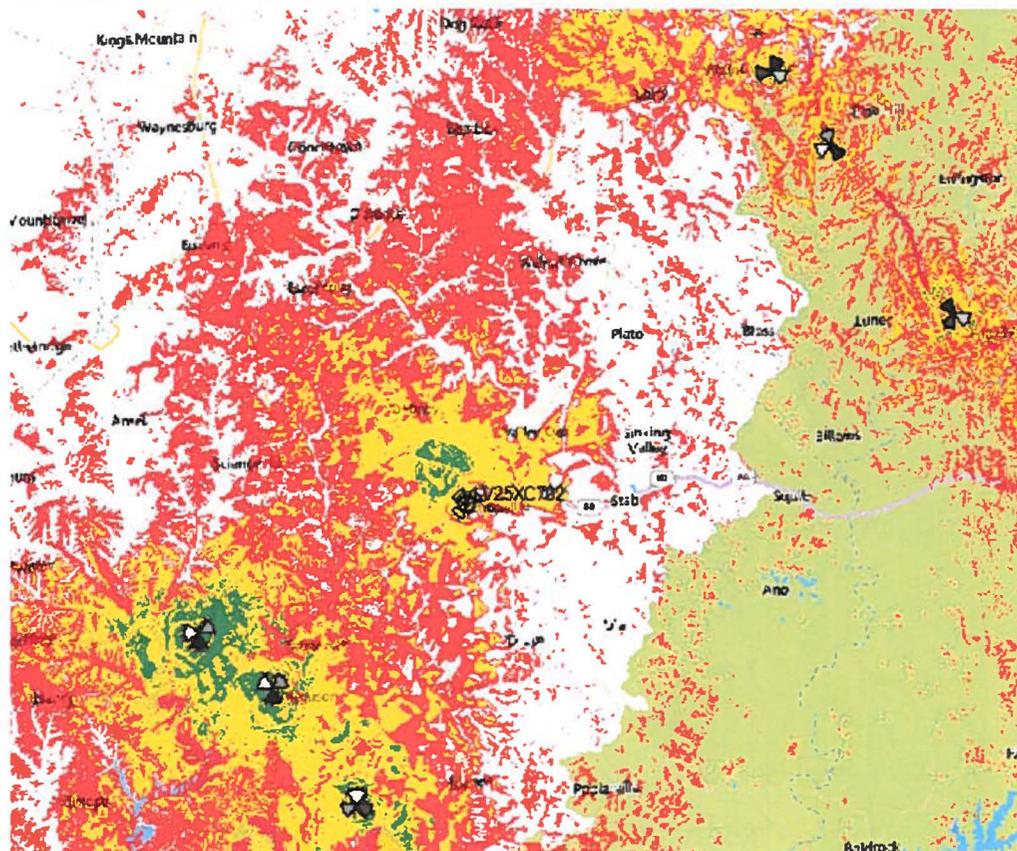


#MoveForward

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Template Version: 16.9MF1.1
Version Date: 10/23/15

Coverage of Relocation Site LV25XC702



Legend

Signal Coverage Level

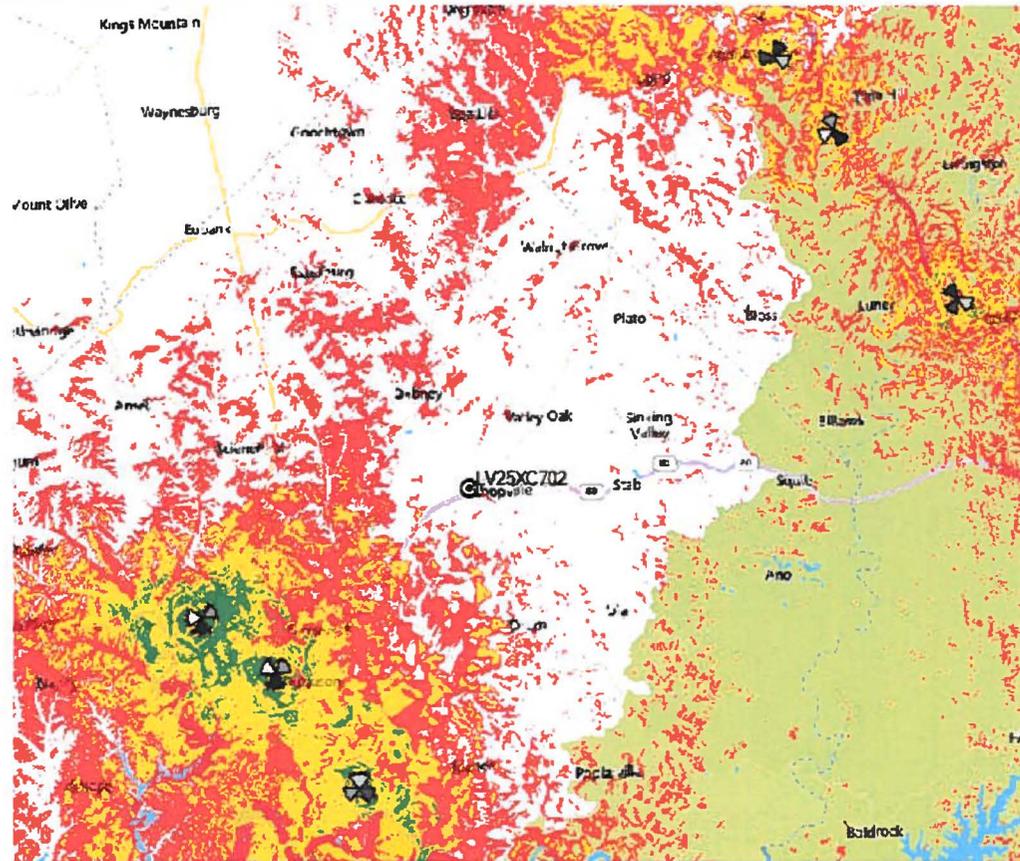
- Excellent
- Good
- Poor

#MoveForward

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Template Version: 16:9MF1.1
Version Date: 10/23/15

Coverage with LV25XC702 Removed



Legend

Signal Coverage Level

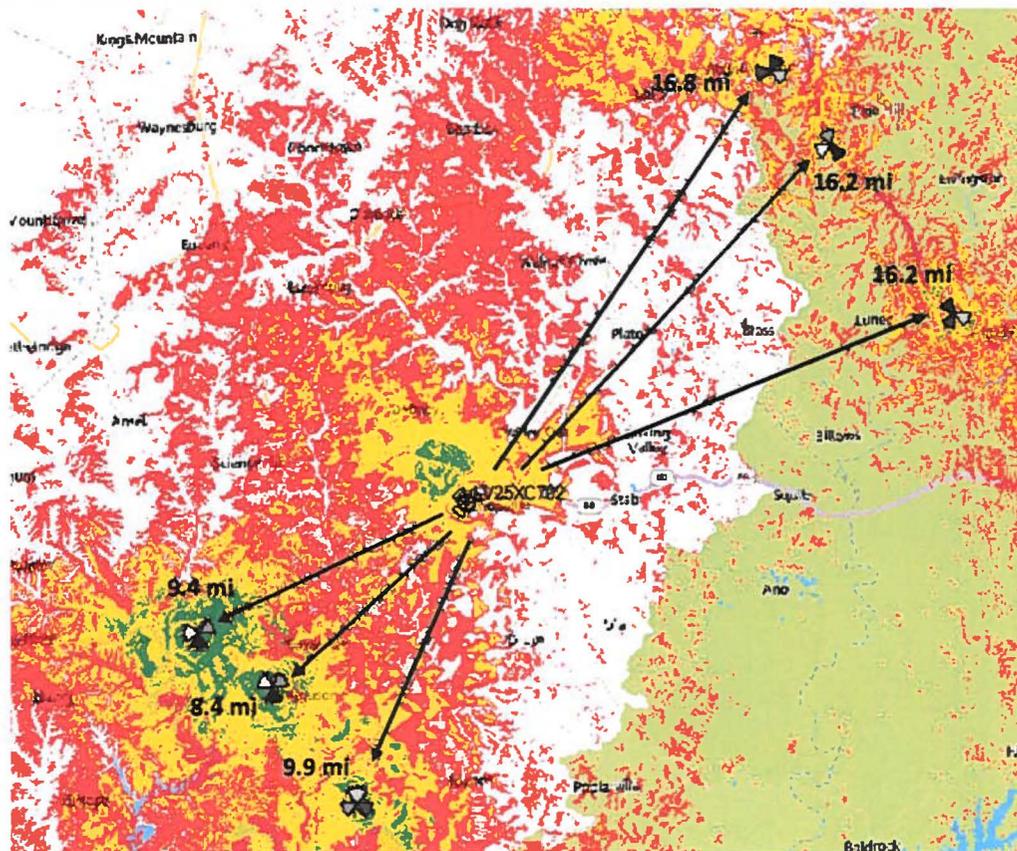
- Excellent
- Good
- Poor

#MoveForward

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Version Date: 10/23/15

Distances to LV25XC702 New Location



| Legend | |
|-----------|------|
| Excellent | Good |
| Good | Poor |

#MoveForward

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Template Version: 16.9MF1.1
Version Date: 10/23/15

EXHIBIT

F

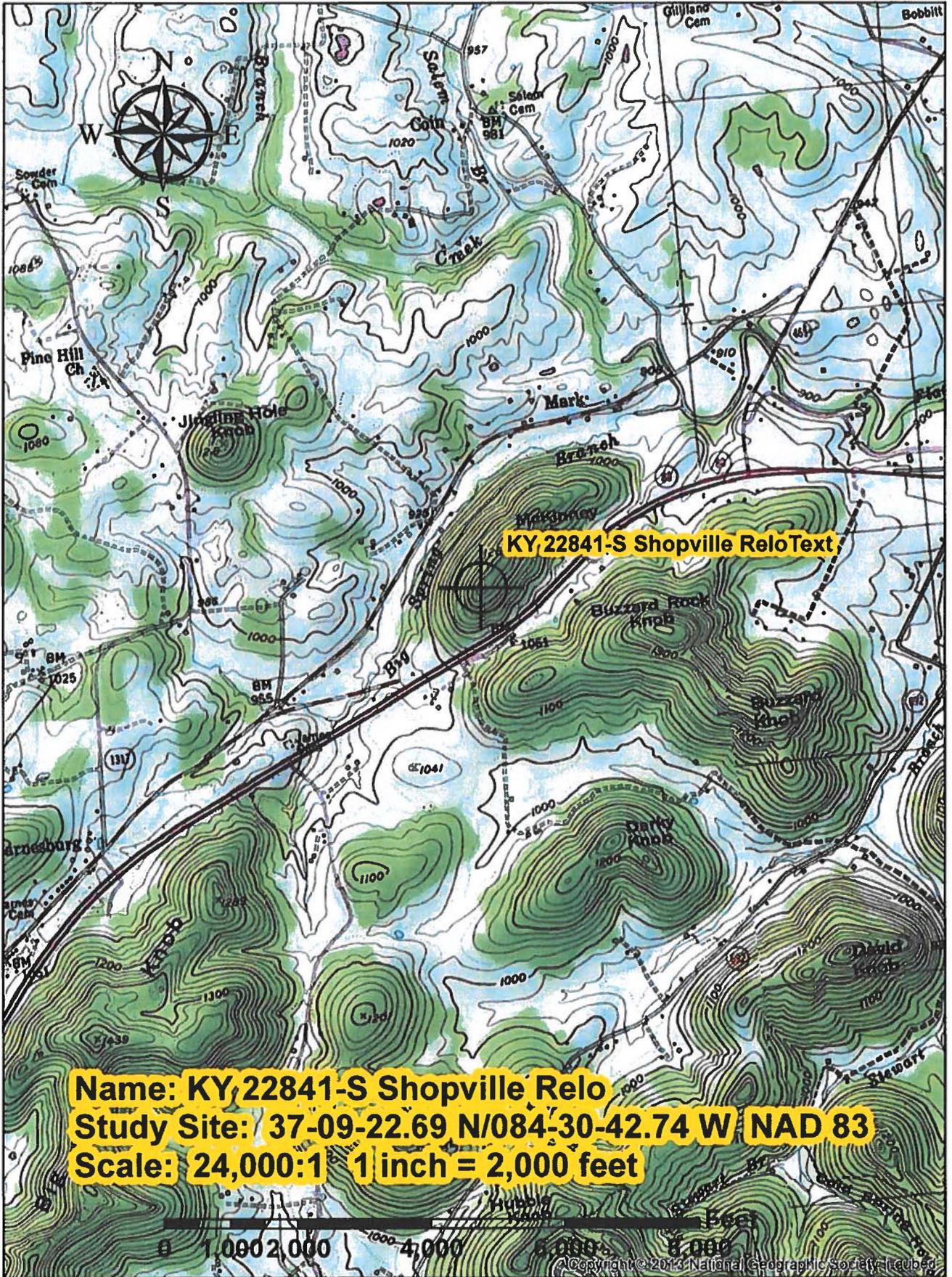


KENTUCKY TRANSPORTATION CABINET
KENTUCKY AIRPORT ZONING COMMISSION

TC 55-2
Rev. 05/2017
Page 2 of 2

APPLICATION FOR PERMIT TO CONSTRUCT OR ALTER A STRUCTURE

| | | | | | |
|---|----------------------------------|---|----------------------------|---|--------------------------|
| APPLICANT (name) SBA Towers | | PHONE 561-226-9481 | FAX 561-226-5961 | KY AERONAUTICAL STUDY # | |
| ADDRESS (street) 8051 Congress Ave | | CITY Boca Raton | | STATE FL | ZIP 33487-1307 |
| APPLICANT'S REPRESENTATIVE (name) Clinton Papenfuss | | PHONE Same | FAX | | |
| ADDRESS (street) Same | | CITY | | STATE | ZIP |
| APPLICATION FOR <input checked="" type="checkbox"/> New Construction <input type="checkbox"/> Alteration <input type="checkbox"/> Existing | | | | WORK SCHEDULE | |
| DURATION <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary (months days) | | | | Start End | |
| TYPE <input checked="" type="checkbox"/> Crane <input type="checkbox"/> Building <input checked="" type="checkbox"/> Antenna Tower <input type="checkbox"/> Power Line <input type="checkbox"/> Water Tank <input type="checkbox"/> Landfill <input type="checkbox"/> Other | | MARKING/PAINTING/LIGHTING PREFERRED <input type="checkbox"/> Red Lights & Paint <input type="checkbox"/> White- medium intensity <input type="checkbox"/> White- high intensity <input checked="" type="checkbox"/> Dual- red & medium intensity white <input type="checkbox"/> Dual- red & high intensity white <input type="checkbox"/> Other | | | |
| LATITUDE 37°09'22.69" | | LONGITUDE 084°30'42.74" | | DATUM <input checked="" type="checkbox"/> NAD83 <input type="checkbox"/> NAD27 <input type="checkbox"/> Other | |
| NEAREST KENTUCKY City Somerset County Pulaski | | NEAREST KENTUCKY PUBLIC USE OR MILITARY AIRPORT Lake Cumberland Regional Airport | | | |
| SITE ELEVATION (AMSL, feet) 1248.48 | | TOTAL STRUCTURE HEIGHT (AGL, feet) 309 AGL | | CURRENT (FAA aeronautical study #) 2019-ASO-13015-OE | |
| OVERALL HEIGHT (site elevation plus total structure height, feet) 1,557 AMSL | | | | PREVIOUS (FAA aeronautical study #) | |
| DISTANCE (from nearest Kentucky public use or Military airport to structure) 7.91 NM | | | | PREVIOUS (KY aeronautical study #) | |
| DIRECTION (from nearest Kentucky public use or Military airport to structure) Bearinf to airport 218.92 | | | | | |
| DESCRIPTION OF LOCATION (Attach USGS 7.5 minute quadrangle map or an airport layout drawing with the precise site marked and any certified survey.) See th attached map | | | | | |
| DESCRIPTION OF PROPOSAL Proposed new construction of 309' AGL structure with lighting rod. | | | | | |
| FAA Form 7460-1 (Has the "Notice of Construction or Alteration" been filed with the Federal Aviation Administration?) <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes, when? 4/8/19 | | | | | |
| CERTIFICATION (I hereby certify that all the above entries, made by me, are true, complete, and correct to the best of my knowledge and belief.) | | | | | |
| PENALTIES (Persons failing to comply with KRS 183.861 to 183.990 and 602 KAR 050 are liable for fines and/or imprisonment as set forth in KRS 183.990(3). Noncompliance with FAA regulations may result in further penalties.) | | | | | |
| NAME Clinton Papenfuss | TITLE Airsapce Analyst | SIGNATURE | | DATE 4/8/19 | |
| COMMISSION ACTION | | <input type="checkbox"/> Chairperson, KAZC <input type="checkbox"/> Administrator, KAZC | | | |
| <input type="checkbox"/> Approved | SIGNATURE | | | DATE | |
| <input type="checkbox"/> Disapproved | | | | | |



millman
surveying National Land Surveyors

a millman land company

Corporate Headquarters
4111 Bradley Circle NW, Suite 240
Canton, OH 44718

PHONE 330.342.0723
TOLL FREE 800.520.1010
FAX 330.342.6224

February 14, 2019

RE:

Site name: **Shopville Relo**
Site number: **KY22841**
Site Address: **TBD – Hwy 80**
Somerset, Kentucky 42503

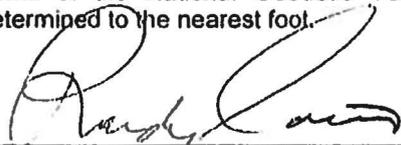
Center of Proposed Tower:

Latitude: **North 37 degrees 09 minutes 22.69 seconds (NAD 83)**
Longitude: **West 84 degrees 30 minutes 42.74 seconds (NAD 83)**

Ground Elevation at Tower: **1248.48' A.M.S.L.**

I hereby certify that the latitude, longitude, and elevations shown hereon were determined from an actual survey performed on the ground by me, or those under my direction, and that the same are within the following FCC "1A" tolerances, horizontal-plus or minus 15 feet, vertical-plus or minus 3 feet.

I also certify that the horizontal datum (coordinates) are in terms of the North American Datum of 1983 (NAD-83) and are expressed as degrees, minutes, and seconds, to the nearest hundredth of a second. The vertical datum (heights) are in terms of the National Geodetic Vertical datum of 1988 (NAVD 88) and are determined to the nearest foot.



Randy M. Davis, P.S.
Kentucky Professional Surveyor No. 3740
For and on behalf of Millman Surveying, Inc.,
MSI JOB NO. 44591



Jessica Ross

From: Clint Papenfuss
Sent: Wednesday, June 26, 2019 11:48 AM
To: Jessica Ross; Angie Becella
Subject: FW: [External] RE: KY 22841-S KY State Filing

KY Approval, see below.

Clinton Papenfuss
SBA Airspace Analyst



SBA Communications Corporation
8051 Congress Avenue
Boca Raton, FL 33487-1307

561.226.9481 + T
561.561.5961 + F
CPapenfuss@sbsite.com

Your Signal Starts Here.

From: Houlihan, John F (KYTC) [mailto:John.Houlihan@ky.gov]
Sent: Wednesday, June 26, 2019 11:44 AM
To: Clint Papenfuss <CPapenfuss@sbsite.com>
Subject: RE: [External] RE: KY 22841-S KY State Filing

This email will serve as verbal approval to start construction.
I will email the KAZC final approval documents this week.
The antenna will be required to use Medium Dual Obstruction Lighting.
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, Office 1-800-928-2700, Desk Phone 502-330-3955

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

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Proposed Case for KY: 2019-ASO-13015-OE

For information only.
This proposal has not yet been studied. Study outcomes will be posted at a later date.
Public comments are not requested, and will not be considered at this time.

| Overview | | | | |
|---|---|------|------|------|
| Study (ASN): 2019-ASO-13015-OE | Received Date: 04/08/2019 | | | |
| Prior Study: | Entered Date: 04/08/2019 | | | |
| Status: Work In Progress | Map: View Map | | | |
| Construction Info | | | | |
| Notice Of: CONSTR | Structure Summary | | | |
| Duration: PERM (Months: 0 Days: 0) | Structure Type: Antenna Tower | | | |
| Work Schedule: | Structure Name: KY 22841-S | | | |
| | FCC Number: | | | |
| Structure Details | | | | |
| Latitude (NAD 83): 37° 09' 22.69" N | Height and Elevation | | | |
| Longitude (NAD 83): 84° 30' 42.74" W | Site Elevation: Proposed 1248 | | | |
| Datum: NAD 83 | Structure Height: 309 | | | |
| City: Somerset | Total Height (AMSL): 1557 | | | |
| State: KY | | | | |
| Nearest County: Pulaski | | | | |
| Frequencies | | | | |
| Low Freq | High Freq | Unit | ERP | Unit |
| 6 | 7 | GHz | 55 | dBW |
| 6 | 7 | GHz | 42 | dBW |
| 10 | 11.7 | GHz | 55 | dBW |
| 10 | 11.7 | GHz | 42 | dBW |
| 17.7 | 19.7 | GHz | 55 | dBW |
| 17.7 | 19.7 | GHz | 42 | dBW |
| 21.2 | 23.6 | GHz | 55 | dBW |
| 21.2 | 23.6 | GHz | 42 | dBW |
| 614 | 698 | MHz | 1000 | W |
| 614 | 698 | MHz | 2000 | W |
| 698 | 806 | MHz | 1000 | W |
| 806 | 901 | MHz | 500 | W |
| 806 | 824 | MHz | 500 | W |
| 824 | 849 | MHz | 500 | W |
| 851 | 866 | MHz | 500 | W |
| 869 | 894 | MHz | 500 | W |
| 896 | 901 | MHz | 500 | W |
| 901 | 902 | MHz | 7 | W |
| 929 | 932 | MHz | 3500 | W |
| 930 | 931 | MHz | 3500 | W |
| 931 | 932 | MHz | 3500 | W |
| 932 | 932.5 | MHz | 17 | dBW |
| 935 | 940 | MHz | 1000 | W |
| 940 | 941 | MHz | 3500 | W |
| 1670 | 1675 | MHz | 500 | W |
| 1710 | 1755 | MHz | 500 | W |
| 1850 | 1910 | MHz | 1640 | W |
| 1850 | 1990 | MHz | 1640 | W |
| 1930 | 1990 | MHz | 1640 | W |
| 1990 | 2025 | MHz | 500 | W |
| 2110 | 2200 | MHz | 500 | W |
| 2305 | 2360 | MHz | 2000 | W |
| 2305 | 2310 | MHz | 2000 | W |
| 2345 | 2360 | MHz | 2000 | W |
| 2496 | 2690 | MHz | 500 | W |



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

Aeronautical Study No.
 2019-ASO-13015-OE

Issued Date: 06/25/2019

Clinton Papenfuss
 SBA Towers
 8051 Congress Avenue
 Boca Raton, FL 33487-1310

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

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

Structure: Antenna Tower KY 22841-S
 Location: Somerset, KY
 Latitude: 37-09-22.69N NAD 83
 Longitude: 84-30-42.74W
 Heights: 1248 feet site elevation (SE)
 309 feet above ground level (AGL)
 1557 feet above mean sea level (AMSL)

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

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

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

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

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

See attachment for additional condition(s) or information.

This determination expires on 12/18/2020 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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

This determination does not constitute authority to transmit on the frequency(ies) identified in this study. The proponent is required to obtain a formal frequency transmit license from the Federal Communications Commission (FCC) or National Telecommunications and Information Administration (NTIA), prior to on-air operations of these frequency(ies).

This determination of No Hazard is granted provided the following conditional statement is included in the proponent's construction permit or license to radiate:

Upon receipt of notification from the Federal Communications Commission that harmful interference is being caused by the licensee's (permittee's) transmitter, the licensee (permittee) shall either immediately reduce the power to the point of no interference, cease operation, or take such immediate corrective action as is necessary to eliminate the harmful interference. This condition expires after 1 year of interference-free operation.

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

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

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

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

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

If we can be of further assistance, please contact our office at (202) 267-3215, or kerryaine.yarber@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2019-ASO-13015-OE.

Signature Control No: 401838028-408812701

(DNE)

Kerryaine Yarber

Specialist

Attachment(s)

Additional Information

Case Description

Frequency Data

Map(s)

cc: FCC

Additional information for ASN 2019-ASO-13015-OE

Please ensure to file the construction crane 30-45 days prior to avoid delays.

Case Description for ASN 2019-ASO-13015-OE

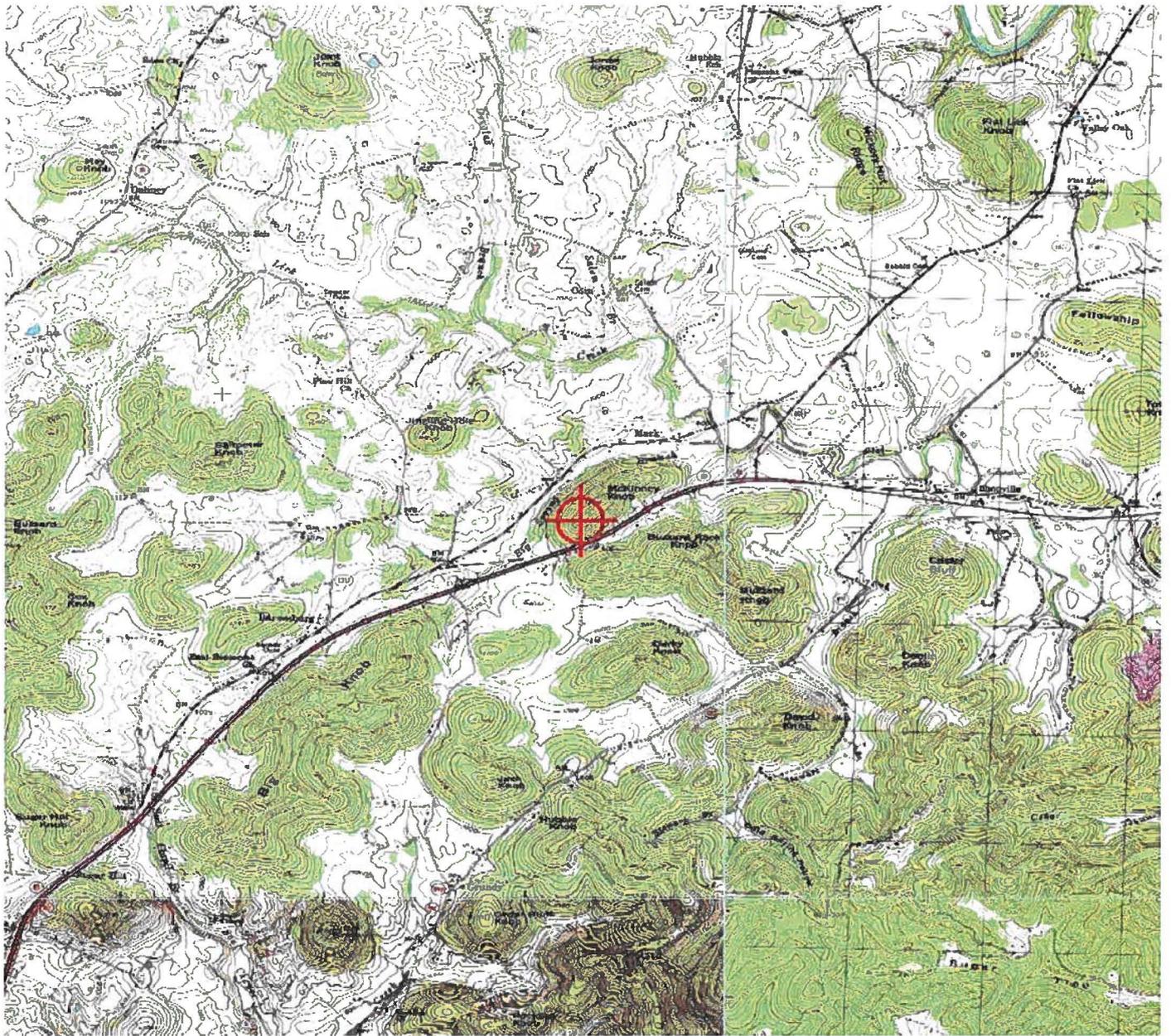
Proposed new construction



Frequency Data for ASN 2019-ASO-13015-OE

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

TOPO Map for ASN 2019-ASO-13015-OE



Sectional Map for ASN 2019-ASO-13015-OE



EXHIBIT

G

Description of Proposed Shopville Relocation Tower, Somerset, Kentucky

This tower site is a relocation of an existing SBA tower which is currently located about .31 miles to the East of this new proposed tower site. This site is about 12 miles East of Somerset, Ky. Due to Kentucky Dept. of Transportation's expansion and rerouting of the traffic flow the existing tower will have to be removed. The proposed expansion plans a large cloverleaf interchange connecting Kentucky State Hwy. 80 to a new Barnesburg road to be built. There is a large resort area with a large lake about 20 miles east of Somerset which brings in a lot of traffic and Hwy. 80 is a major road to the Highway leading to Lexington, Kentucky.

The terrain consists of rolling hills, valleys and high knolls scattered around the area. The proposed site is one of the highest points in the area. The existing use is farm land with small patches of cut over timber. On the South side of Hwy. 80 directly across from the site is a cattle farm which has gently rolling terrain. Just to the East of the cattle farm is a large rock quarry which consumes much of that side of the Hwy. 80. There are a few homes scattered on the South side of the Hwy. but mostly farm or quarry.

The proposed tower site is on the North side of Hwy.80 and the South side of Barnesburg Road and is gently rolling with the exception of the high knoll on which the tower site will be built. This is part of a 64 acre tract which is zoned Farm. There is a home to the west of the site in which the Owner's son resides. There are several homes to the North of the knoll in the valley but they are being bought by the Kentucky Dept. of Transportation for the proposed cloverleaf expansion.

There is an entrance off Hwy. 80 to the proposed road which is an existing old timber road. This is a rock road which is overgrown and will need repairs. It is a slow climb up the hill about $\frac{3}{4}$ of the way. The old timber road ends and it is a sharp incline up an old wagon road to the top of the hill. This wagon road is mostly cleared. There is a main water line running beside the existing timber road which is a concern to stay off the water line. There is mainly rock on this knoll. AT&T lines run part of the way along the existing timber road.

EXHIBIT

H

258307

DEED

THIS DEED OF CONVEYANCE made and entered into this 10th day of August, 2007 by and between YOLANDA DICK VAUGHT, an unmarried widow, of 111 Wildwood Drive, Somerset, Kentucky 42503, GRANTOR, and WILLIAM A. VAUGHT and AUDEAN VAUGHT, husband and wife, jointly, for and during their natural lives with the remainder in fee simple to the survivor of them, of 114 Oak Avenue, Somerset, Kentucky 42501, GRANTEES.

WITNESSETH: That for and in consideration of the sum of ONE HUNDRED TWENTY THOUSAND AND 00/100 (\$120,000.00) DOLLARS, cash in hand paid, the receipt of which is hereby acknowledged, the GRANTOR does hereby bargain, grant, sell and convey unto the GRANTEES, WILLIAM A. VAUGHT and AUDEAN VAUGHT, husband and wife, jointly, for and during their natural lives with the remainder in fee simple to the survivor of them, in fee simple, his or her heirs and assigns, the following described property, to-wit:

TRACT 1: All that portion lying on the North side of Highway No. 80 East and West of the Whitson Road and on the South side of land owned by Arnold Hansford which was conveyed to J. M. Moore on the 7th day of March, 1928 and recorded in Deed Book 99, Page 586 in the Pulaski County Court Clerk's Office.

TRACT 2: All that portion of land lying on the South side of Highway No. 80 East and bounded on the North by above mentioned Highway, on the West by a portion of the Will James farm, and on the East by the land of James Whitson and the Whitson Road.

TRACT 3: A certain tract of land located, lying and being in Pulaski County, State of Kentucky, on the waters of Flatlick Creek, bounded as follows, viz:

Bounded on the South by Highway No. 80 and W. F. Jones; on the East by James A. Hansford; on the North by Randall Cook and Walter Swallows; and on the West by the Whitson Road.

TRACT 4: A certain tract or parcel of land located, lying and being in Pulaski County, Kentucky on the waters of Flat Lick Creek and comprising two tracts:

First: A certain tract of land lying and being in Pulaski County, Kentucky on the waters of Flat Lick Creek and bounded as follows: On the North by the lands of A. J. Barron; on the East by the lands of S. E. Sutton; on the South by the lands of A. F.

and C. H. McKinney; on the West by the lands of W. I. Early and also described as beginning on a stone on the East bank of the creek; thence N 70 E 14 poles to a stone; thence S 73 poles to a white oak; thence S 14 E 94 poles to a post oak; thence S 59 W to a corner and division line of M. W. Braughton and A. J. Braughton; running in a North direction a straight line from said division corner on the Mt. Vernon Road with a small pine on the rize in big front field to a walnut in the back gateway which leads down to the creek; thence a Westwardly direction 210 feet; thence in a north direction on same degree as from Mt. Vernon Road to the creek; thence with the meanders of the creek to the beginning containing 40 acres more or less.

Second Tract: Same containing two acres more or less and adjoining the first tract above described and situated in Pulaski County, Kentucky on the waters of Flat Lick Creek and bounded as follows:

Beginning at a stone at the creek; thence N 70 E 14 1/2 poles to a stone, a division corner; thence N 23 East 60 and 3/4 poles to a stone where stood a double Spanish Oak; thence N 46 W 12 1/2 poles to a bunch of maples on the bank of said creek; thence down said creek to the beginning.

TRACT 5: A certain tract or parcel of land located, lying and being in Pulaski County, State of Kentucky, and bounded as follows:

BEGINNING on a stone, a corner to T. A. Hail, Galen Gilliland and Wyatt Smith; thence west 17 poles and 15 feet to a stone; thence south 20 poles and 6 feet to a stone; thence 7 poles and 14 feet to a stone corner; thence south 3 poles to a stone in the edge of Mt. Vernon Road; thence east with said road 163 poles to a stone; thence northwest 242 poles to the beginning.

TRACT 6: AN UNDIVIDED ONE-FOURTH (1/4) INTEREST in a certain tract or parcel of land lying and being in the County of Pulaski, State of Kentucky, on the waters of Flat Lick Creek and bounded as follows:

BEGINNING at a large poplar stump and stone, old corner and corner to lot #6; thence old line S 52 W 972 poles to a bunch of small dogwood; thence old line S 2 W now 9 W 98 poles to pike; thence same N 57 E 99 poles to a stone; thence N 57 E 31 poles to a dogwood; thence N 26 E 42 poles to a stone; thence N 20 W 15 poles to a dogwood; thence N 79 E 26 poles to a stone in old line; thence N 47 W passing through the center of a spring dividing it equally between this land and the former Wash Raney land 103 poles to the beginning, containing about 50 acres, more or less.

Being the same property conveyed to William A. Vaught, a married person, and Marvin W. Vaught, a married person, by Deed dated September 6, 2000, of record in Deed Book 663, Page 605, Pulaski County Court Clerk's Office, Kentucky. The Life Estates of Allen Vaught and Marie Vaught, retained in Deed Book 663, Page 605, were extinguished as of their deaths. Marvin W. Vaught died testate, devising his interest in the above described property to his wife, Yolanda Dick Vaught. For particulars thereof, see Will Book 053, Page 281, Pulaski County Court Clerk's Office, Kentucky.

TO HAVE AND TO HOLD all of GRANTOR'S right, title and interest in and to the aforesaid property, together with all the rights, privileges, appurtenances and improvements thereunto belonging unto the GRANTEEES, WILLIAM A. VAUGHT and AUDEAN VAUGHT, husband and wife, jointly, for and during their natural lives with the remainder in fee simple to the survivor of them, in fee simple, his or her heirs and assigns, forever, with covenant of GENERAL WARRANTY OF TITLE.

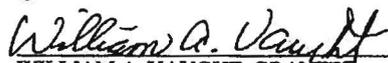
CONSIDERATION CERTIFICATE:

The parties hereto certify that the consideration reflected in this deed is the full consideration paid for the property transferred hereby. We understand that falsification of the stated estimated value is a Class D felony, subject to one to five years of imprisonment and fines up to \$10,000.00. The GRANTEEES join this deed for the sole purpose of certifying the consideration pursuant to KRS Chapter 382.

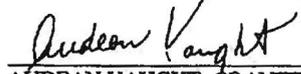
IN TESTIMONY WHEREOF, witness the signatures of the GRANTOR and GRANTEEES, this the date first above written.



YOLANDA DICK VAUGHT, GRANTOR



WILLIAM A. VAUGHT, GRANTEE



AUDEAN VAUGHT, GRANTEE

STATE OF KENTUCKY
COUNTY OF PULASKI.. SCT

The foregoing Deed of Conveyance and Consideration Certificate was signed, acknowledged and sworn to before me this 10th day of August, 2007 by YOLANDA DICK VAUGHT, an unmarried widow, GRANTOR.

Jay McShurley
NOTARY PUBLIC
MY COMM. EXPIRES: 9-14-2010

STATE OF KENTUCKY
COUNTY OF PULASKI.. SCT

The foregoing Consideration Certificate was signed, acknowledged and sworn to before me this 10th day of August, 2007 by WILLIAM A. VAUGHT and AUDEAN VAUGHT, husband and wife, GRANTEEES.

Jay McShurley
NOTARY PUBLIC
MY COMM. EXPIRES: 9-14-2010

THIS DOCUMENT PREPARED WITHOUT
TITLE EXAMINATION AND DOES NOT
GUARANTEE CLEAR OR MARKETABLE
TITLE BY:

Jay McShurley
JAY MCSHURLEY, LAWYER,
126 NORTH MAPLE STREET
P. O. BOX 1827
SOMERSET, KENTUCKY 42502
606-677-9014

STATE OF KENTUCKY, COUNTY OF PULASKI, SCT. I
RALPH TROXTELL, CLERK OF PULASKI COUNTY, CERTIFY
THAT ON THE 12th DAY OF NOVEMBER, THE
FOREGOING DEED WAS PRODUCED TO ME CERTIFIED AS ABOVE
AND LODGED FOR RECORD TRANSFER TAX WAS PAID IN THE SUM
OF 120.00 WHEREUPON I HAVE RECORDED THE SAME,
TOGETHER WITH THIS CERTIFICATE, THIS 10th DAY
OF AUG 2007, IN BOOK 509 PAGE 49
ATTEST: RALPH TROXTELL, CLERK
BY Ralph E. P. [Signature] J.D.C.

2018 - Pulaski Co. Sheriff Property Tax Statement

Pulaski Co. Sheriff
 P.O. Box 752
 Somerset KY 42502

Bill Number: 43586
 District: Pulaski Co
 Location: 0 BARNESBURG RD
 Description: 63 AC BARNESBURG RD
 Map Number: 089-7-0-06
 Farm Acres: 0.00

VAUGHT WILLIAM A & AUDEAN
 114 OAK AVE
 SOMERSET, KY 42501

| | |
|--|--------|
| Amount Due if: | |
| 2% Discount 10/1/18 - 10/31/2018 | 89.68 |
| Face Amount 11/1/18 - 12/31/2018 | 91.51 |
| 5% Penalty 1/1/19 - 01/31/2019 | 96.09 |
| 21% Penalty 2/1/19 - 04/15/2019 | 110.73 |
| Additional penalty after April 15, 2019 | |

| Date Paid | Amount Paid |
|------------|-------------|
| 10/26/2018 | \$89.68 |
| | |

Under Kentucky State Law, these records are public information. Display of this information on the Internet is specifically authorized according to KRS 171.410.

If you believe any data provided is inaccurate, or if you have any comments about this site, we would like to hear from you.

While the city /county has attempted to ensure that the data contained in this file is accurate and reflects the current, the city / county makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. The county does not assume any liability associated with the use or misuse of this data.



EXHIBIT

I

February 14, 2019

RE:

Site name: **Shopville Relo**
Site number: **KY22841**
Site Address: **TBD – Hwy 80**
Somerset, Kentucky 42503

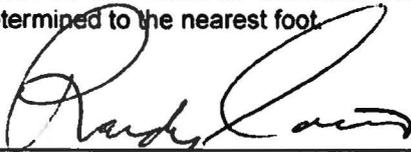
Center of Proposed Tower:

Latitude: **North 37 degrees 09 minutes 22.69 seconds (NAD 83)**
Longitude: **West 84 degrees 30 minutes 42.74 seconds (NAD 83)**

Ground Elevation at Tower: **1248.48' A.M.S.L.**

I hereby certify that the latitude, longitude, and elevations shown hereon were determined from an actual survey performed on the ground by me, or those under my direction, and that the same are within the following FCC "1A" tolerances, horizontal-plus or minus 15 feet, vertical-plus or minus 3 feet.

I also certify that the horizontal datum (coordinates) are in terms of the North American Datum of 1983 (NAD-83) and are expressed as degrees, minutes, and seconds, to the nearest hundredth of a second. The vertical datum (heights) are in terms of the National Geodetic Vertical datum of 1988 (NAVD 88) and are determined to the nearest foot.



Randy M. Davis, FS
Kentucky Professional Surveyor No. 3740
For and on behalf of Millman Surveying, Inc.,
MSI JOB NO. 44591



EXHIBIT

J

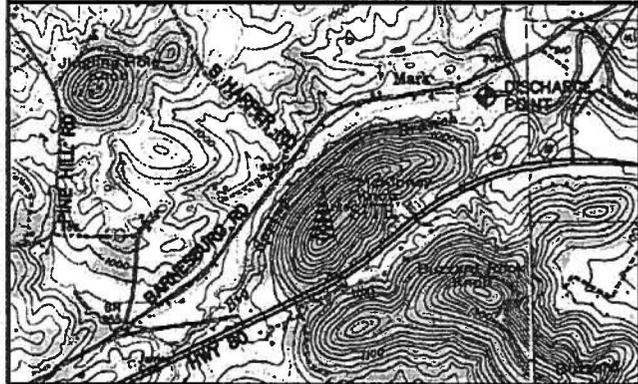
PROJECT SUMMARY

SITE NAME: SHOPVILLE RELO
 SITE ADDRESS: HWY 80
 SOMERSET, KY, 42503
 JURISDICTION: PULASKI COUNTY
 PULASKI COUNTY
 COUNTY:
 ZONING: N/A
 PROPERTY OWNER: WILLIAM A. & AUDEAN VAUGHT
 PHONE: (606) 219-5879
 APPLICANT: SBA TOWERS IX, LLC
 8051 CONGRESS AVENUE
 BOCA RATON, FL 33487-1307
 OFFICE: (800) 487-7483
 FAX: (561) 226-3572
 JASON LASKEY (800) 487-4722
 SITE COORDINATES: 2C/1A
 LATITUDE: N. 37° 09' 22.7" (GPS)
 LONGITUDE: W. 84° 30' 42.7" (GPS)
 ELEVATION: 1248' (GPS)
 OCCUPANCY: UNMANNED
 CONSTRUCTION TYPE: RAW LAND



SITE NAME
 SHOPVILLE
 RELO
SITE I.D.
 KY22841-S
E911 ADDRESS
 HWY 80
 SOMERSET, KY, 42503
PROJECT TYPE
 305' SST TOWER
PLAN ORIGIN DATE
 02-27-19

USGS QUAD MAP 1"=2,000'



DRIVING DIRECTIONS

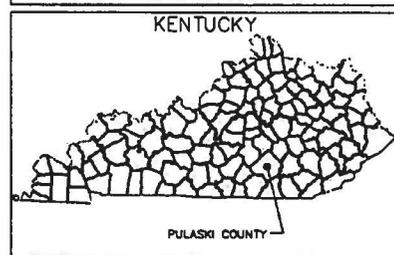
FROM LOCAL CITY OR NEAREST MAJOR HIGHWAY INTERSECTION:
 DIRECTIONS: FROM THE CITY OF SOMERSET, KY TAKE HIGHWAY 80 EAST AND CONTINUE FOR APPROXIMATELY 7 MILES TO THE INTERSECTION WITH WHITSON ROAD. AT THE INTERSECTION TURN LEFT TO CROSS HIGHWAY 80 WEST THE THE SITE ACCESS ON THE LEFT SIDE OF THE ROAD.

ALL PERSONS OWNING PROPERTY LOCATED WITHIN 500 FT OF THE PROPOSED TOWER AND ALL PERSONS OWNING PROPERTY CONTIGUOUS TO THE PROPERTY UPON WHICH THE TOWER IS PROPOSED, HAVE BEEN NOTIFIED BY CERTIFIED MAIL, RETURN RECEIPT REQUESTED, OF THE PROPOSED CONSTRUCTION; GIVEN THE COMMISSION DOCKET NUMBER UNDER WHICH THE APPLICATION WILL BE PROCESSED; AND INFORMED OF THEIR RIGHT TO REQUEST INTERVENTION.

SHEET INDEX

| Sheet Number | Sheet Title |
|--------------|-----------------------------------|
| T-1 | TITLE SHEET |
| T-2 | GENERAL NOTES (1) |
| T-3 | GENERAL NOTES (2) |
| T-4 | TCG - LEGEND |
| Z-1 | ZONING PLAN |
| C-1 | OVERALL SITE PLAN |
| C-2 | PLAN & PROFILE 1 |
| C-3 | PLAN & PROFILE 2 |
| C-4 | PLAN & PROFILE 3 |
| C-5 | PLAN & PROFILE 4 |
| C-6 | ENLARGED SITE PLAN |
| C-7 | TOWER ELEVATION PLAN |
| C-8 | CONSTRUCTION DETAILS - SITE |
| C-9 | CONSTRUCTION DETAILS - FENCE (1) |
| C-10 | CONSTRUCTION DETAILS - FENCE (2) |
| E-1 | UTILITY SITE PLAN (1) |
| E-2 | UTILITY & TELCO H-FRAME DETAIL |
| E-3 | ELEC. SINGLE LINE DETAIL |
| EG-1 | GROUNDING PLAN - DETAIL |
| EG-2 | GROUNDING DETAIL (1) |
| EG-3 | GROUNDING DETAIL (2) |
| ES-1 | EROSION & SEDIMENT CONTROL PLAN 1 |
| ES-2 | EROSION & SEDIMENT CONTROL PLAN 2 |
| ES-3 | EROSION & SEDIMENT CONTROL PLAN 3 |
| ES-4 | EROSION & SEDIMENT CONTROL PLAN 4 |
| ES-5 | EROSION & SEDIMENT CONTROL NOTES |
| ES-6 | E&S DETAILS |

STATE COUNTY MAP



APPROVALS

LANDLORD: _____ DATE: _____

CONSULTING TEAM

ENGINEERING FIRM:
 THE CROSSROADS GROUP, LLC
 16590 POTTSVILLE PIKE, SUITE A
 HAMBURG, PA 19528
 CONTACT: JEREMIAH D. HOAGLAND
 PHONE: (484)-660-3055 FAX: (484) 680-3742
SURVEYING FIRM:
 MILLMAN SURVEYING, INC.
 4111 BRADLEY CIRCLE NW, SUITE 240
 CANTON, OH 44718
 CONTACT: ERINA FORD
 PHONE: (800)-520-1010
TELEPHONE COMPANY:
 TELEPHONE COMPANY: TBD
 ADDRESS:
 CITY, STATE, ZIP
 CONTACT: TBD
 PHONE: TBD FAX: TBD
POWER COMPANY:
 ELECTRIC COMPANY: SKRECC
 128 GARNER SCHOOL HOUSE RD
 SOMERSET, KY, 42503
 CONTACT: BRUCE
 EMAIL: BRUCE@SKRECC.COM
 PHONE: (606) 688-8888 FAX: (606) 688-8888



SBA TOWERS IX, LLC
 8051 CONGRESS AVENUE
 BOCA RATON, FL 33487-1307
 TEL: (800) 487-7483



THE CROSSROADS GROUP, LLC
 www.thecrossroadsgroupinc.com
 16590 Pottsville Pike, Ste. A
 Hamburg, PA 19528
 Phone: PA 484-660-3055
 Fax: 484-680-3742
 1174 S.R. 487
 Pompano, FL 33069
 Phone: FL 370-473-2217
 Fax: 484-680-3742

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO THE CLIENT IS STRICTLY PROHIBITED.

SCALE: AS SHOWN
 DRAWN BY: RMR
 PLAN ORIG. DATE: 02-27-19

REVISIONS

| NO. | DATE | DESCRIPTION |
|-----|---------|------------------------|
| C | 8-24-19 | PER CLIENT COMMENTS |
| B | 8-09-19 | ISSUES DESIGN |
| A | 3-27-19 | ADDITIONAL SITE SURVEY |



PROJECT NO: 2739
 SITE NAME: SHOPVILLE RELO
 SITE NUMBER: KY22841-S
 SITE ADDRESS: HWY 80
 SOMERSET, KY, 42503
 FILE NAME: TITLE-LEGEND.DWG
 SHEET TITLE: TITLE SHEET
 DRAWING NO: T-1
 REVISION: C

GENERAL NOTES

- ALL REFERENCES TO OWNER HEREIN SHALL BE CONSTRUED TO MEAN SBA OR ITS DESIGNATED REPRESENTATIVE.
- ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED UNLESS NOTED OTHERWISE. THE CONTRACTOR MUST HAVE CONSIDERABLE EXPERIENCE IN PERFORMANCE OF WORK SIMILAR TO THAT DESCRIBED HEREIN. BY ACCEPTANCE OF THIS ASSIGNMENT, THE CONTRACTOR IS ATTESTING THAT HE DOES HAVE SUFFICIENT EXPERIENCE AND ABILITY TO COMPLETE THE WORK. THE WORK TO BE PERFORMED AND THAT HE IS LICENSED AND PROPERLY REGISTERED TO DO THIS WORK IN THE STATE AND/OR COUNTRY IN WHICH IT IS TO BE PERFORMED.
- UNLESS SHOWN OR NOTED OTHERWISE ON THE CONTRACT DRAWINGS, OR IN THE SPECIFICATIONS, THE FOLLOWING NOTES SHALL APPLY TO THE MATERIALS LISTED HEREIN, AND TO THE PROCEDURES TO BE USED ON THIS PROJECT.
- ALL HARDWARE ASSEMBLY MANUFACTURER'S INSTRUCTIONS SHALL BE FOLLOWED EXACTLY AND SHALL SUPERCEDE ANY CONFLICTING NOTES ENCLOSED HEREIN.
- IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO INSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION AND/OR FIELD MODIFICATIONS. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WATER TO TEMPORARY BRACING, CUTS OR THE DOWNS THAT MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
- ALL DIMENSIONS, ELEVATIONS AND EXISTING CONDITIONS SHOWN ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND THE TESTING AGENCY PRIOR TO BEGINNING ANY MATERIALS ORDERING, FABRICATION OR CONSTRUCTION WORK ON THIS PROJECT. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND THE OWNER'S ENGINEER. THE DISCREPANCIES MUST BE RESOLVED BEFORE THE CONTRACTOR IS TO PROCEED WITH THE WORK. THE CONTRACT DOCUMENTS DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE OWNER AND/OR THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE PROTECTIVE MEASURES OR THE CONSTRUCTION PROCEDURES.
- ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE NEW AND OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ANY AND ALL SUBSTITUTIONS MUST BE PROPERLY APPROVED AND AUTHORIZED IN WRITING BY THE OWNER AND ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF THE MATERIALS AND EQUIPMENT BEING SUBSTITUTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT THIS PROJECT AND RELATED WORK COMPLIES WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL SAFETY CODES AND REGULATIONS GOVERNING THIS WORK.
- ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE LATEST EDITION OF THE LOCAL BUILDING CODE.
- ALL PROPOSED CELLULAR EQUIPMENT AND FIXTURES SHALL BE FURNISHED BY OWNER FOR INSTALLATION BY THE CONTRACTOR, UNLESS SPECIFICALLY NOTED OTHERWISE HEREIN.
- ACCESS TO THE PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE INTENDED CONSTRUCTION ACTIVITY, INCLUDING WORK SCHEDULE AND MATERIALS ACCESS WITH THE RESIDENT LEASING AGENT FOR APPROVAL.
- RADIO EQUIPMENT INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

GRADING

- THE CONTRACTOR SHALL REWORK (DRY, SCARIFY, ETC.) ALL MATERIAL NOT SUITABLE FOR SUB GRADE IN ITS PRESENT STATE. IF THE MATERIAL, AFTER REWORKING, REMAINS UNSUITABLE THEN THE CONTRACTOR SHALL UNDERCUT THIS MATERIAL AND REPLACE WITH APPROVED MATERIAL AT HIS EXPENSE. ALL SUB GRADES SHALL BE PROOF ROLLED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK PRIOR TO PAVING. ANY SOFT MATERIAL SHALL BE REWORKED OR REPLACED.
- THE CONTRACTOR IS REQUIRED TO MAINTAIN ALL DITCHES, PIPES, AND OTHER DRAINAGE STRUCTURES FREE FROM OBSTRUCTION UNTL WORK IS ACCEPTABLE BY THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES CAUSED BY FAILURE TO MAINTAIN DRAINAGE STRUCTURES IN OPERABLE CONDITION.
- ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTED FOR ONE (1) YEAR FROM DATE OF ACCEPTANCE.
- ALL DIMENSIONS SHALL BE VERIFIED WITH THE PLANS (LATEST REVISION) PRIOR TO COMMENCING CONSTRUCTION. NOTIFY THE OWNER IMMEDIATELY IF DISCREPANCIES ARE DISCOVERED. THE CONTRACTOR SHALL HAVE A SET OF APPROVED PLANS AVAILABLE AT THE SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED. A DESIGNATED RESPONSIBLE EMPLOYEE SHALL BE AVAILABLE FOR CONTACT BY GOVERNING AGENCY INSPECTORS.

STRUCTURAL NOTES

- DESIGN REQUIREMENTS PER LOCAL BUILDING CODE AND THE I/A/71A-222-0 STRUCTURAL STANDARDS FOR STEEL ANTENNAS TOWERS AND SUPPORTING STRUCTURES.
- STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF A.I.S.C. SPECIFICATIONS FOR STRUCTURAL STEEL.
- BUILDINGS-ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN INCLUDING THE COMMENTARY AND THE A.I.S.C. CODE OF STANDARD PRACTICE.
- STRUCTURAL STEEL PLATES AND SHAPES SHALL CONFORM TO ASTM A36. ALL STRUCTURAL STEEL PIPES SHALL CONFORM TO ASTM A53 GRADE B. ALL STRUCTURAL STEEL TUBING SHALL CONFORM TO ASTM A500 GRADE B. ALL STRUCTURAL STEEL COMPONENTS AND FABRICATED ASSEMBLIES SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
- WELDING SHALL BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY (AWS) D1.1-88. STRUCTURAL WELDING CODE-STEEL WELD ELECTRODES SHALL BE E70XX.
- ALL COAXIAL CABLE CONNECTORS AND TRANSMITTER EQUIPMENT SHALL BE AS SPECIFIED BY THE OWNER AND IS NOT INCLUDED IN THESE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL FURNISH ALL CONNECTION HARDWARE REQUIRED TO SECURE THE CABLES. CONNECTION HARDWARE SHALL BE STAINLESS STEEL.
- NORTH ARROW SHOWN ON PLANS REFERS TO TRUE NORTH. CONTRACTOR SHALL VERIFY NORTH AND INFORM OWNER OF ANY DISCREPANCY BEFORE STARTING CONSTRUCTION.
- ALL CAST IN PLACE CONCRETE SHALL BE MIXED AND PLACED IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 318 AND ACI 301, AND SHALL HAVE A 28 DAY MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI (U.O.M.). CONCRETE SHALL BE PLACED AGAINST UNDISTURBED SOIL UNLESS OTHERWISE NOTED. MINIMUM CONCRETE COVER SHALL BE 3 INCHES UNLESS OTHERWISE NOTED.
- ALL REINFORCING STEEL SHALL CONFORM TO ASTM 615 GRADE 60. DEFORMED BILLET STEEL BARS, WELDED WIRE FABRIC REINFORCING SHALL CONFORM TO ASTM A641.
- THE FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE LATEST A.I.S.C. SPECIFICATIONS.
- ALL CONNECTIONS NOT FULLY DETAILED ON THESE PLANS SHALL BE DETAILED BY THE STEEL FABRICATOR IN ACCORDANCE WITH A.I.S.C. SPECIFICATIONS.
- HOT-DIP GALVANIZE ITEMS SPECIFIED TO BE ZINC-COATED. AFTER FABRICATION WHERE PRACTICAL GALVANIZING: ASTM A 123, ASTM A 153/A 153M OR ASTM A 653/A 653M, G90, AS APPLICABLE.
- REPAIR DAMAGED SURFACES WITH GALVANIZING REPAIR METHOD AND PAINT CONFORMING TO ASTM A 780 OR BY APPLICATION OF STICK OR THICK PASTE MATERIAL SPECIFICALLY DESIGNED FOR REPAIR OF GALVANIZING. CLEAN AREAS TO BE REPAIRED, AND REMOVE SLAG FROM WELDS. HEAT SURFACES TO WHICH STICK OR PASTE MATERIAL IS APPLIED WITH A TORCH TO A TEMPERATURE SUFFICIENT TO MELT THE METALLURGY IN STICK OR PASTE. SPREAD MOLTEN MATERIAL UNIFORMLY OVER SURFACES TO BE COATED AND WIPE OFF EXCESS MATERIAL.
- CONTRACTOR SHALL FOLLOW THE MANUFACTURER'S INSTRUCTIONS/SPECIFICATIONS IF NO INFORMATION IS CONTAINED IN THESE PLANS OR IF THE MANUFACTURER'S SPECIFICATIONS ARE STRICTER.
- ALL STRUCTURES, STRUCTURAL DETAILS AND STRUCTURAL SPECIFICATIONS DEPICTED ON THIS PLAN SET ARE DESIGNED BY OTHERS. THEY ARE PROVIDED FOR LOCATION AND GENERAL REFERENCE ONLY. ALL REGULATORY AND DESIGN OBLIGATIONS ARE THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER. THE CROSSROADS GROUP, LLC, ASSUMES NO RESPONSIBILITY OR LIABILITY ASSOCIATED WITH THE DESIGN OBLIGATIONS OF THE STRUCTURAL ENGINEER.

PERMITS

- CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS FOR THIS PROJECT FROM ALL APPLICABLE GOVERNMENTAL AGENCIES. (NOT SUPPLIED BY OWNER)
- ANY PERMITS WHICH MUST BE OBTAINED SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS. (NOT SUPPLIED BY OWNER)
- ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES AND THE LATEST APPLICABLE CODES AND STANDARDS.
- THE CONTRACTOR SHALL NOTIFY THE APPLICABLE JURISDICTIONAL (STATE, COUNTY, OR CITY) ENGINEER 24 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- CONTRACTOR RESPONSIBLE FOR CLOSING AND FILING ALL PERMITS ASSOCIATED WITH SITE.

UTILITIES

- CONTRACTOR SHALL CONTACT A SUBSURFACE UTILITY LOCATOR FOR LOCATION OF EXISTING UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. LOCATION OF EXISTING SEWER, WATER LINES, GAS LINES, COULDRIS OR OTHER STRUCTURES ACROSS, UNDERNEATH, OR OTHERWISE ALONG THE LINE OF PROPOSED WORK ARE NOT NECESSARILY SHOWN ON THE PLANS, AND IF SHOWN ARE ONLY APPROXIMATELY CORRECT. CONTRACTOR ASSUMES SOLE RESPONSIBILITY FOR VERIFYING LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES (INCLUDING TEST PITS BY HAND IF NECESSARY) IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK. CONTACT ENGINEER IMMEDIATELY IF LOCATION OR ELEVATION IS DIFFERENT FROM THAT SHOWN ON THE PLANS, OR IF THERE APPEARS TO BE A CONFLICT.
- CONTRACTOR SHALL COORDINATE ALL UTILITY CONNECTIONS WITH APPROPRIATE UTILITY OWNERS AND CONSTRUCTION MANAGER.
- DAMAGE BY THE CONTRACTOR TO UTILITIES OR PROPERTY OF OTHERS, INCLUDING EXISTING PAVEMENT AND OTHER SURFACES DISTURBED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPAIRED TO PRE CONSTRUCTION CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CLIENT. FOR GRASSED AREAS, SEED AND MULCH SHALL BE ACCEPTABLE.
- THE CONTRACTOR SHALL COORDINATE WITH THE OWNER THE REQUIREMENT FOR AND LIMITS OF OVERHEAD AND/OR UNDERGROUND ELECTRICAL SERVICE.
- THE CONTRACTOR SHALL COORDINATE THE LOCATION OF NEW UNDERGROUND TELE SERVICE WITH THE TELEPHONE UTILITY AND THE OWNER'S REQUIREMENTS.
- ALL UNDERGROUND UTILITIES SHALL BE INSTALLED AND TESTED SATISFACTORILY PRIOR TO COMMENCING ANY PAVING OPERATIONS WHERE SUCH UTILITIES ARE WITHIN THE LIMITS OF PAVEMENT.

CONSTRUCTION NOTES

STORM SEWER

- UNLESS OTHERWISE NOTED, ALL STORM SEWER INLETS SHALL CONFORM TO DEPARTMENT OF TRANSPORTATION STANDARDS.
- UNLESS OTHERWISE NOTED, ALL STORM SEWER PIPING SHALL BE REINFORCED CONCRETE PIPE AND SHALL CONFORM TO DEPARTMENT OF TRANSPORTATION STANDARDS.
- UNLESS OTHERWISE NOTED, ALL CONCRETE DOWNFALLS SHALL CONFORM TO DEPARTMENT OF TRANSPORTATION STANDARDS. THE TOP OF WALL ELEVATION FOR ALL DOWNFALLS SHALL CONFORM TO THESE STANDARDS FOR THE ASSOCIATED PIPE SIZE. IN THE EVENT THAT A HIGH TOP OF WALL ELEVATION IS NECESSARY FOR GRADING, THE "SPECIAL" TOP OF WALL ELEVATION SHALL BE NOTED ON THE PLANS.
- THE TOP OF GRATE ELEVATION FOR ALL CURBSIDE STORM SEWER INLETS IS FOR THE CENTER OF THE INLET AT THE FACE OF CURB.
- THE CONTRACTOR SHALL PROJECT THE ROADWAY GRADE ALONG THE LENGTH OF THE INLET.
- ALL STORM SEWER LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE. PIPE SLOPES ARE CALCULATED BASED ON THIS LENGTH.

GENERAL CONSTRUCTION:

- THIS PLAN CONTAINS PRELIMINARY INFORMATION PERTAINING TO UNDERGROUND UTILITIES WHICH IS FOR GENERAL INFORMATION ONLY, AND MAY NOT BE BASED ON AN ACTUAL SUBSURFACE LOCATION SURVEY. ALL SUBSURFACE INFORMATION SHOWN ON THESE PLANS NEEDS TO BE VERIFIED BY THE PLAN USER. THE PREPARER OF THIS PLAN ASSUMES NO RESPONSIBILITY FOR AND MAKES NO REPRESENTATION OR WARRANTIES AS TO THE ACCURACY OF THE LOCATION OF UNDERGROUND UTILITIES OR OTHER UNDERGROUND FEATURES. THE PLAN USER SHALL EXECUTE A PA ONE CALL PRIOR TO ANY EXCAVATION ON THE SITE.
- ALL CONSTRUCTION SHALL CONFORM TO COUNTY STANDARDS AND SPECIFICATIONS OR DEPARTMENT OF TRANSPORTATION STANDARDS, WHICHEVER IS APPLICABLE.
- CONTRACTOR SHALL BE REMOVED FROM ALL AREAS OF CONSTRUCTION AND STORED SEPARATELY, PRIOR TO BULK EXCAVATION. UPON COMPLETION OF CONSTRUCTION, THE TOPSOIL SHOULD BE REDISTRIBUTED ON THE SITE UNIFORMLY.
- ALL CONTRACTORS SHALL BE RESPONSIBLE TO INSURE THAT ALL TRENCH EXCAVATIONS BE ADEQUATELY STABILIZED AND ACCESSED IN ACCORDANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REQUIREMENTS, INCLUDING ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS / CODES OF SAFE PRACTICE AND PROCEDURES.
- CONTRACTOR SHALL PRE-TEST DESIGN DEPTHS FOR ALL BMP'S PRIOR TO INSTALLING RELATED STRUCTURES OR PERFORMING BULK EXCAVATION (REFER TO THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN FOR ALL BMP AND ASSOCIATED STRUCTURE LOCATIONS). MINOR ADJUSTMENTS MAY BE NECESSARY DURING CONSTRUCTION DUE TO UNKNOWN SITE CONDITIONS. IF NECESSARY, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY FOR FURTHER EVALUATION. ALL FIELD CHANGES MUST BE REVIEWED AND APPROVED BY THE MUNICIPALITY AND/OR AGENCY HAVING JURISDICTION.

PAINTING

- CONTRACTOR TO COORDINATE PAINTING REQUIREMENTS WITH OWNER.
- PAINT COLORS SHALL BE SELECTED TO MATCH EXISTING COLORS AND TEXTURES.
- PROVIDE THE BEST QUALITY GRADE OF COATINGS AS REGULARLY MANUFACTURED BY APPROVED PAINT MATERIAL MANUFACTURERS. MATERIALS NOT DISPLAYING THE MANUFACTURER'S IDENTIFICATION AS A STANDARD, BEST-GRADE PRODUCT WILL NOT BE ACCEPTABLE.
- PROVIDE UNDERCOAT PAINT PRODUCED BY THE SAME MANUFACTURER AS THE FINISH COATS. USE ONLY THINNERS APPROVED BY THE PAINT MANUFACTURER AND USE ONLY WITHIN COMPLETED LIMITS.
- COMPLETELY COVER TO PROVIDE AN OPAQUE, SMOOTH SURFACE OF UNIFORM FINISH, COLOR, APPEARANCE, AND COVERAGE. CLOUDINESS, SPOTTINGS, HOLIDAYS, LAPS, BRUSH MARKS, RUNS, SAGS, ROPENESS, OR OTHER SURFACE IMPERFECTIONS WILL NOT BE ACCEPTABLE.

FERRUSS METALS SHOP PRIMER TOUCH-UP COAT - RED OXIDE METAL PRIMER FINISH COATS - SEMI-GLOSS-ALKYD ENAMEL

SBA CONSTRUCTION REQUIREMENTS

- AWARDED CONTRACTOR WILL BE REQUIRED TO SIGN AND RETURN A COPY OF AN AWARD LETTER FOR SBA'S FILE.
- CONTRACTOR WILL BE REQUIRED TO PROVIDE PROOF OF LICENSE TO PERFORM WORK IN JURISDICTION AT TIME OF BID AWARD.
- CONTRACTOR WILL PROVIDE A CONSTRUCTION SCHEDULE PRIOR TO CONSTRUCTION STARTING AND WILL PROVIDE UPDATE/CHANGES (WITH EXPLANATIONS) TO THAT SCHEDULE WHEN/IF ITEMS ARE DELAYED OR PUSHED OUT.
- CONTRACTOR WILL BE RESPONSIBLE FOR ALL CONCRETE COMPRESSIVE TESTING AND REQUIRED TO SUBMIT FINAL TEST RESULTS WITH CLOSE-OUT BOOK.
- CONTRACTOR WILL BE RESPONSIBLE TO PROVIDE SBA PROJECT MANAGERS WITH PHOTOS OF THE MAJOR CONSTRUCTION MILESTONES AS THEY OCCUR.
- CONTRACTOR WILL BE RESPONSIBLE TO ASSIST IN COORDINATING AND OBTAINING PRIMARY POWER TO THE SITE PRIOR TO TOWER ERECTION, AS WELL AS TELCO SERVICE BEFORE PROJECT COMPLETION. (ON SITE VISITS WITH UTILITY COMPANY REPRESENTATIVES AS NECESSARY, ETC.)
- CONTRACTOR WILL HAVE A REPRESENTATIVE ON A WEEKLY CONFERENCE CALL TO PROVIDE SBA WITH SITE SPECIFIC UPDATES. CURRENTLY, THIS CONFERENCE CALL IS HELD EACH AND EVERY THURSDAY AT 4 PM (EASTERN TIME).
- CONTRACTOR SHOULD BE PREPARED FOR RANDOM SBA SAFETY INSPECTIONS AT ALL TIMES.
- CONTRACTOR IS EXPECTED TO MAINTAIN PROPER WORKING CONDITIONS AND PROCEDURES PER OSHA STANDARDS AT ALL TIMES.
- CONTRACTOR WILL BE REQUIRED TO OBTAIN THE NECESSARY ELECTRICAL PERMITS AND INSPECTIONS AS REQUIRED BY JURISDICTION.
- CONTRACTOR IS EXPECTED TO CLOSE-OUT THE JOB SITE AS QUICKLY AS POSSIBLE (OBTAINING A CERTIFICATE OF OCCUPANCY AND GETTING SBA'S REGIONAL SITE MANAGER'S SIGN-OFF/CHECKLIST APPROVAL ON THE SITE).
- CONTRACTOR WILL PROVIDE A COMPLETED TOWER HEIGHT VERIFICATION FORM AND TAPE DROP WITHIN 24 HOURS OF REACHING OVERALL HEIGHT.
- CONTRACTOR WILL UTILIZE ALL OF THE SBA PROVIDED DOCUMENTATION INCLUDING BUT NOT LIMITED TO: TOWER CONSTRUCTION ACCEPTANCE CHECKLIST, CONSTRUCTION SCHEDULE, CONSTRUCTION CLOSE-OUT LIST & TOWER HEIGHT VERIFICATION. CONTRACTOR IS RESPONSIBLE FOR CONCRETE COMPRESSION TESTING.
- CONTRACTOR IS RESPONSIBLE FOR GROUND MEC TESTING.
- CONTRACTOR IS RESPONSIBLE FOR ALL GRADING AND FILL. CONSTRUCTION TESTING IS REQUIRED AS SET FORTH IN THE GEO TECHNOLOGICAL REPORT PROVIDED BY OWNER.
- ALL ELECTRICAL EQUIPMENT, ELECTRICAL DETAILS AND ELECTRICAL SPECIFICATIONS DEPICTED ON THIS PLAN SET ARE DESIGNED BY OTHERS. THEY ARE PROVIDED FOR LOCATION AND GENERAL REFERENCE ONLY. ALL REGULATORY AND DESIGN OBLIGATIONS ARE THE RESPONSIBILITY OF THE ELECTRICAL ENGINEER. THE CROSSROADS GROUP, LLC, ASSUMES NO RESPONSIBILITY OR LIABILITY ASSOCIATED WITH THE DESIGN OBLIGATIONS OF THE ELECTRICAL ENGINEER.

HANDICAPPED REQUIREMENTS
FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAP ACCESS NOT REQUIRED.

PLUMBING REQUIREMENTS
FACILITY HAS NO PLUMBING.

SBA

SBA TOWERS II, LLC
8001 CONGRESS AVENUE
BOCA RATON, FL 33487-1307
TEL: (800) 487-7463



THE CROSSROADS GROUP, LLC
www.thecrossroadsgroupinc.com

1600A Philadelphia Pk., Ste. A
Huntington, PA 15891
Tel: 484-665-3000
Fax: 484-665-3142

1174 S.R. 407
Pittsburgh, PA 15209
Tel: 412-472-7211
Fax: 412-472-3142

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SCALE: **NTS**

DRAWN BY: **JH**

PLAN ORG DATE: **02-27-19**

REVISIONS

| NO. | DATE | DESCRIPTION |
|-----|---------|------------------------|
| C | 8-29-18 | FOR CLIENT COMMENTS |
| B | 8-08-18 | RPODS DESIGN |
| A | 3-27-18 | ADDITIONAL SITE SURVEY |



PROJECT NO. **2739**

SITE NAME
SHOPVILLE RELO

SITE NUMBER:
KY22841-S

SITE ADDRESS:
**HWY 80
SOMERSET, KY, 42503**

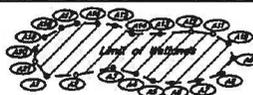
FILE NAME:
TITLE-LEDOEN.DWG

SHEET TITLE
GENERAL NOTES (2)

DRAWING NO. **T-3** REVISION **C**

EXISTING LEGEND

| | |
|--|--------------------------------------|
| | TRACT BOUNDARY |
| | EXISTING PARCEL LINE TO BE ABOLISHED |
| | EXISTING RIGHT-OF-WAY |
| | EXISTING EASEMENT |
| | ADJOINING PROPERTY LINE |
| | EXISTING ZONING/TOWNSHIP BOUNDARY |
| | EXISTING WATER LINE/SERVICE |
| | EXISTING STORM SEWER LINE/INLET |
| | EXISTING GAS LINE |
| | EXISTING ELECTRIC LINE (UNDERGROUND) |
| | EXISTING ELECTRIC LINE (OVERHEAD) |
| | EXISTING SANITARY SEWER LINE/MANHOLE |
| | EXISTING SANITARY LATERAL |
| | EXISTING CURB |
| | EXISTING EDGE OF ROAD (PAVED) |
| | EXISTING SHOULDER (ROAD) |
| | EXISTING EDGE OF ROAD (UNPAVED) |
| | EXISTING DRIVEWAY |
| | EXISTING ROAD CENTERLINE |
| | EXISTING FENCE |
| | EXISTING CONTOUR |
| | EXISTING INDEX CONTOUR |
| | SOILS DELINEATION LINE |
| | STREAM CHANNEL |
| | FEMA DELINEATED FLOODPLAIN |
| | EXISTING GUIDERAIL |
| | EXISTING WOODLINE |
| | EXISTING BRUSHLINE |
| | EXISTING BUILDINGS |
| | EXISTING WETLANDS |
| | EXIST-DECIDUOUS |
| | EXIST-EVERGREEN |
| | EXIST-HEADWALL |
| | LIGHT POST |
| | SIGN |
| | STREET SIGN |
| | UTILITY-POLE |
| | WELL |
| | IP |
| | BOUND |
| | WATER VALVE |



PROPOSED LEGEND

| | |
|--|------------------------------------|
| | PROPOSED BUILDING |
| | PROPOSED BUILDING - SETBACK LINE |
| | PROPOSED LOT - PARCEL LINE |
| | PROPOSED EASEMENT - LINE |
| | PROPOSED RIGHT-OF-WAY |
| | PROPOSED ROAD CENTERLINE |
| | PROPOSED ROAD EDGE (PAVED/NO CURB) |
| | PROPOSED STORM SEWER - PIPING |
| | PROPOSED FENCE LINE |
| | PROPOSED CURBLINE |
| | CLEAR SIGHT TRIANGLE |
| | PROPOSED PHASE LINE |
| | PROPOSED CONCRETE |
| | PROPOSED RIP-RAP |
| | PROPOSED CONCRETE MONUMENT |
| | PROPOSED LIGHT POST |
| | PROPOSED TRAFFIC SIGN |
| | PROPOSED UTILITY POLE |
| | PROPOSED HEADWALL/ENDWALL |
| | PROPOSED INLET |
| | PROPOSED STORM MANHOLE |
| | PROPOSED STORM SEWER LABEL |
| | PROPOSED CONTOUR |
| | PROPOSED CONTOUR INDEX |
| | PROPOSED SPOT ELEVATION |
| | PROPOSED ALTERED TREE LINE |
| | PROPOSED HIGH WATER ELEVATION |
| | PROPOSED SPILLWAY |
| | PROPOSED SPILLWAY - HATCH |
| | PROPOSED BERM - TEXT |
| | PROPOSED BERM - SHADE |
| | PROPOSED BERM - OUTLINE |



+185.4



+185.4



SBA TOWERS IX, LLC
8001 CONGRESS AVENUE
BOCA RATON, FL 33487-1307
TEL: (800) 487-7483



THE CROSSROADS GROUP, LLC
WWW.THECROSSROADSGROUP.COM

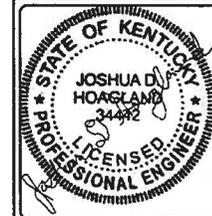
1000 Piedmont Pk., Ste. A
Harrisburg, PA 17103
P: 717-653-5200
F: 717-653-5742

1711 S.R. 607
Pottsville, PA 17850
P: 717-862-2317
F: 717-862-2742

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| SCALE: | NTS |
| DRAWN BY: | JH |
| PLAN ORIG. DATE: | 02-27-19 |

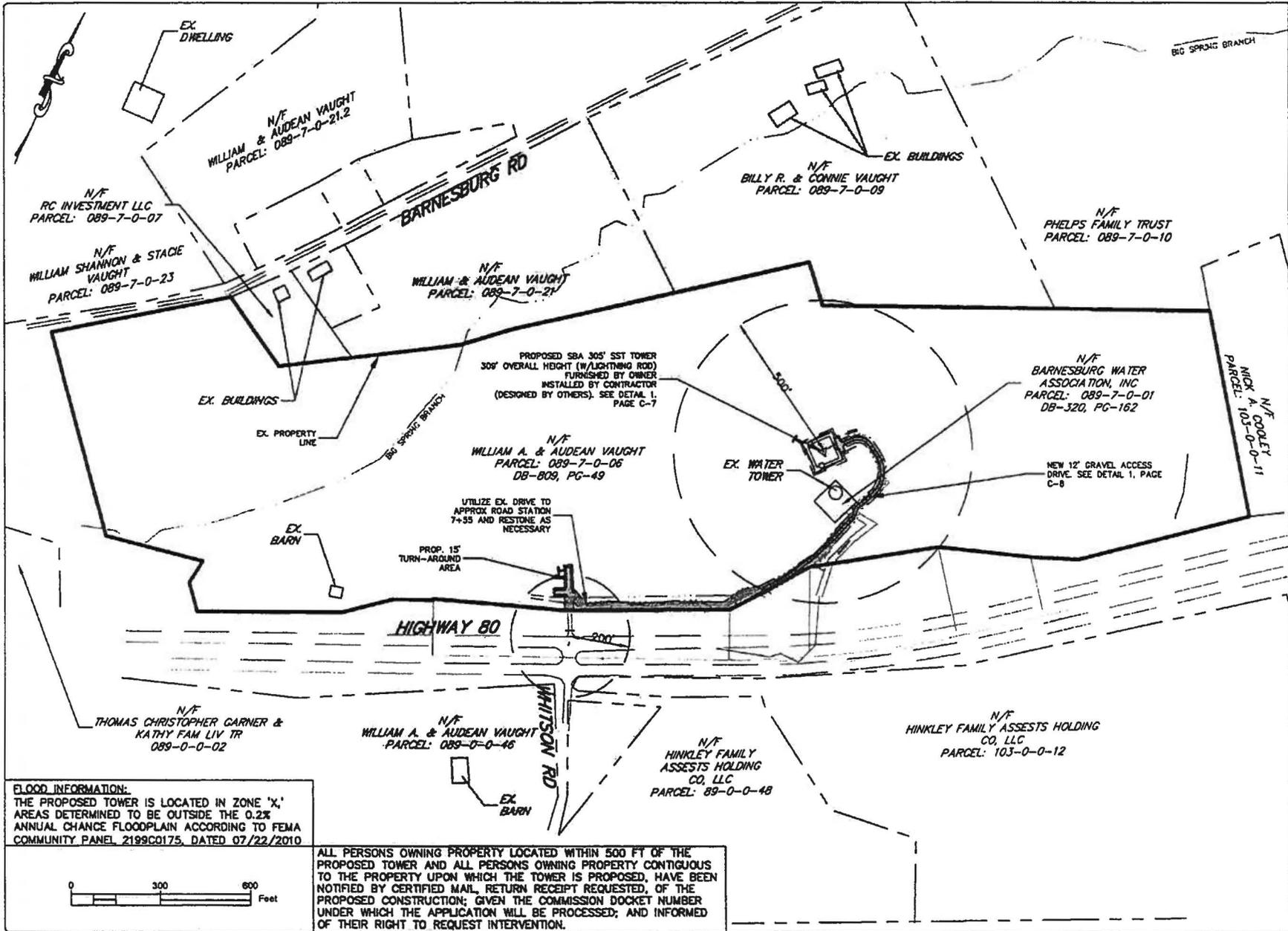
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|-----------|---------|------------------------|
| NO. | DATE | DESCRIPTION |
| C | 8-24-19 | PER CLIENT COMMENTS |
| B | 8-08-19 | REVISED DESIGN |
| A | 3-27-19 | ADDITIONAL SITE SURVEY |



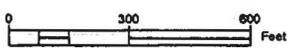
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|---------------|-------------------------------|
| PROJECT NO. | 2739 |
| SITE NAME: | SHOPVILLE RELO |
| SITE NUMBER: | KY22841-S |
| SITE ADDRESS: | HWY 80 SOMERSET, KY, 42503 |
| FILE NAME: | TITLE-LEGEND.DWG |

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| SHEET TITLE: | TCG - LEGEND |
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| DRAWING NO. | REVISION: |
| T-4 | C |



FLOOD INFORMATION:
 THE PROPOSED TOWER IS LOCATED IN ZONE 'X,' AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN ACCORDING TO FEMA COMMUNITY PANEL 2199C0175, DATED 07/22/2010



ALL PERSONS OWNING PROPERTY LOCATED WITHIN 500 FT OF THE PROPOSED TOWER AND ALL PERSONS OWNING PROPERTY CONTIGUOUS TO THE PROPERTY UPON WHICH THE TOWER IS PROPOSED, HAVE BEEN NOTIFIED BY CERTIFIED MAIL, RETURN RECEIPT REQUESTED, OF THE PROPOSED CONSTRUCTION; GIVEN THE COMMISSION DOCKET NUMBER UNDER WHICH THE APPLICATION WILL BE PROCESSED; AND INFORMED OF THEIR RIGHT TO REQUEST INTERVENTION.

SBA

SBA TOWERS DL, LLC
 8081 CONGRESS AVENUE
 BOCA RATON, FL 33487-1307
 TEL: (800) 467-7483

THE CROSSROADS GROUP, LLC
www.thecrossroadsgroup.com

16829 Palmetto Pk., Ste A 1174 S.E. 487
 Huntington, PA 15886 Huntingdon, PA 15886
 Ph: 814-989-3216 Ph: 814-947-3217
 Fax: 814-989-3742 Fax: 814-989-3742

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SCALE: 1" = 300'
 DRAWN BY: RMR
 PLAN ORIG. DATE: 02-27-19

| REVISIONS | | |
|-----------|------|-------------|
| NO. | DATE | DESCRIPTION |
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C 6-24-18 FOR CLIENT COMMENTS
 B 11-09-18 SPIRES DESIGN
 A 3-27-19 ADDITIONAL SITE SURVEY

STATE OF KENTUCKY
 JAMES H. BOGARD
 134442
 LICENSED PROFESSIONAL ENGINEER

PROJECT No. 2739
 SITE NAME: SHOPVILLE RELO
 SITE NUMBER: KY22841-S
 SITE ADDRESS: HWY 80, SOMERSET, KY, 42503
 FILE NAME: CONSTRUCTION-SHEETS.DWG

SHEET TITLE:
ZONING PLAN

| | |
|-------------|----------|
| DRAWING NO. | REVISION |
| Z-1 | C |



SBA TOWERS II, LLC
 8601 CONGRESS AVENUE
 BOCA RATON, FL 33487-1307
 TEL: (800) 467-7483

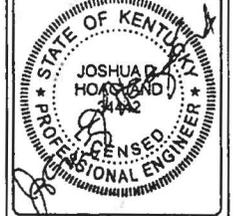


THE CROSSROADS GROUP, LLC
 www.thecrossroadsgroup.com
 14889 Potters Pt. Pk. A 1174 S. R. 47
 Huntingdon, PA 15885 Huntingdon, PA 15885
 Ph: 800-860-3242 Ph: 874-732511
 Fax: 800-860-3242 Fax: 800-860-3242

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SCALE: 1" = 100'
 DRAWN BY: RMR
 PLAN ORIG. DATE: 02-27-19

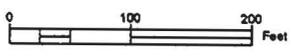
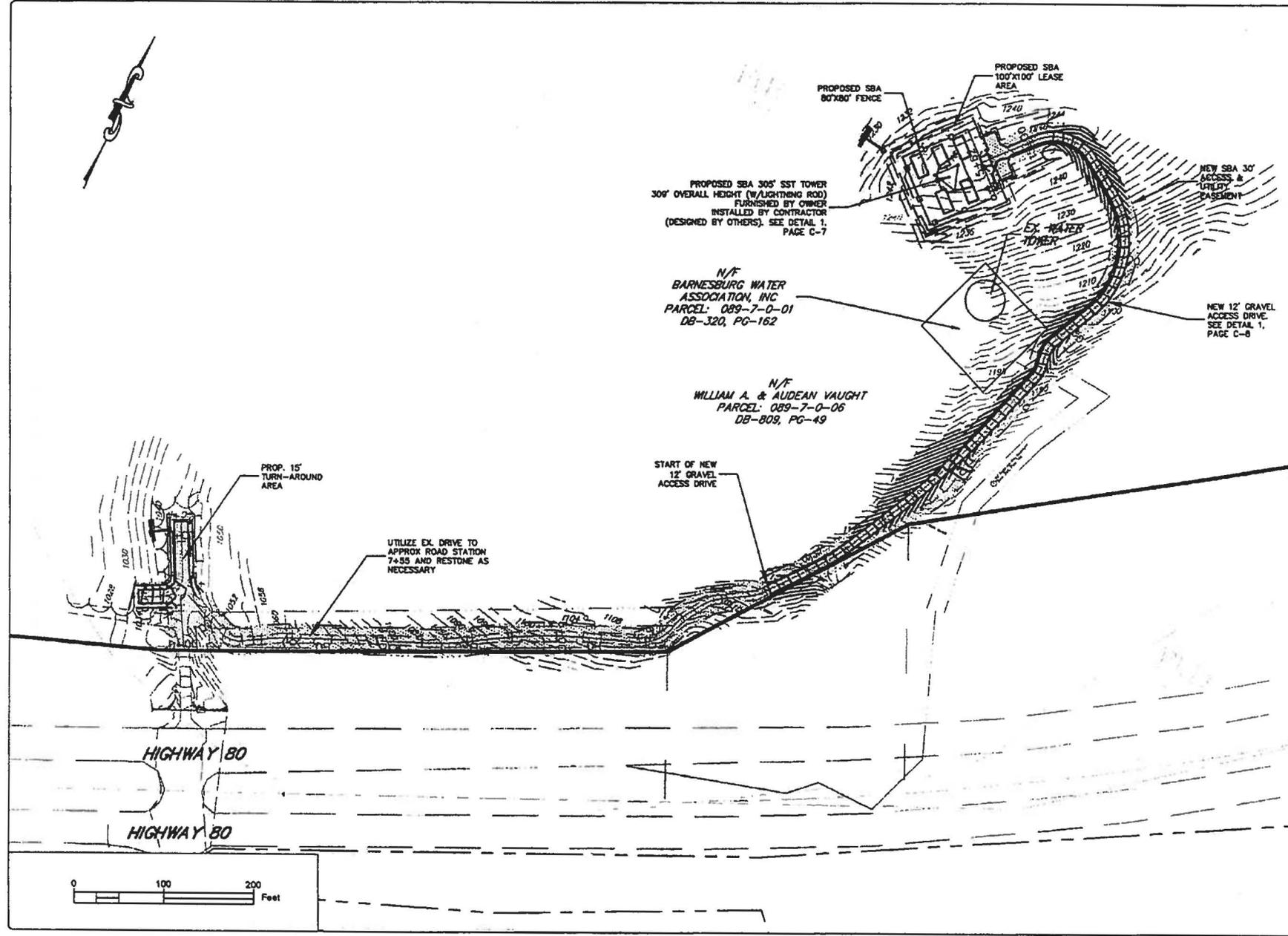
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|-----------|---------|------------------------|
| NO. | DATE | DESCRIPTION |
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| | | |
| C | 8-24-18 | FOR CLIENT COMMENTS |
| B | 5-08-18 | ISSUES DESIGN |
| A | 3-27-18 | ADDITIONAL SITE SURVEY |

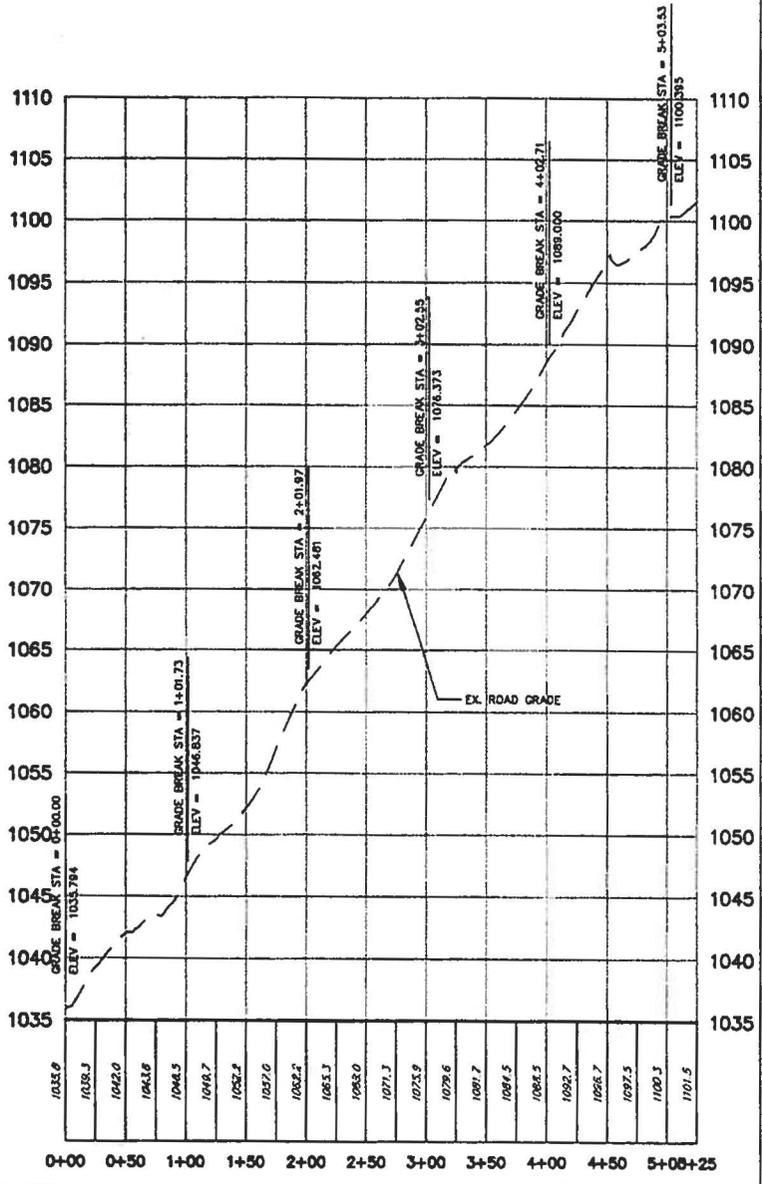
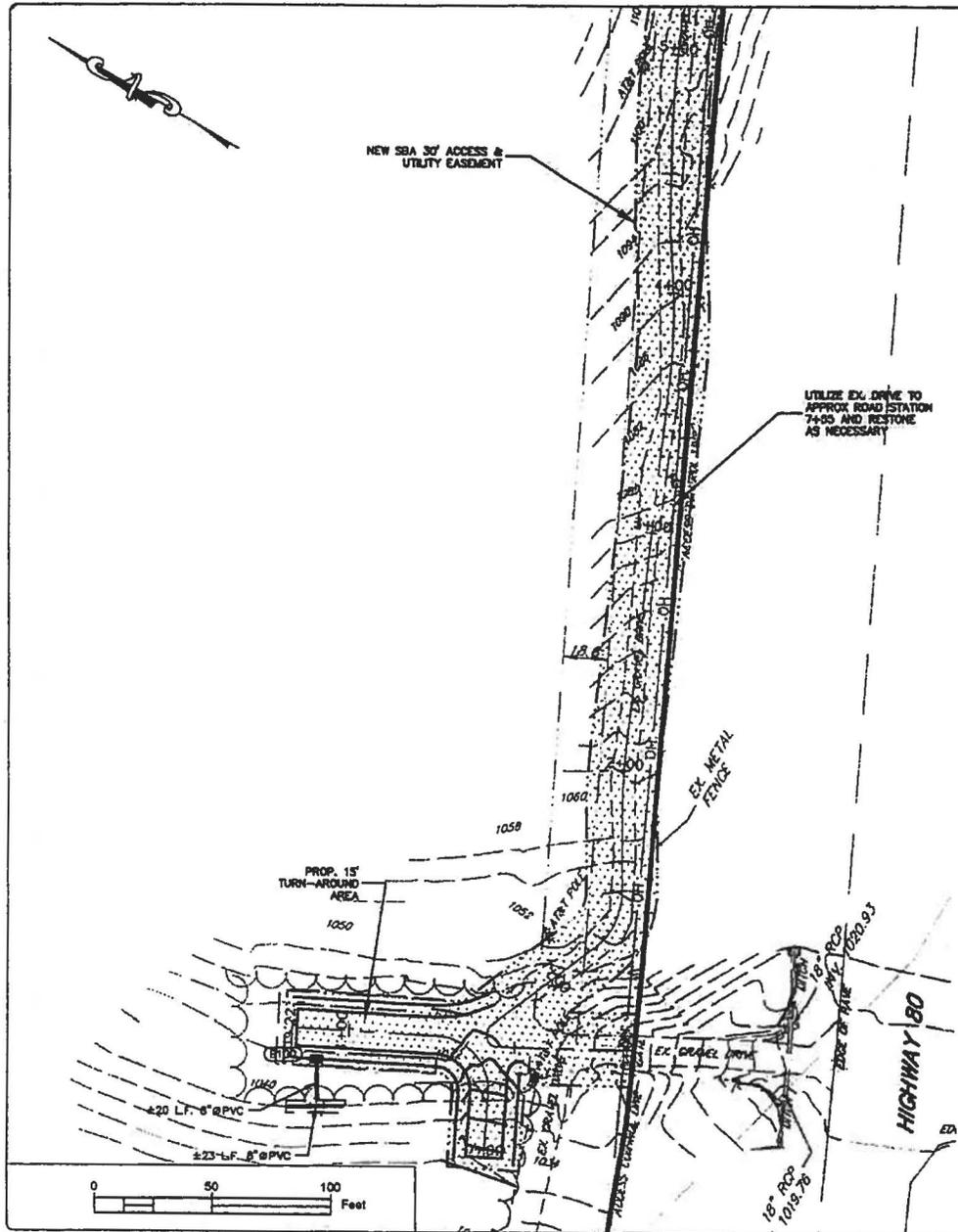


PROJECT No: 2739
 SITE NAME: SHOPVILLE RELO
 SITE NUMBER: KY22841-S
 SITE ADDRESS: HWY 80, SOMERSET, KY, 42503
 FILE NAME: CONSTRUCTION-SHEETS.DWG

SHEET TITLE: OVERALL SITE PLAN

| DRAWING NO | REVISION |
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| C-1 | C |





SBA

SBA TOWERS IX, LLC
 8051 CONGRESS AVENUE
 BOCA RATON, FL 33437-1307
 TEL: (800) 467-7483

THE CROSSROADS GROUP, LLC
 www.thecrossroadsgroupllc.com

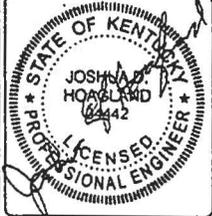
1880 Piedmont Pk., Bldg. A
 Marietta, GA 30067
 Ph: 404-899-3253
 Fax: 404-899-3742

1174 S.E. 497
 Palm Bay, FL 32909
 Ph: 888-672-2217
 Fax: 408-699-3742

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SCALE: 1" = 50'
 DRAWN BY: RMR
 PLAN ORG DATE: 02-27-19

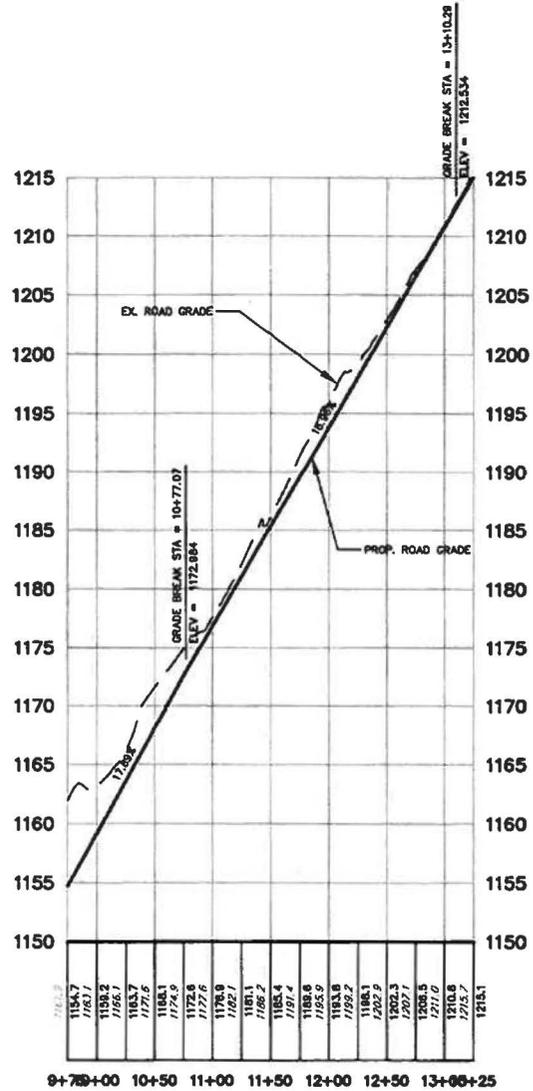
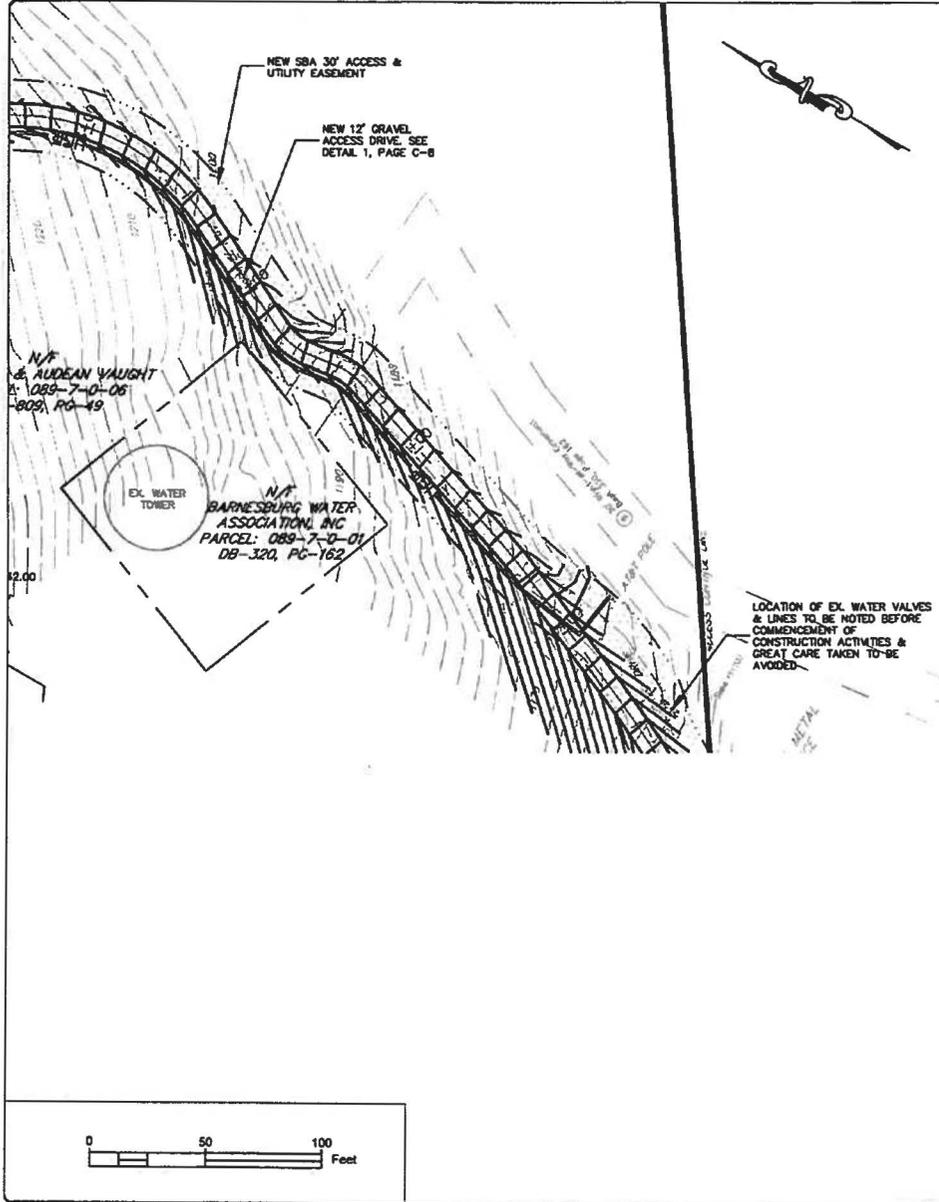
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|-----------|---------|------------------------|
| NO. | DATE | DESCRIPTION |
| C | 4-24-19 | PER CLIENT COMMENTS |
| B | 3-08-19 | KIPROS DESIGN |
| A | 3-27-19 | ADDITIONAL SITE SURVEY |



PROJECT No: 2739
 SITE NAME: SHOPVILLE RELO
 SITE NUMBER: KY22841-S
 SITE ADDRESS: HWY 80, SOMERSET, KY, 42503
 FILE NAME: CONSTRUCTION-SHEETS.DWG

SHEET TITLE: PLAN & PROFILE 1

| DRAWING NO | REVISION |
|------------|----------|
| C-2 | C |



SBA TOWERS IX, LLC
8051 CONGRESS AVENUE
BOCA RATON, FL 33487-1307
TEL: (800) 467-7485



THE CROSSROADS GROUP, LLC
www.thecrossroadsgroupinc.com

15280 Potomac Pike, Ste. A
Huntington, PA 15882
PH: 412-685-3855
FAX: 412-685-3142

11714 E.R. 487
Petersburg, PA 17109
PH: 814-473-3317
FAX: 814-473-3142

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SCALE: 1" = 50'
DRAWN BY: RMR
PLAN ORIG. DATE: 02-27-19

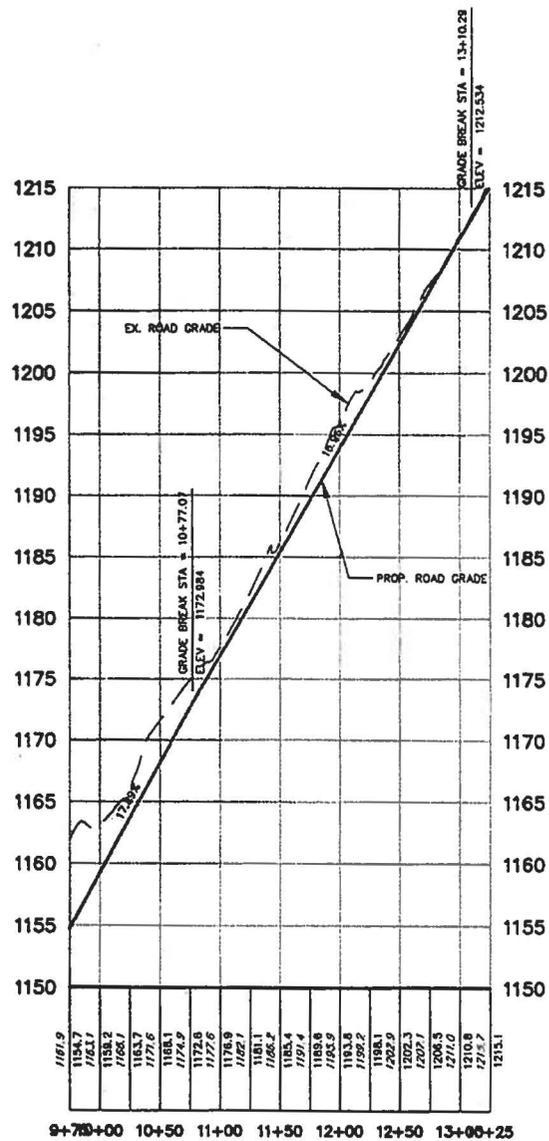
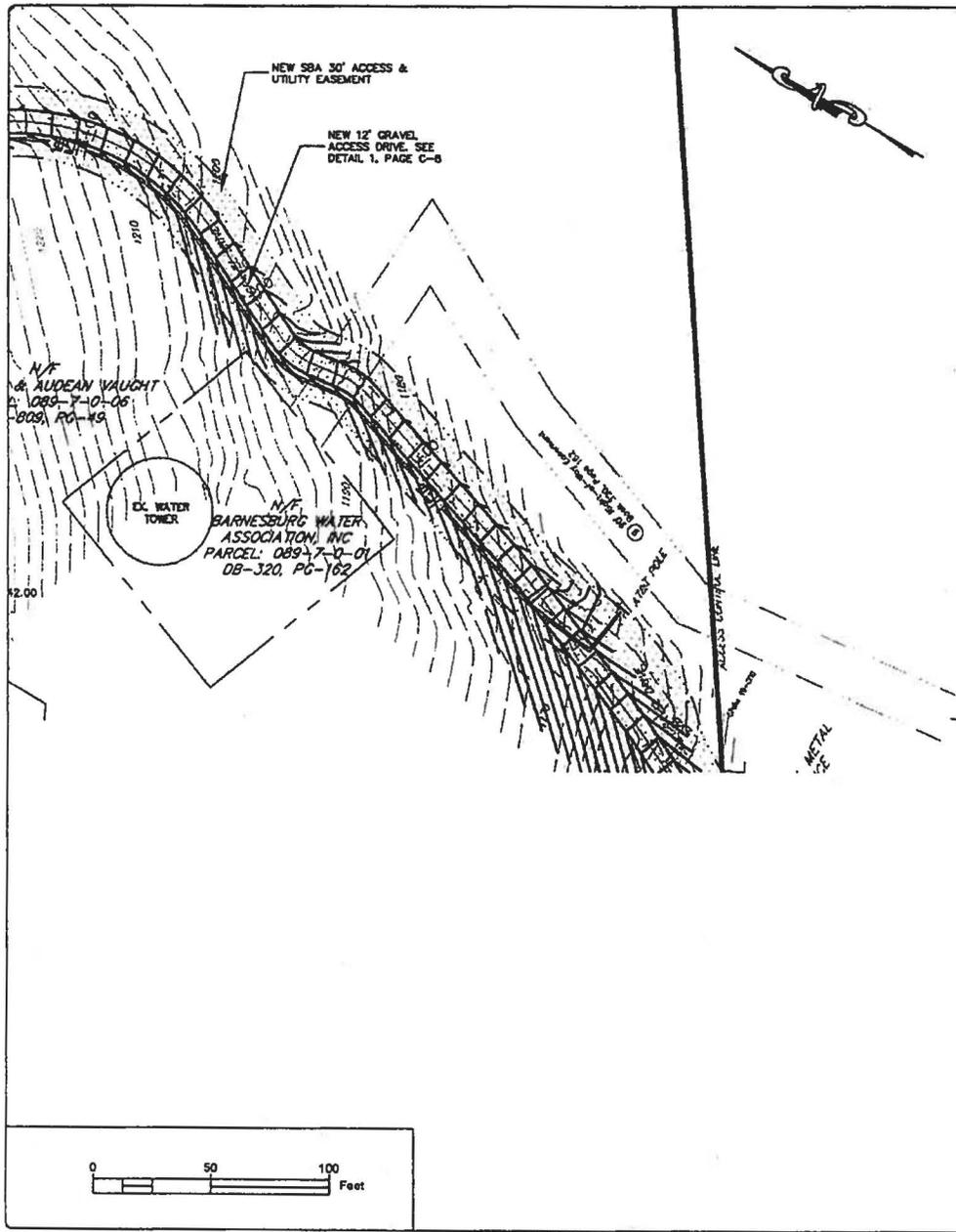
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| NO. | DATE DESCRIPTION |
| C | 6-24-18 PER CLIENT COMMENTS |
| B | 8-08-18 SPECIES DESIGN |
| A | 3-27-18 ADDITIONAL SITE SURVEY |



PROJECT No. 2739
SITE NAME: SHOPVILLE RELO
SITE NUMBER: KY22841-S
SITE ADDRESS: HWY 80 SOMERSET, KY, 42503
FILE NAME: CONSTRUCTION-SHEETS.DWG

SHEET TITLE: PLAN & PROFILE 3

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| DRAWING NO. C-4 | REVISION C |
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SBA
 SBA TOWERS IX, LLC
 8051 CONGRESS AVENUE
 BOCA RATON, FL 33487-1307
 TEL: (800) 467-7483

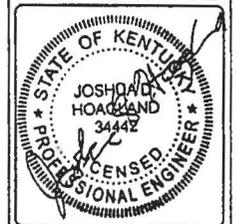


THE CROSSROADS GROUP, LLC
 www.thecrossroadsgroup.com
 16803 Piedmont Pike, Ste. A 1174 S.R. 487
 Huxford, PA 17828 Pottsville, PA 17860
 Pk. 484-903-3211 Pk. 484-903-3211
 Fax: 484-903-3742 Fax: 484-903-3742

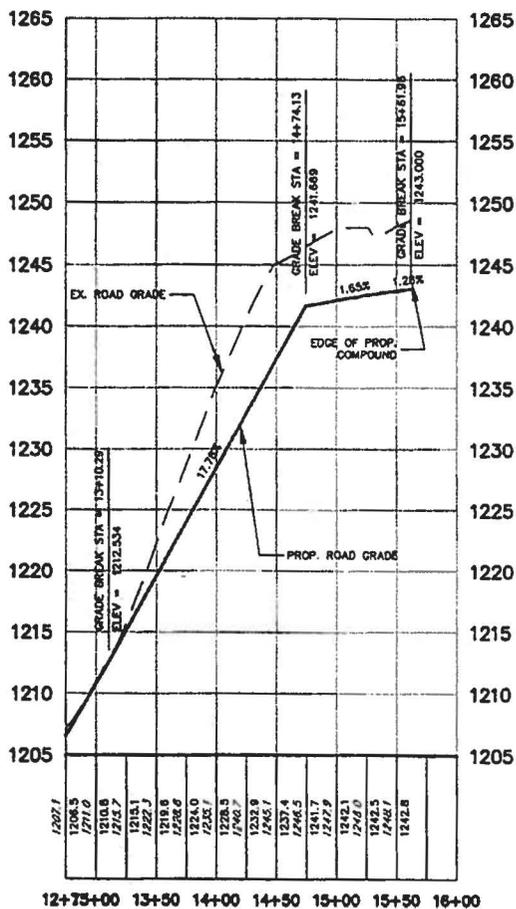
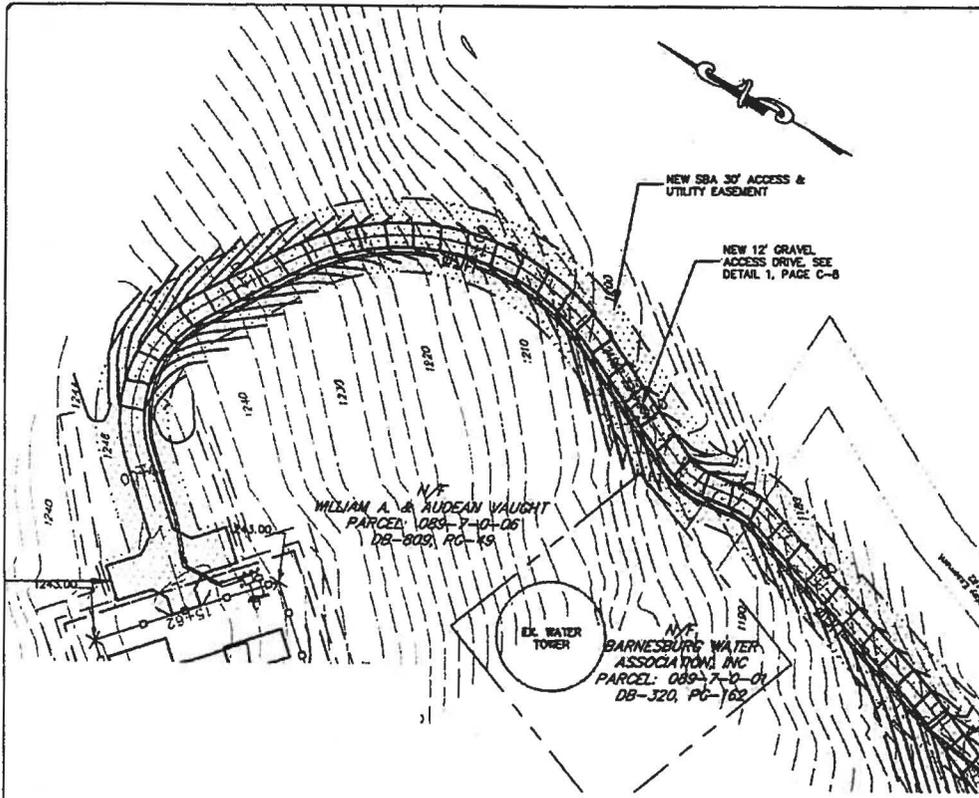
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SCALE: 1" = 50'
 DRAWN BY: RMR
 PLAN ORG. DATE: 02-27-19

| REVISIONS | | |
|-----------|---------|------------------------|
| NO. | DATE | DESCRIPTION |
| C | 8-24-18 | PER CLIENT COMMENTS |
| B | 5-08-18 | SPICES DESIGN |
| A | 3-27-18 | ADDITIONAL SITE SURVEY |



PROJECT No: 2739
 SITE NAME: SHOPVILLE RELO
 SITE NUMBER: KY22841-S
 SITE ADDRESS: HWY 80 SOMERSET, KY, 42503
 FILE NAME: CONSTRUCTION-SHEETS.DWG
 SHEET TITLE: PLAN & PROFILE 3
 DRAWING NO: C-4
 REVISION: C



SBA TOWERS UK, LLC
8031 CONGRESS AVENUE
BOCA RATON, FL 33487-1307
TEL: (800) 487-7483



THE CROSSROADS GROUP, LLC
www.thecrossroadsgroup.com

1860 Feltus Pk. Dr. A
Hamburg, PA 17033
Ph: 484-890-3244
Fax: 484-890-3742

1174 S.R. 487
Hamburg, PA 17033
Ph: 474-670-2111
Fax: 484-890-3742

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SCALE: 1" = 50'
DRAWN BY: RMR
PLAN ORG DATE: 02-27-19

| REVISIONS | | |
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| NO. | DATE | DESCRIPTION |
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PROJECT NO: 2739

SITE NAME: SHOPVILLE RELO

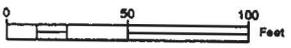
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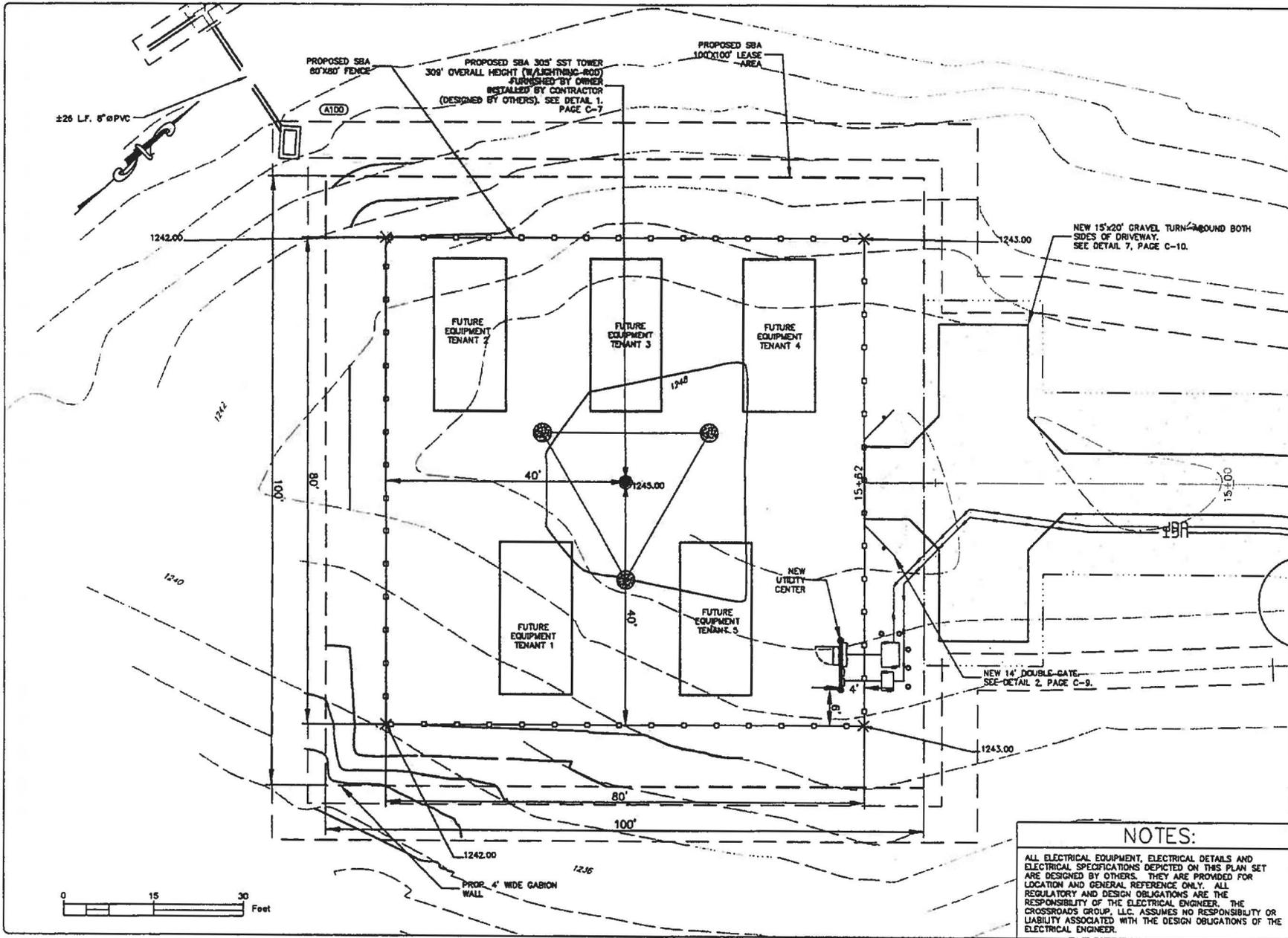
SITE ADDRESS: HWY 80
SOMERSET, KY, 42503

FILE NAME: CONSTRUCTION-SHEETS.DWG

SHEET TITLE: PLAN & PROFILE 4

| DRAWING NO | REVISION |
|------------|----------|
| C-5 | C |





SBA

SBA TOWERS II, LLC
 8051 CONGRESS AVENUE
 BOCA RATON, FL 33487-1307
 TEL: (800) 487-7463



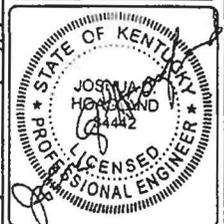
THE CROSSROADS GROUP, LLC
 www.thecrossroadsgroupllc.com

10000 Pottsville Pike, Ste. A | 1174 S.A. 487
 Hagerstown, PA 17825 | Pottsville, PA 17890
 Ph: 484-890-3208 | Ph: 484-890-3211
 Fax: 484-890-3742 | Fax: 484-890-3742

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SCALE: 1" = 15'
 DRAWN BY: RMR
 PLAN ORG DATE: 02-27-19

| REVISIONS | | |
|-----------|---------|------------------------|
| NO. | DATE | DESCRIPTION |
| C | 8-24-18 | PER CLIENT COMMENTS |
| B | 8-09-18 | ISSUES DESIGN |
| A | 3-27-19 | ADDITIONAL SITE SURVEY |



PROJECT NO: 2739

SITE NAME: SHOPVILLE RELO

SITE NUMBER: KY22841-S

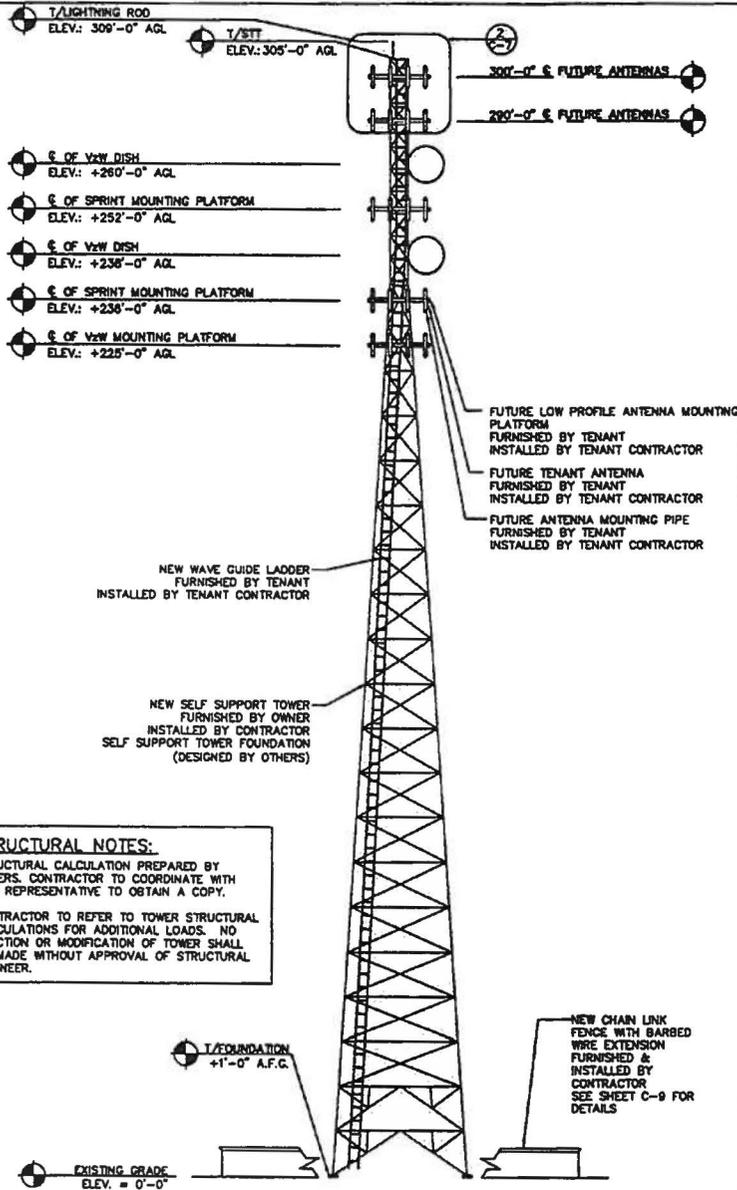
SITE ADDRESS: HWY 80
SOMERSET, KY, 42503

FILE NAME: CONSTRUCTION-SHEETS.DWG

| | |
|------------------------------------|----------------|
| SHEET TITLE: ENLARGED SITE PLAN | |
| DRAWING NO: C-6 | REVISION: C |

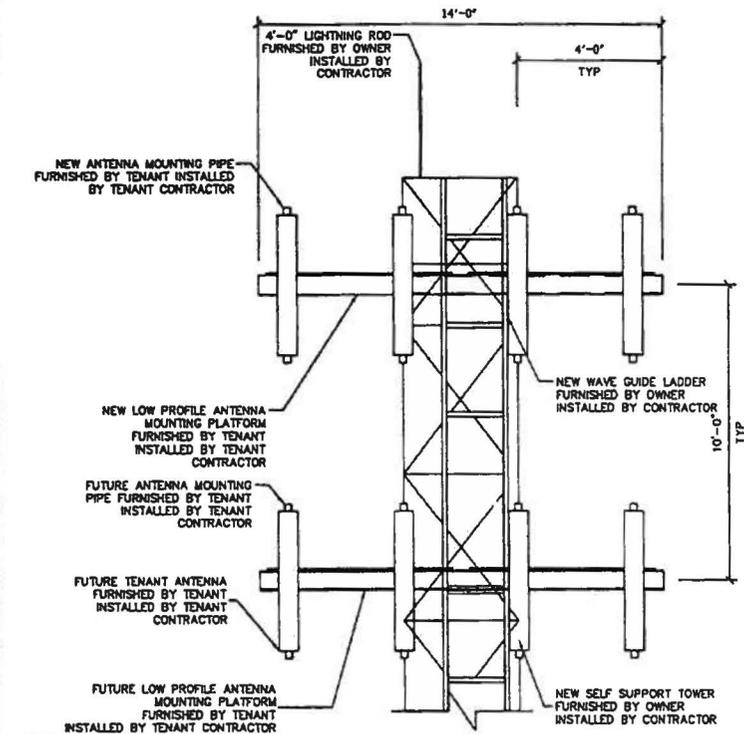
NOTES:

ALL ELECTRICAL EQUIPMENT, ELECTRICAL DETAILS AND ELECTRICAL SPECIFICATIONS DEPICTED ON THIS PLAN SET ARE DESIGNED BY OTHERS. THEY ARE PROVIDED FOR LOCATION AND GENERAL REFERENCE ONLY. ALL REGULATORY AND DESIGN OBLIGATIONS ARE THE RESPONSIBILITY OF THE ELECTRICAL ENGINEER. THE CROSSROADS GROUP, LLC ASSUMES NO RESPONSIBILITY OR LIABILITY ASSOCIATED WITH THE DESIGN OBLIGATIONS OF THE ELECTRICAL ENGINEER.



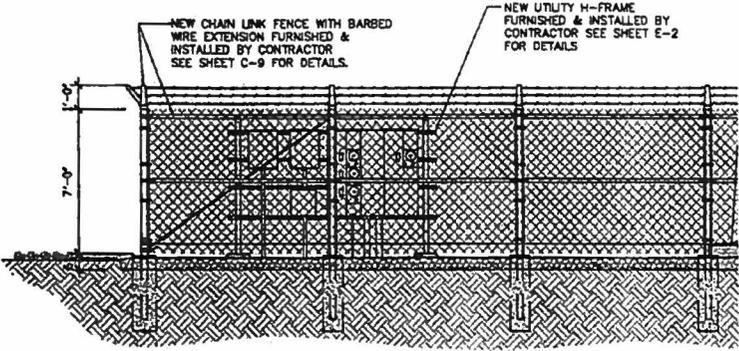
STRUCTURAL NOTES:

1. STRUCTURAL CALCULATION PREPARED BY OTHERS. CONTRACTOR TO COORDINATE WITH ANB REPRESENTATIVE TO OBTAIN A COPY.
2. CONTRACTOR TO REFER TO TOWER STRUCTURAL CALCULATIONS FOR ADDITIONAL LOADS. NO ERECTION OR MODIFICATION OF TOWER SHALL BE MADE WITHOUT APPROVAL OF STRUCTURAL ENGINEER.



2 ELEVATION VIEW @ TOP OF TOWER

SCALE: N.T.S.



3 ELEVATION VIEW @ UTILITY H-FRAME

SCALE: N.T.S.



SBA TOWERS IX, LLC
8051 CONGRESS AVENUE
BOCA RATON, FL 33487-1307
TEL: (800) 487-7483

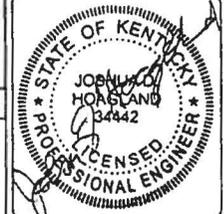


THE CROSSROADS GROUP, LLC
www.thecrossroadsgroup.com
1880 Federal Pkwy, Ste A 1174 S.E. 467
Hollywood, FL 33020 Pottsville, PA 17859
Ph: 404-860-3096 Fax: 610-473-2317
Fax: 404-860-3142 Fax: 484-660-3142

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| | |
|---------------|----------|
| SCALE: | N.T.S. |
| DRAWN BY: | JH |
| PLAN ORG DATE | 02-27-19 |

| REVISIONS | | |
|-----------|---------|------------------------|
| NO. | DATE | DESCRIPTION |
| C | 8-24-18 | FOR CLIENT COMMENTS |
| B | 5-08-19 | RPODES DESIGN |
| A | 3-27-18 | ADDITIONAL SITE SURVEY |



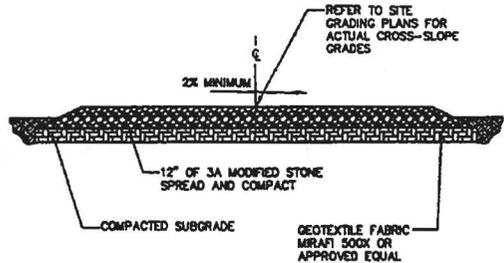
| | |
|--------------|-------------------------------|
| PROJECT NO. | 2739 |
| SITE NAME | SHOPVILLE RELO |
| SITE NUMBER | KY22841-S |
| SITE ADDRESS | HWY 80 SOMERSET, KY, 42503 |
| FILE NAME | CONSTRUCTION-SHEETS.DWG |
| SHEET TITLE | TOWER ELEVATION PLAN |

| | |
|-------------|----------|
| DRAWING NO. | REVISION |
| C-7 | C |

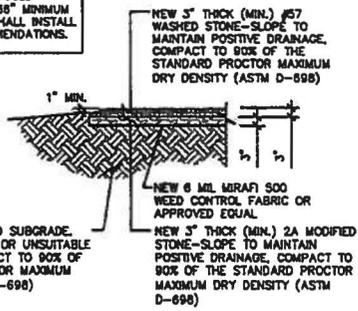
1 ELEVATION VIEW

SCALE: N.T.S.

NOTE:
WEED CONTROL FABRIC SHALL BE USED UNDER ACCESS DRIVE WITH A 36" MINIMUM OVERLAP. CONTRACTOR SHALL INSTALL FABRIC PER MFG. RECOMMENDATIONS.



NOTE:
WEED CONTROL FABRIC SHALL BE USED UNDER ENTIRE PROPOSED GRAVELED AREA WITH A 36" MINIMUM OVERLAP. CONTRACTOR SHALL INSTALL FABRIC PER MFG. RECOMMENDATIONS.



SBA
SBA TOWERS
SITE U.D.A.
FCC#:

NO TRESSPASSING AUTHORIZED ENTRY ONLY
VIOLATORS WILL BE PROSECUTED
ANTENNAS MAY BE ACTIVE

SBA
SITE U.D.A.
FCC#:

18"x24" .040 ALUMINUM

FCC #: XXXXXXXX

4"x18" .040 ALUMINUM

18"x12" .040 ALUMINUM

16"x12" .040 ALUMINUM

NOTE:
CONTRACTOR TO POST THE TEMPORARY SIGNS PRIOR TO SITE CONSTRUCTION.

PLEASE KEEP GATE CLOSED

SBA

SBA TOWERS II, LLC
8051 CONGRESS AVENUE
BOCA RATON, FL 33487-1507
TEL: (800) 467-7483

THE CROSSROADS GROUP, LLC
www.thecrossroadsgroup.com

1680 Parkway Pk., Ste. A
Huntington, VA 22424
Ph: 404-493-3266
Fax: 404-493-3242

1174 E.R. 407
Pottsville, PA 17859
Ph: 610-672-2317
Fax: 610-672-2312

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1 ACCESS DRIVE DETAIL SCALE: N.T.S.

2 COMPOUND FINISH DETAIL SCALE: N.T.S.

3 SIGN DETAIL SCALE: N.T.S.

NOTE: REFER TO SHEET ES-6 FOR EROSION CONTROL DETAILS

SCALE: N.T.S.
DRAWN BY: RMR
PLAN ORIG DATE: 02-27-19

| REVISIONS | | |
|-----------|---------|------------------------|
| NO. | DATE | DESCRIPTION |
| C | 8-24-19 | PER CLIENT COMMENTS |
| B | 8-08-19 | HPDES DESIGN |
| A | 3-27-19 | ADDITIONAL SITE SURVEY |

4 EROSION CONTROL DETAIL SCALE: N.T.S.

5 TYPICAL ROAD ENTRY SCALE: N.T.S.

NOTE: RIP-RAP IS NOT PROPOSED TO BE UTILIZED. NO RIP-RAP DETAILS

PROJECT NO: 2739

SITE NAME: SHOPVILLE RELO

SITE NUMBER: KY22841-S

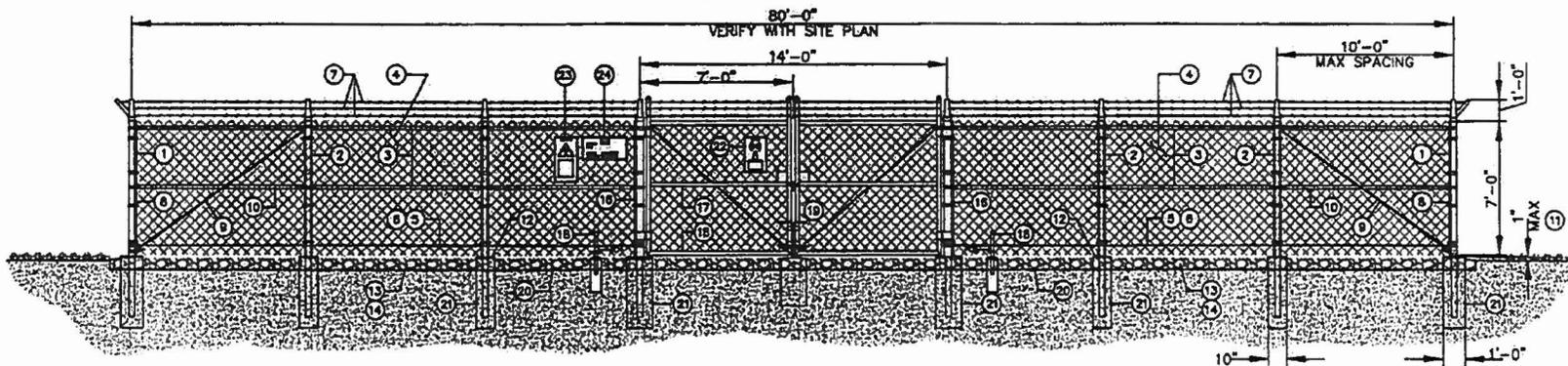
SITE ADDRESS: HWY 80
SOMERSET, KY, 42503

FILE NAME: ZDET.DWG

SHEET TITLE: CONSTRUCTION DETAILS - SITE

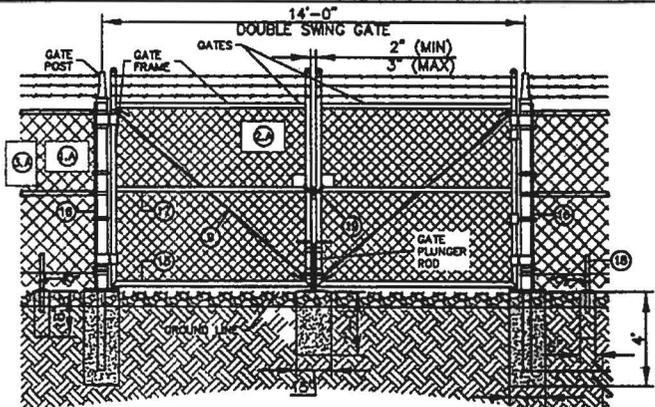
| DRAWING NO | REVISION |
|------------|----------|
| C-8 | C |

6 CULVERT/RIP-RAP DETAIL SCALE: N.T.S.



1 TYPICAL FENCING DETAIL

SCALE: N.T.S.



2 DOUBLE-SWING GATE/SIGN LOCATION DETAIL

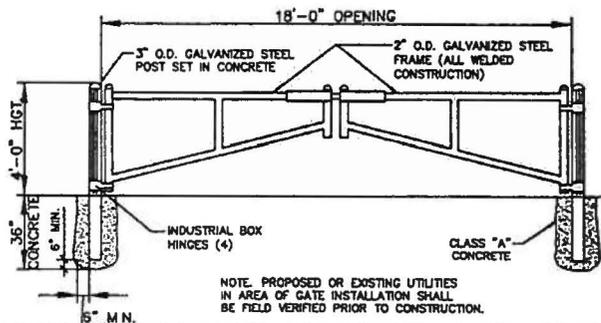
SCALE: 1/2"=1'-0"

GENERAL NOTES:

1. INSTALL FENCING PER ASTM F-567
2. INSTALL SWING GATES PER ASTM F- 900
3. LOCAL ORDINANCE OF BARBED WIRE PERMIT REQUIREMENT SHALL BE COMPLIED IF REQUIRED.
4. POST & GATE PIPE SIZES ARE INDUSTRY STANDARDS. ALL PIPE TO BE GALVANIZED (HOT DIP, ASTM A120 GRADE "A" STEEL). ALL GATE FRAMES SHALL BE WELDED. ALL WELDING SHALL BE COATED WITH (3) COATS OF COLD CALV. (OR EQUAL).
5. ALL OPEN POSTS SHALL HAVE END-CAPS.
6. USE GALVANIZED HOC-RING WIRE TO MOUNT ALL SIGNS.
7. ALL SIGNS MUST BE MOUNTED ON INSIDE OF FENCE FABRIC.
8. MUSHROOM ANCHOR & PLUNGER REQUIRED FOR GATE.
9. LINE POST CONNECTIONS TO BE CAD WELD, CORNER POST CONNECTIONS TO BE MECHANICAL.
10. CAUTION - RFE SIGN (BLACK, YELLOW, WHITE) TO BE MOUNTED NEAR TOWER LEG W/CLIMBING CABLE. DO NOT RESTRICT CLIMBING ACCESS.
11. VERIZON WIRELESS SITE ID SIGN, RFE SIGNS, NOC INFORMATION SIGN AND ALL OTHER SIGNAGE NOT REFERENCED IN THIS DRAWING WILL BE FURNISHED AND INSTALLED BY VERIZON WIRELESS PERSONNEL PER VERIZON WIRELESS RFC SIGNAGE & DEMARCATION POLICY.

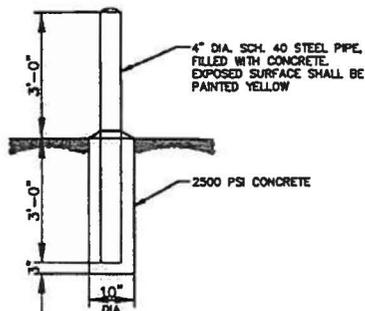
BALLOON REFERENCE NOTES:

- ① CORNER, END OR PULL POST: 3" O.D. SCHEDULE 40 PIPE.
- ② LINE POST: 2 1/2" NOMINAL SCHEDULE 40 PIPE, PER ASTM-F1083. LINE POSTS SHALL BE EQUALLY SPACED AT MAXIMUM 10'-0" O.C.
- ③ TOP RAIL & BRACE RAIL 1-5/8" O.D. STANDARD ROUND PIPE, PER ASTM-F1083.
- ④ FABRIC: 9 GA CORE WIRE SIZE 2" MESH, CONFORMING TO ASTM-A392.
- ⑤ TIE WIRE: 9 GA ALUMINUM. A SINGLE WRAP OF FABRIC TIE AND AT TENSION WIRE BY HOC RINGS SPACED 12" O.C. POSTS/GATES AND 24" RAILS/WIRE.
- ⑥ TENSION WIRE: 9 GA ALUMINUM
- ⑦ BARBED WIRE. DOUBLE STRAND 12-1/2" O.D. TWISTED WIRE TO MATCH WITH FABRIC. 14 GA. 4 PT. BARBS SPACED ON APPROXIMATELY 5" CENTERS.
- ⑧ 3/16" x 3/4" (MIN) FULL HEIGHT STRETCHER BAR
- ⑨ 3/8" DIAGONAL ROD WITH GALVANIZED STEEL TURNBUCKLE OR DIAGONAL THREADED ROD
- ⑩ FENCE CORNER POST BRACE: 1 5/8" NOMINAL PIPE.
- ⑪ 1" MAXIMUM CLEARANCE FROM FINISH GRADE.
- ⑫ FENCE POST FOUNDATION TO BE 1" FINISH ABOVE FINISHED GRADE
- ⑬ 6" COMPACTED BASE MATERIAL.
- ⑭ FINISH GRADE SHALL BE UNIFORM AND LEVEL.
- ⑮ WELDED GATE FRAME: 2" O.D., SCHEDULE 40 PIPE, PER ASTM-F1083.
- ⑯ GATE POST 4" O.D., SCHEDULE 40 PIPE, PER ASTM-F1083.
- ⑰ GATE FRAME BRACE RAIL: 1 1/2" NOMINAL PIPE, PER ASTM-F1083.
- ⑱ DUCK BILL OPEN GATE HOLDER. VERIFY LOCATION IN FIELD PRIOR TO INSTALLATION.
- ⑲ LOCKING DEVICE
- ⑳ GEOTEXTILE FABRIC
- ㉑ CONCRETE FOUNDATION (MIN 3000 PSI). MINIMUM DEPTH: 6" BELOW FROST LINE
- ㉒ 12" x 18" RFE NOTICE SIGN.
- ㉓ 12" x 18" RFE WARNING SIGN.
- ㉔ 18" x 24" IDENTIFICATION SIGN.



3 A-FRAME BARRIER GATE DETAIL

SCALE: N.T.S.



4 BOLLARD DETAIL

SCALE: N.T.S.

5 FENCING NOTES



SBA TOWERS IN, LLC
6051 CONGRESS AVENUE
BOCA RATON, FL 33487-1307
TEL: (800) 467-7483



THE CROSSROADS GROUP, LLC
www.thecrossroadsgroupllc.com

1800 Peninsula Blvd., Ste. A
Huntington, PA 15882
Ph: 814-945-3300
Fax: 814-945-3342

1174 S.A. 487
Huntington, PA 15882
Ph: 870-473-2517
Fax: 880-880-2342

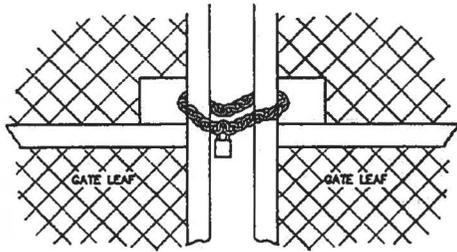
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| SCALE: | N.T.S. |
| DRAWN BY: | RMR |
| PLAN ORG. DATE: | 02-27-19 |

| REVISIONS | | |
|-----------|--------------------------------|-------------|
| C | 9-24-18 PER CLIENT COMMENTS | |
| B | 8-08-18 VERIFY DESIGN | |
| A | 3-27-18 ADDITIONAL SITE SURVEY | |
| NO. | DATE | DESCRIPTION |

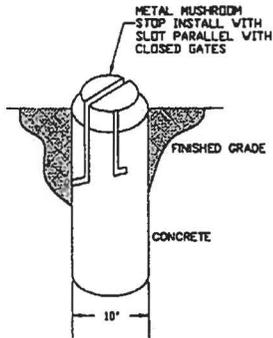


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|--------------|-------------------------------------|
| PROJECT No. | 2739 |
| SITE NAME | SHOPVILLE RELO |
| SITE NUMBER | KY22841-S |
| SITE ADDRESS | HWY 80 SOMERSET, KY, 42503 |
| FILE NAME | ZDET.DWG |
| SHEET TITLE | CONSTRUCTION DETAILS - FENCE (1) |
| DRAWING NO. | REVISION |
| C-9 | C |



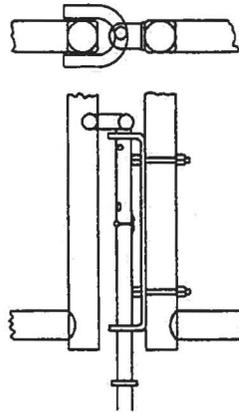
1 GATE FACE - WITH HAND HOLES

SCALE: N.T.S.



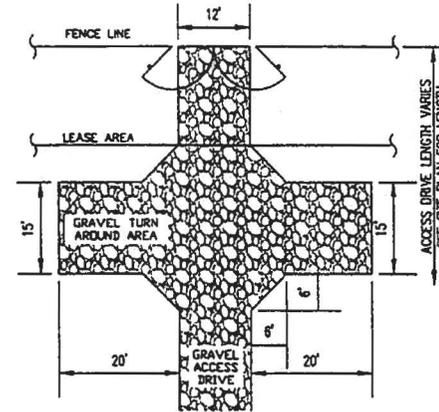
3 MUSHROOM STOP DETAIL

SCALE: N.T.S.



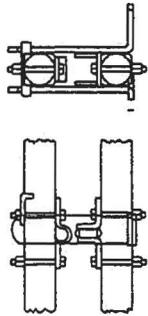
4 DROP ROD ASSEMBLY DETAIL

SCALE: N.T.S.



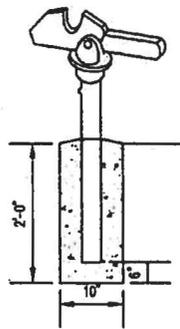
7 ACCESS DRIVE TURN-AROUND DETAIL

SCALE: N.T.S.



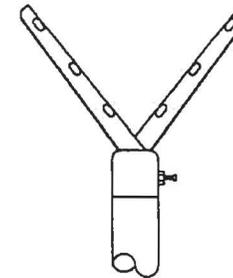
5 LATCH ASSEMBLY DETAIL

SCALE: N.T.S.



6 GATE KEEPER DETAIL

SCALE: N.T.S.



6 WIRE BRACKET DETAIL

SCALE: N.T.S.



SBA TOWERS IX, LLC
8001 CONGRESS AVENUE
BOCA RATON, FL 33487-1307
TEL: (800) 487-7483



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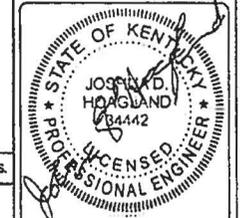
1860 Piedmont Pk. Ste. A
Huntersville, NC 28026
Ph: 484-860-3266
Fax: 484-860-3142

1174 B.R. 487
Farmingdale, NY 11735
Ph: 631-672-2317
Fax: 631-660-3142

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DRAWN BY: RMR
PLAN ORG. DATE: 02-27-19

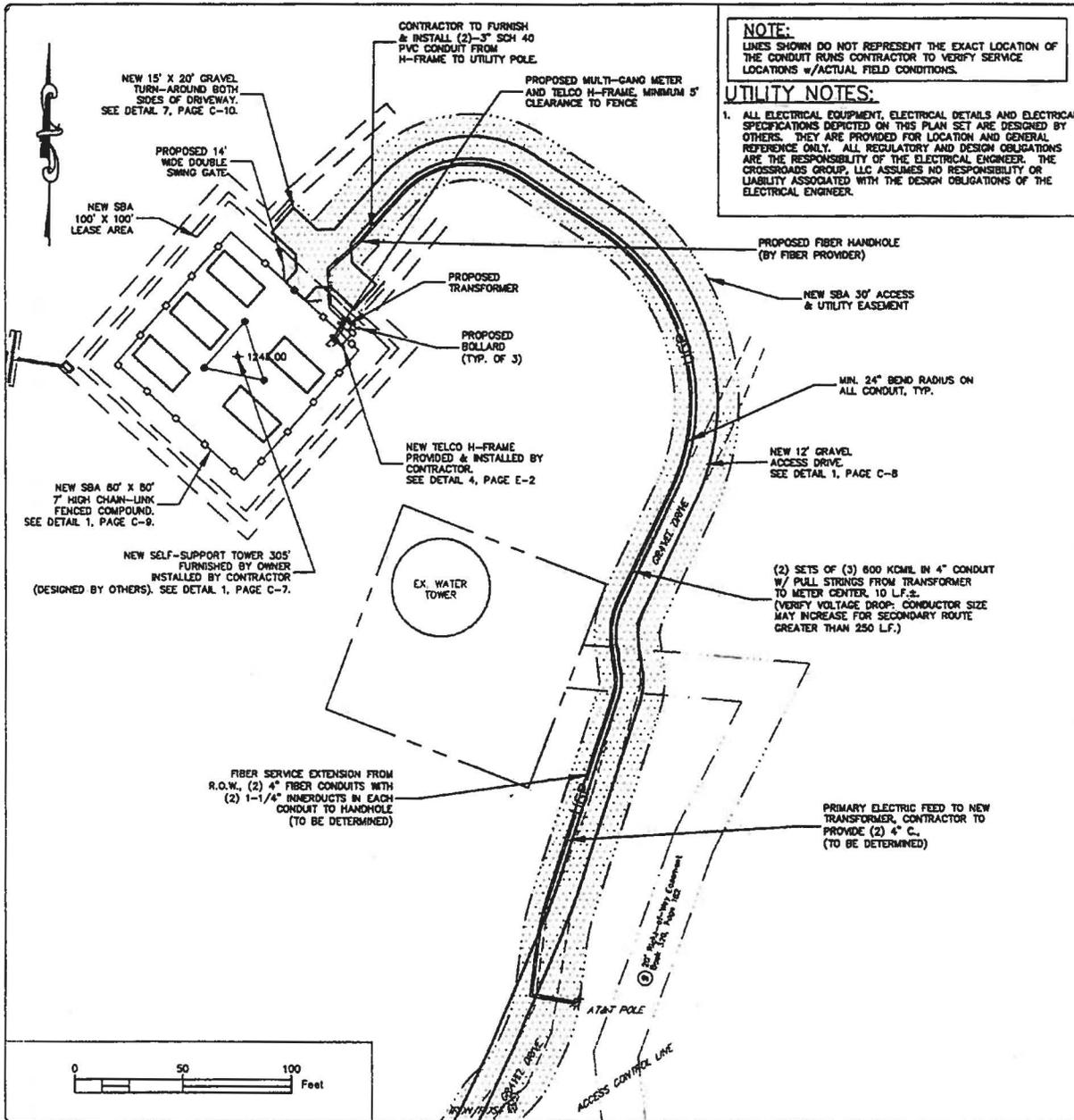
| REVISIONS | | |
|-----------|---------|------------------------|
| NO. | DATE | DESCRIPTION |
| C | 0-24-19 | PER CLIENT COMMENTS |
| B | 5-09-19 | ISSUED DESIGN |
| A | 3-27-19 | ADDITIONAL SITE SURVEY |



PROJECT No. 2739
SITE NAME: SHOPVILLE RELO
SITE NUMBER: KY22841-S
SITE ADDRESS: HWY 80, SOMERSET, KY, 42503
FILE NAME: ZDET.DWG

SHEET TITLE: CONSTRUCTION DETAILS - FENCE (2)

DRAWING NO: C-10
REVISION: C



NOTE:
LINES SHOWN DO NOT REPRESENT THE EXACT LOCATION OF THE CONDUIT RUNS CONTRACTOR TO VERIFY SERVICE LOCATIONS w/ACTUAL FIELD CONDITIONS.

UTILITY NOTES:
1. ALL ELECTRICAL EQUIPMENT, ELECTRICAL DETAILS AND ELECTRICAL SPECIFICATIONS DEPICTED ON THIS PLAN SET ARE DESIGNED BY OTHERS. THEY ARE PROVIDED FOR LOCATION AND GENERAL REFERENCE ONLY. ALL REGULATORY AND DESIGN OBLIGATIONS ARE THE RESPONSIBILITY OF THE ELECTRICAL ENGINEER. THE CROSSROADS GROUP, LLC ASSUMES NO RESPONSIBILITY OR LIABILITY ASSOCIATED WITH THE DESIGN OBLIGATIONS OF THE ELECTRICAL ENGINEER.

GENERAL ELECTRICAL NOTES

- 1.) ALL ELECTRICAL WORK SHALL CONFORM TO NATIONAL ELECTRIC CODE, LATEST ADOPTED EDITION, AND LOCAL CODES.
- 2.) ALL ELECTRICAL MATERIALS, EQUIPMENT AND INSTALLATION PROCEDURES TO CONFORM WITH SBA SPECIFICATIONS.
- 3.) CONTRACTOR SHALL PERFORM ALL VERIFICATION TESTS AND EXAMINATION WORK PRIOR TO THE ORDERING OF THE ELECTRICAL EQUIPMENT AND THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ENGINEER LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT & DISCREPANCIES.
- 4.) ELECTRICAL PLANS, DETAILS, AND DIAGRAMS ARE DIAGRAMMATIC ONLY. FIELD CONDITIONS DICTATE THE AMOUNT AND LOCATION OF EQUIPMENT.
- 5.) ALL MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA, NFPA, AND "UL" LISTED.
- 6.) THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY THE NEC, AND ALL APPLICABLE LOCAL CODES.
- 7.) ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE A MINIMUM INTERRUPTING RATING GREATER THAN THE UTILITY FAULT CURRENT.
- 8.) FOR COMPLETE INTERNAL WIRING AND ARRANGEMENT REFER TO VENDOR PRINTS AND INSTRUCTIONS.
- 9.) PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
- 10.) PROVIDE SBA WITH ONE SET OF COMPLETE ELECTRICAL "AS-BUILT" DRAWINGS AT THE COMPLETION OF THE JOB SHOWING ACTUAL ROUTINGS AND WIRING CONNECTIONS.
- 11.) LABEL ALL ELECTRICAL EQUIPMENT PER SBA SPECIFICATIONS.
- 12.) ALL SINGLE-PHASE SELF-CONTAINED METER CONNECTION DEVICES MUST INCLUDE HORN TYPE BY-PASS PROVISION SO THAT SERVICE WILL NOT BE INTERRUPTED WHEN A METER IS REMOVED FROM THE SOCKET.
- 13.) ALL EQUIPMENT PUNCH OUTS AND CONDUITS (USED AND SPARE) TO BE "RODENT PROOFED" WITH CAPS, STEEL MESH, AND/OR FOAM FILL BY CONTRACTOR (AS NEEDED).
- 14.) ALL INTERIOR CONDUITS AND BUSHINGS SHALL BE EMT. ALL EXTERIOR SHALL BE PVC UNLESS NOTED OTHERWISE. SEE SBA SPECIFICATIONS.
- 15.) NO SPOILS TO BE LEFT ON SITE WITHOUT THE WRITTEN CONSENT OF THE LANDOWNER
- 16.) CONTRACTOR TO PROVIDE 2 PHENOLIC LABELS AT METER. ONE TO IDENTIFY "SBA DISCONNECT" AND THE OTHER TO GIVE SITE ADDRESS.

CODES AND STANDARDS

| | |
|------|--|
| ANSI | AMERICAN NATIONAL STANDARDS INSTITUTE |
| NEC | NATIONAL ELECTRICAL CODE, LATEST ADOPTED EDITION |
| NEMA | NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION |
| NFPA | NATIONAL FIRE PROTECTION ASSOCIATION |
| UL | UNDERWRITERS LABORATORIES, INC. |

UTILITY PROVIDE INFORMATION

POWER COMPANY: SKRECC
ADDRESS: 126 GARNER SCHOOL HOUSE RD
SOMERSET, KY 42503
CONTACT: BRUCE
EMAIL: BRUCE@SKRECC.COM
PHONE: TBD FAX: TBD

TELEPHONE COMPANY: AT&T
ADDRESS: TBD
CONTACT: TBD
PHONE: TBD FAX: TBD



SBA TOWERS IX, LLC
 8051 CONGRESS AVENUE
 BOCA RATON, FL 33487-1307
 TEL: (800) 487-7483

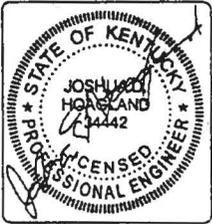


THE CROSSROADS GROUP, LLC
 www.thecrossroadsgroup.com
 1605 Piedmont Plaza, Ste. A 1174 S.R. 487
 Huntington, PA 15886 Huntingdon, PA 15864
 Ph: 484-688-3255 Ph: 870-473-2917
 Fax: 484-688-3742 Fax: 484-688-3742

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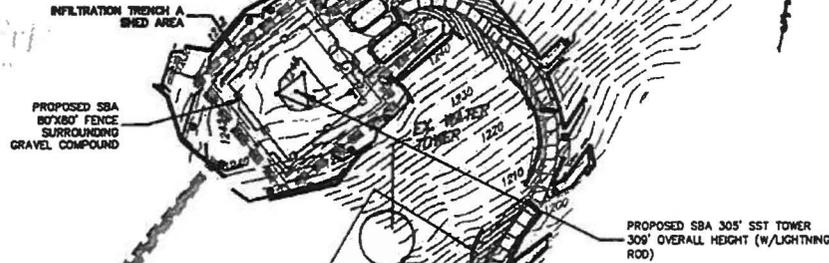
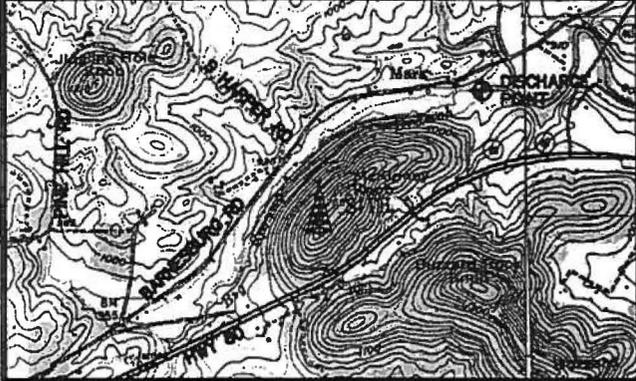
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| SCALE: | 1" = 50' |
| DRAWN BY: | RMR |
| PLAN ORG. DATE: | 02-27-19 |

| REVISIONS | | |
|-----------|------|-------------|
| NO. | DATE | DESCRIPTION |
| | | |
| | | |
| | | |
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| | |
|--------------|-------------------------------|
| PROJECT No. | 2739 |
| SITE NAME | SHOPVILLE RELO |
| SITE NUMBER | KY22841-S |
| SITE ADDRESS | HWY 80 SOMERSET, KY, 42503 |
| FILE NAME | UTILITY-GROUNDING.DWG |
| SHEET TITLE | UTILITY SITE PLAN (1) |
| DRAWING NO. | REVISION |
| E-1 | C |

USGS QUAD MAP 1"=2,000'



N/F BARNESBURG WATER ASSOCIATION INC PARCEL: 089-7-0-01 DB-320, PG-162

N/F WILLIAM A. & AUDEAN VAUGHT PARCEL: 089-7-0-06 DB-809, PG-49

PROP. LIMIT OF DISTURBANCE: 1.47 AC.

PROP. 15' TURN-AROUND AREA

START OF NEW 12' GRAVEL ACCESS DRIVE

INfiltration TRENCH B SHED AREA

EX. DRIVE TO BE RESTORED AS NECESSARY

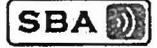
PROP. ROCK CONSTRUCTION ENTRANCE

HIGHWAY 80



LEGEND

| | | | |
|------------------------|------------------------------|--------------------------------|------------------------------|
| — NPDES — | — TP — | — NPDES LINE | — TP — |
| — 8CFS — | — 8CFS — | — TREE PROTECTION/CONST. FENCE | — 8" COMPOST FILTER SOCK |
| — 12CFS — | — 12CFS — | — 12" COMPOST FILTER SOCK | — 12" COMPOST FILTER SOCK |
| — 18CFS — | — 18CFS — | — 18" COMPOST FILTER SOCK | — 18" COMPOST FILTER SOCK |
| — 24CFS — | — 24CFS — | — 24" COMPOST FILTER SOCK | — 24" COMPOST FILTER SOCK |
| — 32CFS — | — 32CFS — | — 32" COMPOST FILTER SOCK | — 32" COMPOST FILTER SOCK |
| — LIMIT OF DISTURBANCE | — TOPSOIL STOCKPILE AREA | — LIMIT OF DISTURBANCE | — TOPSOIL STOCKPILE AREA |
| — BASIN SHED LINE | — ROCK CONSTRUCTION ENTRANCE | — BASIN SHED LINE | — ROCK CONSTRUCTION ENTRANCE |
| — WATERBAR | | — WATERBAR | |



SBA TOWERS OF, LLC
8001 CONGRESS AVENUE
BOCA RATON, FL 33487-1307
TEL: (800) 487-7483



THE CROSSROADS GROUP, LLC
www.thecrossroadsgroup.com
1660 Piedmont Pl., Ste. A 1174 S.B. 487
Harrisburg, PA 17126 Harrisburg, PA 17109
Ph: 484-860-3308 Ph: 484-860-3311
Fax: 484-860-3342 Fax: 484-860-3742

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SCALE: 1" = 100'
DRAWN BY: RMR
PLAN ORIG. DATE: 02-27-19

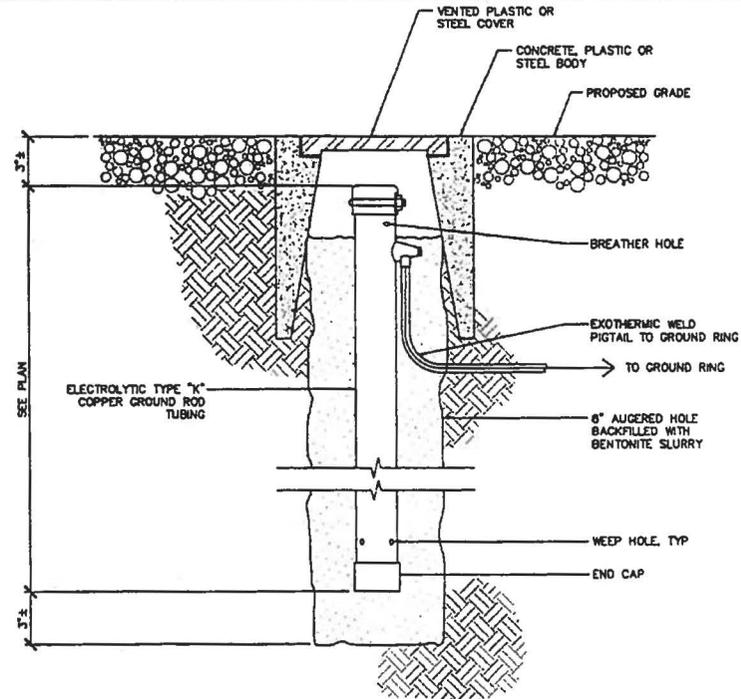
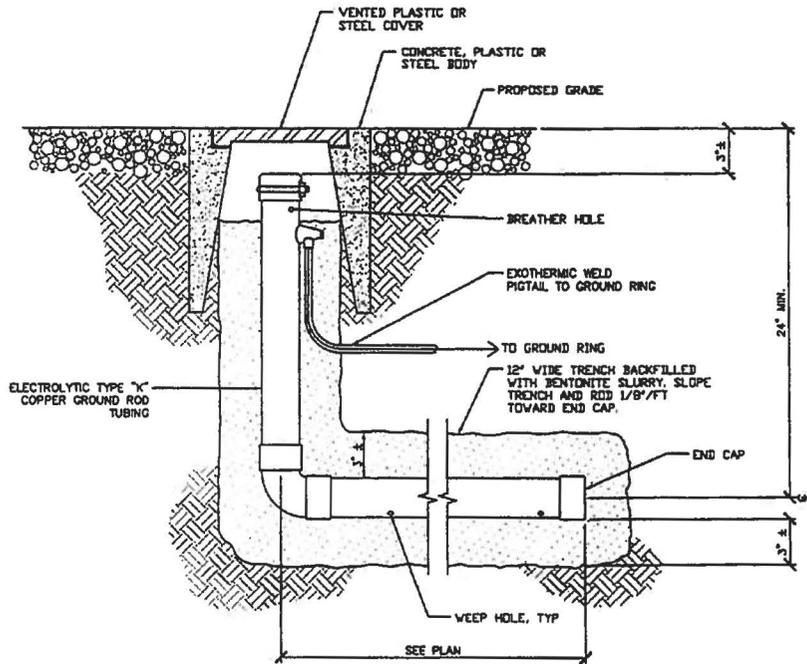
| REVISIONS | | |
|-----------|---------|------------------------|
| NO. | DATE | DESCRIPTION |
| C | 8-24-18 | FOR CLIENT COMMENTS |
| B | 8-08-18 | NPOES DESIGN |
| A | 3-27-18 | ADDITIONAL SITE SURVEY |



PROJECT No: 2739
SITE NAME: SHOPVILLE RELO
SITE NUMBER: KY22841-S
SITE ADDRESS: HWY 80 SOMERSET, KY, 42503
FILE NAME: ZES.DWG

SHEET TITLE: EROSION & SEDIMENT CONTROL PLAN 1

DRAWING NO: ES-1 REVISION: C

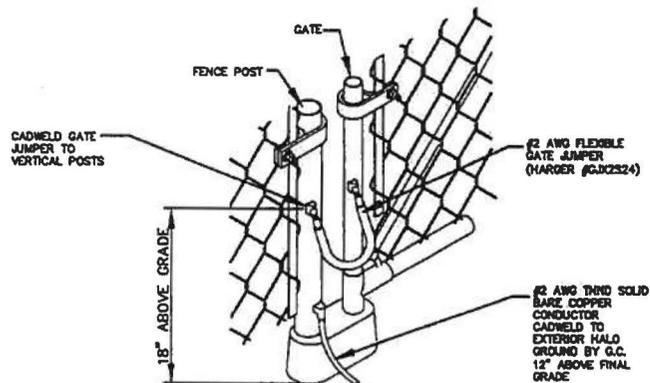


1 XIT CHEMICAL GROUND DETAIL HORIZONTAL (WHEN REQUIRED)

SCALE: N.T.S.

2 XIT CHEMICAL GROUND DETAIL VERTICAL (WHEN REQUIRED)

SCALE: N.T.S.



CORNER AND GATE FENCE POST DETAIL



SBA TOWERS II, LLC
8531 CONGRESS AVENUE
BOCA RATON, FL 33487-1307
TEL: (800) 487-7483

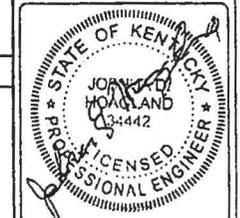


THE CROSSROADS GROUP, LLC
www.thecrossroadsgroup.com
16600 Palmetto Pk., Bldg. A
Houston, TX 77060
Ph: 281-485-2266
Fax: 281-485-2742
1174 E.R. 487
Pittsboro, NC 27620
Ph: 919-472-2317
Fax: 919-485-2742

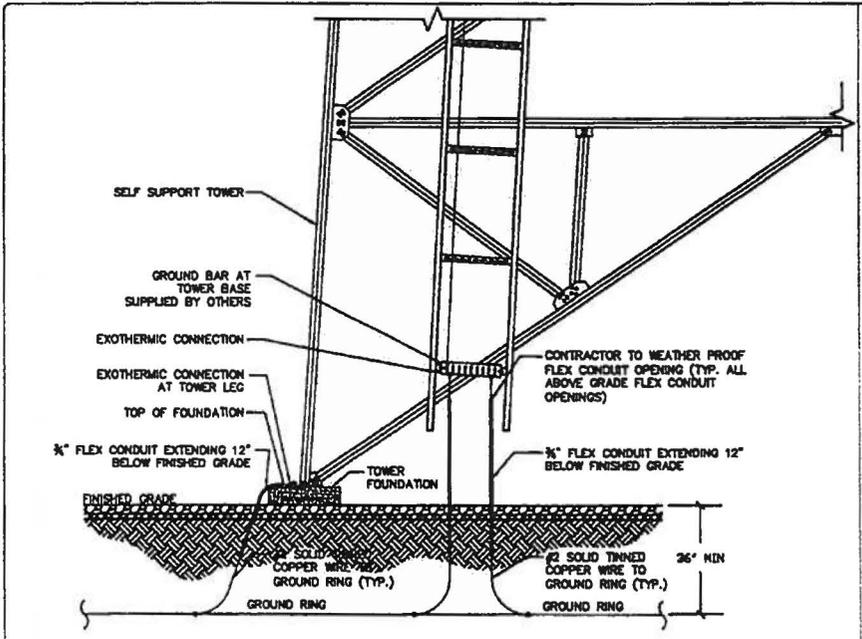
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SCALE: N.T.S.
DRAWN BY: RMR
PLAN ORIG. DATE: 02-27-19

| REVISIONS | | |
|-----------|---------|------------------------|
| NO. | DATE | DESCRIPTION |
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| B | 5-08-18 | RFPEX DESIGN |
| A | 3-27-18 | ADDITIONAL SITE SURVEY |

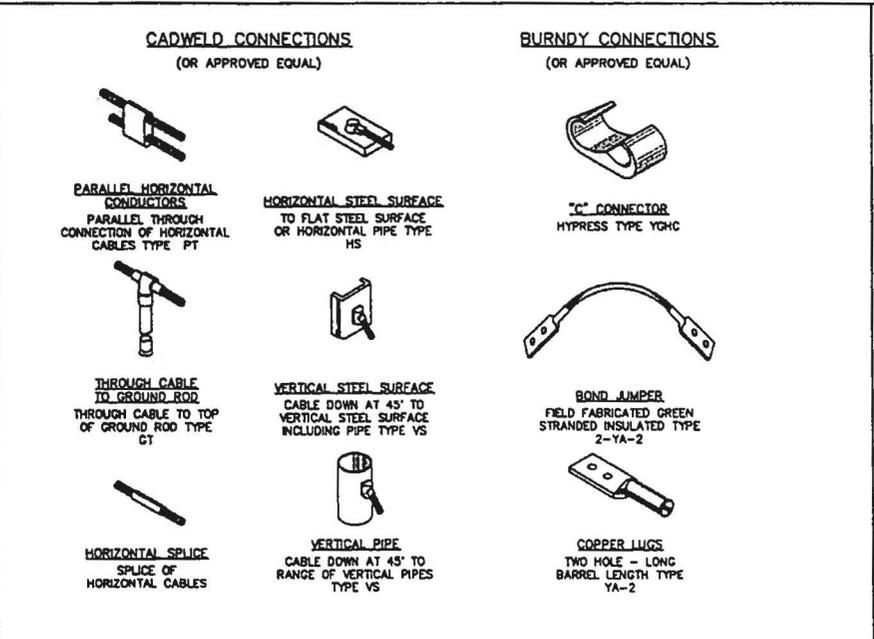


| | |
|--------------|-------------------------------|
| PROJECT NO. | 2739 |
| SITE NAME | SHOPVILLE RELO |
| SITE NUMBER | KY22841-S |
| SITE ADDRESS | HWY 80 SOMERSET, KY, 42503 |
| FILE NAME | UTILITY-GROUNDING.DWG |
| SHEET TITLE | GROUNDING DETAIL (2) |
| DRAWING NO. | EG-3 |
| REVISION | C |



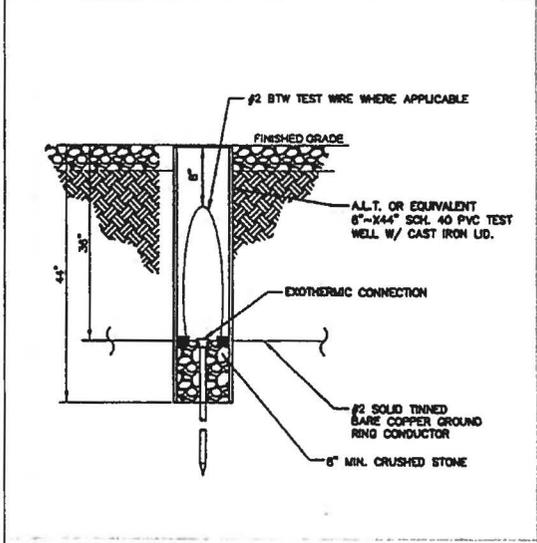
1 GROUNDING @ TOWER BASE

SCALE: N.T.S.



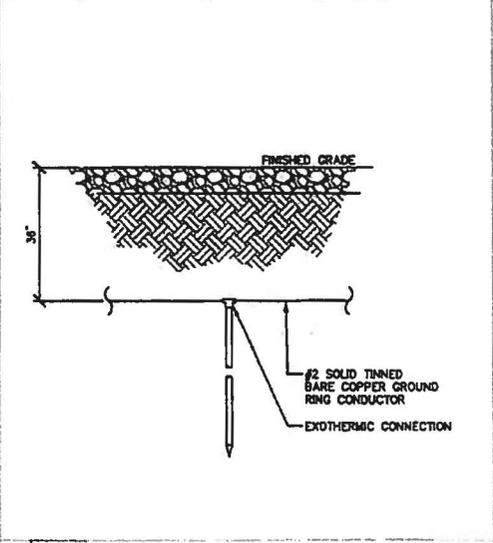
2 TYPICAL WELDING CONNECTIONS

SCALE: N.T.S.



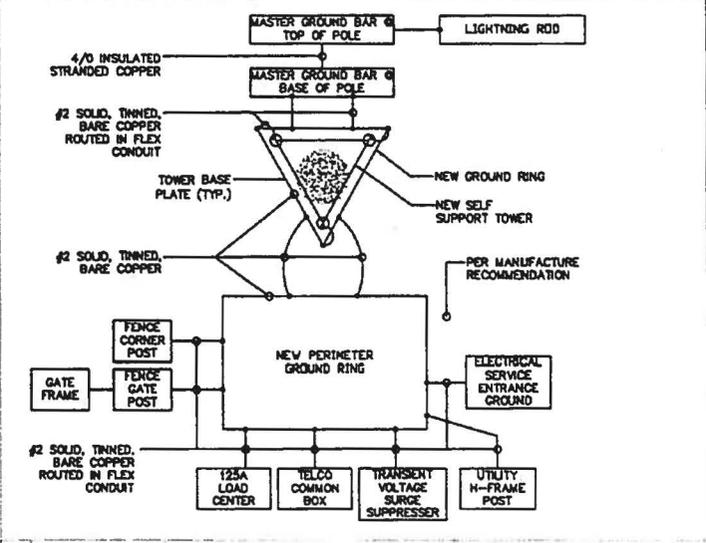
3 ACCESS WELL DETAIL

SCALE: N.T.S.



4 GROUNDING ROD DETAIL

SCALE: N.T.S.



5 SINGLE-LINE DIAGRAM

SCALE: N.T.S.

SBA

SBA TOWERS IX, LLC
8051 CONGRESS AVENUE
BOCA RATON, FL 33487-1307
TEL: (800) 487-7483

THE CROSSROADS GROUP, LLC
www.thecrossroadsgroup.com

1980 Pottsville Pk., Box A 1714 S.R. 467
Pottsville, PA 17870 Pottsville, PA 17880
Ph: 717-860-9286 Ph: 717-472-2317
Fax: 717-860-9242 Fax: 717-472-2312

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|-----------------|----------|
| SCALE: | N.T.S. |
| DRAWN BY: | RMR |
| PLAN ORIG DATE: | 02-27-19 |

REVISIONS

| NO. | DATE | DESCRIPTION |
|-----|---------|------------------------|
| C | 8-24-18 | PER CLIENT COMMENTS |
| B | 5-08-18 | ISSUED DESIGN |
| A | 3-27-18 | ADDITIONAL SITE SURVEY |

PROJECT NO: 2739

SITE NAME: SHOPVILLE RELO

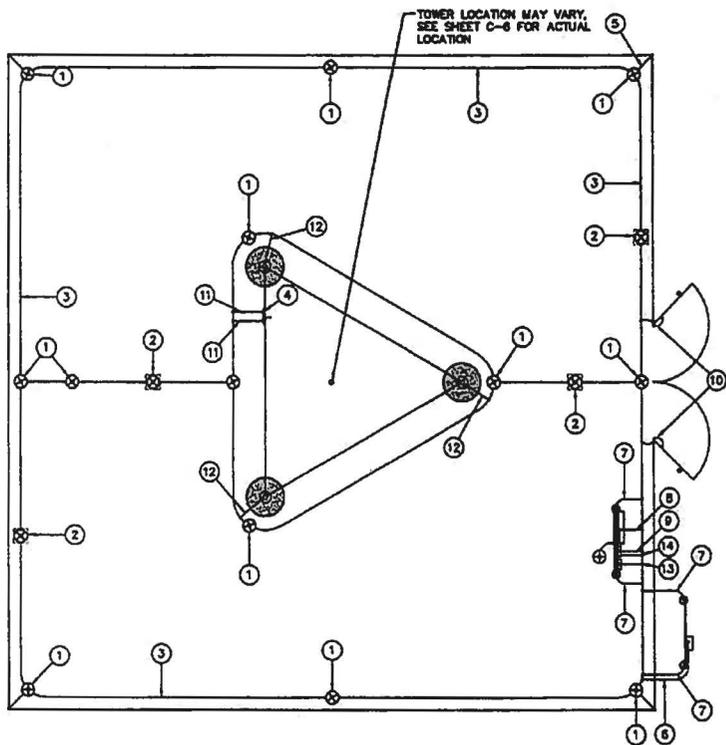
SITE NUMBER: KY22841-S

SITE ADDRESS: HWY 80 SOMERSET, KY, 42503

FILE NAME: UTILITY-GROUNDING.DWG

SHEET TITLE: GROUNDING DETAIL (1)

| | |
|------------------|-------------|
| DRAWING NO: EG-2 | REVISION: C |
|------------------|-------------|



* ALL ELECTRICAL EQUIPMENT, ELECTRICAL DETAILS AND ELECTRICAL SPECIFICATIONS DEPICTED ON THIS PLAN SET ARE DESIGNED BY OTHERS. THEY ARE PROVIDED FOR LOCATION AND GENERAL REFERENCE ONLY. ALL REGULATORY AND DESIGN OBLIGATIONS ARE THE RESPONSIBILITY OF THE ELECTRICAL ENGINEER. THE CROSSROADS GROUP, LLC ASSUMES NO RESPONSIBILITY OR LIABILITY ASSOCIATED WITH THE DESIGN OBLIGATIONS OF THE ELECTRICAL ENGINEER.

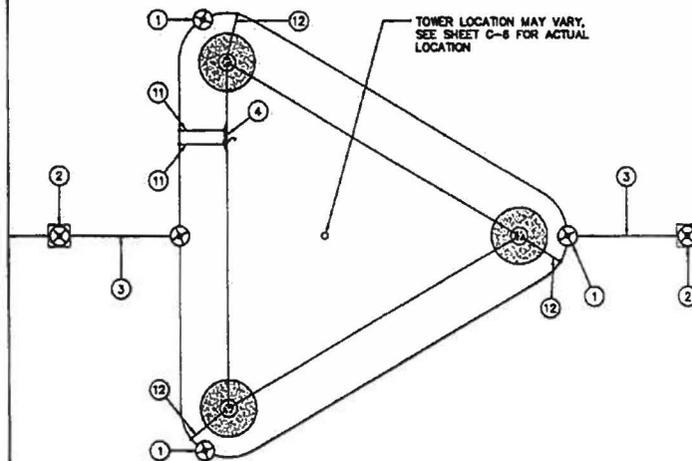
BALLOON REFERENCE NOTES:

- ① 5/8"-x8" COPPER CLAD GROUND ROD BURIED 36" BELOW GRADE (MIN.)
- ② GROUND ROD ACCESS WELL (MIN. OF 4 EACH PER COMPOUND)
- ③ #2 SOLID, TINNED, BARE COPPER WIRE GROUND RING (CONTINUOUS STRAND)
- ④ 1/4"x4"x20" TINNED COPPER GROUND BAR, 2 TYP. AT BASE AND TOP OF TOWER. MOUNT DIRECT TO TOWER, DO NOT ISOLATE.
- ⑤ #2 SOLID, TINNED, BARE COPPER WIRE GROUND LEAD TO FENCE CORNER POST.
- ⑥ #2 SOLID, TINNED, BARE COPPER WIRE GROUND LEAD TO TELCO CELL-PAK.
- ⑦ #2 SOLID, TINNED, BARE COPPER WIRE GROUND LEAD TO UTILITY H-FRAME SUPPORT POST
- ⑧ SERVICE ENTRANCE GROUND TO DEDICATED GROUND ROD
- ⑨ #2 INSULATED, STRANDED COPPER GROUND LEAD ROUTED IN CONDUIT TO 200A LOAD CENTER.
- ⑩ #2 INSULATED, STRANDED COPPER BOND STRAP FROM GATE FRAME TO GATE POST. (TYP EACH GATE)
- ⑪ #2 SOLID, TINNED, BARE COPPER GROUND LEAD FROM GROUND BAR AT SELF SUPPORT TOWER BASE TO GROUND RING, ROUTE IN 3/4" FLEX CONDUIT AND WEATHERPROOF OPEN END. (2 TYPICAL)
- ⑫ #2 SOLID, TINNED, BARE COPPER GROUND LEAD FROM SELF SUPPORT TOWER BASE TO GROUND RING. (2 TYPICAL, 180° SEPARATION)
- ⑬ TOWER LIGHT CONTROLLER (GROUND PER MANUFACTURES RECOMMENDATIONS) (IF REQUIRED)
- ⑭ #2 SOLID, TINNED, BARE COPPER WIRE FROM TRANSIENT VOLTAGE SURGE SUPPRESSOR TO GROUND RING

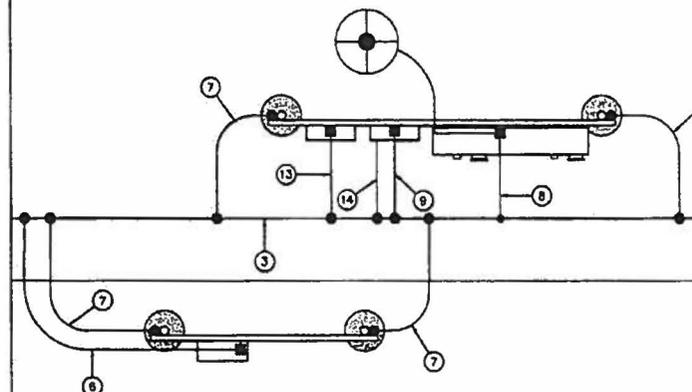
1 SITE GROUNDING PLAN (TYP.)

SYMBOLS LEGEND

- ⊗ GROUND ROD WITH ACCESS
- ⊗ GROUND ROD
- EXOTHERMIC CONNECTION
- MECHANICAL CONNECTION
- GROUND BAR
- GROUND WIRE



2 ENLARGED GROUNDING PLAN @ TOWER BASE (TYP.)



3 ENLARGED GROUNDING PLAN @ UTILITY H-FRAME



SBA TOWERS IX, LLC
8051 CONGRESS AVENUE
BOCA RATON, FL 33487-1307
TEL: (800) 487-7483



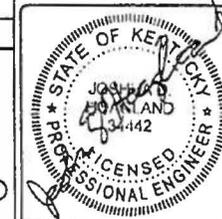
THE CROSSROADS GROUP, LLC
www.thecrossroadsgroup.com

1690 Reynolds Pl., Ste. A
Pottsville, PA 17870
Ph: 484-860-5256
Fax: 484-860-5742

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SCALE: N.T.S.
DRAWN BY: RMR
PLAN ORIG. DATE: 02-27-19

| REVISIONS | | |
|-----------|---------|------------------------|
| NO. | DATE | DESCRIPTION |
| C | 8-24-18 | PER CLIENT COMMENTS |
| B | 8-08-18 | RFPCDC DECISION |
| A | 3-27-18 | ADDITIONAL SITE SURVEY |



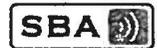
PROJECT NO: 2739
SITE NAME: SHOPVILLE RELO
SITE NUMBER: KY22841-S
SITE ADDRESS: HWY 80
SOMERSET, KY, 42503
FILE NAME: UTILITY-GROUNDING.DWG

SHEET TITLE: GROUNDING PLAN - DETAIL

DRAWING NO: EG-1
REVISION: C

| LOAD PER PHASE (VA) | | SBA PANEL SCHEDULE | | | | | | | | | | LOAD PER PHASE (VA) | | | |
|---------------------|---|---------------------------|--|--|------|-----|-----|------|---------|---------------------|--|---------------------|---|-------|--|
| PHASE | | MAIN: 125A MAIN LUGS | | VOLTAGE: 120/240V PHASE: 1 WIRE: 3 | | | | | | | | | | PHASE | |
| | | FEEDER: | | INTERRUPT RATING: 10 KAIC ENCLOSURE: NEMA 3R | | | | | | | | | | | |
| A | B | CIRCUIT DESCRIPTION | | BREAKER | WIRE | NO. | NO. | WIRE | BREAKER | CIRCUIT DESCRIPTION | | A | B | | |
| | | TOWER LIGHTING CONTROLLER | | 200A | 240 | 1 | 2 | | | SPARE | | | | | |
| | | DUPLX RECEPTACLE | | 200A | 240 | 1 | 2 | | | SPARE | | | | | |
| | | SPARE | | | | | | | | SPARE | | | | | |
| | | SPARE | | | | | | | | SPARE | | | | | |
| | | SPARE | | | | | | | | SPARE | | | | | |
| | | SPARE | | | | | | | | SPARE | | | | | |

- SERVICE BOND IS TO BE MADE BY DEVICES (STRAPS, SCREWS, ETC.) SUPPLIED BY EQUIPMENT MANUFACTURER. IF NO SUCH DEVICE IS SUPPLIED, BOND IS TO BE MADE IN ACCORDANCE WITH NEC ARTICLE 250.
- CONDUCTOR OVERCURRENT PROTECTION DEVICES ARE SELECTED IN ACCORDANCE WITH NEC ARTICLE 240-3. CONDUCTOR SIZING IS SELECTED FROM NEC ARTICLE 310-16.
- CONDUCTOR OVERCURRENT PROTECTION DEVICES ARE SELECTED IN ACCORDANCE WITH NEC ARTICLE 240-3. CONDUCTOR SIZING IS SELECTED FROM NEC ARTICLE 310-16.
- ALL LUGS THAT HOLD MORE THAN ONE WIRE SHALL BE LISTED FOR MULTI-BARRELL CONNECTIONS.
- ALL CONDUCTORS SHALL BE INSULATED THIN WIRE.



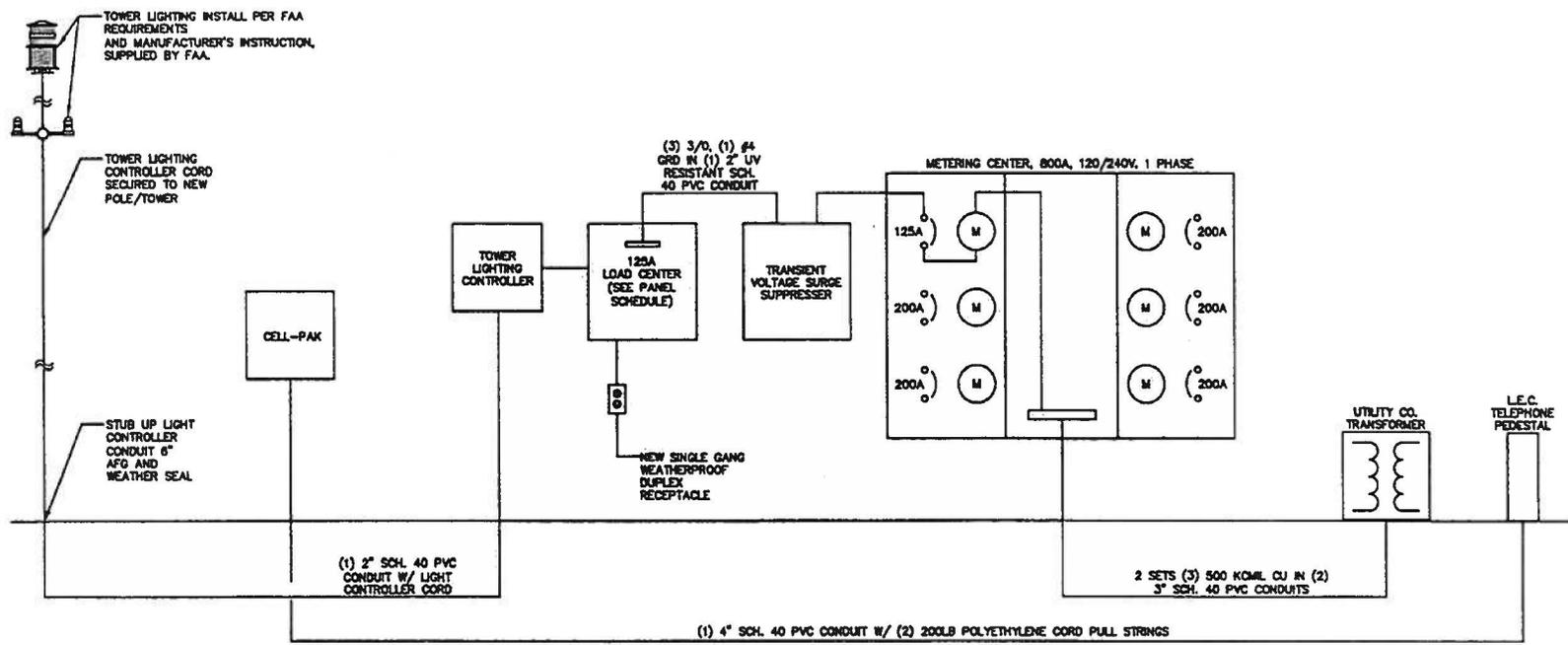
SBA TOWERS IX, LLC
8051 CONGRESS AVENUE
BOCA RATON, FL 33487-1307
TEL: (800) 467-7483



THE CROSSROADS GROUP, LLC
www.thecrossroadsgroup.com
18000 Peninsula Plaza, Ste A 1174 S R 487
Huntington, PA 15882 Hunting, PA 15882
Ph: 484-980-3268 Ph: 470-672-7517
Fax: 484-980-3742 Fax: 484-980-3742

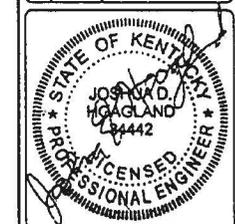
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LOAD CENTER PANEL SCHEDULE & NOTES



| | |
|----------------|----------|
| SCALE | N.T.S. |
| DRAWN BY | RMR |
| PLAN ORIG DATE | 02-27-19 |

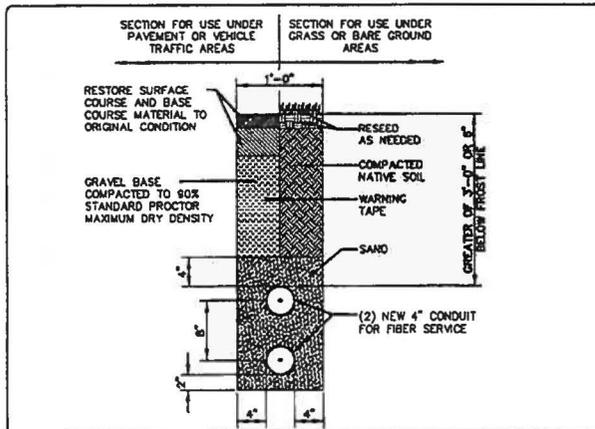
| REVISIONS | | |
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| NO. | DATE | DESCRIPTION |
| C | 8-04-18 | PER CLIENT COMMENTS |
| B | 5-08-18 | IFDCS DESIGN |
| A | 3-27-18 | ADDITIONAL SITE SURVEY |



| | |
|--------------|-------------------------------|
| PROJECT No. | 2739 |
| SITE NAME | SHOPVILLE RELO |
| SITE NUMBER | KY22841-S |
| SITE ADDRESS | HWY 80 SOMERSET, KY, 42503 |
| P.L.R. NAME | UTILITY-GROUNDING.DWG |

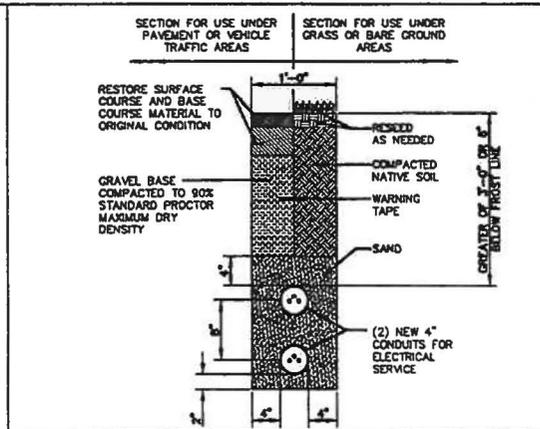
SHEET TITLE
ELEC. SINGLE LINE DETAIL

| | |
|------------|----------|
| DRAWING NO | REVISION |
| E-3 | C |



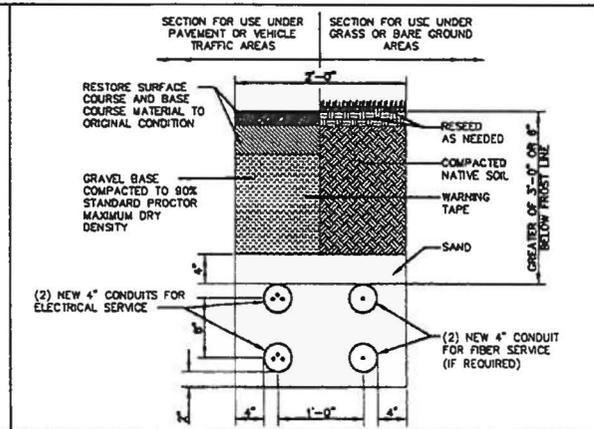
1 TELEPHONE TRENCH DETAIL

SCALE: N.T.S.



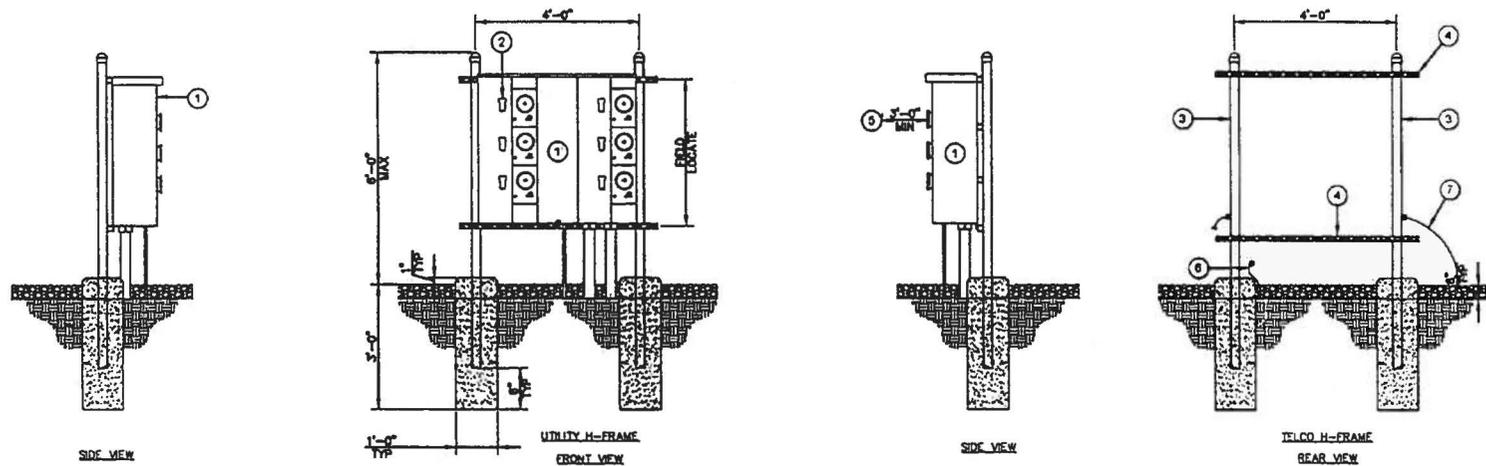
2 ELECTRICAL TRENCH DETAIL

SCALE: N.T.S.



3 JOINT UTILITY TRENCH DETAIL

SCALE: N.T.S.



BALLOON REFERENCE NOTES:

- ① 800A, 120/240V, 1 PHASE, 3 WIRE, 6 POSITION METERING CENTER (200A MAX CIRCUIT BREAKER) (SQUARE D METER PAK OR EQUAL)
- ② 200A SBA SERVICE DISCONNECT (SQUARE D CATALOG OR EQUAL)
- ③ 3" NOMINAL GALVANIZED STEEL PIPE WITH PIPE CAP
- ④ HORIZONTAL SUPPORT MEMBER (UNISTRUT P1000, OR APPROVED EQUAL)
- ⑤ CONTRACTOR TO MAINTAIN 3'-0" MINIMUM CLEARANCE FROM METERING CENTER TO NEAREST OBSTRUCTION
- ⑥ 6' #6 GROUND WIRE COILED AT POST. CONNECT TO GROUNDING SYSTEM
- ⑦ #2 AWG BARE SOLID THINNED COPPER WIRE ROUTED TO GROUNDING SYSTEM (TYP. EACH LEG)

4 UTILITY & TELCO H-FRAME DETAIL (UNLIT-SITES)

SCALE: N.T.S.



SBA TOWERS IX, LLC
8001 CONGRESS AVENUE
BOCA RATON, FL 33487-1107
TEL: (800) 467-7483



THE CROSSROADS GROUP, LLC
www.thecrossroadsgroupllc.com

1600 Parkway Plaza, Ste. A 1174 S.E. 487
Weston, FL 32787
PH: 404-860-3055
FAX: 404-860-3742

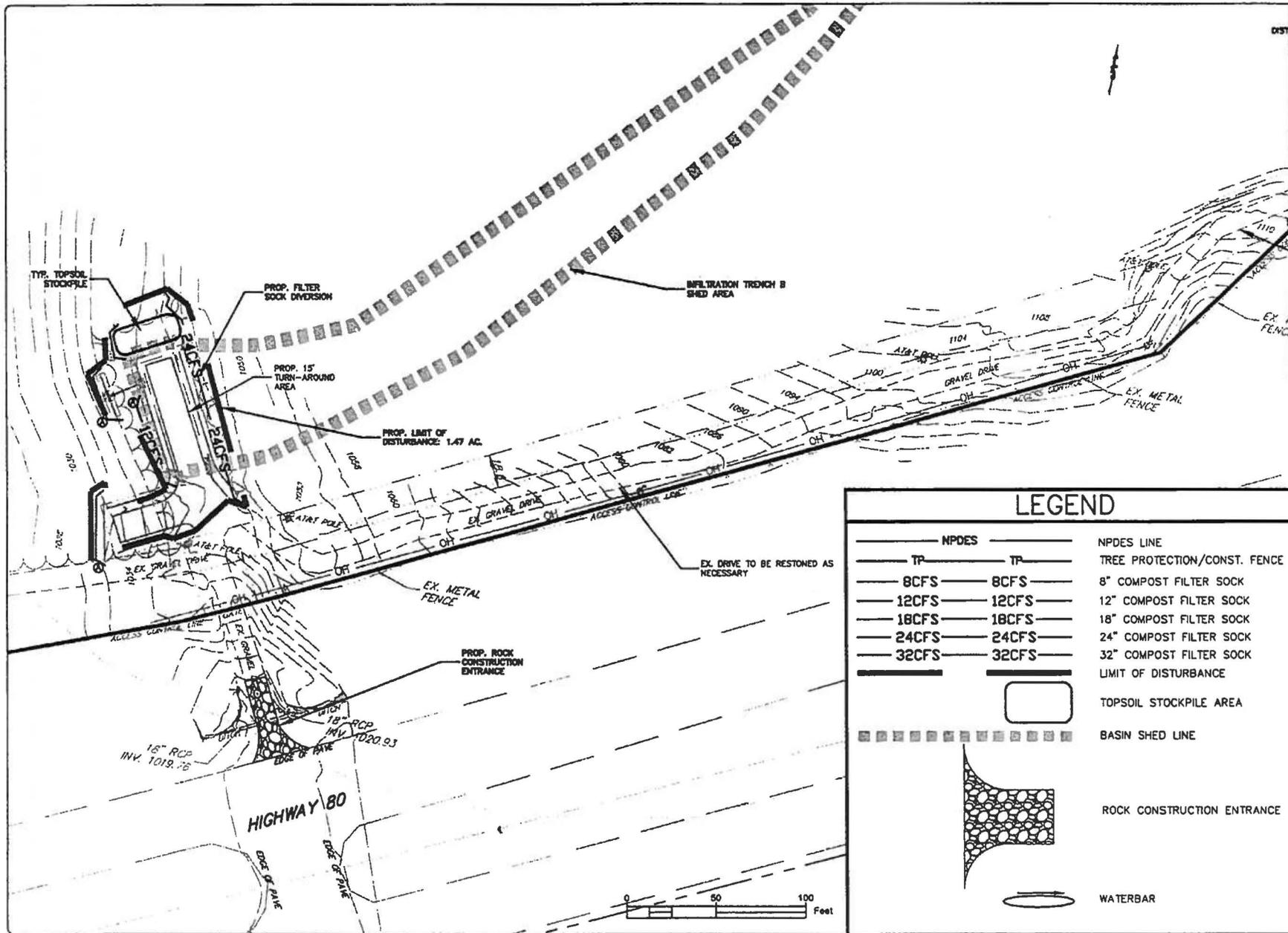
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| DRAWN BY: | RMR |
| PLAN ORIG. DATE: | 02-27-19 |

| REVISIONS | | |
|-----------|---------|------------------------|
| NO. | DATE | DESCRIPTION |
| C | 8-28-19 | PER CLIENT COMMENTS |
| B | 8-28-19 | SPICE DESIGN |
| A | 3-27-19 | ADDITIONAL SITE SURVEY |



| | |
|--------------|-----------------------------------|
| PROJECT No | 2739 |
| SITE NAME | SHOPVILLE RELO |
| SITE NUMBER | KY22841-S |
| SITE ADDRESS | HWY 80 SOMERSET, KY, 42503 |
| FILE NAME | UTILITY-GROUNDING.DWG |
| SHEET TITLE | UTILITY & TELCO H-FRAME DETAIL |
| DRAWING NO | E-2 |
| REVISION | C |



SBA TOWERS IX, LLC
8051 CONGRESS AVENUE
BOCA RATON, FL 33487-1307
TEL: (800) 487-7483



TEE CROSSROADS GROUP, LLC
www.thecrossroadsgroup.com
18600 Patuxent Pk., Ste. A
Hunting, PA 15886
Ph: 484-850-3288
Fax: 484-850-3742
1174 S.E. 467
Painesville, PA 15960
Ph: 484-850-2117
Fax: 484-850-2742

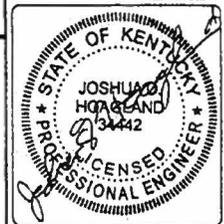
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SCALE: 1" = 50'
DRAWN BY: RMR
PLAN ORIG. DATE: 02-27-19

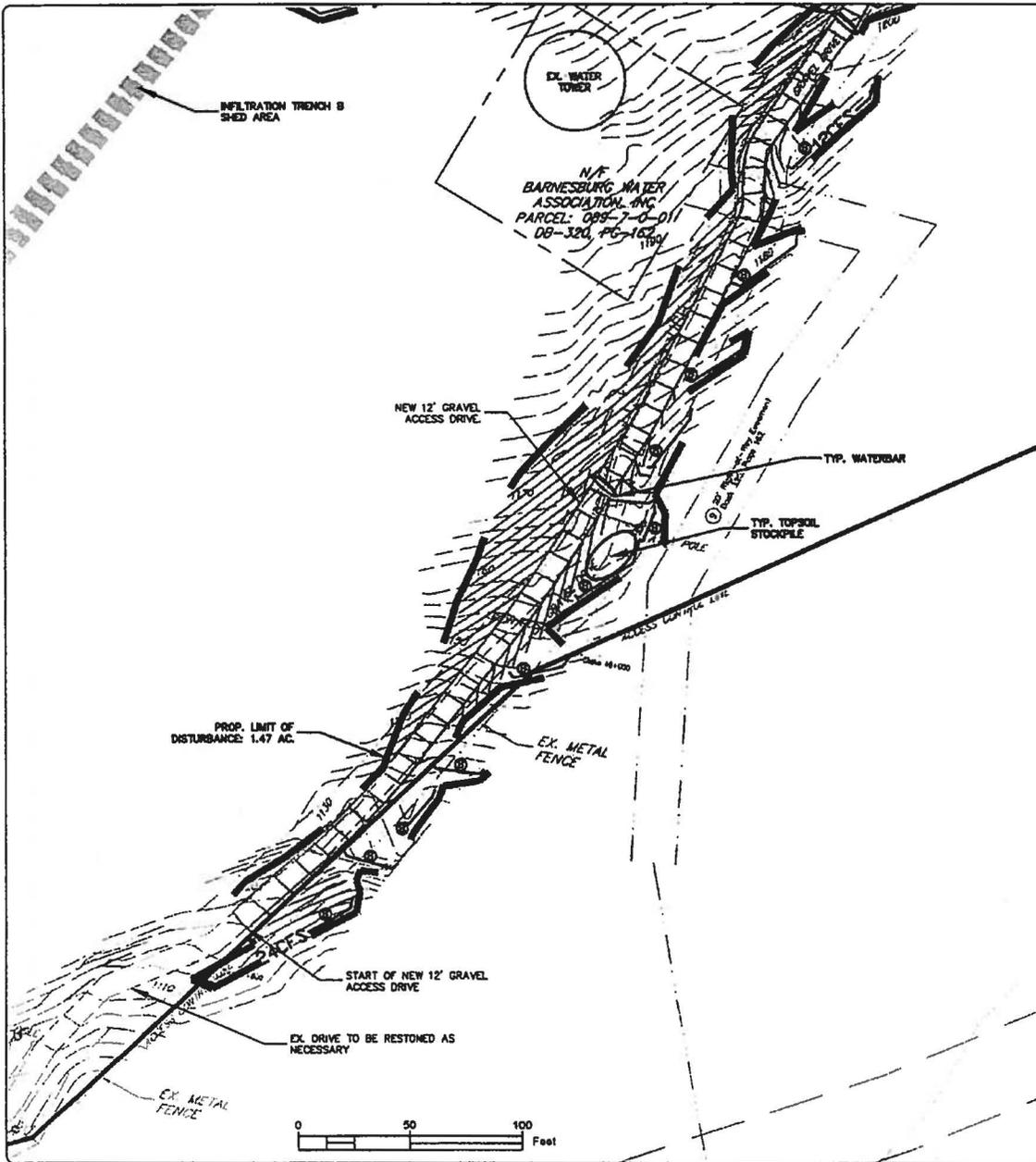
| REVISIONS | |
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| NO. | DATE DESCRIPTION |
| C | 6-24-18 PER CLIENT COMMENTS |
| B | 6-08-18 NPDES DESIGN |
| A | 3-27-18 ADDITIONAL SITE SURVEY |

LEGEND

| | |
|----------------|------------------------------|
| NPDES | NPDES LINE |
| TP | TREE PROTECTION/CONST. FENCE |
| 8CFS | 8" COMPOST FILTER SOCK |
| 12CFS | 12" COMPOST FILTER SOCK |
| 18CFS | 18" COMPOST FILTER SOCK |
| 24CFS | 24" COMPOST FILTER SOCK |
| 32CFS | 32" COMPOST FILTER SOCK |
| --- | LIMIT OF DISTURBANCE |
| [Box] | TOPSOIL STOCKPILE AREA |
| [Dashed Line] | BASIN SHED LINE |
| [Rock Pattern] | ROCK CONSTRUCTION ENTRANCE |
| [Circle] | WATERBAR |



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| PROJECT No. | 2739 |
| SITE NAME | SHOPVILLE RELO |
| SITE NUMBER | KY22841-S |
| SITE ADDRESS | HWY 80 SOMERSET, KY, 42503 |
| FILE NAME | ZES.DWG |
| SHEET TITLE EROSION & SEDIMENT CONTROL PLAN 2 | |
| DRAWING NO. | REVISION |
| ES-2 | C |



SBA

SBA TOWERS DL, LLC
8081 CONGRESS AVENUE
BOCA RATON, FL 33487-1507
TEL: (904) 487-7463

THE CROSSROADS GROUP, LLC
www.thecrossroadsgroup.com

1880 Poplarville Pk., Ste. A
Harrisburg, PA 17124
Ph: 484-860-2000
Fax: 484-860-3742

1174 S.R. 487
Pottsville, PA 17855
Ph: 610-572-2311
Fax: 610-572-2312

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| SCALE: | 1" = 50' |
| DRAWN BY: | RMR |
| PLAN ORIG. DATE: | 02-27-19 |

| REVISIONS | | |
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| NO. | DATE | DESCRIPTION |
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LEGEND

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| | NPDES | NPDES LINE |
| | TP | TREE PROTECTION/CONST. FENCE |
| | 8CFS | 8" COMPOST FILTER SOCK |
| | 12CFS | 12" COMPOST FILTER SOCK |
| | 18CFS | 18" COMPOST FILTER SOCK |
| | 24CFS | 24" COMPOST FILTER SOCK |
| | 32CFS | 32" COMPOST FILTER SOCK |
| | | LIMIT OF DISTURBANCE |
| | | TOPSOIL STOCKPILE AREA |
| | | BASIN SHED LINE |
| | | ROCK CONSTRUCTION ENTRANCE |
| | | WATERBAR |

PROJECT NO. 2739

SITE NAME: SHOPVILLE RELO

SITE NUMBER: KY22841-S

SITE ADDRESS: HWY 80, SOMERSET, KY, 42503

FILE NAME: ZES.DWG

SHEET TITLE: EROSION & SEDIMENT CONTROL PLAN 3

| | |
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| DRAWING NO. | REVISION |
| ES-3 | C |

RECYCLING STATEMENT

ALTHOUGH THERE ARE NO KNOWN PROJECT WASTES FOR THIS SITE, INDIVIDUALS RESPONSIBLE FOR EARTH DISTURBANCE ACTIVITIES MUST ENSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS. CONSTRUCTION WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, CONCRETE, WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. MEASURES SHOULD BE PLANNED AND IMPLEMENTED FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL. WHEREVER POSSIBLE, RECYCLING OF EXCESS MATERIALS IS PREFERRED, RATHER THAN DISPOSAL.

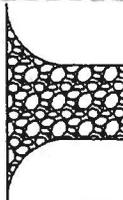
ALL BUILDING MATERIALS AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH KENTUCKY STATE REGULATIONS. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, OR DISCHARGED ON THE SITE.

ALL OFF SITE WASTE AND BORROW AREAS MUST HAVE AN APPROVED E&S PLAN FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.

MULCH TACKING

STRAW AND HAY MULCH SHALL BE ANCHORED IMMEDIATELY AFTER APPLICATION TO PREVENT BEING WINDBLOWN. A TRACTOR-DRAWN IMPLEMENT MAY BE USED TO "CRIMP" THE STRAW OR HAY INTO TO SOIL. THIS METHOD IS LIMITED TO SLOPES NO STEEPER THAN 3 TO 1 AND MACHINERY SHALL BE OPERATED ON THE CONTOUR. (NOTE: CRIMPING BY TRAVERSING WITH TRACK MACHINERY IS NOT ACCEPTABLE). GRUBBED ASPHALT CONTAINING NO SOLVENTS OR OTHER DILUTING AGENTS TOXIC TO PLANT OR ANIMAL LIFE, UNIFORMLY APPLIED AT THE RATE OF 31 GALLONS PER 1,000 S.Y. MAY BE USED TO TACK MULCH. SYNTHETIC OR CHEMICAL BINDERS MAY BE USED AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH PROVIDED THAT SUFFICIENT DOCUMENTATION IS SUBMITTED TO AND APPROVED BY THE COLUMBIA REGIONAL DOW OFFICE TO SHOW THAT THE MATERIAL IS NON-TOXIC TO NATIVE PLANT AND ANIMAL SPECIES AND OTHERWISE ACCEPTABLE. LIGHTWEIGHT PLASTIC, FIBER OR PAPER NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURERS RECOMMENDATIONS.

LEGEND

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|---|------------------------------|
| — NPDES — | NPDES LINE |
| — TP — | TREE PROTECTION/CONST. FENCE |
| — 8CFS — | 8" COMPOST FILTER SOCK |
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| — — — | LIMIT OF DISTURBANCE |
|  | TOPSOIL STOCKPILE AREA |
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SBA TOWERS II, LLC
8024 CROSSROADS AVENUE
BOCA RATON, FL 33497-1307
TEL: (800) 407-7483



THE CROSSROADS GROUP, LLC
www.thecrossroadsgroup.com

16500 Pennells Pk. Bld. A
Huntington, PA 15882
Ph: 814-840-2066
Fax: 814-860-2342

1114 E. 4th
Pottsville, PA 17850
Ph: 610-472-2317
Fax: 610-660-2342

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DRAWN BY: RMR
PLAN ORG. DATE: 02-27-19

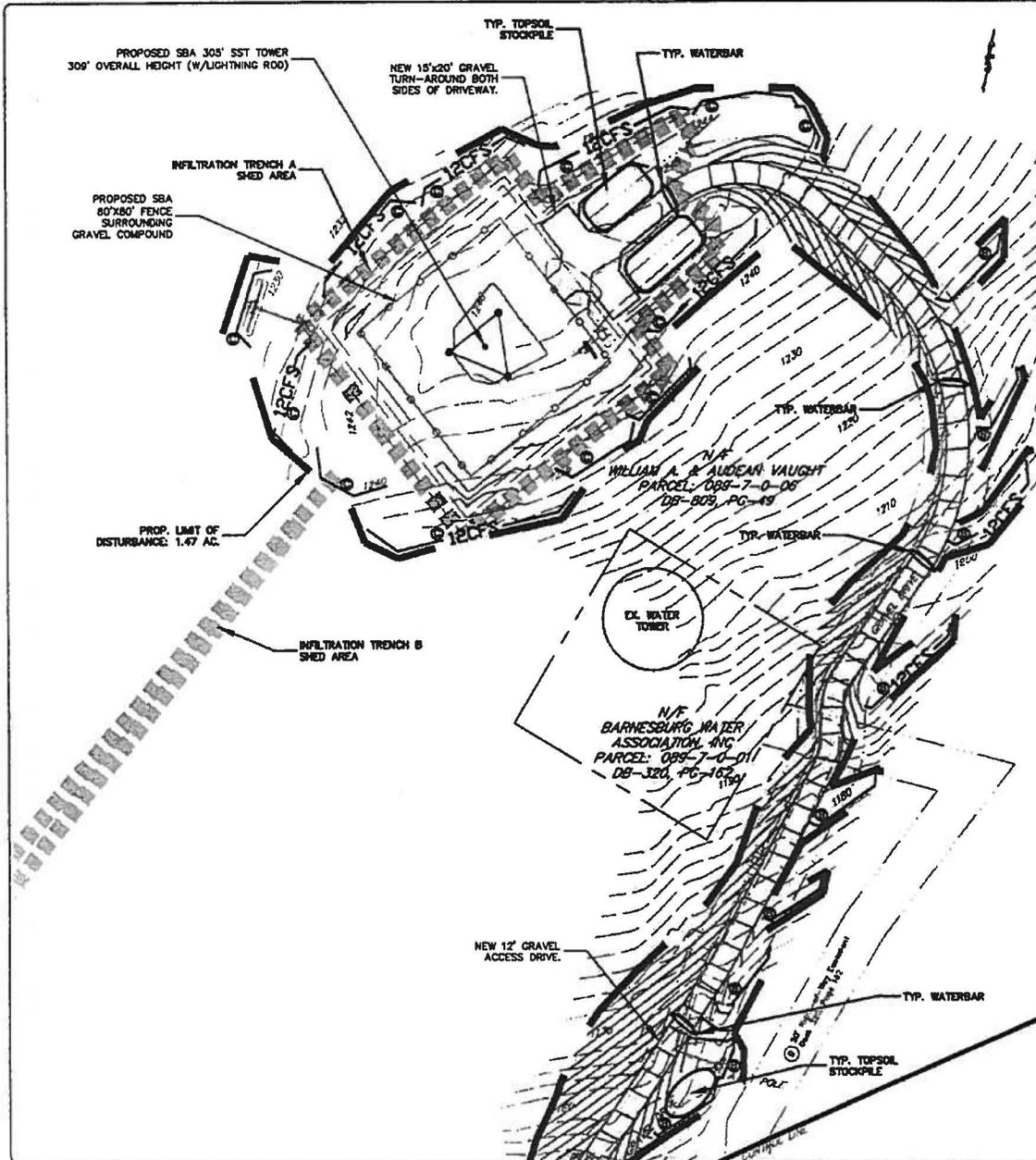
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| NO. | DATE | DESCRIPTION |
| C | 8-24-18 | PER CLIENT COMMENTS |
| B | 8-09-18 | NPDES DESIGN |
| A | 5-27-18 | ADDITIONAL SITE SURVEY |



PROJECT NO. 2739
SITE NAME: SHOPVILLE RELO
SITE NUMBER: KY22841-S
SITE ADDRESS: HWY 80
SONMERSSET, KY, 42503
FILE NAME: ZES.DWG

SHEET TITLE: EROSION & SEDIMENT CONTROL PLAN 4

DRAWING NO. ES-4
REVISION C



EROSION CTRL MAINT NOTES

TO ENSURE ADEQUATE FUNCTION OF THE TEMPORARY CONTROLS, A MAINTENANCE PROGRAM SHALL BE INITIATED WHICH INCLUDES THE FOLLOWING AT A MINIMUM. ALSO, ALL MAINTENANCE DURING CONSTRUCTION AND PRIOR TO FINAL STABILIZATION OF THE SITE SHALL BE THE RESPONSIBILITY OF THE DEVELOPER OR HIS CONTRACTOR.

1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED EAS PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
2. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE EAS PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRE-CONSTRUCTION MEETING.
3. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE KENTUCKY ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-732-8007 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.
5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
6. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE EAS BMPs SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS EAS PLAN.
7. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
8. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAP(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 3:1:1 OR FLATTER.
9. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT.
10. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH KENTUCKY STATE REGULATIONS. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
11. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN EAS PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL.
13. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
14. VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY NOR EXIT DIRECTLY FROM THE PROPERTY ONTO BARNESBURG SPUR ROAD.
15. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPs SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RETENING MUST BE PERFORMED IMMEDIATELY. IF THE EAS BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED MUST BE REQUIRED.
16. LOG RECORD DATES FOR EAS BMPs WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
17. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELLED, OR SWEEP INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
18. ALL SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
19. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 8 INCHES — 6 TO 12 INCHES ON COMPACTED SOILS — PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
20. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUSSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
21. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
22. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOO, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
23. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
24. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
25. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
26. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDING AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
27. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
28. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL, 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
29. EAS BMPs SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
30. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE EAS BMPs.
31. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPs MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPs. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPs SHALL BE STABILIZED IMMEDIATELY, IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
32. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.
33. FAILURE TO CORRECTLY INSTALL EAS BMPs, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF EAS BMPs MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.

CONSTRUCTION SEQUENCE

IN ORDER TO KEEP EROSION AND SEDIMENT POLLUTION DURING CONSTRUCTION TO AN ABSOLUTE MINIMUM, ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING STAGING OF EARTHMOVING ACTIVITIES. EACH STAGE SHALL BE COMPLETED BEFORE A SUBSEQUENT STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. AT LEAST SEVEN (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENTATION CONTROL PLAN PREPARER, AND A REPRESENTATIVE OF THE COLUMBIA DOW REGIONAL OFFICE TO AN ON-SITE PRE-CONSTRUCTION MEETING. ALSO, AT LEAST THREE DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITY, ALL CONTRACTORS INVOLVED IN THAT ACTIVITY SHALL NOTIFY THE KENTUCKY ONE-CALL SYSTEM INC. 1-800-732-8007 TO DETERMINE ANY UNDERGROUND UTILITIES LOCATIONS.

1. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE COLUMBIA DOW REGIONAL OFFICE PRIOR TO IMPLEMENTATION.
2. THE LIMIT OF DISTURBANCE, STREAMS, AND WETLANDS SHOULD BE MARKED PRIOR TO DISTURBANCE ACTIVITIES.
3. INSTALL ROCK CONSTRUCTION ENTRANCE ON EXISTING ACCESS DRIVE AT INTERSECTION WITH HIGHWAY 80 IN ACCORDANCE WITH DETAIL TO SERVE AS ACCESS TO SITE.
4. PLACE SILT FENCING AND/OR COMPOST FILTER SOCK AS DEPICTED ON THE PLANS, AND DOWNSTREAM OF ALL EXCAVATED AREAS OR TOPSOIL STOCKPILING AREAS.
5. UPON INSTALLATION OR STABILIZATION OF ALL PERIMETER SEDIMENT CONTROL BMPs AND AT LEAST 3 DAYS PRIOR TO PROCEEDING WITH THE BULK EARTH DISTURBANCE ACTIVITIES, THE PERMITTEE OR CO-PERMITTEE SHALL PROVIDE NOTIFICATION TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT.
6. CLEAR AND GRUB REMAINDER OF DISTURBED AREAS ON SITE. STRIP TOPSOIL WITHIN AREAS OF PROPOSED EARTHWORK AND STOCKPILE ACCORDING TO PLANS. BEGIN BULK EXCAVATION ACTIVITIES FOR PROPOSED ACCESS DRIVE, PARKING/TURN-AROUND AREAS AND THE COMPOUND AREA AND STABILIZE.
7. BEGIN CONSTRUCTION OF PROPOSED COMPOUND AND COMMUNICATION TOWER. IF ROADWAY IS NOT STABILIZED, ACCESS TO THE CONSTRUCTED STRUCTURE SHALL BE STABILIZED FOR CONSTRUCTION VEHICLE ACCESS.
8. INSTALL REMAINDER OF UNDERGROUND UTILITIES. REFER TO UTILITY LINE EXCAVATION MEASURES. FINISH GRADE, SEED AND MULCH EACH AREA OF DISTURBANCE IMMEDIATELY AFTER CONSTRUCTION IS COMPLETED.
9. AFTER THE ASSOCIATED UPSLOPE DRAINAGE AREA IS STABILIZED, CONSTRUCT THE STORMWATER CONTROL FACILITIES IN ACCORDANCE WITH THE CONSTRUCTION STAGING FOUND ON THE PCSM PLANS.
10. REMOVE TEMPORARY CONTROL MEASURES AFTER UNIFORM EROSION RESISTANT PERENNIAL VEGETATION HAS BEEN ESTABLISHED. MINIMUM OF LATERALS PLACED ON A DRAINAGE COURSE TO THE POINT OF INTEREST WHERE THE SURFACE SOIL IS CAPABLE OF RESISTING EROSION DURING RUNOFF EVENTS AND STABILIZATION OF THE SITE IS COMPLETE TO THE SATISFACTION OF THE COLUMBIA DOW REGIONAL OFFICE. AREAS DISTURBED DURING THE REMOVAL OF THE CONTROLS MUST BE STABILIZED. THE COLUMBIA DOW REGIONAL OFFICE SHALL BE NOTIFIED PRIOR TO REMOVAL OF ANY EROSION CONTROLS.
11. WITHIN 30 DAYS AFTER THE COMPLETION OF EARTH DISTURBANCE ACTIVITIES AUTHORIZED BY THIS PERMIT, INCLUDING THE PERMANENT STABILIZATION OF THE SITE AND PROPER INSTALLATION OF PCSM BMPs IN ACCORDANCE WITH THE APPROVED PCSM PLAN, OR UPON SUBMISSION OF THE NOT IF SOONER, THE PERMITTEE SHALL FILE WITH THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT A STATEMENT SIGNED BY A LICENSED PROFESSIONAL AND BY THE PERMITTEE CERTIFYING THAT WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THIS PERMIT AND THE APPROVED PCSM PLAN. COMPLETION CERTIFICATES ARE NEEDED TO ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE PERMIT AND THE APPROVED EAS AND PCSM PLANS.

FILL MATERIAL NOTES

IF THE SITE WILL NEED TO IMPORT OR EXPORT MATERIAL FROM THE SITE, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND DETERMINATION OF CLEAN FILL WILL REST WITH THE ON-SITE CONTRACTOR.

CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREGGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE).

CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE STILL QUALIFIES AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS.

ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL.

ENVIRONMENTAL DUE DILIGENCE: THE APPLICANT MUST PERFORM ENVIRONMENTAL DUE DILIGENCE TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL.

FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH KENTUCKY STATE REGULATIONS.

MATERIAL NOTES:

1. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
2. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOO, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
3. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
4. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.



SBA TOWERS II, LLC
8001 CONGRESS AVENUE
BOCA RATON, FL 33487-1307
TEL: (561) 467-7483



THE CROSSROADS GROUP, LLC
www.thecrossroadsgroup.com

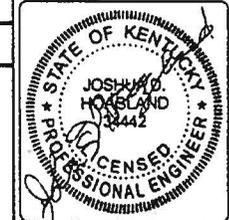
1600 Paradise Plaza, Dr. A 1176 S.A. #47
Pawnee, PA 17050
Ph: 610-693-3206
Fax: 610-693-3242

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SCALE: NTS
DRAWN BY: RMR
PLAN ORG DATE: 02-27-19

REVISIONS

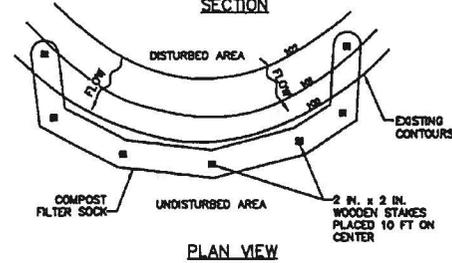
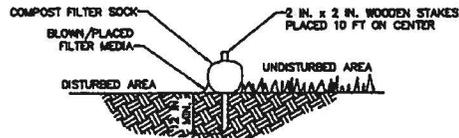
| NO. | DATE | DESCRIPTION |
|-----|---------|------------------------|
| 0 | 0-24-19 | FOR CLIENT COMMENTS |
| 1 | 0-29-19 | ISSUED DESIGN |
| 2 | 3-20-19 | REVISIONAL SITE SURVEY |



PROJECT NO: 2739
SITE NAME: SHOPVILLE RELO
SITE NUMBER: KY22841-S
SITE ADDRESS: HWY 80
SOMERSET, KY, 42503
FILE NAME: ZES.0WG

SHEET TITLE:
EROSION & SEDIMENT
CONTROL NOTES

DRAWING NO: ES-5
REVISION: C



NOTES.

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 6 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

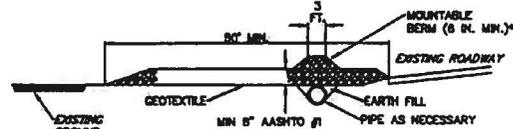
UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

**STANDARD CONSTRUCTION DETAIL #4-1
COMPOST FILTER SOCK**

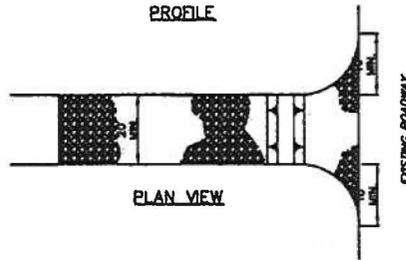
NOT TO SCALE

| LABL. | COMPOST FILTER SOCK | SIZE |
|-------|---------------------|------|
| A | CFB | 12" |
| B | CFB | 24" |
| C | CFB | 12" |

EROSION PERMITTER CONTROLS



PROFILE



PLAN VIEW

* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

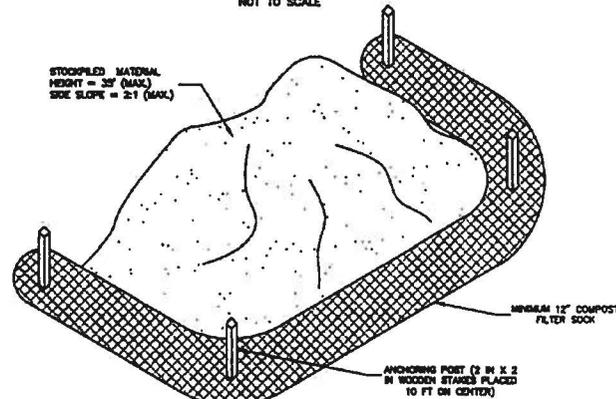
RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

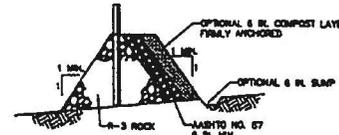
**STANDARD CONSTRUCTION DETAIL #3-1
ROCK CONSTRUCTION ENTRANCE**

NOT TO SCALE

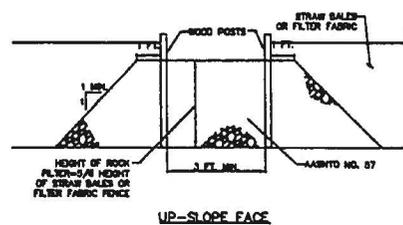


STOCKPILE CONTROL

N.T.S.



OUTLET CROSS-SECTION



UP-SLOPE FACE

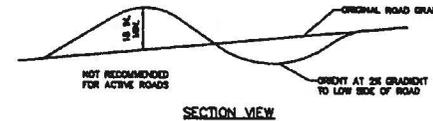
NOTES:

A ROCK FILTER OUTLET SHALL BE INSTALLED BEFORE FAILURE OF A SILT FENCE OR STRAW BALE BARRIER HAS OCCURRED DUE TO CONCENTRATED FLOW ANCHORED COMPOST LAYER SHALL BE USED ON UP-SLOPE FACE IN HQ AND EV WATERSHEDS.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.

**STANDARD CONSTRUCTION DETAIL #4-6
ROCK FILTER OUTLET**

NOT TO SCALE



SECTION VIEW

NOTES:

WATERBARS SHALL DISCHARGE TO A STABLE AREA.

WATERBARS SHALL BE INSPECTED WEEKLY (ONLY ON ACTIVE ROADS) AND AFTER EACH RUNOFF EVENT. DAMAGED OR EXCEEDED WATERBARS SHALL BE RESTORED TO ORIGINAL DIMENSIONS WITHIN 24 HOURS OF INSPECTION.

MAINTENANCE OF WATERBARS SHALL BE PROVIDED UNTIL ROADWAY, SHOULDER, OR RIGHT-OF-WAY HAS ACHIEVED PERMANENT STABILIZATION.

WATERBARS ON RETIRED ROADWAYS, SHOULDER, AND RIGHT-OF-WAYS SHALL BE LEFT IN PLACE AFTER PERMANENT STABILIZATION HAS BEEN ACHIEVED.

SEE PA DEP EROSION CONTROL MANUAL, TABLE 3.1 FOR WATERBAR SPACING.

**STANDARD CONSTRUCTION DETAIL #3-5
WATERBAR**

NOT TO SCALE



SBA TOWERS PK, LLC
8051 CONGRESS AVENUE
BOCA RATON, FL 33487-1307
TEL: (800) 467-7463



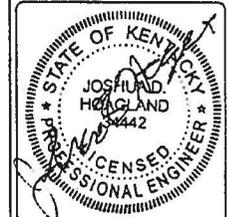
THE CROSSROADS GROUP, LLC
www.thecrossroadsgroup.com

1800 Piedmont Pk., Ch. A 1174 S.R. 497
Huntington, PA 15875 Huntingdon, PA 17000
Ph: 412-685-2000 Ph: 412-673-2311
Fax: 412-685-5122 Fax: 412-685-5122

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| | |
|------------------|----------|
| SCALE: | NTS |
| DRAWN BY: | RMR |
| PLAN ORIG. DATE: | 02-27-19 |

| REVISIONS | | |
|-----------|---------|------------------------|
| NO. | DATE | DESCRIPTION |
| C | 8-24-18 | PER CLIENT COMMENTS |
| B | 8-28-18 | ISSUES DESIGN |
| A | 3-27-18 | ADDITIONAL SITE SURVEY |



| | |
|---------------|-------------------------------|
| PROJECT NO. | 2739 |
| SITE NAME: | SHOPVILLE RELO |
| SITE NUMBER: | KY22841-S |
| SITE ADDRESS: | HWY 80 SOMERSET, KY, 42503 |
| FILE NAME: | ZDET.DWG |

| | |
|-------------|-------------|
| SHEET TITLE | E&S DETAILS |
|-------------|-------------|

| | |
|-------------|-----------|
| DRAWING NO. | REVISION. |
| ES-6 | C |

EXHIBIT

K



Structural Design Report

305' S3TL Series HD1 Self-Supporting Tower
Site: Shopville Relo, KY
Site Number: KY22841-S

Prepared for: SBA NETWORK SERVICES INC
by: Sabre Towers & Poles™

Job Number: 20-0890-CJP

June 11, 2019

Tower Profile..... 1-2

Foundation Design Summary (Option 1)..... 3

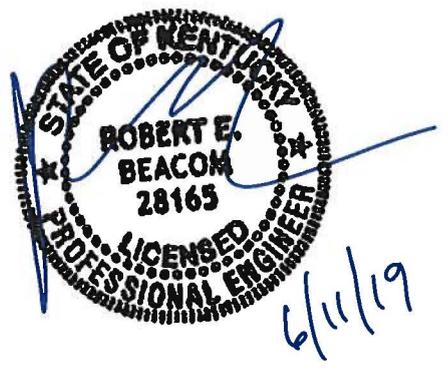
Foundation Design Summary (Option 2)..... 4

Maximum Leg Loads..... 5

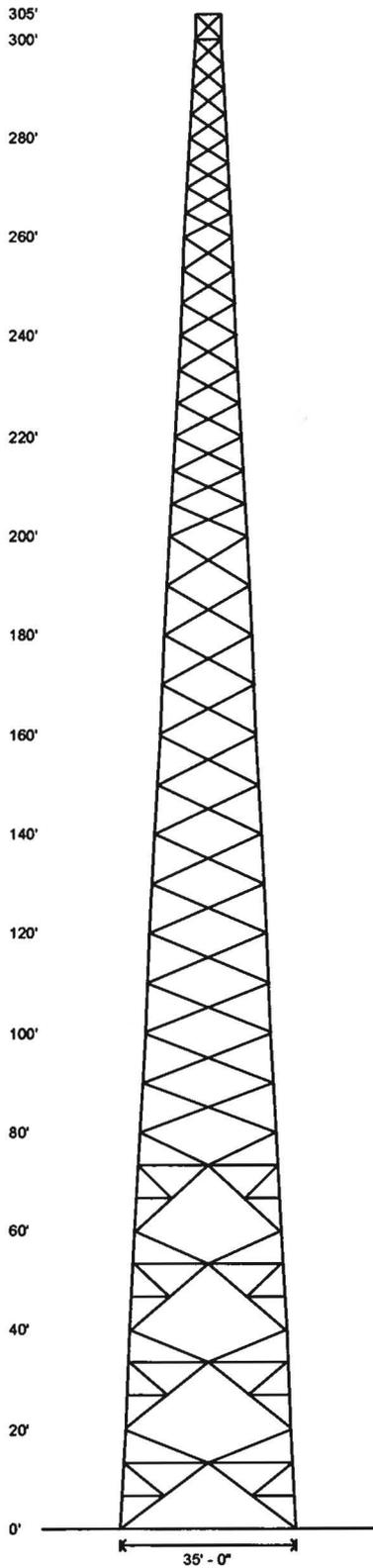
Maximum Diagonal Loads..... 6

Maximum Foundation Loads..... 7

Calculations..... 8-25



| | | | | | | | | | | | |
|--------------------|-----------------|-----------------|-----------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Legs | 14.00 OD X .500 | 12.75 OD X .500 | 8.625 OD X .500 | A | B | C | D | E | F | G | H |
| Diagonals | I J I | K I | L | M | N | O | P | Q | R | S | T |
| Horizontals | Q R Q | R L R | S | NONE |
| Internals | U R U | R V R | V | NONE |
| Sub-Diagonals | W R V | R V R | V | NONE |
| Sub-Horizontals | W R W | R V R | O | (2) 3/4" | (2) 5/8" | (1) 3/4" | (1) 5/8" | (1) 5/8" | (1) 5/8" | (1) 5/8" | (1) 5/8" |
| Brace Bolts | 33' | 29' | 27' | 25' | 23' | 21' | 19' | 17' | 15' | 13' | 11' |
| Top Face Width | X Y X | X Y X | X Y X | X Y X | X Y X | X Y X | X Y X | X Y X | X Y X | X Y X | X Y X |
| Panel Count/Height | 10974 | 10527 | 9398 | 8732 | 8235 | 7119 | 5593 | 4977 | 4482 | 3604 | 2918 |
| Section Weight | | | | | | | | | | | |



Designed Appurtenance Loading

| Elev | Description | Tx-Line |
|------|--|-------------|
| 300 | (1) 250 sq.ft. (no ice) 280 sq.ft. (ice) | (24) 1 5/8" |
| 290 | (1) 200 sq.ft. (no ice) 225 sq.ft. (ice) | (12) 1 5/8" |
| 260 | Leg Dish Mount | |
| 260 | (1) 8' Solid Dish W/ Radome | (3) 1 5/8" |
| 252 | (1) 200 sq.ft. (no ice) 225 sq.ft. (ice) | (12) 1 5/8" |
| 241 | Leg Dish Mount | |
| 241 | (1) 8' Solid Dish W/ Radome | (3) 1 5/8" |
| 236 | (1) 200 sq.ft. (no ice) 225 sq.ft. (ice) | (12) 1 5/8" |
| 225 | (1) 250 sq.ft. (no ice) 280 sq.ft. (ice) | (24) 1 5/8" |

Design Criteria - ANSI/TIA-222-G

| | |
|--|---------|
| ASCE 7-16 Ultimate Wind Speed (No Ice) | 105 mph |
| Wind Speed (Ice) | 30 mph |
| Design Ice Thickness | 1.50 in |
| Structure Class | II |
| Risk Category | II |
| Exposure Category | C |
| Topographic Category | 3 |
| Crest Height | 335 ft |

Base Reactions

| Total Foundation | | Individual Footing | |
|-------------------|--------|--------------------|--------|
| Shear (kips) | 176.87 | Shear (kips) | 104.16 |
| Axial (kips) | 389.05 | Compression (kips) | 962 |
| Moment (ft-kips) | 27615 | Uplift (kips) | 842 |
| Torsion (ft-kips) | 121.81 | | |

Notes

- All legs are A500 (50 ksi Min. Yield).
- All braces are A572 Grade 50.
- All brace bolts are A325-X.
- The tower model is S3TL Series HD1.
- Transmission lines are to be attached to standard 12 hole waveguide ladders with stackable hangers.
- Azimuths are relative (not based on true north).
- Foundation loads shown are maximums.
- All unequal angles are oriented with the short leg vertical.
- Weights shown are estimates. Final weights may vary.
- This tower design and, if applicable, the foundation design(s) shown on the following page(s) also meet or exceed the requirements of the 2018 Kentucky Building Code.
- Tower Rating: 99.51%
- No grout is required under the base plates.

| | | |
|---|---|--|
|  Sabre Industries Towers and Poles | Sabre Communications Corporation 7101 Southbridge Drive P.O. Box 658 Sioux City, IA 51102-0658 Phone (712) 259-6690 Fax (712) 279-0914 | Job: 20-0890-CJP Customer: SBA NETWORK SERVICES INC Site Name: Shopville Reio, KY KY22841-S Description: 305' S3TL Date: 6/11/2019 By: NM |
| | <small>Information contained herein is the sole property of Sabre Communications Corporation, constitutes a trade secret as defined by Iowa Code Ch. 550 and shall not be reproduced, copied or used in whole or part for any purpose whatsoever without the prior written consent of Sabre Communications Corporation.</small> | |

Material List

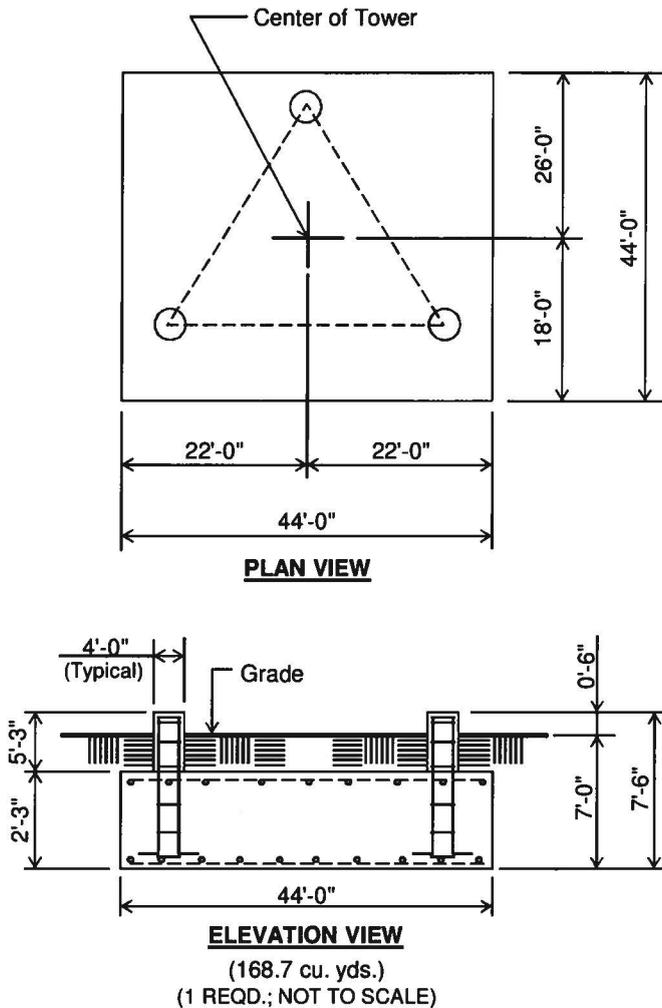
| Display | Value |
|---------|--------------------------|
| A | 12.75 OD X .375 |
| B | 10.75 OD X .500 |
| C | 5.563 OD X .500 |
| D | 5.563 OD X .375 |
| E | 4.500 OD X .337 |
| F | 3.500 OD X .300 |
| G | 3.500 OD X .216 |
| H | 2.375 OD X .154 |
| I | L 6 X 4 X 3/8 |
| J | L 5 X 5 X 3/8 |
| K | L 5 X 5 X 5/16 |
| L | L 4 X 4 X 5/16 |
| M | L 4 X 3 1/2 X 5/16 (SLV) |

| Display | Value |
|---------|-------------------------|
| N | L 4 X 3 1/2 X 1/4 (SLV) |
| O | L 2 1/2 X 2 1/2 X 1/4 |
| P | L 2 X 2 X 3/16 |
| Q | L 4 X 4 X 3/8 |
| R | NONE |
| S | L 4 X 4 X 1/4 |
| T | L 2 X 2 X 1/8 |
| U | L 3 1/2 X 3 1/2 X 1/4 |
| V | L 3 X 3 X 1/4 |
| W | L 3 X 3 X 5/16 |
| X | 1 @ 13.333' |
| Y | 1 @ 6.667' |
| Z | 249 |

| | | |
|---|---|---|
|  <p>Sabre Industries Towers and Poles</p> | <p>Sabre Communications Corporation 7101 Southbridge Drive P.O. Box 658 Sioux City, IA 51102-0658 Phone (712) 258-6680 Fax (712) 279-0814</p> | <p>Job: 20-0890-CJP</p> |
| | <p>Information contained herein is the sole property of Sabre Communications Corporation, constitutes a trade secret as defined by Iowa Code Ch. 550 and shall not be reproduced, copied or used in whole or part for any purpose whatsoever without the prior written consent of Sabre Communications Corporation.</p> | <p>Customer: SBA NETWORK SERVICES INC</p> <p>Site Name: Shopville Relo, KY KY22841-S</p> <p>Description: 305' S3TL</p> <p>Date: 6/11/2019 By: NM</p> |

Customer: SBA NETWORK SERVICES INC
Site: Shopville Relo, KY KY22841-S

305 ft. Model S3TL Series HD1 Self Supporting Tower



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

Notes:

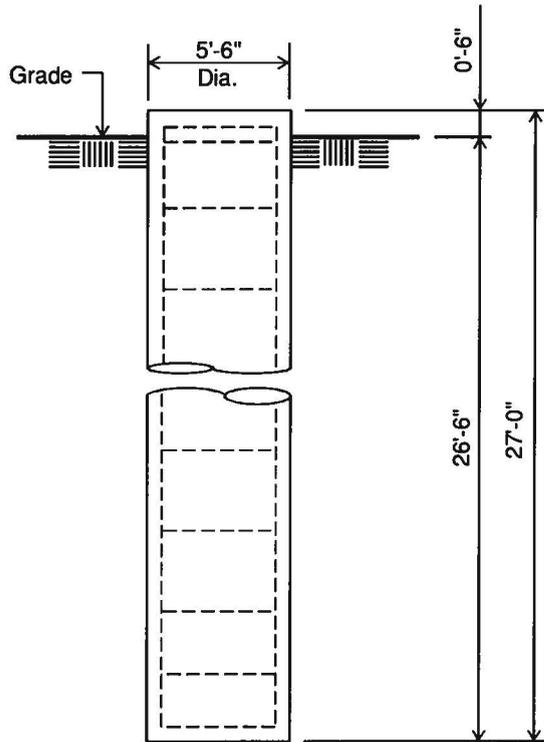
- 1) Concrete shall have a minimum 28-day compressive strength of 4,500 psi, in accordance with ACI 318-11.
- 2) Rebar to conform to ASTM specification A615 Grade 60.
- 3) All rebar to have a minimum of 3" concrete cover.
- 4) All exposed concrete corners to be chamfered 3/4".
- 5) The foundation design is based on the geotechnical report by Delta Oaks Group, Project No. GEO19-04537-08 dated: June 3rd, 2019.
- 6) See the geotechnical report for compaction requirements, if specified.
- 7) The foundation is based on the following factored loads:
Factored download (kips) = 152.32
Factored overturn (kip-ft) = 27,614.70
Factored shear (kips) = 176.87
- 8) 4.75' of soil cover is required over the entire area of the foundation slab.
- 9) The bottom anchor bolt template shall be positioned as closely as possible to the bottom of the anchor bolts.

| Rebar Schedule per Mat and per Pier | |
|--|---|
| Pier | (24) #9 vertical rebar w/ hooks at bottom w/ #4 rebar ties, two (2) within top 5" of pier then 8" C/C |
| Mat | (75) #10 horizontal rebar evenly spaced each way top and bottom. (300 total) |
| Anchor Bolts per Leg | |
| (8) 1.75" dia. x 87" F1554-105 on a 18.75" B.C. w/ 10.5" max. projection above concrete. | |

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Customer: SBA NETWORK SERVICES INC
Site: Shopville Relo, KY KY22841-S

305 ft. Model S3TL Series HD1 Self Supporting Tower



Notes:

- 1) Concrete shall have a minimum 28-day compressive strength of 4,500 psi, in accordance with ACI 318-11.
- 2) Rebar to conform to ASTM specification A615 Grade 60.
- 3) All rebar to have a minimum of 3" concrete cover.
- 4) All exposed concrete corners to be chamfered 3/4".
- 5) The foundation design is based on the geotechnical report by Delta Oaks Group, Project No. GEO19-04537-08 dated: June 3rd, 2019.
- 6) See the geotechnical report for drilled pier installation requirements, if specified.
- 7) The foundation is based on the following factored loads:
Factored uplift (kips) = 842.00
Factored download (kips) = 962.00
Factored shear (kips) = 104.00
- 8) The bottom anchor bolt template shall be positioned as closely as possible to the bottom of the anchor bolts.

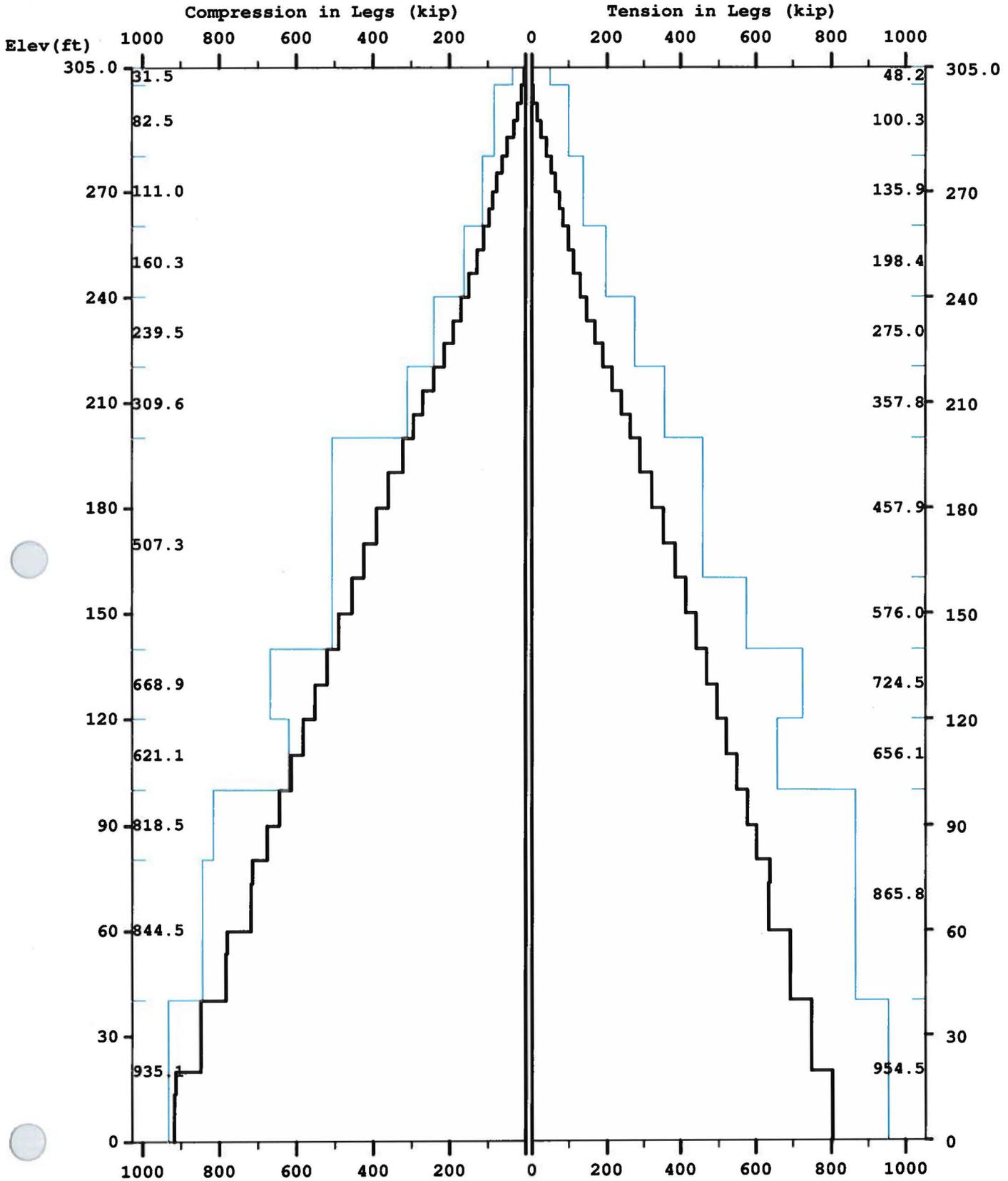
ELEVATION VIEW

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

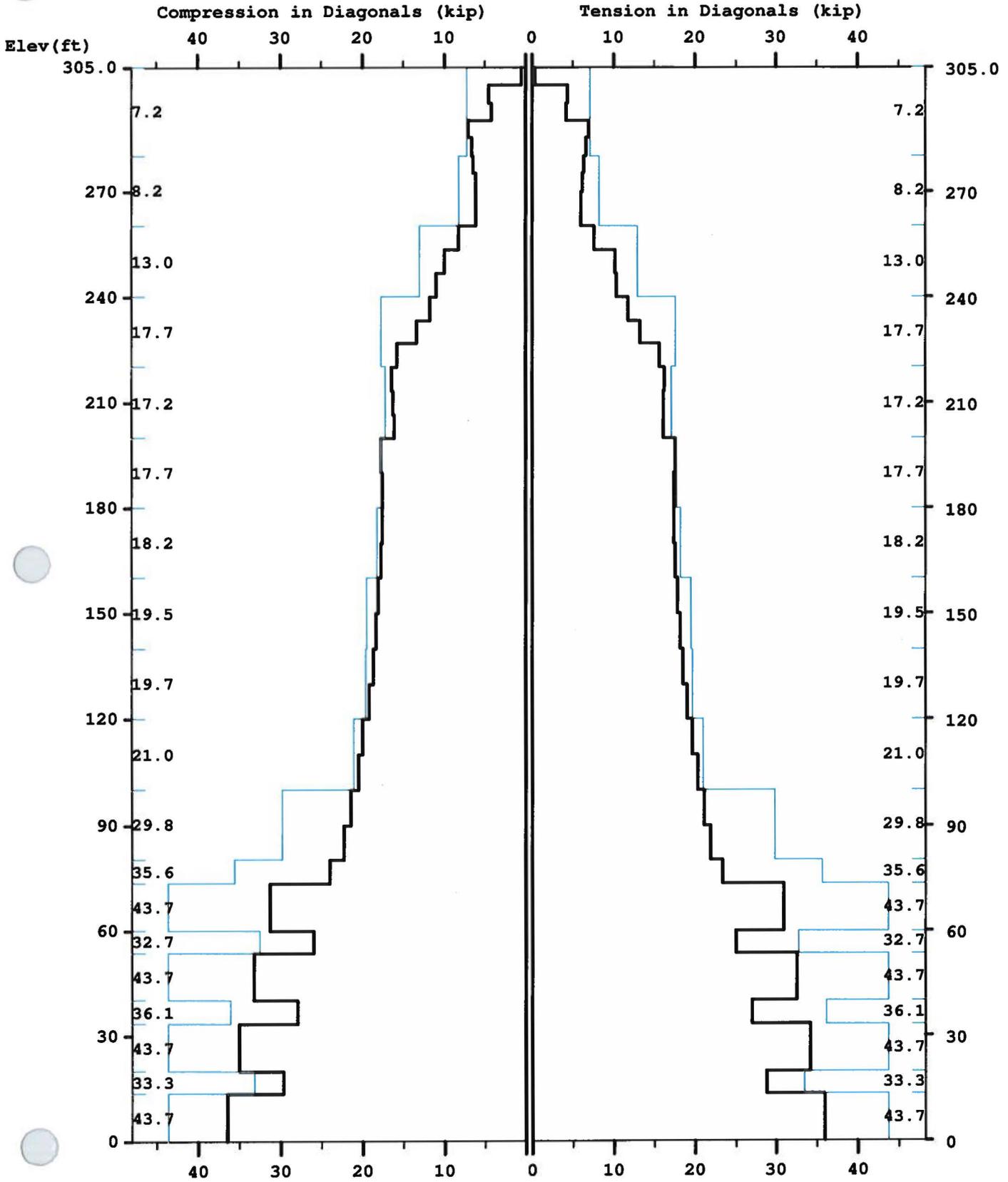
| Rebar Schedule per Pier | |
|--|---|
| Pier | (18) #10 vertical rebar w/ #4 rebar ties, two (2) within top 5" of pier then 7" C/C |
| Anchor Bolts per Leg | |
| (8) 1.75" dia. x 87" F1554-105 on a 18.75" B.C. w/ 10.5" max. projection above concrete. | |

Information contained herein is the sole property of Sabre Towers & Poles, constitutes a trade secret as defined by Iowa Code Ch. 550 and shall not be reproduced, copied or used in whole or part for any purpose whatsoever without the prior written consent of Sabre Towers & Poles.

Maximum

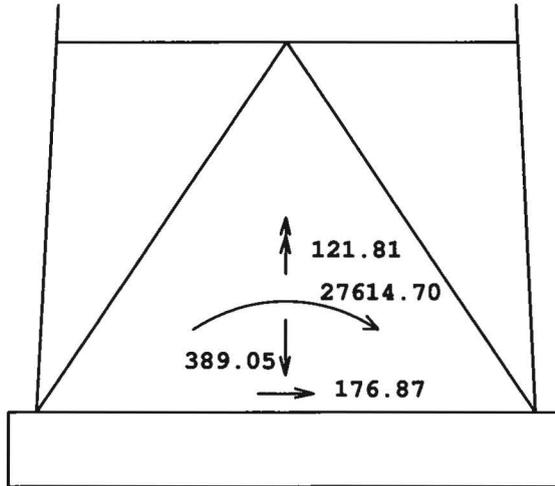


Maximum

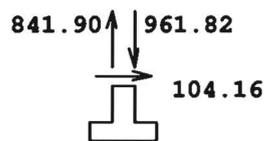
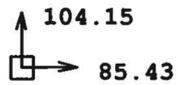


Maximum

TOTAL FOUNDATION LOADS (kip, ft-kip)



INDIVIDUAL FOOTING LOADS (kip)



Latticed Tower Analysis (Unguyed)
 Processed under license at:

(c)2015 Guymast Inc. 416-736-7453

Sabre Towers and Poles

on: 11 jun 2019 at: 14:32:43

MAST GEOMETRY (ft)

| PANEL TYPE | NO. OF LEGS | ELEV. AT BOTTOM | ELEV. AT TOP | F.W. AT BOTTOM | F.W. AT TOP | TYPICAL PANEL HEIGHT |
|------------|-------------|-----------------|--------------|----------------|-------------|----------------------|
| X | 3 | 300.00 | 305.00 | 5.00 | 5.00 | 5.00 |
| X | 3 | 295.00 | 300.00 | 5.50 | 5.00 | 5.00 |
| X | 3 | 280.00 | 295.00 | 7.00 | 5.50 | 5.00 |
| X | 3 | 260.00 | 280.00 | 9.00 | 7.00 | 5.00 |
| X | 3 | 240.00 | 260.00 | 11.00 | 9.00 | 6.67 |
| X | 3 | 220.00 | 240.00 | 13.00 | 11.00 | 6.67 |
| X | 3 | 200.00 | 220.00 | 15.00 | 13.00 | 6.67 |
| X | 3 | 180.00 | 200.00 | 17.00 | 15.00 | 10.00 |
| X | 3 | 160.00 | 180.00 | 19.00 | 17.00 | 10.00 |
| X | 3 | 140.00 | 160.00 | 21.00 | 19.00 | 10.00 |
| X | 3 | 120.00 | 140.00 | 23.00 | 21.00 | 10.00 |
| X | 3 | 100.00 | 120.00 | 25.00 | 23.00 | 10.00 |
| X | 3 | 80.00 | 100.00 | 27.00 | 25.00 | 10.00 |
| V | 3 | 73.33 | 80.00 | 27.67 | 27.00 | 6.67 |
| A | 3 | 60.00 | 73.33 | 29.00 | 27.67 | 13.33 |
| V | 3 | 53.33 | 60.00 | 29.67 | 29.00 | 6.67 |
| A | 3 | 40.00 | 53.33 | 31.00 | 29.67 | 13.33 |
| V | 3 | 33.33 | 40.00 | 31.67 | 31.00 | 6.67 |
| A | 3 | 20.00 | 33.33 | 33.00 | 31.67 | 13.33 |
| V | 3 | 13.33 | 20.00 | 33.67 | 33.00 | 6.67 |
| A | 3 | 0.00 | 13.33 | 35.00 | 33.67 | 13.33 |

MEMBER PROPERTIES

| MEMBER TYPE | BOTTOM ELEV ft | TOP ELEV ft | X-SECTN AREA in.sq | RADIUS OF GYRAT in | ELASTIC MODULUS ksi | THERMAL EXPANSN /deg |
|-------------|----------------|-------------|--------------------|--------------------|---------------------|----------------------|
| LE | 300.00 | 305.00 | 1.075 | 0.787 | 29000. | 0.0000117 |
| LE | 280.00 | 300.00 | 2.228 | 0.787 | 29000. | 0.0000117 |
| LE | 260.00 | 280.00 | 3.016 | 0.787 | 29000. | 0.0000117 |
| LE | 240.00 | 260.00 | 4.407 | 0.787 | 29000. | 0.0000117 |
| LE | 220.00 | 240.00 | 6.111 | 0.787 | 29000. | 0.0000117 |
| LE | 200.00 | 220.00 | 7.952 | 0.787 | 29000. | 0.0000117 |
| LE | 140.00 | 200.00 | 12.763 | 0.787 | 29000. | 0.0000117 |
| LE | 120.00 | 140.00 | 16.101 | 0.787 | 29000. | 0.0000117 |
| LE | 100.00 | 120.00 | 14.579 | 0.787 | 29000. | 0.0000117 |
| LE | 40.00 | 100.00 | 19.242 | 0.787 | 29000. | 0.0000117 |
| LE | 0.00 | 40.00 | 21.206 | 0.787 | 29000. | 0.0000117 |
| DI | 280.00 | 305.00 | 0.484 | 0.626 | 29000. | 0.0000117 |
| DI | 260.00 | 280.00 | 0.715 | 0.626 | 29000. | 0.0000117 |
| DI | 240.00 | 260.00 | 1.188 | 0.626 | 29000. | 0.0000117 |
| DI | 200.00 | 240.00 | 1.562 | 0.626 | 29000. | 0.0000117 |
| DI | 180.00 | 200.00 | 1.812 | 0.626 | 29000. | 0.0000117 |
| DI | 160.00 | 180.00 | 2.246 | 0.626 | 29000. | 0.0000117 |
| DI | 140.00 | 160.00 | 2.402 | 0.626 | 29000. | 0.0000117 |
| DI | 100.00 | 140.00 | 2.859 | 0.626 | 29000. | 0.0000117 |
| DI | 73.33 | 100.00 | 3.027 | 0.626 | 29000. | 0.0000117 |
| DI | 60.00 | 73.33 | 3.609 | 0.626 | 29000. | 0.0000117 |
| DI | 53.33 | 60.00 | 3.027 | 0.626 | 29000. | 0.0000117 |
| DI | 40.00 | 53.33 | 3.609 | 0.626 | 29000. | 0.0000117 |
| DI | 33.33 | 40.00 | 3.609 | 0.626 | 29000. | 0.0000117 |
| DI | 20.00 | 33.33 | 3.609 | 0.626 | 29000. | 0.0000117 |
| DI | 13.33 | 20.00 | 3.609 | 0.626 | 29000. | 0.0000117 |
| DI | 0.00 | 13.33 | 3.609 | 0.626 | 29000. | 0.0000117 |
| HO | 295.00 | 305.00 | 0.484 | 0.626 | 29000. | 0.0000117 |
| HO | 60.00 | 73.33 | 1.938 | 0.626 | 29000. | 0.0000117 |
| HO | 40.00 | 53.33 | 2.402 | 0.626 | 29000. | 0.0000117 |
| HO | 20.00 | 33.33 | 2.859 | 0.626 | 29000. | 0.0000117 |
| HO | 0.00 | 13.33 | 2.859 | 0.626 | 29000. | 0.0000117 |
| BR | 60.00 | 73.33 | 1.438 | 0.000 | 29000. | 0.0000117 |

| | BR | 40.00 | 53.33 | 1.438 | 0.000 | 29000. | 0.0000117 |
|--|----|-------|-------|-------|-------|--------|-----------|
| | BR | 20.00 | 33.33 | 1.688 | 0.000 | 29000. | 0.0000117 |
| | BR | 0.00 | 13.33 | 1.688 | 0.000 | 29000. | 0.0000117 |

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FACTORED MEMBER RESISTANCES

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| BOTTOM ELEV ft | TOP ELEV ft | LEGS | | DIAGONALS | | HORIZONTALS | | INT COMP kip | BRACING TENS kip |
|----------------------|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------------|------------------------|
| | | COMP kip | TENS kip | COMP kip | TENS kip | COMP kip | TENS kip | | |
| 300.0 | 305.0 | 31.48 | 48.15 | 7.16 | 7.16 | 5.82 | 5.82 | 0.00 | 0.00 |
| 295.0 | 300.0 | 82.52 | 100.35 | 7.16 | 7.16 | 5.82 | 5.82 | 0.00 | 0.00 |
| 280.0 | 295.0 | 82.52 | 100.35 | 7.16 | 7.16 | 0.00 | 0.00 | 0.00 | 0.00 |
| 260.0 | 280.0 | 110.98 | 135.90 | 8.19 | 8.19 | 0.00 | 0.00 | 0.00 | 0.00 |
| 240.0 | 260.0 | 160.28 | 198.45 | 13.00 | 13.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 220.0 | 240.0 | 239.46 | 274.95 | 17.67 | 17.67 | 0.00 | 0.00 | 0.00 | 0.00 |
| 200.0 | 220.0 | 309.64 | 357.75 | 17.21 | 17.21 | 0.00 | 0.00 | 0.00 | 0.00 |
| 180.0 | 200.0 | 507.33 | 457.90 | 17.74 | 17.74 | 0.00 | 0.00 | 0.00 | 0.00 |
| 160.0 | 180.0 | 507.33 | 457.90 | 18.22 | 18.22 | 0.00 | 0.00 | 0.00 | 0.00 |
| 140.0 | 160.0 | 507.33 | 576.00 | 19.51 | 19.51 | 0.00 | 0.00 | 0.00 | 0.00 |
| 120.0 | 140.0 | 668.86 | 724.50 | 19.70 | 19.70 | 0.00 | 0.00 | 0.00 | 0.00 |
| 100.0 | 120.0 | 621.06 | 656.10 | 21.03 | 21.03 | 0.00 | 0.00 | 0.00 | 0.00 |
| 80.0 | 100.0 | 818.52 | 865.80 | 29.77 | 29.77 | 0.00 | 0.00 | 0.00 | 0.00 |
| 73.3 | 80.0 | 844.46 | 865.80 | 35.60 | 35.60 | 0.00 | 0.00 | 0.00 | 0.00 |
| 60.0 | 73.3 | 844.46 | 865.80 | 43.74 | 43.74 | 15.60 | 15.60 | 7.41 | 7.41 |
| 53.3 | 60.0 | 844.46 | 865.80 | 32.65 | 32.65 | 0.00 | 0.00 | 0.00 | 0.00 |
| 40.0 | 53.3 | 844.46 | 865.80 | 43.74 | 43.74 | 17.32 | 17.32 | 6.59 | 6.59 |
| 33.3 | 40.0 | 935.10 | 954.45 | 36.10 | 36.10 | 0.00 | 0.00 | 0.00 | 0.00 |
| 20.0 | 33.3 | 935.10 | 954.45 | 43.74 | 43.74 | 18.49 | 18.49 | 9.00 | 9.00 |
| 13.3 | 20.0 | 935.10 | 954.45 | 33.26 | 33.26 | 0.00 | 0.00 | 0.00 | 0.00 |
| 0.0 | 13.3 | 935.10 | 954.45 | 43.74 | 43.74 | 16.75 | 16.75 | 8.14 | 8.14 |

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* only 3 condition(s) shown in full

* Some wind loads may have been derived from full-scale wind tunnel testing

=====

LOADING CONDITION A

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105 mph Ultimate wind with no ice. Wind Azimuth: 0°

MAST LOADING

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| LOAD TYPE | ELEV ft | APPLY..LOAD.. RADIUS ft | AT AZI | LOAD AZI |FORCES..... | |MOMENTS..... | |
|--------------|------------|-------------------------------|-----------|-------------|------------------|-------------|--------------------|-------------------|
| | | | | | HORIZ kip | DOWN kip | VERTICAL ft-kip | TORSNAL ft-kip |
| C | 300.0 | 0.00 | 0.0 | 0.0 | 9.17 | 6.60 | 0.00 | 0.00 |
| C | 290.0 | 0.00 | 0.0 | 0.0 | 7.36 | 3.72 | 0.00 | 0.00 |
| C | 252.0 | 0.00 | 0.0 | 0.0 | 7.46 | 3.72 | 0.00 | 0.00 |
| C | 236.0 | 0.00 | 0.0 | 0.0 | 7.51 | 3.72 | 0.00 | 0.00 |
| C | 225.0 | 0.00 | 0.0 | 0.0 | 9.44 | 6.60 | 0.00 | 0.00 |
| D | 305.0 | 0.00 | 180.0 | 0.0 | 0.07 | 0.04 | 0.00 | 0.00 |
| D | 300.0 | 0.00 | 180.0 | 0.0 | 0.07 | 0.04 | 0.00 | 0.00 |
| D | 300.0 | 0.00 | 43.2 | 0.0 | 0.15 | 0.09 | 0.07 | 0.10 |
| D | 290.0 | 0.00 | 45.7 | 0.0 | 0.15 | 0.08 | 0.07 | 0.10 |
| D | 290.0 | 0.00 | 79.1 | 0.0 | 0.18 | 0.10 | 0.06 | 0.12 |
| D | 280.0 | 0.00 | 81.7 | 0.0 | 0.18 | 0.10 | 0.06 | 0.11 |
| D | 280.0 | 0.00 | 73.8 | 0.0 | 0.18 | 0.12 | 0.07 | 0.13 |
| D | 260.0 | 0.00 | 80.0 | 0.0 | 0.19 | 0.13 | 0.06 | 0.11 |
| D | 260.0 | 0.00 | 74.7 | 0.0 | 0.21 | 0.16 | 0.08 | 0.15 |
| D | 253.3 | 0.00 | 74.7 | 0.0 | 0.21 | 0.16 | 0.08 | 0.15 |
| D | 253.3 | 0.00 | 80.6 | 0.0 | 0.23 | 0.18 | 0.07 | 0.08 |
| D | 246.7 | 0.00 | 80.6 | 0.0 | 0.23 | 0.18 | 0.07 | 0.08 |
| D | 246.7 | 0.00 | 81.3 | 0.0 | 0.24 | 0.19 | 0.06 | 0.06 |
| D | 240.0 | 0.00 | 81.3 | 0.0 | 0.24 | 0.19 | 0.06 | 0.06 |
| D | 240.0 | 0.00 | 41.5 | 0.0 | 0.26 | 0.24 | 0.04 | 0.03 |
| D | 233.3 | 0.00 | 41.5 | 0.0 | 0.26 | 0.24 | 0.04 | 0.03 |
| D | 233.3 | 0.00 | 340.8 | 0.0 | 0.27 | 0.25 | 0.05 | 0.00 |
| D | 226.7 | 0.00 | 340.8 | 0.0 | 0.27 | 0.25 | 0.05 | 0.00 |
| D | 226.7 | 0.00 | 353.6 | 0.0 | 0.34 | 0.28 | 0.13 | 0.08 |
| D | 220.0 | 0.00 | 353.6 | 0.0 | 0.34 | 0.28 | 0.13 | 0.08 |
| D | 220.0 | 0.00 | 355.1 | 0.0 | 0.36 | 0.32 | 0.16 | 0.11 |

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| | | | | | | | | |
|---|-------|------|-------|-----|------|------|------|------|
| D | 200.0 | 0.00 | 354.4 | 0.0 | 0.37 | 0.32 | 0.14 | 0.10 |
| D | 200.0 | 0.00 | 355.5 | 0.0 | 0.38 | 0.37 | 0.17 | 0.11 |
| D | 180.0 | 0.00 | 355.1 | 0.0 | 0.38 | 0.38 | 0.16 | 0.11 |
| D | 180.0 | 0.00 | 355.9 | 0.0 | 0.39 | 0.40 | 0.19 | 0.11 |
| D | 160.0 | 0.00 | 355.6 | 0.0 | 0.40 | 0.41 | 0.18 | 0.11 |
| D | 160.0 | 0.00 | 356.2 | 0.0 | 0.42 | 0.42 | 0.20 | 0.11 |
| D | 140.0 | 0.00 | 356.0 | 0.0 | 0.43 | 0.42 | 0.19 | 0.11 |
| D | 140.0 | 0.00 | 356.5 | 0.0 | 0.45 | 0.50 | 0.22 | 0.12 |
| D | 120.0 | 0.00 | 356.3 | 0.0 | 0.46 | 0.50 | 0.21 | 0.11 |
| D | 120.0 | 0.00 | 356.7 | 0.0 | 0.48 | 0.49 | 0.23 | 0.12 |
| D | 100.0 | 0.00 | 356.6 | 0.0 | 0.49 | 0.50 | 0.22 | 0.12 |
| D | 100.0 | 0.00 | 356.9 | 0.0 | 0.54 | 0.57 | 0.25 | 0.12 |
| D | 80.0 | 0.00 | 356.8 | 0.0 | 0.55 | 0.58 | 0.24 | 0.12 |
| D | 80.0 | 0.00 | 357.1 | 0.0 | 0.52 | 0.54 | 0.27 | 0.12 |
| D | 73.3 | 0.00 | 357.1 | 0.0 | 0.52 | 0.54 | 0.27 | 0.12 |
| D | 73.3 | 0.00 | 357.0 | 0.0 | 0.57 | 0.62 | 0.26 | 0.12 |
| D | 60.0 | 0.00 | 357.0 | 0.0 | 0.57 | 0.62 | 0.26 | 0.12 |
| D | 60.0 | 0.00 | 357.3 | 0.0 | 0.53 | 0.55 | 0.28 | 0.12 |
| D | 53.3 | 0.00 | 357.3 | 0.0 | 0.53 | 0.55 | 0.28 | 0.12 |
| D | 53.3 | 0.00 | 357.2 | 0.0 | 0.59 | 0.65 | 0.27 | 0.12 |
| D | 40.0 | 0.00 | 357.2 | 0.0 | 0.59 | 0.65 | 0.27 | 0.12 |
| D | 40.0 | 0.00 | 357.5 | 0.0 | 0.54 | 0.62 | 0.30 | 0.12 |
| D | 33.3 | 0.00 | 357.5 | 0.0 | 0.54 | 0.62 | 0.30 | 0.12 |
| D | 33.3 | 0.00 | 357.4 | 0.0 | 0.60 | 0.72 | 0.29 | 0.12 |
| D | 20.0 | 0.00 | 357.4 | 0.0 | 0.60 | 0.72 | 0.29 | 0.12 |
| D | 20.0 | 0.00 | 357.6 | 0.0 | 0.51 | 0.63 | 0.31 | 0.11 |
| D | 13.3 | 0.00 | 357.6 | 0.0 | 0.51 | 0.63 | 0.31 | 0.11 |
| D | 13.3 | 0.00 | 357.5 | 0.0 | 0.57 | 0.74 | 0.30 | 0.11 |
| D | 0.0 | 0.00 | 357.5 | 0.0 | 0.57 | 0.74 | 0.30 | 0.11 |

ANTENNA LOADING

|ANTENNA..... | ATTACHMENT | | | |ANTENNA FORCES..... | | | |
|-------------------|------------|-----|-----------|-----|--------------------------|--------------|----------------|-------------------|
| TYPE | ELEV ft | AZI | RAD ft | AZI | AXIAL kip | SHEAR kip | GRAVITY kip | TORSION ft-kip |
| STD+R | 260.0 | 0.0 | 6.7 | 0.0 | 1.61 | 0.00 | 0.40 | 0.00 |
| STD+R | 241.0 | 0.0 | 7.8 | 0.0 | 1.63 | 0.00 | 0.40 | 0.00 |

LOADING CONDITION M

105 mph Ultimate wind with no ice. Wind Azimuth: 0°

MAST LOADING

| LOAD TYPE | ELEV ft | APPLY..LOAD..AT RADIUS ft | AZI | LOAD AZI |FORCES..... | |MOMENTS..... | |
|--------------|------------|---------------------------------|-------|-------------|------------------|-------------|--------------------|-------------------|
| | | | | | HORIZ kip | DOWN kip | VERTICAL ft-kip | TORSNAL ft-kip |
| C | 300.0 | 0.00 | 0.0 | 0.0 | 9.17 | 4.95 | 0.00 | 0.00 |
| C | 290.0 | 0.00 | 0.0 | 0.0 | 7.36 | 2.79 | 0.00 | 0.00 |
| C | 252.0 | 0.00 | 0.0 | 0.0 | 7.46 | 2.79 | 0.00 | 0.00 |
| C | 236.0 | 0.00 | 0.0 | 0.0 | 7.51 | 2.79 | 0.00 | 0.00 |
| C | 225.0 | 0.00 | 0.0 | 0.0 | 9.44 | 4.95 | 0.00 | 0.00 |
| D | 305.0 | 0.00 | 180.0 | 0.0 | 0.07 | 0.03 | 0.00 | 0.00 |
| D | 300.0 | 0.00 | 180.0 | 0.0 | 0.07 | 0.03 | 0.00 | 0.00 |
| D | 300.0 | 0.00 | 43.2 | 0.0 | 0.15 | 0.07 | 0.05 | 0.10 |
| D | 290.0 | 0.00 | 45.7 | 0.0 | 0.15 | 0.06 | 0.05 | 0.10 |
| D | 290.0 | 0.00 | 79.1 | 0.0 | 0.18 | 0.08 | 0.04 | 0.12 |
| D | 280.0 | 0.00 | 81.7 | 0.0 | 0.18 | 0.08 | 0.04 | 0.11 |
| D | 280.0 | 0.00 | 73.8 | 0.0 | 0.18 | 0.09 | 0.05 | 0.13 |
| D | 260.0 | 0.00 | 80.0 | 0.0 | 0.19 | 0.10 | 0.04 | 0.11 |
| D | 260.0 | 0.00 | 74.7 | 0.0 | 0.21 | 0.12 | 0.06 | 0.15 |
| D | 253.3 | 0.00 | 74.7 | 0.0 | 0.21 | 0.12 | 0.06 | 0.15 |
| D | 253.3 | 0.00 | 80.6 | 0.0 | 0.23 | 0.14 | 0.05 | 0.08 |
| D | 246.7 | 0.00 | 80.6 | 0.0 | 0.23 | 0.14 | 0.05 | 0.08 |
| D | 246.7 | 0.00 | 81.3 | 0.0 | 0.24 | 0.14 | 0.04 | 0.06 |
| D | 240.0 | 0.00 | 81.3 | 0.0 | 0.24 | 0.14 | 0.04 | 0.06 |
| D | 240.0 | 0.00 | 41.5 | 0.0 | 0.26 | 0.18 | 0.03 | 0.03 |
| D | 233.3 | 0.00 | 41.5 | 0.0 | 0.26 | 0.18 | 0.03 | 0.03 |
| D | 233.3 | 0.00 | 340.8 | 0.0 | 0.27 | 0.19 | 0.04 | 0.00 |
| D | 226.7 | 0.00 | 340.8 | 0.0 | 0.27 | 0.19 | 0.04 | 0.00 |
| D | 226.7 | 0.00 | 353.6 | 0.0 | 0.34 | 0.21 | 0.09 | 0.08 |
| D | 220.0 | 0.00 | 353.6 | 0.0 | 0.34 | 0.21 | 0.09 | 0.08 |

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| | | | | | | | | |
|---|-------|------|-------|-----|------|------|------|------|
| D | 220.0 | 0.00 | 355.1 | 0.0 | 0.36 | 0.24 | 0.12 | 0.11 |
| D | 200.0 | 0.00 | 354.4 | 0.0 | 0.37 | 0.24 | 0.11 | 0.10 |
| D | 200.0 | 0.00 | 355.5 | 0.0 | 0.38 | 0.28 | 0.13 | 0.11 |
| D | 180.0 | 0.00 | 355.1 | 0.0 | 0.38 | 0.28 | 0.12 | 0.11 |
| D | 180.0 | 0.00 | 355.9 | 0.0 | 0.39 | 0.30 | 0.14 | 0.11 |
| D | 160.0 | 0.00 | 355.6 | 0.0 | 0.40 | 0.30 | 0.13 | 0.11 |
| D | 160.0 | 0.00 | 356.2 | 0.0 | 0.42 | 0.31 | 0.15 | 0.11 |
| D | 140.0 | 0.00 | 356.0 | 0.0 | 0.43 | 0.32 | 0.14 | 0.11 |
| D | 140.0 | 0.00 | 356.5 | 0.0 | 0.45 | 0.37 | 0.16 | 0.12 |
| D | 120.0 | 0.00 | 356.3 | 0.0 | 0.46 | 0.38 | 0.16 | 0.11 |
| D | 120.0 | 0.00 | 356.7 | 0.0 | 0.48 | 0.37 | 0.17 | 0.12 |
| D | 100.0 | 0.00 | 356.6 | 0.0 | 0.49 | 0.37 | 0.17 | 0.12 |
| D | 100.0 | 0.00 | 356.9 | 0.0 | 0.54 | 0.43 | 0.19 | 0.12 |
| D | 80.0 | 0.00 | 356.8 | 0.0 | 0.55 | 0.43 | 0.18 | 0.12 |
| D | 80.0 | 0.00 | 357.1 | 0.0 | 0.52 | 0.40 | 0.20 | 0.12 |
| D | 73.3 | 0.00 | 357.1 | 0.0 | 0.52 | 0.40 | 0.20 | 0.12 |
| D | 73.3 | 0.00 | 357.0 | 0.0 | 0.57 | 0.47 | 0.19 | 0.12 |
| D | 60.0 | 0.00 | 357.0 | 0.0 | 0.57 | 0.47 | 0.19 | 0.12 |
| D | 60.0 | 0.00 | 357.3 | 0.0 | 0.53 | 0.41 | 0.21 | 0.12 |
| D | 53.3 | 0.00 | 357.3 | 0.0 | 0.53 | 0.41 | 0.21 | 0.12 |
| D | 53.3 | 0.00 | 357.2 | 0.0 | 0.59 | 0.49 | 0.20 | 0.12 |
| D | 40.0 | 0.00 | 357.2 | 0.0 | 0.59 | 0.49 | 0.20 | 0.12 |
| D | 40.0 | 0.00 | 357.5 | 0.0 | 0.54 | 0.46 | 0.22 | 0.12 |
| D | 33.3 | 0.00 | 357.5 | 0.0 | 0.54 | 0.46 | 0.22 | 0.12 |
| D | 33.3 | 0.00 | 357.4 | 0.0 | 0.60 | 0.54 | 0.22 | 0.12 |
| D | 20.0 | 0.00 | 357.4 | 0.0 | 0.60 | 0.54 | 0.22 | 0.12 |
| D | 20.0 | 0.00 | 357.6 | 0.0 | 0.51 | 0.47 | 0.23 | 0.11 |
| D | 13.3 | 0.00 | 357.6 | 0.0 | 0.51 | 0.47 | 0.23 | 0.11 |
| D | 13.3 | 0.00 | 357.5 | 0.0 | 0.57 | 0.56 | 0.23 | 0.11 |
| D | 0.0 | 0.00 | 357.5 | 0.0 | 0.57 | 0.56 | 0.23 | 0.11 |

ANTENNA LOADING

|ANTENNA..... | ATTACHMENT | | | |ANTENNA FORCES..... | | | |
|-------------------|------------------------|-----|-----------|-----|--------------------------|--------------|----------------|-------------------|
| TYPE | ELEV ft | AZI | RAD ft | AZI | AXIAL kip | SHEAR kip | GRAVITY kip | TORSION ft-kip |
| STD+R | 260.0 | 0.0 | 6.7 | 0.0 | 1.61 | 0.00 | 0.30 | 0.00 |
| STD+R | 241.0 | 0.0 | 7.8 | 0.0 | 1.63 | 0.00 | 0.30 | 0.00 |

LOADING CONDITION Y

30 mph wind with 1.5 ice. Wind Azimuth: 0

MAST LOADING

| LOAD TYPE | ELEV ft | APPLY.. RADIUS ft | LOAD.. AZI | ..AT AZI |FORCES..... | |MOMENTS..... | |
|--------------|------------|-------------------------|---------------|-------------|------------------|-------------|--------------------|-------------------|
| | | | | | HORIZ kip | DOWN kip | VERTICAL ft-kip | TORSNAL ft-kip |
| C | 300.0 | 0.00 | 0.0 | 0.0 | 1.16 | 14.54 | 0.00 | 0.00 |
| C | 290.0 | 0.00 | 0.0 | 0.0 | 0.94 | 8.48 | 0.00 | 0.00 |
| C | 252.0 | 0.00 | 0.0 | 0.0 | 0.96 | 8.49 | 0.00 | 0.00 |
| C | 236.0 | 0.00 | 0.0 | 0.0 | 0.96 | 8.49 | 0.00 | 0.00 |
| C | 225.0 | 0.00 | 0.0 | 0.0 | 1.20 | 14.56 | 0.00 | 0.00 |
| D | 305.0 | 0.00 | 180.0 | 0.0 | 0.01 | 0.19 | 0.00 | 0.00 |
| D | 300.0 | 0.00 | 180.0 | 0.0 | 0.01 | 0.19 | 0.00 | 0.00 |
| D | 300.0 | 0.00 | 43.2 | 0.0 | 0.02 | 0.34 | 0.25 | 0.01 |
| D | 295.0 | 0.00 | 43.2 | 0.0 | 0.02 | 0.34 | 0.25 | 0.01 |
| D | 295.0 | 0.00 | 45.7 | 0.0 | 0.02 | 0.31 | 0.24 | 0.01 |
| D | 290.0 | 0.00 | 45.7 | 0.0 | 0.02 | 0.31 | 0.24 | 0.01 |
| D | 290.0 | 0.00 | 92.1 | 0.0 | 0.02 | 0.41 | 0.23 | 0.01 |
| D | 285.0 | 0.00 | 92.1 | 0.0 | 0.02 | 0.41 | 0.23 | 0.01 |
| D | 285.0 | 0.00 | 94.9 | 0.0 | 0.02 | 0.42 | 0.21 | 0.01 |
| D | 280.0 | 0.00 | 94.9 | 0.0 | 0.02 | 0.42 | 0.21 | 0.01 |
| D | 280.0 | 0.00 | 86.5 | 0.0 | 0.02 | 0.44 | 0.25 | 0.01 |
| D | 275.0 | 0.00 | 86.5 | 0.0 | 0.02 | 0.44 | 0.25 | 0.01 |
| D | 275.0 | 0.00 | 88.7 | 0.0 | 0.02 | 0.45 | 0.24 | 0.01 |
| D | 270.0 | 0.00 | 88.7 | 0.0 | 0.02 | 0.45 | 0.24 | 0.01 |
| D | 270.0 | 0.00 | 90.9 | 0.0 | 0.02 | 0.46 | 0.22 | 0.01 |
| D | 265.0 | 0.00 | 90.9 | 0.0 | 0.02 | 0.46 | 0.22 | 0.01 |
| D | 265.0 | 0.00 | 93.2 | 0.0 | 0.02 | 0.47 | 0.21 | 0.01 |
| D | 260.0 | 0.00 | 93.2 | 0.0 | 0.02 | 0.47 | 0.21 | 0.01 |
| D | 260.0 | 0.00 | 85.9 | 0.0 | 0.03 | 0.51 | 0.31 | 0.01 |

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| | | | | | | | | |
|---|-------|------|-------|-----|------|------|------|------|
| D | 253.3 | 0.00 | 85.9 | 0.0 | 0.03 | 0.51 | 0.31 | 0.01 |
| D | 253.3 | 0.00 | 76.0 | 0.0 | 0.03 | 0.58 | 0.20 | 0.00 |
| D | 246.7 | 0.00 | 76.0 | 0.0 | 0.03 | 0.58 | 0.20 | 0.00 |
| D | 246.7 | 0.00 | 69.0 | 0.0 | 0.03 | 0.60 | 0.17 | 0.00 |
| D | 240.0 | 0.00 | 69.0 | 0.0 | 0.03 | 0.60 | 0.17 | 0.00 |
| D | 240.0 | 0.00 | 11.5 | 0.0 | 0.03 | 0.72 | 0.14 | 0.00 |
| D | 233.3 | 0.00 | 11.5 | 0.0 | 0.03 | 0.72 | 0.14 | 0.00 |
| D | 233.3 | 0.00 | 327.4 | 0.0 | 0.03 | 0.76 | 0.22 | 0.00 |
| D | 226.7 | 0.00 | 327.4 | 0.0 | 0.03 | 0.76 | 0.22 | 0.00 |
| D | 226.7 | 0.00 | 353.9 | 0.0 | 0.04 | 0.87 | 0.50 | 0.01 |
| D | 220.0 | 0.00 | 353.9 | 0.0 | 0.04 | 0.87 | 0.50 | 0.01 |
| D | 220.0 | 0.00 | 357.1 | 0.0 | 0.04 | 0.94 | 0.62 | 0.01 |
| D | 200.0 | 0.00 | 356.6 | 0.0 | 0.04 | 0.96 | 0.57 | 0.01 |
| D | 200.0 | 0.00 | 357.4 | 0.0 | 0.04 | 0.99 | 0.68 | 0.01 |
| D | 190.0 | 0.00 | 357.4 | 0.0 | 0.04 | 0.99 | 0.68 | 0.01 |
| D | 190.0 | 0.00 | 357.1 | 0.0 | 0.05 | 1.01 | 0.64 | 0.01 |
| D | 180.0 | 0.00 | 357.1 | 0.0 | 0.05 | 1.01 | 0.64 | 0.01 |
| D | 180.0 | 0.00 | 357.6 | 0.0 | 0.05 | 1.04 | 0.74 | 0.01 |
| D | 160.0 | 0.00 | 357.4 | 0.0 | 0.05 | 1.06 | 0.71 | 0.01 |
| D | 160.0 | 0.00 | 357.8 | 0.0 | 0.05 | 1.09 | 0.81 | 0.01 |
| D | 140.0 | 0.00 | 357.7 | 0.0 | 0.05 | 1.11 | 0.77 | 0.01 |
| D | 140.0 | 0.00 | 358.0 | 0.0 | 0.05 | 1.20 | 0.87 | 0.01 |
| D | 120.0 | 0.00 | 357.9 | 0.0 | 0.05 | 1.22 | 0.84 | 0.01 |
| D | 120.0 | 0.00 | 358.1 | 0.0 | 0.06 | 1.23 | 0.94 | 0.01 |
| D | 100.0 | 0.00 | 358.0 | 0.0 | 0.06 | 1.25 | 0.91 | 0.01 |
| D | 100.0 | 0.00 | 358.3 | 0.0 | 0.06 | 1.39 | 1.01 | 0.01 |
| D | 80.0 | 0.00 | 358.2 | 0.0 | 0.06 | 1.41 | 0.97 | 0.01 |
| D | 80.0 | 0.00 | 358.4 | 0.0 | 0.06 | 1.30 | 1.08 | 0.01 |
| D | 73.3 | 0.00 | 358.4 | 0.0 | 0.06 | 1.30 | 1.08 | 0.01 |
| D | 73.3 | 0.00 | 358.3 | 0.0 | 0.07 | 1.59 | 1.05 | 0.01 |
| D | 60.0 | 0.00 | 358.3 | 0.0 | 0.07 | 1.59 | 1.05 | 0.01 |
| D | 60.0 | 0.00 | 358.5 | 0.0 | 0.06 | 1.32 | 1.14 | 0.01 |
| D | 53.3 | 0.00 | 358.5 | 0.0 | 0.06 | 1.32 | 1.14 | 0.01 |
| D | 53.3 | 0.00 | 358.4 | 0.0 | 0.07 | 1.64 | 1.11 | 0.01 |
| D | 40.0 | 0.00 | 358.4 | 0.0 | 0.07 | 1.64 | 1.11 | 0.01 |
| D | 40.0 | 0.00 | 358.5 | 0.0 | 0.06 | 1.40 | 1.19 | 0.01 |
| D | 33.3 | 0.00 | 358.5 | 0.0 | 0.06 | 1.40 | 1.19 | 0.01 |
| D | 33.3 | 0.00 | 358.5 | 0.0 | 0.07 | 1.73 | 1.18 | 0.01 |
| D | 20.0 | 0.00 | 358.5 | 0.0 | 0.07 | 1.73 | 1.18 | 0.01 |
| D | 20.0 | 0.00 | 358.6 | 0.0 | 0.06 | 1.45 | 1.36 | 0.01 |
| D | 13.3 | 0.00 | 358.6 | 0.0 | 0.06 | 1.45 | 1.36 | 0.01 |
| D | 13.3 | 0.00 | 358.7 | 0.0 | 0.07 | 1.90 | 1.77 | 0.01 |
| D | 0.0 | 0.00 | 358.7 | 0.0 | 0.07 | 1.90 | 1.77 | 0.01 |

ANTENNA LOADING

|ANTENNA..... | ATTACHMENT | | |ANTENNA FORCES..... | | | | |
|-------------------|------------|-----|-----------|--------------------------|--------------|--------------|----------------|-------------------|
| TYPE | ELEV ft | AZI | RAD ft | AZI | AXIAL kip | SHEAR kip | GRAVITY kip | TORSION ft-kip |
| STD+R | 260.0 | 0.0 | 6.7 | 0.0 | 0.15 | 0.00 | 1.66 | 0.00 |
| STD+R | 241.0 | 0.0 | 7.8 | 0.0 | 0.15 | 0.00 | 1.66 | 0.00 |

MAXIMUM ANTENNA AND REFLECTOR ROTATIONS:

| ELEV ft | AZI deg | TYPE * |BEAM DEFLECTIONS (deg)..... | | | |
|------------|------------|-----------|----------------------------------|---------|----------|---------|
| | | | PITCH | YAW | ROLL | TOTAL |
| 260.0 | 0.0 | STD+R | -1.316 J | 0.091 V | -1.429 G | 1.319 J |
| 241.0 | 0.0 | STD+R | -1.156 J | 0.072 V | -1.259 G | 1.158 J |

MAXIMUM TENSION IN MAST MEMBERS (kip)

| ELEV ft | LEGS | DIAG | HORIZ | BRACE |
|------------|---------|--------|--------|--------|
| 305.0 | ----- | ----- | 0.21 A | 0.00 A |
| | 0.11 S | 0.32 S | | |
| 300.0 | ----- | ----- | 1.71 K | 0.00 A |
| | 3.80 M | 4.29 T | | |
| 295.0 | ----- | ----- | 0.21 I | 0.00 A |
| | 13.13 M | 4.19 B | | |
| 290.0 | ----- | ----- | 0.13 K | 0.00 A |
| | 24.00 M | 6.94 T | | |
| 285.0 | ----- | ----- | 0.24 A | 0.00 A |

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| | | | | |
|-------|----------|---------|--------|--------|
| 280.0 | 39.54 M | 6.69 H | 0.02 b | 0.00 A |
| 275.0 | 51.76 M | 6.31 N | 0.16 A | 0.00 A |
| 270.0 | 64.49 M | 6.18 B | 0.06 A | 0.00 A |
| 265.0 | 75.17 M | 5.99 X | 0.13 E | 0.00 A |
| 260.0 | 86.23 M | 6.00 F | 0.13 A | 0.00 A |
| 253.3 | 98.16 M | 7.67 R | 0.07 J | 0.00 A |
| 246.7 | 112.20 M | 10.25 L | 0.15 A | 0.00 A |
| 240.0 | 131.50 M | 10.34 R | 0.06 E | 0.00 A |
| 233.3 | 148.52 M | 11.76 L | 0.10 A | 0.00 A |
| 226.7 | 169.05 M | 13.24 X | 0.05 E | 0.00 A |
| 220.0 | 190.27 M | 15.69 L | 0.11 A | 0.00 A |
| 213.3 | 215.53 M | 16.39 X | 0.07 A | 0.00 A |
| 206.7 | 239.17 M | 16.20 L | 0.10 A | 0.00 A |
| 200.0 | 263.02 M | 16.13 X | 0.07 A | 0.00 A |
| 190.0 | 290.08 M | 17.58 L | 0.11 A | 0.00 A |
| 180.0 | 322.77 M | 17.50 X | 0.08 A | 0.00 A |
| 170.0 | 353.02 M | 17.52 L | 0.10 A | 0.00 A |
| 160.0 | 383.25 M | 17.66 X | 0.06 A | 0.00 A |
| 150.0 | 411.82 M | 17.89 L | 0.09 A | 0.00 A |
| 140.0 | 440.54 M | 18.23 X | 0.06 A | 0.00 A |
| 130.0 | 468.11 M | 18.65 L | 0.07 A | 0.00 A |
| 120.0 | 495.89 M | 19.16 X | 0.04 A | 0.00 A |
| 110.0 | 522.99 M | 19.74 L | 0.07 A | 0.00 A |
| 100.0 | 550.49 M | 20.38 X | 0.18 G | 0.00 A |
| 90.0 | 577.59 M | 21.14 L | 0.07 S | 0.00 A |
| 80.0 | 604.93 M | 21.98 L | 0.48 A | 0.00 A |
| 73.3 | 637.20 M | 23.43 L | 2.10 M | 0.00 K |
| 60.0 | 635.71 M | 30.87 L | 0.45 A | 0.00 A |
| 53.3 | 692.62 M | 25.14 X | 2.16 M | 0.00 D |
| 40.0 | 691.07 M | 32.46 L | 0.45 A | 0.00 A |
| 33.3 | 748.82 M | 26.96 X | 2.20 M | 0.00 S |
| 20.0 | 747.10 M | 34.17 L | 0.10 A | 0.00 S |
| 13.3 | 805.69 M | 28.81 L | 2.06 M | 0.00 B |
| 0.0 | 803.93 M | 35.92 G | 0.00 A | 0.00 A |

MAXIMUM COMPRESSION IN MAST MEMBERS (kip)

| ELEV ft | LEGS | DIAG | HORIZ | BRACE |
|------------|------|------|-------|-------|
|------------|------|------|-------|-------|

| | | 20-0890-CJP | |
|-------|--------------------|-------------|--------|
| 305.0 | ----- | -0.19 S | 0.00 A |
| | -0.15 A -0.34 A | | |
| 300.0 | ----- | -1.70 E | 0.00 A |
| | -7.74 G -4.47 B | | |
| 295.0 | ----- | -0.17 O | 0.00 A |
| | -17.78 G -4.10 N | | |
| 290.0 | ----- | -0.13 Q | 0.00 A |
| | -30.93 G -7.11 H | | |
| 285.0 | ----- | -0.19 S | 0.00 A |
| | -47.26 G -6.60 N | | |
| 280.0 | ----- | 0.00 A | 0.00 A |
| | -59.79 G -6.42 B | | |
| 275.0 | ----- | -0.13 S | 0.00 A |
| | -73.27 G -6.13 T | | |
| 270.0 | ----- | -0.05 S | 0.00 A |
| | -84.40 G -6.12 G | | |
| 265.0 | ----- | -0.10 W | 0.00 A |
| | -96.18 G -5.99 X | | |
| 260.0 | ----- | -0.12 S | 0.00 A |
| | -109.13 G -8.23 L | | |
| 253.3 | ----- | -0.04 W | 0.00 A |
| | -126.05 G -9.88 R | | |
| 246.7 | ----- | -0.13 S | 0.00 A |
| | -146.29 G -10.91 L | | |
| 240.0 | ----- | -0.04 S | 0.00 A |
| | -166.00 G -11.79 X | | |
| 233.3 | ----- | -0.09 W | 0.00 A |
| | -188.58 G -13.32 L | | |
| 226.7 | ----- | -0.03 S | 0.00 A |
| | -214.04 G -15.78 L | | |
| 220.0 | ----- | -0.09 W | 0.00 A |
| | -241.56 G -16.41 L | | |
| 213.3 | ----- | -0.05 S | 0.00 A |
| | -266.82 G -16.26 L | | |
| 206.7 | ----- | -0.09 W | 0.00 A |
| | -292.17 G -16.15 L | | |
| 200.0 | ----- | -0.06 S | 0.00 A |
| | -321.48 G -17.66 L | | |
| 190.0 | ----- | -0.10 S | 0.00 A |
| | -356.93 G -17.55 L | | |
| 180.0 | ----- | -0.06 S | 0.00 A |
| | -390.26 G -17.60 L | | |
| 170.0 | ----- | -0.09 S | 0.00 A |
| | -423.59 G -17.71 L | | |
| 160.0 | ----- | -0.05 S | 0.00 A |
| | -455.50 G -17.96 L | | |
| 150.0 | ----- | -0.08 S | 0.00 A |
| | -487.61 G -18.29 L | | |
| 140.0 | ----- | -0.05 S | 0.00 A |
| | -518.96 G -18.73 L | | |
| 130.0 | ----- | -0.06 S | 0.00 A |
| | -550.74 G -19.22 L | | |
| 120.0 | ----- | -0.04 S | 0.00 A |
| | -581.99 G -19.93 G | | |
| 110.0 | ----- | -0.06 S | 0.00 A |
| | -613.62 G -20.44 L | | |
| 100.0 | ----- | -0.18 A | 0.00 A |
| | -645.24 G -21.37 G | | |
| 90.0 | ----- | -0.08 A | 0.00 A |
| | -677.36 G -22.25 G | | |
| 80.0 | ----- | -0.46 S | 0.00 A |
| | -714.14 G -24.07 G | | |
| 73.3 | ----- | -2.39 G | 0.00 E |
| | -716.13 G -31.37 G | | |
| 60.0 | ----- | -0.43 S | 0.00 A |
| | -779.87 G -26.01 G | | |
| 53.3 | ----- | -2.47 G | 0.00 H |
| | -781.93 G -33.17 G | | |
| 40.0 | ----- | -0.42 S | 0.00 A |
| | -847.11 G -27.90 G | | |
| 33.3 | ----- | -2.52 G | 0.00 A |
| | -849.40 G -34.96 G | | |
| 20.0 | ----- | -0.09 S | 0.00 A |
| | -915.98 G -29.63 G | | |
| 13.3 | ----- | -2.39 G | 0.00 T |
| | -918.33 G -36.48 G | | |
| 0.0 | ----- | 0.00 A | 0.00 A |

FORCE/RESISTANCE RATIO IN LEGS

| MAST ELEV ft | -- LEG COMPRESSION -- | | | ---- LEG TENSION ---- | | |
|--------------------|-----------------------|----------------|---------------------------|-----------------------|----------------|---------------------------|
| | MAX COMP | COMP RESIST | FORCE/ RESIST RATIO | MAX TENS | TENS RESIST | FORCE/ RESIST RATIO |
| 305.00 | 0.15 | 31.48 | 0.00 | 0.11 | 48.15 | 0.00 |
| 300.00 | 7.74 | 82.52 | 0.09 | 3.80 | 100.35 | 0.04 |
| 295.00 | 17.78 | 82.52 | 0.22 | 13.13 | 100.35 | 0.13 |
| 290.00 | 30.93 | 82.52 | 0.37 | 24.00 | 100.35 | 0.24 |
| 285.00 | 47.26 | 82.52 | 0.57 | 39.54 | 100.35 | 0.39 |
| 280.00 | 59.79 | 110.98 | 0.54 | 51.76 | 135.90 | 0.38 |
| 275.00 | 73.27 | 110.98 | 0.66 | 64.49 | 135.90 | 0.47 |
| 270.00 | 84.40 | 110.98 | 0.76 | 75.17 | 135.90 | 0.55 |
| 265.00 | 96.18 | 110.98 | 0.87 | 86.23 | 135.90 | 0.63 |
| 260.00 | 109.13 | 160.28 | 0.68 | 98.16 | 198.45 | 0.49 |
| 253.33 | 126.05 | 160.28 | 0.79 | 112.20 | 198.45 | 0.57 |
| 246.67 | 146.29 | 160.28 | 0.91 | 131.50 | 198.45 | 0.66 |
| 240.00 | 166.00 | 239.46 | 0.69 | 148.52 | 274.95 | 0.54 |
| 233.33 | 188.58 | 239.46 | 0.79 | 169.05 | 274.95 | 0.61 |
| 226.67 | 214.04 | 239.46 | 0.89 | 190.27 | 274.95 | 0.69 |
| 220.00 | 241.56 | 309.64 | 0.78 | 215.53 | 357.75 | 0.60 |
| 213.33 | 266.82 | 309.64 | 0.86 | 239.17 | 357.75 | 0.67 |
| 206.67 | 292.17 | 309.64 | 0.94 | 263.02 | 357.75 | 0.74 |
| 200.00 | 321.48 | 507.33 | 0.63 | 290.08 | 457.90 | 0.63 |
| 190.00 | 356.93 | 507.33 | 0.70 | 322.77 | 457.90 | 0.70 |
| 180.00 | 390.26 | 507.33 | 0.77 | 353.02 | 457.90 | 0.77 |
| 170.00 | 423.59 | 507.33 | 0.83 | 383.25 | 457.90 | 0.84 |
| 160.00 | 455.50 | 507.33 | 0.90 | 411.82 | 576.00 | 0.71 |
| 150.00 | 487.61 | 507.33 | 0.96 | 440.54 | 576.00 | 0.76 |
| 140.00 | 518.96 | 668.86 | 0.78 | 468.11 | 724.50 | 0.65 |
| 130.00 | 550.74 | 668.86 | 0.82 | 495.89 | 724.50 | 0.68 |
| 120.00 | 581.99 | 621.06 | 0.94 | 522.99 | 656.10 | 0.80 |
| 110.00 | 613.62 | 621.06 | 0.99 | 550.49 | 656.10 | 0.84 |
| 100.00 | 645.24 | 818.52 | 0.79 | 577.59 | 865.80 | 0.67 |
| 90.00 | 677.36 | 818.52 | 0.83 | 604.93 | 865.80 | 0.70 |
| 80.00 | 714.14 | 844.46 | 0.85 | 637.20 | 865.80 | 0.74 |
| 73.33 | 716.13 | 844.46 | 0.85 | 635.71 | 865.80 | 0.73 |
| 60.00 | 779.87 | 844.46 | 0.92 | 692.62 | 865.80 | 0.80 |
| 53.33 | 781.93 | 844.46 | 0.93 | 691.07 | 865.80 | 0.80 |
| 40.00 | 847.11 | 935.10 | 0.91 | 748.82 | 954.45 | 0.78 |
| 33.33 | 849.40 | 935.10 | 0.91 | 747.10 | 954.45 | 0.78 |
| 20.00 | | | | | | |

| | | | | | | |
|-------|--------|--------|------|--------|--------|------|
| 13.33 | 915.98 | 935.10 | 0.98 | 805.69 | 954.45 | 0.84 |
| 0.00 | 918.33 | 935.10 | 0.98 | 803.93 | 954.45 | 0.84 |

FORCE/RESISTANCE RATIO IN DIAGONALS

| MAST ELEV ft | - DIAG COMPRESSION - | | | --- DIAG TENSION --- | | |
|--------------------|----------------------|----------------|---------------------------|----------------------|----------------|---------------------------|
| | MAX COMP | COMP RESIST | FORCE/ RESIST RATIO | MAX TENS | TENS RESIST | FORCE/ RESIST RATIO |
| 305.00 | 0.34 | 7.16 | 0.05 | 0.32 | 7.16 | 0.04 |
| 300.00 | 4.47 | 7.16 | 0.62 | 4.29 | 7.16 | 0.60 |
| 295.00 | 4.10 | 7.16 | 0.57 | 4.19 | 7.16 | 0.58 |
| 290.00 | 7.11 | 7.16 | 0.99 | 6.94 | 7.16 | 0.97 |
| 285.00 | 6.60 | 7.16 | 0.92 | 6.69 | 7.16 | 0.93 |
| 280.00 | 6.42 | 8.19 | 0.78 | 6.31 | 8.19 | 0.77 |
| 275.00 | 6.13 | 8.19 | 0.75 | 6.18 | 8.19 | 0.76 |
| 270.00 | 6.12 | 8.19 | 0.75 | 5.99 | 8.19 | 0.73 |
| 265.00 | 5.99 | 8.19 | 0.73 | 6.00 | 8.19 | 0.73 |
| 260.00 | 8.23 | 13.00 | 0.63 | 7.67 | 13.00 | 0.59 |
| 253.33 | 9.88 | 13.00 | 0.76 | 10.25 | 13.00 | 0.79 |
| 246.67 | 10.91 | 13.00 | 0.84 | 10.34 | 13.00 | 0.80 |
| 240.00 | 11.79 | 17.67 | 0.67 | 11.76 | 17.67 | 0.67 |
| 233.33 | 13.32 | 17.67 | 0.75 | 13.24 | 17.67 | 0.75 |
| 226.67 | 15.78 | 17.67 | 0.89 | 15.69 | 17.67 | 0.89 |
| 220.00 | 16.41 | 17.21 | 0.95 | 16.39 | 17.21 | 0.95 |
| 213.33 | 16.26 | 17.21 | 0.94 | 16.20 | 17.21 | 0.94 |
| 206.67 | 16.15 | 17.21 | 0.94 | 16.13 | 17.21 | 0.94 |
| 200.00 | 17.66 | 17.74 | 1.00 | 17.58 | 17.74 | 0.99 |
| 190.00 | 17.55 | 17.74 | 0.99 | 17.50 | 17.74 | 0.99 |
| 180.00 | 17.60 | 18.22 | 0.97 | 17.52 | 18.22 | 0.96 |
| 170.00 | 17.71 | 18.22 | 0.97 | 17.66 | 18.22 | 0.97 |
| 160.00 | 17.96 | 19.51 | 0.92 | 17.89 | 19.51 | 0.92 |
| 150.00 | 18.29 | 19.51 | 0.94 | 18.23 | 19.51 | 0.93 |
| 140.00 | 18.73 | 19.70 | 0.95 | 18.65 | 19.70 | 0.95 |
| 130.00 | 19.22 | 19.70 | 0.98 | 19.16 | 19.70 | 0.97 |
| 120.00 | 19.93 | 21.03 | 0.95 | 19.74 | 21.03 | 0.94 |
| 110.00 | 20.44 | 21.03 | 0.97 | 20.38 | 21.03 | 0.97 |
| 100.00 | 21.37 | 29.77 | 0.72 | 21.14 | 29.77 | 0.71 |
| 90.00 | 22.25 | 29.77 | 0.75 | 21.98 | 29.77 | 0.74 |
| 80.00 | 24.07 | 35.60 | 0.68 | 23.43 | 35.60 | 0.66 |
| 73.33 | 31.37 | 43.74 | 0.72 | 30.87 | 43.74 | 0.71 |
| 60.00 | 26.01 | 32.65 | 0.80 | 25.14 | 32.65 | 0.77 |
| 53.33 | | | | | | |

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| | | | | | | |
|-------|-------|-------|------|-------|-------|------|
| 40.00 | 33.17 | 43.74 | 0.76 | 32.46 | 43.74 | 0.74 |
| 33.33 | 27.90 | 36.10 | 0.77 | 26.96 | 36.10 | 0.75 |
| 20.00 | 34.96 | 43.74 | 0.80 | 34.17 | 43.74 | 0.78 |
| 13.33 | 29.63 | 33.26 | 0.89 | 28.81 | 33.26 | 0.87 |
| 0.00 | 36.48 | 43.74 | 0.83 | 35.92 | 43.74 | 0.82 |

MAXIMUM INDIVIDUAL FOUNDATION LOADS: (kip)

| NORTH | LOAD EAST | COMPONENTS DOWN | UPLIFT | TOTAL SHEAR |
|----------|-----------|-----------------|-----------|-------------|
| 104.15 G | 85.43 K | 961.82 G | -841.90 M | 104.16 G |

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

| HORIZONTAL | | | DOWN | OVERTURNING | | | TORSION |
|------------|----------|-------------|---------|-------------|-----------|-------------|---------|
| NORTH | EAST | TOTAL @ 0.0 | | NORTH | EAST | TOTAL @ 0.0 | |
| 176.9 G | -153.9 P | 176.9 G | 389.0 e | 27614.7 G | 24615.3 J | 27614.7 G | 121.8 L |

Latticed Tower Analysis (Unguyed)
Processed under license at:

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Sabre Towers and Poles

on: 11 jun 2019 at: 14:33:37

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

* only 1 condition(s) shown in full
* Some wind loads may have been derived from full-scale wind tunnel testing

LOADING CONDITION A

60 mph wind with no ice. wind Azimuth: 0

MAST LOADING

| LOAD TYPE | ELEV ft | APPLY..RADIUS ft | LOAD..AT AZI | LOAD AZI |FORCES..... | |MOMENTS..... | |
|-----------|---------|------------------|--------------|----------|------------------|----------|-------------------|----------------|
| | | | | | HORIZ kip | DOWN kip | VERTICAL ft-kip | TORSNAL ft-kip |
| C | 300.0 | 0.00 | 0.0 | 0.0 | 3.15 | 5.50 | 0.00 | 0.00 |
| C | 290.0 | 0.00 | 0.0 | 0.0 | 2.52 | 3.10 | 0.00 | 0.00 |
| C | 252.0 | 0.00 | 0.0 | 0.0 | 2.56 | 3.10 | 0.00 | 0.00 |
| C | 236.0 | 0.00 | 0.0 | 0.0 | 2.58 | 3.10 | 0.00 | 0.00 |
| C | 225.0 | 0.00 | 0.0 | 0.0 | 3.24 | 5.50 | 0.00 | 0.00 |
| D | 305.0 | 0.00 | 180.0 | 0.0 | 0.02 | 0.03 | 0.00 | 0.00 |
| D | 300.0 | 0.00 | 180.0 | 0.0 | 0.02 | 0.03 | 0.00 | 0.00 |
| D | 300.0 | 0.00 | 43.2 | 0.0 | 0.05 | 0.07 | 0.06 | 0.04 |
| D | 290.0 | 0.00 | 45.7 | 0.0 | 0.05 | 0.07 | 0.05 | 0.03 |
| D | 290.0 | 0.00 | 79.1 | 0.0 | 0.06 | 0.09 | 0.05 | 0.04 |
| D | 280.0 | 0.00 | 81.7 | 0.0 | 0.06 | 0.09 | 0.05 | 0.04 |

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| | | | | | | | | |
|---|-------|------|-------|-----|------|------|------|------|
| D | 280.0 | 0.00 | 73.8 | 0.0 | 0.06 | 0.10 | 0.06 | 0.04 |
| D | 260.0 | 0.00 | 80.0 | 0.0 | 0.07 | 0.11 | 0.05 | 0.04 |
| D | 260.0 | 0.00 | 74.7 | 0.0 | 0.07 | 0.14 | 0.07 | 0.05 |
| D | 253.3 | 0.00 | 74.7 | 0.0 | 0.07 | 0.14 | 0.07 | 0.05 |
| D | 253.3 | 0.00 | 80.6 | 0.0 | 0.08 | 0.15 | 0.06 | 0.03 |
| D | 240.0 | 0.00 | 81.3 | 0.0 | 0.08 | 0.16 | 0.05 | 0.02 |
| D | 240.0 | 0.00 | 41.5 | 0.0 | 0.09 | 0.20 | 0.03 | 0.01 |
| D | 233.3 | 0.00 | 41.5 | 0.0 | 0.09 | 0.20 | 0.03 | 0.01 |
| D | 233.3 | 0.00 | 340.8 | 0.0 | 0.10 | 0.21 | 0.04 | 0.00 |
| D | 226.7 | 0.00 | 340.8 | 0.0 | 0.10 | 0.21 | 0.04 | 0.00 |
| D | 226.7 | 0.00 | 353.6 | 0.0 | 0.12 | 0.23 | 0.10 | 0.03 |
| D | 220.0 | 0.00 | 353.6 | 0.0 | 0.12 | 0.23 | 0.10 | 0.03 |
| D | 220.0 | 0.00 | 355.1 | 0.0 | 0.13 | 0.26 | 0.13 | 0.04 |
| D | 200.0 | 0.00 | 354.4 | 0.0 | 0.13 | 0.27 | 0.12 | 0.04 |
| D | 200.0 | 0.00 | 355.5 | 0.0 | 0.13 | 0.31 | 0.14 | 0.04 |
| D | 180.0 | 0.00 | 355.1 | 0.0 | 0.13 | 0.31 | 0.13 | 0.04 |
| D | 180.0 | 0.00 | 355.9 | 0.0 | 0.14 | 0.33 | 0.15 | 0.04 |
| D | 160.0 | 0.00 | 355.6 | 0.0 | 0.14 | 0.34 | 0.15 | 0.04 |
| D | 160.0 | 0.00 | 356.2 | 0.0 | 0.15 | 0.35 | 0.17 | 0.04 |
| D | 140.0 | 0.00 | 356.0 | 0.0 | 0.15 | 0.35 | 0.16 | 0.04 |
| D | 140.0 | 0.00 | 356.5 | 0.0 | 0.16 | 0.41 | 0.18 | 0.04 |
| D | 120.0 | 0.00 | 356.3 | 0.0 | 0.16 | 0.42 | 0.17 | 0.04 |
| D | 120.0 | 0.00 | 356.7 | 0.0 | 0.17 | 0.41 | 0.19 | 0.04 |
| D | 100.0 | 0.00 | 356.6 | 0.0 | 0.17 | 0.41 | 0.19 | 0.04 |
| D | 100.0 | 0.00 | 356.9 | 0.0 | 0.18 | 0.48 | 0.21 | 0.04 |
| D | 80.0 | 0.00 | 356.8 | 0.0 | 0.19 | 0.48 | 0.20 | 0.04 |
| D | 80.0 | 0.00 | 357.1 | 0.0 | 0.18 | 0.45 | 0.22 | 0.04 |
| D | 73.3 | 0.00 | 357.1 | 0.0 | 0.18 | 0.45 | 0.22 | 0.04 |
| D | 73.3 | 0.00 | 357.0 | 0.0 | 0.19 | 0.52 | 0.21 | 0.04 |
| D | 60.0 | 0.00 | 357.0 | 0.0 | 0.19 | 0.52 | 0.21 | 0.04 |
| D | 60.0 | 0.00 | 357.3 | 0.0 | 0.18 | 0.46 | 0.23 | 0.04 |
| D | 53.3 | 0.00 | 357.3 | 0.0 | 0.18 | 0.46 | 0.23 | 0.04 |
| D | 53.3 | 0.00 | 357.2 | 0.0 | 0.20 | 0.54 | 0.23 | 0.04 |
| D | 40.0 | 0.00 | 357.2 | 0.0 | 0.20 | 0.54 | 0.23 | 0.04 |
| D | 40.0 | 0.00 | 357.5 | 0.0 | 0.19 | 0.51 | 0.25 | 0.04 |
| D | 33.3 | 0.00 | 357.5 | 0.0 | 0.19 | 0.51 | 0.25 | 0.04 |
| D | 33.3 | 0.00 | 357.4 | 0.0 | 0.21 | 0.60 | 0.24 | 0.04 |
| D | 20.0 | 0.00 | 357.4 | 0.0 | 0.21 | 0.60 | 0.24 | 0.04 |
| D | 20.0 | 0.00 | 357.6 | 0.0 | 0.17 | 0.52 | 0.26 | 0.04 |
| D | 13.3 | 0.00 | 357.6 | 0.0 | 0.17 | 0.52 | 0.26 | 0.04 |
| D | 13.3 | 0.00 | 357.5 | 0.0 | 0.19 | 0.62 | 0.25 | 0.04 |
| D | 0.0 | 0.00 | 357.5 | 0.0 | 0.19 | 0.62 | 0.25 | 0.04 |

ANTENNA LOADING

|ANTENNA..... | ATTACHMENT | |ANTENNA FORCES..... | | | | | |
|-------------------|------------|-----|--------------------------|-----|--------------|--------------|----------------|-------------------|
| TYPE | ELEV ft | AZI | RAD ft | AZI | AXIAL kip | SHEAR kip | GRAVITY kip | TORSION ft-kip |
| STD+R | 260.0 | 0.0 | 6.7 | 0.0 | 0.55 | 0.00 | 0.34 | 0.00 |
| STD+R | 241.0 | 0.0 | 7.8 | 0.0 | 0.56 | 0.00 | 0.34 | 0.00 |

MAXIMUM MAST DISPLACEMENTS:

| ELEV ft | -----DEFLECTIONS (ft)----- | | | --TILTS (DEG)--- | | TWIST DEG |
|------------|----------------------------|---------|---------|------------------|----------|--------------|
| | NORTH | EAST | DOWN | NORTH | EAST | |
| 305.0 | 1.452 G | 1.329 J | 0.019 G | 0.594 G | 0.551 J | -0.034 J |
| 300.0 | 1.400 G | 1.280 J | 0.019 G | 0.594 G | 0.551 J | -0.034 J |
| 295.0 | 1.347 G | 1.231 J | 0.018 G | 0.593 G | 0.549 J | -0.034 J |
| 290.0 | 1.295 G | 1.183 J | 0.018 G | 0.587 G | 0.544 J | -0.035 J |
| 285.0 | 1.242 G | 1.134 J | 0.017 G | 0.577 G | 0.534 J | -0.035 J |
| 280.0 | 1.191 G | 1.087 J | 0.017 G | 0.562 G | 0.519 J | -0.034 J |
| 275.0 | 1.142 G | 1.041 J | 0.016 G | 0.548 G | 0.506 J | -0.034 J |
| 270.0 | 1.094 G | 0.997 J | 0.016 G | 0.531 G | 0.490 J | -0.033 J |
| 265.0 | 1.047 G | 0.954 J | 0.015 G | 0.513 G | 0.473 J | -0.032 J |
| 260.0 | 1.002 G | 0.913 J | 0.015 G | 0.494 G | 0.454 J | -0.031 J |
| 253.3 | 0.946 G | 0.860 J | 0.015 G | 0.475 G | 0.436 J | -0.029 J |
| 246.7 | 0.890 G | 0.810 J | 0.014 G | 0.454 G | 0.417 J | -0.026 J |
| 240.0 | 0.838 G | 0.761 J | 0.014 G | 0.432 G | 0.396 J | -0.024 J |
| 233.3 | 0.787 G | 0.715 J | 0.013 G | 0.414 G | 0.380 J | 0.022 L |
| 226.7 | 0.739 G | 0.671 J | 0.013 G | 0.396 G | 0.363 J | 0.022 L |
| 220.0 | 0.692 G | 0.628 J | 0.012 G | 0.376 G | -0.345 D | 0.022 L |
| 213.3 | 0.648 G | 0.587 J | 0.012 G | 0.360 G | -0.330 D | 0.022 L |
| 206.7 | 0.605 G | 0.548 J | 0.011 G | 0.343 G | 0.314 J | 0.021 L |
| 200.0 | 0.564 G | 0.511 J | 0.011 G | 0.326 G | 0.297 J | 0.021 L |
| 190.0 | 0.507 G | 0.458 J | 0.010 G | 0.308 G | 0.281 J | 0.020 L |

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|-------------|---------|---------|---------|---------|---------|---------|
| 180.0 | 0.452 G | 0.409 J | 0.010 G | 0.290 G | 0.265 J | 0.019 L |
| 170.0 | 0.401 G | 0.362 J | 0.009 G | 0.272 G | 0.247 J | 0.018 L |
| 160.0 | 0.354 G | 0.319 J | 0.009 G | 0.252 G | 0.229 J | 0.017 L |
| 150.0 | 0.310 G | 0.279 J | 0.008 G | 0.232 G | 0.211 J | 0.016 L |
| 140.0 | 0.269 G | 0.242 J | 0.008 G | 0.212 G | 0.192 J | 0.015 L |
| 130.0 | 0.232 G | 0.208 J | 0.007 G | 0.196 G | 0.177 J | 0.014 L |
| 120.0 | 0.197 G | 0.177 J | 0.007 L | 0.179 G | 0.162 J | 0.013 L |
| 110.0 | 0.165 G | 0.148 J | 0.006 L | 0.161 G | 0.145 J | 0.012 L |
| 100.0 | 0.136 G | 0.123 J | 0.006 L | 0.142 G | 0.128 J | 0.011 L |
| 90.0 | 0.107 G | 0.096 J | 0.005 G | 0.127 G | 0.114 J | 0.010 L |
| 80.0 | 0.081 G | 0.073 J | 0.005 G | 0.112 G | 0.101 J | 0.008 L |
| 73.3 | 0.071 G | 0.063 J | 0.004 G | 0.103 G | 0.093 J | 0.008 L |
| 60.0 | 0.047 G | 0.042 J | 0.004 G | 0.084 G | 0.075 J | 0.006 L |
| 53.3 | 0.040 G | 0.035 J | 0.003 G | 0.075 G | 0.067 J | 0.006 L |
| 40.0 | 0.023 G | 0.020 J | 0.002 A | 0.054 G | 0.049 J | 0.004 L |
| 33.3 | 0.019 G | 0.017 J | 0.002 B | 0.046 G | 0.041 J | 0.004 L |
| 20.0 | 0.008 G | 0.007 J | 0.001 B | 0.028 G | 0.025 J | 0.002 L |
| 13.3 | 0.004 G | 0.003 J | 0.001 B | 0.019 G | 0.017 J | 0.001 L |
| 0.0 | 0.000 A |

MAXIMUM ANTENNA AND REFLECTOR ROTATIONS:

| ELEV ft | AZI deg | TYPE * |BEAM DEFLECTIONS (deg)..... | | | |
|------------|------------|-----------|----------------------------------|---------|----------|---------|
| | | | PITCH | YAW | ROLL | TOTAL |
| 260.0 | 0.0 | STD+R | -0.454 J | 0.031 J | -0.494 G | 0.455 J |
| 241.0 | 0.0 | STD+R | -0.399 J | 0.025 J | -0.435 G | 0.400 J |

MAXIMUM TENSION IN MAST MEMBERS (kip)

| ELEV ft | LEGS | DIAG | HORIZ | BRACE |
|------------|----------|--------|--------|--------|
| 305.0 | ----- | ----- | 0.08 A | 0.00 A |
| 300.0 | 0.03 G | 0.10 G | 0.59 K | 0.00 A |
| 295.0 | 0.05 A | 1.43 B | 0.09 I | 0.00 A |
| 290.0 | 3.10 A | 1.47 B | 0.05 K | 0.00 A |
| 285.0 | 6.15 A | 2.33 H | 0.09 A | 0.00 A |
| 280.0 | 11.30 A | 2.33 B | 0.01 J | 0.00 A |
| 275.0 | 15.48 A | 2.14 B | 0.06 A | 0.00 A |
| 270.0 | 19.68 A | 2.14 B | 0.03 A | 0.00 A |
| 265.0 | 23.28 A | 2.04 L | 0.05 E | 0.00 A |
| 260.0 | 26.93 A | 2.07 F | 0.05 A | 0.00 A |
| 253.3 | 30.72 A | 2.58 F | 0.03 J | 0.00 A |
| 246.7 | 34.74 A | 3.54 L | 0.06 A | 0.00 A |
| 240.0 | 41.06 A | 3.49 F | 0.03 E | 0.00 A |
| 233.3 | 46.11 A | 4.08 L | 0.04 A | 0.00 A |
| 226.7 | 52.53 A | 4.50 L | 0.02 E | 0.00 A |
| 220.0 | 58.51 A | 5.42 L | 0.04 A | 0.00 A |
| 213.3 | 66.58 A | 5.64 L | 0.03 E | 0.00 A |
| 206.7 | 74.33 A | 5.62 L | 0.04 A | 0.00 A |
| 200.0 | 82.21 A | 5.56 L | 0.03 E | 0.00 A |
| 190.0 | 91.01 A | 6.09 L | 0.04 A | 0.00 A |
| 180.0 | 101.65 A | 6.04 L | 0.03 A | 0.00 A |
| 170.0 | 111.36 A | 6.07 L | 0.04 A | 0.00 A |

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| | | | | |
|-------|----------|---------|--------|--------|
| 160.0 | 121.09 A | 6.09 L | 0.02 A | 0.00 A |
| | 130.18 A | 6.19 L | | |
| 150.0 | 139.34 A | 6.29 L | 0.04 A | 0.00 A |
| | 147.99 A | 6.45 L | | |
| 140.0 | 156.67 A | 6.60 L | 0.02 A | 0.00 A |
| | 165.07 A | 6.82 L | | |
| 130.0 | 173.65 A | 7.02 L | 0.03 A | 0.00 A |
| | 181.97 A | 7.30 L | | |
| 120.0 | 190.33 A | 7.57 L | 0.06 C | 0.00 A |
| | 198.93 A | 8.07 L | | |
| 110.0 | 200.59 A | 8.07 L | 0.02 G | 0.00 A |
| | 217.44 A | 8.64 L | | |
| 100.0 | 215.72 A | 11.17 L | 0.18 A | 0.00 A |
| | 234.40 A | 9.26 L | | |
| 90.0 | 232.49 A | 11.76 L | 0.68 A | 0.00 J |
| | 251.36 A | 9.91 L | | |
| 80.0 | 249.41 A | 12.35 G | 0.17 A | 0.00 A |
| | | | | |
| 73.3 | | | 0.70 A | 0.00 C |
| | | | | |
| 60.0 | | | 0.17 A | 0.00 A |
| | | | | |
| 53.3 | | | 0.71 A | 0.00 L |
| | | | | |
| 40.0 | | | 0.04 A | 0.00 L |
| | | | | |
| 33.3 | | | 0.66 A | 0.00 B |
| | | | | |
| 20.0 | | | 0.00 A | 0.00 A |
| | | | | |
| 13.3 | | | | |
| | | | | |
| 0.0 | | | | |

MAXIMUM COMPRESSION IN MAST MEMBERS (kip)

| ELEV ft | LEGS | DIAG | HORIZ | BRACE |
|------------|----------|---------|---------|--------|
| 305.0 | | | -0.06 G | 0.00 A |
| | -0.06 A | -0.12 A | | |
| 300.0 | | | -0.58 E | 0.00 A |
| | -3.75 G | -1.60 B | | |
| 295.0 | | | -0.04 C | 0.00 A |
| | -7.39 G | -1.40 B | | |
| 290.0 | | | -0.05 E | 0.00 A |
| | -12.52 G | -2.50 B | | |
| 285.0 | | | -0.05 G | 0.00 A |
| | -18.32 G | -2.24 B | | |
| 280.0 | | | 0.00 A | 0.00 A |
| | -22.66 G | -2.24 B | | |
| 275.0 | | | -0.04 G | 0.00 A |
| | -27.46 G | -2.09 H | | |
| 270.0 | | | -0.01 G | 0.00 A |
| | -31.35 G | -2.13 G | | |
| 265.0 | | | -0.03 K | 0.00 A |
| | -35.54 G | -2.05 L | | |
| 260.0 | | | -0.03 G | 0.00 A |
| | -40.27 G | -2.89 L | | |
| 253.3 | | | -0.01 G | 0.00 A |
| | -46.81 G | -3.38 F | | |
| 246.7 | | | -0.04 K | 0.00 A |
| | -54.04 G | -3.82 L | | |
| 240.0 | | | -0.01 G | 0.00 A |
| | -61.53 G | -4.03 L | | |
| 233.3 | | | -0.03 K | 0.00 A |
| | -69.84 G | -4.64 L | | |
| 226.7 | | | -0.01 G | 0.00 A |
| | -79.77 G | -5.45 L | | |
| 220.0 | | | -0.03 K | 0.00 A |
| | -89.83 G | -5.70 L | | |
| 213.3 | | | -0.01 G | 0.00 A |
| | -98.93 G | -5.62 L | | |

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| | | | | |
|-------|-----------|----------|---------|--------|
| 206.7 | ----- | | -0.03 K | 0.00 A |
| | -108.02 G | -5.61 L | | |
| 200.0 | ----- | | -0.02 G | 0.00 A |
| | -118.65 G | -6.12 L | | |
| 190.0 | ----- | | -0.03 K | 0.00 A |
| | -131.50 G | -6.10 L | | |
| 180.0 | ----- | | -0.02 G | 0.00 A |
| | -143.67 G | -6.10 L | | |
| 170.0 | ----- | | -0.03 K | 0.00 A |
| | -155.84 G | -6.16 L | | |
| 160.0 | ----- | | -0.01 G | 0.00 A |
| | -167.56 G | -6.23 L | | |
| 150.0 | ----- | | -0.02 G | 0.00 A |
| | -179.34 G | -6.36 L | | |
| 140.0 | ----- | | -0.01 G | 0.00 A |
| | -190.93 G | -6.49 L | | |
| 130.0 | ----- | | -0.02 G | 0.00 A |
| | -202.73 G | -6.67 L | | |
| 120.0 | ----- | | -0.01 G | 0.00 A |
| | -214.33 G | -6.89 G | | |
| 110.0 | ----- | | -0.02 G | 0.00 A |
| | -226.06 G | -7.09 L | | |
| 100.0 | ----- | | -0.07 A | 0.00 A |
| | -237.85 G | -7.38 G | | |
| 90.0 | ----- | | -0.03 A | 0.00 A |
| | -249.86 G | -7.69 G | | |
| 80.0 | ----- | | -0.14 G | 0.00 A |
| | -263.30 G | -8.33 G | | |
| 73.3 | ----- | | -0.85 G | 0.00 E |
| | -264.96 G | -10.83 G | | |
| 60.0 | ----- | | -0.13 G | 0.00 A |
| | -287.90 G | -9.00 G | | |
| 53.3 | ----- | | -0.88 G | 0.00 H |
| | -289.62 G | -11.45 G | | |
| 40.0 | ----- | | -0.13 G | 0.00 A |
| | -313.13 G | -9.65 G | | |
| 33.3 | ----- | | -0.90 G | 0.00 J |
| | -315.03 G | -12.06 G | | |
| 20.0 | ----- | | -0.02 G | 0.00 J |
| | -339.09 G | -10.23 G | | |
| 13.3 | ----- | | -0.86 G | 0.00 H |
| | -341.05 G | -12.58 G | | |
| 0.0 | ----- | | 0.00 A | 0.00 A |

MAXIMUM INDIVIDUAL FOUNDATION LOADS: (kip)

| -----LOAD-----COMPONENTS----- | | | | TOTAL |
|-------------------------------|---------|----------|-----------|---------|
| NORTH | EAST | DOWN | UPLIFT | SHEAR |
| 37.27 G | 30.63 K | 356.81 G | -261.57 A | 37.27 G |

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

| -----HORIZONTAL----- | | | DOWN | -----OVERTURNING----- | | | TORSION |
|----------------------|--------|--------|---------|-----------------------|----------|----------|---------|
| NORTH | EAST | TOTAL | | NORTH | EAST | TOTAL | |
| | | @ | | | | @ | |
| | | 0.0 | | | | 0.0 | |
| 60.8 G | 52.9 J | 60.8 G | 126.9 B | 9532.7 G | 8502.2 J | 9532.7 G | 41.8 L |

MAT FOUNDATION DESIGN BY SABRE TOWERS & POLES

Tower Description 305' S3TL Series HD1
 Customer SBA NETWORK SERVICES INC
 Project Number 20-0890-CJP
 Date 6/11/2019
 Engineer NM

| | | | |
|---|----------|--|---------|
| Overall Loads: | | | |
| Factored Moment (ft-kips) | 27614.70 | | |
| Factored Axial (kips) | 389.05 | | |
| Factored Shear (kips) | 176.87 | | |
| Individual Leg Loads: | | | |
| Factored Uplift (kips) | 842.00 | | |
| Factored Download (kips) | 962.00 | | |
| Factored Shear (kips) | 104.00 | | |
| | | Tower eccentric from mat (ft)= | 4 |
| Width of Tower (ft) | 35 | Allowable Bearing Pressure (ksf) | 3.23 |
| Ultimate Bearing Pressure | 6.46 | Safety Factor | 2.00 |
| Bearing Φ s | 0.75 | | |
| Bearing Design Strength (ksf) | 4.845 | Max. Factored Net Bearing Pressure (ksf) | 4.84 |
| Water Table Below Grade (ft) | 999 | | |
| Width of Mat (ft) | 44 | Minimum Mat Width (ft) | 42.01 |
| Thickness of Mat (ft) | 2.25 | | |
| Depth to Bottom of Slab (ft) | 7 | | |
| Bolt Circle Diameter (in) | 18.75 | | |
| Top of Concrete to Top of Bottom Threads (in) | 72.625 | Minimum Pier Diameter (ft) | 2.90 |
| Diameter of Pier (ft) | 4 | Equivalent Square b (ft) | 3.54 |
| Ht. of Pier Above Ground (ft) | 0.5 | | |
| Ht. of Pier Below Ground (ft) | 4.75 | | |
| Quantity of Bars in Mat | 75 | | |
| Bar Diameter in Mat (in) | 1.27 | | |
| Area of Bars in Mat (in ²) | 95.01 | | |
| Spacing of Bars in Mat (in) | 7.04 | Recommended Spacing (in) | 6 to 12 |
| Quantity of Bars Pier | 24 | | |
| Bar Diameter in Pier (in) | 1.128 | | |
| Tie Bar Diameter in Pier (in) | 0.5 | | |
| Spacing of Ties (in) | 8 | Minimum Pier A _s (in ²) | 9.05 |
| Area of Bars in Pier (in ²) | 23.98 | Recommended Spacing (in) | 5 to 12 |
| Spacing of Bars in Pier (in) | 5.20 | | |
| f'c (ksi) | 4.5 | | |
| fy (ksi) | 60 | | |
| Unit Wt. of Soil (kcf) | 0.11 | | |
| Unit Wt. of Concrete (kcf) | 0.15 | | |
| Volume of Concrete (yd ³) | 168.66 | | |

MAT FOUNDATION DESIGN BY SABRE TOWERS & POLES (CONTINUED)

Two-Way Shear:

| | | | |
|---|--------|-------------|-------|
| Average d (in) | 22.73 | | |
| ϕv_c (ksi) | 0.228 | v_u (ksi) | 0.202 |
| $\phi v_c = \phi(2 + 4/\beta_c)f'_c{}^{1/2}$ | 0.342 | | |
| $\phi v_c = \phi(\alpha_s d/b_o + 2)f'_c{}^{1/2}$ | 0.351 | | |
| $\phi v_c = \phi 4f'_c{}^{1/2}$ | 0.228 | | |
| Shear perimeter, b_o (in) | 219.10 | | |
| β_c | 1 | | |

Stability:

| | | | |
|------------------------------------|---------|------------------------------------|---------|
| Overturning Design Strength (ft-k) | 35022.5 | Factored Overturning Moment (ft-k) | 28941.2 |
|------------------------------------|---------|------------------------------------|---------|

One-Way Shear:

| | | | |
|--|--------|--|--------|
| ϕV_c (kips) | 1368.6 | V_u (kips) | 1072.8 |
| Pier Design: | | | |
| Design Tensile Strength (kips) | 1295.1 | T_u (kips) | 842.0 |
| ϕV_n (kips) | 110.7 | V_u (kips) | 104.0 |
| $\phi V_c = \phi 2(1 + N_u/(500A_g))f'_c{}^{1/2}b_w d$ | 14.6 | | |
| V_s (kips) | 113.1 | *** V_s max = $4 f'_c{}^{1/2}b_w d$ (kips) | 494.6 |
| Maximum Spacing (in) | 9.76 | (Only if Shear Ties are Required) | |
| Actual Hook Development (in) | 21.46 | Req'd Hook Development l_{dh} (in) | 14.12 |

*** Ref. ACI 11.5.5 & 11.5.6.3

Anchor Bolt Pull-Out:

| | | | |
|--|-------|-------------------------------------|-------|
| $\phi P_c = \phi \lambda(2/3)f'_c{}^{1/2}(2.8A_{SLOPE} + 4A_{FLAT})$ | 272.8 | P_u (kips) | 842.0 |
| Pier Rebar Development Length (in) | 59.06 | Required Length of Development (in) | 32.80 |

Flexure in Slab:

| | | | |
|----------------------------------|---------|----------------------------------|--------|
| ϕM_n (ft-kips) | 9114.5 | M_u (ft-kips) | 9085.5 |
| a (in) | 2.82 | | |
| Steel Ratio | 0.00792 | | |
| β_1 | 0.825 | | |
| Maximum Steel Ratio (ρ_i) | 0.0197 | | |
| Minimum Steel Ratio | 0.0018 | | |
| Rebar Development in Pad (in) | 113.03 | Required Development in Pad (in) | 16.58 |

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

DRILLED STRAIGHT PIER DESIGN BY SABRE TOWERS & POLES

Tower Description 305' S3TL Series HD1
 Customer Name SBA NETWORK SERVICES INC
 Job Number 20-0890-CJP
 Date 6/11/2019
 Engineer NM

| | |
|---|--------|
| Factored Uplift (kips) | 842 |
| Factored Download (kips) | 962 |
| Factored Shear (kips) | 104 |
| Ultimate Bearing Pressure | 79.16 |
| Bearing Φ s | 0.75 |
| Bearing Design Strength (ksf) | 59.37 |
| Water Table Below Grade (ft) | 999 |
| Bolt Circle Diameter (in) | 18.75 |
| Top of Concrete to Top of Bottom Threads (in) | 72.625 |
| Pier Diameter (ft) | 5.5 |
| Ht. Above Ground (ft) | 0.5 |
| Pier Length Below Ground (ft) | 26.5 |
| Quantity of Bars | 18 |
| Bar Diameter (in) | 1.27 |
| Area of Bars (in ²) | 22.80 |
| Spacing of Bars (in) | 10.08 |
| Tie Bar Diameter (in) | 0.5 |
| Spacing of Ties (in) | 7 |
| f'c (ksi) | 4.5 |
| fy (ksi) | 60 |

Minimum Pier Diameter (ft) 2.90

Minimum Area of Steel (in²) 17.11

| | |
|---------------------------------------|--------------------------|
| Unit Wt. of Concrete (kcf) | 0.15 |
| Download Friction Φ s | 0.75 |
| Uplift Friction Φ s | 0.75 |
| Volume of Concrete (yd ³) | 23.76 |
| Skin Friction Factor for Uplift | 1 |
| Ignore Bottom Length in Download? | <input type="checkbox"/> |

Length to Ignore Download (ft) **0**

| Depth at Bottom of Layer (ft) | Ult. Skin Friction (ksf) | (Ult. Skin Friction)*(Uplift Factor) | γ (kcf) |
|-------------------------------|--------------------------|--------------------------------------|----------------|
| 3 | 0.00 | 0.00 | 0.11 |
| 6.5 | 0.55 | 0.55 | 0.11 |
| 9 | 0.91 | 0.91 | 0.11 |
| 14 | 1.10 | 1.10 | 0.11 |
| 21.3 | 1.00 | 1.00 | 0.11 |
| 26.5 | 8.25 | 8.25 | 0.135 |
| 0 | 0.00 | 0.00 | 0 |
| 0 | 0.00 | 0.00 | 0 |
| 0 | 0.00 | 0.00 | 0 |
| 0 | 0.00 | 0.00 | 0 |

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

Download:

| | | | |
|--|--------|------------------------------|-------|
| Factored Net Weight of Concrete (kips) | 28.7 | | |
| Bearing Design Strength (kips) | 1410.5 | | |
| Skin Friction Design Strength (kips) | 776.2 | | |
| Download Design Strength (kips) | 2186.8 | Factored Net Download (kips) | 990.7 |

Uplift:

| | | | |
|---|--------|------------------------|-------|
| Nominal Skin Friction (kips) | 1035.0 | | |
| W _c , Weight of Concrete (kips) | 96.2 | | |
| W _R , Soil Resistance (kips) | 1551.7 | | |
| Φ _s W _r +0.9W _c (kips) | 1250.3 | | |
| Uplift Design Strength (kips) | 862.8 | Factored Uplift (kips) | 842.0 |

Tension:

| | | | |
|--------------------------------|--------|-----------------------|-------|
| Design Tensile Strength (kips) | 1231.3 | T _u (kips) | 842.0 |
|--------------------------------|--------|-----------------------|-------|

Shear:

| | | | |
|---|-------|---|-------|
| ΦV _n (kips) | 352.9 | V _u (kips) | 104.0 |
| ΦV _c =Φ2(1+N _u /(500A _g))f' _c ^{1/2} b _w d (kips) | 201.8 | | |
| V _s (kips) | 177.7 | *** V _s max = 4 f' _c ^{1/2} b _w d (kips) | 935.1 |
| Maximum Spacing (in) | 7.10 | (Only if Shear Ties are Required) | |
| | | *** Ref. ACI 11.5.5 & 11.5.6.3 | |

Anchor Bolt Pull-Out:

| | | | |
|--|-------|-------------------------------------|-------|
| ΦP _c =Φλ(2/3)f' _c ^{1/2} (2.8A _{SLOPE} + 4A _{FLAT}) | 515.4 | P _u (kips) | 842.0 |
| Rebar Development Length (in) | 50.14 | Required Length of Development (in) | 38.84 |

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

EXHIBIT

L

29
#12810

BOOK 56 PAGE 151 (7)

445914



Prepared by: Andrea Reid-Gentles
After recording return to: ~~Rita Drinkwater~~
SBA Network Services, LLC
8051 Congress Avenue
Boca Raton, FL 33487-1307
Ph: 1-800-487-7483 ext. 7872

Adrian

WHEN RECORDED RETURN TO:
OLD REPUBLIC TITLE
ATTN: COMMERCIAL POST CLOSING
580 SOUTH MAIN ST
SUITE 1031 1900788
AKRON OHIO 44311
(330-436-6000)

MEMORANDUM OF OPTION AND LAND LEASE

John THIS MEMORANDUM OF OPTION AND LAND LEASE (herein "Memorandum") is made this 28 day of January, 2019, by and between WILLIAM A VAUGHT AND AUDEAN VAUGHT, husband and wife, having an address of 114 Oak Avenue, Somerset, Kentucky 42501 (herein "Lessor") and SBA TOWERS IX, LLC, a Delaware limited liability company, having a principal office located at 8051 Congress Avenue, Boca Raton, Florida 33487-1307 (herein "Lessee").

WHEREAS, Lessor and Lessee entered into that certain Option and Land Lease, (hereinafter referred to as "Lease") dated January 28, 2019, whereby Lessor granted to Lessee an Option to lease a portion of the Premises (as defined below). All terms used but not defined herein shall have the meaning ascribed to them in the Lease.

WHEREAS, Lessor and Lessee desire to enter into this Memorandum to give notice of said Lease and all of its terms, covenants and conditions to the same extent as if the same were fully set forth herein.

NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration including the option, the rents reserved and the covenants and conditions more particularly set forth in the Lease, Lessor and Lessee do hereby covenant, promise and agree as follows:

1. The Lease provides in part that Lessor grants to Lessee an exclusive and irrevocable Option to lease approximately 10,000 (100' x 100') square feet as depicted in Exhibit "A" attached hereto (the "Leased Space") within the property located at Highway 80 & Whitson Road, City of Somerset, County of Pulaski, State of Kentucky 42503, Property Parcel ID: 089-7-0-06, with the legal description set forth in Exhibit "B" attached hereto (the "Premises"). The Initial Option Period expires two (2) years from date of execution and may be extended for an additional period of two (2) years.

2. In the event Lessee exercises the Option, Lessee shall lease the Leased Space from Lessor, together with all easements for ingress, egress and utilities as more particularly described in the Lease, all upon the terms and conditions more particularly set forth in the Lease for a term of five (5) years, which term is subject to ten (10) additional five (5) year extension periods.

Site Name: Shopville Relo
Site No.: KY22841-S



3. The sole purpose of this instrument is to give notice of said Lease and all its terms, covenants and conditions to the same extent as if the same were fully set forth herein. The Lease contains certain other rights and obligations in favor of Lessor and Lessee which are more fully set forth therein.

4. **Right of First Refusal.** If at any time during the term of this Lease, Lessor receives a bona fide written offer from any company or its affiliates (a) engaged in the business of owning, operating or maintaining wireless communications facilities, or (b) having any interest as a landlord, tenant or any other capacity in any wireless communications ground lease or easement (the "Offer") to sell, assign, convey, lease or otherwise transfer or create any interest in the current or future Rent, the Premises or the Leased Space, or any portion thereof, which Lessor desires to accept, Lessor shall first give Lessee written notice (including a copy of the proposed contract) of such Offer prior to becoming obligated under such Offer, with such notice giving Lessee the right to acquire the interest described in the Offer on the terms set forth in the Offer. Lessee shall have a period of thirty (30) days after receipt of Lessor's notice and terms to exercise Lessee's right of first refusal by notifying Lessor in writing. If Lessee has not exercised its right of first refusal in writing to Lessor within such thirty (30) day period, the Offer will be deemed rejected. Lessor may not assign the Rent or this Lease or any rights hereunder, or grant any interest in any portion of the Premises, except in connection with conveyance of fee simple title to the Premises, without the prior written consent of Lessee, in Lessee's sole and absolute discretion. Any action taken by Lessor as part of a scheme or contrivance to circumvent the intent of this Section will cause the annual Rent payable to Lessor or its successors or assigns to be reduced by fifty percent (50%) for all terms remaining under this Lease.

5. **Exclusivity.** As part of Lessee's right to the undisturbed use and enjoyment of the Leased Space, Lessor shall not at any time during the Option Period or the Term of this Lease (i) use or suffer or permit another person to use any portion of the Premises or any adjacent parcel of land now or hereafter owned, leased or managed by Lessor for any of the uses permitted herein or other uses similar thereto, or (ii) grant any interest in or an option to acquire any interest in any portion of the Premises that permits (either during the Option Period or the Term of this Lease) any of the uses permitted under this Lease or other uses similar thereto without the prior written consent of Lessee, in Lessee's sole discretion. The phrase "or other uses similar thereto" as used herein shall include, without limitation, the transmission, reception or relay of communications signals and/or data by way of small cells, distributed antenna systems, data centers, C-RAN or fiber.

6. **Assignment.** Lessor may not assign the Rent or the Lease or any rights thereunder, or grant any interest in any portion of the Premises, except in connection with conveyance of fee simple title to the Premises, without the prior written consent of Lessee, in Lessee's sole and absolute discretion.

7. The conditions, covenants and agreements contained in this instrument shall be binding upon and inure to the benefit of the parties hereto, their respective heirs, executors, administrators, successors and assigns for the Term of the Lease and any extensions thereof. All covenants and agreements of the Lease shall run with the land.

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

WITNESSES:

LESSOR: WILLIAM A. VAUGHT

Melody M. Simpson

By: William A. Vaught

Melody M. Simpson
Print Name

Print: William A. Vaught
Title: Owner
Date: 1-25-2019

Connie Woodall

Connie Woodall
Print Name

STATE OF Kentucky
COUNTY OF Petaski } ss:

I HEREBY CERTIFY that on this day, before me, an officer duly authorized in the State aforesaid and in the County aforesaid, to take acknowledgments, personally appeared WILLIAM A. VAUGHT, to me known to be the person described in and who executed the foregoing instrument and who acknowledged before me that he executed the same in the capacity aforesaid.

WITNESS my hand and official seal in the County and State last aforesaid the 25th day of January, 2019.

Sign Name: Jay McShurley
Print Name: Jay McShurley
Notary Public

My Commission expires on: 9-14-2022



WITNESSES:

Melody M. Simpson

Melody M. Simpson
Print Name

Connie Woodall

Connie Woodall
Print Name

LESSOR: AUDEAN VAUGHT

By: Audean Vaught

Print: Audean Vaught

Title: Owner

Date: 1-25-2019

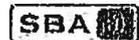
STATE OF Kentucky }
COUNTY OF Pulaski } ss:

I HEREBY CERTIFY that on this day, before me, an officer duly authorized in the State aforesaid and in the County aforesaid, to take acknowledgments, personally appeared Audean Vaught to me known to be the person described in and who executed the foregoing instrument and who acknowledged before me that she executed the same in the capacity aforesated.

WITNESS my hand and official seal in the County and State last aforesaid the 25th day of January, 2019.

Sign Name: Jay McShurley
Print Name: Jay McShurley
Notary Public

My Commission expires on: 9-14-2022



WITNESSES:

[Signature]

Andrea Reid-Gentles

Print Name

[Signature]

Nazarah Williams
Print Name

LESSEE: SBA TOWERS IX, LLC,
a Delaware limited liability company

By: [Signature]
Print: Alyssa Houlihan
Its: Vice President, Site Leasing
Date: 10/8/2012

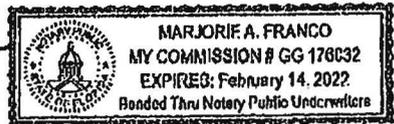
(CORPORATE SEAL)

STATE OF FLORIDA }
COUNTY OF PALM BEACH } .ss:

I HEREBY CERTIFY that on this day, before me, an officer duly authorized in the State aforesaid and in the County aforesaid, to take acknowledgments, personally appeared **ALYSSA HOULIHAN**, as VICE PRESIDENT, SITE LEASING of SBA TOWERS IX, LLC, a Delaware limited liability company, to me known to be the person described in and who executed the foregoing instrument and who acknowledged before me that she executed the same in the capacity aforesated.

WITNESS my hand and official seal in the County and State last aforesaid the 28 day of January 2019.

Sign Name: [Signature]
Print Name: Marjorie A. Franco
Notary Public



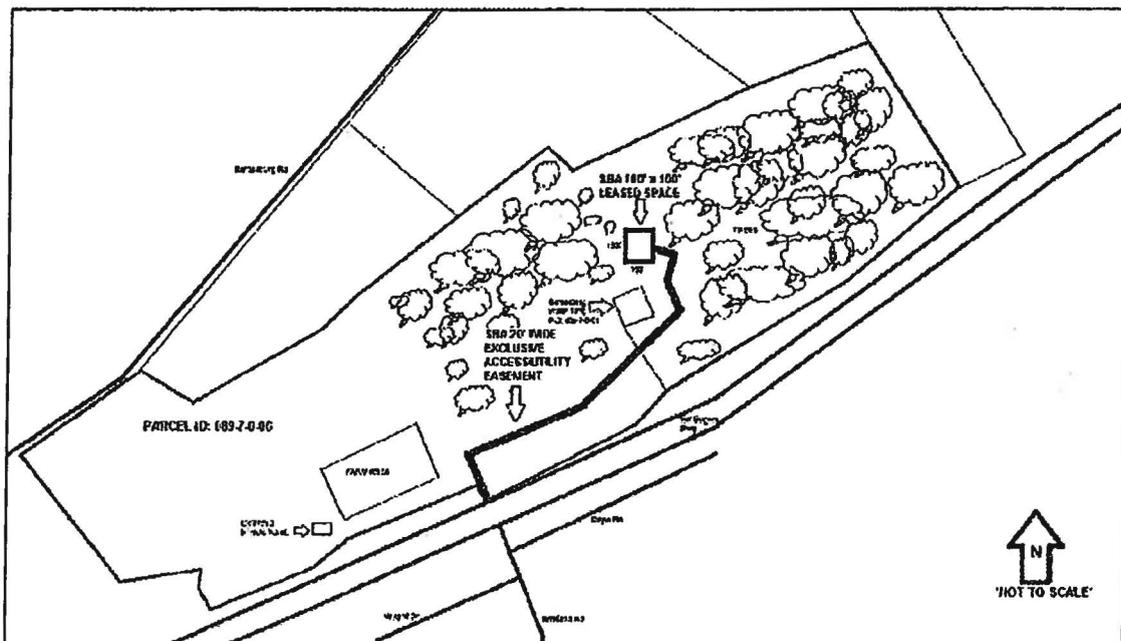
My Commission Expires: 2/14/2022



EXHIBIT A

The Leased Space shall consist of 10,000 (100' x 100') square feet of ground space along with easement rights for access to the Leased Space by vehicle or foot from the nearest public way and for the installation of utility wires, poles, cables, conduits and pipes on the Premises in the approximate locations as depicted below:

LEASED SPACE LEGAL DESCRIPTION/ACCESS AND UTILITY EASEMENTS (SKETCH IF UNAVAILABLE)



Site Name: Shopville Reno
Site No.: KY22841-S

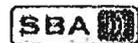


EXHIBIT B

LEGAL DESCRIPTION OF THE PREMISES

A portion of :

TRACT 1: All that portion lying on the North side of Highway No. 80 East and West of the Whitson Road and on the South side of land owned by Arnold Hansford which was conveyed to J. M. Moore on the 7th day of March, 1928 and recorded in Deed Book 99, Page 386 in the Pulaski County Court Clerk's Office.

TRACT 2: All that portion of land lying on the South side of Highway No. 80 East and bounded on the North by above mentioned Highway, on the West by a portion of the Will James farm, and on the East by the land of James Whitson and the Whitson Road.

TRACT 3: A certain tract of land located, lying and being in Pulaski County, State of Kentucky, on the waters of Flatlick Creek, bounded as follows, viz:

Bounded on the South by Highway No. 80 and W. R. Jones; on the East by James A. Hansford; on the North by Randall Cook and Walter Swallows; and on the West by the Whitson Road.

TRACT 4: A certain tract or parcel of land located, lying and being in Pulaski County, Kentucky on the waters of Flat Lick Creek and comprising two tracts:

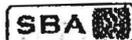
First: A certain tract of land lying and being in Pulaski County, Kentucky on the waters of Flat Lick Creek and bounded as follows: On the North by the lands of A. J. Barron; on the East by the lands of S. B. Sutton; on the South by the lands of A. F.

Being the same property conveyed to William A. Vaught, a married person, and Marvin W. Vaught, a married person, by Deed dated September 6, 2000, of record in Deed Book 663, Page 605, Pulaski County Court Clerk's Office, Kentucky. The Life Estates of Allen Vaught and Marie Vaught, situated in Deed Book 663, Page 605, were extinguished as of their deaths. Marvin W. Vaught died testate, devising his interest in the above described property to his wife, Yolanda Dick Vaught. For particulars thereof, see Will Book 053, Page 281, Pulaski County Court Clerk's Office, Kentucky.

Filed: 02/19/2019 01:27:59 PM
Linda Burnett, County Clerk
Pulaski County, KY

Site Name: Shopville Relo
Site No.: KY22841-S

Received By: PAM JONES



millman
surveying National Land Surveyors

a millman land company

Corporate Headquarters
4111 Bradley Circle NW, Suite 240
Canton, OH 44718

PHONE 330.342.0723
TOLL FREE 800.520.1010
FAX 330.342.6224

February 14, 2019

RE:

Site name: **Shopville Relo**
Site number: **KY22841**
Site Address: **TBD – Hwy 80**
Somerset, Kentucky 42503

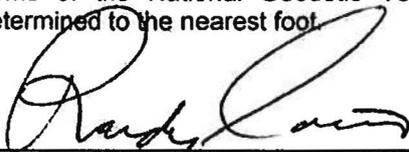
Center of Proposed Tower:

Latitude: **North 37 degrees 09 minutes 22.69 seconds (NAD 83)**
Longitude: **West 84 degrees 30 minutes 42.74 seconds (NAD 83)**

Ground Elevation at Tower: **1248.48' A.M.S.L.**

I hereby certify that the latitude, longitude, and elevations shown hereon were determined from an actual survey performed on the ground by me, or those under my direction, and that the same are within the following FCC "1A" tolerances, horizontal-plus or minus 15 feet, vertical-plus or minus 3 feet.

I also certify that the horizontal datum (coordinates) are in terms of the North American Datum of 1983 (NAD-83) and are expressed as degrees, minutes, and seconds, to the nearest hundredth of a second. The vertical datum (heights) are in terms of the National Geodetic Vertical datum of 1988 (NAVD 88) and are determined to the nearest foot.



Randy M. Davis, F/S
Kentucky Professional Surveyor No. 3740
For and on behalf of Millman Surveying, Inc.,
MSI JOB NO. 44591



EXHIBIT

M



Antenna Structure Registration

[FCC](#) > [WTB](#) > [ASR](#) > [Online Systems](#) > [ASR Search](#)

[FCC Site Map](#)

ASR Application Search

Application A1134340

[? HELP](#)

[New Search](#)
[Return to Results](#)
[Printable Page](#)
[Reference Copy](#)
[Map Application](#)

Application Detail

| | | | |
|---------------------|----------|-------------|----|
| File Number | A1134340 | Constructed | |
| Registration Number | | Dismantled | |
| NEPA | | EMI | No |

Application Information

| | | | |
|---------|-------------|---------------|------------|
| Status | Pending | Date Received | 04/15/2019 |
| Purpose | New | Entered | 04/15/2019 |
| Mode | Interactive | | |

Antenna Structure

Structure Type L TOWER - Lattice Tower

Location (in NAD83 Coordinates - [Convert to NAD27](#))

| | | | |
|--------------------|----------------------------|----------------------------|------------------------|
| Lat/Long | 37-09-22.7 N 084-30-42.7 W | Address | TBD Hwy 80 (KY22841-S) |
| City, State | Somerset , KY | | |
| Zip | 42503 | County | PULASKI |
| Center of AM Array | | Position of Tower in Array | |

Heights (meters)

| | | | |
|--|-------|---|------|
| Elevation of Site Above Mean Sea Level | 380.4 | Overall Height Above Ground (AGL) | 94.2 |
| Overall Height Above Mean Sea Level | 474.6 | Overall Height Above Ground w/o Appurtenances | 93.0 |

Proposed Marking and/or Lighting

FAA Style E

FAA Notification

FAA Study FAA Issue Date

Owner & Contact Information

| | | | |
|-----|------------|-------------------|---------------------------|
| FRN | 0024896698 | Owner Entity Type | Limited Liability Company |
|-----|------------|-------------------|---------------------------|

Owner

SBA Towers IX, LLC
 Attention To: Edward G. Roach
 8051 Congress Avenue
 Boca Raton , FL 33487

P: (561)995-7670
 F:
 E: ERoach@sbsite.com

Contact

Attention To: Edward G. Roach
8051 Congress Avenue
Boca Raton , FL 33487

P: (561)995-7670
F:
E: ERoach@sbsite.com

Environmental Compliance

Does the applicant request a Waiver of the Commission's rules for environmental notice?

No

Is another Federal Agency taking responsibility for environmental review?

No

Reason for another Federal Agency taking responsibility for environmental review

Is the applicant submitting an Environmental Assessment?

No

Does the applicant certify to No Significant Environmental Effect pursuant to Section

Basis for Certification

Name of Federal Agency

Local Notice Date

National Notice Date

04/19/2019

Certification

Authorized Party Roach, Edward G Title VP

Receipt Date 04/15/2019

Comments

Comments

None

History

| Date | Event |
|------------|--------------------------|
| 04/15/2019 | New Application Received |

Trans Log

| Date | Description | Existing Value | Requested Value |
|------|-------------|----------------|-----------------|
| None | | | |

Pleadings

| Pleading Type | File Name | Description | Date Entered |
|---------------|-----------|-------------|--------------|
| None | | | |

Automated Letters

| Date | Description |
|------|-------------|
| None | |

Attachments

| Type | Description | Date Entered |
|------|-------------|--------------|
| None | | |

ASR Help [ASR License Glossary](#) - [FAQ](#) - [Online Help](#) - [Documentation](#) - [Technical Support](#)
ASR Online Systems [TOWAIR](#)- [CORES](#) - [ASR Online Filing](#) - [Application Search](#) - [Registration Search](#)
About ASR [Privacy Statement](#) - [About ASR](#) - [ASR Home](#)

EXHIBIT

N

ULS License

700 MHz Upper Band (Block C) License - WQJQ692 - Cellco Partnership

PA This license has pending applications: 0008587218, 0008581617, 0008404248

| | | | |
|-----------|---------|---------------|-----------------------------------|
| Call Sign | WQJQ692 | Radio Service | WU - 700 MHz Upper Band (Block C) |
| Status | Active | Auth Type | Regular |

Rural Service Provider Bidding Credit

Is the Applicant seeking a Rural Service Provider (RSP) bidding credit?

Reserved Spectrum

Reserved Spectrum

Market

| | | | |
|-----------|-----------------------------|------------------------------|---|
| Market | REA004 - Mississippi Valley | Channel Block | C |
| Submarket | 0 | Associated Frequencies (MHz) | 000746.00000000-000757.00000000-000776.00000000-000787.00000000 |

Dates

| | | | |
|-----------|------------|--------------|------------|
| Grant | 11/26/2008 | Expiration | 06/13/2019 |
| Effective | 11/28/2018 | Cancellation | |

Buildout Deadlines

| | | | |
|-----|------------|-----|------------|
| 1st | 06/13/2013 | 2nd | 06/13/2019 |
|-----|------------|-----|------------|

Notification Dates

| | | | |
|-----|------------|-----|--|
| 1st | 06/20/2013 | 2nd | |
|-----|------------|-----|--|

Licensee

| | | | |
|-----|------------|------|---------------------|
| FRN | 0003290673 | Type | General Partnership |
|-----|------------|------|---------------------|

Licensee

| | |
|---|---|
| Cellco Partnership 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory | P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com |
|---|---|

Contact

| | |
|--|---|
| Verizon Wireless Licensing Manager 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory | P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com |
|--|---|

Ownership and Qualifications

| | | | |
|--------------------|----------------|----------------|-----|
| Radio Service Type | Mobile | | |
| Regulatory Status | Common Carrier | Interconnected | Yes |

Alien Ownership

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

Basic Qualifications

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

Tribal Land Bidding Credits

This license did not have tribal land bidding credits.

Demographics

Race

Ethnicity

Gender

ULS License

Cellular License - KNKN940 - Rural Cellular Corporation

| | | | |
|---------------|-------------------------------|---------------|---------------|
| Call Sign | KNKN940 | Radio Service | CL - Cellular |
| Status | Active | Auth Type | Regular |
| Market | | | |
| Market | CMA448 - Kentucky 6 - Madison | Channel Block | A |
| Submarket | 0 | Phase | 2 |
| Dates | | | |
| Grant | 08/31/2010 | Expiration | 10/01/2020 |
| Effective | 11/02/2016 | Cancellation | |

Five Year Buildout Date

03/11/1996

Control Points

2 500 W Dove Rd, TARRANT, Southlake, TX
P: (800)264-6620

Licensee

| | | | |
|-----|------------|------|-------------|
| FRN | 0003715919 | Type | Corporation |
|-----|------------|------|-------------|

Licensee

| | |
|---|---|
| Rural Cellular Corporation 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory | P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com |
|---|---|

Contact

| | |
|--|---|
| Verizon Wireless Licensing Manager 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory | P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com |
|--|---|

Ownership and Qualifications

| | | | |
|--------------------|----------------|----------------|-----|
| Radio Service Type | Mobile | | |
| Regulatory Status | Common Carrier | Interconnected | Yes |

Alien Ownership

Is the applicant a foreign government or the representative of any foreign government? No

Is the applicant an alien or the representative of an alien? No

Is the applicant a corporation organized under the laws of any foreign government? No

Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country? No

Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a Yes

foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?

If the answer to the above question is 'Yes', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application? **Yes**

Basic Qualifications

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

Demographics

Race

Ethnicity

Gender

ULS License

AWS (1710-1755 MHz and 2110-2155 MHz) License - WQGA940 - Cellco Partnership

| | | | |
|-----------|---------|---------------|--|
| Call Sign | WQGA940 | Radio Service | AW - AWS (1710-1755 MHz and 2110-2155 MHz) |
| Status | Active | Auth Type | Regular |

Rural Service Provider Bidding Credit

Is the Applicant seeking a Rural Service Provider (RSP) bidding credit?

Reserved Spectrum

Reserved Spectrum

Market

| | | | |
|-----------|---------------------------------|------------------------------|---|
| Market | BEA047 - Lexington, KY-TN-VA-WV | Channel Block | B |
| Submarket | 11 | Associated Frequencies (MHz) | 001720.00000000-001730.00000000-002120.00000000-002130.00000000 |

Dates

| | | | |
|-----------|------------|--------------|------------|
| Grant | 11/29/2006 | Expiration | 11/29/2021 |
| Effective | 11/01/2016 | Cancellation | |

Buildout Deadlines

| | |
|-----|-----|
| 1st | 2nd |
|-----|-----|

Notification Dates

| | |
|-----|-----|
| 1st | 2nd |
|-----|-----|

Licensee

| | | | |
|-----|------------|------|---------------------|
| FRN | 0003290673 | Type | General Partnership |
|-----|------------|------|---------------------|

Licensee

| | |
|---|---|
| Cellco Partnership 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory | P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com |
|---|---|

Contact

| | |
|--|---|
| Cellco Partnership Licensing Manager 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory | P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com |
|--|---|

Ownership and Qualifications

| | |
|--------------------|--------|
| Radio Service Type | Mobile |
|--------------------|--------|

Regulatory Status Common Carrier Interconnected Yes

Alien Ownership

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

Basic Qualifications

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

Tribal Land Bidding Credits

This license did not have tribal land bidding credits.

Demographics

Race

Ethnicity

Gender

ULS License

AWS (1710-1755 MHz and 2110-2155 MHz) License - WQGA819 - Rural Cellular Corporation

| | | | |
|-----------|---------|---------------|--|
| Call Sign | WQGA819 | Radio Service | AW - AWS (1710-1755 MHz and 2110-2155 MHz) |
| Status | Active | Auth Type | Regular |

Rural Service Provider Bidding Credit

Is the Applicant seeking a Rural Service Provider (RSP) bidding credit?

Reserved Spectrum

Reserved Spectrum

Market

| | | | |
|-----------|-------------------------------|------------------------------|--|
| Market | CMA448 - Kentucky 6 - Madison | Channel Block | A |
| Submarket | 0 | Associated Frequencies (MHz) | 001710.00000000- 001720.00000000 002110.00000000- 002120.00000000 |

Dates

| | | | |
|-----------|------------|--------------|------------|
| Grant | 11/29/2006 | Expiration | 11/29/2021 |
| Effective | 11/02/2016 | Cancellation | |

Buildout Deadlines

| | |
|-----|-----|
| 1st | 2nd |
|-----|-----|

Notification Dates

| | |
|-----|-----|
| 1st | 2nd |
|-----|-----|

Licensee

| | | | |
|-----|------------|------|-------------|
| FRN | 0003715919 | Type | Corporation |
|-----|------------|------|-------------|

Licensee

| | |
|---|---|
| Rural Cellular Corporation 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory | P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com |
|---|---|

Contact

| | |
|--|---|
| Verizon Wireless Licensing - Manager 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory | P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com |
|--|---|

Ownership and Qualifications

Radio S

EXHIBIT

O

ULS License

SMR, 806-821/851-866 MHz, Auctioned License - WPOI378 - NEXTEL WEST CORP.

PA This license has pending applications: 0008235886

| | | | |
|-----------|---------|---------------|--|
| Call Sign | WPOI378 | Radio Service | YC - SMR, 806-821/851-866 MHz, Auctioned |
| Status | Active | Auth Type | Regular |

Rural Service Provider Bidding Credit

Is the Applicant seeking a Rural Service Provider (RSP) bidding credit?

Reserved Spectrum

Reserved Spectrum

Market

| | | | |
|-----------|---------------------------------|------------------------------|---|
| Market | BEA047 - Lexington, KY-TN-VA-WV | Channel Block | B |
| Submarket | 7 | Associated Frequencies (MHz) | 000816.50000000-000818.00000000-000861.50000000-000863.00000000 |

Dates

| | | | |
|-----------|------------|--------------|------------|
| Grant | 08/08/2018 | Expiration | 06/17/2028 |
| Effective | 12/04/2018 | Cancellation | |

Buildout Deadlines

| | | | |
|-----|------------|-----|------------|
| 1st | 06/17/2001 | 2nd | 06/17/2003 |
|-----|------------|-----|------------|

Notification Dates

| | | | |
|-----|------------|-----|------------|
| 1st | 06/29/2001 | 2nd | 05/12/2003 |
|-----|------------|-----|------------|

Licensee

| | | | |
|-----|------------|------|-------------|
| FRN | 0001608363 | Type | Corporation |
|-----|------------|------|-------------|

Licensee

| | |
|---|---|
| NEXTEL WEST CORP. 12502 Sunrise Valley Drive, M/S: VARESA0209 RESTON, VA 20196 ATTN Government Affairs | P:(800)572-8256 F:(703)433-4483 E:fcclicensing@sprint.com |
|---|---|

Contact

| | |
|---|---|
| Sprint Corporation 12502 Sunrise Valley Drive, M/S: VARESA0209 RESTON, VA 20196 ATTN Spectrum Licensing Team | P:(800)572-8256 F:(703)433-4483 E:fcclicensing@sprint.com |
|---|---|

Ownership and Qualifications

Radio Service Type Mobile
Regulatory Status Common Carrier Interconnected Yes

Alien Ownership

Is the applicant a foreign government or the representative of any foreign government? No

Is the applicant an alien or the representative of an alien? No

Is the applicant a corporation organized under the laws of any foreign government? No

Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country? No

Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country? **Yes**

The Applicant has received a declaratory ruling(s) approving its foreign ownership, and the application involves only the acquisition of additional spectrum for the provision of a wireless service in a geographic coverage area for which the Applicant has been previously authorized. ✓

Basic Qualifications

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

Tribal Land Bidding Credits

This license did not have tribal land bidding credits.

Demographics

Race

Ethnicity

Gender

ULS License

Broadband Radio Service License - B423 - Clearwire Spectrum Holdings III LLC

| | | | |
|-----------|--------|---------------|------------------------------|
| Call Sign | B423 | Radio Service | BR - Broadband Radio Service |
| Status | Active | Auth Type | Regular |

Rural Service Provider Bidding Credit

Is the Applicant seeking a Rural Service Provider (RSP) bidding credit?

Reserved Spectrum

Reserved Spectrum

Dates

| | | | |
|-----------|------------|--------------|------------|
| Grant | 05/10/2016 | Expiration | 03/28/2026 |
| Effective | 01/28/2019 | Cancellation | |

Buildout Deadlines

| | | | |
|-----|------------|-----|--|
| 1st | 05/01/2011 | 2nd | |
|-----|------------|-----|--|

Notification Dates

| | | | |
|-----|------------|-----|--|
| 1st | 05/11/2011 | 2nd | |
|-----|------------|-----|--|

Licensee

| | | | |
|-----|------------|------|---------------------------|
| FRN | 0018399998 | Type | Limited Liability Company |
|-----|------------|------|---------------------------|

Licensee

| | |
|---|---|
| Clearwire Spectrum Holdings III LLC 12502 Sunrise Valley Drive, M/S: VARESA0209 Reston, VA 20196 ATTN Government Affairs | P:(800)572-8256 F:(703)433-4483 E:fcclicensing@sprint.com |
|---|---|

Contact

| | |
|---|---|
| Sprint Corporation 12502 Sunrise Valley Drive, M/S: VARESA0209 Reston, VA 20196 ATTN Spectrum Licensing Team | P:(800)572-8256 F:(703)433-4483 E:fcclicensing@sprint.com |
|---|---|

Broadband Radio Service and Educational Broadband Service Information

Will the requested facilities be used to provide multichannel video programming service? Yes

If the answer to the above question is yes, does the Applicant operate, control or have an attributable interest (as defined in 47 CFR § 27.1202) in a cable television system whose franchise area is located within the geographic service area of the requested facilities? No

Does the Applicant comply with the programming requirements contained in 47 CFR § 27.1203?

Geographic Service Area

Authorization Type BTA

Market BTA423
Somerset, KY

Channel Plan/Channel Number Information

| Channel Plan | Channel Number |
|--------------|------------------------------------|
| New | BRS1 002496.00000-002502.00000 MHz |
| New | BRS2 002618.00000-002624.00000 MHz |
| New | E1 002624.00000-002629.50000 MHz |
| New | E2 002629.50000-002635.00000 MHz |
| New | E3 002635.00000-002640.50000 MHz |
| New | E4 002608.00000-002614.00000 MHz |
| New | F1 002640.50000-002646.00000 MHz |
| New | F2 002646.00000-002651.50000 MHz |
| New | F3 002651.50000-002657.00000 MHz |
| New | F4 002602.00000-002608.00000 MHz |
| New | H1 002657.00000-002662.50000 MHz |
| New | H2 002662.50000-002668.00000 MHz |
| New | H3 002668.00000-002673.50000 MHz |

Ownership and Qualifications

Radio Service Type Fixed, Mobile
Regulatory Status Non-Common Carrier Interconnected No

Alien Ownership

Is the applicant a foreign government or the representative of any foreign government? No

Is the applicant an alien or the representative of an alien?

Is the applicant a corporation organized under the laws of any foreign government?

Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?

Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?

The Alien Ruling question is not answered.

Basic Qualifications

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

Tribal Land Bidding Credits

This license did not have tribal land bidding credits.

Demographics

Race

Ethnicity

Gender

ULS License

1910-1915/1990-1995 MHz Bands, Market Area License - WQKT263 - NEXTEL WEST CORP.

PA This license has pending applications: 0008235294

| | | | |
|-----------|---------|---------------|---|
| Call Sign | WQKT263 | Radio Service | CY - 1910-1915/1990-1995 MHz Bands, Market Area |
| Status | Active | Auth Type | Regular |

Rural Service Provider Bidding Credit

Is the Applicant seeking a Rural Service Provider (RSP) bidding credit?

Reserved Spectrum

Reserved Spectrum

Market

| | | | |
|-----------|---------------------------------|------------------------------|---|
| Market | BEA047 - Lexington, KY-TN-VA-WV | Channel Block | G |
| Submarket | 2 | Associated Frequencies (MHz) | 001910.00000000-001915.00000000-001990.00000000-001995.00000000 |

Dates

| | | | |
|-----------|------------|--------------|------------|
| Grant | 05/16/2017 | Expiration | 03/03/2026 |
| Effective | 05/19/2017 | Cancellation | |

Buildout Deadlines

| | | | |
|-----|------------|-----|--|
| 1st | 03/03/2016 | 2nd | |
|-----|------------|-----|--|

Notification Dates

| | | | |
|-----|------------|-----|------------|
| 1st | 03/09/2016 | 2nd | 03/09/2016 |
|-----|------------|-----|------------|

Licensee

| | | | |
|-----|------------|------|-------------|
| FRN | 0001608363 | Type | Corporation |
|-----|------------|------|-------------|

Licensee

| | |
|---|---|
| NEXTEL WEST CORP. 12502 Sunrise Valley Drive, M/S: VARESA0209 RESTON, VA 20196 ATTN Government Affairs | P:(800)572-8256 F:(703)433-4483 E:fcclicensing@sprint.com |
|---|---|

Contact

| | |
|--|---|
| Sprint Corporation 12502 Sunrise Valley Drive, M/S: VARESA0209 RESTON, VA 20196 ATTN Spectrum Licensing | P:(800)572-8256 F:(703)433-4483 E:fcclicensing@sprint.com |
|--|---|

Ownership and Qualifications

Radio Service Type Mobile
Regulatory Status Common Carrier Interconnected Yes

Alien Ownership

Is the applicant a foreign government or the representative of any foreign government? No

Is the applicant an alien or the representative of an alien? No

Is the applicant a corporation organized under the laws of any foreign government? No

Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country? No

Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country? **Yes**

The Applicant has received a declaratory ruling(s) approving its foreign ownership, and the application involves only the acquisition of additional spectrum for the provision of a wireless service in a geographic coverage area for which the Applicant has been previously authorized. ✓

Basic Qualifications

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

Tribal Land Bidding Credits

This license did not have tribal land bidding credits.

Demographics

Race

Ethnicity

Gender

ULS License

PCS Broadband License - KNLF252 - Sprint Spectrum Realty Company, LLC

PA This license has pending applications: 0008235383

| | | | |
|-----------|---------|---------------|--------------------|
| Call Sign | KNLF252 | Radio Service | CW - PCS Broadband |
| Status | Active | Auth Type | Regular |

Rural Service Provider Bidding Credit

Is the Applicant seeking a Rural Service Provider (RSP) bidding credit?

Reserved Spectrum

Reserved Spectrum

Market

| | | | |
|-----------|---|------------------------------|---|
| Market | MTA026 - Louisville-Lexington-Evansvill | Channel Block | B |
| Submarket | 5 | Associated Frequencies (MHz) | 001870.00000000-001885.00000000-001950.00000000-001965.00000000 |

Dates

| | | | |
|-----------|------------|--------------|------------|
| Grant | 07/14/2015 | Expiration | 06/23/2025 |
| Effective | 04/10/2019 | Cancellation | |

Buildout Deadlines

| | | | |
|-----|------------|-----|------------|
| 1st | 06/23/2000 | 2nd | 06/23/2005 |
|-----|------------|-----|------------|

Notification Dates

| | | | |
|-----|------------|-----|------------|
| 1st | 06/02/2000 | 2nd | 11/01/2004 |
|-----|------------|-----|------------|

Licensee

| | | | |
|-----|------------|------|---------------------------|
| FRN | 0008157679 | Type | Limited Liability Company |
|-----|------------|------|---------------------------|

Licensee

| | |
|---|--|
| Sprint Spectrum Realty Company, LLC 12502 Sunrise Valley Drive, M/S: VARESA0209 Reston, VA 20196 ATTN Government Affairs | P:(800)572-8256 F:(703)433-4483 E:fclicensing@sprint.com |
|---|--|

Contact

| | |
|---|--|
| Sprint Corporation 12502 Sunrise Valley Drive, M/S: VARESA0209 Reston, VA 20196 ATTN Spectrum Licensing Team | P:(800)572-8256 F:(703)433-4483 E:fclicensing@sprint.com |
|---|--|

Ownership and Qualifications

Radio Service Type Mobile

Regulatory Status Common Carrier Interconnected Yes

Alien Ownership

Is the applicant a foreign government or the representative of any foreign government? No

Is the applicant an alien or the representative of an alien? No

Is the applicant a corporation organized under the laws of any foreign government? No

Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country? No

Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country? **Yes**

The Applicant has received a declaratory ruling(s) approving its foreign ownership, and the application involves only the acquisition of additional spectrum for the provision of a wireless service in a geographic coverage area for which the Applicant has been previously authorized. ✓

Basic Qualifications

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

Tribal Land Bidding Credits

This license did not have tribal land bidding credits.

Demographics

Race

Ethnicity

Gender

ULS License

**SMR, 806-821/851-866 MHz, Auctioned (Rebanded YC license) License
- WPOI379 - NEXTEL WEST CORP.**

PA This license has pending applications: 0008235886

| | | | |
|-----------|---------|---------------|--|
| Call Sign | WPOI379 | Radio Service | YH - SMR, 806-821/851-866 MHz, Auctioned (Rebanded YC license) |
| Status | Active | Auth Type | Regular |

Rural Service Provider Bidding Credit

Is the Applicant seeking a Rural Service Provider (RSP) bidding credit?

Reserved Spectrum

Reserved Spectrum

Market

| | | | |
|-----------|---------------------------------|------------------------------|---|
| Market | BEA047 - Lexington, KY-TN-VA-WV | Channel Block | X |
| Submarket | 2 | Associated Frequencies (MHz) | 000818.00000000- 000821.00000000- 000821.00000000- 000824.00000000- 000863.00000000- 000866.00000000- 000866.00000000- 000869.00000000 |

Dates

| | | | |
|-----------|------------|--------------|------------|
| Grant | 08/27/2018 | Expiration | 06/17/2028 |
| Effective | 12/04/2018 | Cancellation | |

Buildout Deadlines

| | | | |
|-----|------------|-----|------------|
| 1st | 06/17/2001 | 2nd | 06/17/2003 |
|-----|------------|-----|------------|

Notification Dates

| | | | |
|-----|------------|-----|------------|
| 1st | 06/29/2001 | 2nd | 05/12/2003 |
|-----|------------|-----|------------|

Licensee

| | | | |
|-----|------------|------|-------------|
| FRN | 0001608363 | Type | Corporation |
|-----|------------|------|-------------|

Licensee

| | |
|---|---|
| NEXTEL WEST CORP. 12502 Sunrise Valley Drive, M/S: VARESA0209 RESTON, VA 20196 ATTN Government Affairs | P:(800)572-8256 F:(703)433-4483 E:fcclicensing@sprint.com |
|---|---|

Contact

| | |
|---|---|
| Sprint Corporation 12502 Sunrise Valley Drive, M/S: VARESA0209 | P:(800)572-8256 F:(703)433-4483 E:fcclicensing@sprint.com |
|---|---|

RESTON, VA 20196
ATTN Spectrum Licensing Team

Ownership and Qualifications

Radio Service Type Mobile
Regulatory Status Common Carrier Interconnected Yes

Alien Ownership

Is the applicant a foreign government or the representative of any foreign government? No

Is the applicant an alien or the representative of an alien? No

Is the applicant a corporation organized under the laws of any foreign government? No

Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country? No

Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country? **Yes**

The Applicant has received a declaratory ruling(s) approving its foreign ownership, and the application involves only the acquisition of additional spectrum for the provision of a wireless service in a geographic coverage area for which the Applicant has been previously authorized. ✓

Basic Qualifications

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

Tribal Land Bidding Credits

This license did not have tribal land bidding credits.

Demographics

Race

Ethnicity

Gender

EXHIBIT

P



GEOTECHNICAL INVESTIGATION REPORT

June 3, 2019

Prepared For:

SBA Communications



**Shopville Relo - KY
KY22841**

Proposed 305-Foot Self-Supporting Tower
HWY 80, Somerset (Pulaski County), Kentucky, 42503
Latitude N 37° 09' 22.7" Longitude W 84° 30' 42.7"

Delta Oaks Group Project GEO19-04537-08
Revision 0

Performed By:

John S. Scott, E.I.

Reviewed By:

Joseph V. Borrelli, Jr., P.E.





INTRODUCTION

This geotechnical investigation report has been completed for the proposed 305-foot self-supporting tower located at HWY 80 in Somerset (Pulaski County), Kentucky. The purpose of this investigation was to provide engineering recommendations and subsurface condition data at the proposed tower location. A geotechnical engineering interpretation of the collected information was completed and utilized to suggest design parameters regarding the adequacy of the structure's proposed foundation capacity under various loading conditions. This report provides the scope of the geotechnical investigation; geologic material identification; results of the geotechnical laboratory testing; and design parameter recommendations for use in the design of the telecommunication facility's foundation and site development.

SITE CONDITION SUMMARY

The proposed tower and compound are located on a wooded hilltop exhibiting a steep sloping topography across the tower compound and subject property.

REFERENCES

- Preliminary Construction Drawings prepared by The Crossroads Group, LLC dated February 27, 2019
- TIA Standard (TIA-222-G), dated August 2005

SUBSURFACE FIELD INVESTIGATION SUMMARY

The subsurface field investigation was conducted through the advancement of one mechanical soil test borings to the auger refusal depth of 21.3 feet bgs. Samples were obtained at selected intervals in accordance with ASTM D 1586. The sampling was conducted 10.0 feet south of the staked centerline of the proposed tower. Upon encountering auger refusal 5.0 feet of rock coring was conducted in accordance with ASTM D 2113. Soil and rock samples were transported to our laboratory and classified by a geotechnical engineer in accordance with ASTM D 2487. A detailed breakdown of the material encountered in our subsurface field investigation can be found in the boring log presented in the Appendix of this report.

Additional testing was performed on selected samples in accordance with ASTM D 7012 (Unconfined Compressive Strength – Rock). Laboratory data can be found in the Appendix of this report.

A boring plan portraying the spatial location of the boring in relation to the proposed tower, tower compound and immediate surrounding area can be found in the Appendix.



SUBSURFACE CONDITION SUMMARY

The following provides a general overview of the site's subsurface conditions based on the data obtained during our field investigation.

FILL

Topsoil was encountered during the subsurface field investigation from the existing ground surface to a depth of 0.2 feet bgs.

SOIL

The residual soil encountered in the subsurface field investigation began at a depth of 0.2 feet bgs in the boring and consisted of sandy lean clay, lean clay, and silty clay. The materials ranged from a stiff to very stiff cohesion.

Auger advancement refusal was encountered during the subsurface field investigation at a depth of 21.3 feet bgs.

ROCK

Rock was encountered during the subsurface investigation at a depth of 21.3 feet bgs. The rock can be described as intensely to moderately fractured, slightly weathered, hard limestone.

SUBSURFACE WATER

At the time of drilling, subsurface water was not encountered during the subsurface investigation. However, subsurface water elevations can fluctuate throughout the year due to variations in climate, hydraulic parameters, nearby construction activity and other factors.

FROST PENETRATION

The frost penetration depth for Pulaski County Kentucky is 30 inches (2.5 feet).

CORROSIVITY

Soil resistivity was performed in accordance with ASTM G187 with a test result of 23,000 ohms-cm.

**FOUNDATION DESIGN SUMMARY**

In consideration of the provided tower parameters and the determined soil characteristics, Delta Oaks Group recommends utilizing a shallow foundation and/or drilled shaft foundation for the proposed structure. The strength parameters presented in the following sections can be utilized for design of the foundation.

GENERAL SUBSURFACE STRENGTH PARAMETERS

| Boring | Depth (bgs) | USCS | Moist/Buoyant Unit Weight (pcf) | Phi Angle (degrees) | Cohesion (psf) |
|--------|-------------|-----------|---------------------------------|---------------------|----------------|
| B-1 | 0.0 – 0.2 | TOPSOIL | 105 | 0 | 0 |
| | 0.2 – 6.5 | CL | 110 | 0 | 1,000 |
| | 6.5 – 19.0 | CL | 115 | 0 | 2,000 |
| | 19.0 – 21.3 | CL – ML | 110 | 0 | 1,500 |
| | 21.3 – 26.3 | LIMESTONE | 135 | 0 | 15,000 |

- The unit weight provided assumes overburden soil was compacted to a minimum of 95% of the maximum dry density as obtained by the standard Proctor method (ASTM D 698) and maintained a moisture content within 3 percent of optimum
- The values provided for phi angle and cohesion should be considered ultimate.



SUBSURFACE STRENGTH PARAMETERS – SHALLOW FOUNDATION

| Boring | Dimensions (feet) | Depth (feet bgs) | Net Ultimate Bearing Capacity (psf) |
|--------|-------------------|------------------|-------------------------------------|
| B-1 | 5.0 x 5.0 | 3.0 | 6,900 |
| | | 4.0 | 7,150 |
| | | 5.0 | 7,400 |
| | | 6.0 | 7,640 |
| | 10.0 x 10.0 | 3.0 | 6,530 |
| | | 4.0 | 6,660 |
| | | 5.0 | 6,780 |
| | | 6.0 | 6,900 |
| | 15.0 x 15.0 | 3.0 | 6,410 |
| | | 4.0 | 6,490 |
| | | 5.0 | 6,570 |
| | | 6.0 | 6,660 |
| | 20.0 x 20.0 | 3.0 | 6,350 |
| | | 4.0 | 6,410 |
| | | 5.0 | 6,470 |
| | | 6.0 | 6,530 |
| | 25.0 x 25.0 | 3.0 | 6,310 |
| | | 4.0 | 6,360 |
| | | 5.0 | 6,410 |
| | | 6.0 | 6,460 |

- Delta Oaks Group recommends the foundation bear a minimum of 3.0 feet bgs.
- A sliding friction factor of 0.35 can be utilized along the base of the proposed foundation.
- The bearing capacity can be increased by 1/3 for transient loading.
- An Ultimate Passive Pressure Table with a reduction due to frost penetration to a depth of 2.5 feet bgs is presented on the following page.
- Delta Oaks Group recommends an appropriate factor of safety be utilized for the design of the foundation.

**ULTIMATE PASSIVE PRESSURE VS. DEPTH - TOWER FOUNDATION**

| Soil Layers (feet) | | Moist Unit Weight | Phi Angle | Cohesion | PV | KP | Ph |
|--------------------|-----|-------------------|-----------|----------|--------|----|--------|
| Top | 0 | 105 | 0 | 0 | 0 | 1 | 0 |
| Bottom | 0.2 | 105 | 0 | 0 | 21 | 1 | 10.5 |
| Top | 0.2 | 110 | 0 | 1000 | 21 | 1 | 1010.5 |
| Bottom | 2.5 | 110 | 0 | 1000 | 274 | 1 | 1137 |
| Top | 2.5 | 110 | 0 | 1000 | 274 | 1 | 2274 |
| Bottom | 6.5 | 110 | 0 | 1000 | 714 | 1 | 2714 |
| Top | 6.5 | 115 | 0 | 2000 | 714 | 1 | 4714 |
| Bottom | 10 | 115 | 0 | 2000 | 1116.5 | 1 | 5116.5 |



SUBSURFACE STRENGTH PARAMETERS - DRILLED SHAFT FOUNDATION

| Boring | Depth (bgs) | Net Ultimate Bearing Capacity (psf) | Ultimate Skin Friction - Compression (psf) | Ultimate Skin Friction - Uplift (psf) |
|--------|-------------|-------------------------------------|--|---------------------------------------|
| B-1 | 0.0 – 3.0 | - | - | - |
| | 3.0 – 6.5 | 14,750 | 550 | 550 |
| | 6.5 – 9.0 | 17,210 | 910 | 910 |
| | 9.0 – 14.0 | 16,460 | 1,100 | 1,100 |
| | 14.0 – 21.3 | 15,370 | 1,000 | 1,000 |
| | 21.3 – 26.3 | 79,160 | 8,250 | 8,250 |

- The top 3.0 feet of soil should be ignored due to the frost penetration, the potential soil disturbance during construction, and the presence of fill material.
- The bearing capacity can be increased by 1/3 for transient loading.
- The values presented assume the concrete is cast-in-place against earth walls and any casing utilized during construction of the foundation was removed.
- Delta Oaks Group recommends an appropriate factor of safety be utilized for the design of the foundation.



SUBSURFACE STRENGTH PARAMETERS – SUPPORT STRUCTURE FOUNDATION

| Boring | Depth (bgs) | Net Ultimate Bearing Capacity (psf) | Minimum Design Footing Width (ft) | Modulus of Subgrade Reaction (pci) |
|--------|-------------|-------------------------------------|-----------------------------------|------------------------------------|
| B-1 | 2.5 | 6,480 | 2.0 | 200 |
| | 3.0 | 6,740 | | |
| | 4.0 | 7,260 | | |
| | 5.0 | 7,780 | | |

- Delta Oaks Group recommends utilizing a slab on grade in conjunction with continuous perimeter footings that bear on residual soil or properly compacted structural fill placed in accordance with the recommendations provided in the *CONSTRUCTION* section of this report.
- The slab on grade should be properly reinforced to prevent concrete cracking and shrinkage.
- The foundation should bear a minimum of 2.5 feet bgs.
- A sliding friction factor of 0.35 can be utilized along the base of the proposed foundation.
- An Ultimate Passive Pressure Table is presented on the following page. An appropriate reduction should be considered in accordance with local building code frost penetration depth.
- Delta Oaks Group recommends an appropriate factor of safety be utilized for the design of the foundation.

**ULTIMATE PASSIVE PRESSURE VS. DEPTH – SUPPORT STRUCTURE FOUNDATION**

| Soil Layers (feet) | | Moist Unit Weight | Phi Angle | Cohesion | PV | KP | Ph |
|--------------------|-----|-------------------|-----------|----------|--------|----|--------|
| Top | 0 | 105 | 0 | 0 | 0 | 1 | 0 |
| Bottom | 0.2 | 105 | 0 | 0 | 21 | 1 | 10.5 |
| Top | 0.2 | 110 | 0 | 1000 | 21 | 1 | 1010.5 |
| Bottom | 2.5 | 110 | 0 | 1000 | 274 | 1 | 1137 |
| Top | 2.5 | 110 | 0 | 1000 | 274 | 1 | 2274 |
| Bottom | 6.5 | 110 | 0 | 1000 | 714 | 1 | 2714 |
| Top | 6.5 | 115 | 0 | 2000 | 714 | 1 | 4714 |
| Bottom | 10 | 115 | 0 | 2000 | 1116.5 | 1 | 5116.5 |

CONSTRUCTION

SITE DEVELOPMENT

The proposed access road and tower compound should be evaluated by a Geotechnical Engineer, or their representative, after the removal or "cutting" of the areas to design elevation but prior to the placement of any structural fill material to verify the presence of unsuitable or weak material. Unsuitable or weak materials should be undercut to a suitable base material as determined by a Geotechnical Engineer, or their representative. Backfill of any undercut area(s) should be conducted in accordance with the recommendations provided in the *STRUCTURAL FILL PLACEMENT* section of this report.

Excavations should be sloped or shored in accordance and compliance with OSHA 29 CFR Part 1926, Excavation Trench Safety Standards as well as any additional local, state and federal regulations.

STRUCTURAL FILL PLACEMENT

Structural fill materials should be verified, prior to utilization, to have a minimum unit weight of 110 pcf (pounds per cubic foot) when compacted to a minimum of 95% of its maximum dry density and within plus or minus 3 percentage points of optimum moisture. Materials utilized should not contain more than 5 percent by weight of organic matter, waste, debris or any otherwise deleterious materials. The Liquid Limit should be no greater than 40 with a Plasticity Index no greater than 20. Structural fill material should contain a maximum particle size of 4 inches with 20 percent or less of the material having a particle size between 2 and 4 inches. Backfill should be placed in thin horizontal lifts not to exceed 8 inches (loose) in large grading areas and 4 inches (loose) where small handheld or walk-behind compaction equipment will be utilized. The potential suitability of on-site materials to be utilized as fill should be evaluated by a Geotechnical Engineer, or their representative just prior to construction.

During construction structural fill placement should be monitored and tested. This should include at minimum, visual observation as well as a sufficient amount of in-place field density tests by a Geotechnical Engineer, or their representative. Materials should be compacted to a minimum of 95% of the maximum dry density as determined by ASTM D 698 (standard Proctor method). Moisture contents should be maintained to within plus or minus 3 percentage points of the optimum moisture content.

SHALLOW FOUNDATIONS

Foundation excavation(s) should be evaluated by a Geotechnical Engineer, or their representative, prior to reinforcing steel and concrete placement. This evaluation should include visual observation to verify a level bearing surface; vertical side-walls with no protrusions, sloughing or caving; and the exposed bearing surface is free of deleterious material, loose soil and standing water. Excavation dimensions should be verified and testing performed on the exposed bearing surface to verify compliance with design recommendations. Bearing testing should be conducted in accordance with ASTM STP399 (Dynamic Cone Penetrometer). A 6-inch layer of compacted crushed stone should be installed prior to reinforcing steel and concrete placement. If subsurface water is encountered during excavation dewatering methods such as sump pumps or well points may be required.

DRILLED SHAFT FOUNDATIONS

Drilled shaft foundations (caissons) are typically installed utilizing an earth auger to reach the design depth of the foundation. Specialized roller bits or core bits can be utilized to penetrate boulders or rock. The equipment utilized should have cutting teeth to result in an excavation with little or no soil smeared or caked on the excavation sides with spiral-like corrugated walls. The drilled shaft design diameter should be maintained throughout the excavation with a plumbness tolerance of 2 percent of the length and an eccentricity tolerance of 3 inches from plan location. A removable steel casing can be installed in the shaft to prevent caving of the excavation sides due to soil relaxation. Upon completion of the drilling and casing placement, loose soils and subsurface water greater than 3-inches in depth should be removed from the bottom of the excavation for the "dry" installation method. The drilled shaft installation should be evaluated by a Geotechnical Engineer, or their representative, to verify suitable end bearing conditions, design diameter and bottom cleanliness. The evaluation should be conducted immediately prior to as well as during concrete placement operations.

The drilled shaft should be concreted as soon as reasonably practical after excavation to reduce the deterioration of the supporting soils to prevent potential caving and water intrusion. A concrete mix design with a slump of 6 to 8 inches employed in conjunction with the design concrete compressive strength should be utilized for placement. Super plasticizer may be required to obtain the recommended slump range. During placement, the concrete may fall freely through the open area in the reinforcing steel cage provided it does not strike the reinforcing steel and/or the casing prior to reaching the bottom of the excavation. The removable steel casing should be extracted as concrete is placed. During steel casing removal a head of concrete should be maintained above the bottom of the casing to prevent soil and water intrusion into the concrete below the bottom of the casing.

If subsurface water is anticipated and/or weak soil layers are encountered drilled shafts are typically installed utilizing the "wet" method by excavating beneath a drilling mud slurry. The drilling mud slurry is added to the drilled shaft excavation after groundwater has been encountered and/or the sides of the excavation are observed to be caving or sloughing. Additional inspection by a Geotechnical Engineer, or their representative, during the "wet" method should consist of verifying 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 just prior to concreting.

Concrete placement utilizing the "wet" method is conducted through a tremie pipe at the bottom of the excavation with the drilling mud slurry level maintained at a minimum of 5 feet or one shaft diameter, whichever is greater, above the ground water elevation. The bottom of the tremie should be set one tremie pipe diameter above the excavation. A closure flap at the bottom of the tremie or a sliding plug introduced into the tremie before the concrete is recommended to reduce the potential contamination of the concrete by the drilling mud slurry. The bottom of the tremie must be maintained in the concrete during placement. Additional concrete should be placed through the tremie causing the slurry to overflow from the excavation in order to reduce the potential for the development of "slurry pockets" remaining in the drilled shaft.



QUALIFICATIONS

The design parameters and conclusions provided in this report have been determined in accordance with generally accepted geotechnical engineering practices and are considered applicable to a rational degree of engineering certainty based on the data available at the time of report preparation and our practice in this geographic region. All recommendations and supporting calculations were prepared based on the data available at the time of report preparation and knowledge of typical geotechnical parameters in the applicable geographic region.

The subsurface conditions used in the determination of the design recommendations contained in this report are based on interpretation of subsurface data obtained at specific boring locations. Irrespective of the thoroughness of the subsurface investigation, the potential exists that conditions between borings will differ from those at the specific boring locations, that conditions are not as anticipated during the original analysis, or that the construction process has altered the soil conditions. That potential is significantly increased in locations where existing fill materials are encountered. Additionally, the nature and extent of these variations may not be evident until the commencement of construction. Therefore, a geotechnical engineer, or their representative, should observe construction practices to confirm that the site conditions do not differ from those conditions anticipated in design. If such variations are encountered, Delta Oaks Group should be contacted immediately in order to provide revisions and/or additional site exploration as necessary.

Samples obtained during our subsurface field investigation will be retained by Delta Oaks Group for a period of 30 days unless otherwise instructed by B+T Group. No warranty, expressed or implied, is presented.

Delta Oaks Group appreciates the opportunity to be of service for this Geotechnical Investigation Report. Please do not hesitate to contact Delta Oaks Group with any questions or should you require additional service on this project.



APPENDIX

BORING PLAN



EXHIBIT

Q



SBA Communications Corporation
8051 Congress Avenue
Boca Raton, FL 33487-1307

T + 561.995.7670
F + 561.995.7626

sbasite.com

Re: PSC Case No.: 2019-00149
SBA Site ID: KY22841-S
SBA Site Name: Shopville Relo
Site Coordinates: 37°09'22.69" N
84°30'42.74" W

**Directions from County Seat of Pulaski County, Kentucky
to the Proposed Site**

From the Pulaski County Courthouse, 100 N Main St, Somerset, Kentucky 42501 to (approximately) 2770 Barnesburg Rd, Somerset, Kentucky 42503

Follow KY-80 BUS E to KY-80 E (approximately 1.5 mi)

1. Head south on N Main St toward W Mt Vernon St. and travel approximately 177 ft
2. Turn left onto Public Square. and travel approximately 194 ft
3. Turn right onto KY-80 BUS E/E Mt Vernon St. and travel approximately 1.4 mi
4. Turn left onto KY-192 W/KY-80 BUS E. and travel approximately 203 ft

Turn right onto KY-80 E. and travel approximately 6.2 mi

Continue on Cr-1039/Mark Shopville Rd to KY-80 W (approximately 0.5 mi)

5. Turn left onto Cr-1039/Mark Shopville Rd. and travel approximately 0.4 mi
6. Turn right onto KY-461 S. and travel approximately 0.1 mi

Turn right onto KY-80 W. and travel approximately 0.8 mi

7. See photo of access road from Hwy 80



If you require any assistance in connection with this matter, please contact me immediately via voice or text message at 561.343.0400

Prepared by:

Jessica Ross
Project Manager, Relocations

EXHIBIT

R



The Crossroads Group, LLC

WWW.THECROSSROADSGROUPLLC.COM

16590 POTTSVILLE PIKE, SUITE A
HAMBURG, PA 19526
PHONE: (484) 660-3055
FAX: (484) 660-3742

301 WEST CENTER STREET
ELYSBURG, PA 17824
PHONE: (570) 672-2317
FAX: (570) 672-2458



Joshua D. Hoagland, VP, PE

EDUCATION:

- B.S. / 2008 / Civil Engineering (Minor/Entrepreneurship & Management)
- Johns Hopkins University

PROFESSIONAL AFFILIATIONS AND APPOINTMENTS:

- Pennsylvania licensed Professional Engineer – PE081273
- Professional Licensed Engineer in New York, Ohio, West Virginia, North Carolina, South Carolina, Delaware, New Hampshire

EXPERIENCE:

Mr. Hoagland's areas of expertise are civil engineering and site permitting. Since starting employment at The Crossroads Group in June of 2008, his responsibilities have expanded from site engineering and design, to include project management presentation at municipal meetings as well as becoming a Jr. Partner at The Crossroads Group, LLC. He has participated as the project manager and engineer on numerous developments throughout the Commonwealth, including the following:

Danson Subdivision II - 43 Unit Townhouse Subdivision
Project Management, Site Engineering, Conditional Use Hearing
Ralpho Township, Northumberland County

Sunland Preserve – 33 Lot Subdivision
Project Management & Site Engineering
Hemlock Township, Columbia County

Immanuel Leidys' Church – Institutional Land Development
Project Management & Site Engineering
Franconia Township, Montgomery County

Martin Subdivision – 3 Lot Subdivision
Project Management, Site Engineering & Low Pressure Sewer Design
Franconia Township, Montgomery County

Children's Developmental Program – Special Needs Daycare Facility Land Development
Site Engineering
Richland Township, Bucks County

Whitetail Run Subdivision – 19 Lot Subdivision
Site Engineering & Project Management
Ralpho Township, Northumberland County

Northpointe Community Church – Church and Community Center Land Development
Site Engineering
Limerick Township, Montgomery County



Robert E. Beacom, P.E., S.E.

Engineering Supervisor

Sabre Towers & Poles (Division of Sabre Industries)

Sioux City, IA

PROFESSIONAL REGISTRATION

Registered Professional Engineer or Structural Engineer in 42 states

- Passed Civil Engineering (P.E.) examination in 2010
- Passed Vertical Component of Structural Engineering (S.E.) examination in 2014
- Passed Lateral Component of Structural Engineering (S.E.) examination in 2015

PROFESSIONAL EXPERIENCE

Sabre Industries

9/05 to Present

Sioux City, IA

Engineering Supervisor

- Full responsibility for the design of communication tower and foundations.
- Designed thousands of self-supporting and guyed towers and their foundations (including seismic design, when necessary), for sites in the United States and foreign countries.
- Trained and mentored four entry-level engineers.
- Helped develop spreadsheets to design foundations.

EDUCATION

Iowa State University

Ames, IA

Bachelor of Science in Civil Engineer, 2005



DELTA OAKS GROUP

JOHN S. SCOTT, E.I.

1209 Cane Creek Drive, Garner NC 27529 • (336) 409-4637 • Jscott@DeltaOaksGroup.com

EDUCATION

North Carolina State University Raleigh, NC

May 2015

B.S Biological and Agricultural Engineering: Environmental Engineering Concentration

Minors: Business Administration, Biological Sciences

Supplemental Course work: Wetlands Design and Restoration, Soil Mechanics, Foundation Design

PROFESSIONAL EXPERIENCE

Geotechnical Engineer I, Delta Oaks Group

January 2018 – Present

- Performed geotechnical site evaluations for both the telecommunication and commercial sector in all 50 states and Puerto Rico using standard geotechnical procedures and engineering software which included SHAFT and Excel.
- Effectively communicated with subcontractors, land owners, and clients to ensure that safe, timely, and accurate subsurface soil investigations were performed.
- Worked closely with structural department to assist in their foundation designs.
- Efficiently maintained the geotechnical laboratory through strict organizational and sanitary procedures and adhered to ASTM standards for soil laboratory tests which include but not limited to Atterberg limits and sieve analysis, and corrosion potential testing.

Field Geotechnical Engineer, Terracon Consulting

July 2015 – January 2018

- Led teams of 2 to 10 in the field to perform full-scale pile load testing of solar panel pile foundations during the preconstruction site investigation phase as well as quality assurance during construction phase.
- Provided general performance results of pile load tests and utilized these results to generate foundation design recommendations using LPILE analysis and Microsoft Excel.
- Organized and aided in geotechnical investigations of potential solar sites and commercial projects which included soil test borings and soil analysis, soil chemical analysis, in-situ electrical resistivity, and thermal resistivity testing.
- Utilized geotechnical investigation results to provide general construction and foundation design recommendations.
- Managed and supported projects from the RFP/RFI phase to report submittal using Microsoft Office and AutoCAD.

Biological and Agricultural Engineering Senior Design Project

August 2014 – May 2015

- Designed irrigation and drainage system in team of 4 for a 48 acre farm with traditional corn, wheat, and soybean rotation that utilized watershed storm runoff as a sustainable irrigation source.
- Collaborated with farmer to understand needs and develop appropriate solution.
- Conducted multiple site visits to survey, collect soil data, and collect water table data by installing a pressure transducer.
- Performed runoff calculations using the rational method, generated hydrographs, analyzed weather, soil, and elevation data using AutoCAD Civil 3D, Excel, and DRAINMOD.
- Determined effects of drainage and irrigation system on crop yields using DRAINMOD.
- Conducted cost-benefit analysis to determine best design for maximizing income per acre.
- Presented system and results to 20 faculty members and undergraduate research symposium.

Hydrologic Technician I (Internship), United States Geological Survey

May 2012 – February 2013

SOFTWARE EXPERIENCE

- gINT, SHAFT, LPILE, GIMP, Microsoft Office

PROFESSIONAL AND SOCIAL ASSOCIATIONS

President of American Society of Civil Engineers – Eastern Branch NC Younger Members Group, Sigma Phi Epsilon fraternity

**SUMMARY**

Mr. Borrelli has extensive management and technical expertise in the geotechnical, engineering inspection, structural and construction material testing fields, with projects that span the United States (all 50 states), Canada (7 provinces), Puerto Rico, the Virgin Islands, Mexico, Costa Rica, the Marianas Islands, and Iraq. He has led project work in the commercial, residential, industrial, government, and telecommunications sectors. Mr. Borrelli's managerial and technical experience includes departmental management and project management.

PROFESSIONAL HISTORY**Delta Oaks Group (October 2015 - Present), Co-Founder**

Mr. Borrelli is responsible for the managerial direction of the firm's engineering licensing. He has developed and implemented engineering operations, technical standards and procedures. He is responsible for technical quality, professional licensing, production oversight, and quality control (including subcontractor quality control). He is also the technical lead for the geotechnical department, overseeing projects from start to finish in the commercial, industrial, and telecommunications industries.

FDH Engineering, Inc. (January 2011 – September 2015), Director-Geotechnical

Began as a staff engineer, performing soil classifications, lab testing oversight, and writing geotechnical reports for the telecommunications industry. Assisted with the management and coordination of projects between clients and drill firms. In April 2011, added geotechnical report peer review to my responsibilities.

In August 2011, promoted to Department Manager, duties remained the same from a technical standpoint, while adding client interaction and overall project management and coordination. At that time management responsibilities included the responsible charge of a department of 7 employees (2 PE's and 1 EI). Over the course of the following 8 months I wrote geotechnical reports for the tower industry, reviewed peer's reports, improved client relations, and department efficiency, while maintaining technical merit.

In December 2011, promoted to Director, duties became more focused on geotechnical report review, project coordination, and technical oversight, in addition to marketing and client relations. Management responsibilities included the responsible charge of a department of 10 employees (3 PE's and 3 EI's). Also expanded industry focus to include small commercial projects in addition to the telecommunications industry. Implemented an efficiency tracking system that focused on production while making sure that the technical quality of reports remained precise and accurate. Implemented a Quality Assurance program that focused on an independent review of random projects from soil classification to report review to ensure that the accuracy of our reports is maintained. Implemented a QA/QC program to monitor subcontract drillers to improve overall field product quality.



Tower Engineering Professionals, Inc. (September 2006 – March 2010), Geotechnical Project Engineer

Geotechnical engineer working primarily on cellular towers, with some residential and commercial construction material testing work. Worked on projects in all 50 states, Guam, Rota, Saipan, as well as the British Columbia and Alberta provinces of Canada. Managed the set up and coordination of projects with clients and drilling firms. Conducted on site soil analysis for classification, density, moisture content, and bearing capacity. Performed laboratory testing on soils for classification, density, moisture content, resistivity, liquid and plastic limits, and plasticity index. Assisted in writing geotechnical reports for existing and new construction tower sites.

ECS Carolinas, LLC (June 2004 - September 2006), Staff Engineer

Construction materials engineer working on residential, commercial, and roadway projects in NC, SC, and VA. Managed the set up and coordination of projects with clients, site superintendents, and contractors. Conducted on site soil analysis for classification, density, moisture content, compaction, and bearing capacity. Performed on site concrete analysis for slump, air content, unit weight, and floor flatness. Oversaw and monitored asphalt placement for NCDOT and associated asphalt coring. Assisted in the implementation of a Quality Management System to obtain AMRL and CCRL certifications for our lab. Managed the schedule for 15 technicians and reviewed/approved their reports. Also prepared project field report for clients.

EDUCATION

North Carolina State University, Civil Engineering
Concentration in Geotechnical & Structural Engineering

LICENSES, PROFESSIONAL ENGINEER

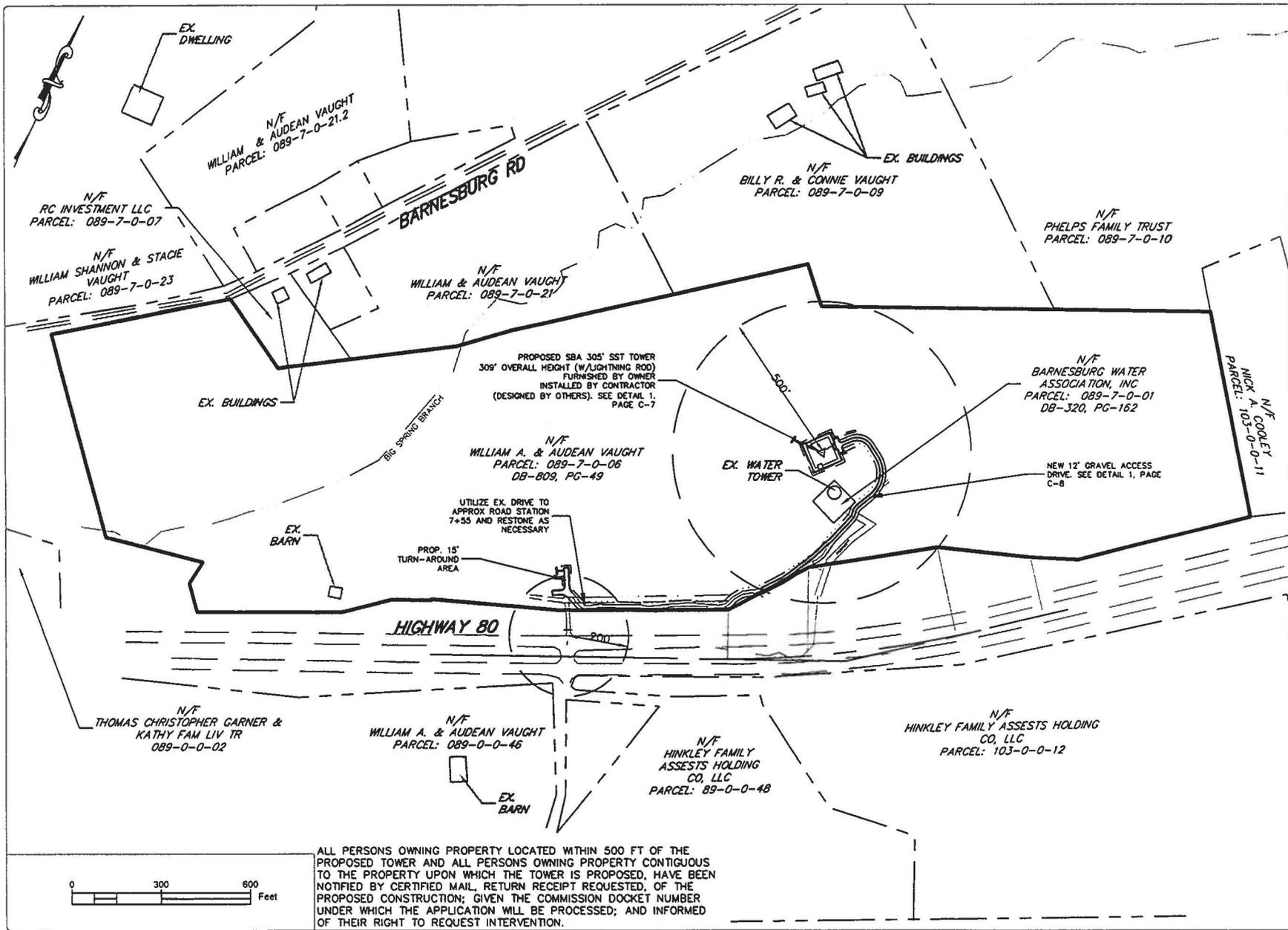
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|-------------|-------------|-----------------------|---------------|----------------|------------|
| Alabama | 33883 | Louisiana | 40269 | Oregon | 88559PE |
| Alaska | 14632 | Maine | 13415 | Pennsylvania | PE082054 |
| Arizona | 60993 | Maryland | 45175 | Rhode Island | PE.0011753 |
| Arkansas | 16744 | Michigan | 6201061511 | South Carolina | 32579 |
| Colorado | PE.0050535 | Minnesota | 51193 | South Dakota | 12010 |
| Connecticut | PEN.0031317 | Mississippi | 25065 | Tennessee | 119185 |
| Delaware | 19591 | Missouri | 2015025025 | Texas | 120321 |
| Florida | 76637 | Montana | 30955 | Vermont | 105576 |
| Georgia | PE038395 | Nebraska | 14973 | Washington | 51401 |
| Hawaii | 15753 | New Hampshire | 14342 | West Virginia | 20526 |
| Idaho | P-16222 | New Jersey | 24GE05150700 | Wisconsin | 44062-6 |
| Illinois | 062066294 | New York | 094297 | Wyoming | PE 14561 |
| Indiana | PE11500139 | North Carolina | 037356 | Puerto Rico | 26827 |
| Iowa | 22917 | North Dakota | PE-9954 | | |
| Kansas | PE24716 | Ohio | 79946 | | |
| Kentucky | 30809 | Oklahoma | 28121 | | |

EXHIBIT

S

**Landowner and Contiguous Landowner List and
Pulaski County Judge Executive**

| Last Name | First Name | Address | City | State | Zip |
|--------------------------------------|-----------------------------------|---|-------------|--------------|------------|
| Vaught | William S. & Stacie | 2127 Barnesburg Road | Somerset | KY | 42503 |
| Vaught | William & Audean | 114 Oak Ave | Somerset | KY | 42501 |
| RC Investments, LLC | | P O Box 246 | Somerset | KY | 42502 |
| Vaught | Billy & Connie | 2770 Barnesburg Road | Somerset | KY | 42503 |
| Phelps Family Trust | C/O Krista Pierce | 89 Heritage Ave | Somerset | KY | 42503 |
| Cooley | Nick | 54 Hwy 1275 S | Monticello | KY | 42633 |
| Barnesburg Water Association I | | 147 E Somerset Church Road | Somerset | KY | 42503 |
| KY Dept of Highways | District 8 | 1660 South US 27, PO Box 607 | Somerset | KY | 42501 |
| Commonwealth of Kentucky | Division of Real Properties | 403 Wapping Street | Frankfort | KY | 40601 |
| Pulaski County Judge Executive | Hon. Stephen B. Kelley, Jr. | 100 North Main Street P O Box 712 | Somerset | KY | 42502 |



SBA

SBA TOWERS IX, LLC
 8031 CONGRESS AVENUE
 BOCA RATON, FL 33487-1307
 TEL: (800) 487-7483

THE CROSSROADS GROUP, LLC
 www.thecrossroadsgroup.com

14350 Pottsville Pkwy., Ste. A
 Hummel, PA 17028
 Ph: 484-660-3500
 Fax: 484-660-3742

1174 S.R. 487
 Pottsville, PA 17880
 Ph: 484-673-2117
 Fax: 484-660-3742

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO THE CLIENT IS STRICTLY PROHIBITED.

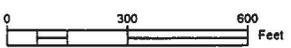
| | |
|----------------|-----------|
| SCALE | 1" = 300' |
| DRAWN BY | RMR |
| PLAN ORG. DATE | 02-27-19 |

| REVISIONS | | |
|-----------|------|-------------|
| NO. | DATE | DESCRIPTION |
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|--------------|-------------------------------|
| PROJECT No. | 2739 |
| SITE NAME | SHOPVILLE RELO |
| SITE NUMBER | KY22841-S |
| SITE ADDRESS | HWY 80 SOMERSET, KY, 42503 |
| FILE NAME | CONSTRUCTION-SHEETS.DWG |
| SHEET TITLE | ZONING PLAN |

| | |
|-------------|----------|
| DRAWING NO. | REVISION |
| Z-1 | B |

ALL PERSONS OWNING PROPERTY LOCATED WITHIN 500 FT OF THE PROPOSED TOWER AND ALL PERSONS OWNING PROPERTY CONTIGUOUS TO THE PROPERTY UPON WHICH THE TOWER IS PROPOSED, HAVE BEEN NOTIFIED BY CERTIFIED MAIL, RETURN RECEIPT REQUESTED, OF THE PROPOSED CONSTRUCTION; GIVEN THE COMMISSION DOCKET NUMBER UNDER WHICH THE APPLICATION WILL BE PROCESSED; AND INFORMED OF THEIR RIGHT TO REQUEST INTERVENTION.



W. DAVID DENTON
J. RONALD JACKSON, MBA, CPA
WILLIAM E. PINKSTON
LISA H. EMMONS
GLENN D. DENTON *
JACKIE M. MATHENY, JR.
ANN R. MYRE
HOLLY M. HOMRA
ALEXANDER D. BLACKWELL *

* Also Licensed to Practice in Illinois



PADUCAH BANK BUILDING
555 JEFFERSON STREET
SUITE 301
P.O. BOX 969
PADUCAH, KY 42002-0969

PHONE (270) 450-8253
FAX (270) 450-8259
www.dentonfirm.com

June 3, 2019

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

WILLIAM & STACIE VAUGHT
2127 BARNESBURG ROAD
SOMERSET KY 42503

Re: Public Notice

Dear Mr. & Mrs. Vaught:

As a result of the KYTC Project for the improvement and widening of KY 461 from KY Hwy 80 to Buck Creek Bridge in Pulaski County, Kentucky; SBA Towers IX, LLC is applying to the Kentucky Public Service Commission (hereinafter "Commission") for a Certificate of Public Convenience and Necessity to construct and operate a wireless telecommunications facility. The proposed facility will be constructed on a portion of a tract of land between Hwy 80 and Barnesburg Road in Somerset, Pulaski County, Kentucky, which the parent tract address is near 2127 Barnesburg Road, Somerset, Pulaski County, Kentucky. A map and aerial image showing the proposed location is attached. The proposed facility will include a new self-support 305 foot tower (309 foot when including lightning rod), plus ground related facilities.

This notice is being sent to you because the Pulaski County Property Valuation Administrator's records indicate that you own property that is within a 500' radius of the proposed site or own property that is contiguous to the property on which the facility is to be constructed.

The Commission welcomes your comments regarding the proposed construction and wants you to be aware of your right to request intervention in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: **Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P. O. Box 615, Frankfort, Kentucky 40602.** Please refer to case number 2019-00149 in any correspondence.

Sincerely,

A handwritten signature in black ink that reads "Lisa H. Emmons". The signature is written in a cursive style.

Lisa H. Emmons
lemmons@dentonfirm.com

Enclosures

cc: Ms. Jessica Ross, SBA Towers IX, LLC, Project Manager, Relocations

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

William & Stacie Vaught
2127 Barnesburg Rd
Somerset Ky 42503

2. Article Number
(Transfer from service label)

7012 1010 0003 6849 9292

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature

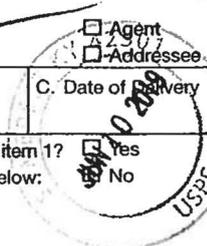
X 

- Agent
- Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? Yes
If YES, enter delivery address below: No



3. Service Type

- Certified Mail Express Mail
- Registered Return Receipt for Merchandise
- Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee)

Yes

W. DAVID DENTON
J. RONALD JACKSON, MBA, CPA
WILLIAM E. PINKSTON
LISA H. EMMONS
GLENN D. DENTON *
JACKIE M. MATHENY, JR.
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PADUCAH BANK BUILDING
555 JEFFERSON STREET
SUITE 301
P.O. BOX 969
PADUCAH, KY 42002-0969

PHONE (270) 450-8253
FAX (270) 450-8259
www.dentonfirm.com

June 3, 2019

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

WILLIAM & AUDEAN VAUGHT
114 OAK AVE
SOMERSET KY 42501

Re: Public Notice

Dear Mr. & Mrs. Vaught:

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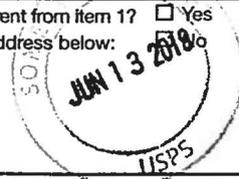
Sincerely,

A handwritten signature in cursive script that reads "Lisa H. Emmons".

Lisa H. Emmons
lemmons@dentonfirm.com

Enclosures

cc: Ms. Jessica Ross, SBA Towers IX, LLC, Project Manager, Relocations

| SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY | |
|--|--|--|
| <ul style="list-style-type: none"> ■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. ■ Print your name and address on the reverse so that we can return the card to you. ■ Attach this card to the back of the mailpiece, or on the front if space permits. | <p>A. Signature <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p><i>[Signature]</i></p> <p>B. Received by (Printed Name) C. Date of Delivery</p> | |
| <p>1. Article Addressed to:</p> <p style="font-size: 1.2em;">William & Audean Vaught 114 OAK AVE Somerset KY 42501</p> | <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below:</p> <div style="text-align: center;">  </div> <p>3. Service Type</p> <p><input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail</p> <p><input type="checkbox"/> Registered <input checked="" type="checkbox"/> Return Receipt for Merchandise</p> <p><input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p> | |
| <p>2. Article Number (Transfer from service label) 7012 1010 0003 6849 9308</p> | | |
| <p>PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540</p> | | |

W. DAVID DENTON
J. RONALD JACKSON, MBA, CPA
WILLIAM E. PINKSTON
LISA H. EMMONS
GLENN D. DENTON *
JACKIE M. MATHENY, JR.
ANN R. MYRE
HOLLY M. HOMRA
ALEXANDER D. BLACKWELL *

* Also Licensed to Practice in Illinois



PADUCAH BANK BUILDING
555 JEFFERSON STREET
SUITE 301
P.O. BOX 969
PADUCAH, KY 42002-0969

PHONE (270) 450-8253
FAX (270) 450-8259
www.dentonfirm.com

June 3, 2019

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

RC INVESTMENTS LLC
P O BOX 246
SOMERSET KY 42502

Re: Public Notice

Dear RC Investments, LLC:

As a result of the KYTC Project for the improvement and widening of KY 461 from KY Hwy 80 to Buck Creek Bridge in Pulaski County, Kentucky; SBA Towers IX, LLC is applying to the Kentucky Public Service Commission (hereinafter "Commission") for a Certificate of Public Convenience and Necessity to construct and operate a wireless telecommunications facility. The proposed facility will be constructed on a portion of a tract of land between Hwy 80 and Barnesburg Road in Somerset, Pulaski County, Kentucky, which the parent tract address is near 2127 Barnesburg Road, Somerset, Pulaski County, Kentucky. A map and aerial image showing the proposed location is attached. The proposed facility will include a new self-support 305 foot tower (309 foot when including lightning rod), plus ground related facilities.

This notice is being sent to you because the Pulaski County Property Valuation Administrator's records indicate that RC Investments, LLC owns property that is within a 500' radius of the proposed site or owns property that is contiguous to the property on which the facility is to be constructed.

The Commission welcomes RC Investments, LLC's comments regarding the proposed construction and wants RC Investments, LLC to be aware of its right to request intervention in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: **Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P. O. Box 615, Frankfort, Kentucky 40602.** Please refer to case number 2019-00149 in any correspondence.

Sincerely,

A handwritten signature in black ink that reads "Lisa H. Emmons". The signature is written in a cursive style with a large initial "L".

Lisa H. Emmons
lemmons@dentonfirm.com

Enclosures

cc: Ms. Jessica Ross, SBA Towers IX, LLC, Project Manager, Relocations

SENDER: COMPLETE THIS SECTION

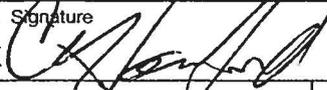
- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

RC Investments LLC
PO Box 246
Somerset Ky 42502

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X 

Agent

Addressee

B. Received by (Printed Name)

C. Date of Delivery

4/18/19

D. Is delivery address different from item 1? Yes

If YES, enter delivery address below: No

3. Service Type

Certified Mail Express Mail

Registered Return Receipt for Merchandise

Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee)

Yes

2. Article Number

(Transfer from service label)

7012 1010 0003 6849 9315

W. DAVID DENTON
J. RONALD JACKSON, MBA, CPA
WILLIAM E. PINKSTON
LISA H. EMMONS
GLENN D. DENTON *
JACKIE M. MATHENY, JR.
ANN R. MYRE
HOLLY M. HOMRA
ALEXANDER D. BLACKWELL *

* Also Licensed to Practice in Illinois



PADUCAH BANK BUILDING
555 JEFFERSON STREET
SUITE 301
P.O. BOX 969
PADUCAH, KY 42002-0969

PHONE (270) 450-8253
FAX (270) 450-8259
www.dentonfirm.com

June 3, 2019

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

BILLY & CONNIE VAUGHT
2770 BARNESBURG RD
SOMERSET KY 42503

Re: Public Notice

Dear Mr. and Mrs. Vaught:

As a result of the KYTC Project for the improvement and widening of KY 461 from KY Hwy 80 to Buck Creek Bridge in Pulaski County, Kentucky; SBA Towers IX, LLC is applying to the Kentucky Public Service Commission (hereinafter "Commission") for a Certificate of Public Convenience and Necessity to construct and operate a wireless telecommunications facility. The proposed facility will be constructed on a portion of a tract of land between Hwy 80 and Barnesburg Road in Somerset, Pulaski County, Kentucky, which the parent tract address is near 2127 Barnesburg Road, Somerset, Pulaski County, Kentucky. A map and aerial image showing the proposed location is attached. The proposed facility will include a new self-support 305 foot tower (309 foot when including lightning rod), plus ground related facilities.

This notice is being sent to you because the Pulaski County Property Valuation Administrator's records indicate that you own property that is within a 500' radius of the proposed site or own property that is contiguous to the property on which the facility is to be constructed.

The Commission welcomes your comments regarding the proposed construction and wants you to be aware of your right to request intervention in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: **Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P. O. Box 615, Frankfort, Kentucky 40602.** Please refer to case number 2019-00149 in any correspondence.

Sincerely,

A handwritten signature in black ink that reads "Lisa H. Emmons". The signature is written in a cursive style.

Lisa H. Emmons
lemmons@dentonfirm.com

Enclosures

cc: Ms. Jessica Ross, SBA Towers IX, LLC, Project Manager, Relocations

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Billy & Connie Vaught
2770 Barnesburg Rd
Somerset Ky 42503

2. Article Number
(Transfer from service label)

7012 1010 0003 6849 9391

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature

Connie Vaught Agent Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? Yes
If YES, enter delivery address below: No

3. Service Type

- Certified Mail Express Mail
- Registered Return Receipt for Merchandise
- Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

W. DAVID DENTON
J. RONALD JACKSON, MBA, CPA
WILLIAM E. PINKSTON
LISA H. EMMONS
GLENN D. DENTON *
JACKIE M. MATHENY, JR.
ANN R. MYRE
HOLLY M. HOMRA
ALEXANDER D. BLACKWELL *

* Also Licensed to Practice in Illinois



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PADUCAH, KY 42002-0969

PHONE (270) 450-8253
FAX (270) 450-8259
www.dentonfirm.com

June 3, 2019

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

PHELPS FAMILY TRUST
C/O KRISTA PIERCE
89 HERITAGE AVE
SOMERSET KY 42503

Re: Public Notice

Dear Phelps Family Trust:

As a result of the KYTC Project for the improvement and widening of KY 461 from KY Hwy 80 to Buck Creek Bridge in Pulaski County, Kentucky; SBA Towers IX, LLC is applying to the Kentucky Public Service Commission (hereinafter "Commission") for a Certificate of Public Convenience and Necessity to construct and operate a wireless telecommunications facility. The proposed facility will be constructed on a portion of a tract of land between Hwy 80 and Barnesburg Road in Somerset, Pulaski County, Kentucky, which the parent tract address is near 2127 Barnesburg Road, Somerset, Pulaski County, Kentucky. A map and aerial image showing the proposed location is attached. The proposed facility will include a new self-support 305 foot tower (309 foot when including lightning rod), plus ground related facilities.

This notice is being sent to you because the Pulaski County Property Valuation Administrator's records indicate that the Phelps Family Trust owns property that is within a 500' radius of the proposed site or owns property that is contiguous to the property on which the facility is to be constructed.

The Commission welcomes the Phelps Family Trust's comments regarding the proposed construction and wants the Phelps Family Trust to be aware of its right to request intervention in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: **Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P. O. Box 615, Frankfort, Kentucky 40602.** Please refer to case number 2019-00149 in any correspondence.

Sincerely,

A handwritten signature in cursive script that reads "Lisa H. Emmons".

Lisa H. Emmons
lemmons@dentonfirm.com

Enclosures

cc: Ms. Jessica Ross, SBA Towers IX, LLC, Project Manager, Relocations

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

PHELPS FAMILY TRUST
 C/O KRISTA PIERCE
 89 HERITAGE AVE
 SOMERSET KY 42503

2. Article Number

(Transfer from service label)

7012 1010 0003 6849 9322

PS Form 3811, February 2004

Domestic Return Receipt

COMPLETE THIS SECTION ON DELIVERY

A. Signature

x *Krista Pierce* Agent Addressee

B. Received by (Printed Name)

Krista Pierce

C. Date of Delivery

*6-8-19*D. Is delivery address different from item 1? YesIf YES, enter delivery address below: No

3. Service Type

 Certified Mail Express Mail Registered Return Receipt for Merchandise Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee)

 Yes

1025 PS-02-M-1540

W. DAVID DENTON
J. RONALD JACKSON, MBA, CPA
WILLIAM E. PINKSTON
LISA H. EMMONS
GLENN D. DENTON *
JACKIE M. MATHENY, JR.
ANN R. MYRE
HOLLY M. HOMRA
ALEXANDER D. BLACKWELL *
* Also Licensed to Practice in Illinois



PADUCAH BANK BUILDING
555 JEFFERSON STREET
SUITE 301
P.O. BOX 969
PADUCAH, KY 42002-0969

PHONE (270) 450-8253
FAX (270) 450-8259
www.dentonfirm.com

June 3, 2019

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

NICK COOLEY
54 HWY 1275 S
MONTICELLO KY 42633

Re: Public Notice

Dear Mr. Cooley:

As a result of the KYTC Project for the improvement and widening of KY 461 from KY Hwy 80 to Buck Creek Bridge in Pulaski County, Kentucky; SBA Towers IX, LLC is applying to the Kentucky Public Service Commission (hereinafter "Commission") for a Certificate of Public Convenience and Necessity to construct and operate a wireless telecommunications facility. The proposed facility will be constructed on a portion of a tract of land between Hwy 80 and Barnesburg Road in Somerset, Pulaski County, Kentucky, which the parent tract address is near 2127 Barnesburg Road, Somerset, Pulaski County, Kentucky. A map and aerial image showing the proposed location is attached. The proposed facility will include a new self-support 305 foot tower (309 foot when including lightning rod), plus ground related facilities.

This notice is being sent to you because the Pulaski County Property Valuation Administrator's records indicate that you own property that is within a 500' radius of the proposed site or own property that is contiguous to the property on which the facility is to be constructed.

The Commission welcomes your comments regarding the proposed construction and wants you to be aware of your right to request intervention in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: **Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P. O. Box 615, Frankfort, Kentucky 40602.** Please refer to case number 2019-00149 in any correspondence.

Sincerely,

A handwritten signature in black ink that reads "Lisa H. Emmons". The signature is written in a cursive style.

Lisa H. Emmons
lemmons@dentonfirm.com

Enclosures

cc: Ms. Jessica Ross, SBA Towers IX, LLC, Project Manager, Relocations

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Nick Cooley
 54 Hwy 1275S
 Monticello KY 42633

COMPLETE THIS SECTION ON DELIVERY

A. Signature Agent
 Nick Cooley Addressee

B. Received by (Printed Name) C. Date of Delivery
Nick Cooley 6-13-14

D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

2. Article Number
 (Transfer from service label)

7012 1010 0003 6849 9339

W. DAVID DENTON
J. RONALD JACKSON, MBA, CPA
WILLIAM E. PINKSTON
LISA H. EMMONS
GLENN D. DENTON *
JACKIE M. MATHENY, JR.
ANN R. MYRE
HOLLY M. HOMRA
ALEXANDER D. BLACKWELL *

* Also Licensed to Practice in Illinois



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P.O. BOX 969
PADUCAH, KY 42002-0969

PHONE (270) 450-8253
FAX (270) 450-8259
www.dentonfirm.com

June 3, 2019

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

BARNESBURG WATER ASSOCIATION I
147 E SOMERSET CHURCH RD
SOMERSET KY 42503

Re: Public Notice

Dear Barnesburg Water Association I:

As a result of the KYTC Project for the improvement and widening of KY 461 from KY Hwy 80 to Buck Creek Bridge in Pulaski County, Kentucky; SBA Towers IX, LLC is applying to the Kentucky Public Service Commission (hereinafter "Commission") for a Certificate of Public Convenience and Necessity to construct and operate a wireless telecommunications facility. The proposed facility will be constructed on a portion of a tract of land between Hwy 80 and Barnesburg Road in Somerset, Pulaski County, Kentucky, which the parent tract address is near 2127 Barnesburg Road, Somerset, Pulaski County, Kentucky. A map and aerial image showing the proposed location is attached. The proposed facility will include a new self-support 305 foot tower (309 foot when including lightning rod), plus ground related facilities.

This notice is being sent to you because the Pulaski County Property Valuation Administrator's records indicate that Barnesburg Water Association I owns property that is within a 500' radius of the proposed site or owns property that is contiguous to the property on which the facility is to be constructed.

The Commission welcomes Barnesburg Water Association I's comments regarding the proposed construction and wants the Barnesburg Water Association I to be aware of its right to request intervention in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: **Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P. O. Box 615, Frankfort, Kentucky 40602**. Please refer to case number 2019-00149 in any correspondence.

Sincerely,

A handwritten signature in black ink, appearing to read "Lisa H. Emmons".

Lisa H. Emmons
lemmons@dentonfirm.com

Enclosures

cc: Ms. Jessica Ross, SBA Towers IX, LLC, Project Manager, Relocations

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Barnesburg Water Association I
 147 E Somerset Church Rd
 Somerset Ky 42503

2. Article Number
(Transfer from service label)

7012 1010 0003 6849 9384

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X *Mona Jahn*

-
- Agent
-
-
- Addressee

B. Received by (Printed Name)

C. Date of Delivery

 D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type

-
- Certified Mail
-
- Express Mail
-
-
- Registered
-
- Return Receipt for Merchandise
-
-
- Insured Mail
-
- C.O.D.

4. Restricted Delivery? (Extra Fee)

 Yes

W. DAVID DENTON
J. RONALD JACKSON, MBA, CPA
WILLIAM E. PINKSTON
LISA H. EMMONS
GLENN D. DENTON *
JACKIE M. MATHENY, JR.
ANN R. MYRE
HOLLY M. HOMRA
ALEXANDER D. BLACKWELL *
* Also Licensed to Practice in Illinois



PADUCAH BANK BUILDING
555 JEFFERSON STREET
SUITE 301
P.O. BOX 969
PADUCAH, KY 42002-0969

PHONE (270) 450-8253
FAX (270) 450-8259
www.dentonfirm.com

June 3, 2019

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

COMMONWEALTH OF KENTUCKY
KY DEPT OF HIGHWAYS – DISTRICT 8
P O BOX 607
SOMERSET KY 42501

Re: Public Notice

Dear Commonwealth of Kentucky – Department of Highways:

As a result of the KYTC Project for the improvement and widening of KY 461 from KY Hwy 80 to Buck Creek Bridge in Pulaski County, Kentucky; SBA Towers IX, LLC is applying to the Kentucky Public Service Commission (hereinafter “Commission”) for a Certificate of Public Convenience and Necessity to construct and operate a wireless telecommunications facility. The proposed facility will be constructed on a portion of a tract of land between Hwy 80 and Barnesburg Road in Somerset, Pulaski County, Kentucky, which the parent tract address is near 2127 Barnesburg Road, Somerset, Pulaski County, Kentucky. A map and aerial image showing the proposed location is attached. The proposed facility will include a new self-support 305 foot tower (309 foot when including lightning rod), plus ground related facilities.

This notice is being sent to you because the Pulaski County Property Valuation Administrator’s records indicate that the Commonwealth of Kentucky, Department of Highways, owns property that is within a 500’ radius of the proposed site or owns property that is contiguous to the property on which the facility is to be constructed.

The Commission welcomes the Kentucky Department of Highways’ comments regarding the proposed construction and wants the Kentucky Dept. of Highways to be aware of its right to request intervention in the Commission’s proceedings on this application. Your comments and request for intervention should be addressed to: **Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P. O. Box 615, Frankfort, Kentucky 40602.** Please refer to case number 2019-00149 in any correspondence.

Sincerely,

A handwritten signature in black ink that reads "Lisa H. Emmons". The signature is written in a cursive style.

Lisa H. Emmons
lemmons@dentonfirm.com

Enclosures

cc: Ms. Jessica Ross, SBA Towers IX, LLC, Project Manager, Relocations

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

COMMONWEALTH OF KENTUCKY
KY DEPT OF HIGHWAYS -
DISTRICT 8
P.O. BOX 607
SOMERSET KY 42501

2. Article Number

(Transfer from service label)

7012 1010 0003 6849 9353

COMPLETE THIS SECTION ON DELIVERY

A. Signature

[Handwritten Signature]

- Agent
 Addressee

B. Received by (Printed Name)

C. Date of Delivery

6/6/9

D. Is delivery address different from item 1? Yes

If YES, enter delivery address below: No

3. Service Type

- Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee)

Yes

W. DAVID DENTON
J. RONALD JACKSON, MBA, CPA
WILLIAM E. PINKSTON
LISA H. EMMONS
GLENN D. DENTON *
JACKIE M. MATHENY, JR.
ANN R. MYRE
HOLLY M. HOMRA
ALEXANDER D. BLACKWELL *
* Also Licensed to Practice in Illinois



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PADUCAH, KY 42002-0969

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www.dentonfirm.com

June 3, 2019

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

COMMONWEALTH OF KENTUCKY
FINANCE AND ADMINISTRATION CABINET
DIVISION OF REAL PROPERTIES
403 WAPPING STREET
FRANKFORT KY 40601

Re: Public Notice

Dear Commonwealth of Kentucky – Division of Real Properties:

As a result of the KYTC Project for the improvement and widening of KY 461 from KY Hwy 80 to Buck Creek Bridge in Pulaski County, Kentucky; SBA Towers IX, LLC is applying to the Kentucky Public Service Commission (hereinafter "Commission") for a Certificate of Public Convenience and Necessity to construct and operate a wireless telecommunications facility. The proposed facility will be constructed on a portion of a tract of land between Hwy 80 and Barnesburg Road in Somerset, Pulaski County, Kentucky, which the parent tract address is near 2127 Barnesburg Road, Somerset, Pulaski County, Kentucky. A map and aerial image showing the proposed location is attached. The proposed facility will include a new self-support 305 foot tower (309 foot when including lightning rod), plus ground related facilities.

This notice is being sent to you because the Pulaski County Property Valuation Administrator's records indicate that the Commonwealth of Kentucky owns property that is within a 500' radius of the proposed site or owns property that is contiguous to the property on which the facility is to be constructed.

The Commission welcomes Commonwealth's comments regarding the proposed construction and wants the Commonwealth to be aware of its right to request intervention in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: **Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P. O. Box 615, Frankfort, Kentucky 40602.** Please refer to case number 2019-00149 in any correspondence.

Sincerely,

A handwritten signature in black ink that reads "Lisa H. Emmons". The signature is written in a cursive style.

Lisa H. Emmons
lemmons@dentonfirm.com

Enclosures

cc: Ms. Jessica Ross, SBA Towers IX, LLC, Project Manager, Relocations

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

COMMONWEALTH of Kentucky
 Finance & Administration Cabinet
 Division of Real Properties
 403 Wapping Street
 FRANKFORT Ky 40601

2. Article Number
(Transfer from service label)

7012 1010 0003 6849 9346

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X *Holly Thompson* Agent Addressee

B. Received by (Printed Name)

Holly Thompson

C. Date of Delivery

D. Is delivery address different from item 1? YesIf YES, enter delivery address below: No

3. Service Type

 Certified Mail Express Mail Registered Return Receipt for Merchandise Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee)

 Yes

W. DAVID DENTON
J. RONALD JACKSON, MBA, CPA
WILLIAM E. PINKSTON
LISA H. EMMONS
GLENN D. DENTON *
JACKIE M. MATHENY, JR.
ANN R. MYRE
HOLLY M. HOMRA
ALEXANDER D. BLACKWELL *
* Also Licensed to Practice in Illinois



PADUCAH BANK BUILDING
555 JEFFERSON STREET
SUITE 301
P.O. BOX 969
PADUCAH, KY 42002-0969
PHONE (270) 450-8253
FAX (270) 450-8259
www.dentonfirm.com

June 3, 2019

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

PULASKI COUNTY JUDGE EXECUTIVE
HON STEPHEN B KELLEY JR
100 NORTH MAIN ST
P O BOX 712
SOMERSET KY 42501

Re: Public Notice

Dear Pulaski County Judge Executive:

As a result of the KYTC Project for the improvement and widening of KY 461 from KY Hwy 80 to Buck Creek Bridge in Pulaski County, Kentucky; SBA Towers IX, LLC is applying to the Kentucky Public Service Commission (hereinafter "Commission") for a Certificate of Public Convenience and Necessity to construct and operate a wireless telecommunications facility. The proposed facility will be constructed on a portion of a tract of land between Hwy 80 and Barnesburg Road in Somerset, Pulaski County, Kentucky, which the parent tract address is near 2127 Barnesburg Road, Somerset, Pulaski County, Kentucky. A map and aerial image showing the proposed location is attached. The proposed facility will include a new self-support 305 foot tower (309 foot when including lightning rod), plus ground related facilities.

This notice is being sent to you in your official capacity as Pulaski County Judge Executive. The Commission welcomes your comments regarding the proposed construction and wants you to be aware of your right to request intervention in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: **Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P. O. Box 615, Frankfort, Kentucky 40602.** Please refer to case number 2019-00149 in any correspondence.

Sincerely,

A handwritten signature in cursive script that reads "Lisa H. Emmons".

Lisa H. Emmons
lemmons@dentonfirm.com

Enclosures

cc: Ms. Jessica Ross, SBA Towers IX, LLC, Project Manager, Relocations

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

PULASKI COUNTY JUDGE
EXECUTIVE
HON STEPHEN B KELLEY JR
100 NORTH MAIN ST
P O BOX 712
SOMERSET KY 42501

2. Article Number

(Transfer from service label)

7012 1010 0003 6849 9360

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X *Cynthia Selts*

Agent

Addressee

B. Received by (Printed Name)

C. Date of Delivery

6/6/19

D. Is delivery address different from item 1? Yes

If YES, enter delivery address below: No

3. Service Type

Certified Mail

Express Mail

Registered

Return Receipt for Merchandise

Insured Mail

C.O.D.

4. Restricted Delivery? (Extra Fee)

Yes

EXHIBIT

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**PUBLIC NOTICE
SBA TOWERS IX, LLC**

**PROPOSES TO CONSTRUCT A TELECOMMUNICATIONS
TOWER
ON THIS SITE. IF YOU HAVE QUESTIONS, PLEASE CONTACT:**

**SBA TOWERS IX, LLC
ATTN: JESSICA BOSS
8691 CONGRESS AVENUE
BOCA RATON, FL 33487**

OR

**THE EXECUTIVE DIRECTOR PUBLIC
SERVICE COMMISSION 111 HOWLE BOULEVARD
P.O. BOX 819
FRANSPORT, KENTUCKY 40061**

PLEASE REFER TO P.S.C. CASE NUMBER 2019-00149 IN YOUR CORRESPONDENCE.

PUBLIC NOTICE
SBA TOWERS IX, LLC

PROPOSES TO CONSTRUCT A TELECOMMUNICATIONS
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ON THIS SITE. IF YOU HAVE QUESTIONS, PLEASE CONTACT:

SBA TOWERS IX, LLC
ATTN: JESSICA ROSS
8051 CONGRESS AVENUE
BOCA RATON, FL. 33487

OR

THE EXECUTIVE DIRECTOR PUBLIC
SERVICE COMMISSION 211 SOWER BOULEVARD
P.O. BOX 615
FRANKFORT, KENTUCKY 40602

PLEASE REFER TO P.S.C. CASE NUMBER 2019-00149 IN YOUR CORRESPONDENCE.



EXHIBIT

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AFFIDAVIT OF PUBLICATION

I, Bethany Daves, OF THE
COMMONWEALTH JOURNAL, A LEGAL NEWSPAPER HOLDING A SECOND-
CLASS PERMIT, PUBLISHED DAILY EXCEPT FOR MONDAYS IN SOMERSET,
COUNTY OF PULASKI, COMMONWEALTH OF KENTUCKY DO SWEAR THAT
THE ATTACHED PROOF OF PUBLICATION OF A

LEGAL NOTICE, AS REQUIRED AND PRESCRIBED BY KRS

PAID ADVERTISEMENT

WAS PUBLISHED IN SAID NEWSPAPER IN THE ISSUE OF April 18, 2019
FOR WHICH THE SUM \$ 117.00 IS DUE AND PAYABLE.

SIGNED: Bethany Daves
TITLE Classified Clerk

SUBSCRIBED AND SWORN TO BEFORE ME, A NOTARY PUBLIC FOR THE
COUNTY OF PULASKI, COMMONWEALTH OF KENTUCKY THIS 9 DAY
OF May 20 19.

Brenda Wachter
MY COMMISSION EXPIRES Sept-4, 2022

Commonwealth Journal

Classifieds

View the Classifieds online at:
www.somerset-kentucky.com



Spread the word about your business or service in the Classified Marketplace - Lawn Care, Baby-sitting, Carpentry, Roofing, Pet Grooming, Carpeting, etc. - for only a few dollars a day!
CALL FOR DETAILS!

Place A Classified
Call 606-678-8191
or send a Fax 606-451-0631
Hours are 8:00 am - 5:00 pm Monday - Friday
Email: classifieds@somerset-kentucky.com



Indoor/Outdoor Sales

• YARD, GARAGE & PORCH SALES
• AUCTIONS • FUND RAISERS
• BAKE SALES • PORCH SALES
Run a 16-line ad for 1-3 days for only \$34.95.



Deals on Wheels

For only \$39.95 run a 10-line ad with a photo for 30 days...or run 7 days for \$20.00. Call today!

Includes cars, trucks, boats, motorcycles, RVs, trailers, etc.



Featured Homes

Let us help you sell your home. Advertise your home for sale in a 15-line ad (includes a photo). Cost is 7 days - \$59; 14 days - \$79; 30 days - \$109.

Your ad will also appear in our Real Estate Showcases published the 1st and 3rd Saturday of each month.

We Accept



Featured Jobs

Do you have a job vacancy to RE? Call our Classified Department today to discuss the many options available to help you find the right employee.

Cost is 7 days - \$175; 14 days - \$200; 30 days - \$250. Includes ad in print and online, 14-day Monster.com posting and Monster Match



Clutter Cleaner

Sell merchandise of all kinds, including automobiles, farm animals, pets, tools, pots & pans, etc. Run for 7 days for \$25; 30 days for \$39.95.

(Does not include property or employment advertisements)

105 Public Notices

SALDERNICE, Ben Sr. - Any and all properties in Putaski Co. No hunting, no fishing, no 4-wheeling, no illegal dumping of trash, no cutting or timber, no trespassing. Not responsible for any accidents or injuries that may occur on properties located in Putaski Co. 918

Alles, Glenn - 134 Sydnee dr Eubank KY. No trespassing, no hunting, no 4-wheeling, no fishing, no cutting of timber, no illegal dumping. Not responsible for any accidents or injuries that may occur on properties located in Putaski Co. Violators will be prosecuted. 220

ALBERT, Janet - No trespassing, no hunting, no fishing, no 4-wheeling, no cutting of timber, no illegal dumping. Not responsible for accidents or injuries that may occur on properties located in Putaski County. Violators will be prosecuted. 0819

ALSP, Geraldine - 1908 Mark Welborn Rd. Somerset. No trespassing, no hunting, no fishing, no 4-wheeling. Violators will be prosecuted. Not liable for any accidents or injuries that may occur on properties located in Putaski County. 0419

BALL, HALEY - No trespassing, no hunting, no camping, no 4-wheeling. Not responsible for accidents or injuries that may occur on any or all properties located in Putaski Co. 519

BARLOW, Patricia - No trespassing, no fishing, no hunting, no 4-wheeling, no camping. Not responsible for accidents or injuries that may occur on any or all properties located in Putaski Co. 819

BARLOW, Steve and Welda - No trespassing, no dumping, no fishing, no hunting, no 4-wheeling. Not responsible for accidents or injuries that may occur on any or all properties located in Putaski Co. 120

BATES, Shelby J. - No trespassing, no hunting, no fishing, no trapping, no 4-wheeling. Not responsible for accidents or injuries that may occur on any or all property located in Putaski Co. 120

BELL, PEGGY - No trespassing, no hunting, no fishing, no illegal dumping, no vehicles, no RV's, no camping. Not responsible for accidents or injuries that may occur on properties located in Putaski Co. 919

Beshars, Lowell - No trespassing, no dumping, no fishing, no hunting, no 4-wheeling. Not responsible for accidents or injuries that may occur on any and all properties located in Putaski County 420

105 Public Notices

BOWLING, Patricia, William & Clayton - No hunting, no 4-wheeling, no cutting of timber, no trespassing. Not responsible for any accidents or injuries that may occur on properties located in Putaski County & on Creekside Dr. Somerset, KY. 1118

BRUNER, John & Beth - Leaning Pine Farms, LLC. No trespassing, no hunting, no fishing, no 4-wheeling, no camping. Not responsible for accidents or injuries that may occur on any or all properties located in Putaski Co. 919

BRYANT, Jackie - 756 Labanow Ave. Burnside KY. No trespassing, no hunting, no fishing. Not responsible for any accidents that may occur on properties located in Putaski County. 919

BURGARDNER, Fern - Fern Meadows Farm Inc. 3176 Elrod Rd. Somerset, KY. Putaski County. No trespassing, no hunting, no 4-wheeling, no fishing. Not responsible for any accidents or injuries that may occur on properties located in Putaski County. 0819

BURTON, Doran, Lisa - Lee Alice & Mike HR-8235 S. HWY 1247 & 999 Dry Branch Rd. Somerset, KY. Cedar Grove Area. No trespassing, no hunting. Violators will be prosecuted. Not responsible for accidents or injuries that may occur on properties located in Putaski Co. 919

Butcher Tom, Clyde - Deaughesse, Jim Price & Jeff Stringer - 425 Thunder rd Somerset, KY 42553. No hunting, no trespassing, no camping. Not responsible for accidents or injuries that may occur on properties in Putaski Co. 2/20

BUTCHER, Edlie - No trespassing, no hunting no unleashed dogs, no 4-wheeling, no cutting of timber, no illegal dumping. Not responsible for any accidents or injuries that may occur on properties located in Putaski Co. 11/20

COOKE, Barry & Joy - No trespassing, no hunting, no fishing, no 4-wheeling, 2550 Silver Star Road. Not responsible for accidents or injuries that may occur on any properties in Putaski County. 12/14

COOMER, Bernice - No trespassing, no hunting, no fishing, no 4-wheeling, no cutting of timber, no illegal dumping. Not responsible for any accidents or injuries that may occur on properties located in Putaski County. 1/20

CORDELL, Ellis & Rogene - No trespassing, no hunting, no off road vehicles. Not responsible for accidents or injuries that may occur on any or all property in Putaski Co. 11/19

CUMMINS, Joe D. & Judith A. - Any and all properties in Putaski County. No hunting, no fishing, no 4-wheeling, no illegal dumping of trash, no cutting of timber, no trespassing. Not responsible for any accidents or injuries that may occur on properties located in Putaski County. 01/20

105 Public Notices

CAMPBELL, Roger & Glenda - No trespassing, no hunting. Not responsible for any accidents or injuries that may occur on all land owned in Putaski County. 09/19

COFFEY, Bonnie - No trespassing, no hunting, no fishing, no 4-wheeling, no cutting of timber, no illegal dumping. Not responsible for accidents or injuries that may occur on properties located in Putaski County. 01/20

COFFEY, Bonnie - No trespassing, no hunting, no fishing, no 4-wheeling, no cutting of timber, no illegal dumping. Not responsible for accidents or injuries that may occur on properties located in Putaski County. 08/19

COOK, Michael & Willette - No trespassing, no hunting, no 4-wheeling. Not responsible for accidents or injuries on properties located in Putaski County. Violators will be prosecuted. 3/20

COOK, Sheila - Any and all properties in Putaski County. No hunting, no fishing, no 4-wheeling, no illegal dumping of trash, no unleashed dogs, no trespassing, no horseback riding, not responsible for accidents or injuries that may occur. 11/19

COOK, Barry & Joy - No trespassing, no hunting, no fishing, no 4-wheeling, 2550 Silver Star Road. Not responsible for accidents or injuries that may occur on any properties in Putaski County. 12/14

COOPER, Bernice - No trespassing, no hunting, no fishing, no 4-wheeling, no cutting of timber, no illegal dumping. Not responsible for any accidents or injuries that may occur on properties located in Putaski County. 1/20

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PUBLIC NOTICE
SBA Network Services, LLC is proposing to build a 305 local Self-Support Telecommunications Tower. Anticipated lighting application is medium intensity dual red/white strobes. The site location is off Highway 90 in Somerset, Putaski County, KY 42503 (37° 22.69' North and 84° 30' 42.74" West). The Federal Communications Commission (FCC) Antenna Structure Registration (ASR, Form 63) filing number is A1134340.
ENVIRONMENTAL EFFECTS - Interested persons may review the application (www.fcc.gov/asr/applications) by entering the filing number. Environmental concerns may be raised by filing a Request for Environmental Review (www.fcc.gov/efr/environmentalreview) and notice filings are strongly encouraged. The mailing address to file a paper copy is: FCC Requests for Environmental Review, Attn: Ramon Williams, 445 12th Street SW, Washington, DC 20554.
HISTORIC PROPERTIES EFFECTS - Public comments regarding potential effects on historic properties may be submitted within 30 days from the date of this publication to: H. Lim, Tercon, 13050 Eastgate Parkway, Louisville, KY 40223, (502) 365-9704; hlim@tercon.com.

REQUEST FOR PROPOSALS
Next Gen Computer Aided Dispatch (CAD)
Putaski County 911 Center

Due to the complexity of the bid proposals for NextGen Computer Aided Dispatch (CAD) we have extended the deadline on behalf of vendors in order for the bids to be prepared in a sufficient manner.
Putaski County 911 Center is seeking Proposals from qualified vendors to furnish and install equipment, accessories, hardware, software, labor, training, and materials for a Next Gen Computer Aided Dispatch (CAD) system. The proposed system will be tested in the Public Safety Answering Point in Somerset, KY.
This solicitation is for the purchase of information technology goods and services. The contract shall be awarded to the company that submits the best overall proposal.
Proposals shall be submitted to Putaski County Fiscal Court, Attn: Judge Steve Frye no later than 4:00 p.m. on Monday May 13th, 2019. Proposals should be submitted to 100 N Main St Somerset, KY 42501. Any questions regarding this RFP should be directed in writing to Director, Aaron Ross at email address aross@putaski911.com and/or phone number (606) 678-5008.
Putaski County 911 Center reserves the right to reject any and all proposals received and to waive any formalities as may be permitted by law.

COMMONWEALTH JOURNAL
POSITION DESCRIPTION

The Commonwealth Journal is accepting applications for the following position:

Position Title: Classified Clerk
Position Type: Part-time 25-30 hours per week

Position Overview: This position meets the public and takes care of customers' needs as it concerns the Commonwealth Journal or by directing them to another department.

Job Duties and Responsibilities:
Answer phones, cashier responsibilities, including taking payments and closing cash register out daily. Does tear sheets daily is the back up for month end closing in classified and sells special. Working Conditions: Work will be performed in the office. Knowledge and Skills: Computer skills including Word and Excel is able to work with customers to input their ads. Have basic knowledge of balancing accounts.

Required Qualifications:
High School Diploma or equivalent.
One year of experience in a related field.
Have basic computer skills with Word.

Preferred Qualifications:
At least 5 years of experience in the sales and marketing field. Bachelor's degree in marketing or related field. Previous experience selling advertising in a media company.

This job description in no way states or implies that these are the only duties to be performed by this employee. The employee will be required to follow any other instructions to perform any other duties upon the request of the individual's manager.

Interested applicants should email resume to: michael.mccleery@somerset-kentucky.com

EXHIBIT

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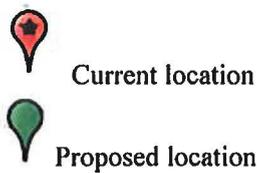
SBA Communications Corporation
8051 Congress Avenue
Boca Raton, FL 33487-1307

T + 561.995.7670
F + 561.995.7626

sbasite.com

Section 1(1)(t)

A map of the area in which the tower is proposed to be located that is draw to scale and that clearly depicts the search area in which a site should, pursuant to radio frequency requirements, be located



The search ring for the relocation was a 0.5-mile radius from the existing site and a similar elevation to the existing tower. CMI Acquisitions found two (2) candidates within the search ring and a third candidate that was just outside of the search ring. Parcel 089-7-0-06 was ultimately chosen because of the increased elevation, existing access road off Hwy 80, SBA Construction approval, and SBA Field approval of the location.