Cellere

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

Application of Central States Tower Holdings, LLC for Issuance of a Certificate of Public Convenience and Necessity to Construct a Cell Site (KY-00-0819A RUSH) in Rush, Kentucky

Case No. 2008-00259

APPLICATION FOR A CERTIFICATE OF
PUBLIC CONVENIENCE AND NECESSITY

Please accept this letter as the formal notification that the above referenced application is being amended to reflect Cellere as the agent for New Cingular Wireless PCS, LLC, as applicant. Enclosed, please find a copy of the applicable FCC License for New Cingular Wireless.

Please feel free to contact me should you have any questions. I can be reached at 231-929-4555, ext. 28 or via email at syagle@cellere.us.

Sincerely,

Sandee Yagle
Title & Leasing Specialist
Cellere

Enclosure

TEL 231.929.4555
FAX 231.929.0099
WWW.cellere.us
info@cellere.us
4110 Copper Ridge Drive, Suite 204, Traverse City, MI 49684

Case No 20080259

ULS License

Cellular License - KNKA773 - NEW CINGULAR WIRELESS PCS, LLC

Call Sign	KNKA773	Radio Service	CL - Cellular
Status	Active	Auth Type	Regular
Market			
Market	CMA110 - Huntington-Ashland, WV/KY/OH	Channel Block	A
Submarket	0	Phase	2
Dates			
Grant	02/12/1988	Expiration	10/01/2007
Effective	02/08/2007	Cancellation	
Five Year Buildout Date			
03/07/1993			
Control Points			
1	2975 BENNEDICT ROAD, CULLODEN, WV		

Licensee			
FRN	0003291192	Type	Limited Liability Company
Licensee			
NEW CINGULAR WIRELESS PCS, LLC 5601 LEGACY DRIVE, MS: A-3 PLANO, TX 75024 ATTN KELLYE E. ABERNATHY		P:(469)229-7422 F:(469)229-7297 E:KELLYE.E.ABERNATHY@CINGULAR.COM	
Contact			
AT&T MOBILITY LLC DAVID C JATLOW 11760 US HIGHWAY 1 NORTH PALM BEACH, FL 33408		P:(202)255-1679 F:(561)279-2097 E:DAVID.JATLOW@CINGULAR.COM	

Ownership and Qualifications

Radio Service Type	Mobile		
Regulatory Status	Common Carrier	Interconnected	Yes

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

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

Demographics			
Race			
Ethnicity		Gender	

ULS License

Cellular License - KNKA773 - NEW CINGULAR WIRELESS PCS, LLC

Locations Summary

Call Sign KNKA773 Radio Service CL - Cellular

16 Total Locations
10 Locations per Summary Page

TP = Termination Pending

Location 1 Fixed

	Coordinates
0.2 MILES NORTH OF MILTON OFF RT. 4 MILTON, WV CABELL County	38-26-37.3 N , 082-07-35.5 W

Location 2 Fixed

	Coordinates
NEAR ROTARY PARK HUNTINGTON, WV CABELL County	38-25-11.3 N , 082-24-05.5 W

Location 3 Fixed

	Coordinates
TARPIN RIDGE 2.6 MILES WEST OF INST. OF I-64 & HWY 23 CATLETTSBURG, KY BOYD County	38-22-50.3 N , 082-39-32.6 W

Location 4 Fixed

	Coordinates
.68 miles SE of Rt. 52 and Rt 144 IRONTON, OH LAWRENCE County	38-31-23.0 N , 082-39-11.0 W

Location 5 Fixed

	Coordinates
.06 MILES WEST NORTHWEST OF INTS. OF I-64 & HWY 7 GRAYSON, KY CARTER County	38-21-06.3 N , 082-56-57.6 W

Location 6 Fixed

	Coordinates
HILLTOP 1/2 MI NORTH OF COUNTY COURT HOUSE IN WAYNE, WV WAYNE County	38-13-31.3 N , 082-27-03.6 W

Location 7 Fixed

	Coordinates
0.75 MILES NE, 43 DEG. OF FORD, WV WAYNE County	38-00-32.3 N , 082-24-01.5 W

Location 8 Fixed

	Coordinates
.71 miles Northeast of Riverside Road and I-64 Kenova, WV	38-23-29.3 N , 082-35-18.6 W

Location 9 Fixed

	Coordinates
.1 MILE NORTH OFHASH RIDGE ROAD BARBOURSVILLE, WV CABELL County	38-24-18.0 N , 082-16-17.0 W

Location 10 Fixed

	Coordinates
OFF US 23, GREENHILLS 0.5 MILE WEST OF GREENUP, KY GREENUP County	38-34-07.3 N , 082-50-27.6 W

16 Total Locations
10 Locations per Summary Page

ULS License

Cellular License - KNKA773 - NEW CINGULAR WIRELESS PCS, LLC

Locations Summary

Call Sign KNKA773 Radio Service CL - Cellular

16 Total Locations
10 Locations per Summary Page

TP = Termination Pending

Location 11 Fixed

	Coordinates
0.33 miles of intersection of US 60 and I-64 Olive Hill, WV	38-19-39.3 N , 083-06-43.6 W

Location 12 Fixed

	Coordinates
(DOUBLE A) LOCATED 1.5 MILES BEARING 193 FROM INTERSECTION OF HWY. 2/7 AND HWY KEHOE, KY CARTER County	38-27-05.3 N , 083-03-19.6 W

Location 13 Fixed

	Coordinates
.5 MI W OF HWY 60 FROM MEADS MEADS, KY BOYD County	38-24-49.3 N , 082-43-09.6 W

Location 14 Fixed

	Coordinates
WASHINGTON & CEDAR STREET BURLINGTON, OH LAWRENCE County	38-24-15.3 N , 082-32-23.6 W

Location 15 Fixed

	Coordinates
2942 McDermott Road Ona, WV CABELL County	36-25-45.4 N , 082-13-01.9 W

Location 16 Fixed

	Coordinates

South of Rt. 60, West of Alt 10, Pea Ridge Barboursbille, WV CABELL County	38-24-36.9 N , 082-19-20.4 W

16 Total Locations
10 Locations per Summary Page

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

Application of Central States Tower Holdings, LLC for Issuance of a Certificate of Public Convenience and Necessity to Construct a Cell Site (KY-00-0819A RUSH) in Rush Kentucky — Case No. 2008-00259

APPLICATION FOR A CERTIFICATE OF
PUBLIC CONVENIENCE AND NECESSITY

Cellere, LLC ("Cellere") as agent for Central States Tower Holdings, LLC ("Central States"), pursuant to KRS 278.020 and 278.040, hereby submits this application for a certificate of public convenience and necessity to construct a cell site to be known as the KY-00-0819A RUSH ("RUSH") cell site in Rush, Kentucky, namely the county of Carter, Kentucky.

1. As required by 807 KAR 5:001 Sections 8(1) and (3), and 807 KAR 5:063, Cellere states that it is a Michigan limited liability company who is acting as agent for Central States Tower Holdings, LLC, who is a Delaware limited liability company and whose full name and address are: Cellere, LLC, 4110 Copper Ridge Drive, Suite 204, Traverse City, Michigan 49684. Central States Tower Holdings, LLC, whose address is: 323 S. Hale Street, Suite #100, Wheaton, IL 60187.

2. Pursuant to 807 KAR §1(1)(b), a copy of the applicant's applications to and approval from the Federal Aviation Administration and Kentucky Airport Zoning Commission are submitted as Exhibit "A".

3. Pursuant to 807 KAR 5:063 § 1(1)(d), applicant is submitting as Exhibit "B", a geotechnical investigation report, signed and sealed by a professional engineer registered in Kentucky, that includes boring logs and foundation design recommendations; and as Exhibit "E", a map that outlines the finding as to the susceptibility of the area surrounding the proposed site to flood hazard.

4. Pursuant to 807 KAR 5:063 § 1(1)(e), clear directions from the county seat to the proposed site, including highway numbers and street names, if applicable, with the telephone number of the person who prepared the directions are submitted as Exhibit "C".

5. Pursuant to 807 KAR § 1(1)(f), a copy of the lease for the property on which the cell tower is proposed to be located is submitted as Exhibit "D".

6. Pursuant to 807 KAR § 1(1)(g), experienced personnel will manage and operate the RUSH cell site. The Vice President of Construction for Cellere, LLC., Chuck Norris, is ultimately responsible for all construction of the cell tower. Mr. Norris has over 15 years of experience. Arthur J. Krueger, Licensed Professional Engineer of Wilcox Professional Services, is responsible for the design specifications of the proposed tower (identified in Exhibit "B"). S.M. Naeem Akhter, Licensed Professional Engineer of Glenmartin, is responsible for the foundation design of the proposed tower (identified in Exhibit "B"). Central States Tower Holdings, LLC, is responsible for the operations of the tower, once constructed. Central States operates cellular communications towers in 19 states with the principals having 35+ years of experience.

7. Pursuant to 807 KAR 5:063 § 1(1)(h), a 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 proposed 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 submitted as Exhibit "E"

8. Pursuant to 807 KAR 5:063 § 1(1)(i), 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 antennae is submitted as Exhibit "B".

9. Pursuant to 807 KAR 5:063 § 1(1)(j), 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, is submitted as Exhibit "B".

10. Pursuant to 807 KAR 5:063 § 1(1((k), a map, drawn to a scale no less than one (1) inch equals 200 feet, that identifies every structure and every owner of real estate within 500 feet of the proposed tower, is submitted as Exhibit "E".

11. Pursuant to 807 KAR 5:063 § 1(1)(l), applicant hereby affirms that every person who owns property within 500 feet of the proposed tower has been: (i) notified by certified mail, return receipt requested, of the proposed construction, (ii) given the commission docket number under which the applications will be processed; and (iii) informed of his or her right to request intervention.

12. Pursuant to KRS 278.665 (2), applicant hereby affirms that every person who, according to the records of the property valuation administrator, owns property contiguous to the property where the proposed cellular tower will be located has been; (i) notified by certified mail , return receipt requested, of the proposed construction; (ii) given the commission docket number under which the application will be processed; and (iii) informed of his or her right to request intervention.

13. Pursuant to 807 KAR 5:063 § 1(1)(m), a list of the property owners who received the notice together with copies of the certified letters sent to listed property owners, is submitted as Exhibit "F".

14. Pursuant to 807 KAR 5:063 § 1(1)(n), applicant hereby affirms that the Office of Carter County Judge Executive has been: (i) notified by certified mail , return receipt requested, of the proposed construction; (ii) given the commission docket number under which the application will be processed; and (iii) informed of its right to request intervention.

15. Pursuant to 807 KAR 5:063 § 1(1)(o), a copy of the notice send to the Carter County Judge Executive is submitted as Exhibit "G".

16. Pursuant to 807 KAR 5:063 § 1(1)(p), applicant hereby affirms that (i) two written notices meeting subsection two (2) of this section have been posted, one in a visible location on the proposed site and one on the nearest public road; and (ii) the notices shall remain posted for at least two weeks after the application has been filed.

17. Pursuant to 807 KAR 5:063 § 1(2)(a), applicant affirms that:

(a) A written notice, of durable material at least two (2) feet by four (4) feet in size, stating that "Central States Tower Holdings, LLC proposes to construct a telecommunications tower on this site", including the addresses and telephone numbers of the applicant and the Kentucky Public Service Commission, has been posted and shall remain in a visible location on the proposed site until final disposition of the application; and

(b) A written notice, of durable material at least two (2) feet by four (4) feet in size, stating that "Central States Tower Holdings, LLC, proposes to construct a telecommunications tower near this site", including the addresses and telephone numbers of the applicant and the Kentucky Public Service Commission, has been posted on the public road nearest the site.

A Copy of each sign is attached as Exhibit "H".

18. Pursuant to 807 KAR 5:063 § 1(1)(q), a statement that notice of the location of the proposed construction has been published in a newspaper of general circulation in the county in which the construction is proposed, a copy of which is submitted as Exhibit "I".

19. Pursuant to 807 KAR 5:063 § 1(1)(r), the cell site, which has been selected, is in a relatively undeveloped area in Rush, in Carter County, Kentucky.

20. Pursuant to 807 KAR 5:063 § 1(1)(s), Central States, LLC, has considered the likely effects of the installation on nearby land uses and values and has concluded that there is no more suitable location reasonably available from which adequate service to the area can be provided, and that there is no reasonably available opportunity to co-locate. Central States, LLC, has attempted to co-locate on towers

designed to host multiple wireless service provider's facilities or existing structures, such as a telecommunications tower, or another suitable structure capable of supporting the utility's facilities.

21. Pursuant to 807 KAR 5:063 § 1(1)(t), a 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 submitted as Exhibit "J".

22. Pursuant to KRS 100.987 (2((a), a grid map, that is drawn to scale, that shows the location of all existing cellular antenna towers and that indicates the general position of proposed construction sites for new cellular antenna towers is submitted as Exhibit "K".

23. No reasonably available telecommunications tower, or other suitable structure capable of supporting the cellular facilities of Central States, LLC and which would provide adequate service to the area exists.

24. Correspondence and communication with regard to this application should be addressed to:

Benjamin Meredith
Cellere, LLC
4110 Copper Ridge Drive, Suite 204
Traverse City, MI 49684
(231) 929-4555
(fax) 929-0099
bmeredith@cellere.us

WHEREFORE, Cellere, LLC , as agent for Central States Tower Holdings, LLC, requests the Commission to enter and order:

1. Granting a certificate of public convenience and necessity to construct the RUSH cell site; and
2. Granting all other relief as appropriate.

Respectfully submitted,

Sandra Poole for Benjamin Meredith

Benjamin Meredith
Cellere, LLC
4110 Copper Ridge Drive, Suite 204
Traverse City, MI 49684
(231) 929-4555
(fax) 929-0099
bmeredith@cellere.us

Index to Exhibits

EXHIBIT A

FAA Application and Determination
And
Kentucky Airport Zoning Commission
Application and Approval

Federal Aviation Administration
Air Traffic Airspace Branch, ASW-520
2601 Meacham Blvd.
Fort Worth, TX 76137-0520

Aeronautical Study No.
2008-ASO-2295-OE
Prior Study No.
2008-ASO-1844-OE

Issued Date: 05/29/2008

Brian Meier
Central States Tower Holdings, LLC
323 South Hale Street Suite 100
Wheaton, IL 60187

**** 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:	Tower KY-00-0819 RUSH
Location:	Rush, KY
Latitude:	38-20-20.81N NAD 83
Longitude:	82-47-08.02W
Heights:	300 feet above ground level (AGL)
	1138 feet above mean sea level (AMSL)

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

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

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

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

See attachment for additional condition(s) or information.
While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

This determination expires on 11/29/2009 unless:

(a) extended, revised or terminated by the issuing office.
(b) 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 POSTMARKED OR DELIVERED TO THIS OFFICE AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

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

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

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

If we can be of further assistance, please contact our office at (817) 838-1994. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2008-ASO-2295-OE.

Signature Control No: 572830-102154402 (DNE)
Linda Steele
Technician

Attachment(s)
Additional Information

Additional information for ASN 2008-ASO-2295-OE

It should be noted that no transmitted frequencies were submitted or approved for this tower at this time.

A separate study is required for any transmitting frequency(ies) on this antenna tower.

Notice of Proposed Construction or Alteration - Off Airport

Project Name: CENTR-000093614-08 **Sponsor:** Central States Tower Holdings, LLC

Details for Case : KY-00-0819 RUSH

Show Project Summary

Case Status

ASN: 2008-ASO-2295-OE
Status: Accepted
Date Accepted: 04/28/2008
Date Determined:
Letters: None

Construction / Alteration Information

Notice Of: Construction
Duration: Permanent
***if Temporary* :** Months: Days:
Work Schedule - Start:
Work Schedule - End:
State Filing: Not filed with State

Structure Summary

Structure Type: Antenna Tower
Structure Name: KY-00-0819 RUSH
FCC Number:
Prior ASN:

Structure Details

Latitude: 38° 20' 20.81" N
Longitude: 82° 47' 8.02" W
Horizontal Datum: NAD83
Site Elevation (SE): 838 (nearest foot)
Structure Height (AGL): 300 (nearest foot)
Marking/Lighting: Dual-red and medium intensity
***Other* :**
Nearest City: Rush
Nearest State: Kentucky
Description of Location: Vacant Land
Description of Proposal: Tower only

Common Frequency Bands

Low Freq	High Freq	Freq Unit	ERP	ERP Unit

Specific Frequencies

KY-00-0819 RUSH

KENTUCKY AIRPORT ZONING COMMISSION

Steven L. Beshear
Governor

90 Airport Road
Frankfort, Kentucky 40601
http://transportation.ky.gov/aviation/kyzoning.htm
502-564-4480

502-564-4480
fax: 502-564-7953

No.: AS-022-DWU-08-091

July 23, 2008

APPROVAL OF APPLICATION

APPLICANT:
Central States Tower, Inc.
323 South Hale Street, Suite 100
Wheaton, IL 60187

SUBJECT: AS-022-DWU-08-091

STRUCTURE:	Antenna Tower
LOCATION:	Rush, KY
COORDINATES:	38-20-20.81 N / 82-47-08.02 W
HEIGHT:	300'AGL/1138'AMSL

The Kentucky Airport Zoning Commission has approved your application for a permit to construct 300'AGL/1138'AMSL Antenna Tower near, Rush, KY 38-20-20.81 N / 82-47-08.02 W.

This permit is valid for a period of 18 months from its date of issuance. If construction is not completed within this period, this permit shall lapse and be void, and no work shall be performed without a new application being approved by the commission.

A copy of the approved application is enclosed for your files.

M-Dual Obstruction lighting is required

John Houlihan, Administrator

Steven L. Beshear
Governor

KENTUCKY AIRPORT ZONING COMMISSION
90 Airport Road
Frankfort, Kentucky 40601
http://transportation.ky.gov/aviation/kyzoning.htm
502-564-4480

502-564-4480
fax: 502-564-7953
No.: AS-022-DWU-08-091

CONSTRUCTION/ALTERATION STATUS REPORT

July 23, 2008

AERONAUTICAL STUDY NUMBER: AS-022-DWU-08-091

Central States Tower, Inc
323 South Hale Street, Suite 100
Wheaton, IL 60187

This concerns the permit which was issued to you by the Kentucky Airport Zoning Commission on July 10, 2008. This permit is valid for a period of 18 months from the date of issuance. If construction is not completed within this period, this permit shall lapse and be void, and no work shall be performed without a new application being approved by the commission. When appropriate, please indicate the status of the project in the place below and return this letter to John Houlihan, Administrator, Kentucky Airport Zoning Commission, 90 Airport Road, Building 400 Frankfort, KY 40601. (502) 564-4480.

STRUCTURE:	Antenna Tower
LOCATION:	Rush, KY
COORDINATES:	38-20-20.18 N / 82-47-08.02 W
HEIGHT:	300'AGL/1138'AMSL

CONSTRUCTION/ALTERATION STATUS
1. The project ( ) is abandoned. ( ) is not abandoned

2. Construction status is as follows:
Structure reached its greatest height of _____ ft. AGL
_____ ft. AMSL on _____(date).

Date construction was completed. _____

Type of obstruction marking/painting. _____

Type of obstruction lighting. _____

As built coordinates. _____

Miscellaneous Information: _____

_____

_____

DATE _____

SIGNATURE/TITLE _____

Kentucky UNBRIDLED SPIRIT

Kentucky

TC 56-50E (Rev. 02/05)

Kentucky Transportation Cabinet, Kentucky Airport Zoning Commission, 200 Mero Street, Frankfort, KY 40622

APPLICATION FOR PERMIT TO CONSTRUCT OR ALTER A STRUCTURE

INSTRUCTIONS INCLUDED

Kentucky Aeronautical Study Number: AS-07L-DWU-08-091

1. APPLICANT -- Name, Address, Telephone, Fax, etc.

Central States Tower, Inc.
323 South Hale Street, Suite 100
Wheaton, ILL 60187
(630) 221-8500

2. Representative of Applicant -- Name, Address, Telephone, Fax

Cellere
4110 Copper Ridge Drive, Suite 204
Traverse City, MI 49684
(231) 929-4555

3. Application for: ☒ New Construction ☐ Alteration ☐ Existing

4. Duration: ☒ Permanent ☐ Temporary (Months _____ Days _____)

5. Work Schedule: Start _____ End _____

6. Type: ☒ Antenna Tower ☐ Crane ☐ Building ☐ Power Line ☐ Landfill ☐ Water Tank ☐ Other _____

7. Marking/Painting and/or Lighting Preferred:

☐ Red Lights and Paint
☐ White - Medium Intensity
☐ White - High Intensity
☒ Dual - Red & Medium Intensity White
☐ Dual - Red & High Intensity White
☐ Other _____

8. FAA Aeronautical Study Number: 2008-ASO-2295-OE

9. Latitude: 38 ° 20 ' 20.81 " N

10. Longitude: 82 ° 47 ' 8.02 " W

11. Datum: ☒ NAD83 ☐ NAD27 ☐ Other _____

12. Nearest Kentucky City: Rush County: Carter

13. Nearest Kentucky public use or Military airport: Fleming Mason

14. Distance from #13 to Structure: +/- 54 miles

15. Direction from #13 to Structure: SE

16. Site Elevation (AMSL): 838 Feet

17. Total Structure Height (AGL): 300 Feet

18. Overall Height (#16 + #17) (AMSL): 1138 Feet

19. Previous FAA and/or Kentucky Aeronautical Study Number(s): None

20. 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 attached 7.5 minute Quad Map and 1A certification

21. Description of Proposal:

Tower Only

22. Has a "NOTICE OF CONSTRUCTION OR ALTERATION" (FAA Form 7460-1) been filed with the Federal Aviation Administration?

☐ No ☒ Yes, When 4/28/08

CERTIFICATION: I hereby certify that all the above statements made by me are true, complete and correct to the best of my knowledge and belief.

Braxton Dougherty VP Construction — Braxton Dougherty — 4/29/08
Printed Name and Title — Signature — Date

PENALTIES: Persons failing to comply with Kentucky Revised Statutes (KRS 183.861 through 183.990) and Kentucky Administrative Regulations (602 KAR 050:Series) are liable for fines and/or imprisonment as set forth in KRS 183.990(3). Non-compliance with Federal Aviation Administration Regulations may result in further penalties.

Commission Action:

☒ Approved
☐ Disapproved

☐ Chairman, KAZC ☒ Administrator, KAZC

Date 2-23-08

Cellere

April 29, 2008

Administrator
Kentucky Airport Zoning Commission
Department of Aviation
200 Metro Street
Frankfort, KY 40622

RE: Form TC 56-50E – Application for New Construction

Hello,

Enclosed please find Form TC-56-50-E for your review and approval for the construction of a new 300' telecommunications tower proposed in Rush, Carter County, Kentucky. I have enclosed a copy of the FAA Form 7460-1, a quad map showing the location of the proposed tower and a copy of the 1A Certification.

If you have any questions or require any additional information please don't hesitate to contact our office.

Thank you,

Joann Wendels

Joann Wendels
Cellere, Agent for Central States Tower, Inc.

TEL 231.929.4555
FAX 231.929.0099
www.cellere.us
info@cellere.us
4110 Copper Ridge Drive, Suite 204, Traverse City, MI 49684

Kentucky

KY-[illegible] 0819 Rush TC 56-50E (Rev. 02/05)

Kentucky Transportation Cabinet, Kentucky Airport Zoning Commission, 200 Mero Street, Frankfort, KY 40622

APPLICATION FOR PERMIT TO CONSTRUCT OR ALTER A STRUCTURE

INSTRUCTIONS INCLUDED

Kentucky Aeronautical Study Number

1. APPLICANT – Name, Address, Telephone, Fax, etc.

Central States Tower, Inc.
333 South Hale Street, Suite 100
Wheaton, IL 60187
(630) 221-8500

2. Representative of Applicant – Name, Address, Telephone, Fax

Cellere
4110 Copper Ridge Drive, Suite 204
Traverse City, MI 49684
(231) 929-4555

3. Application for: ☒ New Construction ☐ Alteration ☐ Existing

4. Duration: ☒ Permanent ☐ Temporary (Months _____ Days _____)

5. Work Schedule: Start _____ End _____

6. Type: ☒ Antenna Tower ☐ Crane ☐ Building ☐ Power Line
☐ Landfill ☐ Water Tank ☐ Other _____

7. Marking/Painting and/or Lighting Preferred:
☐ Red Lights and Paint ☒ Dual - Red & Medium Intensity White
☐ White - Medium Intensity ☐ Dual - Red & High Intensity White
☐ White - High Intensity ☐ Other _____

8. FAA Aeronautical Study Number 2008-ASO-2295-OE

9. Latitude: 38 ° 20 ' 20.81 " N

10. Longitude: 82 ° 47 ' 8.02 " W

11. Datum: ☒ NAD83 ☐ NAD27 ☐ Other _____

12. Nearest Kentucky City: Rush County Carter

13. Nearest Kentucky public use or Military airport:
Fleming Mason

14. Distance from #13 to Structure: +/- 54 miles

15. Direction from #13 to Structure: SE

16. Site Elevation (AMSL): 838 Feet

17. Total Structure Height (AGL): 300 Feet

18. Overall Height (#16 + #17) (AMSL): 1138 Feet

19. Previous FAA and/or Kentucky Aeronautical Study Number(s):
None

20. 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 attached 7.5 minute Quad map and 1A certification

21. Description of Proposal:
Tower Only

22. Has a "NOTICE OF CONSTRUCTION OR ALTERATION" (FAA Form 7460-1) been filed with the Federal Aviation Administration?
☐ No ☒ Yes, When 4/28/08

CERTIFICATION: I hereby certify that all the above statements made by me are true, complete and correct to the best of my knowledge and belief.

Braxton Dougherty VP Construction | Braxton Dougherty | 4/29/08
Printed Name and Title | Signature | Date

PENALTIES: Persons failing to comply with Kentucky Revised Statutes (KRS 183.861 through 183.990) and Kentucky Administrative Regulations (602 KAR 050:Series) are liable for fines and/or imprisonment as set forth in KRS 183.990(3). Non-compliance with Federal Aviation Administration Regulations may result in further penalties.

Commission Action: ☐ Chairman, KAZC ☐ Administrator, KAZC

☐ Approved

☐ Disapproved _____ Date _____

Notice of Proposed Construction or Alteration - Off Airport

Project Name: CENTR-000093614-08 **Sponsor:** Central States Tower Holdings, LLC

Details for Case : KY-00-0819 RUSH

Show Project Summary

Case Status

ASN: 2008-ASO-2295-OE
Status: Work In Progress
Date Accepted: 04/28/2008
Date Determined:
Letters: None

Construction / Alteration Information

Notice Of: Construction
Duration: Permanent
if Temporary : Months: Days:
Work Schedule - Start:
Work Schedule - End:
State Filing: Not filed with State

Structure Summary

Structure Type: Antenna Tower
Structure Name: KY-00-0819 RUSH
FCC Number:
Prior ASN:

Structure Details

Latitude: 38° 20' 20.81" N
Longitude: 82° 47' 8.02" W
Horizontal Datum: NAD83
Site Elevation (SE): 838 (nearest foot)
Structure Height (AGL): 300 (nearest foot)
Marking/Lighting: Dual-red and medium intensity
Other :
Nearest City: Rush
Nearest State: Kentucky
Description of Location: Vacant Land
Description of Proposal: Tower only

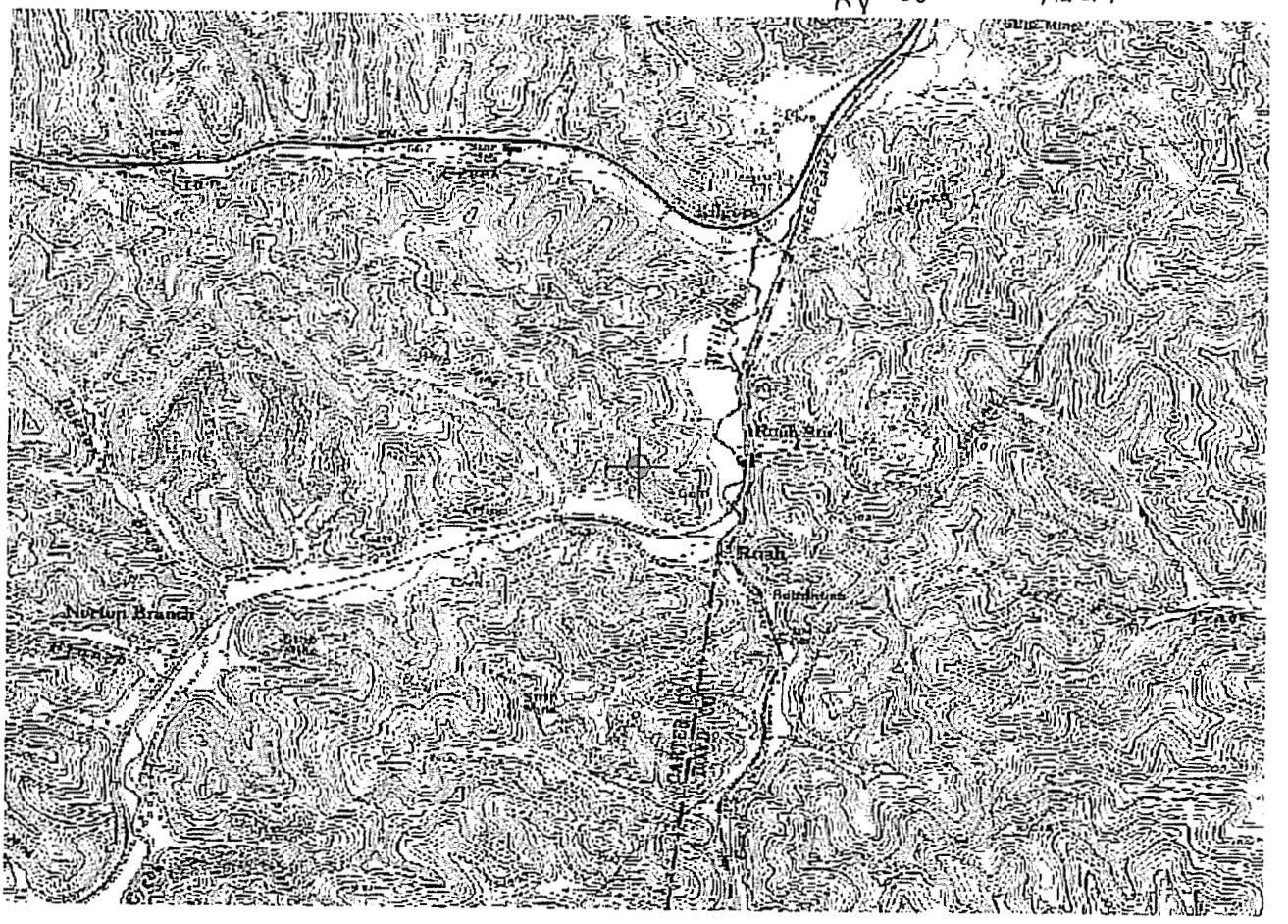
Common Frequency Bands

Low Freq	High Freq	Freq Unit	ERP	ERP Unit

Specific Frequencies

Close Print

KY-00-0819 Rush



engineering & surveying
705-F Lakeview Plaza Blvd.
Worthington, Ohio 43085
Phone: (614) 841-0053
Fax: (614) 841-0170
E-mail: hlg@geoinno.com

Date: March 25, 2008

Applicant: Central States Tower, Inc.
323 South Hale Street, Suite 100
Wheaton, IL 60187

Site Number/Name: KY-00-0819 RUSH

County: Carter

Site Address: 79 +/- Geiger Road; Rush, Ky; 41168

Center of Tower:

LATITUDE: N38°20' 21.52"

LONGITUDE: W82°47' 07.71"

HORIZONTAL DATUM: NAD 83

GROUND ELEVATION: 838 Feet

VERTICAL DATUM: NAVD 88

CERTIFICATION

I herby certify that the survey of this tower site was performed under my direct supervision, and to the best of my knowledge, the location of the center of the site, as shown in geographic coordinates above, has an horizontal accuracy within +/- 20 feet and a vertical accuracy within +/- 3 feet.

STATE OF KENTUCKY
ANTHONY J. ROBINSON
3601
LICENSED PROFESSIONAL LAND SURVEYOR

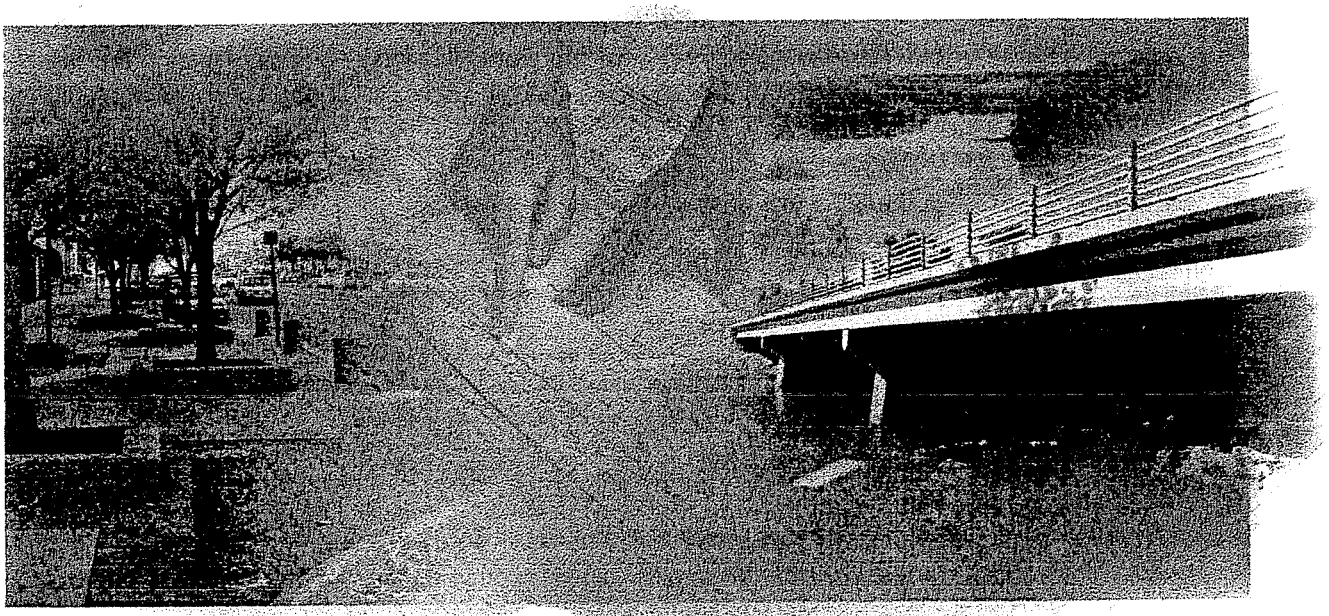
HLG Engineering & Surveying, Inc.

3-31-08

ANTHONY J. ROBINSON, P.S. # 3601, KENTUCKY DATE
JOB# 1011.028

EXHIBIT B

Geotechnical Report; Survey; Tower Design
Tower Foundation Design



SOIL BORING AND ROCK CORING INVESTIGATION REPORT

CST SITE NO. KY-00-0819

RUSH

Grayson Township, Carter County, Kentucky

Prepared for:
CST Holdings, LLC
323 South Hale Street, Suite 100
Wheaton, Illinois 60187

Prepared by:
Wilcox Professional Services, LLC
One Madison Avenue
Cadillac, MI 49601
Wilcox Project No. 25036.00004.10

Applied Geotechnical Services, Inc.

June 9, 2008

Wilcox

STATE OF KENTUCKY
Arthur J. Krueger
25843
LICENSED PROFESSIONAL ENGINEER
7/28/08

TABLE OF CONTENTS

Central States Tower No. KY-00-0819 – Rush
Wilcox Project No. 25036.00004.10

EXECUTIVE SUMMARY

The driller did not report encountering topsoil at the site. Approximately 7½ to 15 feet of weathered sandstone with occasional sandy clay seams was encountered at the boring locations. At the locations of Borings 2 and 3, auger refusal on apparent sandstone was encountered at depths of 10 feet and 7½ feet, respectively. At the location of Boring 1, the weathered sandstone was underlain by alternating layers of sandstone and shale that extended to a depth of 27 feet below the existing ground surface. Auger refusal on apparent sandstone was encountered at this depth. At Boring 2, NQ rock coring was performed from approximate depths of 10 feet to 20 feet below the existing ground surface. The rock coring encountered hard brown sandstone that extended to the explored depth of 20 feet.

Borings 1 and 3 were reported as dry both during drilling and upon completion of the boring. Boring 2 was also reported as dry during drilling. However, water was introduced into Boring 2 during the NQ rock coring operations. Therefore, the groundwater level was not obtained upon completion. Based on our review of the site topographic map and the available soil and rock core information, we estimate the prevailing groundwater level may be located below the explored depth of the soil/ rock core borings.

We understand Central States Tower is planning the construction of a 300-foot self-supporting tower at the site. At the time of our investigation, no information was available to us as to the tower manufacturer or loads. These loads vary considerably depending on the tower characteristics and the number of carriers. Estimated tower loads, based on our experience with similar towers, are presented in Section 1.1 of this report.

We understand mat-and-pier or mat-type foundations are typically used for support of the self-supporting towers such as proposed for the site. Based on the subsurface conditions revealed by the soil and rock core borings, we concur with the use of either-mat-and-pier or mat foundations for support of the proposed tower. We estimate the mat foundation may be on the order of 30 to 35 square feet in plan area and be constructed at a depth of approximately 6 to 8 feet below the existing ground surface. Based on these conditions, we recommend the mat be designed for a presumptive maximum net allowable soil pressure of 10,000 pounds per square foot (psf) on the weathered sandstone.

EXECUTIVE SUMMARY, Page 2 of 2

We anticipate the use of a jack-hammer or similar rock excavation equipment may be necessary to level the base of the mat foundation on the weathered shale surface.

Several feet of cut and fill is anticipated to achieve finished grades within the proposed tower area. We recommend the subgrade soils be scarified and properly benched prior to placement of engineered fill to reduce the risk of a slip plane forming along the native soil-engineered fill surface.

Do not consider this summary separate from the entire text of this report, with all the conclusions and qualifications mentioned herein. Details of our analysis and recommendations are discussed in the following sections and in the appendix of this report.

REPORT PREPARED BY:
Applied Geotechnical Services, Inc.

Jefferey T. Anagnostou, P.E., C.P.G.
Project Consultant

REPORT REVIEWED BY:
Wilcox Professional Services, LLC

Arthur J. Krueger, P.E.
Project Manager

Central States Tower No. KY-00-0819 – Rush
Wilcox Project No. 25036.00004.10

1. INTRODUCTION

We have completed the Soil Boring & Rock Coring Investigation for the proposed Central States Tower Site No. KY-00-0819 – Rush self-supporting lattice tower to be located in Grayson Township, Carter County, Kentucky. Cellere, Inc. retained **Wilcox Professional Services, LLC** to perform this investigation. Subsequently, Wilcox has retained Applied Geotechnical Services, Inc. for laboratory testing and assistance with preparing the engineering report. This report presents the results of the soil boring/rock coring investigation and our estimated soil and rock parameters to be used in the design of the tower foundation.

1.1 Project Description

We understand Central States Tower is planning to construct a 300-foot high, self-supporting lattice type tower at the site. The tower will have three legs on an equilateral triangle. We estimate the tower base width may be approximately 29 feet. At the time this investigation was completed, the tower loads were not yet available. Based on estimated tower loads for a multi-carrier co-locate site, we estimate the tower may impose a compression load per leg of approximately 510 kips, an uplift load per leg of approximately 435 kips, a total shear load of approximately 75 kips and a overturning moment of approximately 12,080 foot-kips.

The approximate elevation of the tower base plate was not available at the time of our report.

1.2 Scope of Services

Our scope of services for this project is as follows.

A) Performing one soil boring at the center of the tower to auger refusal on bedrock, followed by NQ rock coring to a depth of 10 feet into the bedrock and performing soil borings extending to auger refusal on bedrock at a distance of approximately 30 feet uphill and 30 feet downhill of the tower center;

B) Performing appropriate laboratory testing including visual engineering classification, natural moisture content, unconfined compressive strength estimates on representative cohesive samples, performing resistivity, pH, chloride, and sulfide testing of a composite soil sample obtained between depths of 1 to 10 feet; and

C) Preparing an engineering report providing our recommendations for the tower foundation design and construction. The written report includes recommendations regarding the allowable soil bearing capacity, estimated settlement, and construction considerations related to foundation construction.

The field drilling operations were performed by Triad Engineering, Inc. of Scott Depot, West Virginia with coordination by Wilcox Professional Services, LLC. The laboratory testing and engineering report preparation were performed under the direction and supervision of a registered professional engineer according to generally accepted standards and procedures in the practice of geotechnical engineering. If changes occur in the design, location, or concept of the project, the conclusions and recommendations

contained in this report are not valid unless Wilcox Professional Services, LLC reviews the changes. Wilcox Professional Services, LLC will then provide any necessary changes in writing. Our conclusions and recommendations are based on the soil boring/rock coring performed by Triad Engineering, Inc. and project information provided by Cellere, Inc. Slope stability analyses for the proposed tower were beyond the scope of the present geotechnical investigation. We recommend an evaluation of the factor of safety of the proposed mat foundation with respect to global and sliding block failure mechanisms be performed prior to construction.

2. FIELD AND LABORATORY PROGRAM

2.1 Field Program

Cellere, Inc. selected the depth and location of the borings in consultation with Wilcox Professional Services, Inc. As shown on the Schematic Soil Boring Location Plan, a total of three (3) soil borings were performed for the project. The approximate ground surface elevation at the soil/rock core boring locations were estimated based upon a preliminary survey drawings proposed by HLG engineering and Surveying, Inc. and are presented in Table 1.

Table 1: Approximate Ground Surface Elevation at Soil/Rock Core Boring Locations

Soil Boring No.	Approximate Ground Surface Elevation (ft)
B-1	+/- 833
B-2	+/- 838
B-3	+/- 840

A truck mounted rotary drill rig was used to perform the soil boring. Standard split-spoon samplers were used to obtain the soil samples by the Standard Penetration Test (SPT) method in general conformance with ASTM Standard D1586. The number of blows required to drive the sampler 12 inches, after an initial seating of 6 inches, with a 140-pound hammer falling 30 inches is termed the Standard Penetration Resistance, N-value. A graphical representation of the N-values is given on the boring logs appended to this report.

During the field operations, the drill crew maintained a log of the subsurface conditions, including changes in stratigraphy and observed groundwater levels. After completion of the drilling operations, the boreholes were backfilled with drill cuttings and bentonite crumbles.

2.2 Laboratory Testing

The soil and rock samples were placed in sealed containers in the field and brought to the laboratory for testing and classification. A geotechnical engineer classified the samples in general conformance with the Unified Soil Classification System. The cored rock samples were classified by Triad Engineering, Inc.

Laboratory testing of the soil samples included estimating the unconfined compressive strength of the cohesive split-spoon samples with a calibrated hand penetrometer. With a hand penetrometer, the unconfined compressive strength of a soil sample is estimated by measuring the resistance of the soil sample to the penetration of a small, calibrated spring-loaded cylinder. The penetrometer can measure a maximum unconfined compressive strength of 4½ tons per square foot (tsf).

The cores were logged for core recovery and Rock Quality Designation (RQD) by a Triad Engineering, Inc. engineer. The RQD is one the standard measurements of rock competence and is given by the percentage ratio of the total length of the recovered samples 4 inches or more in length to the total length of the core run. Sometimes, core lengths smaller than 4 inches may be included if they are judged to have been fractured during coring and handling.

We will hold the soil and rock core samples for 60 days from the date of this report. If you would like the samples, please contact us within this time frame.

2.3 Laboratory Soil Box Resistivity Test Results

Estimated earth resistivity values of the subsoil below the proposed development area were obtained by performing laboratory resistivity testing using the Miller Soil Box Resistivity instrument. The testing was performed on selected composite split-spoon samples from Soil/Rock Core Borings B-1 through B-3. The composite samples were prepared by thoroughly mixing prior to placement in the soil box instrument. The following estimated earth resistivity values are presented based on the Miller Soil Box Resistivity test results and may be used with judgment in the design of the lightning protection grounding system:

Table 2. Miller Soil Box Resistivity Results

Boring Numbers	Sample Numbers	Represented Depth Below Ground Surface (ft)	Resistivity (Ohm-feet)
B-1 - B-3	S1 – S5	1 to 11.5	165

3. SITE AND SUBSURFACE CONDITIONS

3.1 Site Conditions

The subject site is located at +/- 79 Geiger Road in Grayson Township, Carter County, Kentucky. Based on our review of the Central States Tower Site Candidate Package, it appears the site is situated on a northwest-southeast trending, partially wooded ridge. Within the proposed tower compound, the ground surface slopes downward towards the east, south and west directions.

3.2 Soil and Rock Conditions

The driller did not report encountering topsoil at the site. Approximately 7½ to 15 feet of weathered sandstone with occasional sandy clay seams was encountered at the boring locations. At the locations of Borings 2 and 3, auger refusal on apparent sandstone was encountered at depths of 10 feet and 7½ feet, respectively. At the location of Boring 1, the weathered sandstone was underlain by alternating layers of sandstone and shale that extended to a depth of 27 feet below the existing ground surface. Auger refusal on apparent sandstone was encountered at this depth. At Boring 2, NQ rock coring was performed from approximate depths of 10 feet to 20 feet below the existing ground surface. The rock coring encountered hard brown sandstone that extended to the explored depth of 20 feet.

The weathered sandstone was hard with calibrated hand penetrometer unconfined compressive strengths in excess of 4½ tsf and natural moisture contents of approximately 5 to 9 percent. The sandstone specimen obtained from the NQ rock coring possessed a recovery of 100 percent and an RQD value of 67 percent.

The stratification depths shown on the soil boring log represent the soil and rock conditions at the boring location. Variations may occur at locations away from the boring. Additionally, the stratigraphic lines represent the approximate boundary between soil and rock types; the transition may be more gradual than what is shown. The boring log was prepared on the basis of laboratory classification and testing as well as the field logs of the explored soils and bedrock.

The soil/rock core boring logs are presented in the appendix. The soil and rock profile described above is a generalized description of the conditions encountered at the boring location. Please consult the boring logs for more specific information.

3.3 Groundwater Level Observations

Borings 1 and 3 were reported to be dry both during drilling and upon completion of the boring. Boring 2 was also reported as dry during drilling. However, water was introduced into Boring 2 during the NQ rock coring operations. Therefore, the groundwater level was not obtained upon completion. Based on our review of the available soil and rock core information, we estimate the prevailing groundwater level may be located below the explored depth of the soil/ rock core borings. Expect the prevailing groundwater level to vary due to changes in precipitation, evaporation, surface run-off, and other factors. The groundwater levels discussed herein and shown on the boring logs represent the conditions at the time of the measurements.

4. RESULTS & RECOMMENDATIONS

4.1 Mat Foundation Recommendations

We understand mat-and-pier or mat-type foundations are typically used for support of the self-supporting towers such as proposed for the site. Based on the subsurface conditions revealed by the soil and rock core borings, we concur with the use of either-mat-and-pier or mat foundations for support of the proposed tower. We estimate the mat foundation may be on the order of 30 to 35 square feet in plan area and be constructed at a depth of approximately 6 to 8 feet below the existing ground surface. Based on these conditions, we recommend the mat be designed for a presumptive maximum net allowable soil pressure of 10,000 pounds per square foot (psf) on the weathered sandstone. The mat foundation excavation must be properly sloped or shored in accordance with local, state, and federal trench safety requirements.

The mat foundation excavation can be backfilled with on-site excavated soils or weathered sandstone free of deleterious materials. All backfill should be constructed as engineered fill. We anticipate the on-site overburden will generally be weathered sandstone and sandy clays. Compaction equipment suitable for compacting both cohesive and granular materials should be available for compacting the engineered fill. Place the engineered fill in the mat foundation excavation in level lifts not exceeding 9 inches in loose thickness, and compact to a minimum of 95 percent of the maximum laboratory dry density as determined in accordance with ASTM Standard D-1557 (Modified Proctor). All engineered fill should be placed and compacted at or near the optimum moisture content. The moisture/density relations for the material to be used for engineered fill should be confirmed by a qualified geotechnical engineer prior to placement in the field.

Based on our experience with similar soils, we estimate 125 pounds per cubic foot (pcf) in-place moist density may result from the above compaction requirements.

We anticipate the use of a jack-hammer or similar equipment may be necessary to level the base of the mat foundation. In addition, we recommend the subgrade below fill areas be benched as discussed in Section 4.2 of this report. Slope stability analyses for the proposed tower were beyond the scope of the present geotechnical investigation. We recommend an evaluation of the factor of safety of the proposed mat foundation with respect to global and sliding block failure mechanisms be performed prior to construction.

Once the tower loads are known, Wilcox Professional Services, LLC should be notified so we can re-evaluate our design recommendations in the light of the actual loads.

We recommend all foundation construction be performed under the supervision of a qualified geotechnical engineer. The appropriate type and number of field tests and observations should be performed to verify the foundation bearing material is suitable.

4.2 Engineered Fill Placement

We anticipate several feet of cut and fill will be required to achieve finished grades within the tower compound area. To reduce the risk of a potential slip plane developing between the engineered fill and underlying subgrade soils, we recommend the subgrade surface be scarified and properly benched prior to placement of the engineered fill.

Any fill beneath on-grade structures should be an approved, environmentally clean material. The fill should also be free of organic matter, frozen soil, clods, or other harmful

material. Spread the fill in level lifts, not exceeding 9 inches in loose thickness, and compact the soil to a minimum of 95 percent of the maximum dry density. Determine the maximum dry density according to ASTM Standard D1557 (Modified Proctor). All engineered fill should be placed at or near the optimum moisture content.

4.3 General Comments

The purpose of this report is to aid in the tower foundation. If changes occur in the design, location, or concept of the project, the recommendations contained in this report are not valid. The changes must be reviewed by **WILCOX PROFESSIONAL SERVICES, LLC** with the recommendations of this report modified or affirmed in writing by **WILCOX PROFESSIONAL SERVICES, LLC**.

We base the estimated soil and rock parameters presented in this report upon the data from the soil/rock core borings performed at the approximate locations shown on the Schematic Soil Boring/Rock Core Location Plan. This report does not reflect variations that may occur away from the boring location. The nature and extent of any such variations may not become clear until the time of construction. If significant variations then become evident, it may be necessary for us to re-evaluate our report recommendations.

We recommend **WILCOX PROFESSIONAL SERVICES, LLC** be given the opportunity to review the final design plans and specifications as they relate to the recommendations presented in this report. The review is necessary to verify that the report conclusions and recommendations have been interpreted according to our intent and are properly incorporated into the design. Further, the review will verify that subsequent changes to the project have not affected our recommendations. Without this review, we cannot be held responsible for misinterpretation of our data, analysis, and/or our recommendations or how these are incorporated in the final design.

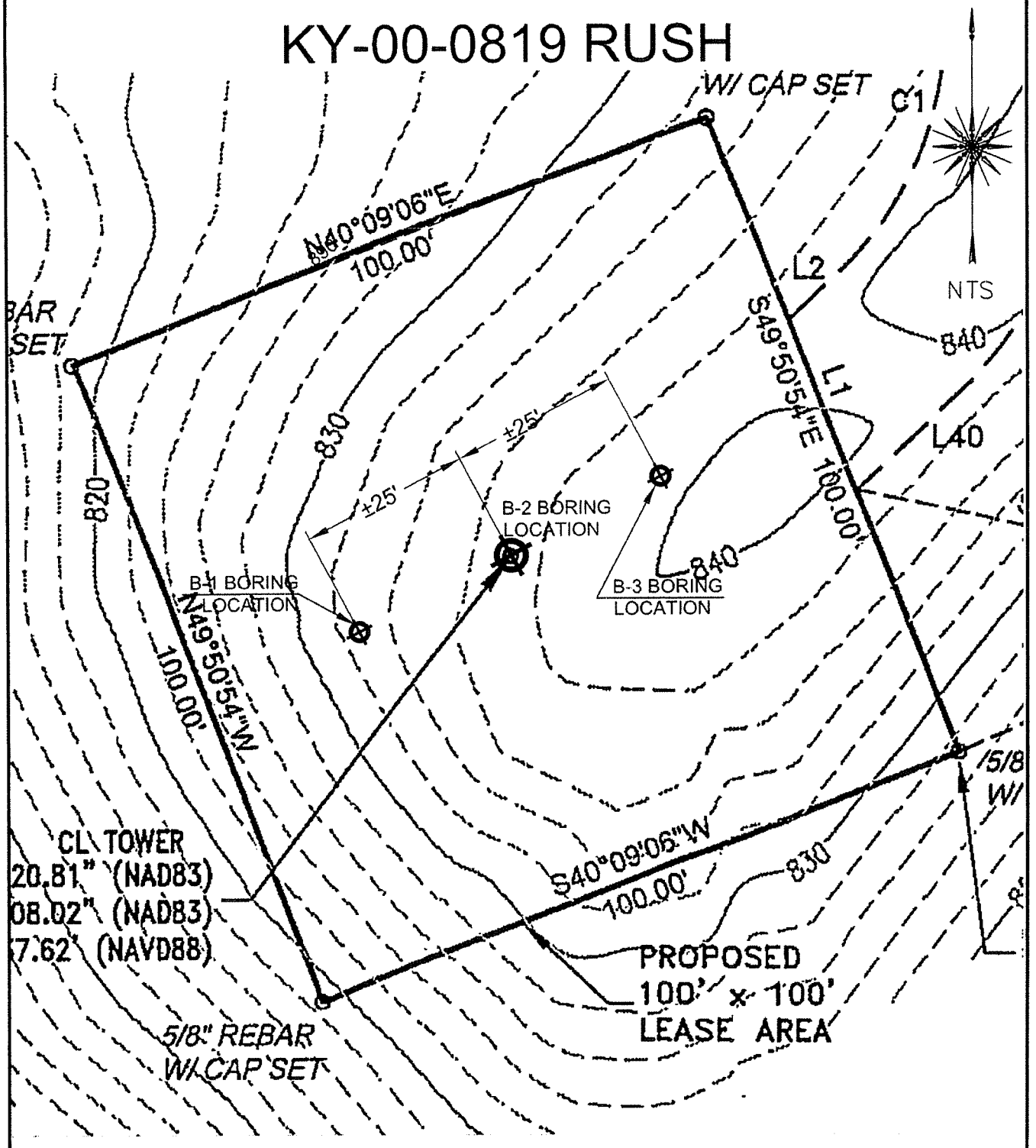
We also recommend a qualified geotechnical engineer supervise all geotechnical related work, including foundation construction, subgrade preparation, and engineered fill placement. The geotechnical engineer should perform the appropriate testing to confirm the geotechnical conditions given in the report are found during construction.
The contract specifications should include the following:

> "The contractor will, upon becoming aware of subsurface or latent physical conditions differing from those disclosed by the original soil investigation work, promptly notify the owner verbally to permit verification of the conditions, and in writing, as to the nature of the differing conditions. No claim by the contractor for any conditions differing from those anticipated in the plans and specifications and disclosed by the soil studies will be allowed unless the contractor has so notified the owner, verbally and in writing, as required above, of such differing subsurface conditions."

APPENDIX

1. SCHEMATIC SOIL\ROCK CORE LOCATION PLAN
2. GENERAL NOTES
3. SOIL/ROCK CORE BORING LOGS (B-1 - B-3)
4. UNIFIED SOIL CLASSIFICATION SYSTEM

KY-00-0819 RUSH



SURVEYOR: TERRADON CORP.

	KY-00-0819 RUSH SCHEMATIC SOIL BORING LOCATION PLAN	DATE 6-6-08 DRN AJK CHD AJK	Wilcox Professional Services			
	CLIENT: CELLERE / CENTRAL STATE TOWERS	SCALE N/A	F.B. PG.	SHEET 1 OF 1	WILCOX JOB NO. 25036.00004.10	

GENERAL NOTES

Drilling & Sampling Symbols

SS – Split Spoon ($1^3/_8$" I.D., 2" O.D., except where noted
ST – Shelby Tube (3" O.D., except where noted)
PA – Power Auger
PS – Piston Sample (3" diameter)
WB – Wash Boring
WS – Wash Sample
HA – Hand Auger Boring
BS – Bag Sample
RC – Rock Core with diamond bit, NX size, except where noted
RB – Roller Bit
N/A – Not applicable or available

Standard Penetration Test "N" Value – Blows per foot after an initial 6-inch seating of a 140-pound hammer falling 30 inches on a 2-inch O.D. split spoon, except where noted.

Water Level Measurement Notation

First—	When noted during drilling or sampling process.
Completion—	After all drilling tools are removed from borehole.
HR—	Number of hours after completion.
N/R—	Not recorded.
Dry—	No measurable water level found in borehole.

Particle Sizes

Boulders–	Greater than 6" (152 mm)
Cobbles –	3" to 6" (76 to 152 mm)
Gravel –	*Coarse*: ¼ to 3" (19 to 76 mm)
	Fine: No.4 to ¾" (4.75 to 19 mm)
Sand –	*Coarse*: No.10 to No.4 (2 to 4.75 mm)
	Medium: No.40 to No.10 (.425 to 2 mm)
	Fine: No.200 to No.40 (.074 mm to .425mm)
Silt –	Minus No.200 (.005 mm to .074 mm)
Clay –	Less than .005 mm

Water levels indicated on the boring logs are the levels measured in the boring at the time indicated. The accurate determination of groundwater levels may not be possible with short term observations, especially in impervious soils. The level shown may fluctuate throughout the year with variations in precipitation, evaporation, runoff, and other hydrogeologic features.

CLASSIFICATION

Cohesionless Soil

Relative Density	"N" Value (Blows/ft)
Very Loose	0 to 4
Loose	5 to 9
Medium Dense	10 to 29
Dense	30 to 49
Very Dense	50 to 79
Extremely Dense	Over 80

Soil Constituents

"Trace"	Less than 10%
"Trace to Some"	10% to 19%
"Some"	20% to 34%
"And"	35% to 50%

Cohesive Soil

Unconfined Compressive Strength (tons per ft^2)	Consistency
Less than 0.25	Very Soft
0.25 to 0.49	Soft
0.49 to 0.99	Medium
1.00 to 1.99	Stiff
2.00 to 3.99	Very Stiff
Greater than 4.00	Hard

If clay content is sufficient so that clay dominates soil properties, then clay becomes the primary noun with other major soil constituent as modifier, i.e. silty clay. Other minor soil constituents may be added according to estimates of soil constituents present, i.e. silty clay, trace to some sand, trace gravel.

AGS, Inc.
15798 Riverside, Livonia, MI 48154
Tel/Fax: (734) 432-2631

Project: CST Site No. KY-00-0819 - RUSH	AGS, Inc.
Client: Cellere, Inc.	37637 Five Mile Road #224
Location: Grayson Twp., Carter Co., Kentucky	Livonia, MI 48154
Project #: 08-1017 Boring Log #: B-1	Tel/Fax: (734) 293-5077

Sample No./Type	Recovery (in.)	Depth (ft.)	Description of Material
		0	Ground Surface Elevation = ± 833'
SS-1	10	1	WEATHERED SANDSTONE - occasional sandy clay seams - hard - brown
		2	
SS-2	12	3	
		4	
		5	
SS-3	12	6	
		7	
SS-4	10	8	
		9	
		10	
SS-5	0	11	
		12	
		13	
SS-6	12	14	
		15	
		16	Driller Reported Alternating Sandstone and Shale Layers
		17	
		18	
SS-7	4	19	
		20	
		21	
		22	
		23	
SS-8	3	24	
		25	

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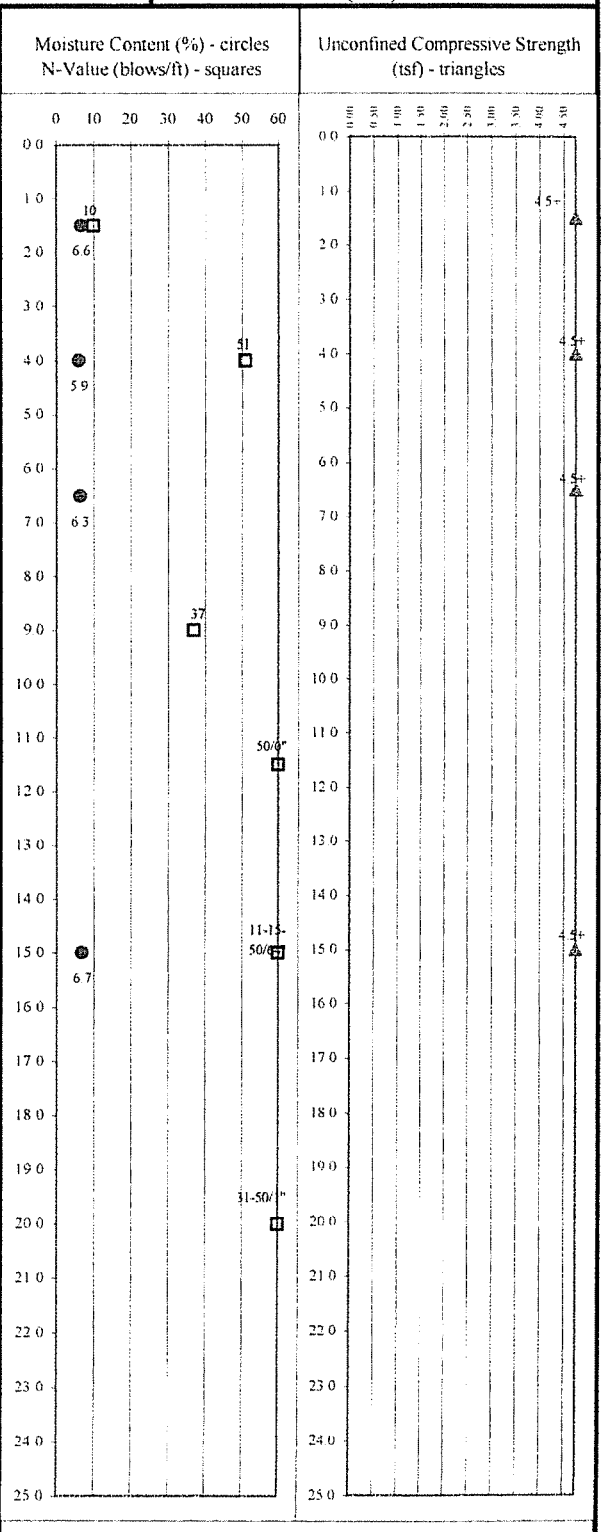
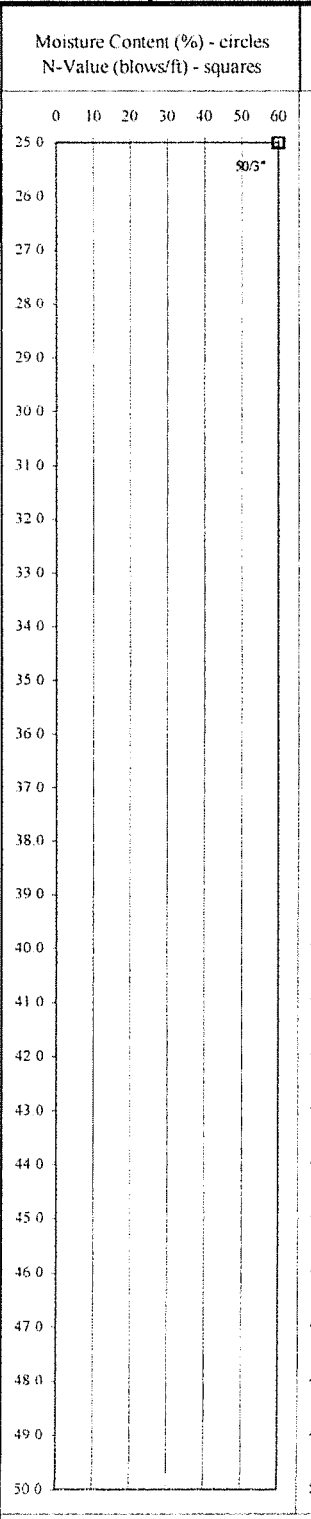


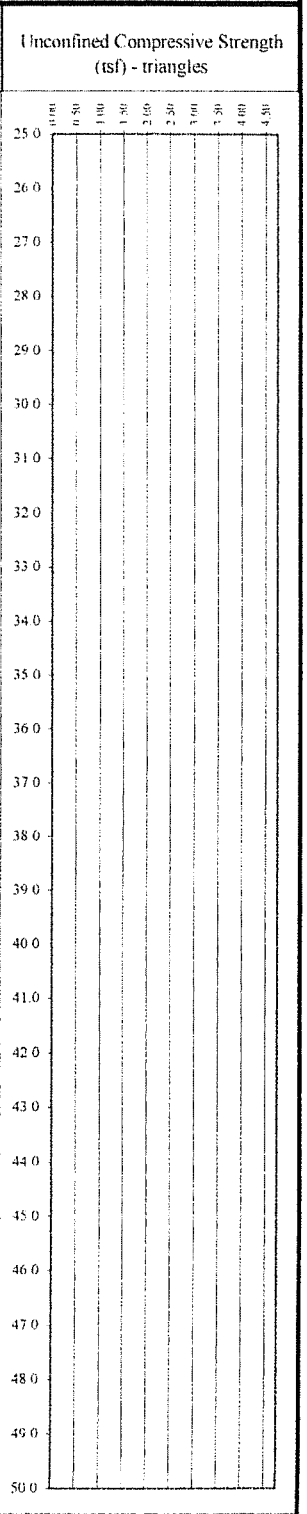
Water Level Observations:	Boring Started: 4/10/08	Approved:
While Drilling: Dry	Boring Completed: 4/10/08	Remarks: Drawn By: JTA
At Completion: Dry	Rig: Rotary	
Cave-In At:	Driller: Triad Engineering, Inc.	

Project: CST Site No. KY-00-0819 - RUSH	**AGS, Inc.**
Client: Cellere, Inc.	**37637 Five Mile Road #224**
Location: Grayson Twp., Carter Co., Kentucky	**Livonia, MI**
Project #: 08-1017 **Boring Log #: B-1 (cont.)**	**Tel/Fax: (734) 293-5077**

Sample No./Type	Recovery (in.)	Depth (ft.)	Description of Material
		26	Driller Reported Alternating Sandstone and Shale Layers
		27	Driller Reported Auger Refusal on Apparent Sandstone @ 27'
		28	
		29	
		30	
		31	
		32	
		33	
		34	
		35	
		36	
		37	
		38	
		39	
		40	
		41	
		42	
		43	
		44	
		45	
		46	
		47	
		48	
		49	
		50	

End of Boring (ft.): 27'

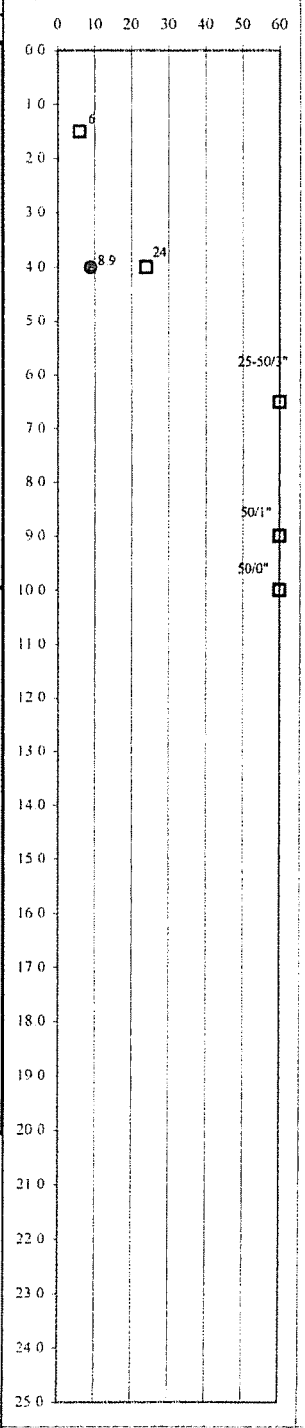


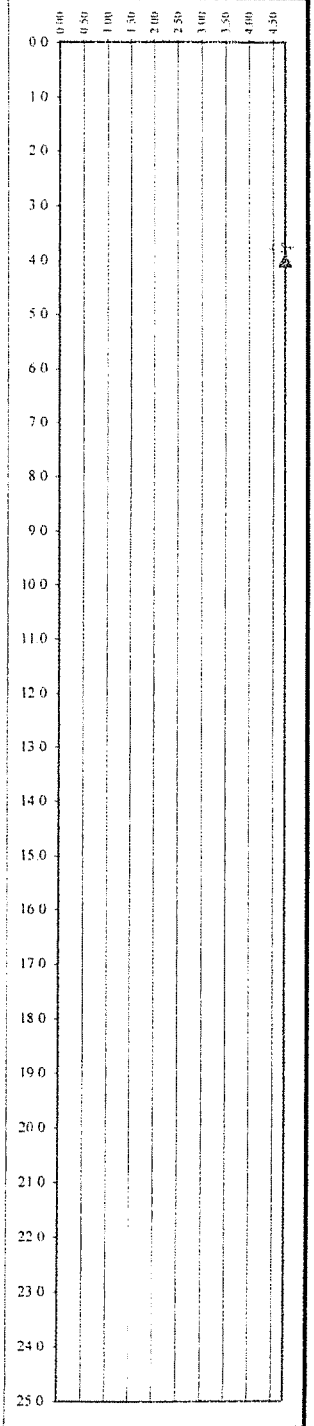


Water Level Observations:	**Boring Started:** 4/10/08		**Approved:**
While Drilling: Dry	**Boring Completed:** 4/10/08	**Remarks:**	**Drawn By:** JTA
At Completion: Dry	**Rig:** Rotary		
Cave-In At:	**Driller:** Triad Engineering, Inc.		

Project: CST Site No. KY-00-0819 - RUSH	**AGS, Inc.**
Client: Cellere, Inc.	**37637 Five Mile Road #224**
Location: Grayson Twp., Carter Co., Kentucky	**Livonia, MI 48154**
Project #: 08-1017 **Boring Log #: B-2**	**Tel/Fax: (734) 293-5077**

Sample No./Type	Recovery (in.)	Depth (ft.)	Description of Material
		0	Ground Surface Elevation = ± 838'
SS-1	12	1	WEATHERED SANDSTONE - occasional sandy clay seams - hard - brown - Driller Reported Auger Refusal on Sandstone @ 10'
		2	
SS-2	10	3	
		4	
		5	
SS-3	10	6	
		7	
SS-4	1	8	
		9	
SS-5	0	10	
RC-1	120	11	SANDSTONE - hard - brown - Recovery = 100%, RQD = 67%
		12	
		13	
		14	
		15	
		16	
		17	
		18	
		19	
		20	End of Boring @ 20'
		21	
		22	
		23	
		24	
		25	
			End of Boring (ft.): 20'

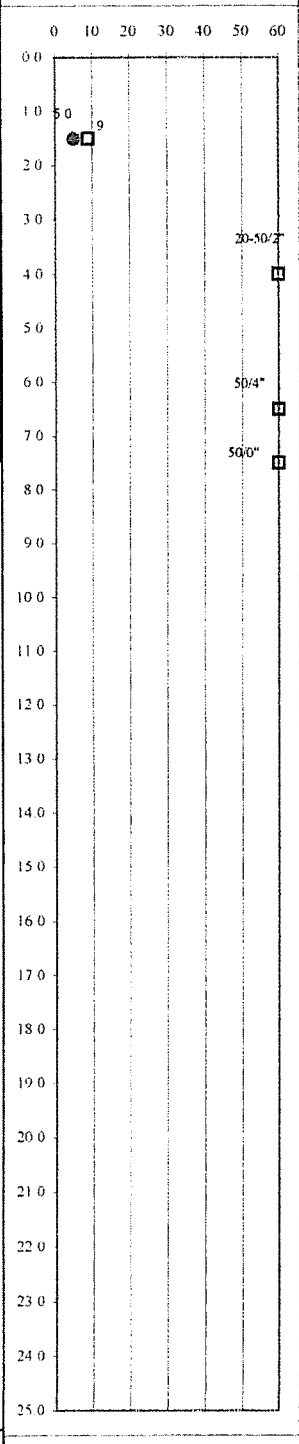


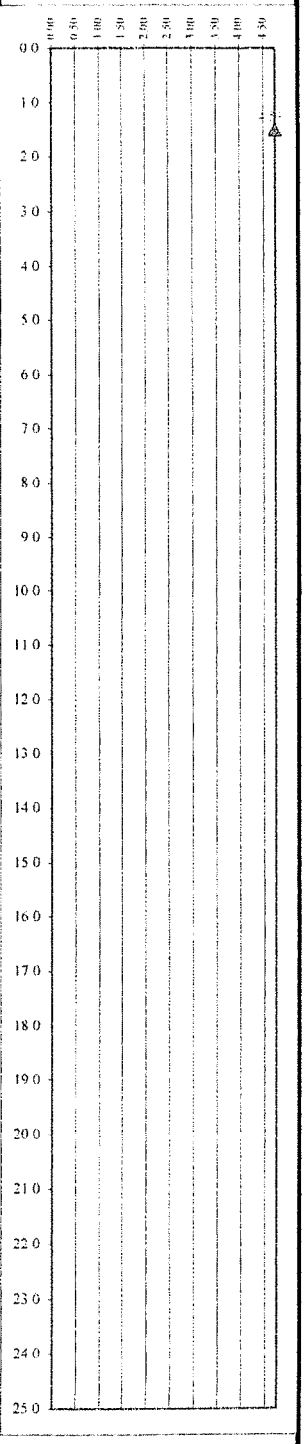


Water Level Observations:	**Boring Started:** 4/10/08	**Approved:**
While Drilling: Dry	**Boring Completed:** 4/10/08	**Remarks:** **Drawn By:** JTA
At Completion: NA	**Rig:** Rotary	
Cave-In At:	**Driller:** Triad Engineering, Inc.	

Project: CST Site No. KY-00-0819 - RUSH	**AGS, Inc.**
Client: Cellere, Inc.	**37637 Five Mile Road #224**
Location: Grayson Twp., Carter Co., Kentucky	**Livonia, MI 48154**
Project #: 08-1017 **Boring Log #: B-3**	**Tel/Fax: (734) 293-5077**

Sample No./Type	Recovery (in.)	Depth (ft.)	Description of Material
		0	Ground Surface Elevation = ± 840'
SS-1	12	1	WEATHERED SANDSTONE - occasional sandy clay seams - hard - brown
		2	
SS-2	8	3	
		4	
		5	
SS-3	4	6	
		7	
SS-4	0	8	Driller Reported Auger Refusal on Sandstone @ 7.5'
		9	
		10	
		11	
		12	
		13	
		14	
		15	
		16	
		17	
		18	
		19	
		20	
		21	
		22	
		23	
		24	
		25	
			End of Boring (ft.): 7.5



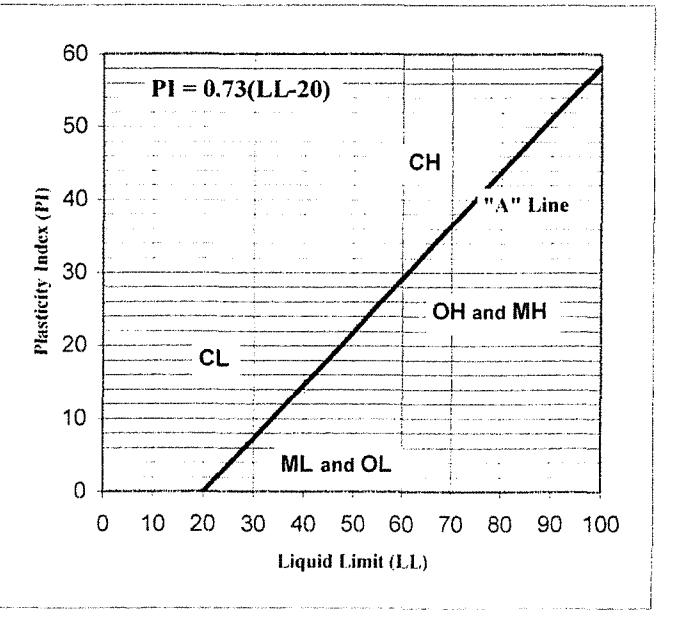


Water Level Observations:	**Boring Started:** 4/10/08		**Approved:**
While Drilling: Dry	**Boring Completed:** 4/10/08	**Remarks:**	**Drawn By:** JTA
At Completion: Dry	**Rig:** Rotary		
Cave-In At:	**Driller:** Triad Engineering, Inc.		

Unified Soil Classification

Major Divisons			Symbol	Typical Names	Laboratory Classification Criteria	
Coarse Grained Soils (More than half of material > No. 200 sieve)	Gravels (More than half of coarse fraction is larger than No. 4 sieve)	Clean Gravels (little or no fines)	GW	Well graded gravels, gravel-sand mixtures, little or no fines	Depending on percentage of fines (fraction smaller than No. 200 sieve), coarse grained soils are classified as follows: Less than 5%..... GW, GP, SW, SP More than 12%... GM, GC, SM, SC 5 to 12%..... Borderline case requiring dual symbols	$C_u = D_{60}/D_{10}$ greater than 4; $C_c = (D_{30})^2 / (D_{10} \times D_{30})$ between 1 and 3
			GP	Poorly graded gravels, gravel-sand mixtures, little or no fines		Not meeting all gradation requirements for GW
		Gravels with appreciable amount of fines	GM d u	Silty gravels, gravel-sand-silt mixtures		Atterberg Limits below "A" line or PI less than 4 — Above "A" line with PI between 4 and 7 are borderline cases requiring dual symbols
			GC	Clayey gravels, gravel-sand-clay mixtures		Atterberg Limits above "A" line with PI greater than 7
	Sands (More than half of coarse fraction is smaller than No. 4 sieve)	Clean Sands (little or no fines)	SW	Well graded sands, gravelly sands, little or no fines		$C_u = D_{60}/D_{10}$ greater than 6; $C_c = (D_{30})^2 / (D_{10} \times D_{30})$ between 1 and 3
			SP	Poorly graded sands, little or no fines		Not meeting all gradation requirements for SW
		Sands with appreciable amount of fines	SM d u	Silty sands, sand-silt mixtures		Atterberg Limits below "A" line or PI less than 4 — Liquid Limits plotting between 10 and 30 with PI between 4 and 7 is a borderline case requiring dual symbols (CL-ML)
			SC	Clayey sands, sand-clay mixtures		Atterberg Limits above "A" line with PI greater than 7
Fine Grained Soils (more than half of material < No. 200 sieve)	Silts and Clays (Liquid Limit < 50)		ML	Inorganic silts, very fine sands rock flour, silty or clayey fine sands or clayey silts with sligh plasticity		
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, and lean clays		
			OL	Organic silts and silty clays of low plasticity		
	Silts and Clays (Liquid Limit > 50)		MH	Inorganic silts, micaceous or diamaceous fine sandy or silty soils, elastic silts		
			CH	Inorganic clays of high plasticity, fat clays		
			OH	Organic clays of medium to high plasticity, organic silts		
	Highly Organic Soils		Pt	Peat and other highly organic soils		

PLASTICITY CHART



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Built on Quality - continuously improving our quality of service to meet and exceed our clients' expectations.

July 29, 2008

Mr. Brian Meier
CST Holdings, LLC
323 South Hale Street, Suite 100
Wheaton, Illinois 60187

Re: Soil Boring & Rock Coring Investigation
Central States Tower Site No. KY-00-0819 – Rush
+/- 79 Geiger Road
Grayson Township, Carter County, Kentucky
Wilcox Project No. 25036.00004.10

Dear Mr. Meier:

We have completed the Soil Boring & Rock Coring Investigation for the proposed Central States Tower, Inc. 300-foot self support tower in Grayson Township, Carter County, Kentucky. This report presents the results of our soil boring/rock coring investigation and estimated soil and rock parameters to be used as a guideline in the design of the tower foundations.

This letter also presents the results of the analytical testing for the chloride and sulfide in the soil samples. The pH, Chloride, and sulfide analytical testing was performed on a composite sample formed by mixing portions of split spoon samples S-1 through S-5 from Borings 1 through 3. The composite sample was prepared by thoroughly mixing prior to testing. The pH testing was performed by AGS using a Cole-Parmer Model 05985-80 Digi-Sense pH meter. Chloride and sulfide analytical testing was performed by EQL Laboratories, Inc. of Sterling Heights, Michigan. The test results indicate the soil sample possessed a pH of 7.1, a chloride content of 39 parts per million (ppm) and a sulfide content below the laboratory detection level. A copy of the test results is appended to this letter.

We appreciate the opportunity to assist you and the design team on this project. If there are any questions, please do not hesitate to contact me at 231-775-7755.

Respectfully,
WILCOX PROFESSIONAL SERVICES, LLC

Arthur J. Krueger, P.E.
Project Manager

Enclosure

CLIENT NAME: APPLIED GEOTECHNICAL SERVICES, INC. **PROJECT NAME/NO.:** 08-1017
37637 FIVE MILE RD, #224
LIVONIA, MI 48154

DATE RECEIVED	DATE ANALYZED	DATE REPORTED
06/11/08	06/18/08	06/20/08

ANALYZED BY: JL ALL RESULTS REPORTED IN ppMILLION

LAB NO./DESCRIPTION			1315 SOIL CST SITE KY-00-0819
		RDL	08-1017
		SOIL	B-1-B-3
COMPOUND NAME		ppM	S-1-5 1-11.5'
SULFIDE	4500-S2-F	20	ND
CHLORIDE	4500-CL-C	10	39

NOTE: "ND" DENOTES THAT ANALYTE RESULT IS BELOW THE REPORTED REGULATORY DERIVED TARGET LIMIT OF DETECTION.

THOMAS S. MEGNA, PRESIDENT_____ ALA GAJDA, LAB SUPERVISOR_____

REFERENCES: 40 CFR PART 136. CURRENT EDITION. las