MINOR SITE PLAN
SUBMITTAL REQUIREMENTS

The site plan application and materials must be submitted in both print and electronic formats, on disc. If you are unable to provide the application materials in electronic format, please contact the Planning Office at 785-832-3150.

- Provide a space (minimum 2” x 3”) generally in the lower right corner of the plans for an approval block for the final plans. Staff will insert the approval block when the plans have been approved and all conditions of approval have been met.

A Minor Site Plan may be submitted for a development proposal which meets the following criteria in Section 20-1305 of the Development Code:

1. The property must have an approved site plan on file which accurately reflects the existing site conditions.
2. The proposal is a change in use to a less intense use or, does not meet the criteria for a standard or major site plan listed in Section 20-1305(b)(2) and (3).

A pre-submittal meeting is required at least 7 days prior to the submittal of the site plan application. At the meeting Planning Staff will assist the applicant in determining if a red-line revision may be submitted for the proposed change and if any of the following items are required:

R  N/A

☐  ✗ 1. Downstream Sanitary Sewer Analysis (DSSA) or letter listing the proposed changes, if any, to the sanitary sewer facilities.

☐  ✗ 2. A Drainage Study, or a letter indicating the amount of change, if any, in the impervious surface on the property.

☐  ✗ 3. Any other items which may be required with the site plan submittal.

Planning Staff will review the site plan application and make a determination of completeness within 5 working days of the application submittal date.
SITE PLAN APPLICATION
For Minor Development Projects
Submit in both print and electronic formats, on disc

OWNER INFORMATION
Name(s)  Crown Castle USA, Inc.  
Contact  Donna Davis  
Address  370 Mallory Station Road, Suite 505  
City  Franklin  State  TN  ZIP  37067  
Phone (615)  771-1553  Fax (___)  
E-mail  donna.davis@crowncastle.com  Mobile/Pager (931)  247-7954

APPLICANT/AGENT INFORMATION
Contact  Donna Davis - Site Acquisition Specialist  
Company  Crown Castle USA, Inc.  
Address  370 Mallory Station Road, Suite 505  
City  Franklin  State  TN  ZIP  37067  
Phone (615)  771-1553  Fax (___)  
E-mail  donna.davis@crowncastle.com  Mobile/Pager (931)  247-7954

PROPERTY INFORMATION
Legal Description  (may be attached)  Please see attached
Address of Property  310 North MacDonald Drive, Lawrence, KS 66049
Description of Existing Improvements or Structures  T-Mobile proposes to replace existing equipment with no changes to the tower height

<table>
<thead>
<tr>
<th>Existing Zoning</th>
<th>Existing Land Use</th>
<th>Proposed Land Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total site area</td>
<td>Current Appraised Value</td>
<td>Existing Building Footprint</td>
</tr>
<tr>
<td># of Buildings</td>
<td>Estimated Cost of Construction</td>
<td>Proposed Building Footprint</td>
</tr>
</tbody>
</table>

$16,500

Are you also submitting any of the following applications?
• Building Permit  YES  • Subdivision Plat  NA  • Special Use Permit  NA  • Zoning Change  NA
• Variance  NA  • Other (specify)
Description of Project:

Property Address: 310 North McDonald Drive, Lawrence, KS 66049

Detailed Description of Proposed Project:
(Attach additional sheets if necessary)

T-Mobile proposes to replace existing ground cabinet/equipment and replace with new cabinets/equipment inside the existing compound - no compound expansions proposed.

Also replacing existing antennas/equipment with no changes to the existing tower height

Reason for Request: Upgrading antennas and ancillary equipment
(Attach additional sheets if necessary)
SIGNATURE

I/We, the undersigned am/are the (owner(s)), (duly authorized agent), (Circle One) of the aforementioned property. By execution of my/our signature, I/we do hereby officially apply for site plan approval as indicated above.

Signature(s):  Donna Davis  Date  08/09/2022

____________________________________________  Date __________________

____________________________________________  Date __________________

____________________________________________  Date __________________

Note: If signing by agent submit Owner Authorization Form

STAFF USE ONLY

Application No. _____________________________________________
Date Received _____________________________________________
Fee $ _____________________________________________
Date Fee Paid _____________________________________________
Determination of Completeness, Accuracy, and Sufficiency

I have reviewed the site plan application submitted by:

Name: ___________________________________________ Date: ____________

Application No. ____________________________________

Based upon the submitted information, I find the application to be:

□ Complete (based upon the items reviewed)

□ Incomplete, inaccurate, or insufficient (circle) for the following reasons:
  □ The application or plan contains one or more significant inaccuracies or omissions that hinder timely or competent evaluation of the plan’s/application’s compliance with Development Code standards.

□ The application contains multiple minor inaccuracies or omissions that hinder timely or competent evaluation of the plan’s/application’s compliance with Development Code standards.

□ The application or plan cannot be approved without a variance or some other change or modification that the decision-making body for that application or plan does not have the authority to make.

□ Other

_________________________________________________

_________________________________________________

_________________________________________________

_________________________________________________

_________________________________________________

_________________________________________________

_________________________________________________

_________________________________________________

Planner ___________________________ Date ____________

Determination of Completeness  Page 6 of 6  Site Plan Application
3/19/2013
August 9, 2022

KS - CITY OF LAWRENCE 2014
Planning & Development
6 EAST 6TH STREET
LAWRENCE, KS 66044

Via Electronic Delivery

**********NOTICE OF ELIGIBLE FACILITIES REQUEST**********

RE: Request for Minor Modification to Existing Wireless Facility – Section 6409
Site Address: 310 North McDonald Drive, Lawrence, KS 66049
Crown Site Number: 824954 / Crown Site Name: Kansas Turnpike Authority
Customer Site Number: A5E0015A / Application Number: 620516

Attention Planning & Development:

On behalf of T-Mobile Central LLC ("T-Mobile" or "Applicant"), Crown Castle USA Inc. ("Crown Castle") is pleased to submit this request to modify the existing wireless facility noted above through the collocation, replacement and/or removal of the Applicant’s equipment as an eligible facilities request for a minor modification under Section 6409 and the rules of the Federal Communications Commission ("FCC").

Section 6409 mandates that state and local governments must approve any eligible facilities request for the modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station. Under Section 6409, to toll the review period, if the reviewing authority determines that the application is incomplete, it must provide written notice to the applicant within 30 days, which clearly and specifically delineates all missing documents or information reasonably related to whether the request meets the federal requirements. Additionally, if a state or local government, fails to issue any approvals required for this request within 60 days, these approvals are deemed granted. The FCC has clarified that the 30-day and 60-day deadlines begins when an applicant: (1) takes the first step required under state or local law; and (2) submits information sufficient to inform the jurisdiction that this modification qualifies under the federal law. Please note that with the submission of this letter and enclosed items, the thirty and sixty-day review periods have started. Based on this filing, the deadline for written notice of incomplete application is September 8, 2022, and the deadline for issuance of approval is October 8, 2022.

---

3 See 47 CFR § 1.6100 (c)(3). 4 See 2020 Upgrade Order at paragraph 16.
The proposed scope of work for this project includes:
Add or replace antennas, ancillary equipment and ground equipment as per plans for an existing carrier on an existing wireless communication facility.

At the end of this letter is a checklist of the applicable substantial change criteria under Section 6409. Additionally, please find enclosed the following information in support of this request:

(1) Minor Site Plan Application
(2) Construction Drawings;
(3) Structural Analysis; and
(4) Section 6409 Substantial Change Checklist.

As these documents indicate, (i) the modification involves the collocation, removal or replacement of transmission equipment; and (ii) such modification will not substantially change the physical dimensions of such tower or base station. As such, it is an “eligible facilities request” as defined in the FCC’s rules to which the 60-day deadline for approval applies. Accordingly, Applicant requests all authorization necessary for this proposed minor modification under Section 6409.

Our goal is to work with you to obtain approvals earlier than the deadline. We will respond promptly to any request for related information you may have in connection with this request. Please let us know how we can work with you to expedite the approval process. We look forward to working with you on this important project, which will improve wireless telecommunication services in your community using collocation on existing infrastructure. If you have any questions, please do not hesitate to contact me.

Regards,

Donna Davis
Donna Davis
Site Acquisition Specialist
Crown Castle, Agent for Applicant
(615) 771-1553
Donna.Davis@crowncastle.com
Section 6409 Substantial Change Checklist
Towers Outside of the Public Right of Way

The Federal Communications Commission has determined that a modification substantially changes the physical dimension of a wireless tower or base station under 47 U.S.C. § 1455(a) if it meets one of six enumerated criteria under 47 C.F.R. § 1.6100.

Criteria for Towers Outside the Public Rights of Way

<table>
<thead>
<tr>
<th>YES/NO</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO</td>
<td>Does the modification increase the height of the tower by more than the greater of:</td>
</tr>
<tr>
<td></td>
<td>(a) 10%</td>
</tr>
<tr>
<td></td>
<td>(b) or, the height of an additional antenna array plus separation of up to 20 feet from the top of the nearest existing antenna?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YES/NO</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO</td>
<td>Does the modification add an appurtenance to the body of the tower that would protrude from the edge of the tower more than 20 feet or more than the width of the tower structure at the level of the appurtenance, whichever is greater?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YES/NO</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO</td>
<td>Does the modification involve the installation of more than the standard number of new equipment cabinets for the technology involved or add more than four new equipment cabinets?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YES/NO</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO</td>
<td>Does the modification entail any excavation or deployment outside the current site by more than 30 feet in any direction, not including any access or utility easements?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YES/NO</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO</td>
<td>Does the modification defeat the concealment elements of the eligible support structure?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YES/NO</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO</td>
<td>Does the modification violate conditions associated with the siting approval with the prior approval the tower or base station other than as specified in 47 C.F.R. § 1.6100(c)(7)(i) – (iv)?</td>
</tr>
</tbody>
</table>

If all questions in the above section are answered “NO,” then the modification does not constitute a substantial change to the existing tower under 47 C.F.R. § 1.6100.
AMENDMENT TO OPTION AND LEASE AGREEMENT AND MEMORANDUM OF AMENDMENT

THIS AMENDMENT TO OPTION AND LEASE AGREEMENT, AND MEMORANDUM OF AMENDMENT (this "Amendment") is made as of the 28th day of August, 2015, by and between Kansas Turnpike Authority ("Landlord" and for indexing purposes only "Grantor") and T-MOBILE USA TOWER, LLC, a Delaware limited liability company by and through CCTMO, LLC, a Delaware limited liability company, its attorney-in-fact ("Tenant" and for indexing purposes only "Grantee").

PRELIMINARY STATEMENT:

WHEREAS, Landlord and VoiceStream Kansas City, Inc., a Delaware corporation d/b/a T-Mobile ("Original Tenant") entered into that certain Option and Lease Agreement dated the 15th day of December, 2005, (the "Agreement") whereby Tenant leased certain real property, together with access and utility easements, located in Douglas County, Kansas (the "Leased Premises" and the "Easements") and more particularly described on Exhibit "A" attached hereto, being a part of a larger tract of land owned by the Landlord located in Douglas County, Kansas (the "Landlord's Property") and more particularly described on Exhibit "B" attached hereto, a Amendment of Lease of which was recorded on September 16, 2009 at Book 1054 Page 983 with the Douglas County Register of Deeds (the "Memorandum");

WHEREAS, Tenant is the successor in interest to Original Tenant pursuant to an unrecorded TMO Internal Transfers Agreement dated November 28, 2012 and a Master Prepaid Lease Agreement dated November 30, 2012 and a Management Agreement dated November 30, 2012;

WHEREAS, as of even date herewith, Landlord and Tenant desire to amend the Agreement and the Memorandum for the purpose of correcting the description of the Premises; and

NOW, THEREFORE, in consideration of the premises and the mutual covenants and conditions herein contained and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Owner and Tenant hereby enter into this Amendment as follows:

1. **Recitals.** The foregoing recitals are true and correct and are incorporated herein by reference.

2. **Amended Terms.** The Agreement and Memorandum are hereby amended and revised to amend the definition of the Premises with the definition of the "Premises" as shown on Exhibit B attached hereto and made a part hereof by reference. To the extent that there are differences between any exhibit or description of the Leased Premises attached to or contained within the Agreement and Exhibit B attached to this Amendment, Exhibit B attached to this Amendment shall prevail.

By: (Initials) [Signature]
Date: [Date]
Doc Type: [Type]
BUN: [BUN Number] Lease/Lic: [License Information]
3. **Ratification.** Landlord and Tenant hereby ratify the Agreement and agree that no breaches or defaults of the Agreement exist as of the Effective Date of this Amendment. Further, Landlord and Tenant are not aware of any events which have occurred which, with the passage of time or service of notice, or both would constitute a default under the Agreement. Except as modified or superseded by this Amendment, all other terms and conditions of the Agreement shall remain in full force and effect and are hereby restated and incorporated herein by reference.

4. **Address For Notices.** Landlord and Tenant desire to provide notification of a change the address of Tenant and Tenant’s counsel as follows:

   If to Tenant: T-Mobile USA Tower LLC
c/o CCTMO LLC
Attn: Legal Department
2000 Corporate Drive
Canonsburg, Pennsylvania 15317

5. **Definitions.** Any capitalized terms not defined herein shall have the meanings ascribed to such terms in the Agreement.

6. **Authority.** Landlord and Tenant represent and warrant to each other that they have the full right and authority to execute, deliver and perform the Agreement as amended by this Amendment.

7. **Original Copies.** Original copies of the Agreement are in the possession of Landlord and Tenant. The Agreement contains other terms not herein set forth but which are incorporated by reference herein for all purposes, and this Amendment is executed for the purpose of placing parties dealing with the Premises on notice of the existence of the Agreement and its contents, and shall ratify and confirm all other terms of the Agreement as fully as if the same had been set forth herein. All exhibits referred to in this Amendment are hereby incorporated herein by reference. Additional information concerning the terms of the Agreement can be obtained from Landlord or Tenant.

8. **Third Party Consents.** Owner represents and warrants to Tenant that there is no mortgage, lien, claim of right or other encumbrance affecting the Premises as revised by this Amendment which requires the consent to the Amendment of any party which has not been obtained. Landlord is required to obtain a nondisturbance agreement from any current and future holder of any mortgage upon the Landlord’s Property with regard to the Premises.

9. **Recording.** This Amendment is intended for recording purposes only, and does not modify, supersede, diminish, add to or change all or any of the terms of the Amended Lease in any respect. The terms and conditions of the Amended Lease shall control notwithstanding that the terms and conditions of the Amended Lease may be inconsistent or vary from those set forth in this Amendment.

10. **Counterparts.** This Amendment may be executed in one or more counterparts, each of which shall be deemed an original.

   [SIGNATURE PAGES FOLLOW.]
IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed as of the date set forth above.

LANDLORD:

Kansas Turnpike Authority

By: [Signature]
Printed Name: Steve A. Hewitt
Title: CEO

STATE OF Kansas )
COUNTY OF Sedgwick )

On this 5th day of August, 2015, before me appeared Steve A. Hewitt, to me personally known, who, being by me duly sworn, did say that he/she is the CEO of Kansas Turnpike Authority, and that the within Amendment was signed on behalf of said municipal corporation by authority of its ______________________ and said ______________________ acknowledged the within Amendment to be the free act and deed of said municipal corporation and that he/she executed the same for the purposes therein stated.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

[Signature]
NOTARY PUBLIC

My Commission Expires:

DIANA C. ENSIGN
Notary Public - State of Kansas
My Appl. Expires 3-18-17
TENANT:

T-MOBILE USA TOWER, LLC, a Delaware limited liability company

By: CCTMO LLC,
a Delaware limited liability company,
its Attorney in Fact

By: Bryan A. Cobb
Name: Bryan A. Cobb
Title: Real Estate Manager, Midwest Area

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF WASHINGTON

On this 28th day of August, 2015, before me appeared Bryan, to me personally known, who, being by me duly sworn, did say that he/she is the Attorney in Fact of CCTMO LLC, a Delaware limited liability company, who is the Attorney in Fact for T-Mobile USA Tower, LLC, a Delaware limited liability company and that the within Amendment was signed on behalf of said limited liability company by authority of its members and said Bryan acknowledged the within Amendment to be the free act and deed of said limited liability company and that he/she executed the same for the purposes therein stated.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

\[Signature\]
NOTARY PUBLIC

My Commission Expires:

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
Tara Urcho, Notary Public
Cecil Twp., Washington County
My Commission Expires July 21, 2018
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES
PROPERTY DESCRIPTION: PREMISES

A 60 foot by 60 foot Lease Area situated in the Southwest Quarter (SW/4) of Section Twenty-four (24), Township Twelve (12), Range Nineteen (19), Douglas County, Kansas, more particularly described as follows:

COMMENCING at the Southeast Corner of Southwest Quarter of said Section 24 (Fnd. 5/8" Alum. Cap in Mon. Box), said point bears South 01°52'40" East, a distance of 2644.84 feet from the Northeast Corner of said Southwest Quarter (Fnd. Brass Cap in Mon. Box.); thence North 57°04'28" West, a distance of 1529.08 feet to the POINT OF BEGINNING of said 60 foot by 60 foot Lease Area; thence South 60°22'24" West, a distance of 60.00 feet; thence North 29°37'36" West, a distance of 60.00 feet; thence North 60°22'24" East, a distance of 60.00 feet; thence South 29°37'36" East, a distance of 60.00 feet to the POINT OF BEGINNING. Containing 3,600 square feet, more or less.
NOTE:
- CORRECT KNOCKOUT TOOL REQUIRED FOR PUNCHING KNOCKOUTS. DO NOT DRILL THROUGH KNOCKOUTS.
- CONDUIT MUST BE PROPERLY SECURED TO PREVENT DAMAGE TO CABINETS AND/OR CABLES.
NOTE:
- Correction knockout tool required for punching knockouts. Do not drill through knockouts.
- Conduit must be properly secured to prevent damage to cabinets and/or yellowing.
B+T Group is pleased to submit this “Structural Analysis Report” to determine the structural integrity of the above-mentioned tower.

The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

<table>
<thead>
<tr>
<th>Load Case</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC5: Proposed Equipment Configuration</td>
<td>Sufficient Capacity</td>
</tr>
</tbody>
</table>

This analysis has been performed in accordance with the 2018 International Building Code based upon an ultimate 3-second gust wind speed of 110 mph. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Structural analysis prepared by: Massood Sattari

Respectfully submitted by: B+T Engineering, Inc.

Brad Milanowski, P.E.

Brad Milanowski, P.E.
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2) ANALYSIS CRITERIA
   - Table 1 - Proposed Equipment Configuration
   - Table 2 - Other Considered Equipment

3) ANALYSIS PROCEDURE
   - Table 3 - Documents Provided
     - 3.1) Analysis Method
     - 3.2) Assumptions

4) ANALYSIS RESULTS
   - Table 4 - Section Capacity (Summary)
   - Table 5 - Tower Component Stresses vs. Capacity - LC5
     - 4.1) Recommendations

5) APPENDIX A
   - tnxTower Output

6) APPENDIX B
   - Base Level Drawing

7) APPENDIX C
   - Additional Calculations
1) INTRODUCTION

This tower is a 150 ft. Monopole tower designed by TransAmerican Power Products, Inc.

2) ANALYSIS CRITERIA

<table>
<thead>
<tr>
<th>TIA-222 Revision:</th>
<th>TIA-222-H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Category:</td>
<td>II</td>
</tr>
<tr>
<td>Wind Speed:</td>
<td>110 mph</td>
</tr>
<tr>
<td>Exposure Category:</td>
<td>C</td>
</tr>
<tr>
<td>Topographic Factor:</td>
<td>1</td>
</tr>
<tr>
<td>Ice Thickness:</td>
<td>1.5 in</td>
</tr>
<tr>
<td>Wind Speed with Ice:</td>
<td>40 mph</td>
</tr>
<tr>
<td>Service Wind Speed:</td>
<td>60 mph</td>
</tr>
</tbody>
</table>

Table 1 - Proposed Equipment Configuration

<table>
<thead>
<tr>
<th>Mounting Level (ft)</th>
<th>Center Line Elevation (ft)</th>
<th>Number of Antennas</th>
<th>Antenna Manufacturer</th>
<th>Antenna Model</th>
<th>Number of Feed Lines</th>
<th>Feed Line Size (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>148.0</td>
<td>150.0</td>
<td>3</td>
<td>Commscope</td>
<td>FFHH-65C-R3</td>
<td>12</td>
<td>7/8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>Commscope</td>
<td>HCS 2.0 Part 1</td>
<td>6</td>
<td>1-5/8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>Nokia</td>
<td>AEHC</td>
<td>2</td>
<td>1-1/2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>Nokia</td>
<td>AHFIG_TMO</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>Nokia</td>
<td>ALOA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 - Other Considered Equipment

<table>
<thead>
<tr>
<th>Mounting Level (ft)</th>
<th>Center Line Elevation (ft)</th>
<th>Number of Antennas</th>
<th>Antenna Manufacturer</th>
<th>Antenna Model</th>
<th>Number of Feed Lines</th>
<th>Feed Line Size (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>140.0</td>
<td>140.0</td>
<td>6</td>
<td>Andrew</td>
<td>LNX-6515DS-A1M</td>
<td>2</td>
<td>1-1/4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>Ericsson</td>
<td>AIR 32 B4A/B2P</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>Ericsson</td>
<td>RRUS 11 B13</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>Ericsson</td>
<td>RRUS B13/RRUS A2</td>
<td></td>
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<td>2</td>
<td>Raycap</td>
<td>RRFDC-3315-PF-48</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>--</td>
<td>Platform Mount [LP 302-1]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

<table>
<thead>
<tr>
<th>Document</th>
<th>Reference</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tower Manufacturer Drawing</td>
<td>3512466</td>
<td>CCI Sites</td>
</tr>
<tr>
<td>Foundation Drawing</td>
<td>3512466</td>
<td>CCI Sites</td>
</tr>
<tr>
<td>Geotech Report</td>
<td>3512465</td>
<td>CCI Sites</td>
</tr>
<tr>
<td>Antenna configuration</td>
<td>Date: 07/04/2022</td>
<td>CCI Sites</td>
</tr>
</tbody>
</table>
3.1) Analysis Method

tnxTower (version 8.1.1.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A. When applicable, Crown Castle has calculated and provided the effective area for panel antennas using approved methods following the intent of the TIA-222 standard.

3.2) Assumptions

1) The tower and structures were maintained in accordance with the TIA-222 standard.
2) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.

This analysis may be affected if any assumptions are not valid or have been made in error. B+T Group should be notified to determine the effect on the structural integrity of the tower.

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)

<table>
<thead>
<tr>
<th>Section No.</th>
<th>Elevation (ft)</th>
<th>Component Type</th>
<th>Size</th>
<th>Critical Element</th>
<th>P (K)</th>
<th>SF*P_allow (K)</th>
<th>% Capacity</th>
<th>Pass / Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>150 - 113.25</td>
<td>Pole</td>
<td>TP27.065x18x0.188</td>
<td>1</td>
<td>-8.873</td>
<td>950.962</td>
<td>39.1</td>
<td>Pass</td>
</tr>
<tr>
<td>L2</td>
<td>113.25 - 91.75</td>
<td>Pole</td>
<td>TP31.993x25.827x0.188</td>
<td>2</td>
<td>-11.005</td>
<td>1126.597</td>
<td>55.6</td>
<td>Pass</td>
</tr>
<tr>
<td>L3</td>
<td>91.75 - 47.75</td>
<td>Pole</td>
<td>TP42.472x30.631x0.25</td>
<td>3</td>
<td>-17.235</td>
<td>1994.811</td>
<td>50.7</td>
<td>Pass</td>
</tr>
<tr>
<td>L4</td>
<td>47.75 - 0</td>
<td>Pole</td>
<td>TP53.75x40.677x0.313</td>
<td>4</td>
<td>-29.291</td>
<td>3255.724</td>
<td>45.3</td>
<td>Pass</td>
</tr>
<tr>
<td>Summary</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Pole (L2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>55.6 Pass</td>
</tr>
<tr>
<td>Rating</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>55.6 Pass</td>
</tr>
</tbody>
</table>

Table 5 - Tower Component Stresses vs. Capacity - LC5

<table>
<thead>
<tr>
<th>Notes</th>
<th>Component</th>
<th>Elevation (ft)</th>
<th>% Capacity</th>
<th>Pass / Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2</td>
<td>Anchor Rods</td>
<td>Base</td>
<td>40.9</td>
<td>Pass</td>
</tr>
<tr>
<td>1,2</td>
<td>Base Plate</td>
<td>Base</td>
<td>33.5</td>
<td>Pass</td>
</tr>
<tr>
<td>1,2</td>
<td>Base Foundation (Structure)</td>
<td>Base</td>
<td>36.2</td>
<td>Pass</td>
</tr>
<tr>
<td>1,2</td>
<td>Base Foundation (Soil Interaction)</td>
<td>Base</td>
<td>16.4</td>
<td>Pass</td>
</tr>
</tbody>
</table>

Structure Rating (max from all components) = 55.6%

Notes:
1) See additional documentation in “Appendix C – Additional Calculations” for calculations supporting the % capacity consumed.
2) Rating per TIA-222-H Section 15.5.

4.1) Recommendations

The tower and its foundations have sufficient capacity to carry the proposed load configuration. No modifications are required at this time.