## ·T· · · Mobile·

Please Reply To:
Sam Simons
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September 22, 2015

Attorney Melanie Bachman Connecticut Siting Council 10 Franklin Square New Britain, CT 06501

## EM-T-MOBILE-052-140414

T-Mobile Site ID CTHA233B 130 Birdseye Road, Farmington, Connecticut Notice of Compliance with Conditions and Construction Completion

Dear Attorney Bachman:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the following conditions:

- Modify the tower in accordance with the structural analysis report prepared by B+T Group, stamped by Chad Tuttle on March 27, 2014:
- Within 45 days following completion of the antenna installation, T-Mobile shall provide documentation certified by a professional engineer that its installation complied with the requirements of the structural analysis;
- Any deviation from the proposed modification as specified in this notice and supporting materials with the Council shall render this acknowledgement invalid;
- Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
- Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- The validity of this action shall expire one year from the date of this letter; and
- The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration.

The attached PE Closeout Letter dated September 17, 2015 provides evidence of compliance with the conditions outlined by the Council.

In addition, T-Mobile hereby notifies the Council that construction of the acknowledged modifications were complete as of March 10, 2015.

Sincerely,

Samuel Simons, T-Mobile

Sam Simons

CC: Mark Richard, T-Mobile



Date: September 17, 2015

Sam Simons **Engineering Development - Connecticut** T-Mobile 35 Griffin Road South Bloomfield, CT 06002

Paul J Ford and Company 250 E. Broad St., Suite 600 Columbus, OH 43215 614-221-6679

Subject:

**Structural Opinion Letter** 

Carrier Designation:

**T-Mobile** Co-Locate Carrier Site Number:

CTHA233B

Siting Council ID:

EM-T-Mobile-052-140414

Engineering Firm Designation:

Paul J Ford and Company Project Number: 79915-0019.001.7100

Site Data:

3 A Birdseye Rd., Farmington, Hartford County, CT Latitude 41° 42' 56.94", Longitude -72° 48' 37.42"

140 Foot - Monopole Tower

Dear Sam Simons,

Paul J. Ford and Company is pleased to submit this "Structural Opinion Letter" for the structural integrity of the aforementioned tower. The purpose of the opinion letter is to determine the suitability of the tower with the proposed and existing loading as specified in Tables 1 & 2 on the next two pages. The opinion is consistent with the guidelines as stated in the 2005 Connecticut Building Code and the TIA/EIA-222-F Structural Standards for Steel Antenna Towers and Antenna Supporting Structures using a fastest mile wind speed of 80 mph with no ice, 37.6 mph with 1 inch ice thickness and 50 mph under service loads.

Based on a comparison of the verified proposed loading (shown Table 1 & 2) versus the previous analysis loads (including wind speeds) from B+T Group (job number 77969.12.01, dated March 27, 2014) we have determined that loading is similar and should not change the opinions concluded by others.

Based upon a review of the photos provided, it appears that the antennas and equipment listed in Table 1 have been installed.

We at Paul J. Ford and Company appreciate the opportunity of providing our continuing professional services to you. If you have any questions or need further assistance on this or any other projects please give us a call.

Respectfully submitted by:

Jared Smith, El Structural Designer KSS

Table 1 - Proposed Antenna and Cable Information

| Mounting<br>Level (ft) | Center<br>Line<br>Elevation<br>(ft) | Number<br>of<br>Antennas | Antenna<br>Manufacturer | Antenna Model                            | Number<br>of Feed<br>Lines | Feed<br>Line<br>Size (in) | Note |
|------------------------|-------------------------------------|--------------------------|-------------------------|--|----------------------------|---------------------------|------|
| 100.0                  | 100.0                               | 3                        | ericsson                | ERICSSON AIR 21 B2A<br>B4P w/ Mount Pipe | 1                          | 1-5/8                     | 1    |
|                        |                                     | 3                        | ericsson                | ERICSSON AIR 21 B4A<br>B2P w/ Mount Pipe |                            |                           |      |
|                        |                                     | 1                        | tower mounts            | T-Arm Mount                              |                            |                           |      |

Notes:

| Mounting<br>Level (ft) | Center<br>Line<br>Elevation<br>(ft) | Number<br>of<br>Antennas | Antenna<br>Manufacturer | Antenna Model                | Number<br>of Feed<br>Lines | Feed<br>Line<br>Size (in) | Note |
|------------------------|-------------------------------------|--------------------------|-------------------------|------------------------------|----------------------------|---------------------------|------|
| 139.0                  | 139.0                               | 3                        | rfs celwave             | APXV9ERR18-C-A20             | 3                          | 1-1/4                     | 1    |
|                        |                                     | 1                        | tower mounts            | Platform Mount               |                            |                           |      |
| 137.0                  | 140.0                               | 3                        | alcatel lucent          | 800MHz 2x50W RRH<br>W/FILTER | -                          | -                         | 1    |
|                        | 137.0                               | 3                        | alcatel lucent          | PCS 1900MHz 4x45W-<br>65MHz  |                            |                           |      |
|                        |                                     | 1                        | tower mounts            | Side Arm Mount               |                            |                           |      |
| 400.0                  | 130.0                               | 6                        | ericsson                | RRUS 11                      | _                          | _                         | 1    |
| 129.0                  | 129.0                               | 1                        | tower mounts            | Side Arm Mount               |                            |                           |      |
| 128.0                  | 130.0                               | 3                        | ericsson                | RRUS 11                      | _                          | _                         | 2    |
|                        |                                     | 2                        | kmw                     | AM-X-CD-16-65-00T-RET        | 9<br>2<br>1                | 7/8<br>3/4<br>3/8         | 1    |
|                        |                                     | 1                        | andrew                  | SBNH-1D6565C                 |                            |                           |      |
|                        |                                     | 3                        | powerwave               | 7770.00                      |                            |                           |      |
|                        |                                     | 1                        | raycap                  | DC6-48-60-18-8F              |                            |                           |      |
|                        | 128.0                               | 6                        | powerwave               | LGP21401                     |                            |                           |      |
|                        |                                     | 1                        | tower mounts            | T-Arm Mount                  |                            |                           |      |
| 120.0                  | 120.0                               | 12                       | swedcom                 | ALP 9212-N                   | 12                         | 7/8                       | 1    |
|                        |                                     | 1                        | tower mounts            | Platform Mount               |                            |                           |      |
| 110.0                  | 110.0                               | 1                        | raycap                  | TME-DB-T16Z-8AB-0Z           | -                          | -                         | 2    |
|                        |                                     | 1                        | tower mounts            | Side Arm Mount               |                            |                           |      |
| 108.0                  | 109.0                               | 3                        | antel                   | BXA-171063-12CF-EDIN-2       | 1                          | 1-5/8                     | 2    |
|                        |                                     | 3                        | antel                   | BXA-70063-4CF-EDIN-X         |                            |                           |      |
|                        |                                     | 1                        | kathrein                | 800 10735V01                 |                            |                           |      |
|                        |                                     | 3                        | antel                   | BXA-185060/8CFX2             | 12                         | 1-5/8                     | 1    |
|                        |                                     | 2                        | antel                   | BXA-70063-6CF-EDIN-4         |                            |                           |      |
|                        |                                     | 6                        | rfs celwave             | FD9R6004/2C-3L               |                            |                           |      |
|                        | 108.0                               | 1 1                      | tower mounts            | Platform Mount               |                            |                           |      |
|                        |                                     | 3                        | alcatel lucent          | RRH2X40-AWS                  | -                          | -                         | 2    |

<sup>1)</sup> Verified antenna/coax installation heights and quantities

| Mounting<br>Level (ft) | Center<br>Line<br>Elevation<br>(ft) | Number<br>of<br>Antennas | Antenna<br>Manufacturer | Antenna Model              | Number<br>of Feed<br>Lines | Feed<br>Line<br>Size (in) | Note |
|------------------------|-------------------------------------|--------------------------|-------------------------|----------------------------|----------------------------|---------------------------|------|
| 100.0                  | 100.0                               | 3                        | Ericsson                | KRY 112 144/1              | 12                         | 7/8                       | 1    |
|                        |                                     | 3                        | Ericsson                | KRY 112 89/5               | _                          | -                         | 3    |
|                        |                                     | 3                        | rfs celwave             | APX16DWV-16DWV-S-E-<br>A20 |                            |                           |      |
|                        |                                     | 1                        | tower mounts            | Side Arm Mount             |                            |                           |      |
| 90.0                   | 90.0                                | 3                        | kathrein                | 742 213                    | 6                          | 7/8                       | 1    |
|                        |                                     | 1                        | tower mounts            | Pipe Mount                 |                            |                           |      |
| 70.0                   | 72.0                                | 2                        | alcatel lucent          | KS24019-L112A              | 2                          | 5/16                      | 1    |
|                        | 70.0                                | 2                        | tower mounts            | Side Arm Mount             |                            |                           |      |
| 49.0                   | 51.0                                | 1                        | alcatel lucent          | KS24019-L112A              | 1                          | 1/0                       | 1    |
|                        | 49.0                                | 1                        | tower mounts            | Side Arm Mount             |                            | 1/2                       |      |

Notes:

- 1) 2) 3)
- Existing Equipment Reserved Equipment Equipment To Be Removed