



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

October 12, 2018

William Stone
Real Estate Specialist
Crown Castle
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065

RE: **EM-T-MOBILE-155-181001** – T-Mobile notice of intent to modify an existing telecommunications facility located at 467 South Quaker Lane, West Hartford, Connecticut.

Dear Mr. Stone:

The Connecticut Siting Council (Council) received a notice of intent to modify the above-referenced facility on October 1, 2018.

According to Section 16-50j-71 of the Regulations of Connecticut State Agencies, "...any modification, as defined in Section 16-50j-2a of the Regulations of Connecticut State Agencies, to an existing tower site, except as specified in Sections 16-50j-72 and 16-50j-88 of the Regulations of Connecticut State Agencies, may have a substantial adverse environmental effect."

Staff has reviewed this exempt modification request for completeness and has identified a deficiency in the Mount Structural Analysis (MA) prepared by Hudson Design Group, dated May 9, 2018 and stamped and signed by Daniel Hamm. The Analysis Results on page 4 of the MA indicates a Mount Structure Rating of 181%, this is an overstress situation (>100%) and although the Structural Analysis Report submitted with the request does include the recommended mount modifications and indicates an overall Tower Structure Rating of 88.7% the MA does not indicate the Mount Structure Rating which includes the recommended mount modifications. Please see attached the mount structure rating table on page 2 of the Mount Analysis prepared by Hudson Design Group for site no. CT1131, dated June 21, 2018, for your reference.

Therefore, the exempt modification request is incomplete at this time. The Council recommends that Crown Castle provide a mount analysis for the proposed equipment that includes a passing mount structure rating as referenced above and is stamped and signed by a professional engineer duly licensed in the State of Connecticut on or before November 16, 2018. If additional time is needed to gather the requested information, please submit a written request for an extension of time prior to November 16, 2018.

This notice of incompleteness shall have the effect of tolling the Federal Communications Commission (FCC) 60-day timeframe in accordance with Paragraph 217 of the FCC Wireless Infrastructure Report and Order issued on October 21, 2014 (FCC 14-153).

Thank you for your attention to this matter. Should you have any questions, please feel free to contact me at 860-827-2951.

Sincerely,

Melanie Bachman
Executive Director

MAB/FOC/in

c: The Honorable Shari Cantor, Mayor, Town of West Hartford
Todd Dumais, Town Planner, Town of West Hartford

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Affirmative Action / Equal Opportunity Employer

- HDG considers this mount to be asymmetrical and has applied wind loads in 30 degree increments all around the mount. Per TIA-222-G Annex B, the max basic wind speed for this site is equal to 100 mph with a max basic wind speed with ice of 40 mph. Per the AT&T Mount Technical Directive and Appendix N of the Connecticut State Building Code, an ultimate wind speed of 120 mph converted to a nominal wind speed of 93 mph was used for this analysis.
- HDG considers this site to be exposure category B; tower is located in an urban/suburban or wooded area with numerous closely spaced obstructions.
- HDG considers this site to be topographic category 1; tower is located on flat terrain or the bottom of a hill or ridge.
- The mount has been analyzed with load combinations consisting of 500 lbs live load using a service wind speed of 30 mph wind on the worst case antenna. Analysis performed on each antenna pipe to determine worst case location; worst case location was antenna position 1.
- The mount has been analyzed with load combinations consisting of a 250 lbs live load in a worst case location on the mount.

Based on our evaluation, we have determined that the existing mounts **ARE NOT CAPABLE** of supporting the proposed installation. HDG recommends the following modifications:

- **Install new 2"std. (2.38" O.D.) diagonal steel brace (typ. of 2 per sector, total of 6).**

	Component	Controlling Load Case	Stress Ratio	Pass/Fail
Existing 3C/4C/5C/6C Mount Rating	10	LC52	118%	FAIL
Proposed 3C/4C/5C/6C Mount Rating	27	LC52	97%	PASS

Reference Documents:

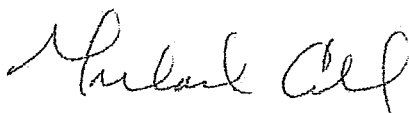
- Mount mapping report prepared by ProVertic LLC.

This determination was based on the following limitations and assumptions:

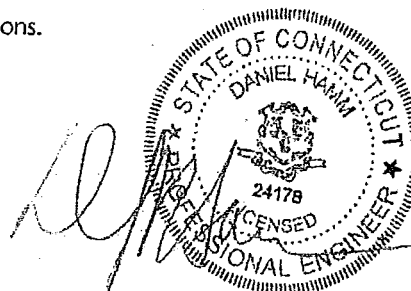
1. HDG is not responsible for any modifications completed prior to and hereafter which HDG was not directly involved.
2. All structural members and their connections are assumed to be in good condition and are free from defects with no deterioration to its member capacities.
3. All antennas, coax cables and waveguide cables are assumed to be properly installed and supported as per the manufacturer's requirements.
4. The existing mount has been adequately secured to the tower structure per the mount manufacturer's specifications.
5. All components pertaining to AT&T's mounts must be tightened and re-plumbed prior to the installation of new appurtenances.
6. HDG performed a localized analysis on the mount itself and not on the supporting tower structure.

Please feel free to contact our office should you have any questions.

Respectfully Submitted,
Hudson Design Group LLC



Michael Cabral
Structural Dept. Head



Daniel P. Hamm, PE
Principal