July 28, 2017

Rachelle Steffes
Partner Delivery Manager
T-Mobile
15 Commerce Way, Suite B
Norton, MA 02766

Structural Assessment Letter for the Proposed T-Mobile 600MHz Installation, Design 6094G
Site Address: 880 Forest Avenue, Portland, ME 04101, Cumberland County
T-Mobile Site Number: 4DN2202A
T-Mobile Site Name: ME202 / Deering Pavilion

Dear Ms. Steffes:

Pursuant to your request, **Network Building + Consulting Engineering Services** ("**NB+C ES**") has evaluated the proposed T-Mobile telecommunication upgrades at the subject location. The existing structure is a 90' high multi story building, with a penthouse on top, located in Portland, ME. The following tables below show the existing and proposed installation.

Table 1 - Proposed Antenna and Cable Information

Mounting Level (ft.)	Center Line Elevation (ft.)	Number of Antennas	Antenna Manufacturer	Antenna Model	Carrier	Feed Line Size (in)	Note
110.0	110.0	3	RFS	APXVAA24_43-U-A20 (96.0"x24.0"x8.5", 101.4 lbs.)	T-Mobile	-	-
		3	Ericsson	Radio 4478 B71 RRU (15.0"x13.0"x8.0", 60.0 lbs.)			
		3	-	14' x 3.0"-Ø Nom. Sch. 40 wall Mount			

Table 2 – Existing/Future Antenna and Cable Information

Mounting Level (ft.)	Center Line Elevation (ft.)	Number of Antennas	Antenna Manufacturer	Antenna Model	Carrier	Feed Line Size (in)	Note
110.0	110.0	3	Ericsson	AIR21 B4A/B2P	T-Mobile	(12) 7/8 Coax (3) 6x12 Hybrid	1
		3	RFS	APX16DWV-16DWVS-E-A20			
		3	-	Generic Twin Style 1A - PCS TMA			
		3	-	Generic Twin Style 1B - AWS TMA			
		6	-	10' x 2.0"-Ø Nom. Sch. 40 wall mount			

Notes:
1) Existing Equipment

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NB+C ES has reviewed the Mount Analysis prepared by **NB+C ES** dated July 26, 2017, the Preliminary Construction Drawings prepared by **NB+C ES** dated July 26, 2017, Structural Analysis Report by Advanced Engineering Group, P.C. dated November 28, 2016, Structural Evaluation Letter by Chappell Engineering Associates, LLC dated May 22, 2012, Structural Analysis Report by Bay State Design dated June 9, 2009, Construction Drawing by Advanced Engineering Group, P.C. dated November 22, 2016, RFDS sheet from T-Mobile dated June 27, 2017 and Site Photos and Notes taken by **NB+C ES** personnel dated July 5, 2017

This certification assumes that all structural members are in good condition. The contractor shall be responsible for the means and methods of construction. No structural qualification is made or implied by this letter for existing structural members not supporting the proposed installation. Any deterioration or localized damage or distress to the structure or mounts, should be documented and reported to the engineer and repaired by the contractor prior to the installation of the proposed antennas.

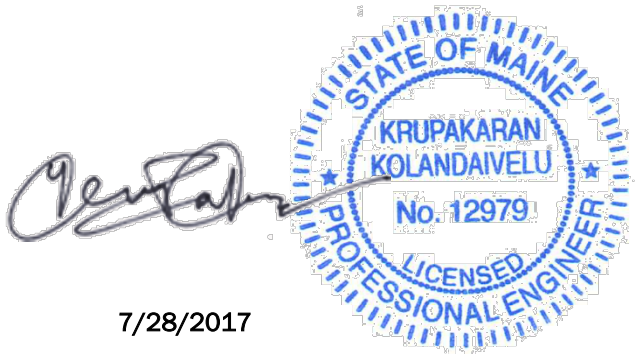
Based on an assessment of the existing site conditions and by reviewing the aforementioned documents, and per the code provision of the *Maine Uniform Building and Energy Code* and *Structural Standards for Steel Antenna Towers and Antenna Supporting Structures ANSI/TIA-222-G code* for applied gravity and lateral loads, **NB+C ES** has determined that the proposed loading will have a negligible increase in the stresses to the existing building structure. Thus the existing structure is **adequate** and can support the proposed installation as intended.

Please refer to the construction drawings prepared by **NB+C ES** for additional details. Should you have any questions or require additional information, please feel free to contact us.

Prepared by: Hitesh Pandey, E.I.T.

Respectfully submitted by:
NB+C Engineering Services, LLC

Krupakaran Kolandaivelu, P.E.
Engineering Manager – Structural
ME License # 12979



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