

# NewTower LLC



January 26, 2010

Mr. Sam Saltonstall  
21 Elizabeth Street  
Peak Island ME 04108

Subject: Safety Report for American Tower Company's Amertower 25 met tower, 100' (+/-) in Peak Island, Cumberland County, ME  
250 BRACKETT AVE / PARK AVE  
P.I. - 08-K-1; 09-E-4

Dear Sam:

Per your request I have performed a structural analysis and safety evaluation on the above referenced tower. The analysis is performed based on the information and specifications and other data supplied by American Tower Company. The tower base rests on a steel plate with a ground rod driven to hold in place.

The proposed Met tower is analyzed using ANSI/TIA-222-F-1996 standard per Maine Building Code. The design wind speed is 85 mph without ice (equivalent to 105 mph 3-sec gust wind) and 74 mph (fastest mile) simultaneously with  $\frac{1}{2}$ " ice. The results of the analysis are summarized in attached drawings. The tower structure is found to **meet** ANSI / TIA-222-F-1996 criteria, provided all guy wires are 3/16" diameters. All guy wires are anchored 70' from the tower center. The weakest component is the outermost guy wires being at 76.6% of rating.

Because the proposed tower is a temporary tower (1 to 2 years of duration) located in a **remote** area, it represents a low hazard to human life in the event of structural failure. Because the met tower is located in a relatively low earthquake zone and Per TIA-222-G section 2.7.3, **earthquake effects on structure may be ignored.**

The soil type is Hollis but the allowable soil pressure is not available from formal soil report. Therefore, the lowest presumptive allowable load for shallow foundation of 1500 psf (or 1.5 ksf) is considered. Based on the TIA-222-F analysis results (using allowable stress method), the maximum tower axial load is 19.5 kips. The maximum pressure on soil is less than 2 ksf.

Based on Amertower 25 install directions and the Hollis soils, it appears that 6" or 8" inches diameter screw in anchors are worthy candidates. Alternatively, cement anchor foundations might be considered. However, since the actual soil type is not confirmed by a professional engineer prepared soil report, the criterion for an anchor to be accepted is

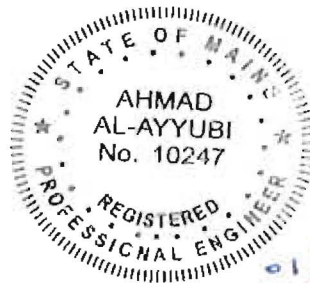
to pass the pull test performed after the installation of the anchor, based on the manufacturer's specifications.

The proposed Amertower 25 has been successfully installed and performed in ME and other states for the past few years. There is no reason to believe that it will be a concern to public safety if the tower is properly installed, according to the install directions, and the installed anchors being pull tested to the values specified in this letter,

Sincerely Yours,



Ahmad Ayyubi, P.E.



01/26/10