



HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING

November 22, 2023

Via Email

Mr. Doug Small, Director
Department of Public Works
20 Ponderosa Road
Ashland, MA 01721

Re: T-Mobile Installation on Cedar Structural Peer Review #1

Dear Mr. Small,

We are writing this letter to report our findings from our structural peer review of the T-Mobile Wireless Communications installation at the Cedar Street water tank site in Ashland MA.

We have received a structural design calculations package submitted by Prince Lobel Tye LLP on behalf of T-Mobile, on August 30, 2023, via email, containing five (5) sheets with a date of August 8, 2023, with a subject name "Structural Analysis, 396 Cedar Street, Ashland, MA". The work proposed by T-Mobile appears to include removal of equipment and mountings from the roof of the tank and relocation of equipment to the shell of the tank.

We were authorized on October 25, 2023, by Peter Matchak to begin our peer review, following his receipt of the peer review retainer check.

It is our understanding that the Ashland Planning board is awaiting the completion of our peer review prior to their approval of the project. At this time, we have submitted our peer review of the drawings submitted for the installation. The peer review identified several recommended revisions to the design.

Our structural engineer has reviewed the structural analysis submitted by the applicant and we have the following comments.

1. The calculations include an additional 50lb load under the brackets equation. The 50lbs is not defined by materials or equipment. Please provide details as to what makes up the 50lb load reference.

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2. The front wind load calculation appears to use a side wind direction and loading; however this would provide a more conservative calculation. Therefore, no revision to the calculation sheet is required.
3. As included in our drawing peer review, there appears to be a mast that contains more than 1 antenna. The structural analysis did not include calculations for two antennae on one mast. Update calculations analysis if there are 2 antennae on one mast.
4. As part of any communications equipment project, a Certification Letter is required from the structural engineer to allow Ashland Water Department to comply with MassDEP Policy DWP98-01, regarding antennae installations on water storage tanks. The applicant has not provided the letter to date.
5. Water Tower Analysis: The structural analysis report did not analyze the water storage tanks ability to support the proposed loading. Sheet 4 of the structural analysis report indicated, in the conclusion section, "The standpipe water tank is considered structurally adequate by inspection". Analysis of the tank is required per the Ashland Tank Communications Equipment mounting standard, the lease agreement and the MassDEP Policy DWP98-01 for new installations.
 - a. Sheet A-2 of the drawing set submitted includes a "Tower Analysis Note" This note, located top right of the drawing, indicates the water tank was not analyzed for structural integrity to carry the proposed loads. This analysis is required per the Ashland Tank Communications Equipment mounting standard and the lease agreement.

If in agreement, please forward this letter to the appropriate T-Mobile Wireless representative. Ashland received the drawings and reports from Adam Braillard of Prince Lobel Tye LLP. If you would like our office to forward this letter to Adam Braillard, please let us know.

If you have any questions regarding this letter, please feel free to contact our office. If you agree, the letter can be passed on to the applicant.

Sincerely,

Haley Ward, Inc.

Gregory J. Eldridge, P.E.
Vice President - Senior Project Manager

Cc: Dan Maurer – Ashland - via email
Peter Matchak - Ashland

Enclosures: Structural analysis report

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