

Michael F. Plahovinsak, P.E.

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May 7, 2020

Skyway Towers
3637 Madaca Lane
Tampa, FL 33618

Re: Proposed 95-ft Unipole
Located in Collin Co., TX: Site #TX-09680 Peachtree
MFP #30319-003

I understand that there may be some concern on the part of local building officials regarding the potential for failure of the proposed communication unipole. Communication structures are designed in accordance with the Telecommunications Industry Association ANSI/TIA-222-G, "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures".

I will design this unipole to withstand a 3-second gust wind speed of 90 mph (V_{asd}) in accordance with ANSI/TIA-222-G for Collin County. *The design will also conform to the requirements of the 2012-2015 International Building Code for an equivalent ultimate wind speed of 116 mph (V_{ult}).*

This unipole will be intentionally designed to accommodate a theoretical fall radius. The upper 24' of the pole will be designed to meet the wind loads of the design, however, the lower portion of the pole will be designed with a minimum 10% extra capacity. Assuming the pole will be fabricated according to my design and well maintained, in the event of a failure due to extreme wind and a comparable appurtenance antenna loads (winds in excess of the design wind load), it would yield/buckle at the 71' elevation. The yielded section would most likely remain connected and hang from the standing section effectively collapsing on itself.

The structure will be designed with all of the applicable factors as required by the code. A properly designed, constructed and maintained pole has never collapsed; unipoles are safe structures with a long history of reliable operation.

I hope this review of the unipole design has given you a greater degree of comfort regarding the design capacity inherent in pole structures. If you have any additional questions please call me at 614-398-6250 or email mike@mfpeng.com.

Sincerely,



Michael F. Plahovinsak, P.E.
Professional Engineer