

March 23, 2021

Mr. Tim Caletka
Engineer IV - Construction
Verizon
6696 Tri County Parkway (Suite 100)
Schertz TX 78154

RE: Proposed 105' Monopole & foundation for Pfennig in Pflugerville, TX

Dear Mr. Caletka:

Upon receipt of order, we propose to design and supply a 105' monopole and foundation for the above referenced site. The monopole and foundation will be designed for an ASCE 7-16 ultimate wind speed of 108 mph without ice and 30 mph with 1" ice, Structure Class II, Exposure Category C and Topographic Category 1, in accordance with ANSI/TIA-222-G.

When designed according to this standard, the wind pressures and steel strength capacities include several safety factors. Therefore, it is highly unlikely that the monopole will fail structurally in a wind event where the design wind speed is exceeded within the range of the built-in safety factors.

Should the wind speed increase beyond the capacity of the built-in safety factors, to the point of failure of one or more structural elements, the most likely location of the failure would be within the monopole shaft, above the base plate. Assuming that the wind pressure profile is similar to that used to design the monopole, the monopole will buckle at the location of the highest combined stress ratio within the monopole shaft. This is likely to result in the portion of the monopole above leaning over and remaining in a permanently deformed condition. **Please note that this letter only applies to the above referenced monopole designed and manufactured by Sabre Towers & Poles.** This would effectively result in a fall radius less than or equal to 30 feet.

Sincerely,

Amy R. Herbst, P.E.
Senior Design Engineer



[Handwritten Signature]
3/23/21

Sabre Communications Corporation
Texas Registration Number F-4365