

My comments to you for consideration:

1. (letter from NB+C, no date) This statement was prepared by the applicant's engineering firm, **NB&C out of Elkridge, Md.** It states that the county's Chancellor 500ft tower site is at or near capacity, and with pending stricter structural standards proposed to be adopted by the American National Standards Institute next year, that this tower will **LIKELY** not be able to accommodate many future modifications.  
The county's tower at this site meets current EIA/TIA-222-G structural guidelines, as designed and constructed in 2016 by **NB&C, Glen Allen, VA.** Additionally, as the county has completed its public safety radio system work on that tower, and as at least two other providers have removed equipment from the tower, T-Mobile, as a current co-locator on that tower, currently resides on this county-owned tower, the county receives license fees from T-Mobile on a monthly basis, and their equipment resides at approximately 265 ft, which is well above the tree line, for maximum coverage. The tower has passed structural analysis evaluations as a result of the county's work, and it does not appear that T-Mobile has approached the county to evaluate any additional equipment load on this tower prior to submission of this special use permit to construct a new tower. This tower is approximately 1 ¼ miles from the Chancellor tower site, and given the height desired by T-Mobile, and given that T-Mobile is already co-located on this county-owned structure, I recommend that T-Mobile expand their equipment at this facility.
2. Additionally, the water tank at Cherry Road is available for co-location, with heights possibly available up to 160'. There does not appear to be any evidence that T-Mobile has approached the County to request co-location, and instead may have relied on their engineering firm to evaluate structural capacity of the water tank. The Cherry Road water tank is approximately 1 ½ miles from the proposed new site, and should be considered as a viable site. The propagation maps provided with this package reflect a map scale; however, the propagation maps for the water tank appear to be inflated to a point where the map is amplified to portray a lack of coverage that may, or may not exist...there is no scale identified on these maps. Why is the propagation map for the water tank so zoomed in and why is there no map scale? This should have been caught by the county's consultant, and validated prior to presentation. The water tank is available for co-location now.
3. Before argument is presented that T-Mobile needs this site to improve coverage and/or capacity, I see nothing in this report that reflects the current state of coverage, and how this new site will fill those gaps, other than a letter, from a T-Mobile frequency engineer, saying that there are issues with coverage and capacity. I see no supporting documentation to backup his claims.
4. Additionally, their proposed tower will meet current TIA-222-G standards (see comment above in #1).

5. There is also a discrepancy in the county consultant's report, that reflects this tower is a 150' tower with a four foot lightening rod. The applicant has stated it's a ten foot lightening rod. I am assuming the latter, but it appears our consultant may not be paying as much attention to these SUP applicants packages as he may need to.

A word of note/FYI only – it is probable that this site may be required to facilitate the capacity of the T-Mobile system, as this is a very highly dense and populated area. Please also note that Planning staff has indicated that the tower proposed further in the Maple Grove development, behind the church, MAY no longer be needed and that the applicant MAY be willing to co-locate on this proposed tower.

This tower is only 150', and will only structurally hold three service providers, which includes T-Mobile. While it is possible that T-Mobile could decide to relocate their equipment from the Chancellor tower to this new proposed tower, it is highly unlikely, given the current height they are riding on the tower as of right now.

Please note there are quite a few proposed tower sites in the near vicinity of this proposed site – I've attached a map to indicate such. If this tower gets approved, I would request that each new tower site presented in the future be carefully evaluated; from my perspective, popping up these 140-150ft towers all up and down Rt 3 may or may not be the solution; we may need to discuss one or two taller towers to accommodate more service providers in the area.

I would also recommend you ask T-Mobile why they cannot implement shorter, cell-site technology to expand capacity (not coverage), to accommodate what may appear to be more of a capacity issue than a coverage issue. Again, with no "existing state" propagation map to compare current state vs their desired state of coverage and capacity, its pretty difficult to make that evaluation one way or the other.