



MEMORANDUM

TO: Planning Commission
FROM: Elena Sasin, Assistant Planner
DATE: February 28, 2018
SUBJECT: Verizon Wireless Facility at 7400 SW Scholls Ferry Road (WF2017-0011 / ADJ2017-0004 / VAR2017-0005 / DR2017-0124) Staff Memo

Staff is providing the following memo to clarify the meeting process for March 7, 2018 and to address additional public testimony as well as materials provided by the applicant.

Summary of Previous Meeting:

At the conclusion of the January 24, 2018 hearing on the Verizon Wireless Facility at 7400 SW Scholls Ferry Road proposal, the Planning Commission (Commission) agreed to keep the record open until February 14, 2018 to provide the applicant an opportunity to address questions and concerns raised at the hearing as well as an opportunity for the public to respond to the new evidence. After February 14, 2018, no new evidence, written, oral or otherwise, would be accepted. Therefore, the continued hearing scheduled for March 7th, 2018, will be for deliberation only. Without re-opening the record, the Commission will not be able to ask questions of the applicant or public, in order to avoid introducing new evidence.

If the Commission has any questions regarding the hearing process, please contact staff.

Summary of Concerns and Questions Raised at the January 24, 2018 Hearing:

**Please note that staff's exhibits are numbered similarly to the applicant's but refer to different items.*

1. What is the minimum height (or minimum adjustment to the standard) necessary to make a reasonable use of the structure? Could another future tower fulfill the coverage gap if this tower was only permitted to be built to 80 feet in height?
 - On page 1 of the applicant's February 21, 2018 final rebuttal (Exhibit 3), as well as in the applicant's original narrative (Exhibit 1, dated January 16, 2018, pages 9 and 10) the applicant indicates that a 100-foot tall tower is the minimum necessary to overcome surrounding obstructions and address capacity needs. On page 3 of the applicant's February 7, 2018 narrative (Exhibit 2) and page 2 of the February 21, 2018 narrative (Exhibit 3), the applicant suggests that finding a suitable site within the search ring for the tower, which would not require a height adjustment, was a challenge and other interested parties would likely experience the same difficulty.
2. Could other wireless communication facility towers be located on the same site?

- Staff would like to clarify the difference between collocation of wireless facilities and the clustering of towers. Collocation refers to attaching two or more antenna systems to the same tower and the practice is encouraged. Clustering of towers refers to the placement of one or more wireless communication facility towers on the same lot, which is prohibited within all Residential and Multiple Use zoning districts (Section 60.70.35.16, Beaverton Development Code). Only one tower could be permitted on this lot.
3. In the event of a catastrophe, address what would happen to the remaining 60 feet of the tower after the top 40 feet breaks off. Since the proposed tower is less than 45 feet from the southern property line, could the remaining 60 feet topple over into the adjacent undeveloped right-of-way? Could it hit a tree, causing it to fall as well?
- To address this concern the applicant submitted additional evidence from a registered professional engineer (Exhibit 15, of the applicant's exhibits) who provided a written analysis of the proposed tower's design and concluded that in the event of a "structural failure" it is highly unlikely that it would result in anything more than a visible bending or warping of the base or pole section. The engineer also indicated that only under very unusual circumstances would the tower actually fall over. On page 4 of the applicant's final written rebuttal, the applicant explains that the heaviest portion of the pole is located above the 40-foot breaking point and once that portion bends or folds over onto itself, the bottom 60 foot tall steel pole with no significant wind load remaining, is highly unlikely to fall.
 - Additionally, the applicant's plans and narrative submitted on February 7, 2018 (Exhibit 2), show that the trees nearest to the proposed tower range from 30 to 50 feet in height, therefore, if caused to fall because of the tower, are not tall enough to cross the approximately 60 foot wide undeveloped right-of-way.
4. What are the heights of the trees? Where are the 80 to 100 foot tall trees?
- The applicant submitted photographs of the surrounding trees (Exhibit 16, of the applicant's exhibits) and a revised landscape plan sheet (Exhibit 17, of the applicant's exhibits) which show that the trees closest to the proposed wireless facility are between 30 and 50 feet tall. On page 8 of applicant's original narrative (Exhibit) the applicant states that the neighboring parcel to the south has an approximately 10-foot higher ground elevation than the subject site and that the dense groves of trees to the south and northeast reach heights of over 80 and 100 feet respectively. In the same narrative, on page 14, the applicant states that the undeveloped area to the south of the subject site is composed of a dense grove of trees that reach heights of over 80 feet.
 - The applicant's testimony during the January 24, 2018 hearing included that the wireless technology is not completely "line of sight" because it can pass through some objects but that it does need to clear significant objects such as trees. Additionally, the applicant's materials include a detail of the proposed antenna configuration (Exhibit 7, of the applicant's exhibits, Sheet No. A-2) which shows that the antennas are positioned around the circumference of the monopole.
5. What other sites were considered prior to selecting the subject site?
- Exhibit 18 of the applicant's February 7, 2018 submittal includes an Alternative Sites Analysis which provides additional information regarding the three other sites considered for the tower. The analysis notes that the search area largely contained small-lot properties, where meeting

setback requirements is difficult. Further, the obstacle of finding an agreeable location on a lot to which the property owner or landlord was receptive to, also presented a challenge. The applicant has stated numerous times that the land use approval process for this location began while the site was still outside of the City's jurisdiction, and complied with Washington County's setback regulations, at the time making it a more ideal site, than the other available sites in the search area.

6. If a 100 foot tall tower is the minimum necessary for the applicant, how would the collocation spots lower down on the tower be useful?
 - The applicant states in the February 7, 2018 narrative (Exhibit 2) that the second antenna array could be placed at 84 feet, which is still above the 80 foot tree line and that other carriers may use different equipment and frequencies which may have the ability to penetrate clutter, such as trees, more effectively.
7. Clarify trees being removed.
 - The applicant's plans (Exhibit 7, of the applicant's exhibit, Sheet SV-1) and narrative (Exhibit 1, page 5) show and state that three small trees, one-inch caliper in size, need to be removed to accommodate the proposed extension of the driveway leading up to the leased area. No other tree removal is proposed or permitted with this development.

Summary of Additional Public Testimony Received after the January 24, 2018 hearing but Prior to February 14, 2018:

Exhibit 4 – Margaret Armstrong, Received February 1, 2018:

Ms. Armstrong's written testimony focuses on the trees that are located on and within the vicinity of the subject site. Ms. Armstrong states she is familiar with the landscape through her volunteer work at the church.

Exhibit 5 – Jeanna Bennett, Lynn, Hayden and Sommer Shultz, Received February 13, 2018:

Testimony expressing the concern about the health impacts associated with wireless communication facilities and suggesting that if built, these towers should be located in places where people are not living and working. The testimony also suggested that the development of wireless communication facilities negatively affects property values.

Exhibit 6 – Jeffrey Diephuis, Received February 14, 2018:

Mr. Diephuis questions the applicant's accuracy in regards to tree heights within the vicinity of the subject site, suggesting that the surrounding tree canopy is not 80 to 100 feet, as indicated by the applicant. Additionally, Mr. Diephuis asserts that the applicant has not provided sufficient evidence demonstrating that the additional height of the tower is the minimum necessary to make a reasonable use of the land. Mr. Diephuis asks that the Planning Commission deny the request for a major adjustment.

Exhibit 7 – Julie Lucas, Received February 14, 2018:

Ms. Lucas submitted two written testimonies. The first email questioned the height of the trees and accuracy of the photo-simulations provided by the applicant. Ms. Lucas's second submittal describes concerns related to environmental and health impacts caused by wireless communication facilities, as well as the effect on property values of the neighborhood.

Staff would like to note that the purpose of keeping the record open was to provide an opportunity for the applicant to address questions and concerns raised at the January 24, 2018 public hearing and subsequently an opportunity for the public to review the new evidence and provide related testimony. At that hearing, Assistant City Attorney, Peter Livingston, recommended that the applicant's additional evidence be limited to the issues raised by the opponents. Some of the public testimony provided after the hearing, raises concerns which were not mentioned at the hearing or during the public noticing period and are not directly related to any applicable approval criteria to which the proposal is subject to, such as effects on surrounding property values and potential health impacts.

Although not required, the applicant has submitted a Non-Ionizing Electromagnetic Exposure Report (Exhibit 4 of applicant's exhibits) which concludes that the proposal will comply with FCC rules.

Additionally, in response to concerns over health implications, Staff refers to the Federal Telecommunications Act of 1996. One provision of the Telecommunications Act prohibits state and local governments from denying permit applications for cellular towers based upon the environmental effects. Of significance is a rule from the Telecommunications Act shown below:

"No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the regulations contained in this chapter concerning the environmental effects of such emissions" [332(c)(7)(B)(iv)].