

ARCHITECTURAL REVIEW BOARD STAFF REPORT

Project #/Name	ARB-2021-63: Shentel (Beam) Fixed Wireless – 50064 Patterson Mill – Tier 2 PWSF
Review Type	Preliminary Review of a Site Development Plan
Parcel Identification	07100-00-00-037J0
Location	North side of Patterson Mill Lane, just south of I-64 (See Figure 1.)
Zoned	Rural Area (RA) / Entrance Corridor (EC)
Owner/Applicant	Patricia W. Patterson / Shentel (Jessie Wilmer)
Magisterial District	Samuel Miller
Proposal	To construct a telecommunications facility consisting of a 98.5’ monopole tower and associated structures and equipment.
Context	The immediate area is wooded and adjacent to Interstate 64. The surrounding area is rural in character with residential and agricultural buildings.
Visibility	See page 3.
ARB Meeting Date	July 6, 2021
Staff Contact	Khris Taggart

HISTORY

Since 2000, the ARB has reviewed multiple Personal Wireless Service Facilities proposals for this property, one of which has been constructed at 90’ tall. Due to the similarity in height between the existing and proposed monopoles, a balloon test was determined to be not required. A site visit was held on June 21, 2021 to determine the potential visibility of the proposed monopole and related equipment based on the existing facility.



Figure 1: Project location.

PROJECT DETAILS The proposal includes the following:

- Installation of a 98.5'-tall monopole within a fenced compound in a 30' x 30' lease area, with monopole located approximately 75' from the I-64 right-of-way.
- Installation of ground equipment including various cabinets, an H-frame for other equipment, and an ice bridge.
- Installation of a 6'-tall chain link fence with a 1'-tall barbed wire overhang around the 20' x 20' compound.
- Creation of a 30'-wide access and utility easement from the existing gravel access drive to the lease area.
- Installation of 3 Nokia antennas using a mounting collar and frames within a single array.
 - Nokia antenna size is: 25.6" high x 19.7" wide x 9.6" deep.
 - The backs of these antennas are shown mounted at 12" from the face of the pole.
- Installation of an MTI dish antenna and radio below the antenna array.
 - MTI antenna size is: 14.6" high x 14.6" wide x 1.6" deep.
 - Mimosa B5c Radio size is: 10.5" high x 6.2" wide x 3" deep.
- The proposal allows for the future installation of two additional arrays below the dish antenna and radio.
- The reference tree is identified as a 20" diameter White Oak at 87.92' tall (763.93 AMSL).
- Monopole, antennas, and base station equipment are to be painted Umbra SW 4008.

ANALYSIS REGARDING THE GROUND EQUIPMENT

A Certificate of Appropriateness from the ARB is required for the base equipment portion of this proposed telecommunications facility in the Entrance Corridor. The ARB may impose conditions on the Certificate of Appropriateness, based on the EC Guidelines, and consistent with Section 5.1.40 of the Zoning Ordinance.

Ref	Guideline	Issues	Recommendations
	Accessory structures and equipment		
18	The following should be screened to eliminate visibility from the Entrance Corridor street: e) Mechanical equipment g) Chain link fence, barbed wire	The compound is proposed to be surrounded by a chain link fence. While chain link fencing is not typically appropriate for the EC, the fencing and the ground equipment it is surrounding are not expected to be visible from the I-64 Entrance Corridor.	None.

ANALYSIS REGARDING VISIBILITY OF THE FACILITY

The ARB may act in an advisory capacity to the Agent as to whether the facility is being sited to minimize its visibility.

Ref	Guideline	Issues	Recommendations
	Development pattern		
33	The relationship of buildings and other structures to the Entrance Corridor street and to other development within the corridor should be as follows: f. The placement of structures on the site should respect existing views and vistas on and around the site.	The site visit in late June revealed that the existing monopole was not visible from either the eastbound or westbound lanes of I-64. There is a slight increase in visibility during the months when the leaves are off the trees, as evidenced by the applicant’s photo simulations that appear to have been taken in Spring. (See Figures 2-5.) These images show that the existing pole is visible through the trees from vantage points on I-64 directly across from the site, and rising slightly above the trees from a more distant point on the corridor. Note, however, that the existing pole is not skylit. With a location and height similar to that of the existing monopole, the proposed monopole is expected to have the same level of visibility.	Given the degree of visibility when viewing the existing site, the proposed location of the new facility is expected to sufficiently minimize the visibility of the monopole from the I-64 EC. Little to no negative impact on the Entrance Corridor is anticipated.

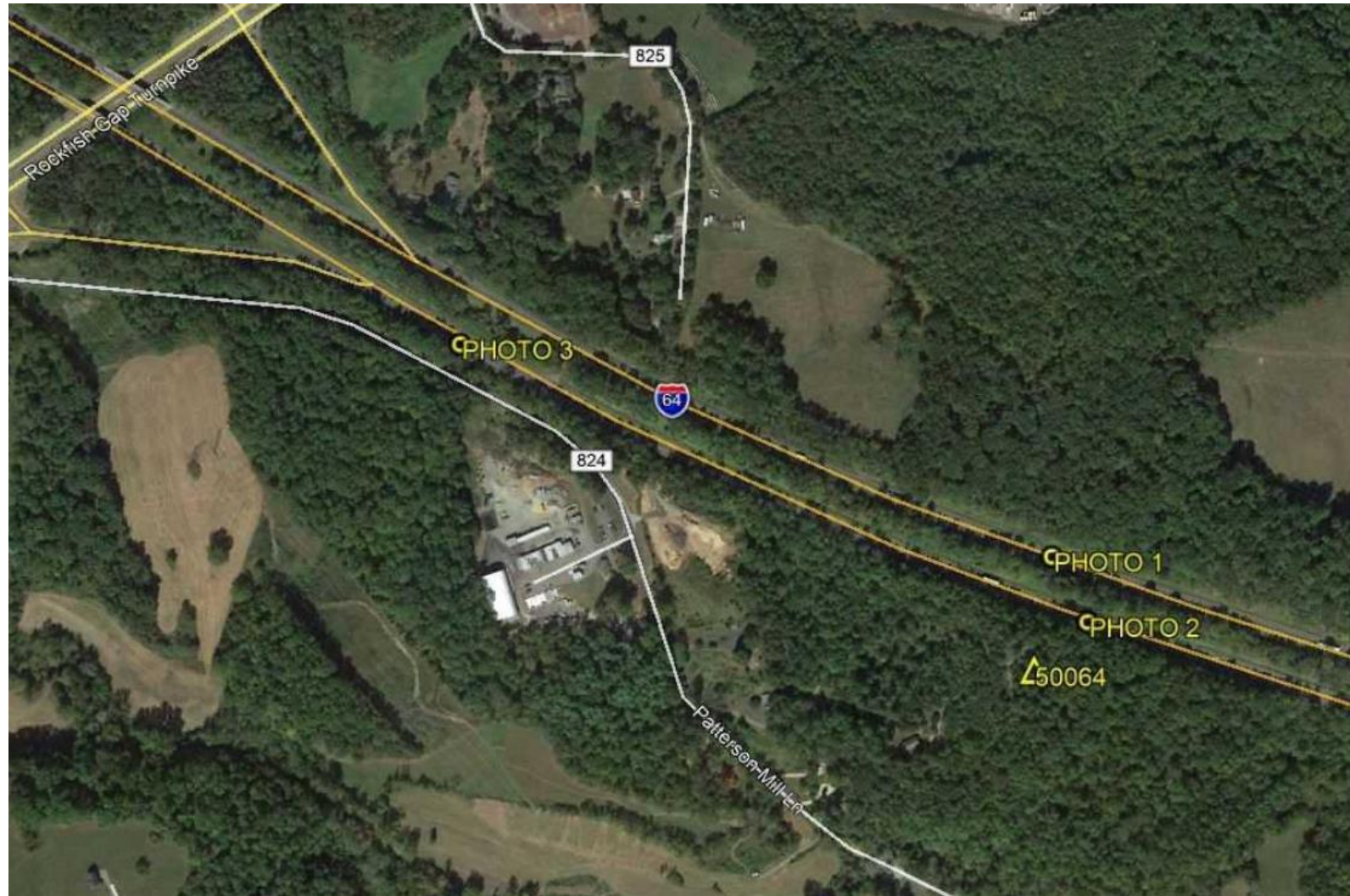


Figure 2: Map overview of the locations of the photo simulations provided by the applicant. The monopole site is highlighted by the yellow triangle.

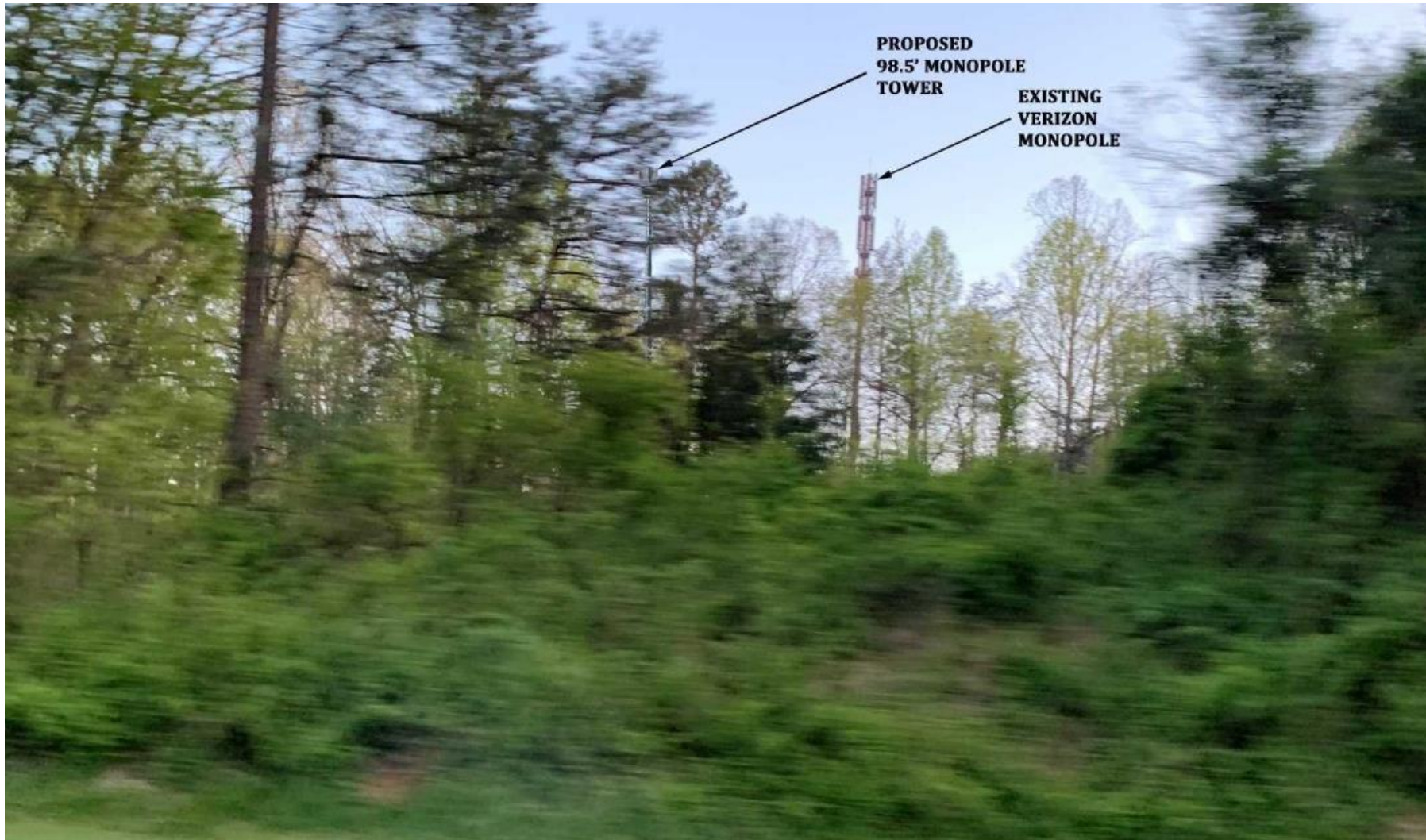


Figure 3: Applicant's photo simulation of the existing monopole and proposed monopole from I-64 eastbound looking south.



Figure 4: Applicant's photo simulation of the existing monopole and proposed monopole from I-64 westbound looking south.



Figure 5: Applicant's photo simulation of the existing monopole and proposed monopole from I-64 westbound near exit 107 looking southeast.

SUMMARY OF RECOMMENDATIONS

Points of Discussion

1. Anticipated visibility of the monopole
2. Anticipated visibility of the ground equipment and base station

Recommendations

Regarding the Certificate of Appropriateness for the ground equipment and base station:

Because the ground equipment and chain link fencing are not expected to be visible from the EC, staff recommends approval of the Certificate of Appropriateness for the ground equipment and base station.

Regarding visibility of the monopole:

Staff recommends that the ARB forward the following recommendation to the Agent:

1. The ARB finds that the proposed location will sufficiently minimize the visibility of the monopole from the I-64 Entrance Corridor.

ATTACHMENTS

- **Attach. 1: ARB2021-63: [Shentel Patterson Mill Site Plan](#)**