

Wednesday, December 5, 2018

RE: Proposed Verizon Wireless Communications Facility

Site Name: EV Barlow.

Type of Tower: 280' self-support Tower.

Location: 2557 Steve Denton Rd Barlow, KY 42024.

To Whom It May Concern:

As a radio frequency engineer for Verizon Wireless, I am providing this letter to state the need for a Verizon Wireless site called **EV Barlow**.

The EV Barlow site is proposed with the below objectives:

- 1. Offload 4G traffic from busy site to the northwest.
- 2. Offload 4G traffic from busy site to the northeast.
- 3. Improve 4G throughput to existing heavy data users.
- 4. Improve 4G network reliability by increasing the amount of time our customers operate on 4G instead of 3G.

Currently the area is experiencing high demand for wireless high-speed data. Growth forecasts have triggered the need for an additional site in the area. The tower is needed to provide all Verizon customers in the area with the best experience on their 4G wireless devices.

Raw Land — Design plans for a new tower would provide tower height of **280'**. The new structure height was decided upon to best cover the offload area and interact with the existing Verizon sites. If we are limited to building a structure less than the proposed height, another tower would be needed in the vicinity in the near future. In addition, building a structure that is too short can cause existing taller sites to shoot over the proposed site and building a site that is too tall can cause the proposed site to shoot over existing sites. Both situations create a poor experience from a user perspective. The new structure will be placed near the center of the area with high traffic demand and offload the surrounding sites greatly. The new tower design meets stated objectives.

Verizon Wireless cares about the communities as well as the environment and prefers to collocate on existing structures when available. It can be noticed from any map that Verizon Wireless is currently collocated on many existing structures in the area. We prefer collocation due to reduced construction costs, faster deployment, and environment protection. However, Verizon Wireless was unable to find a suitable structure within the center of demand area to collocate the proposed **EV Barlow** site.



Verizon Wireless design engineers establish search area criteria in order to effectively meet coverage objectives as well as offload existing Verizon cell sites. When met, the criterion also reduces the need for a new site to cover the area in the immediate future. Each cellular site covers a limited area, depending on site configuration and the surrounding terrain. Cell sites are built in an interconnected network; which means each cell site must be located so that their respective coverage areas are contiguous. This provides uninterrupted communications throughout the coverage area.

Since collocation is generally the most cost-effective means for prompt deployment of new facilities, Verizon Wireless makes every effort to investigate the feasibility for using existing towers or other tall structures for collocation when designing a new site or system expansion. However, collocation on an existing tower or tall structure is not always feasible due to location of existing cell sites. Cell sites are placed in a way so they provide smooth hand off to each other and are placed at some distance from each other to eliminate too much overlap. Too much overlap may result in a waste of resources and raise a system capacity overload concern.

This cell site has been designed, and shall be constructed and operated in a manner that satisfies regulations and requirements of all applicable governmental agencies that have been charged with regulating tower specifications, operation, construction, and placement, including the FAA and FCC.

Sincerely,

Michael Fahim.

RF Engineer, Verizon Wireless

Milwel



STATE OF INDIANA

COUNTY OF AMICTON

Subscribed and sworn to before me this 5th day of December, 2018.

Notary Public

THOMAS D. HERNDON
Notary Public, State of Indiana SEAL
My Commission Expires 9/2/2023

County of Residence Amitor