



December 16, 2019
File: 10155545-3.0

Re: Verizon Permit Application for Small Cell Installation
7 Cross Street
City of Beacon, New York, 12508
Aesthetic Review Memo

Mayor Casale and the Beacon City Council:

This memorandum was prepared to summarize HDR's review of aesthetic aspects for a proposed "small cell" wireless telecommunication facility on a new 42.6-ft utility pole at the above-referenced location (the site) in the City of Beacon. The following information was reviewed by HDR for this memorandum:

- Lease Exhibit Drawings (Tectonic) – 3 pages (file "CliffandWillow_LErev4_20190924")
- Photosimulations (Tectonic) – 7 pages (file "CliffandWillow_SimsRev2_20191119")

The current proposed location of the small cell facility is on City-owned property¹ near the northeast corner of a parking lot ("proposed lease area"). Simulations were provided for both a wooden utility pole and a decorative (dark green) metal pole option. A canister antenna is mounted at the top (total facility height of 49.7 ft). Ancillary small cell equipment is depicted on the simulations for a few scenarios:

- *Side-mounted on the pole exterior (all on one side; stacked)*
- *Side-mounted on the pole exterior (distributed on different sides of the pole)*
- *Contained at grade within a fenced equipment area at the pole base*
- *The simulations for the decorative metal pole option also include lighting, to simulate the existing (but shorter) light poles on Main Street.*

These options were discussed during a December 12, 2019 conference call with the applicant and City representatives. The space requirements for ancillary equipment were also discussed, including electric meter and subpanel, radio shroud box, and remote radiohead [RRH] units. The 7 Cross Street equipment is similar in size to that associated with the 110 Howland Avenue small cell, where such equipment is contained within ground-based fencing at the pole's base.

It is HDR's opinion, based on our experience with various small cell configurations and designs and a review of the above-noted applicant information, that ancillary equipment associated with the Verizon facility proposed at 7 Cross Street cannot be effectively contained inside the metal utility pole option (i.e., within the pedestal's base). This potential stealthing of ancillary equipment *within* a pole structure would of course not be an option for a solid (conventional) wooden utility pole; however, to design such with the metal pole option in mind would require an unusually large base pedestal and larger diameter pole that would appear to be out of character in our opinion.

For reference, select photosimulations are included and captioned below.

¹ The City should confirm the process for special permit, zoning, and technical review of this application, given that the facility location has been moved to City-owned property.



Wooden pole option; antenna at top and ancillary equipment mounted on 2 sides of pole (Sim S-1B)



Wooden pole option; antenna at top and ancillary equipment in small ground-based fenced area (Sim S-1C)



Metal decorative pole option; antenna at top, lighting, and ancillary equipment pole-mounted on one side (Sim S-1D)

Should the metal decorative pole option be selected (see simulation immediately above), it is understood that colors and aesthetic features for the pole, antenna, and all visible ancillary equipment will be consistent with the existing Main Street decorative light poles (or as otherwise approved by the City). Cabling will be routed within the pole, and any visible sections of cables will be minimized and painted to match the pole exterior. **It is recommended that the need for above grade fiber and electric wire connections be confirmed by Verizon, and moved to be below grade as feasible (these wires are shown in the Lease Exhibit Drawings but not on the photosimulations).** Verizon shall submit final aesthetic details (e.g., color; antenna and pole architecture; ancillary equipment configurations as selected by the City) in supplemental lease exhibits for



review and approval prior to construction. If lighting is included on the new pole, Verizon shall adhere to City specifications regarding light fixtures and LED requirements and submit supplemental lighting information for review and approval. HDR understands that architectural specifications for existing metal light poles and lighting can be furnished to Verizon by the City.

If a wooden utility pole is selected, the pole-mounted antenna, cabling, and ancillary equipment shall be painted to match the pole color (tan). For any option, 1-2 bollards should also be installed to protect the pole (and ground-based fencing, if selected) from vehicle movements.

Please note that this memorandum focuses on aesthetic options currently being considered by the City for its review of the lease exhibits. Should a more extensive technical review be required (addressing other project items including but not limited to: small cell background information and proposed operations; application review in terms of compliance with City Code sections and SEQRA; coverage / capacity; RF Emissions review; etc.) and as consistent with our Tech Memo items addressed for the 110 Howland Avenue special permit review, please let me know.

Sincerely,
Henningson, Durham & Richardson
Architecture and Engineering, P.C.
in association with HDR Engineering Inc.

A handwritten signature in black ink that reads "Michael P. Musso, P.E.".

Michael P. Musso, P.E.
Senior Project Manager

cc: Anthony Ruggiero
Nicholas Ward-Willis
John Clarke