



HISTORIC RESOURCES DETERMINATION

Date: February 25, 2020

To: The First Taxing District
of the City of Norwalk
12 New Canaan Avenue
P.O. Box 27
Norwalk, CT 06852

Re: Proposed Telecommunications Facility
173.5 West Rocks Road
Norwalk, Connecticut

The Norwalk First Taxing District (the "District") intends to install a new telecommunications facility ("Facility" or "Tower") at its property off West Rocks Road ("Host Property"). The Facility will replace existing wireless service providers' (or "Carriers") antennas and equipment currently located on the District's water tank. The existing water tank has reached the end of its useful life, and the District plans to decommission and remove it prior to installing a replacement water tank nearby on the Host Property.

Several technical and functional considerations limit the District's ability to use the new water tank to support the Carriers' antennas and equipment. As a result, a separate support structure is required. Relocating the Carriers to a separate structure would allow both the District and the Carriers unencumbered and independent future uses and access to their respective facilities.

The relocated wireless facilities require compliance with the National Environmental Policy Act (NEPA), including Section 106 of the National Historic Preservation Act of 1966 (NHPA). As part of its due diligence efforts on behalf of the District, All-Points Technology Corporation, P.C. ("APT") consulted extensively with the State Historic Preservation Office ("SHPO") from July 2018 to January 2020 to mutually determine a suitable location and design of the Facility that would minimize its potential visual effects to the Merritt Parkway Historic District (the "Parkway"), a resource listed on the National Register of Historic Places. These collaborative efforts regarding placement options within the Host Property and their associated benefits/constraints are discussed herein.

District Options

After initial consultation with the Carriers regarding Radio Frequency ("RF") objectives, it was determined that a 130-foot tall, steel monopole could accommodate the necessary antennas and equipment and meet their coverage needs. The District proposed three (3) areas on the Host Property that were vetted by the Carriers to ensure RF objectives would be met at any of these locations.

Option "A"

Option "A" would include a tower located southwest of the existing water tank, approximately 60 feet north of the new water tank. The SHPO felt the Facility would be highly visible and would introduce an additional tall structure visible from north-bound portions of the Parkway.

Option "B"

Option "B" would place the tower in the location of the existing water tank. Similar to Option "A", the new tower would be located north of the new water tank, would be closer to the Parkway boundary, and would offer comparable visibility. As with Option "A", the combination of the new water tank and tower would increase the number of structures visible from the Parkway.

This option would pose additional logistical challenges to the Carriers and to the District. By locating the new tower in the same location as the existing Facility, there would be a need for interim RF coverage during decommissioning of the existing water tank and construction of the new monopole. This would require the installation of one (1) or more temporary towers. The space required for temporary tower installations could impede the ability to decommission the existing tower.

Option "C"

Option "C" would place the new tower southeast of the existing Facility, approximately 100 feet northeast of the new water tank. This location would be similar to Options A and B with respect to visibility from and effects on the Parkway.

SHPO Alternate Locations

At any of these three (3) optional locations, views of the new tower would be limited to northbound traffic on the Parkway from distances ranging between approximately 1.5 miles and 0.4 mile from the Host Property. In a letter dated January 23, 2019 from SHPO, a new tower at Options A, B or C "...would constitute an adverse effect to historic resources."¹ SHPO provided alternatives for consideration in its letter that are discussed below.

Option "D"

The first alternative suggested by SHPO would involve placing the new tower approximately 60 feet west of the new water tank. This would situate the new tower "in front" of the new water tank as viewed from the Parkway travelling north. SHPO's rationale was that the visibility of the tower in this location would be minimized by "blending in" with the water tank and providing the appearance of one structure. While the tower's proximity to the Parkway would not change significantly, the visual impacts could be minimized by the backdrop of the new water tank. Although not the SHPO's prime consideration, this alternative could also help to shield views of the tower from nearby residences. The Carriers would be able to meet their RF objectives at this location with a ±130-foot tall monopole.

Option "E"

The second alternative suggested would involve placing the new tower between the new water tank and West Rocks Road, essentially "behind" the new water tank as viewed from the Parkway travelling north. This placement would offer a similar "softening" effect on visibility as Option "D", thus minimizing views from the south on the Parkway. However, this alternative would not minimize the effectiveness of the site for the Carriers due to shadowing and/or blocking of their signal southwestward along the Parkway.

¹ SHPO Letter dated January 23, 2019 addressed to the First District Water Department, Page 2, Paragraph 2.

Existing Water Tank

A third alternative suggested by SHPO was to leave the existing water tank and Carrier installations in place. This option presents challenges to both the Carriers and the District. The heights of the antennas on the existing water tank are not optimum from a wireless service perspective, as each Carrier experiences compromised coverage today. Also, the District must decommission the existing water tank because it is at the end of its useful life and leaving it in place is not advisable from a water utility perspective; once decommissioned, the tank may not be capable of accommodating the necessary load due to differences in structural capacity without water. Further, the tank represents a health and safety concern; its surface is coated with lead -containing paint and polychlorinated biphenyls (PCBs). In addition to paint abatement activities, surficial soil in the immediate vicinity of the tank must be also remediated. As such, it is not technically feasible to maintain the existing structure.

Telecommunications Facility on Other Property

Another alternative suggested by SHPO would be to consider a new tower at another property within the immediate area. Due to the topography, coverage requirements and extremely dense residential development in this area, available and feasible locations are extremely limited. If suitable land could be secured and a structure designed to meet the Carriers' RF objectives, it would likely be placed in an area in similar proximity to the Parkway and subject to SHPO review. This alternative could result in the need for a taller tower or involve multiple locations in order to accommodate the Carriers' coverage and SHPO's objectives.

Collocation on New Water Tank

The District, in coordination with the Carriers, did evaluate the potential to collocate the antennas and equipment on the new water tank. Although this arrangement could provide for adequate RF coverage in the area, several structural and technical constraints were identified. The current design of the new water tank would have the top of the reservoir at a height of 111 feet AGL. The height of the reservoir cannot be increased without compromising water pressure throughout the District's entire system.

In order to achieve the height required for Carriers' installations, steel supports could be attached to the top of the new water tank, with antenna arrays in two tiers; this design would increase the overall height of the new structure to approximately 134 feet AGL. However, the penetrations to the tank shell necessary to install steel framing supports create areas for moisture/precipitation to infiltrate, potentially compromising the tank's integrity over time and increasing inspection and maintenance requirements. In addition, installation of the antenna framing would place substantial additional loading on the tank, potentially compromising its structural integrity. Revising the design to accommodate the additional loading would prove cost prohibitive for the District. Additionally, this arrangement would impose the same challenges the District and Carriers face today when service is required on the telecommunications facilities, including disruption to District operations, access, worker safety and integrity of the steel water tank shell.

Collocation on Eversource Transmission Structures

During informal consultations with SHPO and initial contact with the Merritt Parkway Conservancy, the potential for collocation on nearby Eversource-owned transmission structures was discussed. Two (2) Eversource transmission structures located near the Route 7 interchange are visible when travelling northbound on the Parkway. As these are existing structures in the viewshed of the water tank, it was thought that the visual impact might be less intrusive.

These transmission structures support 345-kV lines which pose health and safety risks to workers, both during installation and maintenance. Line outages are necessary for any work associated with these structures, which

needs to be coordinated with the Independent Service Operator-New England, and often requires advance scheduling of six (6) months or longer. Regardless of the known and anticipated constraints of collocating the Carriers' equipment on the Eversource structures, the location(s) are approximately 0.8-mile to the southwest of the Host Property and are between 60 to 70 feet lower in elevation. The Carriers would not be able to meet their RF coverage objectives in this area due to the significant change in elevation and distance from the current location.

Conclusion

After extensive consultation with SHPO, Option "D" (the proposed location west of the new water tank) was deemed acceptable, provided the antenna arrays are mounted within three (3) feet of the monopole. Although not an ideal solution, SHPO determined that this location, combined with a narrower profile at the top of the new monopole would lessen the overall visual impact on the Parkway. APT received the SHPO's final determination in writing on January 17, 2020, which states:

The SHPO has determined that the proposed undertaking will have no adverse effect to sites listed on or eligible for listing on the National Register of Historic Places, with the following conditions:

1. The antennas, RRUs, wires, mounts, and associated equipment will be designed, painted to match adjacent materials, and installed to be as non-visible as possible (including antenna differential), and
2. if not in use for six consecutive months, the screening, antennas and equipment shall be removed by the telecommunications facility owner. This removal shall occur within 90 days of the end of such six-month period.

A depiction of the optional site locations on the Host Property and the SHPO determination letter are provided as Attachments to this memorandum.

Attachments



Legend

- A Optional Site Locations
- New Water Tank Location
- Approximate Parcel Boundary
- Subject Property

Optional Site Locations Summary Map

Proposed Wireless Telecommunications Facility
 First Taxing District of
 The City of Norwalk
 173 1/2 West Rocks Road
 Norwalk, Connecticut





January 17, 2020

Ms. Stacey Vairo
Architectural Historian
c/o All Points Technology Corp.
567 Vauxhall Street Extension, Suite 311
Waterford, CT 06320

Subject: Proposed Telecommunications Facility
173.5 West Rocks Road
Norwalk, CT
Norwalk First Taxing District
ENV-20-0386

Dear Ms. Vairo:

The State Historic Preservation Office is in receipt of the submitted proposal for the above-referenced project, submitted for review and comment pursuant to the National Historic Preservation Act and in accordance with Federal Communications Commission regulations.

The property located at 173.5 West Rocks Road is adjacent to the National Register of Historic Places (NR) listed Merritt Parkway (NR# 91000410).

The proposed scope of work includes the installation of a 130 foot tall monopole, within an approximately 3,518 square foot chain-link fenced compound, with gravel ground covering. A 12 foot wide gravel access road is proposed to run from the compound to an access drive leading to an adjacent water tower. Four service carriers are proposed to transfer services from an existing collocation on an adjacent water tower, resulting in telecommunications collocations at 90 feet, 105 feet, 115 feet, and 125 feet above ground level (AGL). The antenna differential from the monopole is to be as small as possible. The collocation at each level is proposed as follows:

- 90 Feet AGL: Six panel antennas, two per sector, with twelve remote radio heads (RRHs), four per sector
- 105 Feet AGL: Three panel antennas, one per sector, with nine RRHs, three per sector

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- 115 Feet AGL: Nine panel antennas, three per sector, with six RRHs, two per sector
- 125 Feet AGL: Six panel antennas, two per sector, with 15 RRHs, five per sector

A Phase IB of the reconnaissance survey was completed in anticipation of ground disturbance during construction of the compound and consisted of subsurface testing of areas that would be subject to ground disturbing impacts as part of the proposed undertaking. A total of 22 of 22 planned shovel tests were excavated successfully throughout the proposed work area. Of the 22 shovel tests, none yielded cultural material from either historic or prehistoric periods. This office concurs that as a result of the information submitted, no additional archaeological investigation of the area is recommended.

The SHPO has determined that the proposed undertaking will have no adverse effect to sites listed on or eligible for listing on the National Register of Historic Places, with the following conditions:

1. The antennas, RRUs, wires, mounts, and associated equipment will be designed, painted to match adjacent materials, and installed to be as non-visible as possible (including antenna differential), and
2. if not in use for six consecutive months, the screening, antennas and equipment shall be removed by the telecommunications facility owner. This removal shall occur within 90 days of the end of such six-month period.

The State Historic Preservation Office appreciates the opportunity to review and comment upon this project. These comments are provided in accordance with the Connecticut Environmental Policy Act and Section 106 of the National Historic Preservation Act. For further information please contact Marena Wisniewski, Environmental Reviewer, at (860) 500-2357 or marena.wisniewski@ct.gov.

Sincerely,



Catherine Labadia
Deputy State Historic Preservation Officer

State Historic Preservation Office

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