Appendix D

Preliminary Visual Assessment and Photo-Simulations

PRELIMINARY VISUAL ASSESSMENT & PHOTO-SIMULATIONS

January 9, 2020

United Illuminating Company
180 Marsh Hill Road
Orange, CT 06477

Re: Proposed Modifications
Old Town Substation
280-330 Kaechele Place
Bridgeport, Connecticut

Introduction

The United Illuminating Company ("UI" or the "Company") is proposing to rebuild its existing Old Town Substation (the "Substation" or "Project") currently located at 280 Kaechele Place in Bridgeport, Connecticut. On behalf of UI, All-Points Technology Corporation, P.C. ("APT") completed this preliminary visual assessment by photographing existing conditions and preparing computer-generated photo-simulations depicting the Project post-development during leaf-on[1] conditions.

Project Setting

The existing Substation is located on a ±0.9-acre Company-owned property in a mixed commercial and residential area, approximately 0.55 mile southeast of Exit 48 of the Merritt Parkway (CT Route 15) and ±0.5 northwest of Lake Forest. UI is proposing to rebuild the Substation on adjacent Company-owned land at 312-330 Kaechele Place, encompassing an additional ±2.98 acres. The three abutting lots (280-330; comprising ±3.88 acres) are collectively referred to herein as the "Property").

Commercial development lies to the west of the Property, along Kaechele Place and Main Street. Woodlands abut the Property to the north, south and east; Eversource's transmission corridor extends east to west through these woods, including the Elton Rogers Woodland Park, an undeveloped Bridgeport park. Eversource's existing lattice transmission structures are approximately 105 feet in height. Residential development lies farther north and south/southwest of the Property.

The existing ±one (1) acre Substation fence line would expand to the north and east to create a new ±2.25-acre fenced-in facility. The expansion would accommodate new equipment and infrastructure, including nine (9) ±95-foot tall steel monopoles, three (3) lightning masts, bus work, transformers, and an enclosure. The Project would require tree/vegetation removal on the north and east sides of the Property; some limited clearing may also be required immediately to the south.

[1] At the time of the initial site visit, the leaves were on the deciduous trees surrounding the existing Substation.

Methodology

On August 8, 2019, APT personnel conducted field reconnaissance to assess existing conditions and complete an unmanned aircraft ("drone") flight to obtain high-resolution digital photographic imagery of the existing Substation and surrounding area. Three-dimensional computer models were developed for the existing Substation and the proposed rebuild from AutoCAD information. A photographic simulation was then generated to portray a scaled rendering of the Project (see attached graphics). Using field data, site plan information and image editing software, the proposed expansion was scaled to the correct location and height, relative to the existing Substation and surrounding area. The attachment includes an existing condition photograph and two (2) separate simulations, each demonstrating the Project's proposed construction sequencing over time.

Observations

Nearby locations along Sequoia Road, Kaechele Place, Hillview Street and Oliver Street were evaluated to determine what, if any, changes to visibility of the Substation might occur resulting from development of the Project. There were no unobstructed views of the existing Substation observed from publicly-accessible locations in these areas. The presence of intervening trees and buildings effectively block direct views of the Substation.

Recognizing that visibility varies seasonally as the deciduous leaves fall, UI has requested APT evaluate potential views of the proposed modifications during "leaf-off" conditions. This work is schedule for mid-January 2020 and will be subsequently be presented as part of the Company's Siting Council submission.

Prepared by,

ALL-POINTS TECHNOLOGY CORPORATION, P.C.

Michael Libertine,
Director of Siting and Permitting

Attachments

Attachments

EXISTING

ALL-POINTS TECHNOLOGY CORPORATION

UI

PROPOSED

ALL-POINTS TECHNOLOGY CORPORATION

UI

FUTURE EXPANSION

ALL-POINTS TECHNOLOGY CORPORATION

UI