

A. INTRODUCTION AND SUMMARY OF FINDINGS

This Chapter analyzes the potential impacts of the Proposed Project on electricity and natural gas services. The Proposed Project would be served by a new electric distribution system on the Project Site and may also be served by natural gas. The Applicant has not yet determined whether they will provide gas for cooking and heating, or if the buildings will be entirely electric. As such, the Applicant prepared, and Con Ed reviewed, the electric and gas loads associated with the Alternative Site Layout for both scenarios.¹ Based on their review of the loads, Con Ed determined that the only off-site mitigation that would be required would be the extension of the natural gas main from East Main Street to the Project Site, if the Applicant moved forward with a gas HVAC system. If, however, it is determined that the buildings will be entirely electric, gas service to the Site may not be provided.

B. EXISTING CONDITIONS

Con Ed provides electric service to the Project Site from overhead lines situated in the right-of-way along Old Route 6. The electric line then extends overhead to a privately-owned pole on the southern side of the Project Site, where the service then continues underground. The underground line supplies the Project Site's tap box, which then feeds two existing on-site transformers.

The Project Site is not currently served by natural gas. However, there is a Con Ed main approximately 800 feet away from the Project Site, within East Main Street.

C. THE FUTURE WITHOUT THE PROPOSED PROJECT

There are no planned changes to the electricity and gas service networks in the vicinity of the Project Site by 2026, the build year.

D. THE FUTURE WITH THE PROPOSED PROJECT

The Proposed Project would be served by a new electric distribution system on the Project Site and may also be served by natural gas.

Each multi-family building will have its own pad-mounted transformer to supply electricity. The cottage buildings will also have pad-mounted transformers to supply electricity, grouped such that several cottage buildings will be on a single transformer. An emergency generator will supply each multifamily building's emergency/standby power. The generators could either be powered

¹ See discussion of the Alternative Site Layout in the "Executive Summary." For the Alternative Site Layout. The same type of HVAC systems would be used for the Proposed Project (see **Appendix F, Basis of Design**).

by natural gas from Con Ed or by diesel fuel oil stored in sub-base fuel tanks beneath the generators.

The Applicant has not yet determined whether the buildings' HVAC systems will be electric- or natural gas-powered systems. Therefore, the Applicant requested information from Con Ed regarding the on- and off-site improvements that would be required in both an all-electric and a natural gas scenario. As noted in **Appendix F**, Con Ed determined for the all-electric scenario, it would re-use the existing pole and T-tap box on the Project Site to serve the new development, and that there would be no off-site improvements required.

With respect to the scenario in which cooking and heating were fueled by natural gas, Con Ed determined that the existing four-inch-high pressure polyethylene (HPPE) gas main in East Main Street would need to be extended approximately 800 feet down East Main Street to the Project Site. From there, the Applicant would need to install a two-inch HPPE gas service line from the property line into the Project Site. The Applicant would be required to pay for all but 100 feet of the gas main extension.

While the electric and gas demand anticipated for the Proposed Project would be greater than the Alternative Site Layout—the Proposed Project would contain approximately 771,283 square feet of conditioned space, while the Alternative Site Layout reviewed by Con Ed, it is anticipated the off-site improvements required to serve the Proposed Project would be the same. At the time of Site Plan approval, the Applicant would confirm with Con Ed the final off-site mitigation measures that would be necessary to serve the facility based on the final site design.

E. MITIGATION MEASURES

The Proposed Project would include various energy conservation measures, as discussed in further detail in Chapter 20, "Sustainability," including the use of LED interior and exterior lighting, right-sized HVAC systems, and the use of activity-sensing and photovoltaic sensing lighting controls, where appropriate. It is anticipated that each apartment unit within the multifamily buildings will have a dedicated high-efficiency one-to-one split system heat pump. Similarly, the common corridors will have one-to-con split system heat pumps, while the amenity spaces will utilize variable refrigerant flow (VRF) multizone split system heat pumps. The buildings would be insulated in accordance with all applicable building and conservation codes, including the use of insulated windows. The Applicant would also undertake a feasibility study to determine if solar power could be utilized. The Proposed Project would include Electric Vehicle (EV) chargers at various locations within the Project Site.

With the inclusion of these measures, as well as the measures required by Con Ed, the Proposed Project is not anticipated to have a significant adverse impact on electric or natural gas services.

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