## Pratt Landing Category A Feasibility Study NYSERDA PON 4614

Westchester County

Technical Lead: Endurant Energy (formerly GI Energy)

Anticipated completion of study/availability of final report: September 2021



## The Site & Beneficiaries

**Pratt landing will be new construction of a mixed-use complex in New Rochelle** with eight buildings (seven new construction buildings, plus restoration of an existing building). The complex, which will consist collectively of over 700,000 square feet, will be analyzed to explore district-style heat pumps. The site will be built-out over phases, and the implications for design of a thermal district will be considered. The analysis will quantify the peak of the composited thermal load and compare it to the sum of the individual peaks in order to assess the load-flattening benefits of aggregating into a district.

## **Potential Thermal Resources**

The primary opportunity anticipated will leverage heat recovery heat pumps to move heat from one building to another, and supplemental thermal resources, if needed, could include water-source via Echo Bay, ground-coupled boreholes, air-source heat pumps, and/or sewage water from the adjacent New Rochelle Wastewater Treatment Plant.

## **Potential Configuration**

Will explore 4G design, consisting of a central Thermal Building, which houses the heat pumps and from which hot water and chilled water will be distributed via conveyance pipes to the end-use buildings (simple radiators can be used in the end-use buildings). Benefits of this configuration include: opportunity to integrate with other supplemental thermal infrastructure and use the heat pumps as the first-call (reserving the fossil fuel systems as supplement to meet extreme peaks or for systemwide redundancy for resilience); focusing the location where electric infrastructure upgrades are needed to meet the expanded electrification demand to occur at the Thermal Building (as opposed to at the end-use buildings) to minimize disruption to mission-focused activities during construction, and cost containment.