

Private Residence

Pool Pavilion



Rhinebeck, New York



The Building:

This unique residence is part of the original Astor Estate and sits on the Hudson River in Rhinebeck, NY. The owner hired Jaklitsch Gardiner Architects of New York, NY to design a new pool pavilion to complement the existing house and renovate an existing garage into a guesthouse. The pool pavilion was designed to match the turn of the 20th century architecture of the main house, including the details of the interior. This approach required the new mechanical, electrical, and plumbing systems to complement the historically inspired architecture.

Nature of Firm's Responsibilities:

Landmark Facilities Group designed a ducted variable refrigerant flow (VRF) system with hot water reheat to heat and cool the new pool pavilion. Ductwork was routed from the basement mechanical space up to historically accurate radiator enclosures. The design also included custom controls to connect the pool heaters to a combustion air fan, lighting controls, and a specialized heater for the pool cover. The firm also designed a well water system and sewage transfer to the site septic system.

The project involved extensive coordination during design to ensure all of the building support and pool equipment would fit within the pavilion basement. Coordination also extended to the site as electric, water, and propane was routed between buildings and around landscaping features.