

# City of Troy District Energy Project - Phase 1A

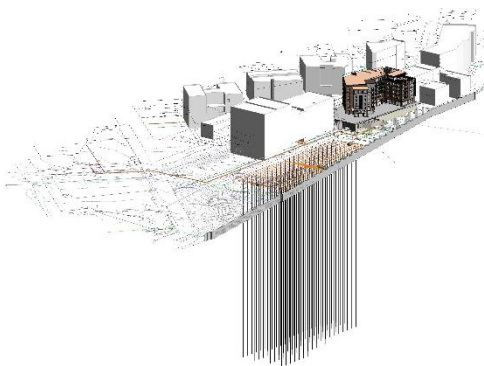
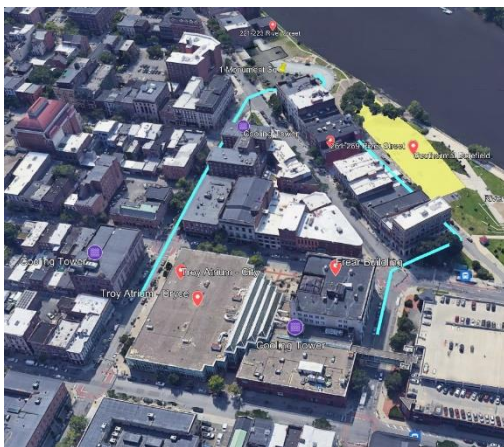
## Category C: Site Specific Implementation Project

### NYSERDA PON 4614

Rensselaer County

Technical Lead: CHA Consulting Engineers

Anticipated completion of construction: July 2024



## The Site & Beneficiaries

As part of ongoing Troy Riverfront region redevelopment initiatives, CHA, Siemens, and the Troy City Council have developed a multi-phase community heat pump project to provide a high efficiency heating and cooling district energy option in a **Disadvantaged Community**. This phase is to implement a district energy system based on a geothermal bore field as a primary energy resource and is designed to allow for a future potential river water connection as customer loads exceed available geothermal capacity. This proposal for Phase 1A covers nine potential buildings in the northern waterfront area: 1 Monument Square, the Arts Center, the Troy Atrium Complex, and existing mixed-used multifamily or office buildings. These buildings were chosen for the district system because of their geographical proximity to the new construction development project at the old Troy City Hall on River St in downtown Troy.

## Project Scope

The major tasks under the scope of this project are: construction of the district energy central plant, installation of the community geothermal bore field, installation of the district energy distribution piping, and upgrade of building level systems along with completion of the 1 Monument Square building construction. Most target buildings need major HVAC renovations; therefore, a district system would present the opportunity to replace aging equipment with electrified systems such as water source heat pumps in buildings without the additional capital expense of boilers, cooling towers, or VRF heat pump units.

## Project Benefits

The project is in a historically underserved community and will improve the neighborhood by lowering infrastructure and equipment maintenance costs and monthly heating and cooling costs, which will help reduce the cost of living in the neighborhood. One Monument Square will include a Future of Cities & Urban Sustainability (FOCUS) Living Lab, a dynamic, interactive exhibit space that will showcase urban design and technology solutions for sustainable communities. FOCUS aligns with green workforce development initiatives and will provide educational experiences for the neighborhood.