

**Business of the Village Board
Village of Saranac Lake**

SUBJECT: Project Management & Energy Service Company Date: 09/23/2024

DEPT OF ORIGIN: Village Manager Bill # 141-2024

DATE SUBMITTED: 9/11/2024 EXHIBITS: _____

APPROVED AS TO FORM:

Village Attorney

Village Administration

EXPENDITURE
REQUIRED:

AMOUNT
BUDGETED:

APPROPRIATION
REQUIRED:

SUMMARY STATEMENT:

Resolution to engage Siemens Industry Inc. for project management and energy services company (ESCO)

MOVED BY: Scollin SECONDED BY: Ryan

VOTE ON ROLL CALL:

MAYOR WILLIAMS	<u>yes</u>
TRUSTEE RYAN	<u>yes</u>
TRUSTEE WHITE	<u>yes</u>
TRUSTEE SCOLLIN	<u>yes</u>
TRUSTEE BRUNETTE	<u>yes</u>

**RESOLUTION TO ENGAGE SIEMENS INDUSTRY INC. FOR PROJECT MANAGEMENT
AND ENERGY SERVICES COMPANY (ESCO)**

WHEREAS, the Village of Saranac Lake issued a Request for Qualifications (RFQ) from qualified firms to provide project management and ESCO services for energy performance in the Village, and,

WHEREAS, the Village received three submissions by qualified firms, and,

WHEREAS, a selection committee reviewed the qualifications and interviewed the firms and recommend engage Siemens Industry Inc. to assist the Village with energy performance services, and

WHEREAS, Siemens Industry Inc. will propose an energy savings project to the Village, and

WHEREAS, the Village is under no contractual obligation to accept said project.

THEREFORE, BE IT RESOLVED, the Village of Saranac Lake Board of Trustees accepts the recommendation to engage with Siemens Industry Inc. for Energy Services Company (ESCO) services.



Village of Saranac Lake & Siemens

Energy and Infrastructure Partnership

SIEMENS

Discussion Agenda

1 Welcome & Introductions



2 Energy Performance Contracting (EPC)



3 Programs and Process



A large, stylized graphic of a teal particle trail or streamer, composed of many small dots, curves from the top center towards the right side of the slide.

1 | Introductions

Your Stable and Reliable Partner

- 175+ years in business as a Global Technology Company
- Working with 200+ US local governments and municipalities
- Generating \$1 billion in energy and operational savings
- Wide portfolio of capabilities and deep experience
- Strong commitment to NY State with deep local resources
- \$78 billion in revenues with 320,000 global employees




175

Years of Siemens

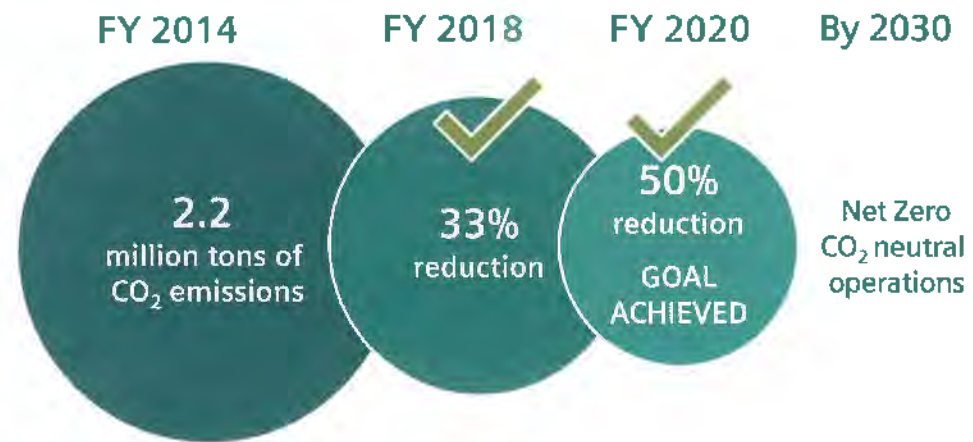
Siemens Corporate Decarbonization Performance

We walk the walk...

Levers for a CO₂ neutral Siemens by 2030

- EP 100** 100% net zero buildings 
- EV 100** 100% fleet electrification 
- RE 100** 100% clean energy sourcing 

CO₂ reduction progress in our operations



To date we have **invested \$100M** into our own energy efficiency projects
This has produced **\$20M of annual cost reduction** for our operations

From **2024-30** we will **invest \$650M decarbonizing** our operations

Using our offerings **Siemens customers avoided 160k Tons CO₂e** in FY 2023 alone

Partnership Alignment



Three main areas of focus

Technology, Energy, and Infrastructure Renewal

Sustainability & Electrification & Resiliency

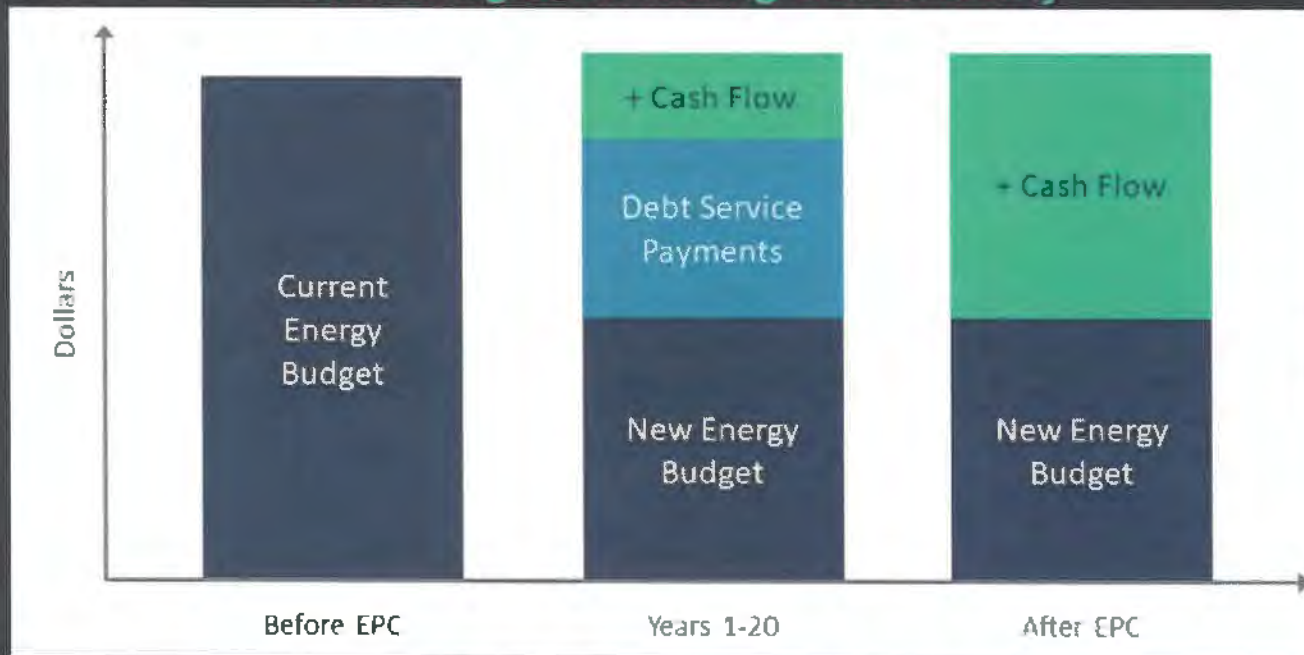
Digitalization & Operational Excellence

RFQ award allows Siemens to work with the Village to develop energy projects at **Siemens risk**

2 | Energy Performance Contracting NY State Energy Law Article 9

New York State Article 9 (Energy Performance Contracting EPC)

Achieving Self-Funding Sustainability



- ✓ Energy & Operational savings fund additional capital needs
- ✓ Budget Neutral
- ✓ Single Source Responsibility
- ✓ No Change Orders
- ✓ Maximize all available incentives, grants and tax rebates
- ✓ Revenue Generation for Smart Village technologies

Siemens pragmatic approach to infrastructure

1. REDUCE

Energy Efficiency:

Drive down energy consumption and increase operational efficiency to reduce costs and your environmental impact.

4. PROTECT

Data-Driven Optimization:

Continuously analyze and optimize your buildings and operations to be more precise and effective with your investment decisions.



2. PRODUCE

On-Site Generation:

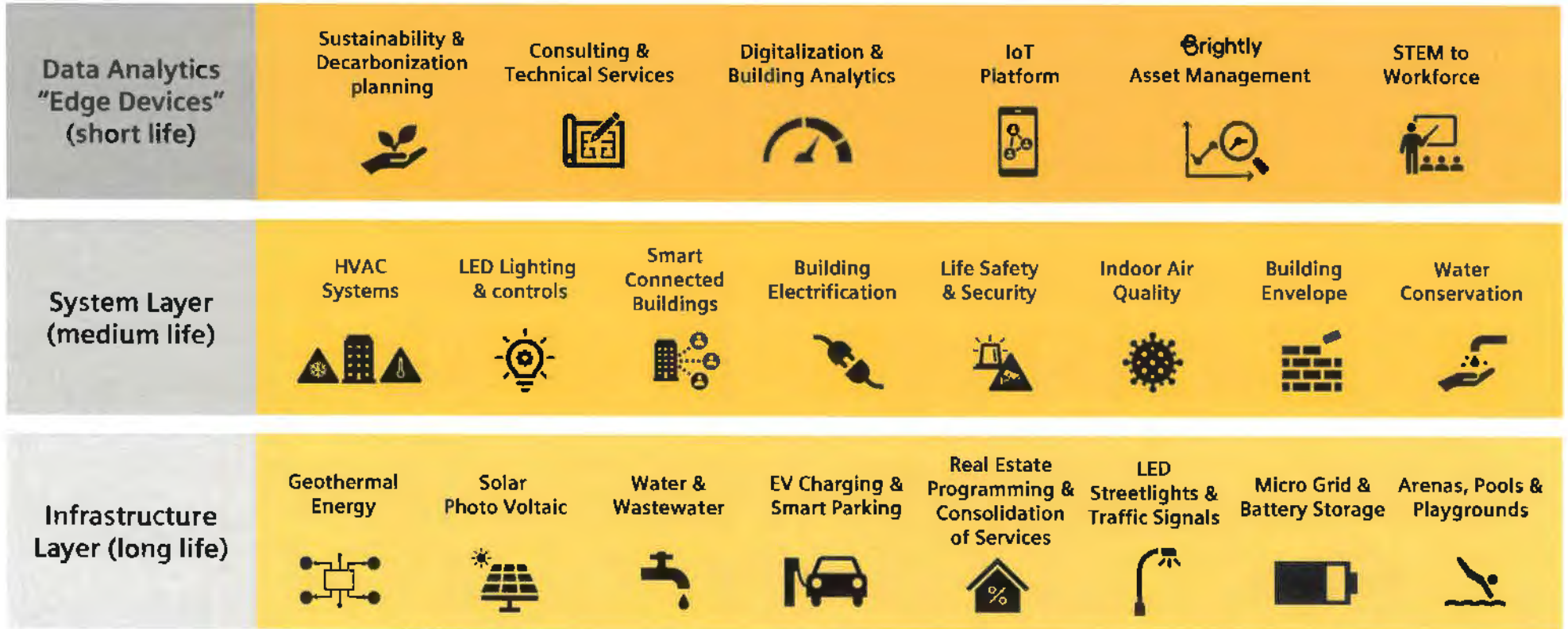
Generate and store energy on-site so that you are less reliant on the grid and have a more sustainable energy-mix.

3. PROCURE

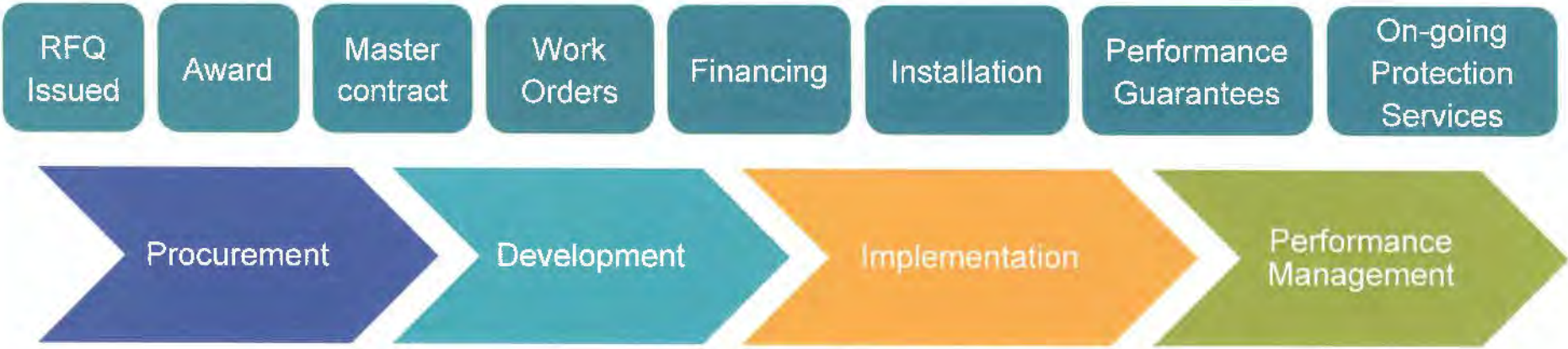
Energy Supply Management:

Manage the energy purchasing process to lower total energy spend, mitigate risks and meet sustainability targets.

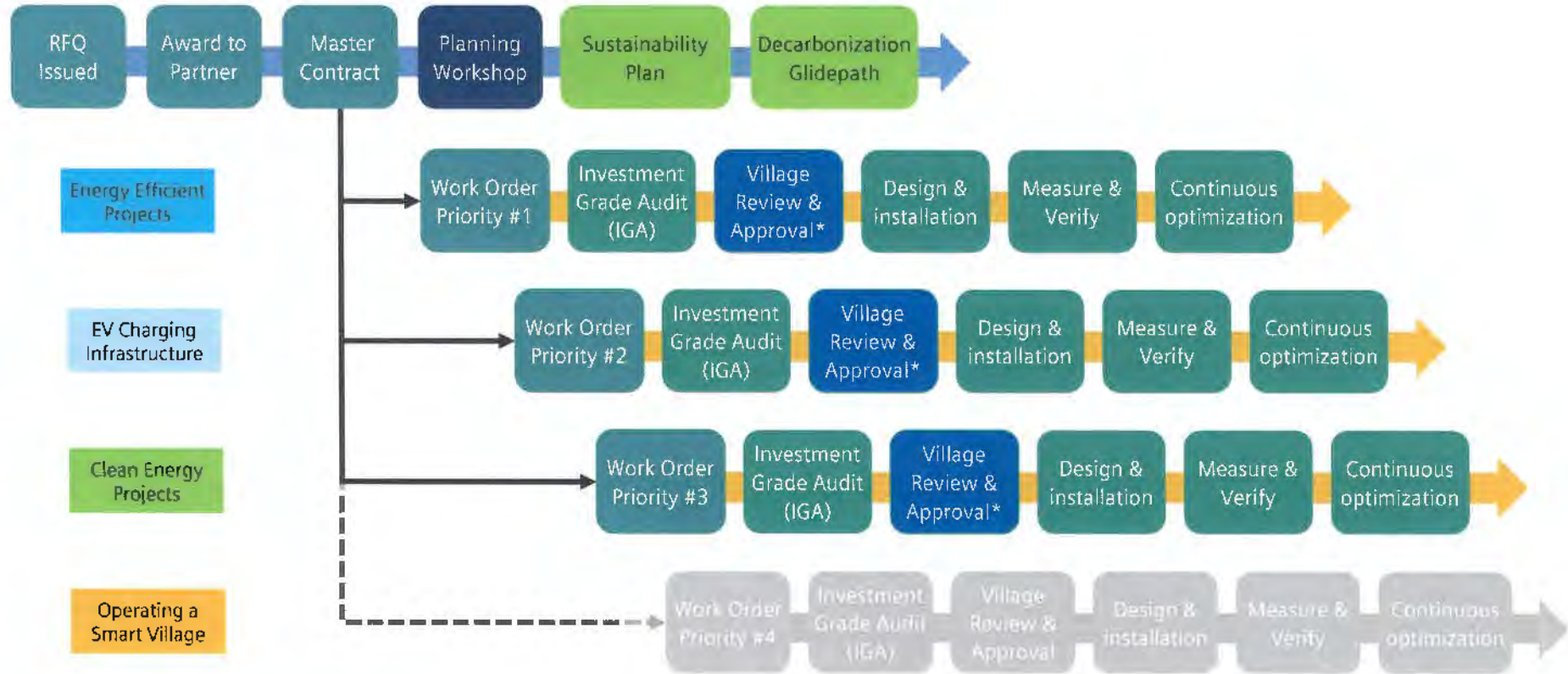
Our capability overview



Energy and Infrastructure Partnership Process Overview





Energy and Infrastructure Partnership Process Steps



***Projects are developed at Siemens risk & each project requires Village approval**

Contract and Financial Vehicles

Contract & Procurement

- Energy Savings Performance Contract
 - Cooperative Purchasing Program Sourcewell 
 - PPA - Power Purchase Agreement
 - EaaS - Energy-as-a-Service
 - Utilities Monetization/Outsourcing
 - Service Contracts
- 

Financing and Funding

- Tax Exempt Municipal Lease
 - Grants - Federal and State
 - Utility Rebates & Incentives
 - Asset Monetization - Revenue Generation
 - Inflation Reduction Act Programs
 - Bipartisan Infrastructure Law
- Bond
- Debt/Equity Finance

Overview of Siemens Approach

Team approach

- ✓ Collaborative with Village departments
- ✓ Work with strategic partners of Village
- ✓ Iterative process focused on highest needs
- ✓ No risk Development Agreement
- ✓ Design Build Methodology



Holistic approach

Reinventing, rebuilding & strengthening Village infrastructure across portfolio
Leverage NYS Energy Law Article 9
Guaranteed Energy Savings + Grants = Infrastructure Renewal
Assured price - No Change Orders



Deep NYS experience

Continued success with our multi-phase guaranteed Energy Performance Contracting customers across NYS

- Rensselaer County
- City of Troy
- City of Buffalo
- City of Oswego
- City of Fulton
- City of Johnstown
- Town of Clarkstown
- Gloversville ESD
- City of Glens Falls
- Oxford Academy



Broad technology & solutions portfolio expertise

- Broad knowledge of energy technology.
- Implementation best practices,
- On-going asset protection services
- We are also product agnostic



Flexible financial models

- Tax Exempt Municipal Lease (TEML)
- Power Purchase Agreements (PPA)
- Energy-as-a-Service
- Bonds
- Siemens Financial Services



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Contact

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4 | Use Case Studies



PERFORMANCE CONTRACTING REFERENCE

City of Johnstown
Johnstown, New York

The City of Johnstown is located in Fulton County in Upstate New York. In 2019 the City entered into a performance contracting agreement with Siemens for the acquisition of street lights and LED upgrades along with needed facility improvement measures to its City Hall and Department of Public Works.



PERFORMANCE CONTRACTING REFERENCE

City of Troy
Troy, New York

The City of Troy is located in Rensselaer County in New York State. It is one of three major centers for the Albany metropolitan area. Siemens has had a very long-standing relationship with the City. After a successful Phase 1 project that included facility improvement measures at two Police Stations, six Fire Stations, Knickerbocker Arena, the Department of Public Works, and two Parking Garages in 2011, the City contracted with Siemens for two additional phases that include a Police Station, Parking Garages, six Fire Stations and the Department of Public Works.



Improvement Measures

- New APOCET energy management system
- Replacement of 30-ton rooftop unit
- Demand controlled ventilation
- New natural gas-fired hot water heater
- New space heater boilers with condensing units
- Lighting upgrades
- Weatherization improvements
- New 230 kW diesel emergency generator
- Unoccupied temperature setback
- Frequency drive upgrades
- Time-of-day scheduling

PERFORMANCE CONTRACTING REFERENCE

Rensselaer County
Troy, New York

The first phase of our project with Rensselaer County involved energy efficiency improvements to the County's Municipal building. This was followed by improvements in the operation and capacity of the WWTP. Siemens developed solutions to resolve issues with the existing sludge reduction process, which included the conversion of three sludge holding tanks to anaerobic digesters. The Phase 2 aspect of the project involved Siemens' advanced solution for sludge disposal whereby a natural gas/methane direct-fired sludge dryer was installed. This device eliminates the need for monofill space or off-site removal, saving the sewer district in excess of \$1 million per year. A third phase just yielded \$1.5 million in actual savings after the first year of the guarantee.



Improvement Measures

Phase 1

- Fluorescent lighting upgrade
- New AHUs with energy recovery units and ultrasonic humidifiers
- New boiler and DHW heater
- Kitchen equipment upgrades
- Ozone laundry system
- Emergency power receptacles in resident rooms

Phase 2

- Two new chillers
- Three new boilers
- Seven new rooftop units
- New 800 kW emergency generator
- 72,000 SF of new roof

Phase 3

- LED lighting upgrade including VIV technology
- Kitchen hood control
- AHU refurbishment and replacement
- Smart hot water and chilled water pumps
- Installation of Newdepoint Bi-polar ionization
- Kitchen and laundry upgrades
- Building envelope improvements
- Control system upgrade

PERFORMANCE CONTRACTING REFERENCE

Van Rensselaer Manor
Troy, New York

The Van Rensselaer Manor "The Manor" is a large 362-bed facility built in 1996 on a beautiful campus in North Greenbush, New York. The Manor is considered to still be a state-of-the-art facility as it was when it originally opened over 25 years ago. Siemens is proud to have played a role in keeping this accolade by updating the facility through three phases of energy saving performance contracting projects.