

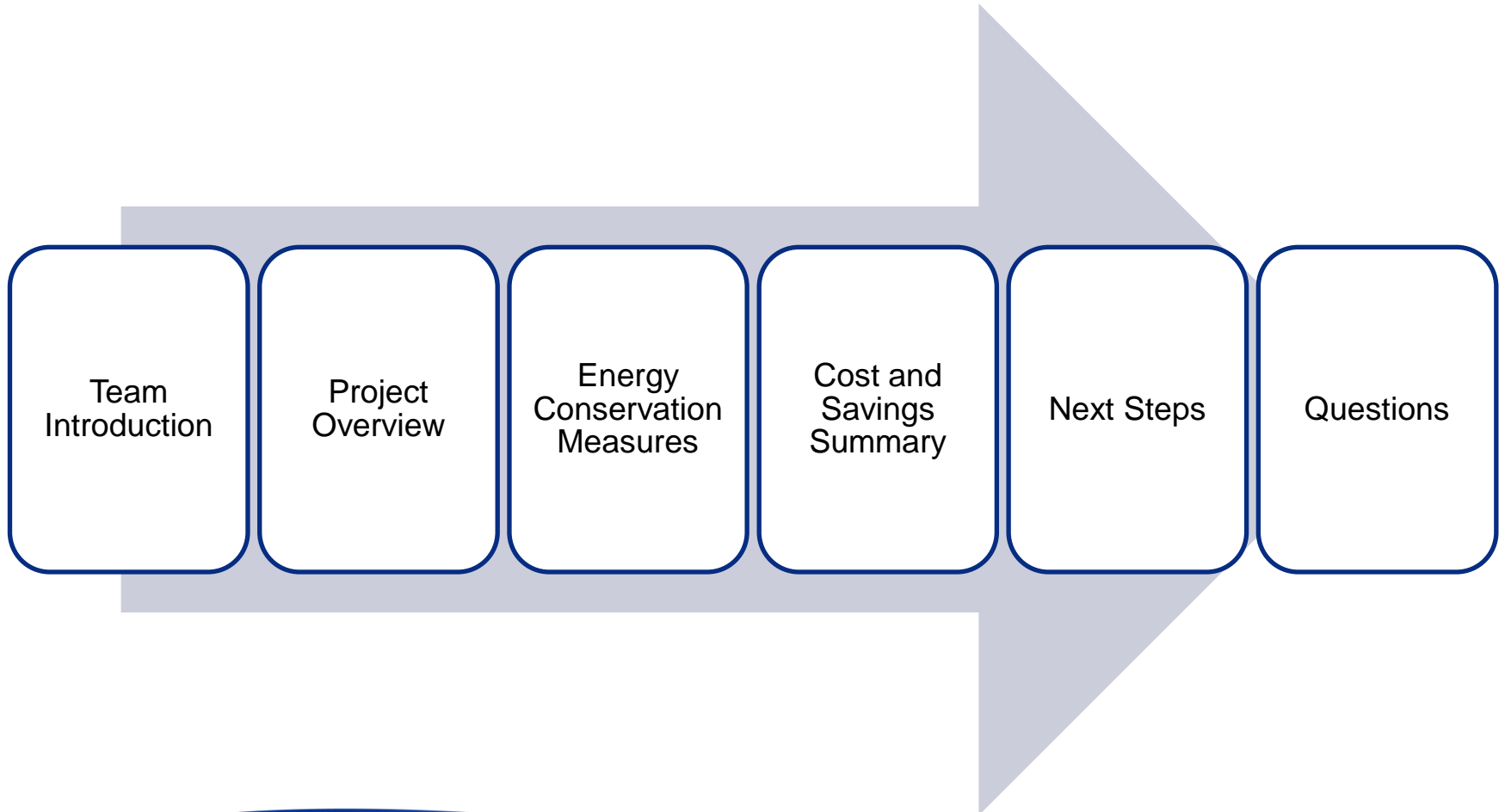
Levittown Public Schools

An Energy Conservation Plan





Agenda





Performance Contract Team

- Account Executives
 - Danny Haffel, Syosset, NY
 - Operations Management
 - Robert Rolston, Syosset, NY
 - Energy Engineering
 - Pratik Thakkar, Syosset, NY
 - Steve Stuart, Syosset, NY
 - Hirav Joshi, Syosset, NY
- Over 100 Years of Combined Experience in school construction and SED design
 - Dedicated NYSED Team located in Albany
 - Undisputed Leader in Energy Performance Contracting Nationwide
 - NYSED Team Entering into 100th Project - #1 in Region





Project Overview

Energy Performance Contracting is:

An agreement that allows school districts to take budgeted utility and operational costs and reallocate them into energy saving capital Improvements without the need for Increased Taxes.

Energy Conservation
Measures (ECM) :
11

SED Payback:
17.9 years

Positive Cash Flow:
\$8,631,520

Project Cost:
\$15,756,401

District Annual
Savings:
\$872,042

Energy Conservation Measures





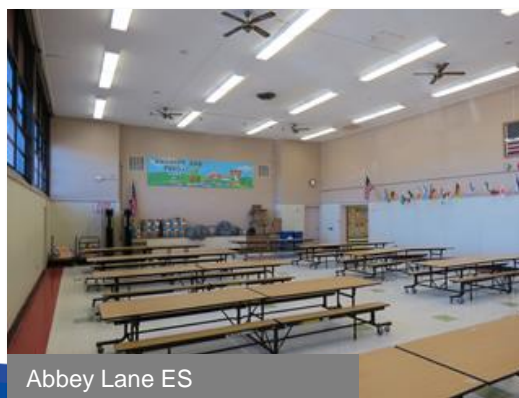
Energy Conservation Measures: Lighting – Interior & Exterior with Ceiling Replacement

- LED Lighting throughout the District – **Over 11,600 Upgrades**
- New LED Fixture/Retrofit Kits with Adaptable Controls in Classrooms, Hallways, Cafés and Offices
- New LED High Bay with Adaptable Controls and 2X4 troffer kits with adaptable controls in Gyms
- New Classroom Ceilings throughout the district – **86,419 sq. ft**
- Exterior: Non-LED Exterior Lights to be converted to LED

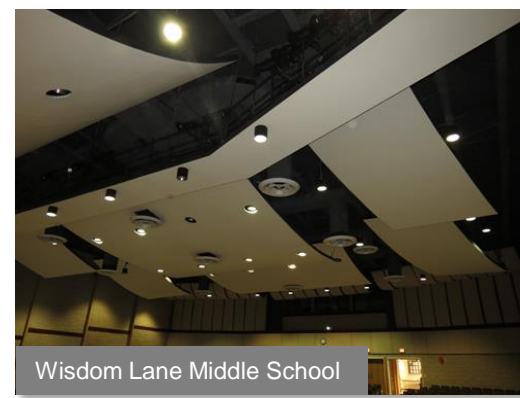
Building	Ceilings (SF)
Abbey Lane Elementary School	13,220
Gardiners Avenue Elementary School	31,792
Northside Elementary School	16,201
Summit Lane Elementary School	25,206
Total	86,419



MacArthur High School



Abbey Lane ES



Wisdom Lane Middle School

Annual Energy Savings: **\$163,253**



Energy Conservation Measures: Air Handling Unit/RTU Replacement

- New High Efficiency RTU and Condensing Units – at **Wisdom Lane Middle School**
 - Auditorium Condensing Unit – One (1)
 - Guidance RTU – One (1)
 - Library Condensing Units – Two (2)



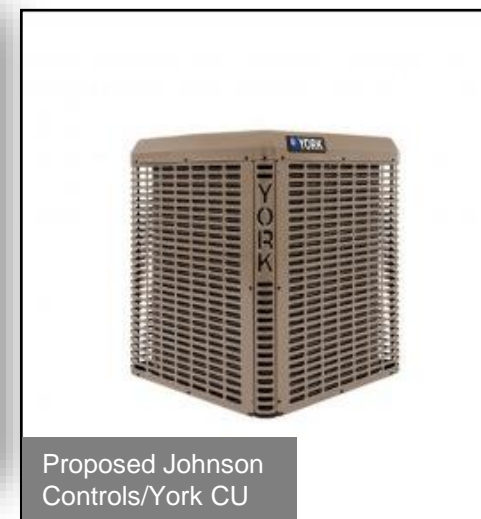
Proposed Johnson Controls/York RTU



Wisdom Lane MS Library Condenser



Wisdom Lane MS Guidance RTU



Proposed Johnson Controls/York CU

Annual Savings: \$7,782



Energy Conservation Measures: Boilers Replacement

- **Two (2) new 150 HP dual fuel steam boilers – Northside Elementary School**



Northside ES - Existing Boilers



Northside ES – Existing Burners

Annual Savings: \$5,370



Energy Conservation Measures: Renewable Energy – Photovoltaic Electric Generation

- Total Carports Photovoltaics at the District : **2,728.50 kW DC**
- Full Benefit of PV Ownership

Building	Total PV (kW)	Total kWh (%) Savings
Division Avenue High School	484.7	78%
MacArthur High School	488.1	80%
Levittown Memorial Education Center	421.7	77%
Jonas E. Salk Middle School	368.4	85%
Wisdom Lane Middle School	351.9	93%
Abbey Lane Elementary School	251.6	90%
Summit Lane Elementary School	201.6	77%
Buildings & Grounds Office	160.5	72%
Total	2,728.5	70%

- JCI to submit Interconnection Applications during the DEA Phase

Annual Savings: \$450,110



Energy Conservation Measures: Renewable Energy – Photovoltaic Electric Generation



Division Avenue High School



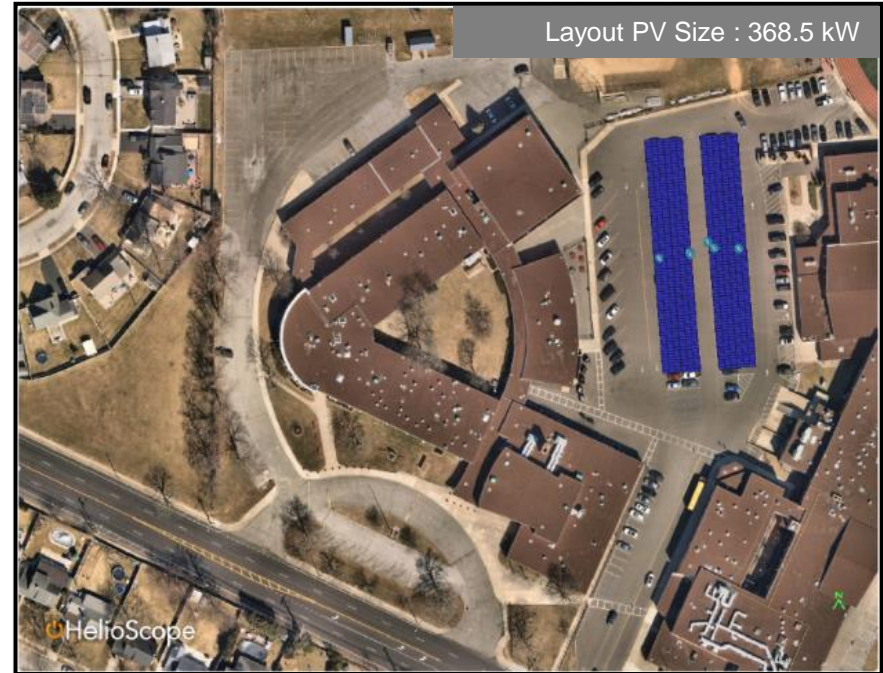
MacArthur High School



Energy Conservation Measures: Renewable Energy – Photovoltaic Electric Generation



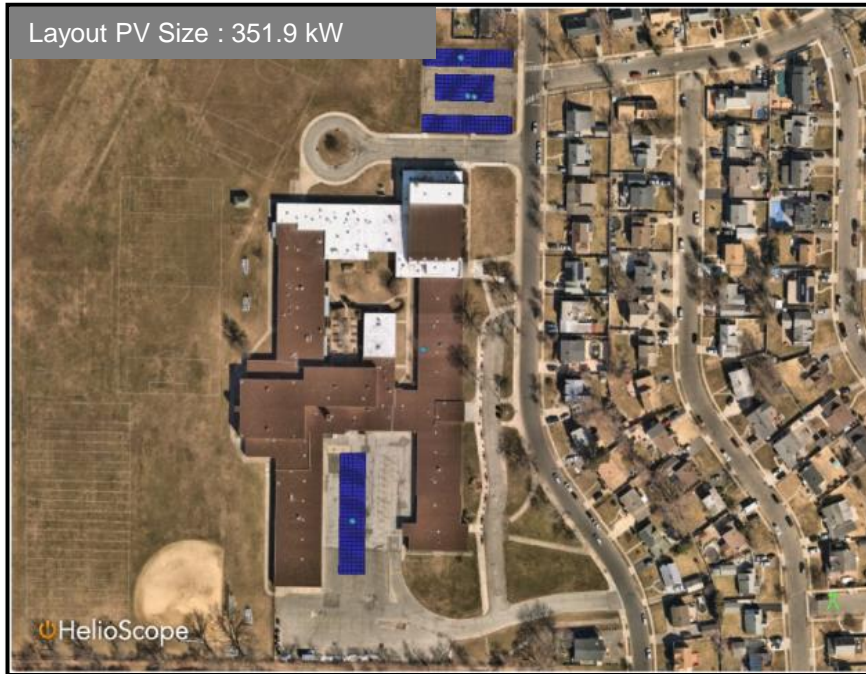
Memorial Education Center



Jonas E. Salk Middle School



Energy Conservation Measures: Renewable Energy – Photovoltaic Electric Generation



Wisdom Lane Middle School



Abbey Lane Elementary School



Energy Conservation Measures: Renewable Energy – Photovoltaic Electric Generation

Layout PV Size : 201.7 kW



**Summit Lane Elementary
School**

Layout PV Size : 160.6 kW



**Building & Grounds Office,
Transportation Garage and
Transportation Office**



Energy Conservation Measures: Renewable Energy – Photovoltaic Electric Generation (Solar Canopy / Carport System)



JCI Carport Installation – Smithtown School District – 2.06 MW System



Energy Conservation Measures: Other Measures

Energy Management System – Demand Control
Ventilation – **Savings \$3,431**

Unit Ventilator Upgrades – **Savings \$1,284**

Heating System – DHW Replacement– **Savings \$1,684**

Refrigeration Equipment Upgrade – **Savings \$3,124**

Energy Efficient Transformers – **Savings \$1,802**

Plug Load Controllers – **Savings \$2,259**

Cost and Savings Summary





Positive Cash Flow!

Proposed Project at 3.0% interest rate and 64.9% NYSED aid

	Year 1	Total
Tax exempt lease payment	(\$1,305,730)	(\$19,585,946)
Annual Savings	\$872,042	\$18,672,446
NYSED aid	\$629,475	\$9,442,120
Estimated Rebates	\$102,900	\$102,900
Net cash flow to District	\$298,687	\$8,631,520

M&V Services at No Additional Cost to the District: For three (3) years.



Project Timeline

JCI to Perform DEA with Input from JAG & District: Sep 2021

BOE to Authorize EPC: Nov 2021

JCI to provide design criteria to JAG: Feb 2022

JAG to prepare submission to SED: Apr 2022

SED Approval & Financing: Jul 2022

Construction Commences Aug 2022

Final Completion:

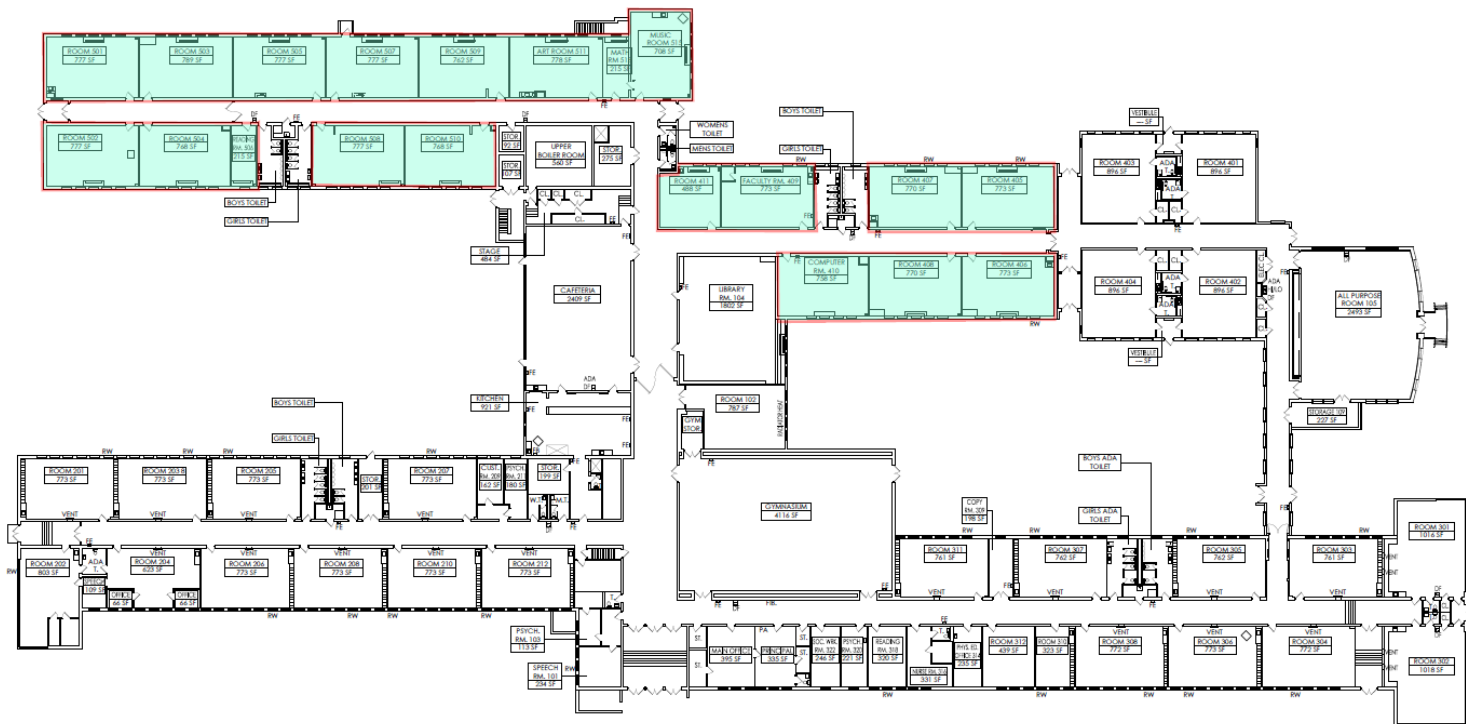
Jul 2024

Questions?



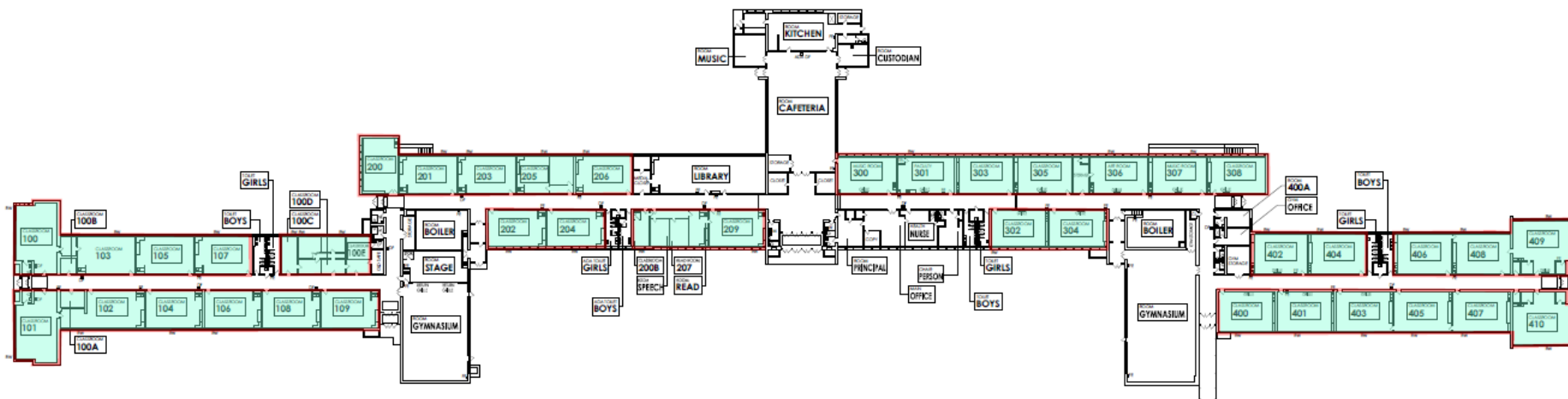


Energy Conservation Measures: Ceiling Replacements





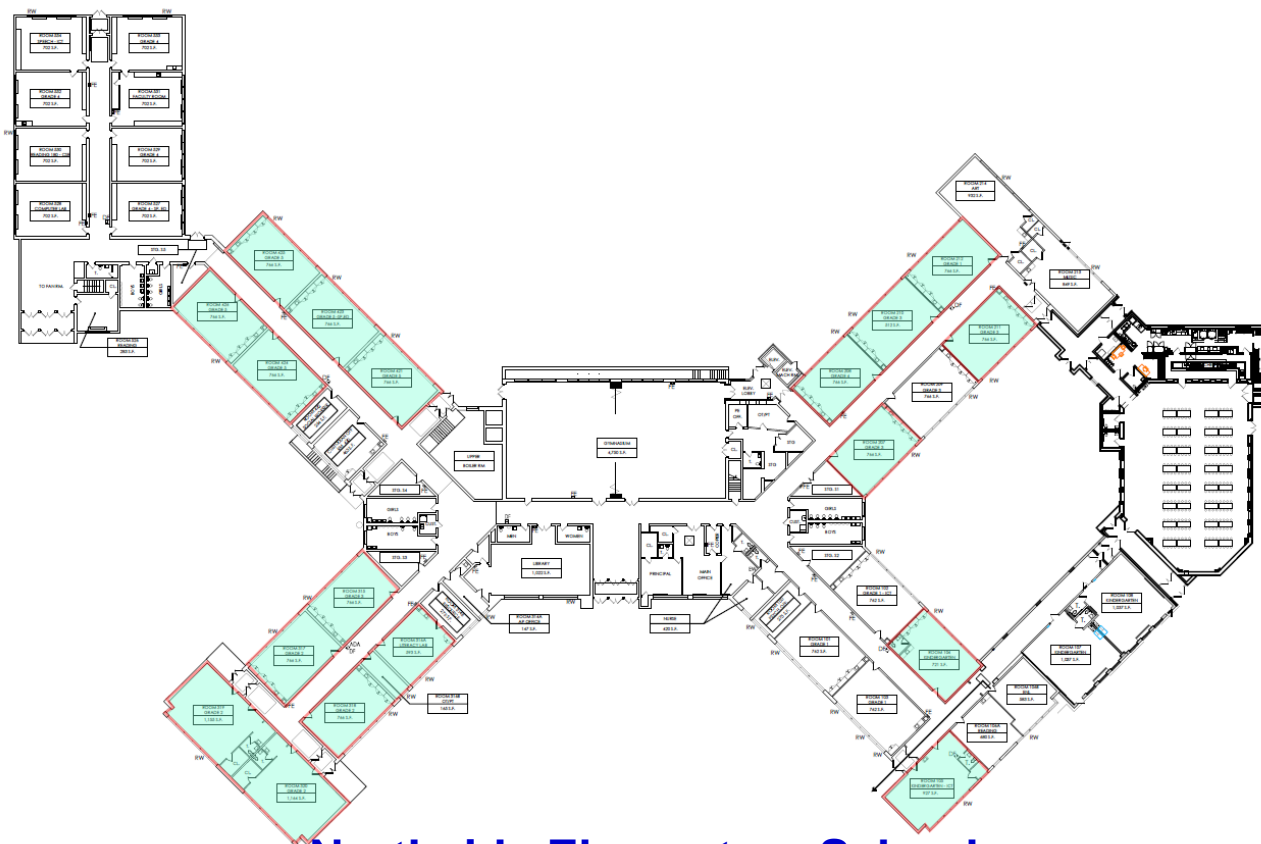
Energy Conservation Measures: Ceiling Replacements



Gardiner Ave Elementary School



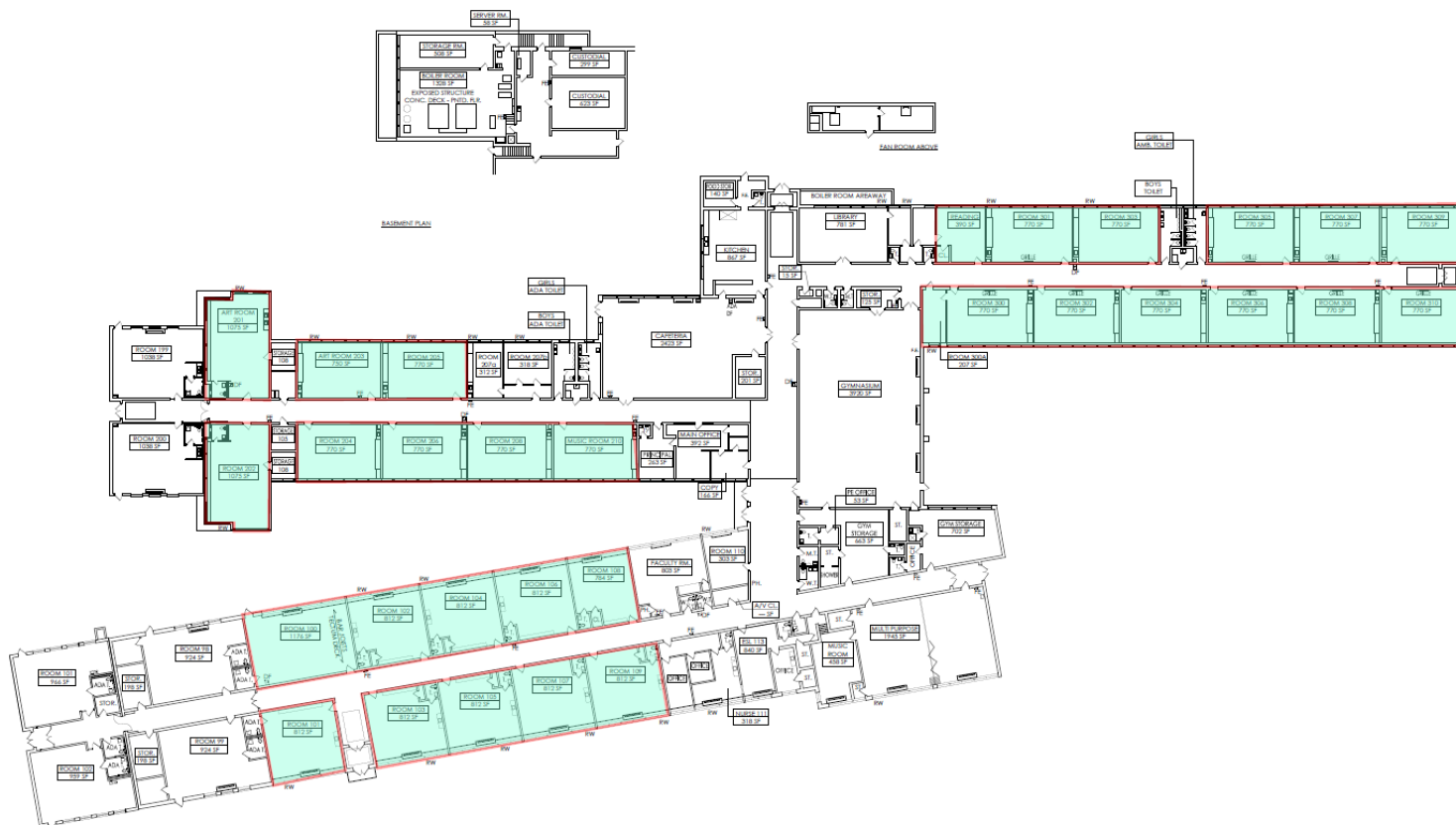
Energy Conservation Measures: Ceiling Replacements



Northside Elementary School



Energy Conservation Measures: Ceiling Replacements



Summit Lane Elementary School