



**MILLBROOK**  
CENTRAL SCHOOL DISTRICT

# **Capital Project Presentation**

**May 20, 2025 Referendum Vote  
Public Information Sessions**

# Capital Project Timeline Review (Pre-referendum) 2022-23

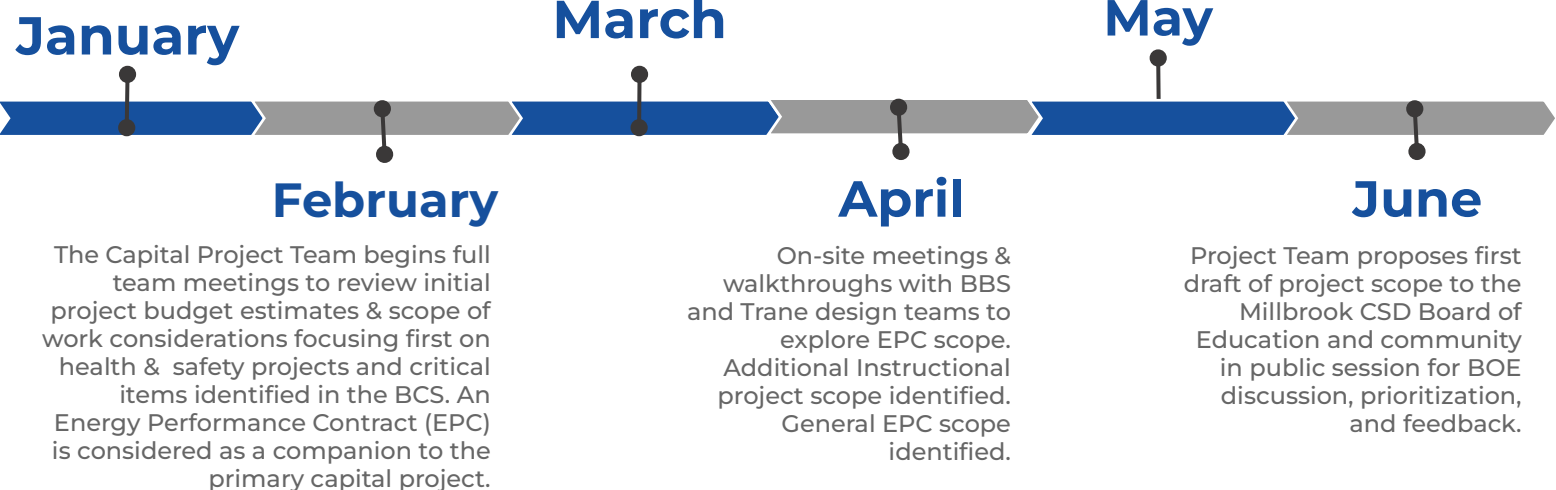


Millbrook CSD selects The Palombo Group as the District's construction management firm which includes assisting with capital project design, scheduling, and cost estimation.

BPD, Inc, the District's financial advisors, perform a financial analysis to help determine the potential project budget and tax implications.

Representatives from Trane joined the Project Team to discuss EPC, HVAC, and Sustainability project options.

District authorizes Trane Technologies to complete their comprehensive EPC assessment. The Project Team explores a multi-phase and / or multiple proposition proposals incorporating the potential EPC scope.



# Capital Project Timeline Review (Pre-referendum) 2023-24



Pre-referendum project design phase continues, with various design options considered, exploring in-kind replacements and potential enhancements to buildings, systems, and instructional spaces.

Design team explores additional sustainability options to enhance proposed EPC. Scope of work re-prioritized and narrowed to reduce overall project budget. Final scope presented to Board of Education including a list of deferred recommendations and the projected financial implications of each proposition.

Public meetings and informational sessions held both on and off campus to share project information with the Millbrook CSD community.

School District Newsletters may be distributed, describing bond issue and its impact. Final public hearings held.

**July / August**

**October**

**Jan - March**

**April / May**



**September**

**Nov - Dec**

**Mid-March**

Pre-referendum project scope and designs near completion. Design team refines system and spatial configurations for cost estimation. Scope of work broken down into a multiphasic proposal.

Pre-referendum design plans finalized. Presentation materials prepared for publication and displays throughout the District.

Board of Education adopts a Resolution Submitting a Bond Proposition for vote at the Annual District Meeting and Election to be held on May 21, 2024, at which time a Bond Proposition will be considered by the voters. The BOE must make final "SEQRA" findings at this time, or earlier.



**May 21, 2024**

**05/21/24: Capital Project Vote Middle School Auditorium**

# Capital Project Timeline Review (Pre-referendum) 2024-25



The Project Team reconvenes to revise the scope of work for a proposed re-vote. Priority focus on health and safety issues, as well as ADA compliance. All instructional & program enhancements removed from project scope.

Architects & Engineers present revised project scope to the Board of Education (BOE). BOE adopts resolution to submit a Bond Proposition for vote on November 19, 2024 to bring this project to the voters for consideration. Project Team attends all Back to School Nights to share revised proposed project scope and voting information.

## June / July



## August

Pre-referendum project scope and designs near completion. EPC scope reduced to eliminate previously considered solar collection array. Financial advisors calculate project funding and tax implications based on revised / reduced project scope.

## September



## October - November

District sends out special newsletter and posts information including slide decks, infographics, and informational videos addressing FAQs about this project. Two in-person public information sessions scheduled to provide more in-depth information.



## November 19, 2024

**11/19/24: Capital Project Re-vote Middle School Auditorium**  
**\* Failed Referendum Vote - All Propositions**

# Capital Project Timeline Review (Pre-referendum) 2024-25 (continued)



The Project Team Architects, Structural Engineers, and Construction Managers to perform comprehensive inspections of MMS roofing and ceiling systems, assessing materials and extent of damage. Additional damage to support structures and ceilings are identified. Cost estimates for remediation are calculated and provided to the District.

BOE reviews updated financial information based on revised scope options to determine what scope will be put forth to the voters in May. District administration coordinates meetings with concerned community members to discuss the project scope and the impacts of undertaking versus delaying the proposed scopes of work.

## December



## January

Financial planners update funding options and financial impact to the District and community in light of updated construction estimates identified in the December inspections. Project Team begin discussions of revised scope options for a tentative May referendum vote.

## February



## March - April

District sends out special newsletters and posts information including slide decks, infographics, and informational videos addressing FAQs about the project. In-person public information sessions will be scheduled to provide more in-depth information to the community.



**May 20, 2025**  
**05/20/25: Capital Project Re-vote - MMS Band Room located directly next to the auditorium (MMS Auditorium Closed due to roof / ceiling condition)**

# Capital Project Timeline Review: (Post-referendum) 2024-25



Architects & design team complete and file Plans and Specifications for building improvements with NYS Education Department Office of Facilities Planning for review and approval.

Bid process begins. Project construction bid forms/packages are distributed to contractors. Construction timelines and phasing are finalized and schedules are created.

## Summer / Fall 2025

## Spring 2026



## Fall / Winter 2025-2026

## Summer / Fall 2026

NYS Office of Facilities Planning sends back any notes for revisions / modifications. Design team responds accordingly. NYS issues approval of project plans and specifications.

Project construction phase commences. District capital reserves and cash on hand are used to fund initial project phases to the extent possible. (Bond issuance tentatively planned for 2027-2028)

# Since the November vote



- Administrators have created Continuity of Operations Plans (COOP)
- Considered multiple permutations of catastrophic failures with COOP plans
- Compared historical BCS from 2015 which informed the Feasibility Study 2017- 2018 with the BCS from 2021 and the updated report in 2024
- Reviewed the Feasibility Study from SY 2017 - 2018 and researched live birth and enrollment data
- Analyzed feedback from previous information sessions and communications

# Suggestions from the public



- Highlighting neglectful individuals from past BOE/administration
- Closing (Elm Drive) Elementary School
- Adding Modular Classrooms
  - Approximate cost: \$650,000 per two unit pods
  - Does not include the cost of excavation, electrification or life safety systems (fire and smoke)
  - Other factors to consider cost of fitting for technology, wireless access, safety and security
- New Construction vs. Renovation and Repair

# Factors to highlight



In the Feasibility Study in 2018, it was noted that the following scope of work was recommended to be initiated within 5 years of the study to maintain conditions of district buildings “for the next generation.” This was based on a Building Condition Survey conducted in 2015.

\*\* Reminder that BCS projected costs are for in kind system replacements and repair with no calculation for system improvements. Many of our systems were noted to be “end of useful life” or beyond at the time of this assessment.

Building	Scope
High School	\$608,465
Middle School	\$10,671,904
Alden Place	\$2,226,600
Elm Drive	\$5,248,220
<b>Total as of 2018</b>	<b>\$18,775,189</b>

# 2018 Feasibility Study Cost Estimates (Based upon 2015 BCS Study)



Building	Scope (BCS 2015)	Inflation projection 2024 - 2025
High School	\$608,465	\$991,125
Middle School	\$10,671,904	\$17,383,407
Alden Place	\$2,226,600	\$3,626,897
Elm Drive	\$5,248,220	\$8,548,797
Total as of 2018	\$18,775,189	\$30,550,227

Increase in cost by delaying: **\$11,775,038**

# 2021-22 BCS (Elective off-cycle) Highlights



- Grand total for all listed items with a 1-5 year priority:  
**\$41,747,467**

- | Breakdown by Building | Escalated for 2025    |
|-----------------------|-----------------------|
| ○ Elm: \$10,841,267   | ○ Elm: \$12,467,457   |
| ○ Alden: \$ 7,439,000 | ○ Alden: \$ 8,554,850 |
| ○ MMS: \$19,251,200   | ○ MMS: \$22,138,880   |
| ○ MHS: \$ 4,216,000   | ○ MHS: \$ 4,848,400   |

Total Escalated Cost: **\$48,009,587**

*\*Note: The costs above are pure construction costs calculated at the time of assessment.*

# 2021-22 BCS (Elective off-cycle) Highlights



- Grand total for all listed items with a 1-5 year priority:  
**\$41,747,467**
- Common issues throughout the District (in 2021-22):
  - HVAC
  - Electrical systems
  - Plumbing
  - Lighting
  - ADA Compliance
  - Flooring, Doors, and Windows

# Since the Feasibility Study



- Added Elm Drive two/three classrooms of Pre K (2) - capped at 15
- Added Elm Drive 8:1:1 Special Class Program (1)
- Added MMS 8:1:1 Special Class Program (1) - MHS SY 2025 - 2026
- Adding MMS 8:1:1 Program 2025 -2026 (1)
- Increased population of ELLs to 6% of our total population (non integrated classes based on need)

# Flaws of the Feasibility Study



In 2018, the feasibility study made assumptions of class sizes of

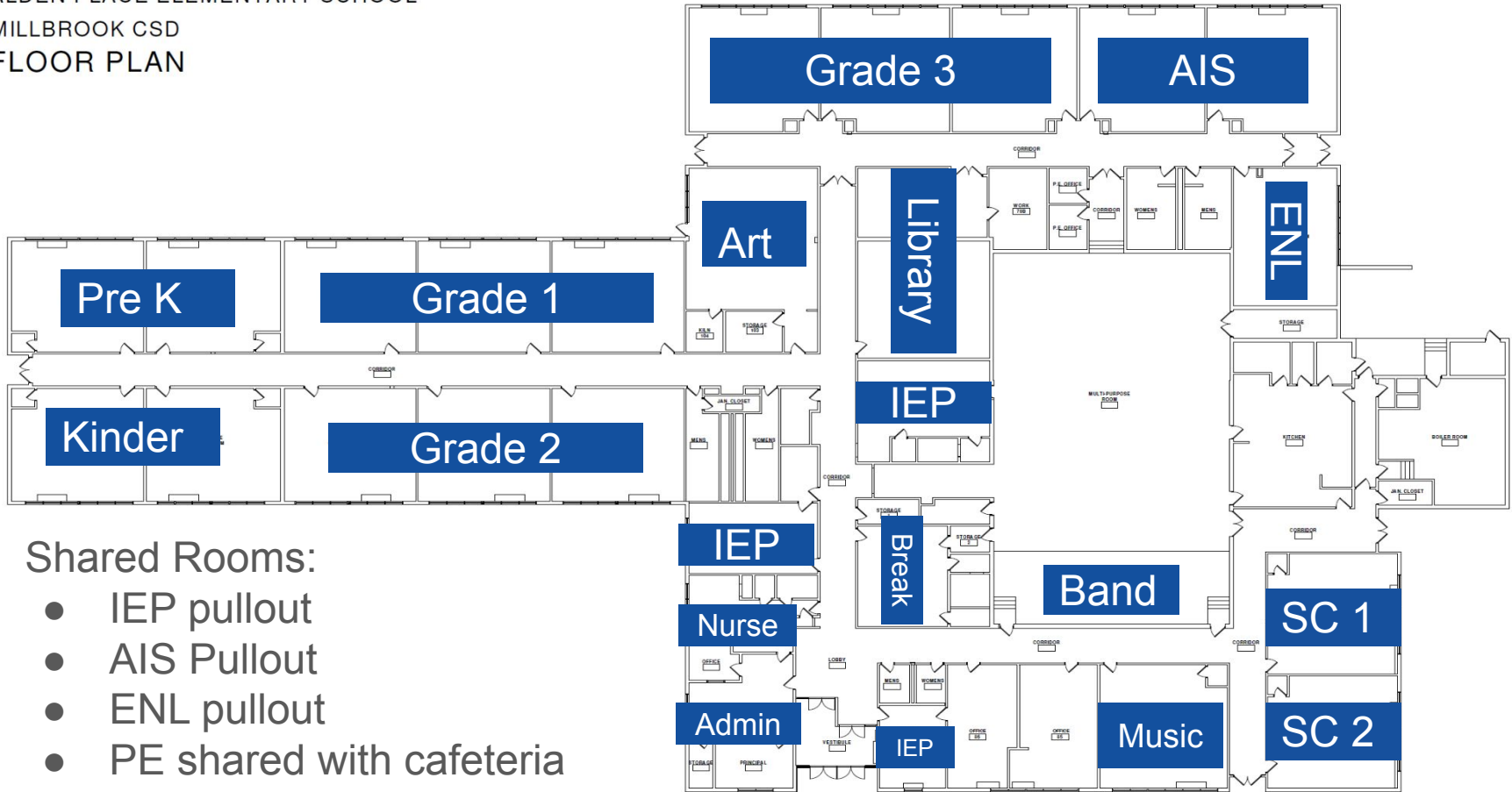
Grade Level	Assumption 2018	Actual	Difference (# rooms)
Pre K	n/a	15	0
K - 2	22	18	3
3 - 6	24	20	4 (1)
7- 12	26	22	5 (1)

# Closing Elm Drive Elementary School



- Increase in traffic on Alden Place
- Increase lunch production in APES kitchen requires additional lunch periods
- Decrease in room utilization for PE classes with increased PE classes
- Grade-level specific classroom requirements
  - Pre-K, Kindergarten, and self-contained special education classrooms require restrooms
- Staff Break Room \*required

ALDEN PLACE ELEMENTARY SCHOOL  
MILLBROOK CSD  
FLOOR PLAN



Shared Rooms:

- IEP pullout
- AIS Pullout
- ENL pullout
- PE shared with cafeteria

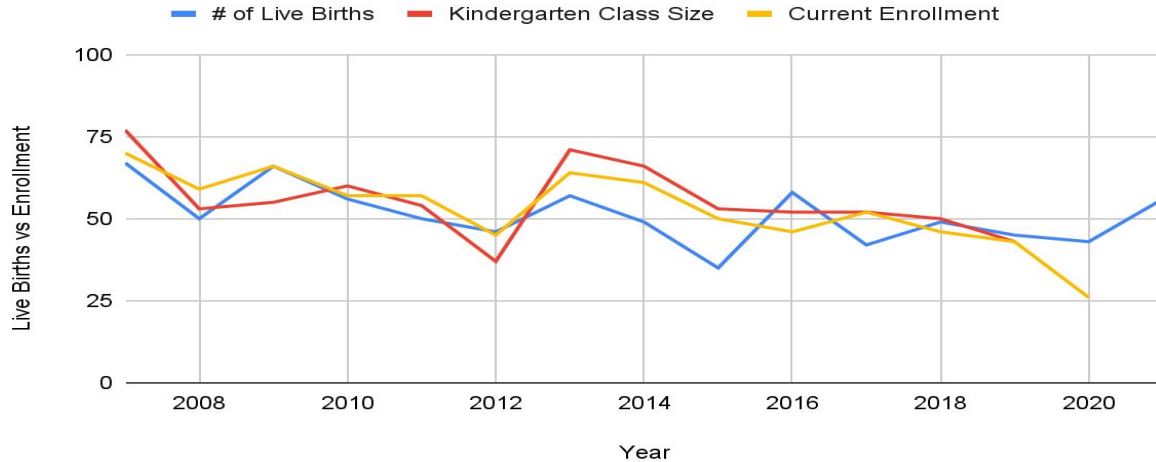
# Live Birth vs Enrollment Data (2007-2021)



Per the NYS Department of Health and BEDS enrollment data, the total live births and Enrollment data for Millbrook CSD (2007 - 2021) are as follows:

"Class of" Cohort	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Birth Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
# of Live Births	67	50	66	56	50	46	57	49	35	58	42	49	45	43	56
Kindergarten Class Size	77	53	55	60	54	37	71	66	53	52	52	50	43		
Current Enrollment	70	59	66	57	57	45	64	61	50	46	52	46	43	26	

MILLBROOK CSD (2007-2021)



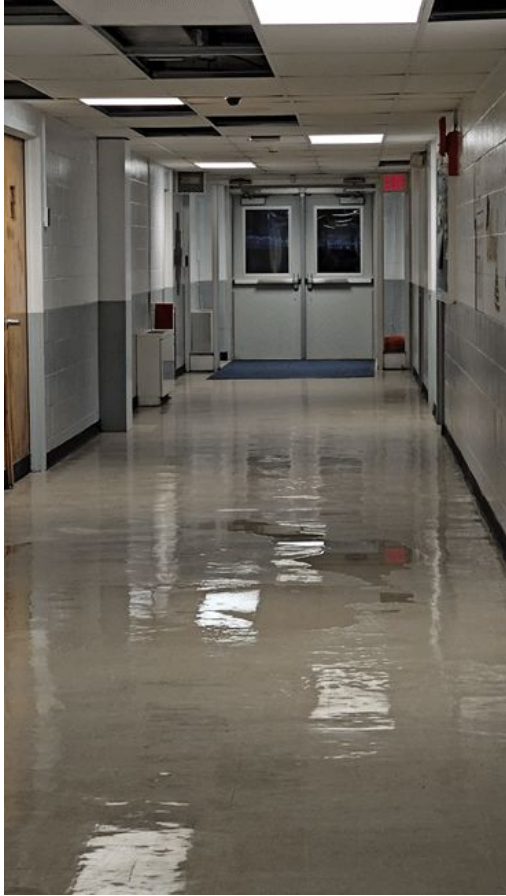


# **Examples of Existing Building Conditions - Updated 2025**

# New Leaks Since November 2024



# New Leaks Since November 2024



# New Leaks Since November 2024 - Additional Precautions Taken

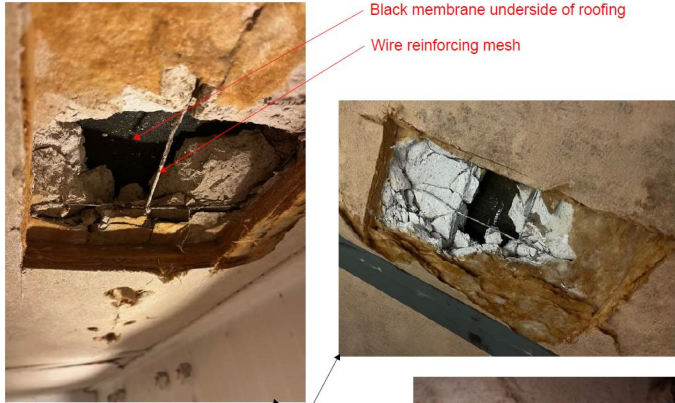


# Millbrook Middle School Roof Assessment (Dec 2024)



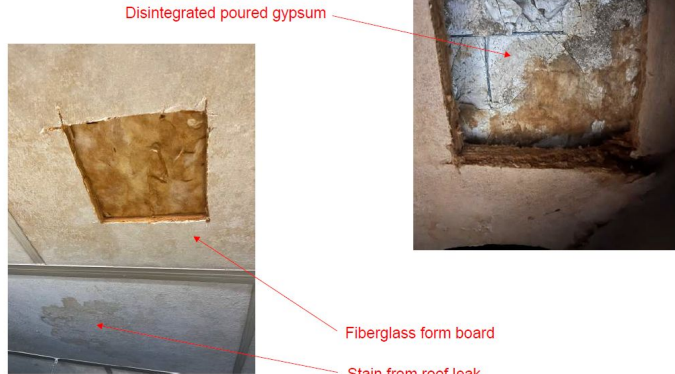
## Excerpts of Architect's Report:

- Our observation found several roof deck types – poured gypsum, concrete plank, tectum plank, metal, and wood. Locations and extents are shown on the attached diagram.
- **Of concern, and the primary reason for the study, is the poured gypsum.** Poured gypsum, when kept dry, is a fine roof deck that will provide a long service life. But **when it is subjected to long and constant exposure to moisture, it deteriorates rapidly.**
- When moisture penetrates poured gypsum, the gypsum loses its strength and causes the form boards below to sag. The sagging is accompanied by staining, and sometimes the form boards crack when the sagging is too great. If the wire remains in good or fair condition, it will hold the roof deck together, despite the sag. **If the wire rusts through, then collapse is a possibility.**



Black membrane underside of roofing  
Wire reinforcing mesh

Example photos of worst conditions



Disintegrated poured gypsum

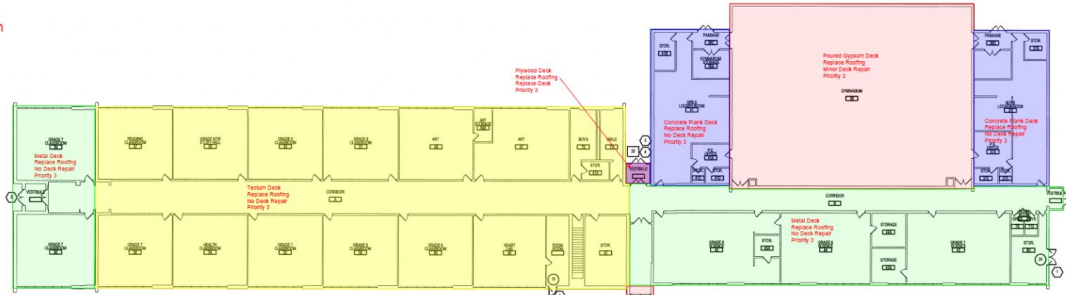
Fiberglass form board  
Stain from roof leak

Example photo of common condition

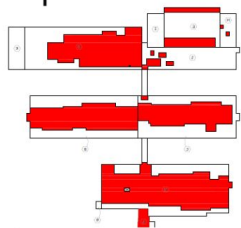
# Millbrook Middle School Roof Assessment (Dec 2024)



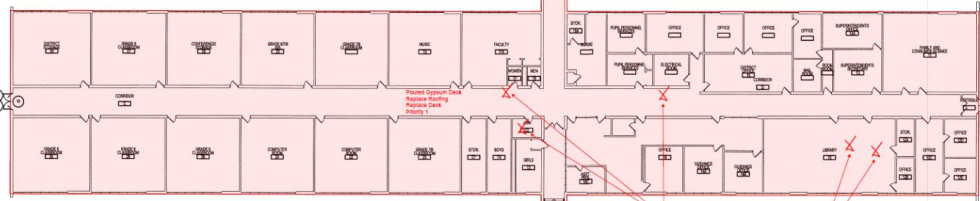
December 27, 2024  
 Roof Deck Inspection  
 Joseph B. Rettig  
 BBS Architects



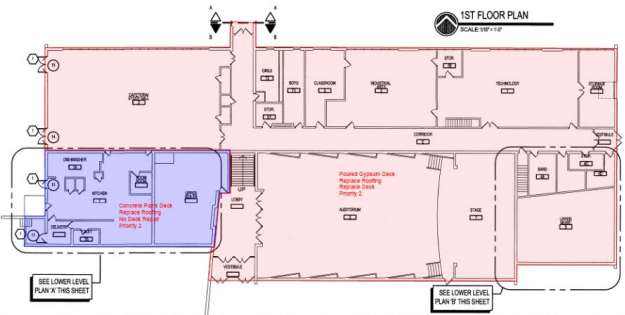
Upper Wing  
 Priority 3



Wet roofing from infrared scan



Middle Wing  
 Priority 1



Lower Wing  
 Priority 2

- 3 probes, mesh intact, but deck broken and damp
- 2 probes, mesh and deck intact
- X = Location of Probe Showing 1" Fiberglass Formboard, 2" Poured Gypsum, Wire Mesh



Aerial Photo

MILLBROOK CENTRAL SCHOOL DISTRICT MILLBROOK MIDDLE SCHOOL CAPITAL IMPROVEMENT PROJECT
FIRST FLOOR PLAN
A1-100

# Millbrook Middle School Roof Assessment (Dec 2024)



## Auditorium Ceiling

- In addition to roof deck observation and probes, we also observed the auditorium plaster ceiling. **The ceiling is deteriorating from roof leaks causing pieces of plaster to fall onto the seating area.** The District has appropriately barred occupation of the auditorium for some weeks already.
- **In this stage front area, the paint was already peeling from water infiltration.** The finish coat of plaster easily separated from the scratch (or base) coat.
- **With further water infiltration, partial collapse of the ceiling is possible.** Considering my observations at the stage front probe, and the fact that plaster is already collapsing elsewhere in the auditorium, **we recommend continued closure of the auditorium until the roofing, roof deck, and ceiling replacement are completed in their entirety.**

# Proactive Maintenance Measures Implemented

In an effort to mitigate system, structural, and mechanical failures going forward, the District has implemented a number of measures including the following:

- Routine in-house inspections of all buildings, systems & structures
- Contracted periodic inspections by licensed professional firms for major systems & equipment (e.g. boilers, chillers, elevators, playgrounds)
- Increased training opportunities for maintenance staff
- Maintenance contracts for major systems / trades (i.e. boilers / HVAC repair, electrical, plumbing)
- Fully funding maintenance reserve
- Fully funding capital reserve
- Implementation of digital preventative maintenance schedules
- Life-cycle planning for all major equipment & systems





# **Energy Performance Contract (EPC) Information**



# Energy Performance Contract (EPC): Background Information

## Energy Consumption in Millbrook CSD

### ENERGY STAR® Portfolio Manager® Score

The table below lists the ENERGY STAR score for each building in your district. The ENERGY STAR score is on a scale of 1 to 100, where the higher score represents the more energy efficient building. The national average score for K-12 school buildings is 67<sup>3</sup>. Buildings with an ENERGY STAR score of 75 or higher may be eligible for ENERGY STAR certification. For more information visit: <https://www.energystar.gov/buildings/tools-and-resources/how-apply-energy-star>

Name	Building Type	ENERGY STAR Score
Elm Drive School	Elementary School	6
Alden Place School	Elementary School	30
Millbrook Middle School	Middle School	34
Millbrook High School	High School	38

- The average school in America scores an energy star rating of **67**.
- To be energy star certified you need to be **75** or better.
- Millbrook's best scoring building is the HS with a **38**, *and it uses nearly twice the amount of energy* as compared to the national average.
- Elm's score is only scores **6**, using **11 times** more energy than the national average.

# Energy Performance Contract (EPC): Background Information

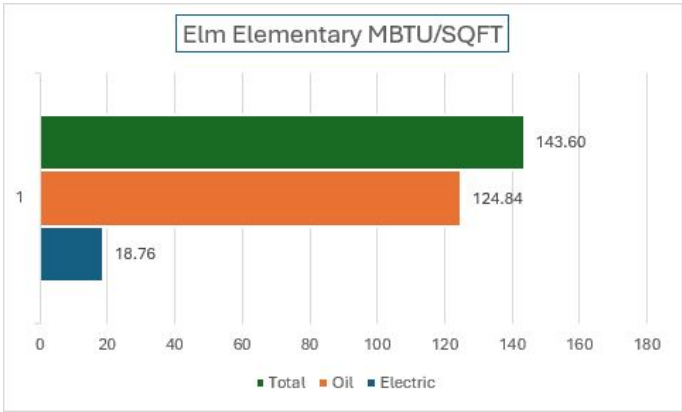
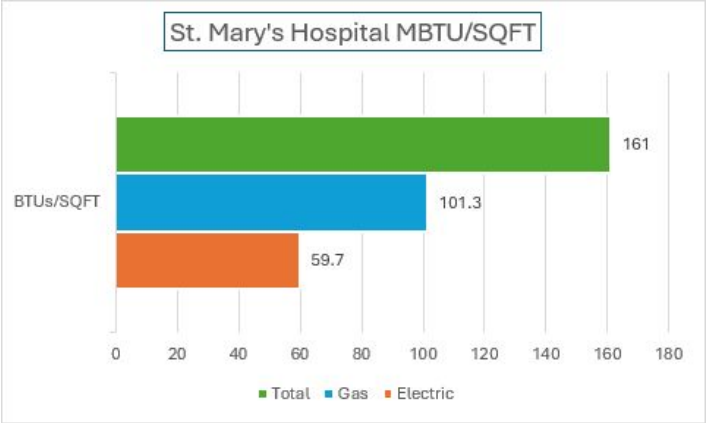
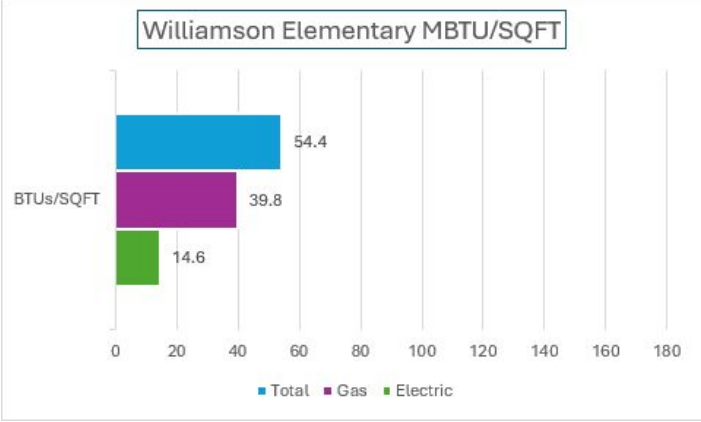
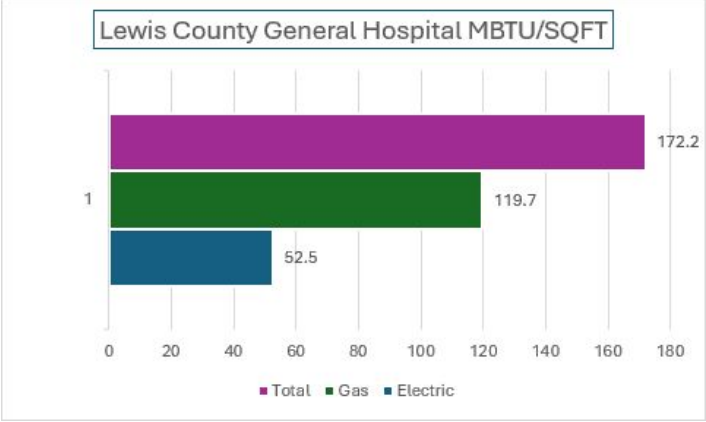
## Energy Consumption in Millbrook CSD



	High School	Middle School	Alden Place	Elm Drive
Total Utility \$	\$137,770	\$114,059	\$73,415	\$75,785
Square Foot (SF)	71,266	82,154	41,599	33,059
kBtu/SF Total	94.65	76.01	97.69	141.63
\$/SF Total	\$1.93	\$1.39	\$1.76	\$2.29

- The table above shows that Elm Drive Elementary School uses more energy per square foot than Millbrook HS.
  - *Note: Millbrook HS has Air Conditioning and generally longer hours of operation.*
- Elm’s design and configuration is more similar to the Middle School, but uses nearly double the energy.
- When looking at the kBtu/SF total an efficient school building in NY should be about 50. **Elm is almost 3X that amount (in kBtu/SF).**

# Energy Performance Contract (EPC): Background Information





# **Financial Overview & Potential Tax Impact of Proposed Projects**

*Financial Projections Provided by  
Bernard P. Donegan, Inc.*

# PROJECT FINANCES

## FACTORS IMPACTING FUNDING

- Energy Performance Contract
- State Aid
- Cash on hand
- Capital Reserves



# CAPITAL PROJECT: PROPOSITION 2\*

## MILLBROOK MIDDLE SCHOOL REPAIRS AND MILLBROOK HS EFFICIENCY UPGRADES



PROJECT FUNDS WILL COME FROM THE FOLLOWING AREAS:	
NYS Building Aid	\$ 5,517,838
Capital Reserve	\$ 12,000,000
Retiring Debt Service	\$ 11,296,305
<b>New Debt Service (Tax Impact)</b>	<b>\$ 10,450,339</b>
<b>Total Cost of Project (Excluding EPC)</b>	<b>\$ 39,264,482</b>
Proposed EPC	\$ 3,184,145
<b>Total Cost of Project (Including EPC)</b>	<b>\$ 42,448,627</b>

### MMS Scope Includes:

- Roof & Windows Replacement
- Full HVAC system replacement
- EPC work (cost neutral)
- ADA Improvements

### MHS Scope Includes:

- HVAC System Repairs & Efficiency Upgrades
- EPC work (cost neutral)

### PROPOSITION 2: IMPACT TO TAXPAYERS:

**\$0.38 / \$1,000 Full Value**

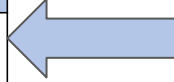
*\*Note: Proposition 1 on the May 2025 ballot will be for the 2025-26 General Fund / Annual Operating Budget. The two capital project propositions will be propositions 2 and 3 respectively.*



**PROJECT FUNDS WILL COME FROM THE FOLLOWING AREAS:**

<b>Total Cost of Project (Including EPC)</b>	<b>\$ 42,448,627</b>
Proposed EPC	\$ 3,184,145
<b>Total Cost of Project (Excluding EPC)</b>	<b>\$ 39,264,482</b>
NYS Building Aid (projected)	\$ 5,517,838
Capital Reserve	\$ 12,000,000
Retiring Debt Service	\$ 11,296,305
<b>New Debt Service (Tax Impact)</b>	<b>\$ 10,450,339</b>

Voters will vote on the total cost of the project.

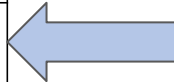


EPC work is cost neutral to taxpayers, but must be authorized in order to receive additional aid.



MCSD will receive 23% building aid on eligible parts of the project.

**\*\* There is a maximum allowable aid for each portion of the project.**



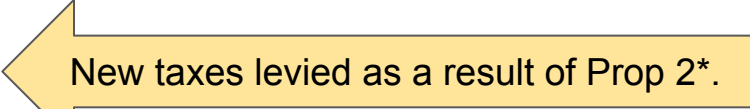
Money the District has saved over a period of 8 years to fund this project.



Retiring debt will be replaced without levying new taxes.



**New taxes levied as a result of Prop 2\*.**



\*Estimated over approximately 17 years from the date of issuance

# CAPITAL PROJECT: PROPOSITION 3

## ELM DRIVE & ALDEN PLACE ELEMENTARY SCHOOLS HVAC REPLACEMENTS & RELATED WORK



PROJECT FUNDS WILL COME FROM THE FOLLOWING AREAS:	
NYS Building Aid	\$ 3,476,405
Capital Reserve	\$ -
Retiring Debt Service	\$ -
<b>New Debt Service (Tax Impact)</b>	<b>\$ 18,302,855</b>
<b>Total Cost of Project (Excluding EPC)</b>	<b>\$ 21,779,260</b>
Proposed EPC	\$ 2,708,491
<b>Total Cost of Project (Including EPC)</b>	<b>\$ 24,487,751</b>

Elm Drive Elementary Scope Includes:

- Full HVAC system replacement
- Windows Replacement
- Electrical Upgrades
- EPC work (cost neutral)

Alden Place Scope Includes:

- Full HVAC system replacement
- Boiler Replacement
- EPC work (cost neutral)

**PROPOSITION 3: IMPACT TO TAXPAYERS:**

**\$0.64 / \$1,000 Full Value**

**Total Impact to Taxpayers (Propositions 2 & 3):  
\$1.02 / \$1,000 of full taxable assessed Property Value\***

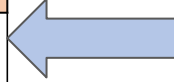
*\*Note: These percentages are based on having no STAR exemption*



**PROJECT FUNDS WILL COME FROM THE FOLLOWING AREAS:**

<b>Total Cost of Project (Including EPC)</b>	<b>\$ 24,487,751</b>
Proposed EPC	\$ 2,708,491
<b>Total Cost of Project (Excluding EPC)</b>	<b>\$ 21,779,260</b>
NYS Building Aid (projected)	\$ 3,476,405
Capital Reserve	-
Retiring Debt Service	-
<b>New Debt Service (Tax Impact)</b>	<b>\$ 18,302,855</b>

Voters will vote on the total cost of the project.



EPC work is cost neutral to taxpayers, but must be authorized in order to receive additional aid.



MCSD will receive 23% building aid on eligible parts of the project.

**\*\* There is a maximum allowable aid for each portion of the project.**



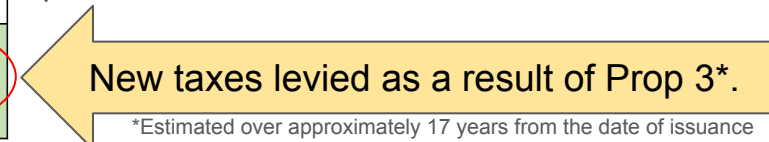
Capital reserve funds fully allocated to Prop 2.



Retiring debt will be fully allocated to Prop 2.



**New taxes levied as a result of Prop 3\*.**



\*Estimated over approximately 17 years from the date of issuance

# Estimated Tax Impact to Community: Proposition 2: MMS & MHS



Millbrook Central School District

Prop 2

**AVERAGE COST TO TAXPAYER**  
**16 Year Maturity Schedule for \$39,264,482 Capital Project**



**AVERAGE MARGINAL INCREASE FOR YEARS 2027-2042**

Full Value	<u>ENHANCED STAR</u> <i>\$84,000 Equalized Value Exemption</i>		<u>BASIC STAR</u> <i>\$30,000 Equalized Value Exemption</i>		<u>NO STAR</u>	
	<u>Income Restrictions*</u>		<u>Primary Residence</u>		<u>Non-Primary Residence</u>	
	Annual	Monthly	Annual	Monthly	Annual	Monthly
\$100,000	\$ 6	\$ 0.50	\$ 27	\$ 2.25	\$ 38	\$ 3.17
200,000	44	3.67	65	5.42	76	6.33
300,000	83	6.92	103	8.58	115	9.58
400,000	121	10.08	141	11.75	153	12.75
500,000	159	13.25	180	15.00	191	15.92
600,000	197	16.42	218	18.17	229	19.08
700,000	236	19.67	256	21.33	268	22.33
800,000	274	22.83	294	24.50	306	25.50

# Estimated Tax Impact to Community: Propositions 2 & 3: Elm & Alden ES



Millbrook Central School District

Prop 2 & 3



**AVERAGE COST TO TAXPAYER**  
**16 Year Maturity Schedule for \$61,043,742 Capital Project**

**AVERAGE MARGINAL INCREASE FOR YEARS 2027-2042**

Full Value	<u>ENHANCED STAR</u> \$84,000 Equalized Value Exemption Income Restrictions*		<u>BASIC STAR</u> \$30,000 Equalized Value Exemption Primary Residence		<u>NO STAR</u> Non-Primary Residence	
	Annual	Monthly	Annual	Monthly	Annual	Monthly
\$100,000	\$ 16	\$ 1.33	\$ 71	\$ 5.92	\$ 102	\$ 8.50
200,000	118	9.83	173	14.42	204	17.00
300,000	220	18.33	275	22.92	305	25.42
400,000	322	26.83	377	31.42	407	33.92
500,000	424	35.33	478	39.83	509	42.42
600,000	525	43.75	580	48.33	611	50.92
700,000	627	52.25	682	56.83	713	59.42
800,000	729	60.75	784	65.33	814	67.83

# Summary and Next Steps



- Millbrook CSD is seeking your support in the largest and most necessary capital project plan in the District's modern history.
- These projects are rooted in much needed improvements to our school buildings & related systems in order to maintain basic functionality.
- Project scope includes modernizations to increase sustainability, reduce our carbon footprint, make our buildings more accessible, and improve the quality of instruction.
- Improving the condition of our schools can directly impact our children's health and education.

# Summary and Next Steps



## Per the United States EPA\*:

- Poor indoor environments have been associated with a variety of health symptoms and a decline in student performance in reasoning, typing, and math.
- Schools without a major maintenance backlog have a higher average daily attendance, or ADA, by an average of 4 to 5 students per 1,000 and a lower annual dropout rate by 10 to 13 students per 1,000.
- Growing evidence also suggests that improving outdoor air ventilation rates can improve student and teacher performance, increase test scores, and reduce airborne transmission of infection. In one study, children in classrooms with higher outdoor air ventilation rates scored 14 to 15% higher on standardized tests than children in classrooms with lower outdoor air ventilation rates.
- (The) Individuals with Disabilities Education Act of 1997 and Section 504 of the Rehabilitation Act of 1973, Subpart D, require public elementary and secondary school recipients of federal funding to provide an appropriate public education to qualified students with disabilities ... The provisions of an appropriate education must be designed to meet the individual educational needs of disabled persons as adequately as the needs of nondisabled persons.

\*Sources: <https://www.epa.gov/schools/about-state-school-environmental-health-guidelines>  
<https://www.epa.gov/iaq-schools/evidence-scientific-literature-about-improved-academic-performance>

# Questions? Email

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