

Galvin Middle School

School Committee February 1, 2024

Agenda:

Schedule Overview
School Building Committee update

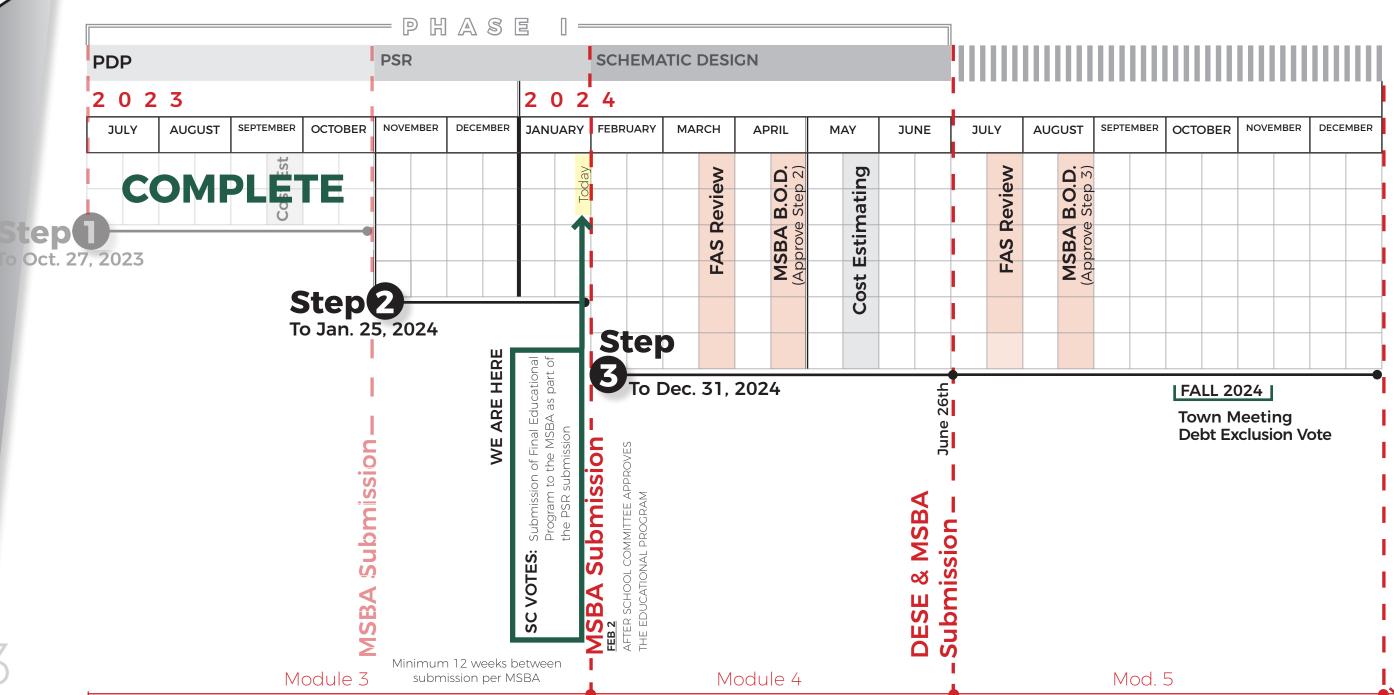
- Construction Delivery Method
- Option Selection

MSBA Review Comments
Educational Program Updates
Submission Vote

Canton Public Schools // Leftfield Project Management // Ai3 Architects, LLC



Galvin Middle School Project Schedule Overview





Construction Delivery Method

Design - Bid - Build (DBB): M.G.L. Chapter 149 Documents are completed in their entirety, released for bidding, and the qualified contractor with the lowest bid is selected

Construction Manager at Risk (CMr): M.G.L. Chapter 149A Construction Manager joins the team prior to document completion to provide insight on items like schedule, logistics, constructability, and phasing. Transparent accounting process utilized to develop Guaranteed Maximum Price (GMP)

SBC VOTED UNANIMOUSLY

to move forward with Construction Manager at Risk (CMr) as the delivery method for the project

project benefits GMS remains occupied
Busy campus with both GMS & HES
Long lead construction items - possible early buy
Potential for early release packages





Building Options

Matrix of possible configurations

PRIOR TO DECEMBER
20TH MEETING
20TH **Option 1 Base Repair** With Auditorium With Auditorium Grades 6-8 **Option 5 Option 2 Option 3 Option 4** (6-8) Add/Reno (6-8) Add/Reno (6-8) New Construction (6-8) New Construction **NO Auditorium** With Auditorium **NO Auditorium** With Auditorium **Option 8 Option 9 Option 6 Option 7** Grades 5-8 (5-8) New Construction (5-8) New Construction (5-8) Add/Reno (5-8) Add/Reno **NO Auditorium** With Auditorium **NO Auditorium** With Auditorium Addition / Renovation **New Construction**





Building Options - Matrix

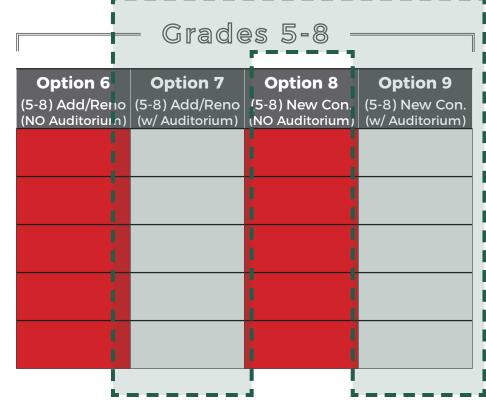
Building Organization Options



			Grade	? S	6=8
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Categories	Option 1 Base Repair
Educational Program	
Community & Access	
Construction Phasing	
Sustainability	
Cost	

Option 2	Option 3	Option 4	Option 5
(6-8) Add/Reno (NO Auditorium)		(6-8) New Con. (NO Auditorium)	



Options no longer relevant based upon School Building Committee and School Committee votes held on Dec. 20, 2023

Options still applicable to the project. (Option 7 & Option 9)





Building Options Overview

ALL OPTIONS INCLUDE:

correct QUANTITY of learning & support spaces inclusion of 5th grade spaces 800 seat AUDITORIUM 1.5 or 2 court GYMNASIUM

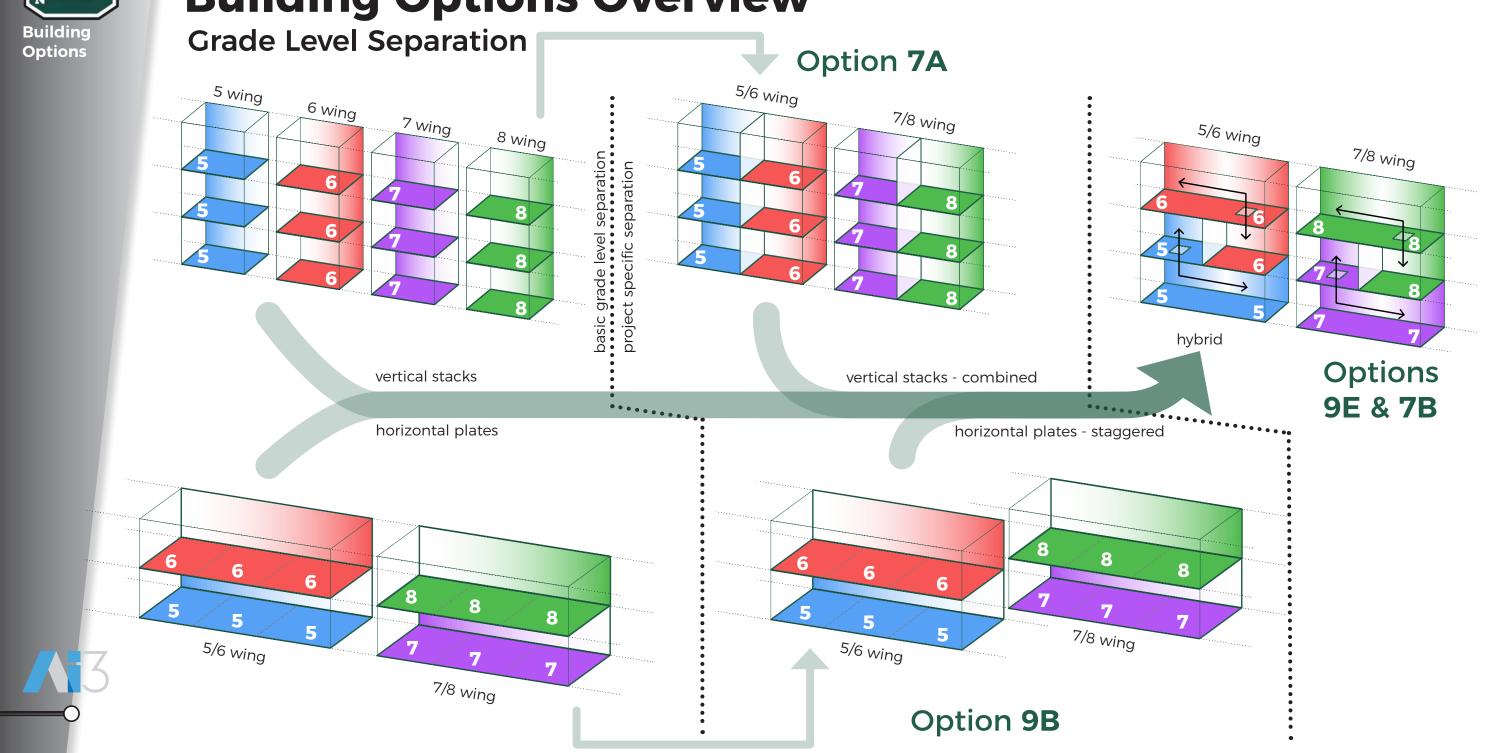
OPTIONS EVOLVED BASED UPON:

weekly working group meetings building committee feedback school committee feedback community forum feedback additional stakeholder feedback





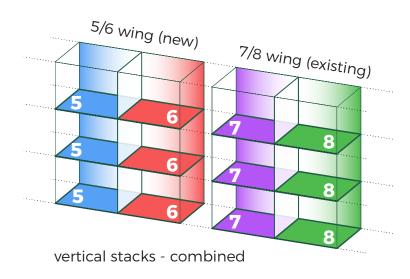
Building Options Overview



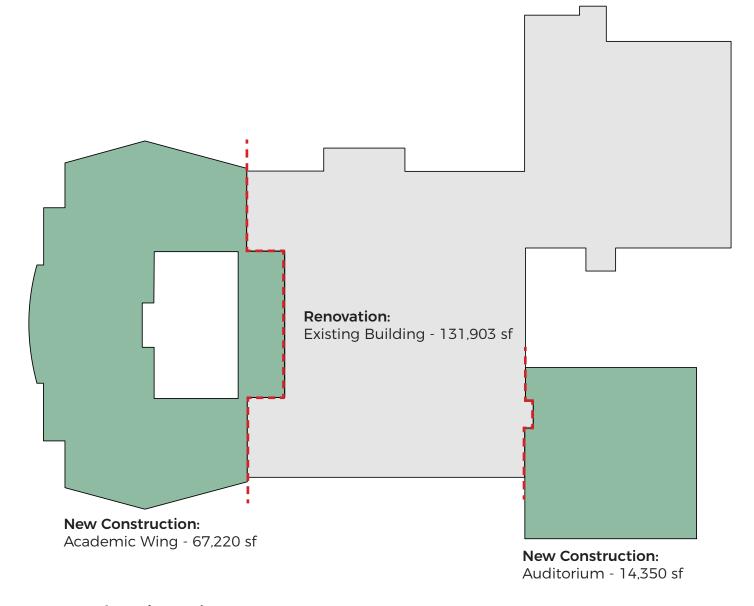


Option 7A

Minor Addition / Major Renovation



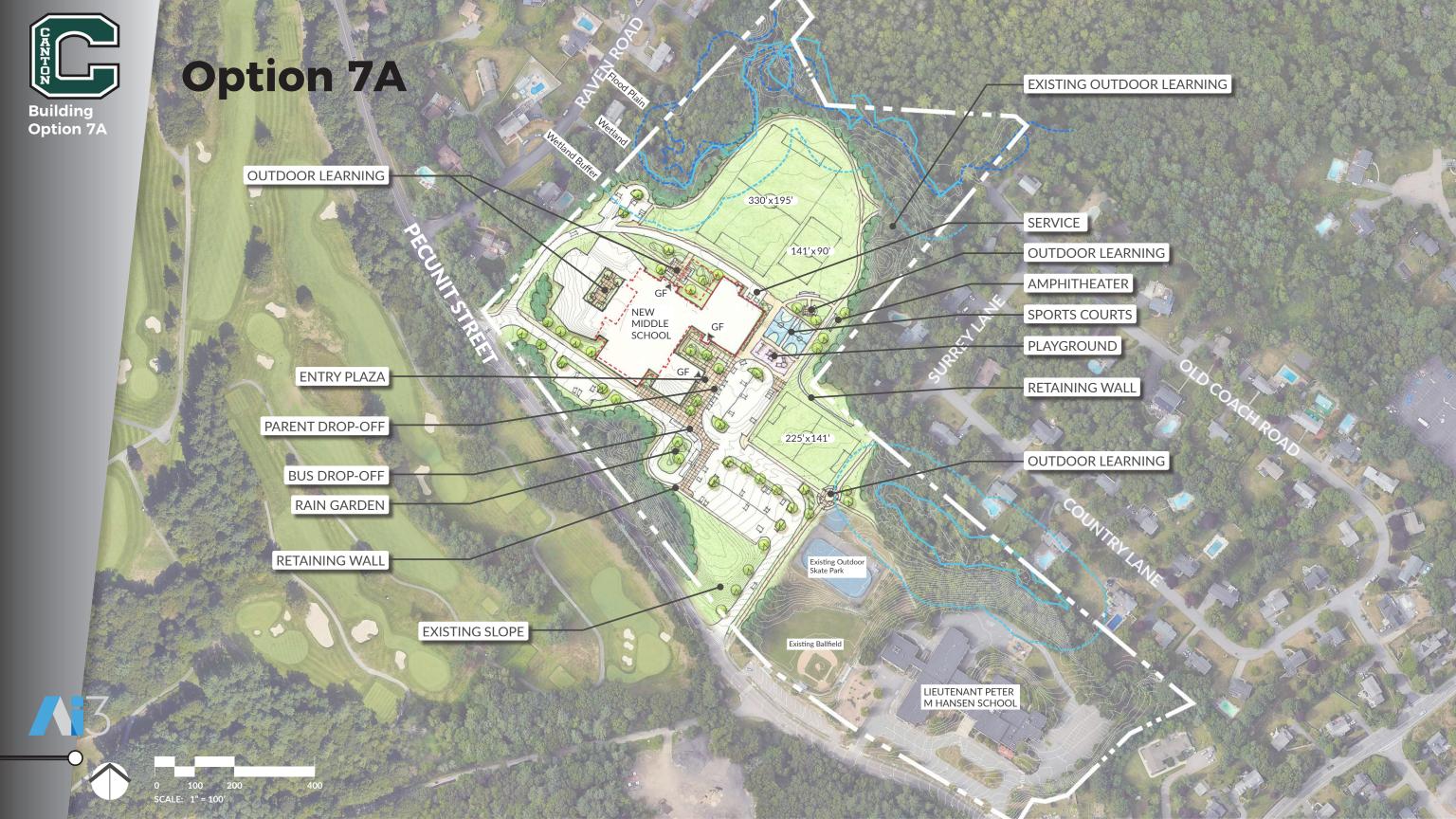
Grade Level Separation



Total Project Size:

213,473 sf







Option 7A - SUMMARY

Minor Addition / Major Renovation

Summary:

Total Project Size: 213,473 sf Minor Addition: 81,570 sf Major Renovation: 131,903 sf

Construction duration: 60 months Estimated Project Cost (CMr): \$225 mil

Advantages:

Provides correct quantity of program spaces
Allows for 5th grade to move to GMS
Clearly defined grade configuration between 5/6 and 7/8
large footprint/roof area for possible photovoltaic arrays (PV Panels)

Obstacles:

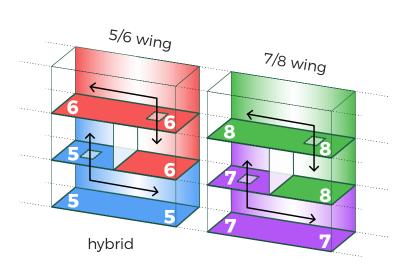
Large % of program spaces are undersized
Building organization does not support grade level teaming
- primarily at the 7/8 grade level
Long construction duration with phased occupancy required
- temporary partitions required
Large building footprint restricts site usage
Some windowless classrooms remain
1.5 court gymnasium



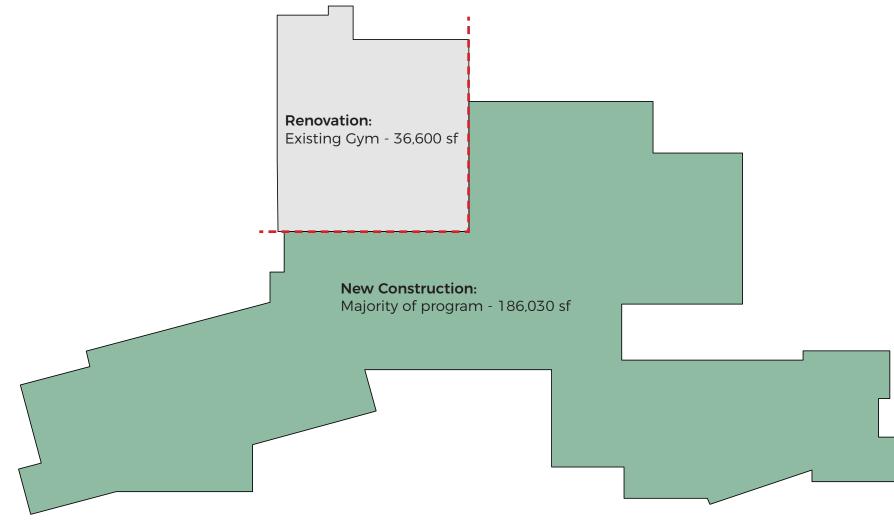


Option 7B

Major Addition / Minor Renovation



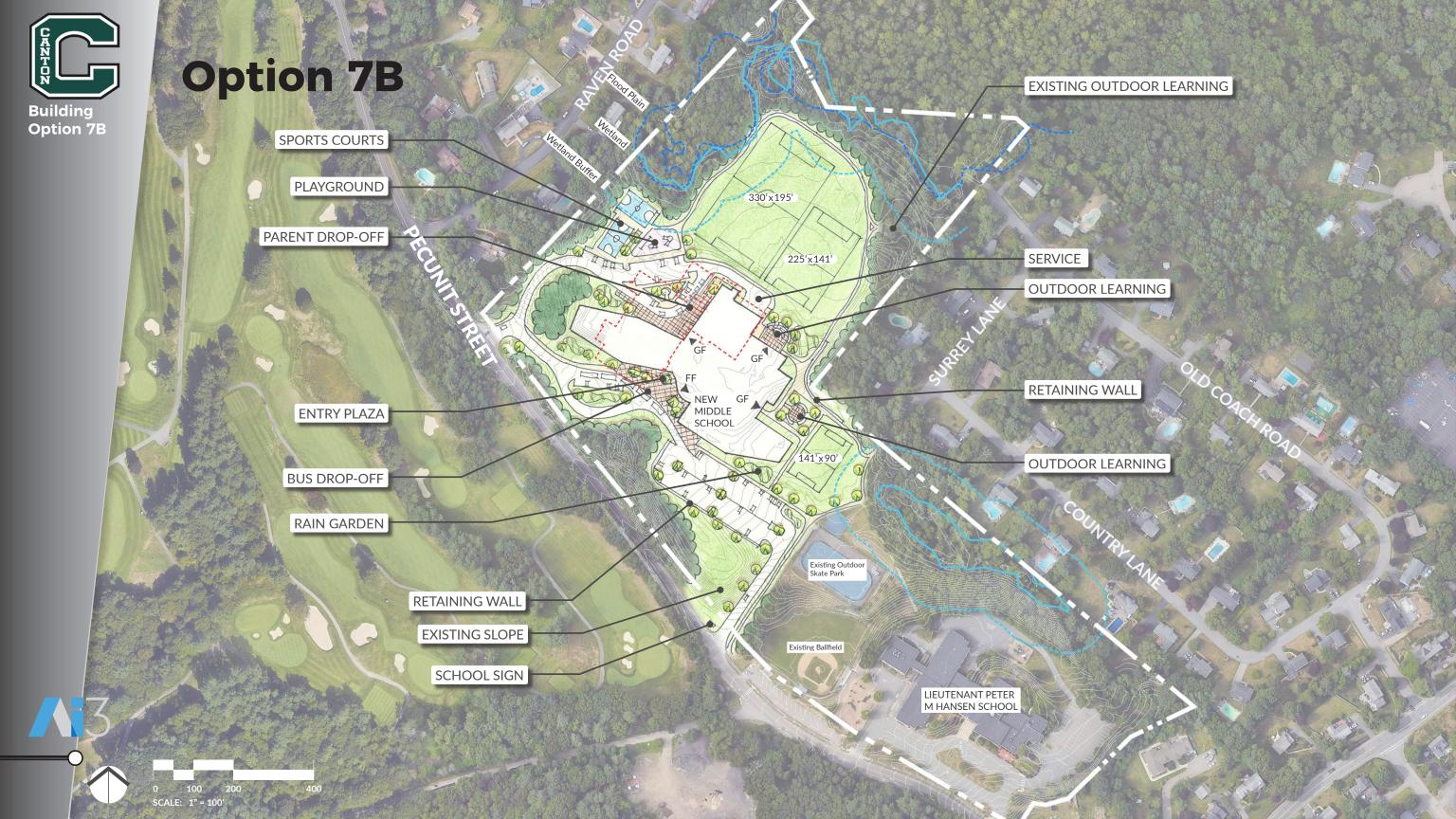
Grade Level Separation





Total Project Size:

222,630 sf





Option 7B - SUMMARY

Major Addition / Minor Renovation

Summary:

Total Project Size: 222,630 sf Minor Renovation: 36,600 sf Major Addition: 186,030 sf

Construction duration: 64 months Estimated Project Cost (CMr): \$248 mil

Advantages:

Provides correct quantity and size of program spaces (minus gym)
Allows for 5th grade to move to GMS
Grade level teaming and collaboration is supported in organization
Clearly defined grade configuration between 5/6 and 7/8
Easily identifiable entry point
Academic core oriented to maximize solar benefits and reduce glare

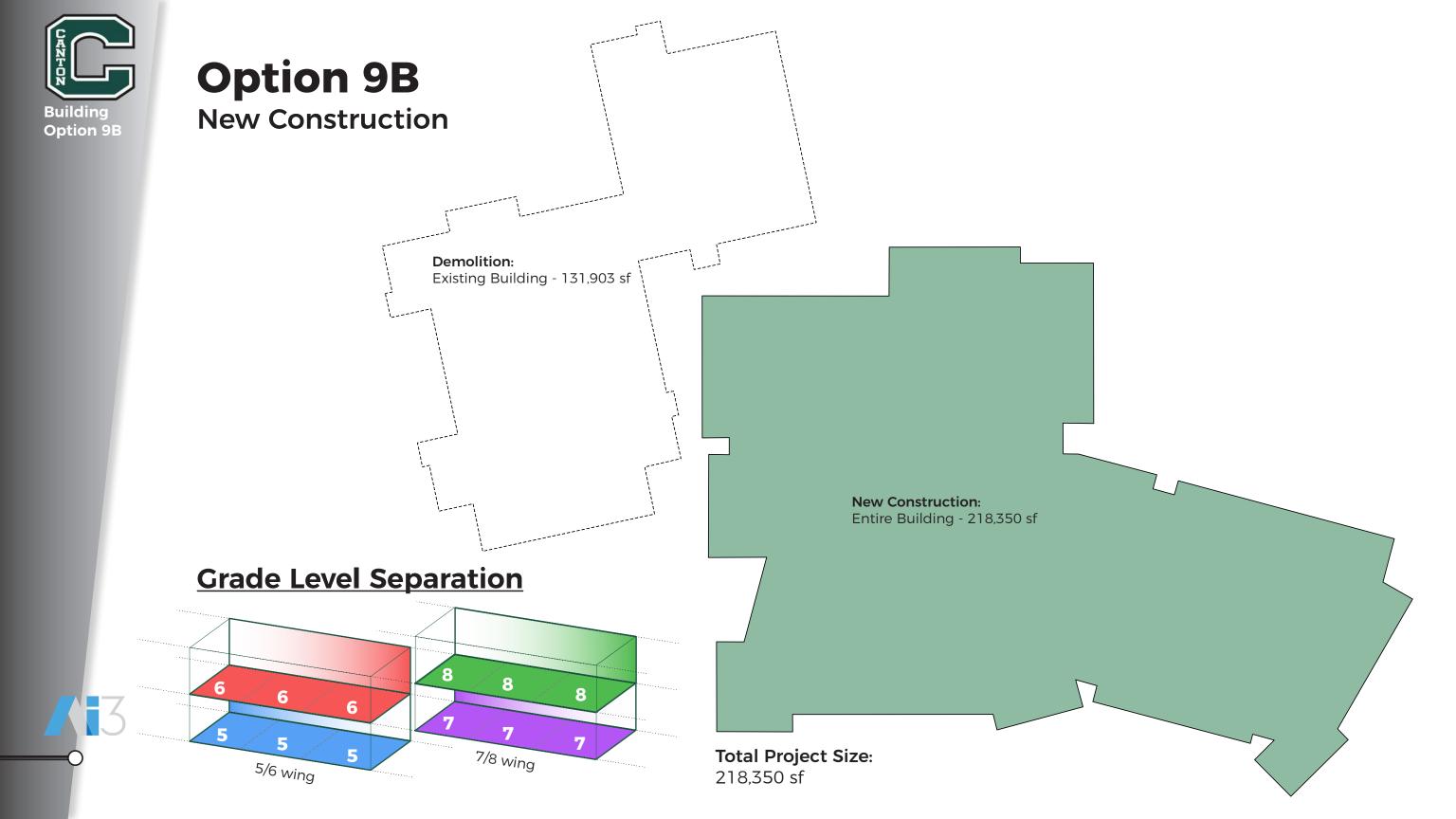
Obstacles:

Long construction duration with phased occupancy required temporary partitions required

Footprint location isolates site access to rear field

1.5 court gymnasium public access to the auditorium is not ideal small footprint/roof area for possible photovoltaic arrays (PV Panels)









Option 9B - SUMMARY

New Construction

Summary:

Total Project Size: 218,350 sf

Construction duration: 48 months

Estimated Project Cost (CMr): \$237 mil

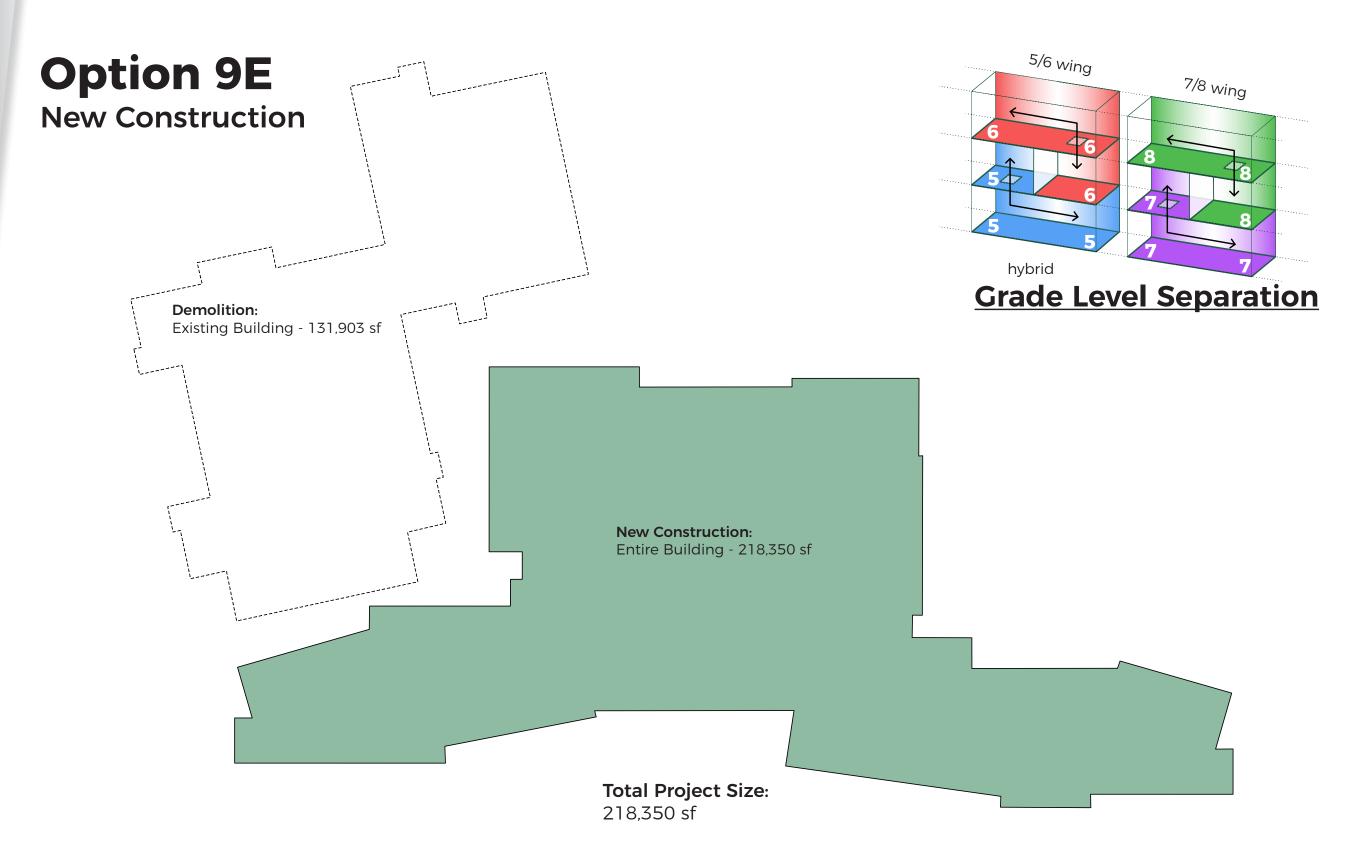
Advantages:

Provides correct quantity and size of program spaces Allows for 5th grade to move to GMS Clearly defined grade configuration between 5/6 and 7/8 Grade level teaming and collaboration is supported in organization All new construction limiting existing building unknowns large footprint/roof area for possible photovoltaic arrays (PV Panels)

Obstacles:

large footprint limiting open space & site access opportunities expansive footprint to support single floor grade level configuration limits daylight opportunities to interior spaces Phased construction with some temporary partitions Academic core not conducive to solar orientation benefits







Option 9E

New Construction Floor 1

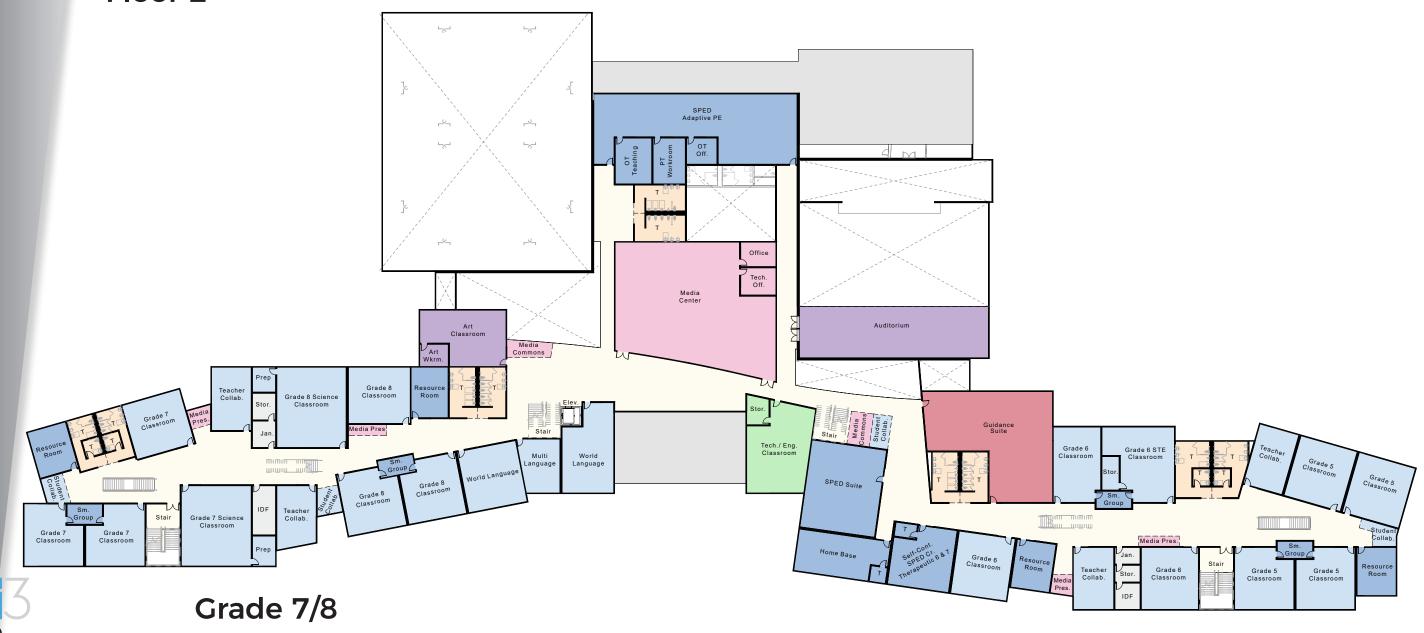


Grade 5



Option 9E

New Construction Floor 2

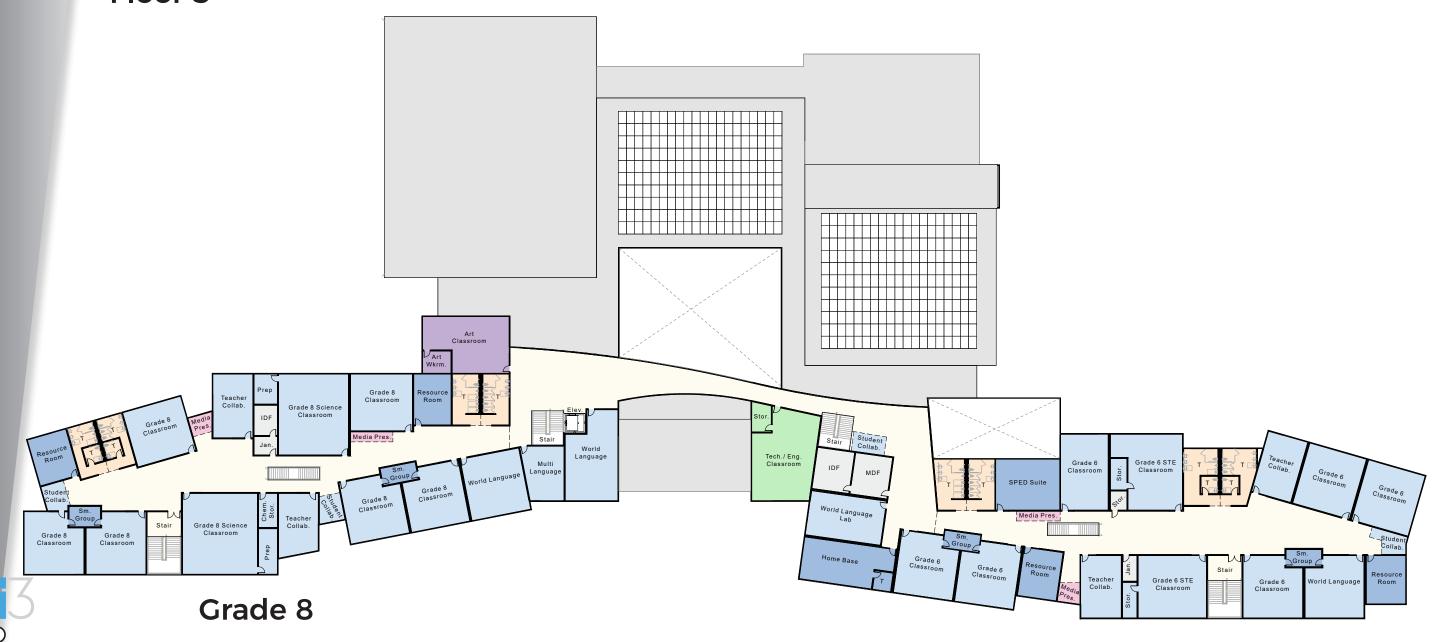


Grade 5/6



Option 9E

New Construction Floor 3



Grade 6





Option 9E - SUMMARY

New Construction

Summary:

Total Project Size: 218,350 sf

Construction duration: 36 months

Estimated Project Cost (CMr): \$232 mil

Advantages:

Provides correct quantity and size of program spaces
Allows for 5th grade to move to GMS
smallest footprint maximizing site and open space
Clearly defined grade configuration between 5/6 and 7/8
Grade level teaming and collaboration is supported in organization
All new construction limiting existing building unknowns
Linear footprint to provide daylight opportunities to interior spaces
Academic core oriented to maximize solar benefits and reduce glare

Obstacles:

smallest footprint/roof area for possible roof mounted photovoltaic arrays (PV Panels)

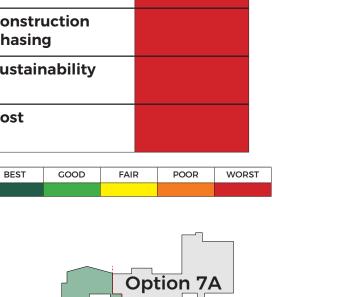




Building Options - Matrix

Building Organization Options





Option 7A

Renovation: 131,903 sf **New Construction:** 81,570 sf

Total Project Size: 213.473 sf



Option 7A

Minor Add /

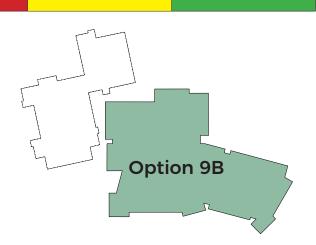
Major Reno

60 months

\$225 mil

Renovation: 36,600 sf New Construction: 186,030 sf

Total Project Size: 222.630 sf



Demolition: 131,903 sf **New Construction**: 218,350 sf

Total Project Size: 218.350 sf

Grades 5-8

Option 9B

New Construction

Horizontal

48 months

\$237 mil

Option 9E

New Construction

Vertical

36 months

\$232 mil

Option 7B

Major Add /

Minor Reno

64 months

\$248 mil

SBC VOTED
UNANIMOUSLY
to move forward
with OPTION 9E
as the preferred
option



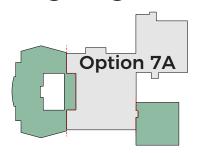
Demolition: 131,903 sf **New Construction:** 218,350 sf

Total Project Size: 218,350 sf



Building Options - Matrix

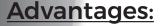
Building Organization Options Summary



Renovation: 131,903 sf New Construction: 81.570 sf

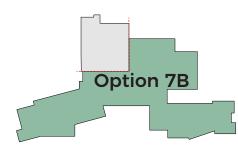
Total Project Size:

213,473 sf



Obstacles:

- Correct quantity of program spaces
- 5th grade to move to GMS
- Clearly defined grade configuration between 5/6 and 7/8
- Large footprint/roof area for possible photovoltaic arrays (PV Panels)
- Large % of program spaces are undersized
- Building organization does not support 7/8 grade level teaming
- Long construction duration
- Large building footprint
- Some windowless classrooms remain
- 1.5 court gymnasium



Renovation: 36,600 sf New Construction: 186,030 sf

Total Project Size:

222,630 sf

- Correct quantity and size of program spaces (minus gym)
- 5th grade to move to GMS
- Grade level teaming and collaboration is supported in organization
- Clearly defined grade configuration between 5/6 and 7/8
- Easily identifiable entry point
- Maximizes solar benefits
- Long construction duration
- Footprint location isolates site access to rear field
- 1.5 court gymnasium
- Public access to the auditorium is not ideal
- Small footprint/roof area for possible photovoltaic arrays (PV Panels)



Demolition: 131,903 sf **New Construction:** 218.350 sf

Total Project Size:

218,350 sf

- Correct quantity and size of program spaces
- 5th grade to move to GMS
- Clearly defined grade configuration between 5/6 and 7/8
- Organization supports grade level teaming and collaboration
- Limited existing building unknowns
- Large footprint/roof area for possible photovoltaic arrays
- Large footprint limits open space & site access opportunities
- Expansive footprint limits daylight opportunities to interior spaces
- Phased construction
- Academic core not conducive to solar orientation benefits

SBC VOTED UNANIMOUSLY



Demolition: 131,903 sf **New Construction**: 218,350 sf

Total Project Size:

218,350 sf

- Correct quantity and size of program spaces
- 5th grade to move to GMS
- Smallest footprint maximizing site and open space
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- Organization supports grade level teaming and collaboration
- Limited existing building unknowns
- Linear footprint to provide daylight opportunities to interior spaces
- Maximizes solar benefits
- Smallest footprint/roof area for possible roof mounted photovoltaic arrays (PV Panels)





Preferred Schematic Report (PSR)

Table of Contents

3.3.1 INTRODUCTION

Overview of Process

Performance Space Selection

Project Directory

Updated Project Schedule

Summary of Final Evaluation of Existing Conditions

Summary of Final Evaluation of Alternatives

Summary of the District's Preferred Solution

MSBA Review & District Response to PDP Report

3.3.2 EVALUATION OF EXISTING CONDITIONS

Existing Conditions Evaluations & Floor Plans

Existing Site Analysis, Electric Service, Gas Service, Communications

Service, Landscape Plan, Site Aerial Survey

3.3.3 FINAL EVALUATION OF ALTERNATIVES

Overview

Option 7a: Academic Addition / Major Renovation

Conceptual Site Plan

Conceptual Floor Plans

Conceptual Phasing and Construction Impact

Site & Utilities Analysis

Structural Systems Narrative

Major Building Systems Narratives

Option 7b: New Academic Building / Gymnasium Renovation

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Conceptual Phasing and Construction Impact

Site & Utilities Analysis

Structural Systems Narrative

Major Building Systems Narratives

Option 9b: New Construction with Grade-Level Teams by Floor

Conceptual Site Plan

Conceptual Floor Plans

Conceptual Phasing and Construction Impact

Site & Utilities Analysis

Structural Systems Narrative

Major Building Systems Narratives

Option 9e: New Construction w/ Hybrid Stacked Grade-Level Teams

Conceptual Site Plan

Conceptual Floor Plans

Conceptual Phasing and Construction Impact

Site & Utilities Analysis

Structural Systems Narrative

Major Building Systems Narrative

Permitting Requirements - All Options

Construction Cost Estimates - All Options

Summary of Preliminary Design Pricing

3.3.4 PREFERRED SOLUTION

Educational Program

Grade Configuration

Option 9e: New Construction w/ Hybrid Stacked Grade-Level Teams

Conceptual Diagrams

Conceptual Floor Plans

Conceptual Site Plan

Conceptual Site Sections

Site Plan Diagrams

Space Summary

Sustainability Documents

Budget Statement

Project Schedule

3.3.5 LOCAL ACTIONS & APPROVAL CERTIFICATION

Local Actions and Approvals Letter

School Building Committee Agendas & Minutes

School Committee Agendas & Minutes

APPENDIX

Educational Program - Redlined Copy

VOTE to submit the Final Educational Program to the MSBA as part of the PSR submission





Educational Program

Progression

Draft Educational Program submitted to the MSBA on October 27 as part of the PDP submission

Project Team received comments from the MSBA on the PDP submission on December 22.

- - - → Comments asking for additional/clarifying information on scheduling, utilization, curriculum, and staffing

Project Team responded to the review comments formally on January 16th with requested additional information.

Educational Program has been updated:

- Grade Configuration Decision
- Incorporating all MSBA requested additional information

→ □ School Committee review and approve updated Educational Program as the final version submitted to the MSBA as part of the PSR submission.

A "clean" and a "redlined" version will be included in the submission as required by the MSBA





Educational Program

Key Highlights

- · 800 Seat Auditorium
- Language Labs
- Supporting the Community
 - Auditorium
 - Black Box Theater
 - · 2 Court Gymnasium
 - Library Media Center
- Library Media Center and Commons Distribution

