

# Lexington High School

## School Building Committee



1. Call to Order

2. Vote Previous Meeting Minutes 12:00 - 12:05 p.m.

- [August 19<sup>th</sup>, 2024](#)

**3. Introduce:** Ground Floor Program & Footprint Area, Total Gross Square Footage, "New Construction on Fields"

Massing Options & "Phased in Place" Massing Options, and new addition/renovation option B.4 12:05 – 12:50 p.m.

**4. Confirm:** Parking Quantity and Location, Driveways and Circulation, & Current Use and Anticipated Impacts of Fields 12:50 – 1:00 p.m.

5. SBC Discussion on Designer Presentation 1:00 - 1:30 p.m.

6. Communications Working Group Update (K.Lenihan) 1:30 - 1:35 p.m.

7. Public Comment 1:35 – 1:45 p.m.

8. Reflections/Action Items 1:45 – 2:00 p.m.

Adjourn – 2:00 p.m.

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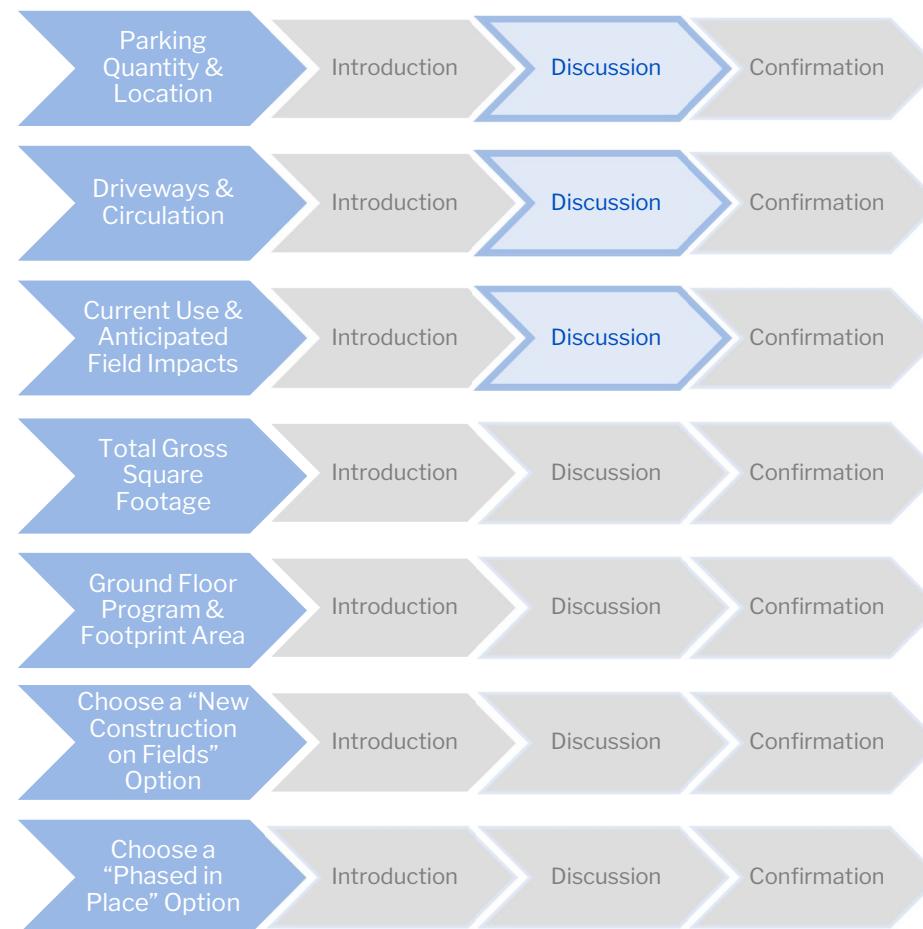
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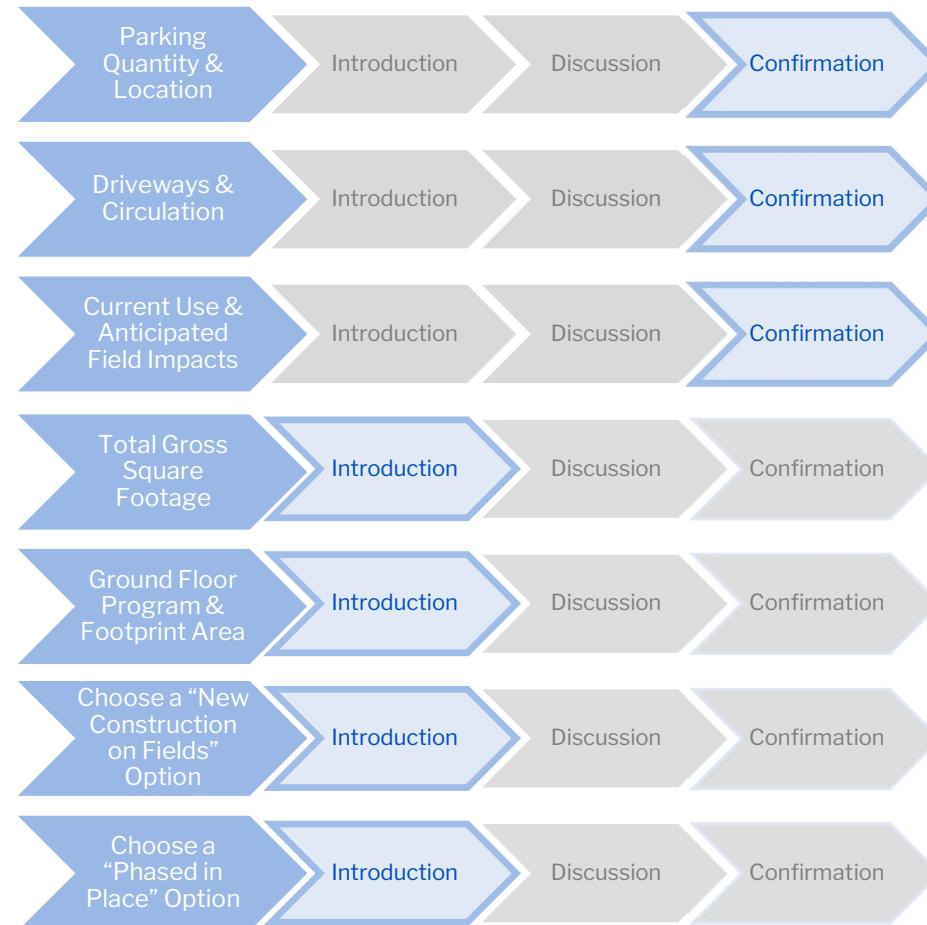
# PSR Decision Progress Update

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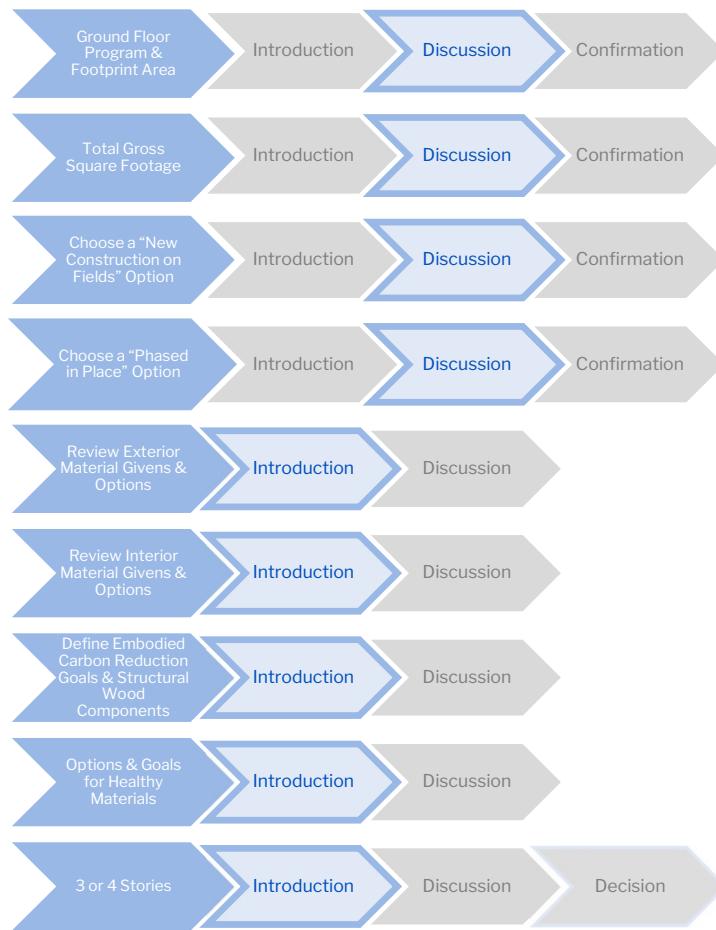
## Progress Update/ 8.19 SBC Meeting



## Progress Update/ 9.3



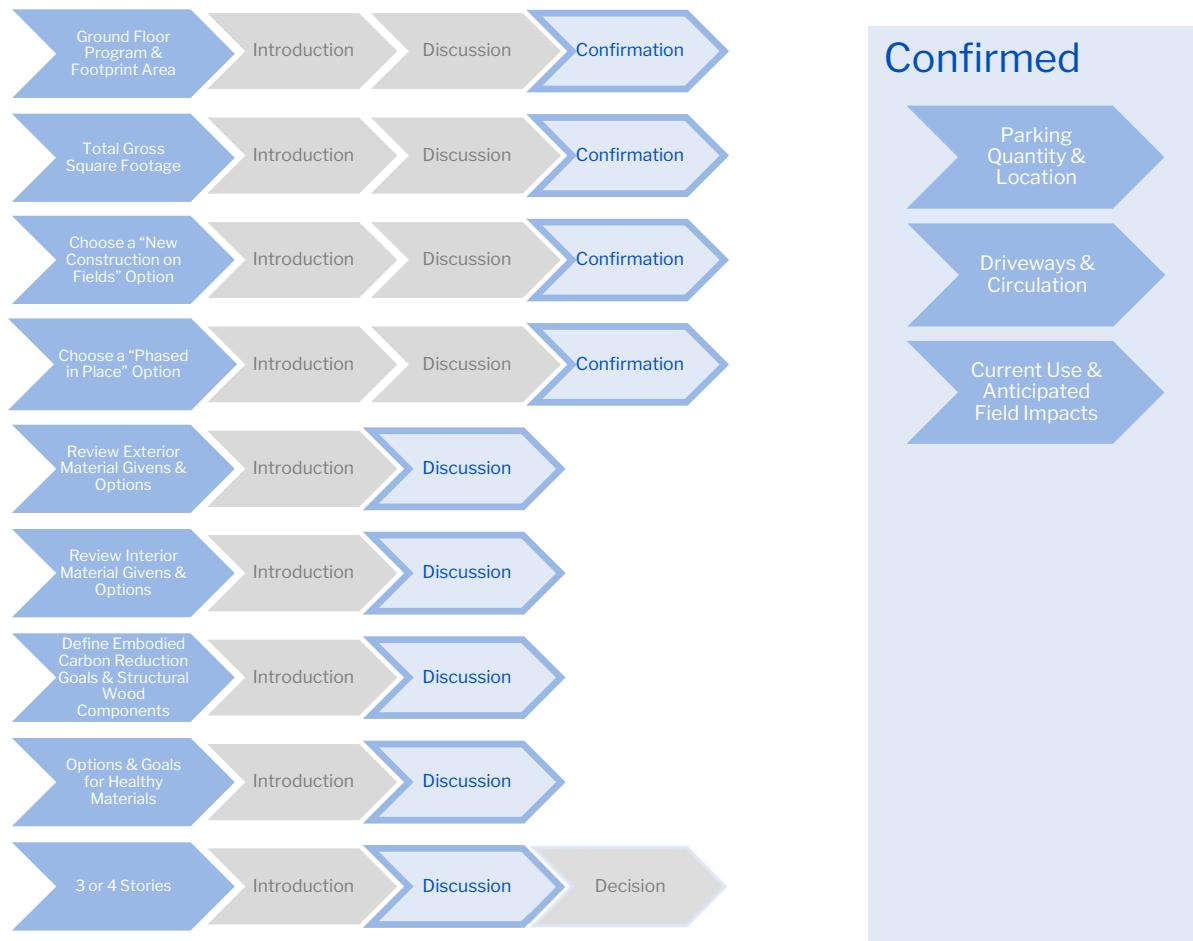
## Progress Update/ 9.16



### Confirmed



## Progress Update/ 9.30



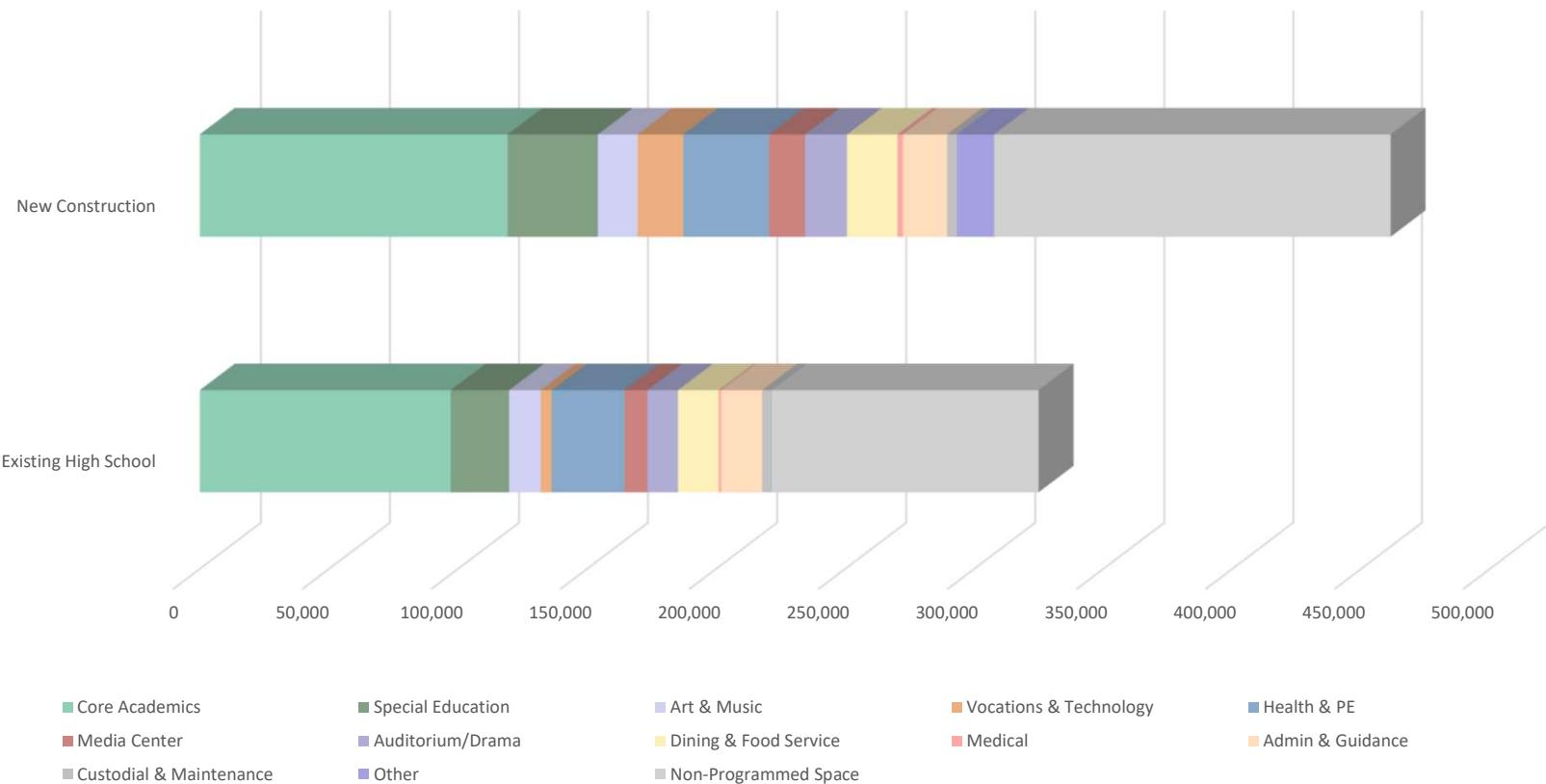
# Introduce: Total Gross Square Footage

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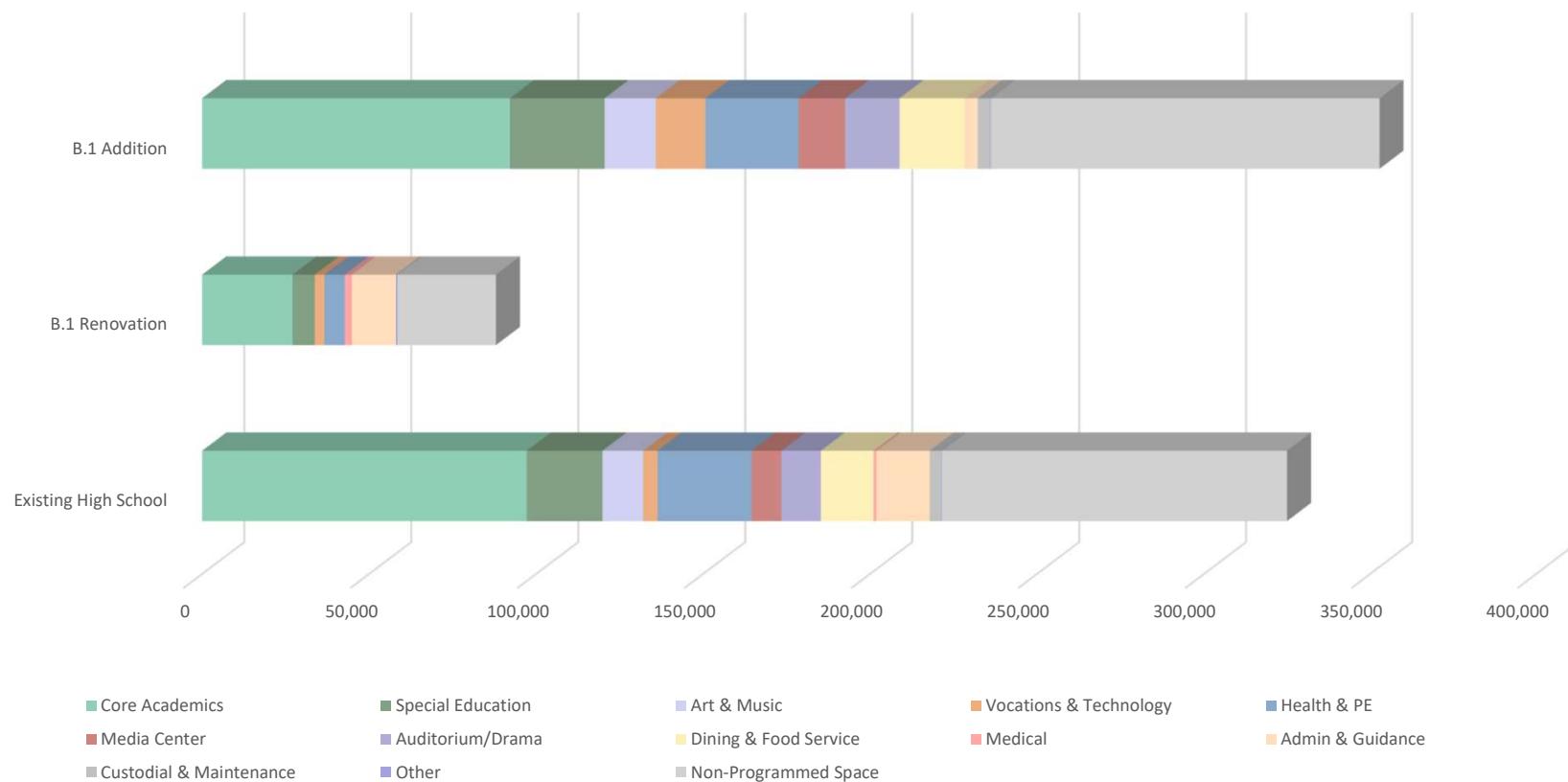
## Whole Building Program/Proposed Space Summary - New Construction w/ Central Office

<b>Room Type</b>	<b>Existing Area (SF)</b>	<b>Proposed Area (SF)</b>
Core Academic	97,199	119,230
Special Education	22,675	35,025
Art & Music	12,186	15,350
Vocation & Technology	4,271	17,720
Health & Physical Education	28,213	33,250
Media Center	8,912	13,890
Auditorium/Drama	11,814	16,300
Dining & Food Service	15,783	19,520
Medical	856	2,100
Administration & Guidance	15,970	17,170
Custodial & Maintenance	3,502	3,722
Other (school store, pop up shop/gallery)	125	600
Central Office	0	13,800
Non-Programmed Spaces (circulation, elevators, bathrooms, closets, supply, storage, MEP, FP, structure, etc.)	103,452	153,839
<b>Total Building Gross Floor Area</b>	<b>324,958</b>	<b>461,516</b>

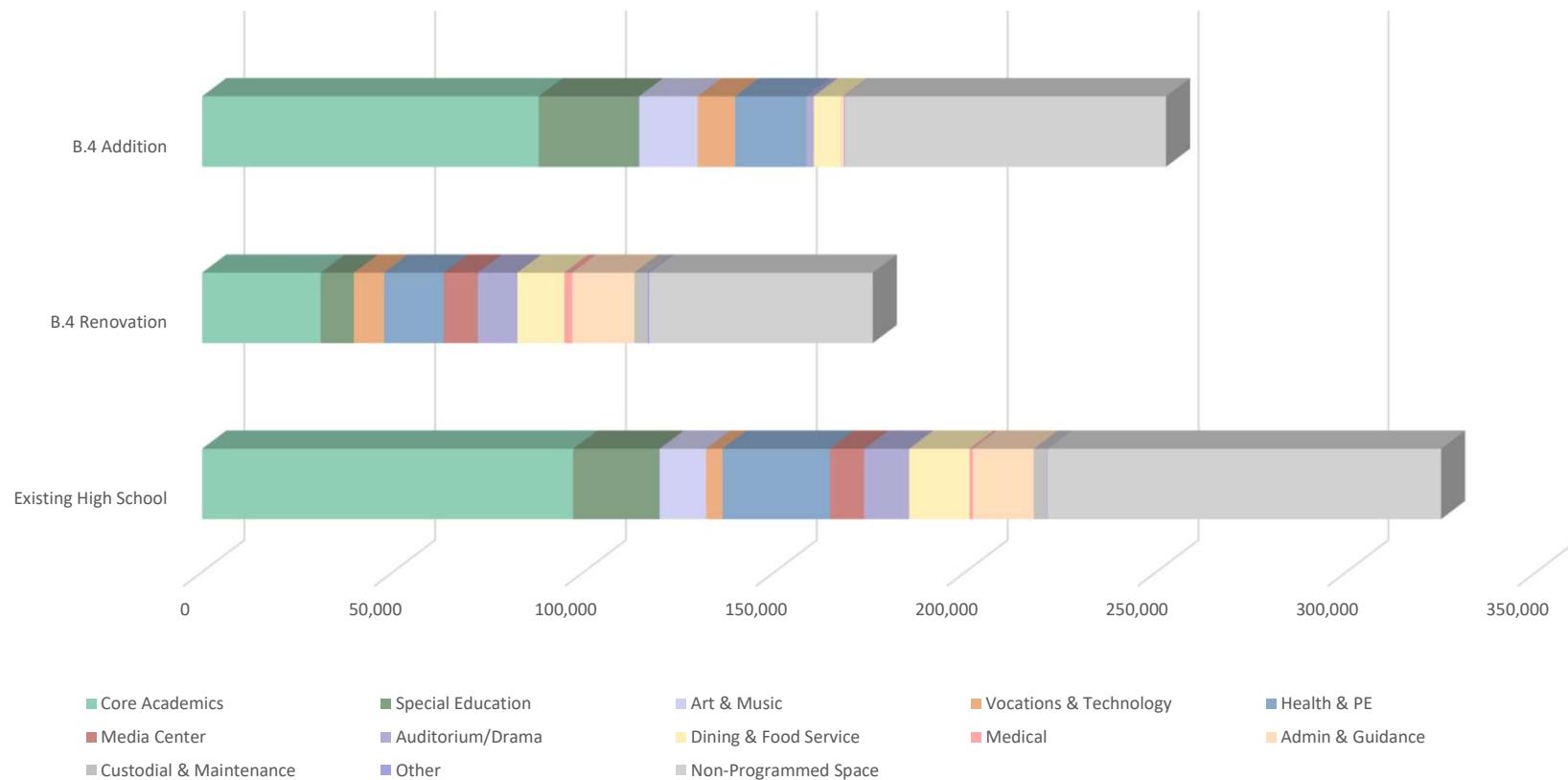
## Whole Building Program/Existing High School vs. All New Construction



## Whole Building Program /Existing High School vs. Addition/Renovation Alt B.1



## Whole Building Program /Existing High School vs. Addition/Renovation Alt B.4

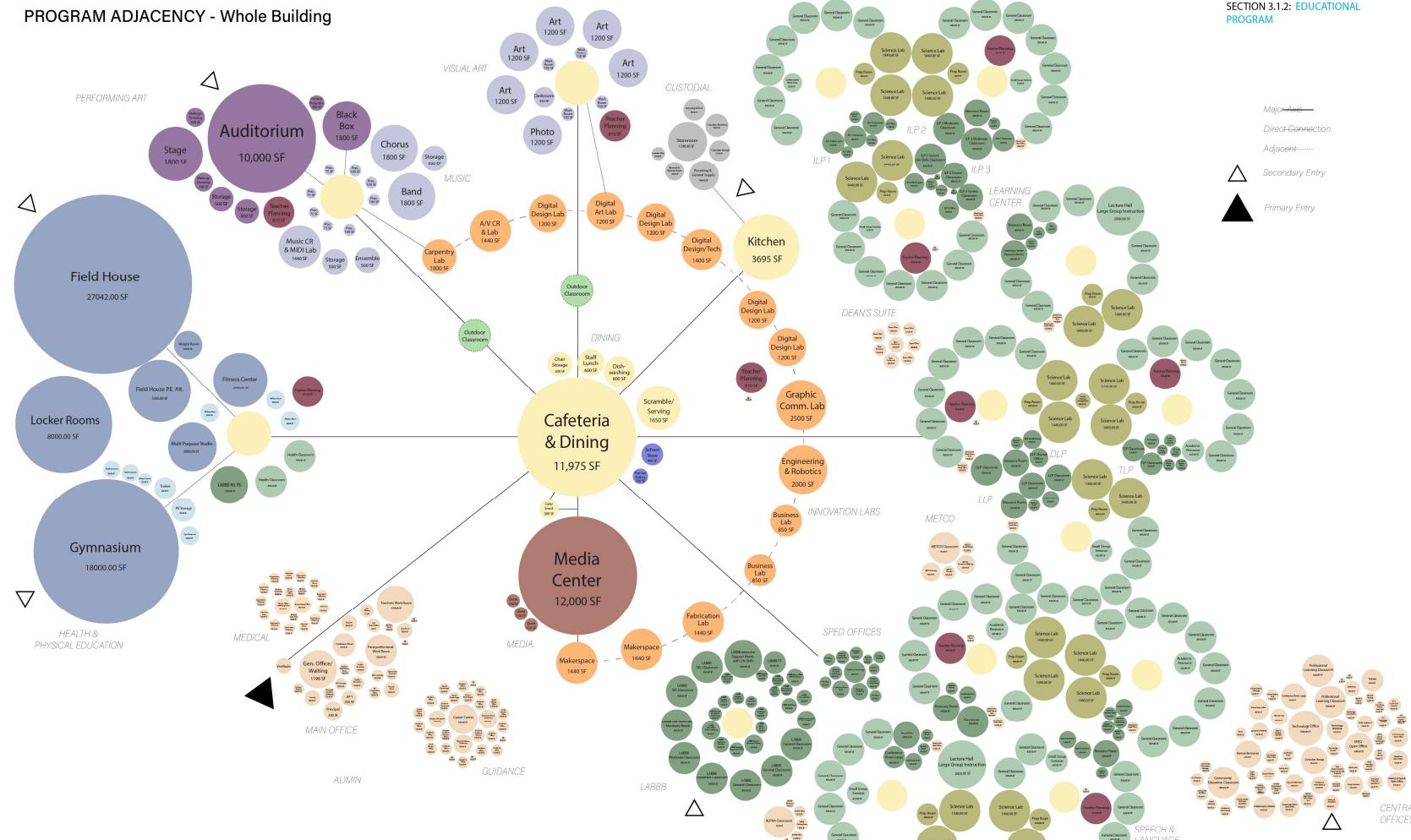


# Introduce: Ground Floor Program and Footprint Area

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## **Whole Building Program/Program Adjacency**

## PROGRAM ADJACENCY - Whole Building



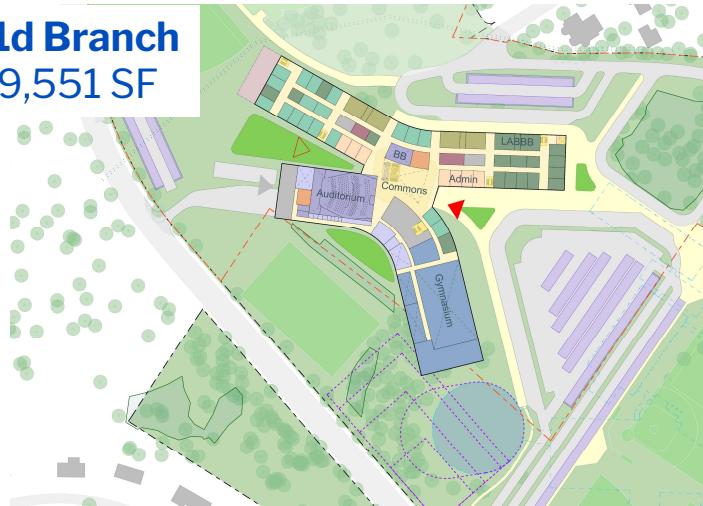
Lexington High School | Preliminary Design Program 3.1.2

09/03/2024

## Discussion: Footprint Area – New Construction in Open Space

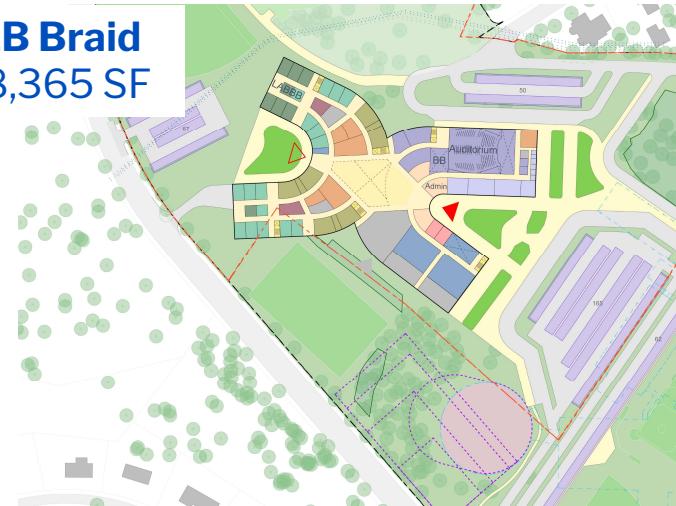
**C.1d Branch**

169,551 SF



**C.2B Braid**

168,365 SF



**C.5B Bloom**

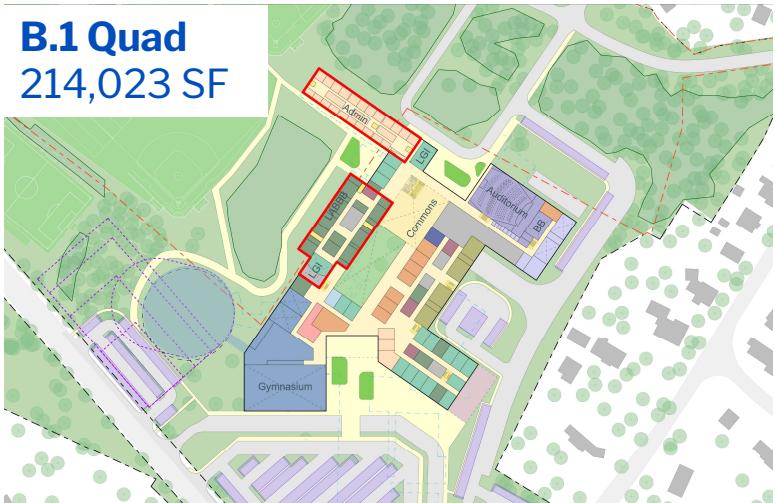
173,013 SF\*



\*Potential 7,000 SF reduction  
of footprint with Level 2  
Gymnasium

## Discussion: Footprint Area – Phased in Place

**B.1 Quad**  
214,023 SF



**D.2 Weave**  
156,400 SF



**B.4 Figure Eight**  
242,861 SF



# Introduce: Choose a “New Construction on Fields” Option

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## Introduction: Choose a “New Construction on Fields” Option

### Lexington High School Educational Criteria:

- Classroom configurations that promote **collaboration**
- Adjacencies of different curricular areas for a wide variety of **interdisciplinary learning**
- **Flexibility** to organize school in different ways:
  - i.e.: Small learning communities, Schools within a School, Freshman Academy)
- Accessibility to and shared **hands-on learning** opportunities of Innovation Labs/ Makerspaces
- Organizational and **character-defining** elements:
  - Library / media center (centralized)
  - Student dining (centralized)
  - Auditorium
  - Outdoor student space similar to existing LHS Quad
  - Active hallways

## Introduction: Choose a “New Construction on Fields” Option

### Lexington High School Educational Criteria:

- Ease of **wayfinding**
- Reduced student corridor **passing time**
  - 4 minutes
  - 5 minutes
  - 6+ minutes
- **Outdoor learning** opportunities
  - At the ground
  - On elevated floors / rooftop
- Ability to reduce impacts of **open campus**
- Promotes **student agency**

## Introduction: Choose a “New Construction on Fields” Option

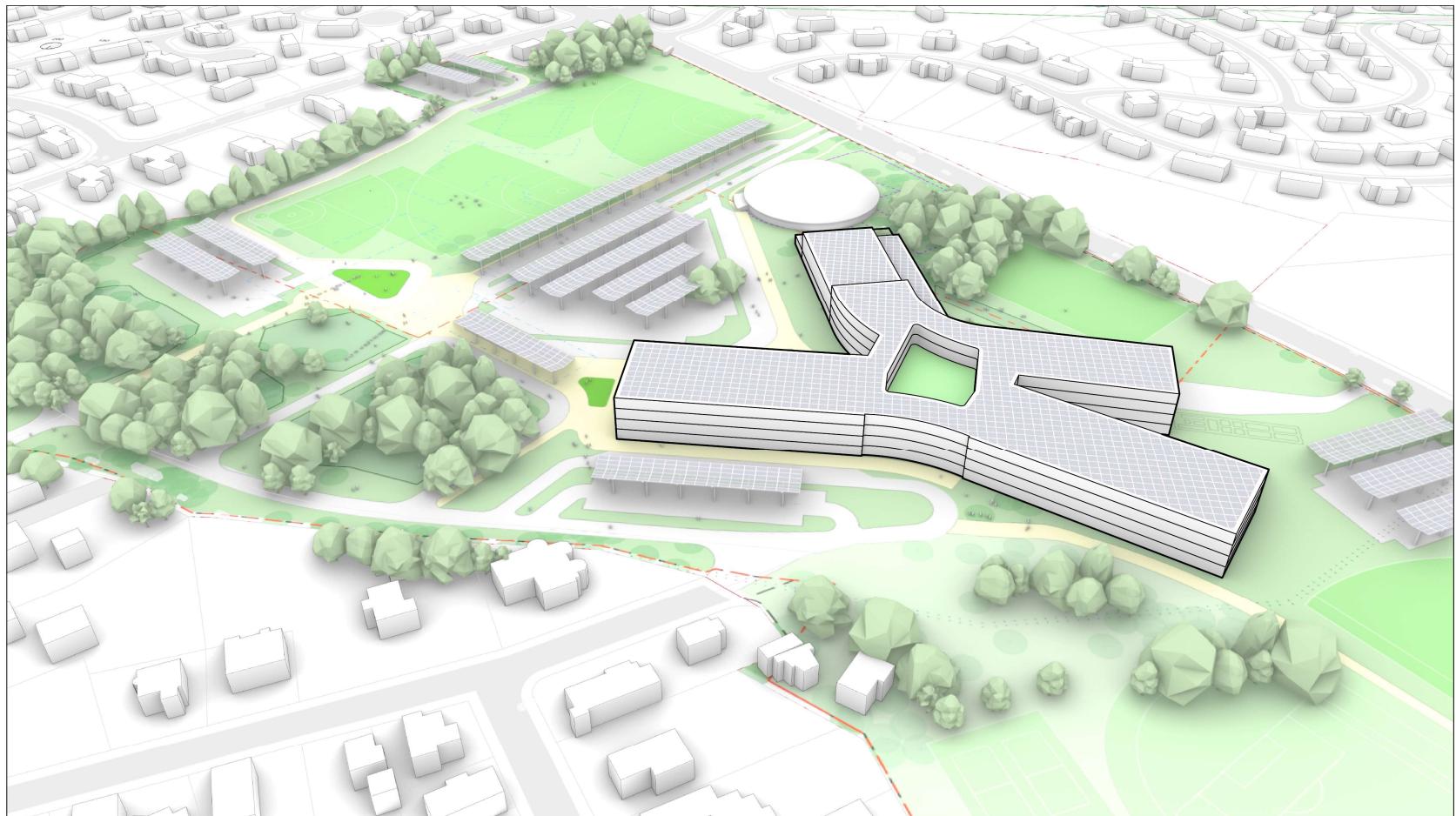
### Construction Alternatives: Educational Criteria

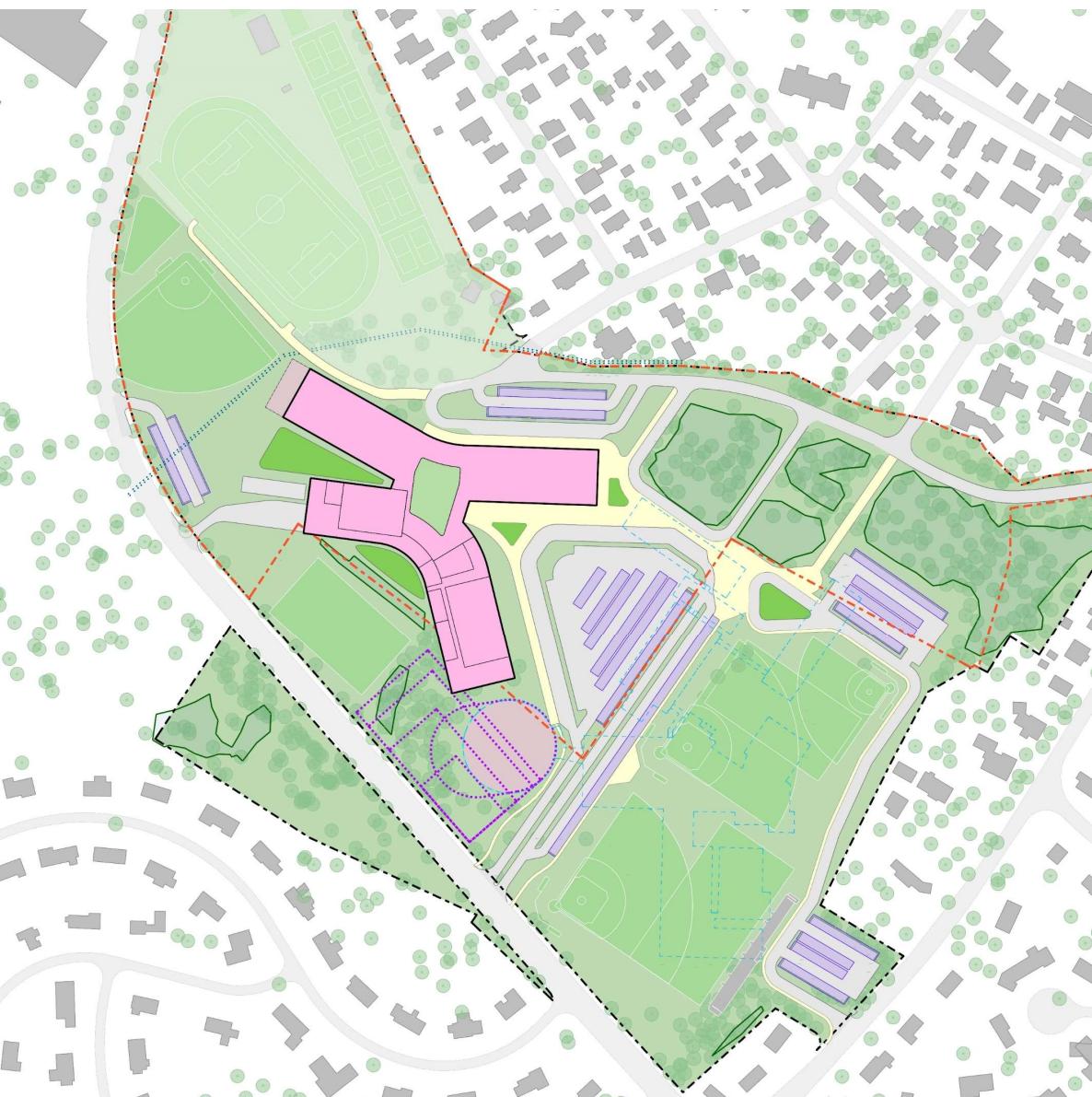


Topic	Branch	Braid	Bloom
Promotes Collaboration and Student Agency	+		
Interdisciplinary Adjacencies	+	+	
Flexibility of Organization	+		
Access to Hands-on Learning		+	
Ease of Wayfinding	+		
Outdoor Learning Opportunities		+	
Future Expansion Potential			+
Level 1 Programming			+
Possibilities for Inclusion			+

# NEW CONSTRUCTION ON FIELDS

## Option C.1d – ‘BRANCH’ Massing





## Option C.1d – 'BRANCH' Site Plan

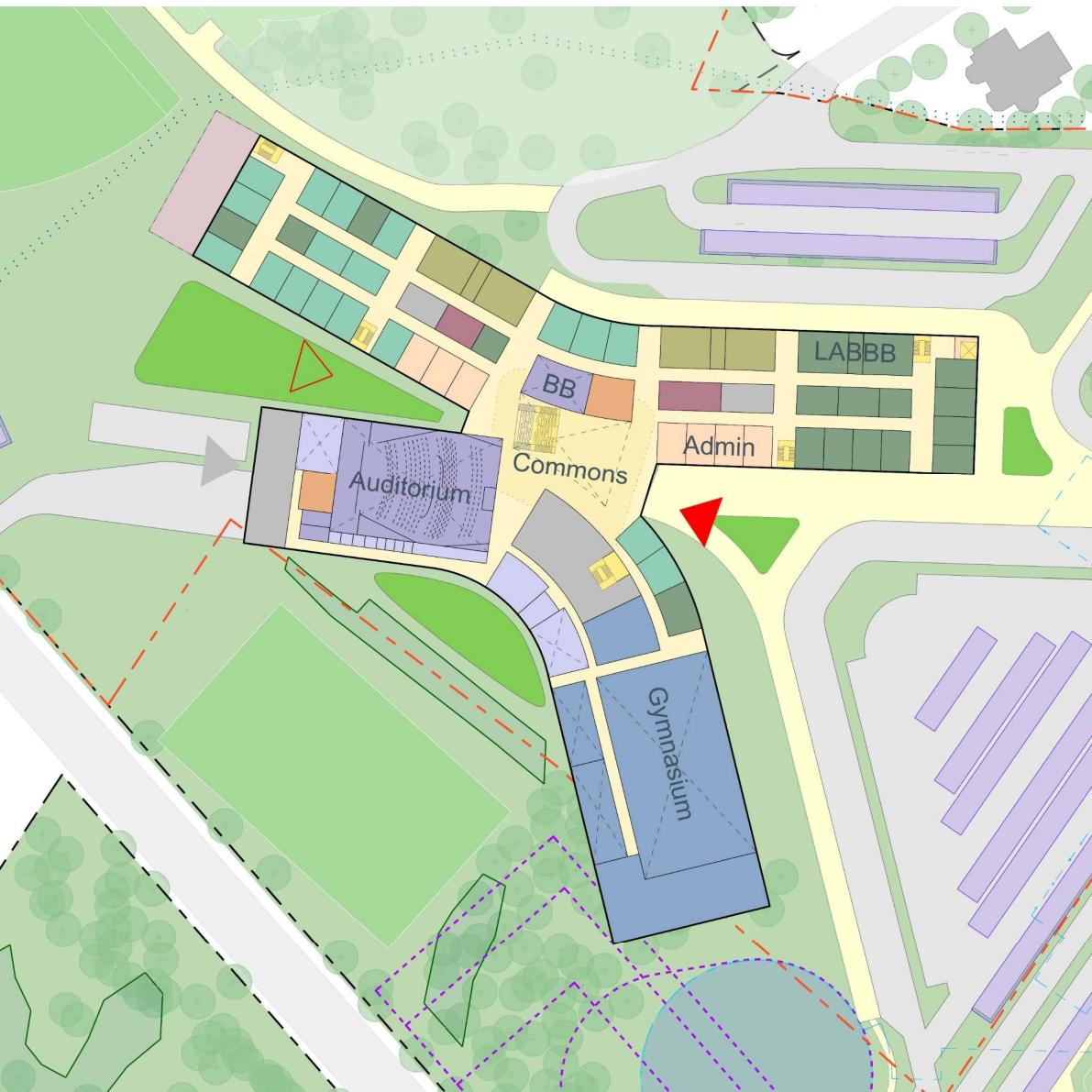
### Positives:

- Rational, efficient layout of program
- Good Solar Orientation
- Enclosed upper-level Courtyard
- Generous Entry at East

### Negatives:

- Lack of civic presence at Worthen Rd
- Tall massing adjacent to playground
- Attenuated outdoor space



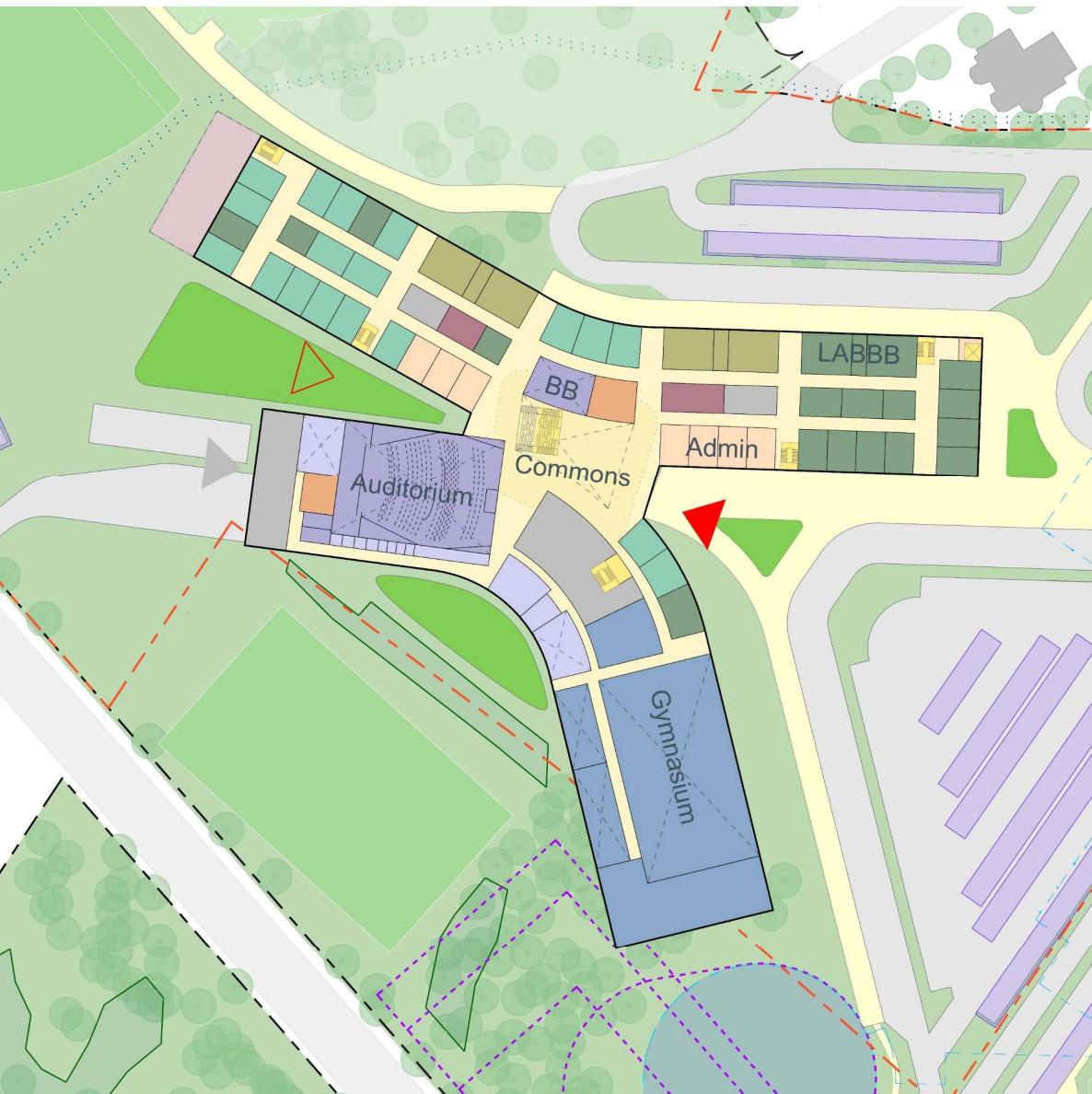


## Option C.1d – ‘BRANCH’ Ground Floor

Level 1 Footprint: 169,550 sf  
Floors: 4

- Bi-level Central Commons
- Gym at Level 1
- Media Center at Level 2
- Black Box at Level 2
- Stacked Innovation Labs adjacent to Dining Commons
- Outdoor courtyard at Level 3
- Gym may not be close to both main entry AND Field House



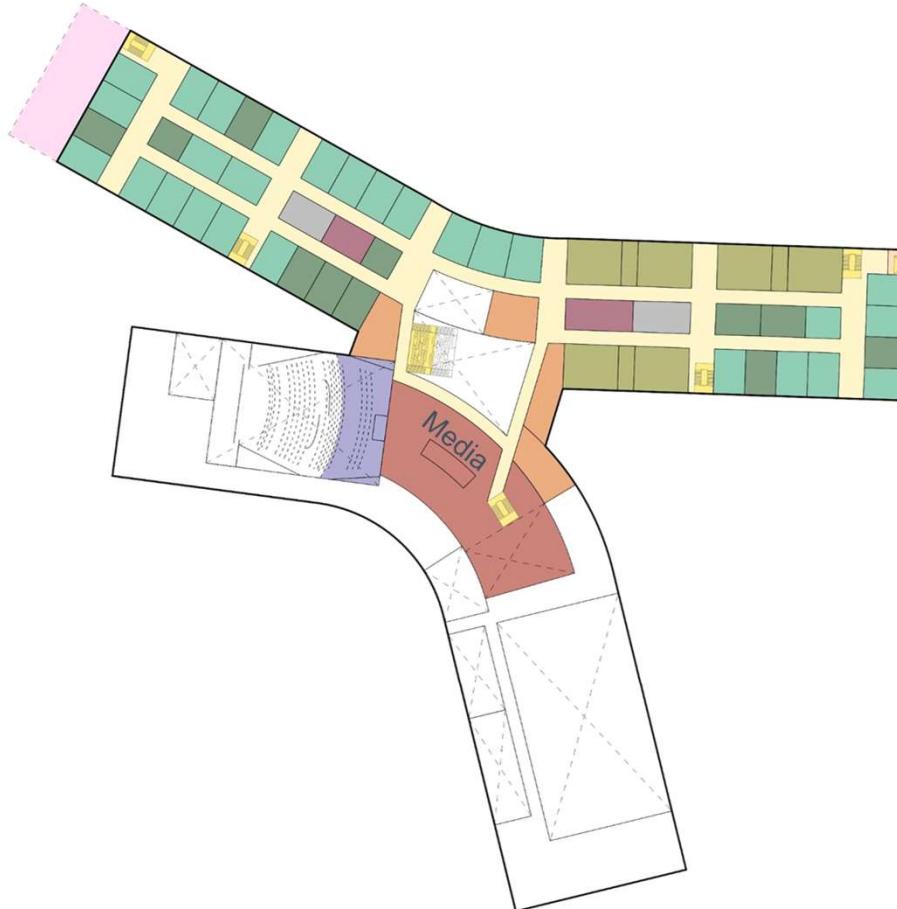


## Option C.1d – ‘BRANCH’ Educational Criteria

Topic	Grade
Promotes Collaboration/ Student Agency	+
Interdisciplinary Adjacencies	+
Flexibility of Organization	+
Access to Hands-on Learning	
Ease of Wayfinding	+
Outdoor Learning	
Future Expansion Potential	
Possibilities for Inclusion	



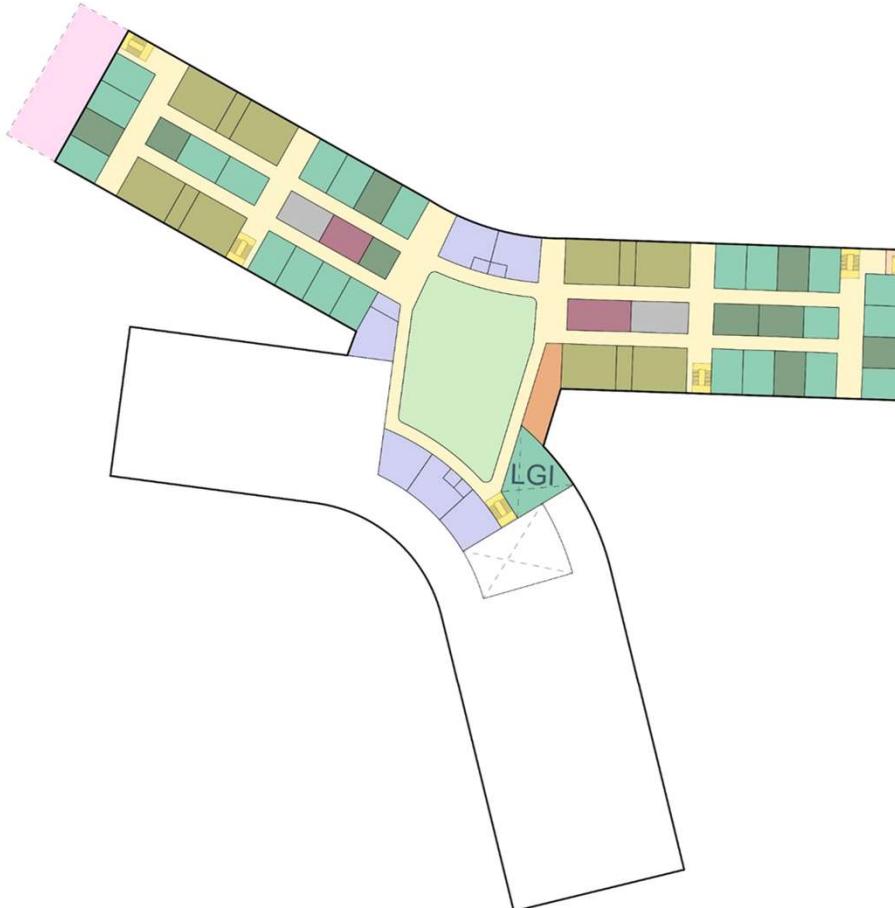
## Option C.1d – ‘BRANCH’ Level 2



- Core Academic
- Teacher Planning & Small Group Spaces
- Special Education
- Auditorium / Drama
- Art & Music
- Media Center
- Vocation & Technology
- Health & Physical Education
- Administration, Guidance, ALPHA, METCO, Central Offices
- Medical
- Kitchen, Restrooms, Custodial
- Commons
- Circulation
- Vertical Circulation
- Rooftop Open Space



## **Option C.1d – ‘BRANCH’ Level 3**

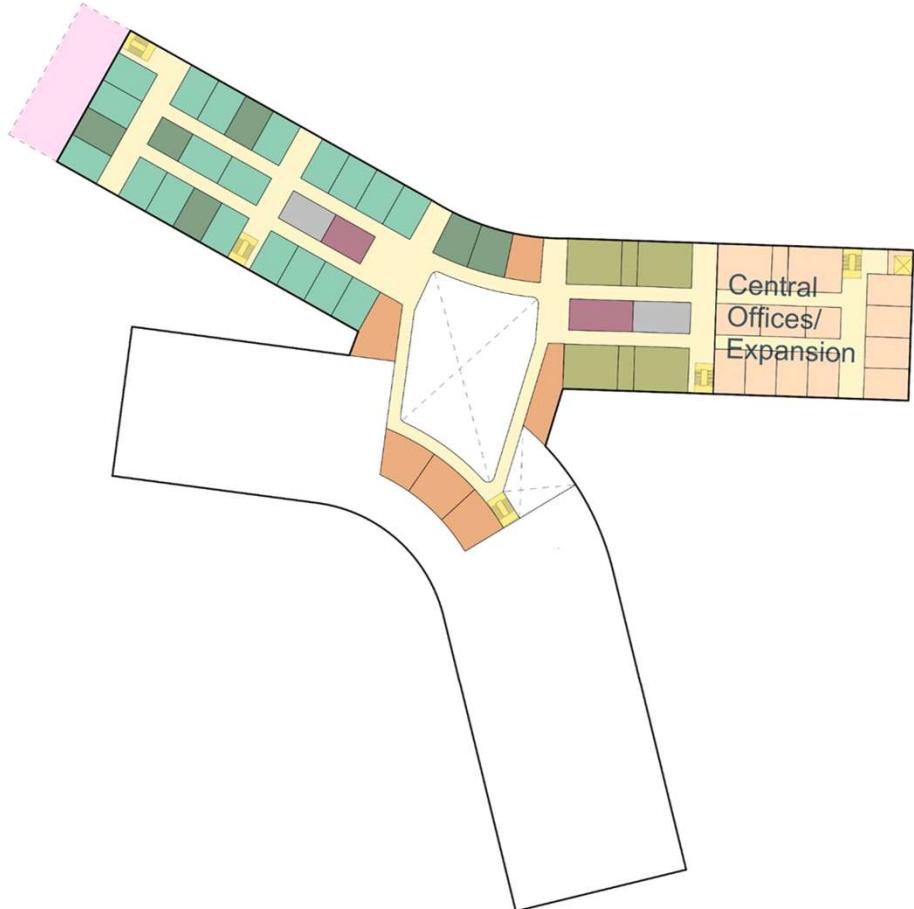


Rooftop Open S

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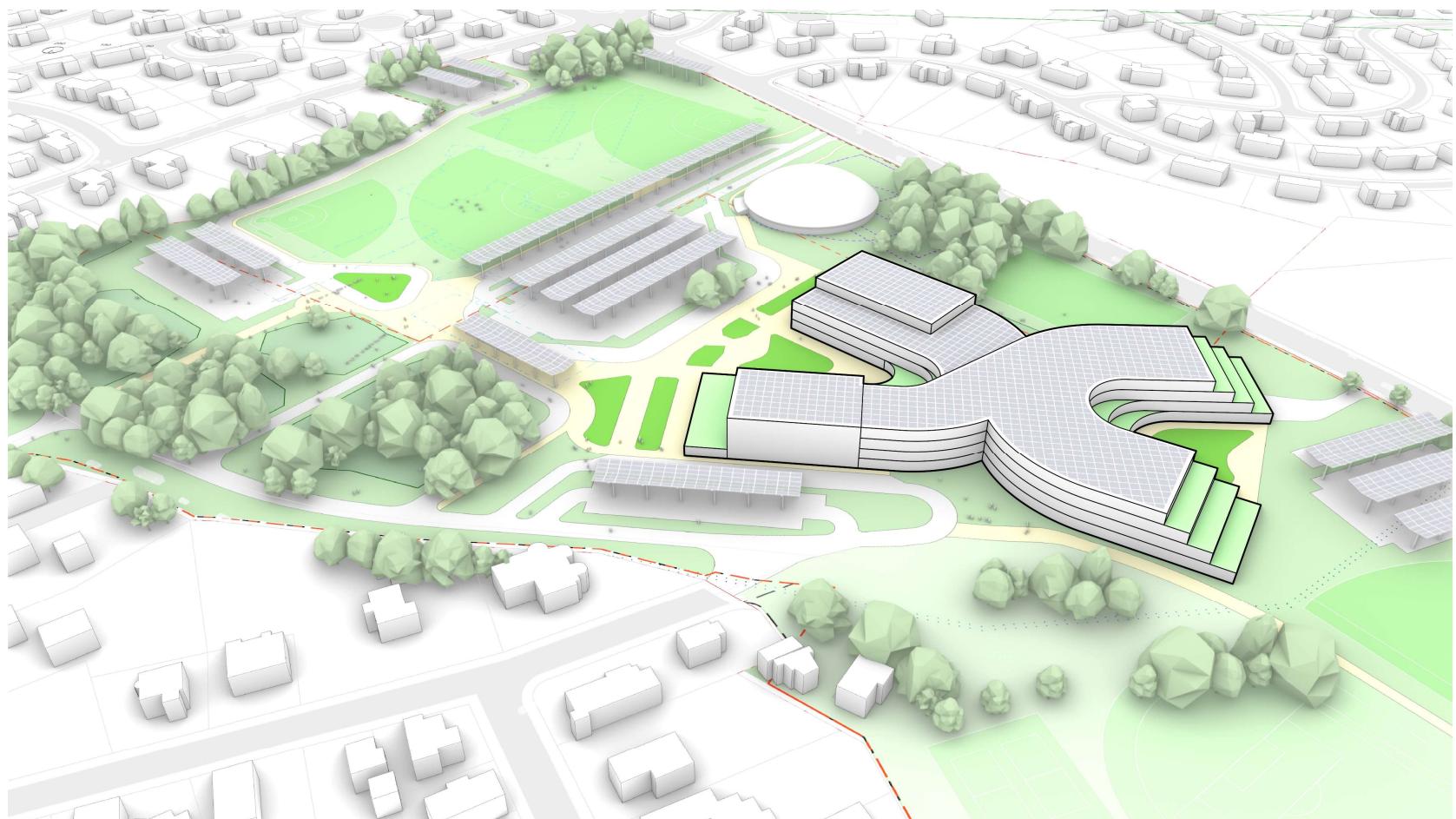
## **Option C.1d – ‘BRANCH’ Level 4**

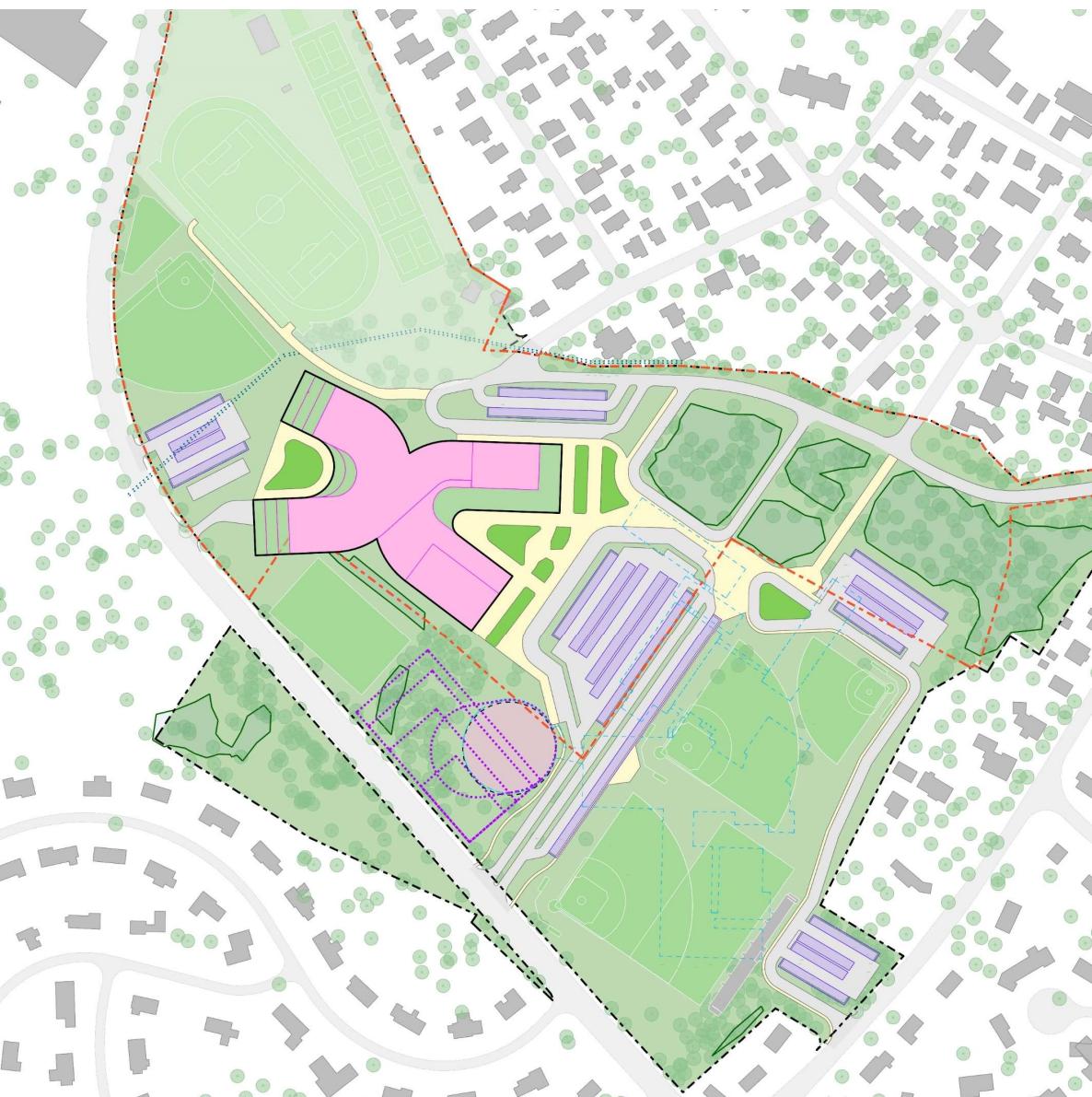
- Core Academic
  - Teacher Planning & Small Group Spaces
  - Special Education
  - Auditorium / Drama
  - Art & Music
  - Media Center
  - Vocation & Technology
  - Health & Physical Education
  - Administration, Guidance, ALPHA, METCO, Central Offices
  - Medical
  - Kitchen, Restrooms, Custodial
  - Commons
  - Circulation
  - Vertical Circulation
  - Rooftop Open Space



# NEW CONSTRUCTION ON FIELDS

## Option C.2b – ‘BRAID’ Massing





## Option C.2b – 'BRAID' Site Plan

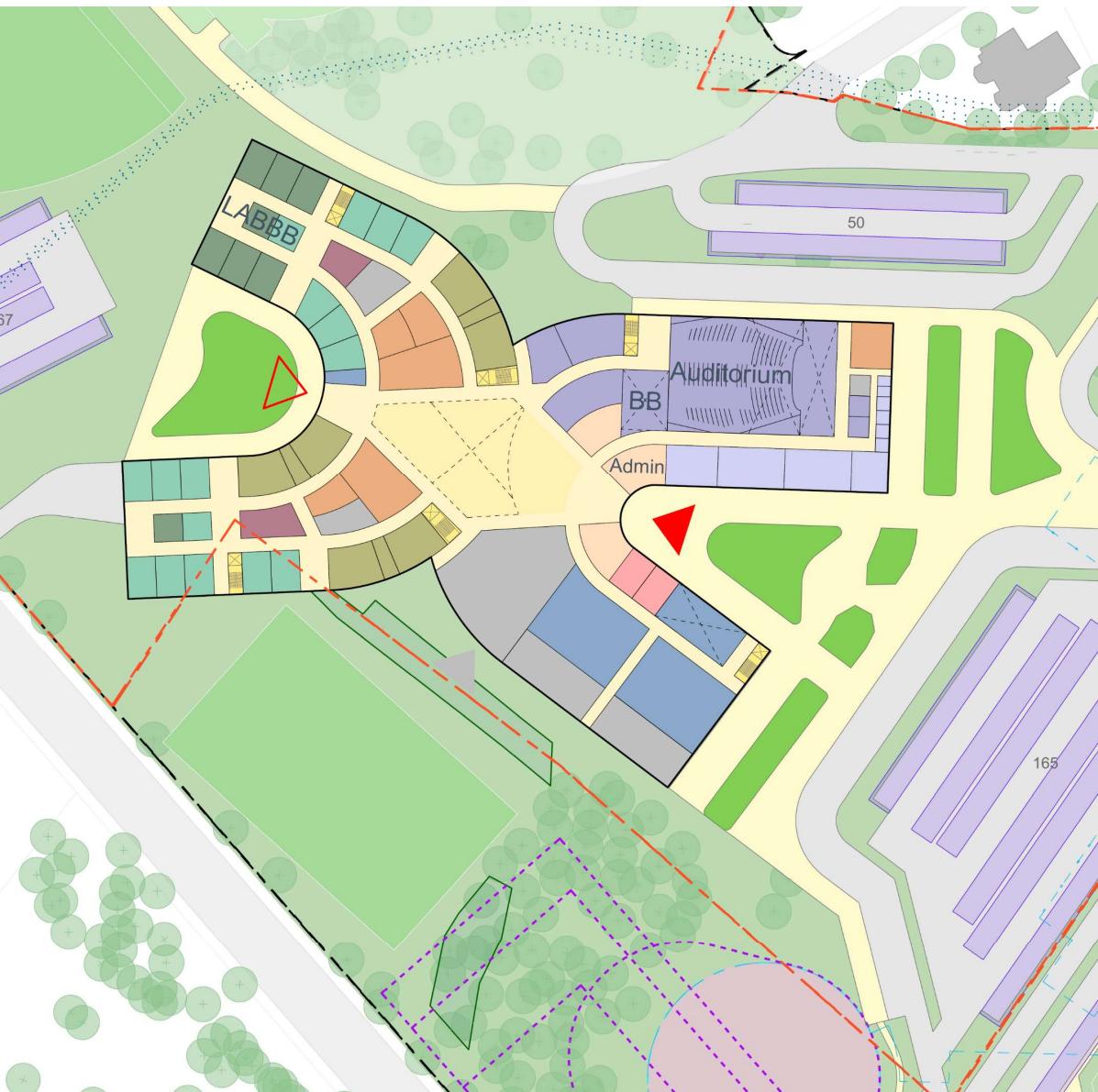
### Positives:

- Rational, efficient layout of program
- Good Solar Orientation
- Enclosed upper-level Courtyard
- Generous Entry at East
- Potential for outdoor classrooms

### Negatives:

- No Courtyard within building
- Entry not visible at Worthen Rd
- Tall massing adjacent to playground
- Gym may not be close to both main entry AND Field House





## Option C.2b – ‘BRAID’ Ground Floor

Level 1 Footprint: 168,365 sf  
Floors: 4

- Bi-level Central Commons
- Gym at Level 2
- Media Center at Level 3
- Black Box at Level 2
- Distributed Innovation Labs, some adjacent to Dining Commons
- Outdoor terraces at academic wings



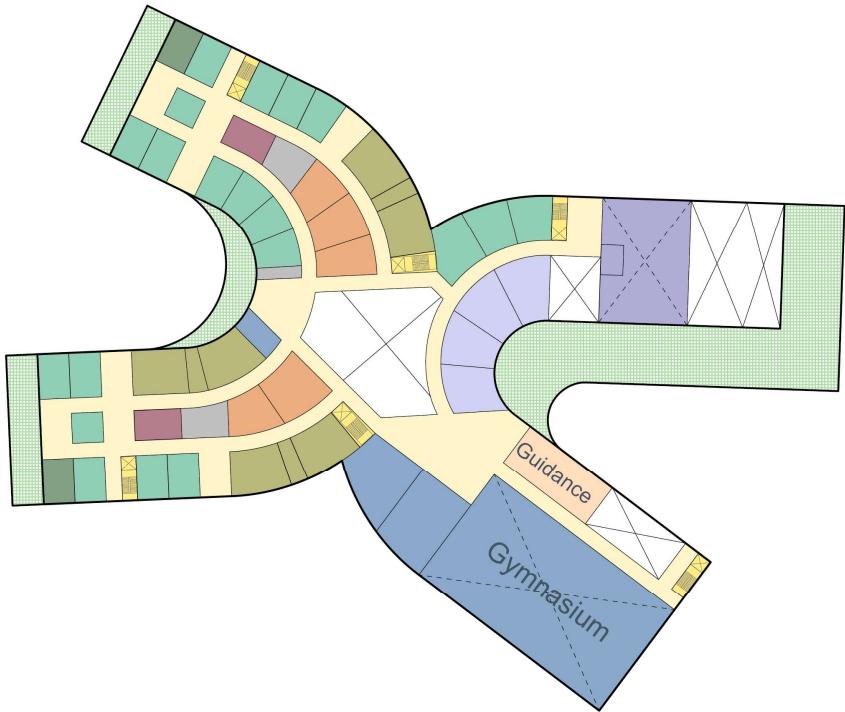


## Option C.2b – ‘BRAID’ Educational Criteria

Topic	Grade
Promotes Collaboration/ Student Agency	
Interdisciplinary Adjacencies	+
Flexibility of Organization	
Access to Hands-on Learning	+
Ease of Wayfinding	
Outdoor Learning	+
Future Expansion Potential	
Possibilities for Inclusion	



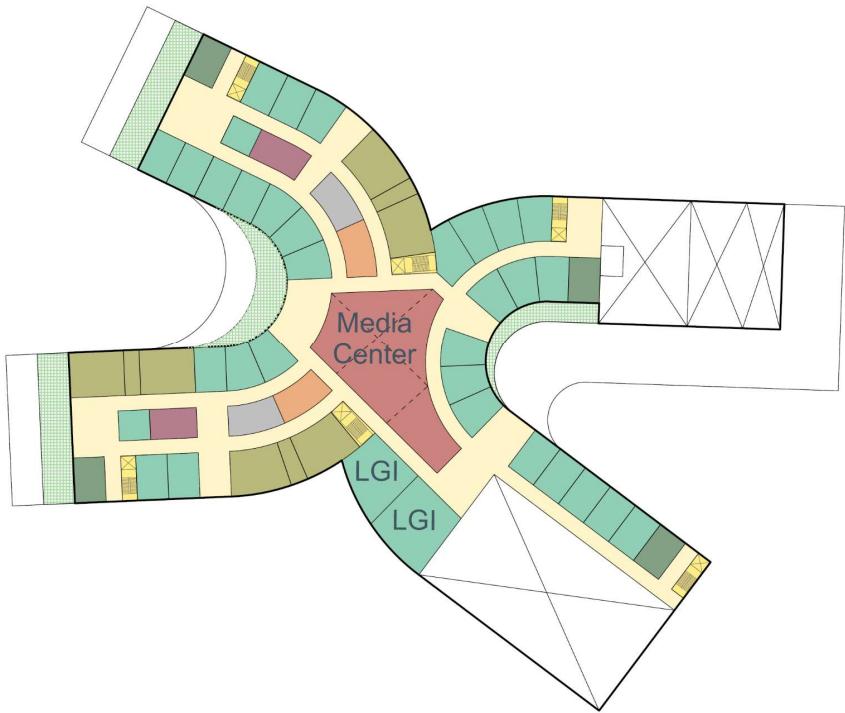
## Option C.2b – ‘BRAID’ Level 2



- Core Academic
- Teacher Planning & Small Group Spaces
- Special Education
- Auditorium / Drama
- Art & Music
- Media Center
- Vocation & Technology
- Health & Physical Education
- Administration, Guidance, ALPHA, METCO, Central Offices
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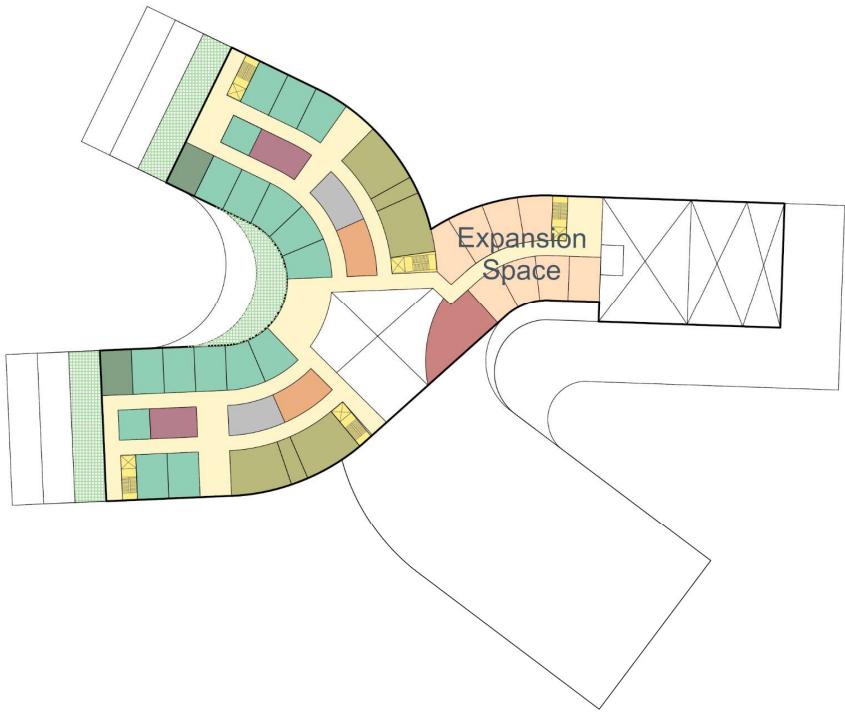
## Option C.2b – ‘BRAID’ Level 3



- Core Academic
- Teacher Planning & Small Group Spaces
- Special Education
- Auditorium / Drama
- Art & Music
- Media Center
- Vocation & Technology
- Health & Physical Education
- Administration, Guidance, ALPHA, METCO, Central Offices
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- Kitchen, Restrooms, Custodial
- Commons
- Circulation
- Vertical Circulation
- Rooftop Open Space



## Option C.2b – ‘BRAID’ Level 4

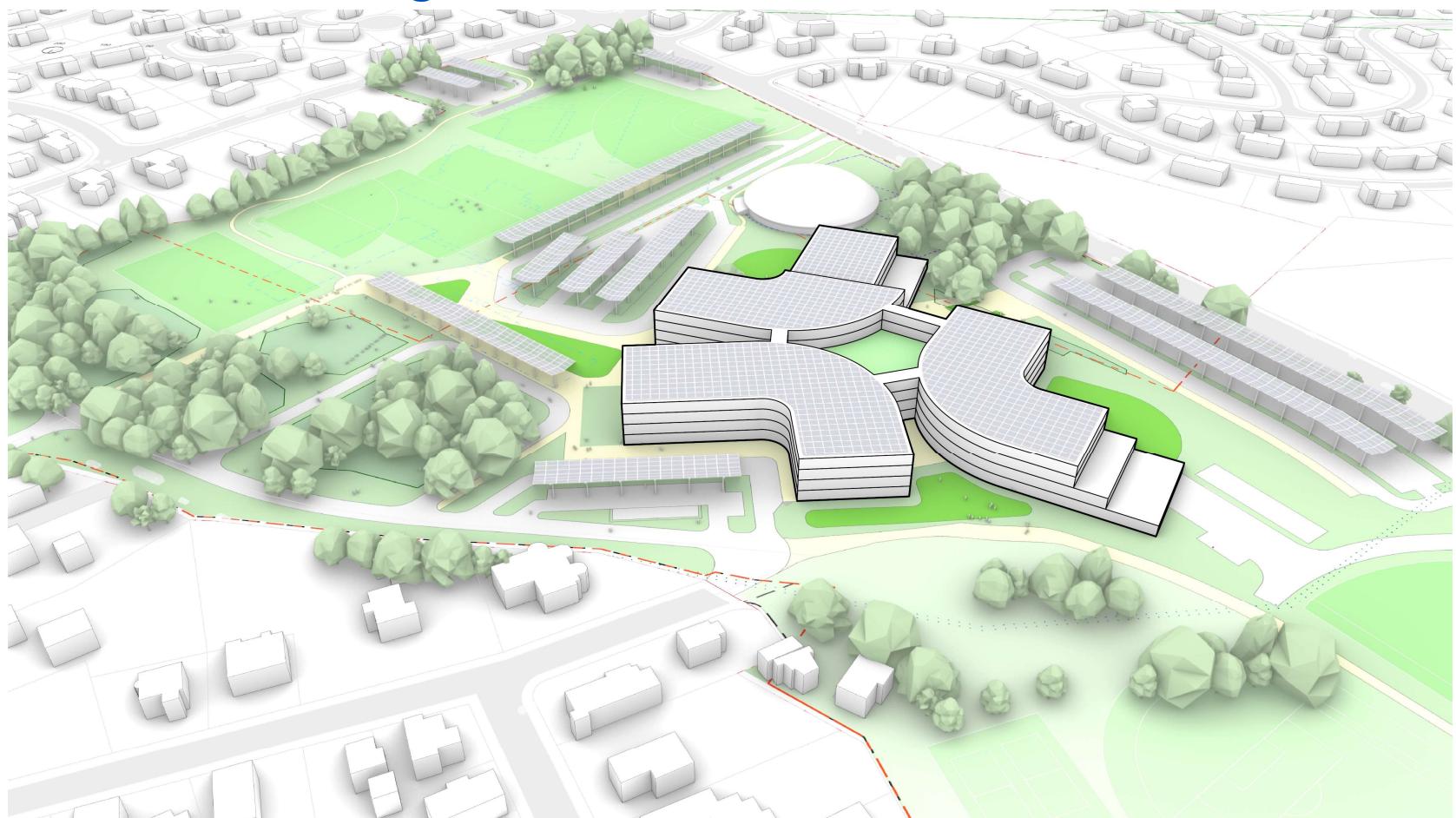


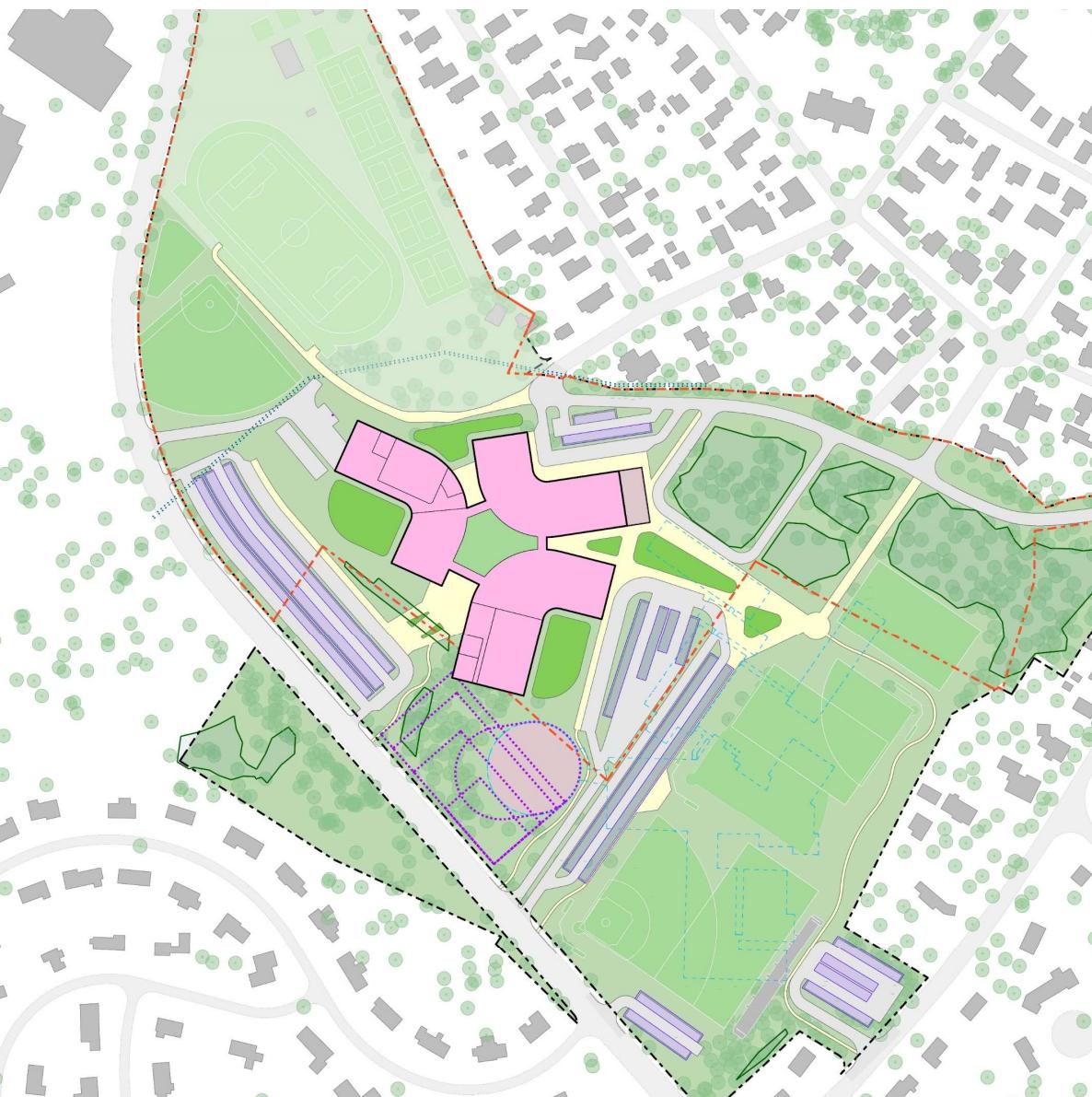
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- Auditorium / Drama
- Art & Music
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- Vocation & Technology
- Health & Physical Education
- Administration, Guidance, ALPHA, METCO, Central Offices
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# NEW CONSTRUCTION ON FIELDS

## Option C.5b – ‘BLOOM’ Massing





## Option C.5b – ‘BLOOM’ Ground Floor

### Positives:

- Level 1 program adjacencies
- Flexibility of program organization
- Good Civic Presence
- Visibility of main entry from Worthen Rd
- Scaled down massing at adjacent playground
- Potential for outdoor classrooms

### Negatives:

- Large number of PV canopies between building and Worthen Rd





## Option C.5b – ‘BLOOM’ Ground Floor

Level 1 Footprint: 173,013 sf

Floors: 4

- Bi-level Central Commons
- Gym at Level 1
- Media Center at Level 2
- Black Box at Level 2
- Stacked Innovation Labs adjacent to Dining Commons
- Outdoor courtyard at Level 3



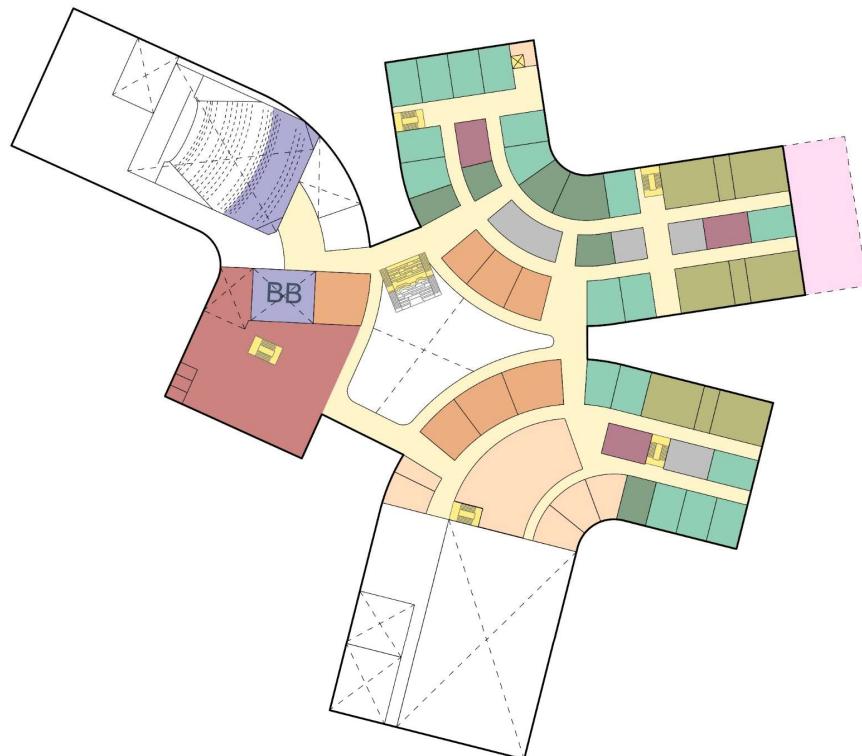


## Option C.5b – ‘BLOOM’ Educational Criteria

Topic	Grade
Promotes Collaboration/ Student Agency	
Interdisciplinary Adjacencies	
Flexibility of Organization	
Access to Hands-on Learning	
Ease of Wayfinding	
Outdoor Learning	+
Future Expansion Potential	+
Possibilities for Inclusion	+



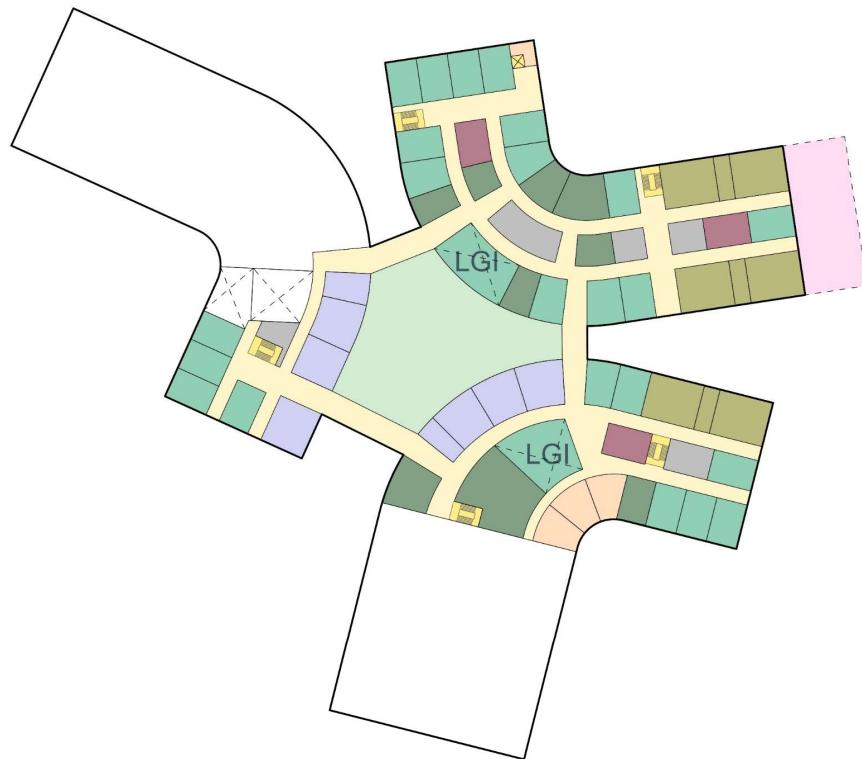
## Option C.5b – ‘BLOOM’ Level 2



- Core Academic
- Teacher Planning & Small Group Spaces
- Special Education
- Auditorium / Drama
- Art & Music
- Media Center
- Vocation & Technology
- Health & Physical Education
- Administration, Guidance, ALPHA, METCO, Central Offices
- Medical
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- Circulation
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## Option C.5b – ‘BLOOM’ Level 3



- Core Academic
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- Special Education
- Auditorium / Drama
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- Vertical Circulation
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## Option C.5b – ‘BLOOM’ Level 4



- Core Academic
- Teacher Planning & Small Group Spaces
- Special Education
- Auditorium / Drama
- Art & Music
- Media Center
- Vocation & Technology
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- Commons
- Circulation
- Vertical Circulation
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## Introduction: Choose a “New Construction on Fields” Option

### Construction Alternatives: Concept Facts



Concept Facts	C.1d Branch	C.2b Braid	C.5b Bloom
Size of Site		57.8 acres	
Northern Recreation Area		12.2 acres	
Wetlands		4.1 acres	
Potential Site Area for LHS Development		41.5 acres	
Athletic Fields & Outdoor Space		24.6 acres	
C1-Varsity Baseball Field		Relocated	
C2-Varsity Softball Field		Reconstructed	
C3-JV Baseball Field		Relocated	
C4-Little League Diamond		Relocated	
C5-Crumb Football Field		Relocated	
C6-Worthen Practice Field		Relocated	
C7-Multi Use Rectangle		Relocated	
C8-Multi Use Cricket		Relocated	
School Building & Central Office Gross Square Feet (GSF)		461,516	
Number of Stories		4	
School Building Footprint (SF)	169,550	168,365	173,013
Project Cost	\$625,000,000	\$600,000,000	\$620,000,000
Project Duration (Base Program Only)		4 Years	

## Introduction: Choose a “New Construction on Fields” Option

### Construction Alternatives: Criteria Matrix

Rating Scale: Good Fair Poor



Topic	C.1d Branch	C.2b Braid	C.5b Bloom
Disruption to Students			
Academic Adjacencies			
Connection to Outdoors			
Organizational Flexibility			
Facilitates Inclusive Interactions			
Site Circulation			
Displacement of Fields			
Future Expansion			
Civic Presence			
Construction Duration			

## Introduction: Choose a “New Construction on Fields” Option

### Construction Alternatives: Criteria Matrix

Rating Scale: Good (Green) | Fair (Yellow) | Poor (Red)



Topic	C.1d Branch	C.2b Braid	C.5b Bloom
Disruption to Students	Green	Green	Green
Academic Adjacencies	Green	Green	Green
Connection to Outdoors	Green	Green	Green
Organizational Flexibility	Green	Green	Green
Facilitates Inclusive Interactions	Green	Green	Green
Site Circulation	Yellow	Yellow	Green
Displacement of Fields	Red	Red	Red
Future Expansion	Green	Green	Green
Civic Presence	Yellow	Green	Green
Construction Duration	Green	Green	Green

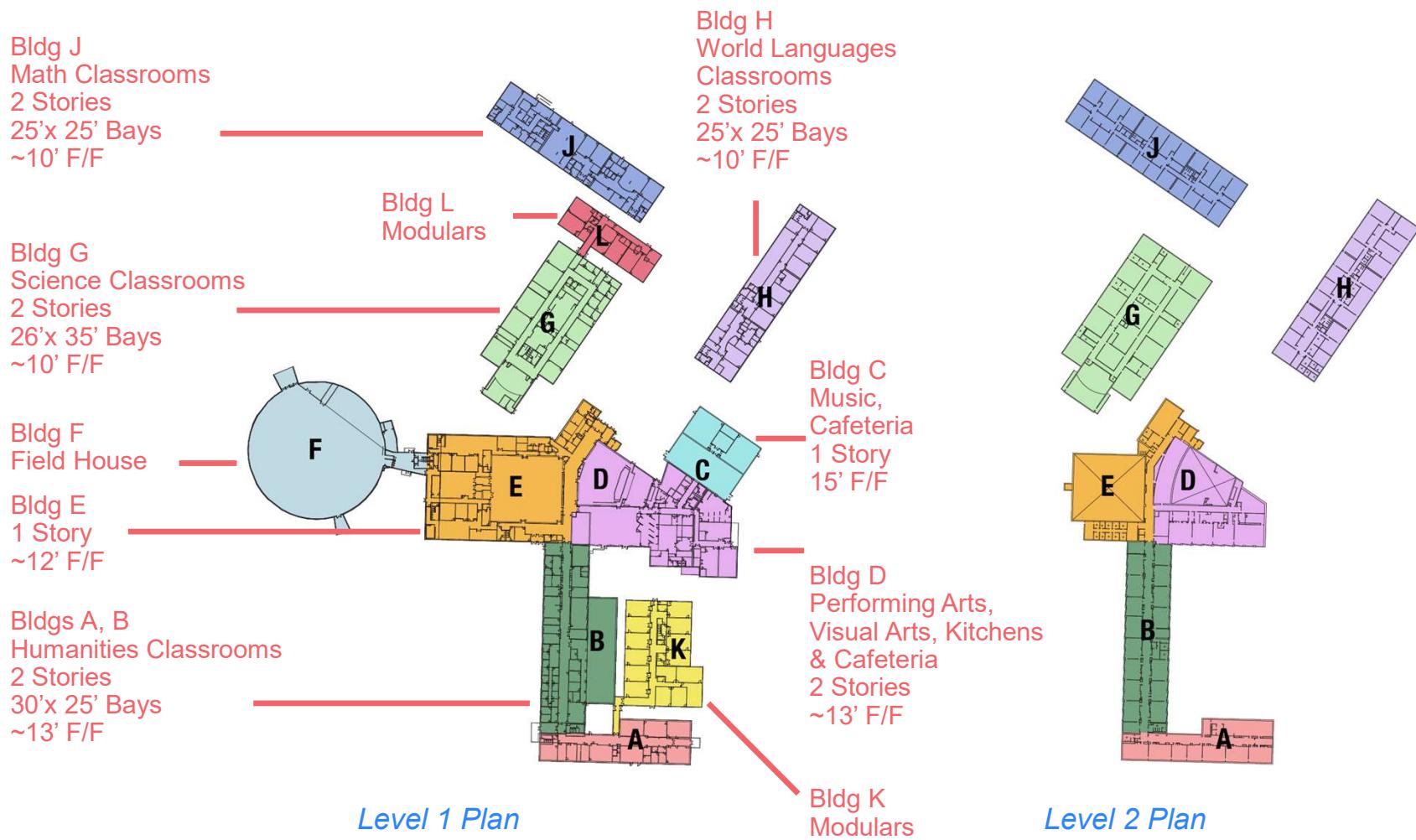
# Introduce: Choose a “Phased in Place” Options

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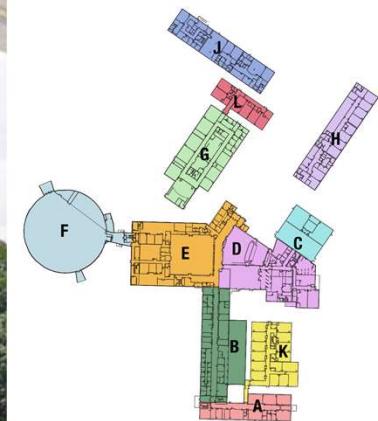
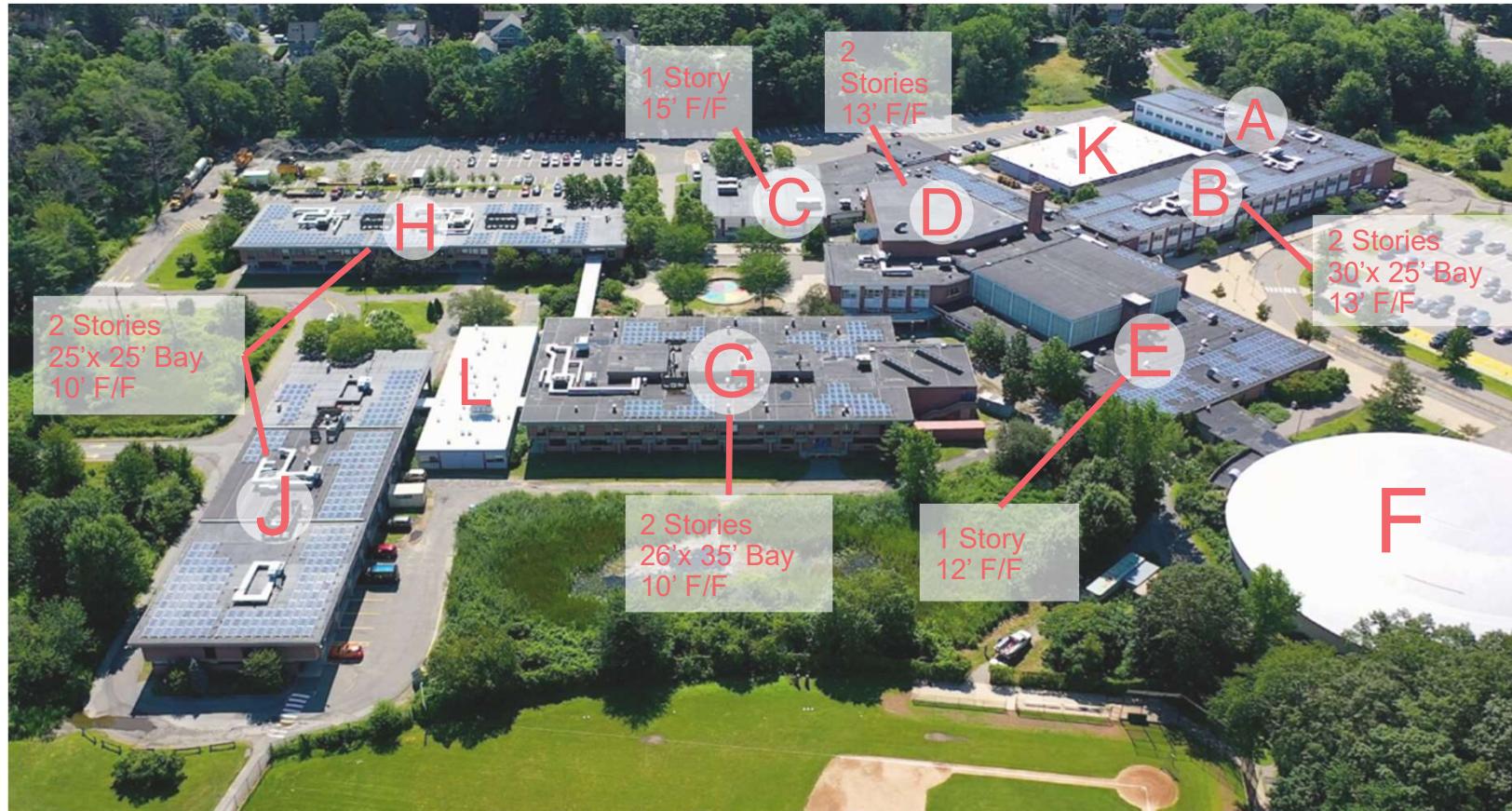
## EXISTING BUILDINGS – PROSPECTS FOR RENOVATION



## EXISTING BUILDINGS – PROSPECTS FOR RENOVATION



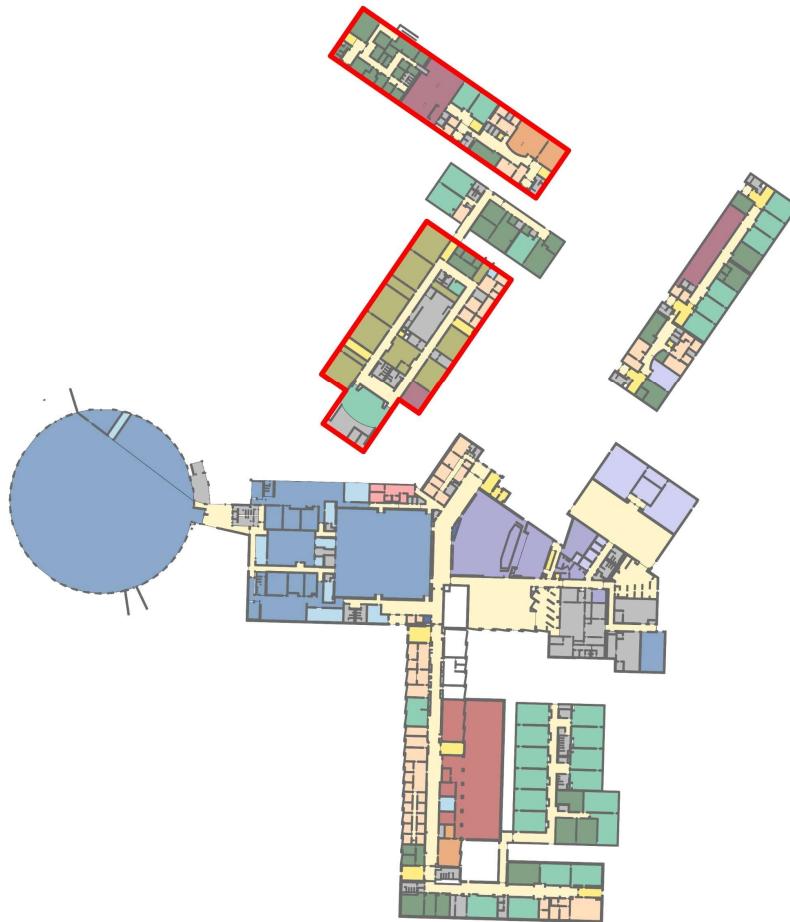
## EXISTING BUILDINGS – PROSPECTS FOR RENOVATION



# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

## B.1 Approach:

- Renovate 1960's Buildings G and J  
~88,000 sf
- Use larger structural bays of Science Building G for new classrooms
- Use undersized structural bays of Math Building J for small spaces such as offices
- Enable construction of new Commons/Kitchen/Custodial and Performing Arts with early demolition of World Languages Building H
- Core building services in Building D must be maintained until new plant can be constructed
- Includes new 18,000 sf Gymnasium

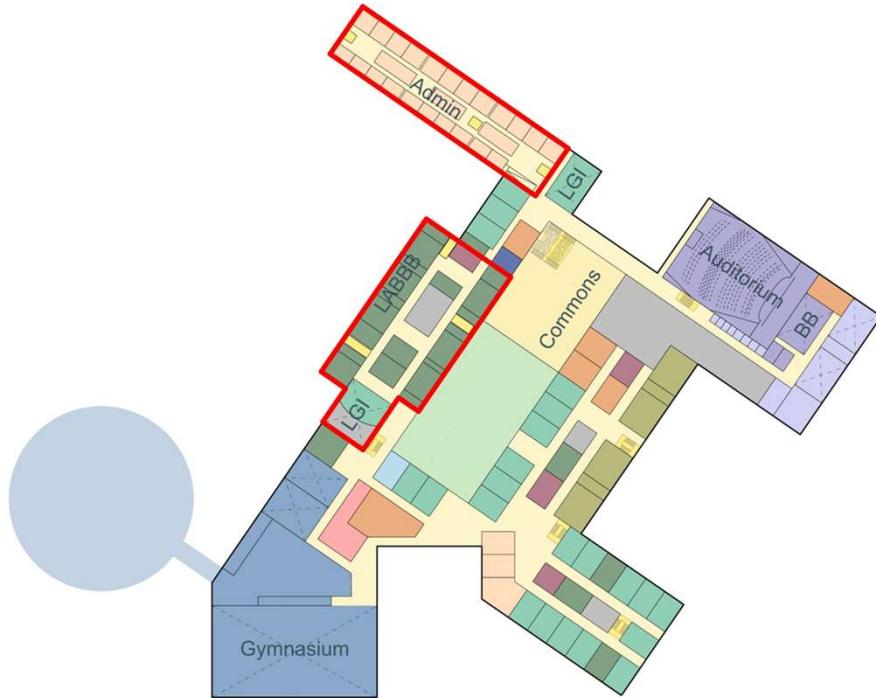


*Existing Plan*

# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

## B.1 Approach:

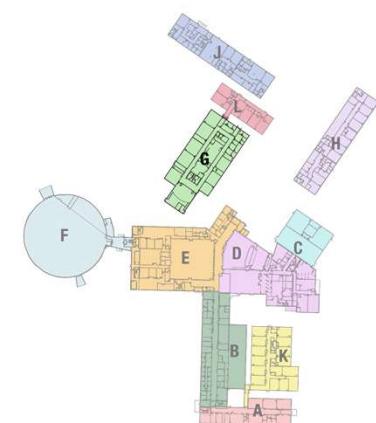
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*B.1 Plan*

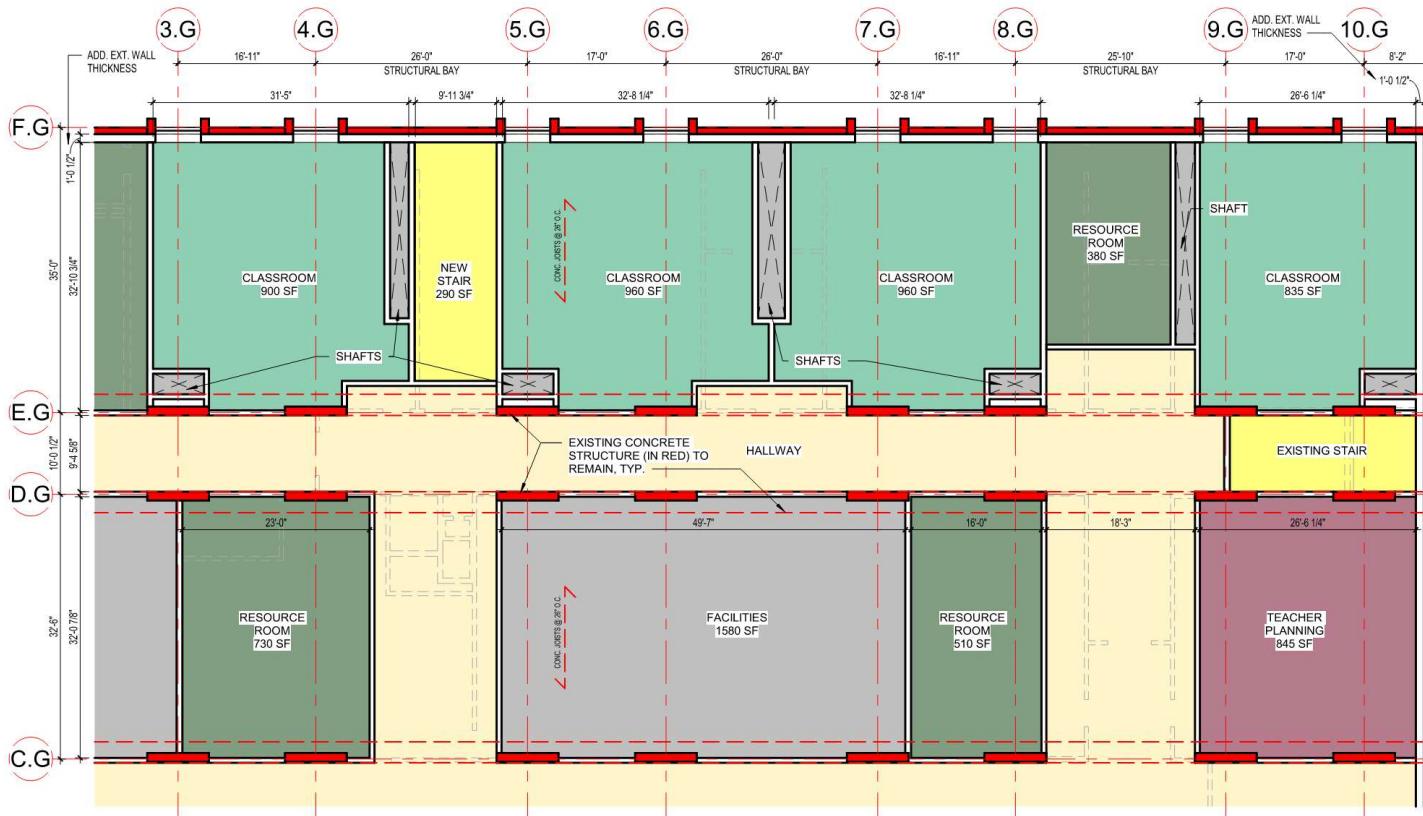
# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

## Building G – Structural Bay Analysis – Level 2 Existing Partial Plan



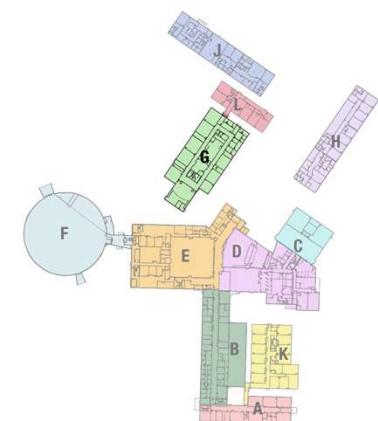
# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

## Building G – Structural Bay Analysis – Level 2 Partial Plan



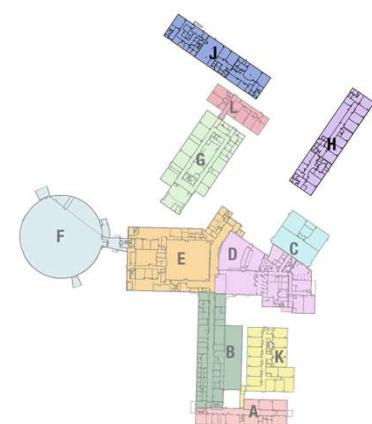
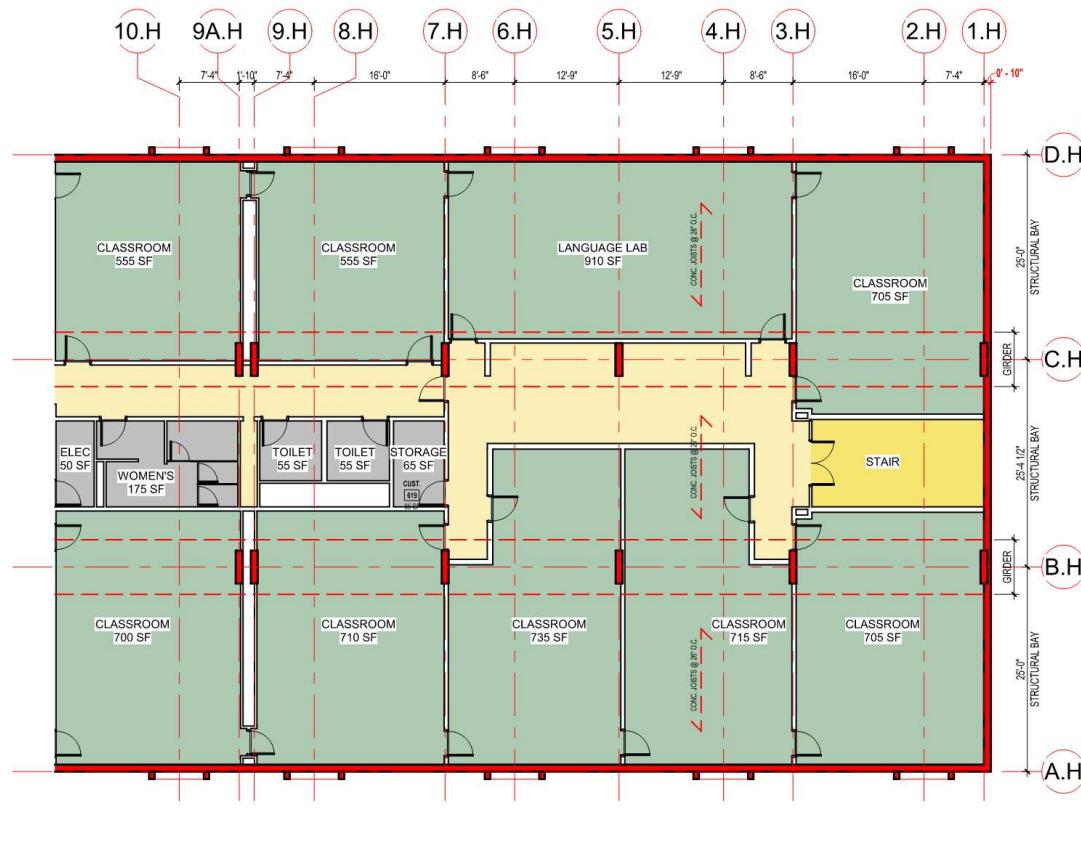
Takeaways:

- Science Classroom bays may be reconfigured for General Education classrooms, SPED Resource Rooms and Teacher Planning
- New shafts may be introduced for fresh air distribution from roof
- Exterior walls thickened to meet thermal performance criteria



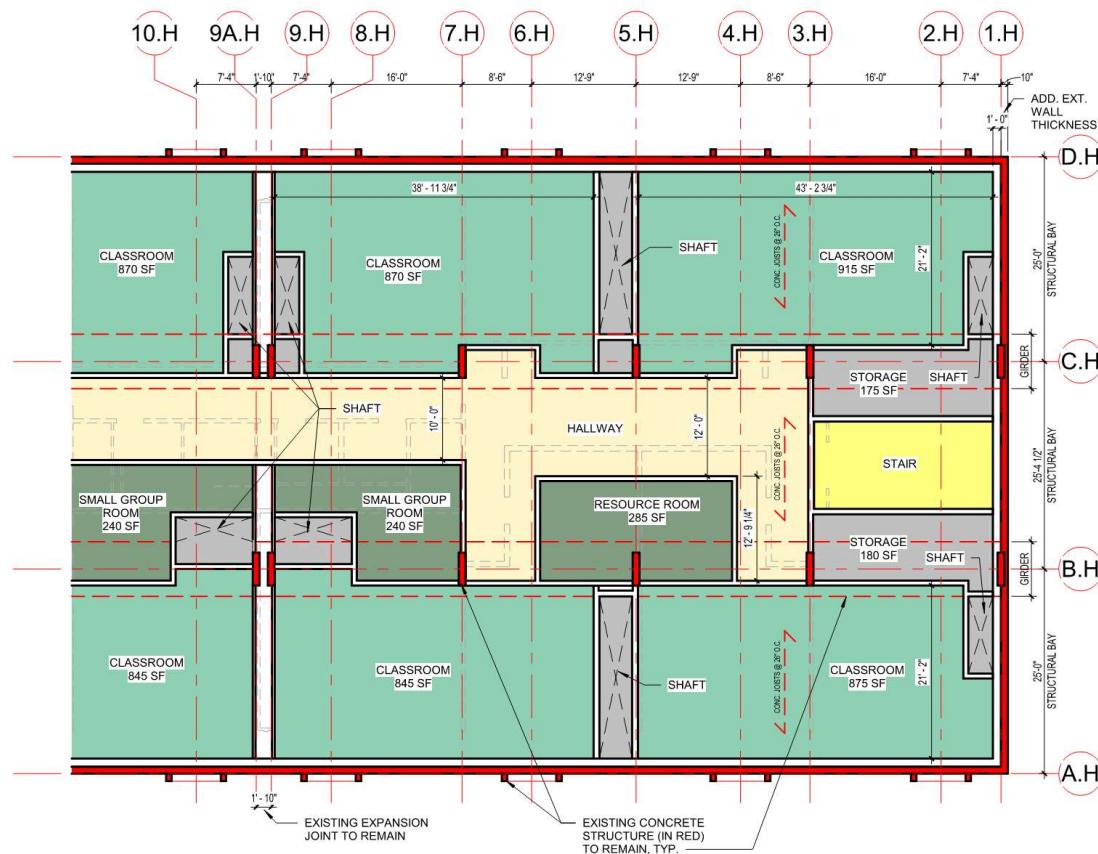
# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

## Buildings H & J – Structural Bay Analysis – Level 2 Existing Partial Plan



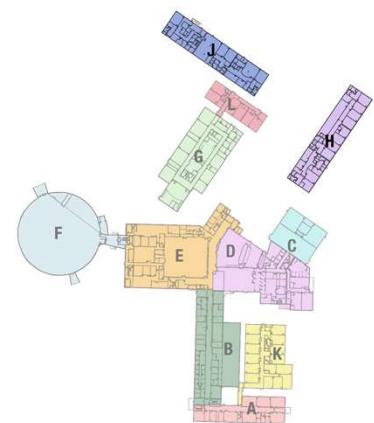
# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

## Buildings H & J – Structural Bay Analysis – Level 2 Partial Plan



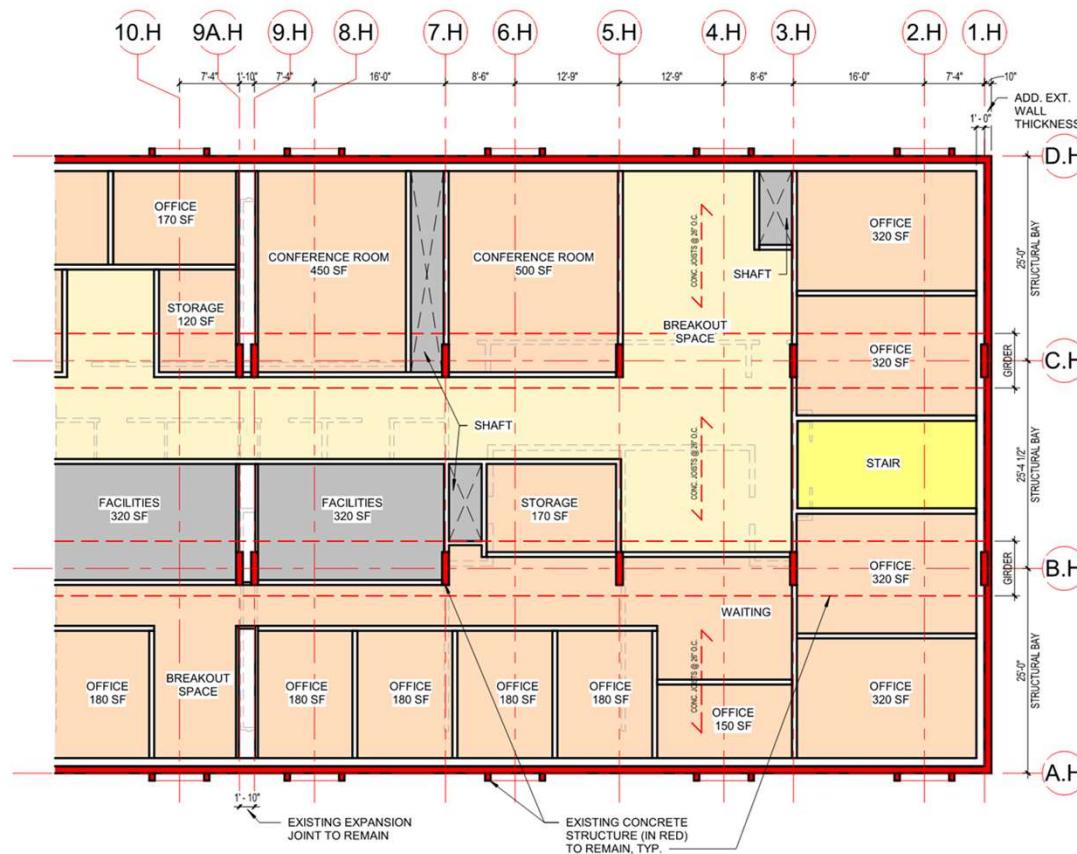
## Takeaways:

- Gut renovation allows enlarging classrooms for General Education use, however room proportion would be slightly elongated
- New shafts may be introduced for fresh air distribution from roof
- Exterior walls thickened to meet thermal performance criteria
- Central zone may not yield useful geometry for SPED, Teacher Planning or other support spaces



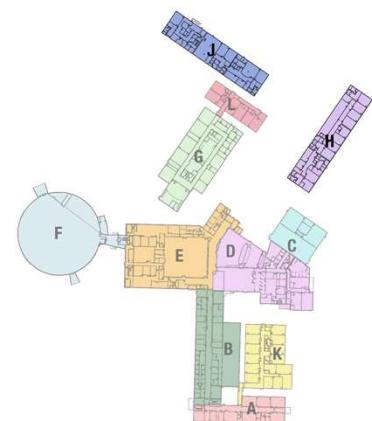
# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

## Building H & J – Structural Bay Analysis – Level 2 Partial Plan



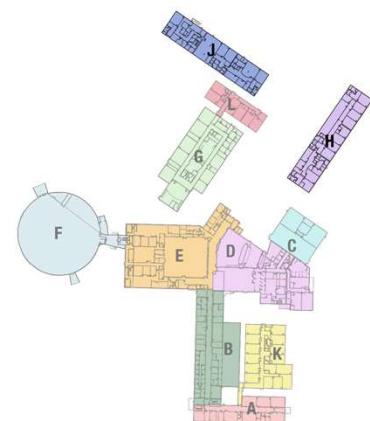
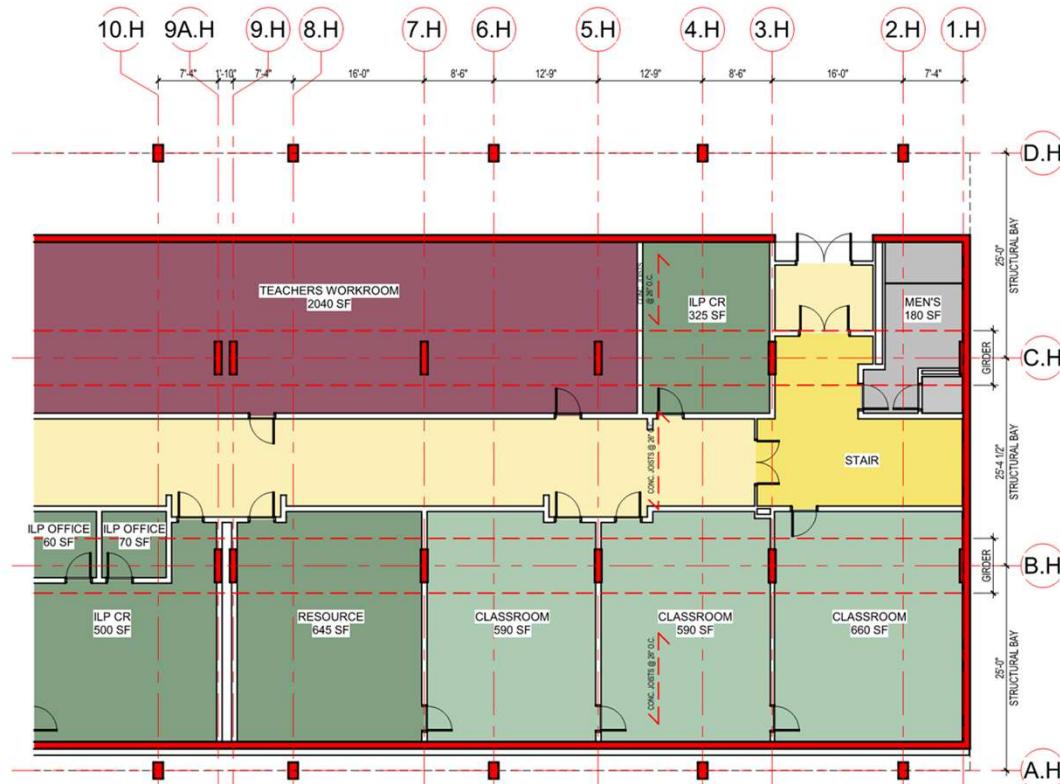
## Takeaways:

- Renovation for office program layout is possible at Level 2
- New shafts may be introduced for fresh air distribution from roof
- Exterior walls thickened to meet thermal performance criteria



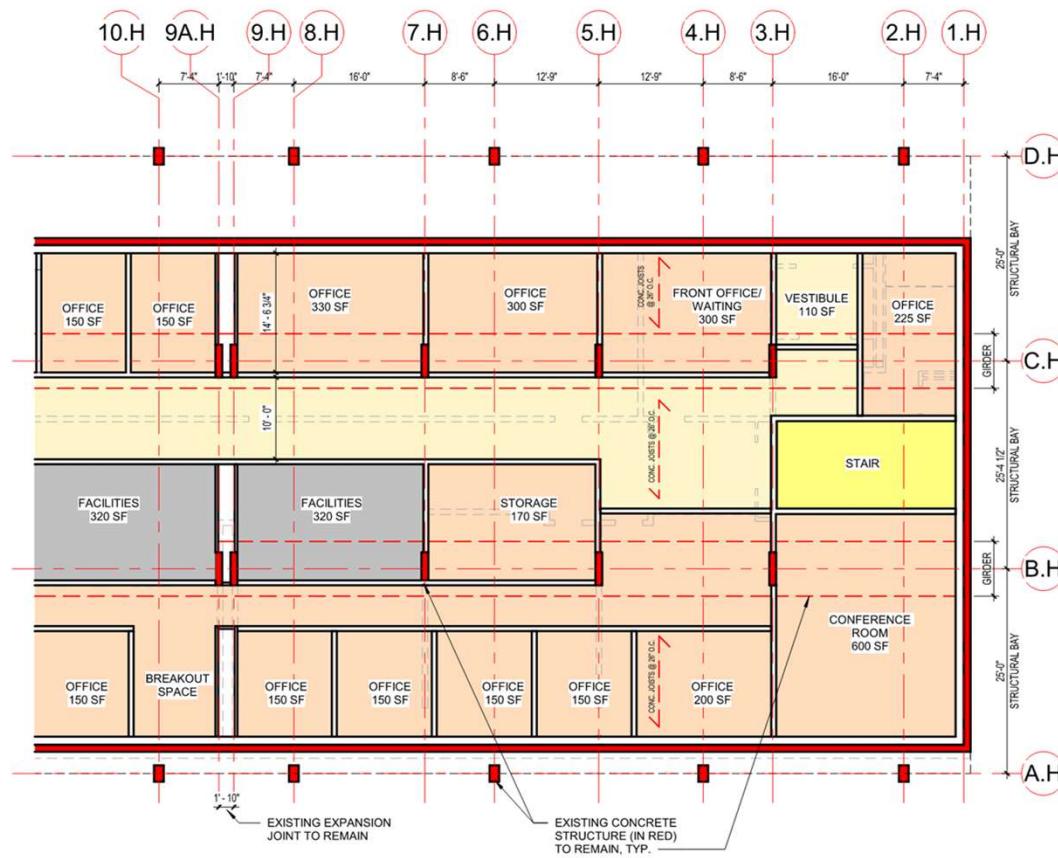
# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

## Building H & J – Structural Bay Analysis – Level 1 Existing Partial Plan



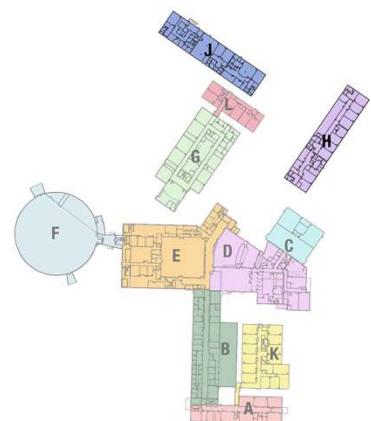
# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

## Building H & J – Structural Bay Analysis – Level 1 Partial Plan



Takeaways:

- Renovation for office program layout is possible at Level 1
- Note: Building J Level 1 is 3' lower than the rest of the campus



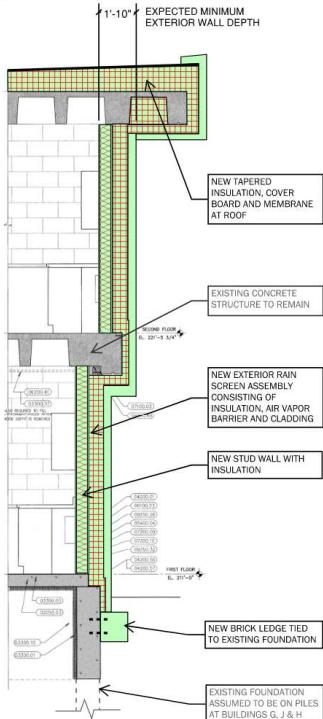
# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

## Conceptual Wall Sections

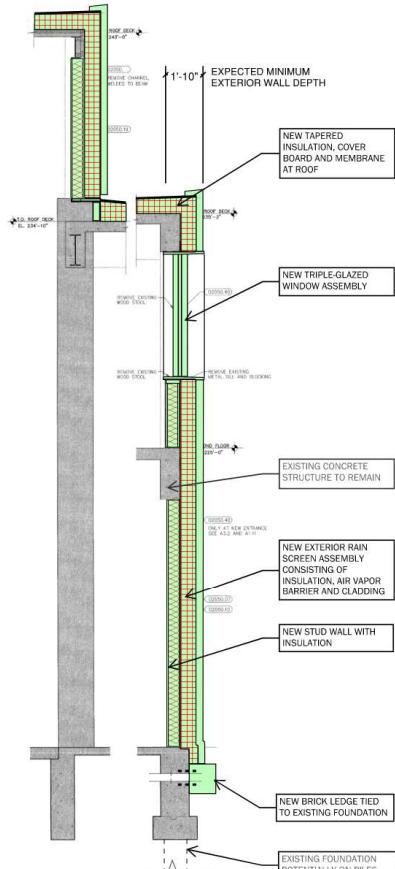
BUILDING G WALL SECTION  
(H & J ARE SIMILAR)

**EXPECTED EXTERIOR RENOVATION REQUIREMENTS:**

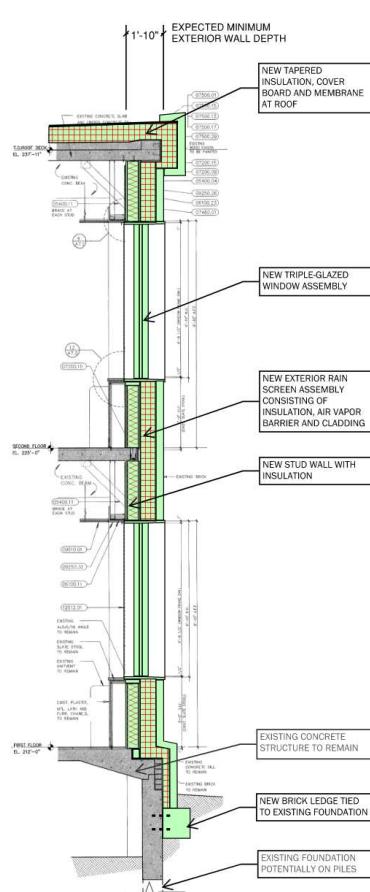
1. EXCAVATE AND INSTALL NEW FOUNDATIONS OUTBOARD OF EXISTING FOUNDATIONS
2. DEMOLISH EXISTING EXTERIOR WALLS
3. REPAIR AND REINFORCE EXISTING CONCRETE STRUCTURE AS NEEDED
4. INSTALL NEW EXTERIOR WALLS THAT PROVIDE A CONTINUOUS AIR BARRIER AND AN ENERGY CODE COMPLIANT INSULATION VALUE
5. REMOVE EXISTING ROOFING MEMBRANE AND INSTALL NEW TAPERED INSULATION, COVERBOARD AND ROOFING MEMBRANE TO MEET ENERGY CODE REQUIREMENTS



BUILDING E WALL SECTION



BUILDING B WALL SECTION

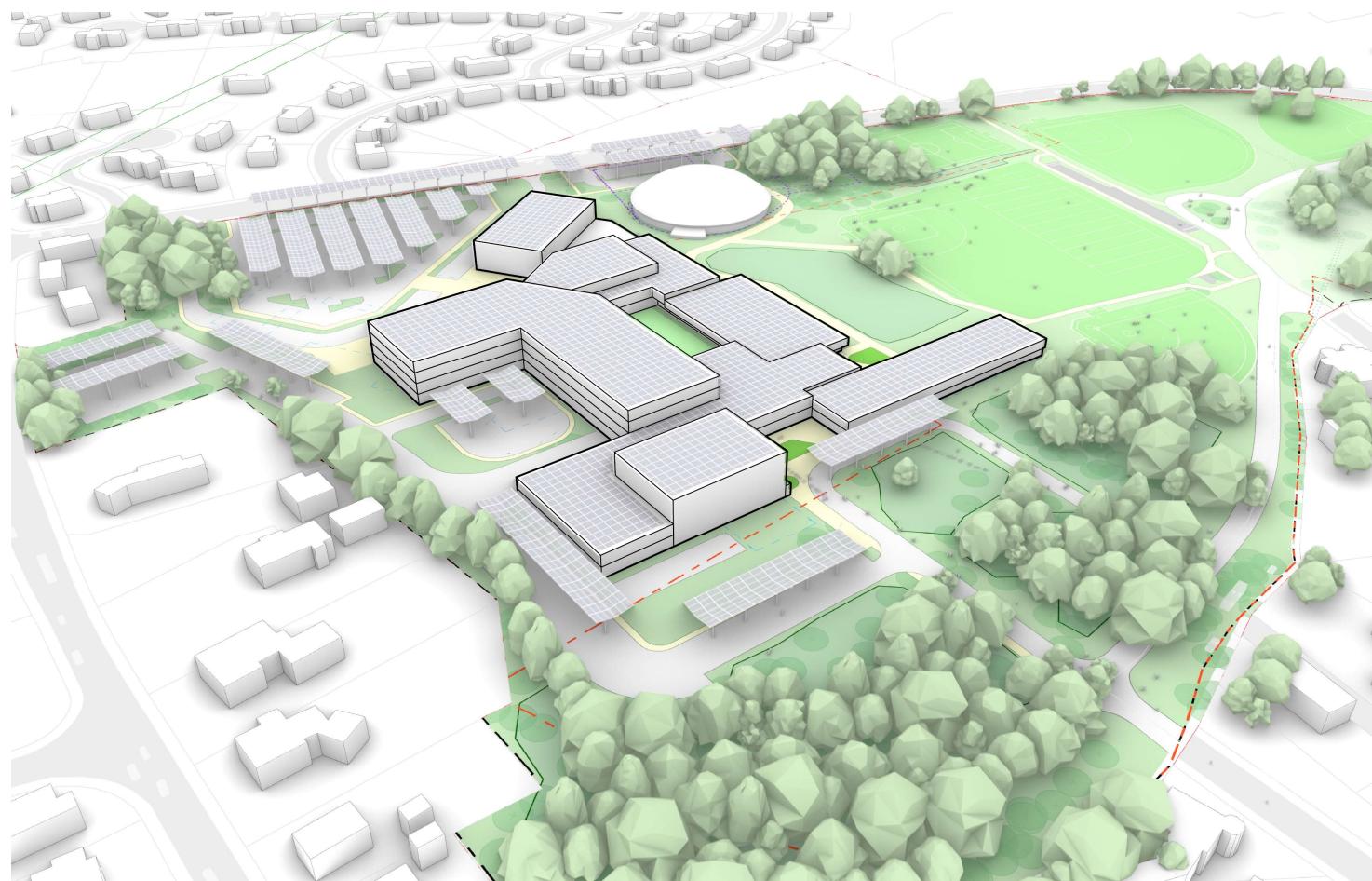


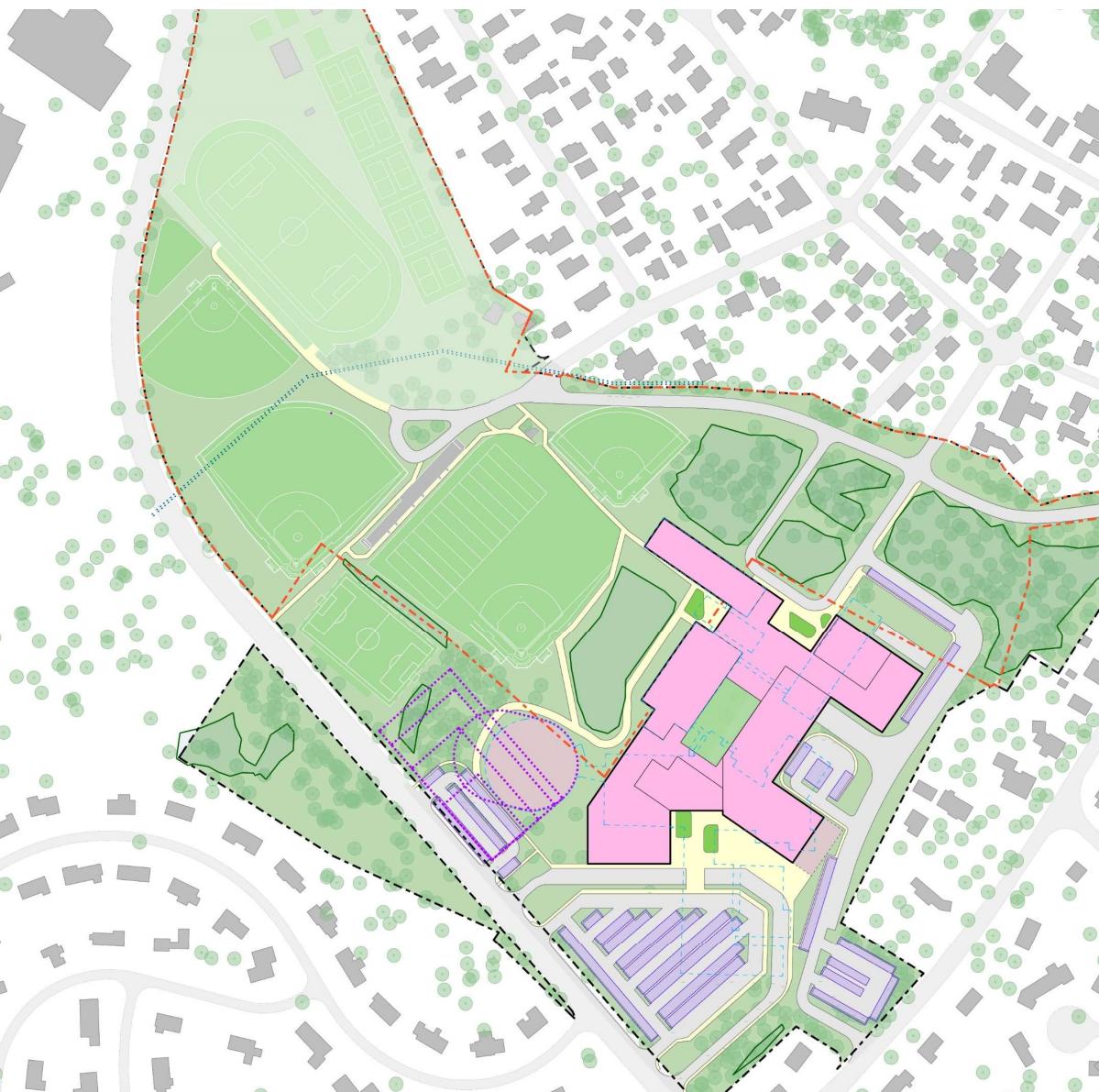
## Structural Notes:

- Temporary shoring at existing buildings will be required at each phase prior to final completion
- Renovations are likely to trigger seismic upgrade requirements that include new shear walls, brace frames and steel reinforcement
- New foundations on minipiles are needed for any added loads at existing buildings
- Any existing roof adjacent to a taller addition will require reinforcement for snow drift
- New steel dunnage is required at new mechanical units placed atop an existing roof
- Steel framing and reinforcement is required for all new openings cut into an existing roof or floor
- Building expansion joints are required to separate all existing construction from new

# RENOVATION AND ADDITION – ON EXISTING FOOTPRINT

## Option B.1 – ‘QUAD’ Massing





## Option B.1- 'QUAD' Site Plan

### Positives:

- Flexibility of program organization
- Maintains current Civic Presence and relationship to Muzzey St
- Potential for outdoor classrooms

### Negatives:

- Utilizes a limited amount of existing buildings for renovation
- Very low headroom in existing buildings G and J
- Difficult to connect existing levels with new floor-to-floor heights
- Cannot build more levels over existing structures
- Seismic upgrades needed in existing buildings





## Option B.1 – ‘QUAD’ Ground Floor

Level 1 Footprint: 230,800 sf  
Floors: 2-4

- Media Center at Level 2
- Gym at Level 1
- Black Box at Level 1
- Deans/Guidance at Level 1
- Centralized Innovation Labs
- Courtyard at Level 1
- Visual Art at Level 3
- Gym adjacent to Field House
- 60 months Construction Duration





## Option B.1 – ‘QUAD’ Educational Criteria

Topic	Grade
Promotes Collaboration/ Student Agency	Green
Interdisciplinary Adjacencies	Green
Flexibility of Organization	Yellow
Access to Hands-on Learning	Yellow
Ease of Wayfinding	Green
Outdoor Learning	Green
Future Expansion Potential	Green
Possibilities for Inclusion	Green

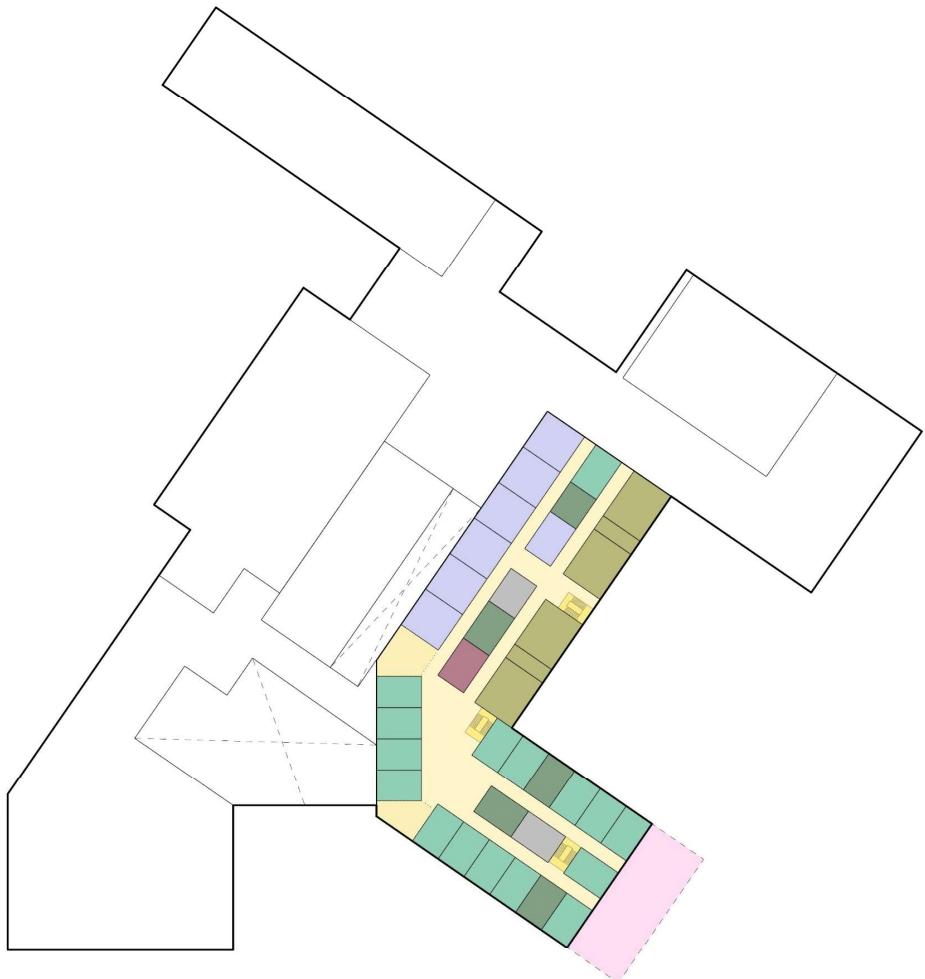


## Option B.1 – ‘QUAD’ Level 2



- Core Academic
- Teacher Planning & Small Group Spaces
- Special Education
- Auditorium / Drama
- Art & Music
- Media Center
- Vocation & Technology
- Health & Physical Education
- Administration, Guidance, ALPHA, METCO, Central Offices
- Medical
- Kitchen, Restrooms, Custodial
- Commons
- Circulation
- Vertical Circulation
- Rooftop Open Space



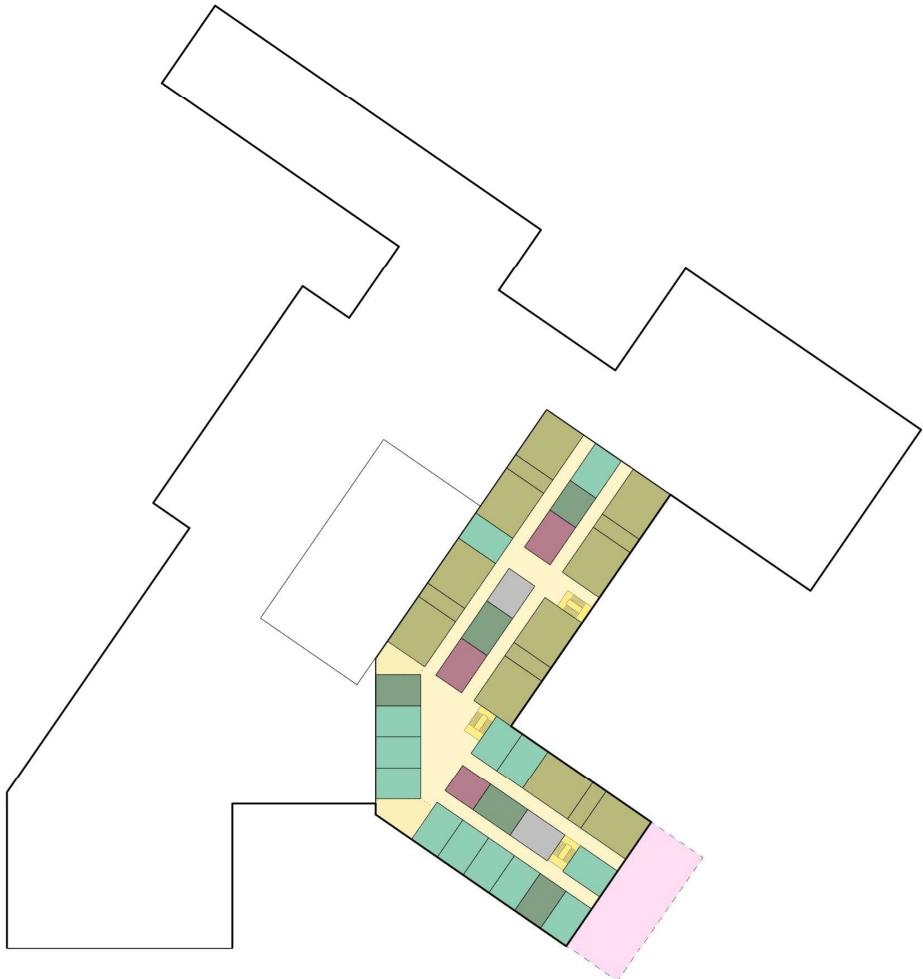


## Option B.1 – 'QUAD' Level 3

Core Academic
Teacher Planning & Small Group Spaces
Special Education
Auditorium / Drama
Art & Music
Media Center
Vocation & Technology
Health & Physical Education
Administration, Guidance, ALPHA, METCO, Central Offices
Medical
Kitchen, Restrooms, Custodial
Commons
Circulation
Vertical Circulation
Rooftop Open Space



## Option B.1 – ‘QUAD’ Level 4

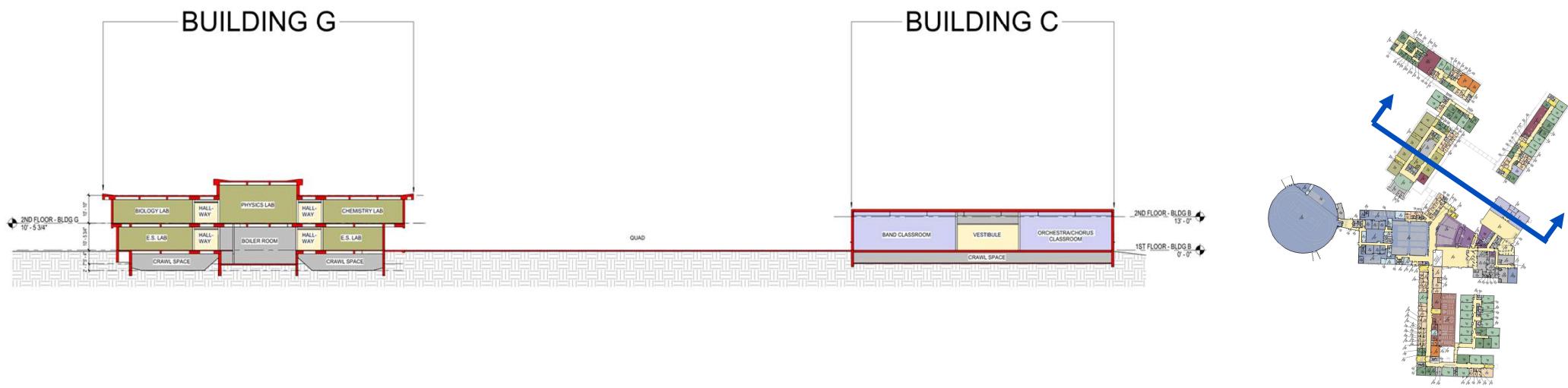


- Core Academic
- Teacher Planning & Small Group Spaces
- Special Education
- Auditorium / Drama
- Art & Music
- Media Center
- Vocation & Technology
- Health & Physical Education
- Administration, Guidance, ALPHA, METCO, Central Offices
- Medical
- Kitchen, Restrooms, Custodial
- Commons
- Circulation
- Vertical Circulation
- Rooftop Open Space



# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

## Section Study – Existing Buildings G & C



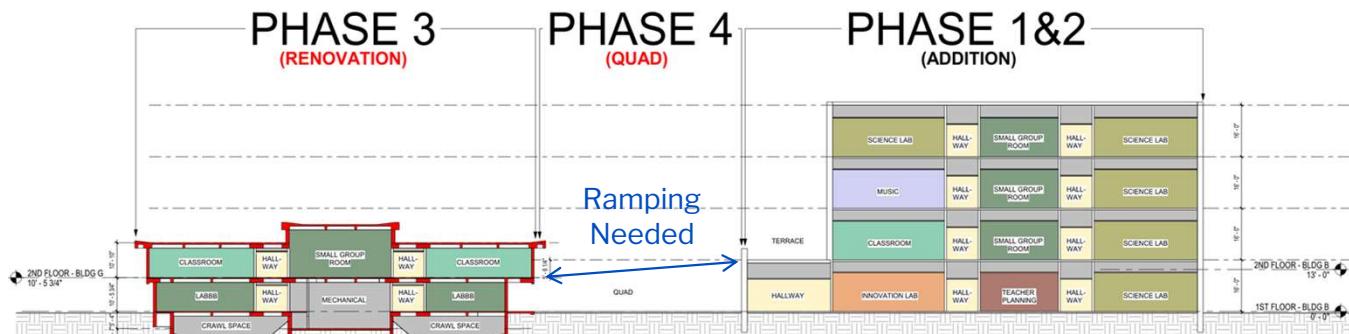
# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

## Section Study – Building G & Addition

### Takeaways:

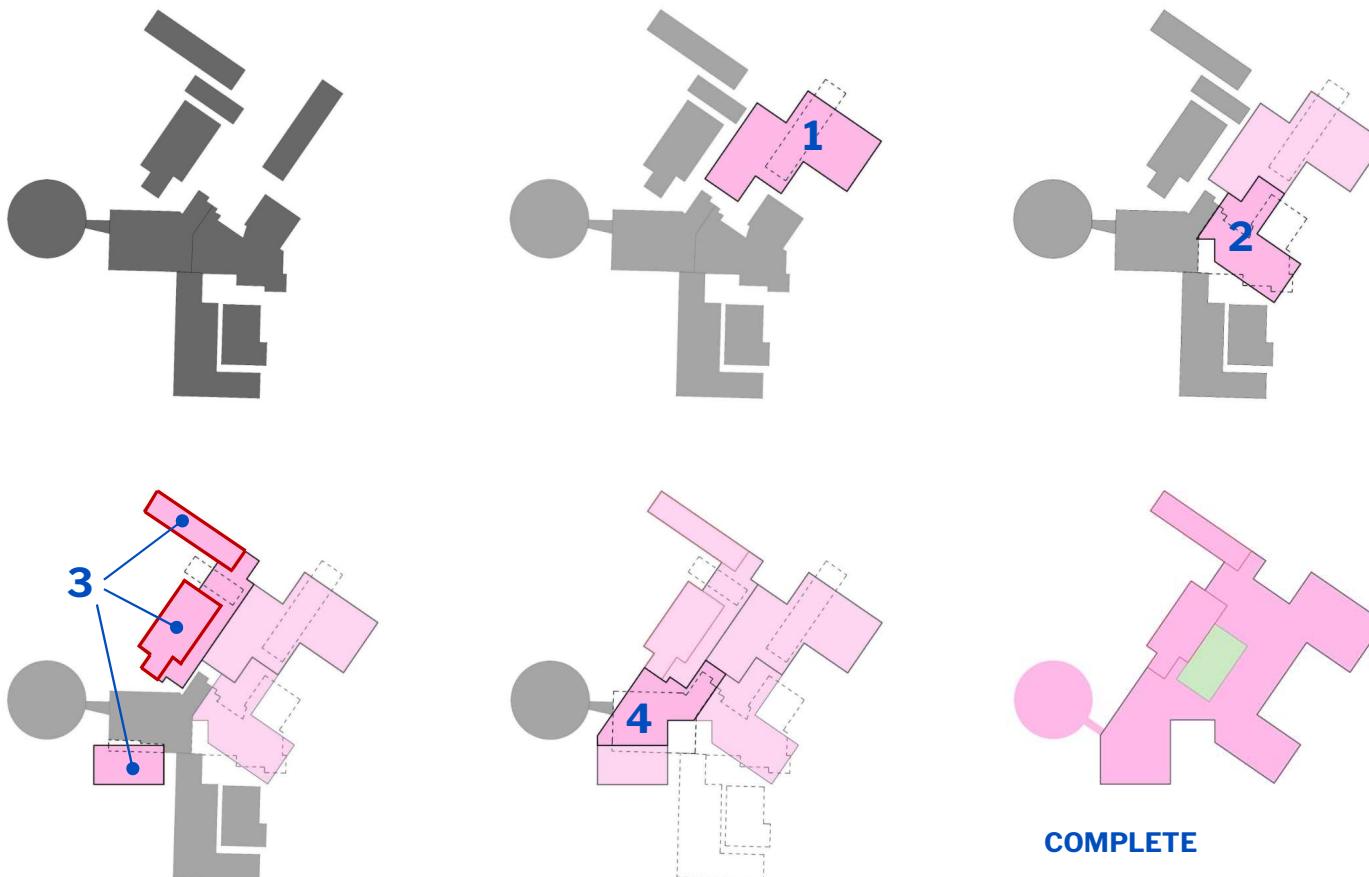
#### Building G:

- Level 2 is 5'-6" lower than new building Level 2
- Floor to floor height is only +/- 10'-6"
- Little to no ceiling space available to run new MEP systems



## EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

### B.1 'QUAD' Phasing



#### Takeaways:

- 4 phases total
- Renovation scope is limited to Buildings G & J
- Temporary shoring of existing structure is limited compared to Scheme B.4
- Demo required of new Gym construction pushes locker rooms to modulars
- Phase 2 removes existing MEP infrastructure & emergency generator in Building D which will necessitate temp services to supply Building A, B, C, D, E & K for two phases

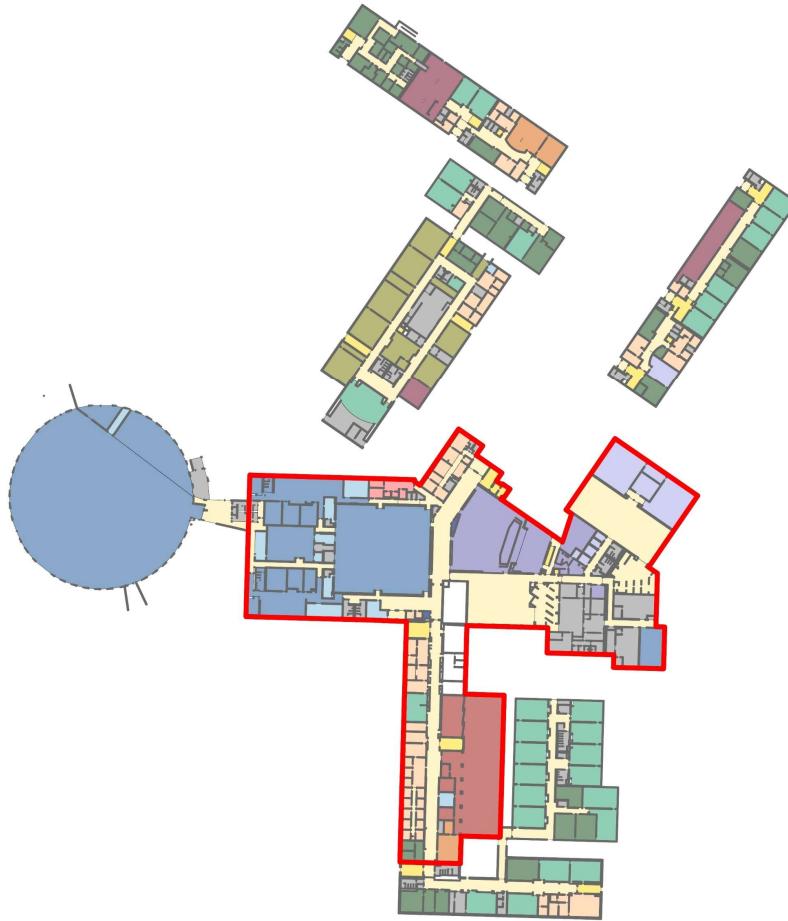
#### KEY

#	PHASE
■	EXISTING CONSTRUCTION
■	NEW ADDITION
■	COMPLETED CONSTRUCTION FROM PREVIOUS PHASE
■	EXISTING BUILDINGS TO BE RENOVATED
□	EXISTING BUILDINGS TO BE DEMOLISHED

# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

## B.4 Approach:

- Renovate 1950's Buildings B, C, D and E  
~169,500 sf
- Cafeteria, Performing Arts and Visual Arts in Buildings C and D may be renovated in place via Summer Construction
- Enlarge undersized classrooms of Building B by relocating partitions, or convert to office program
- Existing Gymnasium is repurposed for other high-bay programs
- New academic wings (120' wide footprint) bracket existing core buildings and define new courtyards
- Core building services in Building D must be maintained until new plant can be constructed

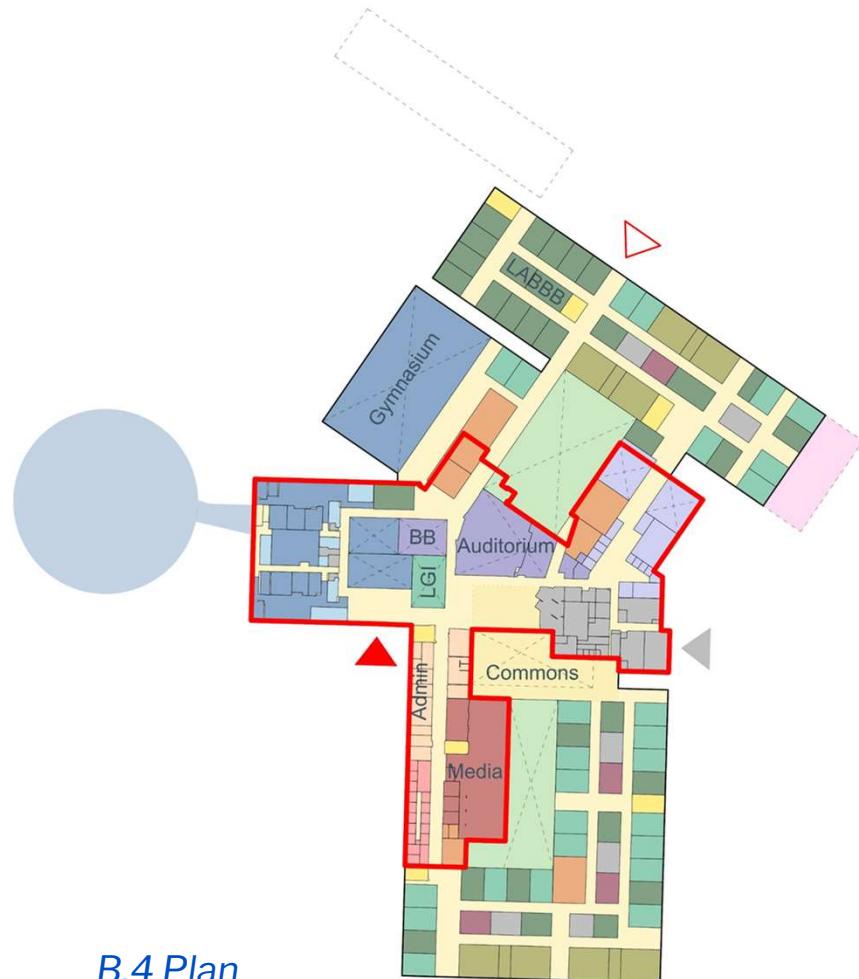


*Existing Plan*

# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

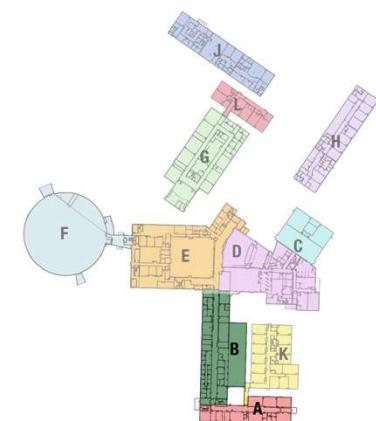
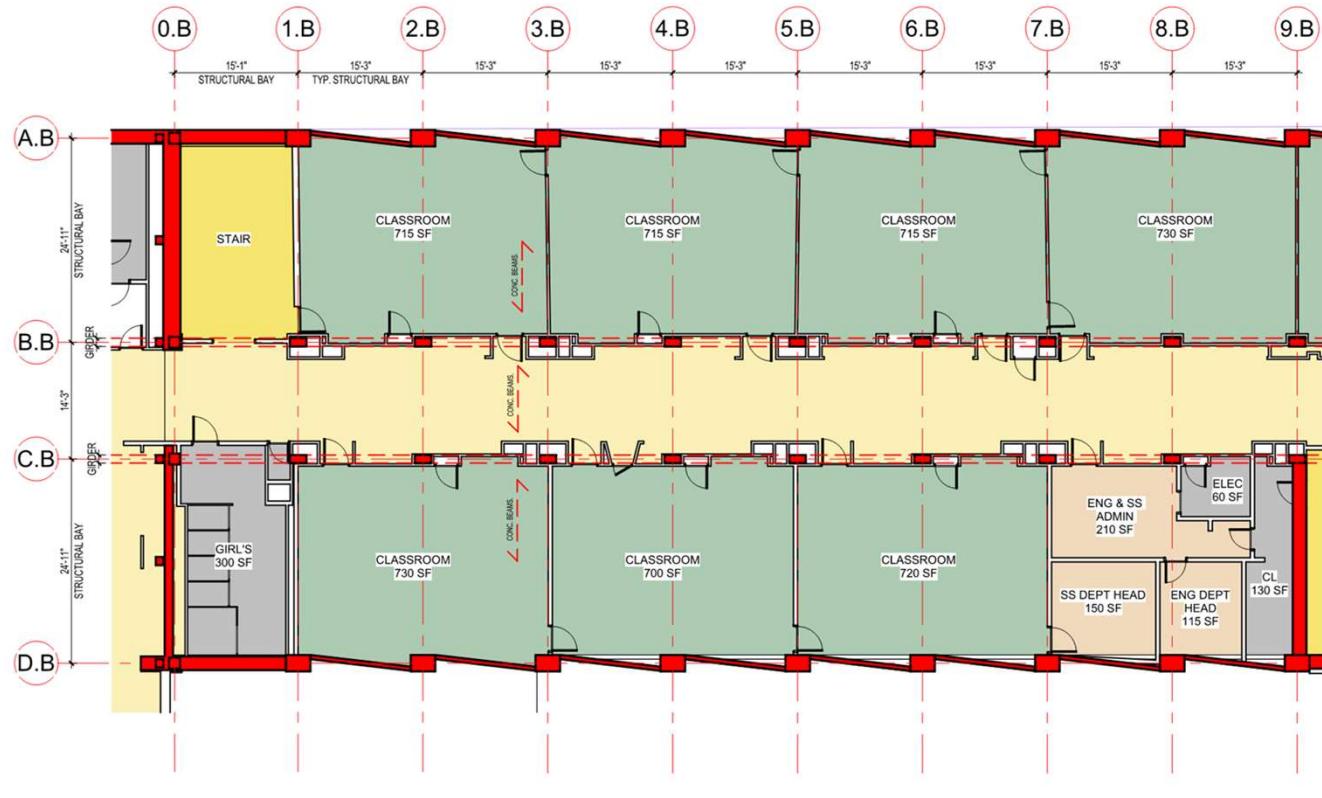
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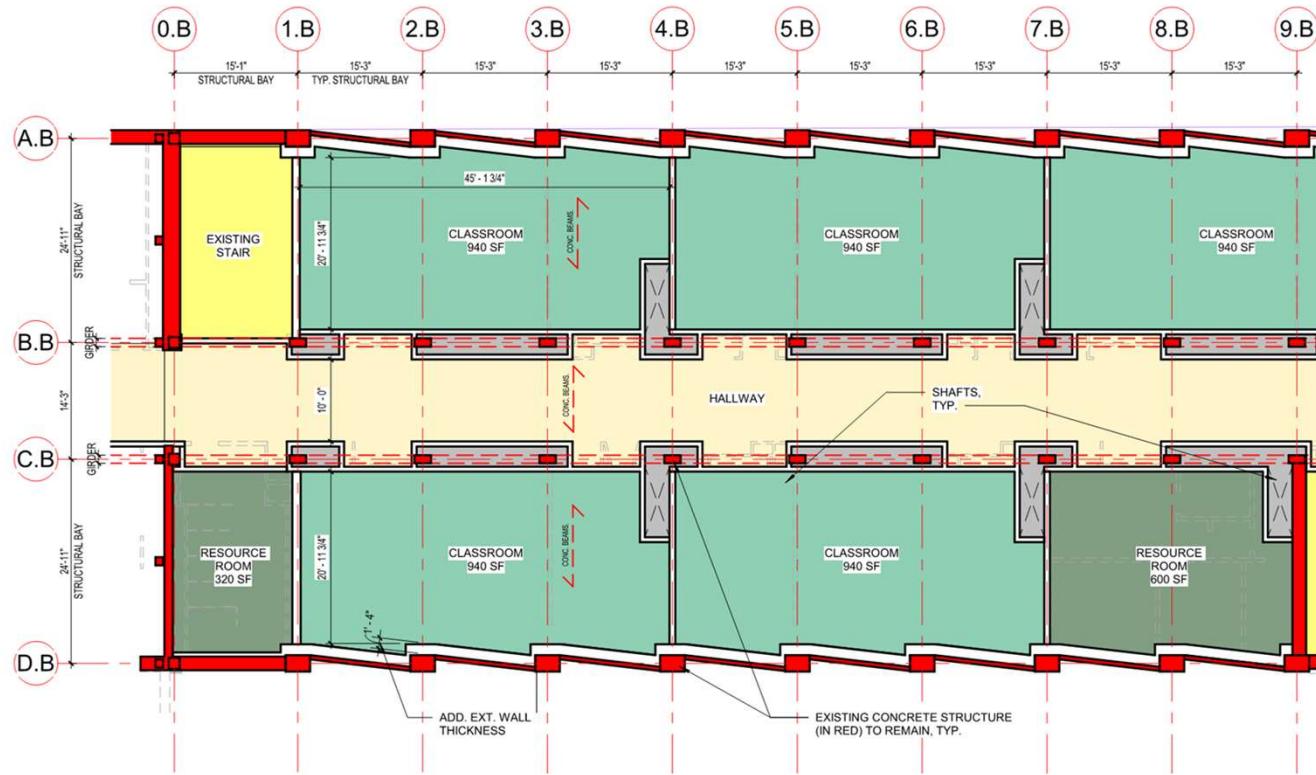
# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

## Building B – Structural Bay Analysis – Level 2 Existing Partial Plan



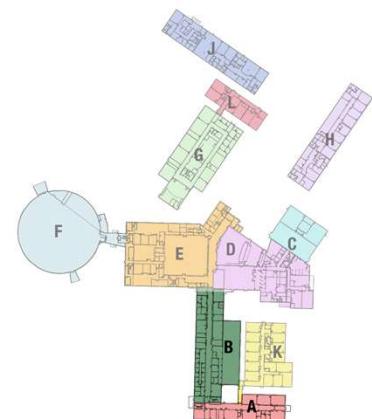
# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

## Building B – Structural Bay Analysis – Level 2 Partial Plan



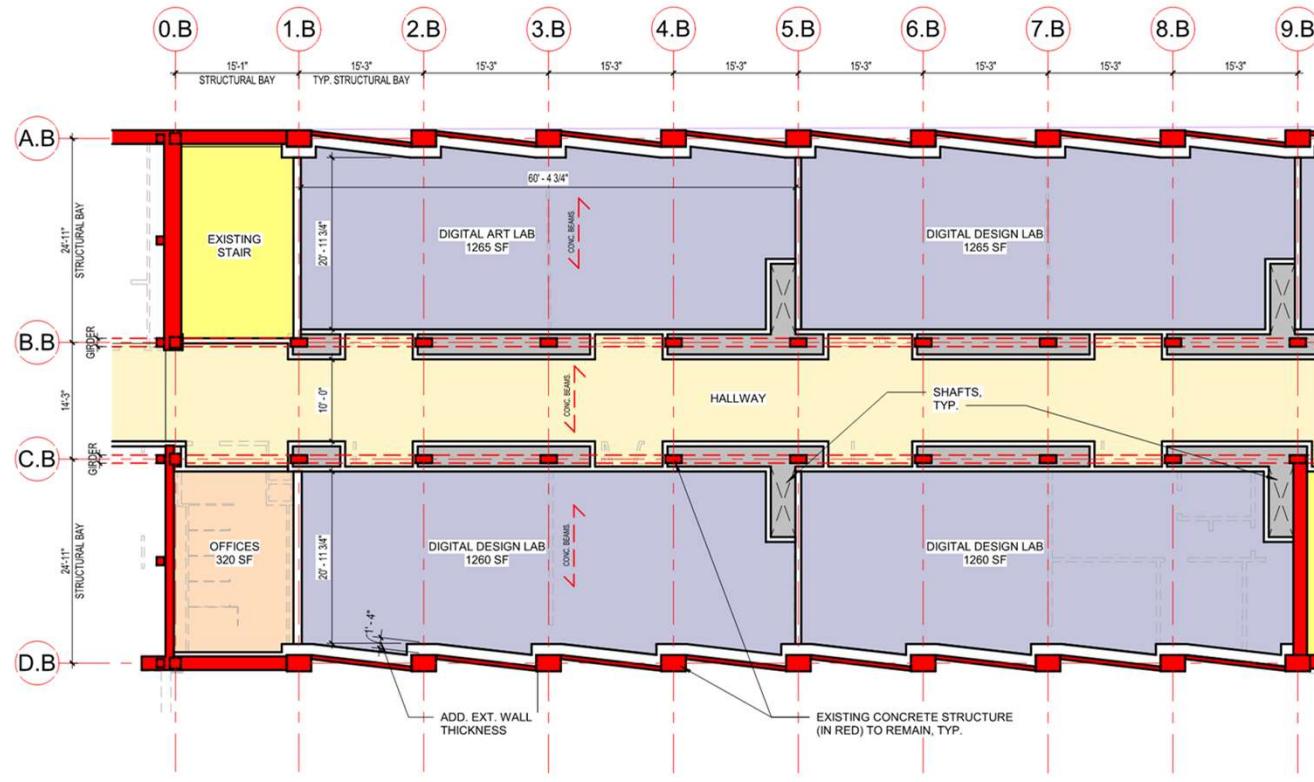
Takeaways:

- Existing undersized Classroom bays may be enlarged, however this may result in oversized rooms with elongated proportions
- New shafts may be introduced for fresh air distribution from roof
- Exterior walls thickened to meet thermal performance criteria
- Linear character of “student street” with double-loaded corridors would remain



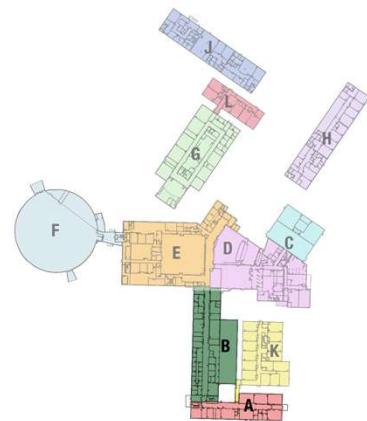
# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

## Building B – Structural Bay Analysis – Level 2 Partial Plan



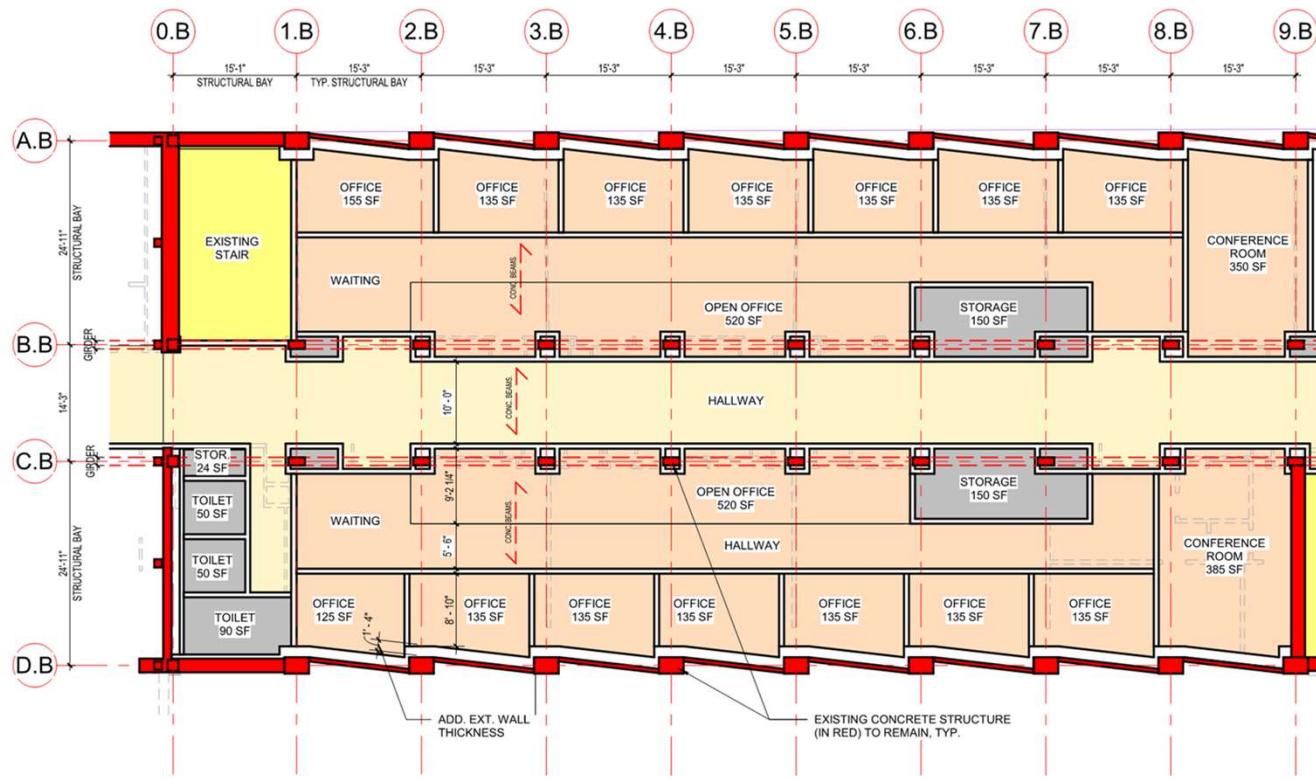
Takeaways:

- Existing Classroom bays may be reconfigured for Innovation Lab spaces, however room proportion is more elongated than would be desirable.
- New shafts may be introduced for fresh air distribution from roof
- Exterior walls thickened to meet thermal performance criteria
- Linear character of “student street” with double-loaded corridors would remain and “authentic learning” programs would not be very visible



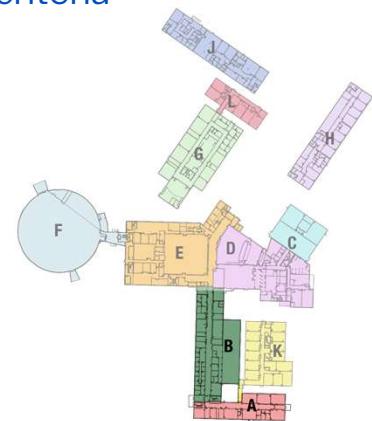
# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

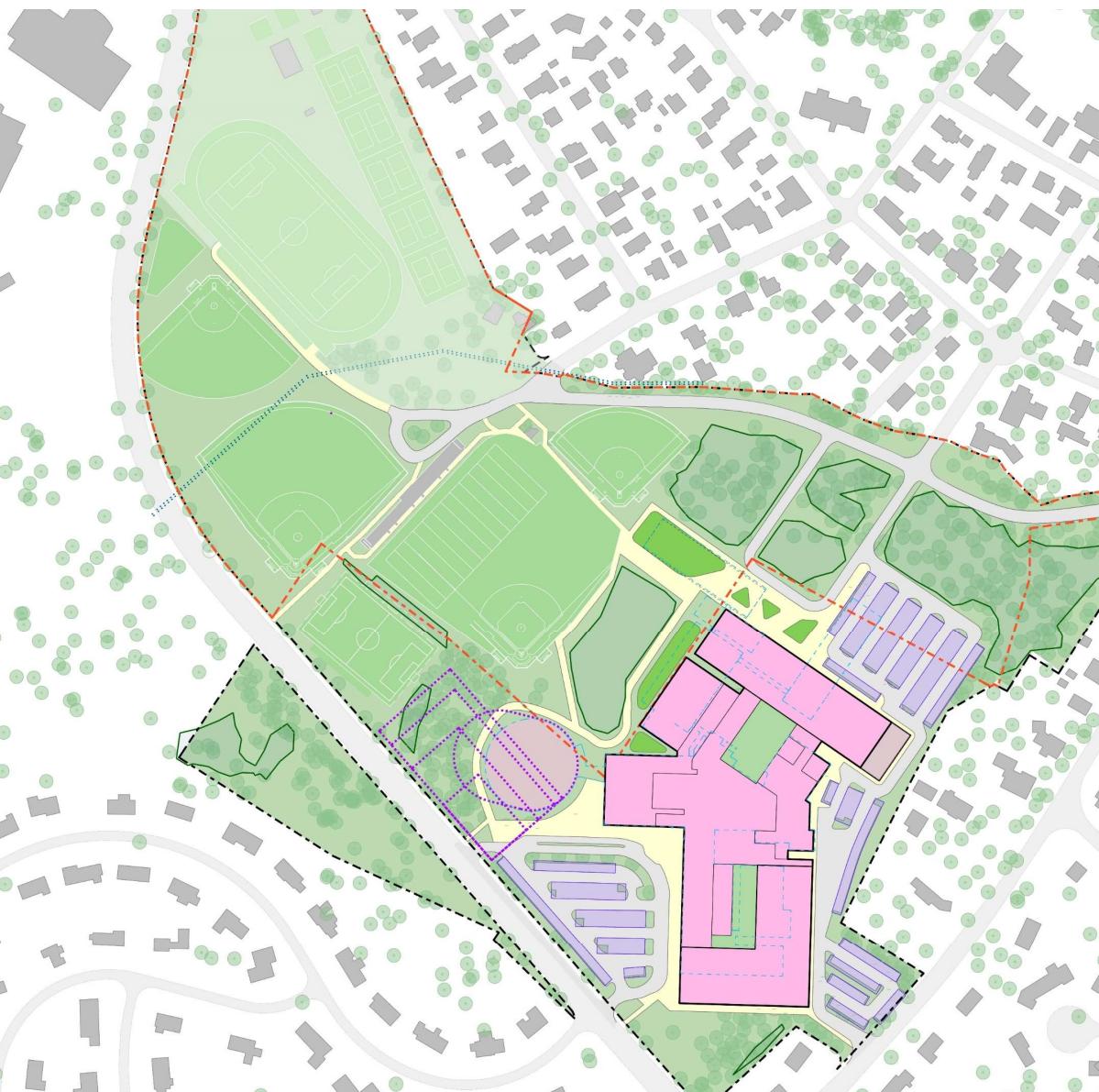
## Building B – Structural Bay Analysis – Level 1 Partial Plan



### Takeaways:

- Existing undersized Classroom bays may be converted to office suites (similar to some current uses)
- New shafts may be introduced for fresh air distribution from roof
- Exterior walls thickened to meet thermal performance criteria





## Option B.4– ‘Figure Eight’ Site Plan

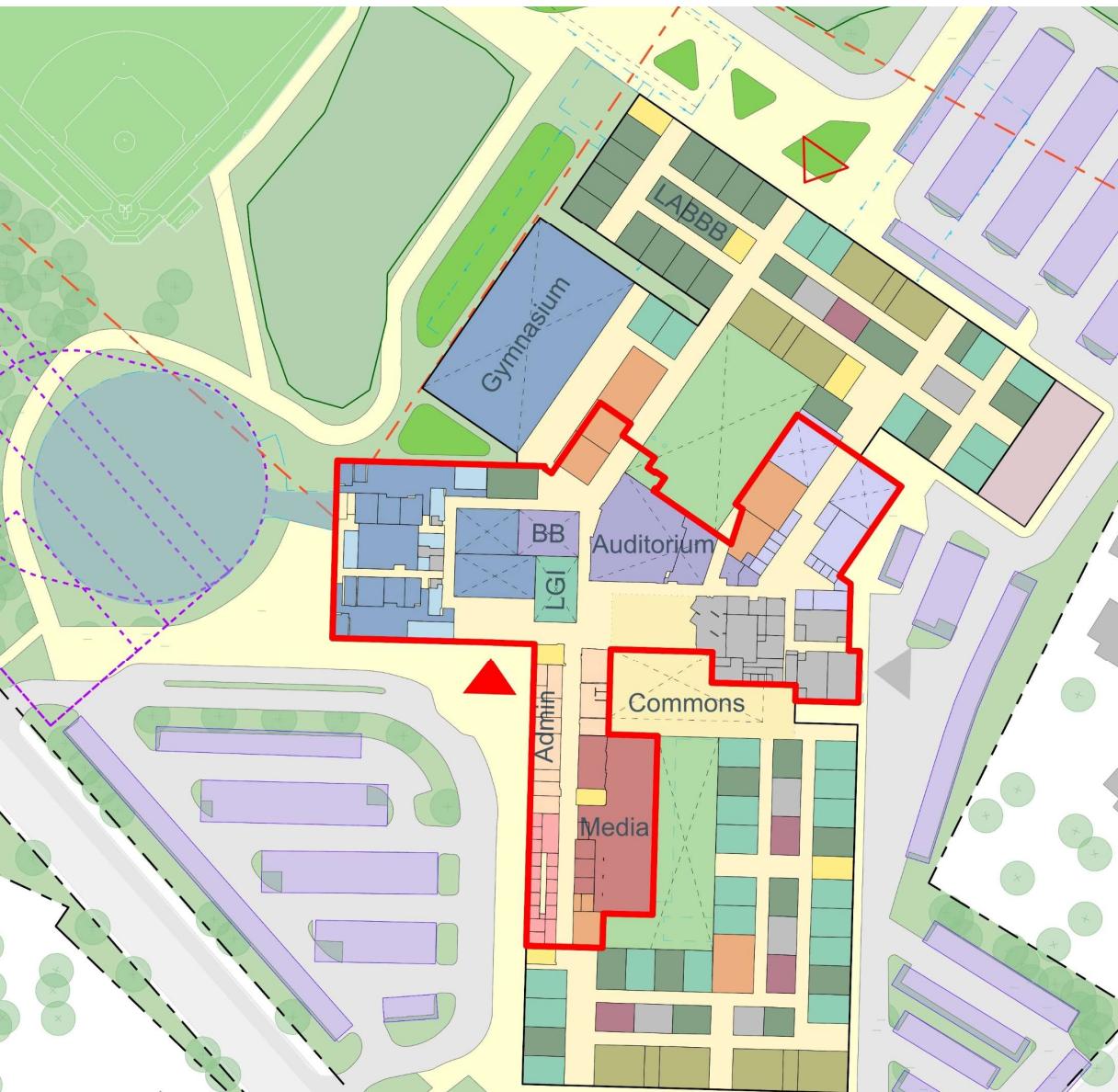
### Positives:

- Utilizes more of existing buildings for renovation than Alt B.1, could potentially result in modest \$/SF cost savings
- Visibility of main entry from Worthen Rd
- Two enclosed courtyard spaces

### Negatives:

- In-place renovations of Auditorium, Music, Kitchen, Media Center, Locker Rooms may take longer and be more disruptive than Alt B.1
- Low headroom in existing buildings
- Disconnected academic wings at L3
- Cannot build more levels over existing structures – multiple roof levels not efficient for PV layout
- Seismic upgrades needed in existing buildings





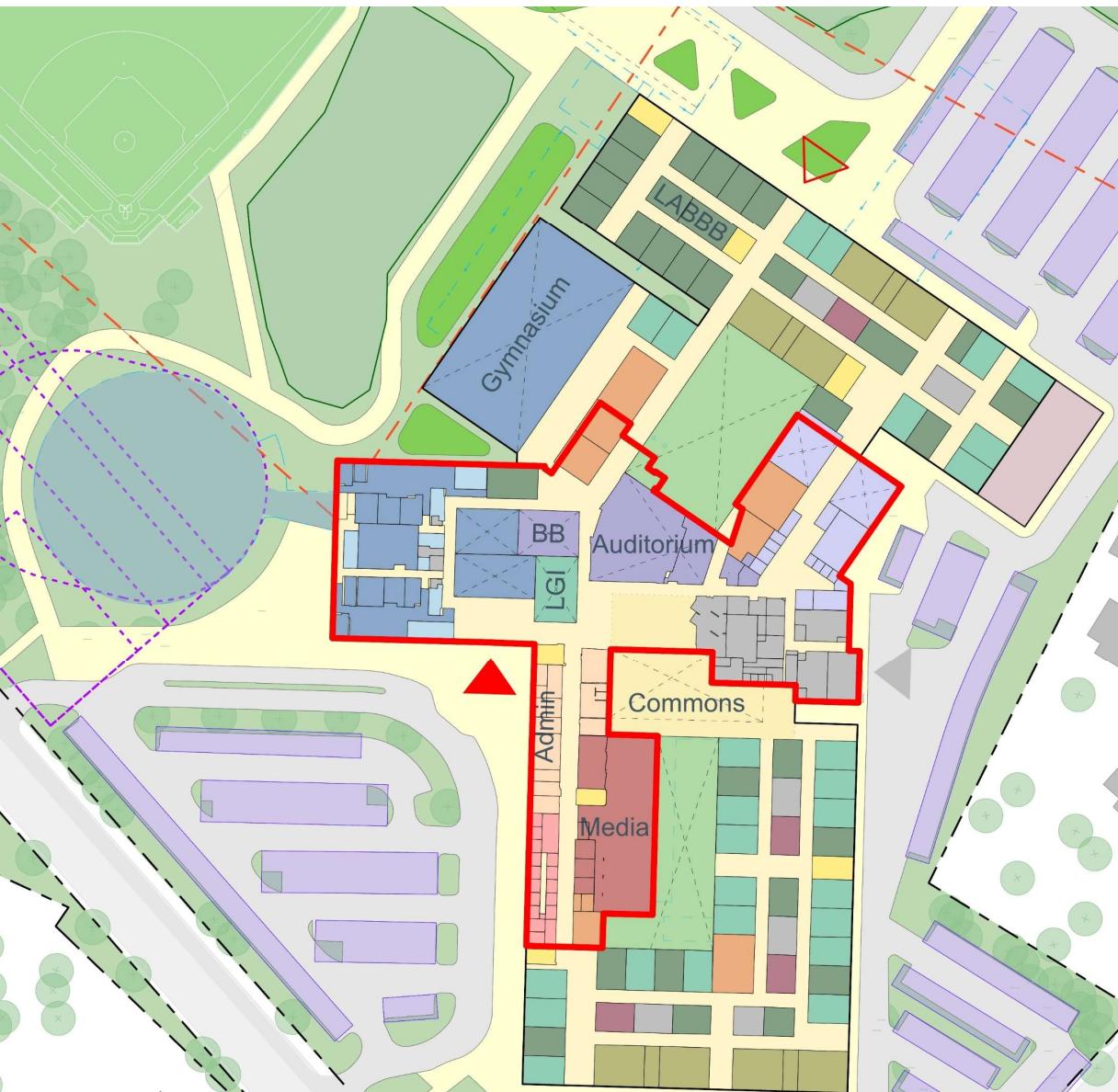
## Option B.4– ‘Figure Eight’ Ground Floor

Level 1 Footprint: 242,861 sf

Floors: 2-3

- Renovates Buildings B, C, D and E
- Auditorium, Music, Kitchen, Media Center, Locker Rooms renovated in place
- Renovated spaces may be more constrained than new and offline for some duration
- Adds two new 120' wide Academic Wings
- Two enclosed Quad spaces
- New 18,000 sf Gymnasium
- 72 months Construction Duration



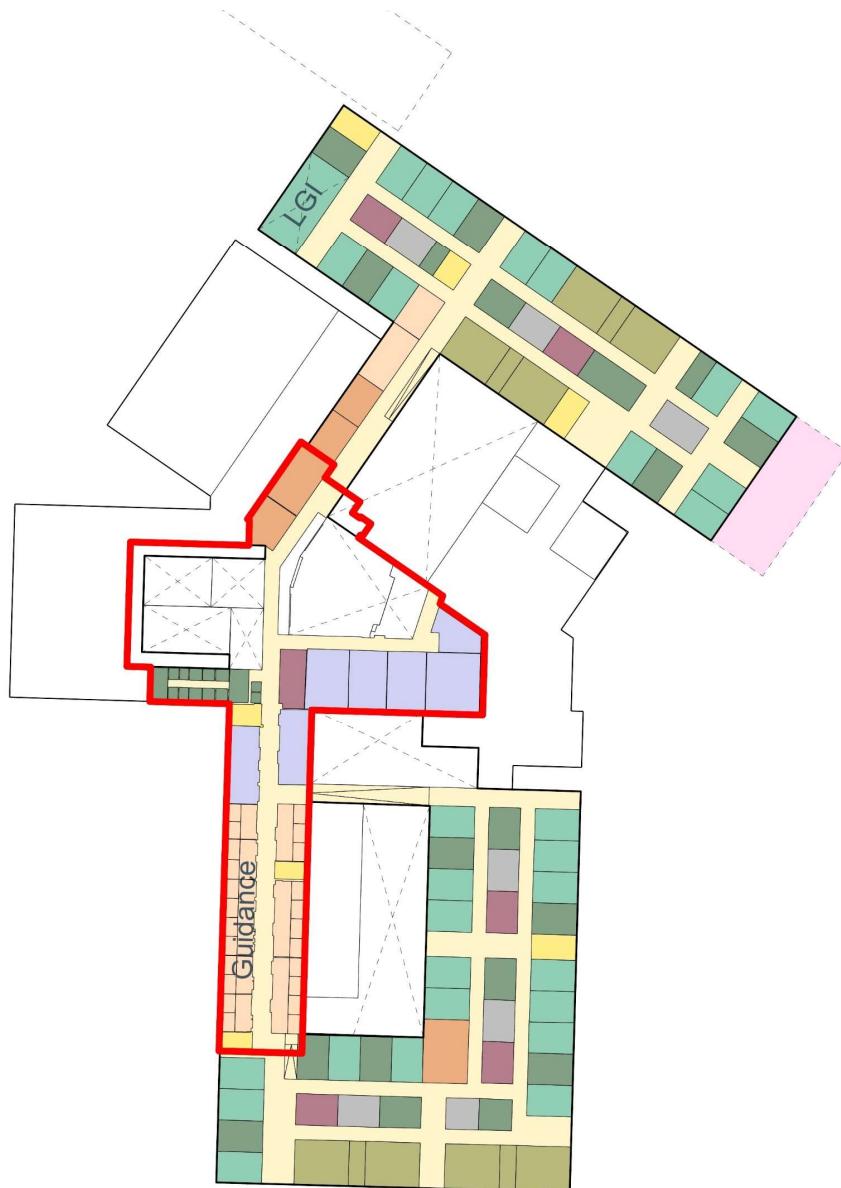


## Option B.4– ‘Figure Eight’ Educational Criteria

Topic	Grade
Promotes Collaboration/ Student Agency	Yellow
Interdisciplinary Adjacencies	Yellow
Flexibility of Organization	Green
Access to Hands-on Learning	Green
Ease of Wayfinding	Yellow
Outdoor Learning	Green
Future Expansion Potential	Green
Possibilities for Inclusion	Yellow



## Option B.4- 'Figure Eight' Level 2



- Core Academic
  - Teacher Planning & Small Group Spaces
  - Special Education
  - Auditorium / Drama
  - Art & Music
  - Media Center
  - Vocation & Technology
  - Health & Physical Education
  - Administration, Guidance, ALPHA, METCO, Central Offices
  - Medical
  - Kitchen, Restrooms, Custodial
  - Commons
  - Circulation
  - Vertical Circulation
  - Rooftop Open Space
- 09/03/2024
- 25 75 125

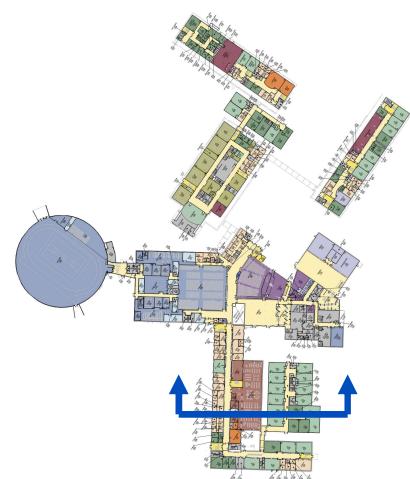
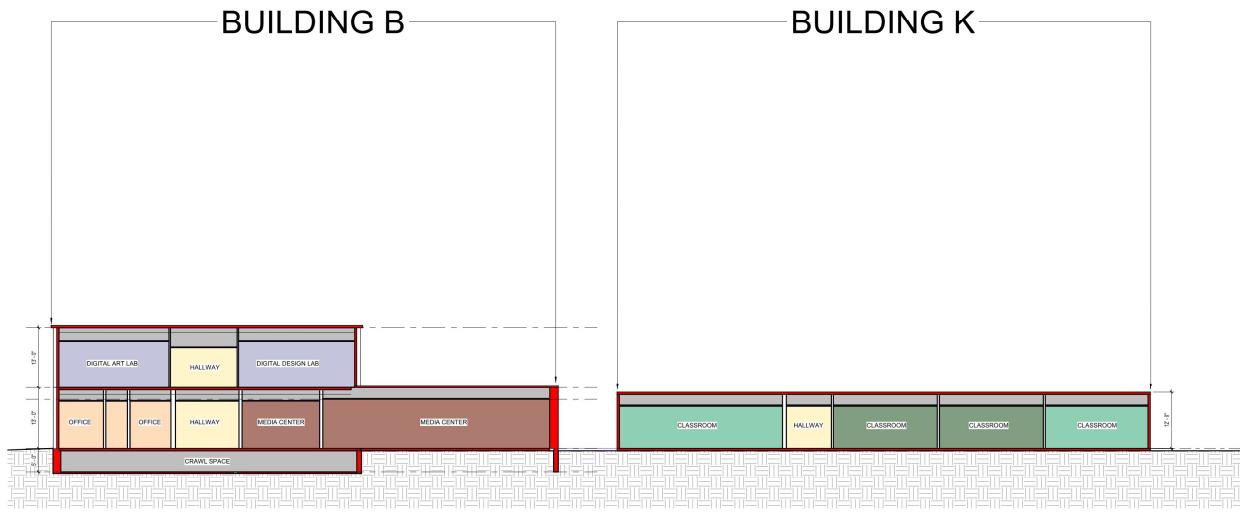


## Option B.4- 'Figure Eight' Level 3

- Core Academic
  - Teacher Planning & Small Group Spaces
  - Special Education
  - Auditorium / Drama
  - Art & Music
  - Media Center
  - Vocation & Technology
  - Health & Physical Education
  - Administration, Guidance, ALPHA, METCO, Central Offices
  - Medical
  - Kitchen, Restrooms, Custodial
  - Commons
  - Circulation
  - Vertical Circulation
  - Rooftop Open Space
- 09/03/2024
- 25 75 125

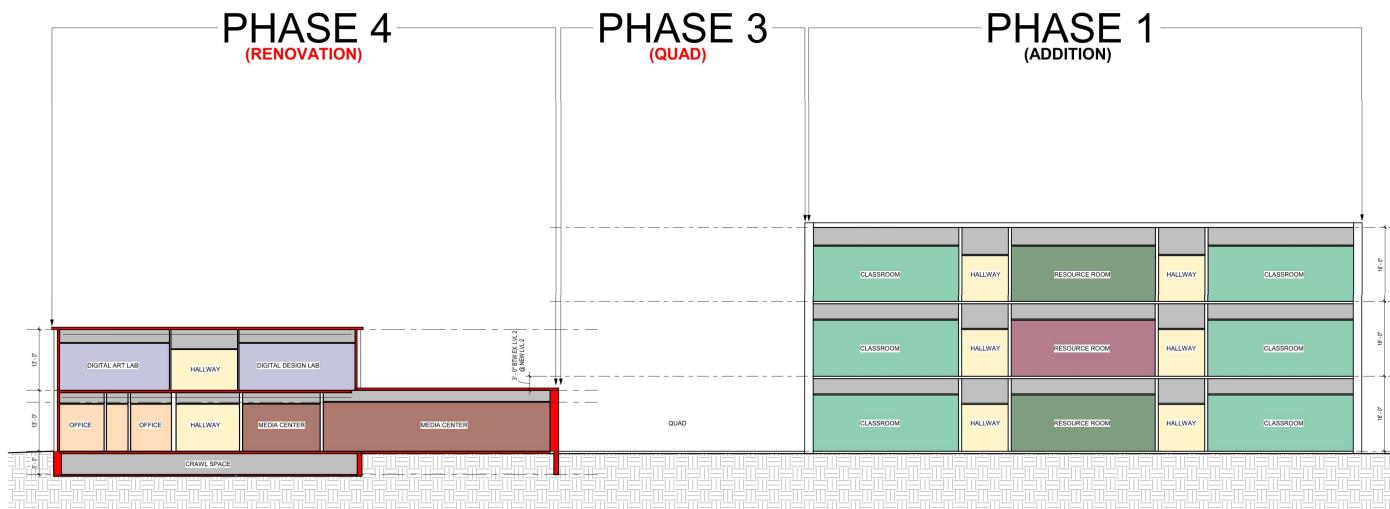
# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

## Section Study – Existing Buildings B & K



# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

## Section Study – Alternative B.4 Building B & Addition



## Takeaways:

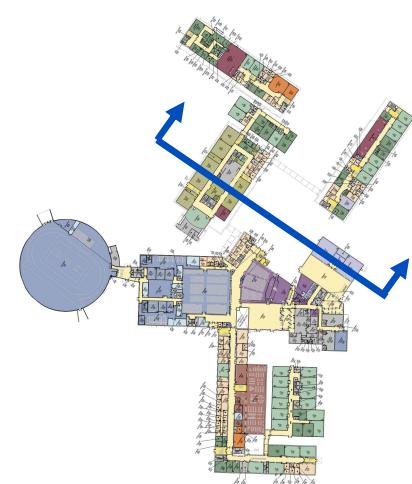
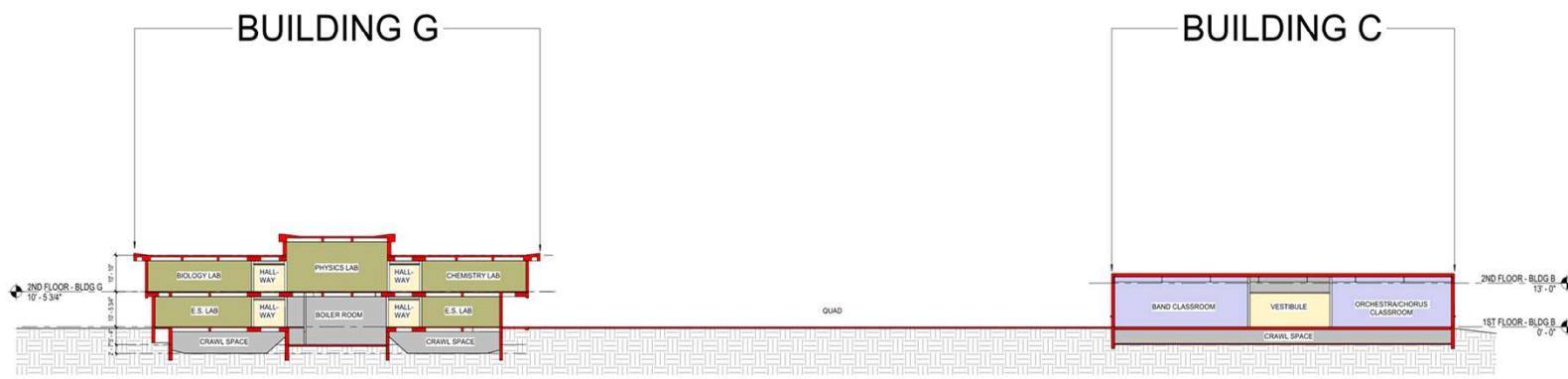
### Building B:

- Level 2 is 3'-0" lower than new building Level 2
- Floor to floor height is +/- 13'-0"
- More ceiling space available to run MEP compared to Building G



# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

## Section Study – Existing Buildings G & C



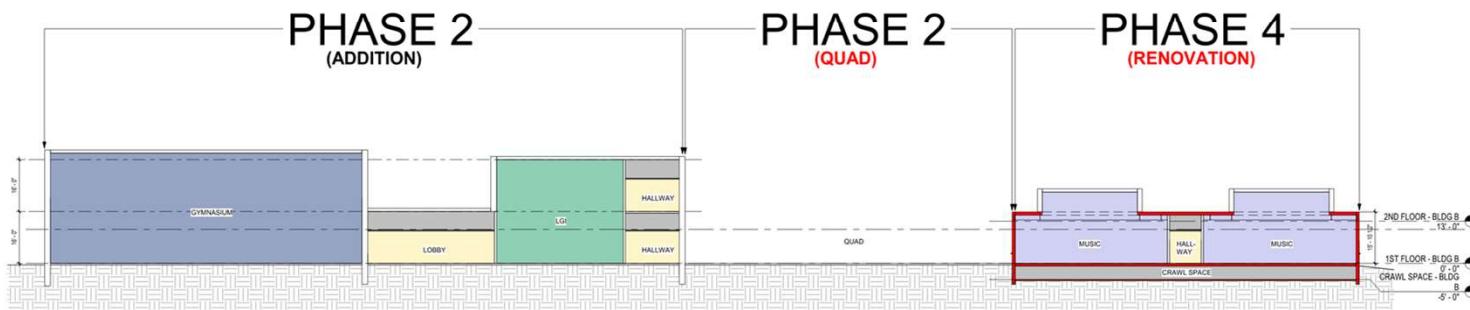
# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

## Section Study – Addition & Building C

Takeaways:

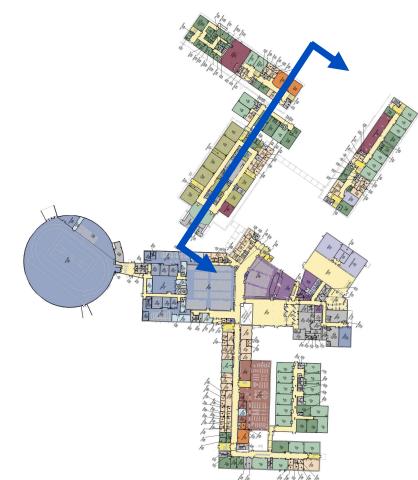
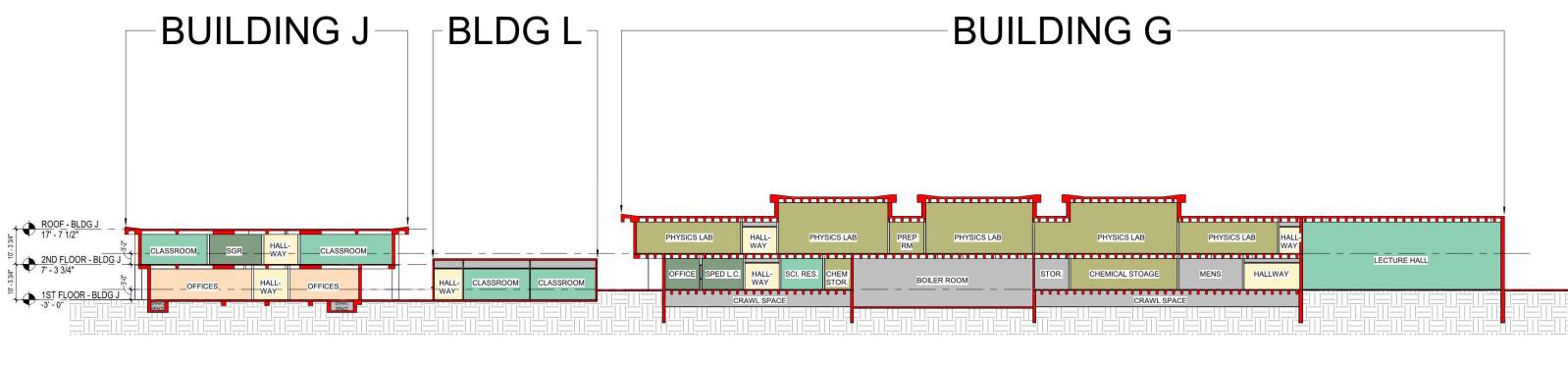
Building C:

- Bottom of roof steel = +13'-4" which is not ideal for Music spaces, requires roof expansion



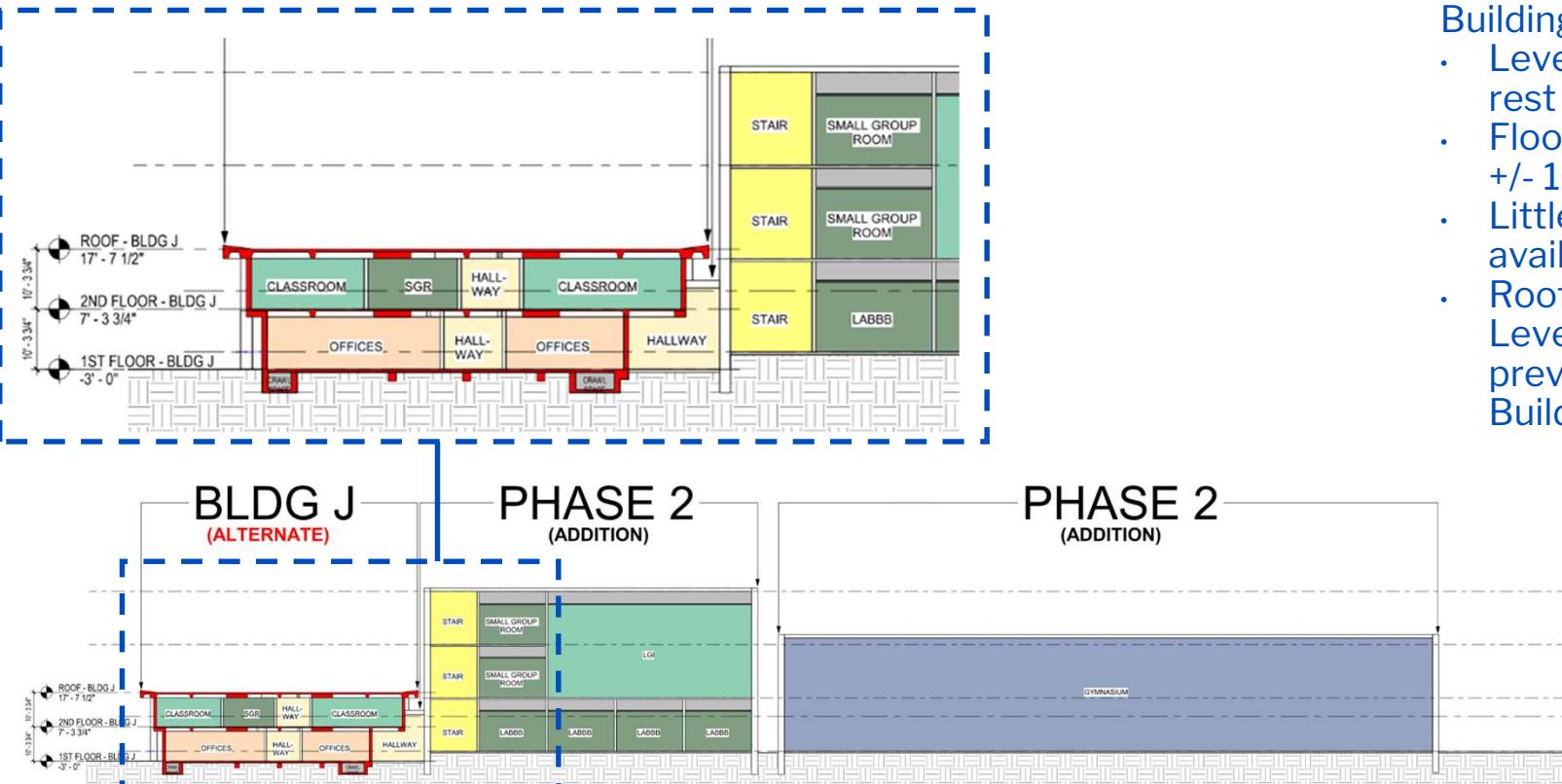
# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

## Section Study – Existing Buildings J & G



# EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

## Section Study –Buildings J & Addition



## Takeaways:

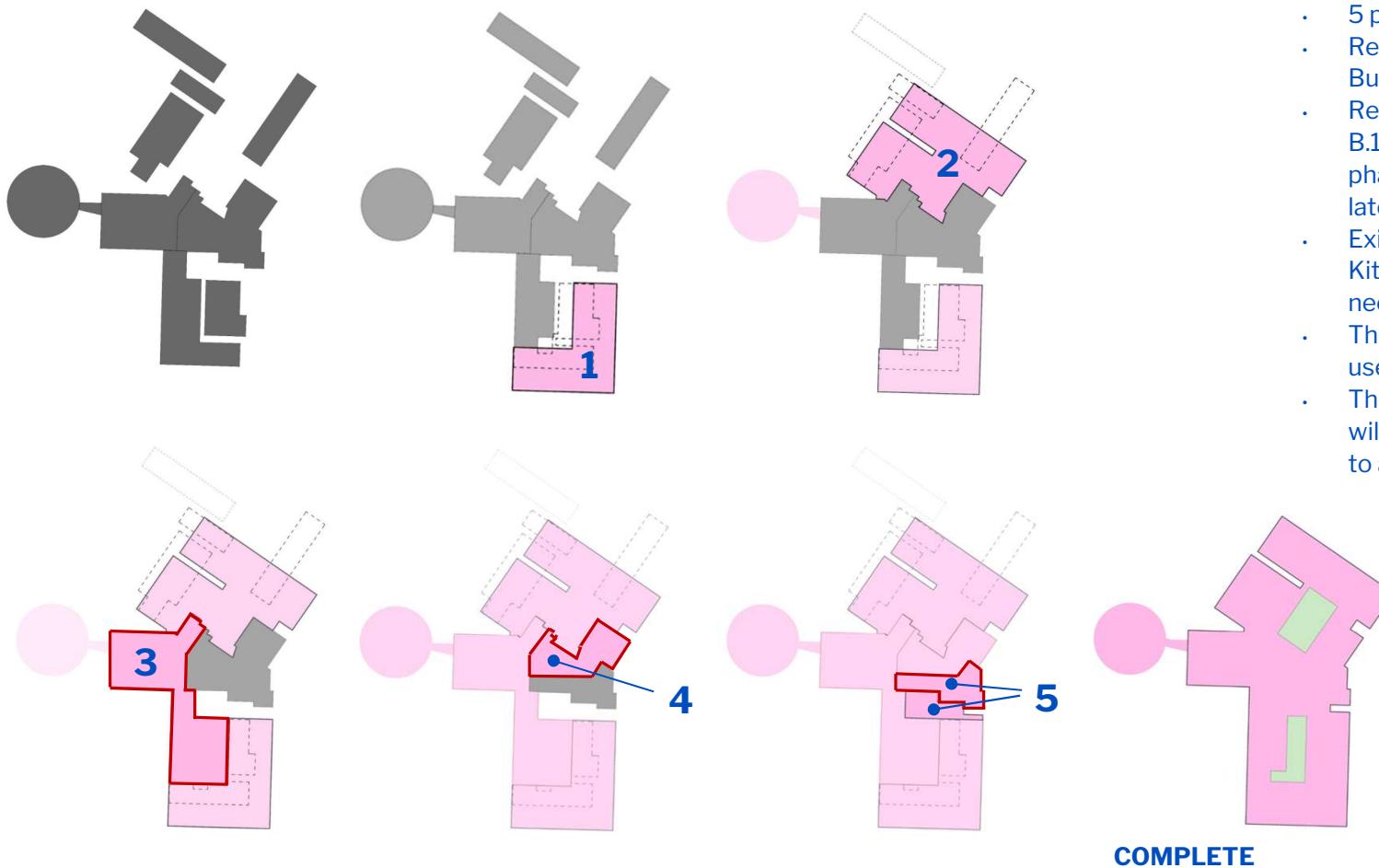
Building J Not Renovated:

- Level 1 is 3'-0" lower than rest of building
- Floor to floor height is only +/- 10'-4"
- Little to no ceiling space available to run MEP
- Rooftop and new Addition Level 2 roughly align, preventing a connection to Building J Level 2



## EXISTING BUILDINGS – PROSPECTS FOR RENOVATION

### B.4 Phasing



### Takeaways:

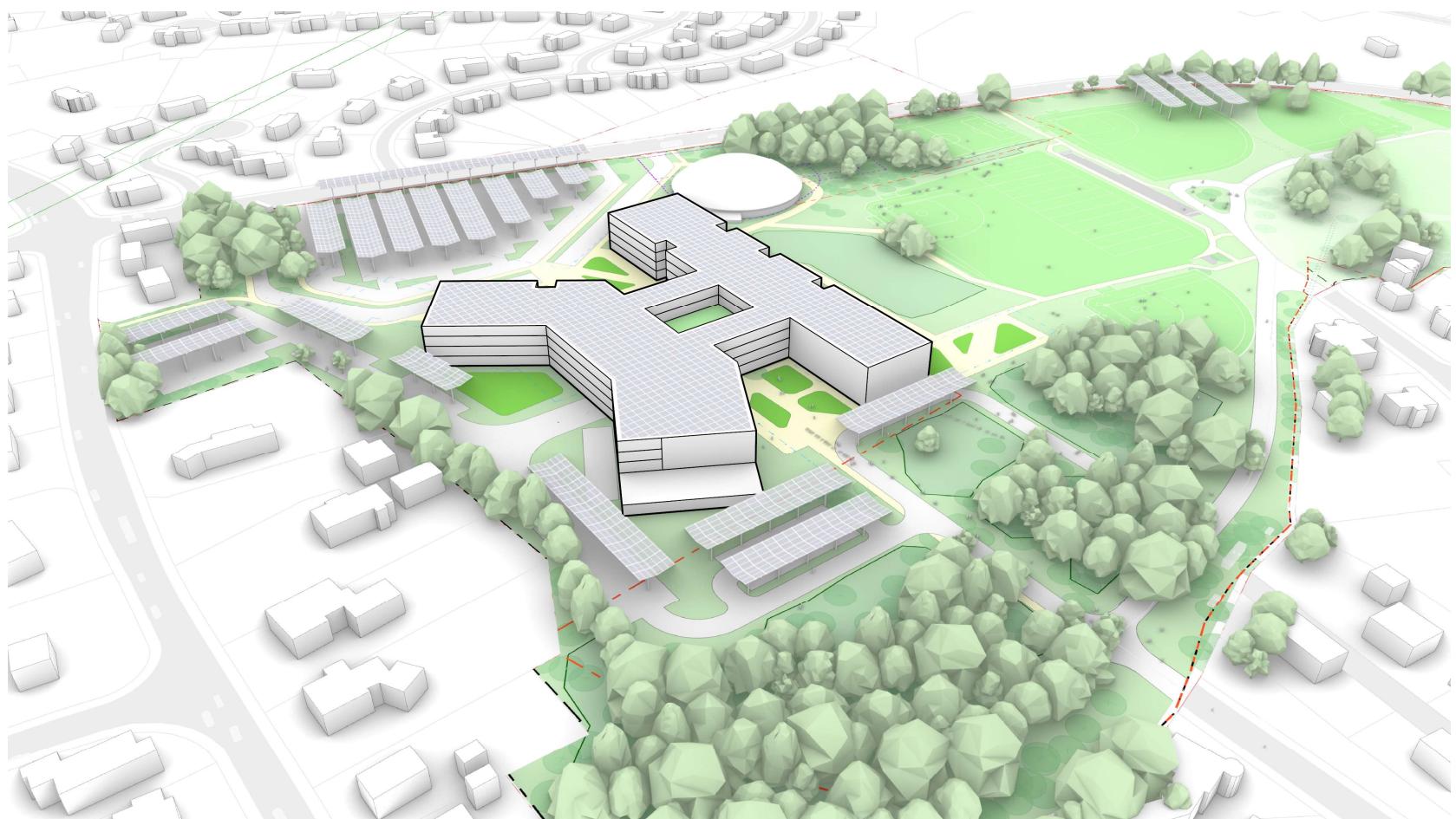
- 5 phases total
- Renovation scope is large and includes Buildings B, C, D & E
- Renovation is more invasive than Scheme B.1 and will require temporary shoring at all phases and permanent seismic upgrades, lateral bracing and reinforcement
- Existing MEP infrastructure, Loading Dock & Kitchen in Building D are maintained as needed until Phase 5
- The existing Gym and Locker Rooms can be used until the new Gym is built in Phase 2
- The renovation of the existing Auditorium will not expand seating capacity or upgrade to a full-height fly tower/backstage

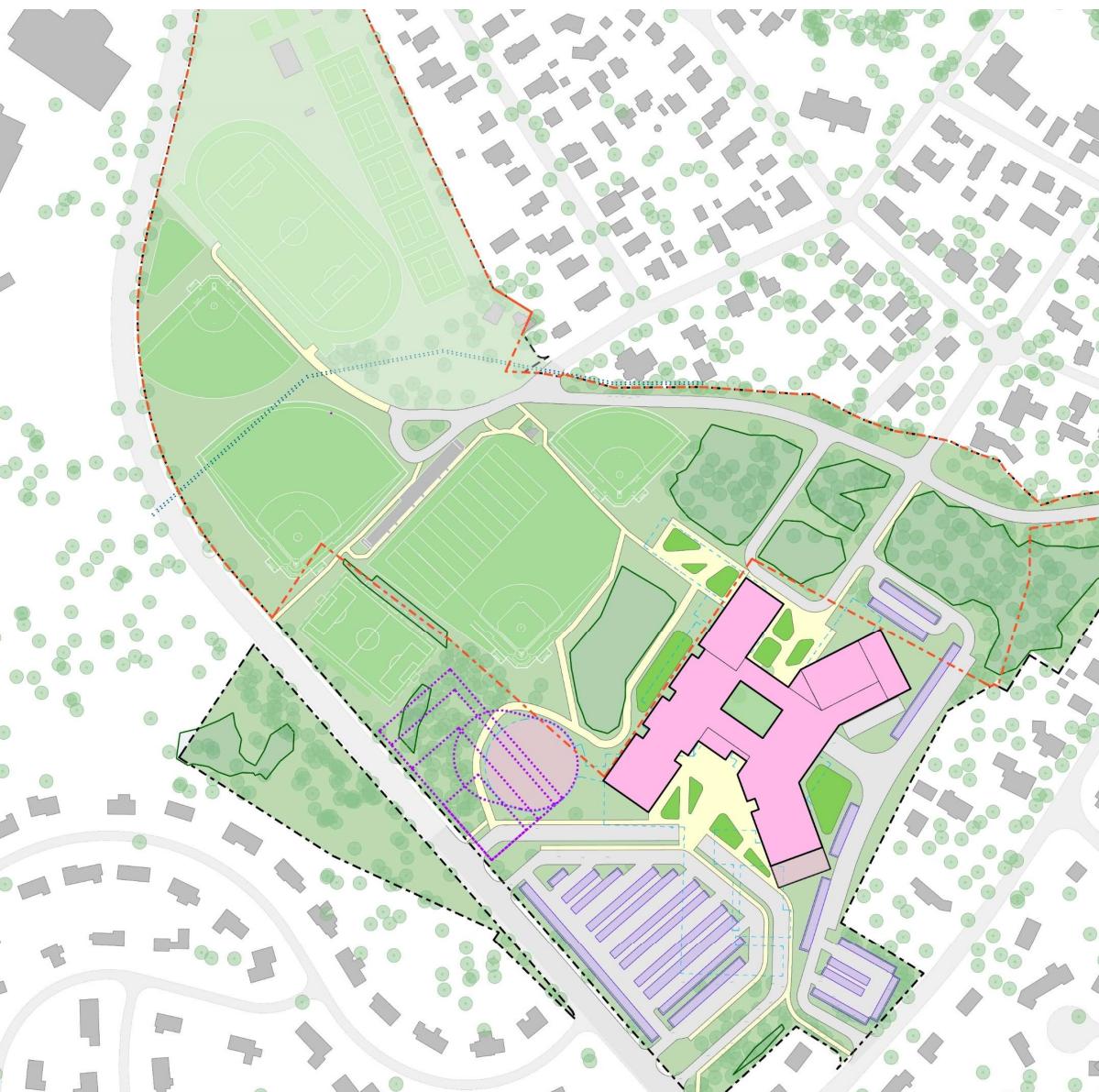
### KEY

#	PHASE
■	EXISTING CONSTRUCTION
■	NEW ADDITION
■	COMPLETED CONSTRUCTION FROM PREVIOUS PHASE
■	EXISTING BUILDINGS TO BE RENOVATED
□	EXISTING BUILDINGS TO BE DEMOLISHED

# NEW CONSTRUCTION – ON EXISTING FOOTPRINT

## Option D.2 – ‘WEAVE’ Massing





## Option D.2 – ‘WEAVE’ Site Plan

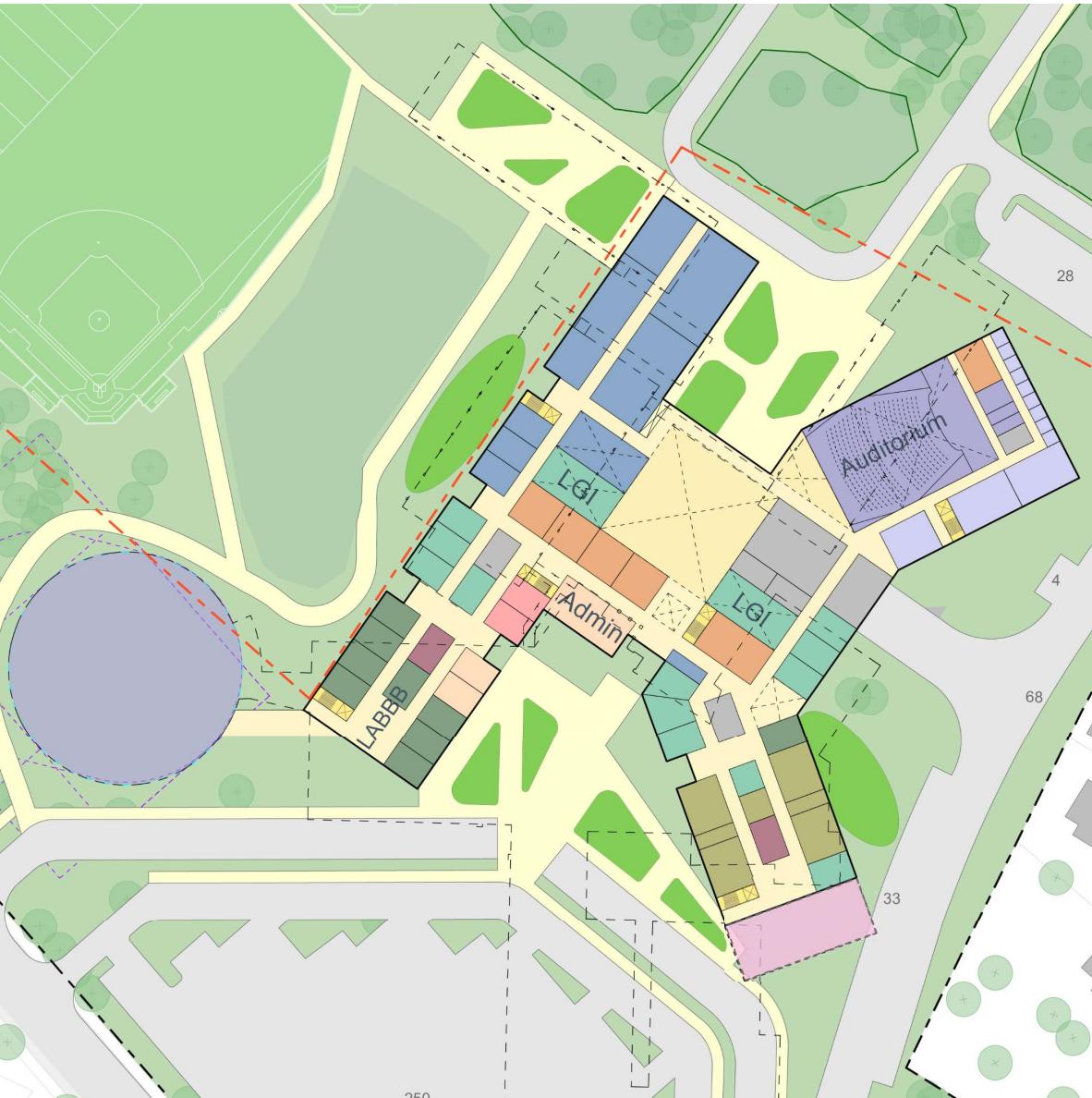
### Positives:

- Reduces impacts on fields vs. other new construction alternatives.
- Flexibility of program organization
- Maintains current Civic Presence and relationship to Muzzey St
- Potential for outdoor classrooms

### Negatives:

- Phased construction is more disruptive and time intensive than new construction.



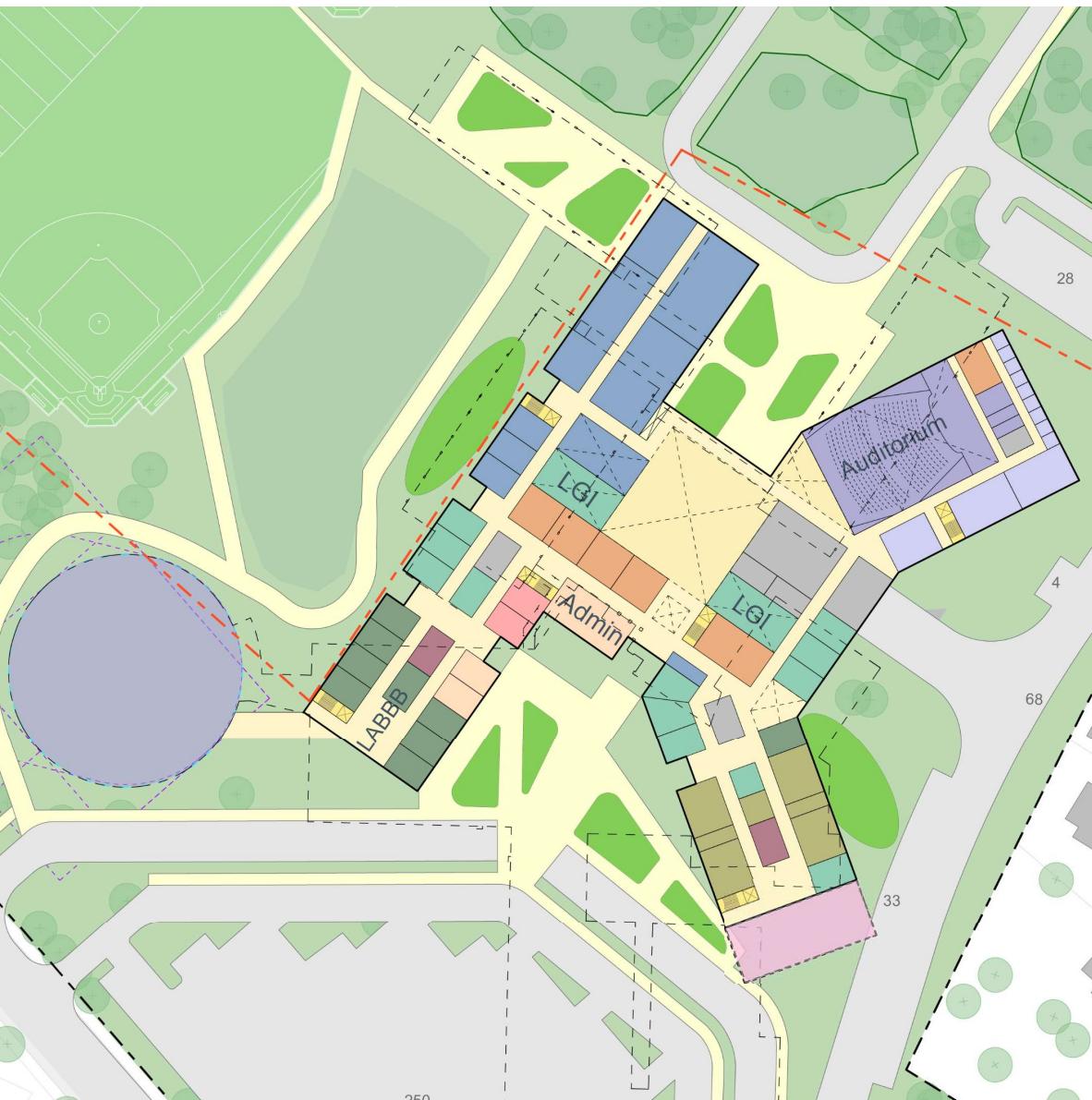


## Option D.2- ‘WEAVE’ Ground Floor

Level 1 Footprint: 158,304 sf  
Floors: 4

- Media Center at Level 3
- Gym at Level 2
- Black Box at Level 2
- Centralized Innovation Labs adjacent to Dining Commons
- Outdoor courtyard at Level 3
- Visual Art at Level 3
- Gym not adjacent to existing Field House due to phasing
- 60 months Construction Duration



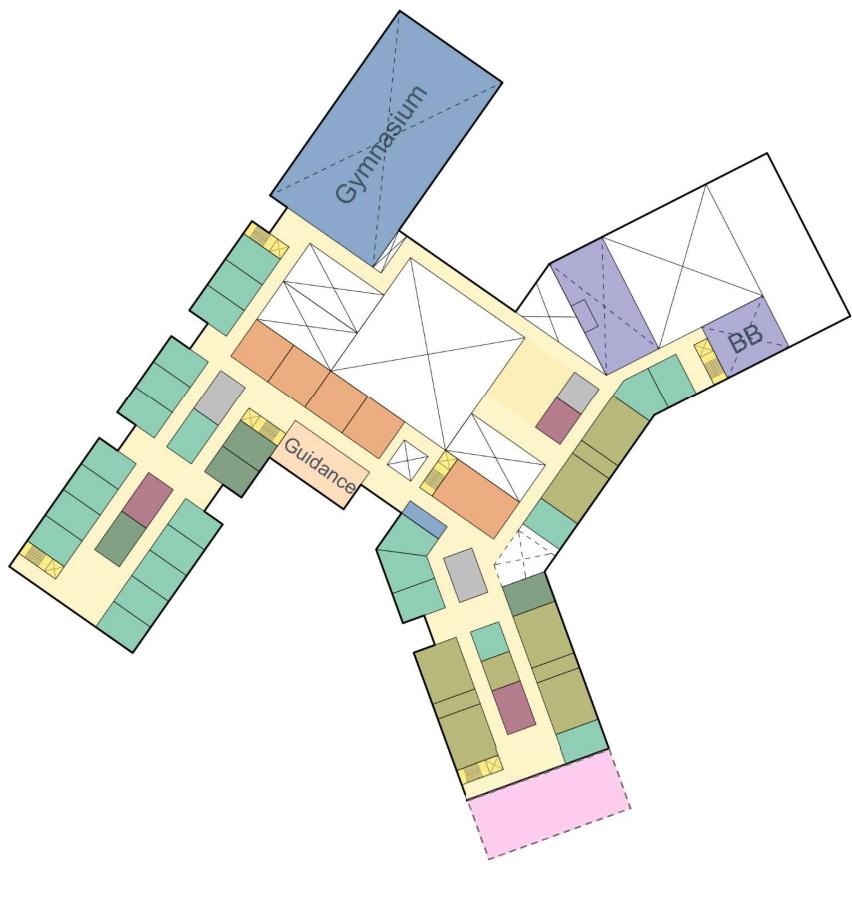


## Option D.2– ‘WEAVE’ Educational Criteria

Topic	Grade
Promotes Collaboration/ Student Agency	Green
Interdisciplinary Adjacencies	Green
Flexibility of Organization	Green
Access to Hands-on Learning	Green
Ease of Wayfinding	Green
Outdoor Learning	Green
Future Expansion Potential	Green
Possibilities for Inclusion	Green



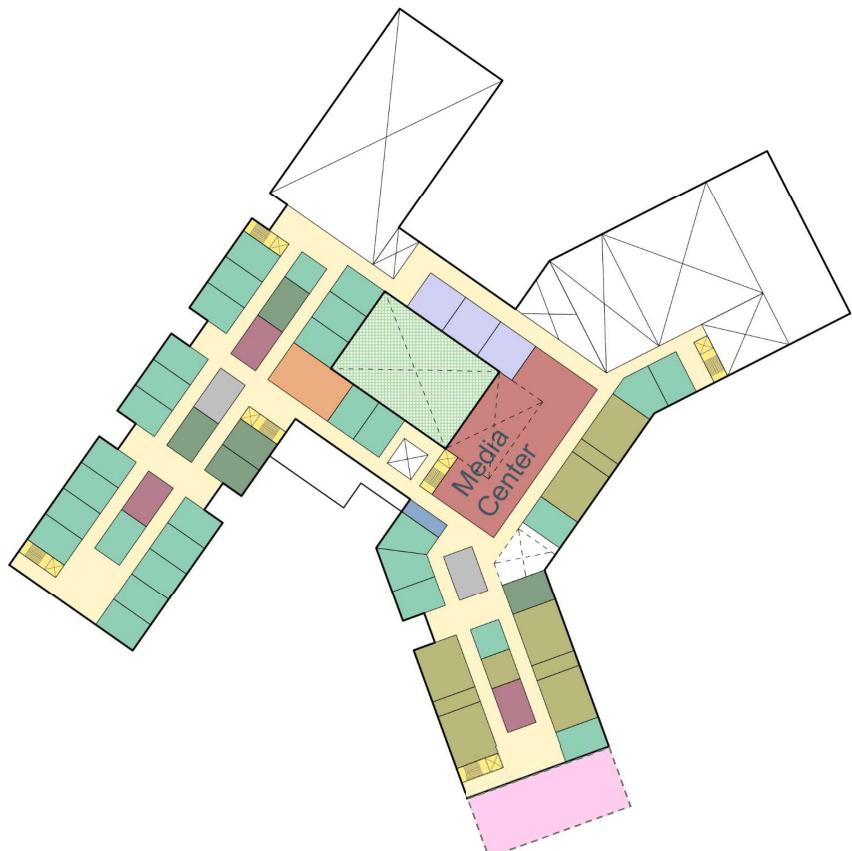
## Option D.2 – ‘WEAVE’ Level 2



■ Core Academic  
 ■ Teacher Planning & Small Group Spaces  
 ■ Special Education  
 ■ Auditorium / Drama  
 ■ Art & Music  
 ■ Media Center  
 ■ Vocation & Technology  
 ■ Health & Physical Education  
 ■ Administration, Guidance, ALPHA, METCO, Central Offices  
 ■ Medical  
 ■ Kitchen, Restrooms, Custodial  
 ■ Commons  
 ■ Circulation  
 ■ Vertical Circulation  
 □ Rooftop Open Space



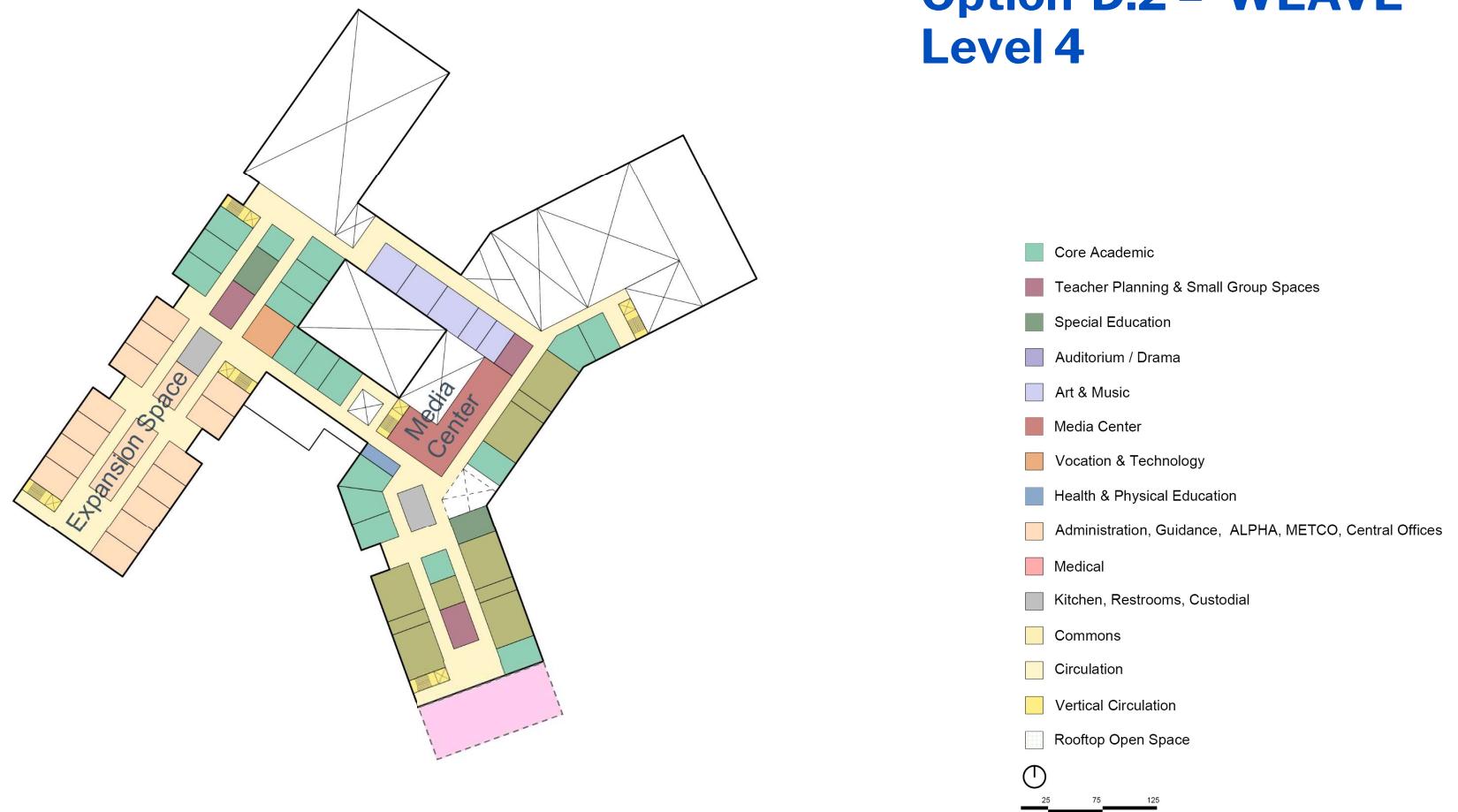
## Option D.2 – ‘WEAVE’ Level 3



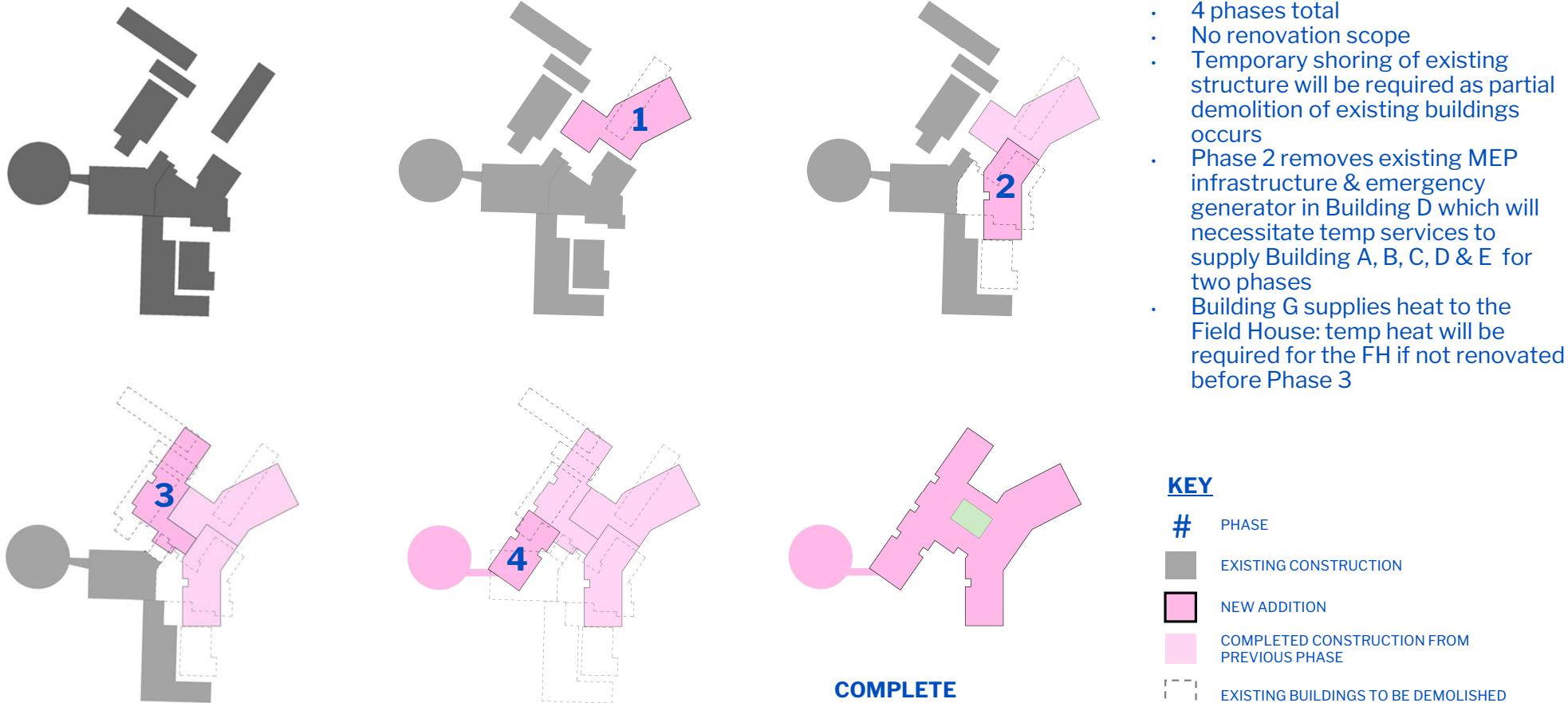
- Core Academic
- Teacher Planning & Small Group Spaces
- Special Education
- Auditorium / Drama
- Art & Music
- Media Center
- Vocation & Technology
- Health & Physical Education
- Administration, Guidance, ALPHA, METCO, Central Offices
- Medical
- Kitchen, Restrooms, Custodial
- Commons
- Circulation
- Vertical Circulation
- Rooftop Open Space



## Option D.2 – ‘WEAVE’ Level 4



## D.2 'WEAVE' Phasing



## Introduction: Choose a “Phased in Place” Option

### Construction Alternatives: Criteria Matrix

Rating Scale: Good Fair Poor



Topic	B.1 Quad	B.4 Figure Eight	D.2 Weave
Disruption to Students			
Academic Adjacencies			
Connection to Outdoors			
Organizational Flexibility			
Facilitates Inclusive Interactions			
Site Circulation			
Displacement of Fields			
Future Expansion			
Civic Presence			
Construction Duration			

## Introduction: Choose a “Phased in Place” Option

### Construction Alternatives: Criteria Matrix

Rating Scale: Good (Green) | Fair (Yellow) | Poor (Red)



Topic	B.1 Quad	B.4 Figure Eight	D.2 Weave
Disruption to Students	Poor	Poor	Poor
Academic Adjacencies	Fair	Good	Good
Connection to Outdoors	Good	Good	Good
Organizational Flexibility	Good	Good	Good
Facilitates Inclusive Interactions	Good	Good	Good
Site Circulation	Fair	Fair	Fair
Displacement of Fields	Fair	Fair	Fair
Future Expansion	Good	Good	Good
Civic Presence	Fair	Fair	Good
Construction Duration	Fair	Poor	Fair

1. Call to Order

2. Vote Previous Meeting Minutes 12:00 - 12:05 p.m.

- [August 19<sup>th</sup>, 2024](#)

**3. Introduce:** Ground Floor Program & Footprint Area, Total Gross Square Footage, "New Construction on Fields"

Massing Options & "Phased in Place" Massing Options, and new addition/renovation option B.4 12:05 – 12:50 p.m.

**4. Confirm:** Parking Quantity and Location, Driveways and Circulation, & Current Use and Anticipated Impacts of Fields 12:50 – 1:00 p.m.

5. SBC Discussion on Designer Presentation 1:00 - 1:30 p.m.

6. Communications Working Group Update (K.Lenihan) 1:30 - 1:35 p.m.

7. Public Comment 1:35 – 1:45 p.m.

8. Reflections/Action Items 1:45 – 2:00 p.m.

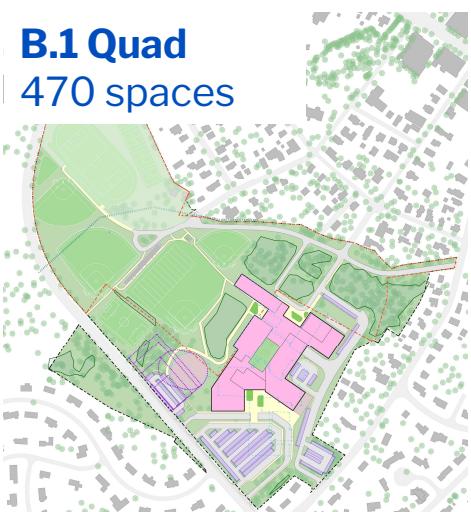
Adjourn – 2:00 p.m.

# Confirm: Parking Quantity & Location

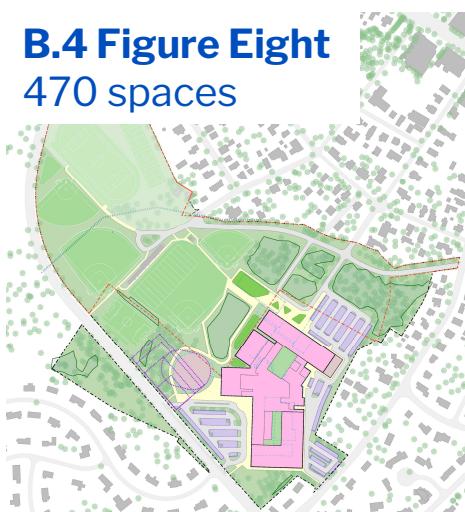
smma

## Confirm: Parking Quantity & Location

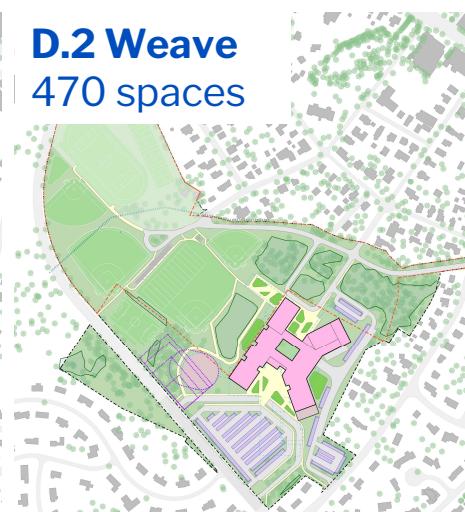
**B.1 Quad**  
470 spaces



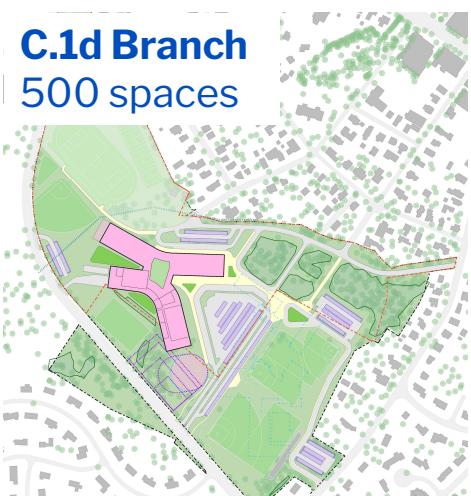
**B.4 Figure Eight**  
470 spaces



**D.2 Weave**  
470 spaces



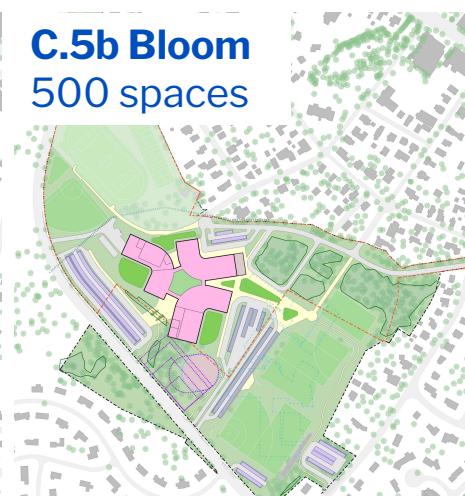
**C.1d Branch**  
500 spaces



**C.2b Braid**  
500 spaces



**C.5b Bloom**  
500 spaces

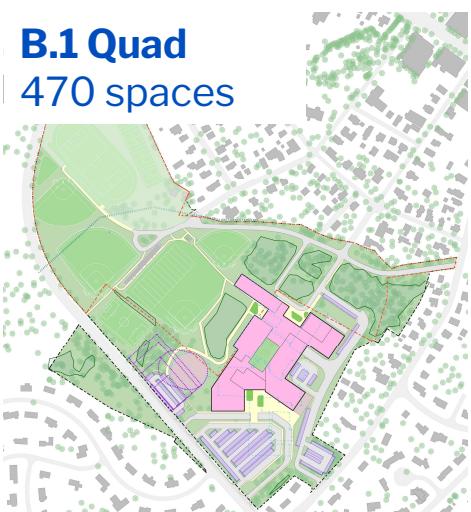


Proposed Spaces		
LHS/LABB Faculty/Staff	<b>372</b>	Ratio of combined staff to student enrollment, existing to proposed
Facilities/Food Service	<b>6</b>	Maintain existing program
LABBB Vans	<b>20</b>	Maintain existing program
Visitors	<b>15</b>	Maintain existing quantity
Central Office	<b>60</b>	Based on program, providing parking for all in person staff
Students	<b>0</b>	
Accessible	<b>20</b>	2% min
LHS school buses, LHS bus and LABBB van drivers	<b>0</b>	
<b>TOTAL</b>	<b>493 -&gt; 500</b>	

## Confirm: Parking Quantity & Location

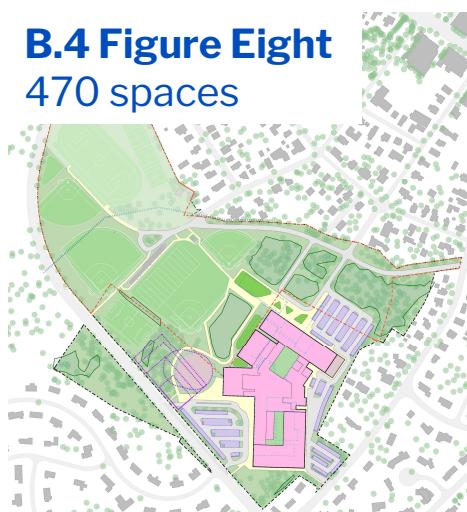
**B.1 Quad**

470 spaces



**B.4 Figure Eight**

470 spaces



**D.2 Weave**

470 spaces



### Proposed Spaces

LHS/LABB Faculty/Staff	<b>372</b>	Ratio of combined staff to student enrollment, existing to proposed
Facilities/Food Service	<b>6</b>	Maintain existing program
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Central Office	<b>60</b>	Based on program, providing parking for all in person staff
Students	<b>0</b>	
Accessible	<b>20</b>	2% min
LHS school buses, LHS bus and LABBB van drivers	<b>0</b>	
<b>TOTAL</b>	<b>493 -&gt; 500</b>	

### Build in Place Confirmation:

- Reduced parking program OR price additional 30 spaces in structure

## Confirm: Parking Quantity & Location

**C.1d Branch**

500 spaces



**C.2b Braid**

500 spaces



**C.5b Bloom**

500 spaces



### Proposed Spaces

LHS/LABB Faculty/Staff	<b>372</b>	Ratio of combined staff to student enrollment, existing to proposed
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Accessible	<b>20</b>	2% min
LHS school buses, LHS bus and LABBB van drivers	<b>0</b>	
<b>TOTAL</b>	<b>493 -&gt; 500</b>	

### New Build on Fields Confirmation:

- Provide parking program at grade

# Confirm: Driveways & Circulation

smma

## **Confirm: Driveways & Circulation**

- Separate school bus, LABBB van, and parent drop off loops
- Neighborhood impacts: minimize use of residential streets for school access
- Bus traffic in and out of Worthen Road
- Queue length: ability to keep queued vehicles off public streets
- Pedestrian/Bicycle Safety: prioritize student circulation, access, and movement

# Confirm: Current Use & Anticipated Field Impacts

smma

## Confirm: Anticipated Field Impacts

# New Builds on Fields – (Options C.1d, C.2b, & C.5b)

### CONSTRUCTION SCHEDULE\*

September 2026 – May 2030

#### FIELD IMPACTS

	Ground Source	Air Source
C1 – Varsity Baseball Diamond	12/2026 – 5/2030	12/2026 – 5/2030
C2 – Varsity Softball Diamond	12/2027 – 11/2028	<b>none</b>
C3 – Junior Varsity Baseball Diamond	9/2026 – 5/2030	9/2026 – 5/2030
C4 – Little League Diamond	12/2026 – 5/2030	12/2026 – 5/2030
C5 – Crumb Football Field	9/2026 – 5/2030	9/2026 – 5/2030
C6 – Worthen Practice Field	12/2026 – 5/2030	<b>6/2029</b> – 5/2030
C7 – Multi Use Rectangle	12/2027 – 5/2030	<b>6/2029</b> – 5/2030
C8 – Multi Use Cricket	9/2026 – 5/2030	9/2026 – 5/2030



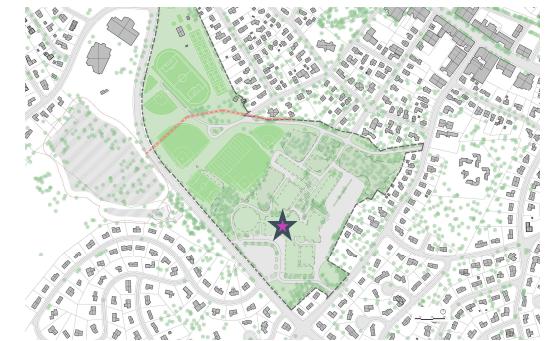
\*Construction schedule is preliminary and would need to be confirmed and coordinated with the selected CM

## Confirm: Anticipated Field Impacts

# Build in Place – (Options B.1, D.2, & B.4)

**CONSTRUCTION SCHEDULE\***  
September 2026 – November 2031

FIELD IMPACTS	Ground Source	Air Source
C1 – Varsity Baseball Diamond	none	none
C2 – Varsity Softball Diamond	none	none
C3 – Junior Varsity Baseball Diamond	9/2026 – 11/2031	9/2026 – 11/2031
C4 – Little League Diamond	none	none
C5 – Crumb Football Field	9/2026 – 6/2031	9/2026 – 6/2031
C6 – Worthen Practice Field	6/2029 – 6/2031	none
C7 – Multi Use Rectangle	none	none
C8 – Multi Use Cricket	9/2026 – 11/2031	9/2026 – 11/2031

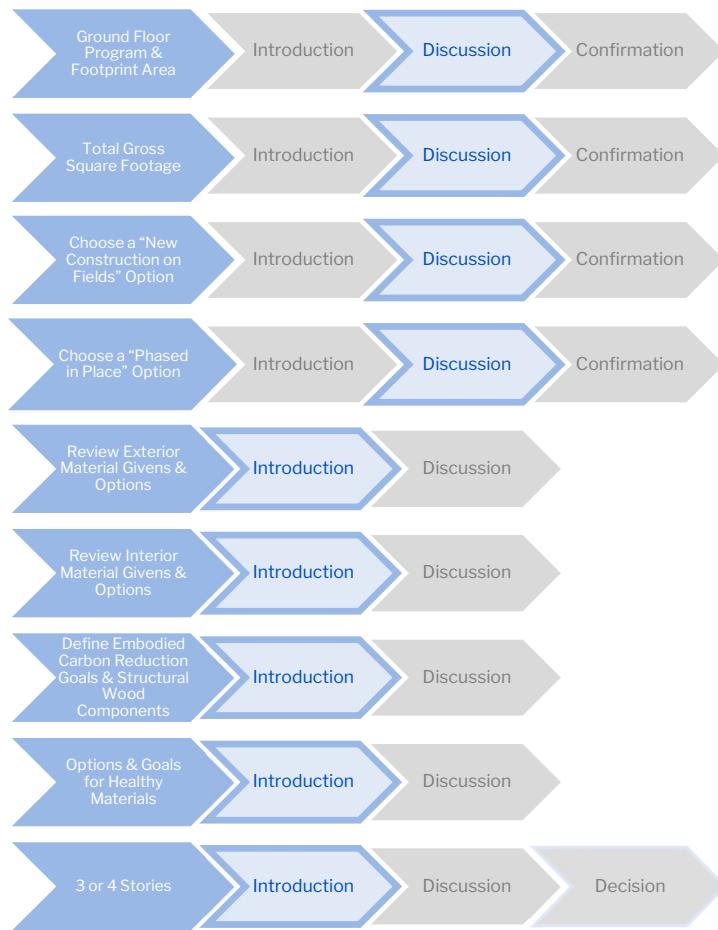


\*Construction schedule is preliminary and would need to be confirmed and coordinated with the selected CM

# Next Steps

smma

## Progress Update/ 9.16



### Confirmed



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- [August 19<sup>th</sup>, 2024](#)

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# Thank you