

# WELCOME!

## Improvements to Pierce School Community Visioning Meeting

*We will get started soon.*

*This meeting is being  
recorded.*

*There will be a brief  
presentation followed by a  
Q&A period. Please submit  
questions through the chat  
function. Or, raise your hand  
during the Q&A.*

# Have A Question?

**IF JOINING BY WEB (Computer, Tablet, etc):**



Raise Hand

Click to  
raise your  
hand during  
Q+A



Q+A

Click to type  
your questions  
anytime during  
webinar

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Passcode: 47088884

Press \*9 to raise your hand

Press \*6 to unmute/mute yourself



SASAKI

# The John R. Pierce School



**COMMUNITY MEETING 2**

OCTOBER 25, 2021

# TONIGHT'S AGENDA

**Welcome and Introduction**

*5 min*

**Schedule**

*1 min*

**Pierce School Today**

*5 min*

**Summary of Options**

*20 min*

**Summary of Sustainability**

*10 min*

**Q&A**

*45 min*

**Next Steps**

*5 min*

# School Building Committee

**Bernard Greene**, Co-Chair  
*Select Board*

**Melvin Kleckner**  
*Town Administrator*

**Daniel Bennett**  
*Building Commissioner*

**Ken Kaplan**  
*Building Commission*

**Carol Levin**  
*Advisory Finance Committee*

**Steve Heikin**  
*Planning Board*

**Charlie Simmons**  
*Director of Public Buildings*

**Nancy O'Connor**  
*Parks and Recreation Commission*

**Melissa Goff**  
*Deputy Town Administrator*

**Tony Guigli**  
*Building Department Project Manager*

**Helen Charlupski**, Co-Chair  
*School Committee*

**Linus J. Guillory Jr., PhD**  
*Superintendent of Schools*

**Andy Liu**  
*School Committee*

**Lesley Ryan-Miller**  
*Deputy Superintendent of Teaching & Learning*

**Samuel Rippin**  
*Assistant Superintendent of Schools Admin. & Finance*

**Jamie Yadoff**  
*Interim Pierce School Principal*

**Aaron Williams**  
*Pierce School Parent*

**Nurit Zuker**  
*Pierce School Parent*

**Matt Gillis**  
*Director of Operations, PSB Project Manager*

# Project Management + Design Team



Owner's Project Manager

Jim Rogers  
Jen Carlson  
Lynn Stapleton



# Pierce School Design Process

We are here!

Winter 2021

Spring, Summer, Fall 2021

Winter, Spring 2022

Later in 2022

## PHASE 1 PRELIMINARY DESIGN & PROGRAM

- Understand the School's past and present
- Understand community perspective and vision for the future

## PHASE 2 DEVELOPMENT OF ALTERNATIVES

Concept Options +  
Cost Estimate



Refined  
Conceptual  
Plan + Cost  
Estimate



## PHASE 3 SCHEMATIC DESIGN

Schematic  
Design Drawings



Cost  
Estimate



## VOTE

## DESIGN DEVELOPMENT AND DOCUMENTATION

Public +  
Stakeholder  
Meetings



GOAL:

**LISTEN**

**TEST CONCEPTUAL  
IDEAS**

**CONFIRM REFINED  
CONCEPT**

**MORE OPPORTUNITIES  
TO ENGAGE DURING  
DETAILED DESIGN**



**NOV**  
**2021**

**FALL**  
**2022**

**SPRING**  
**2024**

**SEPT**  
**2026**

SBC Selects Single Preferred Option

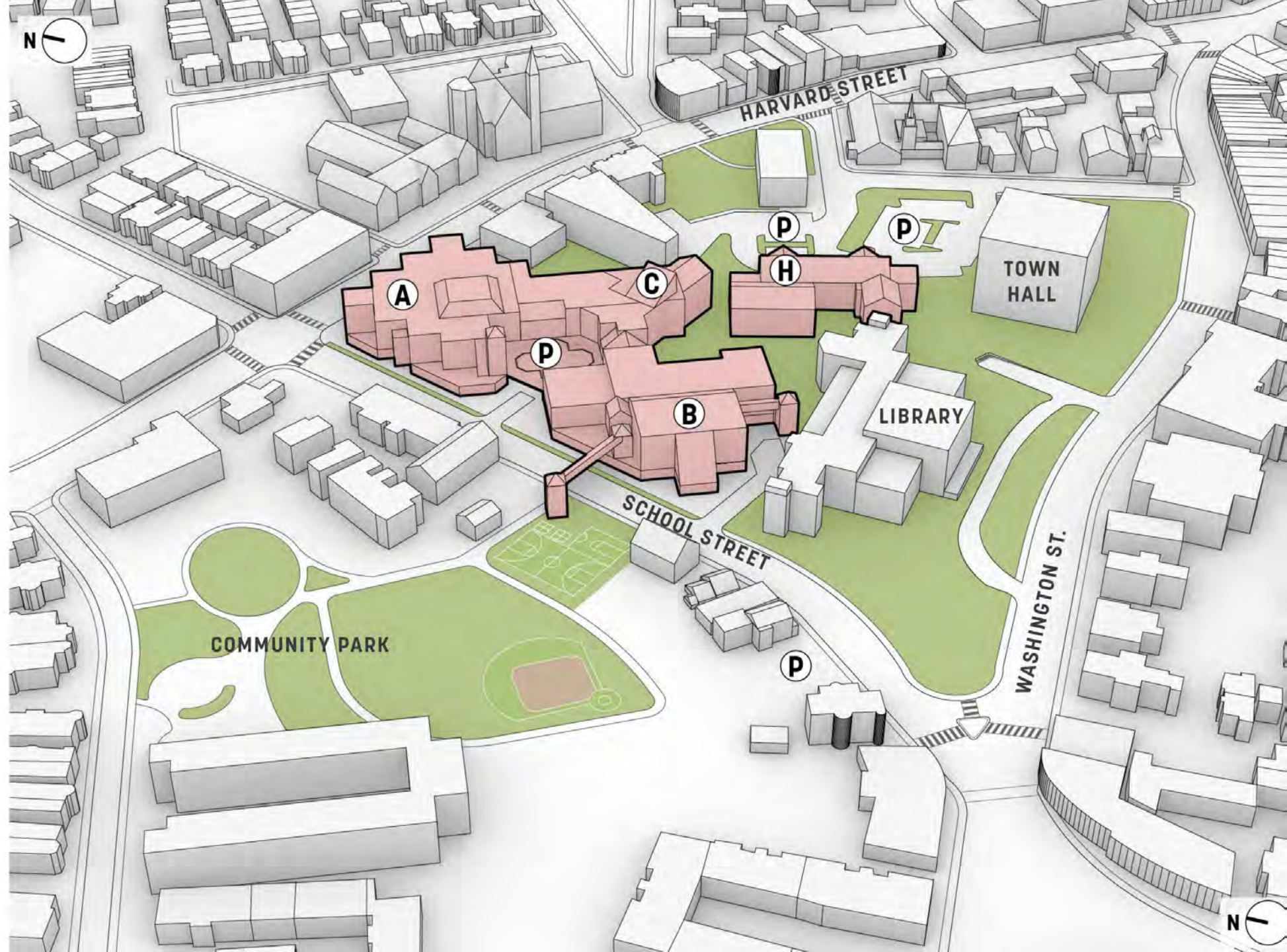
Town Meeting Vote & Debt Exclusion Vote

Anticipated Construction Start Date

Anticipated School Open Date

# Pierce School Today

- A = Existing Wing A
- B = Existing Wing B
- C = Existing Wing C
- H = Historic Building
- P = Parking





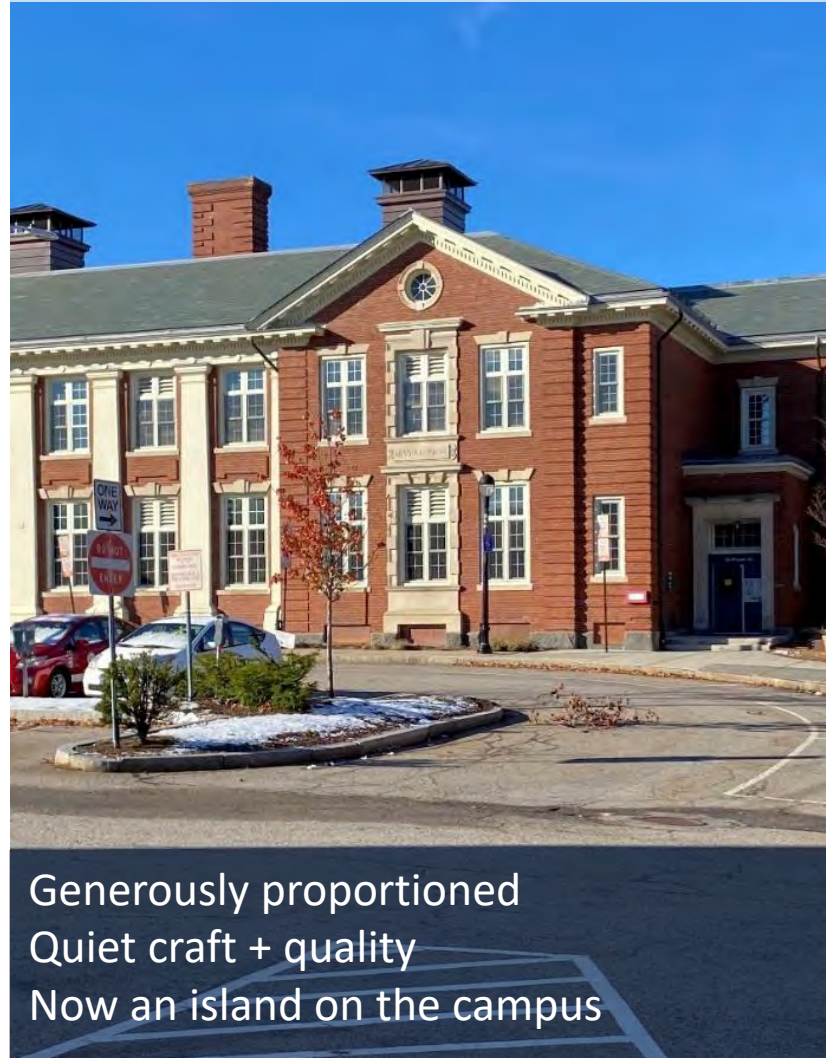
# Pierce School Today

1974 Open School



Visually + acoustically intense  
Moments of quirky delight  
Difficult to navigate

1854 Age of Reform



Generously proportioned  
Quiet craft + quality  
Now an island on the campus

Products of their Times



Inward-looking  
Could be more inviting + accessible  
Systems and envelope need upgrading

# Many Voices, Many Perspectives on the School's Future



**196**

**Responses to the  
Online Survey**



**6** Educational  
Visioning Sessions

**12** School Building  
Committee and Working  
Group Meetings



**2**

**Community Forums**  
Educational Program,  
Site and Building Visioning

# We Heard...



## ARRIVAL & CIRCULATION

- A majority of students arrive on foot or by bike
- Parking is important for employees and staff
- People arrive from all sides of the school, crosswalks and traffic calming are important



## ENVIRONMENTAL SYSTEMS

- Desire for the site to express and teach about the natural environment
- Increase shade trees and thermal comfort in outdoor spaces



## OUTDOOR PLAY & LEARNING

- Community park is well loved and also used for recess and physical education
- Garden beds and amphitheater are important parts of the school culture and curriculum



## NEIGHBORHOOD PRESENCE

- Significant desire for community social spaces and public art defining the streetscape
- Consider connectivity through the block
- Facade and massing along the street should relate to local character

# Key Priorities that Emerged

## Educational

Support Pierce's K-8 Community

Whole Child Approach

Project-Based and Hands-On Learning

Collaboration and Integrated Delivery

Library as Hub

## Architectural

Thermal and Physical Comfort

Maintain Pierce's Uniqueness

Agile Learning Spaces

Improved Street Presence and Access

Support for the Arts

## Community

An easier to navigate building for community members and families

Safer drop-off

Ease of access for events

Safe road crossing

Outdoor Areas

Access to library and other public spaces

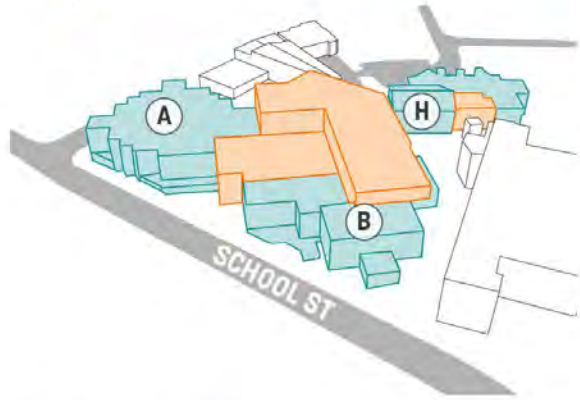
## ... and some givens:

*The school will be accessible, sustainable, and meet standards for acoustics and air quality.*

*The school will be equal in quality to other recently-built Brookline K8 schools.*

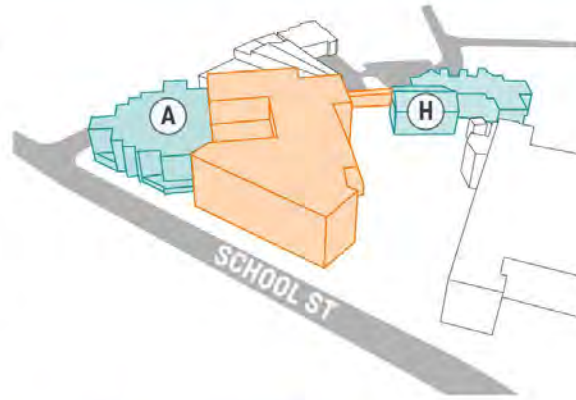
# SUMMARY OF OPTIONS

# Summary of Options



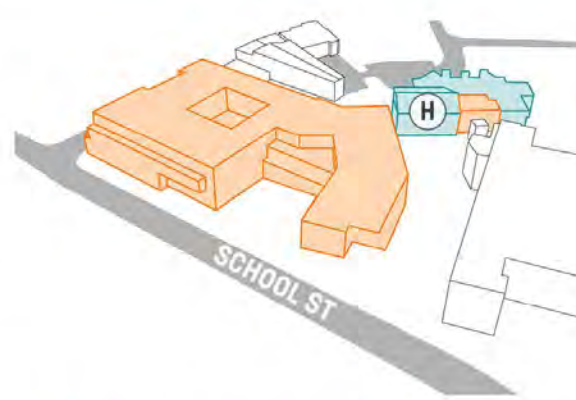
## OPTION 1

- Renovate existing Units A + B
- Replace Unit C with a new addition
- Connect to a renovated historic 19th century school building



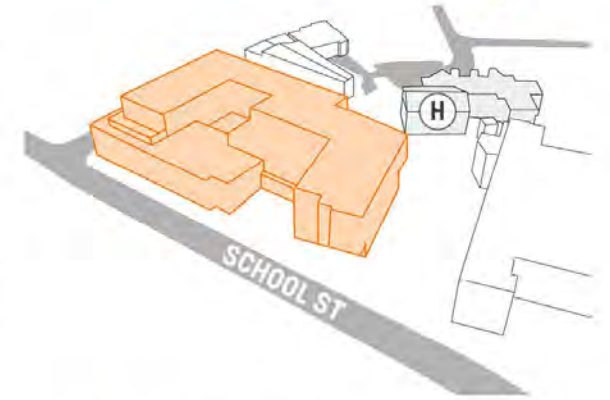
## OPTION 2b

- Renovate existing Unit A
- Replace Units B + C with a new addition
- Connect to a renovated historic 19th century school building



## OPTION 3b-H

- New building
- Connect to a renovated historic 19th century school building



## OPTION 3b

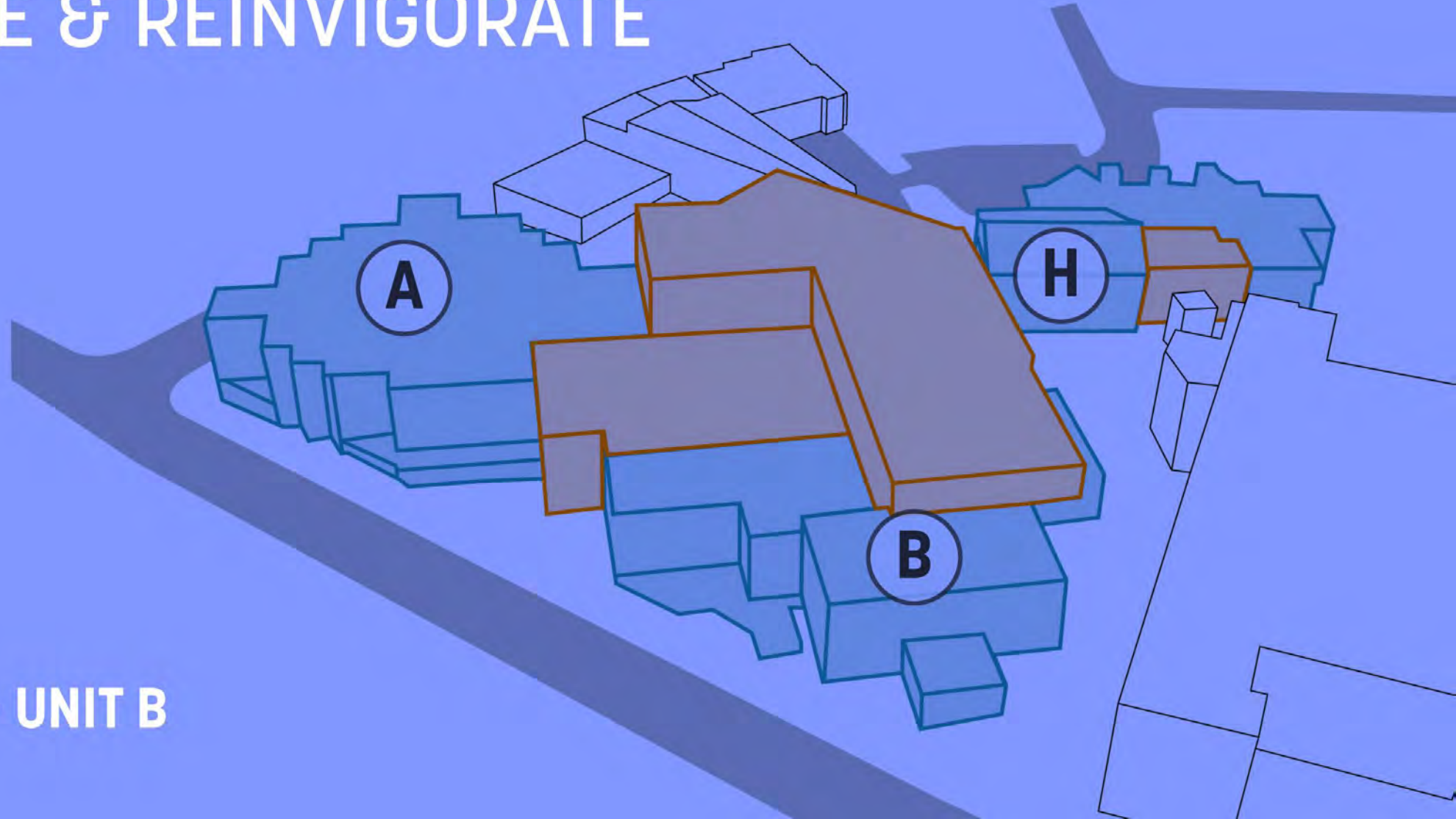
- New independent building
- Historic 19th century school building would need to be renovated separately for other school uses

~~OPTION 4 (not pictured)~~

- ~~• Building on Pierce Playground~~

# OPTION 1

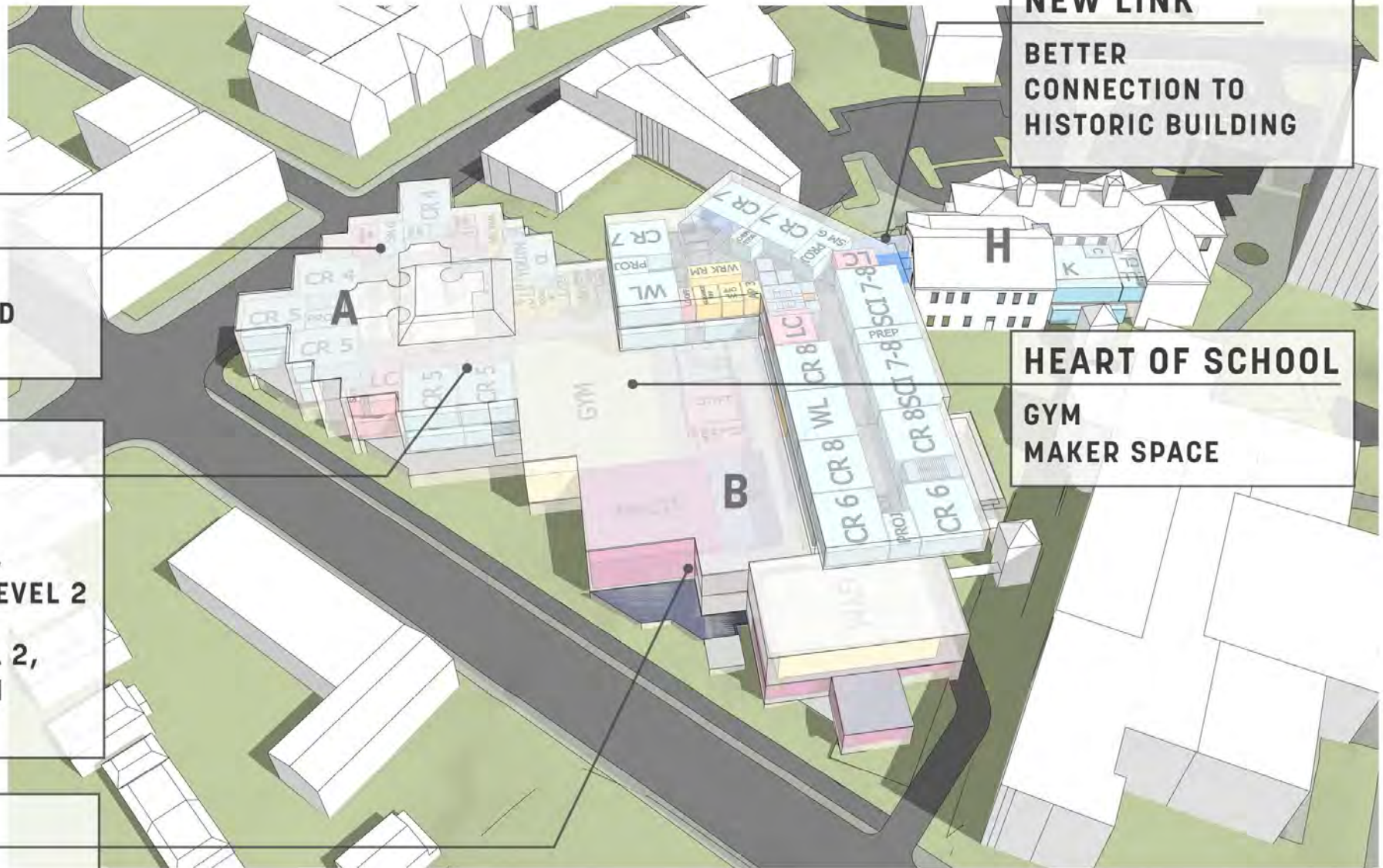
PRESERVE & REINVIGORATE



KEEP UNIT A + UNIT B

OPTION 1

# Building Organization



## UNIT A

LIBRARY  
PRESERVED + UPDATED  
NEAR 3, 4, 5

## GRADE BANDS

6-7-8 ON LEVEL 4

1, 2 AND 6 ON LEVEL 3,  
ALIGNED W/ K ON H-LEVEL 2

HALF OF 4, 5 ON LEVEL 2,  
ALIGNED W/ PRE-K ON  
H-LEVEL 1

## EVENT SPACES

MULTIPURPOSE  
MUSIC, ART & SMALL GYM

## NEW LINK

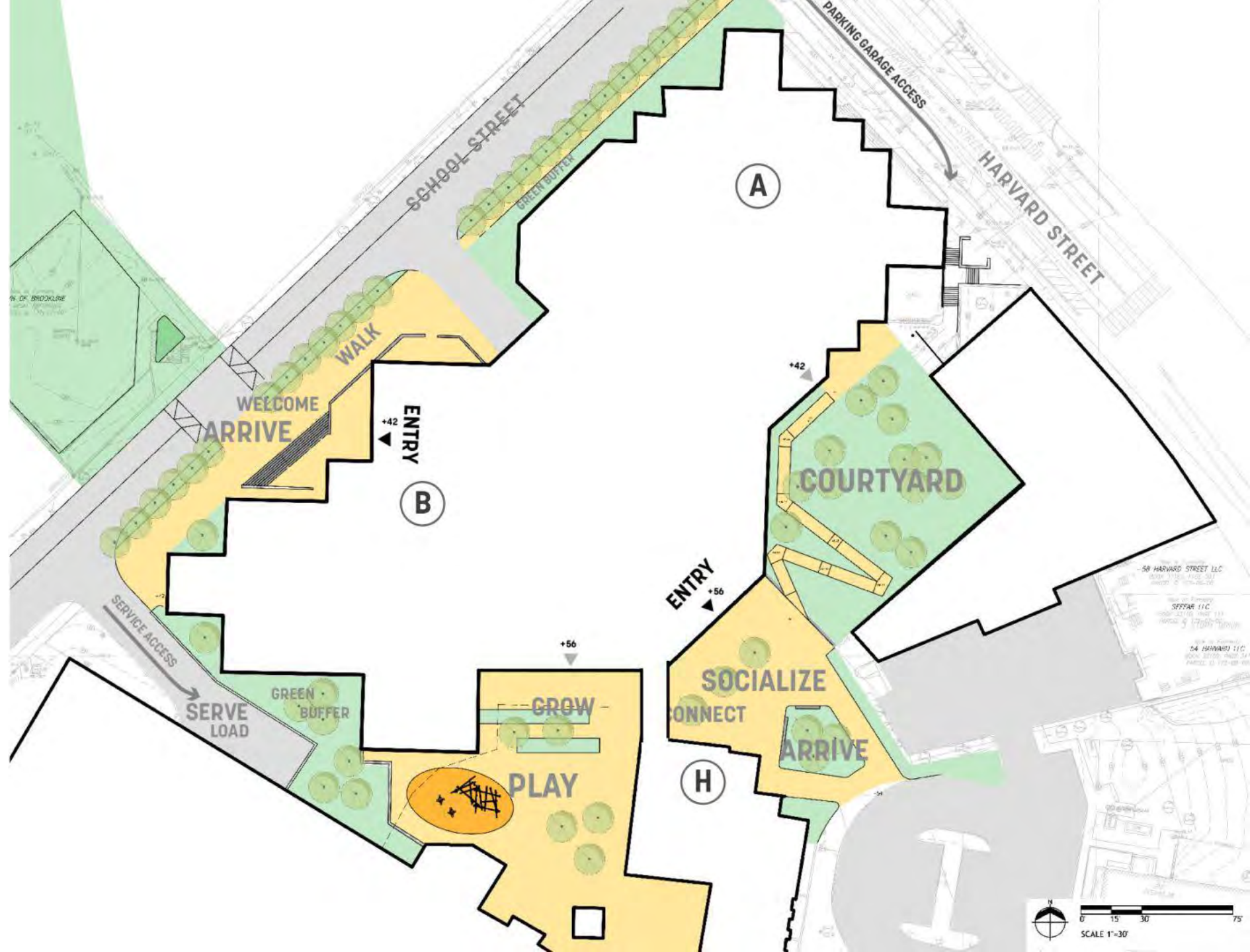
BETTER  
CONNECTION TO  
HISTORIC BUILDING

## HEART OF SCHOOL

GYM  
MAKER SPACE



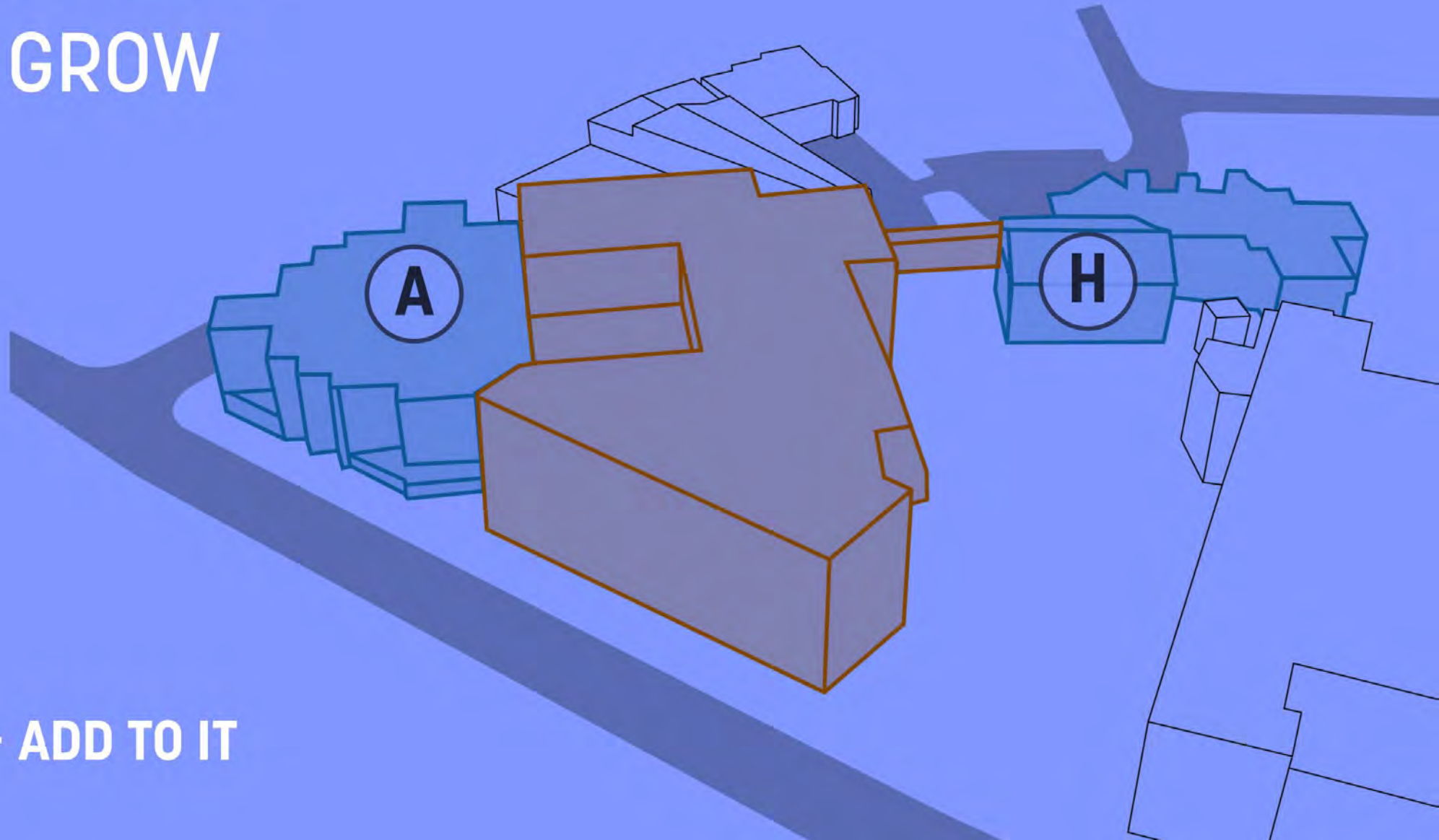
# OPTION 1 Site Plan





# OPTION 2B

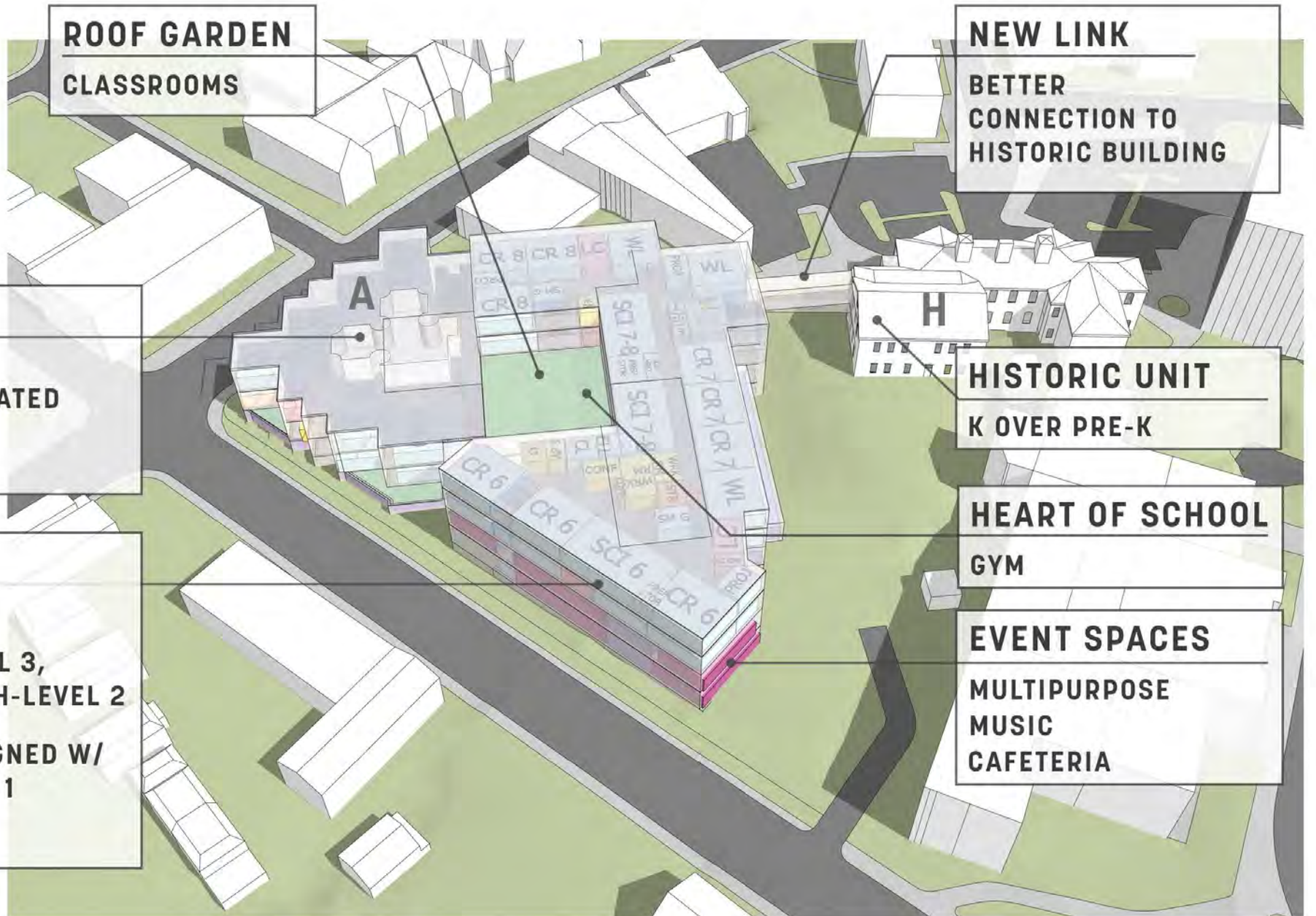
ADAPT & GROW



KEEP UNIT A + ADD TO IT

OPTION 2B

# Building Organization



**ROOF GARDEN**

**CLASSROOMS**

**NEW LINK**

**BETTER CONNECTION TO HISTORIC BUILDING**

**UNIT A**

**LIBRARY PRESERVED + UPDATED NEAR 3, 4,5 AND MAKER SPACE**

**HISTORIC UNIT**

**K OVER PRE-K**

**GRADE BANDS**

**6-7-8 ON LEVEL 4**

**1,2 AND 5 ON LEVEL 3, ALIGNED W/ K ON H-LEVEL 2**

**4 ON LEVEL 2, ALIGNED W/ PRE-K ON H-LEVEL 1**

**3 ON LEVEL 1**

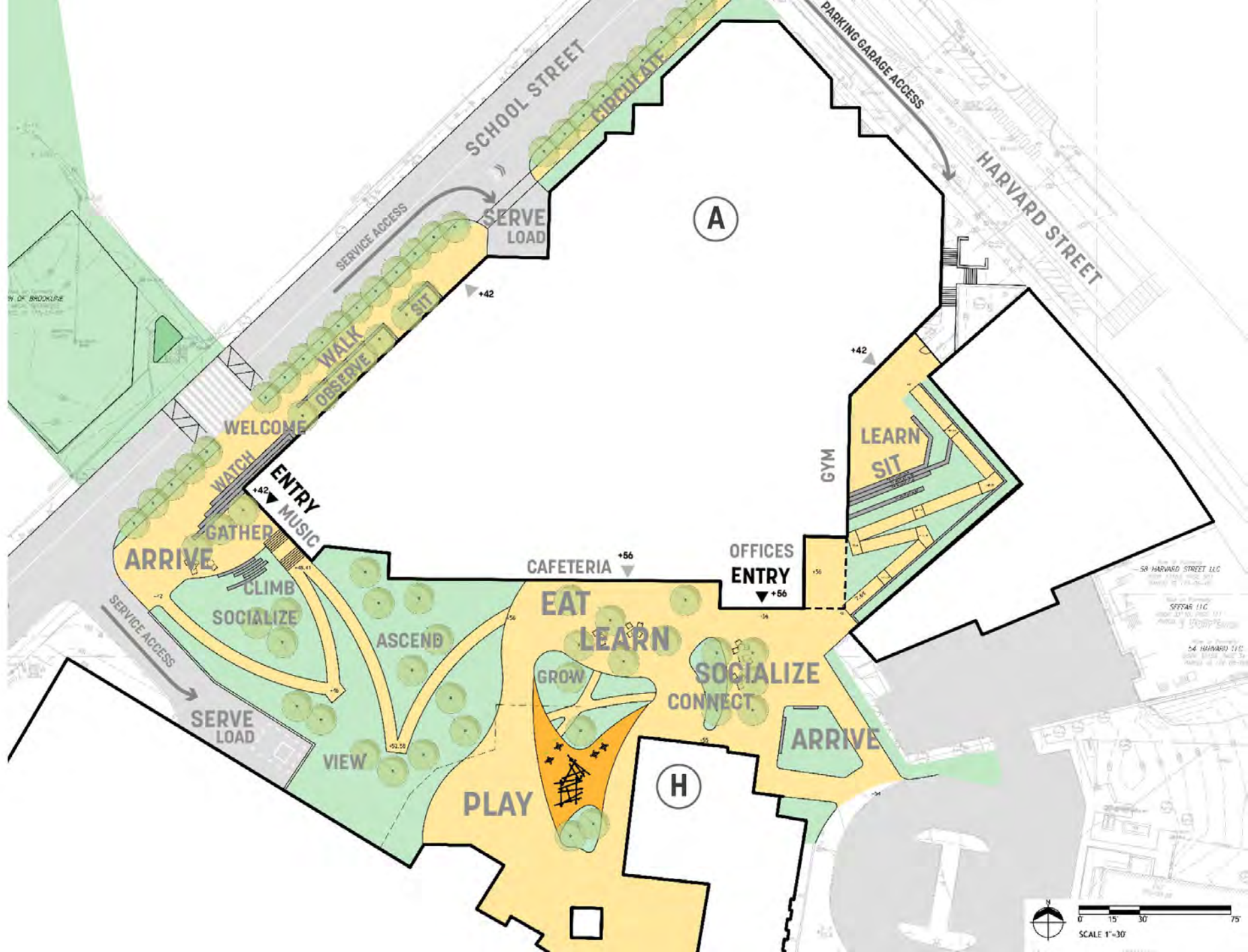
**HEART OF SCHOOL**

**GYM**

**EVENT SPACES**

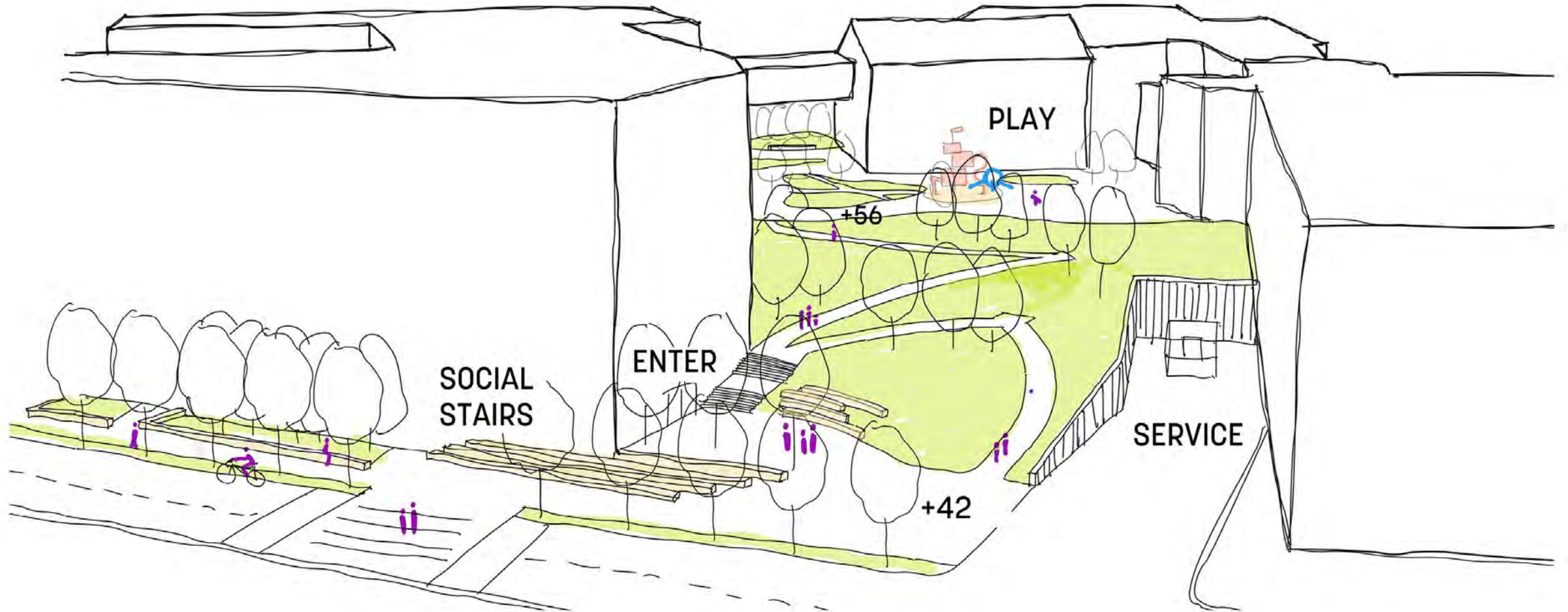
**MULTIPURPOSE MUSIC CAFETERIA**

OPTION 2B  
**Site Plan**



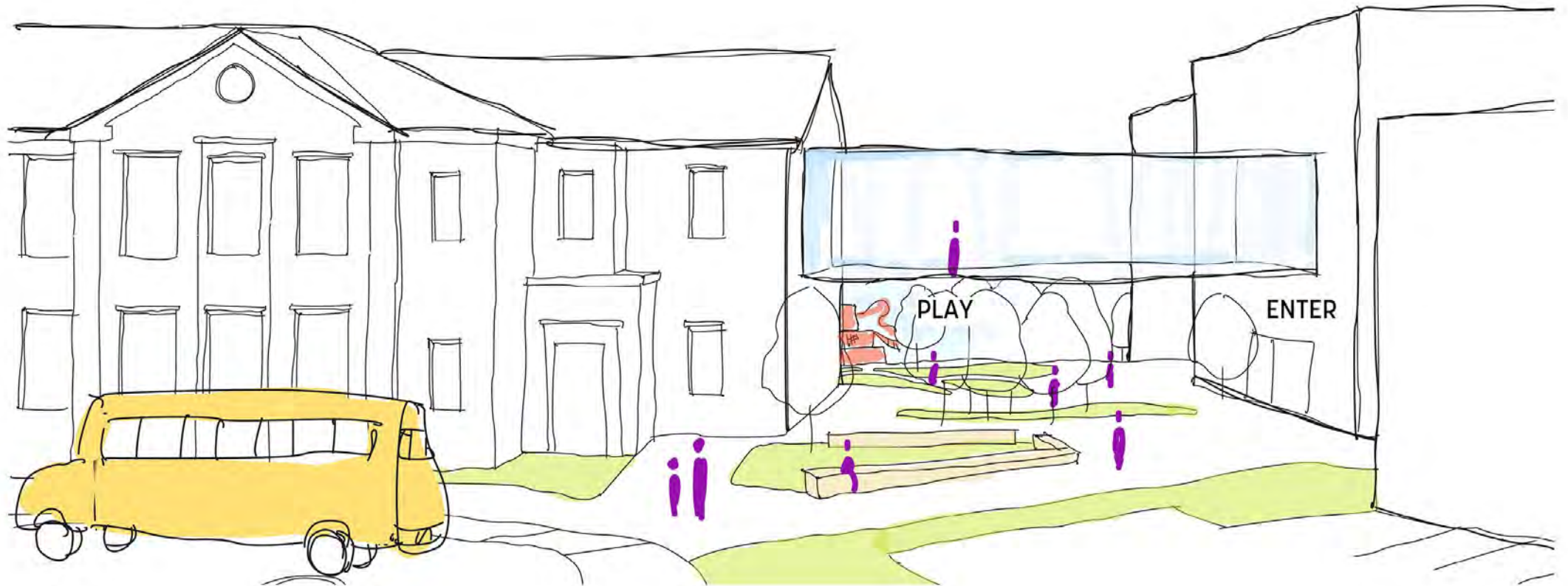
OPTION 2B

# School St Experience



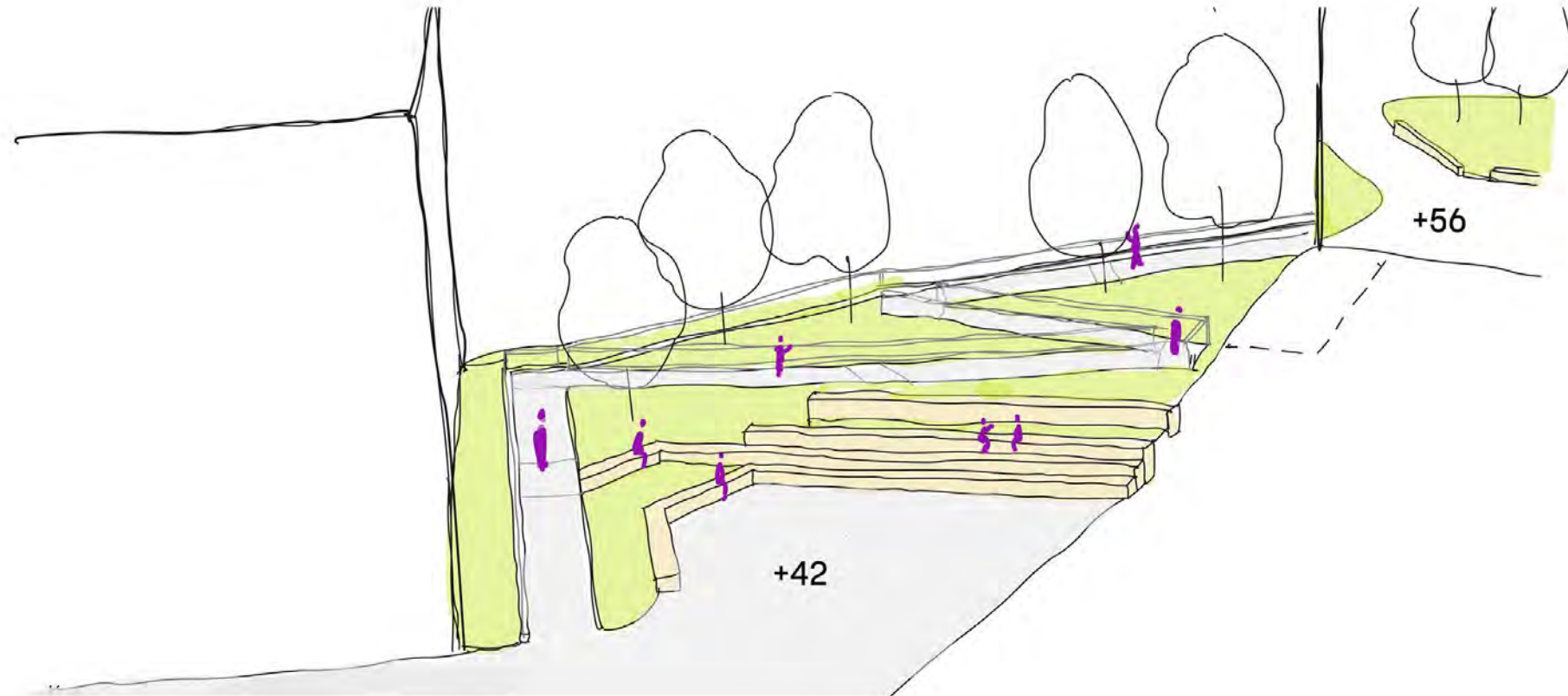
OPTION 2B

# Entry / Arrival Experience



OPTION 2B

# Outdoor Classroom





## OPTION 2B

# Overall Considerations



### Pros +

Through-block green space connection to park

Maximizes South facing facade

Preserves some embodied carbon

### Cons -

Grades bands for grades Pre-K to 5 are scattered on multiple floor levels

Media Commons not at hub of school

Historic building somewhat disconnected from rest of school

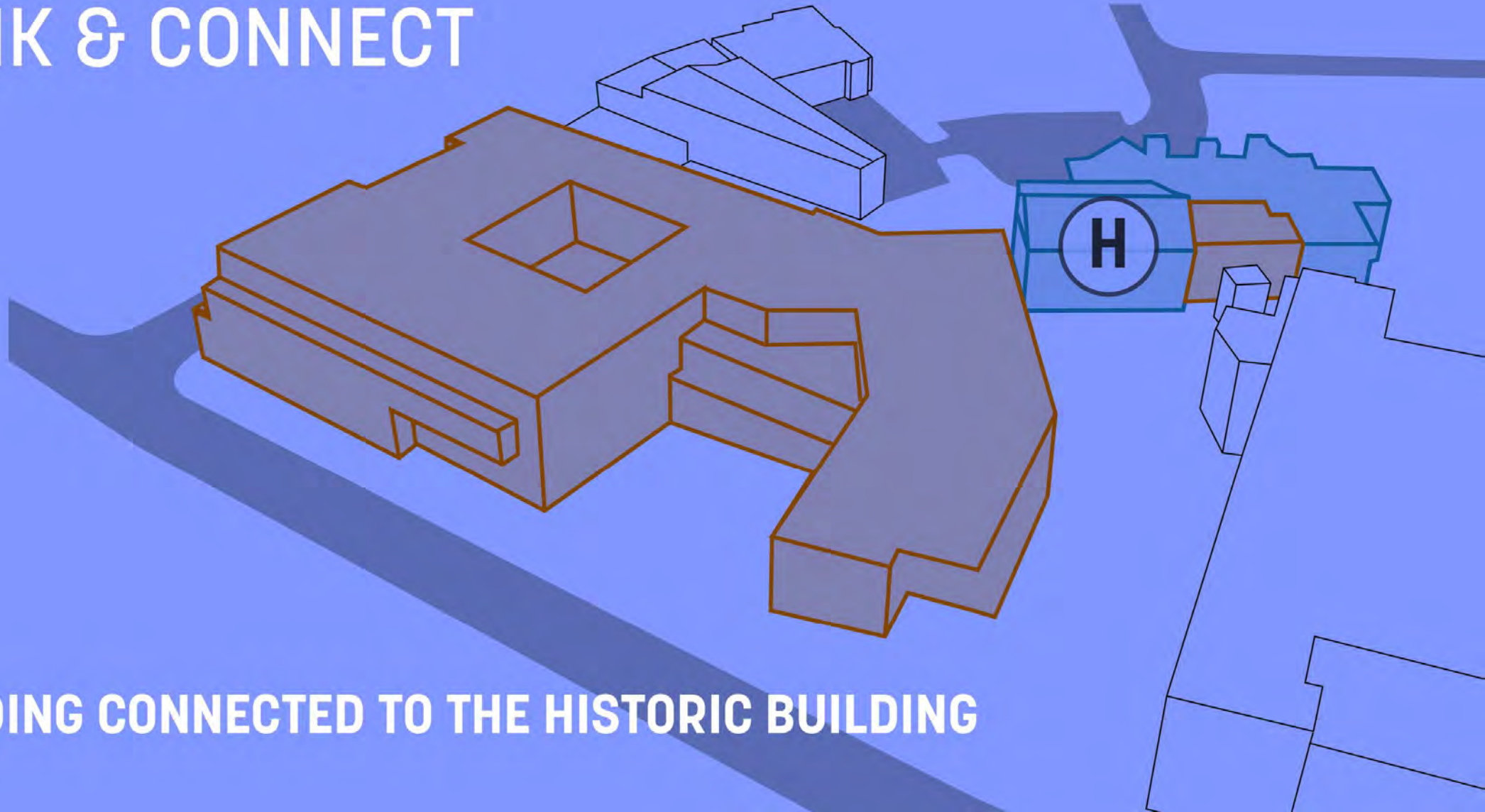
Space use is inefficient due to reuse of existing buildings

Poor service access location off of School Street

Operational energy performance not as good as other options

# OPTION 3B-H

## RETHINK & CONNECT



**NEW BUILDING CONNECTED TO THE HISTORIC BUILDING**

OPTION 3B-H

# Building Organization

## ROOF GARDEN

MAKER SPACE  
ART

## NEW LINK

BETTER  
CONNECTION TO  
HISTORIC BUILDING

## EVENT SPACES

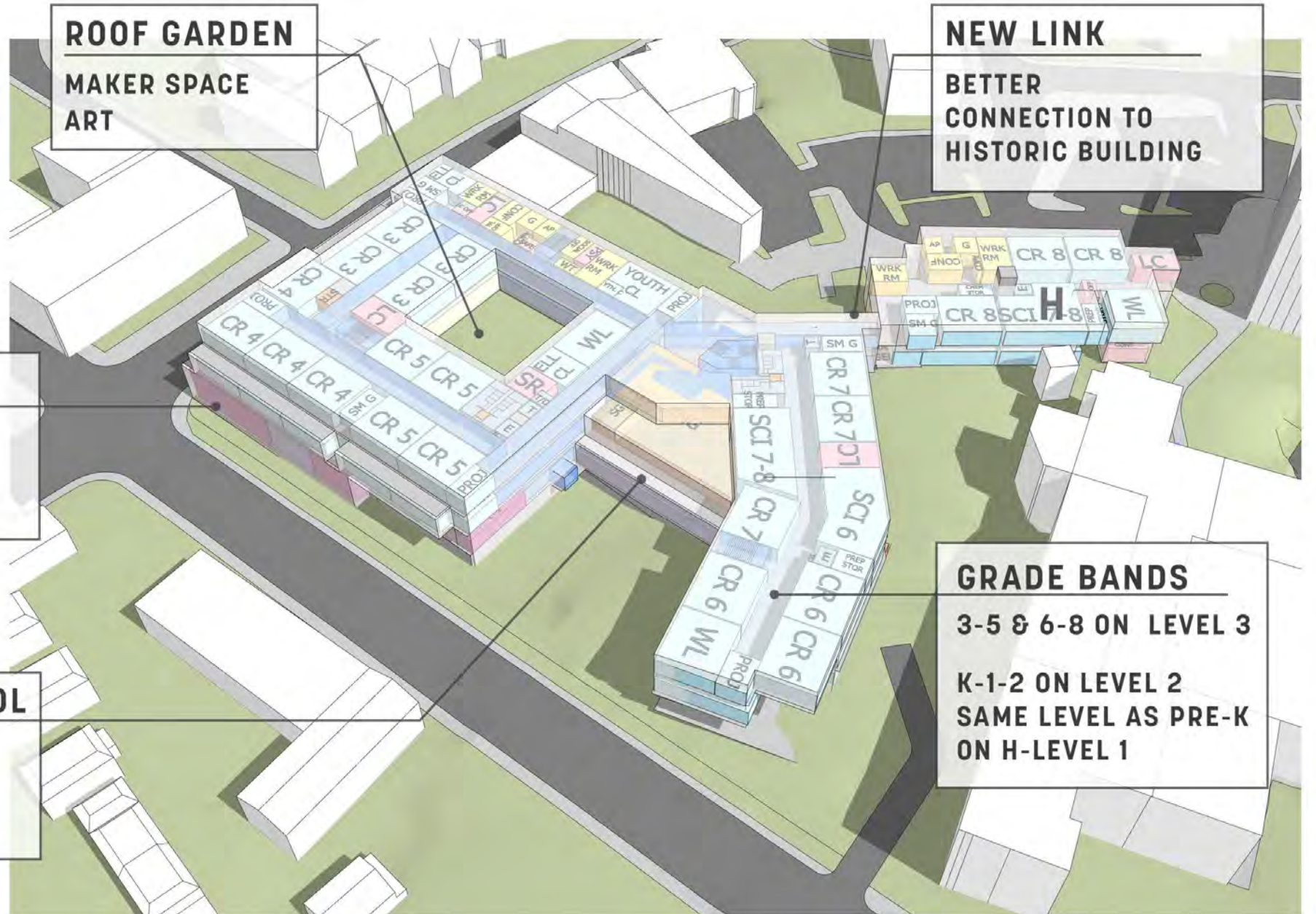
GYM  
MULTIPURPOSE  
MUSIC

## HEART OF SCHOOL

LIBRARY  
CAFETERIA  
ENTRANCE

## GRADE BANDS

3-5 & 6-8 ON LEVEL 3  
K-1-2 ON LEVEL 2  
SAME LEVEL AS PRE-K  
ON H-LEVEL 1

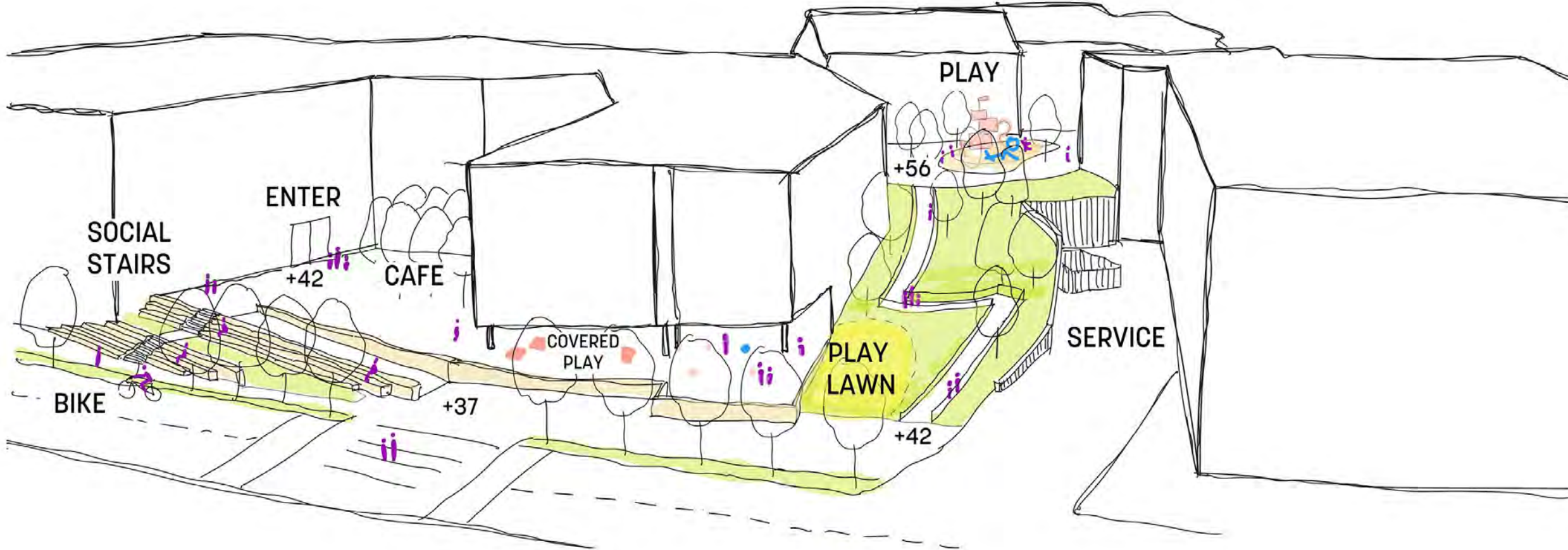


OPTION 3B-H  
**Site Plan**



OPTION 3B-H

# School St Experience



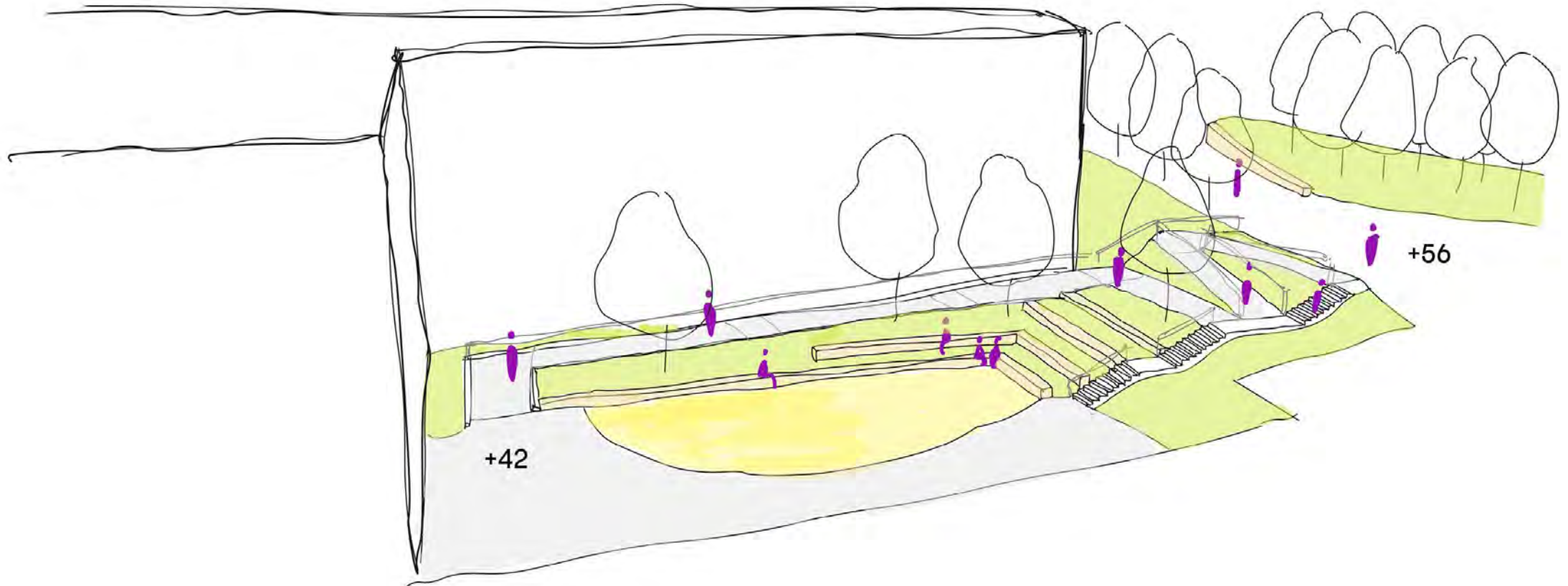
OPTION 3B-H

# Entry / Arrival Experience



OPTION 3B-H

# Outdoor Classroom



OPTION 3B-H

## Overall Considerations



### Pros +

Three stories

Strong opportunity to align building organization with program and educational goals

Grade Band organization is good

Media Commons is hub of school

Interior courtyard is extension of Fab Lab

Generous courtyard facing School Street

If geothermal is feasible, may be close to net zero operating carbon

### Cons -

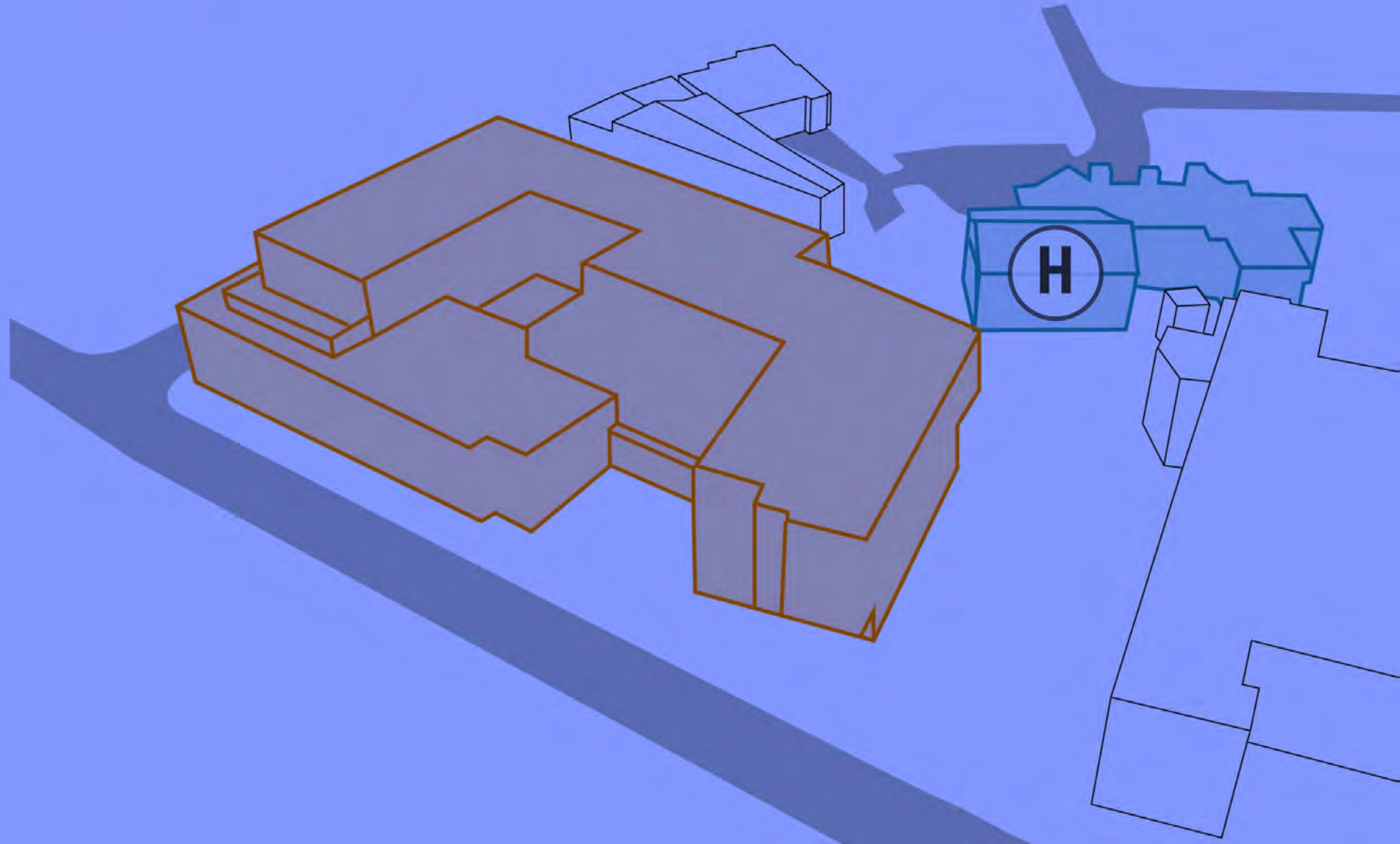
Indirect through-block connection to Playground

Narrow green space buffer along Library edge shared with service entrance



# OPTION 3B

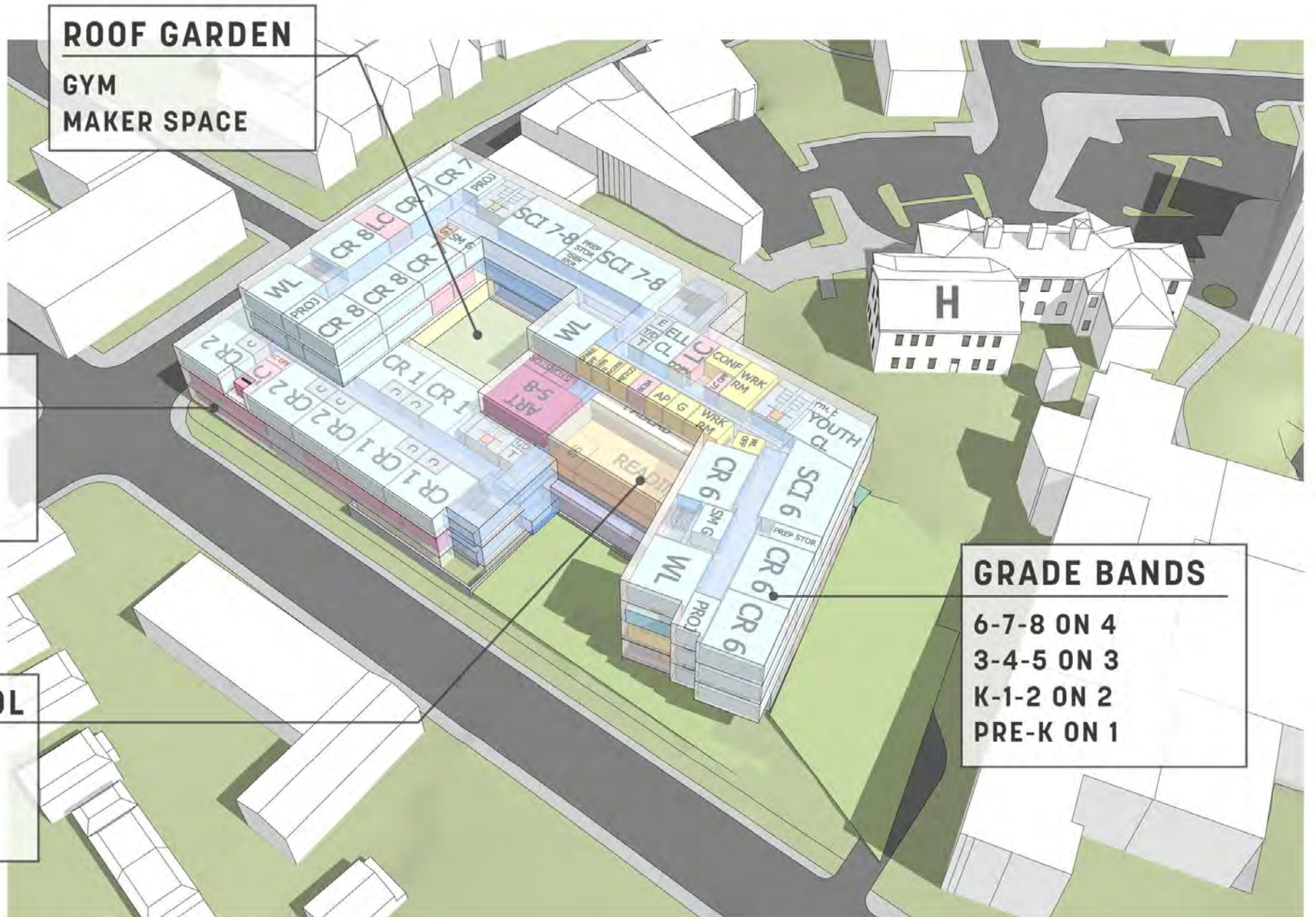
## REIMAGINE



NEW BUILDING

OPTION 3B

# Building Organization



**ROOF GARDEN**  
GYM  
MAKER SPACE

**EVENT SPACES**  
GYM  
MULTIPURPOSE  
MUSIC

**HEART OF SCHOOL**  
LIBRARY  
CAFETERIA  
ENTRANCE

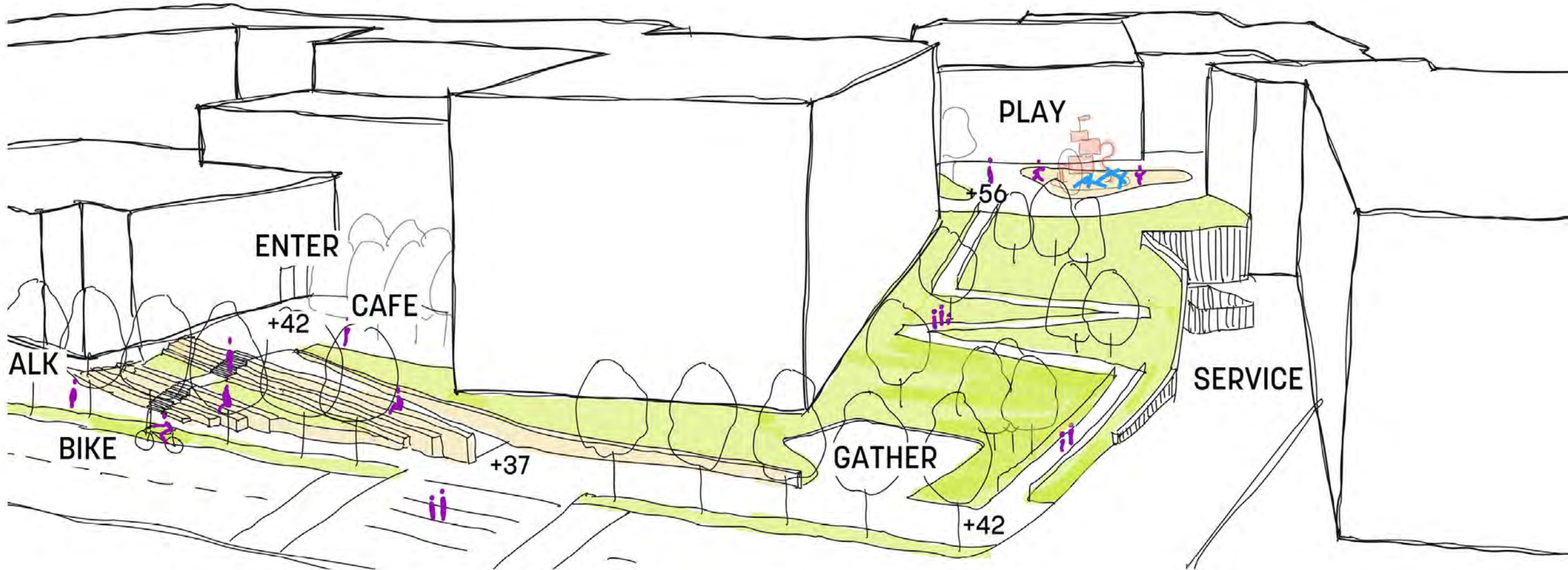
**GRADE BANDS**  
6-7-8 ON 4  
3-4-5 ON 3  
K-1-2 ON 2  
PRE-K ON 1

OPTION 3B  
**Site Plan**



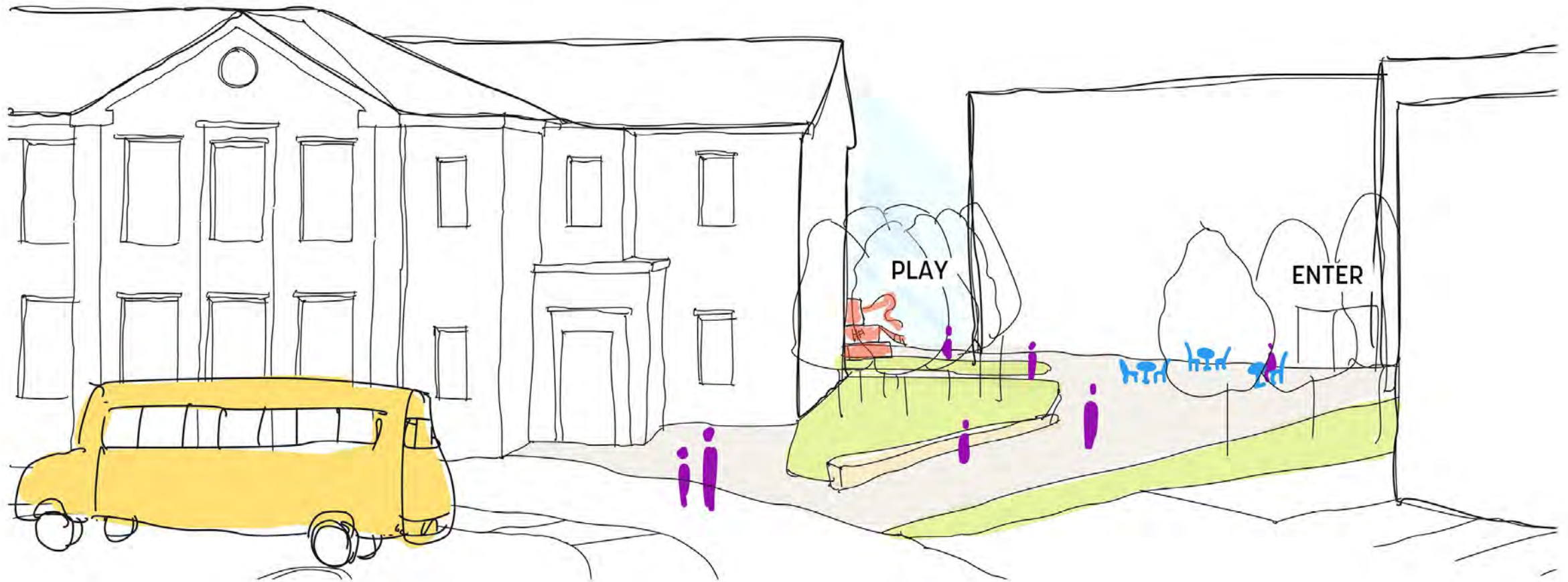
OPTION 3B

# School St Experience



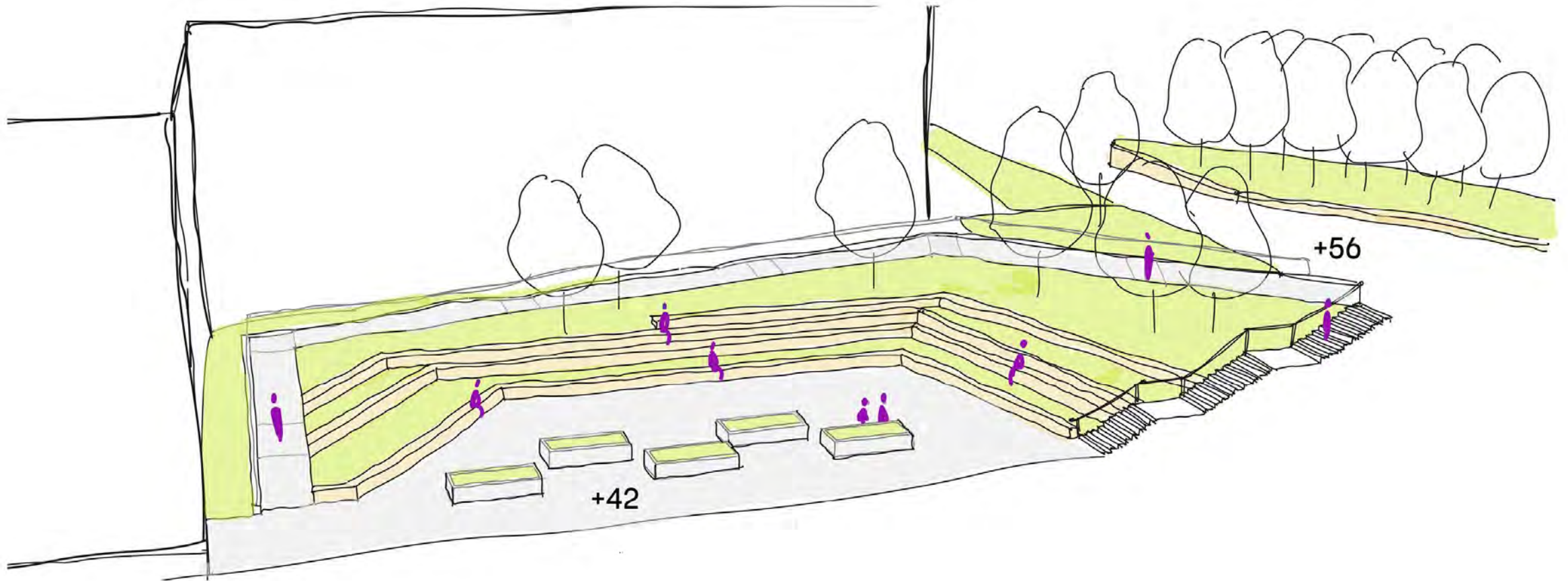
OPTION 3B

# Entry / Arrival Experience



OPTION 3B

# Outdoor Classroom



## OPTION 3B

# Overall Considerations



## Pros +

Through-block green space connection to park

Strong opportunity to align building organization with program and educational goals

Grade Band organization is strong - one per floor

Media Commons is hub of school

Interior courtyard is extension of Fab Lab

Tight efficient layout

If geothermal is feasible, may be close to net zero operating carbon

Historic building available for other Town uses

## Cons -

4 stories

Pre-K is on School St. level, not drop-off level

Historic building requires renovation as separate project for other school uses

K classrooms are separated from each other

# SUSTAINABILITY



# Sustainability Priorities



**Maximizing daylighting**

**Indoor Air Quality, ventilation/filtration, healthy materials, acoustics**

**Sustainable transportation, encouraging non- car transportation**

**Great outdoor learning and play spaces**



**Decarbonization: electrification of all building systems**

**Minimizing loads / energy use**

**Maximizing renewable energy generation onsite: PV, geothermal**

**Purchasing any additional electricity from renewable resources**



**Potential reuse of existing building elements**

**New construction with low-carbon materials for structure, envelope and interiors**



**Certifications Required by MSBA: LEED or NE-CHPS**

**Possible ILFI Zero Carbon: aligns with Town of Brookline and MSBA goals**

# Sustainability Priorities that vary by Option



Maximizing daylighting

Indoor Air Quality, ventilation/filtration, healthy materials, acoustics

Sustainable transportation, encouraging non-car transportation

**Great outdoor learning and play spaces**



Decarbonization: electrification of all building systems

**Minimizing loads / energy use**

**Maximizing renewable energy generation onsite: PV, geothermal**

Purchasing any additional electricity from renewable resources



Potential reuse of existing building elements

**New construction with low-carbon materials for structure, envelope and interiors**



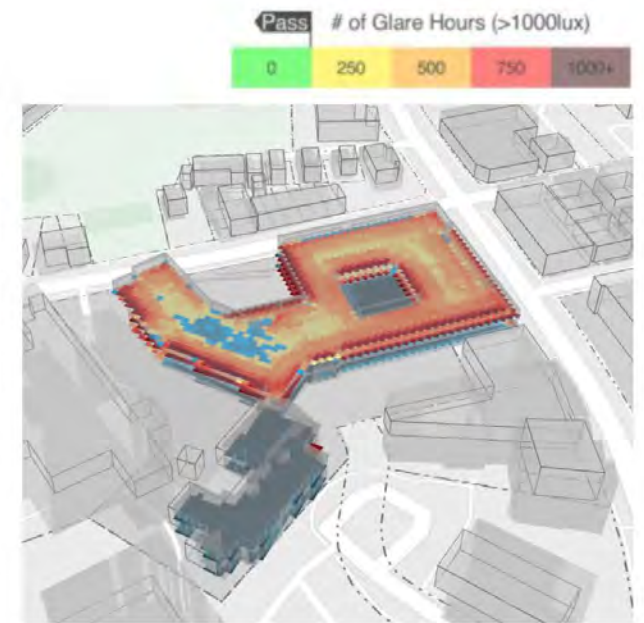
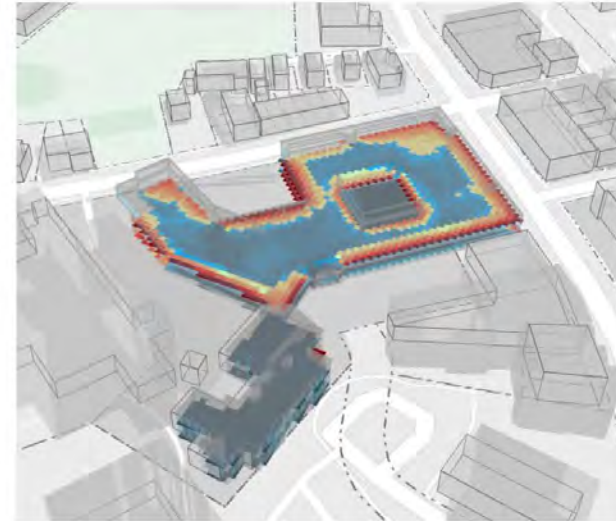
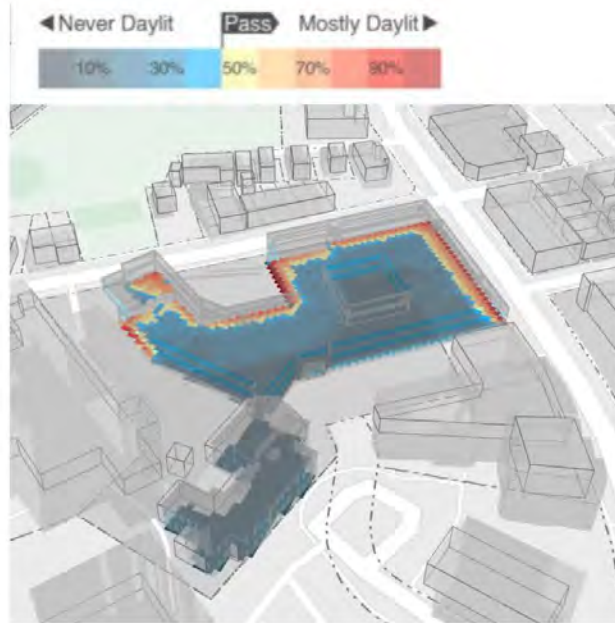
Certifications Required by MSBA: LEED or NE-CHPS

**Possible ILFI Zero Carbon: aligns with Town of Brookline and MSBA goals**

# Daylighting and Glare Control



Daylight Analysis



Glare Analysis



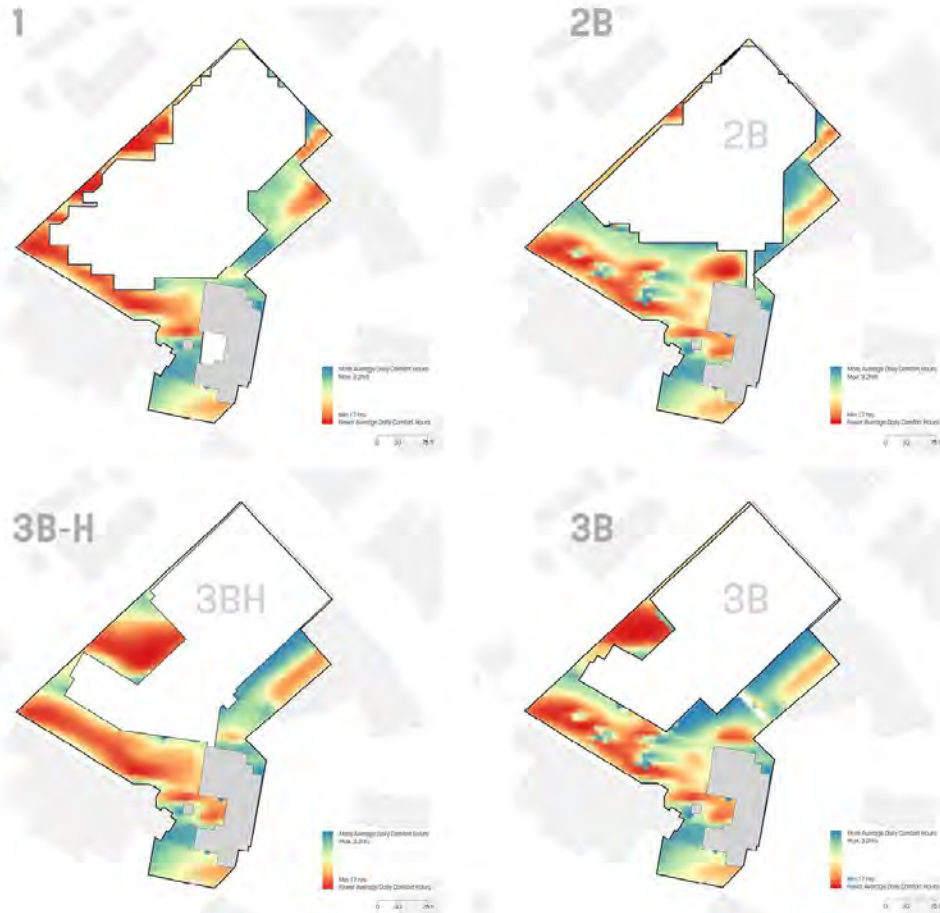
> All options will benefit from exposure-specific design of windows and shading

# Outdoor Comfort & Shadow Studies

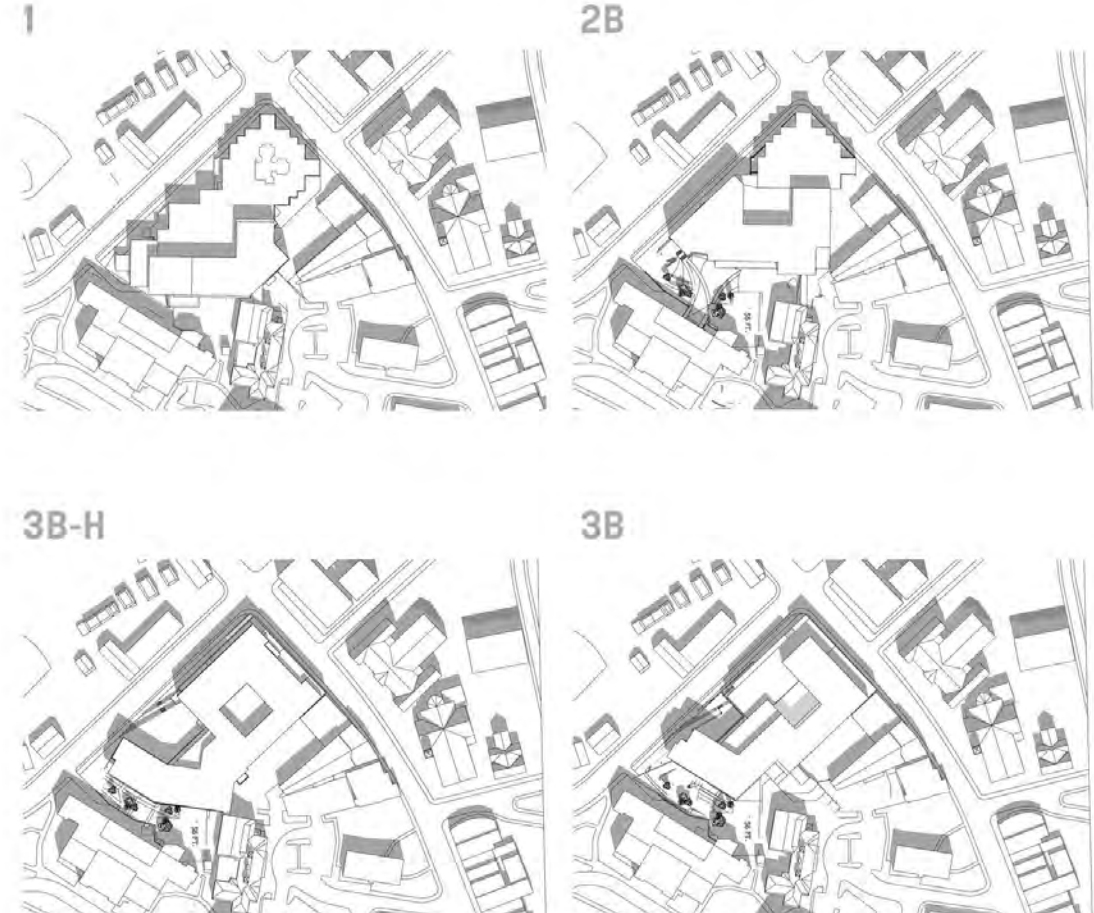


> As we develop plans for selected design, there is an opportunity to tune outdoor activities to best exposure

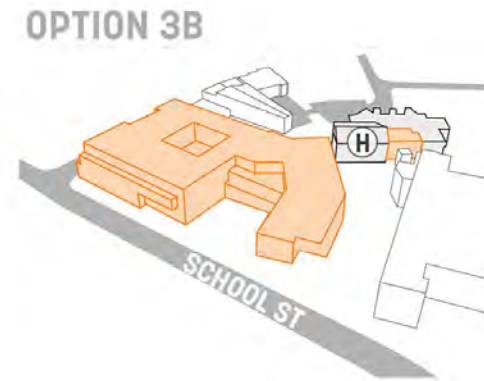
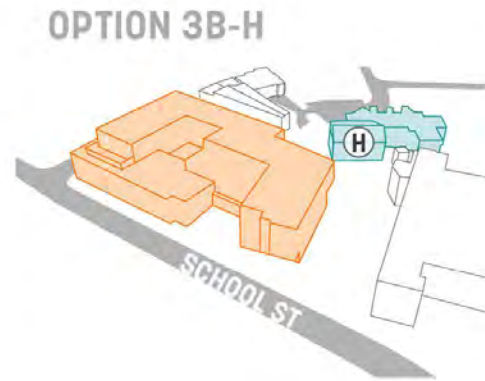
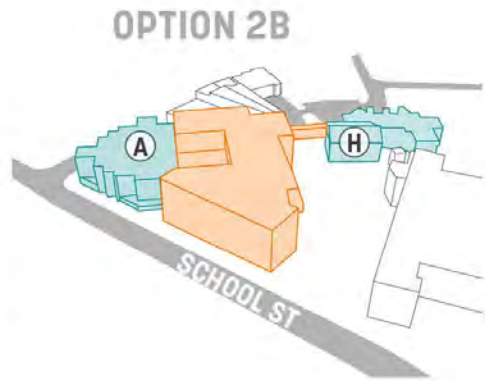
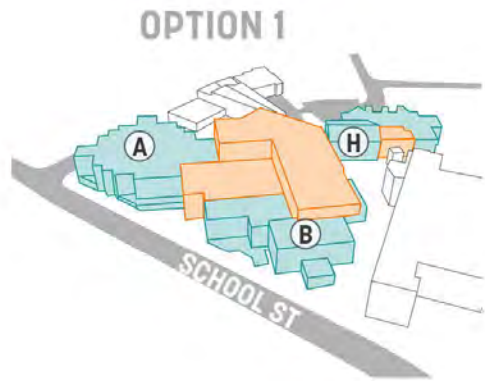
### Annual Average Outdoor Thermal Comfort



### Shadow Studies Example: September 2 at 3pm



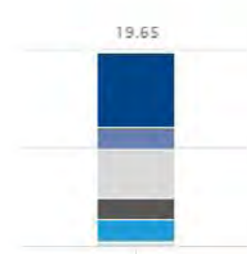
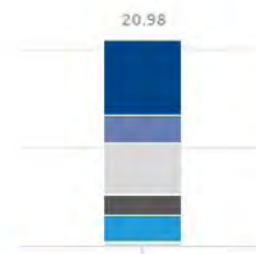
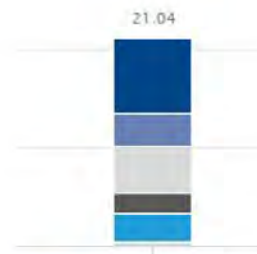
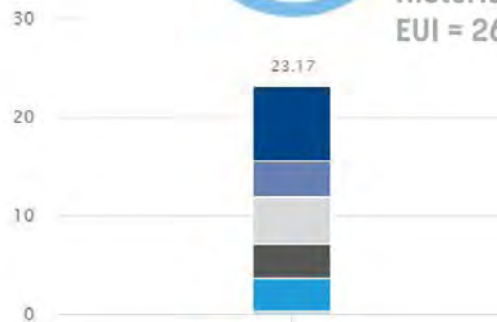
# Energy Use & PV benefits



Energy Use Intensity (EUI) Without PV



Energy Use Intensity by different loads without PV



● Equipment ● Heating ● Lighting ● Hot Water ● Pumps

Energy Use Intensity (EUI) With PV

**11 with PV**

**6 with PV**

**7 with PV**

**3.5 with PV**

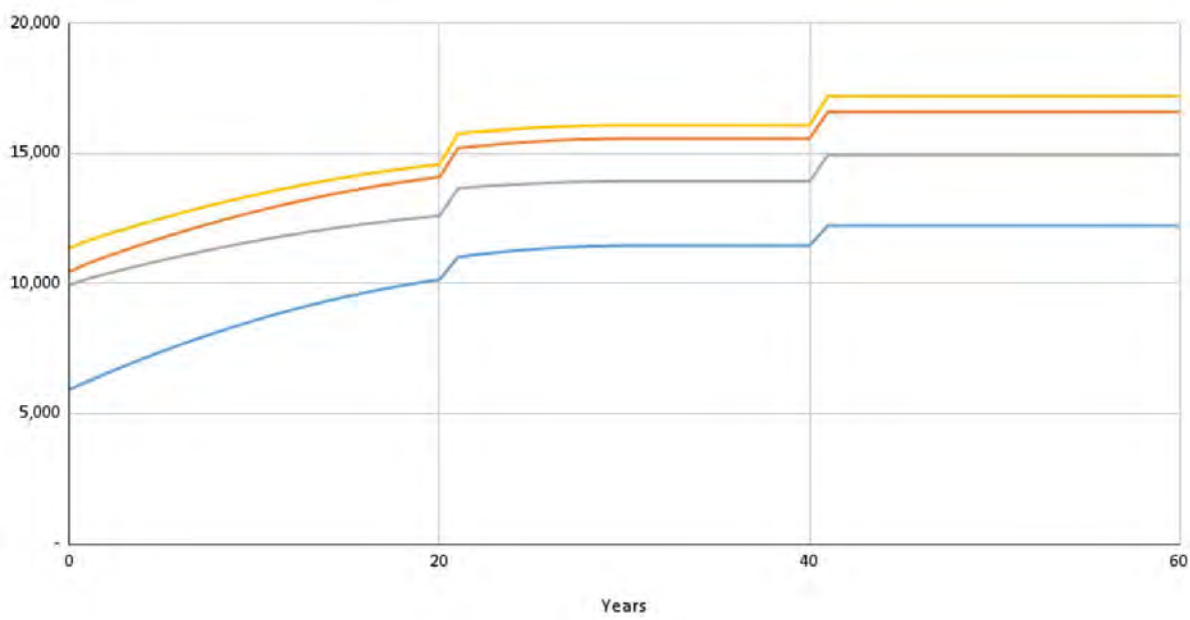
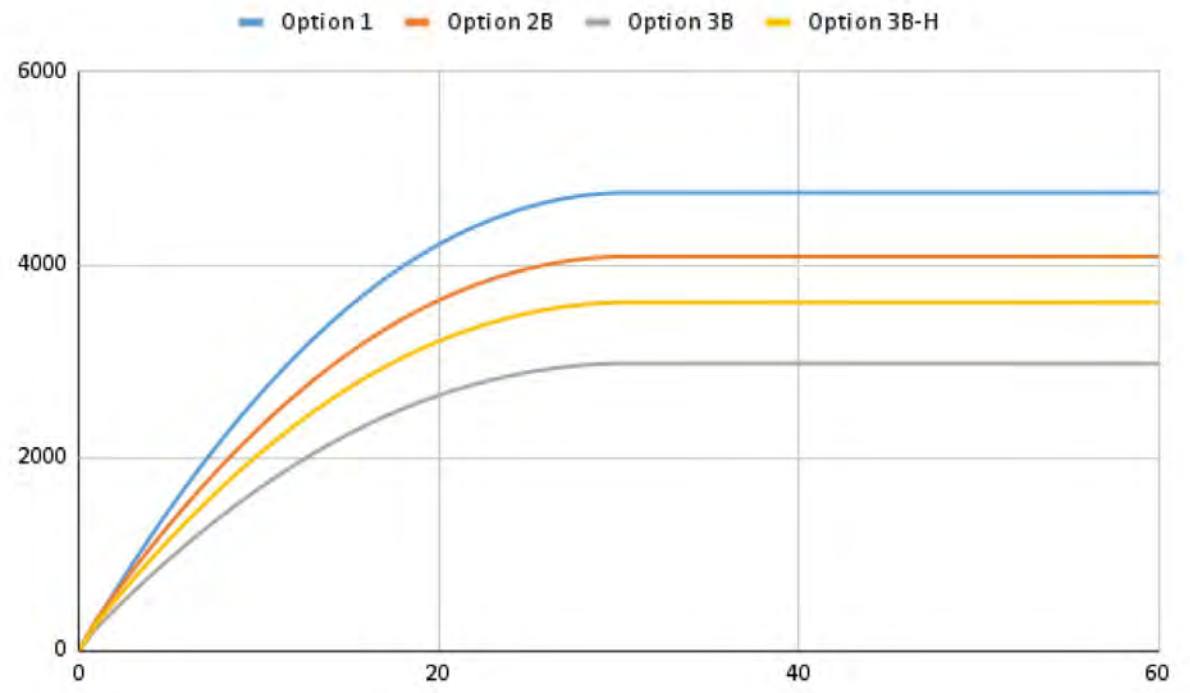
*Note: preliminary analysis meant for comparison. Final values will vary as the design progresses.*

# Embodied and Operational Carbon Emissions

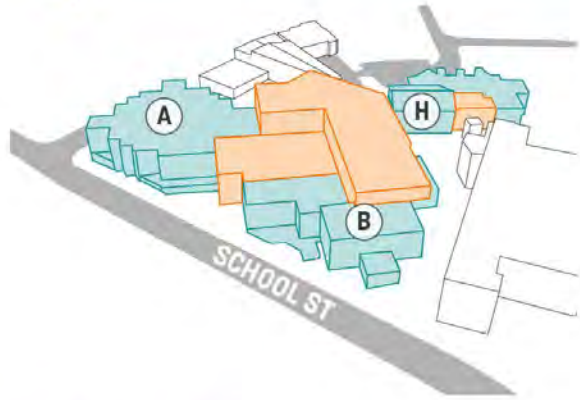


**Operational Carbon Emissions**  
considering commitment to purchase 100% renewable energy by 2050

**Total Carbon Emissions**  
(Operational and Embodied)  
considering commitment to purchase 100% renewable energy

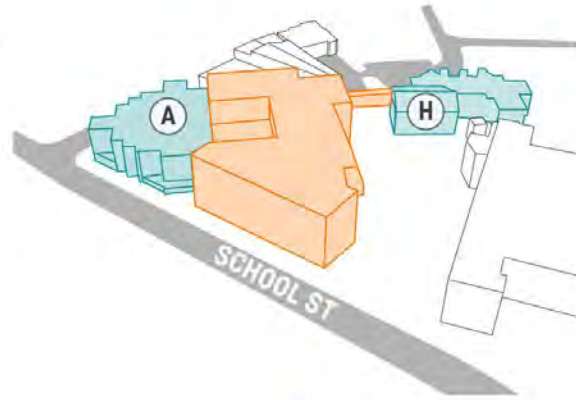


# Summary of Options



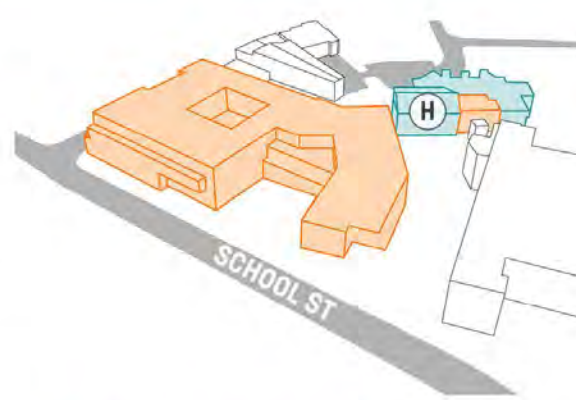
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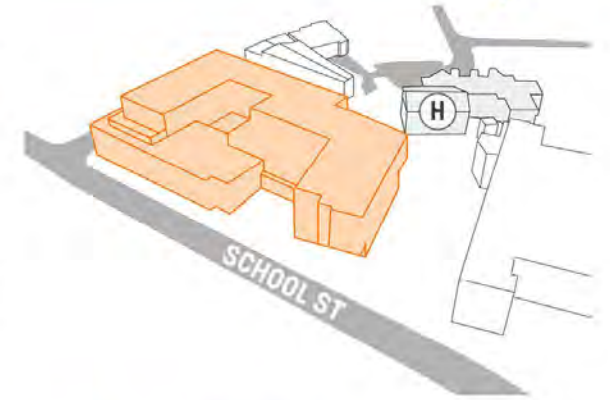
## OPTION 2b

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## OPTION 3b-H

- New building
- Connect to a renovated historic 19th century school building



## OPTION 3b

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- Historic 19th century school building would need to be renovated separately for other school uses

# Have a Question?

See past presentations and submit comments and questions:

<https://www.brookline.k12.ma.us/Page/2463>

## JOINING BY WEB (Computer, Tablet, etc):



Raise Hand

Click to raise your hand during Q+A



Q+A

Click to type your questions anytime during webinar

## JOINING BY PHONE (Dial): +1 669 216 1590

Webinar ID: 160 923 4814

Passcode: 47088884

Press \*9 to raise your hand

Press \*6 to unmute/mute yourself



# Next Steps

Next Meeting

Winter 2021

Spring, Summer, Fall 2021

Winter, Spring 2022

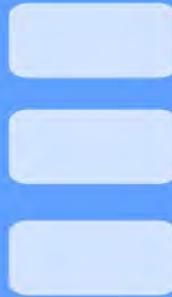
Later in 2022

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- Understand community perspective and vision for the future

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## PHASE 3 SCHEMATIC DESIGN

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Cost  
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VOTE

DESIGN  
DEVELOPMENT AND  
DOCUMENTATION

Public +  
Stakeholder  
Meetings



GOAL:

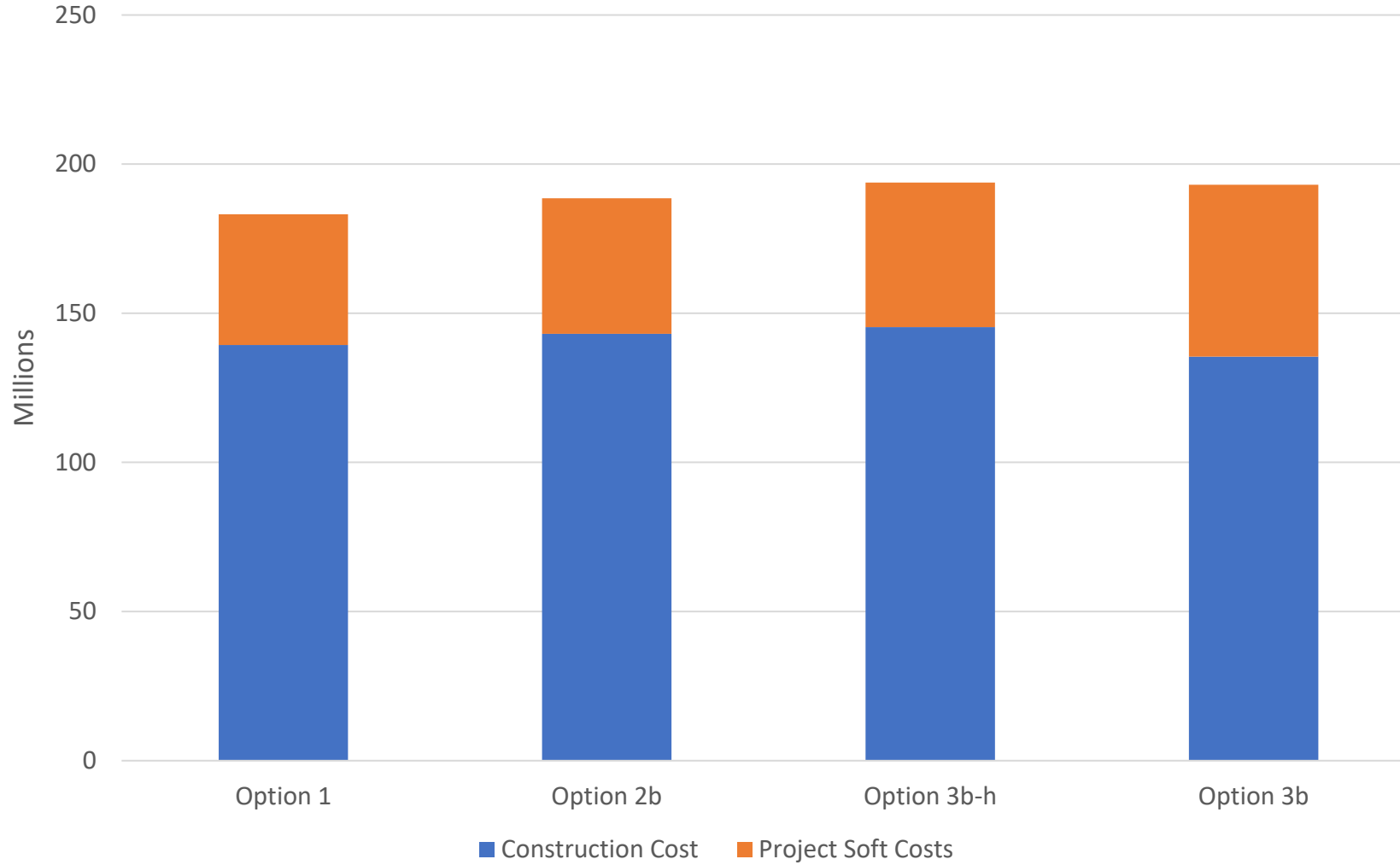
**LISTEN**

**TEST CONCEPTUAL  
IDEAS**

**CONFIRM REFINED  
CONCEPT**

**MORE OPPORTUNITIES  
TO ENGAGE DURING  
DETAILED DESIGN**

## Cost Comparison



# **THANK YOU!**

**Improvements to Pierce School Community Visioning Meeting**