



# 115 Sycamore Street New School Building

Community Workshop - Sustainability

April 12, 2026

PERKINS —  
EASTMAN  
*Human by Design*

# COMMUNITY WORKSHOP

## 1. INTRODUCTION - 35 min

Welcome and Goals - 15 min

Net Positive Education & Measures of Excellence - 10 min

Project Update - 10 min

## 2. BRAINSTORMING 45 min

Carbon: Operations and Energy, Embodied

Wellness: Daylight, Materials, IEQ, Mobility, Arts & Discovery

Site: Outdoor Play, Gardens, Transportation, Ecosystems, Safety

## 3. SHARING 40 min

Reporting and Discussion - 20 min

A School for Sustainaville - 10 min

Summary and Next Steps - 10 min



# SUSTAINABILITY

Conserving resources

Minimizing operational expenditures

Creating healthy, high-performance places to live and learn

Inspiring the next generations of environmental stewards

# WHAT IS SUSTAINABILITY?



**LEED v4 for BD+C: New Construction and Major Renovation Project Checklist**

Y	?	N		
			Credit	1
<b>0</b>	<b>0</b>	<b>0</b>	<b>Location &amp; Transportation</b>	<b>16</b>
			Credit	16
			Credit	1
			Credit	2
			Credit	5
			Credit	5
			Credit	1
			Credit	1
			Credit	1
<b>0</b>	<b>0</b>	<b>0</b>	<b>Sustainability</b>	<b>10</b>
Y			Prereq	Required
			Credit	1
			Credit	2
			Credit	1
			Credit	
			Credit	
			Credit	

The table is a LEED v4 for BD+C: New Construction and Major Renovation Project Checklist. It is overlaid with a large, thick red 'X' that spans across the entire table, indicating that this concept is not the correct answer to the question.

# SUSTAINABILITY IS...

CREATING **AS MUCH VALUE AS POSSIBLE**

(SOCIAL, ECONOMIC, ENVIRONMENTAL)

BY HAVING **A MEASURABLY POSITIVE IMPACT.**

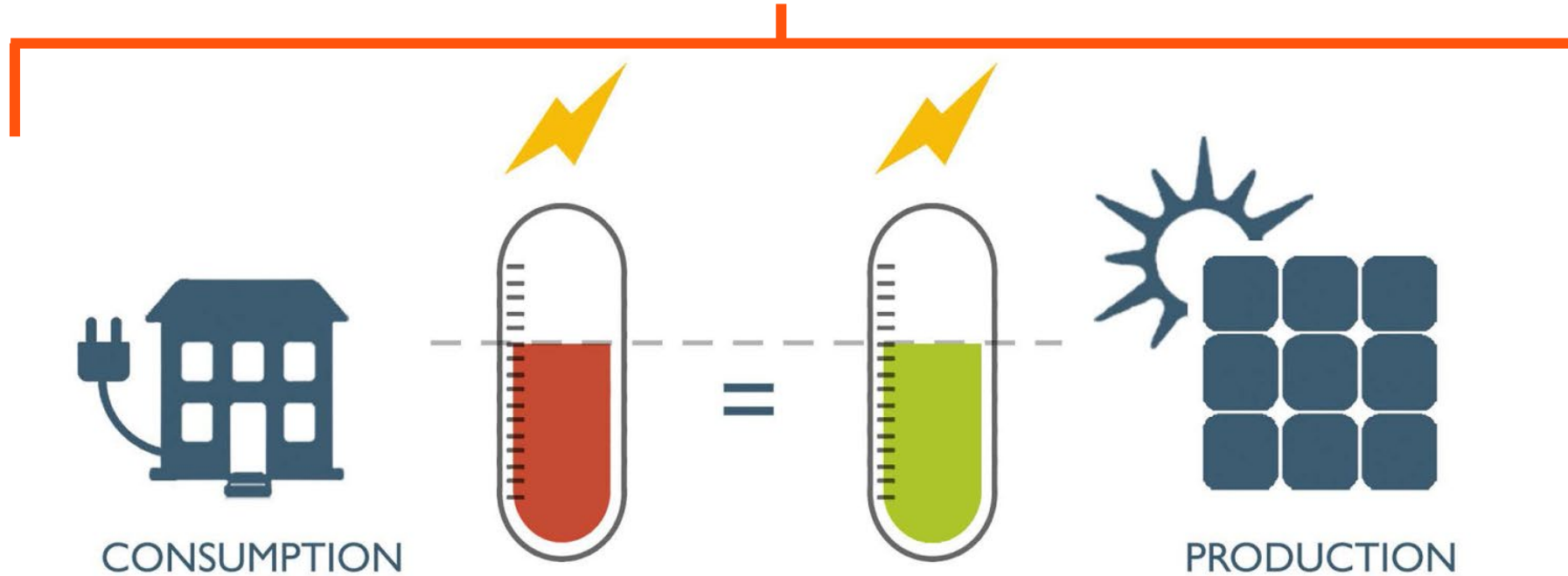


# SUSTAINABILITY IS \$EVERYTHING

# A NET ZERO ENERGY & CARBON BUILDING

## NET ZERO ENERGY

A project that meets Net Zero Energy produces as much energy on-site as it consumes on an annual basis. On-site production comes from renewable sources such as solar photovoltaics.



# A SUSTAINABLE SITE

An aerial photograph of a school playground. The playground features a large green area with various pieces of equipment, including a blue and red structure, a slide, and a climbing wall. There are several trees scattered throughout the area, and a paved path winds through the green spaces. The background shows a school building with a grid-like facade.

## TRANSPORTATION

- All Modes
- Traffic Mitigation
- Parking

## RECREATION

- Hardscape
- Soft Scape
- Age-appropriate
- Informal

## ECOSYSTEM

- Planting
- Shading
- Pollinating
- Stormwater
- Gardening

## CURRICULUM

- Signage
- Outdoor Classrooms



**Net Zero Energy**

**Net Positive Education:**

**Baking-in High-Performance Strategies**



# A SCHOOL FOCUSED ON WELLNESS / CURRICULUM

## DAYLIGHT

- Distribution
- Glare

## THERMAL COMFORT

- Air Temperature
- Humidity
- Radiant Surface Temp
- Thermal Imaging

## ACOUSTICS

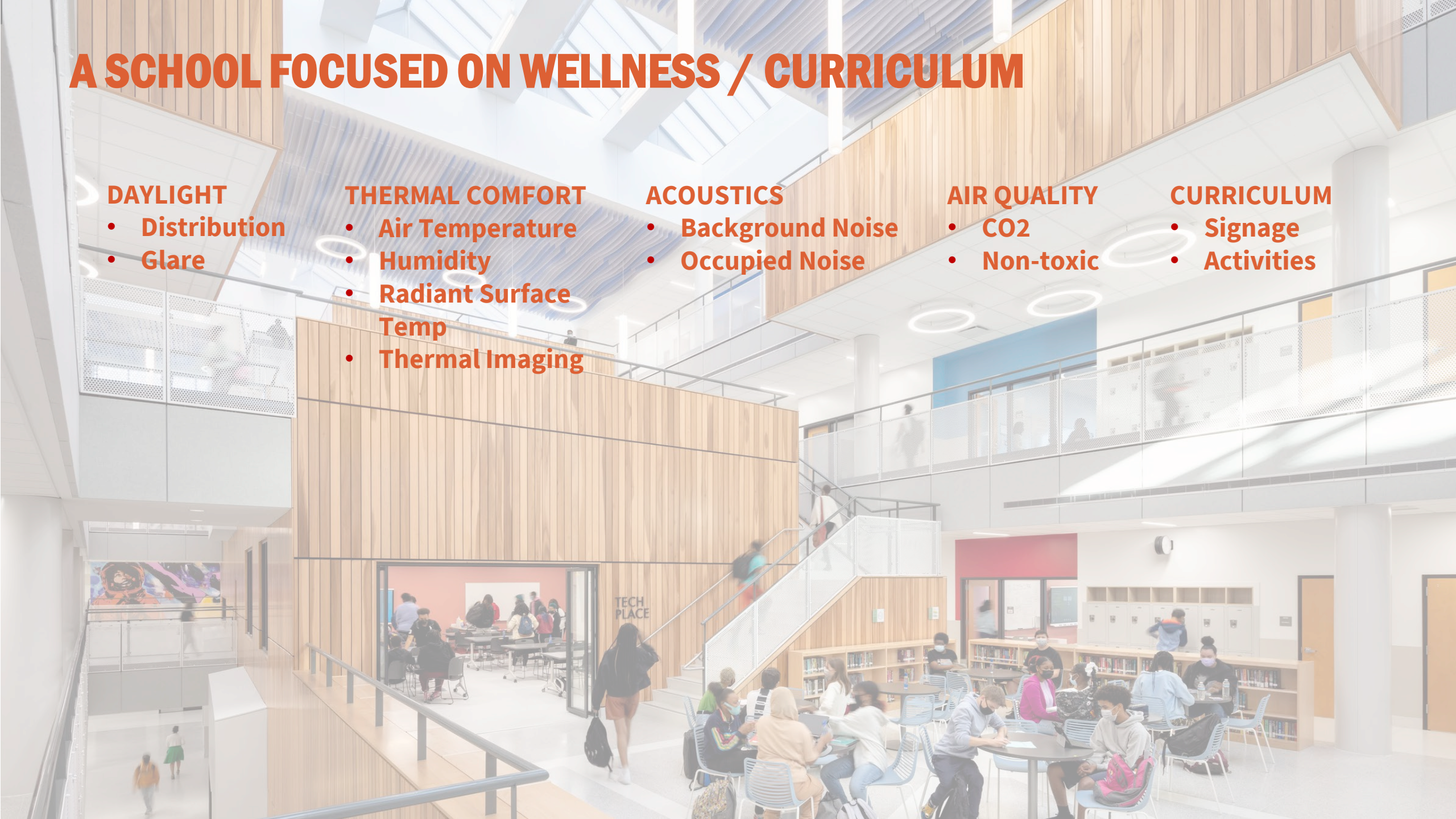
- Background Noise
- Occupied Noise

## AIR QUALITY

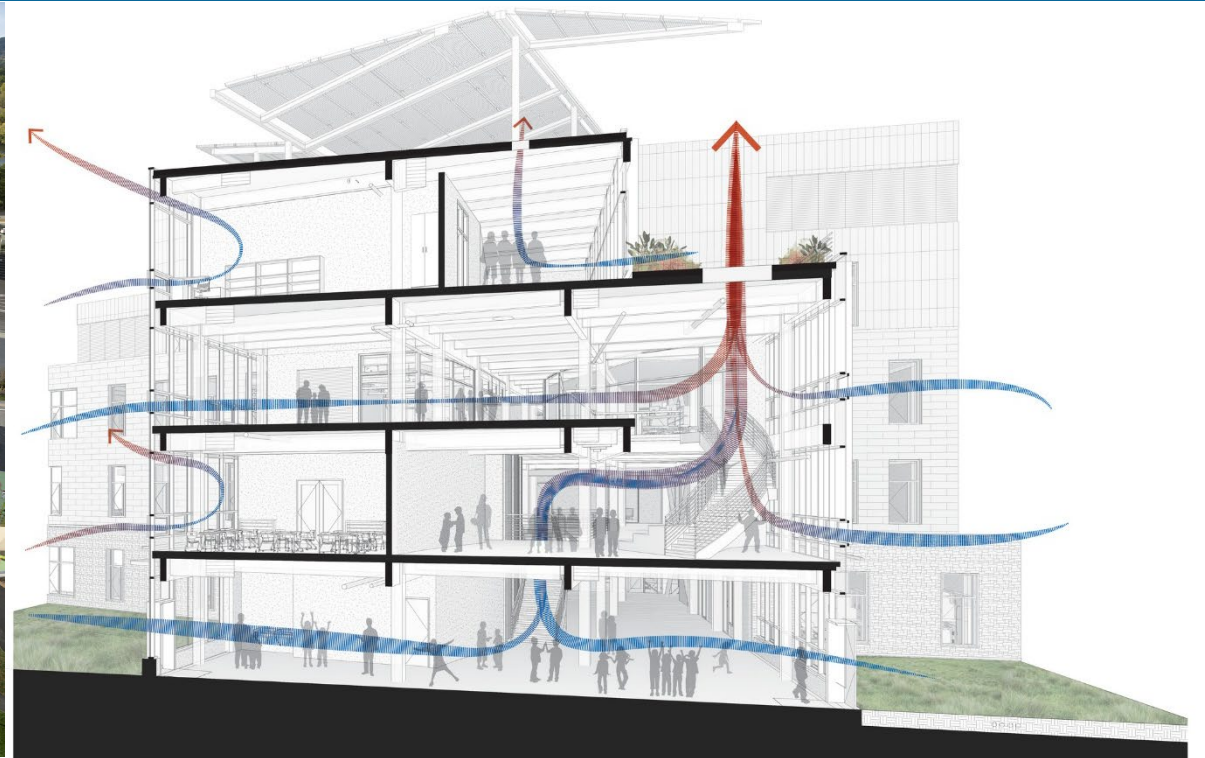
- CO2
- Non-toxic

## CURRICULUM

- Signage
- Activities



# MEASURING SUSTAINABILITY



# MEASURING SUSTAINABILITY



LEED



WELL



Passive  
Building



American Institute  
of Architects  
Design Excellence  
Framework

# AIA DESIGN FRAMEWORK

## 10 MEASURES OF EXCELLENCE



**Measure 1**  
Design for Integration



**Measure 2**  
Design for Equitable Communities



**Measure 3**  
Design for Ecosystems



**Measure 4**  
Design for Water



**Measure 5**  
Design for Economy



**Measure 6**  
Design for Energy



**Measure 7**  
Design for Well-being



**Measure 8**  
Design for Resources



**Measure 9**  
Design for Change

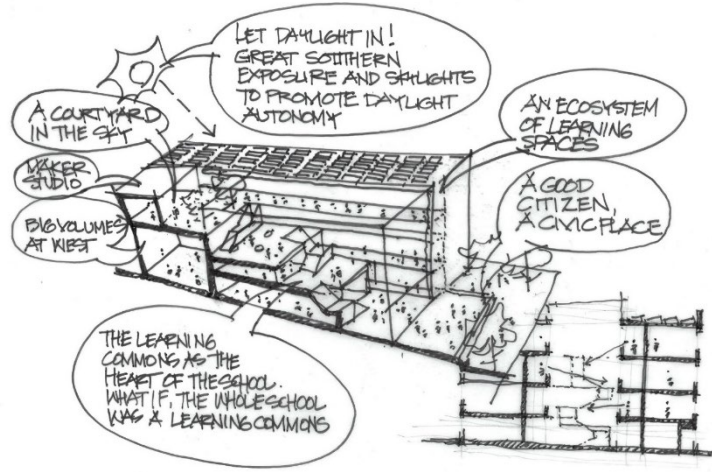


**Measure 10**  
Design for Discovery



# Measure 1

## Design for Integration



CENTRAL DESIGN VISION



INTEGRATIVE PROCESS



ALTERNATIVE TRANSPORTATION



BEAUTY & DELIGHT



## Measure 2

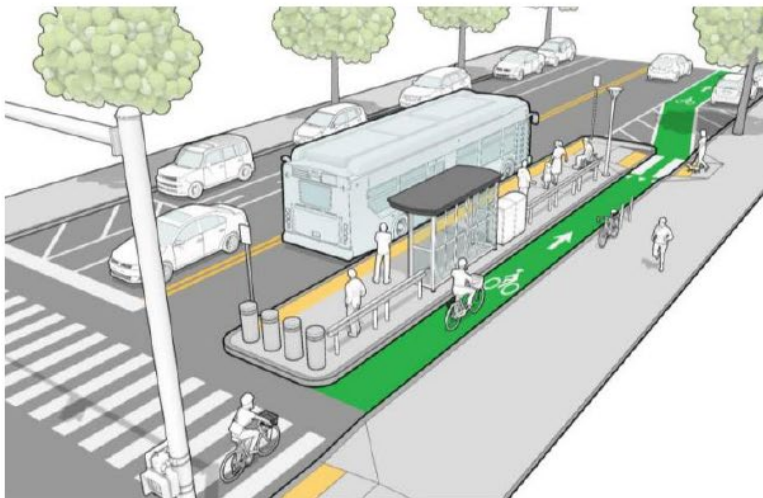
### Design for Equitable Communities



WALKABILITY AND HUMAN SCALE



COMMUNITY ENGAGEMENT



ALTERNATIVE TRANSPORTATION



SCHOOL SPIRIT/IDENTITY



## Measure 3

### Design for Ecosystems



LANDSCAPING



BIODIVERSITY



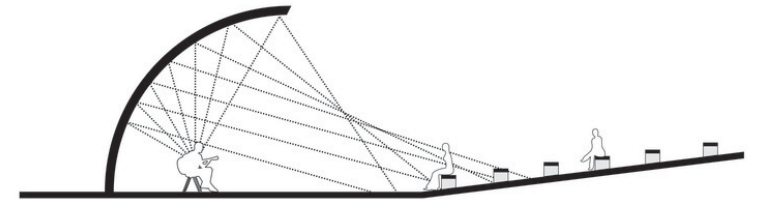
BIRD FRIENDLY DESIGN



HABITAT



LIGHT POLLUTION



SITE ACOUSTICS



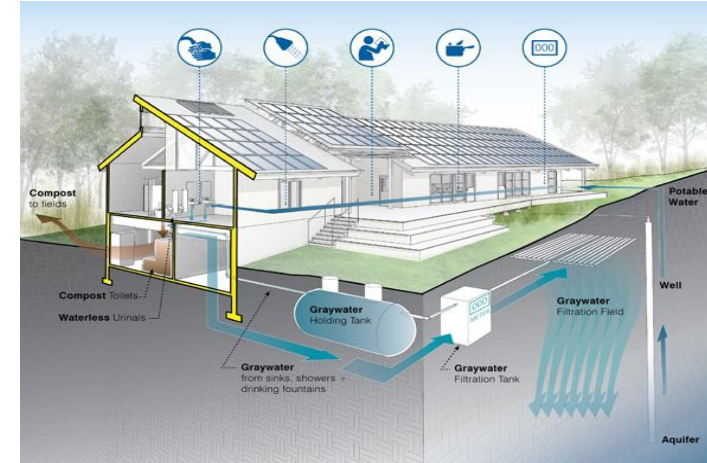
# Measure 4 Design for Water



**INDOOR WATER EFFICIENCY**



**RAINWATER MANAGEMENT**



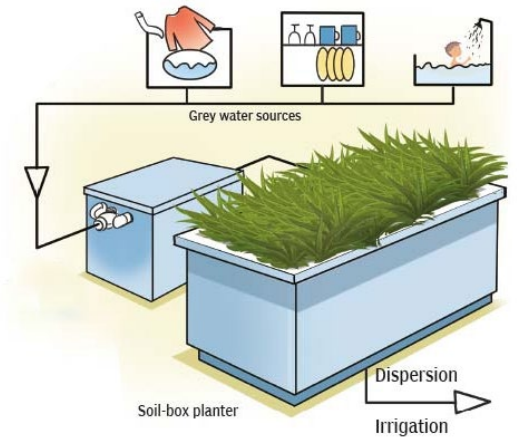
**NET ZERO WATER**



**OUTDOOR WATER USE REDUCTION**



**WATER CAPTURE AND REUSE**



**GREY/BLACK WATER TREATMENT**



# Measure 5

## Design for Economy



**BUILDING SIZE**



**FINANCING AND INCENTIVES**



**COMMUNITY LINKS**



**MATERIAL USE**



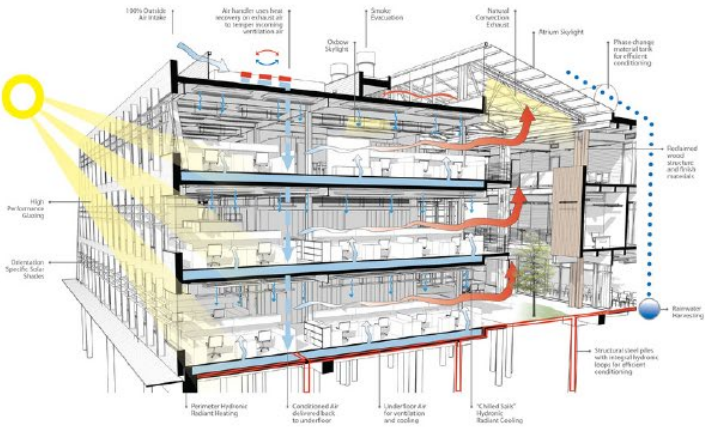
**OPERATIONS**



**FLEXIBILITY AND MULTI-USE**



# Measure 6 Design for Energy



PASSIVE DESIGN / CLIMATE RESPONSIVE



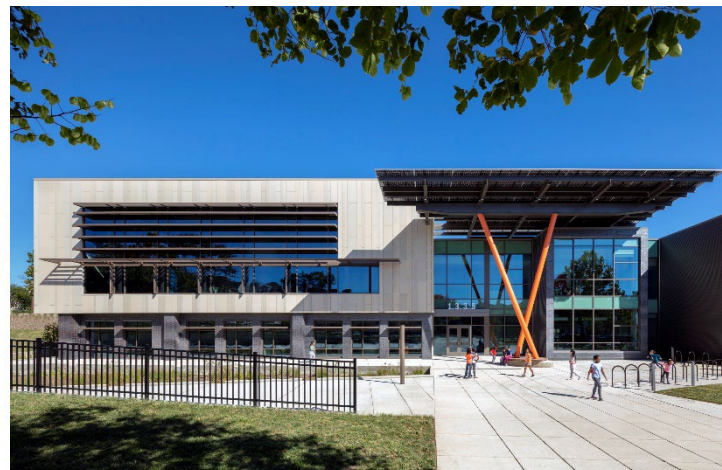
ONSITE RENEWABLES



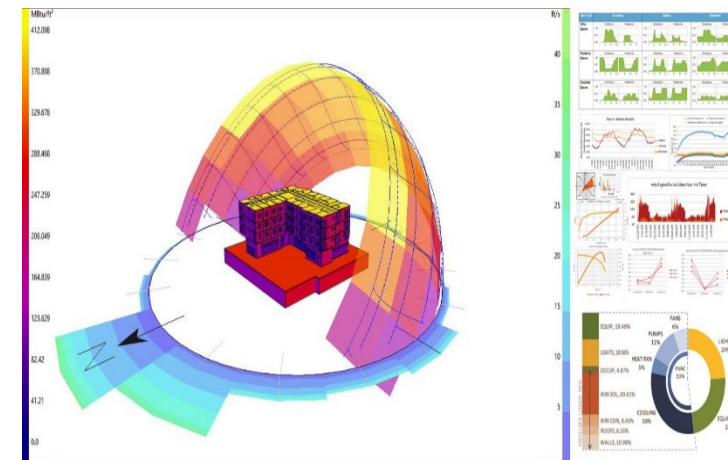
COMMISSIONING



PASSIVE DESIGN / CLIMATE RESPONSIVE  
PERKINS EASTMAN 115 SYCAMORE STREET SCHOOL



NET ZERO ENERGY / NET ZERO CARBON



ENERGY MODELING



## Measure 7

### Design for Well-being



DAYLIGHTING



BIOPHILIA/CONNECTION TO NATURE



ACOUSTICS/ELECTRIC LIGHT



INDOOR AIR QUALITY



FOOD/MOVEMENT/EXERCISE



VIEWS TO THE OUTSIDE



# Measure 8 Design for Resources



SAFER MATERIAL SELECTION



EMBODIED CARBON



MATERIAL SOURCING



CONSTRUCTION WASTE DIVERSION



## Measure 9 Design for Change



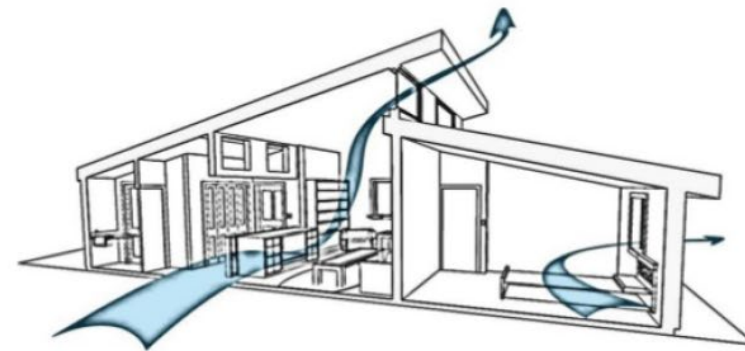
COMMUNITY RESILIENCY



ACTIVE RESERVE (WATER/ELECTRICITY)



DESIGN FOR FUTURE CLIMATE EVENTS RISK



PASSIVE SURVIVABILITY



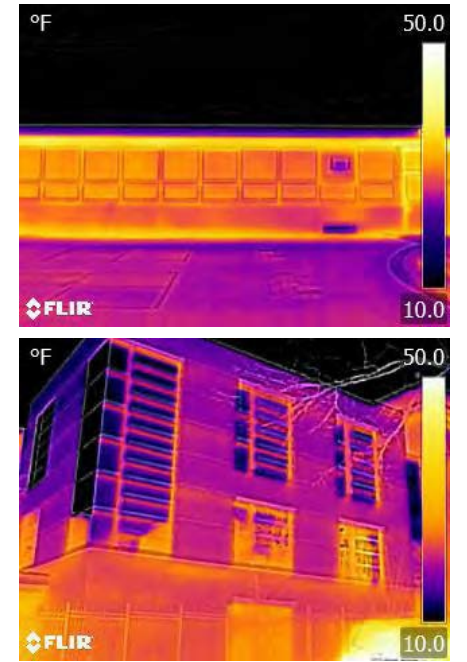
# Measure 10 Design for Discovery



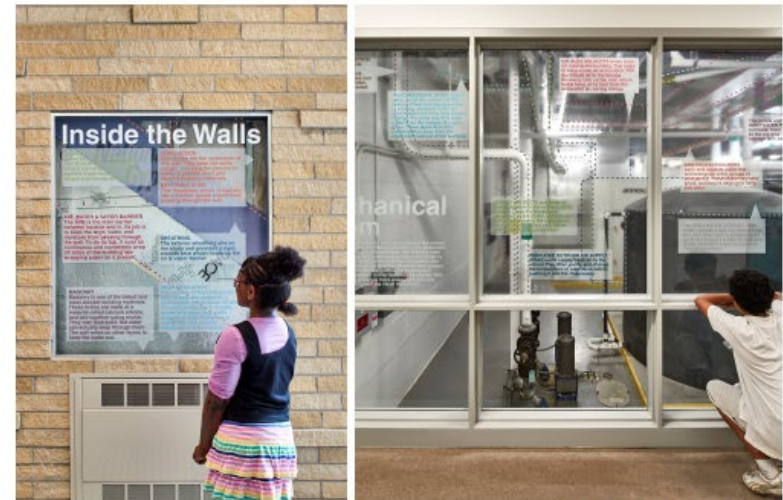
BRINGING DATA TO LIFE



INFLUENCE BEHAVIOR



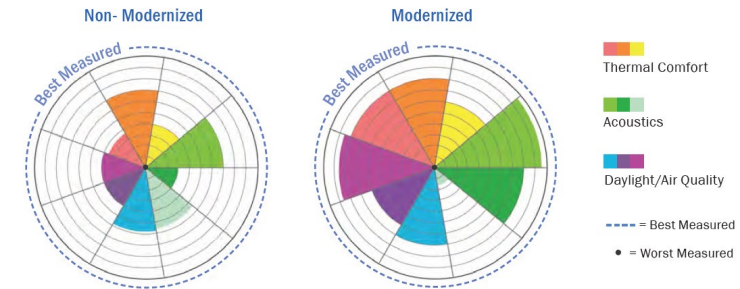
POST-OCCUPANCY EVALUATION AND ENGAGEMENT



SIGNAGE/EDUCATION





INFLUENCE BEHAVIOR



DISCOVERIES THAT INFLUENCES BEHAVIOR

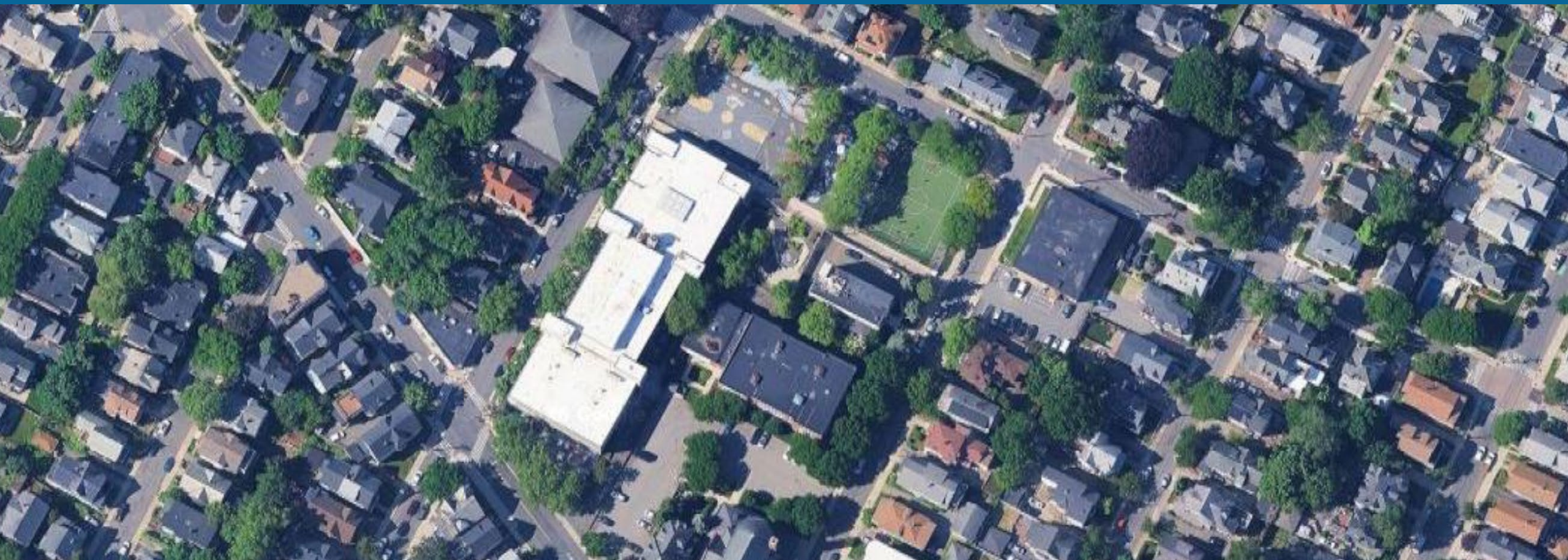
# AIA DESIGN FRAMEWORK – 10 MEASURES

1. Integration 
2. Community 
3. Ecology 
4. Water 
5. Economy 
6. Energy 
7. Wellness 
8. Resources 
9. Change 
10. Discovery 

Which are measures should be a priority for us?

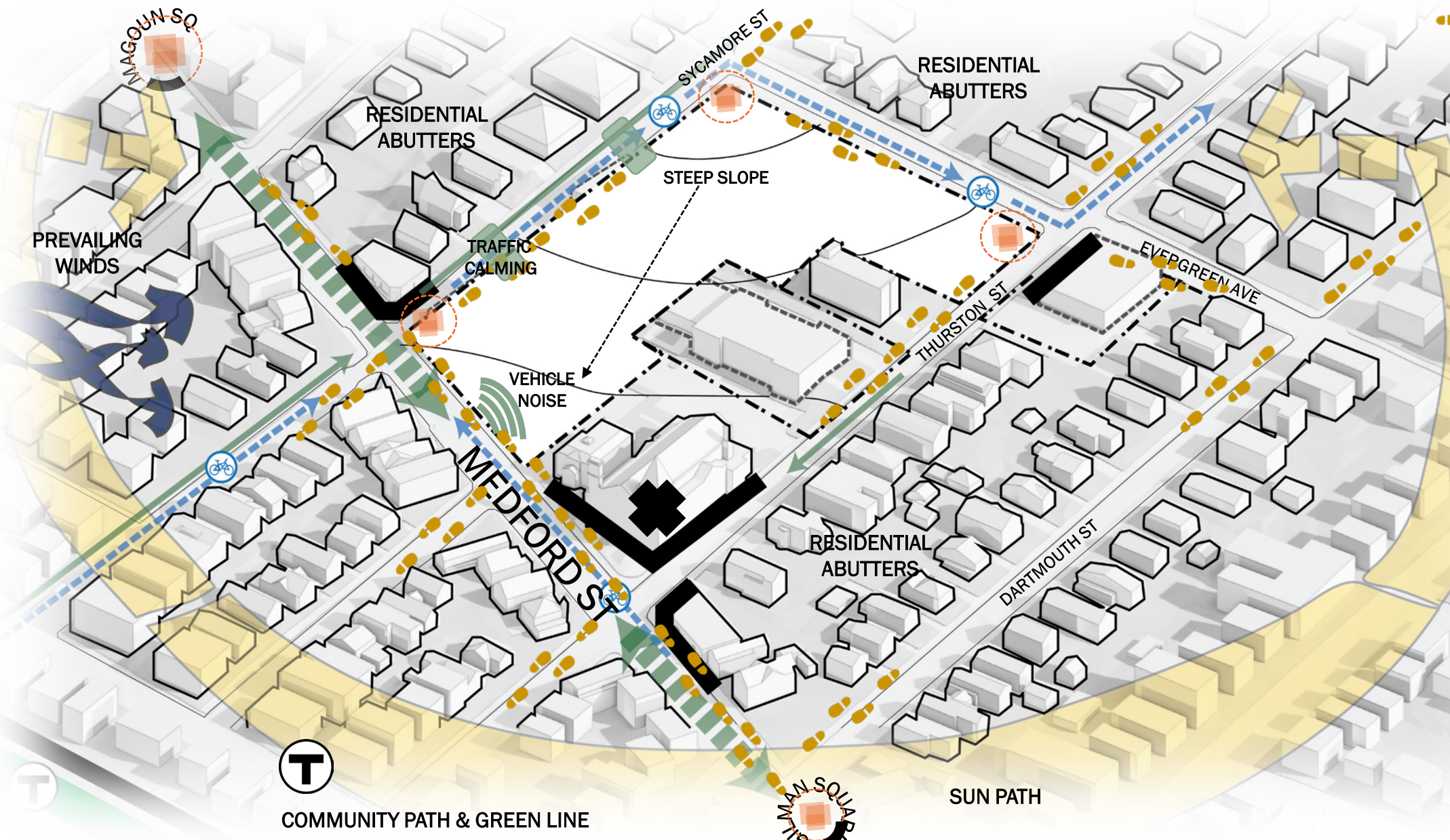
What design strategies will be most helpful?

# 115 SYCAMORE STREET







# 115 Sycamore Street

## SITE ANALYSIS



### PATHS

-  Pedestrian
-  Bike
-  Rail
-  Roads

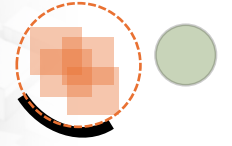
### EDGES



### DISTRICTS



### NODES



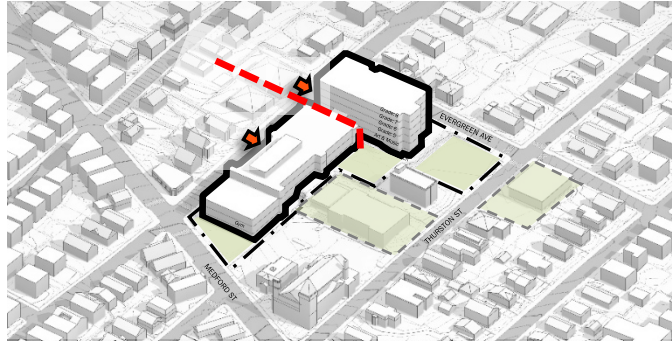
### LANDMARKS



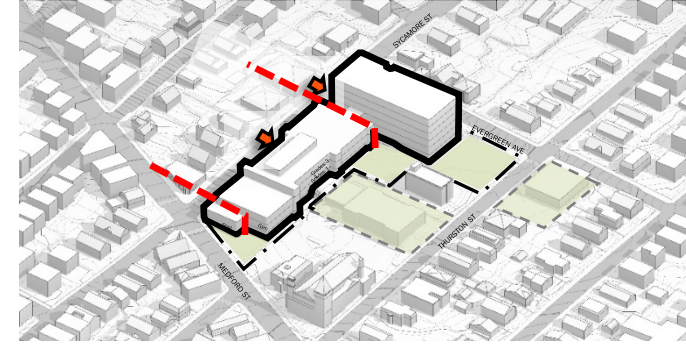
COMMUNITY PATH & GREEN LINE

# OPTION SUMMARY

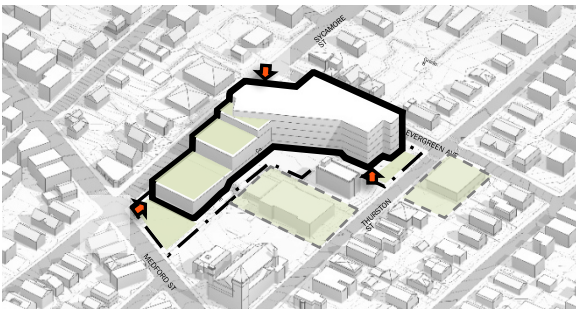
**1A** ADDITION/RENOVATION  
115 SYCAMORE ST. 690 STUDENTS



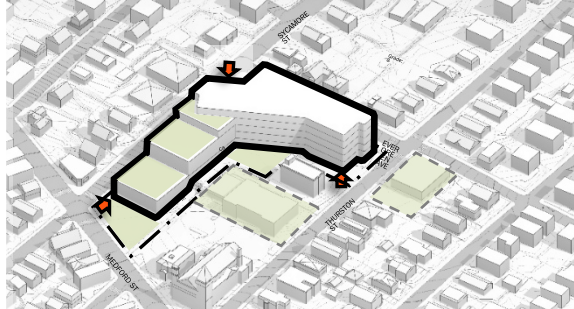
**1B** ADDITION/RENOVATION  
115 SYCAMORE ST. 925 STUDENTS



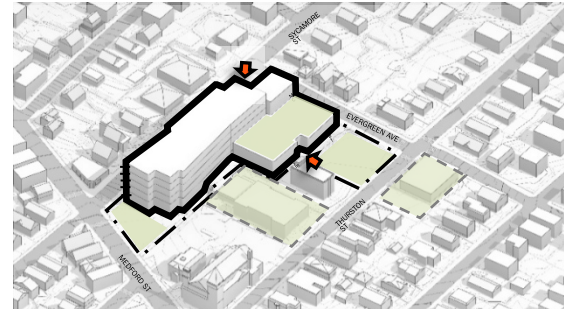
**2A** NEW CONSTRUCTION  
115 SYCAMORE ST. 690 STUDENTS



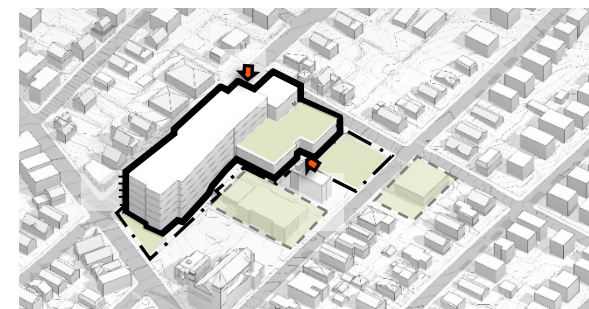
**2B** NEW CONSTRUCTION  
115 SYCAMORE ST. 925 STUDENTS



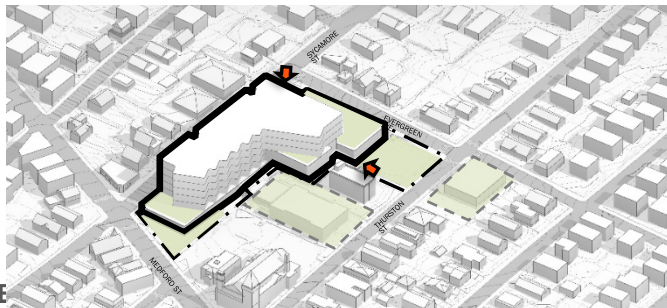
**3A** NEW CONSTRUCTION  
115 SYCAMORE ST. 690 STUDENTS



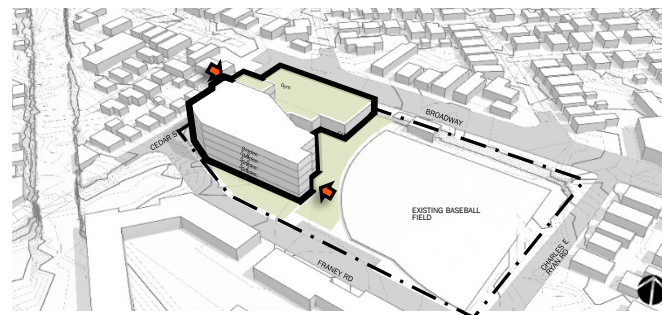
**3B** NEW CONSTRUCTION  
115 SYCAMORE ST. 925 STUDENTS



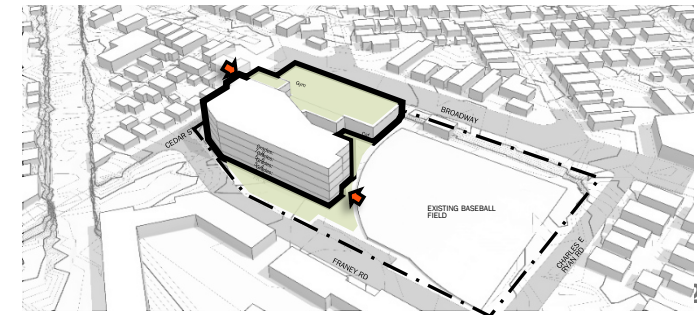
**4** NEW CONSTRUCTION  
115 SYCAMORE ST. 925 STUDENTS



**5A** NEW CONSTRUCTION  
TRUM FIELD. 690 STUDENTS



**5B** NEW CONSTRUCTION  
TRUM FIELD. 925 STUDENTS

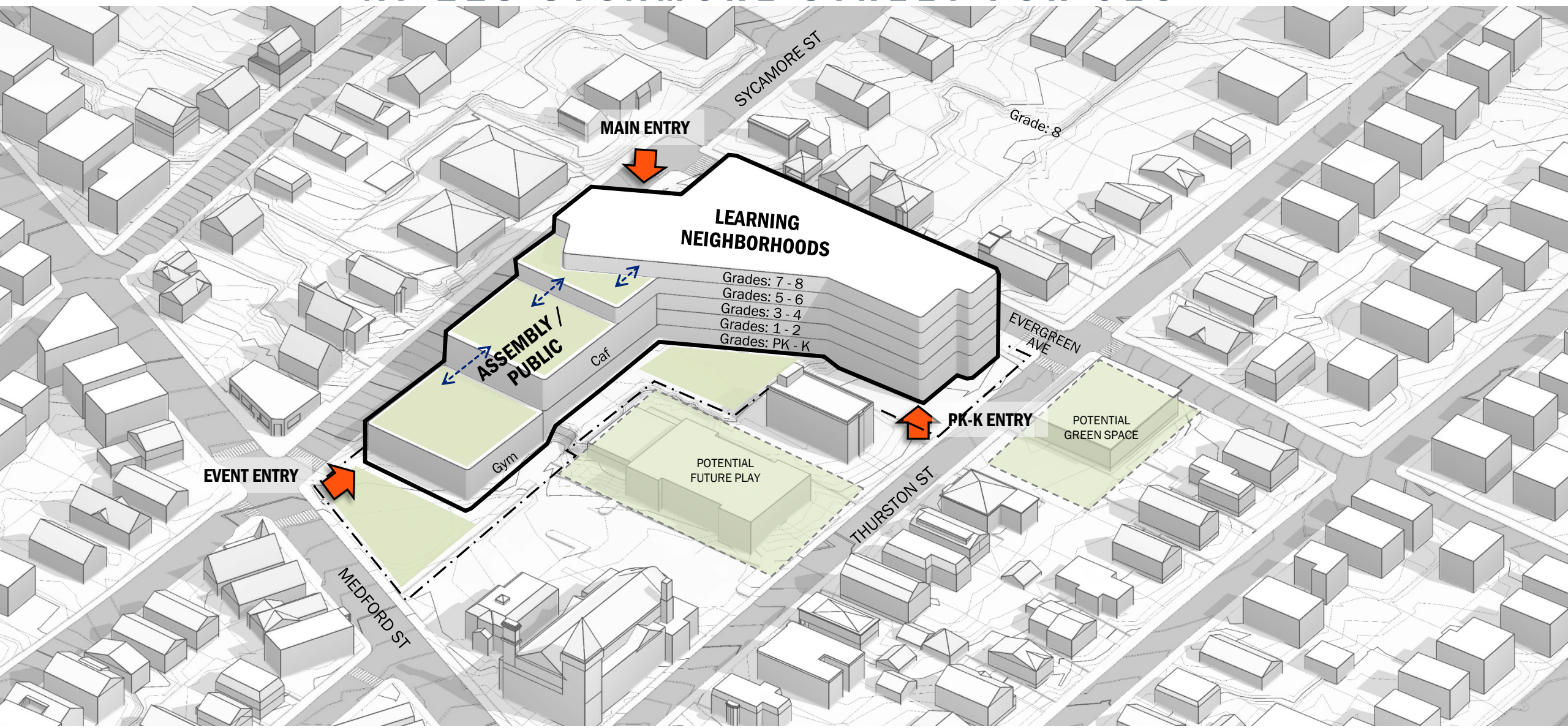


# SCHOOL BUILDING COMMITTEE RESPONSES BY TOPIC

		Existing	Addition and Renovation		New School at 115 Sycamore Street					New School at Trum Field	
115 Sycamore Street - New School Building	Criteria Priority	Base Repair	Additon/Renovation 690	Additon/Renovation 925	115 Sycamore 690	115 Sycamore 925	115 Sycamore 690	115 Sycamore 925	115 Sycamore 925	Trum Field 690	Trum Field 925
Evaluation Criteria	Select: Low, Medium or High from pull down	Base	1A	1B	2A	2B	3A	3B	4	5A	5B
Stakeholders	High	1.8	1.5	1.8	3.0	3.4	2.5	3.1	4.0	1.1	1.1
Cost	Low	2.1	1.5	2.3	2.8	4.3	2.6	3.1	4.0	1.8	1.7
Walkshed	High	2.7	3.0	2.6	3.8	3.4	3.4	2.9	3.1	2.6	2.6
Green Space	High	2.7	2.4	2.1	2.5	3.3	2.9	3.3	3.5	1.4	1.3
Neighborhood	High	2.7	2.1	2.3	3.0	3.5	2.8	3.0	3.8	1.9	1.7
Educational	High	1.4	2.0	2.4	3.8	4.8	3.1	3.9	4.4	2.6	3.1
Health & Safety	Medium	1.1	1.8	2.3	3.1	4.4	2.8	3.4	4.1	2.5	3.0
Future Expansion	Low	2.0	2.4	2.0	3.0	2.8	3.0	3.1	3.0	2.3	2.0
Swing Space	Low	1.5	1.9	3.0	2.7	4.0	2.7	3.6	4.1	2.4	3.2
Timeline	Low	2.3	2.5	2.5	3.3	3.9	2.8	3.1	3.9	2.0	1.7
Disruption	High	2.7	2.5	2.5	3.3	3.6	3.0	3.3	3.5	2.4	2.1
Environmental	High	1.4	2.0	2.3	4.0	4.3	3.0	3.6	4.4	2.3	2.1
Orientation	Medium	1.6	2.0	2.4	4.1	4.6	3.1	3.5	4.3	3.3	3.0
O&M	Low	1.7	1.9	2.4	3.0	4.0	2.5	3.0	3.8	2.8	3.0
Traffic	High	2.9	2.8	2.3	3.1	3.0	2.4	2.5	2.9	2.0	1.9
Permitting	Low	2.5	2.7	2.7	3.4	3.6	3.0	3.1	3.7	1.9	1.9

# NEW CONSTRUCTION - OPTION 2B

## AT 115 SYCAMORE STREET FOR 925





# NEW CONSTRUCTION- OPTION 2B

## AT 115 SYCAMORE STREET FOR 925

ROOFTOP LEARNING



NOTE: SPECIAL EDUCATION SPACES ARE LOCATED WITHIN EACH ACADEMIC NEIGHBORHOOD

**LEVEL 3**

ROOFTOP LEARNING & PLAY



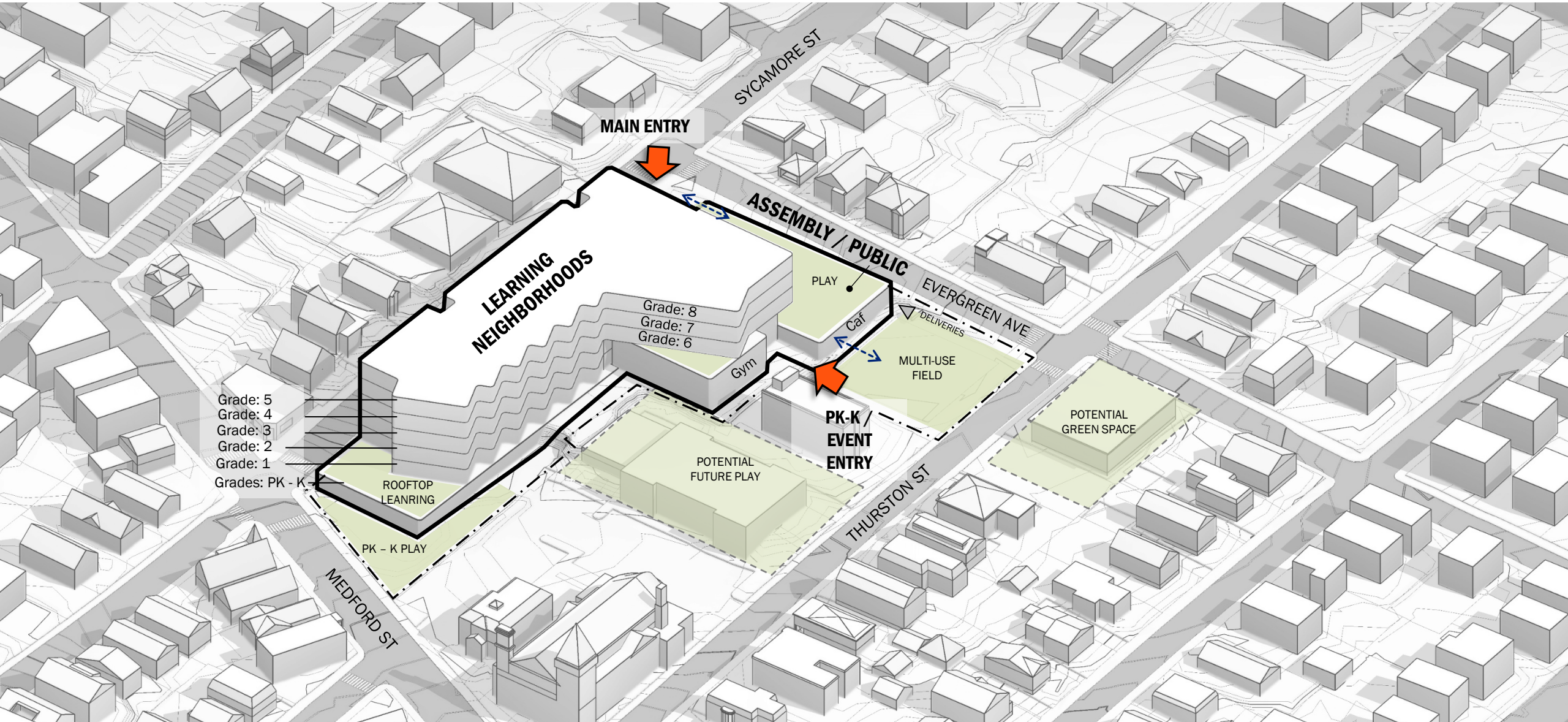
**LEVEL 4**

ROOFTOP LEARNING



**LEVEL 5**

# NEW CONSTRUCTION - OPTION 4 AT 115 SYCAMORE STREET FOR 925



# NEW CONSTRUCTION - OPTION 4 AT 115 SYCAMORE STREET FOR 925



# NEW CONSTRUCTION - OPTION 4

## AT 115 SYCAMORE STREET FOR 925



### LEVEL 1B

PERKINS EASTMAN 115 SYCAMORE STREET SCHOOL

### LEVEL 2

NOTE: SPECIAL EDUCATION SPACES ARE LOCATED WITHIN EACH ACADEMIC NEIGHBORHOOD

OPTION 3D  
925 STUDENTS



# NEW CONSTRUCTION - OPTION 4

## AT 115 SYCAMORE STREET FOR 925



### LEVEL 3

PERKINS EASTMAN 115 SYCAMORE STREET SCHOOL

### LEVEL 4

### LEVEL 5

Carbon: Operations and Energy, Embodied Carbon

Wellness: Daylight, Materials, IEQ, Arts & Discovery

Site: Outdoor Play, Gardens, Transportation, Mobility Ecosystems, Safety

# BRAINSTORMING

A group of diverse people are gathered around a wall covered in colorful sticky notes, engaged in a brainstorming session. The scene is dimly lit, with the primary light source coming from the wall, highlighting the participants' faces and the notes. Three large, semi-transparent colored circles (orange, yellow, and teal) are overlaid on the image, each containing a category name. The background shows architectural drawings and more sticky notes on the wall.

Carbon

Wellness/  
Curriculum

Site

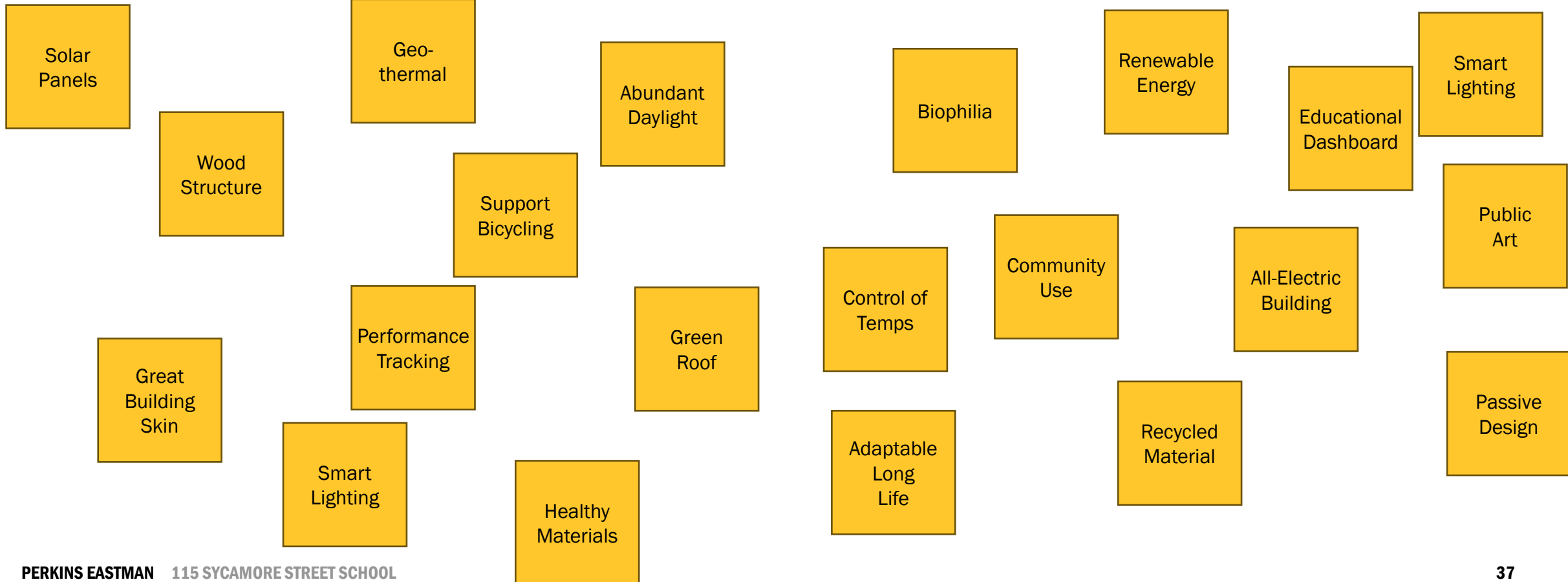
# EXAMPLE: CARBON

## PART 1 -- BRAINSTORMING

Nice to Have



Must Have



# EXAMPLE: CARBON

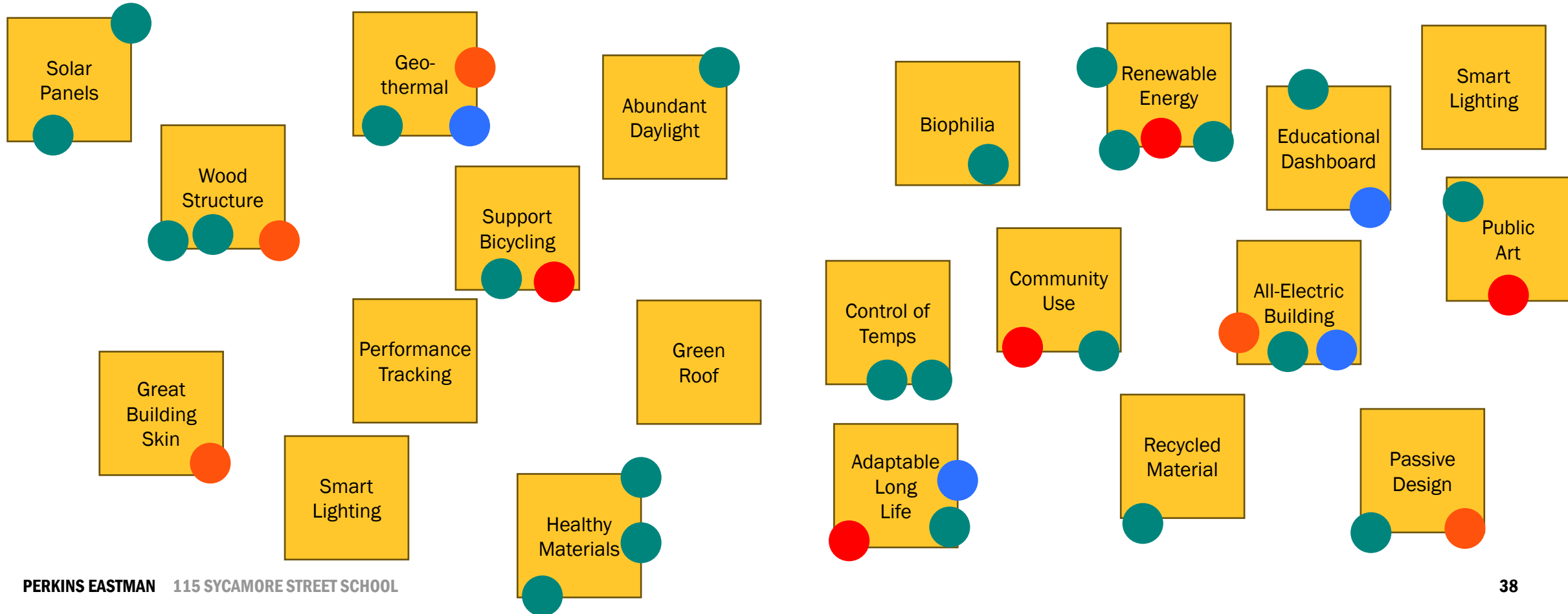
## PART 2, VOTE-BY-DOT

-  School Community
-  Neighbors
-  City Employees
-  Consultants

Nice to Have



Must Have





Carbon: Operations and Energy, Embodied Carbon

Wellness: Daylight, Materials, IEQ, Arts & Discovery

Site: Outdoor Play, Gardens, Transportation, Mobility Ecosystems, Safety

# DISCUSSION



Carbon

Wellness/  
Curriculum

Site





People

Policy

Office of Sustainability and  
Environment (OSE)

Climate Action Commission (*Interim*)

High School Green Facilities

Department of Public Works

Capital Projects

Public Space and Urban Forestry

Mobility Division

 SOMERVISION2040

Climate Forward

Vision Zero Somerville

Somerville Bicycle Network Plan

Pollinator Action Plan

# COMMUNITY PARTNERS

Gilman Square Neighborhood  
Association

Mothers Out Front

Voice

Green New Deal for SPS

Climate Coalition of Somerville

Foreign Language Groups

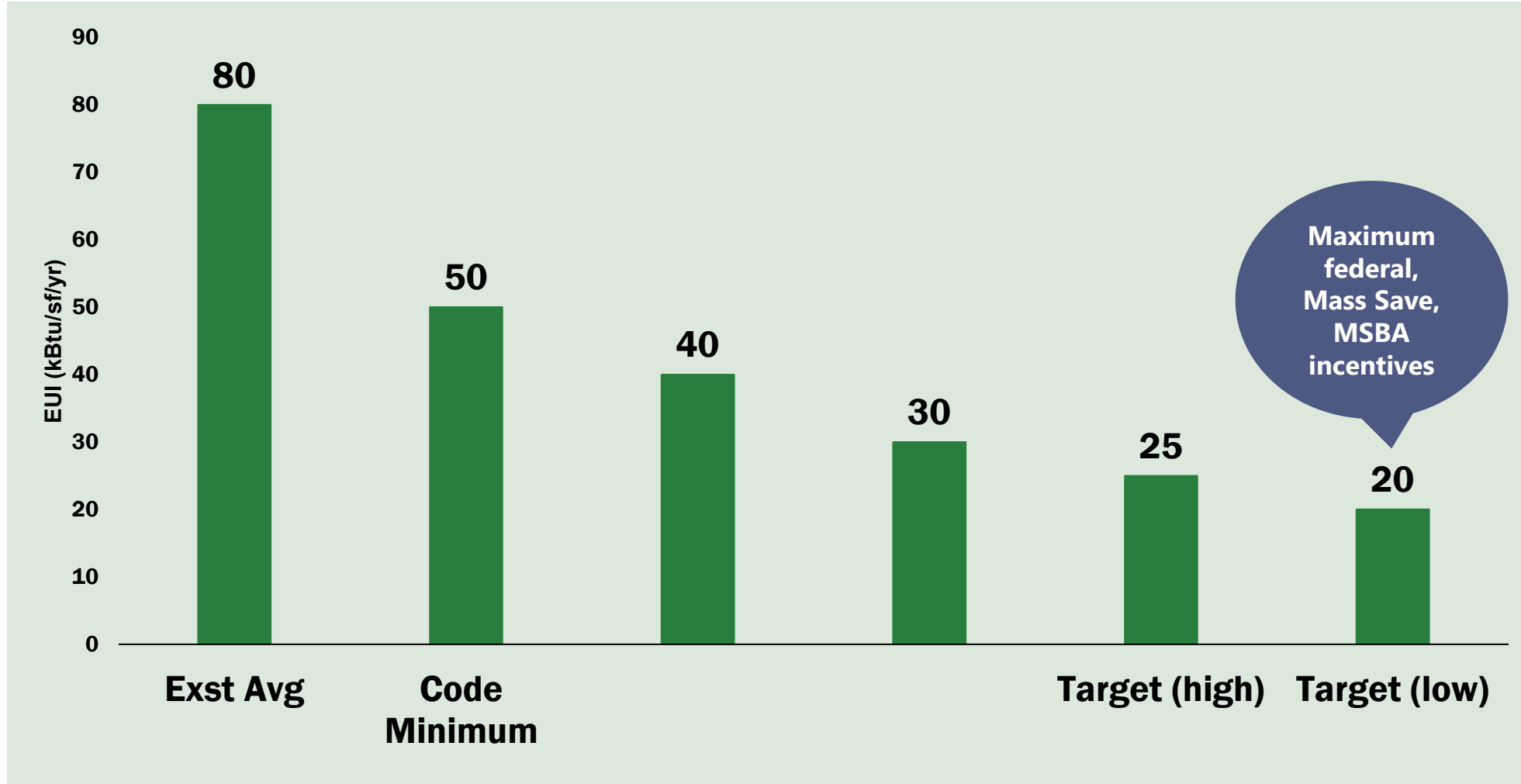
Groundwork Somerville

Tean Empowerment & Climate Clubs

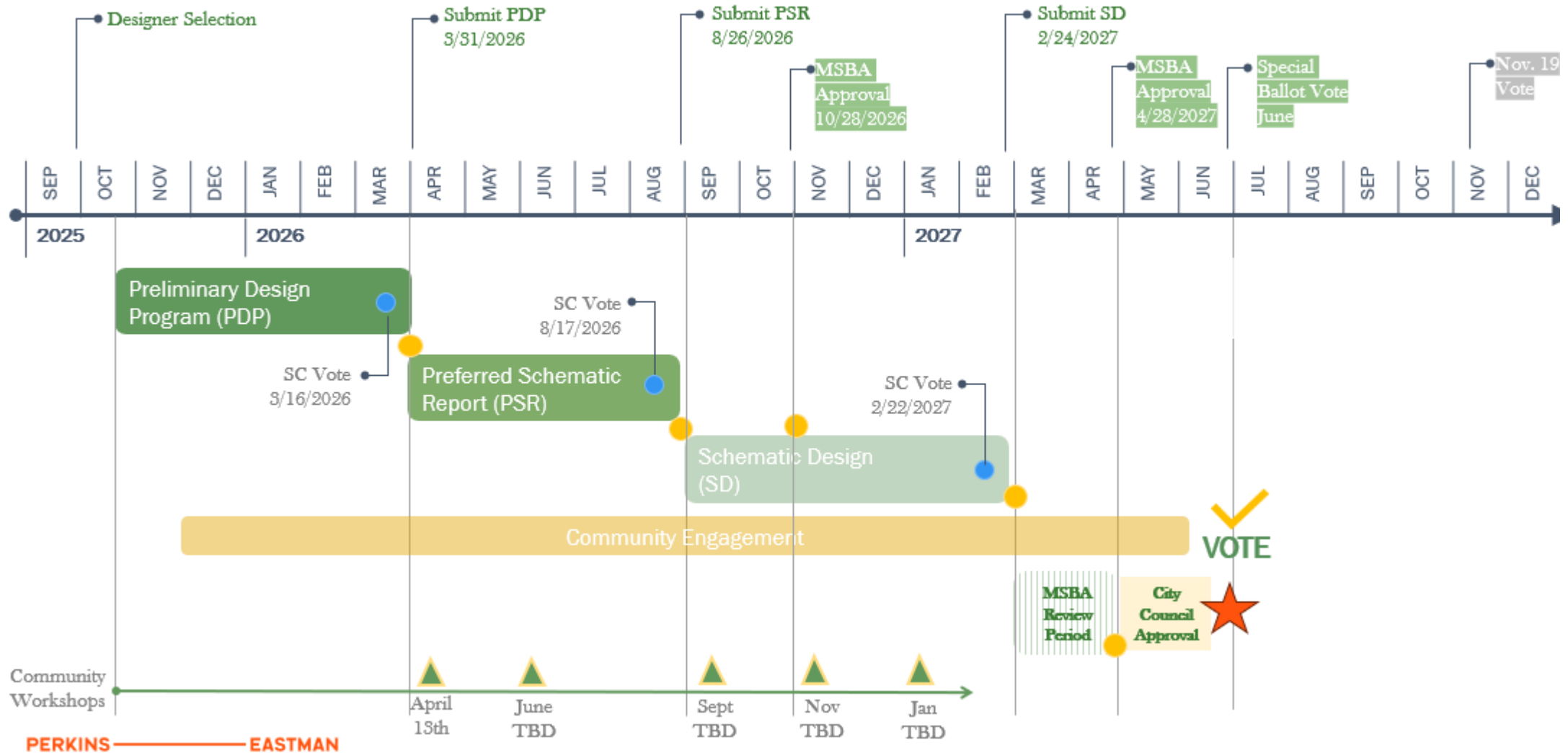
Somerville Family Learning  
Collaborative

# COMPETING PRIORITIES + INFORMED DECISIONS (ENERGY USE)

- Community Benefits
- Climate Goals
- First Costs & Lifetime Costs
- Rebates & Incentives
- Energy Efficiency
- Maintenance
- Durability
- Operations



# UPCOMING SCHEDULE MILESTONES





# 115 Sycamore Street New School Building

Community Workshop - Sustainability

April 12, 2026

PERKINS —  
EASTMAN  
*Human by Design*