

SCHOOL COMMITTEE MEETING

John R. Pierce K-8 School

September 15, 2022



TODAY'S AGENDA

- 01 PIERCE SCHOOL
 - Opening Remarks
 - Introductions
 - Public Process
 - Existing Conditions & Needs
- 02 MSBA FEASIBILITY STUDY/SCHEMATIC DESIGN
 - MSBA Process Overview
 - Summary of Options Studied
 - Schedule
- 03 DESIGN UPDATE
 - Revised Site Plan
 - Revised Floor Plans
 - Revised Renderings
- 04 PROJECT COSTS
 - Schematic Design Estimate
 - Proposed Value Engineering
 - How we got to Current Budget
 - Proposed Total Project Budget
 - Potential Escalation
 - Next Steps
 - Why Pierce Now?
- 05 QUESTIONS & ANSWERS

PIERCE SCHOOL

OPENING REMARKS



PUBLIC SCHOOLS of
BROOKLINE

PIERCE SCHOOL

SCHOOL BUILDING COMMITTEE



Bernard Greene, Co-Chair

Select Board

Janet Fierman, Co-Chair

Building Commission

Helen Charlupski, Co-Chair

School Committee

Melvin Kleckner

Town Administrator

Melissa Goff

Deputy Town Administrator

Daniel Bennett

Building Commissioner

Carol Levin

Advisory Finance Committee

Steve Heikin

Planning Board

Charlie Simmons

Director of Public Buildings

Nancy O'Connor

Parks and Recreation Commission

Tony Guigli

Building Department Project Administrator

Linus J. Guillory Jr., PhD

Superintendent of Schools

Andy Liu

School Committee

Lesley Ryan-Miller

Deputy Superintendent of Teaching & Learning

Samuel Rippin

Asst. Superintendent of Schools Admin. & Finance

Jamie Yadoff

Pierce School Principal

Matt Gillis

Director of Operations, PSB Project Manager

Aaron Williams

Pierce School Parent

Nurit Zuker

Pierce School Parent

PIERCE SCHOOL

PROJECT TEAM



Better design, together.



CONSIGLI
Est. 1905



Eligibility & Preliminary Design Program Phase Meetings – 21 Public Meetings (June 3, 2019 – June 15, 2021)

- SBC Meeting April 22, 2020
- SBC Meeting June 18, 2020
- SBC Meeting September 23, 2020
- SBC Meeting October 6, 2020
- SBC Meeting January 28, 2021
- SBC Meeting June 14, 2021
- Public Forum March 2, 2021
- Public Forum March 15, 2021
- Public Forum March 18, 2021
- Building Commission Meeting May 12, 2020
- Building Commission Meeting June 9, 2020
- Building Commission Meeting August 11, 2020
- Building Commission Meeting September 8, 2020
- Building Commission Meeting October 13, 2020
- Building Commission Meeting November 10, 2020
- Building Commission Meeting December 8, 2020
- Building Commission Meeting January 12, 2021
- Building Commission Meeting February 9, 2021
- Building Commission Meeting March 9, 2021
- Building Commission Meeting April 13, 2021
- Building Commission Meeting May 11, 2021



Preferred Schematic Report Phase Meetings – 17 Public Meetings (June 16, 2021 – March 2, 2022)

- SBC Meeting August 4, 2021
- SBC Meeting September 9, 2021
- SBC Meeting September 30, 2021
- SBC Meeting October 14, 2021
- SBC Meeting October 21, 2021
- SBC Meeting October 28, 2021
- SBC Meeting November 8, 2021
- SBC Meeting December 6, 2021
- SBC Meeting December 13, 2021
- Public Forum October 25, 2021
- Building Commission Meeting June 15, 2021
- Building Commission Meeting July 13, 2021
- Building Commission Meeting August 10, 2021
- Building Commission Meeting September 14, 2021
- Building Commission Meeting October 12, 2021
- Building Commission Meeting November 9, 2021
- Building Commission Meeting December 14, 2021



Schematic Design Phase Meetings To Date (Ongoing) – 22+ Public Meetings (March 3, 2022 – December 21, 2022)

- SBC Meeting January 13, 2022
- SBC Meeting February 3, 2022
- SBC Meeting February 17, 2022
- SBC Meeting March 7, 2022
- SBC Meeting April 1, 2022
- SBC Meeting April 14, 2022
- SBC Meeting April 28, 2022
- SBC Meeting May 19, 2022
- SBC Meeting June 16, 2022
- SBC Meeting July 6, 2022
- SBC Meeting July 13, 2022
- SBC Meeting July 20, 2022
- Building Commission Meeting January 11, 2022
- Building Commission Meeting February 15, 2022
- Building Commission Meeting March 15, 2022
- Building Commission Meeting April 12, 2022
- Building Commission Meeting May 10, 2022
- Building Commission Meeting June 14, 2022
- Building Commission Meeting June 29, 2022
- Building Commission Meeting July 12, 2022
- Building Commission Meeting August 9, 2022
- Public Forum June 13, 2022

PIERCE SCHOOL

PUBLIC PROCESS



PUBLIC SCHOOLS of
BROOKLINE



HOME | DISTRICT | SCHOOLS | STUDENTS & FAMILIES | SCHOOL COMMITTEE | HUMAN RESOURCES | BUILDING PROJECTS | STAFF PORTAL

HOME / DISTRICT Building Projects

BUILDING PROJECTS

Overview >

BHS Expansion Project >

Driscoll School Building Project >

Pierce School Building Project >

Pierce School Building Project - Overview

- [School Street Traffic Study \(May 23, 2022\)](#)
- [Community Forum Recording \(June 13, 2022\)](#) Passcode: MXi!A1Vj
- [Preferred Schematic Report \(Published December 23, 2021\)](#)
- [Preliminary Design Program \(Includes Educational Plan and Space Summary\)](#)
- [Project Schedule \(Updated December 2021\)](#)

ID	Task Name	Start	Finish
1	Eligibility Period	Mon 6/3/19	Wed 8/12/20
2	MSBA Invitation to Eligibility Period	Mon 6/3/19	Mon 6/3/19
3	Initial Compliance Certification	Thu 12/12/19	Thu 12/12/19
4	Study Enrollment Certification	Fr 12/13/19	Wed 3/25/20
5	MSBA Invitation to Conduct Feasibility Study	Wed 4/15/20	Wed 4/15/20
6	City Appropriation of Funds for Feasibility Study	Mon 5/11/20	Mon 5/11/20
7	Execution of Feasibility Study Agreement	Tue 5/12/20	Wed 5/12/20

FAQ'S

SUBMIT A QUESTION OR COMMENT

SUBSCRIBE TO EMAIL UPDATES

Most Recent Meeting

September 15, 2022

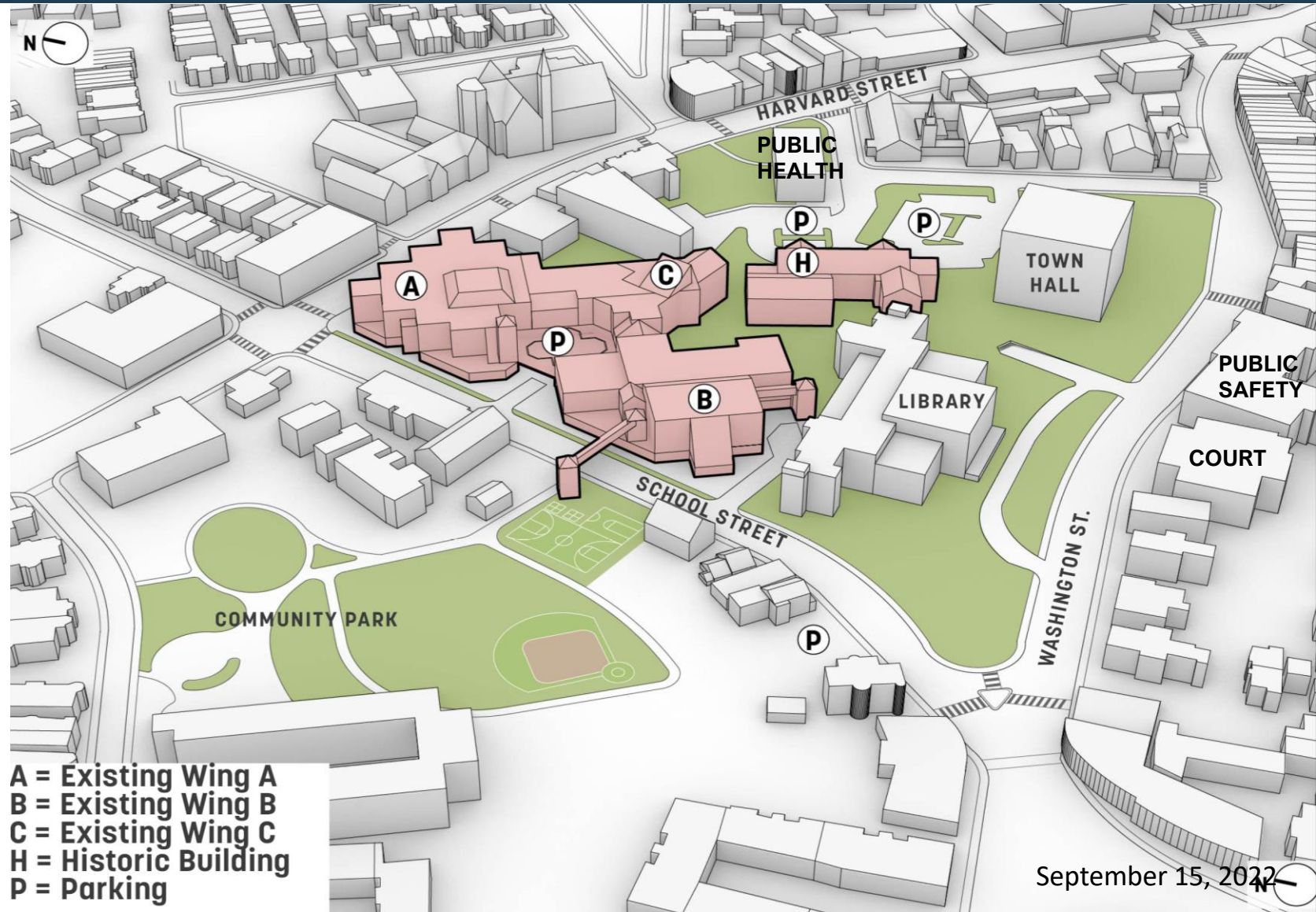
PIERCE SCHOOL

EXISTING CONDITIONS & NEEDS



Pierce School Today

- Situated in Brookline Village within Government Campus
- 2.5 Acre School Campus
- 725 Students in K-8 Currently
- 800 Students in PreK-8 Proposed
- All Parking below Building in Garage Structure
- School's Playground is a Town Park
- Pick-up/Drop-Off is Off Site
- Steep Topography



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

PIERCE SCHOOL

EXISTING CONDITIONS & NEEDS



Why the Existing Pierce School Does Not Meet Educational Needs



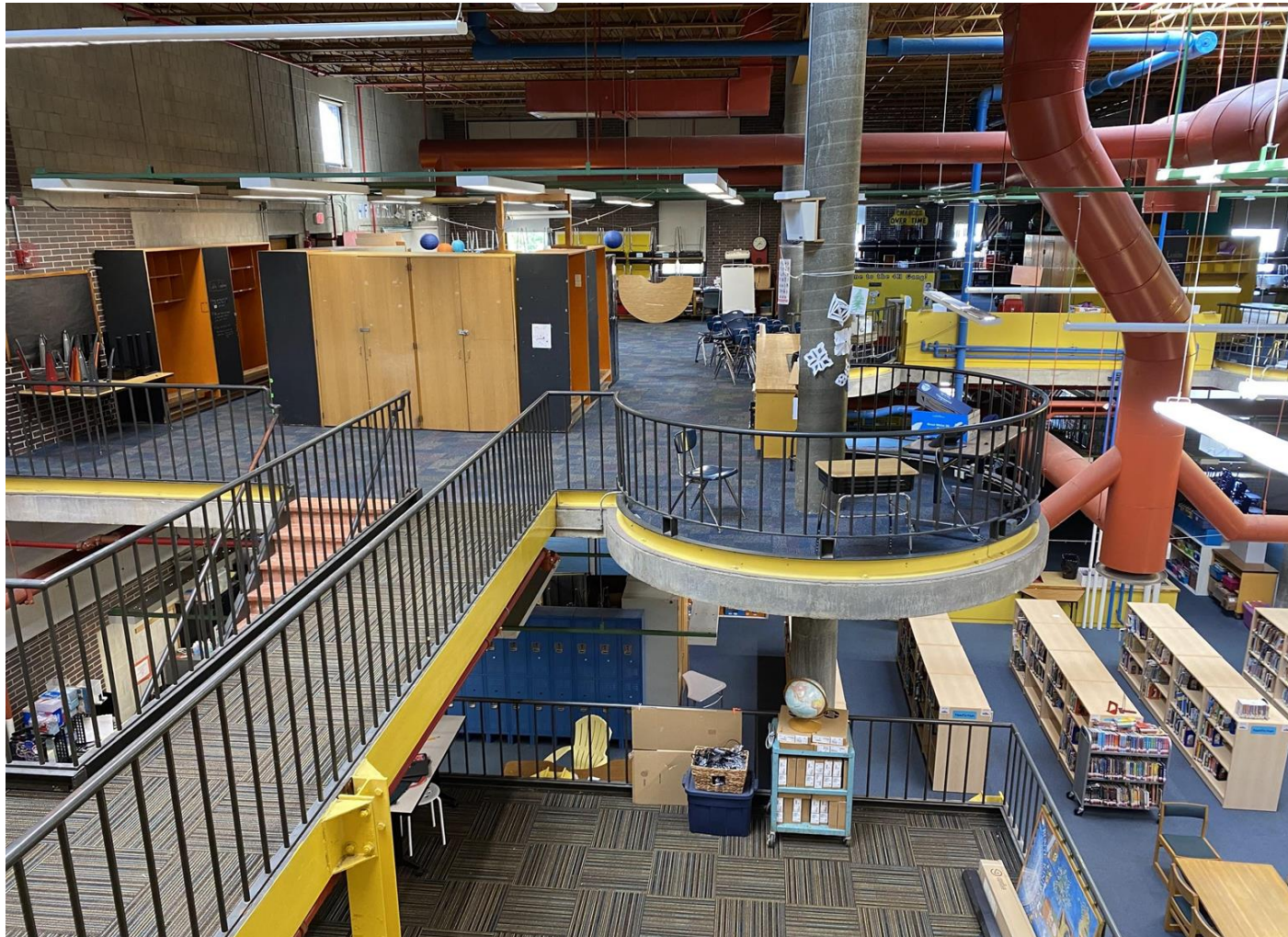
Teaching

- Constant Distractions (noise, echoes)
- Isolation from Colleagues
- Less teaching time due to transition issues



PIERCE SCHOOL

EXISTING CONDITIONS & NEEDS



Learning

- Physical Disability Challenges
- Social/Emotional Challenges
- ADA/Civil Rights and Code Issues
- Equity
- Growth of Educational Programs (existing capacity)



PIERCE SCHOOL

EXISTING CONDITIONS & NEEDS



Accessibility

- Physical Disability Challenges
- ADA/Civil Rights and Code Issues



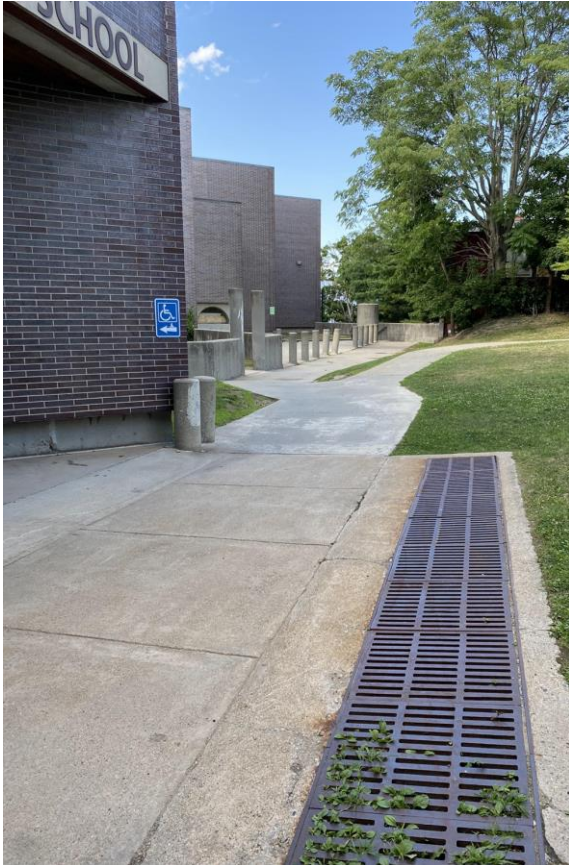
PIERCE SCHOOL

EXISTING CONDITIONS & NEEDS



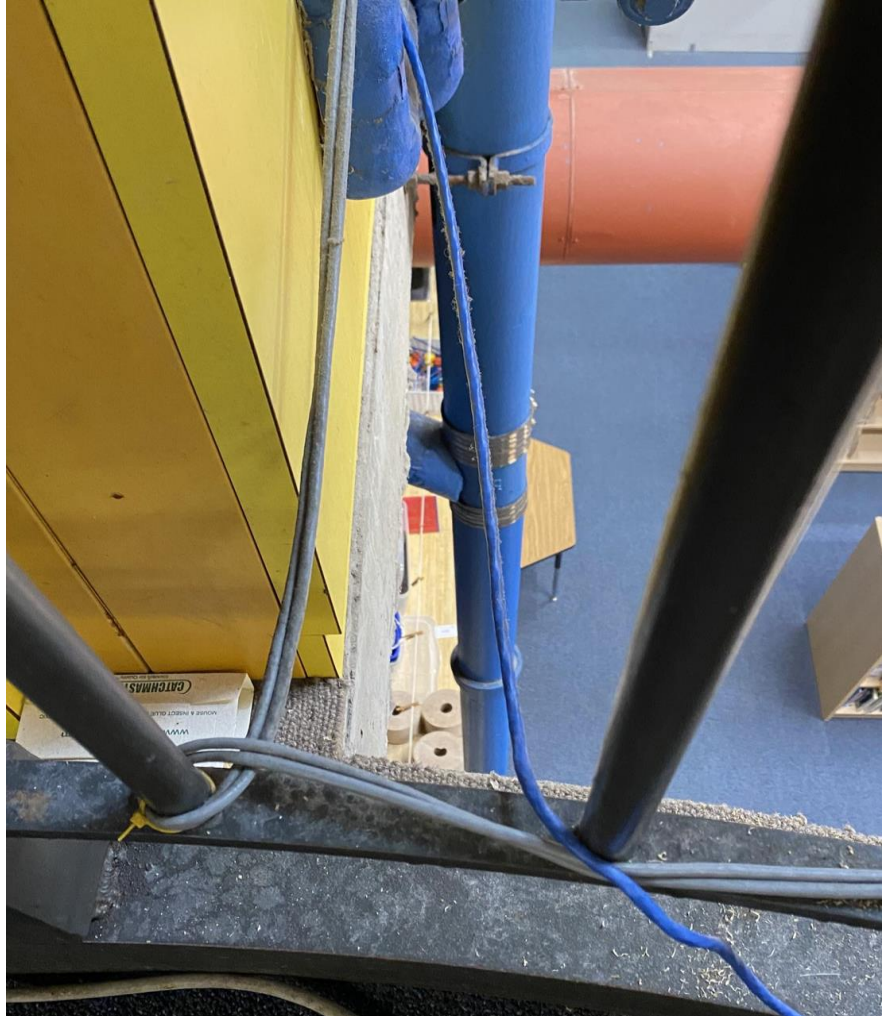
Safety

- Significant Security Issues and Concerns



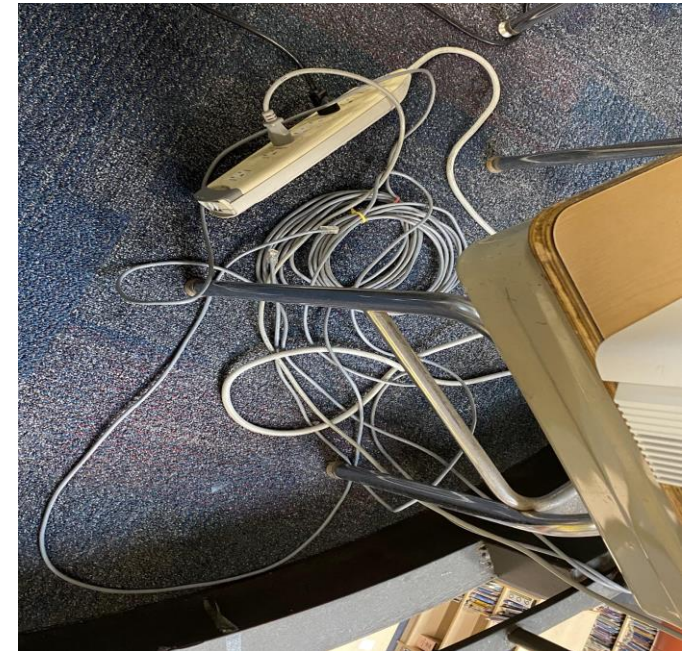
PIERCE SCHOOL

EXISTING CONDITIONS & NEEDS



Code Issues

- Noncompliance Issues
- Hazardous Concerns



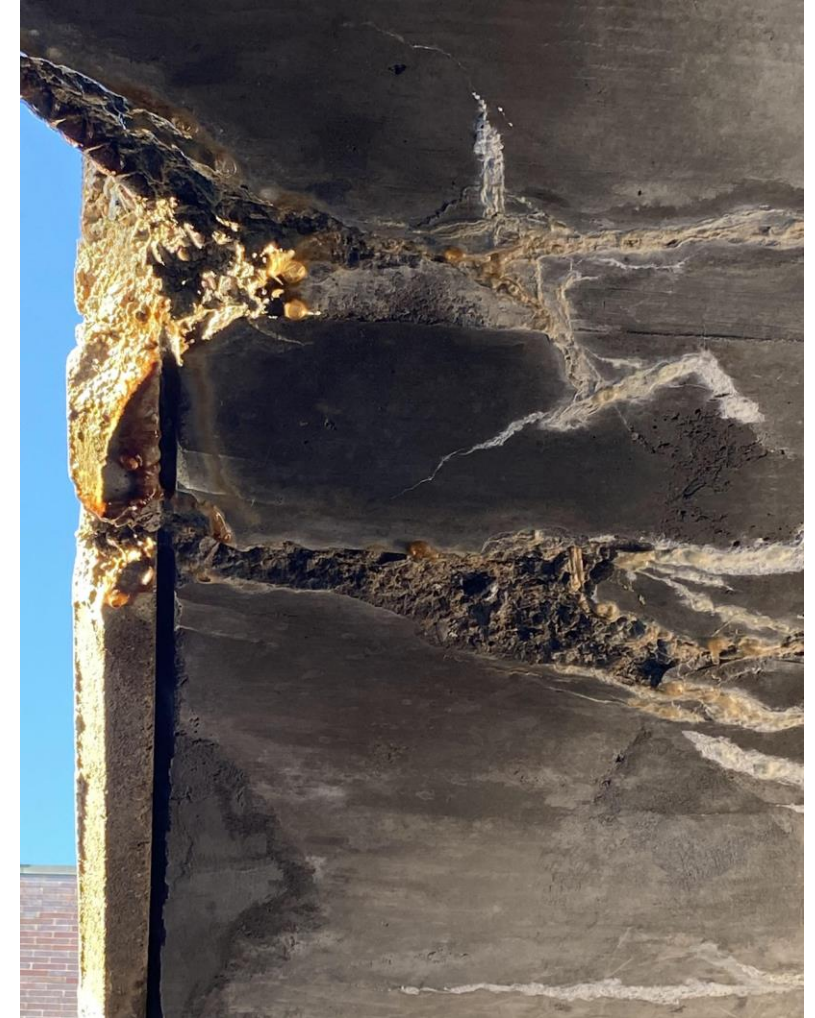
PIERCE SCHOOL

EXISTING CONDITIONS & NEEDS



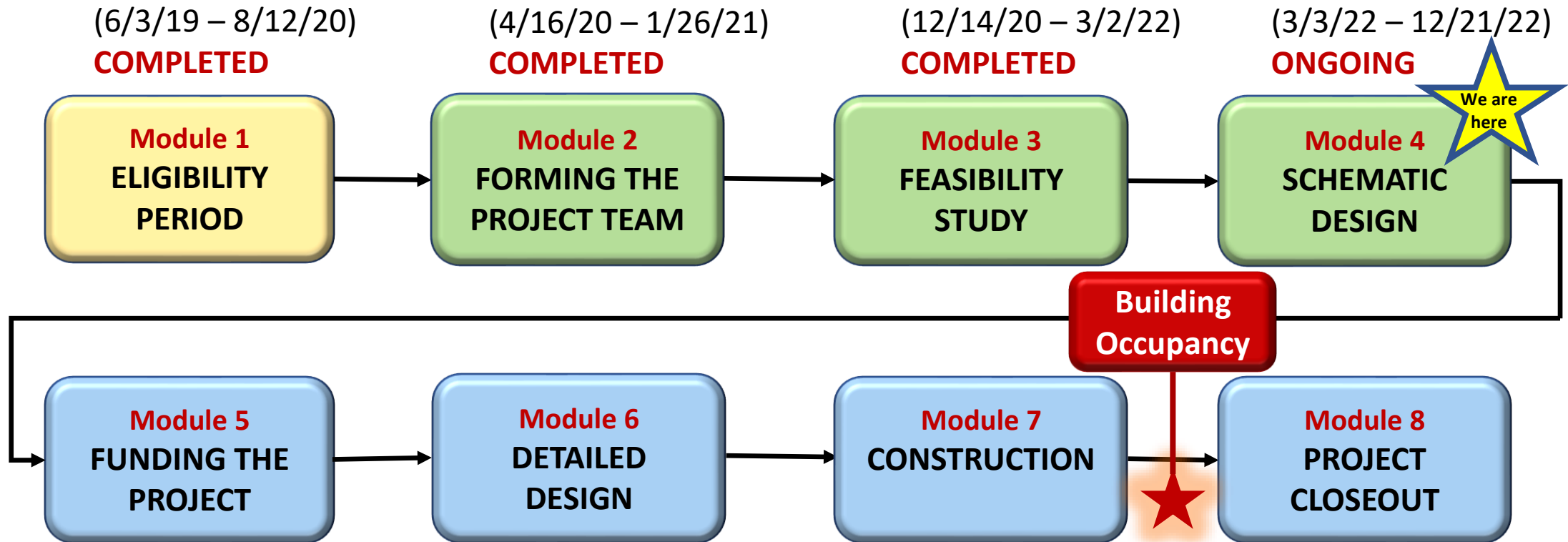
Maintenance, Repairs & Changes

- Difficult to accomplish in an all-concrete building
- Work is costly



MSBA PROCESS

FEASIBILITY STUDY / SCHEMATIC DESIGN



MSBA PROCESS

For more details about the Modules, visit:

www.massschoolbuildings.org/building/modules_overview



MSBA PROCESS

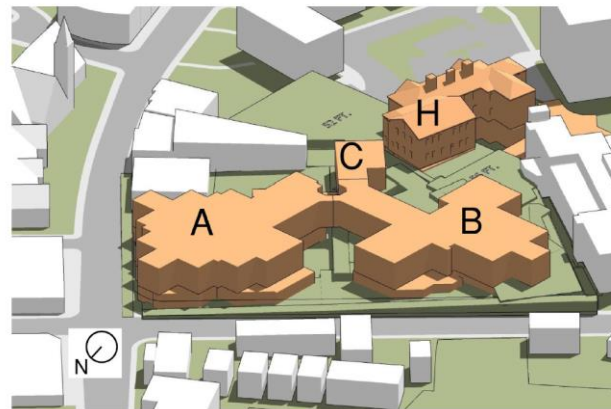
SUMMARY OF OPTIONS STUDIED



Summary of Preliminary Design Program (PDP) Options



Plan View (Existing School)



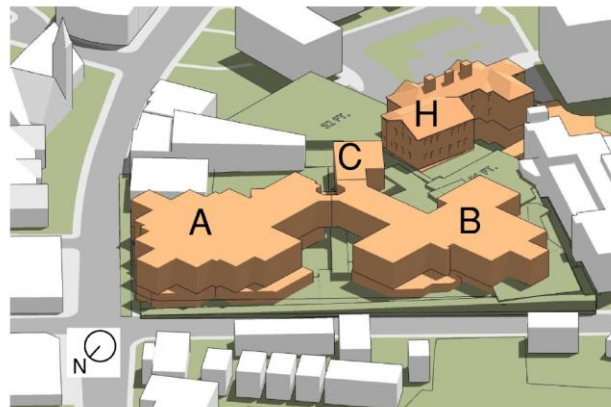
Axon View East (Existing School)

Option R – Code Upgrade Only

- Net Square Footage too small to fit Program



Plan View (Existing School)



Axon View East (Existing School)

Option R1 – Renovation Only

- Net Square Footage too small to fit Program

MSBA PROCESS

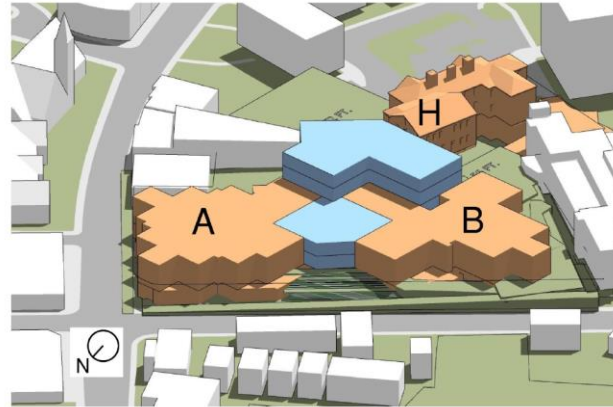
SUMMARY OF OPTIONS STUDIED



Summary of Preliminary Design Program (PDP) Options



Plan View (Option 1)



Axon View East (Option 1)



Plan View (Option 2b)



Axon View East (Option 2b)

Option 1 – Add/Reno A, B & H (Demo C)

- Given the tight site and quirky volumes of Unit B, it would not be possible to configure the spaces to the sizes, volumes, and spatial relationships required by the Educational Program and Initial Space Summary (ISS)

Option 2 (a&b) – Add/Reno A&H (Demo B&C)

- Due to its deep floor plate, interior daylighting would be compromised
- Increased logistical challenges
- Difficulty configuring existing building spaces to the sizes, volumes and spatial relationships required by the Educational Program and ISS

MSBA PROCESS

SUMMARY OF OPTIONS STUDIED



Summary of Preliminary Design Program (PDP) Options



Plan View (Option 3c)



Axon View East (Option 3c)



Plan View (Option 4b)



Axon View West (Option 4b)

Option 3 – New Building on Existing Site

- Keeping the existing garage has many complexities that are costly to build, logistically difficult and incur compromises to the final design.

Option 4 – New Building on Existing Park

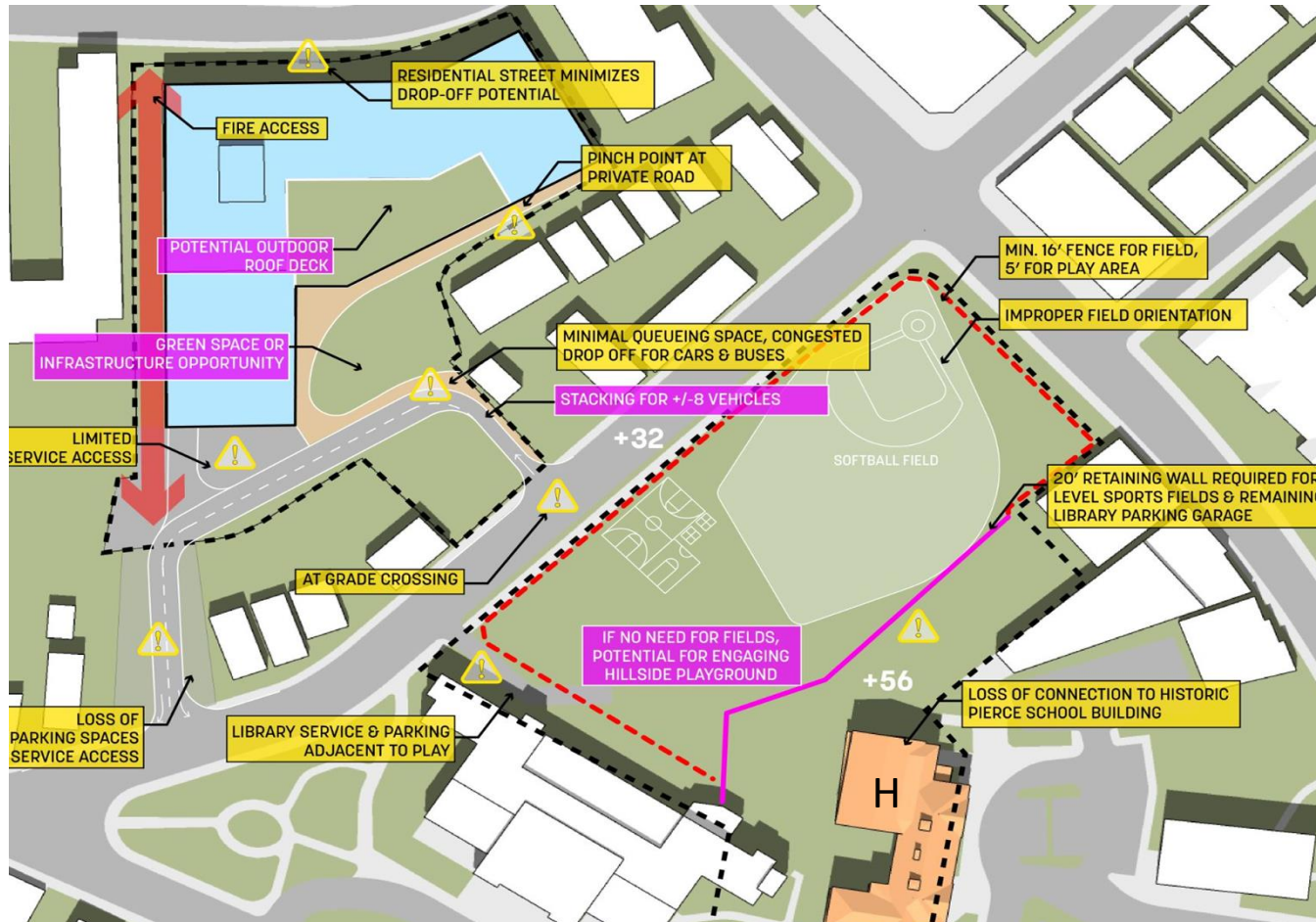
- More restrictive setbacks and less height
- Scale of new building not relative to residential neighbors
- Land Swap - Requires Article 97 process
- Loss of use of local park for 3-4 years
- Quality of new park: Grade change for existing (10') vs. proposed park (23')

MSBA PROCESS

SUMMARY OF OPTIONS STUDIED



Summary of Preliminary Design Program (PDP) Options



Option 4b – New Building on Existing Park

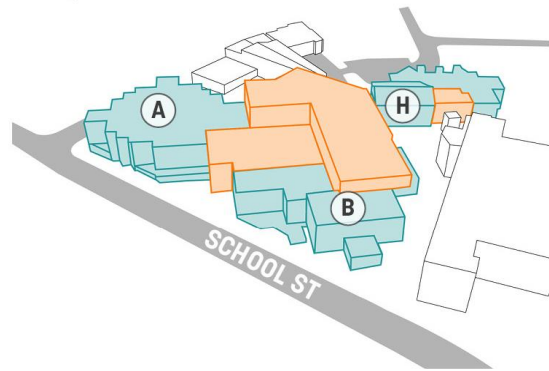
- Taller building required to fit program – not ideal for educational purposes
- Closely abuts residences – this would cause a lot of disruption during construction and would block views and sunlight after building is complete
- Article 97 Process with land swap required adding over a year to the project
- Existing 1970s building site not suitable for land swap due to grade change
- Does not provide adequate access for drop off/pick-up queuing
- Does not provide adequate service access

MSBA PROCESS

SUMMARY OF OPTIONS STUDIED

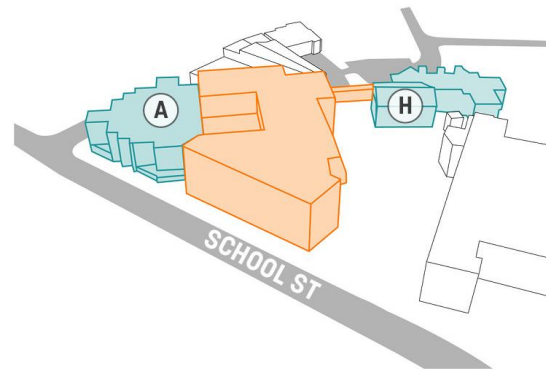


Summary of Preferred Schematic Report (PSR) Options



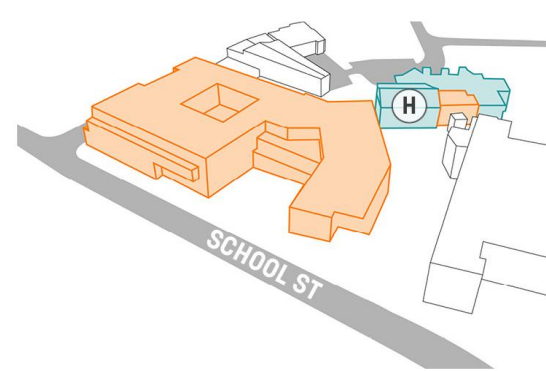
OPTION 1

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



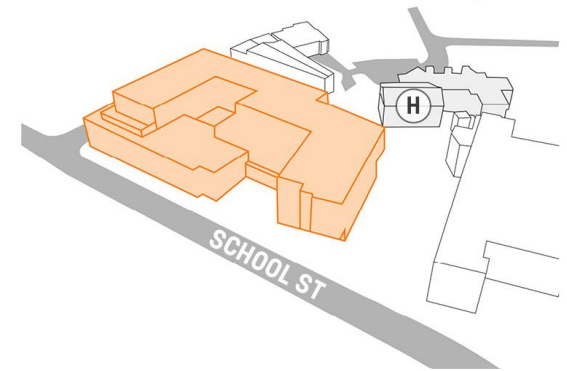
OPTION 2b

- 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

MSBA PROCESS

OPTIONS DECISION MATRIX



Notes:

1. Each subset of criteria is given a score from 1-5 based on the compliance of items in the subset.
2. Each subset of criteria is prioritized as a portion of 100% and that percentage is the multiplier on that subset.
3. Subtotals are provided for each overall category.
4. Category subtotals are added into a Total Score for each option.

		Best	Better	Good	Fair	Poor	
		5	4	3	2	1	
		DESIGN OPTIONS					
Type		REPAIR	ADD/RENO		NEW		
Option		R	1	2b	3b	3b-H	
Description		Repair/ Code Only	Add/Reno Keep A & B	Add/Reno Keep A	New w/o historic	New w/ historic	
Criteria	Multiplier						
Pedagogy/Program	Educational Program	15	1	1	2	5	5
	Ability to map the bubble diagram to the building Media Commons as the Hub of the School Student Travel Time (Horizontal and Vertical Across Building)						
	Indoor/Outdoor Connections	5	1	4	4	3	5
	Secondary Public Entrances at Harvard and School Streets Pre-K Adjacency to Main Entrance and drop off loop Outdoor Early Elementary Playspace Adjacent to Classrooms						
	Outdoor Classrooms and Gardens	5	3	2	4	5	4
	Outdoor space extended from Makerspace Amphitheater						
	Flexibility and Community Use	5	1	1	2	5	5
Future Flexibility and Growth Ability to Separate off-hours Access to Multi-purpose Room and Gym							
Pedagogy/Program Subtotal		30	40	50	80	140	145

MSBA PROCESS

OPTIONS DECISION MATRIX



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		Best	Better	Good	Fair	Poor	
		5	4	3	2	1	
		DESIGN OPTIONS					
Type		REPAIR	ADD/RENO		NEW		
Option		R	1	2b	3b	3b-H	
Description		Repair/ Code Only	Add/Reno Keep A & B	Add/Reno Keep A	New w/o historic	New w/ historic	
Criteria	Multiplier						
Town/Neighborhood Impacts	Costs and Risks	15	2	2	2	5	5
	Total Project Costs (including historic building renovation) Constructibility and Risk						
	Other Town-wide Considerations	5	5	5	5	1	5
	Maintain historic building as part of the school						
	Urban Design and Planning	5	1	1	4	5	4
	Pedestrian Permeability Through Site Green Space Continuity Through Site Gathering Space at School Street Shading at Main Entry Universal Design Outdoor thermal comfort						
	Parking and Service Access	5	5	5	2	5	5
	Garage Parking Spaces Relative to Existing Service Access						
	Site Safety	5	2	2	5	5	4
	Traffic and School St. Crossing Safety Off Hours Site Security						
Town/Neighborhood Impacts Subtotal		35	95	95	110	155	165

MSBA PROCESS

OPTIONS DECISION MATRIX



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		Best	Better	Good	Fair	Poor	
		5	4	3	2	1	
		DESIGN OPTIONS					
Type		REPAIR	ADD/RENO		NEW		
Option		R	1	2b	3b	3b-H	
Description		Repair/ Code Only	Add/Reno Keep A & B	Add/Reno Keep A	New w/o historic	New w/ historic	
Criteria							
Multiplier							
Architectural Impacts	Building Interior	10	2	1	1	4	4
	Organizational Clarity and Wayfinding						
	Space Efficiency						
	Universal Accessibility (All options are MAAB/ADA compliant)						
	4 Story Experience						
	Building Exterior	5	3	3	3	4	4
	Massing Along School and Harvard Streets						
	Improved Architectural and Street Level Experience						
Health and Wellness	5	1	1	2	4	4	
Indoor air quality, ventilation and filtration							
Healthy building materials and acoustics							
Maximizes Daylighting and Views							
Sustainability - Carbon	5	5	5	3	4	4	
Life Cycle Embodied Carbon (with Historic Building included in both options)							
Sustainability - Energy	10	1	2	3	5	5	
Building envelope							
Passive strategies - orientation and massing							
Ground source heat pumps/geoexchange							
Photovoltaic Energy Generation							
Architectural Impact Subtotal		35	75	75	80	150	150

MSBA PROCESS

OPTIONS DECISION MATRIX



Notes:

1. Each subset of criteria is given a score from 1-5 based on the compliance of items in the subset.
2. Each subset of criteria is prioritized as a portion of 100% and that percentage is the multiplier on that subset.
3. Subtotals are provided for each overall category.
4. Category subtotals are added into a Total Score for each option.

		DESIGN OPTIONS					
		REPAIR	ADD/RENO			NEW	
Type	Option	R	1	2b	3b	3b-H	
Description		Repair/ Code Only	Add/Reno Keep A & B	Add/Reno Keep A	New w/o historic	New w/ historic	
Category	Criteria	Criteria Multiplier					
	Total Score	100	210	220	270	445	460



Option 3b-H

MSBA PROCESS

PRICING MATRIX AT PREFERRED SCHEMATIC



Option (Description)	Total Gross Square Feet	Square Feet of Renovated Space (\$*/SF)	Square Feet of New Construction (\$*/SF)	Site, Building Takedown, Haz Mat Etc. (\$*)	Estimated Total Construction** (\$*)	Estimated Total Project Costs (\$)
Option R - Code Upgrade <i>Garage Reno Only:</i> <i>78,277sf / \$3,592,349*</i>	226,072 sf	226,072 sf \$ 352.86 /sf	- sf \$ - /sf	\$ 6,727,467	\$ 86,498,489 \$ 382.61 /sf	\$ 137,696,498
Option 1 - Add / Reno <i>Garage Reno: 66,004sf / \$4,080,384*</i> <i>New Garage: 27,387sf / \$5,281,263*</i>	301,445 sf	178,294 sf \$ 363.51 /sf	123,151 sf \$522.29 /sf	\$ 14,439,070	\$ 143,572,028 \$ 476.28 /sf	\$ 210,499,587
Option 2b - Add / Reno <i>Garage Reno: 48,893sf / \$3,022,566*</i> <i>New Garage: 32,378sf / \$6,243,779*</i>	298,825 sf	128,294 sf \$ 304.78 /sf	170,531 sf \$540.49 /sf	\$ 16,060,900	\$ 147,332,597 \$ 493.04 /sf	\$ 215,618,699
Option 3b-H*** - Add / Reno <i>Garage Reno: 24,646sf / \$1,523,622*</i> <i>New Garage: 47,228sf / \$8,340,771*</i>	255,363 sf	55,122 sf \$ 329.39 /sf	200,241 sf \$ 569.86 /sf	\$ 18,251,936	\$ 150,518,572 \$ 589.43 /sf	\$ 220,000,000
Option 3b - New Construction <i>Garage Reno: 25,911sf / \$1,601,825*</i> <i>New Garage: 46,912sf / \$9,071,778*</i>	203,181 sf	25,911 sf \$ 156.43 /sf	177,270 sf \$ 663.75 /sf	17,553,680	\$ 139,269,845 \$ 685.45 /sf	\$ 219,966,521

MSBA PROCESS

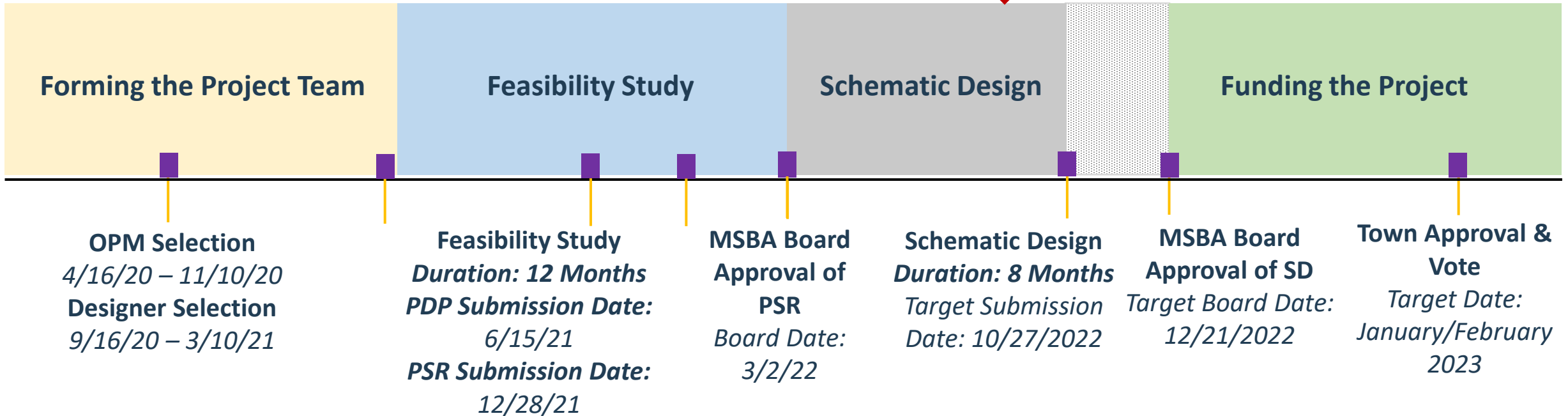
CURRENT SCHEDULE



Feasibility Study
Duration: 22 Months

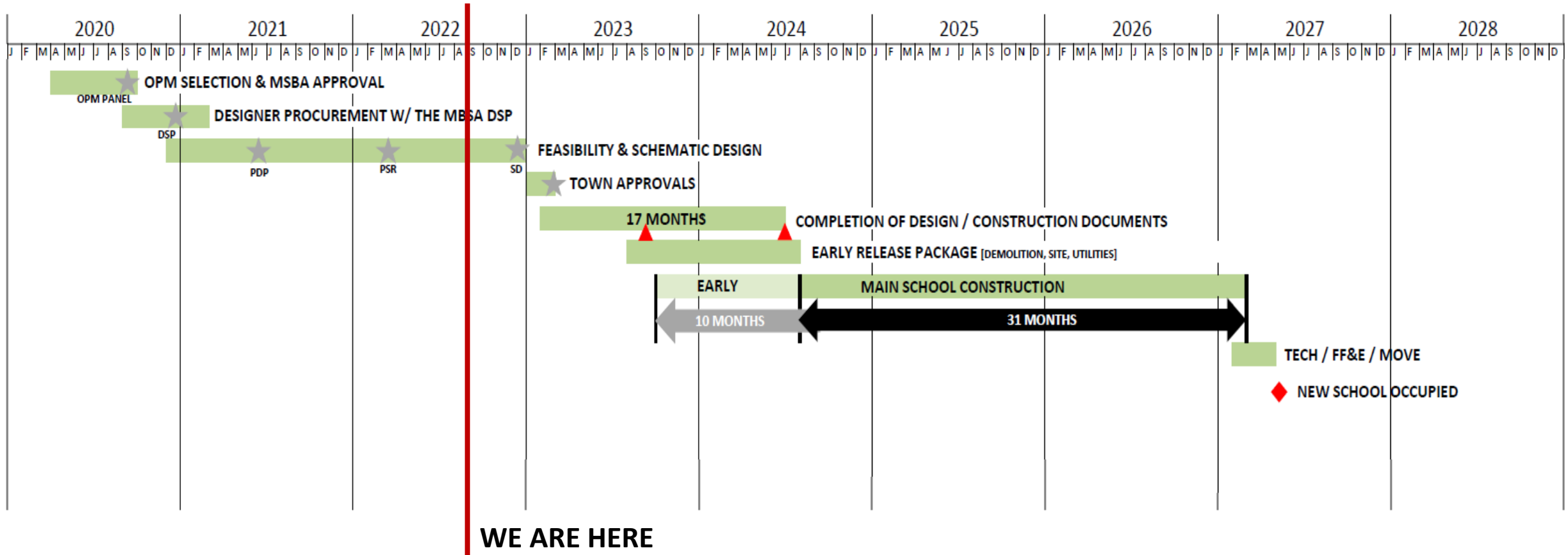


**WE
ARE
HERE**



MSBA PROCESS

CURRENT & PROPOSED SCHEDULE



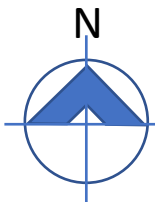
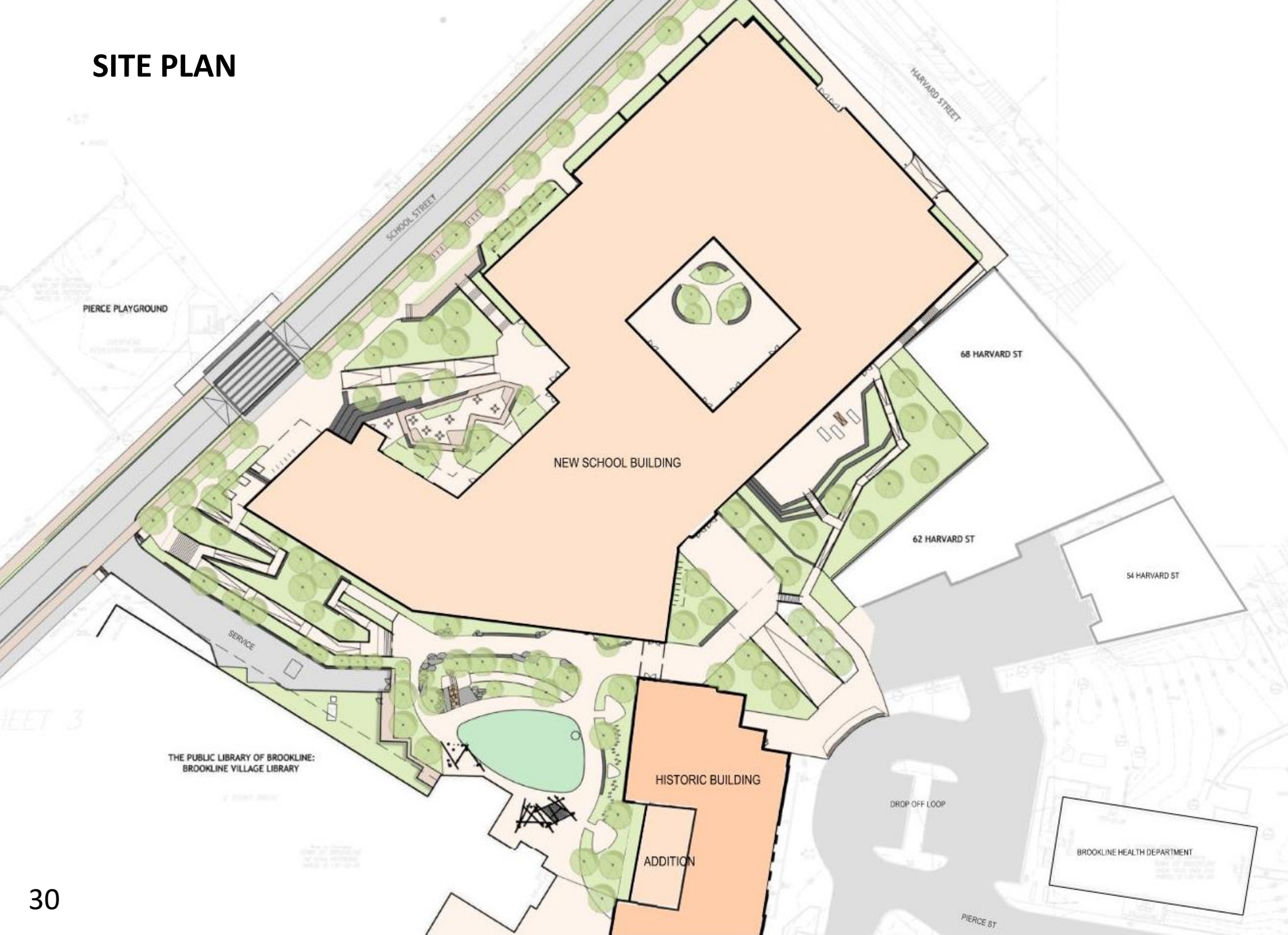
DESIGN UPDATE

REVISED FLOOR PLANS



Better design, together.

SITE PLAN

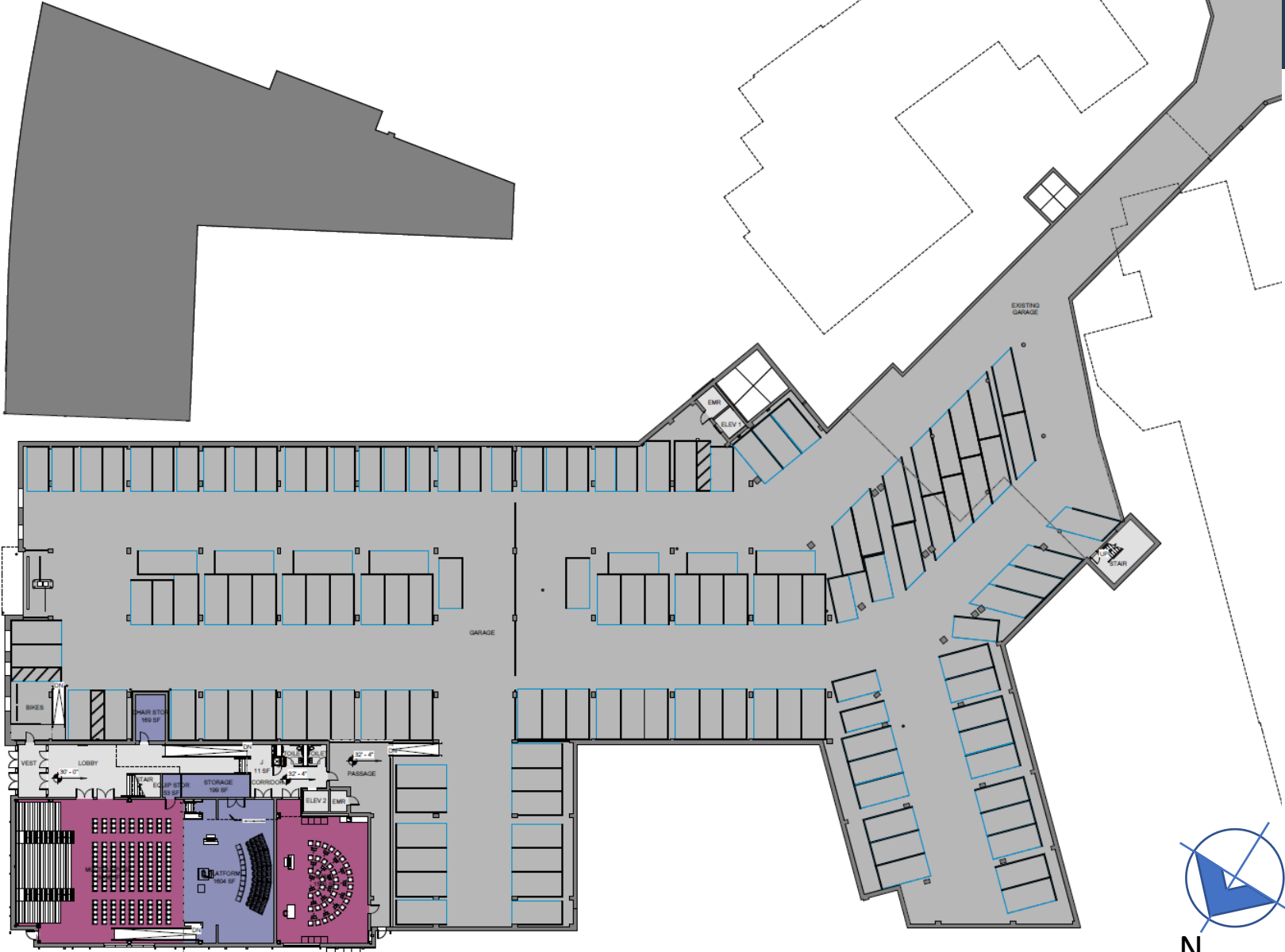


GROUND FLOOR PLAN



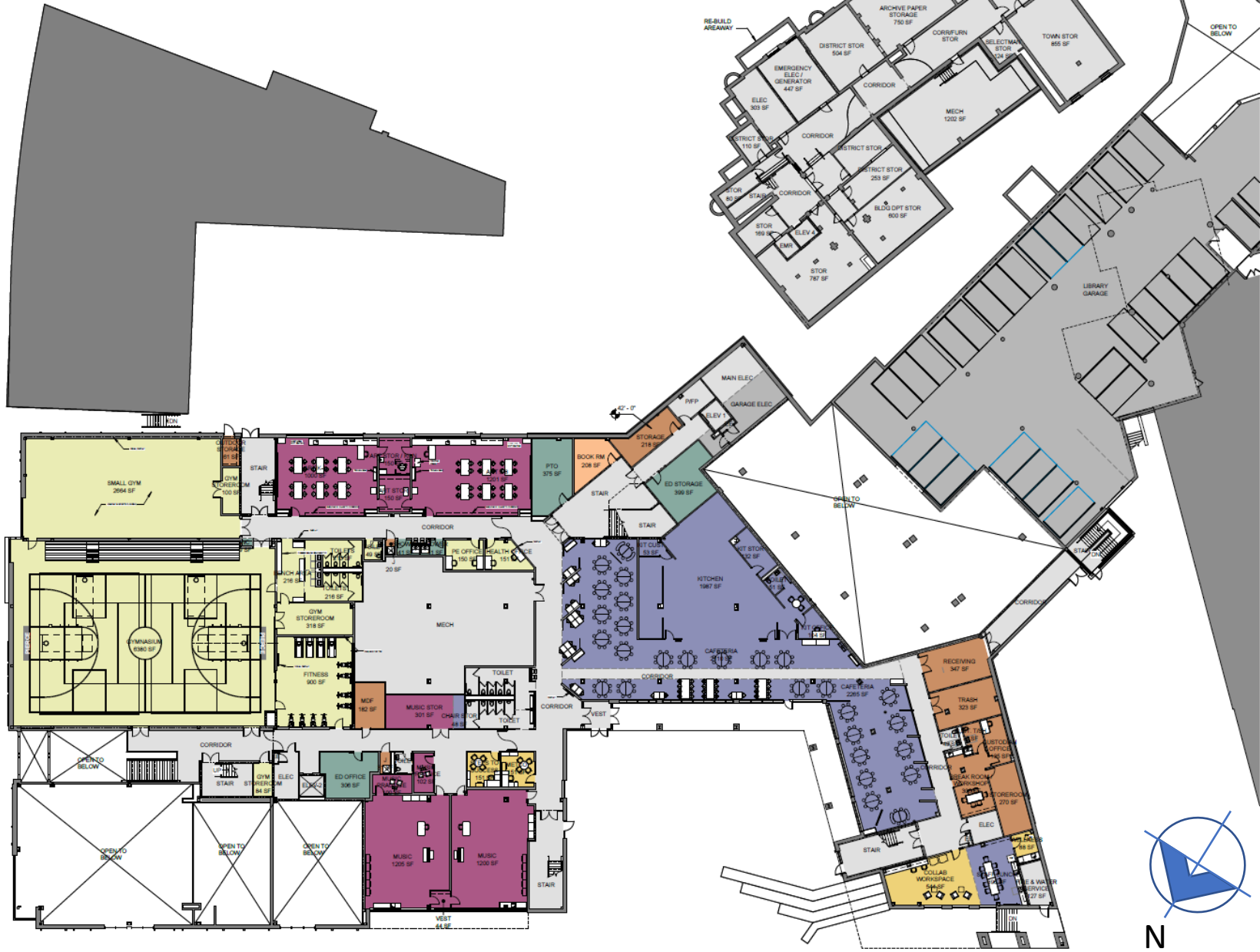
PIERCE SCHOOL

50 SCHOOL STREET
BROOKLINE, MA 02445



- 1. CORE ACADEMIC
- 2. SPECIAL EDUCATION
- 3. ART & MUSIC
- 4. VOCATIONS & TECHNOLOGY
- 5. HEALTH & PHYSICAL EDUCATION
- 6. MEDIA CENTER
- 7. DINING & FOOD SERVICE
- 8. MEDICAL
- 9. ADMINISTRATION & GUIDANCE
- 10. CUSTODIAL & MAINTENANCE
- 11. OTHER
- 13. PARKING EXCLUDED
- 14. NON-PROGRAMED SPACE

FIRST FLOOR PLAN



PIERCE SCHOOL

50 SCHOOL STREET
BROOKLINE, MA 02445

- 1. CORE ACADEMIC
- 2. SPECIAL EDUCATION
- 3. ART & MUSIC
- 4. VOCATIONS & TECHNOLOGY
- 5. HEALTH & PHYSICAL EDUCATION
- 6. MEDIA CENTER
- 7. DINING & FOOD SERVICE
- 8. MEDICAL
- 9. ADMINISTRATION & GUIDANCE
- 10. CUSTODIAL & MAINTENANCE
- 11. OTHER
- 13. PARKING EXCLUDED
- 14. NON-PROGRAMED SPACE



SECOND FLOOR PLAN



PIERCE SCHOOL

50 SCHOOL STREET
BROOKLINE, MA 02445



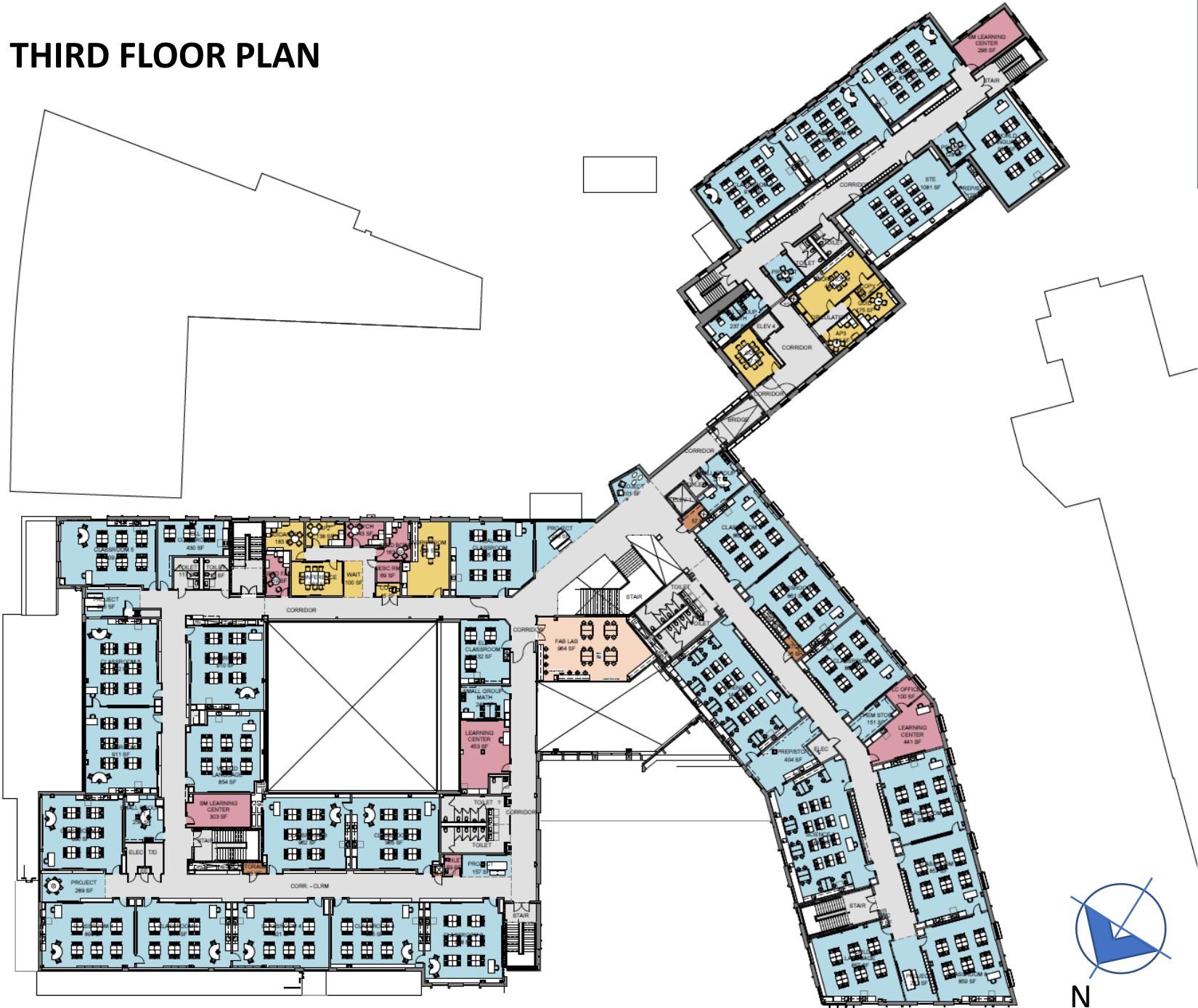
- 1. CORE ACADEMIC
- 2. SPECIAL EDUCATION
- 3. ART & MUSIC
- 4. VOCATIONS & TECHNOLOGY
- 5. HEALTH & PHYSICAL EDUCATION
- 6. MEDIA CENTER
- 7. DINING & FOOD SERVICE
- 8. MEDICAL
- 9. ADMINISTRATION & GUIDANCE
- 10. CUSTODIAL & MAINTENANCE
- 11. OTHER
- 13. PARKING EXCLUDED
- 14. NON-PROGRAMED SPACE

THIRD FLOOR PLAN



PIERCE SCHOOL

50 SCHOOL STREET
BROOKLINE, MA 02445



- 1. CORE ACADEMIC
- 2. SPECIAL EDUCATION
- 3. ART & MUSIC
- 4. VOCATIONS & TECHNOLOGY
- 5. HEALTH & PHYSICAL EDUCATION
- 6. MEDIA CENTER
- 7. DINING & FOOD SERVICE
- 8. MEDICAL
- 9. ADMINISTRATION & GUIDANCE
- 10. CUSTODIAL & MAINTENANCE
- 11. OTHER
- 13. PARKING EXCLUDED
- 14. NON-PROGRAMED SPACE

DESIGN UPDATE

REVISED RENDERINGS



SASA AKI

Better design, together.

School Street at Library



School Street Aerial



School Street Entrance



Harvard Street + School Street



Harvard Street



Pierce Main Entrance



Pierce Main Entrance



Art Courtyard



Art Courtyard



PROJECT COSTS

SCHEMATIC DESIGN ESTIMATE



John R. Pierce School: Brookline, MA

Schematic Design Cost Estimate Comparison

6/10/2022

Based on Cost Estimates from 6/9/22

	GSF 262,787		GSF 262,787		GSF 262,787		SD Estimate Variance (high - low)	
	OPM Estimator (PM&C)		ARCH Estimator (AM Fogarty)		Consigli Construction			
	Total Amount	Cost/SF	Total Amount	Cost/SF	Total Amount	Cost/SF	Total Amount	Cost/SF
02 Existing Conditions	\$ 12,295,167	\$ 46.79	\$ 14,068,793	\$ 53.54	\$ 13,591,326	\$ 51.72	\$ 1,296,159	\$ 4.93
03 Concrete	\$ 11,020,562	\$ 41.94	\$ 11,329,730	\$ 43.11	\$ 11,574,428	\$ 44.04	\$ 553,866	\$ 2.11
04 Masonry	\$ 3,754,318	\$ 14.29	\$ 5,203,389	\$ 19.80	\$ 4,086,872	\$ 15.55	\$ 332,554	\$ 1.27
05 Metals	\$ 10,405,741	\$ 39.60	\$ 11,826,882	\$ 45.01	\$ 12,615,329	\$ 48.01	\$ 2,209,588	\$ 8.41
06 Woods, Plastics, and Composites	\$ 1,852,743	\$ 7.05	\$ 2,408,373	\$ 9.16	\$ 2,928,107	\$ 11.14	\$ 1,075,364	\$ 4.09
07 Thermal and Moisture Protection	\$ 8,453,471	\$ 32.17	\$ 8,486,677	\$ 32.29	\$ 7,333,582	\$ 27.91	\$ 1,119,889	\$ 4.26
08 Openings	\$ 6,747,090	\$ 25.68	\$ 6,498,726	\$ 24.73	\$ 7,041,124	\$ 26.79	\$ 294,034	\$ 1.12
09 Finishes	\$ 11,906,519	\$ 45.31	\$ 11,750,485	\$ 44.71	\$ 10,715,767	\$ 40.78	\$ 1,190,752	\$ 4.53
10 Specialties	\$ 687,986	\$ 2.62	\$ 960,160	\$ 3.65	\$ 819,142	\$ 3.12	\$ 131,156	\$ 0.50
11 Equipment	\$ 1,063,544	\$ 4.05	\$ 1,220,032	\$ 4.64	\$ 2,388,317	\$ 9.09	\$ 1,324,773	\$ 5.04
12 Furnishings	\$ 2,621,382	\$ 9.98	\$ 1,992,108	\$ 7.58	\$ 2,263,088	\$ 8.61	\$ 358,294	\$ 1.36
13 Special Construction	\$ 50,000	\$ 0.19	\$ -	\$ -	\$ 228,000	\$ 0.87	\$ 178,000	\$ 0.68
14 Conveying Systems	\$ 645,000	\$ 2.45	\$ 633,000	\$ 2.41	\$ 737,500	\$ 2.81	\$ 92,500	\$ 0.35
21, 22, 23 Mechanical	\$ 19,912,125	\$ 75.77	\$ 19,939,450	\$ 75.88	\$ 19,428,887	\$ 73.93	\$ 483,238	\$ 1.84
26 Electrical	\$ 17,394,431	\$ 66.19	\$ 15,894,378	\$ 60.48	\$ 17,037,891	\$ 64.84	\$ 356,540	\$ 1.36
31 Earthwork	\$ 8,081,768	\$ 30.75	\$ 7,395,536	\$ 28.14	\$ 7,771,069	\$ 29.57	\$ 310,699	\$ 1.18
32 Exterior Improvements	\$ 5,232,432	\$ 19.91	\$ 5,424,576	\$ 20.64	\$ 4,406,591	\$ 16.77	\$ 825,841	\$ 3.14
33 Utilities	\$ 837,548	\$ 3.19	\$ 1,296,824	\$ 4.93	\$ 1,902,114	\$ 7.24	\$ 1,064,566	\$ 4.05
INCL. Geothermal Under Building	\$ 4,704,573	\$ 17.90	\$ 8,458,328	\$ 32.19	\$ 7,337,922	\$ 27.92	\$ 3,753,755	\$ 14.28
NOT INCL. Geothermal In Park/Playground	\$ 3,434,128	\$ 13.07	\$ 7,687,083	\$ 29.25	\$ 6,694,087	\$ 25.47	\$ 4,252,955	\$ 16.18
TOTAL DIRECT CONSTRUCTION COSTS	\$ 130,835,775	\$ 497.88	\$ 134,787,447	\$ 512.92	\$ 134,207,056	\$ 510.71	\$ 3,371,281	\$ 12.83
Design & Estimating Contingency	\$ 12,613,120	\$ 48.00	\$ 12,632,912	\$ 48.07	\$ 12,686,913	\$ 48.28	\$ 73,793	\$ 0.28
General Conditions	\$ 10,478,617	\$ 39.87	\$ 10,478,617	\$ 39.87	\$ 10,478,617	\$ 39.87	\$ -	\$ -
General Requirements	\$ 3,799,702	\$ 14.46	\$ 4,118,162	\$ 15.67	\$ 4,128,302	\$ 15.71	\$ 328,600	\$ 1.25
Insurances	\$ 2,763,024	\$ 10.51	\$ 2,784,070	\$ 10.59	\$ 2,906,208	\$ 11.06	\$ 143,184	\$ 0.54
Bonds	\$ 1,847,577	\$ 7.03	\$ 1,145,979	\$ 4.36	\$ 1,222,303	\$ 4.65	\$ 701,598	\$ 2.67
CM Fee (Overhead & Profit)	\$ 3,443,634	\$ 13.10	\$ 3,566,110	\$ 13.57	\$ 3,627,013	\$ 13.80	\$ 183,379	\$ 0.70
CM GMP Contingency	\$ 4,304,542	\$ 16.38	\$ 4,348,915	\$ 16.55	\$ 4,334,723	\$ 16.50	\$ 44,373	\$ 0.17
SDI / Sub Bond Pool	\$ 1,304,657	\$ 4.96	\$ 1,181,912	\$ 4.50	\$ 1,776,168	\$ 6.76	\$ 594,256	\$ 2.26
Escalation	\$ 13,243,776	\$ 50.40	\$ 15,285,823	\$ 58.17	\$ 13,321,259	\$ 50.69	\$ 2,042,047	\$ 7.77
TOTAL ESTIMATED CONSTRUCTION COSTS	\$ 184,634,424	\$ 702.60	\$ 190,329,944	\$ 724.27	\$ 188,688,562	\$ 718.03	\$ 5,695,520	\$ 21.67
Soft Costs Calculated at 25%	\$ 46,158,606	\$ 175.65	\$ 47,582,486	\$ 181.07	\$ 47,172,141	\$ 179.51	\$ 1,423,880	\$ 5.42
TOB Project Management Costs	\$ 1,500,000	\$ 5.71	\$ 1,500,000	\$ 5.71	\$ 1,500,000	\$ 5.71	\$ -	\$ -
Relocation Costs	\$ 10,000,000	\$ 38.05	\$ 10,000,000	\$ 38.05	\$ 10,000,000	\$ 38.05	\$ -	\$ -
TOTAL ESTIMATED PROJECT COSTS	\$ 242,293,030	\$ 922.01	\$ 249,412,430	\$ 949.10	\$ 247,360,703	\$ 941.30	\$ 7,119,400	\$ 27.09

SCHEMATIC DESIGN ESTIMATE THAT PROMPTED VALUE ENGINEERING: \$247,360,703

Factors for Increase in Cost

- More information on site and logistics of construction raised costs
- Significantly higher than typical HAZMAT costs estimated
- Higher than expected inflation since Preferred Schematic Report estimate



Criteria for Accepting Value Engineering (VE)

VE was only accepted if it met the following criteria:

- No Impact to the Educational Plan for the School
- No Compromise to the Fossil Fuel Free Status and Sustainability of the School
- No Decrease in Durability or Maintainability of Building Materials and Finishes
- Maintained the Function, Quality and Aesthetics of the School

PROJECT COSTS

PROPOSED VALUE ENGINEERING



Pierce School
Brookline, MA

Schematic Estimate - Value Management

Item/Description	Total Amount	Grand Total Amount	Category
56 Reduce Lighting Allowance at School to \$10.00/sf	(143,099)	(190,748)	Allowance
A33 Reduce Wall Covering Allowance from \$200,000 to \$100,000	(100,000)	(133,298)	Allowance
HZ01 Reduce Asbestos Unit Cost to Subcontractor Pricing	(5,215,990)	(6,952,788)	Allowance
L04 Reduce play equipment allowance by 20%.	(337,500)	(449,879)	Allowance
AVM09 Reduce Playground Equipment Allowance to \$300k	(487,500)	(649,826)	Allowance
Subtotal Allowance Reduction	(6,284,089)	(8,376,539)	
03 Staging at Brick Only	(360,500)	(480,538)	Façade
A10 Changes to Stair 7 Enclosure	(32,297)	(43,051)	Façade
A24 Replace metal soffits ESA-01 and ESA-02 with exterior stucco	(129,505)	(172,627)	Façade
Subtotal Façade	(522,302)	(696,216)	
05 Reduce fireproofing and painting at existing garage	(139,170)	(185,510)	Garage
09 Leave Garage Walls, Columns and Ceiling Unpainted	(170,730)	(227,579)	Garage
13 Eliminate Tunnel to Historic Building	(750,090)	(999,852)	Garage
A02 Eliminate waterproofing of existing garage roof	(150,400)	(200,480)	Garage
A13 Delete concrete openings and exterior metal grilles at existing garage	(76,500)	(101,973)	Garage
AVM10A Reduce New Concrete Parking Structure by Moving Demo Line	(226,327)	(301,689)	Garage
AVM10B Eliminate Extension to Library Parking	(412,691)	(550,107)	Garage
AVM10C Eliminate Scope at Existing Library Parking	(283,014)	(377,251)	Garage
Subtotal Garage	(2,208,922)	(2,944,441)	
11 Eliminate Precast Benches at Courtyard	(76,750)	(102,306)	Landscape
Subtotal Landscape	(76,750)	(102,306)	
A05 Substitute special sprinklers at rated interior glass in lieu of 90 minute	(344,500)	(459,210)	Material
A25 Change 67% of Interior Storefront to Hollow Metal with Wood Doors	(104,175)	(138,863)	Material
A32b Reduce terrazzo flooring area by 4,525sf, replace with linoleum	(147,517)	(196,636)	Material
A40 Security Film in Lieu of Security Glass	(60,000)	(79,979)	Material
L02 Change all impermeable pavers	(197,400)	(263,129)	Material
A15 Replace intumescent paint at exposed beams with hd sprav fireproofing	(46,000)	(61,317)	Material
AVM02 Double Glazed CW in Lieu of Triple	(209,300)	(278,992)	Material
AVM03 Change 52% of CW to Storefront and Panels	(377,993)	(503,855)	Material
AVM03A Change 2,623 sf of CW to Metal Panel	(82,739)	(110,289)	Material
AVM08 Change ACP-1 and ACP-2 to 2x2 ACT	(171,541)	(228,660)	Material
Subtotal Material Change	(1,741,165)	(2,320,930)	

Item/Description	Total Amount	Grand Total Amount	Category
A12 Changes to Service Corridor	(15,380)	(20,501)	Scope Reduction
A18 Reduce 6' snow barrier from 524sf to 344 sf	(26,780)	(35,697)	Scope Reduction
A29 Reduce wall tile in toilet rooms to 6'	(131,805)	(175,693)	Scope Reduction
E01 Change all PV panels to PPA by others or add alternate	(2,000,000)	(2,665,952)	Scope Reduction
H04 Eliminate Return/Exhaust Insulation within Building. With exception of	(244,946)	(326,507)	Scope Reduction
T0 Additional Work at School Street	1,100,685	1,467,186	Scope Reduction
A16 Delete fencing and automatic vehicle barriers at middle of upper garage.	(24,450)	(32,591)	Scope Reduction
A20 Reduce layers of GWB at walls from 3 to 2 at 50% of type 1E walls	(128,142)	(170,811)	Scope Reduction
A21 Reduce Sinks at Pre-K, 7th and 8th Grade Classrooms (16 sinks)	(49,556)	(66,057)	Scope Reduction
AVM01 Reduce Overall GSF	(2,524,574)	(3,365,196)	Scope Reduction
AVM06 Eliminate Millwork Benches at Project Spaces	(181,800)	(242,335)	Scope Reduction
AVM07 Eliminate 41 Wardrobe Units	(54,796)	(73,042)	Scope Reduction
EV01 Reduce to 30 EV spaces (15 units of dual port)	(75,424)	(100,538)	Scope Reduction
	(63,875)	(85,144)	Scope Reduction
Subtotal Scope Reduction	(4,420,843)	(5,892,878)	
20 Eliminate Concrete Under Play Surface	(103,528)	(138,001)	Structure
A03 Substitute ERA-01R metal deck with fireproofing, except under	(276,644)	(368,759)	Structure
Subtotal Structure	(380,172)	(506,760)	
58 Use WAP with Minimal Hardwired Tel-Data Outlets	(180,549)	(240,667)	Telcom/AV
59 Wireless Clock System	(117,357)	(156,434)	Telcom/AV
AV01 Delete Speech Reinforcement in Classroom	(175,000)	(233,271)	Telcom/AV
AVM14 Reduction in AV	(1,938,594)	(2,584,099)	Telcom/AV
Subtotal Telcom/AV	(2,411,500)	(3,214,471)	
HZ02 Remove library oil tank through other Town budget	(120,000)	(159,957)	Town
55 Lightning Preventor (single mast) vs UL Master System	(34,637)	(46,170)	Town
AVM05 Eliminate Fire Pump	(130,633)	(174,130)	Town
Subtotal Town Decision	(285,270)	-380,257	
Total	(18,331,013)	(24,434,798)	

TOTAL APPROVED CONSTRUCTION VE:
\$24,434,794



CONSIGLI
Est. 1905

PROJECT COSTS

HOW WE GOT TO BUDGET



Schematic Design Estimate to Current Budget

Schematic Design Estimate: **\$247,360,703**

SD Construction VE Approved: **(\$ 24,434,794)**

Construction VE Added Back: **\$ 782,847**
(Highlighted on VE List)

Feasibility Study Budget: **(\$ 2,000,000)**
(Previously Funded Costs)

Soft Cost Reductions: **(\$ 6,198,284)**
(Reflective of Going from a % of ECC to Actual Costs)

Relocation, Moving &
Town of Brookline Costs Reductions: **(\$ 8,500,000)**

Move Geothermal to an Add Alternate: **(\$ 7,337,922)**

Current Total Project Budget: \$199,672,550

ABBREVIATIONS

VE: Value Engineering

ECC: Estimated Construction Cost

Hard Costs: Construction Costs

Soft Costs: All costs required to facilitate a project such as management, design, furnishings, technology, testing, inspections, utility costs, moving, contingencies, etc.

PIERCE SCHOOL

PROPOSED TOTAL PROJECT BUDGET



Feasibility Study/Schematic Design:	\$	0
<i>(Previously Funded, Allocated and Expended Costs)</i>		
Administrative Costs:	\$	7,555,000
<i>(Includes OPM Costs)</i>		
A/E Costs:	\$	18,289,869
<i>(Includes Reimbursable A/E Consultants Costs)</i>		
Preconstruction Costs:	\$	300,000
Construction Costs:		\$157,698,691
Miscellaneous Project Costs:	\$	3,000,000
<i>(Includes Utility Company Fee, Construction Testing & Inspections, Moving, TOB Management)</i>		
FFE:	\$	1,850,000
Technology:	\$	1,517,069
Project Costs Subtotal:		\$190,210,629

Project Costs Subtotal:	\$190,210,629
Contingencies:	\$ 9,461,921
<i>(Used Only as Needed to Fund Changes)</i>	
Total Project Costs:	\$199,672,550
Less MSBA Funding:	<u>(\$ 44,816,070)</u>
Cost to Town:	\$154,856,480

<p>COST TO TOWN</p> <p>\$ 154,856,480</p>

PROJECT COSTS

POTENTIAL ESCALATION



	BUILD NOW	BUILD LATER
Cost of Construction <i>(Escalation at 4% for 5 Years)</i>	\$157,698,691	\$191,864,570
Soft Costs	\$ 41,973,859	\$ 47,966,142
Project Costs	\$199,672,550	\$239,830,712
MSBA Funding	(\$44,622,411)	(\$ 0)
Town Costs	\$154,856,480	\$239,830,712

COST DIFFERENCE: \$84,974,232

If a decision is made to build beyond the current timeline, the Town could spend nearly \$85M more for the exact same scope 5 years later. Including the construction timeframe, the school would not be completed until 2032.



Next Steps Timeline

09/15/22	School Committee Presentation and Vote
09/20/22	Select Board Presentation and Vote on Budget and to Place Project on Ballot
10/13/22	Deadline to Submit Budget Information to MSBA
TBD	SBC Meeting to Approve Submission of Schematic Design Report to MSBA
10/27/22	Deadline to Submit Schematic Design Report to MSBA
12/21/22	MSBA Board of Directors Meeting
January 2023	Debt Exclusion Vote

PIERCE SCHOOL

WHY PIERCE NOW?



PIERCE SCHOOL

QUESTIONS AND ANSWERS

