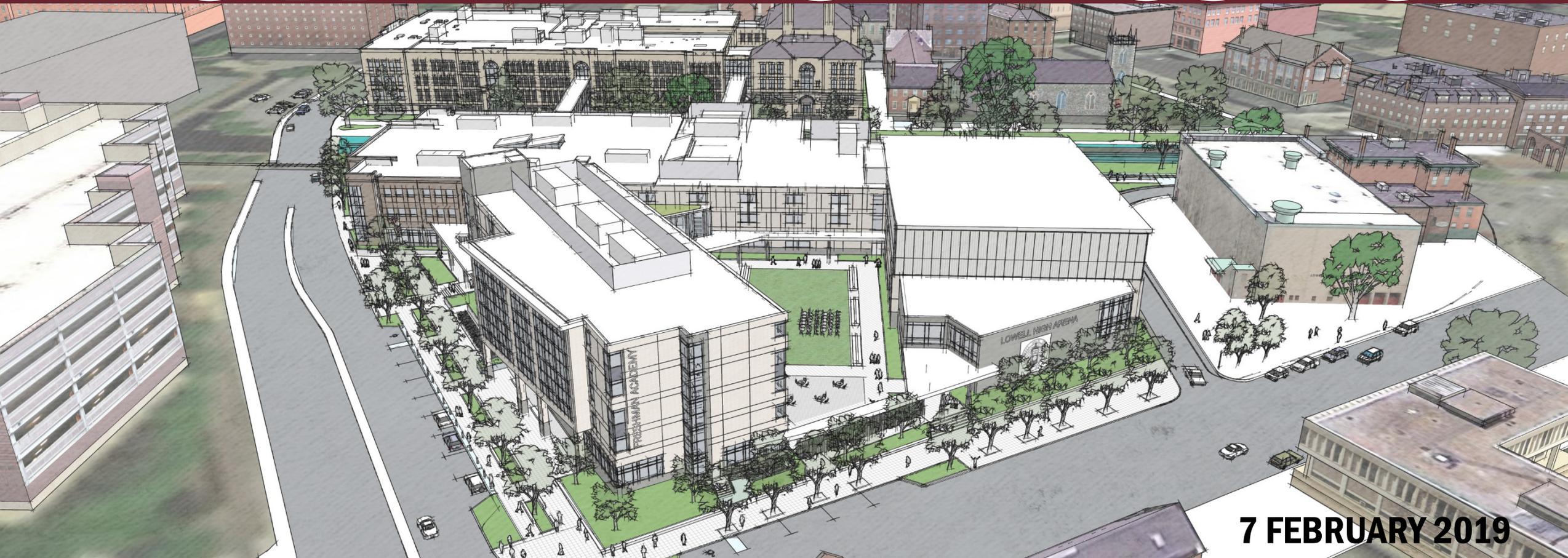


PERKINS —
EASTMAN

SCHOOL BUILDING COMMITTEE | COMMUNITY MEETING

LOWELL HS PROJECT

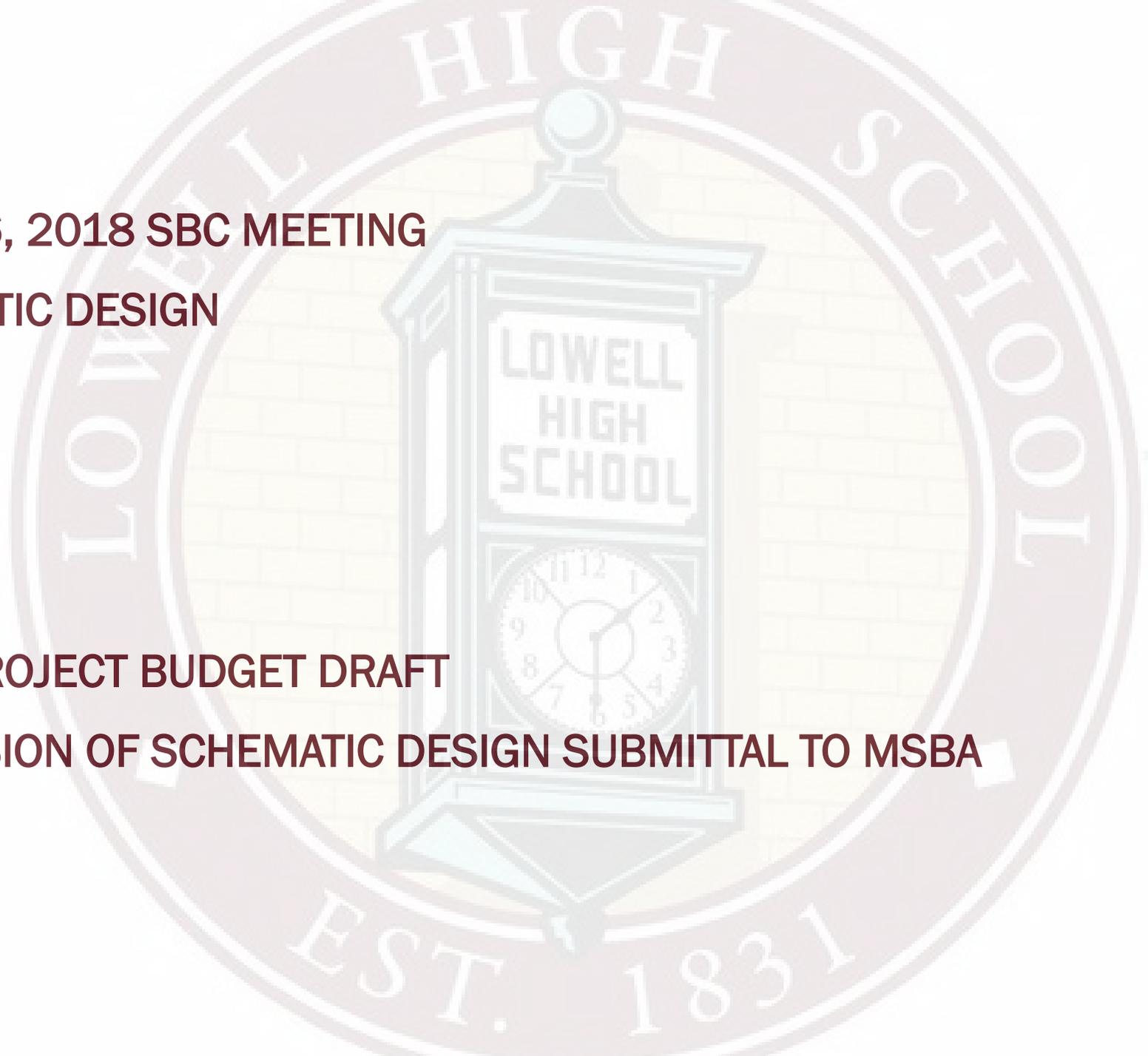


7 FEBRUARY 2019

LOWELL HIGH SCHOOL

SCHEMATIC DESIGN UPDATE- AGENDA

- ACCEPT MINUTES OF DEC. 6, 2018 SBC MEETING
- PRESENTATION OF SCHEMATIC DESIGN
 - PROCESS
 - PROGRAM & PLAN
 - SITE DESIGN
 - BUILDING DESIGN
- PRESENTATION OF TOTAL PROJECT BUDGET DRAFT
- VOTE TO APPROVE SUBMISSION OF SCHEMATIC DESIGN SUBMITTAL TO MSBA
- NEXT STEPS



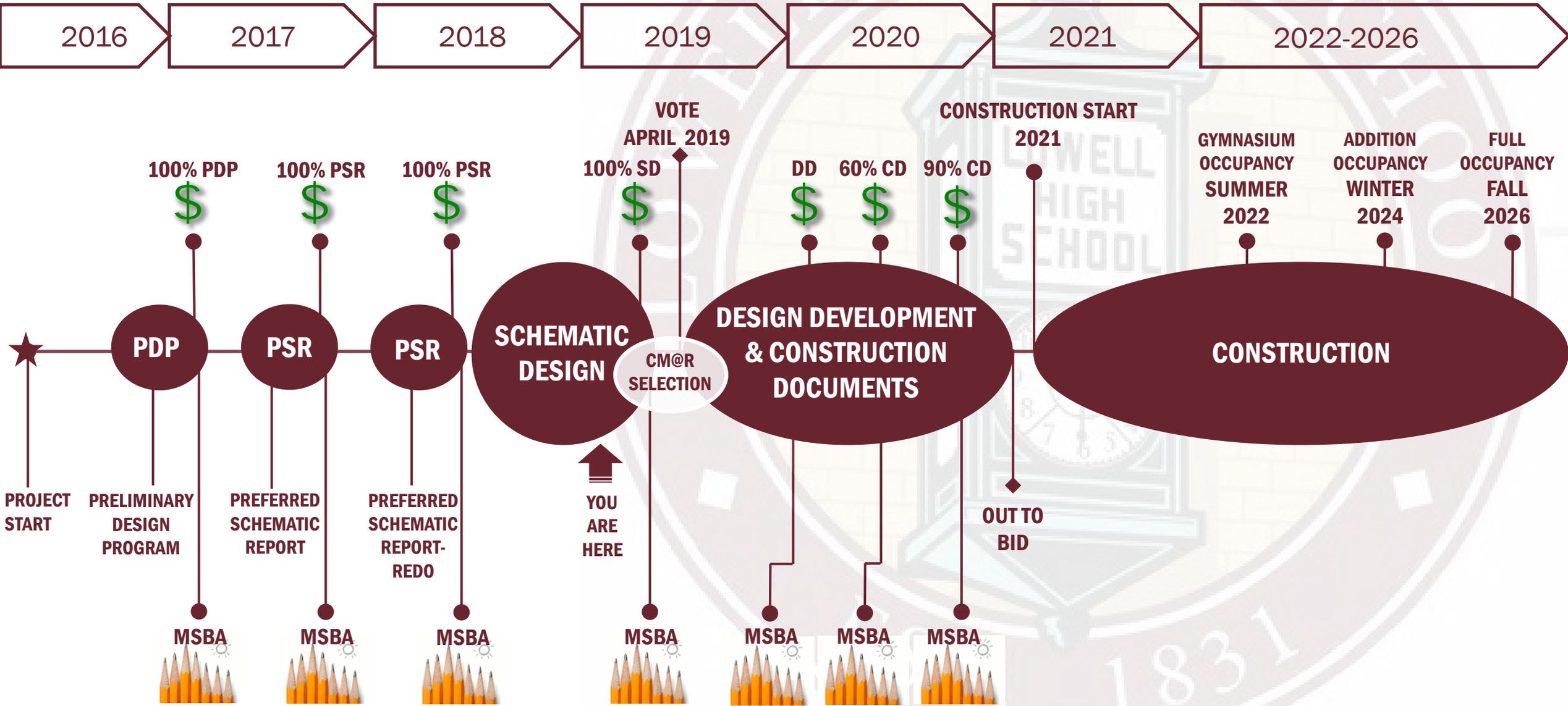
LOWELL HIGH SCHOOL

SCHEMATIC DESIGN RECAP

	AUGUST '18	SEPTEMBER '18	OCTOBER '18	NOVEMBER '18	DECEMBER '18	JANUARY '19
SBC MEETINGS	●	●	●	●		
ELT/WORKING GROUP MEETINGS		● ●	● ●	● ●		
FOCUS GROUP MEETINGS		● ●	● ●			
LOWELL HISTORIC/ NATIONAL PARKS		●	●	●		
ISD/FIRE/POLICE				●		
PLANNING & DEVELOPMENT				●		
EX. CONDITIONS (75 ARCAND)				●		● ●
STUDENT FORUM					●	
SECURITY MTG					●	

LOWELL HIGH SCHOOL

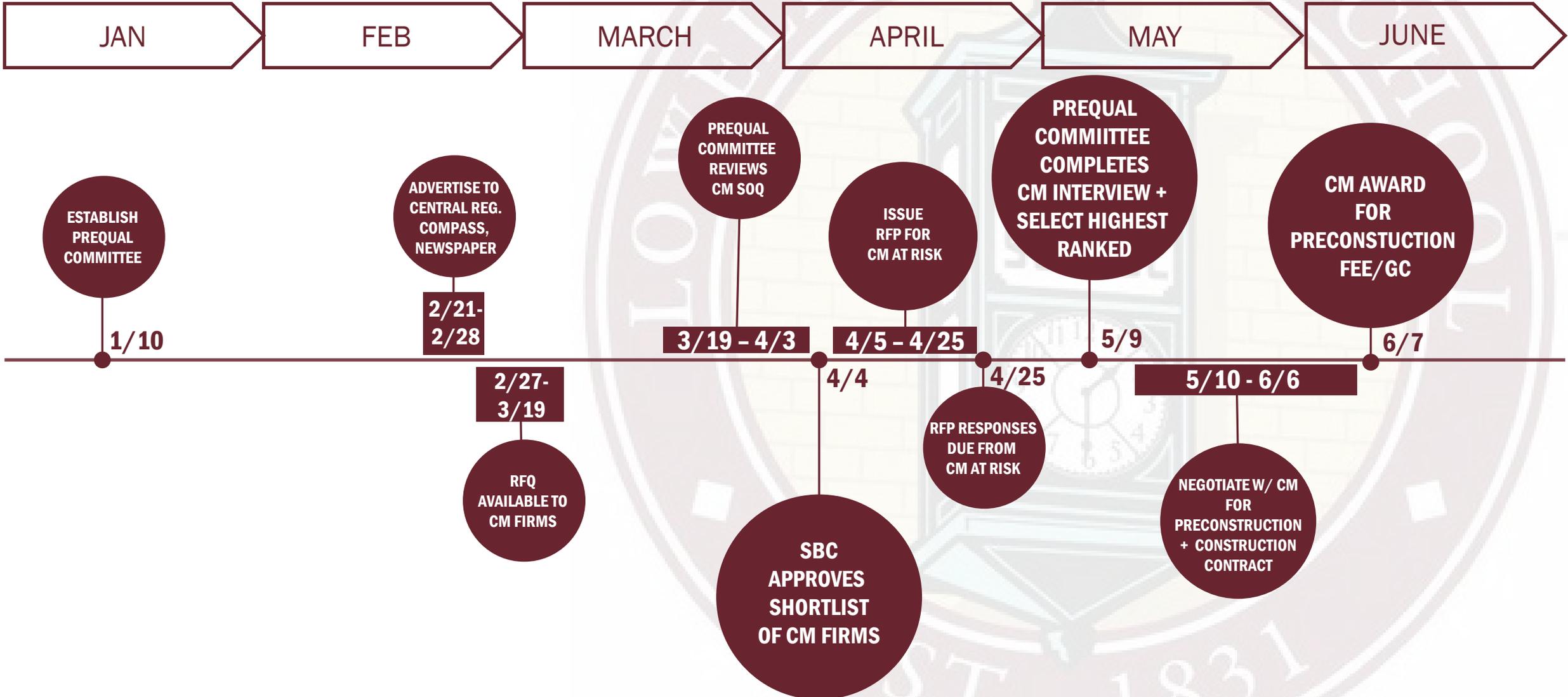
OVERALL SCHEDULE



LOWELL HIGH SCHOOL

CONSTRUCTION MANAGER AT RISK

2019



LOWELL HIGH SCHOOL

AERIAL VIEW OF EXISTING CAMPUS



LOWELL HIGH SCHOOL

AERIAL VIEW OF PROPOSED CAMPUS



SPACE SUMMARY

MSBA Reviewed with Few Exceptions:

Core Academics - unchanged

Special Educ. - subject to DESE

Art & Music - unchanged

Voc. & Tech. - unchanged

Health & PE - unchanged

Media Center - unchanged

Aud. & Drama - unchanged

Food Service - unchanged

Medical - unchanged

Admin & Guid - unchanged

Cust. & Maint. - unchanged

Other - unchanged, few ineligible

Ineligible = 4k of 388k net sf (1%)

Gross Sf - updated per Bldg. Scan

- Existing Updated (628k to 614k)
- Proposed Updated (622k to 623k)

Existing Spaces				Proposed Space Summary v20 (SD)					
LOWELL HIGH SCHOOL				3530a-5/Class/15/11-17/1ms 177					
Existing Conditions				Proposed Total					
ROOM TYPE	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals
CORE ACADEMIC SPACES									
	748	4	2,903						
	809	8	4,857						
	850	12	10,191						
	948	3	2,844						
	1,024	2	2,043						
Classroom - Freshman (incl Health)	816	27	Average	900	33	29,700	900	33	29,700
	592	2	1,184						
	724	33	23,903						
	808	15	12,114						
	850	18	15,301						
	888	10	8,873						
	964	7	6,743						
	992	8	7,938						
	1,017	1	1,017						
	1,184	1	1,184						
Classroom - Gr 10-12 (incl Health & ELI)	825	65	Average	900	3	Average	905	79	Average
Classroom - General	122								
Teacher Planning - Freshman	493	1	493						
Top Prog (Tech/Out. Ling. 40th Comp. Cntr)	804	8	4,814						
Dept Off/ing. 208 Lab. Sci. W/ELL. Instr.	112	8	812						
Teacher Dev/ing/Training Libs + Cntr.	3,598	1	3,598						
Teacher Planning	16								
Small Group Seminar (20-30 seats)									
Science Classroom / Lab - Freshman	978	7	6,943						
Science Classroom / Lab - Gr 10-12	900	19	17,100						
Science Classroom / Lab (incl 3 ELL Sen)	26								
Prep Room	156	7	1,091						
Central Chemical Storage Rm	196	1	196						
Unassigned Green House/Growing Room									
Clean Room (w/ MicroBio Tech Lab)									
SPECIAL EDUCATION									
			21,900						
LIFE SKILLS (89 shr's w/8 pre-sets)									
Life Skills CR 12 ages - H/Ch's/Land/Map	968	4	3,873						
Life Skills Hygiene/Wash/Changing Rooms	400	1	400						
Life Skills Intensive CR + 78 (2 age groups)	872	2	1,744						
Life Skills Sensory Room	344	1	344						
Life Skills I/CGN Autism CR - 78 S. Quest	818	2	1,637						
Life Skills - Adaptive PE / Sensory-Motor									
ADJUSTMENTS (80 shr's w/8 pre-sets)									
Adjustments CR	738	7	5,183						
Adjust Social Worker	185	1	185						
Classroom Worker									
Storage									
FUNDAMENTAL (190 shr's w/14 pre-sets)									
Fundamentals - Freshman	810	2	1,618						
Fundamentals - Gr 10-12	545	7	3,812						
Fundamentals Instruct. Support CR (for 24)									
OTHER SPECIAL NEEDS									
OT/PT (part-time)									
Deaf/Hearing Impaired Suite	1,086	1	1,086						
Speech & OT/PT (Office for 3 + mtgs for 6)	178	3	534						
Psych - Evaluation/Testing	299	2	599						
Social Worker	189	1	189						
PA/LS Mentoring Office/Conf	181	2	362						
SPEO Dept Chair	241	1	241						
SPEO Dept Team Chair (for 2)	227	1	227						
SPEO Office (Chk/Walsh/Flora)	304	1	304						
Conference (1 for 12, 1 for 20)									

Spaces per Guidelines			
3530a-5/Class/15/11-17/1ms 183			
MSBA Guidelines			
(refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM NFA ¹	# OF RMS	area totals	Comments
		163,048	
850	120	162,800	not SF incl - 100 SF excl
100	120	12,000	
500	8	4,000	
1,440	31	44,640	of this 1000 seats 1 per workstation
200	31	6,200	
200	1	200	
		34,248	

Version 11.24.2010

High School Space Summary

Item	Value	Value	Value	Value	Value
Class Building Net Floor Area (net sf)	318,252	218,537	158,532	388,876	364,861
Proposed Student Capacity / Enrollment	3,720			3,320	3,320
Total Building Gross Floor Area (GFA) ²	622,000	544,741	238,575	623,326	552,840
Grossing factor (GFA/NFA)	1.73	1.88	1.58	1.81	1.51

¹ Individual Room Net Floor Area (NFA) includes the net square footage measured from the inside face of the perimeter walls and includes all specific spaces assigned to a particular program area including such spaces as non-commercial tables and storage rooms.
² Total Building Gross Floor Area (GFA) includes the entire building gross square footage measured from the outside face of exterior walls.

Architect Certification
 I hereby certify that all of the information provided in this "Proposed Space Summary" is true, complete and accurate and, except as agreed to in writing by the Massachusetts School Building Authority, in accordance with the guidelines, rules, regulations and policies of the Massachusetts School Building Authority to the best of my knowledge and belief. A false statement, made under the penalties of perjury.
 Name of Architect Firm: Perkins Eastman / DPC
 Name of Principal Architect: Robert Bell
 Signature of Principal Architect: [Signature]
 Date: 30 November 2010

EDUCATIONAL PROGRAM

- Connected Freshmen Academy
- Zone for Community Use / Lock-Off
 - Access to Media Center & Food Service
 - Daytime Public Access
- Create Hub/Heart to the School
- Organize for Interdisciplinary Collaboration
 - 9th Grade Core Academic Teams
 - STEM & Humanities Planning Clusters
 - Integrated SPED, ELL, Health & Flexible Learning Spaces
 - Clustered Fine Arts, Digital Media, ROTC & World Language
- Accessible House Model for Admin/Support
- Provide Good Daylight/Orientation
- Minimize Educational Disruption

Educational Program (v12 for the revised PSR)

Lowell High School, established in 1831 with a principal and 47 students, was the first public co-educational high school in the United States and one of the first integrated high schools in the nation. In 1896 Coburn Hall was erected and an adjacent building was added in 1922. The school was expanded across the canal in 1980 with the construction of a new building and field house. Expansion and renovation of both buildings occurred in 1997. In 2005, the district repurposed a nearby middle school to serve as additional space for the Lowell High School Freshman Academy.

Throughout its long life, the high school buildings have been repurposed to the extent possible to meet educational needs, but the structure only allows for minimum flexibility and usage. As the school expands in numbers and evolves into a modern educational approach, a new facility is needed to implement technology seamlessly across the building and to offer flexible spaces that support collaboration and 21st century teaching and learning.

LHS successfully completed the Fall 2015 NEASC Accreditation process and received full reaccreditation. However, the school was placed on warning for standard 7: Community Resources for Learning, which deals with budget, facilities, and the physical plant. The accreditation committee listed the following concerns (noted in the 4/22/16 Accreditation letter):

The school site and plant do not minimally support the delivery of high quality school programs and services, including but not limited to the following:

- Leaks in the roof, the tunnel, and from sinks
- Temperature fluctuations where one room is considerably warm while another is considerably colder
- The presence of pests in the building
- Windows in need of repair
- The nurse's office which is small and not easily navigated by wheelchair-bound students
- The lack of full accessibility to individuals with physical handicaps
- The main cafeteria that is at or near capacity
- The lack of capacity of the electrical system resulting in the inability to support upgrades in technology
- The lack of natural light or adequate ventilation in art rooms
- The inability of the science labs in both the 1922 and the 1980 buildings to support modern science curriculum and pedagogy
- The lack of equitable facilities to support students in life skills programs
- The lack of equitable access to up-to-date technology for all students

LOWELL HIGH SCHOOL

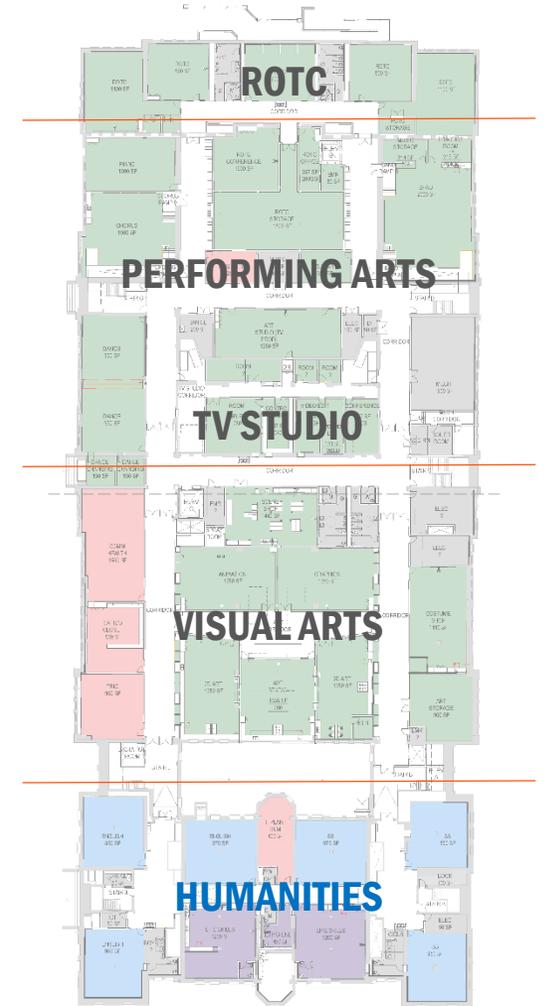
BASEMENT PLAN - TRANSFORMATION



Ayer-Shirley HS - SMMA



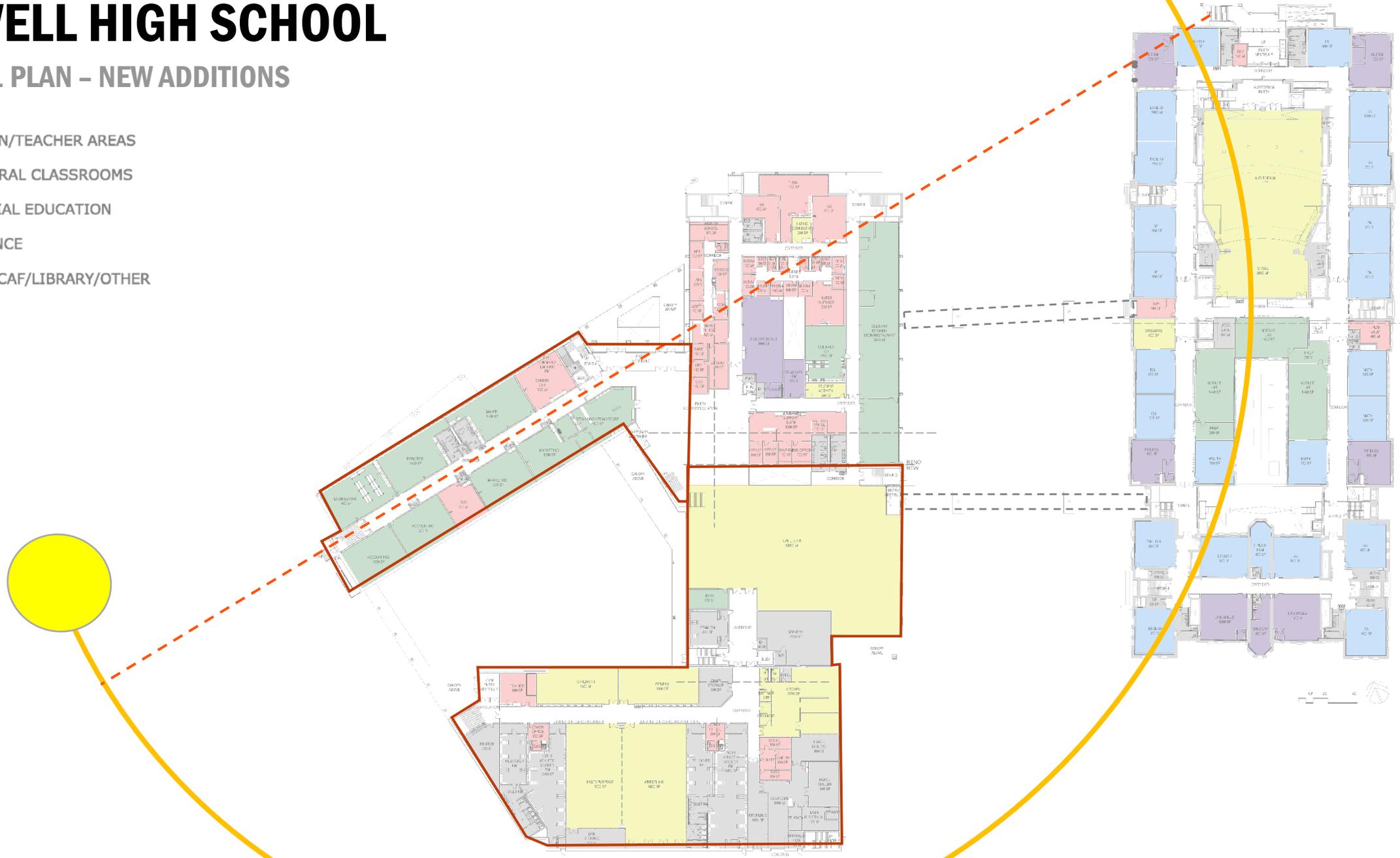
Quaker Meeting Hs & Arts Center – Kieran Timberlake



LOWELL HIGH SCHOOL

LEVEL-1 PLAN - NEW ADDITIONS

- ADMIN/TEACHER AREAS
- GENERAL CLASSROOMS
- SPECIAL EDUCATION
- SCIENCE
- GYM/CAF/LIBRARY/OTHER

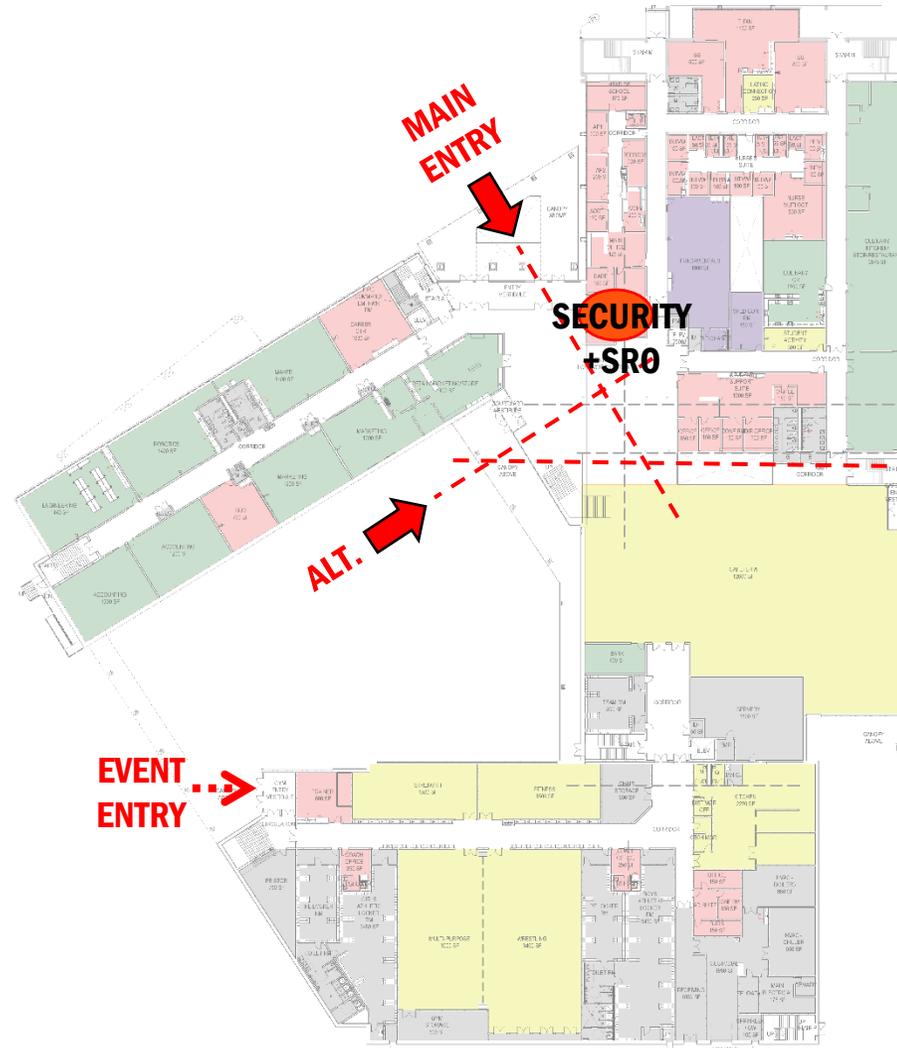




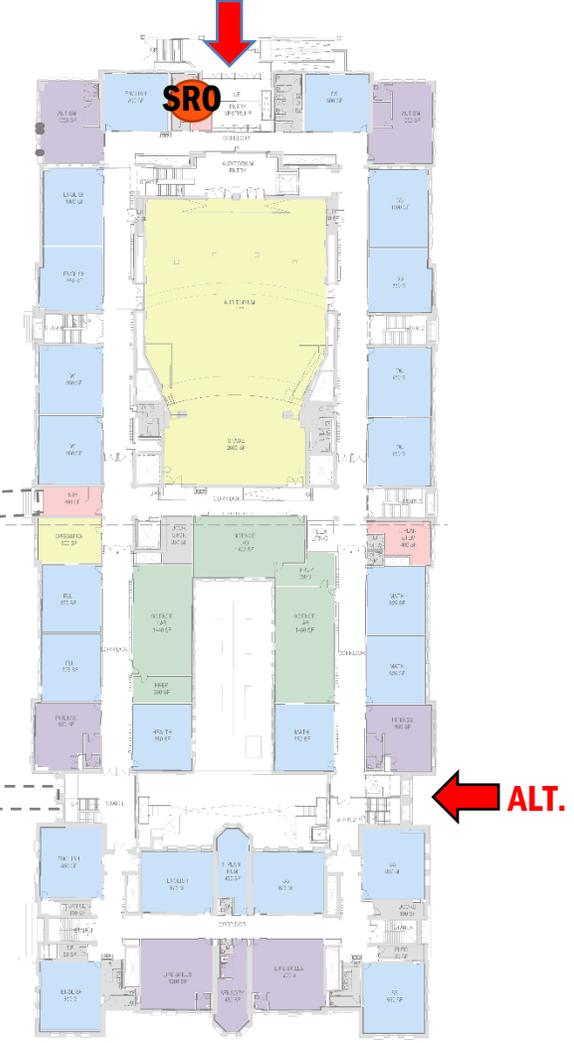
LOWELL HIGH SCHOOL

LEVEL-1 PLAN - ENTRY / ACCESS

- ADMIN/TEACHER AREAS
- GENERAL CLASSROOMS
- SPECIAL EDUCATION
- SCIENCE
- GYM/CAF/LIBRARY/OTHER



SECONDARY ENTRY

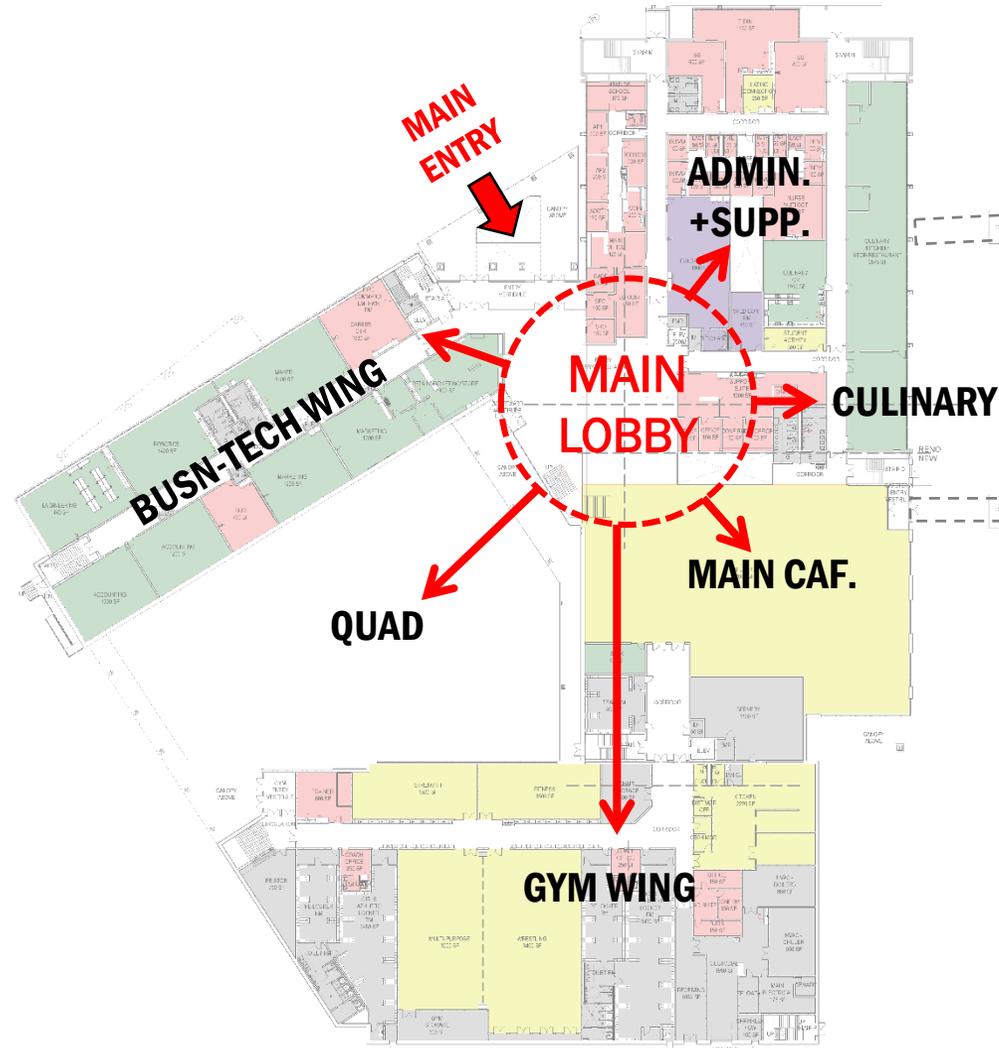




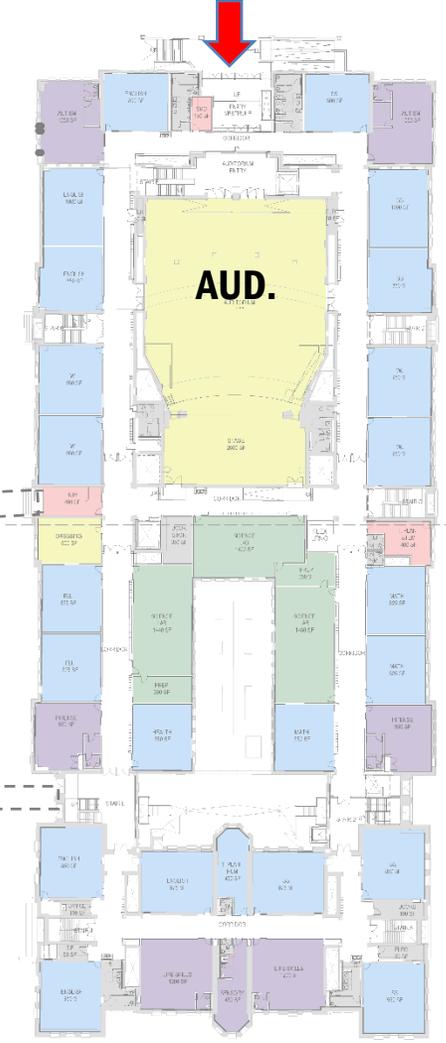
LOWELL HIGH SCHOOL

LEVEL-1 PLAN - HEART OF THE SCHOOL

- ADMIN/TEACHER AREAS
- GENERAL CLASSROOMS
- SPECIAL EDUCATION
- SCIENCE
- GYM/CAF/LIBRARY/OTHER

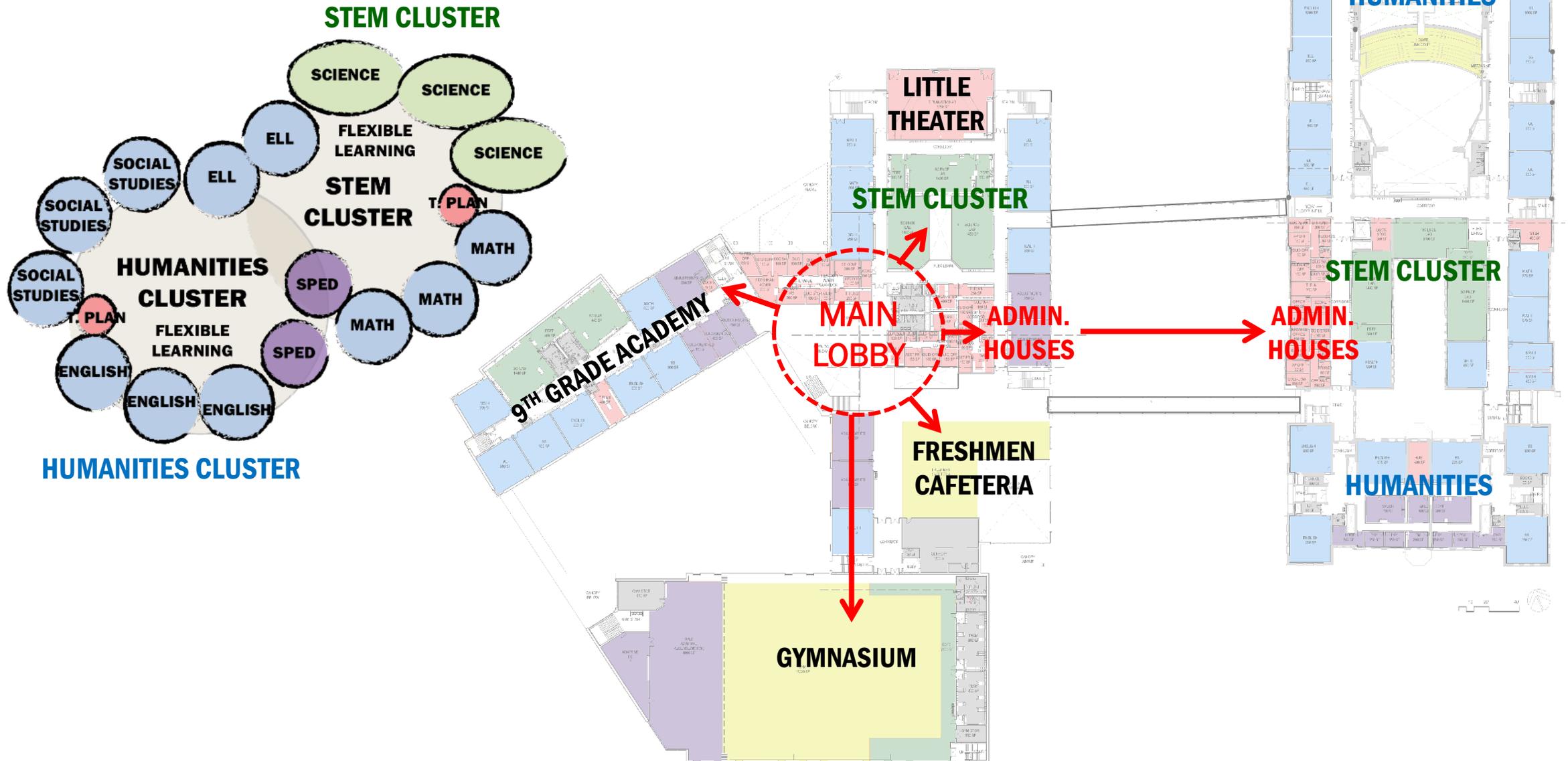


SECONDARY ENTRY



LOWELL HIGH SCHOOL

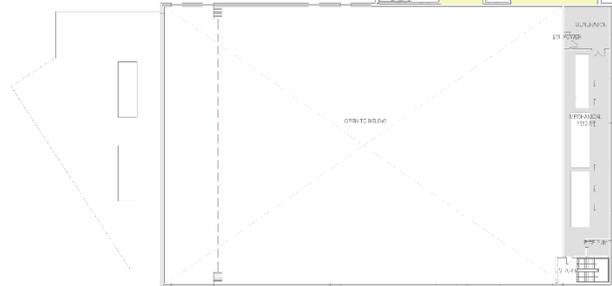
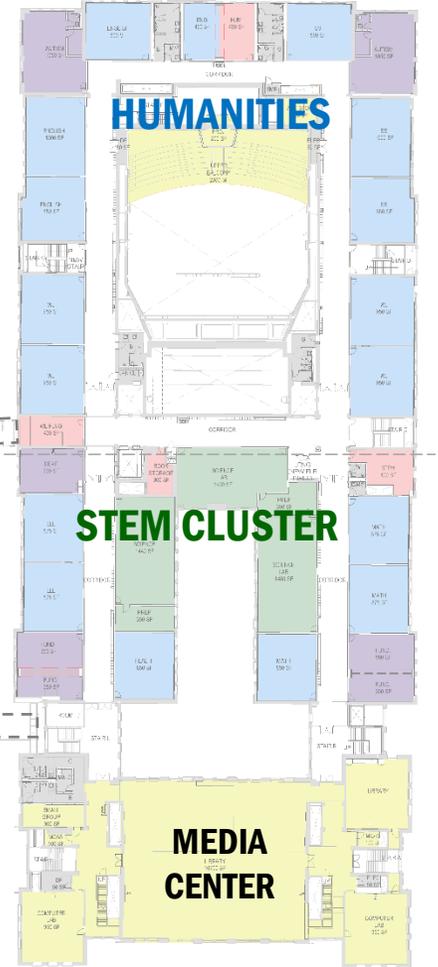
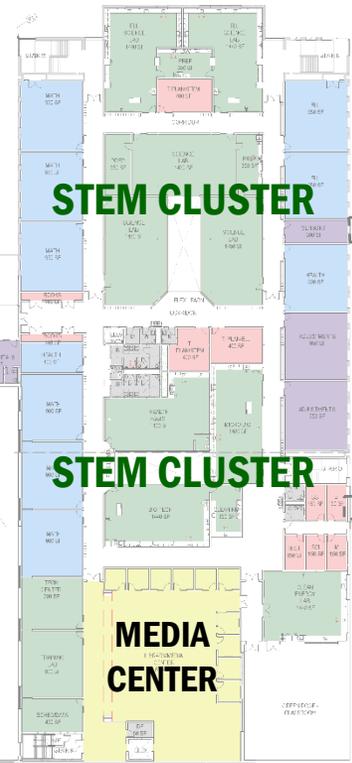
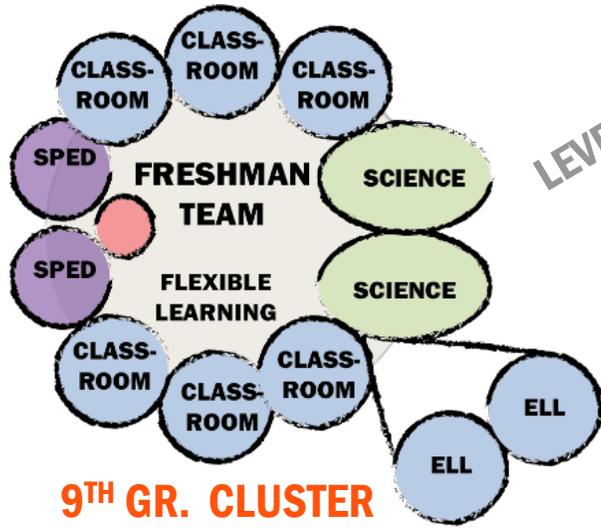
LEVEL-2 PLAN & ACADEMIC CLUSTERS



LOWELL HIGH SCHOOL

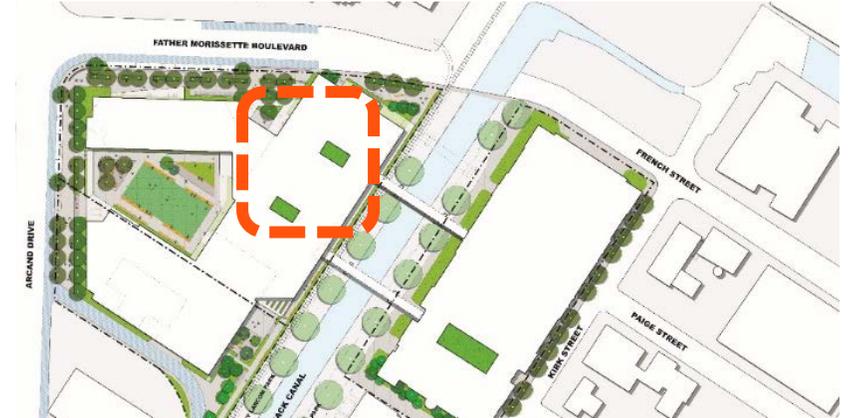
LEVEL 3 PLAN

- ADMIN/TEACHER AREAS
- GENERAL CLASSROOMS
- SPECIAL EDUCATION
- SCIENCE
- GYM/CAF/LIBRARY/OTHER



LANDSCAPE OPPORTUNITIES

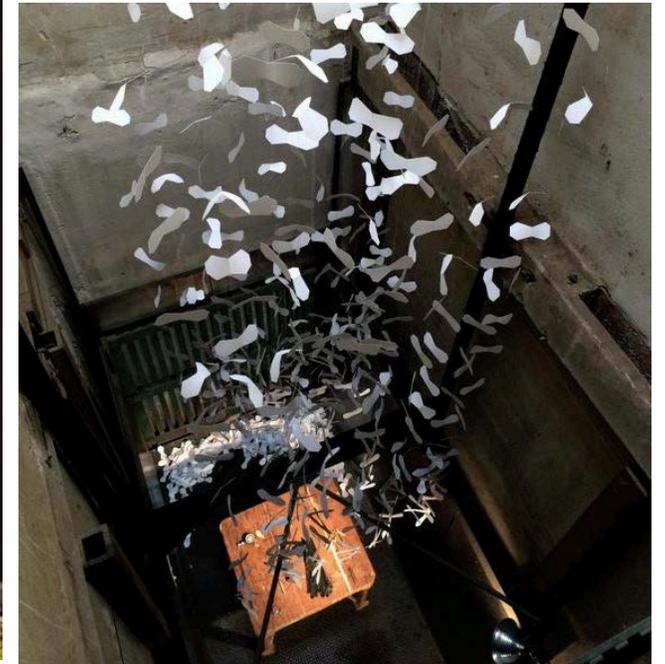
“THE LIGHT WELLS”



Tahari Courtyards,
Millburn NJ



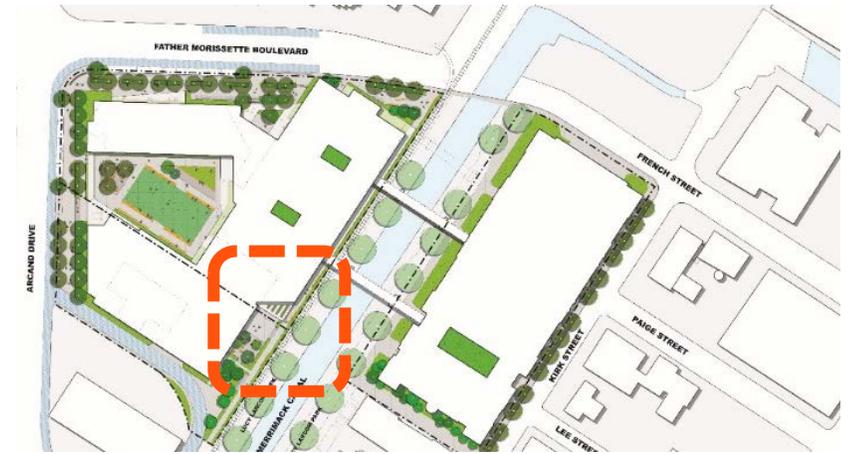
Tahari Courtyards,
Millburn NJ



Site Specific Installation,
Velvet Da Vinci San Francisco

LANDSCAPE OPPORTUNITIES

“THE ROOFTOP”



Adelaide High School Roof Terrace,
Adelaide, Australia



Alexandria Center for Life Sciences,
NYC, NY



Fenway Farms,
Boston, MA

GEORGE AYOTTE PARKING GARAGE

SITE PLAN

FATHER MORISSETTE BOULEVARD

MAIN ENTRANCE

THE LIGHT WELLS

THE QUAD

FRESHMAN ACADEMY

1980 BUILDING

ARCAND DRIVE

GYMNASIUM

1922 BUILDING

FRENCH STREET

THE GREEN ROOFTOP

THE PICNIC TERRACE

MERRIMACK CANAL

PAIGE STREET

KIRK STREET

LEE STREET

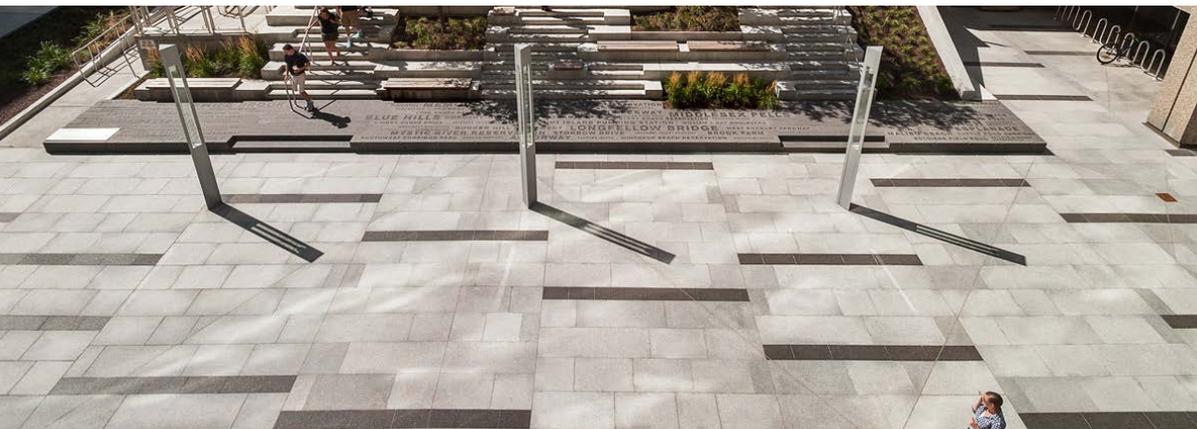
1922 COURTYARD

MERRIMACK STREET



LANDSCAPE OPPORTUNITIES

MAIN ENTRANCE



LANDSCAPE OPPORTUNITIES

“THE QUAD”



LOWELL HIGH SCHOOL

AERIAL VIEW OF PROPOSED CAMPUS



LOWELL HIGH SCHOOL

FRESHMAN ACADEMY VIEW FROM FATHER MORISSETTE BLVD & ARCAND DRIVE



LOWELL HIGH SCHOOL

GYMNASIUM VIEW FROM ARCAND DRIVE



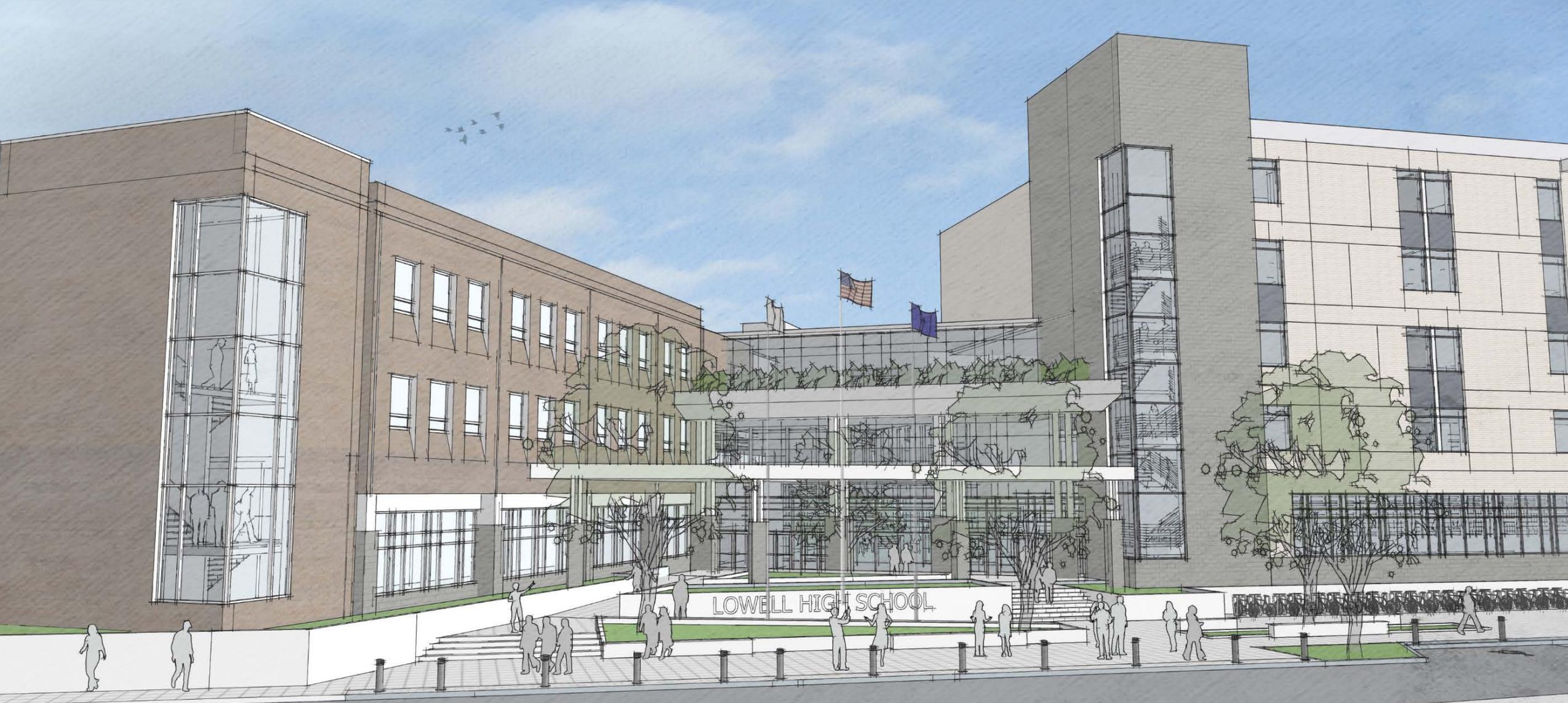
LOWELL HIGH SCHOOL

VIEW OF GYMNASIUM FROM ARCAND DRIVE



LOWELL HIGH SCHOOL

VIEW TOWARD NEW FRONT ENTRY



LOWELL HIGH SCHOOL

BIRDSEYE VIEW FROM SOUTH



LOWELL HIGH SCHOOL

1922 BUILDING FROM FATHER MORISSETTE



LOWELL HIGH SCHOOL

1922 BUILDING FROM KIRK STREET



LOWELL HIGH SCHOOL

SUMMARY OF PROJECT COSTS

TOTAL GROSS SQUARE FEET	622,777 S.F.				
SQUARE FEET OF RENOVATED SPACE	388,262 S.F.	* (\$/SF)	\$358.55 /SF		
SQUARE FEET OF NEW CONSTRUCTION	234,515 S.F.	* (\$/SF)	\$485.29 /SF		
SITE, BUILDING TAKEDOWN, HAZMAT ETC.		* (\$)	\$17,423,246		
ESTIMATED TOTAL CONSTRUCTION **		* (\$)	\$270,444,856	* (\$/SF)	\$434.26 /SF
ESTIMATED PROJECT COSTS		(\$)	\$343,399,220		
LOCAL SHARE		(\$)	\$129,267,512		

* Marked Up Construction Costs

** Does Not Include Construction Contingency

LOWELL HIGH SCHOOL

NEXT STEPS

- 2/7 SCHOOL BUILDING COMMITTEE MEETING (VOTE)
- 2/12 CITY COUNCIL MEETING (VOTE)
- 2/20 SCHEMATIC DESIGN SUBMISSION TO MSBA
- TBD PROJECT SCOPE & BUDGET MEETING
- 4/10 MSBA BOARD MEETING
- 4/24 CITY COUNCIL MEETING (APPROVAL)
- 4/25 OPM & A&E NOTICE TO PROCEED
- 5/2019 – 2/2021 DESIGN
- 6/2019 CM AWARD
- 3/2021 – 7/26 CONSTRUCTION

PERKINS —
EASTMAN

SCHOOL BUILDING COMMITTEE | COMMUNITY MEETING

LOWELL HS PROJECT



7 FEBRUARY 2019