

H M F H A R C H I T E C T S

SAUGUS HIGH SCHOOL PRELIMINARY DESIGN PROGRAM PROGRESS UPDATE

SAUGUS, MASSACHUSETTS

Lori Cowles, AIA Principal

August 1, 2016

SHS PRELIMINARY DESIGN PROGRAM

- Educational Visioning Report (draft for review)
- Facility assessment (complete
- Educational plan (draft for review)
- Space Summary (draft for review)
- Draft Alternatives

Proposed Space Summary - High Schools

Color Key: Black=HS, Red=MS, Green=Shared

COMBINED M-H		Existing Conditions	
ROOM TYPE	ROOM NFA ¹	# OF RMS	area totals
CORE ACADEMIC SPACES		67	72,470
(List classrooms of different sizes separately)			
Classroom - General	925	1	925
Classroom - General	855	2	1,710
Classroom - General	845	4	3,380
Classroom - General	745	13	9,685
Classroom - General	755	4	3,020
Classroom - General	735	5	3,675
Classroom - General	680	1	680
Classroom - General	585	2	1,170
Classroom - General	575	1	575
Classroom - General	555	1	555
Classroom - General	845	33	27,885
Classroom - General	1,010	3	3,030
Classroom - General	530	1	530
Teacher Planning			
Small Group Seminar (20-30 seats)			
Science Classroom / Lab	1,230	1	1,230
Science Classroom / Lab	990	3	2,970
Science Classroom / Lab	880	4	3,520
Science Classroom / Lab	1,010	6	6,060
Prep Room	200	1	200
Prep Room	145	1	145
Prep Room	135	3	405
Prep Room	95	2	190
Prep Room	225	3	675
Prep Room	120	1	120
Central Chemical Storage Rm	135	1	135
SPECIAL EDUCATION		4	15,085
(List classrooms of different sizes separately)			
Self-Contained SPED (Life Skills)	770	2	1,540
Self-Contained SPED (18-22 Program)	1,210	1	1,210
Self-Contained SPED Toilet			
Small Group Room			
Sub-separate Classroom	925	1	925
Resource Room	745	1	745
Resource Room	735	2	1,470
Resource Room	585	1	585
PROUD Program	1,350	1	1,350
ETL Office/Meeting Room	390	1	390
Speech/ Testing	325	1	325
Psychologist	325	1	325
Self-Contained SPED (Life Skills/Autism)	1,010	1	1,010
Self-Contained SPED Toilet			
Resource Room	845	2	1,690
Resource Room	1,010	1	1,010
Social/Emotional Room	845	1	845

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PROPOSED								
Existing to Remain/Renovated			New			Total		
ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals
		0		56	74,810			0
			850	26	22,100	(Note: 700/23=30x85% utilization= 26)		
						NINE ADDITIONAL CLASSROOMS		
			850	30	25,500	(Note: 660/23=29, increased to 30)		
			400	12	4,800	(12 workstations + conference each)		
			1,440	8	11,520	(Note: qty matches existing)		
						TWO ADDITIONAL SCIENCE		
			1,440	6	8,640	(Note: qty matches existing)		
			150	8	1,200			
			150	6	900			
			150	1	150			
		0		3	13,580			0
			1,200	1	1,200			
			900	1	900			
			60	2	120			
			850	1	850			
			600	4	2,400			
			600	2	1,200			
			350	1	350			
			300	1	300			
			300	1	300			
			900	1	900			
			60	1	60			
			900	3	2,700			
			600	1	600			

MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM NFA ¹	# OF RMS	area totals	Comments
		66,030	
850	47	39,950	825 SF min - 950 SF max
100	47	4,700	
500	3	1,500	
1,440	12	17,280	3 x85% ut=20 Seats-1 per /day/student
200	12	2,400	
200	1	200	
		14,100	
950	10	9,500	assumed 8% of pop. in self-contained SPED
60	10	600	
500	4	2,000	1/2 size Genl. Clrm.
500	4	2,000	1/2 size Genl. Clrm.

Proposed Space Summary - High Schools

Color Key: Black=HS, Red=MS, Green=Shared

COMBINED M-H	Existing Conditions		
ROOM TYPE	ROOM NFA ¹	# OF RMS	area totals
Time Out Room	225	1	225
ETL Office/Meeting Room	370	1	370
PT	225	1	225
OT (/ Speech)	845	1	845
Life Skills Café			
ART & MUSIC			11,470
Art Classroom - 25 seats	1,800	1	1,800
Art/Pottery Classroom - 25 seats	1,780	1	1,780
Art Workroom w/ Storage & kiln	500	1	500
Art Classroom	1,160	1	1,160
Art Classroom	1,010	1	1,010
Art Workroom w/ Storage & kiln			
Band / Chorus - 100 seats	1,525	1	1,525
Band / Chorus - 100 seats	1,660	1	1,660
Music Classroom/Large Group	1,150	1	1,150
Chorus - 50 - 100 seats			
Ensemble			
Music Practice	100	2	200
Music Practice / Ensemble	85	1	85
Music Practice / Ensemble	65	1	65
Music Office	75	1	75
Music Storage - Instruments	210	1	210
Music Storage - Uniforms	150	1	150
Music Office	100	1	100
VOCATIONS & TECHNOLOGY			9,060
Tech Clrm. - (E.G. Drafting, Business)			
Tech Clrm. - CADD	745	1	745
Tech Clrm. - Video Production	745	1	745
Tech Clrm. - Web Design	745	1	745
Tech Clrm. - Engineering	1,420	1	1,420
Tech Clrm. - Engineering	975	1	975
Tech Clrm. - Coding/ Web Design	1,190	1	1,190
Tech Shop - (E.G. Consumer, Wood)			
Tech Shop - Engineering	1,500	1	1,500
Tech Shop - Engineering	1,740	1	1,740
HEALTH & PHYSICAL EDUCATION			49,235
Gymnasium	7,840	1	7,840
Gymnasium	6,445	1	6,445
Gymnasium	8,250	1	8,250
PE Alternatives	4,000	1	4,000
Gym Storeroom	1,225	1	1,225
Gym Storeroom	1,300	1	1,300
Locker Rooms - Boys / Girls w/ Toilets	2,000	1	2,000
Locker Rooms - Boys / Girls w/ Toilets	2,100	1	2,100
Locker Rooms - Boys / Girls w/ Toilets	570	1	570
Locker Rooms - Boys / Girls w/ Toilets	625	1	625

Version
11.24.2010

PROPOSED								
Existing to Remain/Renovated			New			Total		
ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals
			150	1	150			
			350	1	350			
			300	1	300			
			300	1	300			
			600	1	600			
		0			10,250			0
			1,200	2	2,400			
			150	2	300			
			1,200	2	2,400	ONE ADDITIONAL ART		
			150	2	300			
			1,500	1	1,500			
			1,500	1	1,500			
			850	1	850	ONE ADDITIONAL MUSIC		
			75	4	300			
			500	1	500			
			200	1	200			
		0			9,100			0
			850	1	850			
			850	1	850			
			850	1	850			
			850	2	1,700			
			850	1	850			
			1,000	2	2,000			
			1,000	2	2,000			
		0			29,890			0
			12,000	1	12,000			
			3,000	2	6,000	ONE ADDITIONAL ALT PE		
			300	2	600			
			2,000	2	4,000	SEPARATED BY AGE GROUP		
			2,000	2	4,000			

High School Space Summary

MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM NFA ¹	# OF RMS	area totals	Comments
		8,200	
1,200	3	3,600	Assumed use - 25% Population - 5 times/week
150	3	450	
1,500	1	1,500	Assumed use - 25% Population - 5 times/week
1,500	1	1,500	
200	1	200	
75	6	450	
500	1	500	
		12,800	
1,200	4	4,800	Assumed use - 50% Population - 5 times/week
2,000	4	8,000	Assumed use - 50% Population - 5 times/week
		23,816	
12,000	1	12,000	
3,000	1	3,000	
300	1	300	
7,616	1	7,616	5.6 sf/student total

5.6 sf/student total

Proposed Space Summary - High Schools

Color Key: Black=HS, Red=MS, Green=Shared

COMBINED M-H	Existing Conditions		
ROOM TYPE	ROOM NFA ¹	# OF RMS	area totals
Locker Rooms - Boys / Girls w/ Toilets	1,700	1	1,700
Locker Rooms - Boys / Girls w/ Toilets	1,740	1	1,740
Locker Rooms - Boys / Girls w/ Toilets	3,330	1	3,330
Locker Rooms - Boys / Girls w/ Toilets	880	2	1,760
Weight Room/ Fitness Center	1,080	1	1,080
Phys. Ed. Storage	1,585	1	1,585
Gym Storeroom	1,300	1	1,300
Athletic Director's Office	265	1	265
AD Clerk's Office	180	1	180
Health Instructor's Office w/ Shower & Toilet	460	1	460
Health Instructor's Office w/ Shower & Toilet	180	2	360
Trainer	1,120	1	1,120
MEDIA CENTER			9,705
Media Center / Reading Room	4,585	1	4,585
Media Center / Reading Room	3,045	1	3,045
Computer Lab	745	1	745
Computer Lab	680	1	680
Computer Lab	650	1	650
AUDITORIUM / DRAMA			21,600
Auditorium	8,060	1	8,060
Stage	2,245	1	2,245
Auditorium	4,800	1	4,800
Stage	1,215	1	1,215
Auditorium Storage			
Make-up / Dressing Rooms			
Controls / Lighting / Projection			
Drama Classroom	1,285	1	1,285
Drama Storage	1,350	1	1,350
Drama Classroom	1,485	1	1,485
Drama Storage	1,160	1	1,160
DINING & FOOD SERVICE			25,065
Cafeteria / Student Lounge / Break-out	8,075	1	8,075
Cafeteria / Dining	6,700	1	6,700
Silent Dining	400	1	400
Chair / Table / Equipment Storage	1,200	1	1,200
Scramble Serving Area			
Kitchen	3,850	1	3,850
Kitchen	3,765	1	3,765
Staff Lunch Room	400	1	400
Staff Lunch Room	675	1	675
MEDICAL			905
Medical Suite Toilet	30	2	60
Medical Suite Toilet	45	1	45
Nurses' Office / Waiting Room	180	1	180

Version
11.24.2010

PROPOSED								
Existing to Remain/Renovated			New			Total		
ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals
			1,000	1	1,000	SPS SPECIFIC SPACE		
			500	2	1,000	(Note: one for football/lacrosse equipment)		
			150	1	150			
			100	1	100	SPS SPECIFIC SPACE		
			160	2	320			
			160	2	320			
			400	1	400	SPS SPECIFIC SPACE		
		0			8,400			0
			8,400	1	8,400			
						(Note: assumes 1:1 technology)		
		0			14,400			0
			7,500	1	7,500	(Note: MSBA caps at 750 seats)		
			1,600	1	1,600			
			500	1	500			
			300	2	600			
			200	1	200			
			1,500	1	1,500	SPS SPECIFIC SPACE		
			1,500	1	1,500	SPS SPECIFIC SPACE		
			1,000	1	1,000	SPS SPECIFIC SPACE		
		0			11,540			0
			3,600	1	3,600	(Note: assumes 3 seatings; 240 max)		
			3,600	1	3,600	(Note: assumes 3 seatings; 240 max)		
			490	1	490			
			300	1	300			
			300	1	300			
			2,660	1	2,660			
			590	1	590	(Note: 590/20 = 30 people)		
		0			1,320			0
			60	1	60	SEPARATED BY AGE GROUP		
			60	1	60			
			200	1	200			

MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM NFA¹	# OF RMS	area totals	Comments
500	1	500	
150	1	150	
250	1	250	
		8,400	
8,400	1	8,400	
		10,400	
7,500	1	7,500	2/3 Enrollment @ 10 SF/Seat - 750 seats MAX
1,600	1	1,600	
500	1	500	
300	2	600	
200	1	200	
		11,140	
6,800	1	6,800	3 seatings - 15SF per seat
490	1	490	
600	1	600	
2,660	1	2,660	1600 SF for first 300 + 1 SF/student Add'l
590	1	590	20 SF/Occupant
		1,210	
60	1	60	
250	1	250	

Proposed Space Summary - High Schools

Color Key: Black=HS, Red=MS, Green=Shared

COMBINED M-H		Existing Conditions	
ROOM TYPE	ROOM NFA ¹	# OF RMS	area totals
Nurses' Office / Waiting Room	190	1	190
Interview Room			
Interview Room			
Examination Room / Resting	300	1	300
Examination Room / Resting	130	1	130
ADMINISTRATION & GUIDANCE			9,542
General Office / Waiting Room / Toilet	400	1	400
General Office / Waiting Room / Toilet	660	1	660
Security @ Main Entry			
Teachers' Mail and Time Room			
Duplicating Room	110	1	110
Duplicating Room	200	1	200
Records Room	60	1	60
Records Room	120	1	120
Principal's Office w/ Conference Area	280	1	280
Principal's Office w/ Conference Area	235	1	235
Principal's Secretary / Waiting			
Assistant Principal's Office - AP1	400	1	400
Assistant Principal's Office - AP2	280	1	280
Assistant Principal's Office - AP1	285	1	285
Assistant Principal's Office - AP2	285	1	285
Supervisory / Spare Office			
Conference Room	400	1	400
Conference Room	370	1	370
Guidance Office	130	3	390
Guidance Office	450	1	450
Guidance Office	180	1	180
Spare Office	160	1	160
Guidance Waiting Room	400	1	400
Guidance Waiting Room	400	1	400
Guidance Storeroom	75	1	75
Conference Room	130	1	130
Adjustment Counselor Office	130	1	130
Adjustment Counselor	285	1	285
Career Center			
Records Room			
MCAS Storage	370	1	370
In-School Suspension	480	1	480
In-School Suspension	637	1	637
Teachers' Work Room	500	1	500
Teachers' Work Room	290	3	870
CUSTODIAL & MAINTENANCE			2,265
Custodian's Office			
Custodian's Workshop			
Custodian's Storage	1,260	1	1,260
Recycling Room / Trash			
Receiving and General Supply	315	1	315
Storeroom			
Network / Telecom Room	550	1	550
Network / Telecom Room	140	1	140
OTHER Version			8,345

11.24.2010

PROPOSED								
Existing to Remain/Renovated			New			Total		
ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals
			200	1	200			
			100	1	100			
			100	1	100			
			100	3	300			
			100	3	300			
		0			6,205			0
			300	1	300			
			300	1	300			
			80	1	80			
			100	1	100			
			200	1	200			
			200	1	200			
			300	1	300			
			300	1	300			
			150	1	150			
			150	1	150			
			150	1	150			
			150	1	150			
			450	1	450	(Note: 450/15 = 30 people)		
			150	3	450	SEPARATED BY AGE GROUP		
			150	2	300			
			100	1	100			
			100	1	100			
			100	1	100			
			150	1	150			
			150	1	150			
			350	1	350			
			195	1	195			
			400	1	400	SPS SPECIFIC SPACE		
			400	1	400	SPS SPECIFIC SPACE		
			340	1	340			
			340	1	340			
		0			2,645			0
			150	1	150			
			250	1	250			
			375	1	375			
			400	1	400			
			490	1	490			
			780	1	780			
			200	1	200			
		0			0			0

MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM NFA ¹	# OF RMS	area totals	Comments
100	3	300	
100	6	600	
		5,165	
680	1	680	
100	1	100	
200	1	200	
200	1	200	
375	1	375	
125	1	125	
150	1	150	
150	1	150	
120	1	120	
450	1	450	
150	7	1,050	
100	1	100	
100	1	100	
490	1	490	
195	1	195	
680	1	680	
		2,645	
150	1	150	
250	1	250	
375	1	375	
400	1	400	
490	1	490	
780	1	780	
200	1	200	
		0	

Proposed Space Summary - High Schools

Color Key: Black=HS, Red=MS, Green=Shared

COMBINED M-H	Existing Conditions		
ROOM TYPE	ROOM NFA ¹	# OF RMS	area totals
Town Maintenance Department	4,790	1	4,790
Adult Education Wood Shop	1,350	1	1,350
Town TV Studio	2,205	1	2,205
Total Building Net Floor Area (NFA)			234,747
Proposed Student Capacity / Enrollment			
Total Building Gross Floor Area (GFA) ²			353,000
Grossing factor (GFA/NFA)			1.50

PROPOSED								
Existing to Remain/Renovated			New			Total		
ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals
		0			182,140			0
					1,360			201
					273,210			
					1.5			#DIV/0!

MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM NFA ¹	# OF RMS	area totals	Comments
		163,906	
		1,360	172
		233,920	245,859
		1.43	1.50

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-communal toilets 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 true statement, made under the penalties of perjury.

Name of Architect Firm:

Name of Principal Architect:

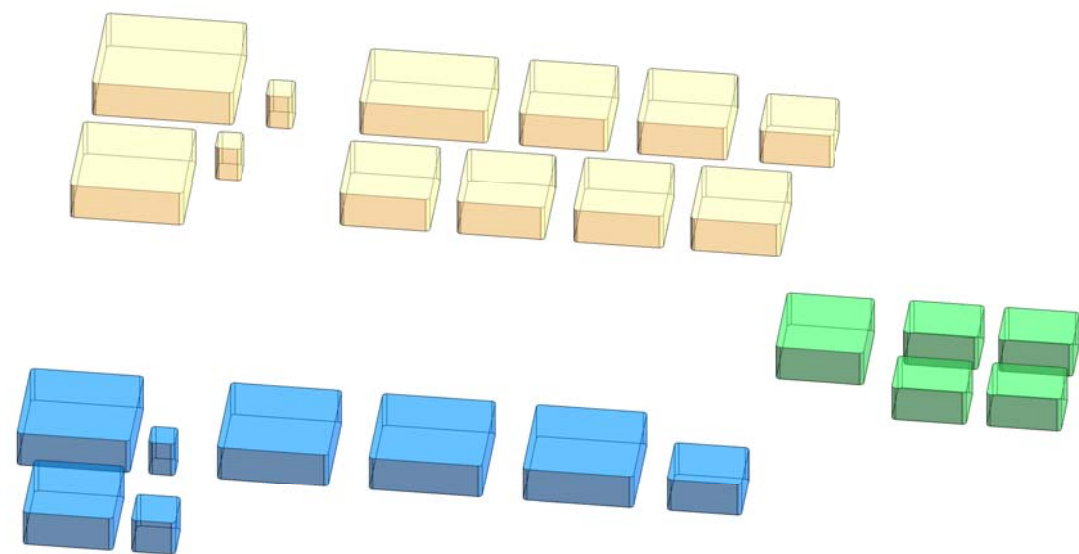
Signature of Principal Architect:

Date:

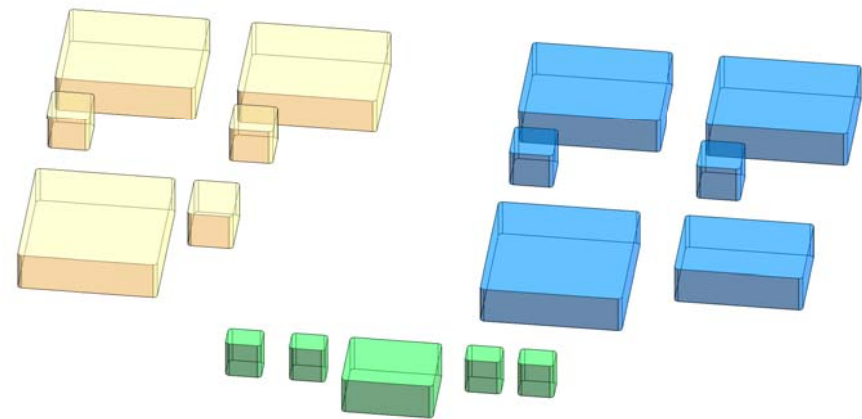
CORE ACADEMIC SPACES



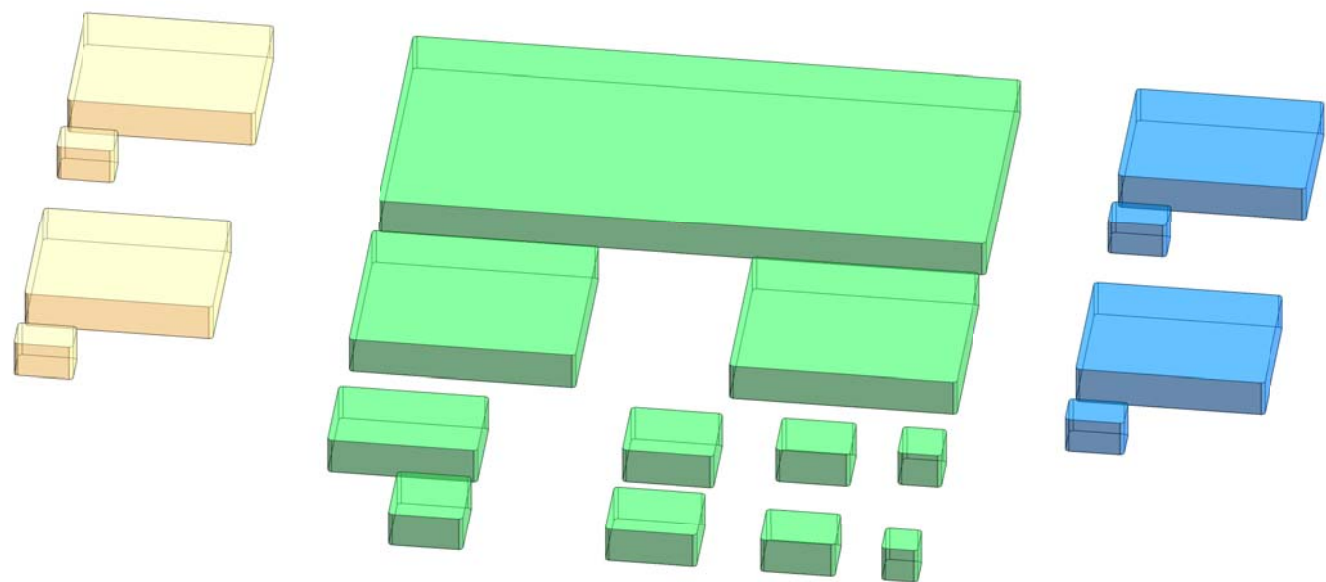
SPECIAL EDUCATION



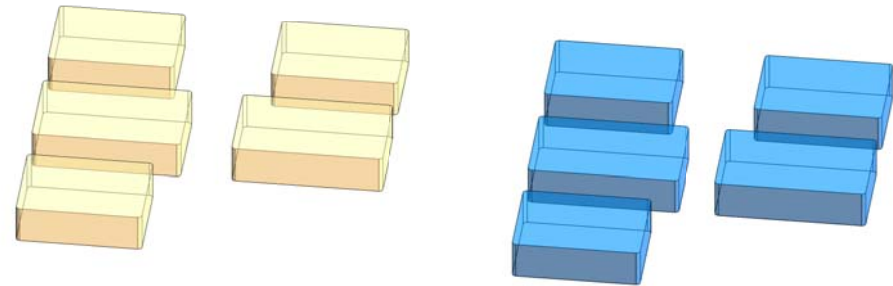
ART & MUSIC



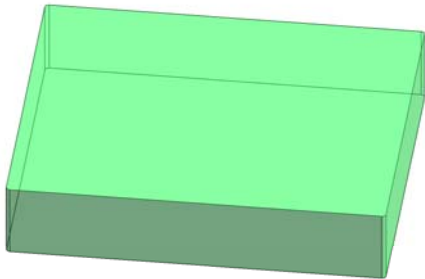
HEALTH & PHYSICAL
EDUCATION



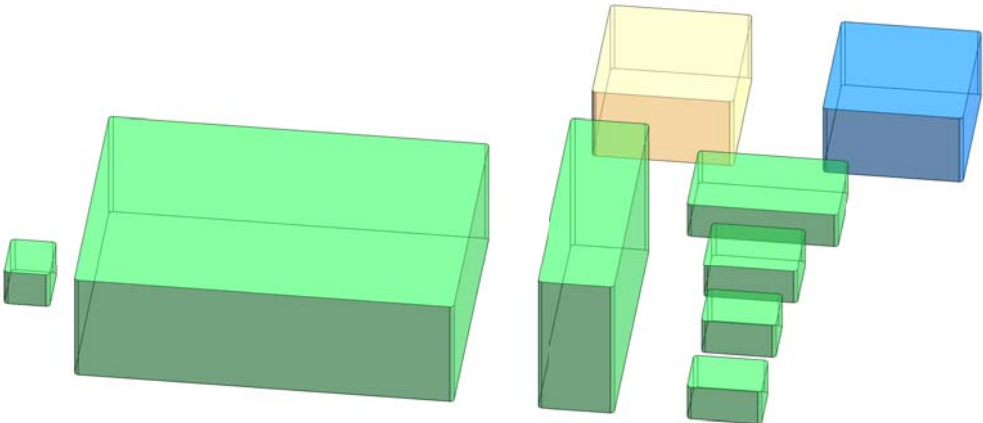
VOCATIONS &
TECHNOLOGY



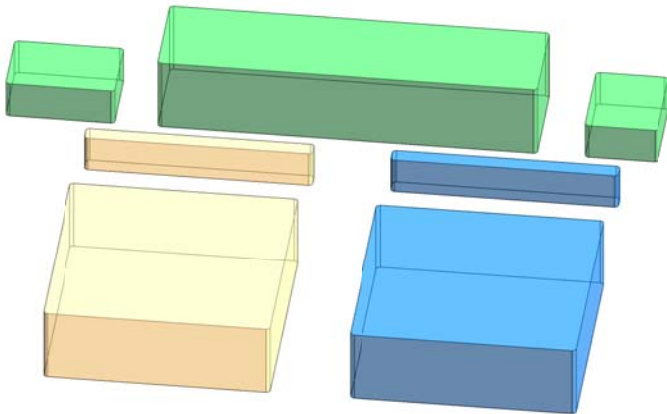
LEARNING COMMONS



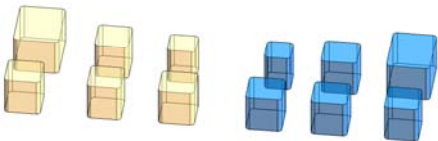
AUDITORIUM/ DRAMA



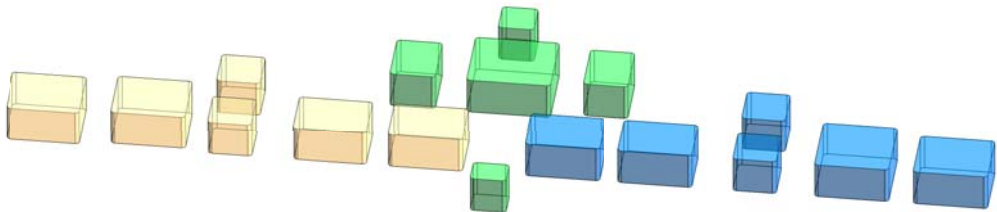
DINING & FOOD SERVICES



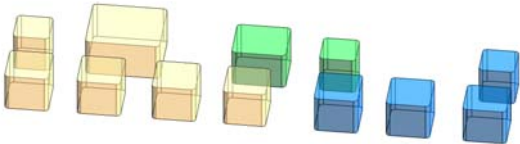
MEDICAL



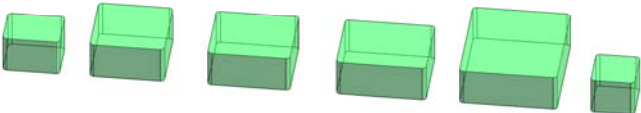
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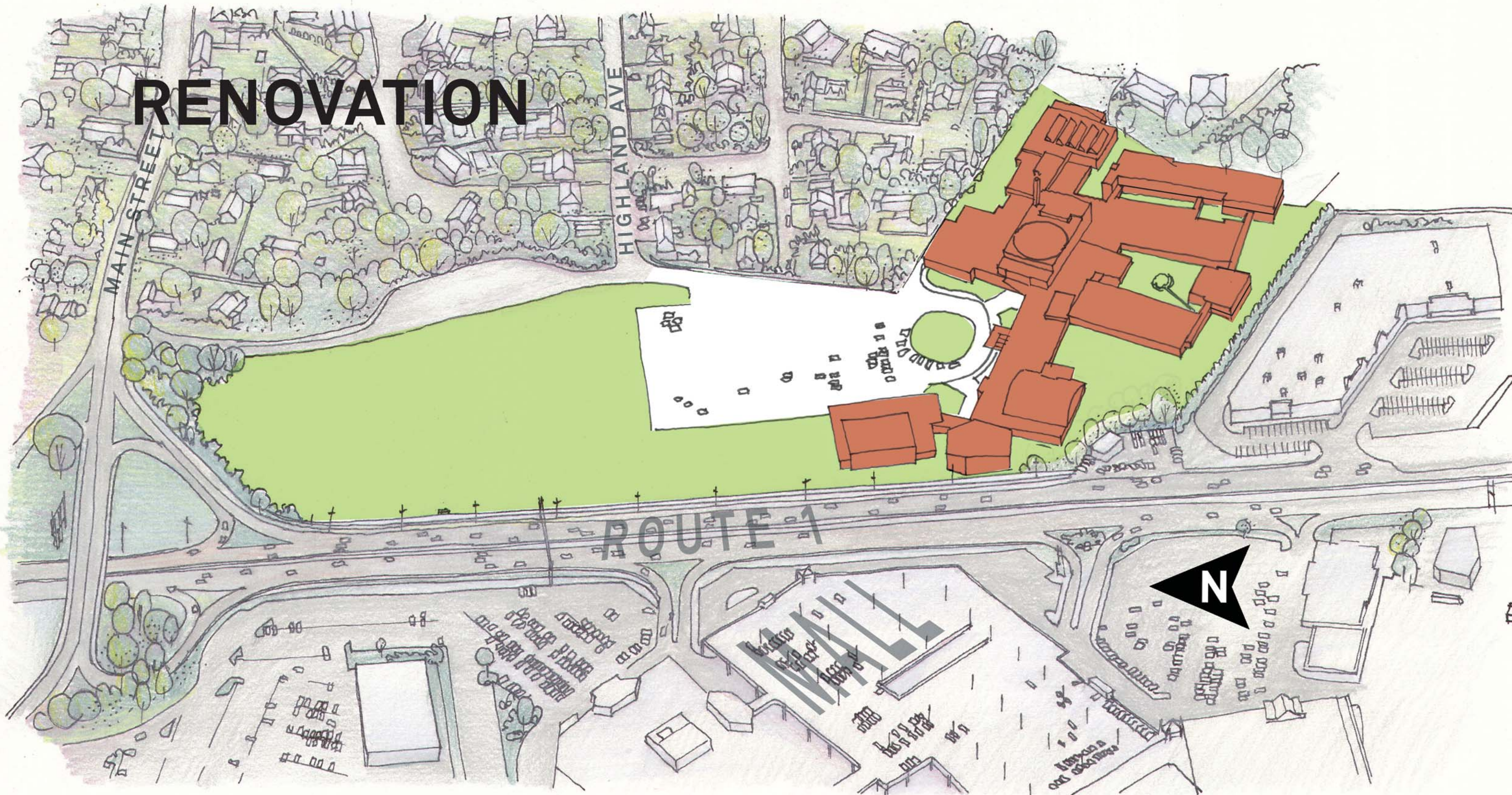
GUIDANCE



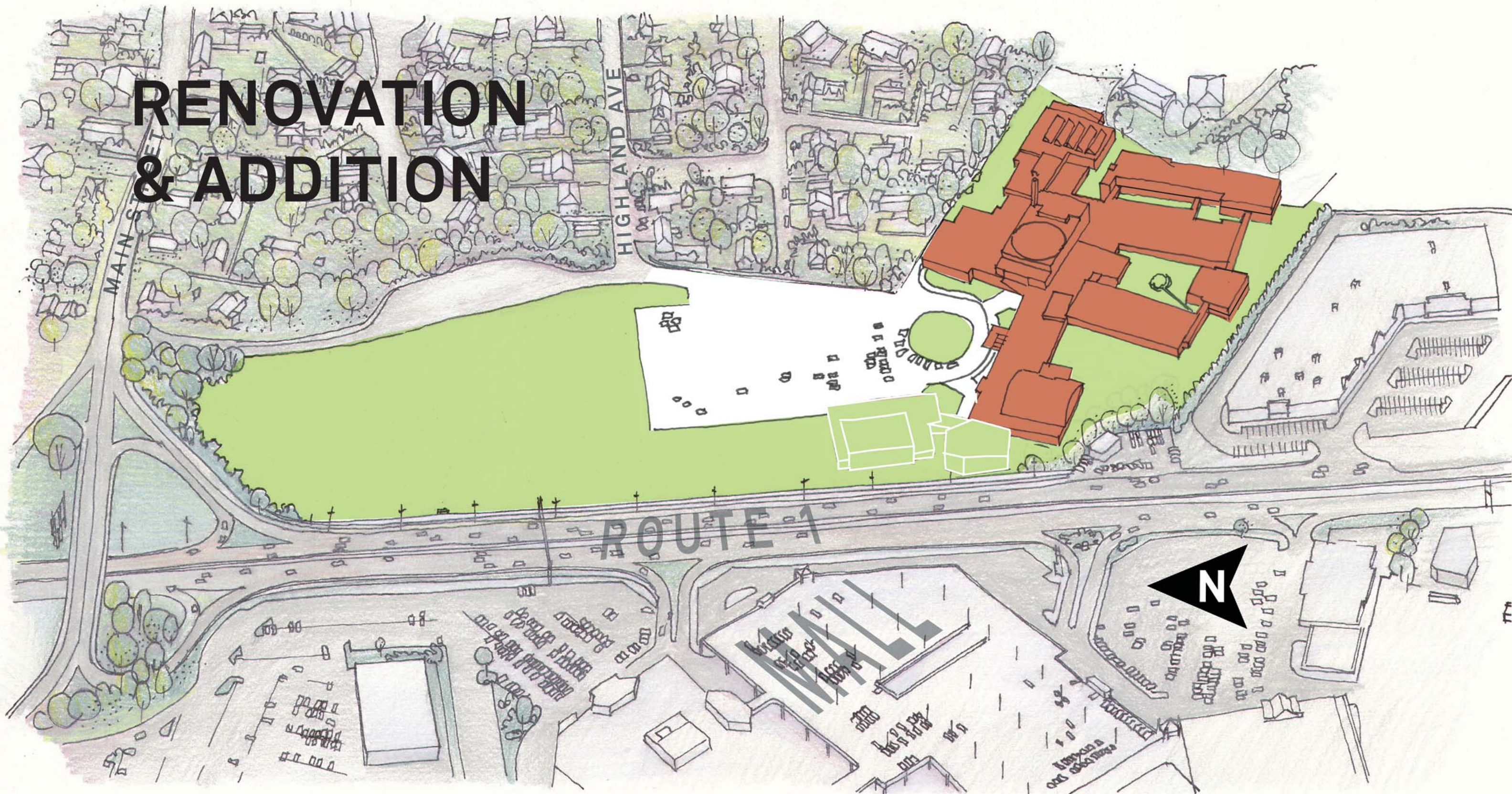
CUSTODIAL & MAINTENANCE



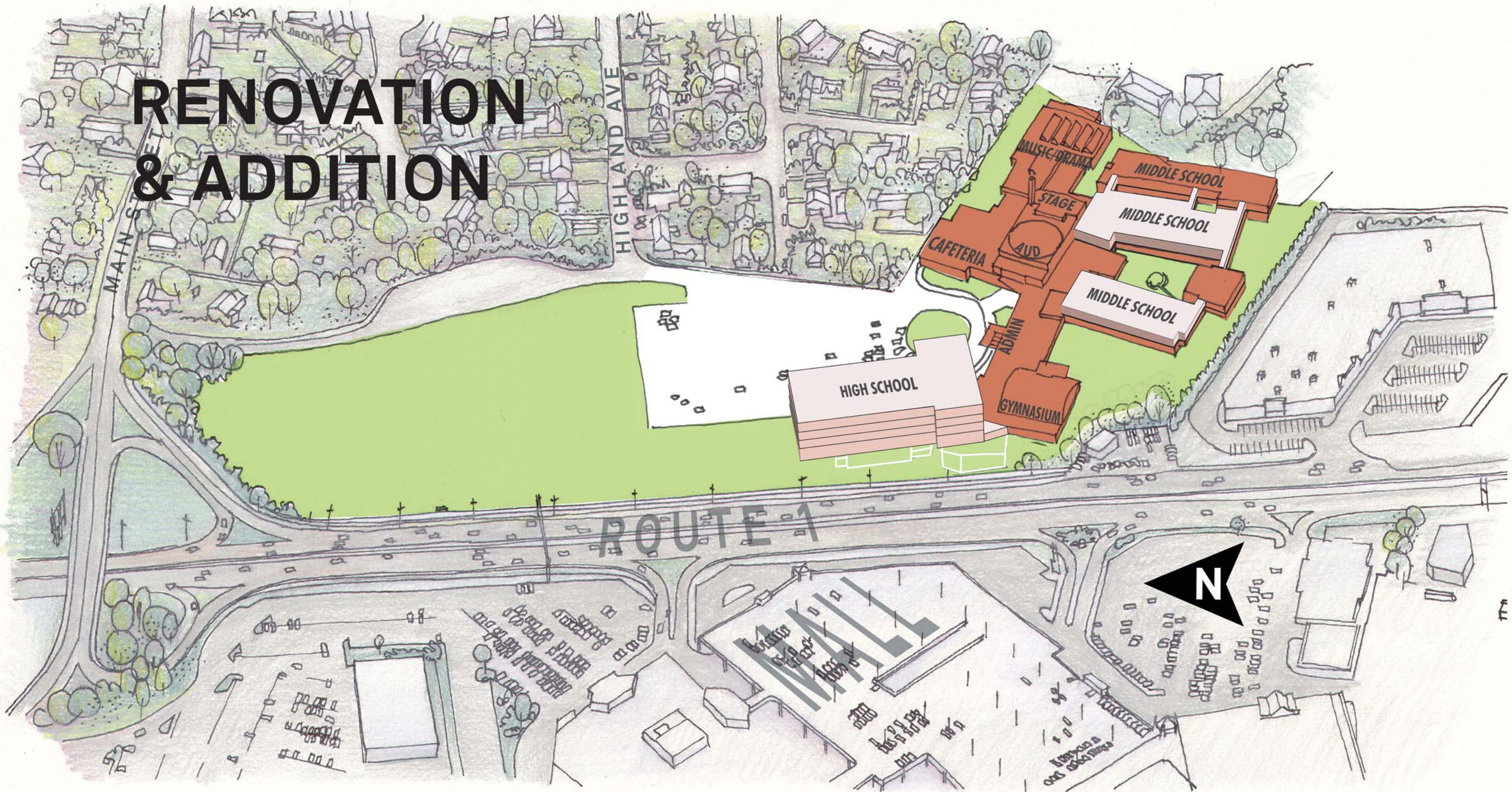
RENOVATION



RENOVATION & ADDITION



RENOVATION & ADDITION



NEW CONSTRUCTION

