

One Hartford Square West 146 Wyllys Street, Bldg 1-203 Hartford, CT 06106 860.547.1970 | www.tskpstudio.com



MANCHESTER SCHOOLS PHASE II

SMARTR II Committee - August 28, 2018

School Modernization and Reinvestment Team Revisited (SMARTR)



Tracy Maio

SMARTR II Members

Cheri Ann Eckbreth – Chair

Brian Murphy Chris Pattacini Matt Galligan Matthew Geary

Peter Conyers Scott Shanley

Deborah Hagenow Pamela Floyd-Cranford Steve Gates



MISSION

• The mission of SMARTR 2 is to build upon the well-vetted and voter approved outcomes, principles, guidelines and educational specifications from SMARTR1, gather and use up to date demographic data and apply the principles, specifications and information to complete the elementary school rebuilding project in a manner consistent with phase one.



SMARTR 1 GUIDING PRINCIPLES

- Current elementary schools are aging, inefficient, and do not provide a 21st century learning environment.
- There needs to be parity of facilities and sustainable racial balance between all elementary schools.
- Some of the district's schools experience significant conflict between buses, cars, and walkers.
- Where prudent, state school construction assistance money should be optimized; state reimbursement formulas discourage construction/rehabilitation of smaller schools
- Research by SMARTR I indicates that enrollment capacity for the school sizes being considered does not have a negative impact on learning given classroom sizes between 17-22 students.
- There is a strong desire to maintain a "neighborhood" structure to the elementary schools. This structure can be maintained by expanding current neighborhood boundaries and maintaining geographic continuity.



SMARTR II has fulfilled the mission by testing a variety of options against the guiding principles. The options examined included:

- 4 School Option Like New Renovation of 4 Elementary Schools
- 3 School Option Like New Renovation of 3 Elementary Schools One School Repurposed
- 2 School Option Like New Renovation of 2 Elementary Schools Two Schools Repurposed



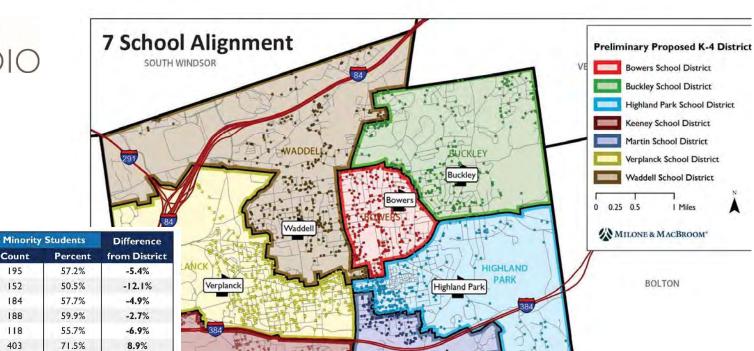
OPTION COMPARISON

	4 School Option	3 School Option	2 School Option
Provide 21st Century Environment Provide Parity of Facilities Achieve Racial/Socioeconomic Balance Maximize State Reimbursement Minimize Cost to Town Maintain Neighborhood Structure			
Allow for Future Growth Optimal Satisfactory Unsatisfactory	RE	COMMEND	DED



4 SCHOOL OPTION





Martin

GLASTONBURY

Based on 7 school Elementary alignment

All out of area placements were returned to their elementary school district of residence

Count

195

152

184

188

118

403

384

1,624

70.5%

62.6%

7.9%

0.0%

KEENEY

Does not include Pre-K enrollment

School

Bowers

Buckley

Keeney

Martin

Verplanck

Waddell

District

Highland Park

	Free/Redu	Free/Reduced Lunch		
School	Count	Percent	from District	
Bowers	180	52.8%	-2.2%	
Buckley	121	40.2%	-14.8%	
Highland Park	179	56.1%	1.1%	
Keeney	155	49.4%	-5.6%	
Martin	119	56.1%	1.2%	
Verplanck	385	68.3%	13.3%	
Waddell	288	52.8%	-2.1%	
District	1,427	55.0%	0.0%	

Based on 7 school Elementary alignment

All out of area placements were returned to their elementary school district of residence

Does not include Pre-K enrollment

For conceptual purposes of Deliniations may not be ex

BOLTON



Manchester Public Schools K-4 Enrollment, by Grade: 2016-17

School	K	1	2	3	4	K-4 Total
Bowers	66	64	67	66	78	341
Buckley	66	58	62	61	54	301
Highland Park	67	65	61	62	64	319
Keeney	68	56	57	71	62	314
Martin	43	49	35	42	43	212
Verplanck	105	127	108	108	116	564
Waddell	125	112	117	94	97	545
Total	540	531	507	504	514	2,596

Based on 7 school Elementary Alignment

As if consolidated K-4 boundaries were already in place

All out of area placements were returned to their elementary school district of residence



Manchester Phase II Budget Comparison - 4 School Option

Program	Bowers Total Area (SF), 341 students, 20 classrooms @ 900 SF	Buckley Total Area (SF), 301 students, 17 classrooms @ 820 SF	Keeney Total Area (SF), 314 students, 17 classrooms @ 850 SF	Martin Total Area (SF), 212 students, 12 classrooms @ 915 SF	
PROGRAM SUB-TOTAL	39,685	35,315	33,445	30,100	
PROGRAM GROSS AREA	59,528	52,973	50,168	45,150	
EXISTING GROSS AREA	66,750	56,420	48,550	41,300	
ALLOWABLE AREA (SF)	42,625	37,625	39,250	26,500	
REQUIRED ADDITIONAL AREA	-7,223	-3,448	1,618	3,850	TOTALS
PROJECT BUDGET (\$440 PER SF)	\$18,800,000	\$16,600,000	\$17,300,000	\$11,700,000	\$64,400,000
MAXIMÚM REIMBURSEMENT 68.57%)	\$12,900,000	\$11,400,000	\$11,900,000	\$8,000,000	\$44,200,000
EFFECTIVE RATE	48.94%	48.80%	53.76%	40.17%	
EFFECTIVE RATE PENALTY	\$3,660,000	\$3,300,000	\$2,590,000	\$3,300,000	\$12,850,000
TOTAL REIMBURSEMENT	\$9,200,000	\$8,100,000	\$9,300,000	\$4,700,000	\$22,100,000
NET COST TO TOWN	\$9,600,000	\$8,500,000	\$8,000,000	\$7,000,000	\$33,100,000

NOTE: Costs Do Not Include Escalation

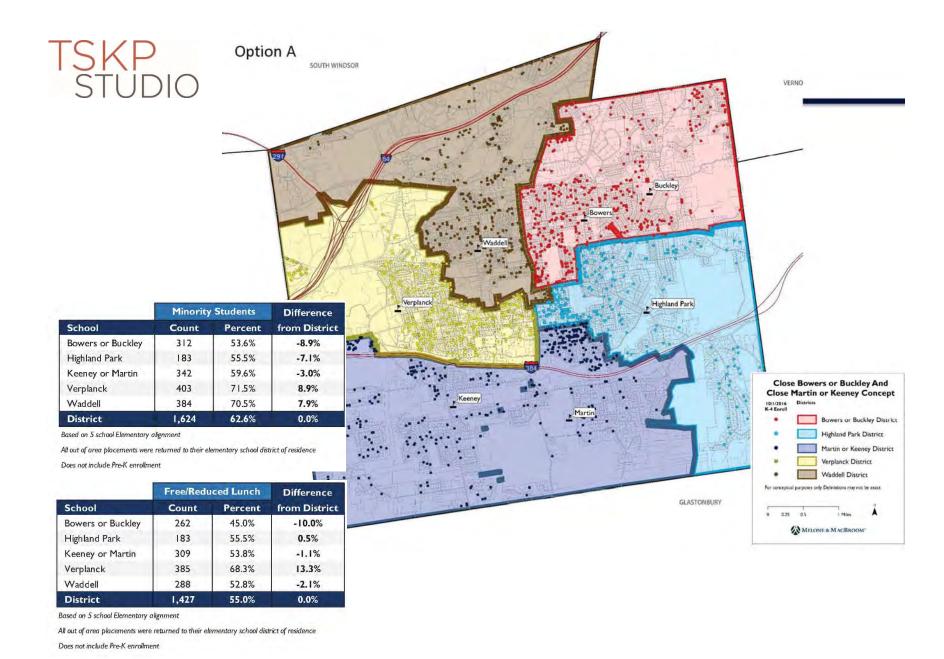


4 School option is Not Recommended

- Does not achieve parity and equity with other schools regarding school enrollments
- Underutilization of State funding
- Expensive to provide parity of program amenities with other new schools
- Will adversely impact towns ability to bond other needed projects



2 SCHOOL OPTION





Manchester Public Schools K-4 Enrollment, by Grade: 2016-17

School	K	1	2	3	4	K-4 Total
Bowers or Buckley	122	109	114	117	120	582
Highland Park	66	69	66	63	66	330
Keeney or Martin	121	114	102	122	115	574
Verplanck	105	127	108	108	116	564
Waddell	125	112	117	94	97	545
Total	540	531	507	504	514	2,596

Based on 5 school Elementary Alignment

As if consolidated K-4 boundaries were already in place

All out of area placements were returned to their elementary school district of residence

- Bowers or Buckley is closed whichever can best accommodate expansion to 580 student model remains
- Keeney or Martin is closed whichever can best accommodate expansion to 580 student model remains



Manchester Phase II Budget Comparison - 2 School Option

Program	Bowers Total Area, 582 students, 28 classrooms C @ 900 SF	Buckley Total Area, 582 PR students, 28 classrooms @ 820 SF	Keeney Total Area, 574 students, 28 classrooms @ 850 SF	Martin Total AreA, 574 OR students, 28 classrooms @ 915 SF		
PROGRAM SUB-TOTAL	49,720	45,970	46,270	48,040	_	
PROGRAM GROSS AREA	74,580	68,955	69,405	72,060		
EXISTING GROSS AREA	66,750	56,420	48,550	41,300		
ALLOWABLE AREA (SF)	67,269	67,269	66,354	66,354		
REQUIRED ADDITIONAL AREA	7,830	12,535	20,855	30,760	TOTAL RANGE	OF COSTS
PROJECT BUDGET (\$440 PER SF)	\$29,600,000	\$29,600,000	\$29,200,000	\$29,200,000	\$58,800,000 -	\$58,800,000
MAXIMÚM REIMBURSEMENT (68.57%)	\$20,300,000	\$20,300,000	\$20,000,000	\$20,000,000	\$40,319,160 -	\$40,319,160
EFFECTIVE RATE	61.82%	66.89%	65.41%	63.01%		
EFFECTIVE RATE PENALTY	\$1,990,000	\$500,000	\$880,000	\$1,580,000	\$1,380,000 -	\$3,570,000
TOTAL REIMBURSEMENT	\$18,300,000	\$19,800,000	\$19,100,000	\$18,400,000	\$38,939,160 -	\$36,749,160
NET COST TO TOWN	\$11,300,000	\$9,800,000	\$10,100,000	\$10,800,000	\$19,860,840 - \$	\$22,050,840

NOTE: Costs Do Not Include Escalation



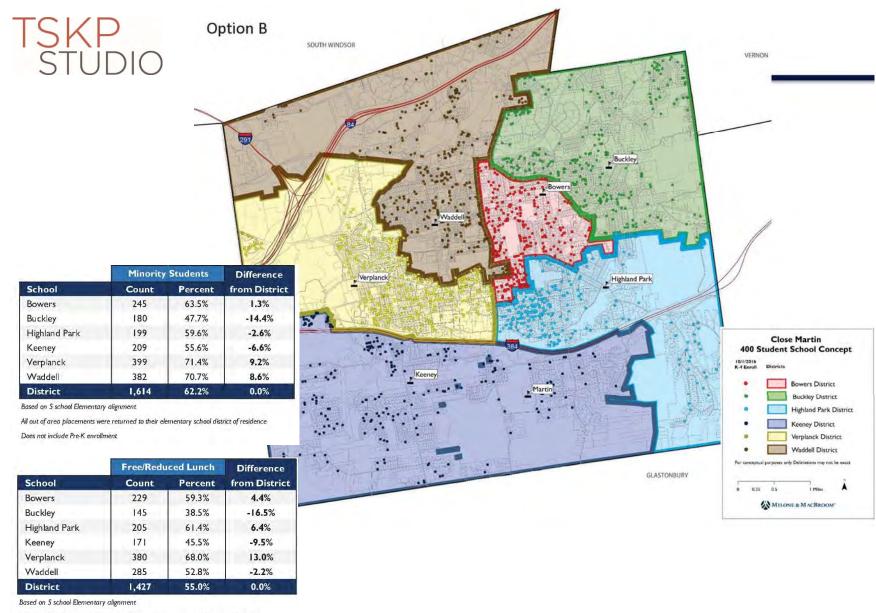
2 School option is NOT RECOMMENDED

- This option provides for parity and equity and best maximizes State aid
- Data indicates that the population of Manchester is growing and Manchester will be the most populated Hartford suburb by 2030
- The 2 school option would leave elementary schools at or near peak capacity for the education specifications. Adding students/classrooms at a later time could require significant changes in common areas, specialty areas, and/or site circulation threatening parity. The ability for some school sites to accommodate additional growth in this option is extremely limited.
- SMARTR2 believes it is important to provide future Boards with expansion options as the population grows, and, hopefully, some students return to MPS. SMARTR 2 does not recommend the two school option as the members believe it not likely sustainable over the course of time and debt service



3 SCHOOL OPTION

(Recommended)



All out of area placements were returned to their elementary school district of residence

Does not include Pre-K enrollment



Manchester Public Schools K-4 Enrollment, by Grade: 2016-17

School	K	1	2	3	4	K-4 Total
Bowers	73	76	75	78	84	386
Buckley	77	77	80	76	67	377
Highland Park	76	66	58	66	68	334
Keeney	75	71	66	82	82	376
Verplanck	105	126	107	106	115	559
Waddell	124	110	115	94	97	540
Total	540	531	507	504	514	2,596

Based on 5 school Elementary Alignment

As if consolidated K-4 boundaries were already in place

All out of area placements were returned to their elementary school district of residence

- Martin is closed or repurposed
- Bowers, Buckley and Keeney fit a 400 student school model



Manchester Phase II Program Comparison Current Target Enrollment

Program	Bowers Total Area (SF), 386 students, 21 classrooms @ 900 SF	Buckley Total Area (SF), 377 students, 21 classrooms @ 820 SF	Keeney Total Area (SF) 376 students, 21 classrooms @ 850 SF
Parking	120 (51 existing)	125 (79 existing)	115 (71 existing)
Classrooms Special Ed Resource OT/PT Social Work, Psychologist, Speech Language ELL/Reading ELL/Math	18,900 600 400 800 250 300 300	17,220 600 400 800 250 300 300	17,850 600 400 800 250 300 300
Art	1,150	1,150	1,150
Band Music STEM Gym PE Office/Storage Stage LMC Project Room Cafe Kitchen Principal's Office Main Office Conference Room	900 900 5,000 400 1,065 2,100 570 2,035 1,500 250 600	900 0 900 4,775** 400 1,255 2,100 570 1,665 1,260 250 600 200	900 0 900 5,000 400 935 2,100 570 2,165 1,500 250 600
Health Services Staff Work Room	450 450	450 450	450 450
Family Resouce Room	500	500	500
Staff Lounge	450	400	450
Custodial Office Storage	150 2,000	150 700	150 0
PROGRAM SUB-TOTAL	42,220	38,545	39,170
PROGRAM GROSS AREA	63,330	57,818	58,755
EXISTING GROSS AREA	66,750	56,420	48,550
ALLOWABLE AREA (SF)	48,250	50,194	47,000
REQUIRED ADDITIONAL AREA	-3,420	1,398	10,205



Manchester Phase II Budget Comparison - 3 School Option

Program	Bowers Total Area (SF), 386 students, 21 classrooms @ 900 SF	Buckley Total Area (SF), 377 students, 21 classrooms @ 820 SF	Keeney Total Area (SF), 376 students, 21 classrooms @ 850 SF	
PROGRAM SUB-TOTAL	42,220	38,545	39,170	
PROGRAM GROSS AREA	63,330	57,818	58,755	
EXISTING GROSS AREA	66,750	56,420	48,550	
ALLOWABLE AREA (SF)	48,250	50,194	47,000	
REQUIRED ADDITIONAL AREA	-3,420	1,398	10,205	TOTALS
PROJECT BUDGET (\$440 PER SF)	\$21,200,000	\$22,100,000	\$20,700,000	\$64,000,000
MAXIMUM REIMBURSEMENT (68.57%)	\$14,500,000	\$15,200,000	\$14,200,000	\$43,900,000
EFFECTIVE RATE	52.36%	59.73%	55.07%	
EFFECTIVE RATE PENALTY	\$3,450,000	\$2,000,000	\$2,840,000	\$8,290,000
TOTAL REIMBURSEMENT	\$11,100,000	\$13,200,000	\$11,400,000	\$35,700,000
NET COST TO TOWN	\$10,100,000	\$8,900,000	\$9,300,000	\$28,300,000

NOTE: Costs Do Not Include Escalation



The 3 School Option is RECOMMENDED

- Accommodates program space consistent with Education specifications and "21st century" learning
- Creates three schools of 400 students allowing for future district growth through population growth or returning students
- Creates opportunity for a second preschool center in the future allowing consolidation of programs from Buckley, MHS, and Keeney
- Achieves better than 50% state funding while accomplishing community goals

BOWERS

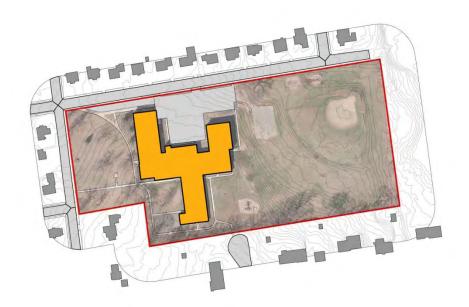
Site

- ·Small site
- · Vehicular Traffic / Parking Issues

BOWERS ELEMENTARY SCHOOL 141 PRINCTON STREET MANCHESTER, CT 06042

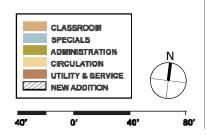


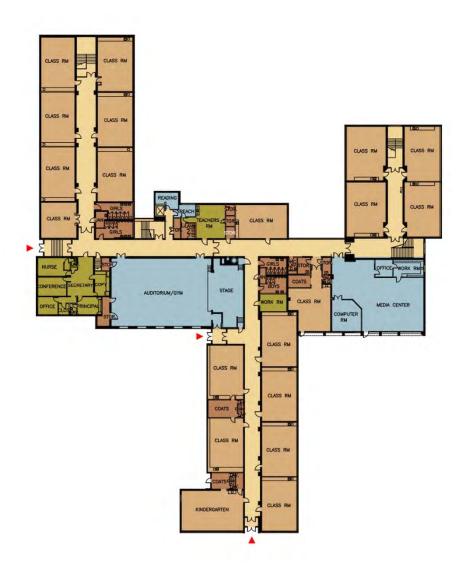
8.1 ACRES, SITE AREA



BOWERS Upper level

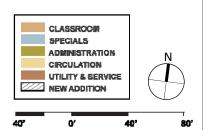
- •Wing Configuration Makes Grade Continuity Difficult
- •Main Office Not Near Parking

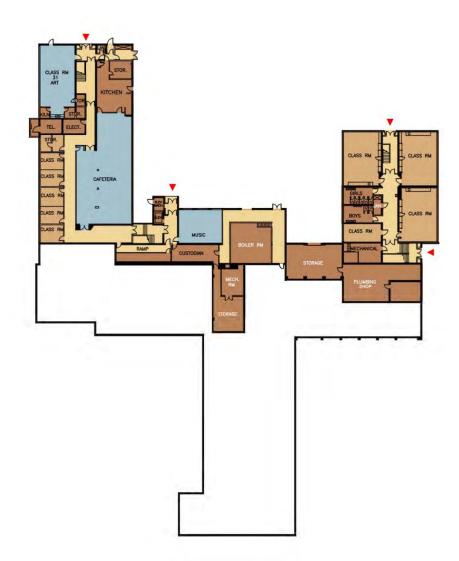




BOWERS Lower level

- •Lower Level Classrooms Isolated From School
- •Lower Level Classrooms not Handicap Accessible
- •School Entrance Not Prominent

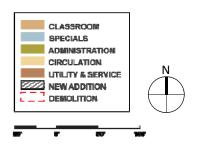




BOWERS

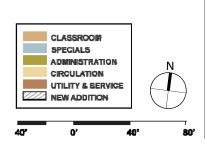
Site

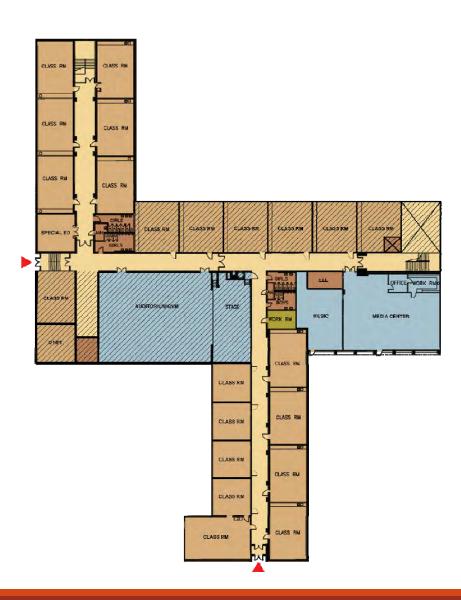
- •Separate Cars/Buses
- •Increase On Site Parking



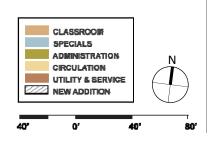


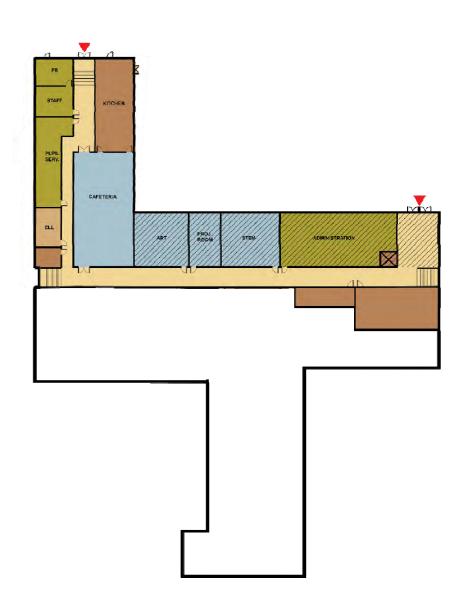
BOWERSUpper Level Plan





BOWERSLower Level Plan

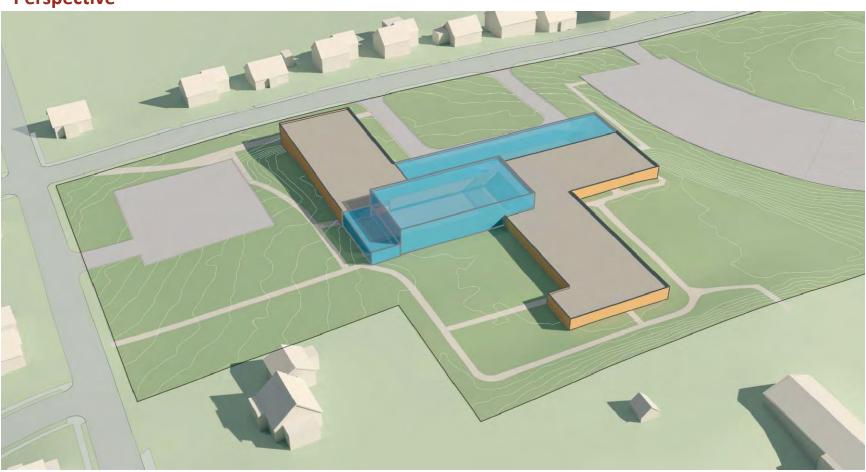






BOWERS

Perspective





BUCKLEYSite

•Building Straddles Significant Topography

BUCKLEY ELEMENTARY SCHOOL 250 VERNON STREET MANCHESTER, CT 06042



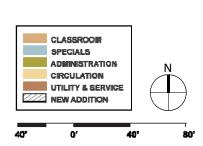


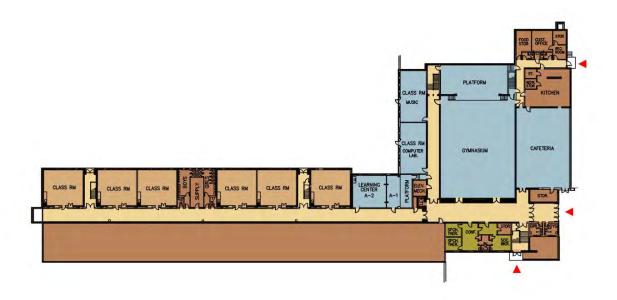




BUCKLEY Lower Level

- Small Classroom Size
- •Administration Not on Main Floor

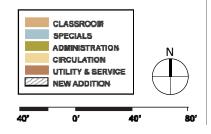


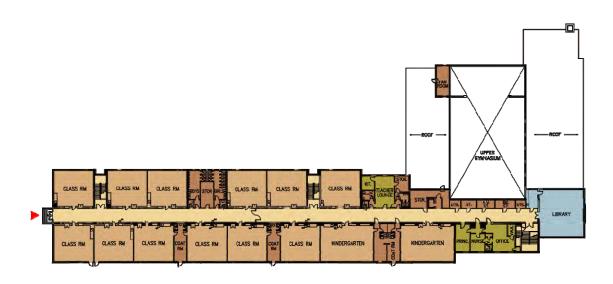




BUCKLEY Upper Level

- •Small Classroom Size
- •Not Handicap Accessible

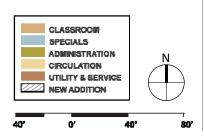


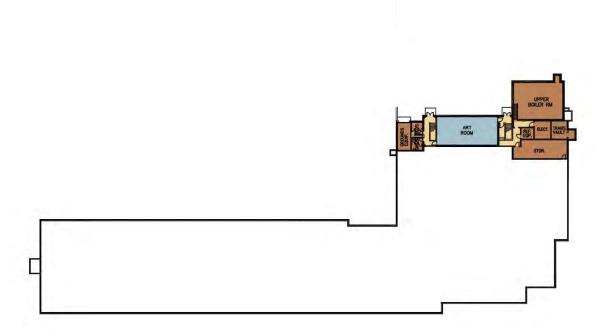




BUCKLEYBasement level

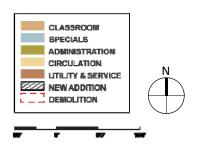
•Art Room Remote and Not Handicap Accessible

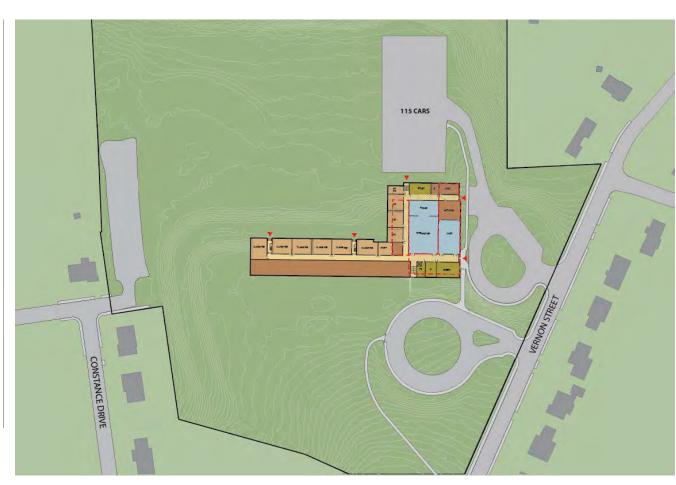




BUCKLEYSite

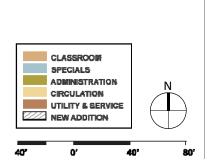
•Increase On Site Parking

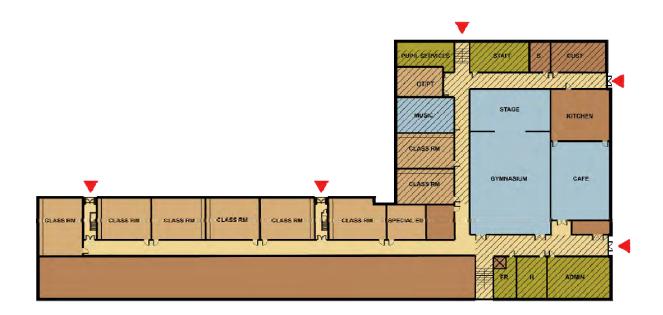






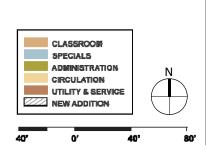
BUCKLEY Lower Level

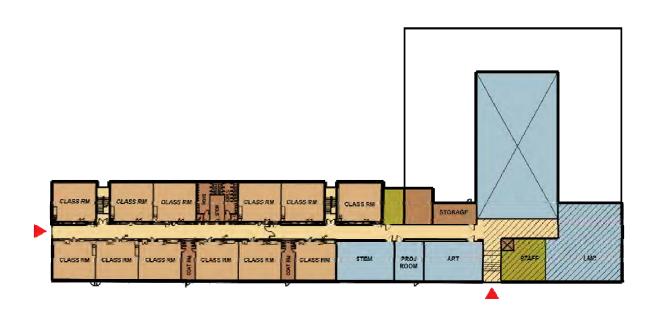






BUCKLEY Upper Level







BUCKLEY



KEENEY

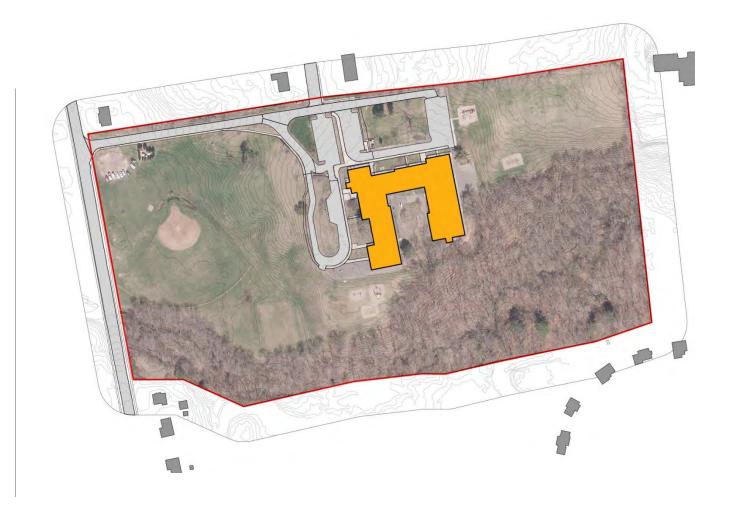
Site

- •Significant Topography to South, East and West
- Wetlands to South

KEENEY ELEMENTARY SCHOOL 179 KEENEY STREET MANCHESTER, CT 06040



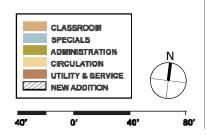
27.1 ACRES, SITE

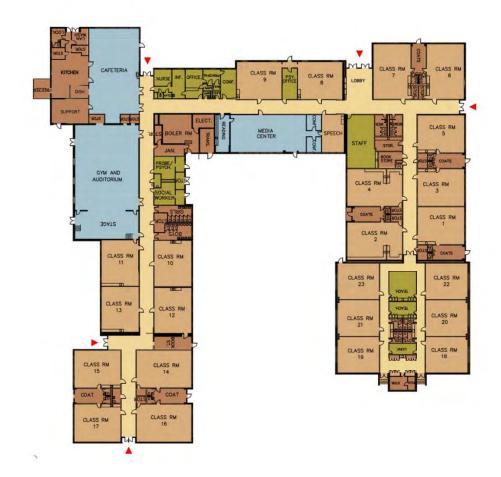


KEENEY

First Floor

- •Significant Variation in Classroom Size
- •Wing Configuration Makes Grade Continuity Difficult

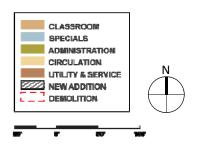




KEENEY

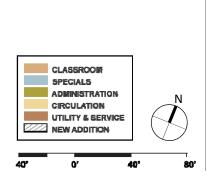
Site

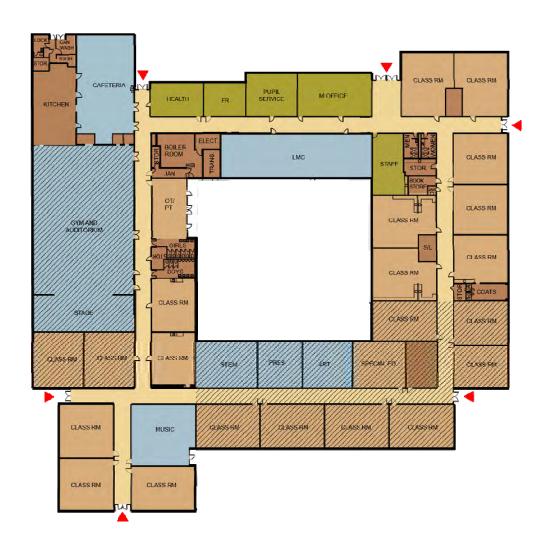
- •Increase On-Site Parking
- •Separate Cars/Buses





KEENEY Lower Level





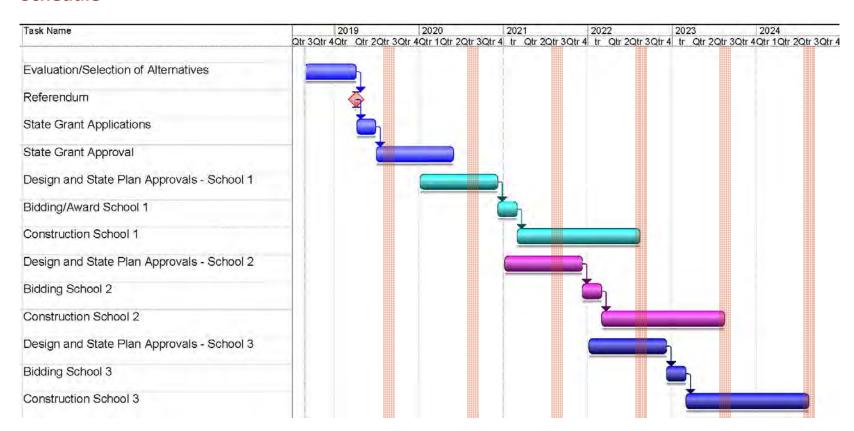


KEENEY





3 School Option Schedule





RE-USE

In order to complete the effort, reutilization of decommissioned buildings needs to be completed when the need for "swing space" ends. SMARTR 2 suggests a redirection or new committee to explore and examine costs for partial inclusion in a Phase 2 referendum as follows:

- Martin school as a preschool center due to its current code appropriate construction (likely construction 2024-25)
- Robertson as a Community Center due to its proximity to significant Park and recreation space, pool, tennis etc and, it's relative age (likely construction 2025-26)
- Nathan Hale working with a private party for vibrant and active reuse
 (2020)
- Reuse Washington for Recreation (Mahoney) and potential for BOE office space, Adult Ed, Alternative MS/HS space.



QUESTIONS?



MARTIN

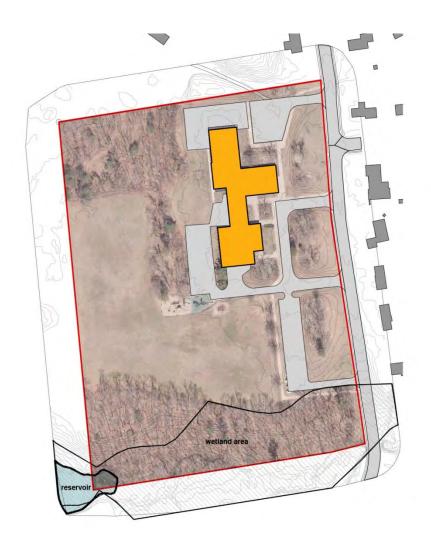


MARTIN Site

MARTIN ELEMENTARY SCHOOL 140 DARTMOUTH MANCHESTER, CT 06040

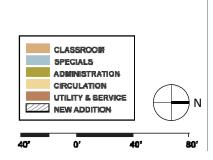


18.1 ACRES, SITE





MARTIN First floor







4 SCHOOL OPTION



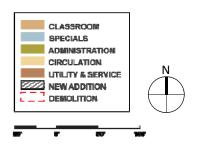
Manchester Phase II Program Comparison - 4 School Option

Program	Bowers Total Area (SF), 341 students, 20 classrooms @ 900 SF	Buckley Total Area (SF), 301 students, 17 classrooms @ 820 SF	Keeney Total Area (SF), 314 students, 17 classrooms @ 850 SF	Martin Total Area (SF 212 students, 12 classrooms @ 915 Si
Parking	106 (51 existing)	93 (79 existing)	97 (71 existing)	66 (55 existing)
Classrooms	18,000	13,940	14,450	10,980
Special Ed Resource	600	600	600	600
OT/PT	400	400	400	400
Social Work, Psychologist,			1000	
Speech	800	800	800	800
Speech Language	250	250	250	250
ELL/Reading	300	300	300	300
ELL/Math	300	300	300	300
Art	1,150	1,150	1,150	1,150
Band	0	0	0	0
Music	900	900	900	900
STEM	900	900	900	900
Gym	3,365**	4,775**	2,725**	3,300**
PE Office/Storage	400	400	400	400
Stage	1.065	1,255	935	1.200
LMC	2,100	2,100	2,100	2,100
Project Room	570	570	570	570
Cafe	2.035	1,665	2,165	1,500
Kitchen	71000			
	1,500	1,260	1,500	1,500
Principal's Office	250	250	250	250
Main Office	600	600	600	600
Conference Room	200	200	200	200
Health Services	450	450	450	450
Staff Work Room	450	450	450	450
Family Resouce Room	500	500	500	500
Staff Lounge	450	450	400	350
Custodial Office	150	150	150	150
Storage	2,000	700	0	0
PROGRAM SUB-TOTAL	39,685	35,315	33,445	30,100
PROGRAM GROSS AREA	59,528	52,973	50,168	45,150
EXISTING GROSS AREA	66,750	56,420	48,550	41,300
ALLOWABLE AREA (SF)	42,625	37,625	39,250	26,500
REQUIRED ADDITIONAL	-7,223	-3,446	1,618	3,850

BOWERS

Site

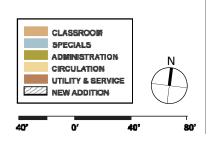
- •Separate Cars/Buses
- •Increase On Site Parking

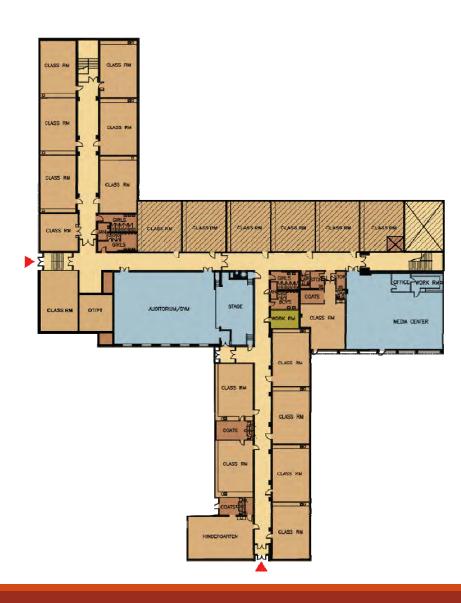




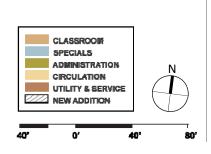


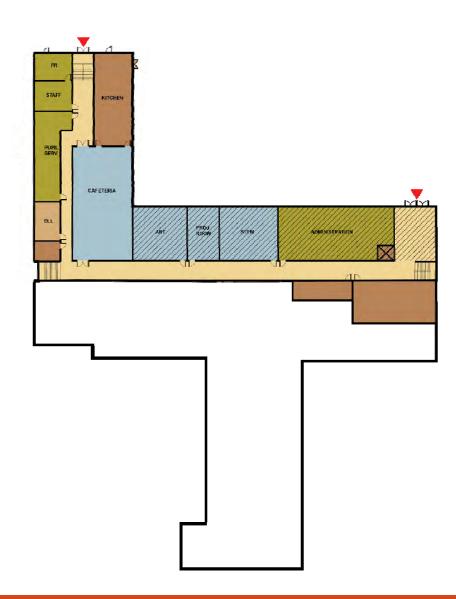
BOWERS Upper Level Plan



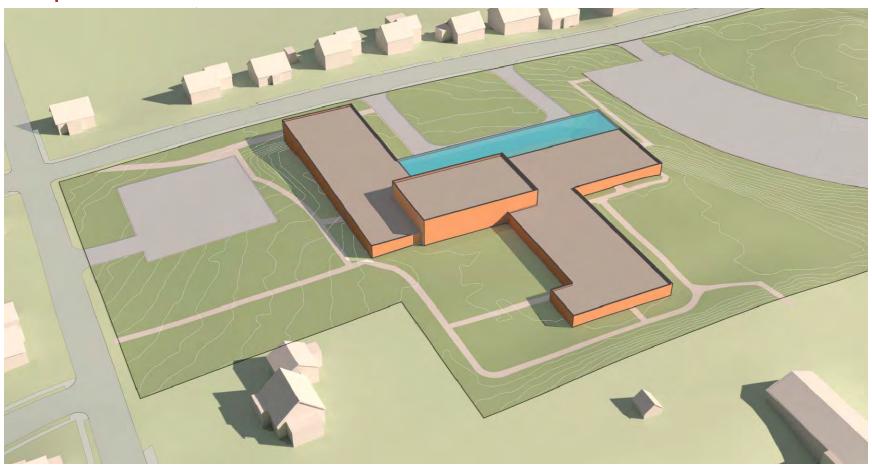


BOWERSLower Level Plan





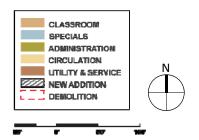
BOWERS



BUCKLEY

Site

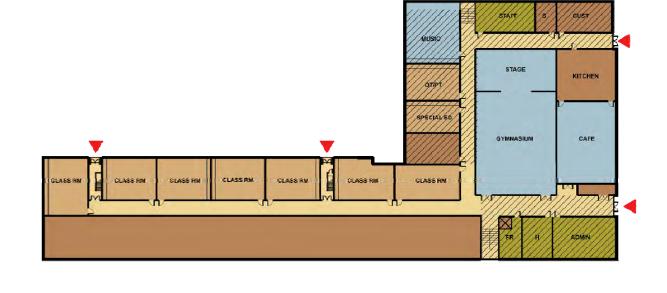
- •Increase On-Site Parking
- •Discharge Cars in Two Directions

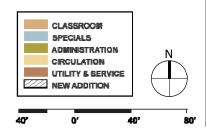






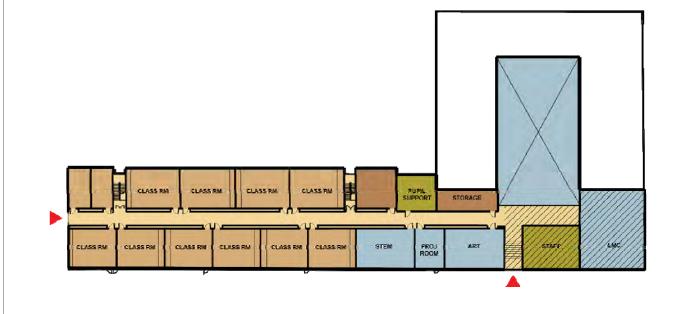
BUCKLEY Lower Level Plan

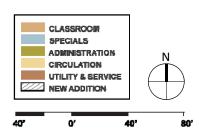






BUCKLEY Upper Level Plan







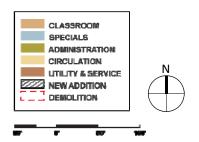
BUCKLEY



KEENEY

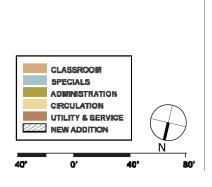
Site

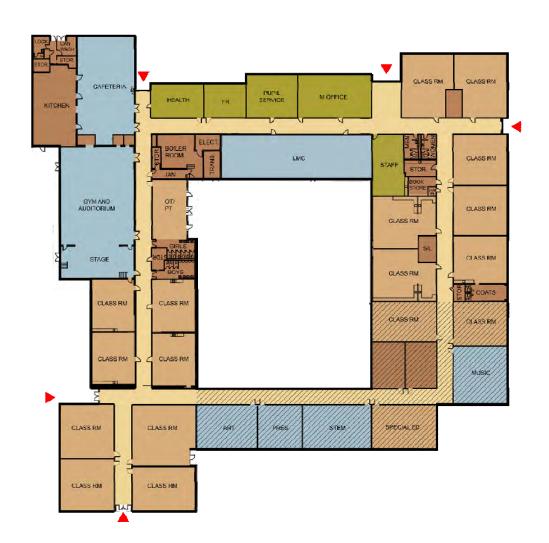
- •Increase On-Site Parking
- •Separate Cars/Buses





KEENEY First Floor







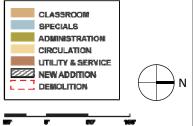
KEENEY



MARTIN

Site

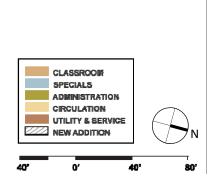
- •Increase On-Site Parking
- •Separate Cars/Buses

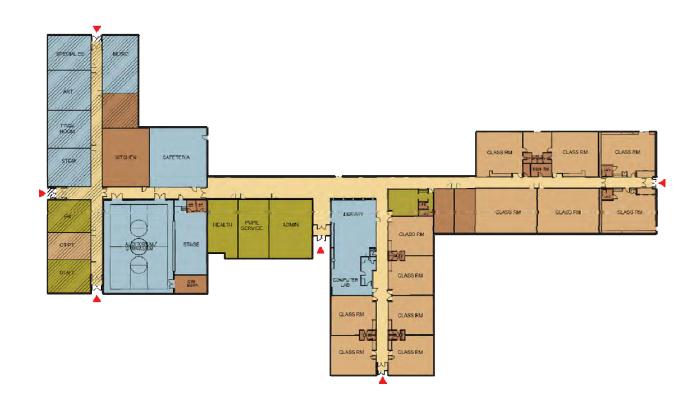






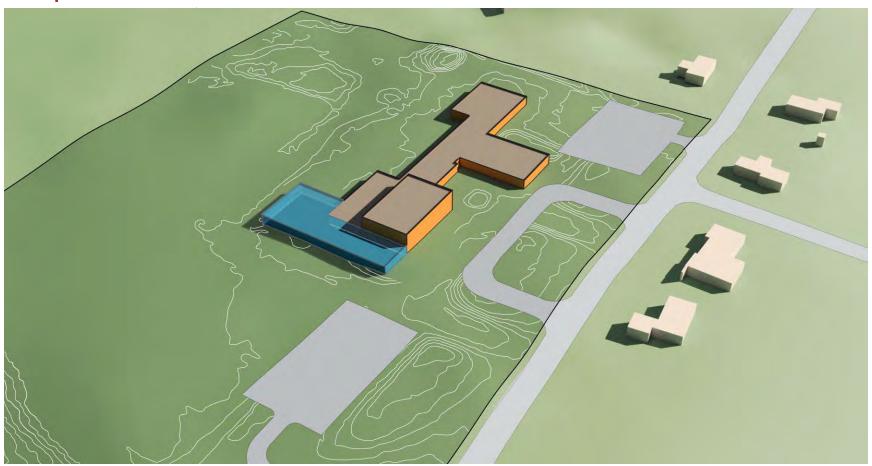
MARTIN First Floor Plan







MARTIN





2 SCHOOL OPTION



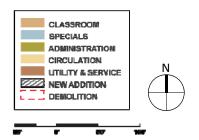
Manchester Phase II Program Comparison - 2 School Option

Program	Bowers Total Area, 582 students, 28 classrooms 0 @ 900 SF	Buckley Total Area, 582 PR students, 28 classrooms @ 820 SF	Keeney Total Area, 574 students, 28 classrooms OR @ 850 SF	Martin Total AreA, 574 students, 28 classrooms @ 915 SF
Parking	190 (51 existing)	190 (79 existing)	190 (71 existing)	190 (55 existing)
Classrooms	25,200	22,960	23,800	25,620
Special Ed Resource	600	600	600	600
OT/PT	400	400	400	400
Speech	800	800	800	800
Speech Language	250	250	250	250
ELL/Reading	300	300	300	300
ELL/Math	300	300	300	300
Art	1,150	1,150	1,150	1,150
Band	900	900	900	900
Music	900	900	900	900
STEM	900	900	900	900
Gym	5,000	4,775**	5,000	5,000
PE Office/Storage	400	400	400	400
Stage	1,000	1,255	1,000	1,000
LMC	2,100	2,100	2,100	2,100
Project Room	570	570	570	570
Cafe	2,400	2,400	2,400	2,400
Kitchen	1,500	1,260	1,500	1,500
Principal's Office	250	250	250	250
Main Office	600	600	600	600
Conference Room	200	200	200	200
Health Services	450	450	450	450
Staff Work Room	450	450	450	450
Family Resouce Room	500	500	500	500
Staff Lounge	450	450	400	350
Custodial Office Storage	150 2,000	150 700	150 0	150 0
PROGRAM SUB-TOTAL	49,720	45,970	46,270	48,040
PROGRAM GROSS AREA	74,580	68,955	69,405	72,060
EXISTING GROSS AREA	66,750	56,420	48,550	41,300
LLOWABLE AREA (SF)	67,269	67,269	66,354	66,354
REQUIRED ADDITIONAL	7,830	12,535	20,855	30,760

BOWERS

Site

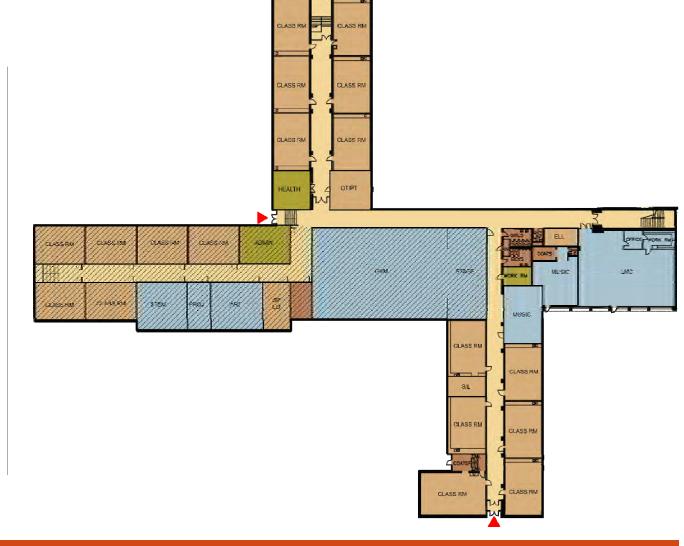
- •Separate Cars/Buses
- •Increase On-Site Parking
- •Discharge Cars in Tow Directions







BOWERS Upper Level



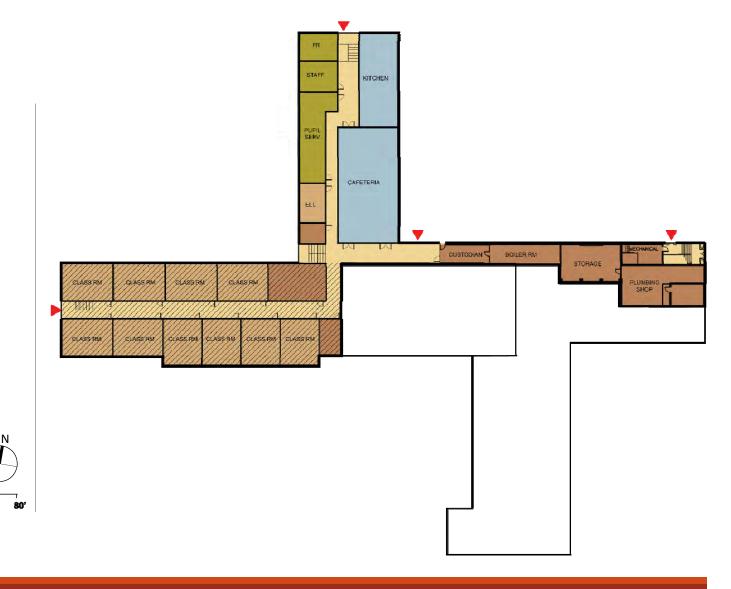
CLASSROOM SPECIALS ADMINISTRATION



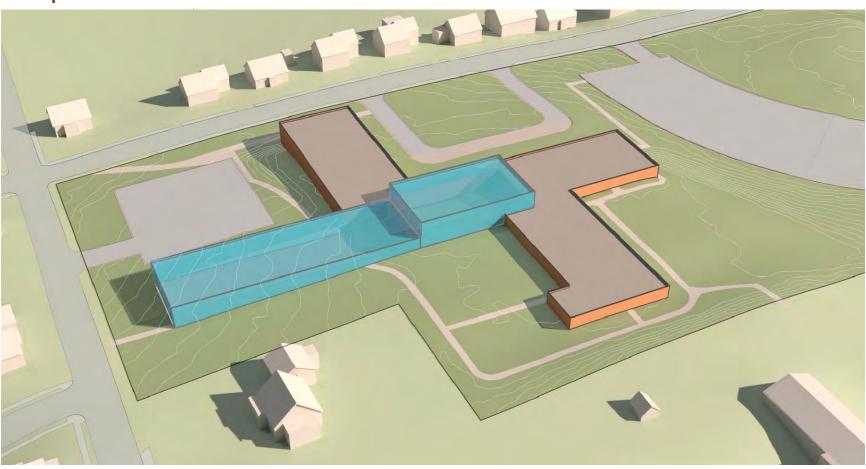
BOWERS Lower Level

CLASSROOM
SPECIALS
ADMINISTRATION
CIRCULATION
UTILITY & SERVICE
NEW ADDITION

0'



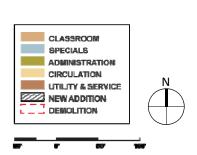
BOWERS



BUCKLEY

Site

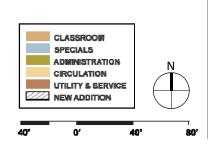
- •Increase On-Site Parking
- •Discharge Cars in Two Directions

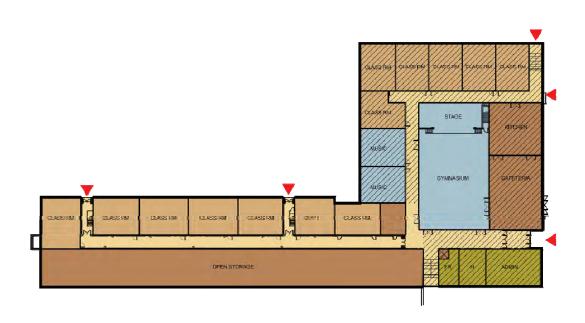






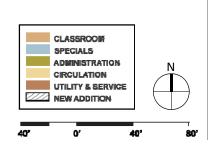
BUCKLEY Lower Level







BUCKLEY Upper Level







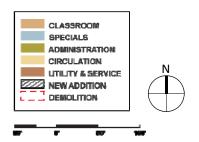
BUCKLEY



KEENEY

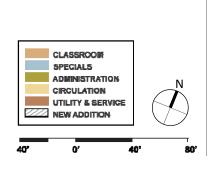
Site

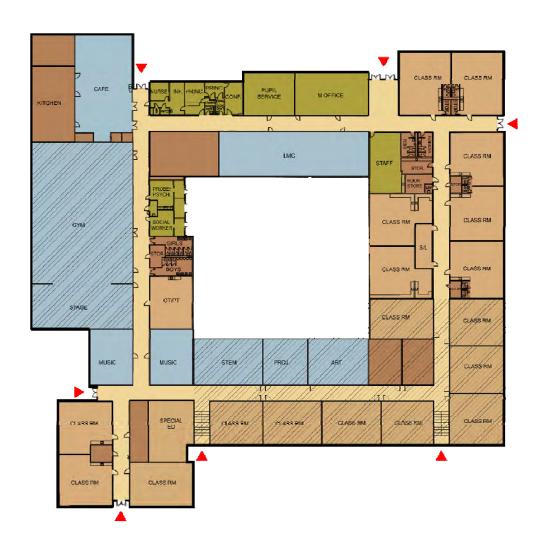
- •Separate Cars/Buses
- •Increase On-Site Parking



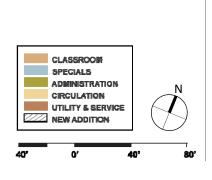


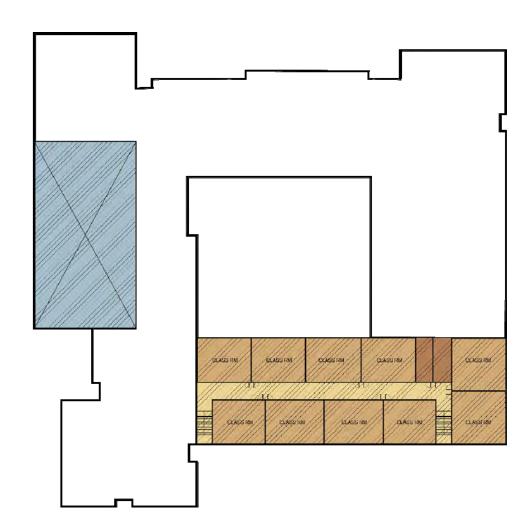
KEENEY Lower Level





KEENEY Upper Level







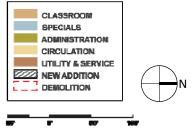
KEENEY



MARTIN

Site

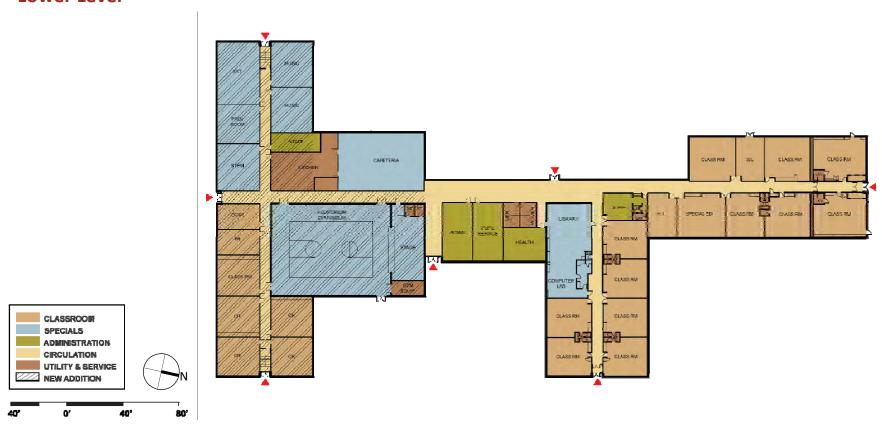
- •Separate Cars/Buses
- •Increase On-Site Parking
- •Discharge Cars In Two Directions





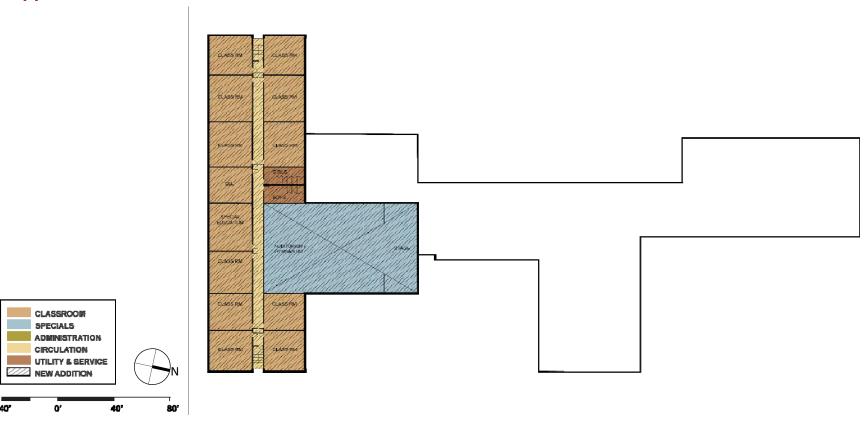


MARTIN Lower Level





MARTIN Upper Level





MARTIN

