#### LEXINGTON PUBLIC SCHOOLS

Ad hoc Schools Master Plan Committee Middle & Elementary Schools



#### **AGENDA**

- 1. Population Growth Goals
- 2. Grade Configuration Options
- 3. 5 8 Middle School
- 4. PreK K Early Childhood Center
- 5. Middle School Option Components
- 6. Middle School Options
- 7. Clarke Site Constraints / Options
- 8. Diamond Site Constraints / Options
- 9. Elementary Options Refined
- 10. Getting to Five Years Out



# GRADE CONFIGURATION OPTIONS (11/20/2014 PRESENTATION)

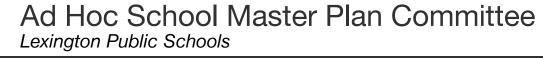
Current													Co	mments
													Sta	atus Quo, Most people are likely
PreK	K	1	2	3	4	5	6	7	8	9	10	11	12 co	mfortable with this configuration
Option 1	1													
Drok	K	1	2	2	4	_	6	7	o	9	10	11		8 is inefficient in small elementary schools ely require more classrooms
PreK	K	1	2	3	4	5	6	/	8	9	10	11	1Z IIK	ely require more classrooms
Option 2	)													
Option 2													Ad	lds a transition in within the elementary
														ades which can be disruptive; but likely
PreK	K	1	2	3	4	5	6	7	8	9	10	11		duces the number of classrooms needed
11011					-				-					
Option 3	3													
·													Re	lieves elementary schools only; requires
PreK	K	1	2	3	4	5	6	7	8	9	10	11	12 ea	rly childhood school and MS additions
Option 4	1													
													All	elementary and both MS are relieved,
													Ea	rly Childhood and High School become
PreK	K	1	2	3	4	5	6	7	8	9	10	11	12 the	e priority
Option 5	5													
														lieves elementary schools only, High
PreK	K	1	2	3	4	5	6	7	8	9	10	11	12 Scl	hool become the priority
Option 6														
PreK	K	1	2	3	4	5	6	7	8	9	10	11	12	

Ad Hoc School Master Plan Committee Lexington Public Schools



# GRADE CONFIGURATION OPTIONS

Curren	t												Comments
													Status Quo, Most people are likely
PreK	K	1	2	3	4	5	6	7	8	9	10	11	12 comfortable with this configuration
Option	1: PreK	; K - 8; 9 -	- 12: DEL	ETED									
Option	2: PreK	; K - 2; 3 -	- 5: 6 - 8;	9 - 12: DE	LETED								
Option	3												
													Relieves elementary schools only; requires
PreK	K	1	2	3	4	5	6	7	8	9	10	11	12 early childhood school and MS additions
O to ti o to	4. Dual	11. 1 - 5	. 6 7. 0	12. DELE	TED								
Option	4: Prek	- H; 1 - 5	; 6 - 7; 8 -	- 12: DELE	ILED								
Option	5: K - 4;	; 5 - 8; 8 -	12: DELE	TED									
Option	6: PreK	- K; 1 - 6	; 7 - 8; 9 -	12: DELE	TED								
Option	7												
PreK	K	1	2	3	4	5	6	7	8	9	10	11	12 3 Middle Schools
	K	1	2	3	4								





# WHAT IF: 5 – 8 MIDDLE SCHOOLS?

- Current 6 8 Population = 1,617 + Projected 10 Year Population 255
   Total 10 year Population = 1,872
- If 3 Equal Middle Schools Grades 6 8 = 624 students each (30% smaller)
  - Current Grade 5 Population = 555 + Projected 10 Year Population +83
     Total 10 year Population = 638 (2,510 total students for grades 5-8)
  - (2) 5-8 middle schools = 1,255 students / school
     (3) 5-8 middle schools = 836 students / school
  - Clarke: at 836 is similar to today (824), no opportunity to right size triangular classrooms
  - Diamond: at 836 students is larger than current population (793)
  - New Middle School: 836 students = 133,760 GSF, similar in size than Clarke today (133,200 GSF)
     (No currently known Town site large enough to support facility of this size)

### WHAT IF: PREK / K EARLY CHILDHOOD CENTER?

- Current K Population = 430 + Projected Population 83 = Total K of 513
- 513 Students at 18 students/class = 29 Kindergarten classrooms = 79,500 GSF
- PreK Projected Requirement = 16,500 GSF
- Total Size = 90,000 to 96,000 GSF (2 stories maximum)
- Central Administration Site: only known site which might support facility of this size

#### Pro's:

Frees up 26 classrooms throughout system = 598 spaces/students for grades 1 – 5

#### Con's:

- Adds another transition to elementary grades
- Adds a 7<sup>th</sup> school administrator/guidance/SPED/nurse
- Requires relocation of Central Office



## COMPONENT OPTIONS - PREK

·		Nature of Construction	Size	Prelim Cost (const only)	Comments
Option 1	Phase 2 Option using Central Administration	Additions / Renovations	<del>16,000 gsf</del>	\$9.9 - \$11.2M	Central Offices upgraded
Option 2	(1) Story Building North of the Central Administration Building	Pre-Fabricated Building	16,500 gsf		Central offices not upgraded
Option 3	(1) Story Addition to Existing PreK at Harrington	Bricks and Mortar	7,000 gsf		Central Offices not upgraded
Option 4	(1) Story Building on Laconia Street Site	Pre-Fabricated Building	16,500 gsf		Significant Site Development Costs
Option 5	Incorporated into Hastings Capital Project	Bricks and Mortar	<del>16,500 gsf</del>	-	Subject to MSBA Approval; 5 Year Solution, Site may not support for a 1st Floor solution
Option 6	Incorporated into a PreK - 4 Harrington Site Building	Bricks and Mortar	<del>16,500 gsf</del>	-	_
Option 7	PreK addition to High School Site	Bricks and Mortar or Pre- Fabricated Building	<del>16,500 gsf</del>	-	
Option 8	PreK - K: New School	Bricks and Mortar	<del>96,500 gsf</del>	-	Too large for most available Sites

Ad Hoc School Master Plan Committee Lexington Public Schools





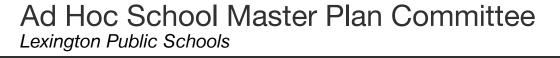
Harrington Elementary
Lexington Public Schools



Harrington Elementary
Lexington Public Schools

# MIDDLE SCHOOL TEAMS

TEAMS	1	2	3	4	5	6	7	8	9
Team = English, Social Studies, Math, Science (@ 23 students)	92	184	276	368	460	552	644	736	828
Grades 6-8		552	828	1104	1380	1656	1932	2208	2484
Total Students per Grade	NA	NA	276	NA	NA	552	NA	NA	828



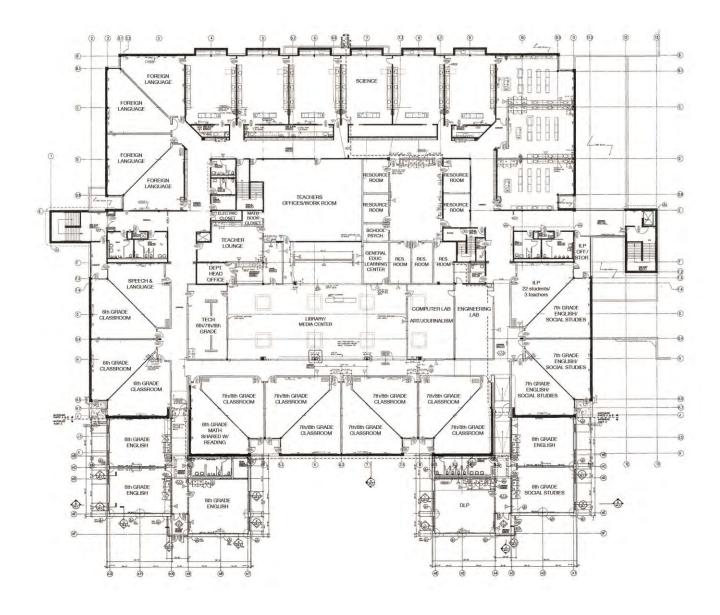


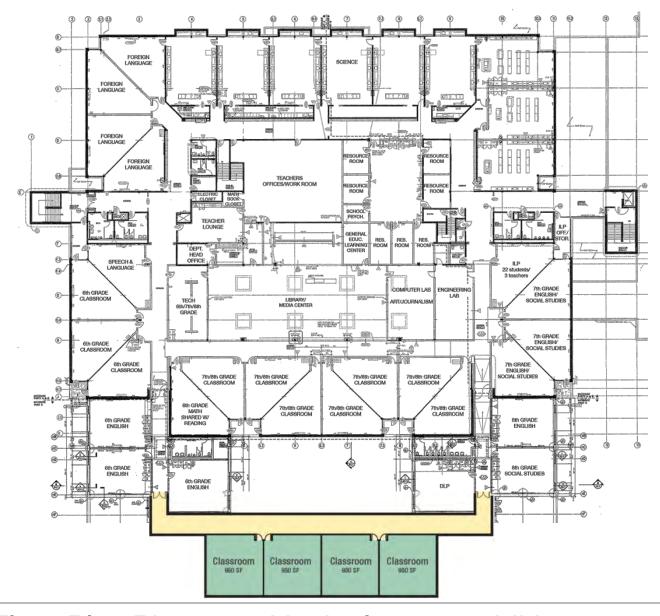
# CLARKE MIDDLE SCHOOL COMPONENT OPTIONS

			Nature of Construction	Population Change	Size	New Population	Comments
Option 1	824 Existing Population	Right Size 6 – 8	Renovations	<del>-138</del>	NA	<del>686</del>	Reduced population requires Diamond to accommodate all population increases
Option 2	824 Existing Population						
Phase 1		(1) Story building to the north	Pre-fabricated building	(1) Team 92 Students	6,400 gsf	916	Includes relocation of the underground detention system
Phase 2		(3) Story addition to the east (6 – 8)	Bricks & Mortar	138 Students	11,200 gsf	1,054	(6) Classrooms + (2) Sm. Group
Phase 3		Right Size (6 – 8)	Renovations	-138	18,000 gsf Renovation	916	Reconfigure triangular CR's, loss of 6 classrooms

Ad Hoc School Master Plan Committee Lexington Public Schools

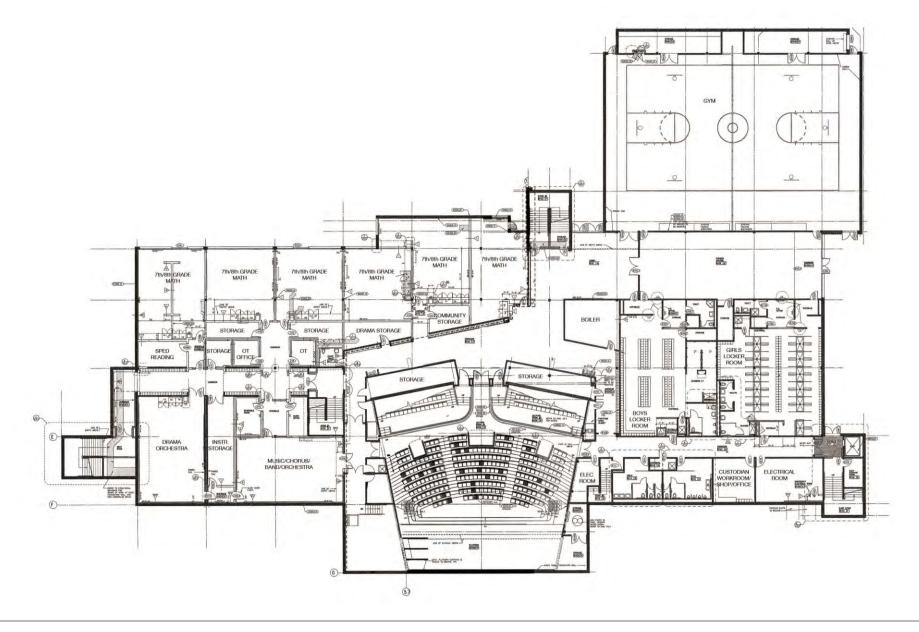


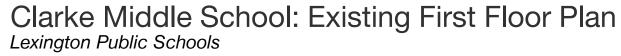




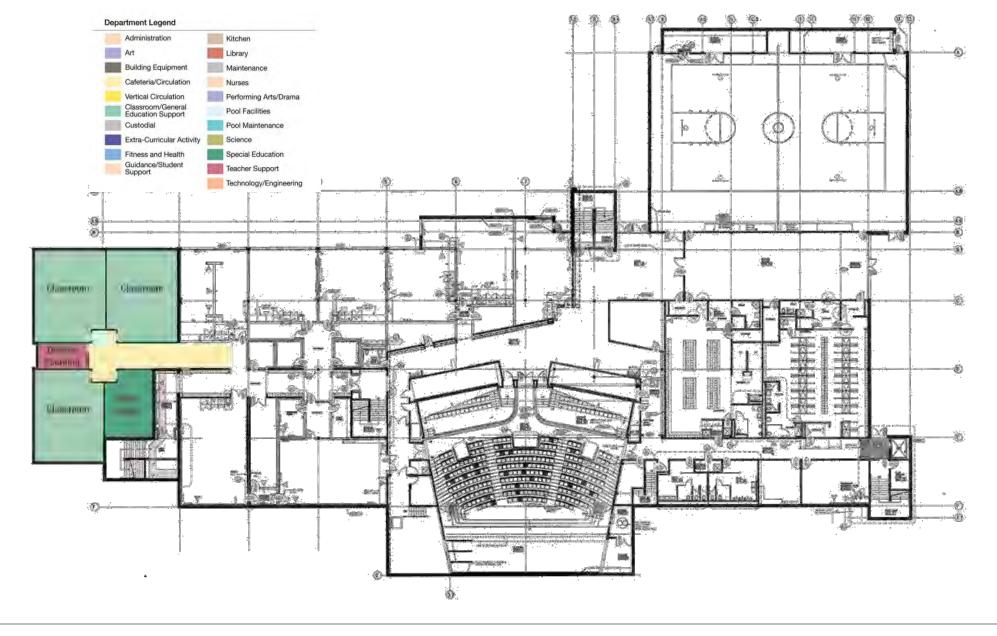
Clarke Middle School: Third Floor Plan Phase 1 with single story addition Lexington Public Schools

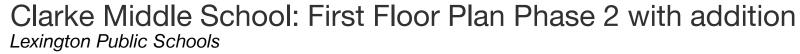




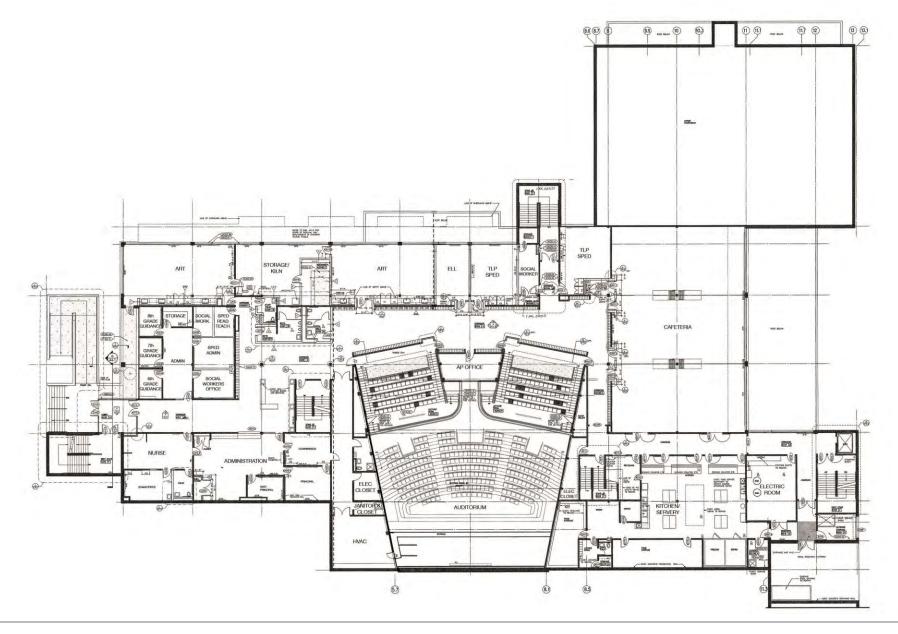






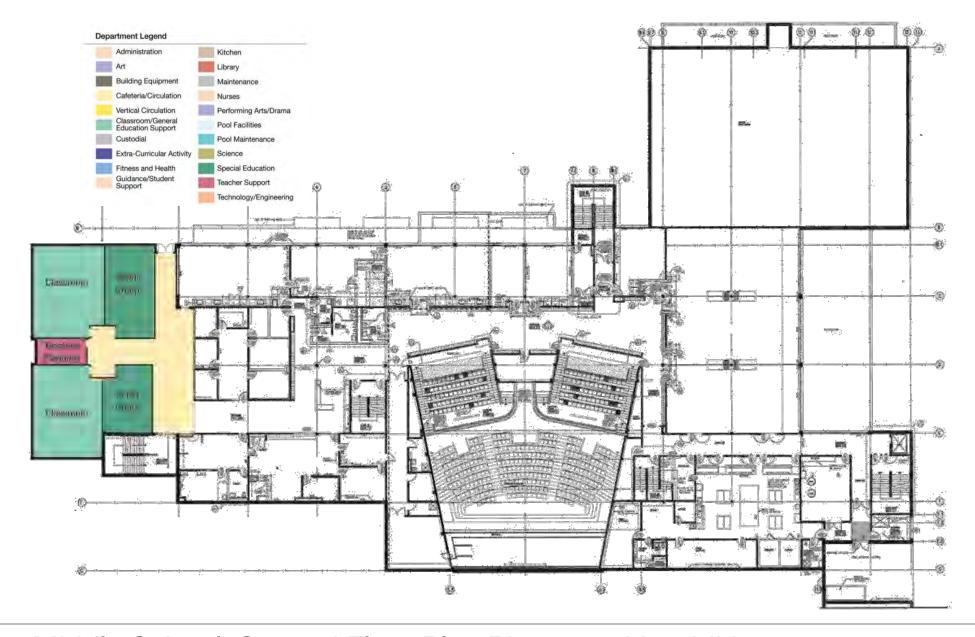






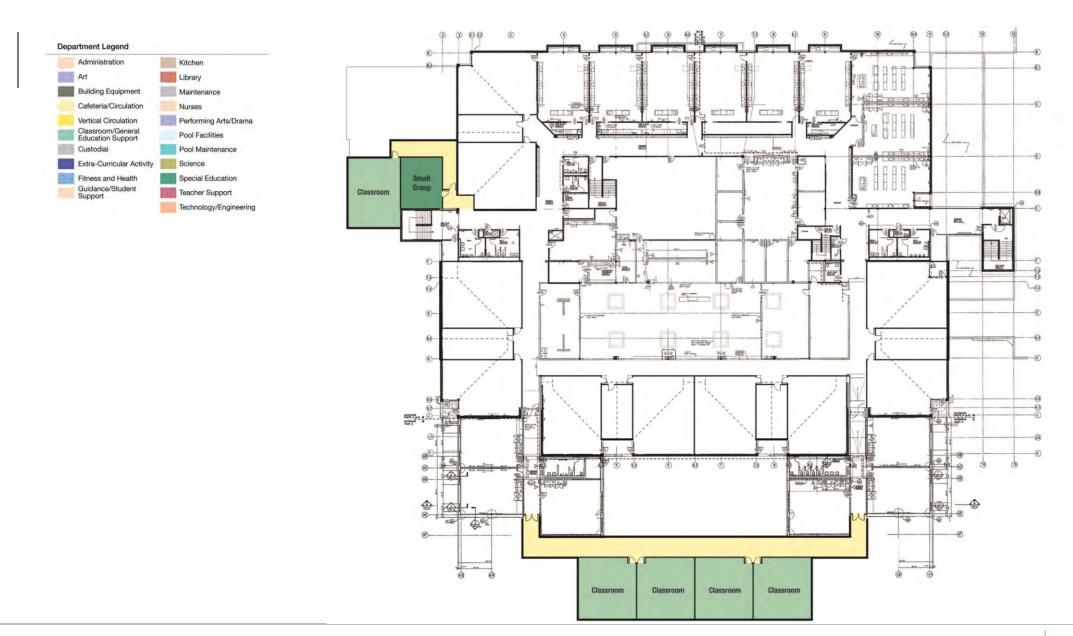






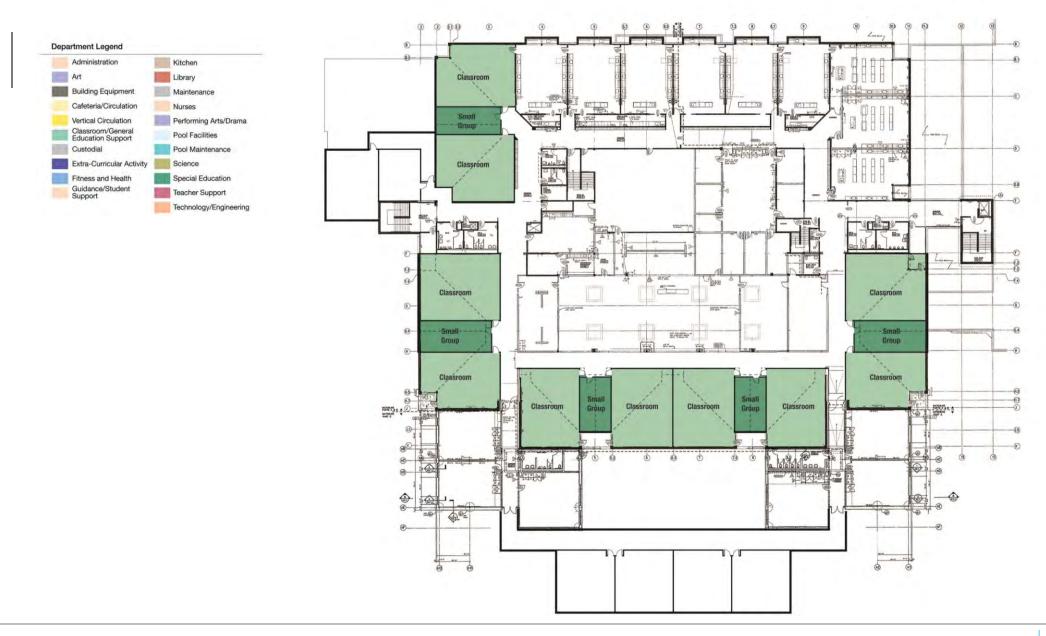












Clarke Middle School: Third Floor Plan Phase 3 with corrected CR's Lexington Public Schools



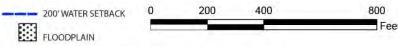


Clarke Middle School – Site Plan Lexington Public Schools





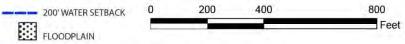
Clarke Middle School – Site Analysis Lexington Public Schools





Clarke Middle School – Site Analysis (addition)

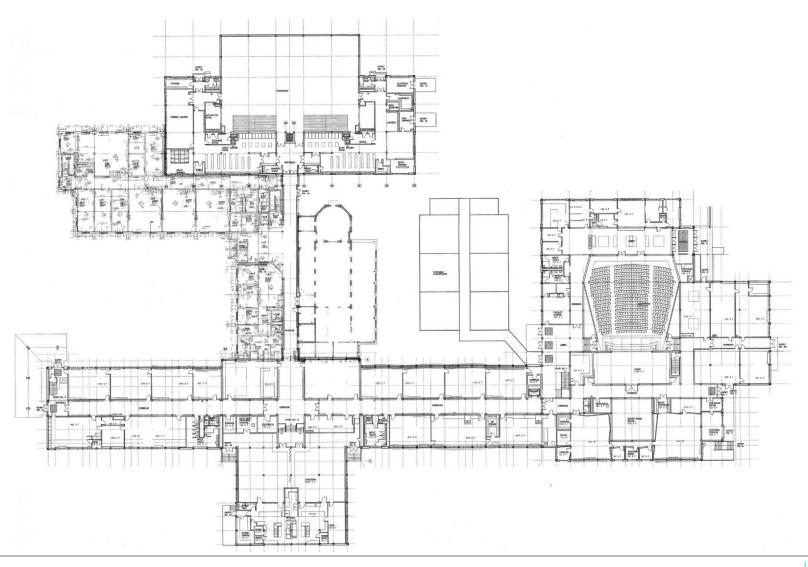
Lexington Public Schools



# DIAMOND MIDDLE SCHOOL COMPONENT OPTIONS

			Nature of Construction	Population Change	Size	New Population	Comments
Option 4	793 Existing Population	Additions and renovations (6 – 8)	Bricks & Mortar	+184	22,300 GSF + 9,000 GSF Modular	977	(6) Modular CR's removed 8 CR's added (2) teams+)
Option 5	793 Existing Population	Additions and Renovations (6 – 8) for full population increase	Bricks & Mortar	+255	26,000 GSF + 9,000 GSF Modular	1,048	(6) Modular CR's removed 12 CR's added (3) teams)

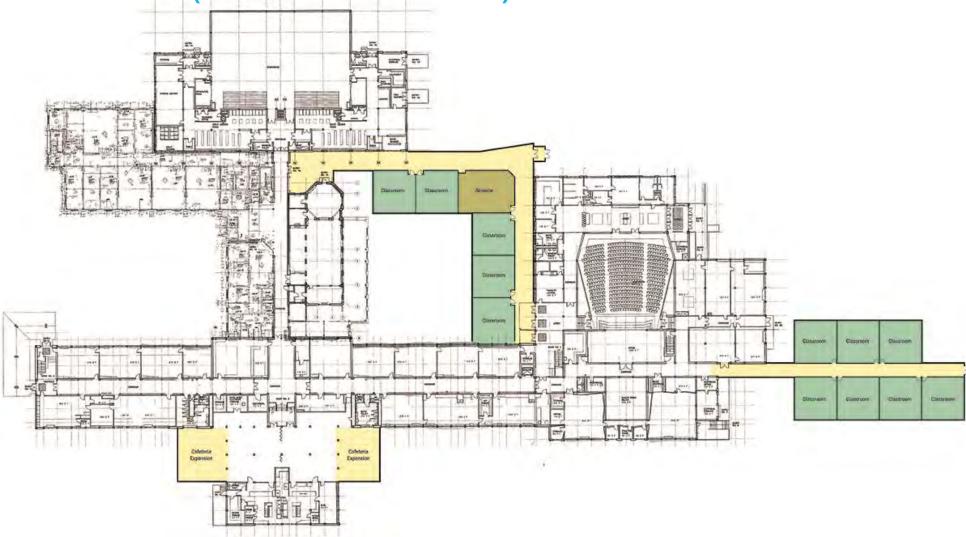




Diamond Middle School: Existing First Floor Plan Lexington Public Schools



## DIAMOND OPTION (IN PROGRESS)



Diamond Middle School: First Floor Plan Lexington Public Schools



## DIAMOND OPTION

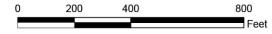


Diamond Middle School: Second Floor Plan Lexington Public Schools





Diamond Middle School – Site Plan Lexington Public Schools





Diamond Middle School – Site Analysis
Lexington Public Schools

WETLAND
FLOODPLAIN









Diamond Middle School – Addition Lexington Public Schools



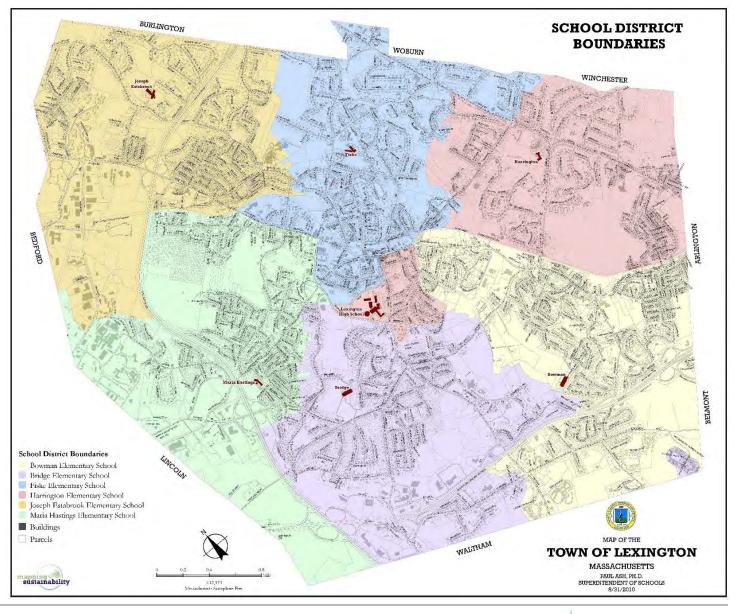
### DISTRICT OPTIONS – MIDDLE SCHOOLS

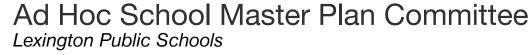
#### COMBINED CAPACITY - 5 & 10 YEAR ENROLLMENT PROJECTION SOLVE FOR 202/255 STUDENTS INCLUDING RIGHT SIZING CLARKE MIDDLE SCHOOL

	Grade Range	Clarke	Diamond	3 <sup>rd</sup> Middle School	Added Capacity	Time Frame	Comments
Phase 1	6 - 8	Prefab Building on North Side, +92, Part A	Bricks & Mortar Addition, +184	NA	+276	5 Year	Exceeds Target of 255
Phase 2 & 3	6 - 8	(3) Story Addition to the East Side, +138 Right Size, -138	Complete	NA	+276	10 Year	Exceeds Target of 255
Option 2	6-8	Right Size Only, -138 (Total 686)	Larger Bricks & Mortar Addition, +255 (Total 1,048)	NA	+ <del>255</del>	<del>10 Year</del>	Equals Target of 255



## CURRENT ELEMENTARY BOUNDARIES







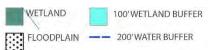
#### **COMPONENT OPTIONS - BOWMAN**

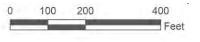
- 1. No Additions (Status Quo): assumes population increase are accommodated elsewhere
- 2. PreFab Additions for temp capacity; (reduce population): repurpose some spaces to better accommodate SPED, music, art, 21<sup>st</sup> C enhancements, and modest future growth
- 3. Addition (classrooms only): to accommodate growth
- 4. Addition (classrooms + increase to "core spaces"): growth + cafe, gym, library, SPED, music, art, , 21st C enhancements
- 5. Standard Modulars for temp capacity; (reduce population): does not address core

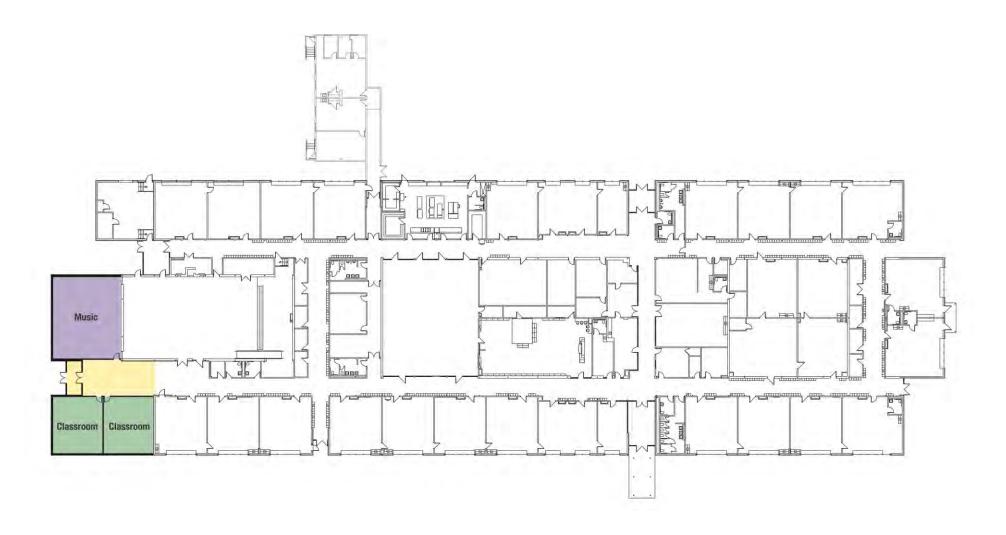


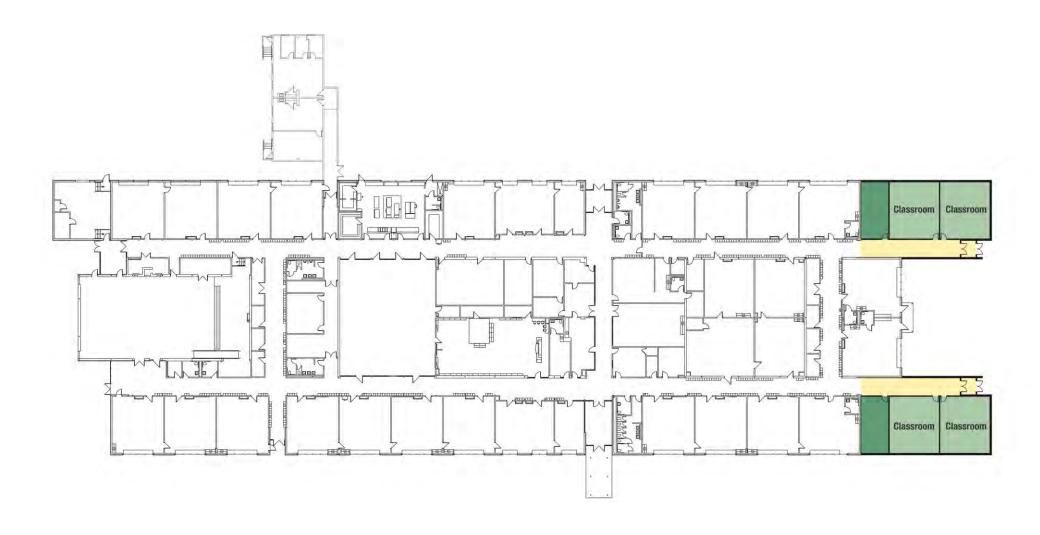


Bowman Elementary School Lexington Public Schools





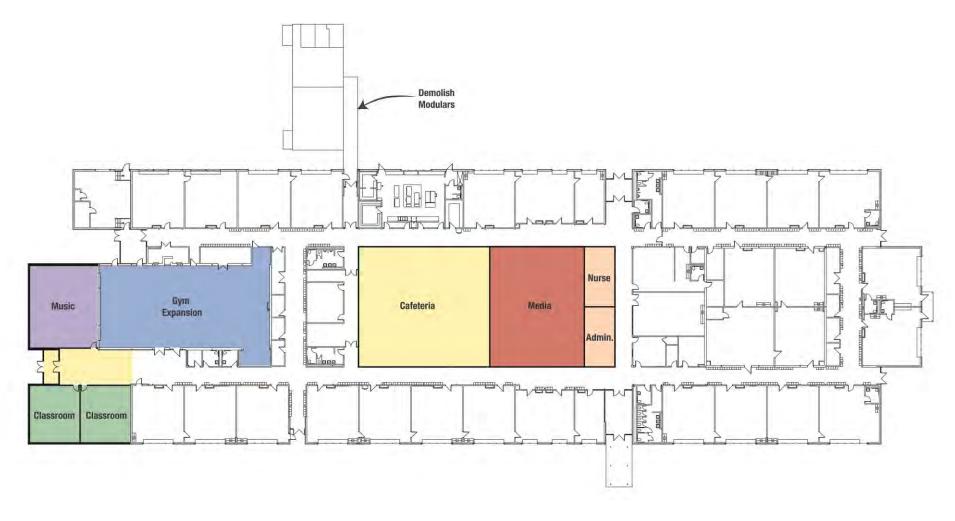








## RIGHT SIZE



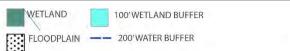
# **COMPONENT OPTIONS - BRIDGE**

- 1. No Additions (Status Quo): assumes population increase are accommodated elsewhere
- 2. PreFab Additions for temp capacity; repurpose some spaces to better accommodate SPED, music, art, 21<sup>st</sup> C enhancements, and modest future growth
- 3. Addition (classrooms only): to accommodate growth
- 4. Addition (classrooms + increase to "core spaces"): growth + cafe, gym, library SPED, music, art, , 21st C enhancements
- 5. Standard Modulars for temp capacity; (reduce population): does not address core





Bridge Elementary School Lexington Public Schools





**SMMA** 

# COMPONENT OPTIONS - ESTABROOK

- 1. No Work (Status Quo):
- 2. Redistrict to take advantage of available space







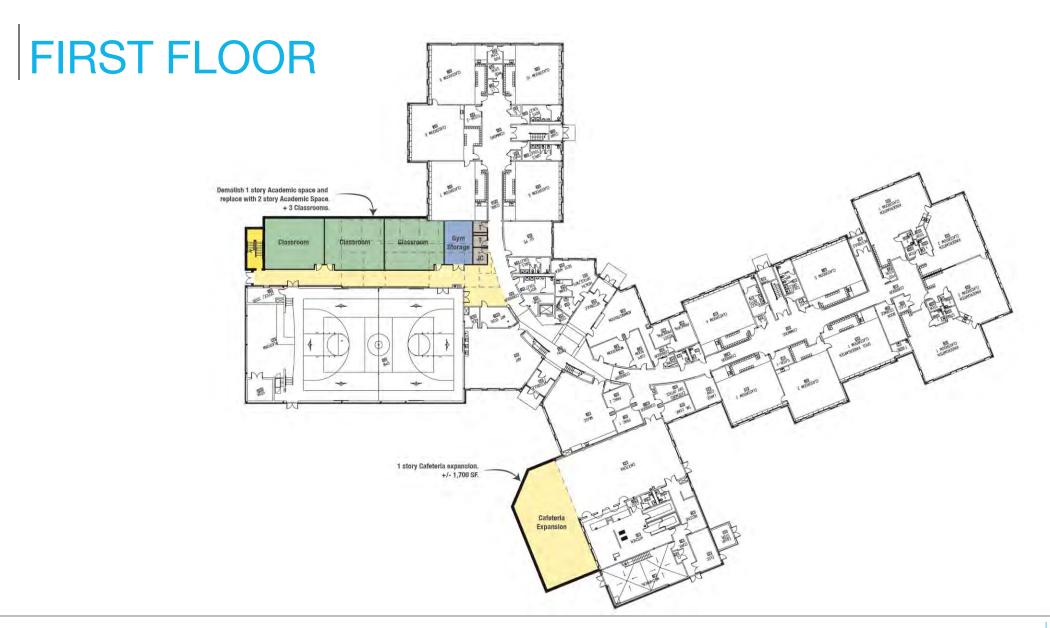
# **COMPONENT OPTIONS - FISKE**

- 1. No Additions (Status Quo): assumes population increase are accommodated elsewhere
- 2. No Additions (reduce population): repurpose some spaces to better accommodate SPED, music, art, 21<sup>st</sup> C enhancements, and modest future growth
- 3. Addition (classrooms only): to accommodate growth
- 4. Addition (classrooms + increase to "core spaces") growth + cafe, SPED, music, art, 21st C enhancements



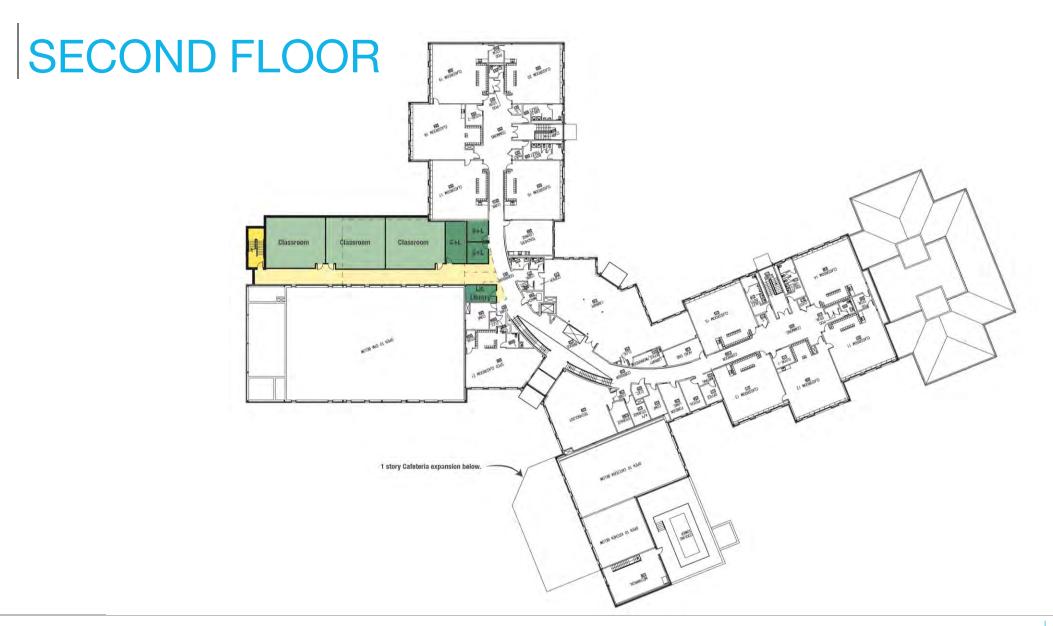








**SMMA** 

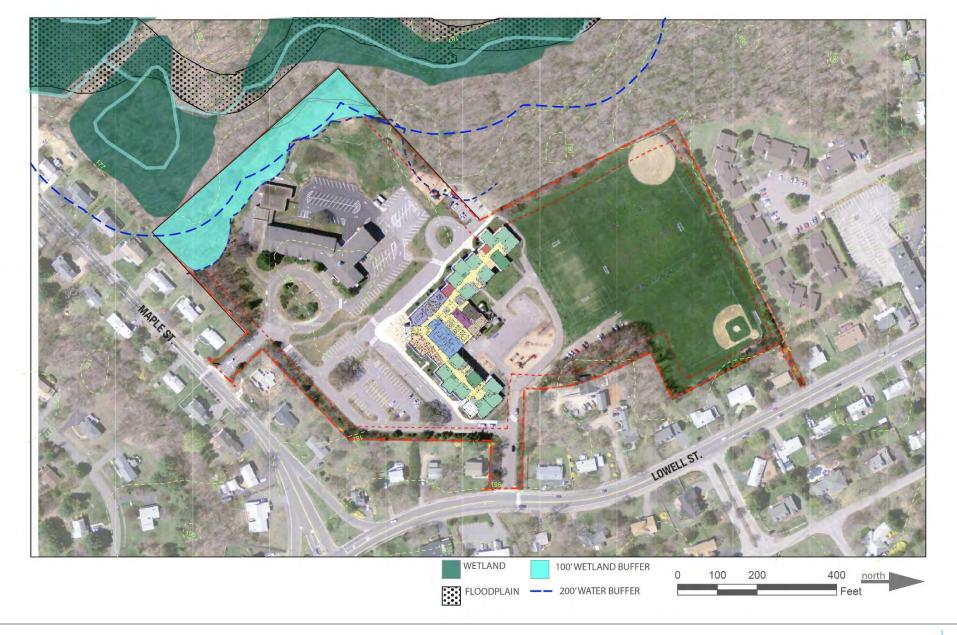




SMMA

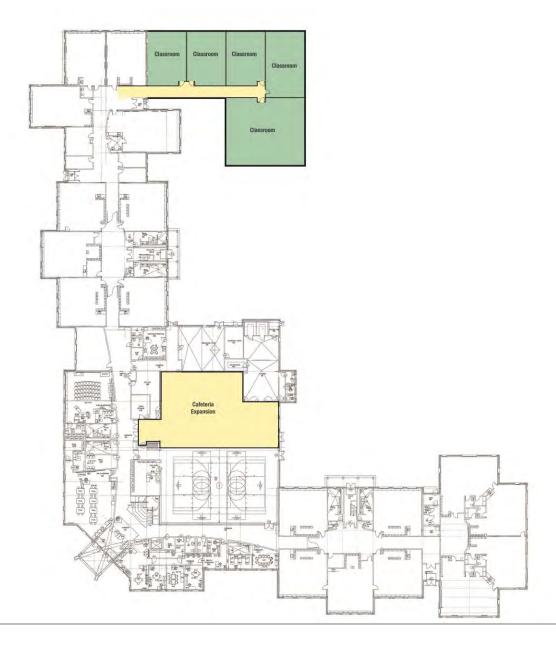
# **COMPONENT OPTIONS - HARRINGTON**

- 1. No Additions (Status Quo): assumes population increase are accommodated elsewhere
- 2. No Additions (reduce population): repurpose some spaces to better accommodate SPED, music, art, 21<sup>st</sup> C enhancements, and modest future growth
- 3. Relocate Pre-K Program (convert 3+ to ES classrooms)
- 4. Addition (classrooms only): item 3+ to accommodate growth
- 5. Addition (classrooms + increase to "core spaces"): growth + cafe, gym, SPED, music, art, 21st C enhancements











# COMPONENT OPTIONS - HASTINGS

- 1. Capital Project (for 532 students 4 sections)
- 2. Capital Project (for 665 students 5 sections)

Variables: MSBA Schedule and MSBA approved size

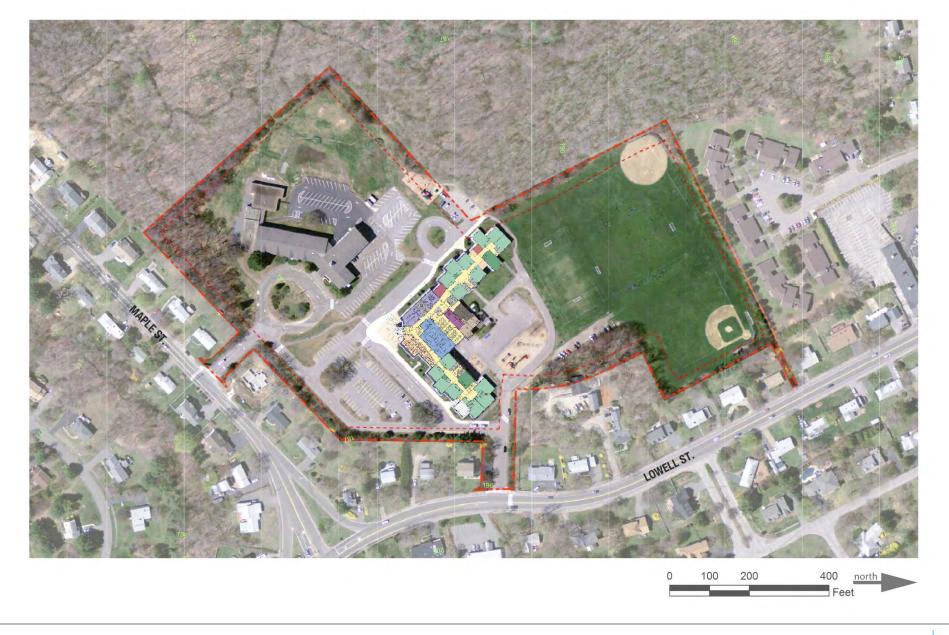






# COMPONENT OPTIONS – CENTRAL ADMINISTRATION BUILDING SITE

- 1. Central Admin Leases Space in an Office Building
- 2. Capital Project (convert to K-5): Renovation
- 3. Capital Project (new K-5): Remove Existing Building
- 4. Capital Project (new Early Childhood, Pre-K / K)
- 5. Central Administration Remains, New Pre-K Behind

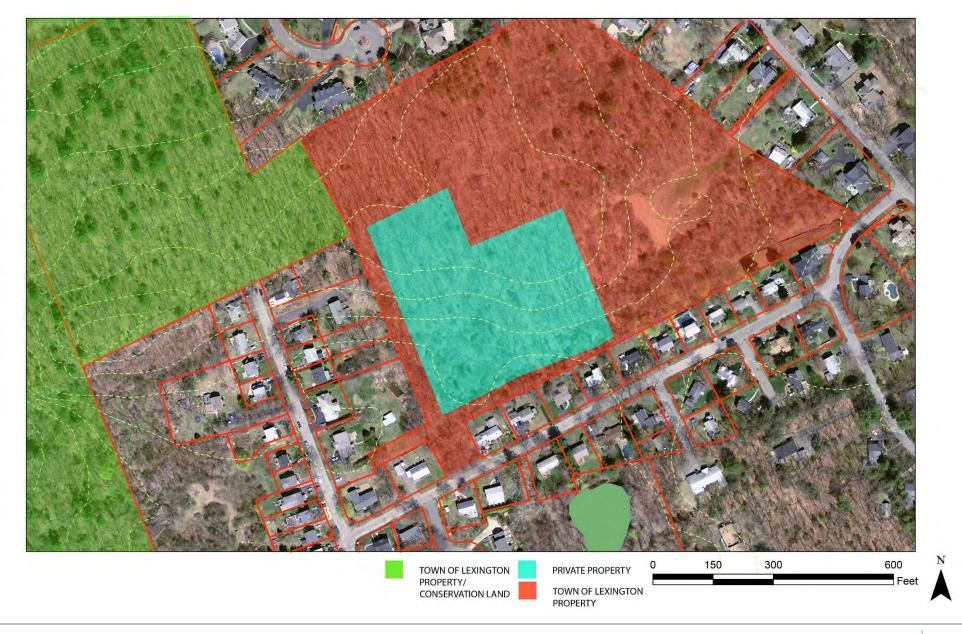






# COMPONENT OPTIONS – LACONIA STREET SITE

- 1. Capital Project (new K-5) limited access to site
- 2. New Pre-K building small program and limited traffic makes this site a potential building location; recommend acquisition of private site within the boundaries of the site.
- 3. Capital Project (new Early Childhood, Pre-K / K) likely too large for the site
- 4. Develop for Recreation Fields (swap for ES fields)







### **ELEMENTARY SCHOOL SECTIONS**

Sections	1	2	3	4	5	6
Kindergarten Classrooms (@18 students)	18	36	54	72	90	108
Grades 1-5 Classrooms (@ 23 students)	115	230	345	460	575	690
Total Students per School	133	266	399	532	665	798

#### **Example: 3 Section School**

 $3 \times 18$  kindergarten students = 54 students

5 grades x 3 / grade section = 15 sections 1-5 classrooms

5 grade 1-5 classrooms x 23 students = 345

Total Students in 3 section school = 399

Note: 90% Utilization Factor Recommendation

Ad Hoc School Master Plan Committee Lexington Public Schools



## DISTRICT OPTIONS - ELEMENTARY SCHOOLS

#### **COMBINED CAPACITY** - 5 & 10 YEAR ENROLLMENT PROJECTION SOLVE FOR 500 STUDENTS INCLUDING RIGHT SIZING EXISTING ELEMENTARY SCHOOLS

	Bowman ES	Bridge ES	Estabrook ES	Fiske ES	Harrington ES	Phase 2 Hastings ES	Central Administration Site (Old Harrington)	Added Capacity
1,	Status Quo	Status Quo	Growth + Redistricting +96 Students	Status Quo	Expand Pre-K in current location	MSBA Capital Project (+239 Students) 5 Sections/Grade	-	335 Students 5 Year Solution
2.	Status Quo	Status Quo	Growth + Redistricting +96 Students	Status Quo	Expand Pre-K in current location; Remove 1 Pod, replace w/2 story (+69 students)	MSBA Capital Project (+239 Students) 5 Sections/Grade	-	404 Students 5 Year Solution
3.	Status Quo	Status Quo	Growth + Redistricting +96 Students	Status Quo	Remove Pre-K Pod (replace w/2 story (+129 students)	MSBA Capital Project (+239 Students) 5 Sections/Grade	Pre-K Pre-Fabricated Building	464 Students 10 Year Solution
4.	Right Size (4 sections) -46	Right Size (4 sections) -46	Growth + Redistricting +96 Students	Add 4 classrooms (3 Gen Ed) (+69 students)	Remove Pre-K (+69 students) Remove 1 Pod, replace w/2 story (+69 students	MSBA Capital Project (+239 Students) 5 Sections/Grade	Pre-K Pre-Fabricated Building	450 Students 10 Year Solution
5.	Right Size (4 sections) -46	Right Size (4 sections) -46	Growth + Redistricting +96 Students	Status Quo	Remove Pre-K (+69 students)	MSBA Capital Project (+239 Students) 5 Sections/Grade	New PreK –K building to replace Old Harrington +529 students + PreK	841 Students 10 Year Solution
6.	Add/Reno (+87 students) 5 Sections/Grade	Add/Reno (+92 students) 5 Sections/Grade	Growth + Redistricting +96 Students	Add/Reno (+43 students) 4 Sections/Grade	Add/Reno (+86 students) 4 Section/Grade	MSBA Capital Project (+239 Students) 5 Sections/Grade	-	643 Students 10 Year Solution

### DISTRICT OPTIONS – MIDDLE SCHOOLS

#### COMBINED CAPACITY - 5 & 10 YEAR ENROLLMENT PROJECTION SOLVE FOR 202/255 STUDENTS INCLUDING RIGHT SIZING CLARKE MIDDLE SCHOOL

	Grade Range	Clarke	Diamond	3 <sup>rd</sup> Middle School	Added Capacity	Time Frame	Comments
Phase 1	6 - 8	Prefab Building on North Side, +92, Part A	Bricks & Mortar Addition, +184	NA	+276	5 Year	Exceeds Target of 255
Phase 2 & 3	6 - 8	(3) Story Addition to the East Side, +138 Right Size, -138	Complete	NA	+276	10 Year	Exceeds Target of 255
Option 2	6-8	Right Size Only, -138 (Total 686)	Larger Bricks & Mortar Addition, +255 (Total 1,048)	NA	+ <del>255</del>	<del>10 Year</del>	Equals Target of 255



# GETTING TO 5 YEARS – DISTRICT OPTION 1

							Master	Plan Capacity a	ind Schedule	Impacts - Dist	rict Option 1									
	2014-15 Current Population	Appropriations Spring 2015	2015-16 Pop Increase	Capacity	Appropriations Spring 2016	2016-17 Pop Increase	Capacity		2017-18 Pop Increase	Capacity	Appropriations	2018-19 Pop increase	Capacity	Appropriations	2019-20 Pop Increase	Capacity	Appropriations	2020-21 Pop Increase	Capacity	2020-2025 Future Population
PreK (Harrington Addition) demo, B&M addition		\$ for design		-	\$ for const					150 FTE										TBD
Bowman Elementary School PreFab or Std Portables, Temp Capacity, 3+/- Classrooms	576	\$ Design & Construction		.576		69	645			645			645			645	\$ right size reno		645	532
Bridge Elementary School PreFab, Temp Capacity, Right Size	585	\$ Design & Construction		585		69	654			654			654			654	\$ right size reno		654	532
Estabrook Elementary School no work	500	*	96 if filled to capacity	596		96 if filled to capacity	596		96 if filled to capacity	596		96 if filled to capacity	596		96 If filled to capacity	596		96 if filled to capacity	596	596
Fiske Elementary School no work	489	-		489			489			489			489			489			489	489
Harrington Elementary School expand PreK see above	446			446			446			446			446			446			446	446
Hastings Elementary School Assumes new or renovated 5 sections	426	\$ for MSBA Feasibility Study		468	\$ for construction		468			468			468			468		239	665	665
Elementary Total Capacity Elementary Requirement	3,022			3,160 3,049			3,298 3,085	1		3,298 3,121			3,298 3,157			3,298 3,193		335	3,495 3,239	3,260 3,438
Clarke Middle School PreFab Addition	820	\$ Design & Construction		828		92	912			912			912			912			912	912
Diamond Middle School	780	\$ for design & standard portables		828	\$ for const		828			828		322	964			964			964	964
Middle School Total Middle Schools Requirement	1,600		-0-	1,656 1,653		92	1,/40 1,/33			1,740 1,775			1,876 1,805				5 Redistricting to o		1,876 1,888	1,876 1,872

Ad Hoc School Master Plan Committee Lexington Public Schools



# GETTING TO 5 YEARS – DISTRICT OPTION 4

						M	aster Plan	Capacity an	nd Schedu	le Impacts	- District O	ption 4								
	2014-15.  Current Population	Appropriations Spring 2015	2015-16 Pop Increase	Capacity	Appropriations Spring 2016	2016-17	Capacity		2017-18 s Pop Increase			2018-19 as Pop Increase	Capacity	Appropriations	2019-20 Pop Increase	Capacity	Appropriations	2020-21 Pop Increase	Capacity	2020-2025 Future Population
PreK (Central Administration Site) PreFab building	100 FTE	\$ for design & construction					150FTE		1	180 FTE										TBD
Bowman Elementary School PreFab, Temp Capacity, Right Size	576	\$ Design & Construction		576		69	645			645			645			645	\$ right size reno		532	532
Bridge Elementary School PreFab, Temp Capacity, Right Size	585	\$ Design & Construction		.585		69	654		r.	654			654			654	\$ right size reno		532	532
Estabrook Elementary School	500		96 if filled to capacity	596		96 if filled to capacity	596		96 if filled to capacity	596		96 if filled to capacity	596		96 if filled to capacity	596		96 if filled to capacity	596	596
Fiske Elementary School B&M addition	489	\$ Design		489	\$ for construction		489		69	558			558			558			558	558
Harrington Elementary School B&M addition	446	\$ Design		446	\$ for construction		446		138	584			584			584			584	584
Hastings Elementary School Assumes new or renovated 5 sections	426	\$ for MSBA Feasibility Study		468	\$ for construction		468			468			468			468		239	665	665
Elementary Total Capacity Elementary Requirement	3,022			3,160 3,049			3,298 3,085			3,505 3,121			3,505 2,157			3,505 3,193		335	3,467 3,239	3,467 3,438
Clarke Middle School PreFab Addition	820	\$ Design & Construction				92	912			912			912			912			912	912
Diamond Middle School	780	\$ for design & standard portables		-	\$ for const		828			828		322	964			964			964	964
Middle School Total Middle Schools Requirement	1,600		0	0 1,653		92	1,740			1,740			1,876 1,805			1,87	76 Redistricting to o	ccur with the	1,876 1,888	

Ad Hoc School Master Plan Committee Lexington Public Schools



# Discussion

