



## Barrington Public Schools Facility Committee Meeting Development of Preliminary Options



January 26, 2010



## Discussion Outline

- I. Planning Assumptions
- II. Enrollment Projections
- III. Summary of Elementary School  
Classroom Space
- IV. Option Development



## Planning Assumptions

### Met with School District Administrators and Principals

- Discussed and prioritized school space needs
- Developed educational parameters for plan development
- Identified several options to meet programmatic needs



## Planning Assumptions

### Educational Planning Assumptions

1. Priority deferred maintenance needs should be addressed
2. Pre-K Program could support (3) classrooms instead of current (2) classrooms
  - o 750-800 NSF per classroom with toilet rooms
  - o 15 students per classroom – 50/50 ratio of special needs students
  - o Doesn't have to be located in elementary schools – could provide programmatic opportunities for Middle School or High School
3. Full-day Kindergarten would be ideal
4. Centralized Kindergarten or Early Childhood Center (grades K-2) should be investigated
5. Students should stay in the same school for a minimum of three grades (exception for centralized kindergarten)



## Planning Assumptions

### Educational Planning Assumptions (Continued)

6. Class-size recommendations (Based upon current classroom sizes)
  - o Kindergarten – (17) ½-day students, (20) full-day students
  - o 1<sup>st</sup> -2<sup>nd</sup> Grades – (20) students
  - o 3<sup>rd</sup> Grade – (22) students
  - o 4<sup>th</sup>-5<sup>th</sup> Grade – (23) students
  - o Middle School/High School – (25) student average
7. Elementary Schools need separate Music and Art for existing populations
8. Elementary Schools should have dedicated Computer Lab
9. Each school needs dedicated conference room
10. Each school needs appropriate space for OT/PT, speech, reading, psychologist, social worker, ELL, resource room (total of 2,800 NSF)



## Planning Assumptions

### Educational Planning Assumptions (Continued)

11. Separate gymnasium & cafeteria is ideal
  - o Existing spaces are better cafeterias
  - o Hampden Meadows is too small for either function
12. Main Office space and school security need to be addressed
13. Health Offices need appropriate size, access, and privacy
14. Nayatt and Primrose Hill needs appropriate library space
15. Schools need appropriate faculty rooms (issue at Sowams and Hampden Meadows)
  - o Hampden Meadows also needs additional staff toilet rooms
16. Schools should have appropriate storage
17. Schools need adequate parking



# Planning Assumptions

## Educational Planning Assumptions (Continued)

- 18. Middle School renovations should improve cohesion of Team program spaces
- 19. Middle School "6<sup>th</sup> grade wing" is highest priority
- 20. Middle School model could include 5<sup>th</sup> Grade
- 21. High School needs focus on deferred maintenance repairs



# Enrollment Projections NESDEC Projections

<u>Grade</u>	<u>Current</u>	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>2013/14</u>	<u>2014/15</u>
K	185	184	161	139	173	166
1	243	235	233	204	176	219
2	263	252	244	242	212	182
3	258	268	257	249	247	216
4	288	264	275	263	255	253
5	249	291	267	278	266	258
6	237	253	296	272	283	271
7	273	243	259	303	279	290
8	269	273	243	259	303	279
9	257	267	271	241	257	300
10	303	253	262	266	237	253
11	297	300	250	259	263	235
12	276	290	293	244	253	256
<b>Total</b>	<b>3,398</b>	<b>3,373</b>	<b>3,311</b>	<b>3,219</b>	<b>3,204</b>	<b>3,178</b>
Index	100.0	99.3	97.4	94.7	94.3	93.5

Enrollment Projections based upon the New England School Development Council (NESDEC) 2009-10 Enrollment Projections – November 30, 2009



## Enrollment Projections Maximum Capacities

<u>Grade</u>	<u>Current Students</u>	<u>Projected Enrollment</u>	<u>Students per Classroom</u>	<u># of Classrooms</u>	<u>Maximum Students</u>
K	185	166	17 (20)	5 (9)	170 (180)
1	243	219	20	11	220
2	263	182	20	10	200
3	258	216	22	10	220
4	288	253	23	11	253
5	249	258	23	12	276
6	237	271	25	11	275
7	273	290	25	12	300
8	269	279	25	12	300
9	257	300	25	12	300
10	303	253	25	11	275
11	297	235	25	10	250
12	276	256	25	11	275
<b>Total</b>	<b>3,398</b>	<b>3,178</b>		<b>133</b>	<b>3,324</b>

Kindergarten numbers represent ½-day kindergarten (full-day kindergarten)



## Summary of Existing Space

	<u>Barrington High</u>	<u>Barrington Middle</u>	<u>Hampden Meadows</u>	<u>Primrose Hill</u>	<u>Nayatt</u>	<u>Sowams</u>
Grades Served	9-12	6-8	4-5	Pre-K-3	Pre-K-3	K-3
Size (gross square feet)	189,000	147,000	49,350	36,000	34,000	29,300
# of Students (Oct. 2008)	1,133	779	537	344	368	272
SF per Student	167	189	92	105	92	108
State Guidelines SF per Student	185	160	159	173	171	180
Variance						
- SF per Students	18	(29)	67	68	79	72
- Total GSF Potential Impact	20,605	(22,360)	36,033	23,512	28,928	19,660



## Summary of Existing Space Elementary School Classrooms

Grade	Existing General Classrooms				Total
	Primrose		Hampden		
	Nayatt	Hill	Sowams	Meadows	
Pre-K	1	1			2
K	2	2	2		6
1	4	5	4		13
2	5	4	4		13
3	5	4	3		12
4				12	12
5				10	10
<b>Total</b>	<b>17</b>	<b>16</b>	<b>13</b>	<b>22</b>	<b>68</b>

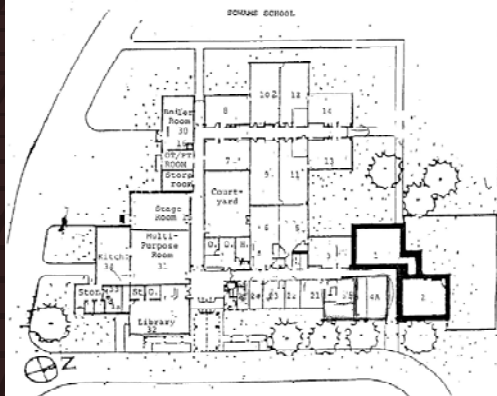


## Option Development

- Option 1 – Maintain current grade alignment and construct additions as necessary
- Option 2 – Centralize Kindergarten and construct additions as needed
- Option 3 – Centralize Kindergarten and Construct new Middle School for grades 5-8; Demolish existing Middle School
- Option 4 – Centralize all grades – Pre-K – 2, 3 – 5, 6 – 8, and 9 – 12; construct new Middle School and re-use existing Middle School
- Option 5 – Construct new Middle School, centralize kindergarten, and provide (2) grades 1-4 schools; demolish Nayatt and Primrose Hill
- Option 6 – Construct new Middle School for grades 5-8, (4) Pre-K – 4 schools, and demolish existing Middle School
- Option 7 – (4) Pre-K – 4 schools, relocate 5<sup>th</sup> grade to Middle School addition



# Option 1 – Additions Only Sowams Elementary School

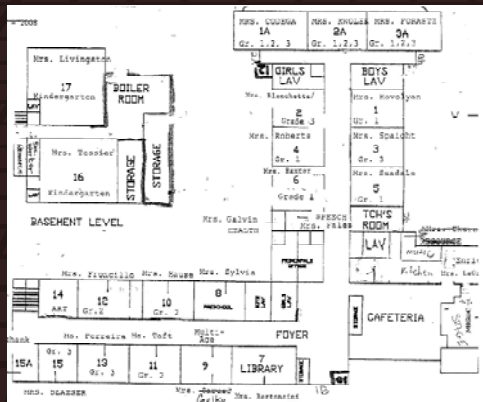


Space Needs	NSF
Convert (1) classroom for other use	(850)
Pre-K Classroom	850
Art Room	1,150
Music Room	1,350
Gymnasium	6,300
Special Education Spaces	1,500
Nurses Office	510
Faculty Room	300
<b>Total Net Square Feet</b>	<b>11,110</b>
<b>Total Gross Square Feet</b>	<b>15,871</b>
Existing GSF	29,300
Addition	15,871
<b>Total Building Size</b>	<b>45,171</b>
State Guidelines SF per Student	180
Total Allowable Building Size	46,080
Variance to addition	909

Grade	Current Enrollment			Projected Enrollment			Maximum Students
	Current Students	Current Classrooms	Students/Classroom	Projected Enrollment	Projected Students/Classroom	# of Classrooms	
Pre-K	0	0	0.0	15	15	1	15
K	59	2	14.8	53	17	2	68
1	74	4	18.5	67	20	4	80
2	76	4	19.0	53	20	3	60
3	63	3	21.0	53	22	3	66
<b>Total</b>	<b>272</b>	<b>13</b>		<b>241</b>		<b>13</b>	<b>289</b>



# Option 1 – Additions Only Nayatt Elementary School

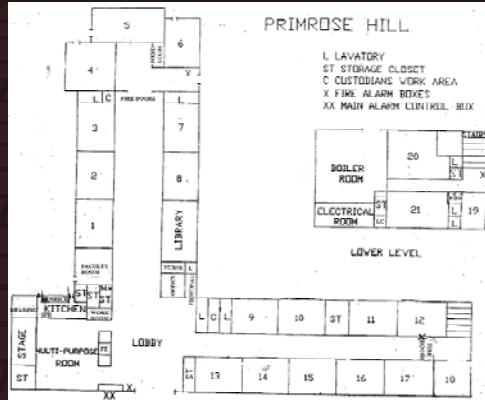


Space Needs	NSF
Convert (2) classrooms for other use	(1,400)
Music Room	1,350
Gymnasium	6,300
Special Education Spaces	3,000
Expand Main/Nurses Offices	2,010
Conference Room	400
Expand Library/Computer Room	1,525
<b>Total Net Square Feet</b>	<b>13,185</b>
<b>Total Gross Square Feet</b>	<b>18,836</b>
Existing GSF	34,000
Addition	18,836
<b>Total Building Size</b>	<b>52,836</b>
State Guidelines SF per Student	180
Total Allowable Building Size	55,080
Variance to addition	2,244

Grade	Current Enrollment			Projected Enrollment			Maximum Students
	Current Students	Current Classrooms	Students/Classroom	Projected Enrollment	Projected Students/Classroom	# of Classrooms	
Pre-K	15	1	15.0	15	15	1	15
K	61	2	15.3	55	17	2	68
1	83	4	20.8	75	20	4	80
2	107	5	21.4	75	20	4	80
3	102	5	20.4	86	22	4	88
<b>Total</b>	<b>368</b>	<b>17</b>		<b>306</b>		<b>15</b>	<b>331</b>



## Option 1 – Additions Only Primrose Hill Elementary School

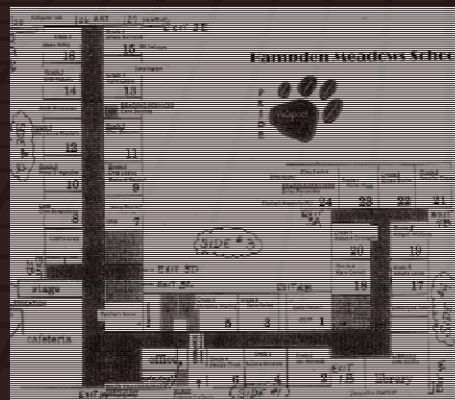


Space Needs	NSF
Convert (2) classrooms for other us	(1,400)
Gymnasium	6,300
Special Education Spaces	2,300
Expand Main/Nurses Offices	2,010
Conference Room	400
Expand Library/Computer Room	1,000
<b>Total Net Square Feet</b>	<b>10,610</b>
<b>Total Gross Square Feet</b>	<b>15,157</b>
Existing GSF	36,000
Addition	15,157
<b>Total Building Size</b>	<b>51,157</b>
State Guidelines SF per Student	180
Total Allowable Building Size	52,380
Variance to addition	1,223

Grade	Current Enrollment			Projected Enrollment			
	Current Students	Current Classrooms	Students/Classroom	Projected Enrollment	Projected Students/Classroom	# of Classrooms	Maximum Students
Pre-K	15	1	15.0	15	15	1	15
K	68	2	17.0	62	17	2	68
1	88	5	17.6	80	20	4	80
2	79	4	19.8	55	20	3	60
3	94	4	23.5	79	22	4	88
<b>Total</b>	<b>344</b>	<b>16</b>		<b>291</b>		<b>14</b>	<b>311</b>



## Option 1 – Additions Only Hamden Meadows Elementary School

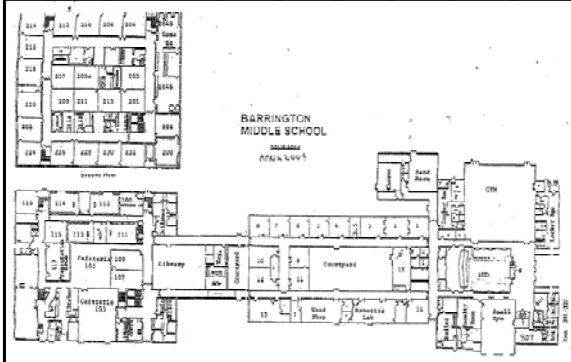


Space Needs	NSF
(1) Additional Classroom	850
Gymnasium	6,300
Special Education Spaces	800
Expand Main/Nurses Offices	2,010
Faculty Room	300
Expand Cafeteria	1,353
<b>Total Net Square Feet</b>	<b>11,613</b>
<b>Total Gross Square Feet</b>	<b>16,589</b>
Existing GSF	49,350
Addition	16,589
<b>Total Building Size</b>	<b>65,939</b>
State Guidelines SF per Student	156
Total Allowable Building Size	79,716
Variance to addition	13,777

Grade	Current Enrollment			Projected Enrollment			
	Current Students	Current Classrooms	Students/Classroom	Projected Enrollment	Projected Students/Classroom	# of Classrooms	Maximum Students
4	288	12	24.0	253	23	11	253
5	249	10	24.9	258	23	12	276
<b>Total</b>	<b>537</b>	<b>22</b>		<b>511</b>		<b>23</b>	<b>529</b>



## Option 1 – Additions Only Barrington Middle School



Space Needs	NSF
Relocate Science Labs & Resource w/ Teams	-
Team Meeting Areas	2,700
(3) Add. Classrooms (World Language/Health)	2,400
Music Computer Lab	1,000
Conference/Office Areas	500
Adaptive P/E	800
Capture Underutilized Space	(4,651)
<b>Total Net Square Feet</b>	<b>2,749</b>
<b>Total Gross Square Feet</b>	<b>3,927</b>
Existing GSF	147,000
Addition	3,927
<b>Total Building Size</b>	<b>150,927</b>
State Guidelines SF per Student	160
<b>Total Allowable Building Size</b>	<b>134,400</b>
Variance to addition	(16,527)

Grade	Current Enrollment			Projected Enrollment			
	Current Students	Current Classrooms	Students/Classroom	Projected Enrollment	Students/Classroom	# of Classrooms	Maximum Students
6	237	14	16.9	271	25	11	275
7	273	10	27.3	290	25	12	300
8	269	10	26.9	279	25	12	300
<b>Total</b>	<b>779</b>	<b>34</b>		<b>840</b>		<b>35</b>	<b>875</b>

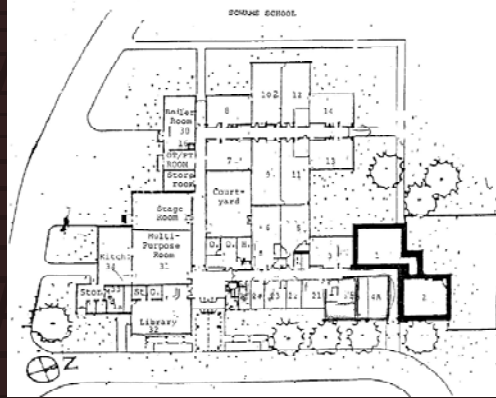


## Option 1 – Additions Only Summary of Space Needs

	Existing Space	Additions	Projected Space
Nayatt	34,000	18,836	52,836
Primrose Hill	36,000	15,157	51,157
Sowams	29,300	15,871	45,171
Hampden Meadows	49,350	16,589	65,939
Middle School	147,000	-	147,000
<b>Total</b>	<b>295,650</b>	<b>66,454</b>	<b>362,104</b>



## Option 2 – Centralize Kindergarten Sowams Elementary School



Grade	Current Enrollment			Projected Enrollment			
	Current Students	Current Classrooms	Students/Classroom	Projected Enrollment	Students/Classroom	# of Classrooms	Maximum Students
Pre-K	0	0	0.0	45	15	3	45
K	59	2	14.8	166	20	9	180
1	74	4	18.5				
2	76	4	19.0				
3	63	3	21.0				
<b>Total</b>	<b>272</b>	<b>13</b>		<b>211</b>		<b>12</b>	<b>225</b>



## Option 2 – Centralize Kindergarten Remaining Elementary School

Grade	Current Enrollment			Projected Enrollment			
	Current Students	Current Classrooms	Students/Classroom	Projected Enrollment	Students/Classroom	# of Classrooms	Maximum Students
Pre-K	30	2	15.0				
K	129	4	32.3				
1	171	9	19.0	196	20	10	200
2	186	9	20.7	198	20	10	200
3	196	9	21.8	204	22	10	220
4	288	12	24.0	337	23	15	345
5	249	10	24.9	259	23	12	276
<b>Total</b>	<b>1090</b>	<b>49</b>		<b>1194</b>		<b>57</b>	<b>1241</b>

Space Needs	NSF
(8) Additional Classrooms	6,800
All Additional Spaces	35,408
<b>Total Net Square Feet</b>	<b>42,208</b>
<b>Total Gross Square Feet</b>	<b>60,297</b>



## Option 3 – Construct 5-8 Middle School w/ Centralized Kindergarten

Centralize Pre-K and Kindergarten into Sowams

Grades 1-4 housed in remaining (3) Elementary Schools

Grade	Current Enrollment			Projected Enrollment			
	Current Students	Current Classrooms	Students/Classroom	Projected Enrollment	Students/Classroom	# of Classrooms	Maximum Students
Pre-K	30	2	15.0				
K	129	4	32.3				
1	171	9	19.0	196	20	10	200
2	186	9	20.7	198	20	10	200
3	196	9	21.8	204	22	10	220
4	288	12	24.0	337	23	15	345
5	249	10	24.9				
<b>Total</b>	<b>1090</b>	<b>49</b>		<b>935</b>		<b>45</b>	<b>965</b>

Construct New Middle School Serving Grades 5-8

Number of Students	1,098
State Allowance SF/Student	160
<b>Total Allowable GSF</b>	<b>175,680</b>

Demolish Existing Middle School



## Option 4 – Centralized Schools

Early Childhood Center (Pre-K – 2) in Hampden Meadows

Grade	Current Enrollment			Projected Enrollment			
	Current Students	Current Classrooms	Students/Classroom	Projected Enrollment	Students/Classroom	# of Classrooms	Maximum Students
Pre-K				45	15	3	45
K				166	20	9	180
1				219	20	11	220
2				182	20	10	200
3							
4	288	12	24.0				
5	249	10	24.9				
<b>Total</b>	<b>537</b>	<b>22</b>		<b>612</b>		<b>33</b>	<b>645</b>

Grades 3-5 housed in Existing Middle School

Construct New Middle School Serving Grades 5-8

Number of Students	1,098
State Allowance SF/Student	160
<b>Total Allowable GSF</b>	<b>175,680</b>

Demolish Nayatt, Primrose Hill, and Sowams

Hampden Meadows Space Needs	NSF
Construct Kindergarten/Pre-K Room	13,200
Gymnasium	6,300
Special Education Spaces	800
Expand Main/Nurses Offices	2,010
Faculty Room	300
Expand Cafeteria	1,353
<b>Total Net Square Feet</b>	<b>23,963</b>
<b>Total Gross Square Feet</b>	<b>34,232</b>
Existing GSF	49,350
Addition	34,232
<b>Total Building Size</b>	<b>83,582</b>
State Guidelines SF per Student	156
<b>Total Allowable Building Size</b>	<b>95,472</b>
Variance to addition	11,890



## Option 5 – Construct New Middle School w/ (2) Grades 1-4 Schools

Centralized Kindergarten at Sowams

Grades 1-4 housed in Existing Middle School and Hampden Meadows

Grade	Current Enrollment			Projected Enrollment			
	Current Students	Current Classrooms	Students/Classroom	Projected Enrollment	Students/Classroom	# of Classrooms	Maximum Students
Pre-K							
K							
1				219	20	11	220
2				182	20	10	200
3				216	22	10	220
4	288	12	24.0	253	23	11	253
5	249	10	24.9				
6	237	14	16.9				
7	273	10	27.3				
8	269	10	26.9				
<b>Total</b>	<b>1316</b>	<b>56</b>		<b>870</b>		<b>42</b>	<b>893</b>

Construct New Middle School Serving Grades 5-8

Number of Students	1,098
State Allowance SF/Student	160
<b>Total Allowable GSF</b>	<b>175,680</b>

Demolish Nayatt and Primrose Hill



## Option 6 – Construct New Middle School w/ (4) Pre-K – 4 Schools

Convert all existing Elementary Schools to Pre-K – 4<sup>th</sup> Grade

Grade	Current Enrollment			Projected Enrollment			
	Current Students	Current Classrooms	Students/Classroom	Projected Enrollment	Students/Classroom	# of Classrooms	Maximum Students
Pre-K	30	2	15.0	45	15	3	45
K	185	6	15.4	166	20	9	180
1	243	13	18.7	219	20	11	220
2	263	13	20.2	182	20	10	200
3	258	12	21.5	216	22	10	220
4	288	12	24.0	253	23	11	253
5	249	10	24.9	258	23	12	276
<b>Total</b>	<b>1301</b>	<b>60</b>		<b>1339</b>		<b>66</b>	<b>1394</b>

Convert Classrooms in Hampden Meadows for Kindergarten

Construct New Middle School Serving Grades 5-8

Number of Students	1,098
State Allowance SF/Student	160
<b>Total Allowable GSF</b>	<b>175,680</b>



## Option 7 – Construct Middle School Addition for Grades 5&6 w/ (4) Pre-K – 4 Schools

Convert all existing Elementary Schools to Pre-K – 4<sup>th</sup> Grade

Construct New Middle School Serving Grades 5-8

- Renovate 2-story Section
- Reconstruct/Add on to “6<sup>th</sup> Grade Wing”

<u>Space Needs</u>	<u>NSF</u>
# of Students	1,098
State Guidelines SF per Student	160
Total Allowable Building Size	175,680
Existing GSF	147,000
Allowable Addition	28,680



## Option Summary

	<u>Existing Space</u>	<u>Additions</u>	<u>Demolition</u>	<u>Projected Space</u>
Option 1	484,650	66,454		551,104
Option 2	484,650	60,297		544,947
Option 3	484,650	175,680	(147,000)	513,330
Option 4	484,650	209,912	(99,300)	595,262
Option 5	484,650	175,680	(70,000)	590,330
Option 6	484,650	175,680		660,330
Option 7	484,650	28,680		513,330