

# WALPOLE PUBLIC SCHOOLS



12/31/2016

## SECONDARY SCHOOLS SPACE OPTIONS STUDY

A Study to investigate the feasibility of converting the current Walpole High School into a combined Middle School and constructing a new High School on the site of the current Bird Middle School.

*Drummey Rosane Anderson, Inc.*



# Walpole Public schools

## SECONDARY SCHOOLS SPACE OPTIONS STUDY

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## ACKNOWLEDGEMENTS

This Study was commissioned by the Town of Walpole acting through the Walpole School Committee. It was funded by the Commonwealth Community Compact.

Numerous individuals and committees participated in the process of developing and reviewing the information and findings of this Study, including:

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### Walpole School Committee

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### Walpole Town Administrator

James A. Johnson

Reviewers/Contributors also included the Walpole Board of Selectmen, Finance Committee, and Building Committee

**EXECUTIVE SUMMARY**

## EXECUTIVE SUMMARY

In the Spring of 2016, the Town of Walpole commissioned this Secondary Space Options Study to investigate the feasibility of combining their two middle schools into a single middle school to be located in the current Walpole High School, and to investigate the feasibility of constructing a new high school on the site of the current Bird Middle School. This goal was consistent with Walpole's Statements of Interest (SOI) submitted to the Massachusetts School Building Authority (MSBA) in March of 2016.

### Existing Conditions:

In 2013 a facilities assessment study of Walpole's two middle schools was performed by CDR Maguire. As summarized in Walpole's Statement of Interest to the MSBA, the conditions of these schools are "deficient and or obsolete when compared to modern code and guidelines". Many spaces are lacking, undersized or functionally inappropriate for 21<sup>st</sup> century education. Most building systems and materials are at the end of their useful life.

The current Walpole High School is in good physical condition, but is significantly overcrowded and lacking in appropriate spaces that can support 21<sup>st</sup> century education. The overall size of the building is approximately 190,000 square feet as compared to the MSBA guidelines that suggest that a High School for 1,250 students should be 225,000 sf. Several spaces are undersized including typical classrooms, science labs, the gymnasium, auditorium, and cafeteria. Educational flexibility is limited by the lack of collaboration areas, small group rooms and teacher planning spaces.

### Goals:

Walpole Public Schools has identified the following goals for the school system:

- Construct a new High School
- Consolidate the two Middle Schools into a single school to be located in the existing High School

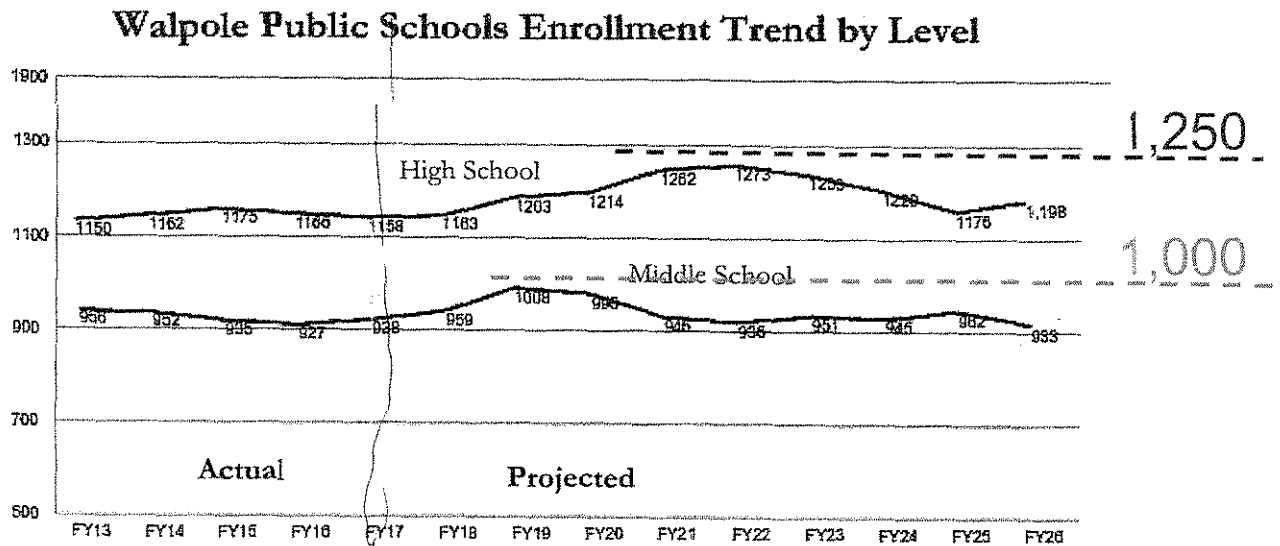
### Objectives:

The specific objectives for this Study were identified as:

- Test the feasibility of converting the High School into a consolidated Middle School
- Test feasibility of constructing a new High School on the Bird Middle School site

## Enrollment Projections

A necessary first step in this Study was to identify the future Middle School and High School enrollments. The District engaged Accept Education Collaborative to produce ten-year enrollment projections based upon historical data, demographic information, and local building development.



Source: Accept Education Collaborative

For the purpose of this Study, it was agreed to use the following enrollments:

Combined Middle School: 1,000 students

Walpole High School: 1,250 students

These enrollments are slightly higher than the current enrollments and slightly higher than the ten-year projections to allow for some future growth within the 50-year lifespan of a new facility.

## Findings

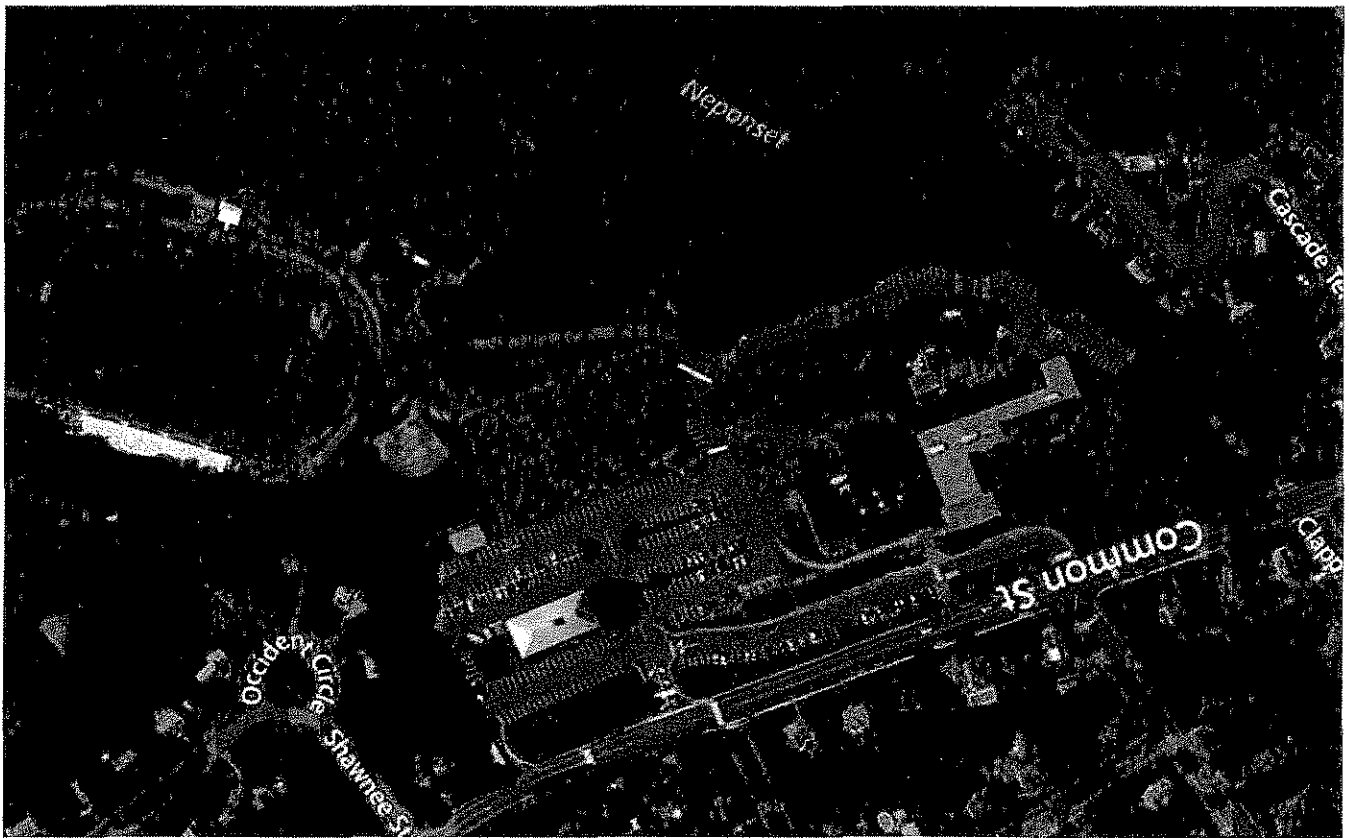
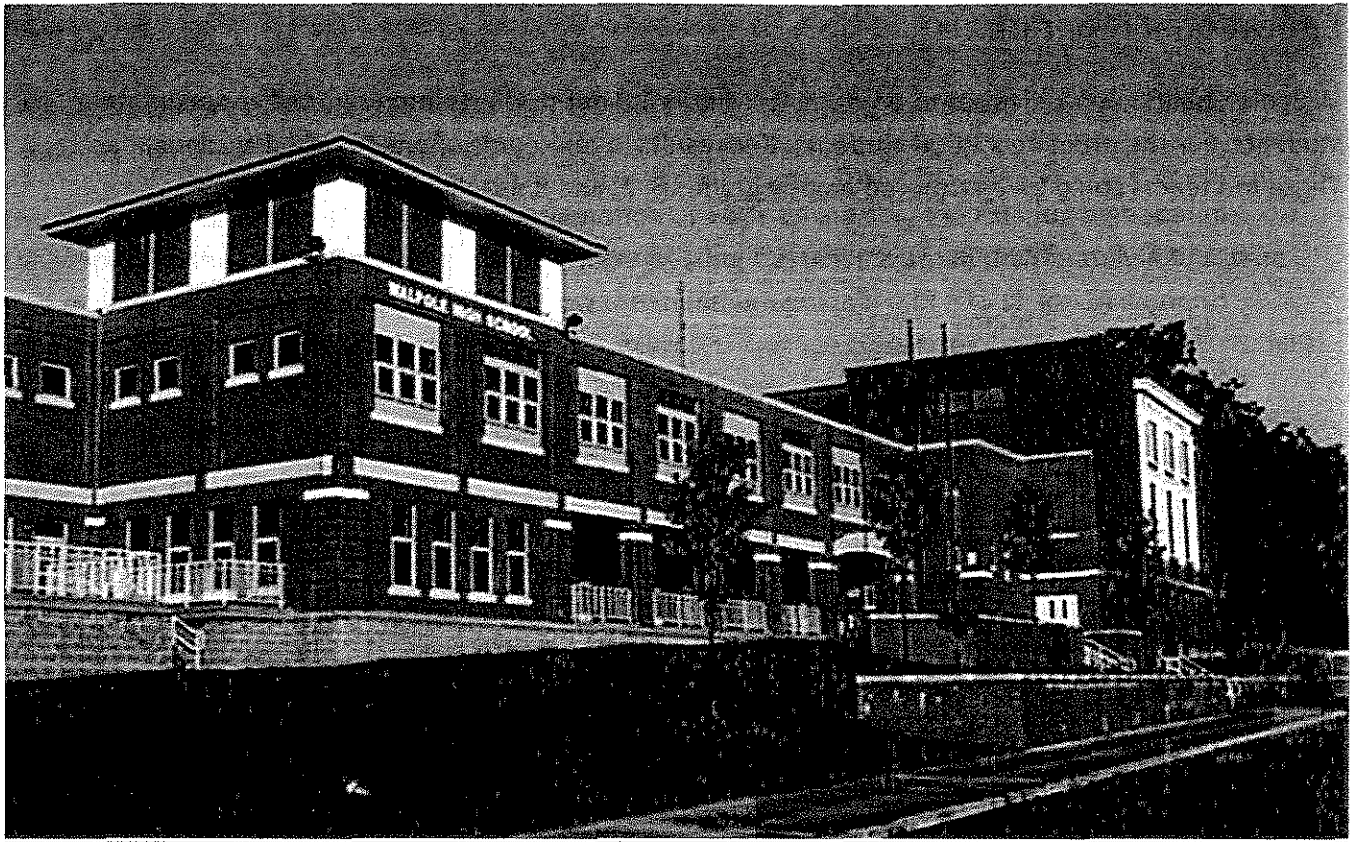
Based upon the findings of this Study, it is feasible to construct a new 1,250-student High School on the Bird Middle School site and to convert the current Walpole High School into a combined Middle School to accommodate 1,000 students.

The order-of-magnitude project costs for these projects are:

Combined Middle School (Option A): \$1,025,000.

new Walpole High School: \$155 Million

**COMBINED MIDDLE SCHOOL**



Existing Walpole High School on Common Street



## Educational Program

Walpole Public Schools desires to organize its Middle School students into teams of approximately 100 students. For the projected 1,000 students, this results in ten teams of one hundred students each. These ten teams could be distributed among grades 6, 7, and 8 as follows:

Grade 6:	3 teams
Grade 7:	3 teams
Grade 8:	3 teams
"floater"	1 team

Each team would consist of four classrooms (for English language arts, Social Studies, Math, and World Languages) and one science lab. Each grade level would also include a projects room ("maker space"), a small-group room, boy's and girl's toilet rooms and one teachers' planning space.

Additionally, specialized spaces will also be required for music, art, and Special Education.

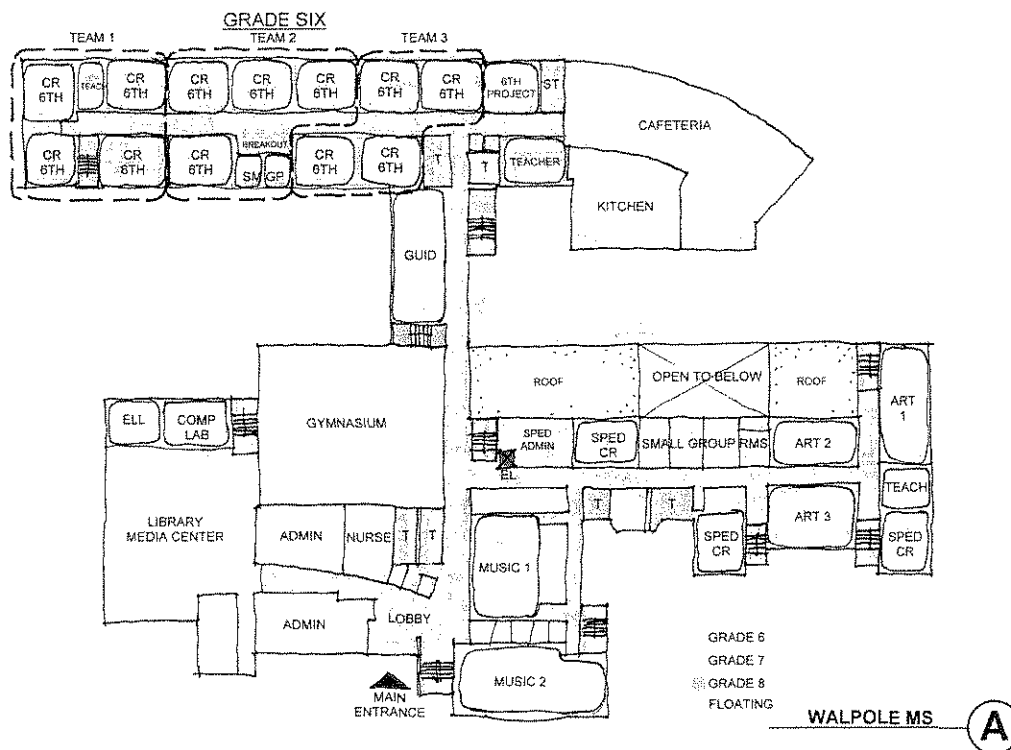
It is assumed that the existing core spaces- Auditorium, Library, Gymnasium in the current High School would remain as-is to serve the combined Middle School

Although a detailed listing of space needs was not produced, a draft MSBA Space Summary form that itemizes all space needs was completed for reference, and is contained in the Appendix to this Study.

Option A minimizes the amount of re-configuration of walls by utilizing the existing high school classrooms to the greatest extent possible. These existing classrooms are approximately 750 square feet in area on average which is slightly below the minimum guideline of 825 sf. for 24 students. However, compensating for this deficiency, the expected average class size of this option is 20 students per class, which is proportionately below the basis of design.

40 Classrooms are arranged into 10 Teams and Grades are assigned to each wing and floor of the existing building to reinforce the goal of the educational vision. Each Team consists of four general classrooms and one dedicated science lab. Each Grade would have their own Project room (Maker Space), collaboration/breakout area, small group rooms, Teacher's room, Boys & Girls rooms, and Storage.

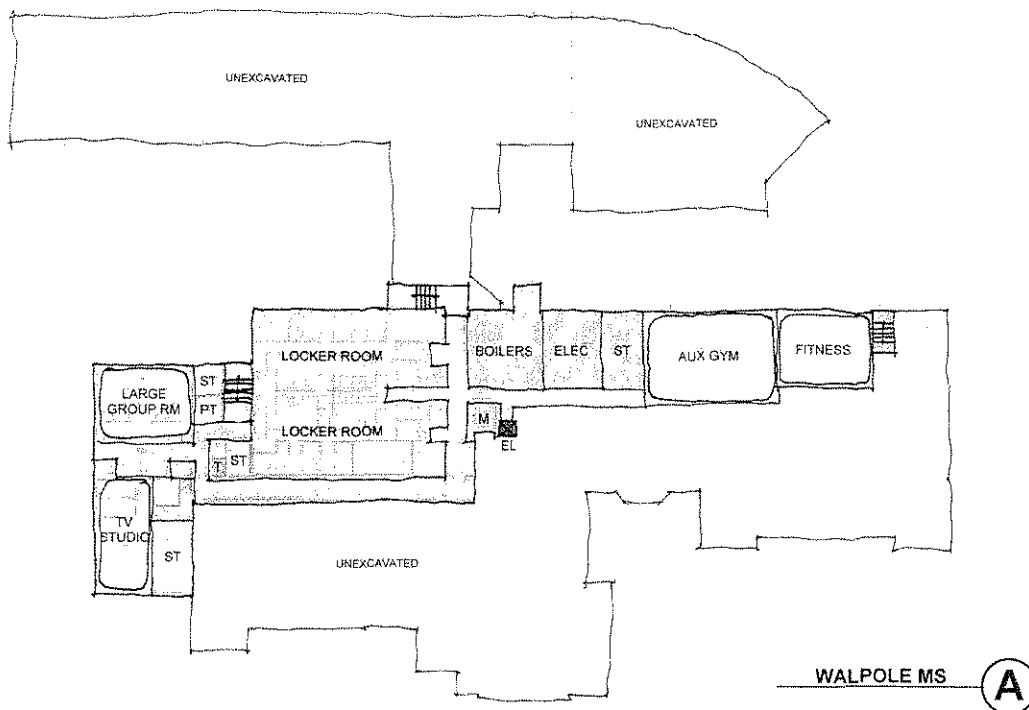
The existing core areas of the current high school: art, music, cafeteria, gym, library, auditorium, and administration would remain in their current location with minimal changes.



*Proposed First Floor Plan*

The floor plan shows a building layout with several rooms and outdoor areas. At the top, there are two large rectangular areas labeled "ROOF". Below these, on the left, is another "ROOF" area. The central part of the plan features a long corridor or common area labeled "GRADE EIGHT TEAM 2". To the right of this corridor is a series of rooms: "CR 8TH" (Classroom 8th), "CR 8TH", "CR 8TH", "CR 8TH", "CR 8TH", and "CR 8TH". Below these classrooms are three rooms: "8TH TEACH" (8th Grade Teaching Room), "SPED CR" (Special Education Classroom), and "8TH PROJECT". To the right of these are two more "CR 8TH" rooms and a "SM BP" (Small Break) room. A "TEAM 3" label is positioned above the rightmost "CR 8TH" room. On the left side of the central corridor, there are rooms labeled "T" (Toilet) and "EL" (Elevator). A large area labeled "OPEN TO AUD" (Open to Auditorium) is located below the central corridor. The bottom right corner of the plan includes a legend: "GRADE 6" (represented by a solid line), "GRADE 7" (represented by a dashed line), "GRADE 8" (represented by a dotted line), and "FLOATING" (represented by a cross-hatched pattern). The building is labeled "WALPOLE MS" at the bottom right, with a large letter "A" in a circle next to it.

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Proposed Ground Floor Plan

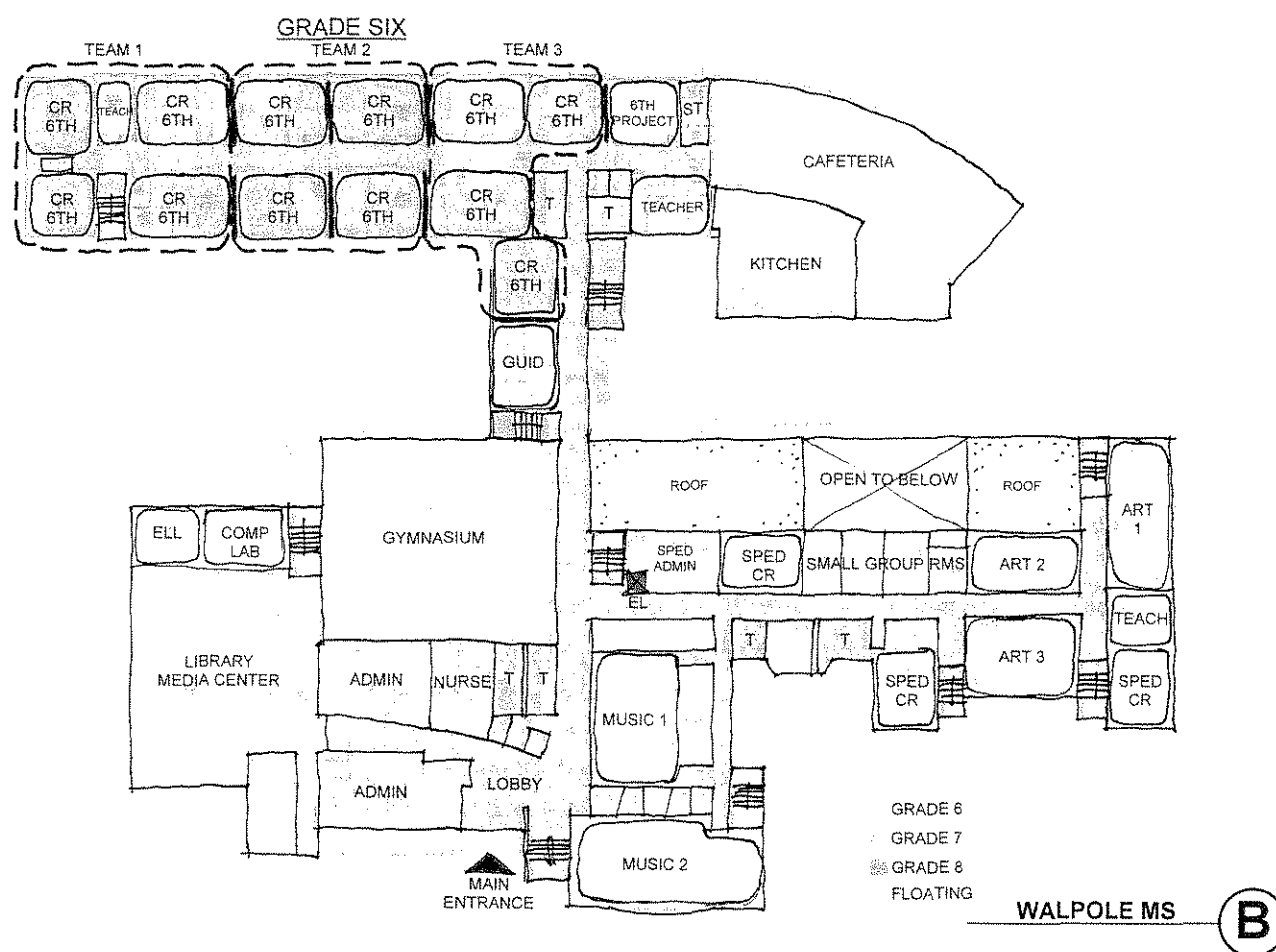
## Project Cost

Option A requires only minor, selective renovation work to the existing High School. A conceptual "order-of-magnitude" cost estimate was prepared based upon the scope of work identified in the above conceptual sketches.

First Floor:	Modify existing language lab, wood shop, and small group rooms to create two Classrooms, break-out areas, small group room, and Teachers Room:	<b>\$425,000.</b>
Second Floor:	Modify existing Tech labs to create two classrooms, Projects room, and small group room. Renovate Dept. head area to create Teacher's Room.:	<b>\$185,000.</b>
Third Floor:	Modify existing Tech lab to create Projects room. Renovate Dept. head area to create Teacher's Room.:	<b>\$65,000.</b>
	<b>Construction Cost</b>	<b>\$675,000.</b>
	plus Soft Costs (25%) Fees, Contingencies, FF&E etc.	\$165,000.
	Escalation 5 years @ 4%	\$185,000.
	<b>TOTAL PROJECT COST</b>	<b>\$1,025,000.</b>

Option B varies from Option A by addressing the classroom size issue. Through strategic demolition, five existing classrooms can be reconfigured into four; increasing the average classroom size to at least 850 square feet. The total number of classrooms is reduced from 40 to 36. This provides for three Teams per grade; nine Teams total. This reconfiguration also reduces the space available for small group rooms and collaboration areas.

The balance of the spaces remains essentially the same as Option A.



*Proposed First Floor Plan*

ROOF

ROOF

ROOF

TEAM 2

GRADE EIGHT

CR 8TH

CR 8TH

CR 8TH

CR 8TH

CR 8TH

8TH TEACH

SPED CR

8TH PROJECT

TEAM 3

CR 8TH

CR 8TH

CR 8TH

SM/CP

CR 8TH

OPEN TO AUD

GRADE 6

GRADE 7

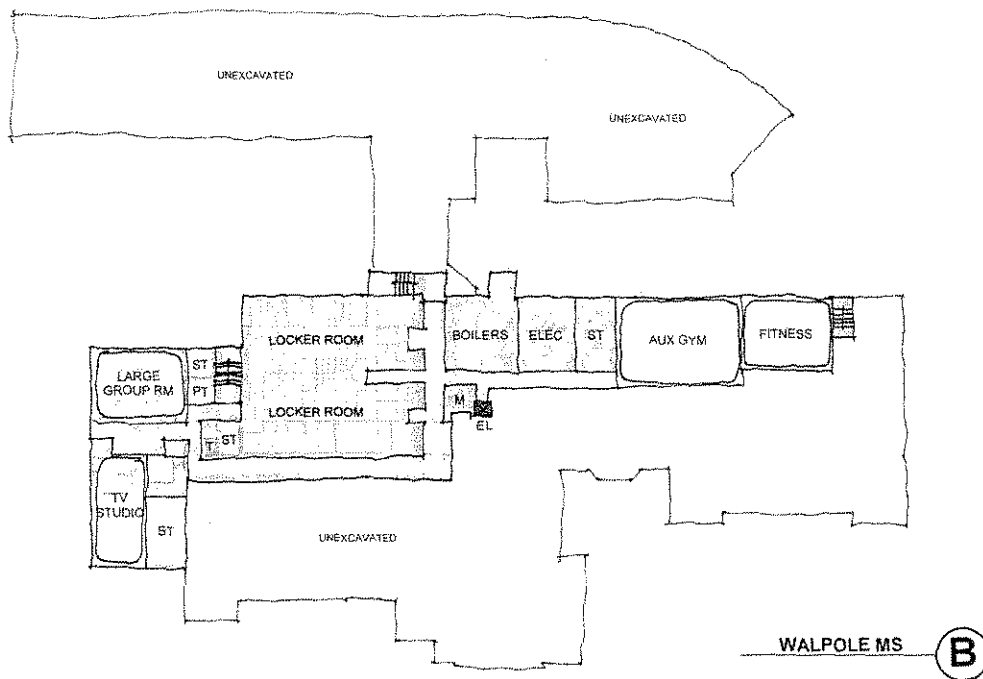
GRADE 8

FLOATING

WALPOLE MS

B

Page 17



Proposed Ground Floor Plan

## Project Cost

Option B requires significantly more construction work than Option A in order to enlarge typical classroom sizes. A conceptual "order-of-magnitude" cost estimate was prepared based upon the scope of work identified in the above conceptual sketches.

First Floor:	Construct 4 Classrooms from existing 5, twice. Modify existing guidance, and small group into SpEd resource and Teachers Room:	<b>\$1,078,000.</b>
Second Floor:	Construct 4 Classrooms from existing 5, three times. Modify existing Tech labs to create two classrooms, Projects room, and small group room. Renovate Dept. head area to create Teacher's Room.:	<b>\$1,422,000.</b>
Third Floor:	Construct 4 Classrooms from existing 5. Modify existing Tech lab to create Projects room. Renovate Dept. head area to create Teacher's Room.:	<b>\$475,000.</b>
	<b>Construction Cost</b>	<b>\$2,975,000.</b>
	plus Soft Costs (25%) Fees, Contingencies, FF&E etc.	\$740,000.
	Escalation 5 years @ 4%	\$805,000.
	<b>TOTAL PROJECT COST</b>	<b>\$4,520,000.</b>

New WALPOLE HIGH SCHOOL



## Educational Program

The scope of this Study did not include an in-depth development of a full Educational Program, but it was agreed that certain basic assumptions could be made to assist in testing the feasibility of a new High School on the Bird Middle School site.

The assumptions utilized for this Study is that the Educational Program for a new Walpole High School would be generally similar to the current High School with a few exceptions. The proposed curriculum would be generally the same with a greater emphasis on STEM (Science, Technology, Engineering, Math). The teaching and learning methodologies would be updated to meet the District's desire to provide more 21<sup>st</sup> Century methodologies including collaboration, project-based learning, and personalized instruction.

The organization, configuration, and infrastructure of the proposed school should promote small learning communities, support digital and blended learning, and provide flexibility.

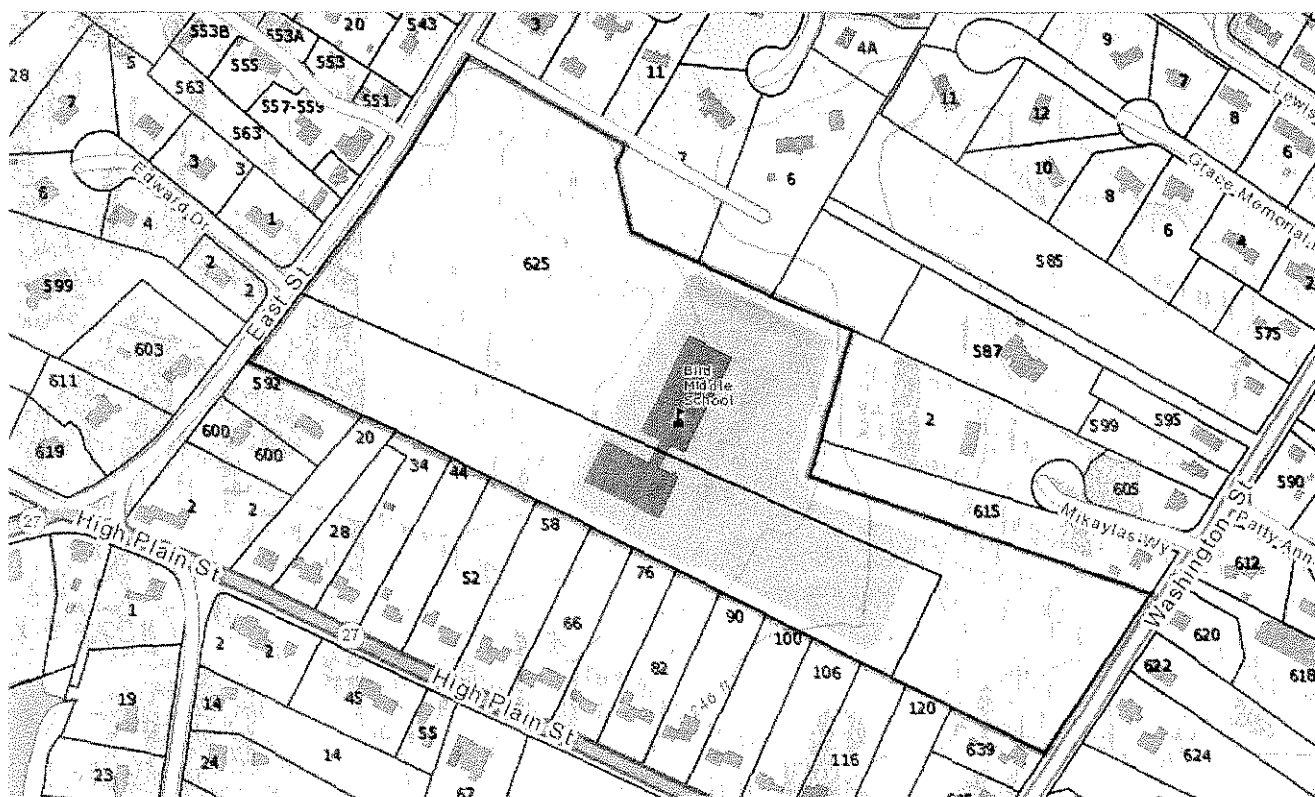
A draft MSBA Space Summary form that itemizes all space needs was completed for reference, and is contained in the Appendix to this Study. This draft calculated that approximately 225,000 square feet would be required for the proposed enrollment of 1,250 students. This was the area utilized for developing options in this Study.

## Existing Conditions

The Bird Middle School is located in a residential area in the north central part of Walpole on Washington Street, close to the intersection with High Plain Street (Route 27). The property also has frontage on East Street. The site comprises approximately 20 acres.

The current middle school building occupies the center of the site and is accessed via a driveway from Washington Street to the east. The western portion of the site along East Street is developed with athletic fields including two baseball fields and one softball field.

The site is sloping from a high point on the east to the playing fields on the west. The terraced site has approximately 50 to 60 feet of grade change from east to west.

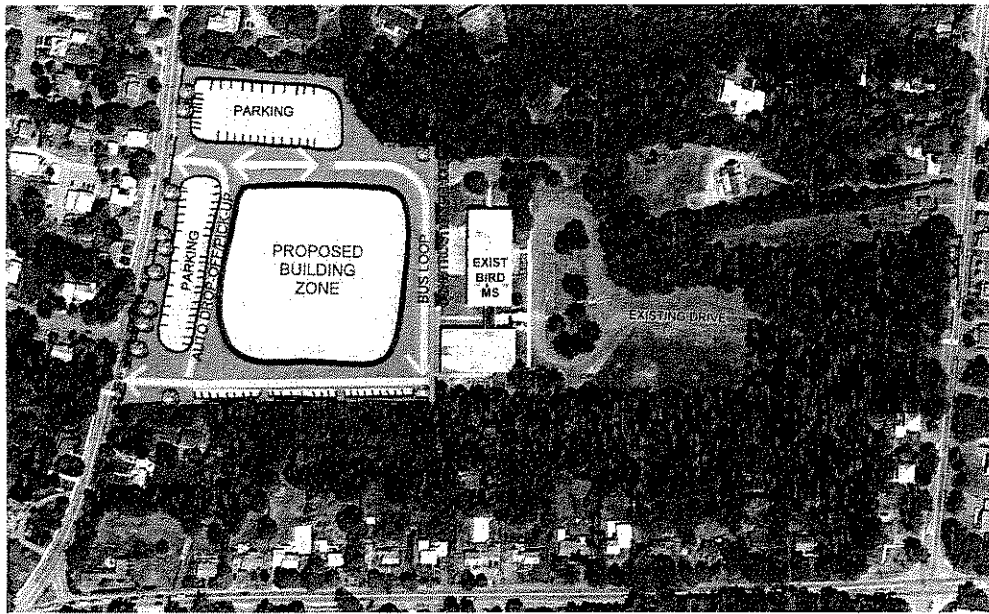


Four vertical strips of microfilm are shown, each containing a different frame from a document. The frames appear to be pages of text, though the text is too small and blurry to be legible. The strips are arranged vertically, with the top strip being the shortest and the bottom strip being the longest.

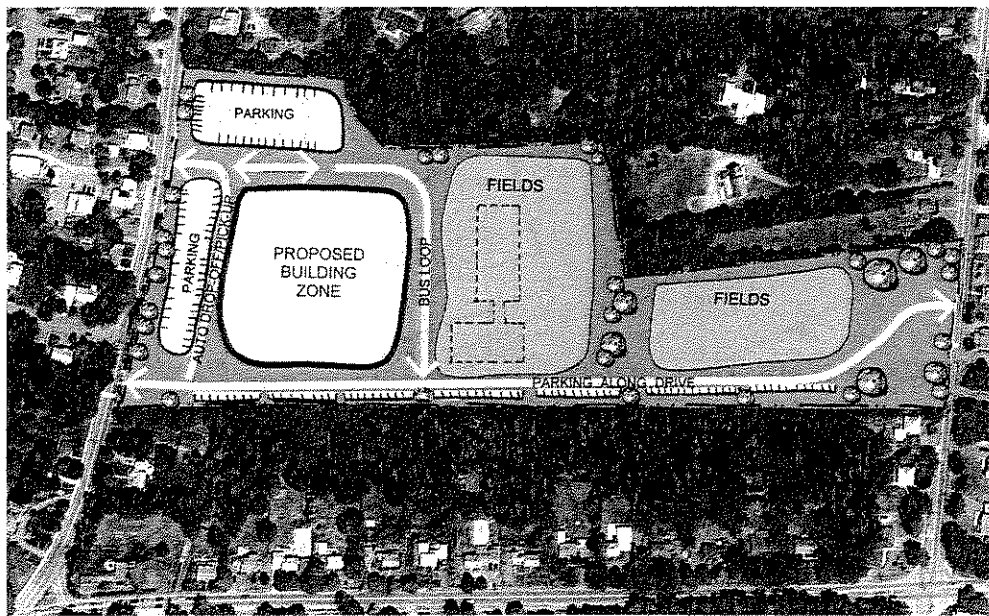
## Development Options

The strategy to develop a new High School on the Bird Middle School site involves phased construction of a new building adjacent to the occupied Middle School. The school would remain in operation throughout the construction phase.

Once the new school is complete and suitable for occupancy by the high school students and teachers, the middle school would be vacated and subsequently demolished. That portion of the site would be developed with playing fields and additional parking.



Phase 1



Phase 2

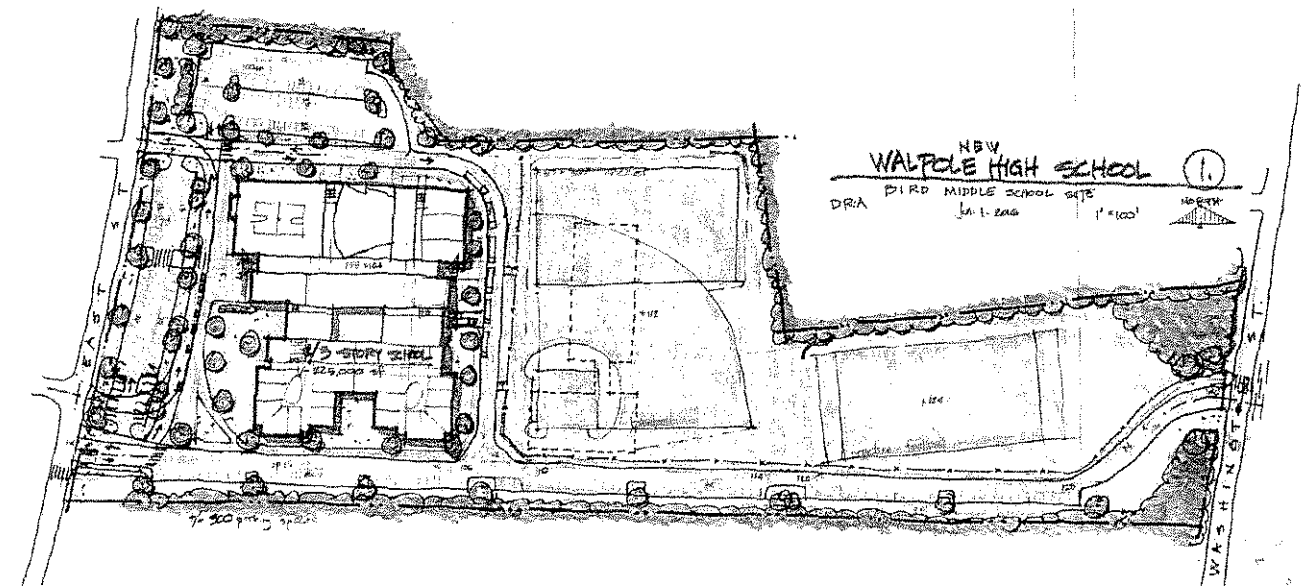
Three different building options were developed for the new High School, each with 225,000 sf of space, but with differing configurations and varying amounts of parking.

## Option 1

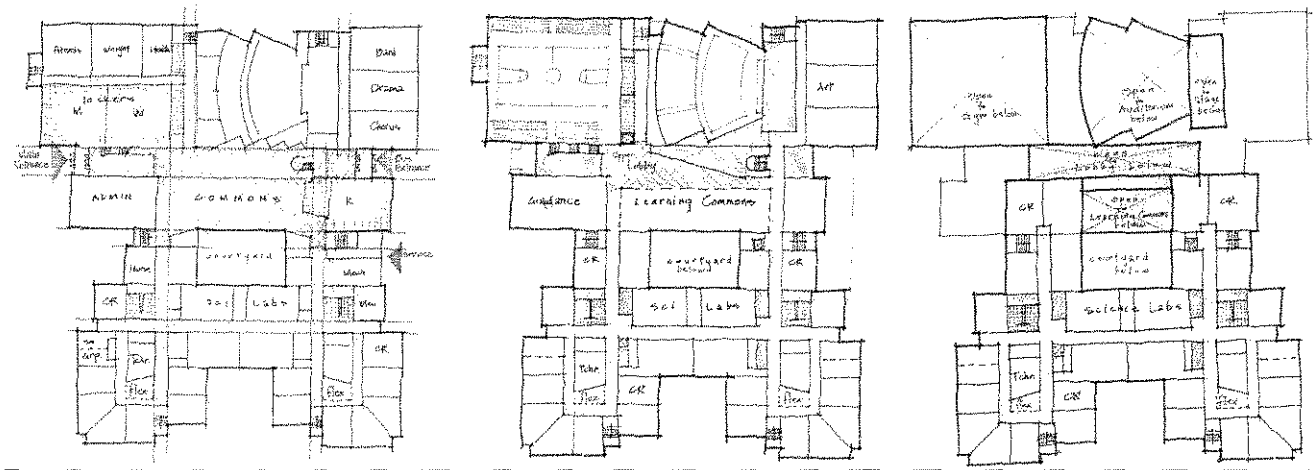
This Option proposes a three-story building arranged in a courtyard configuration. The main entrance faces East Street and is accessible from a vehicular drop-off lane. A service drive and bus drop-off lane provides access to a secondary entrance at the rear of the school. The public assembly areas of auditorium, gym and student commons/lobby are to the north and the academic classrooms are arranged in clusters to the south of the courtyard.

The Athletic fields are built on terraces above the level of the school. A driveway with additional parking connects to Washington Street.

This Option provides approximately 300 parking spaces, which is the minimum required.



## Site Plan



First Floor Plan

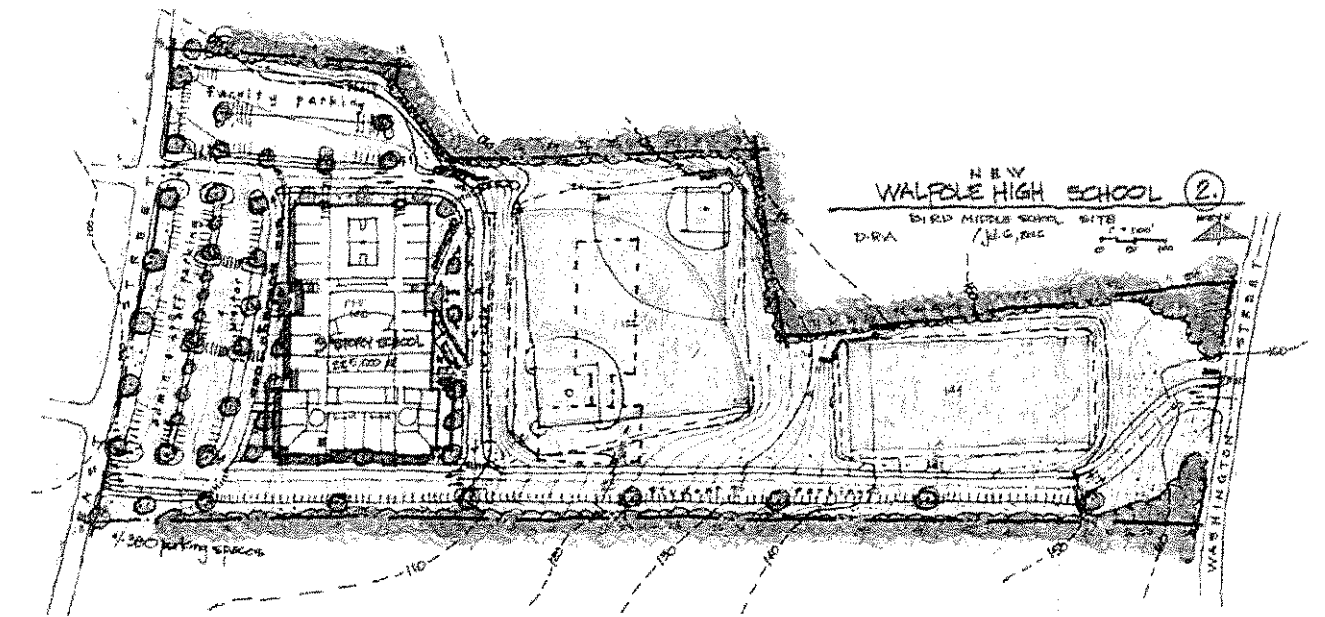
Second Floor Plan

Third Floor Plan

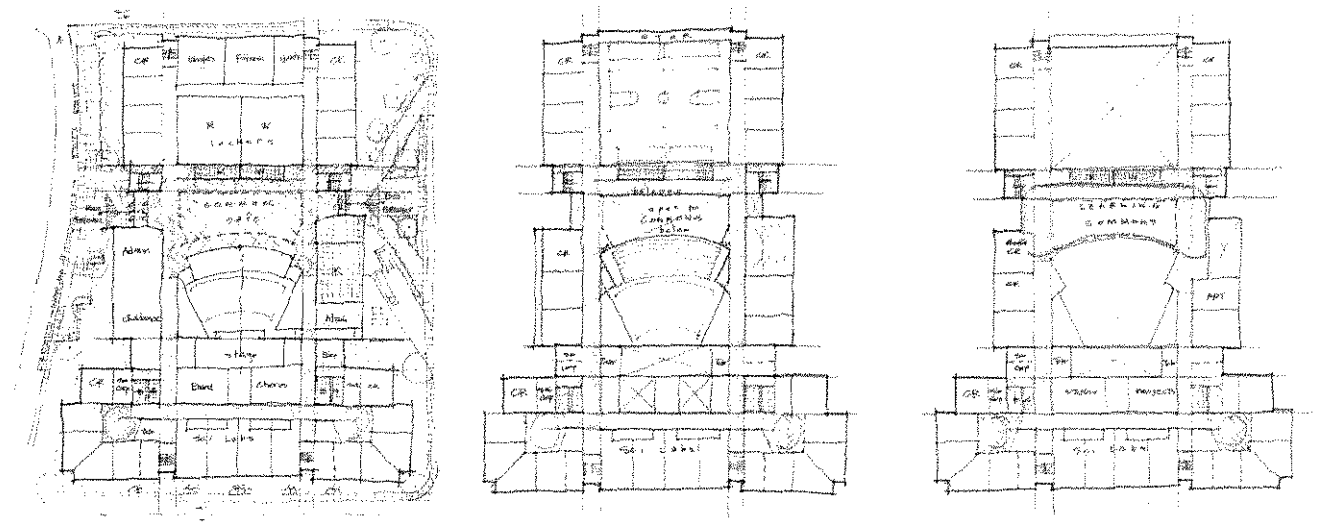
## Option 2

This Option is also a three-story building and occupies a similar location on the site as Option 1. It has a more compact footprint with the gym and auditorium located internally with classrooms around the perimeter of the building.

This Option provides approximately 380 parking spaces due to the more compact footprint.



Site Plan



First Floor Plan

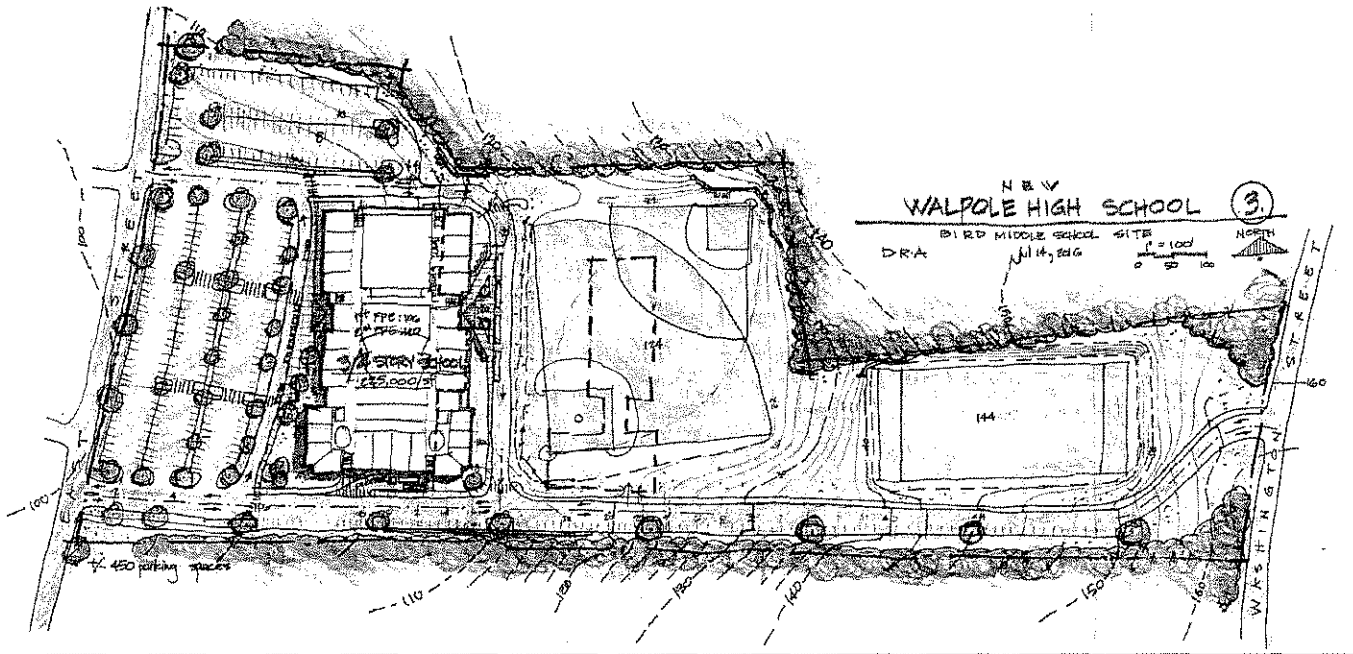
Second Floor Plan

Third Floor Plan

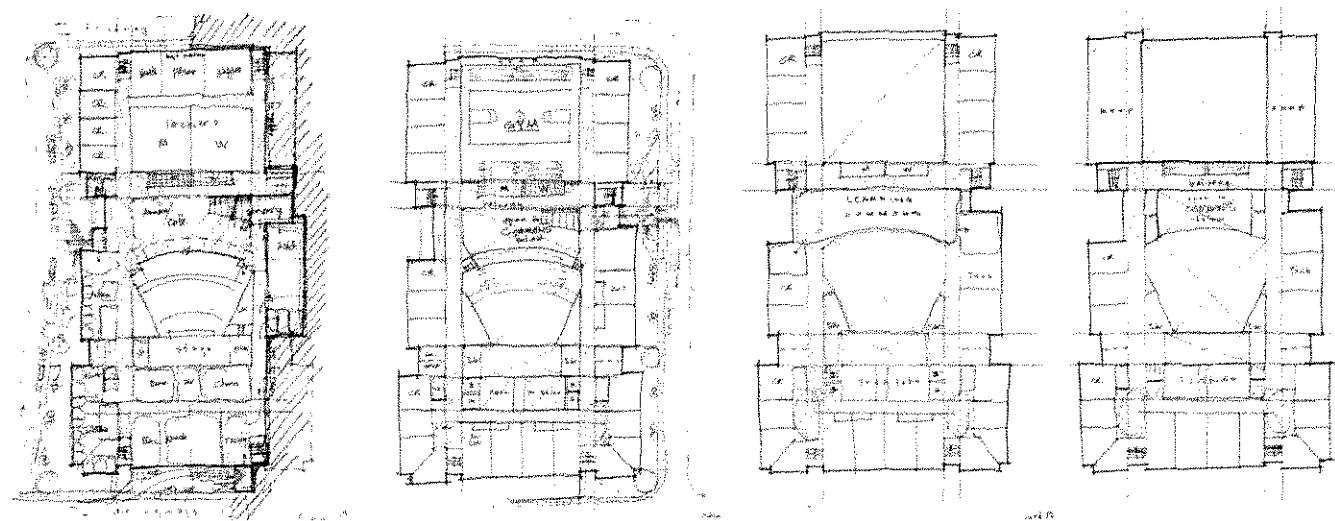
### Option 3

This Option is very similar to Option 2, except that it arranges the program on four floors in order to further tighten up the site layout and allow for additional parking in front of the building. This option proposes to cut the building into the sloping site on the east side. This creates partial basement space that accommodates the kitchen, locker rooms, boiler room and other support spaces. The secondary bus entrance on the east provides at-grade access to the second level.

This Option provides approximately 450 parking spaces and has the most compact footprint.



### Site Plan



First Floor Plan

Second Floor Plan

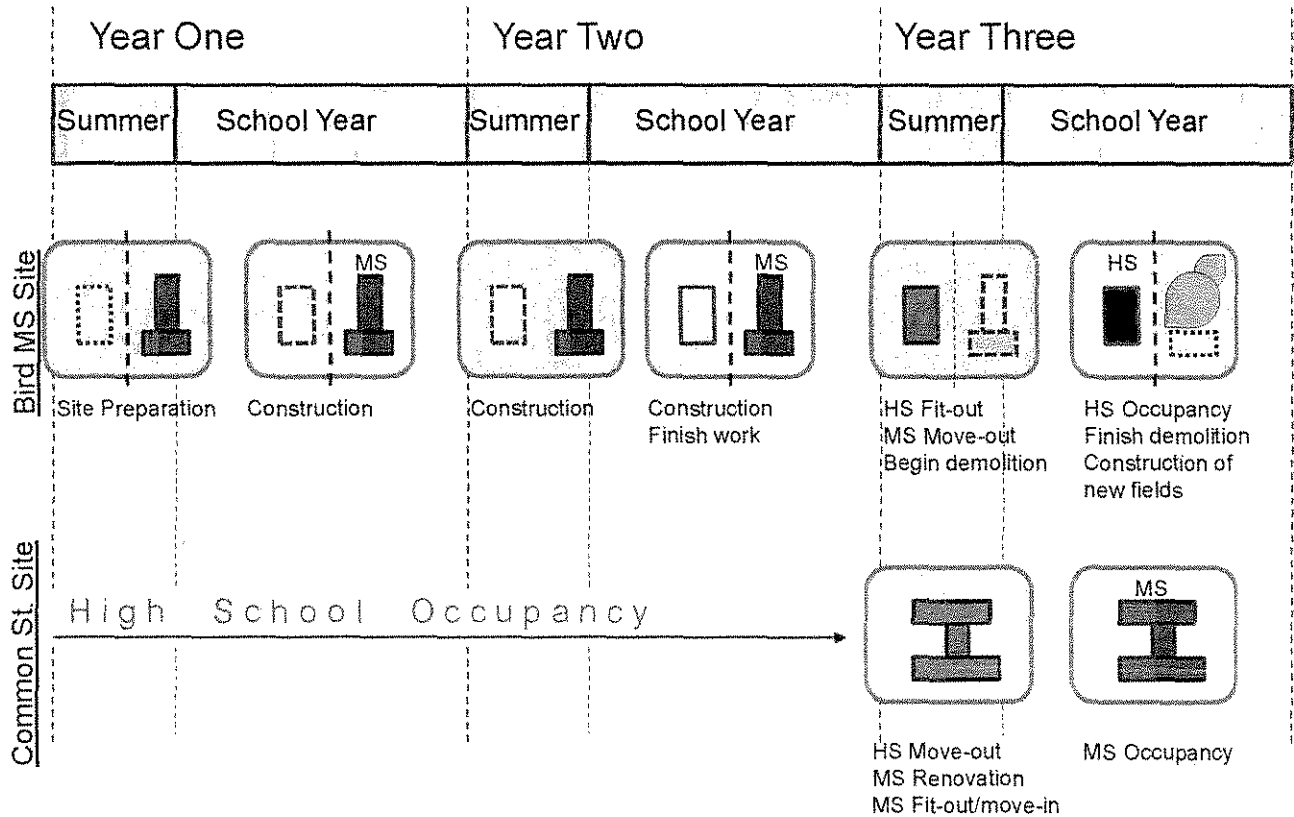
Third Floor Plan

Fourth Floor Plan

## Project Phasing

The feasibility of successfully combining Walpole's two middle schools and developing a new High School on the Bird Middle School is dependent upon the careful phasing and integration of the two projects.

The diagram below illustrates how this could best be accomplished.



Thus, these two projects could reasonably be accomplished in three years without significantly disrupting on-going teaching and learning, particularly if the High School construction could be started in the Spring and the Middle School renovation of the current high school could be accomplished in one summer.



## Project Cost

Square foot cost data from similar school construction projects was used to provide an "order of magnitude" cost estimate. It results in the following calculation:

### Construction Cost (2016) Option 1, 2, 3

225,000 sf x \$450/sf =	\$101 M
Soft Costs @ 25% =	<u>\$25 M</u>
Total Project Cost	\$126 M
<u>escalation (5 years @4%)</u>	<u>\$27 M</u>
Total Projected Project Cost	<b>\$153 M</b>

APPENDIX

MSBA Space Summary forms

## Proposed Space Summary - Middle Schools

Conceptual Plan  
18-Jul-16

Walpole Middle School		Existing Conditions	
ROOM TYPE	ROOM NFA <sup>1</sup>	# OF RMS	area totals
<b>CORE ACADEMIC SPACES</b>			0
<i>List classrooms of different sizes separately</i>			
Classroom - General		38	
Small Group Seminar (20-30 seats) / Breakout		4	
Science Classroom / Lab		10	
Prep Room		9	
Language Lab		1	
<b>SPECIAL EDUCATION</b>			0
<i>List classrooms of different sizes separately</i>			
Self-Contained SPED		2	
Self-Contained SPED Toilet			
Resource Room		2	
Small Group Room / Reading		2	
Testing, Offices		5	
<b>ART &amp; MUSIC</b>			0
Art Classroom		3	
Art Workroom w/ Storage & kiln			
Band / Chorus - 100 seats		2	
Music Practice / Ensemble			
<b>VOCATIONS &amp; TECHNOLOGY</b>			0
Tech Ctr. - (E.G. Drafting, Business, Comp.Lab)		6	
Tech Shop - (E.G. Consumer, Wood)		2	
<b>HEALTH &amp; PHYSICAL EDUCATION</b>			0
Gymnasium			
Gym Storeroom			
Health Instructor's Office w/ Shower & Toilet			
Locker Rooms - Boys / Girls w/ Toilets			
<b>MEDIA CENTER</b>			0
Media Center / Reading Room			
<b>DINING &amp; FOOD SERVICE</b>			0
Cafetorium / Dining			
Stage			
Chair / Table / Equipment Storage			
Kitchen			
Staff Lunch Room			
<b>MEDICAL</b>			0
Medical Suite Toilet			
Nurses' Office / Waiting Room			
Examination Room / Resting			
<b>ADMINISTRATION &amp; GUIDANCE</b>			0
General Office / Waiting Room / Toilet			
Teachers' Mail and Time Room			
Duplicating Room			
Records Room			
Principal's Office w/ Conference Area			
Principal's Secretary / Waiting			
Assistant Principal's Office - AP1			
Assistant Principal's Office - AP2			
Supervisory / Spare Office			
Conference Room			
Guidance Office			
Guidance Waiting Room			
Guidance Storeroom			
Teachers' Work Room			
<b>CUSTODIAL &amp; MAINTENANCE</b>			0
Custodian's Office			
Custodian's Workshop			
Custodian's Storage			
Recycling Room / Trash			
Receiving and General Supply			
Storeroom			
Network / Telecom Room			
<b>OTHER</b>			0
<i>Other (specify)</i>			
Total Building Net Floor Area (NFA)			0
Proposed Student Capacity / Enrolment			
Total Building Gross Floor Area (GFA)			190,000
Grossing factor (GFA/NFA)			#DIV/0!

MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM NFA <sup>1</sup>	# OF RMS	area totals	Comments
		48,179	
960	37	35,160	880 SF min - 960 SF max
500	3	1,500	
1,200	9	10,800	1 period / day / student
80	9	720	
		11,070	
960	7	6,650	assumed 8% of pop. in self-contained SPED
60	7	420	
500	5	2,500	1/2 size Gen'l. Clm.
500	3	1,500	1/2 size Gen'l. Clm.
		4,800	
1,200	2	2,400	assumed use - 50% population 2 times / week
150	2	300	
1,500	1	1,500	assumed use - 50% population 2 times / week
200	3	600	
		6,400	
1,200	2	2,400	Assumed use - 25% Population - 5 times/week
2,000	2	4,000	Assumed use - 25% Population - 5 times/week
		6,400	
6,000	1	6,000	
150	1	150	
250	1	250	
1,000	2	2,000	
		6,130	
6,130	1	6,130	
		12,283	
7,500	1	7,500	2 seatings - 15 SF per seat
1,600	1	1,600	
533	1	533	
2,300	1	2,300	180 SF for first 300 + 1 SF/student Adult
350	1	350	20 SF/occupant
		718	
60	1	60	
250	1	250	
100	4	400	
		4,100	
600	1	600	
100	1	100	
200	1	200	
200	1	200	
375	1	375	
125	1	125	
150	1	150	
150	2	300	
150	1	150	
350	1	350	
150	5	750	
100	1	100	
50	1	50	
650	1	650	
		2,475	
150	1	150	
250	1	250	
375	1	375	
400	1	400	
433	1	433	
667	1	667	
200	1	200	
		0	
		104,538	
		1,000	
		160,000	
		1.53	

Version  
11.24.2010

Middle School Space Summary

## Proposed Space Summary - High Schools

 Concord Area Plan  
 23-May-16

New Walpole High School	Existing Conditions		
ROOM TYPE	ROOM NFA <sup>1</sup>	# OF RMS	area totals
<b>CORE ACADEMIC SPACES</b>			0
<i>(List classrooms of different sizes separately)</i>			
Classroom - General		36	
Teacher Planning		6	
Small Group Seminar (20-30 seats)		4	
Science Classroom / Lab		10	
Prep Room		9	
Central Chemical Storage Rm		1	
<b>SPECIAL EDUCATION</b>			0
<i>(List classrooms of different sizes separately)</i>			
Self-Contained SPED		2	
Self-Contained SPED Toilet		0	
Resource Room		2	
Small Group Room		2	
Testing Offices		1	
		4	
<b>ART &amp; MUSIC</b>			0
Art Classroom - 25 seats		3	
Art Workroom w/ Storage & kiln		3	
Band - 60 - 100 seats		1	
Chorus - 50 - 100 seats		1	
Ensemble		0	
Music Practice		5	
Music Storage		1	
<b>VOCATIONS &amp; TECHNOLOGY</b>			0
Tech Ctr. - (E.G. Drafting, Business, Lang)		3	
Tech Shop - (E.G. Consumer, Wood)		2	
Computer Labs		3	
<b>HEALTH &amp; PHYSICAL EDUCATION</b>			0
Gymnasium			
PE Alternatives			
Gym Storeroom			
Locker Rooms - Boys / Girls w/ Toilets			
Phys. Ed. Storage			
Athletic Director's Office			
Health Instructor's Office w/ Shower & Toilet			
<b>MEDIA CENTER</b>			0
Media Center / Reading Room			
Computer Lab			
<b>AUDITORIUM / DRAMA</b>			0
Auditorium			
Stage			
Auditorium Storage			
Make-up / Dressing Rooms			
Controls / Lighting / Projection			
<b>DINING &amp; FOOD SERVICE</b>			0
Cafeteria / Student Lounge / Break-out			
Chair / Table Storage			
Scramble Serving Area			
Kitchen			
Staff Lunch Room			

MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM NFA <sup>1</sup>	# OF RMS	area totals	Comments
		59,640	
850	42	35,700	25 SF min - 950 SF max
100	42	4,200	
500	3	1,500	
1,440	11	15,640	3 x 35% ut=20 Seats-1 per /day/student
200	11	2,200	
200	1	200	
		13,090	
950	9	8,550	assumed 8% of pop. in self-contained SPED
60	9	540	
500	4	2,000	1/2 size Genl. Ctrm.
500	4	2,000	1/2 size Genl. Ctrm.
		8,290	
1,200	3	3,600	Assumed use - 25% Population - 5 times/week
150	3	450	
1,600	1	1,600	Assumed use - 25% Population - 5 times/week
1,500	1	1,500	
200	1	200	
75	6	450	
500	1	500	
		12,890	
1,200	4	4,800	Assumed use - 50% Population - 5 times/week
2,000	4	8,000	Assumed use - 50% Population - 5 times/week
		23,200	
12,000	1	12,000	
3,000	1	3,000	
300	1	300	
7,000	1	7,000	5.6 student total
500	1	500	
150	1	150	
250	1	250	
		7,713	
7,713	1	7,713	
		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	
		10,426	
6,250	1	6,250	3 seatings - 15 SF per seat
463	1	463	
500	1	500	
2,550	1	2,550	1600 SF for first 300 + 1 SF/student Add'l
563	1	563	20 SF/occupant

 Version  
 11.24.2010

High School Space Summary

## Proposed Space Summary - High Schools

Conceptual Plan  
23-May-16

New Walpole High School		Existing Conditions	
ROOM TYPE	ROOM NFA <sup>1</sup>	# OF RMS	area totals
<b>MEDICAL</b>			8
Medical Suite Toilet			
Nurses' Office / Waiting Room			
Interview Room			
Examination Room / Resting			
<b>ADMINISTRATION &amp; GUIDANCE</b>			0
General Office / Waiting Room / Toilet			
Teachers' Mail and Time Room			
Duplicating Room			
Records Room			
Principal's Office w/ Conference Area			
Principal's Secretary / Waiting			
Assistant Principal's Office - AP1			
Assistant Principal's Office - AP2			
Supervisory / Spare Office			
Conference Room			
Guidance Office			
Guidance Waiting Room			
Guidance Storeroom			
Career Center			
Records Room			
Teachers' Work Room			
<b>CUSTODIAL &amp; MAINTENANCE</b>			0
Custodian's Office			
Custodian's Workshop			
Custodian's Storage			
Recycling Room / Trash			
Receiving and General Supply			
Storeroom			
Network / Telecom Room			
<b>OTHER</b>			0
Other (specify)			
Total Building Net Floor Area (NFA) <sup>2</sup>			0
Proposed Student Capacity / Enrollment			
Total Building Gross Floor Area (GFA) <sup>2</sup>			190,000
Grossing Factor (GFA/NFA)			#DIV/0!

MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM NFA <sup>1</sup>	# OF RMS	area totals	Comments
		1,110	
60	1	60	
250	1	250	
100	3	300	
100	5	500	
		5,014	
625	1	625	
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	
463	1	463	
181	1	181	
625	1	625	
		2,563	
150	1	150	
250	1	250	
375	1	375	
400	1	400	
463	1	463	
725	1	725	
200	1	200	
		0	
		154,154	
		1,250	180
		225,000	
		1.46	

<sup>1</sup> Individual Room Net Floor Area (NFA)

program area including such spaces as non-communal toilets and storage rooms.

<sup>2</sup> Total Building Gross Floor Area (GFA)

includes the entire building gross square footage measured from the outside face of exterior walls

Walpole Public schools

Cost Estimates

## Walpole HS / Conversion to MS

## Option A

*minimal construction/ retain existing classrooms*

Floor	Scope	Area	unit cost	subtotal	total
1st	Construct 2 CR's from existing small group rooms, & Language Lab	1,600	\$100	\$160,000	
	Construct CR from portion of existing Wood shc	800	\$100	\$80,000	
	Create break-out space off corridor and two small group rooms from existing CR	800	\$100	\$80,000	
	Modify existing small groups, storage, school store for use as SpEd resource rooms	1,000	\$50	\$50,000	
	Modify small group room into Teachers Room	600	\$25	\$15,000	
					\$385,000
2nd	Minor modifications to 2 existing Tech Labs to create 2 CR's	2,000	\$25	\$50,000	
	Modifications to existing Tech lab & Storage to create 7th Gr Projects Room and small group room	1,200	\$25	\$30,000	
	Modifications to existing Dept Head Office & Storage to create 7th Gr Teachers Room	600	\$50	\$30,000	
	Modifications to existing Dept Head Office & Storage to create 8th Gr Teachers Room	600	\$50	\$30,000	
	Create 8th Projects Room(1) from existing computer lab	1,100	\$25	\$27,500	
					\$167,500
3rd	Create 8th Projects Room(2) from existing computer lab	1,100	\$25	\$27,500	
	Modifications to existing Dept Head Office & Storage to create 8th Gr Teachers Room	600	\$50	\$30,000	
					\$57,500
SubTotal					\$610,000
Contingency 10%					\$60,000
TOTAL Construction Cost					\$670,000
Soft Costs (25%)					\$170,000
TOTAL PROJECT COST					<b>\$840,000</b>



## Walpole HS / Conversion to MS

## Option B

enlarge classrooms to 900 sf average

Floor	Scope	Area	unit cost	subtotal	total
1st	Construct 4 CR's from existing 5 CR's	3,750	\$100	\$375,000	
	Construct CR from portion of existing Wood shop	800	\$100	\$80,000	
	Construct 4 CR's from existing 5 CR's	3,750	\$100	\$375,000	
	Construct CR from portion of existing Guidance area	850	\$100	\$85,000	
	Modify existing small groups, storage, school store for use as SpEd resource rooms	1,000	\$50	\$50,000	
	Modify small group room into Teachers Room	600	\$25	\$15,000	
					\$980,000
2nd	Construct 4 CR's from existing 5 CR's	3,750	\$100	\$375,000	
	Construct 4 CR's from existing 5 CR's	3,750	\$100	\$375,000	
	Minor modifications to 2 existing Tech Labs to create 2 CR's	2,000	\$25	\$50,000	
	Modifications to existing Tech lab & Storage to create 7th Gr Projects Room and small group room	1,200	\$25	\$30,000	
	Construct 4 CR's from existing 5 CR's	3,750	\$100	\$375,000	
	Modifications to existing Dept Head Office & Storage to create 7th Gr Teachers Room	600	\$50	\$30,000	
	Modifications to existing Dept Head Office & Storage to create 8th Gr Teachers Room	600	\$50	\$30,000	
	Create 8th Projects Room(1) from existing computer lab	1,100	\$25	\$27,500	
					\$1,292,500
3rd	Create 8th Projects Room(2) from existing computer lab	1,100	\$25	\$27,500	
	Construct 4 CR's from existing 5 CR's	3,750	\$100	\$375,000	
	Modifications to existing Dept Head Office & Storage to create 8th Gr Teachers Room	600	\$50	\$30,000	
					\$432,500
	SubTotal				\$2,705,000
	Contingency 10%				\$270,000
	TOTAL Construction Cost				\$2,975,000
	Soft Costs (25%)				\$740,000
	TOTAL PROJECT COST				<b>\$3,715,000</b>

## Community Presentations

## Walpole Public Schools High School / Middle School Study

### High School/Middle School Study

#### Existing Conditions

- Existing Middle School facilities are deficient and educationally inadequate
- Existing High School is overcrowded and doesn't meet 21<sup>st</sup> C educational standards

### High School/Middle School Study

#### Goals

Address the deficiencies of current High School and 2 Middle Schools by:

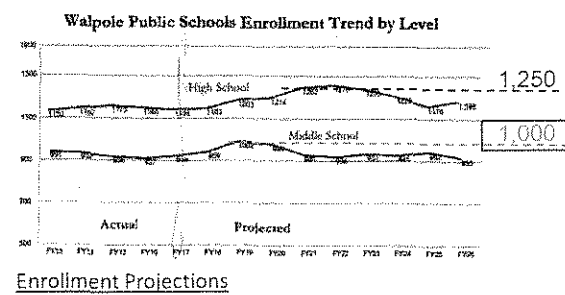
- Constructing a new High School
- Consolidating the two Middle Schools into a single school to be located in the existing High School

### High School/Middle School Study

#### Objectives

- Test the feasibility of converting the High School into a consolidated Middle School
- Test feasibility of constructing a new High School on the Bird Middle School site

### Space Needs



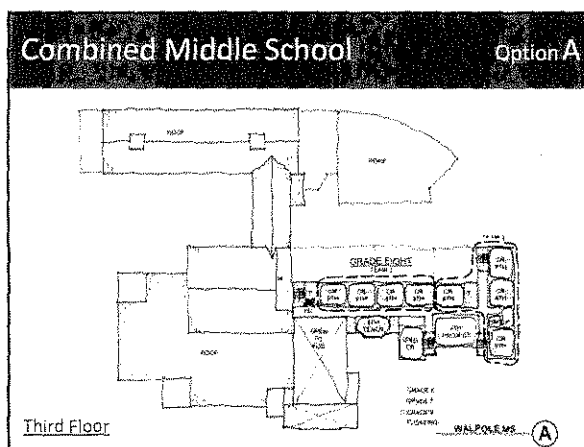
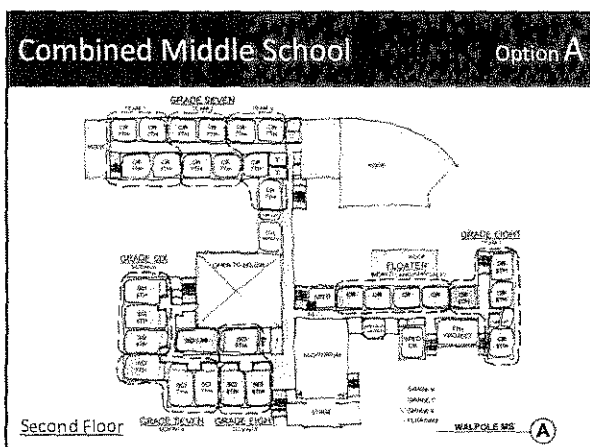
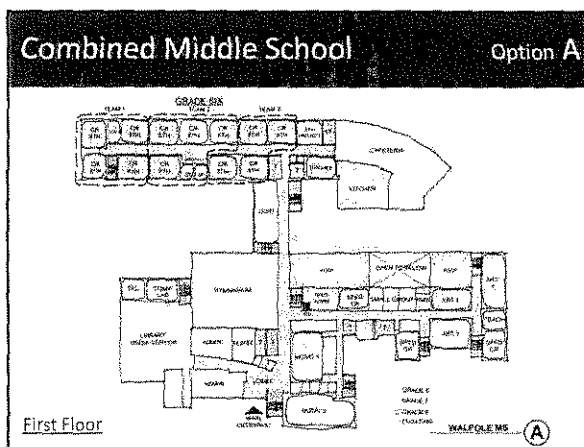
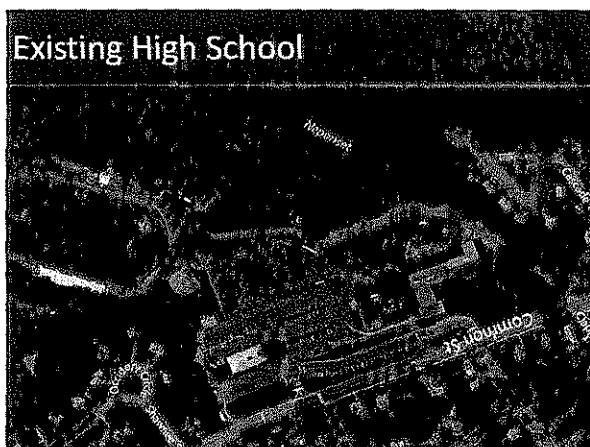
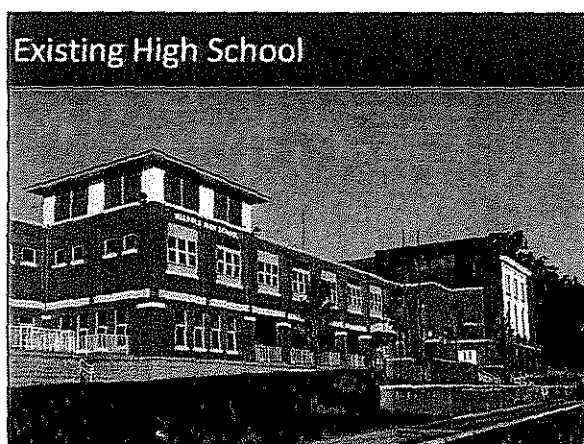
### Space Needs

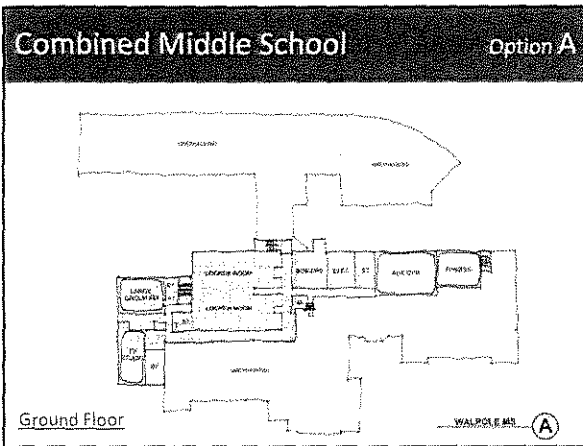
#### MSBA Guidelines

- Middle School: 1,000 students = 160,000 square feet
  - Existing Bird MS: 88,500 sf
  - Existing Johnson MS: 99,660 sf

High School: 1,250 students = 225,000 square feet  
Existing Walpole HS: 190,000 sf

Combined Middle School Space Needs							
1000 students							
	students	teams	students/ team	CR's/ team	academic CR	sci labs	students/ CR
Gr 6	300	3	100	4	12	3	20
Gr 7	300	3	100	4	12	3	20
Gr 8	300	3	100	4	12	3	20
Floater	100	1	100	4	4	1	20
	1000	10	100		40	10	
1000 students							
Gr 6	333	3	111	4	12	3	22.2
Gr 7	333	3	111	4	12	3	22.2
Gr 8	333	3	111	4	12	3	22.2
	1000	9	111		36	9	



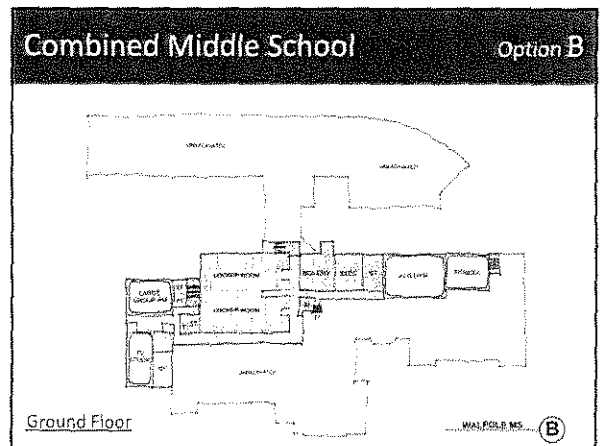
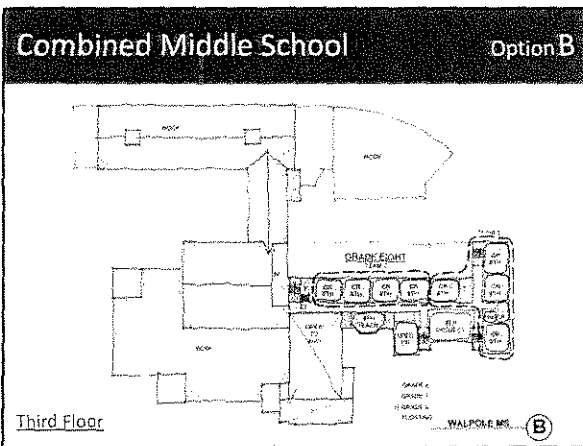
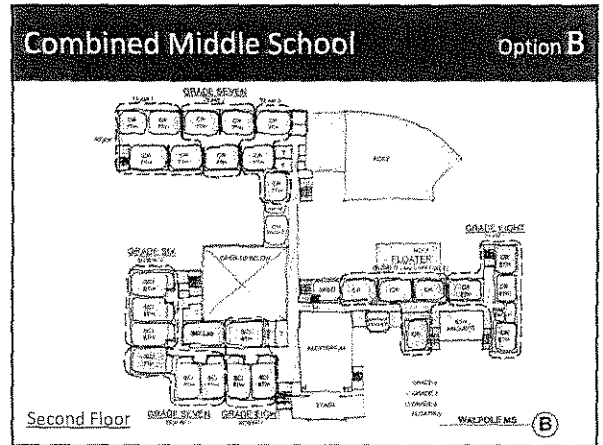
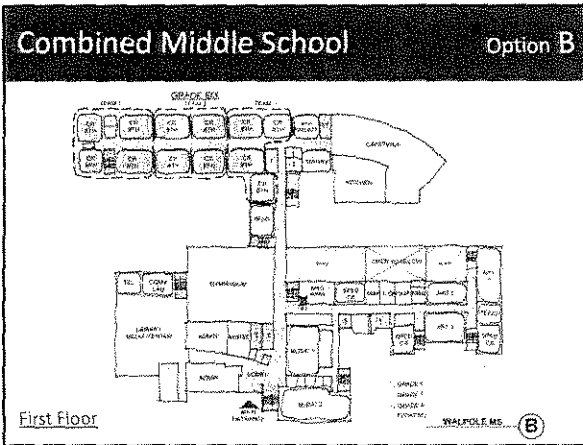


Combined Middle School

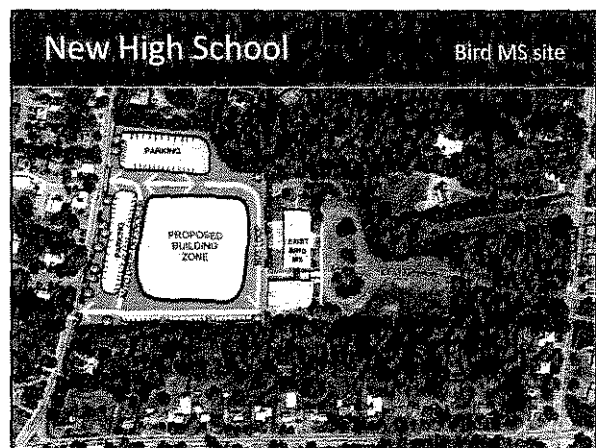
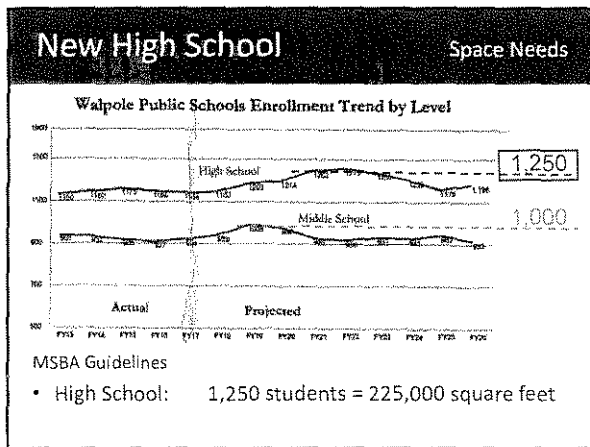
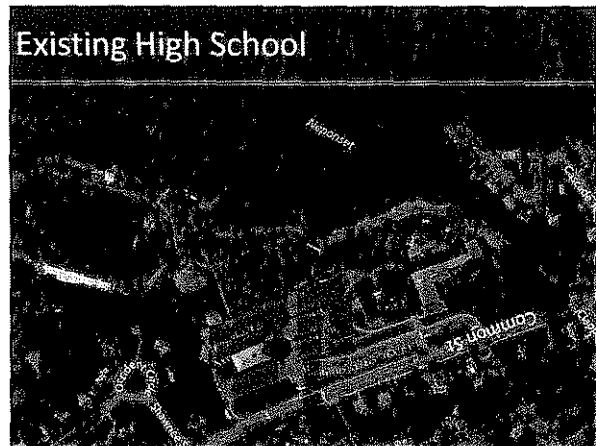
Space Needs

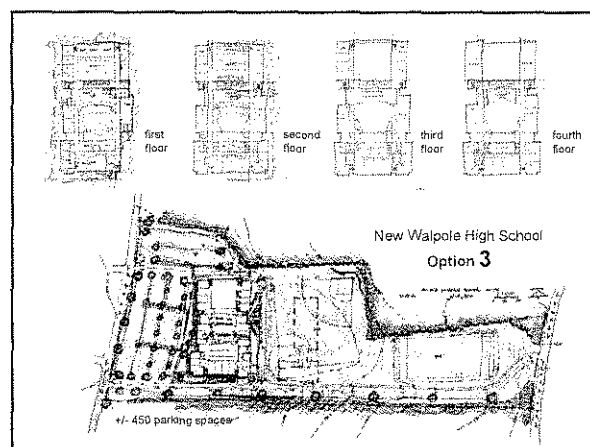
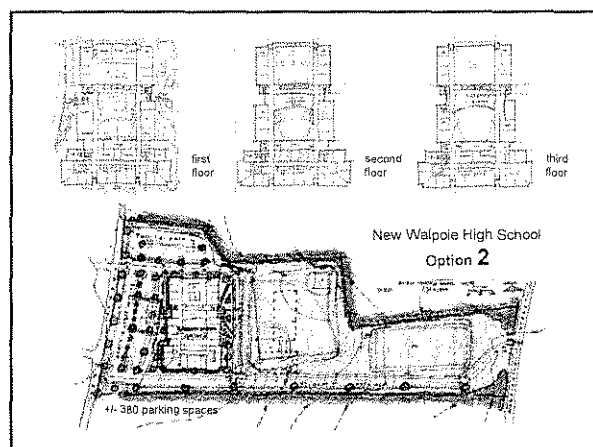
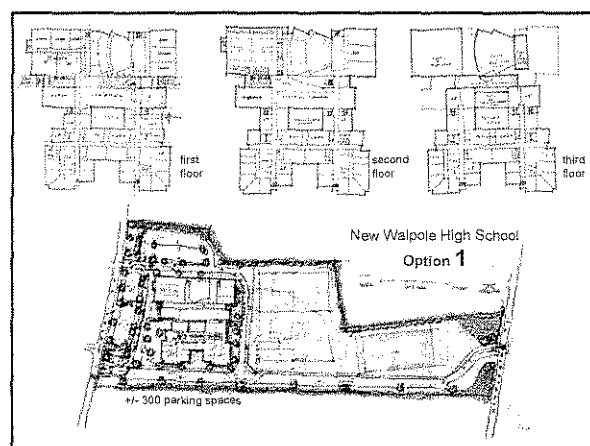
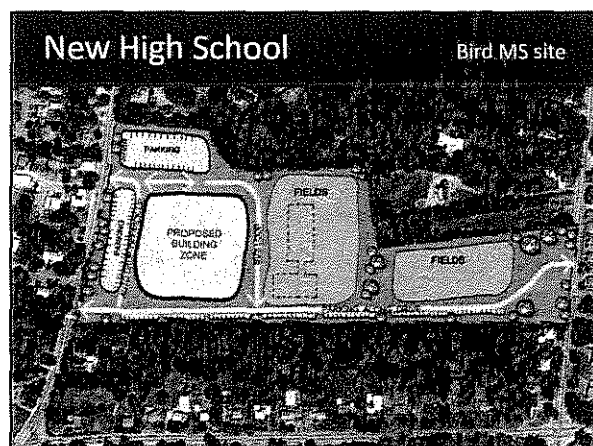
1000 students							A	
	students	teams	students/ team	CR's/ team	academic CR	sci labs	students/ CR	
Gr 6	300	3	100	4	12	3	20	
Gr 7	300	3	100	4	12	3	20	
Gr 8	300	3	100	4	12	3	20	
Floater	100	1	100	4	4	1	20	
	1000	10	100		40	10		

1000 students							B	
	students	teams	students/ team	CR's/ team	academic CR	sci labs	students/ CR	
Gr 6	333	3	111	4	12	3	22.2	
Gr 7	333	3	111	4	12	3	22.2	
Gr 8	333	3	111	4	12	3	22.2	
	1000	9	111		36	9		

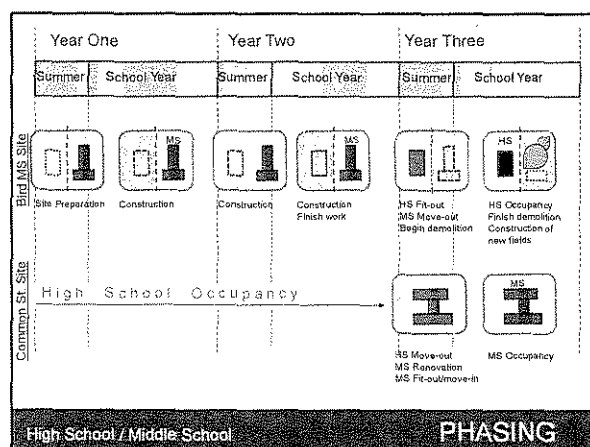


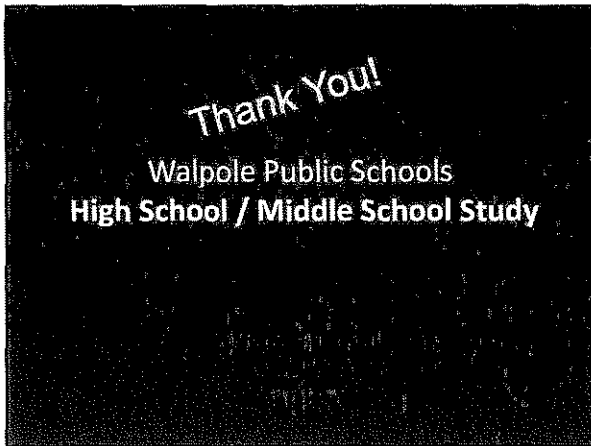
Combined Middle School		Costs
Approximate Total Project Cost		
• Option A	\$840,000.	
• Option B	\$3.7 Million	





<b>New Walpole High School</b>		Costs
Construction Cost (2016) Option 1, 2, 3		
225,000 sf x \$450/sf =		\$101 M
Soft Costs @ 25% =		\$25 M
Total Project Cost		\$126 M
escalation (5 years @4%)		\$27 M
Total Projected Project Cost		<b>\$153 M</b>







Community feedback

## Feedback from the Community

At a combined meeting of the Walpole School Committee, Finance Committee and Building Committee, on October 24, 2016 a final draft of this report was presented for review and discussion.

A summary of some of the comments from that meeting follows (in no particular order):

*Is there flexibility for future expansion? Limited by athletic fields, consider acquiring additional land.*

*What are the educational advantages of one middle school? - Parity, opportunities, specialists in one location, maximizing resources, retaining team sizes.*

*Why not Johnson MS site in lieu of Bird MS? – limited size, traffic, proximity to wells*

*Why not build a new middle school; retain HS? - HS deficiencies would remain; HS difficult to expand*

*Are there accreditation issues at the HS? – not at this time*

*Current school configuration is good-4 elem's, 2 MS, 1 HS; should be retained. One MS might be too big*

*It would be good to look at all options; bring boards together and engage the broader community*

*What are the enrollment projections for each MS individually?*

*Have other options been cost estimated? - Only very conceptually*

*One new HS can benefit all grades 6 – 12.*

*Are resources reduced with one HS? - no*

*Insufficient parking should not be a priority driving project*

*The Town recently invested in the renovation/addition of the HS!? – actually by the time a project is concluded it may be 25 – 30 years old and would still be used (as a MS).*