

Somerville High School



Symmes Maini & McKee
Associates

SMMA

February 11, 2016

An aerial architectural rendering of a university campus. The scene features several large, multi-story brick buildings with classical architectural elements like arched windows and columns. A central green lawn is surrounded by numerous trees. A network of streets with cars and a few trucks is visible, along with a small white clock tower on the left side. The overall style is a clean, illustrative architectural drawing with a light blue tint.

Preliminary Design Program Planning

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- 1.2 Invitation to Feasibility Study
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- 2.2 Class Size Policy
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1. INTRODUCTION

- 1.1 Statement of Interest Summary
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SMMA
DRAFT
INTRODUCTION

Section 1 - Introduction

1.1 STATEMENT OF INTEREST SUMMARY

The existing Somerville High School is located at 81 Highland Avenue, in Somerville, MA. The existing school was built over the course of many years, with the oldest portion dating back to 1895. The site measures approximately 13 acres around the high school, and is located on a shared parcel that also includes Somerville City Hall and the Somerville Main Public Library branch.


In April, 2013, the City of Somerville submitted a Statement of Interest (SOI) to the Massachusetts School Building Authority (MSBA) for the High School. At the November 19, 2014 Board of Directors meeting, the MSBA board voted to issue an invitation to the City to conduct a feasibility study for this Statement of Interest to identify and study possible solutions and, through a collaborative process with the MSBA, reach a mutually-agreed upon solution. The SOI focused on the replacement, renovation or modernization of aged and inoperable facility systems, and replacement or addition to obsolete buildings to provide for a full range of educational programs. Since the submission of the SOI, an evaluation of all major building systems has shown that the HVAC, plumbing, electrical, technology, fire alarm and emergency power systems are all at the end of their useful life. The existing 360,000 square foot building, with the oldest section dating back to 1895, is supported on conventional spread footings; aside from the most recent additions constructed in 1986, there is no lateral force resisting structural system in the building. The existing exterior wall system is a combination of uninsulated brick mass masonry walls and brick veneer walls over metal stud backup with limited insulation within the stud cavity. The existing building is completely non-compliant with the current energy code. The building is partially accessible but the third and fourth floors of the school are served by a single elevator that does not comply with current car size requirements. Asbestos is located throughout the building including behind the exterior brick veneer in the 1986 construction; see Section 4.9 for a detailed analysis. In addition, there are a number of general educational concerns in the building including: a geographic separation between the general academic and vocational portions of the comprehensive high school; classrooms not equipped for 21st century instruction; and a lack of differentiated learning environments. Additional existing conditions information is included in Section 4 and the complete SOI is included in Appendix 8.1.

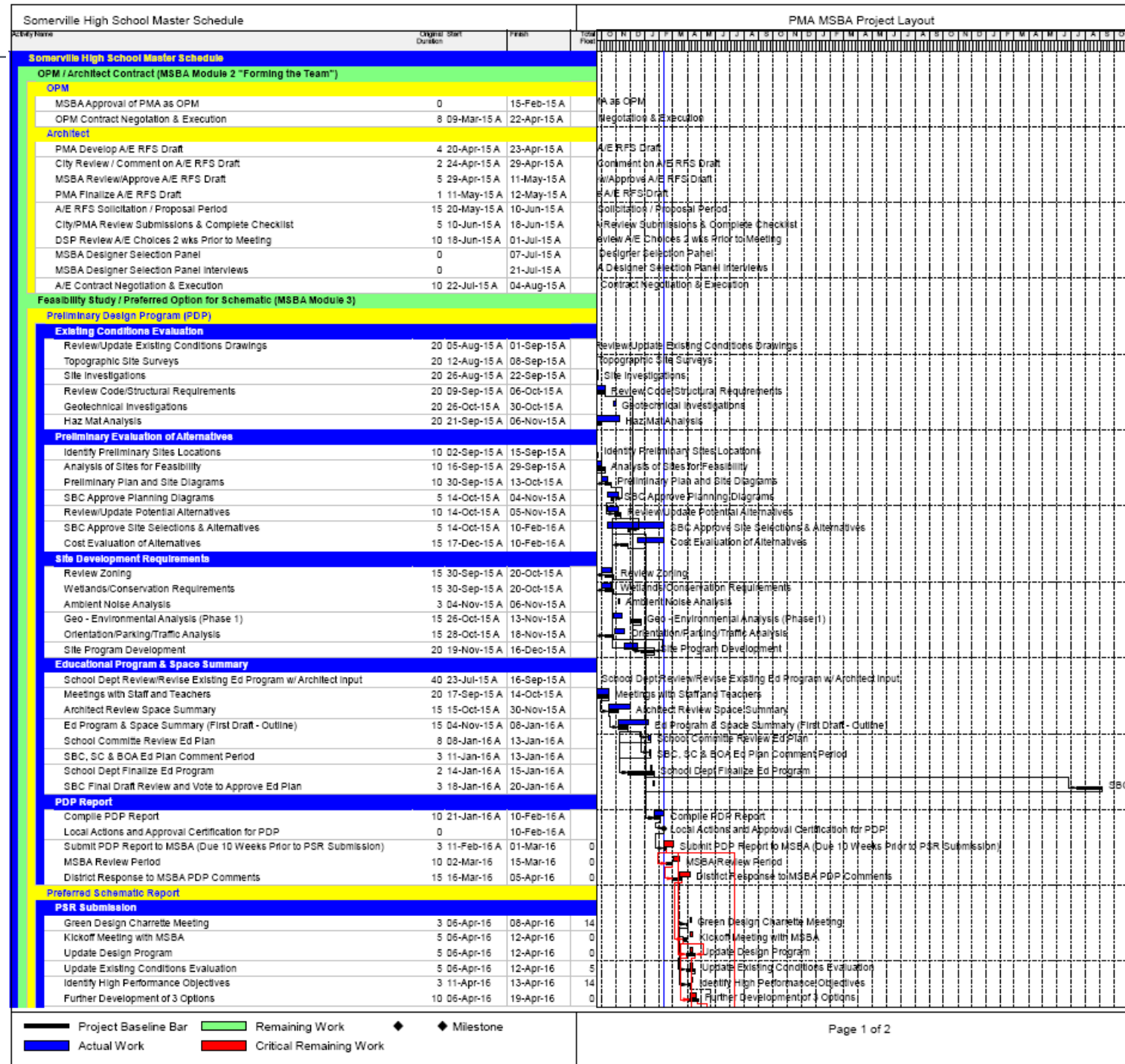
1.2 INVITATION TO FEASIBILITY STUDY

At the November 19, 2014 Board of Directors meeting, the MSBA board voted to issue an invitation to the City to conduct a feasibility study for this Statement of Interest to identify and study possible solutions and, through a collaborative process with the MSBA, reach a mutually-agreed upon solution. The invitation is included in Appendix 8.2.

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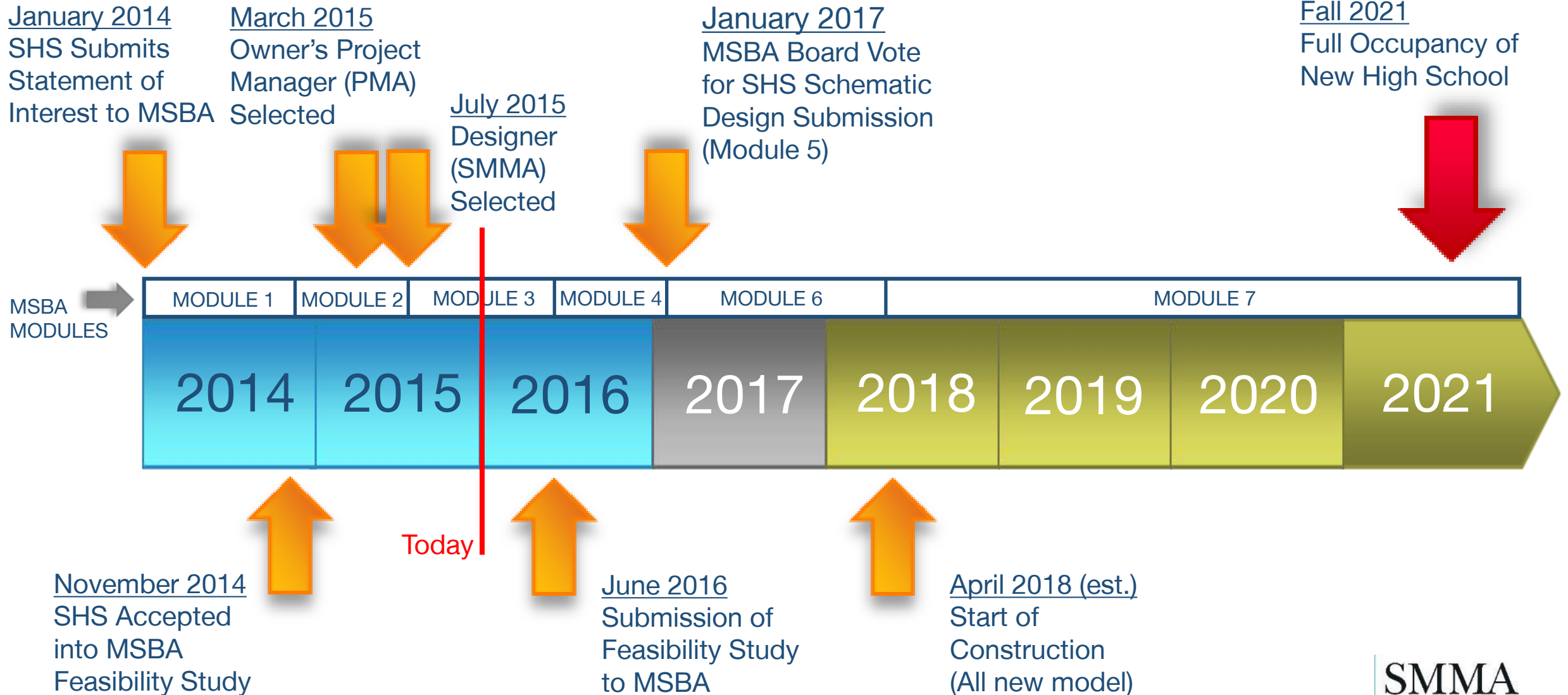
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1.6 Project Schedule



7. LOCAL ACTIONS AND APPROVAL CERTIFICATION

Preliminary Design Program (PDP) - Submit March 1st 2016

Conceptual Cost estimates by Designer (SMMA) with Owner's Project Manager (OPM – PMA) support & review

1. School Building Committee (SBC) vote on full report
2. School Committee Chair's approval and signature
3. Superintendent's approval and signature
4. Mayor's approval and signature

7. LOCAL ACTIONS AND APPROVAL CERTIFICATION

Preferred Schematic Report (PSR) - Submit June 1st 2016

Cost estimates by SMMA & PMA

1. SBC vote on full report
2. School Committee Chair's approval and signature
3. Superintendent's approval and signature
4. Mayor's approval and signature
5. Board of Aldermen vote on funding ballot question

7. LOCAL ACTIONS AND APPROVAL CERTIFICATION

Schematic Design (SD) - Submit November 28th 2016

Cost estimates by SMMA & PMA

1. SBC vote on full submission
2. School Committee Chair's approval and signature
3. Superintendent's approval and signature
4. Mayor's approval and signature
5. Board of Aldermen vote on funding full project cost

7. LOCAL ACTIONS AND APPROVAL CERTIFICATION

Design Development (DD) - Submit July 5th 2017

Select Construction Management team (IG approval)

Cost estimates by SMMA & CM

1. SBC vote on full submission

7. LOCAL ACTIONS AND APPROVAL CERTIFICATION

Construction Documentation (CD) – Complete April 11th 2018

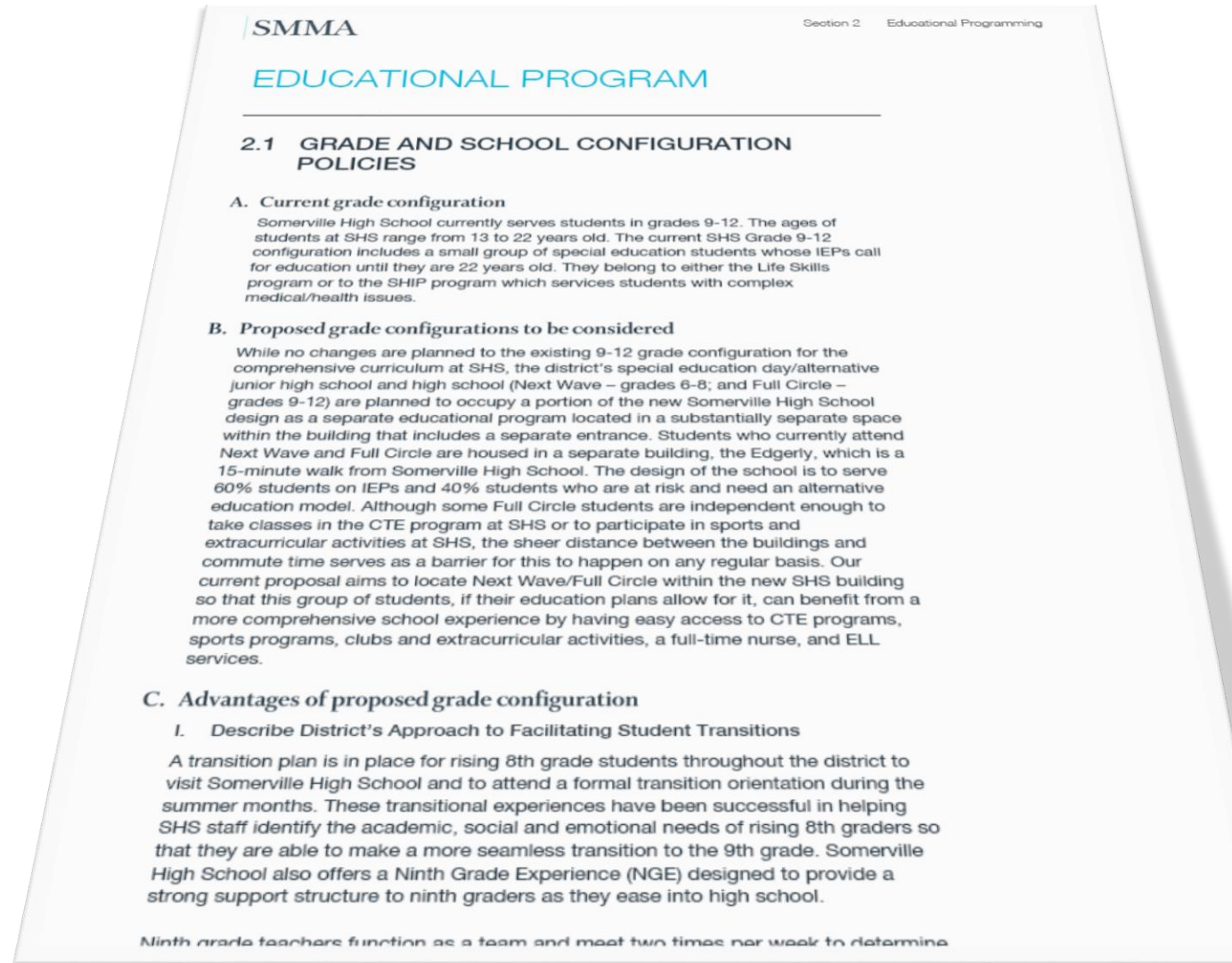
Cost estimates by SMMA & CM at 60% and 90%

Early construction or procurement packages by SMMA & Construction Management team (TBD)

1. SBC vote on full submission

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Block	Start	End	Monday	Tuesday	Wednesday	Thursday	Friday
1	7:55	9:02	A1	A2	A3	A4	B4
2	9:06	10:01	B1	D2	B2	B3	C4
3	10:05	11:00	C1	Rotating Extension Block	C2	C3	D4
4	11:04 11:34 12:04	11:34 12:04 12:34	D1	E2	D3	E3	E4
5	12:38	1:33	E1	F1	F2	F3	F4
6	1:37	2:32	G1	G2	Advisory/Common Plan. Time/Assemblies	G3	G4

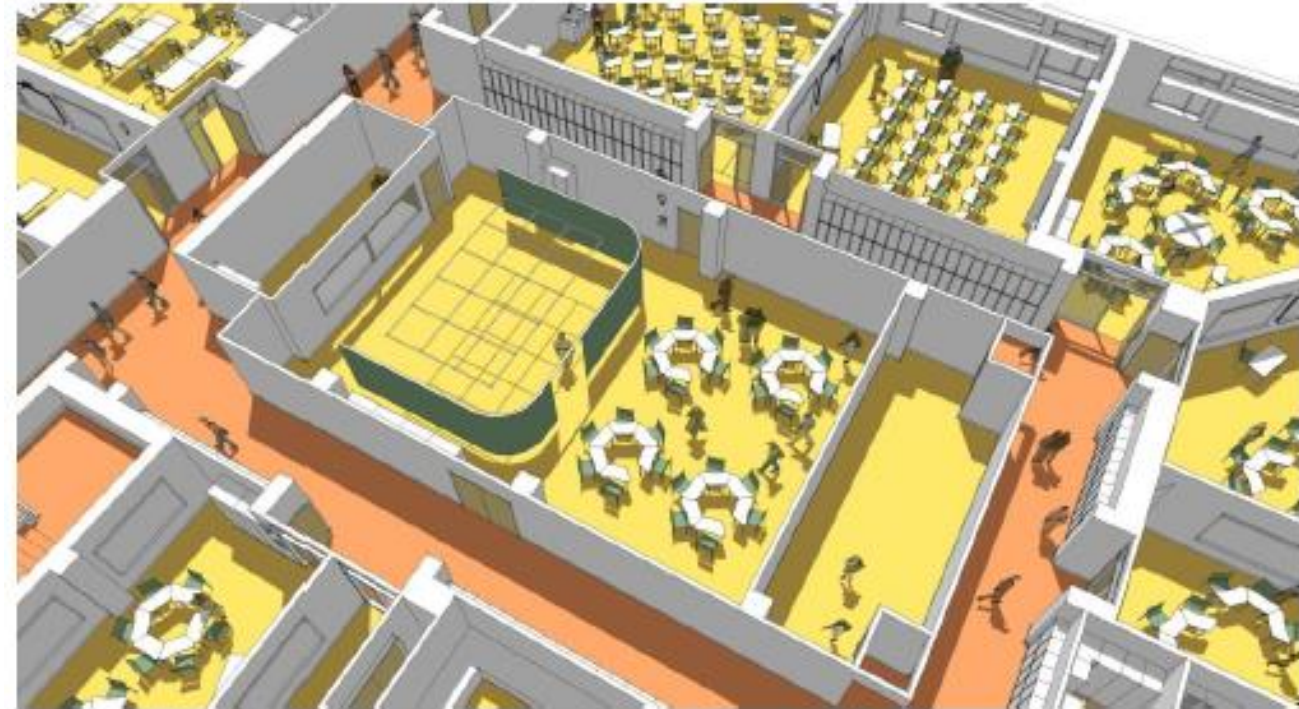
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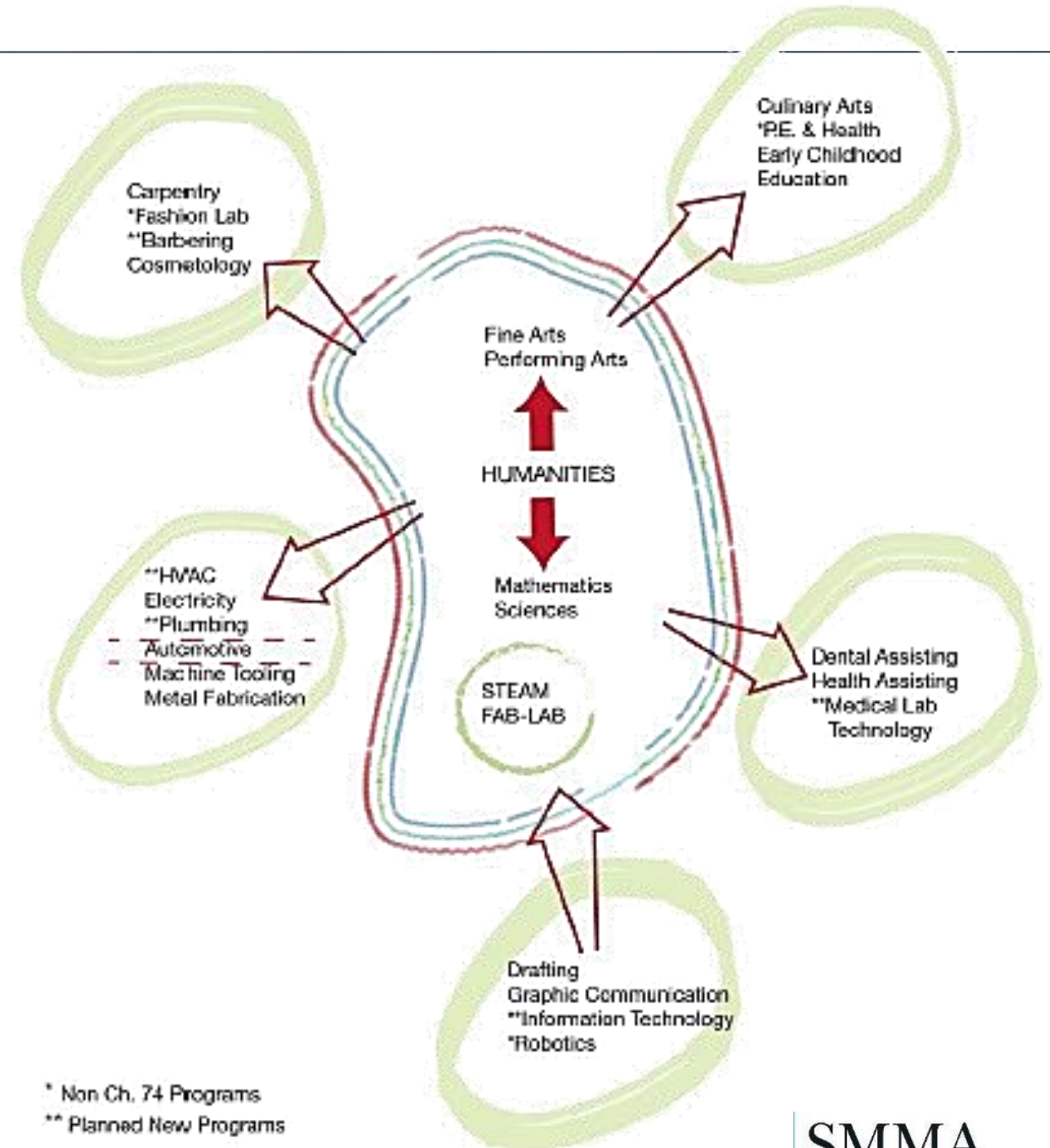
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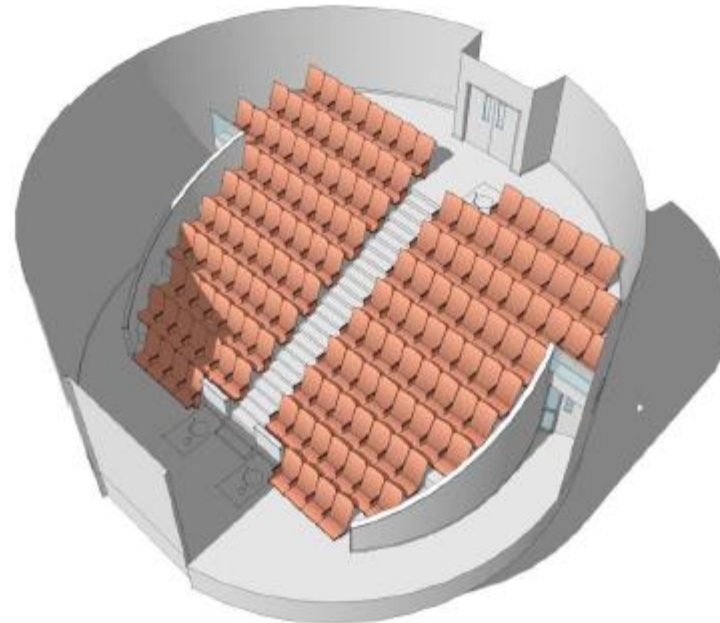
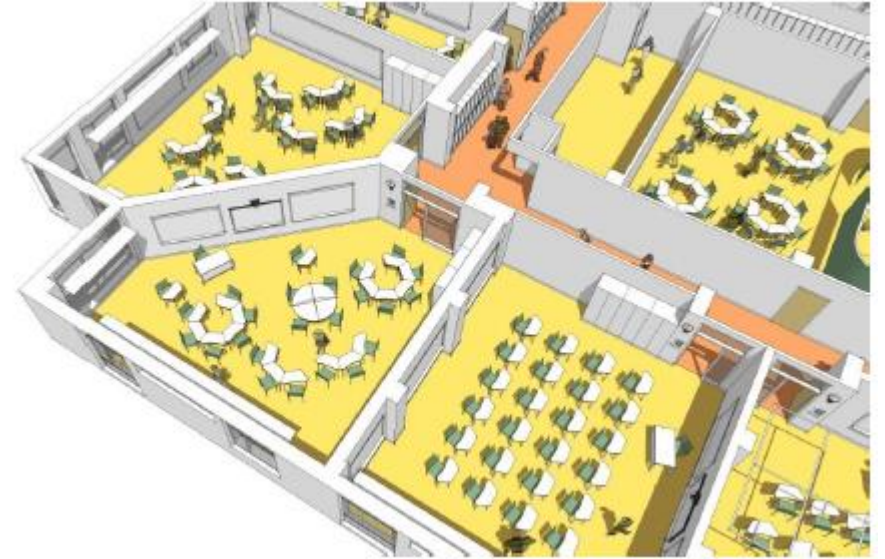
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2. Next Wave Alternative School EDUCATIONAL PROGRAM

2.1	Grade and School Configuration Policy	2.11	Performing Arts Programs
2.2	Class Size Policy	2.12	Physical Education Programs
2.3	School Scheduling Methodology	2.13	Special Education Programs
2.4	Teaching Methodology and Structure	2.14	Vocations and Technology Programs
2.5	Teacher Planning	2.15	Narrative description of the types of educational activities.
2.6	Pre-kindergarten	2.16	Transportation Policies
2.7	Kindergarten	2.17	Functional and Spatial Relationships
2.8	Lunch Programs	2.18	Security and Visual Access Requirements
2.9	Technology Instruction Policies and Program Requirements		
2.10	Visual Art Programs		

(sub-section headings analogous to Somerville High School Educational Program)

3. INITIAL SPACE SUMMARY

- 3.1 Space Summary Template 
- 3.2 Narrative description of the variances between the Districts proposed program and the MSBA guidelines
- 3.3 Scaled floor plans of the Existing Facility

3.1 SUMMARY

The Initial Space Summary was developed to address the goals and vision of the Educational Program through a series of interviews with the District administration and the High School administration, teachers, staff, and students. This section includes the Initial Space Summary.

There were 17 meetings conducted between September 18 and September 30, 2015 that included 37 individual participants. The meeting reports, located in Appendix 8.4 of this report are a record of those discussions. They do not represent a promise of inclusion in the project but rather participants' desires as well as attitudes towards organization and pedagogy for teaching and learning.

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3.1 Space Summary - All New Construction


Somerville High School	Existing Conditions			PROPOSED									MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)					
	ROOM TYPE	ROOM NFA ¹	# OF RMS	area totals	Existing to Remain/Renovated			New			Total			Ch. 74 Requirements	ROOM NFA ¹	# OF RMS	area totals	Comments
CORE ACADEMIC SPACES				59,494	0			69,580			69,580				68,170			# of RMS based on FTE Students w/o NWFC
Classroom - General	varies	54		34,794			850	42	35,700	850	42	35,700		850	47	39,950		825 SF min - 550 SF max
Classroom - ESL	varies	5		4,286			850	3	2,550	850	3	2,550						
Teacher Planning	varies	12		3,389			850	5	4,250	850	5	4,250		100	47	4,700		
Small Group Seminar (20-30 seats)							425	4	1,700	425	4	1,700		500	4	2,000		
Large Group Instruction (80-100 seats)							1,800	1	1,800	1,800	1	1,800						
Lecture Hall/Mini-Theater (200 seats)							2,600	1	2,600	2,600	1	2,600						
Science Classroom / Lab	varies	13		12,339			1,440	12	17,280	1,440	12	17,280		1,440	13	18,720		3 x 95% ul=20 Seats=1 per 100/student
Prep Room	varies	8		1,633			400	6	2,400	400	6	2,400		200	13	2,600		
Central Chemical Storage Rm	105	1		105			200	1	200	200	1	200		200	1	200		
Computer Labs	varies	3		1,998														
Language Lab	950	1		950			1,100	1	1,100	1,100	1	1,100						
SPECIAL EDUCATION				5,282	0			19,959			19,959				16,110			# of RMS based on Total Student Population w/ NWFC
Self-Contained SPED	see below													950	11	10,450		assumed 8% of pop. in self-contained SPED
Self-Contained SPED Toilet							60	2	120	60	2	120		60	11	660		
Life Skills Classroom	981	1		981			1,500	1	1,500	1,500	1	1,500						
Shared Kitchenette							200	1	200	200	1	200						
"SHIP" Medically Fragile Student Classroom	1,175	1		1,175			1,500	1	1,500	1,500	1	1,500						
ASD Classroom w/ Breakout - Moderate							850	1	850	850	1	850						
Quiet Room							150	1	150	150	1	150						
ASD Classroom w/ Breakout - Moderate							850	1	850	850	1	850						
Study Skills Classroom							425	1	425	425	1	425						
Therapeutic Classroom							425	1	425	425	1	425						
PT/OT/Speech Sensory Room							425	1	425	425	1	425						
Transition Skills Classroom (for 18-22 year old students)	297	1		297			425	1	425	425	1	425						
Resource Room	varies	3		1,836			425	4	1,700	425	4	1,700		500	5	2,500		1/2 size Genl. Clim.
Small Group Room	150	1		150			425	4	1,700	425	4	1,700		500	5	2,500		1/2 size Genl. Clim.
SPED Office - Adj Counselor	varies	3		368			200	3	600	200	3	600						
SPED Office - Department Head							150	1	150	150	1	150						
SPED Office - Workroom	486	1		486			425	1	425	425	1	425						
Next Wave/Full Circle Program																		
FC Classrooms							425	8	3,400	425	8	3,400						
NW Classrooms							425	4	1,700	425	4	1,700						
NWFC Reception							400	1	400	400	1	400						
NWFC Clinical Counselor Office							120	2	240	120	2	240						
NWFC Director Office							150	1	150	150	1	150						
NWFC Aide Workstation							54	1	54	54	1	54						
NWFC Crisis Counselor Office							120	2	240	120	2	240						
NWFC Nurse Station							200	1	200	200	1	200						
NWFC Conference Room (20 seats)							425	1	425	425	1	425						
NWFC Study Room							200	1	200	200	1	200						

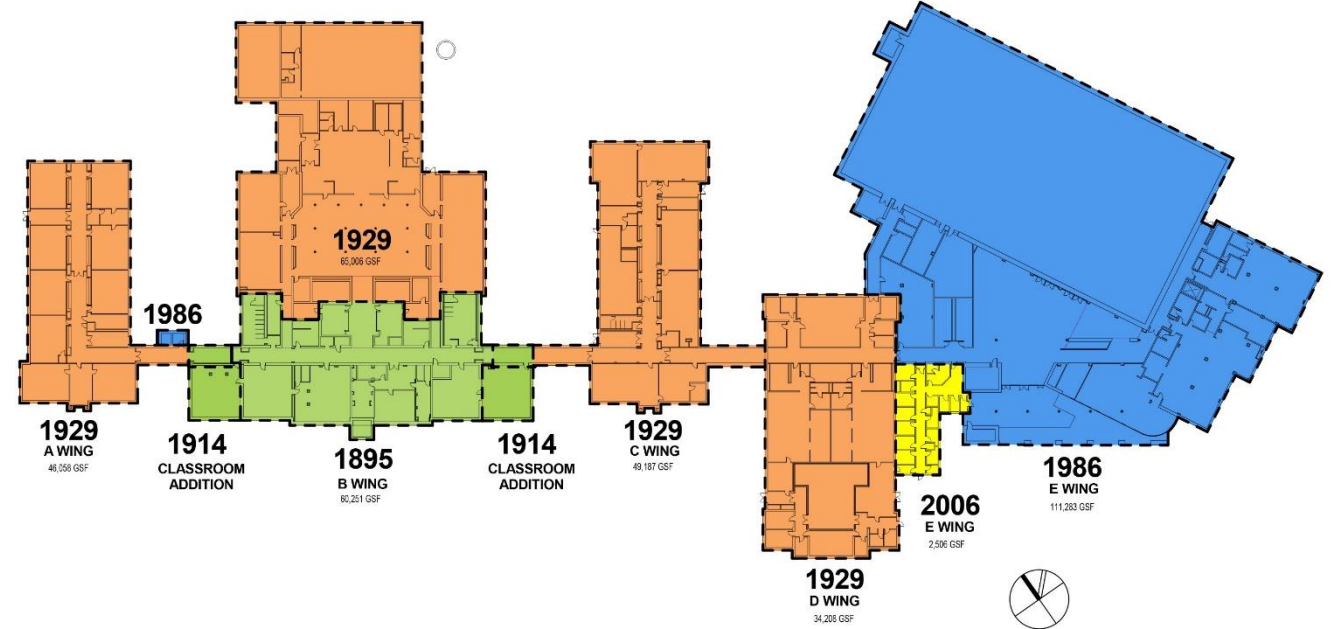
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3.1 Space Summary – Addition/Renovation


Somerville High School	Existing Conditions			PROPOSED									Ch. 74 Requirements	MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
	ROOM NFA ¹	# OF RMS	area totals	Existing to Remain/Renovated			New			Total				ROOM NFA ¹	# OF RMS	area totals	Comments
ROOM TYPE				ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals		ROOM NFA ¹	# OF RMS	area totals	
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Classroom - General	varies	54	34,794	850	24	20,400	850	18	15,300	850	42	35,700		850	47	39,950	825 SF min - 950 SF max
Classroom - ESL	varies	5	4,286	850	3	2,550	0	0	-	850	3	2,550					
Teacher Planning	varies	12	3,389	850	5	4,250	0	0	-	850	5	4,250		100	47	4,700	
Small Group Seminar (20-30 seats)				425	4	1,700	0	0	-	425	4	1,700		500	4	2,000	
Large Group Instruction (80-100 seats)							1,800	1	1,800	1,800	1	1,800					
Lecture Hall/Mini-Theater (200 seats)							2,600	1	2,600	2,600	1	2,600					
Science Classroom / Lab	varies	13	12,339	1,440	0	-	1,440	12	17,280	2,880	12	17,280		1,440	13	18,720	3 x85% up=20 Seats-1 per iday/student
Prep Room	varies	8	1,633	200	0	-	200	12	2,400	400	6	2,400		200	13	2,600	
Central Chemical Storage Rm	105	1	105				200	1	200	200	1	200		200	1	200	
Computer Labs	varies	3	1,098														
Language Lab	950	1	950				1,100	1	1,100	1,100	1	1,100					
SPECIAL EDUCATION			5,282			3,409			16,550			19,959				16,110	# of RMS based on Total Student Population w/ MWFC
Self-Contained SPED	see below						80	2	120	80	2	120		950	11	10,450	assumed 8% of pop. in self-contained SPED
Self-Contained SPED Toilet							1,500	1	1,500	1,500	1	1,500		60	11	660	
Life Skills Classroom	981	1	981				200	1	200	200	1	200					
Shared Kitchenette							1,500	1	1,500	1,500	1	1,500					
"SHIP" Medically Fragile Student Classroom	1,175	1	1,175				850	1	850	850	1	850					
ASD Classroom w/ Breakout - Severe							150	1	150	150	1	150					
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Transition Skills Classroom (for 18-22 year old students)	297	1	297				425	1	425	425	1	425					
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SPED Office - Adj Counselor	varies	3	356				200	3	600	200	3	600					
SPED Office - Department Head							150	1	150	150	1	150					
SPED Office - Workroom	486	1	486				425	1	425	425	1	425					
Next Wave/Full Circle Program																	
FC Classrooms				425	4	1,700	425	4	1,700	425	8	3,400					
NW Classrooms				425	4	1,700	425	4	1,700	425	4	1,700					
NWFC Reception				400	1	400				400	1	400					
NWFC Clinical Counselor Office				120	2	240	0	0	-	120	2	240					
NWFC Director Office				150	1	150	0	0	-	150	1	150					
NWFC Aide Workstation				54	1	54	0	0	-	54	1	54					
NWFC Crisis Counselor Office				120	2	240	0	0	-	120	2	240					
NWFC Nurse Station				200	1	200				200	1	200					
NWFC Conference Room (20 seats)				425	1	425				425	1	425					

4. EVALUATION OF EXISTING CONDITIONS

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*Somerville High School
Somerville, Massachusetts*

Existing Conditions Report
Kitchen

Overview of Existing- Based on 11/5/15 Meeting

The existing kitchen space is 3,640 net square foot plus an additional 690 net square feet for the Teacher Servery. The current configuration of the kitchen is traditional with a straight line configuration with students entering from one end and exiting from the other. The amount of space creates congestion with too many students trying to get through the line. A separate Salad Bar is away from the main servery. The limited space restricts the menu options and any expansion.

The storage is spread out between multiple areas, including the receiving area and general storage area. The Cooler and Freezer storage areas are deep in the kitchen. The shipments must be carried through the prep spaces to get into the Storage.

There are two snack bar areas, one off of the teacher's server and one at the opposite end of the serving line. This latter one includes a dishwasher and the 3 bay sink.

Currently there is no recycling/cardboard space. This needs to be accommodated.


Current Kitchen Equipment

- 3 Double Convection Ovens
- 1 Two Compartment Streamer
- 1 40 Gallon Tilting Kettle
- 1 Tilting Kettle
- 1 Six Burner Range
- 1 Flat Top

Future Equipment

- 1 Blast Chiller
- 1 Double Convection Oven

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CDW CONSULTANTS, INC.
CIVIL & ENVIRONMENTAL ENGINEERS

HAZARDOUS MATERIALS SUMMARY REPORT

Somerville High School
81 Highland Avenue
Somerville, Massachusetts


Prepared for

Symmes Maini & Mckee
1000 Massachusetts Avenue
Cambridge, MA 02138

November 2015

CDW Project # 1491.0

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SOMERVILLE HIGH SCHOOL
Somerville, Massachusetts

Existing Conditions Traffic Analysis


Prepared For:
Symmes Maini & McKee Associates

Prepared by:
Design Consultants, Inc.

January 2016



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- 4.12 Preliminary Geotechnical Report
- 4.13 Site Environmental Noise Analysis
- 4.14 Code Compliance Consideration Report



CDW CONSULTANTS, INC.
CIVIL & ENVIRONMENTAL ENGINEERS

PHASE I ENVIRONMENTAL SITE ASSESSMENT
(ASTM E 1527-13)

Somerville High School
81 Highland Avenue
Somerville, Massachusetts


November 30, 2015

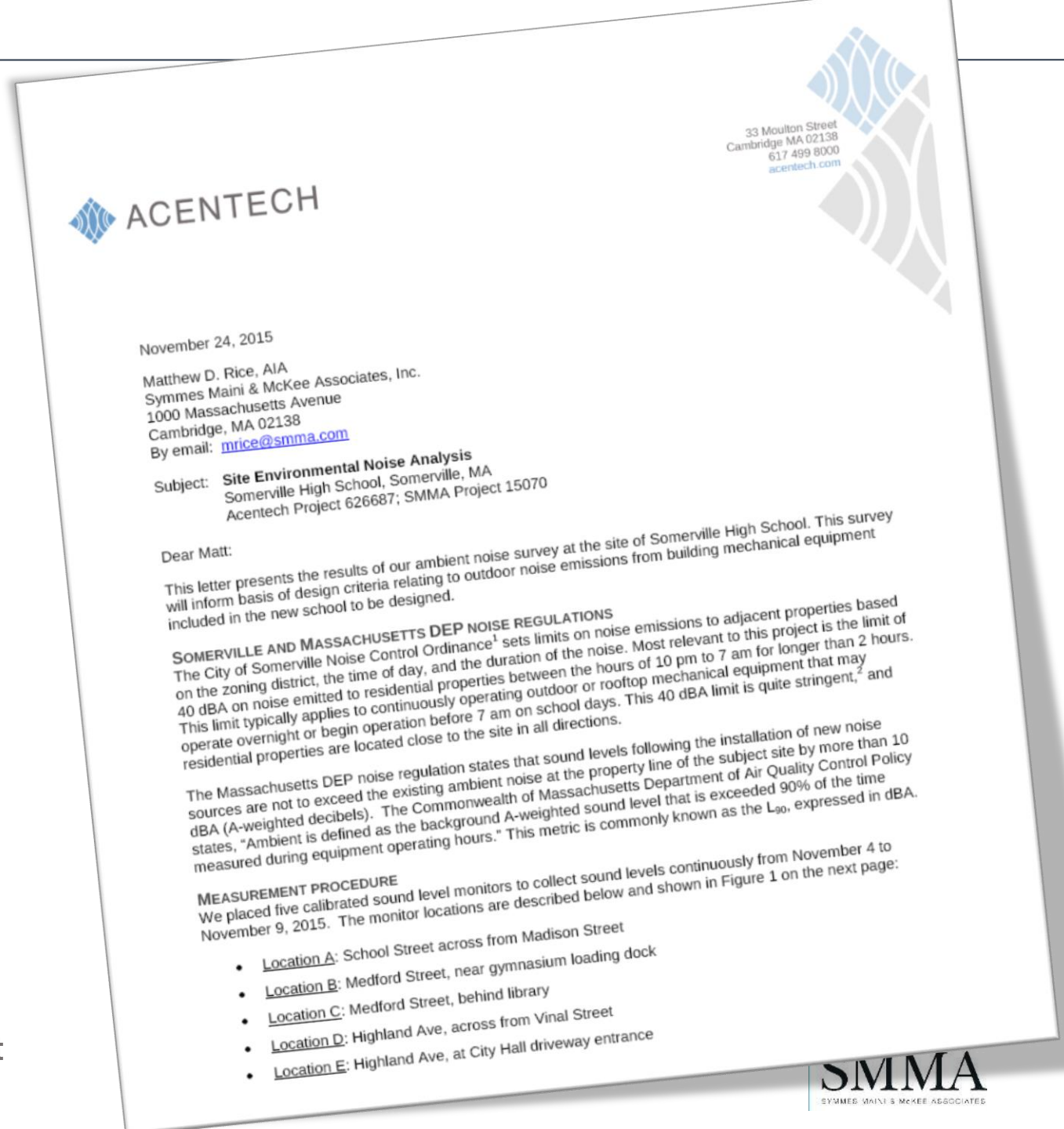
Prepared for:

Symmes Maini and Mckee
1000 Massachusetts Avenue
Cambridge, Massachusetts


CDW Project #1491.00

4. EVALUATION OF EXISTING CONDITIONS

- 4.1 Existing Site Conditions
- 4.2 Existing Building Conditions
- 4.3 Existing Structural System
- 4.4 Existing Fire Protection System
- 4.5 Existing Plumbing System
- 4.6 Mechanical System
- 4.7 Existing Electrical System
- 4.8 Existing Food Service Conditions
- 4.9 Hazardous Materials Report
- 4.10 Traffic Report
- 4.11 Geo-Environmental Report (Phase 1)
- 4.12 Preliminary Geotechnical Report
- 4.13 Site Environmental Noise Analysis 
- 4.14 Code Compliance Consideration Report



4. EVALUATION OF EXISTING CONDITIONS

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- 4.13 Site Environmental Noise Analysis
- 4.14 Code Compliance Consideration Report 



5. SITE DEVELOPMENT REQUIREMENTS

- 5.1 Existing Site Plan 
- 5.2 Site Development Requirements



6. PRELIMINARY EVALUATION OF ALTERNATIVES

- 6.1 School Assignment Practices and Available Space
- 6.2 Regionalizing or Tuition Agreements with Adjacent School Districts
- 6.3 Leasing, Renting, Acquisition of Existing Buildings for School Use
- 6.4 Project Goals
- 6.5 Site Alternatives
- 6.6 Construction Alternates including cost Estimate and Schedules

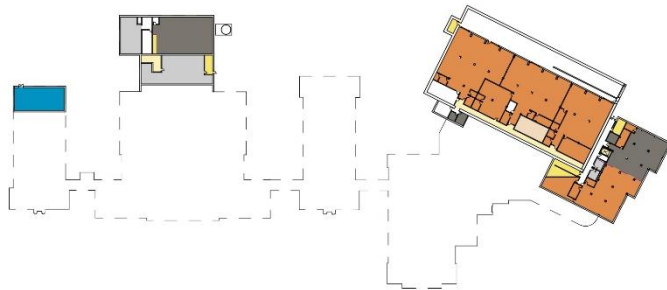
6.6 Construction Alternates



PROGRAM PLAN LEGEND

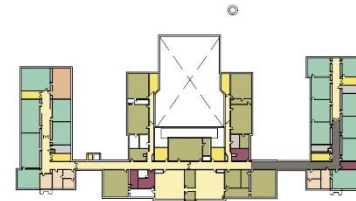
ADMINISTRATION / GUIDANCE / STUDENT SERVICES / NURSE	HEALTH & FITNESS
BUILDING EQUIPMENT	KITCHEN / SERVERY
CAFETERIA & CIRCULATION	PHYSICAL EDUCATION & SPORT SUPPORT
CHAPTER 74	SPECIAL EDUCATION
CLASSROOM & GENERAL EDUCATION SUPPORT	VERTICAL CIRCULATION
COMMUNITY USE	VOCATIONAL & TECHNOLOGY
CUSTODIAL / MAINTENANCE / STORAGE	

1 LEVEL 1
SCALE: 1" = 160'-0"

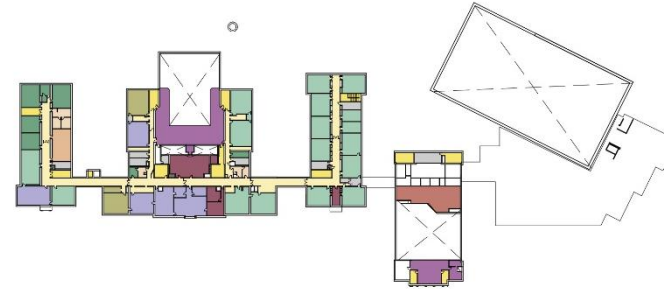


L LOWER LEVEL PLAN
SCALE: 1" = 160'-0"

4 LEVEL 4
SCALE: 1" = 160'-0"



3 LEVEL 3
SCALE: 1" = 160'-0"



2 LEVEL 2
SCALE: 1" = 160'-0"



Ait 0 & 1

Alternative 0 – Code Upgrade & Repair Only

Alternative 1 – Full Gut Renovation, No New Additions

Both Alternatives Involve Phased Construction



6.6 Construction Alternates



Alternate 0

PROS

- Cost
- Duration

CONS

- The completed construction would not accommodate the current or future curriculum.
- No space or flexibility is provided for the projected growth in student population.

6.6 Construction Alternates



Alternate 1

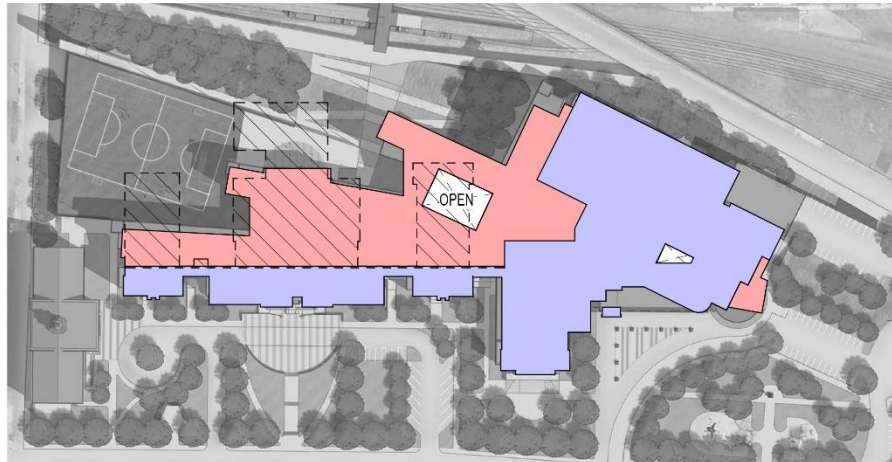
PROS

- Cost
- Completely renewed school with modern & functional systems
- Potential for improved energy conservation and lower operating costs
- Some response to current educational programming needs

CONS

- Neither current nor future curriculum are fully accommodated.
- Neither space nor flexibility provided for the projected growth in student population.
- Less potential for meeting community design and image goals given the ability to only refresh the existing exterior envelope.
- Complicated construction phasing
- Long construction duration
- Swing space is required
- Internal and external construction congestion

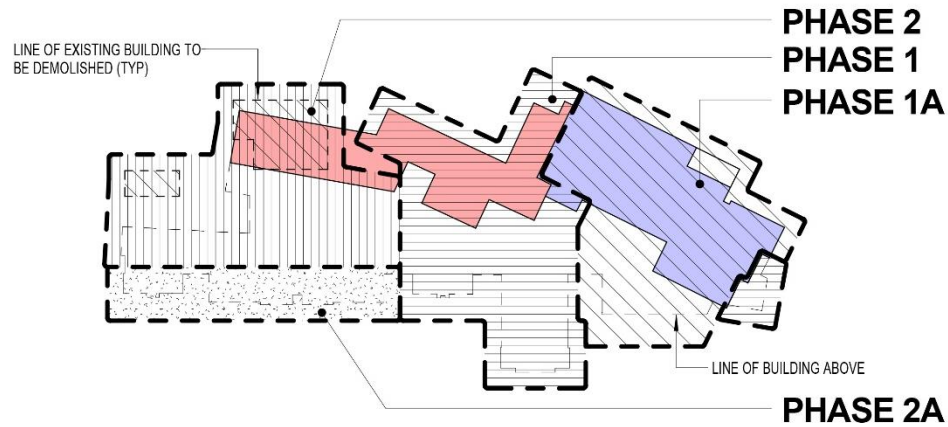
6.6 Construction Alternates



CONSTRUCTION LEGEND

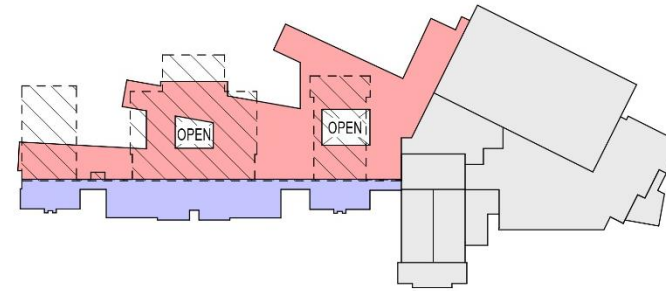
ADD RENO ROOF

1 LEVEL 1
SCALE: 1" = 160'-0"

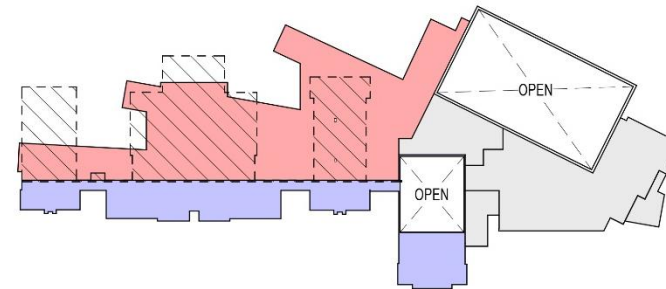


L LOWER LEVEL
SCALE: 1" = 160'-0"

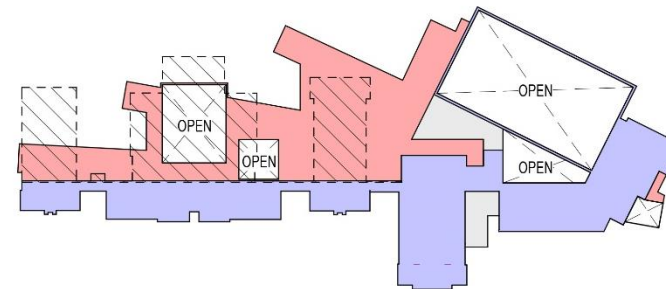
4 LEVEL 4
SCALE: 1" = 160'-0"



3 LEVEL 3
SCALE: 1" = 160'-0"



2 LEVEL 2
SCALE: 1" = 160'-0"



Ait 2

Alternative 2 – Addition / Renovation

Renovate 1986 CTE Wing & Southern Portions of 1895/1929 Classrooms

New Auditorium & Cafeteria

Phased Construction



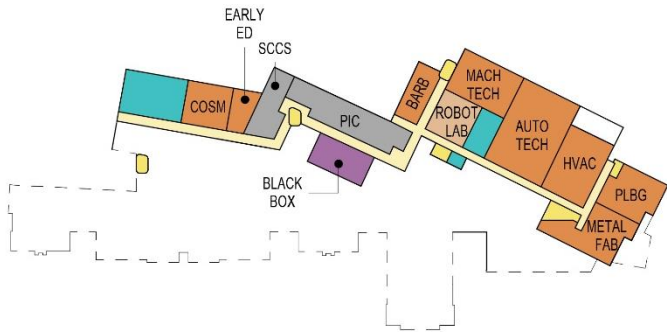
6.6 Construction Alternates



PROGRAM AREAS

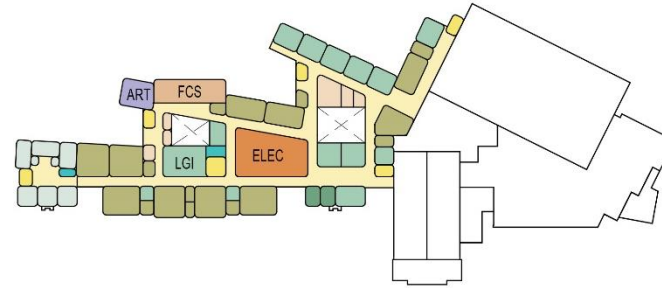
 ADMIN	 CIRCULATION	 NWFC	 SPED
 ARTS	 CR	 OFF-SITE AUXILIARY	 STAIR/ELEV
 AUDITORIUM/DRAMA	 HEALTH/PE	 ROOF	 SUPPORT
 CH 74	 MEDIA CENTER	 SCIENCE	 TECH

1 LEVEL 1
SCALE: 1" = 160'-0"

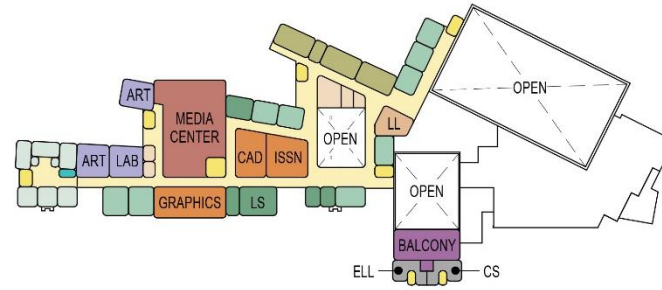


L LOWER LEVEL
SCALE: 1" = 160'-0"

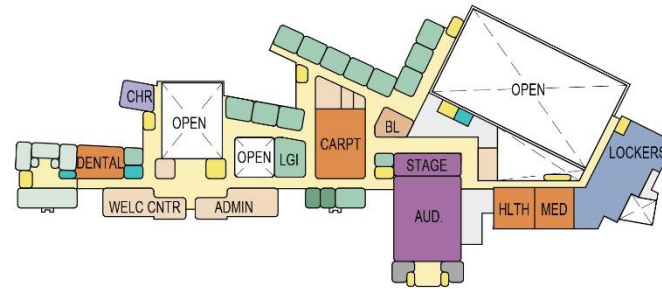
4 LEVEL 4
SCALE: 1" = 160'-0"



3 LEVEL 3
SCALE: 1" = 160'-0"



2 LEVEL 2
SCALE: 1" = 160'-0"



Alt 2

Alternative 2 – Addition / Renovation

Renovate 1986 CTE Wing & Southern Portions of 1895/1929 Classrooms

New Auditorium & Cafeteria

Phased Construction



6.6 Construction Alternates

Alternate 2

PROS

- Completely renewed school, leveraging the most recent construction on site for renovation economy
- Potential energy conservation and lower operating costs
- Response to current educational programming needs
- Full accommodation of current and future curriculum
- Space and flexibility is provided for the projected growth in student population
- Potential for meeting community design and image goals
- Preserves the historic assets of the highest-value construction facing the main lawn.



CONS

- Third highest cost (3 of 8)
- Complicated construction phasing
- Long construction duration
- Swing space is required
- Internal and external construction congestion

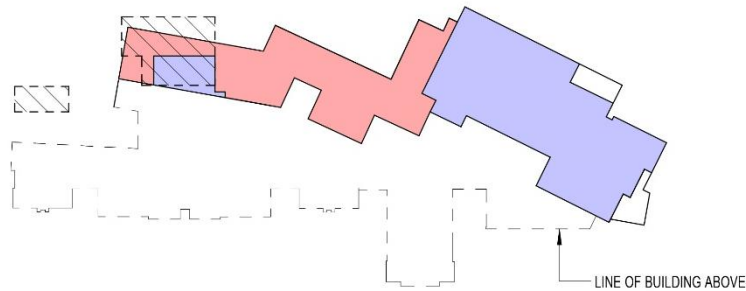
6.6 Construction Alternates



CONSTRUCTION LEGEND

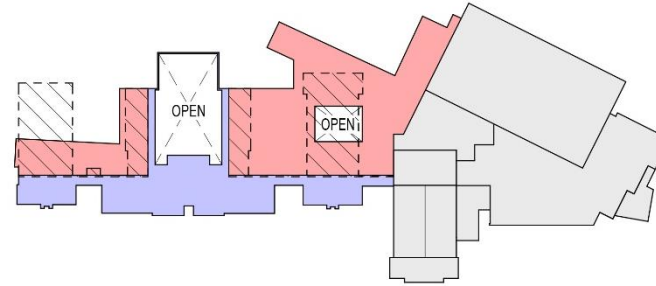
ADD RENO ROOF

1 LEVEL 1
SCALE: 1" = 160'-0"

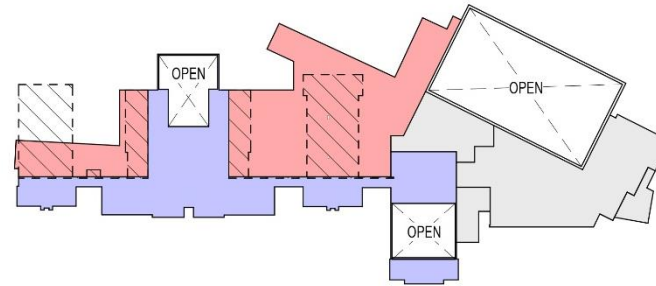


L LOWER LEVEL
SCALE: 1" = 160'-0"

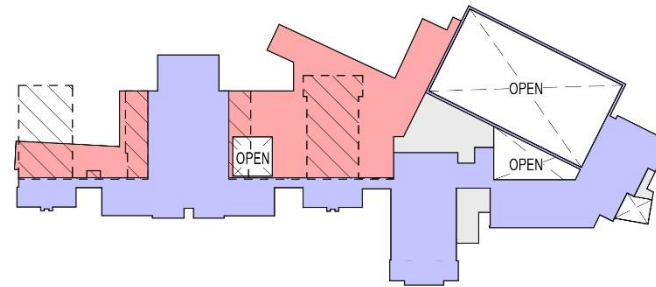
4 LEVEL 4
SCALE: 1" = 160'-0"



3 LEVEL 3
SCALE: 1" = 160'-0"



2 LEVEL 2
SCALE: 1" = 160'-0"



Ait 3

Alternative 3 – Addition / Renovation

Renovate 1986 CTE Wing & Southern Portions of 1895/1929 Classrooms

Renovate Auditorium

New Cafeteria

Phased Construction



6.6 Construction Alternates

Alternate 3

PROS

- Completely renewed school, leveraging the most recent construction on site for renovation economy
- Potential for energy conservation and lower operating costs
- Response to current educational programming needs
- Full accommodation of current and future curriculum
- Space and flexibility is provided for the projected growth in student population
- Potential for meeting community design and image goals
- Preserves the historic assets of the highest-value construction facing the main lawn



CONS

- Cost
- Complicated construction phasing
- Long construction duration
- Swing space is required
- Internal and external construction congestion

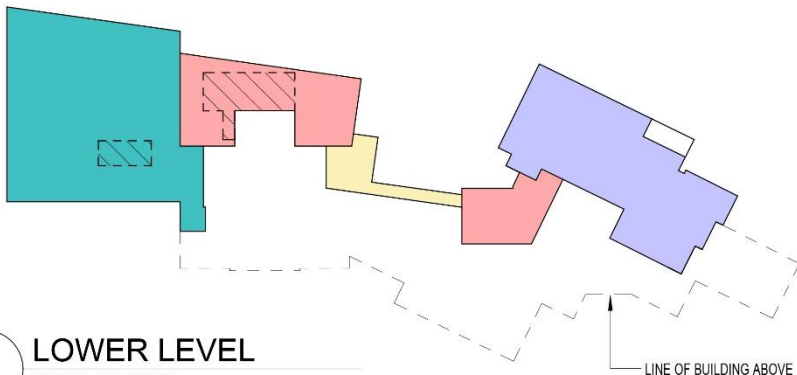
6.6 Construction Alternates



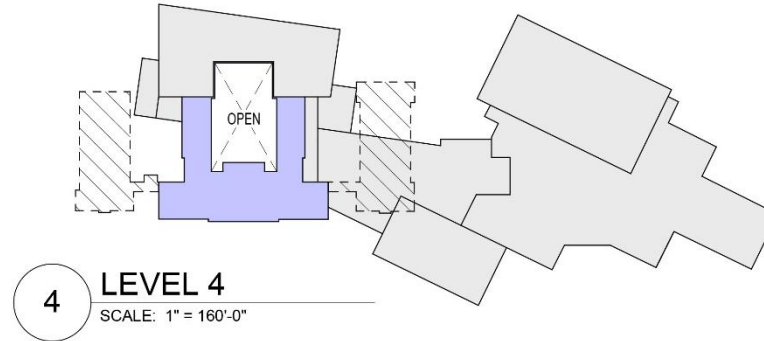
CONSTRUCTION LEGEND

■ ADD ■ FIELD ■ MAIN STREET ■ PARKING ■ RENO ■ ROOF

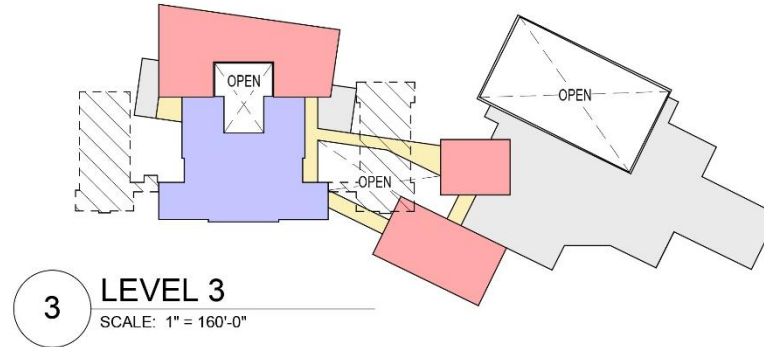
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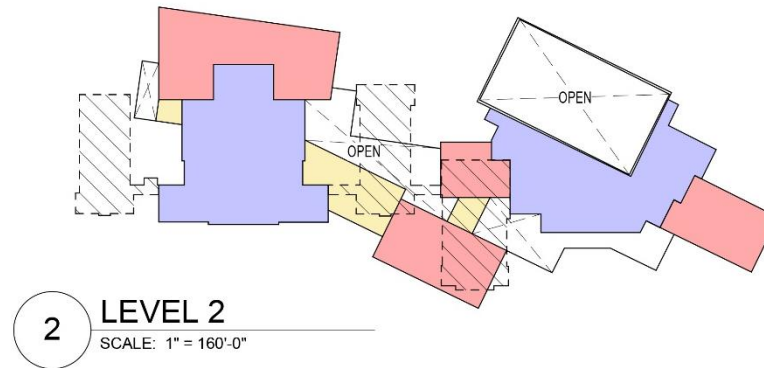
5 LOWER LEVEL
SCALE: 1" = 160'-0"



4 LEVEL 4
SCALE: 1" = 160'-0"



3 LEVEL 3
SCALE: 1" = 160'-0"



2 LEVEL 2
SCALE: 1" = 160'-0"

Ait 4

Alternative 4 – Addition / Renovation

Concourse Approach

Enclosed / Open
Central Circulation and Activity Space –
Incorporates Cafeteria

Renovate 1986 CTE Wing & 1895/1929 B Wing

Renovate Auditorium
Phased Construction



6.6 Construction Alternates

Alternate 4

PROS

- Completely renewed school, leveraging the most recent construction on site for renovation economy
- Potential for energy conservation and lower operating costs
- Response to current educational programming needs
- Full accommodation of current and future curriculum
- Space and flexibility is provided for the projected growth in student population
- Potential for meeting community design and image goals

CONS

- Cost
- Complicated construction phasing
- Long construction duration
- Swing space is required
- Internal and external construction congestion



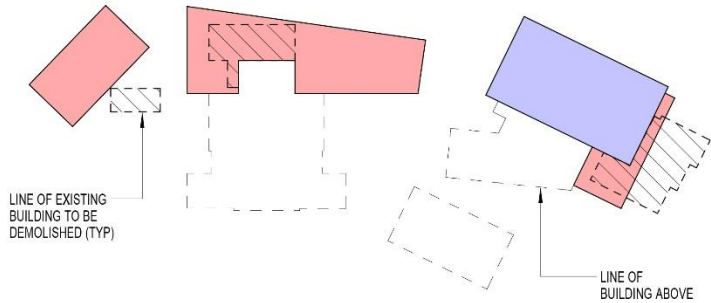
6.6 Construction Alternates



CONSTRUCTION LEGEND

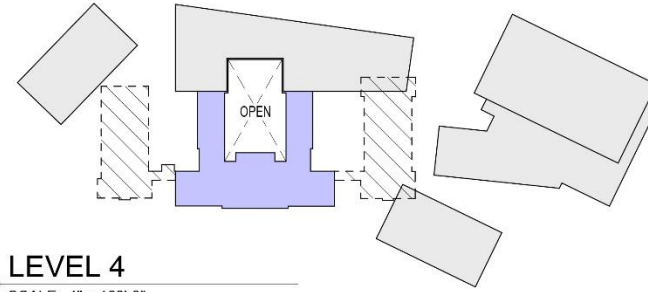
- ADD
- FIELD
- RENO
- ROOF

1 LEVEL 1
SCALE: 1" = 160'-0"

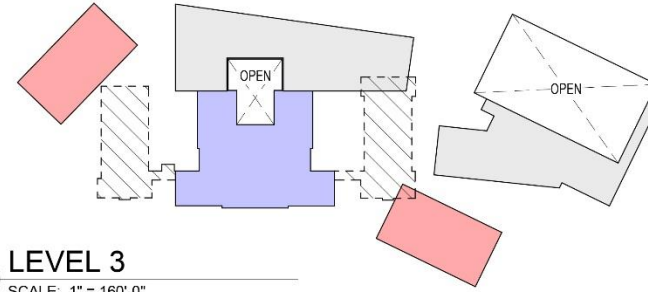


L LOWER LEVEL
SCALE: 1" = 160'-0"

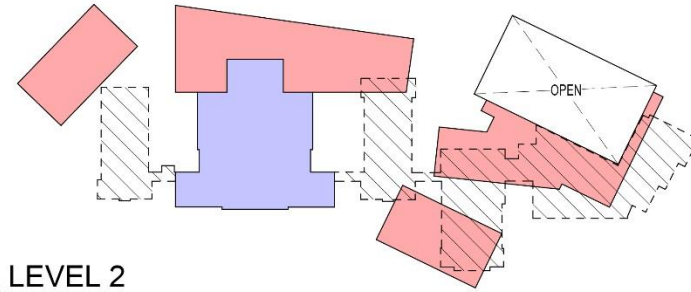
4 LEVEL 4
SCALE: 1" = 160'-0"



3 LEVEL 3
SCALE: 1" = 160'-0"



2 LEVEL 2
SCALE: 1" = 160'-0"



Alt 4a

Alternative 4a –
Addition / Renovation

Campus Approach

Renovate 1986
Gymnasium & 1895
Building

Renovate Auditorium

New Cafeteria

New Disconnected
Buildings

Phased Construction



6.6 Construction Alternates



Alternate 4a

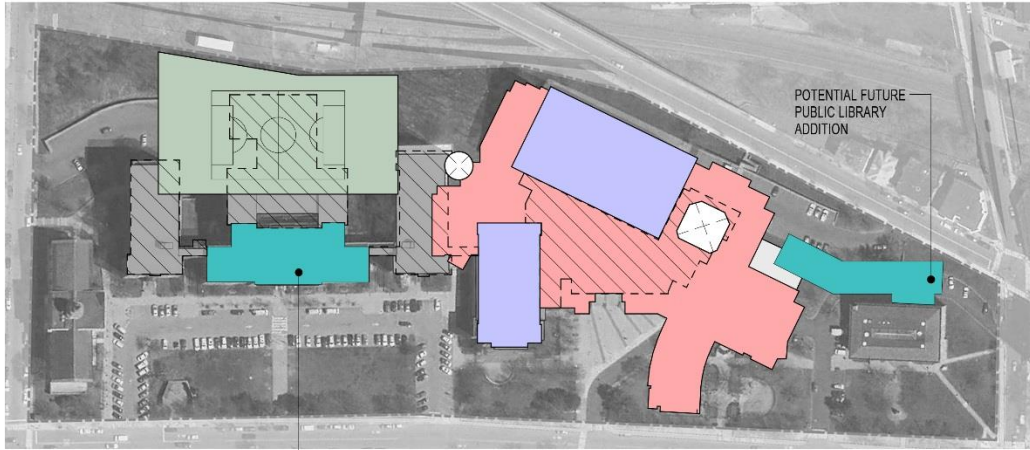
PROS

- Completely renewed school.
- Potential for energy conservation and lower operating costs
- Response to current educational programming needs
- Full accommodation of current and future curriculum
- Space and flexibility is provided for the projected growth in student population
- Potential for meeting community design and image goals
- Greater ability to isolate operations of individual buildings for improved security and energy consumption during after-hours use.

CONS

- Cost
- Complicated construction phasing
- Long construction duration
- Swing space is required
- Internal and external construction congestion
- Maintaining a secure campus is more complicated due to multiple buildings and multiple entry points.
- Increased grossing requirements associated with multiple buildings to account for additional stairs, elevators, toilet rooms and similar support services.
- Disconnected buildings compromise day-to-day operations of the school, with the potential to reinforce curriculum separation, rather than unification.

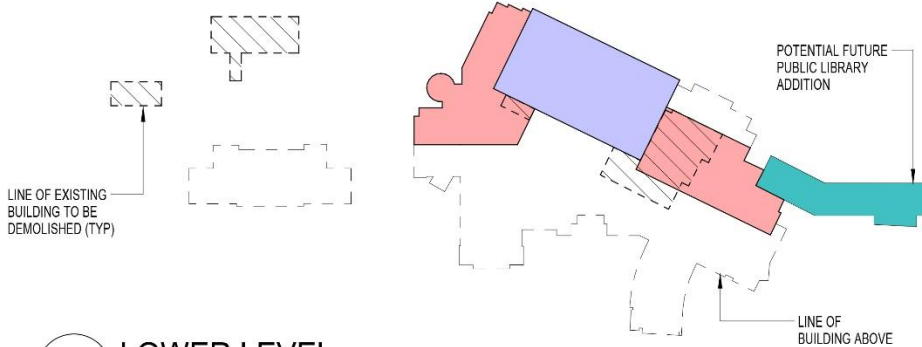
6.6 Construction Alternates



POTENTIAL FUTURE RE-USE OF 1895 STRUCTURE FOR CITY OFFICES (TYP. FOR FOUR FLOORS)

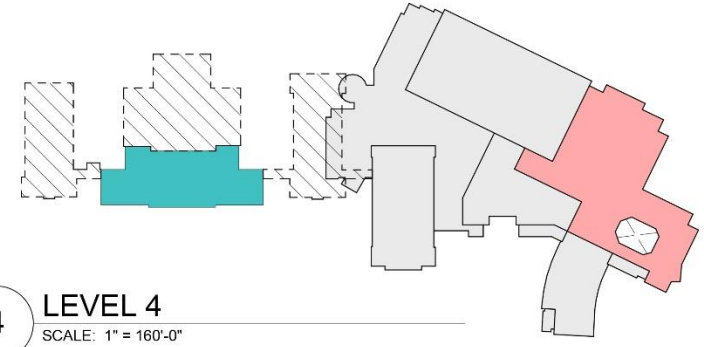
CONSTRUCTION LEGEND
 ADD FIELD FUTURE RENO ROOF

1 LEVEL 1
 SCALE: 1" = 160'-0"

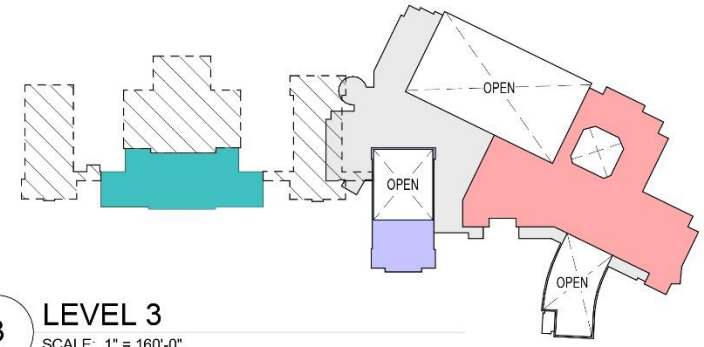


L LOWER LEVEL
 SCALE: 1" = 160'-0"

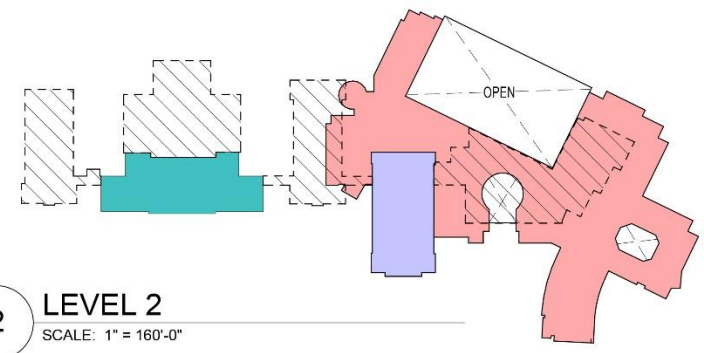
4 LEVEL 4
 SCALE: 1" = 160'-0"



3 LEVEL 3
 SCALE: 1" = 160'-0"



2 LEVEL 2
 SCALE: 1" = 160'-0"



Alt 4b

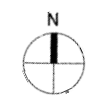
Alternative 4b –
 Addition / Renovation

Build HS to East Site

Enclosed / Open
 Central Circulation and
 Activity Space –
 Incorporates Cafeteria

Renovate 1986 Field
 House & CTE Spaces
 below Wing & D Wing
 (1929 War Memorial)

Phased Construction



6.6 Construction Alternates

Alternate 4b

PROS

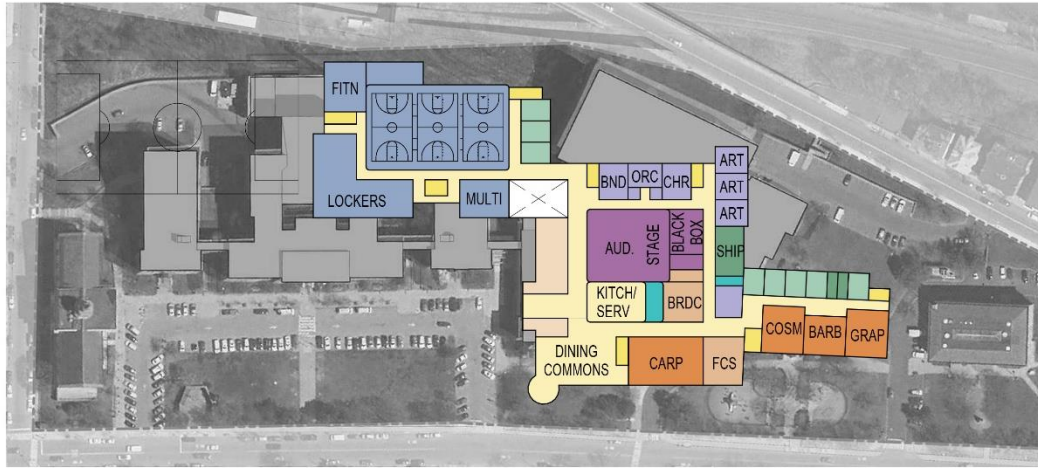
- Completely renewed school.
- Potential for energy conservation and lower operating costs
- Response to current educational programming needs
- Full accommodation of current and future curriculum
- Space and flexibility is provided for the projected growth in student population
- Potential for meeting community design and image goals
- Simplified phasing approach by building new addition on a relatively open portion of the site.
- Allows for a potential future addition connection to the Somerville Public Library Main Branch building



CONS

- Cost
- Long construction duration
- Swing space is required for the heavy vocational shops given the extent of proposed construction in the E Wing.
- External construction congestion

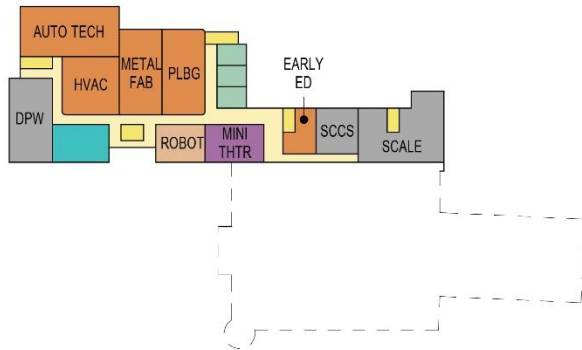
6.6 Construction Alternates



PROGRAM AREAS

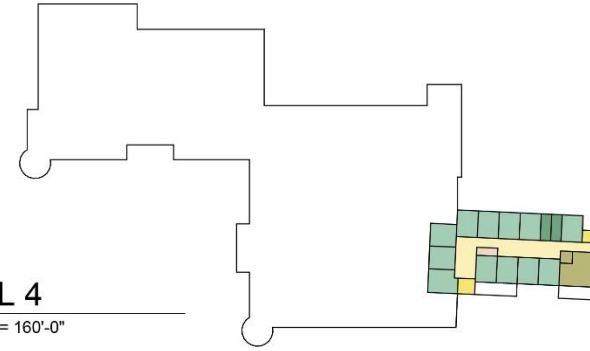
ADMIN	CH 74	HEALTH/PE	OFF-SITE AUXILIARY	STAIR/ELEV
ARTS	CIRCULATION	MEDIA CENTER	SCIENCE	SUPPORT
AUDITORIUM/DRAMA	CR	NWFC	SPED	TECH

1 LEVEL 1
SCALE: 1" = 160'-0"

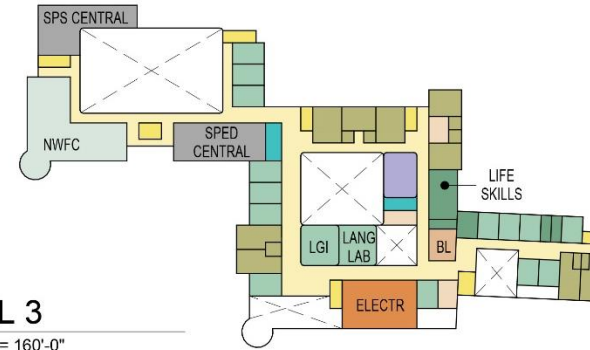


L LOWER LEVEL
SCALE: 1" = 160'-0"

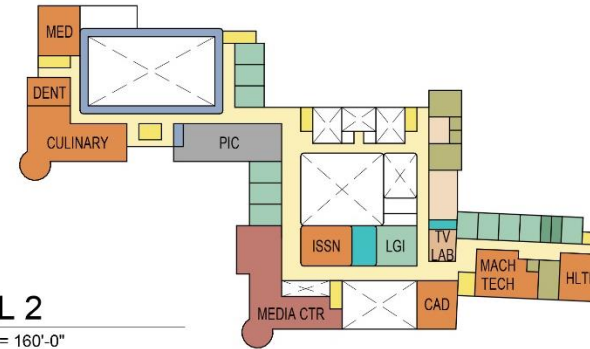
4 LEVEL 4
SCALE: 1" = 160'-0"



3 LEVEL 3
SCALE: 1" = 160'-0"



2 LEVEL 2
SCALE: 1" = 160'-0"



Ait 5

Alternative 5 – New Construction

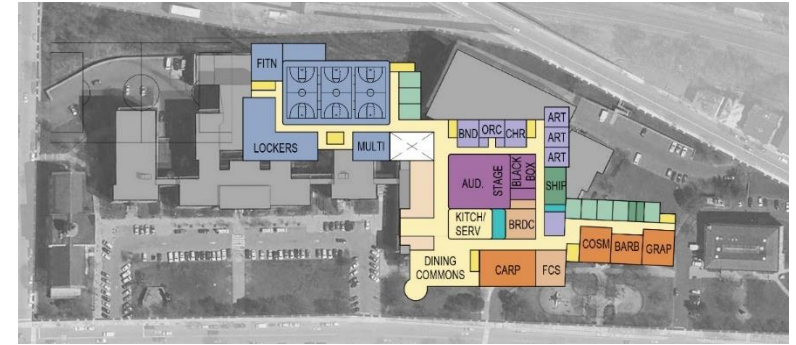
Demolish Existing High School and Build Completely New on the Existing High School Site

Phased Construction



6.6 Construction Alternates

Alternate 5



PROS

- Completely new school
- Simplified construction
- Greatest potential energy conservation and lowest operating cost
- Response to current educational programming needs
- Full accommodation of current and future curriculum
- Space and flexibility is provided for the projected growth in student population
- Potential for meeting community design and image goals

CONS

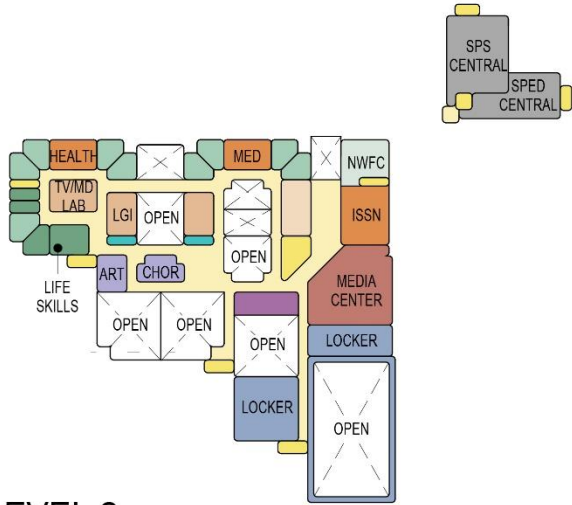
- Cost
- Complicated construction phasing
- Long construction duration
- Swing space is required
- External construction congestion
- No indoor track program given the new, smaller gymnasium size.

6.6 Construction Alternates

Ait 6

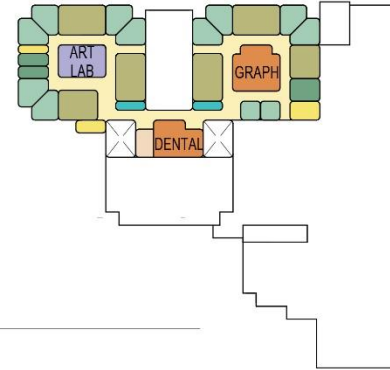
Alternative 6 – New Construction

Demolish DPW Structures and Build New at Franey Road Site

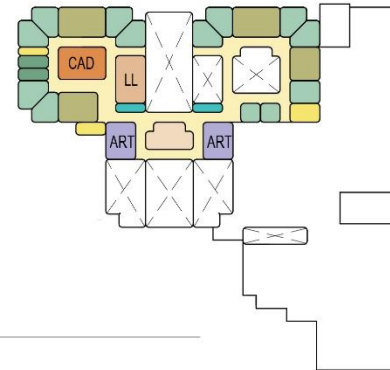


2 LEVEL 2
SCALE: 1" = 160'-0"

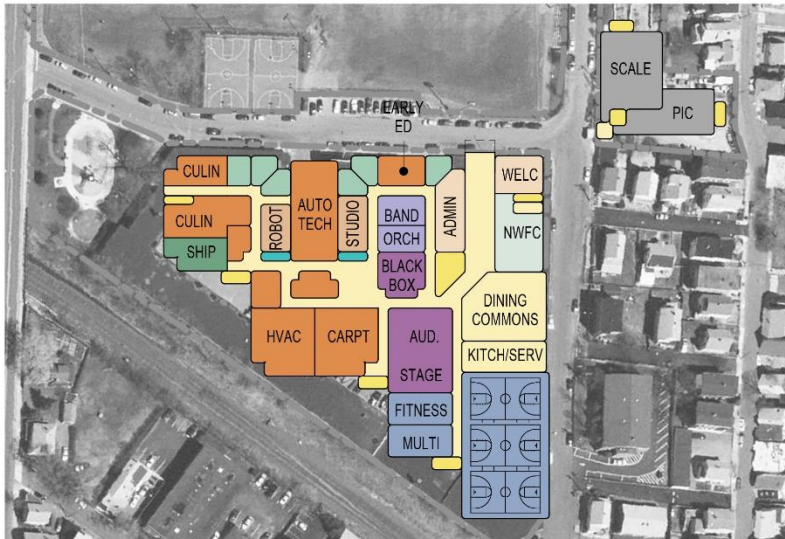
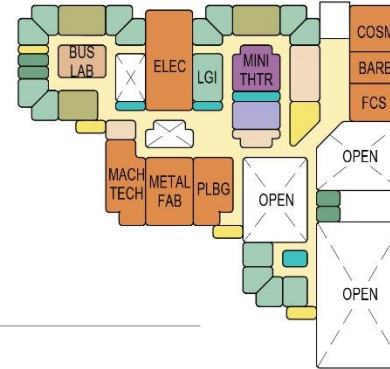
5 LEVEL 5
SCALE: 1" = 160'-0"



4 LEVEL 4
SCALE: 1" = 160'-0"



3 LEVEL 3
SCALE: 1" = 160'-0"



1 LEVEL 1
SCALE: 1" = 160'-0"

PROGRAM AREAS

- ADMIN
- ARTS
- AUDITORIUM/DRAMA
- CH 74
- CIRCULATION
- CR
- HEALTH/PE
- MEDIA CENTER
- NWFC
- OFF-SITE AUXILIARY
- SCIENCE
- SPED
- STAIR/ELEV
- SUPPORT
- TECH



6.6 Construction Alternates

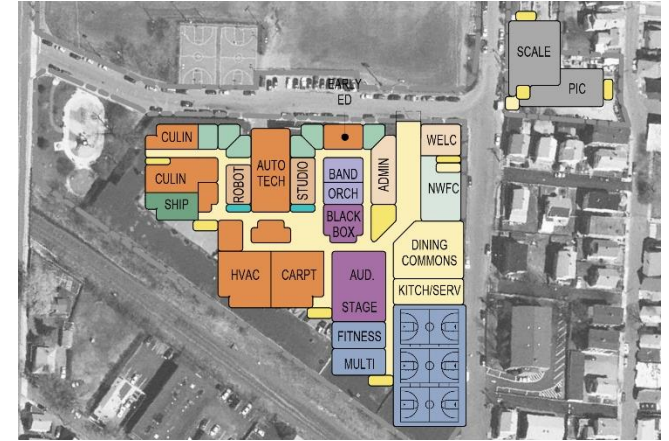
Alternate 6

PROS

- Completely new school
- Greatest potential energy conservation and lowest operating cost
- Response to current educational programming needs
- Full accommodation of current and future curriculum
- Space and flexibility is provided for the projected growth in student population
- Potential for meeting community design and image goals
- No swing space is required

CONS

- Cost
- Complicated construction involving underground parking garage below the entire footprint of the school
- Longest overall project schedule
- External construction congestion
- No indoor track program given the new, smaller gymnasium size





Thank you!