

Somerville High School

Somerville Historic Commission



Symmes Maini & McKee
Associates

SMMA

March 15, 2015

Somerville High School

Existing High School:

History of Construction on Site

Existing Program Plans

Medford

Street

Hill

Remains of
Revolutionary
Breastwork

Central

Church St

School

Centra

B

Somerville Free High School - 1852



The Latin High School - 1872



Public Library- 1880



English High School - 1895



Additions to English High School – est. 1914



Somerville High School - 1929



Somerville High School – 1956 (Fire)



Somerville High School - 1957



Somerville High School – 1986 to 2015



Salvaged Items: Names based upon Mass Historic Commission Registry



George Dilboy Bust - 1930 - *MHC



Anthony V. Fedele Way Sign



Civil War Memorial - 1908 - *MHC



Somerville Honor Roll - 1945



Somerville High Honor and Progress" Plaque"



Women of the Union Square Post Plaque



Class of 2010 Stone



Korean War Memorial - 2000



Central Hill Playground Entrance



First Congregational Unitarian Society Stone



Vietnam Memorial - 1985



Spanish War Monument - 1929 - *MHC

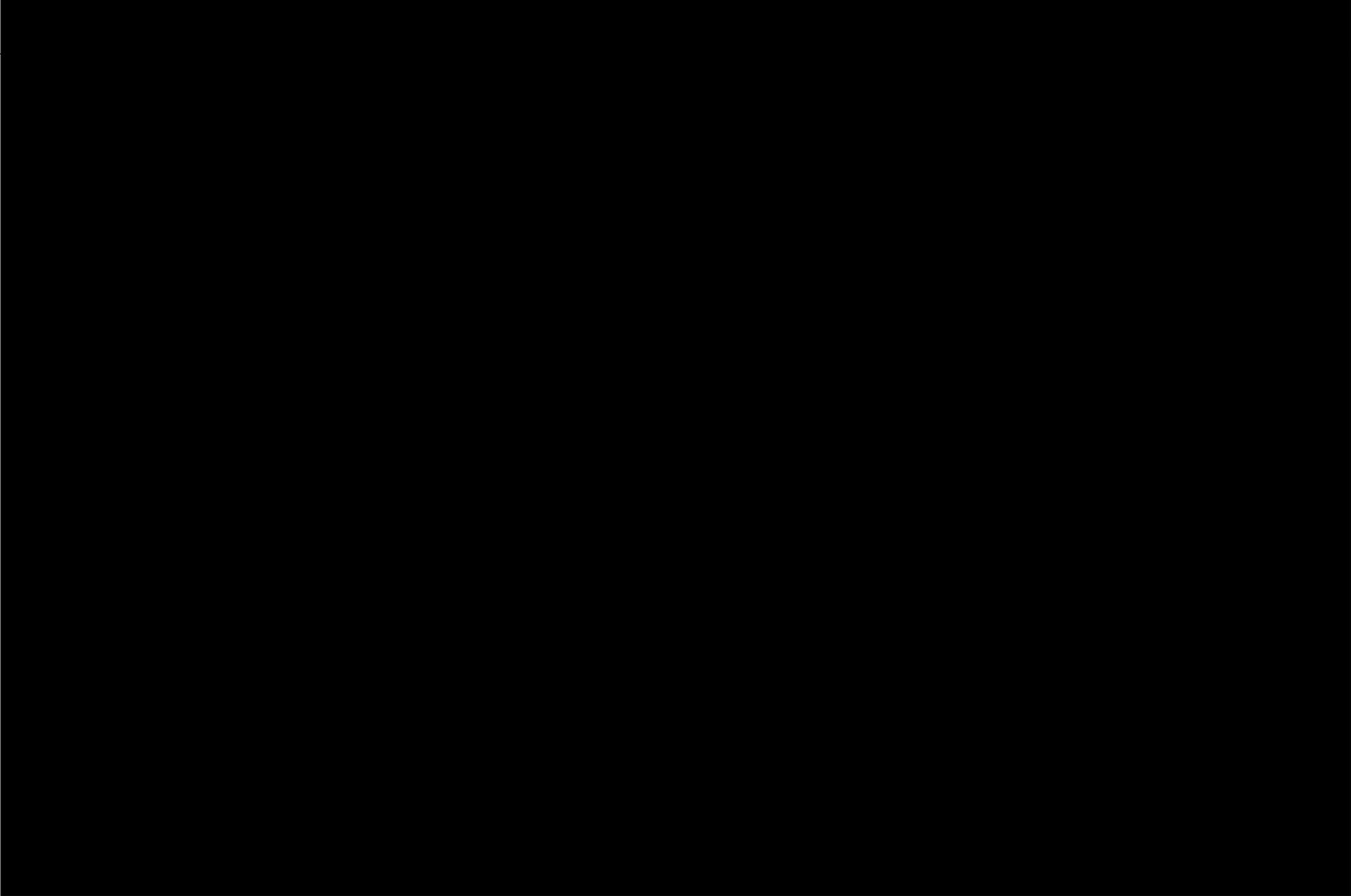


Field and Venue Inventory



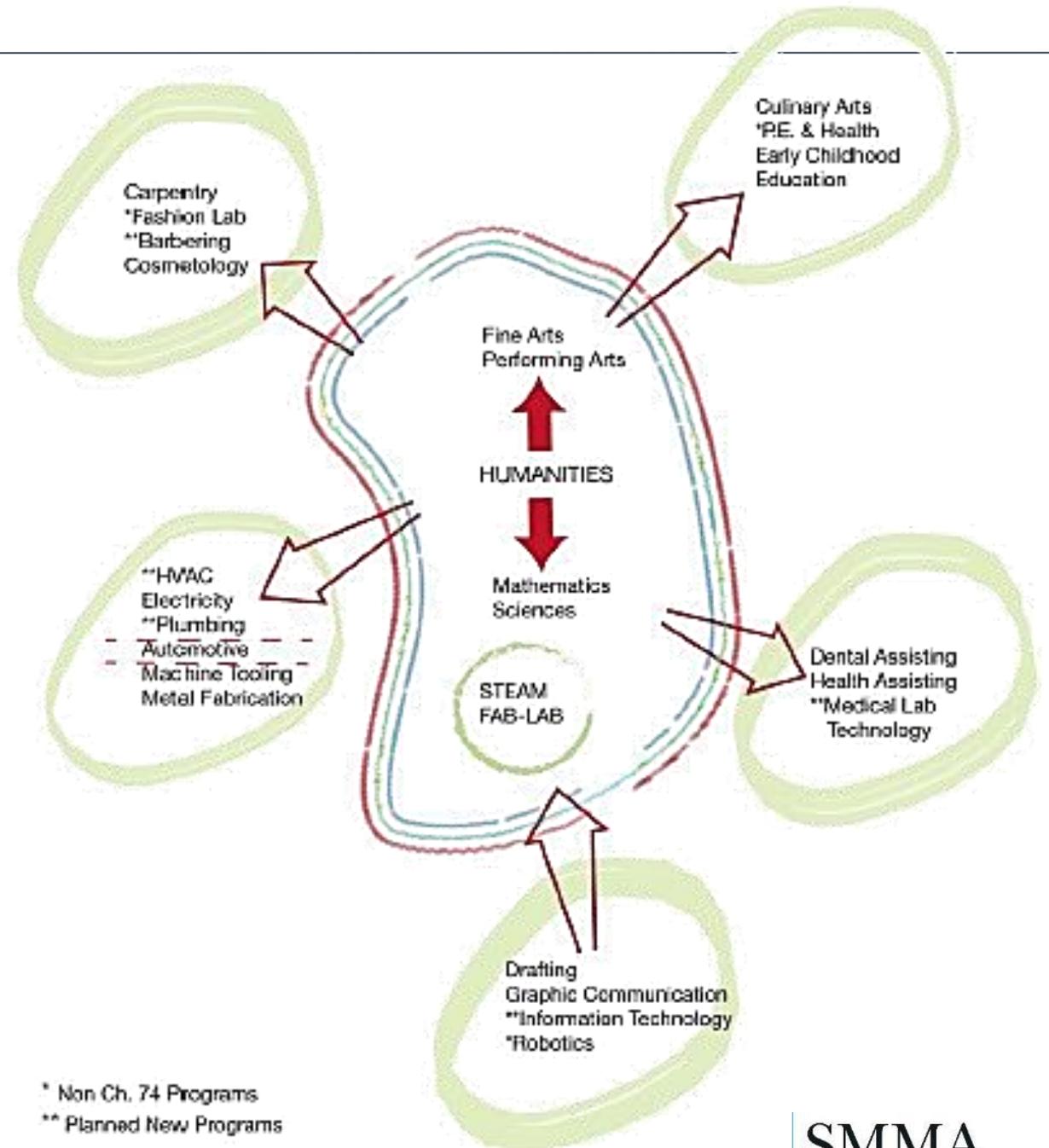
Somerville High School Field House		Blessing of the Bay Boathouse	
Veterans Memorial Hockey Rink		Crew	
Conway Park		Kennedy School	
Fall: Football Practice		J.V. Basketball	
Spring: Little League		Argenziano School Field	
Dilboy Stadium		Girl's Soccer Practice	
Fall: Football		Ultimate Frisbee	
Spring: Track		East Somerville Community School	
Trum Field		Freshman Basketball	
Spring: Baseball & Softball		Soccer Practice	
Foss Park (DCR)		Capuano Early Education center	
Fall: Soccer Practice		Soccer Practice	
Spring: Softball, Ultimate Frisbee		Draw Seven	
		Soccer Field	





EDUCATIONAL PROGRAM DIAGRAM

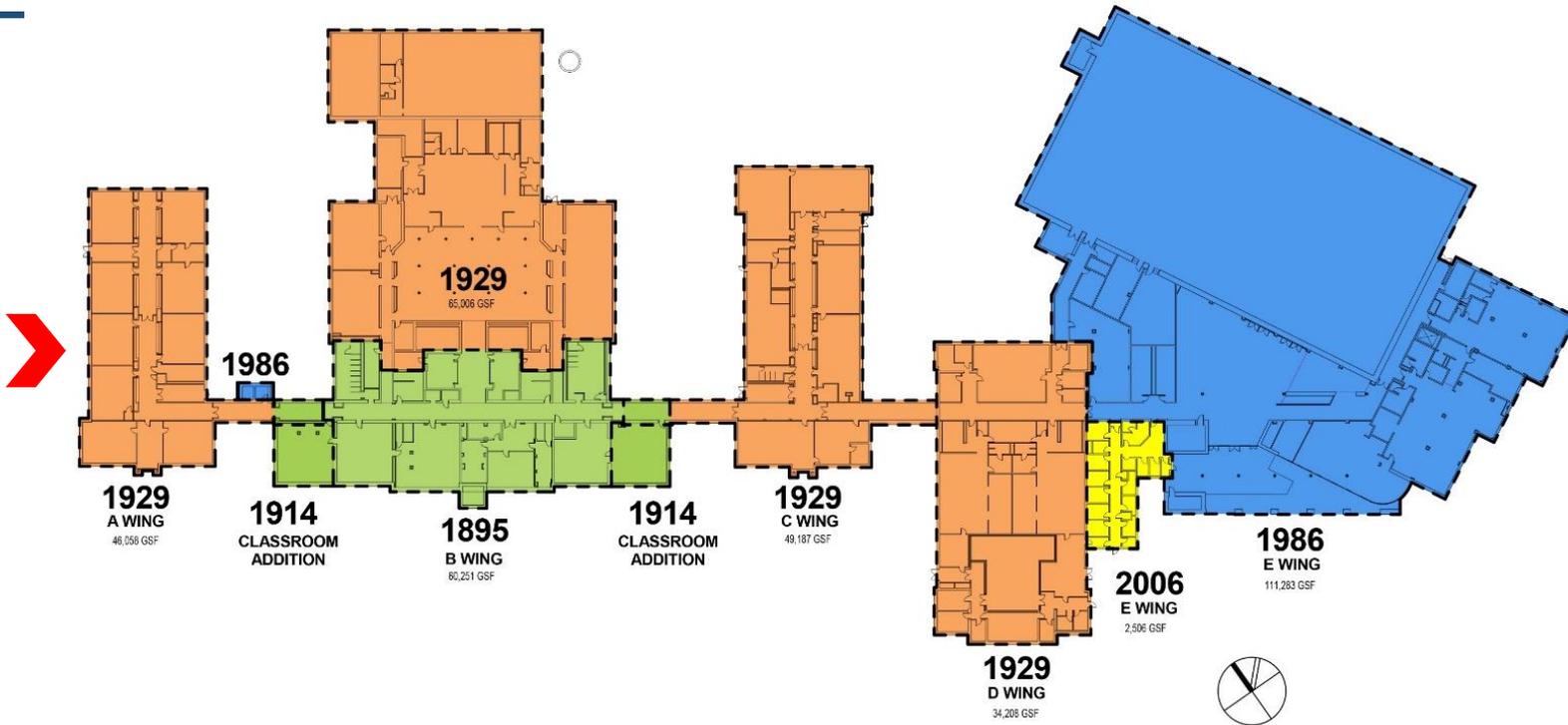
- 2.11 Performing Arts Programs
- 2.12 Physical Education Programs
- 2.13 Special Education Programs
- 2.14 Vocations and Technology Programs
- 2.15 Narrative description of the types of educational activities. ➤
- 2.16 Transportation Policies
- 2.17 Functional and Spatial Relationships
- 2.18 Security and Visual Access Requirements

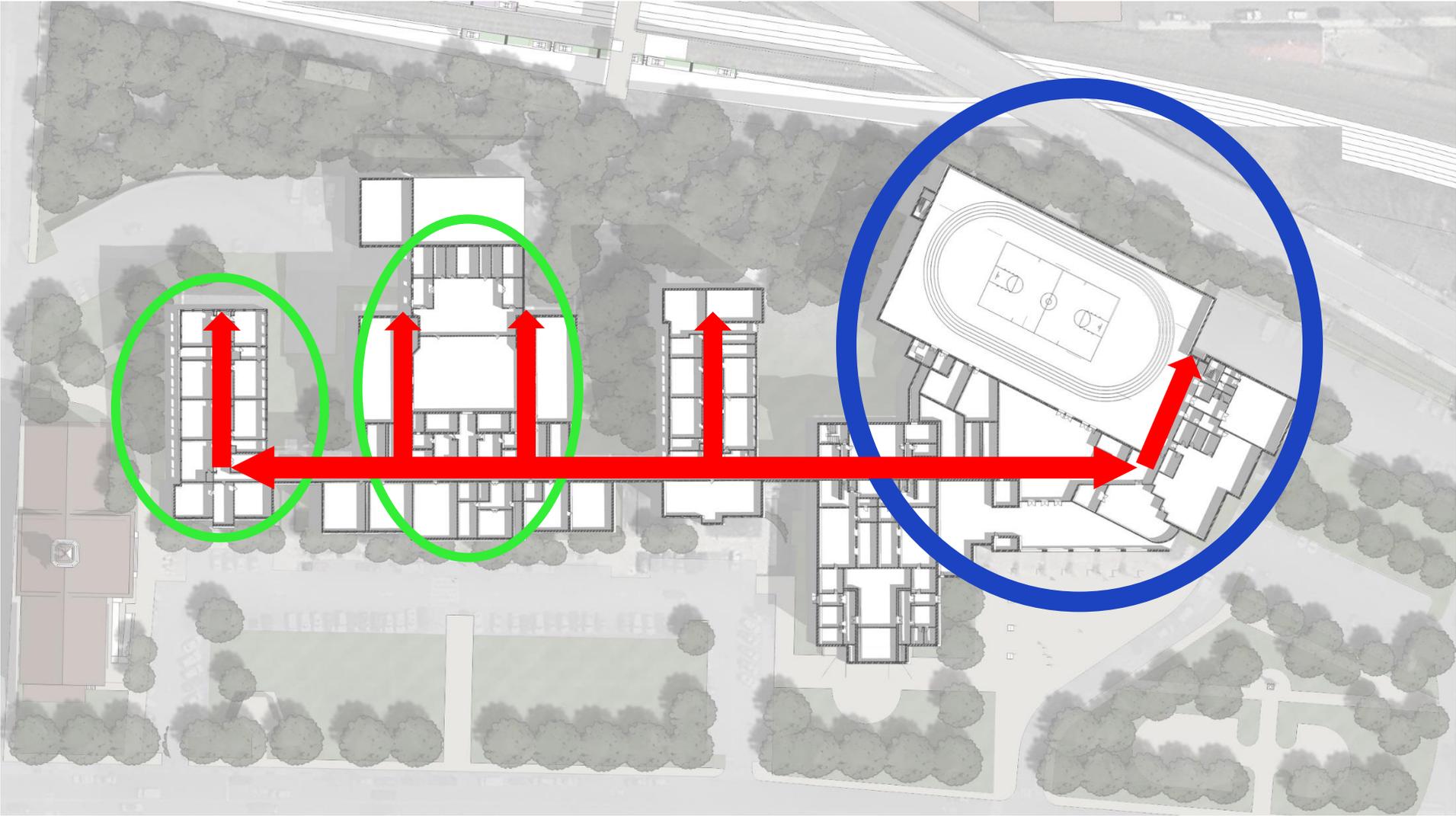


* Non Ch. 74 Programs
 ** Planned New Programs

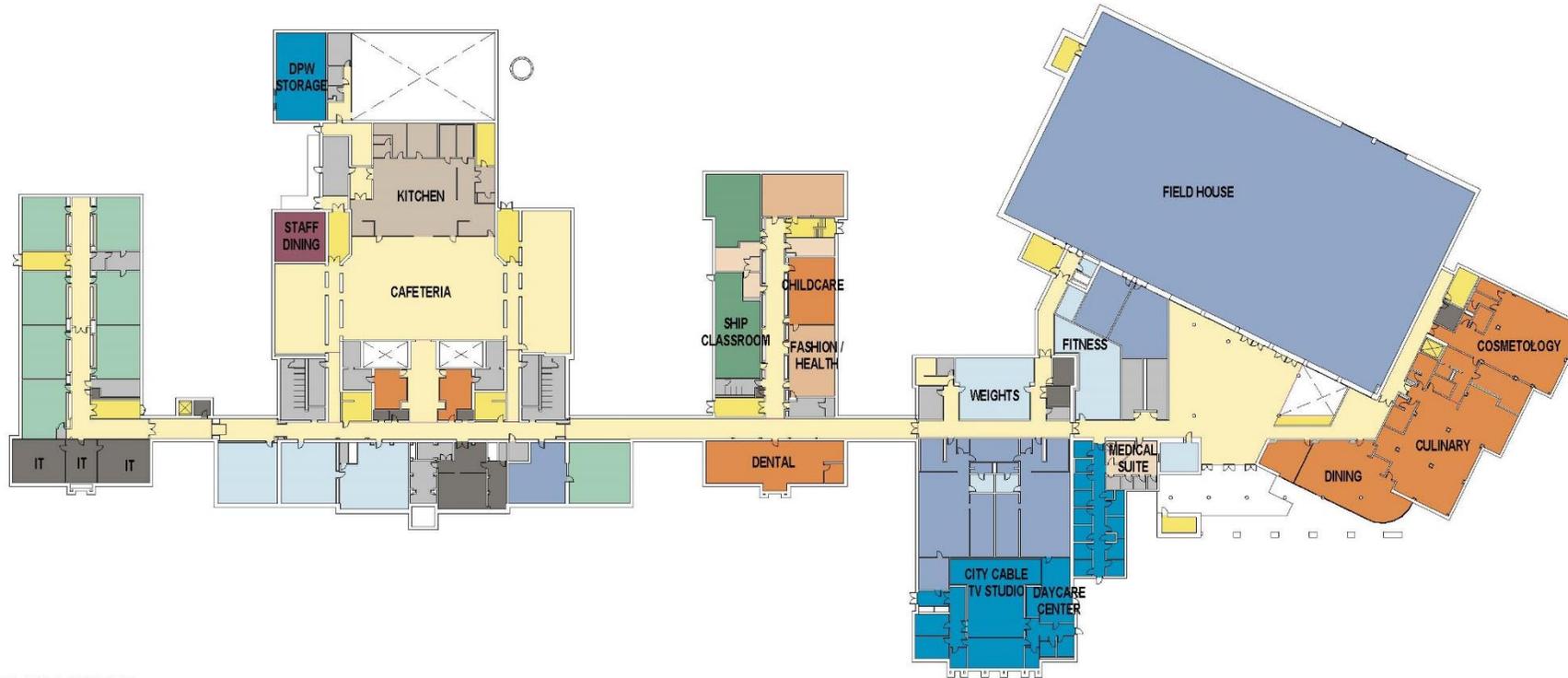
4. EVALUATION OF EXISTING CONDITIONS

- 4.1 Existing Site Conditions
- 4.2 Existing Building Conditions
- 4.3 Existing Structural System
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- 4.14 Code Compliance Consideration Report





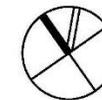
Existing High School – 1st Floor Program Plan



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	 TEACHER PLANNING & SUPPORT
 COMMUNITY USE	 VERTICAL CIRCULATION
 CUSTODIAL / MAINTENANCE / STORAGE	 VOCATIONAL & TECHNOLOGY

Somerville High School GSF	
LEVEL	AREA
SHOP LEVEL	45900 SF
1ST FLOOR	125420 SF
2ND FLOOR	89950 SF
3RD FLOOR	64080 SF
4TH FLOOR	44220 SF
TOTAL GSF:	369570 SF

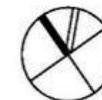


Existing High School – MSBA Program Deficiency Plan



- Grey Square Footage Meets MSBA Requirements
- Yellow Not Within a Typical MSBA High School Program
- Red 10% or More < MSBA Space Standards
- Blue Not Part of MSBA Program

Somerville High School GSF	
LEVEL	AREA
SHOP LEVEL	50470 SF
RED PLANS	
1ST FLOOR	129100 SF
2ND FLOOR	90200 SF
3RD FLOOR	63710 SF
4TH FLOOR	55030 SF
TOTAL GSF	389520 SF



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 Steamer
- 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

4. EVALUATION OF EXISTING CONDITIONS

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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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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

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November 19, 2015

Ms. Lorraine Finnegan
Symmes Maimi & McKee Associates
1000 Massachusetts Avenue
Cambridge, MA 02138
Phone: (617) 547-5400
Fax: (617) 648-4920
E-mail: lfinnegan@smma.com

Re: **Preliminary Geotechnical Report
Proposed Somerville High School
Somerville, Massachusetts
LGCI Project No. 1538**

Dear Ms. Finnegan:

Lahlaf Geotechnical Consulting, Inc. (LGCI) has completed a preliminary geotechnical study for Somerville High School in Somerville, Massachusetts. We are submitting this preliminary report electronically, please notify us if you need a hard copy.

The soil samples from our explorations are currently stored at LGCI for further analysis, if requested. Unless notified otherwise, we will dispose of the soil samples after three months.

Thank you for choosing LGCI as your geotechnical engineer.

Very truly yours,

Lahlaf Geotechnical Consulting, Inc.



Todd Dwyer, P.E.
Senior Project Manager



Abdelmajid M. Lahlaf, Ph.D., P.E.
Principal Engineer

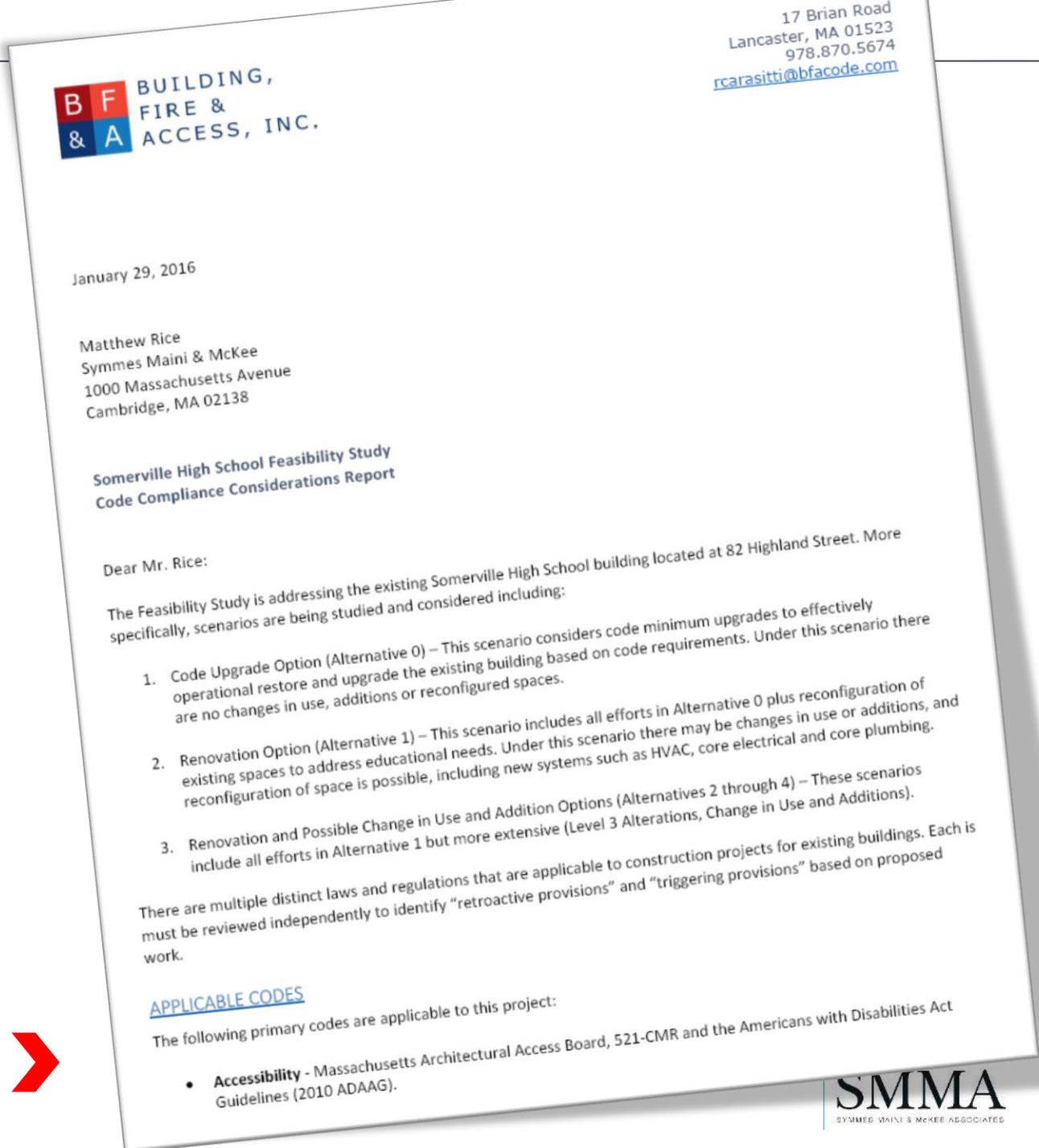
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An aerial architectural rendering of a city street scene. The scene features a central street with several cars and a truck. On the left, there is a large, multi-story building with a prominent portico and a small tower. To the right, there are several smaller buildings and a large green area with many trees. The overall style is a clean, illustrative architectural drawing with a light blue and green color palette. The text is overlaid on the top left portion of the image.

PDP/PSR Alternatives Criteria and Preferred Schematic Design Selection Planning

Somerville High School – Existing Circulation



Somerville High School - Historic Assets



Somerville High School – “Valuable” High Quality Facades



Somerville High School - Cost Effective High School Assets



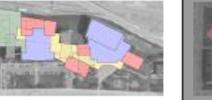
Somerville High School – “Poor Quality” High School Assets



6.6 Construction Alternates

Somerville High School
Somerville Public Schools
ALTERNATIVES CRITERIA MATRIX

Preliminary Design Program [PDP] Alternatives

CRITERIA	Alt 0 Repairs & Code Compliance Only	Alt 1 Interior Full Renovation Only	Alt 2 New Auditorium Add/Reno	Alt 3 Renovated Auditorium Add/Reno	Alt 4 Concourse Plan Add/Reno	Alt 4A Campus Plan Add/Reno	Alt 4B East Side of Hill Infill Plan Add/Reno	Alt 5 New Const. at Existing HS Site	Alt 6 New Const at DPW Site / Franey Road
									
Students	1,590	1,590	1,590	1,590	1,590	1,590	1,590	1,590	1,590
Total Gross Area (Square Feet)	360,000	360,000	376,285	392,575	394,575	394,575	376,285	364,290	364,290
Total Approximate Project Cost (Millions)	\$74	\$232	\$247	\$254	\$268	\$268	\$277	\$279	\$297
Approximate Construction Start	Apr-2018	Apr-2018	Apr-2018	Apr-2018	Apr-2018	Apr-2018	Apr-2018	Apr-2018	Apr-2020
Approximate Construction Duration	24 months	36 months	36 months	36 months	36 months	36 months	36 months	36 months	60 months

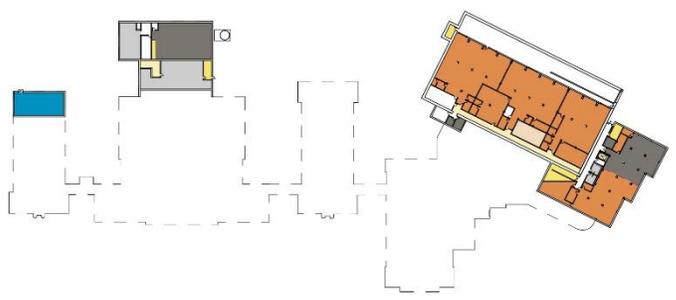
6.6 Construction Alternates



PROGRAM PLAN LEGEND

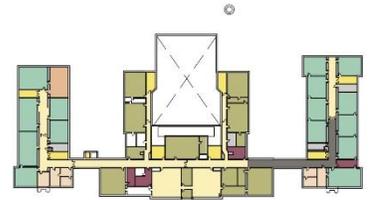
ADMINISTRATION / GUIDANCE / STUDENT SERVICES / NURSE	HEALTH & FITNESS
BUILDING EQUIPMENT	KITCHEN / SERVERY
CAFETERIA & CIRCULATION	PHYSICAL EDUCATION & SPORT SUPPORT
CHAPTER 74	SPECIAL EDUCATION
CLASSROOM & GENERAL EDUCATION SUPPORT	VERTICAL CIRCULATION
COMMUNITY USE	VOCATIONAL & TECHNOLOGY
CUSTODIAL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

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

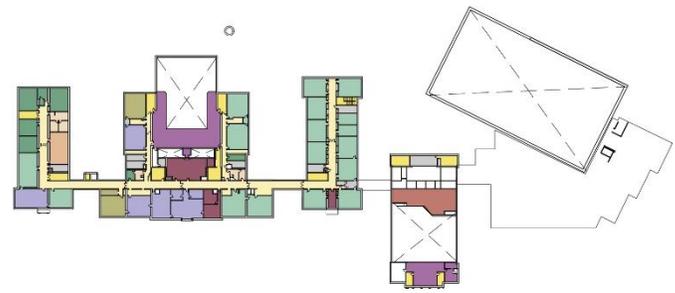


L LOWER LEVEL PLAN
SCALE: 1" = 160'-0"

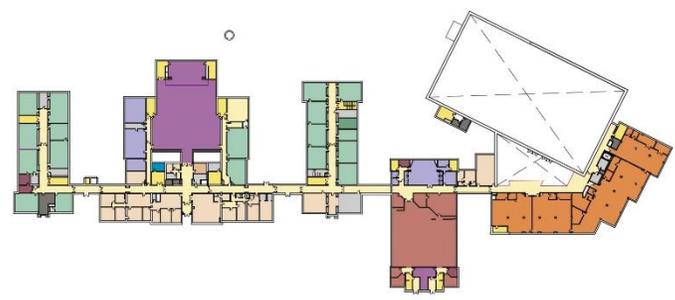
4 LEVEL 4
SCALE: 1" = 160'-0"



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



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



Ait 0 & 1

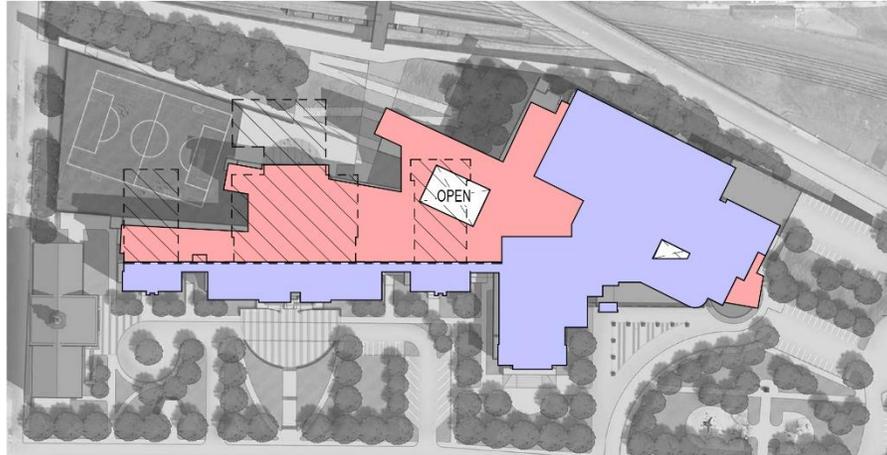
Alternative 0 – Code Upgrade & Repair Only

Alternative 1 – Full Gut Renovation, No New Additions

Both Alternatives Involve Phased Construction



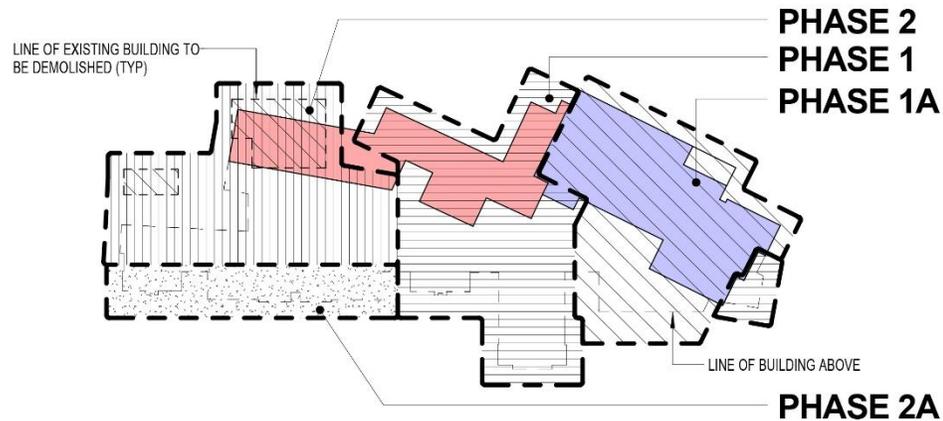
6.6 Construction Alternates



CONSTRUCTION LEGEND

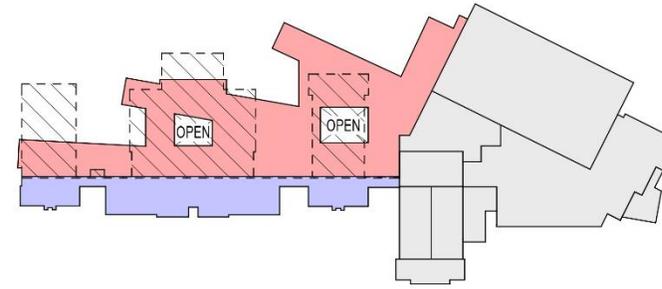
ADD RENO ROOF

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

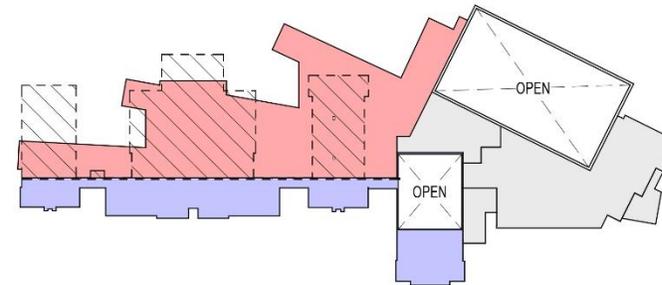


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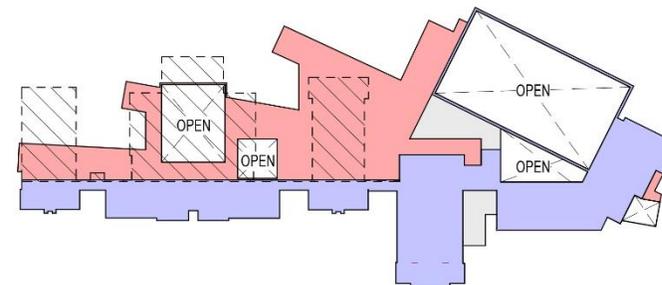
4 LEVEL 4
SCALE: 1" = 160'-0"



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



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



Ait 2

Alternative 2 – Addition /
Renovation

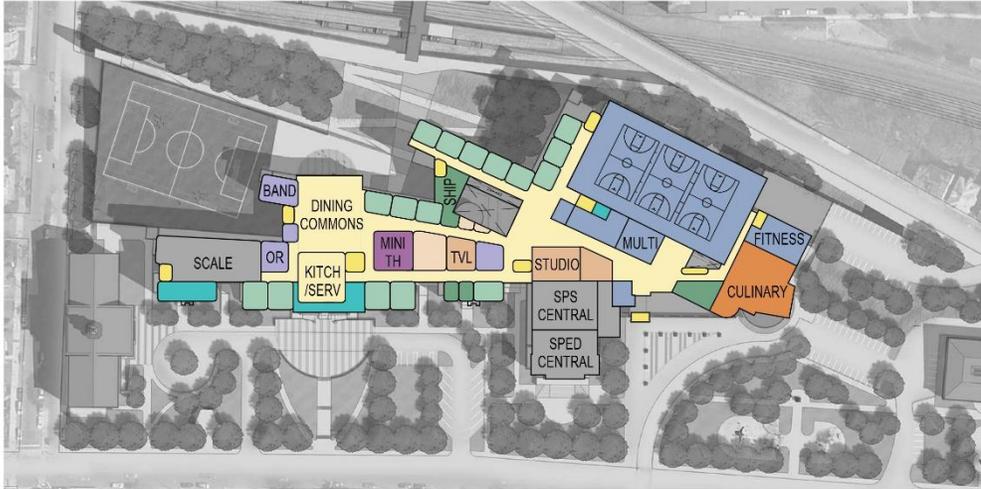
Renovate 1986 CTE
Wing & Southern
Portions of 1895/1929
Classrooms

New Auditorium &
Cafeteria

Phased Construction



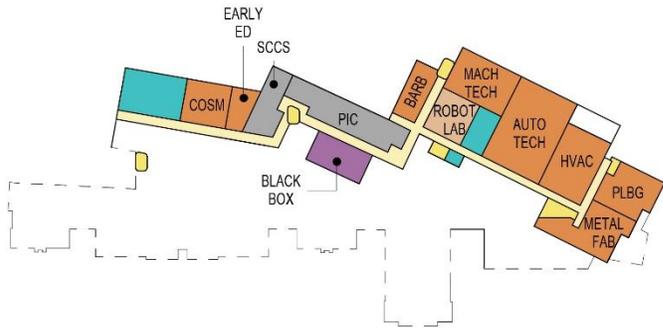
6.6 Construction Alternates



PROGRAM AREAS

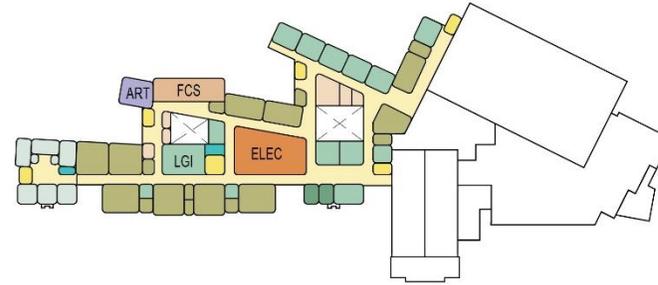
 ADMIN	 CIRCULATION	 NWFC	 SPED
 ARTS	 CR	 OFF-SITE AUXILIARY	 STAIR/ELEV
 AUDITORIUM/DRAMA	 HEALTH/PE	 ROOF	 SUPPORT
 CH 74	 MEDIA CENTER	 SCIENCE	 TECH

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

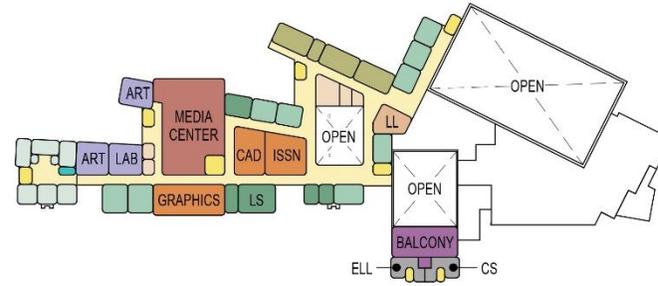


L LOWER LEVEL
SCALE: 1" = 160'-0"

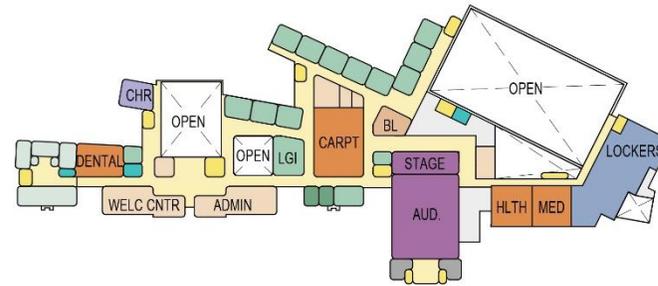
4 LEVEL 4
SCALE: 1" = 160'-0"



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



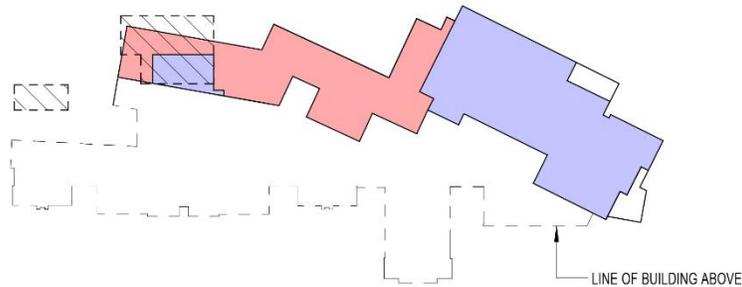
6.6 Construction Alternates



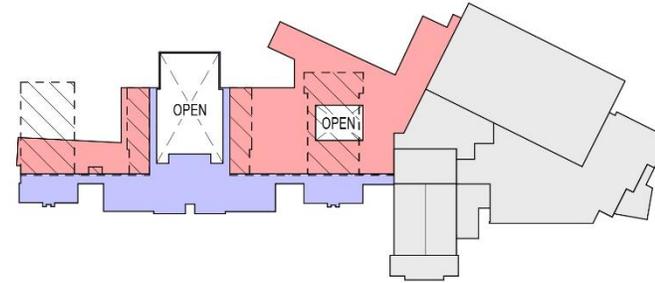
CONSTRUCTION LEGEND

ADD RENO ROOF

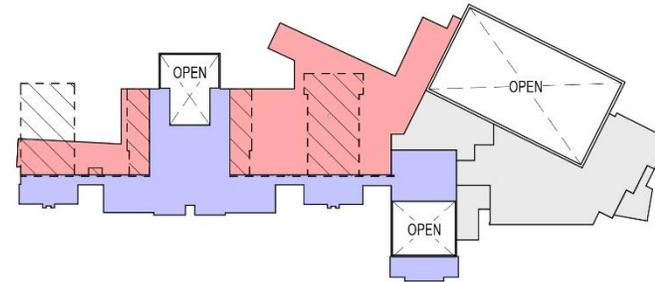
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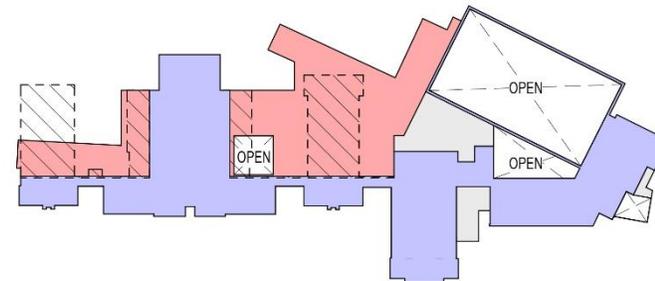
L LOWER LEVEL
SCALE: 1" = 160'-0"



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



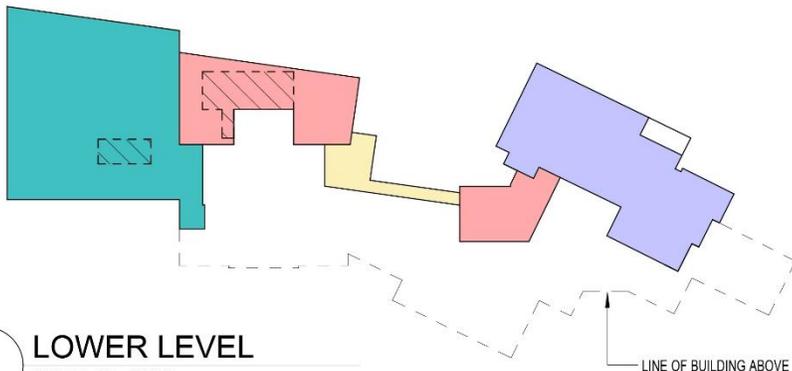
6.6 Construction Alternates



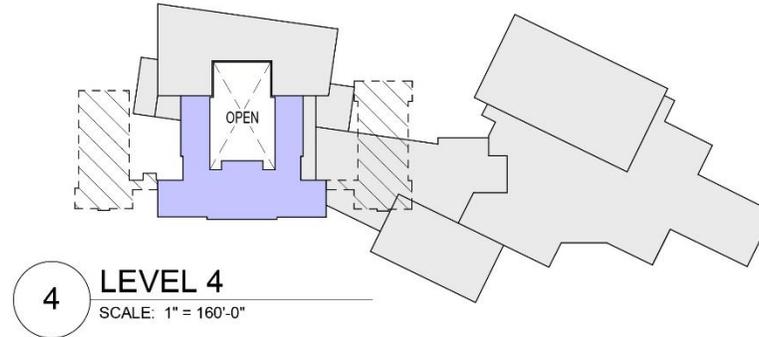
CONSTRUCTION LEGEND

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

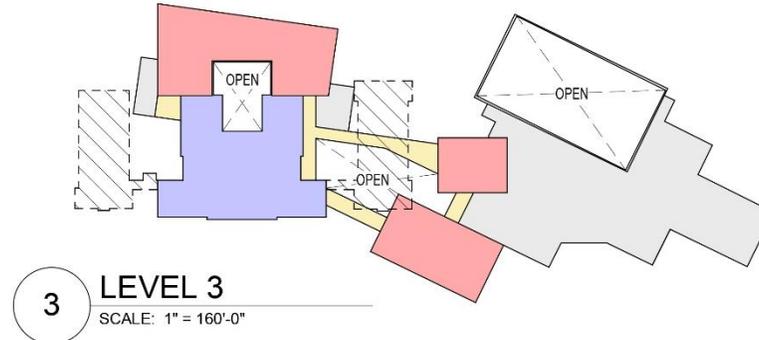
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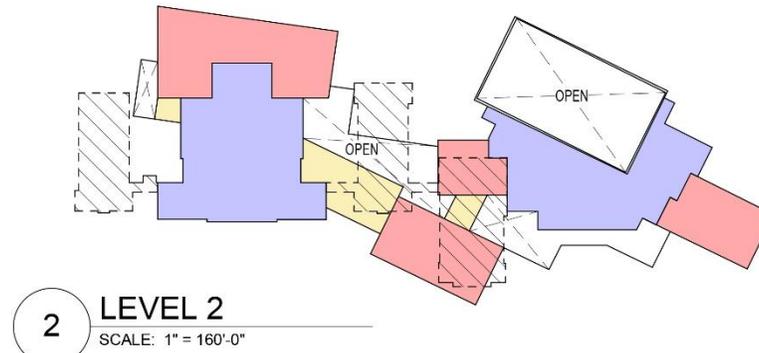
5 LOWER LEVEL
SCALE: 1" = 160'-0"



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



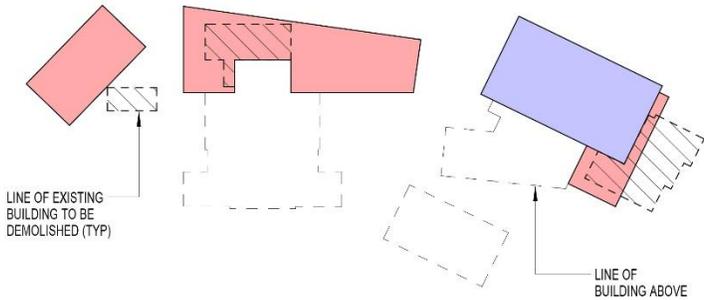
6.6 Construction Alternates



CONSTRUCTION LEGEND

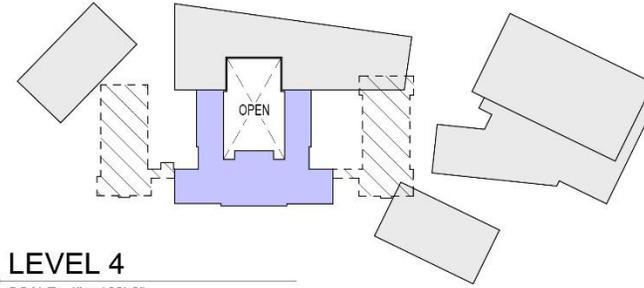
- ADD
- FIELD
- RENO
- ROOF

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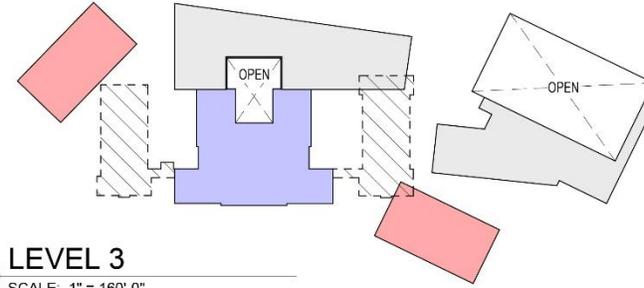


L LOWER LEVEL
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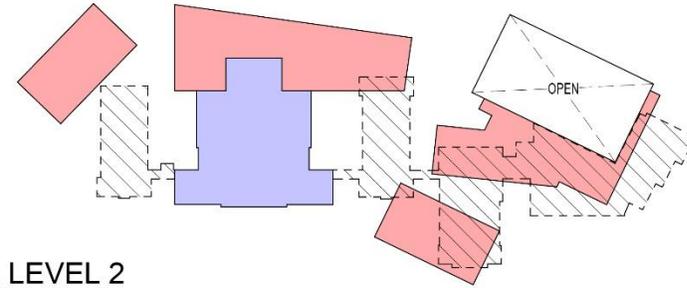
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Alt 4a

Alternative 4a – Addition / Renovation

Campus Approach

Renovate 1986
Gymnasium & 1895
Building

Renovate Auditorium

New Cafeteria

New Disconnected
Buildings

Phased Construction



6.6 Construction Alternates

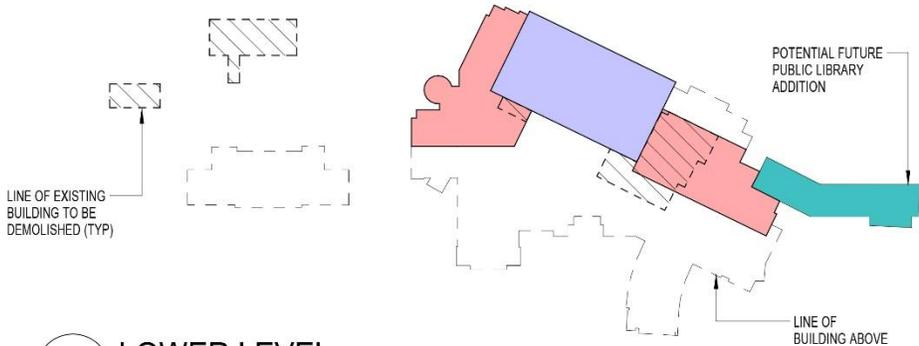


POTENTIAL FUTURE RE-USE OF 1895 STRUCTURE FOR CITY OFFICES (TYP. FOR FOUR FLOORS)

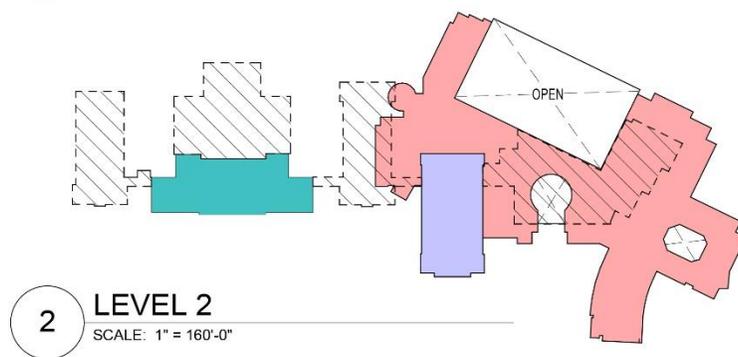
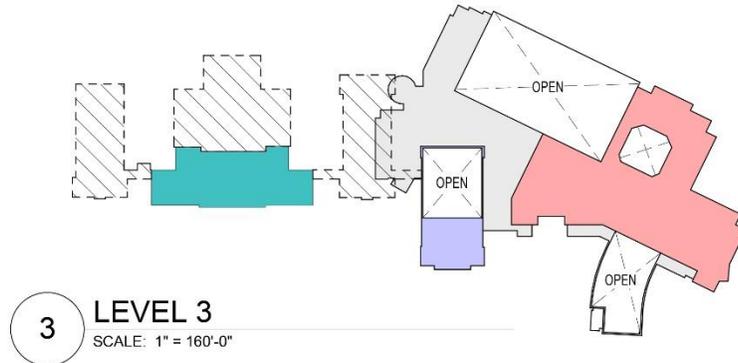
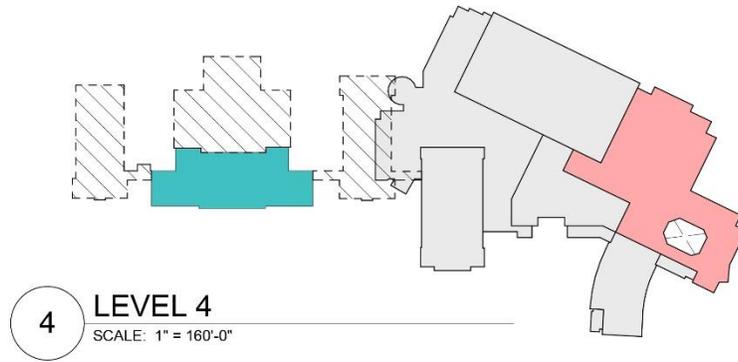
CONSTRUCTION LEGEND

ADD FIELD FUTURE RENO ROOF

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



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



Alt 4b

Alternative 4b – Addition / Renovation

Build HS to East Site

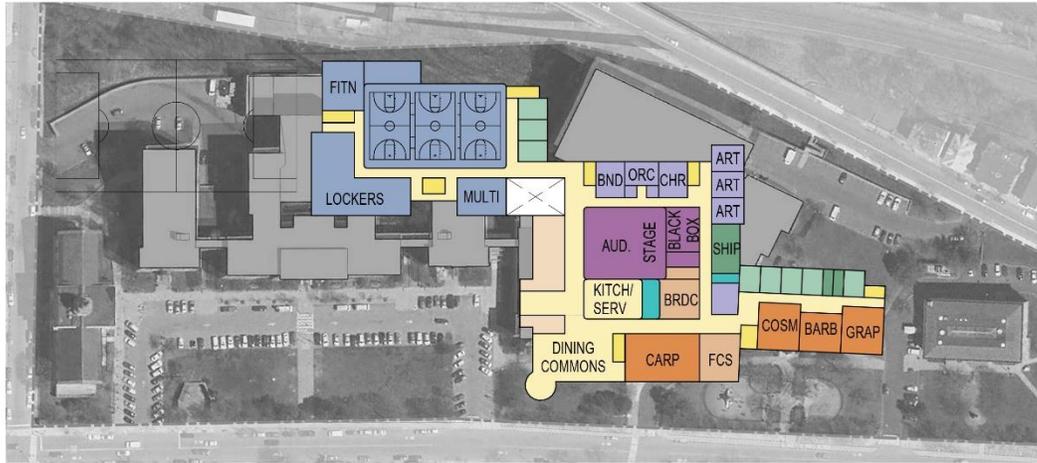
Enclosed / Open Central Circulation and Activity Space – Incorporates Cafeteria

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

Phased Construction



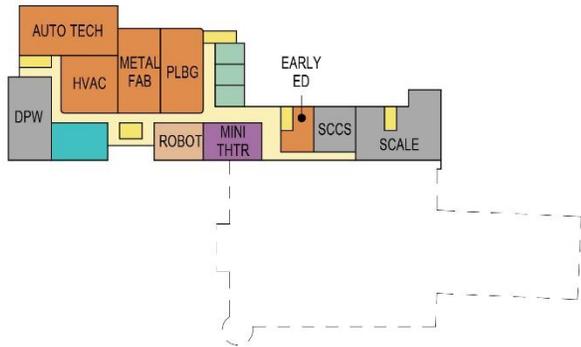
6.6 Construction Alternates



PROGRAM AREAS

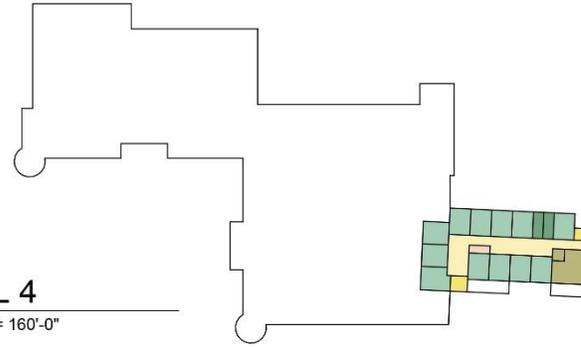
ADMIN	CH 74	HEALTH/PE	OFF-SITE AUXILIARY	STAIR/ELEV
ARTS	CIRCULATION	MEDIA CENTER	SCIENCE	SUPPORT
AUDITORIUM/DRAMA	CR	NWFC	SPED	TECH

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

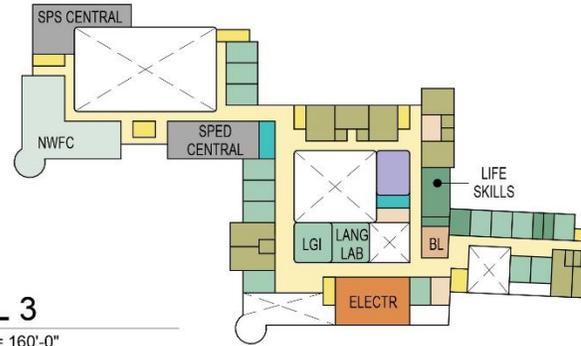


L LOWER LEVEL
SCALE: 1" = 160'-0"

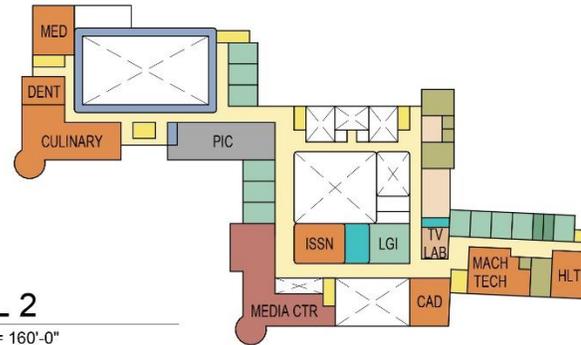
4 LEVEL 4
SCALE: 1" = 160'-0"



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



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



Ait 5

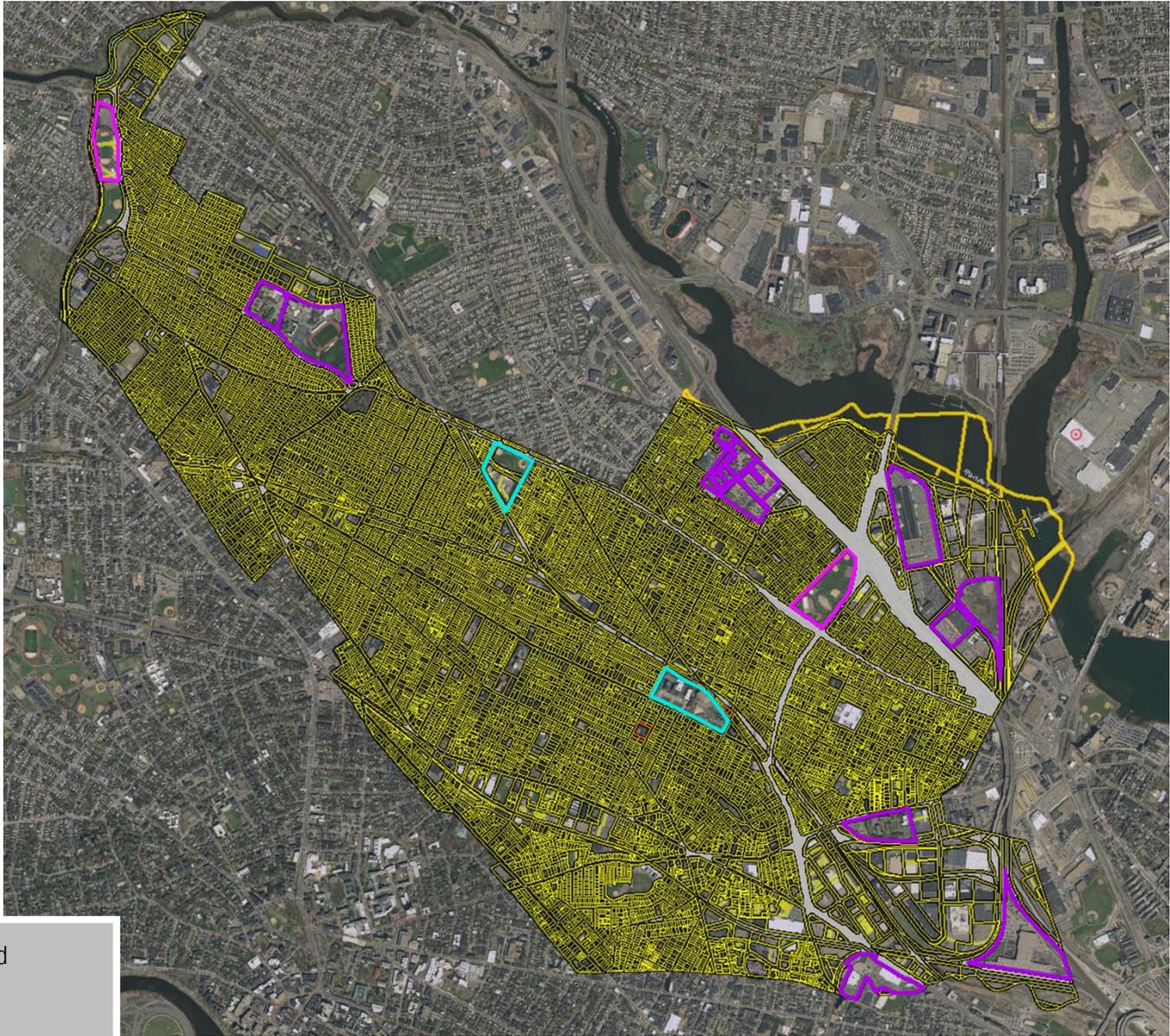
Alternative 5 – New Construction

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

Phased Construction



City of Somerville: Parcels Greater Than 10 Acres



-  Commonwealth Owned
-  Privately Owned
-  City Owned

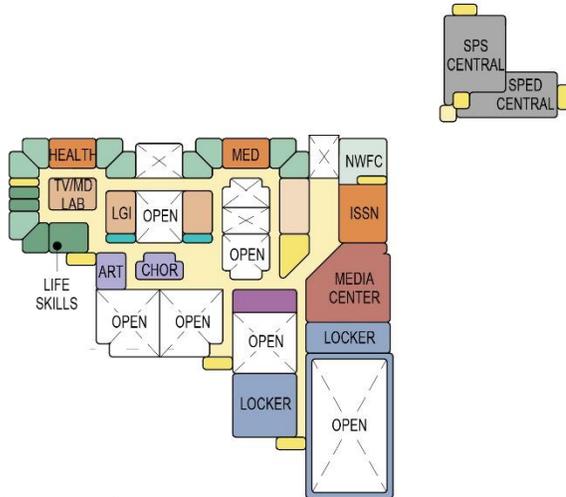


6.6 Construction Alternates

Ait 6

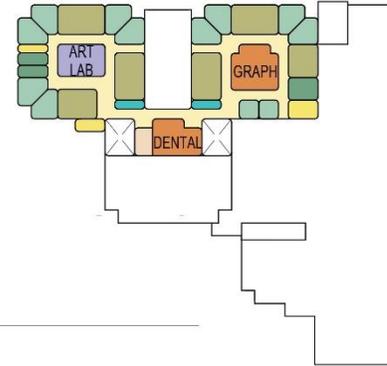
Alternative 6 – New Construction

Demolish DPW Structures and Build New at Franey Road Site

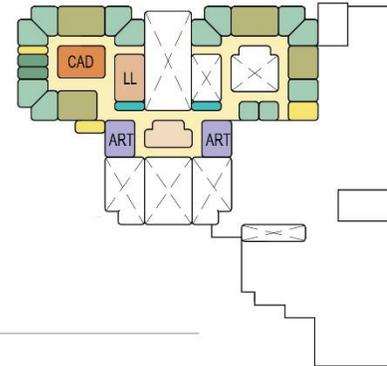


2 LEVEL 2
SCALE: 1" = 160'-0"

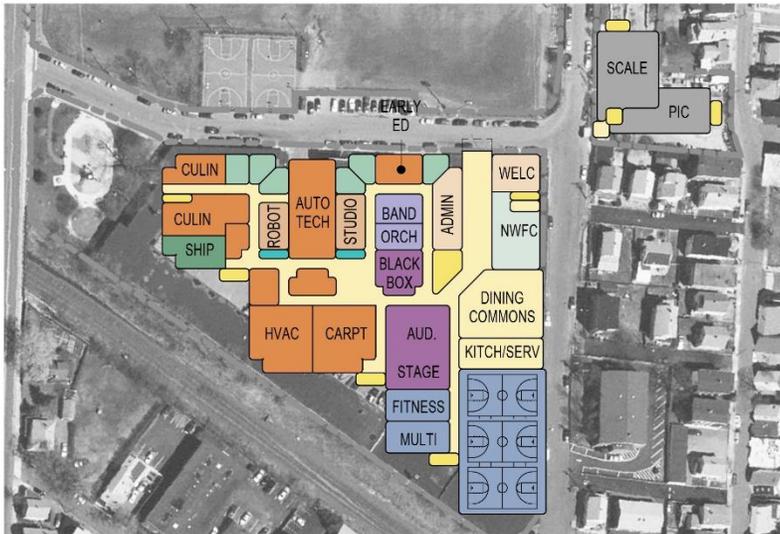
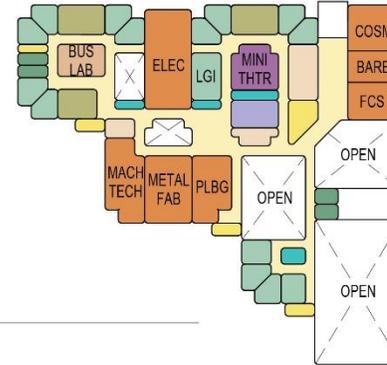
5 LEVEL 5
SCALE: 1" = 160'-0"



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



Project Schedule



Project Schedule

January 2014
SHS Submits
Statement of
Interest to MSBA

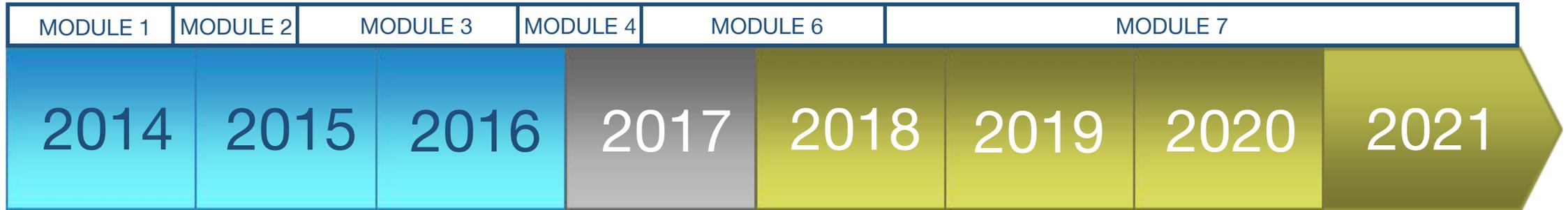
March 2015
Owner's Project
Manager (PMA)
Selected

July 2015
Designer
(SMMA)
Selected

April 2017
MSBA Board Vote
for SHS Schematic
Design Submission
(Module 5)

Fall 2021
Full Occupancy of
New High School

MSBA
MODULES

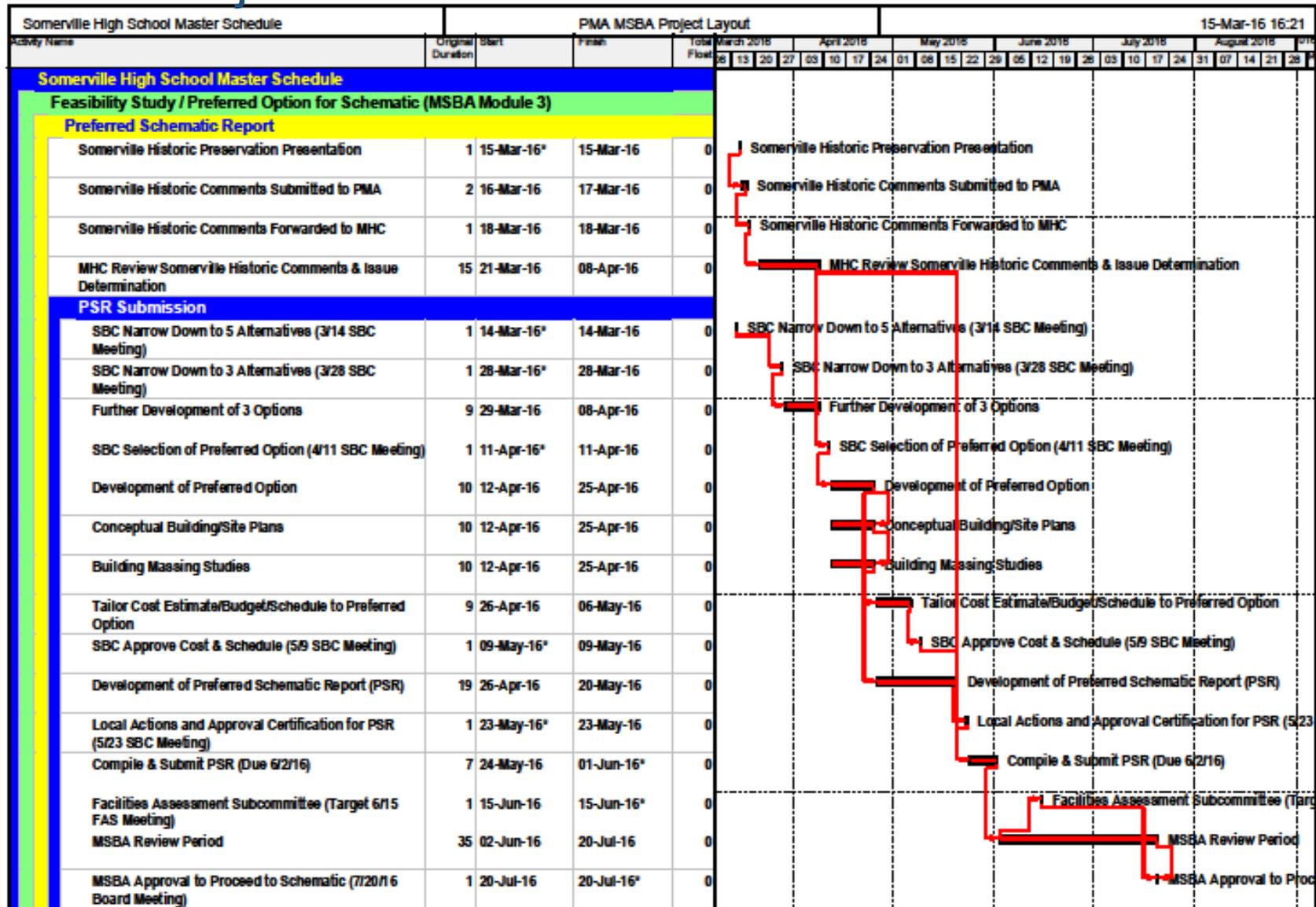


November 2014
SHS Accepted
into MSBA
Feasibility Study

September 2016
Submission of
Feasibility Study
to MSBA

August 2018 (est.)
Start of
Construction

Project Schedule



█ Actual Work █ Critical Remaining Work
█ Remaining Work ● Milestone



Thank you!