

FULLER MIDDLE SCHOOL FEASIBILITY STUDY

Community Forum 3
February 12, 2018

Agenda

1. Introductions
2. Process and Schedule
3. Existing School Conditions
4. Educational Programming
5. Pre-Concept Options
6. Next Steps
7. Questions

Introductions

School Building Committee Members

Dr. Yvonne Spicer

Charlie Sisitsky

Dr. Edward Gotgart

Chris Walsh

Adam Freudberg

Dr. Robert Tremblay

Heather Connolly

Richard Finlay

David Miles

Mary Ellen Kelley

Jennifer Pratt

Dr. Sonia Diaz

Matt Torti

Mayor

Co-Chair, Board of Selectmen

Co-Chair, Chief Operating Officer, FPS

State Representative

Chairman Framingham School Committee

Superintendent of Schools

School Committee Chair

School Committee Member and Convenor

Finance Committee Member

Chief Financial Officer

Chief Procurement Officer

Chief Academic Officer FPS

Director of Buildings and Grounds, FPS

School Building Committee Members (continued)

Jose Duarte	Principal, Fuller Middle School
Caitlin Stempleski	Teacher, Fuller School Middle
Patrick Johnson	Principal, Walsh Middle School
John Haidemenos	Principal, Woodrow Wilson School
Michael Tusino	Building Commissioner
Richard Weader II	Member
Michael Grilli	Member
Dr. Jennifer Krusinger Martin	Member
Donald Taggart III	Member
David Panich	Member
Thomas Barbieri	Member
Dr. Dale Hamel	Member

Architect

Jonathan Levi Architects

Owner's Project Manager (OPM)

Symmés Maini and McKee Associates

Feasibility Study Scope, Process and Schedule

Feasibility Study Scope

- **MSBA** is an independent public authority that administers and funds a program for grants to eligible cities, towns, and regional school districts for school construction and renovation projects.
- **MSBA** mandates a multi-step rigorous study and approval process

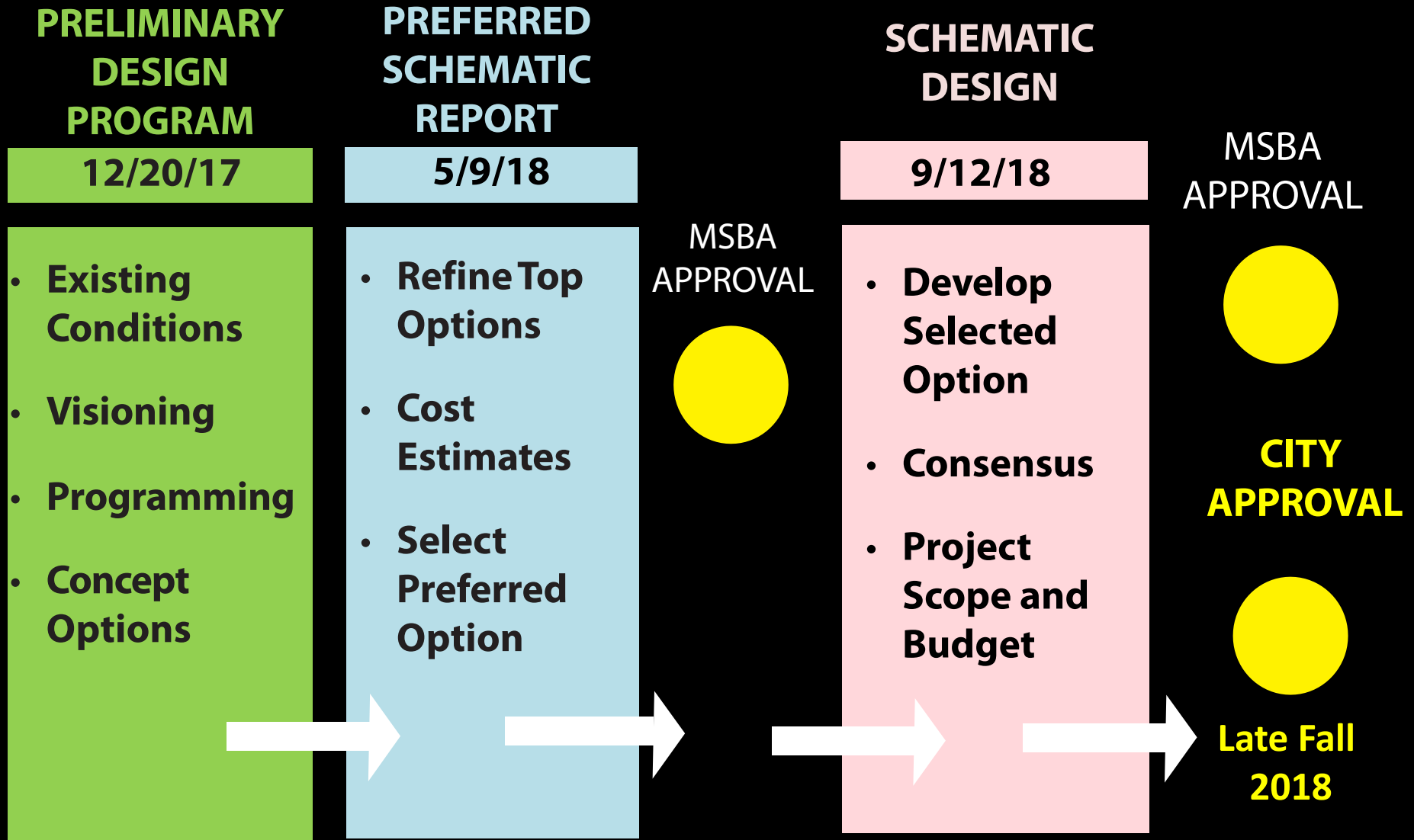
Feasibility Study Scope

The MSBA has agreed to participate with Framingham in a feasibility study for a **630 Student Middle School for Grades 6-8.**

Study Scope includes:

- Existing Conditions Review
- Educational Program
- Design Alternatives
 - Renovation
 - Renovation / Addition
 - All New Construction
- Cost Estimates

MSBA Feasibility Study Process and Schedule



Completed Project Milestones

February 2013 Pre-Feasibility Study Completed

November 2015 Framingham Submits Proposal to MSBA

April 2016 Historic Enrollments Study Completed

June 2016 K-8 Educational Visioning Completed

October 2016 Framingham Town Meeting approves
Feasibility Study Funding

December 2016 Framingham and MSBA Agree on
Student Design Enrollment

February 2017 MSBA Invites Framingham to
Feasibility Study

Completed Project Milestones

June 2017 Framingham Retains Owner's
Project Manager

September 2017 Framingham Retains Architect

November 13, 2017 Community Forum No. 1

November 27, 2017 Community Forum No. 2

December 20, 2017 Preliminary Design Program
Submitted to MSBA

February 6, 2018 Presentation to City Council

Questions?

Defining the Need

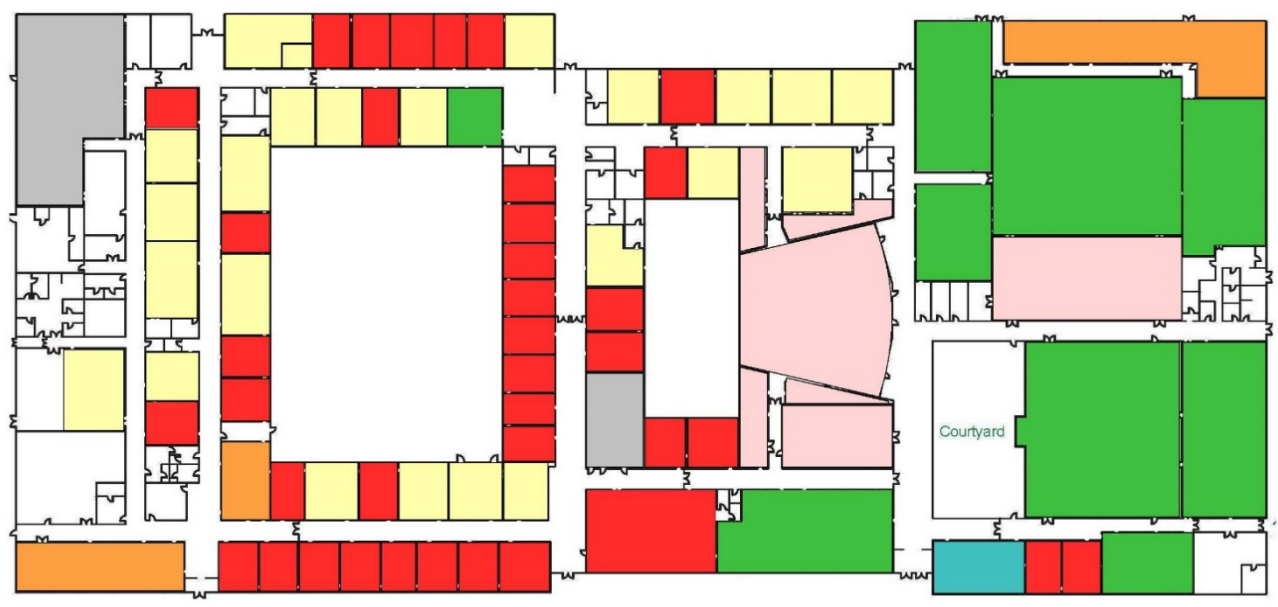
The Need:

- Need a long-term solution to resolve deteriorating school building
- Provide educational spaces to meet MSBA standards
- Update the layout to meet 21st century Visioning Session goals

The Goal

- Cost Effective, Sustainable and Educational Appropriate School with the least impact to the ongoing education of the students

EDUCATIONAL DEFICIENCIES



- BETWEEN 90% - 110% MSBA GUIDELINE
- MORE THAN 110% MSBA GUIDELINE
- LESS THAN 90% MSBA GUIDELINE
- NOT IN MSBA PROGRAM
- OUTSIDE PROGRAMS

1 FULLER SCHOOL - MSBA SPACE NEEDS COMPLIANCE
1" = 60'-0"

Existing School Conditions

A 2013 Pre-Feasibility Study by Bargmann Hendrie + Archetype Inc concluded that “Fuller Middle School, constructed as Framingham High School in 1958, while well maintained, has reached the end of its useful life.”

More recently, JLA and their team of consulting engineers have provided additional inspection to determine what work would be required to bring the Fuller up to current building codes and standards.

Energy Code:

The building was designed and built with almost no insulation on the floors, walls, or roof. The windows are typically single glazed. New work would need to comply with current codes, which would **save substantial \$\$ in ongoing annual energy costs.**



Accessibility

Most entries from the outside are non-compliant. The Auditorium floor is too steep, lacks landings, and has no accessible route from the seats to the stage.



EXISTING CONDITIONS AT FULLER SCHOOL

Structural:

Much of the structural concrete floor and gypsum roof deck is degrading and would need to be replaced. To meet current earthquake code, the entire roof would need to be replaced with steel deck and steel brace frames installed at the walls.



EXISTING CONDITIONS AT FULLER SCHOOL

Mechanical Electrical, Plumbing, Fire Protection

Systems typically have outlived their intended useful life. Boilers were installed in 2003, so have been used for over half of their expected useful service life. The building is not sprinklered.

To comply with current code, it would need to be fully sprinklered and have a new fire alarm system installed.



Hazardous Materials

Typical of older buildings, there are concealed hazmats. While these materials do not pose a problem as long as they are undisturbed, they will need to be identified and disposed of properly as part of a renovation project.



Educational Programming

EDUCATIONAL PROGRAM

Fuller Middle School is in its fourth year of STEAM (Science, Technology, Engineering, Arts and Mathematics)

- Transdisciplinary Instruction – Connect multiple content areas by linking concepts and skills with a real-world context. Encourage and support Inquiry.
- Personalized and Collaborative Learning – Teach students to take charge of their own learning with “hands-on” projects that can correspond with their interests and needs.

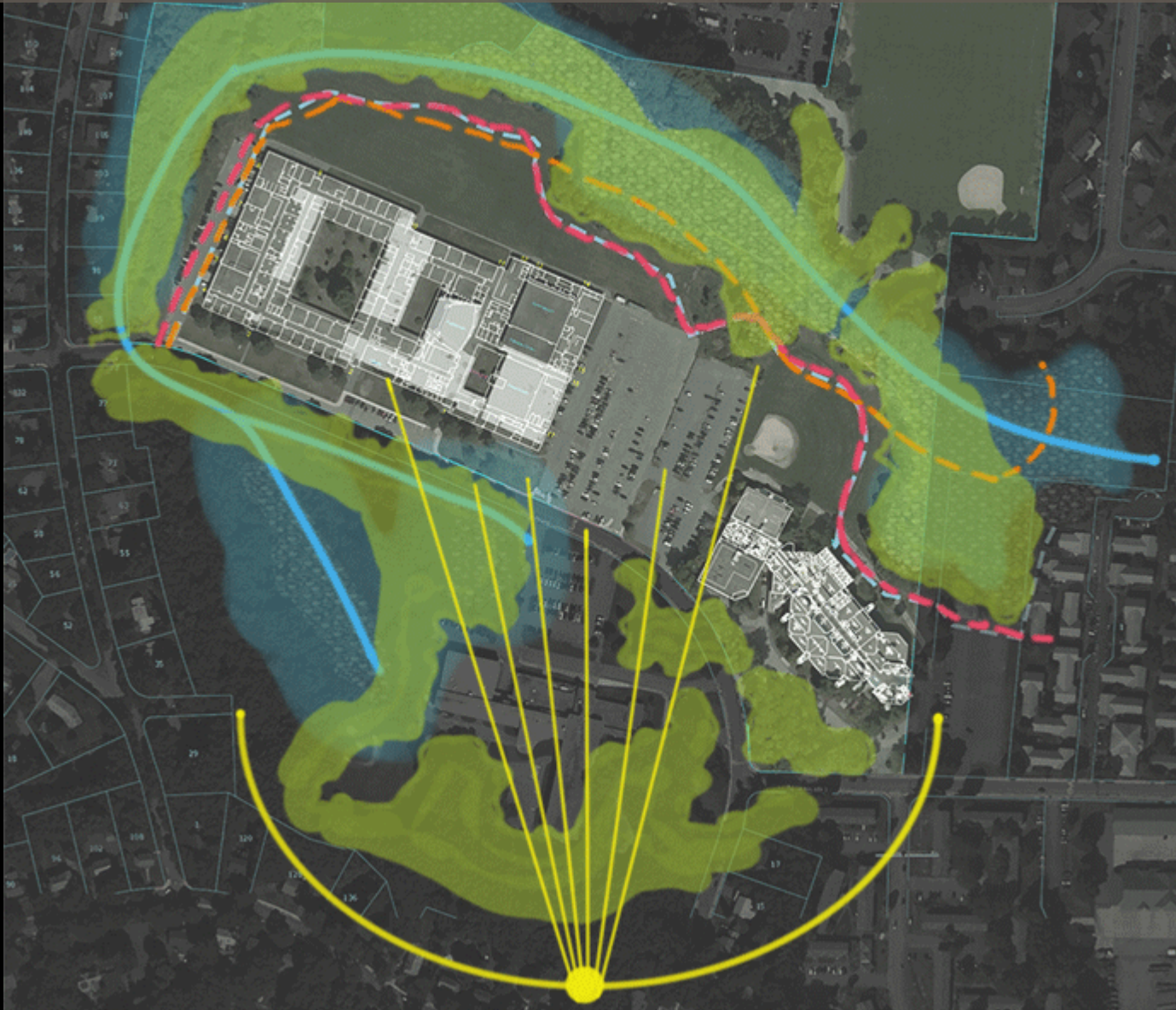
EDUCATIONAL PROGRAM

- Whole Child, Whole Community – Actively support emotional and social foundations to improve academic success.
- Visible Learning – Inspire students to learn from each other through student collaboration, presentations, demonstrations, and ongoing works-in-progress.
- Community and Civic Hub – Continue existing use as central location for meetings, adult learning, school productions and recreational activities.
- Adaptability – This building will need to meet Framingham’s future needs, so must be versatile enough to accommodate different teaching methods, including traditional ones.

Questions?

Preliminary Design Options

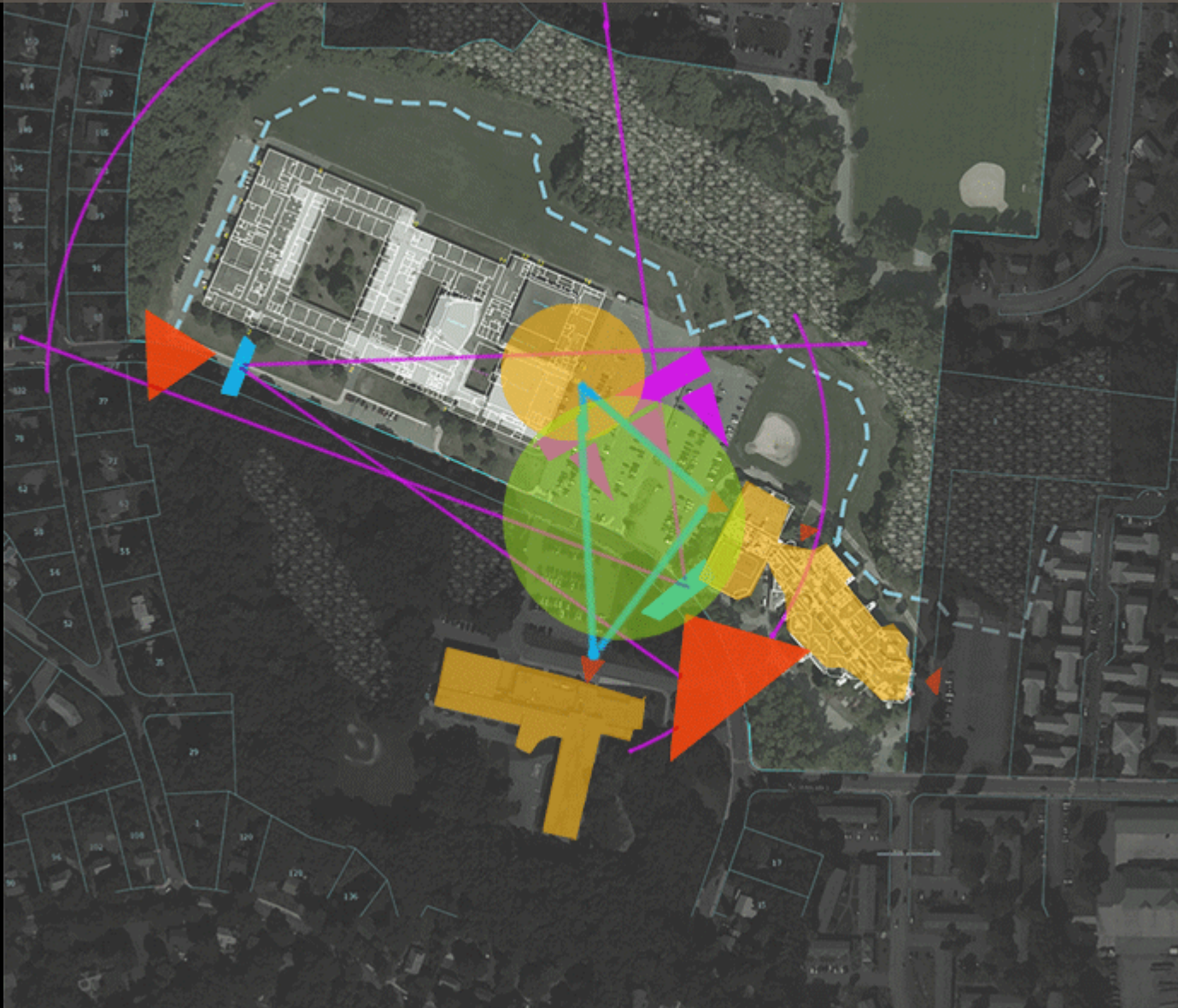
Landscape Analysis



Urban Analysis

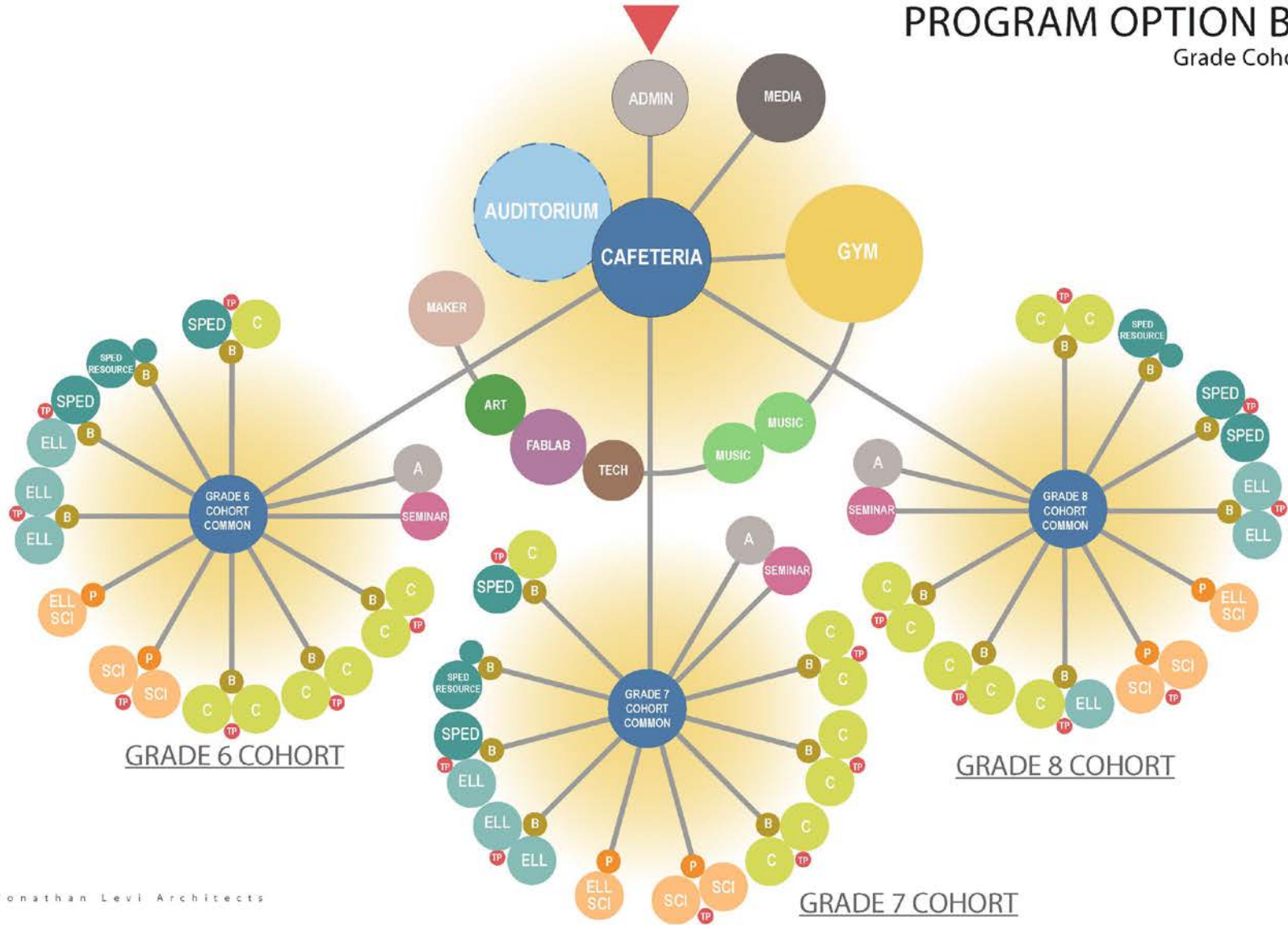


Campus Analysis

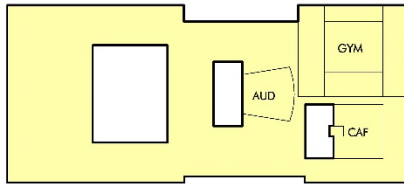


Alternatives

PROGRAM OPTION B.2 Grade Cohorts

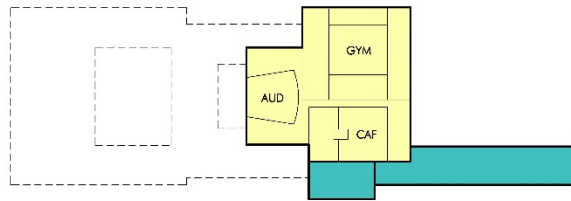


Alternatives



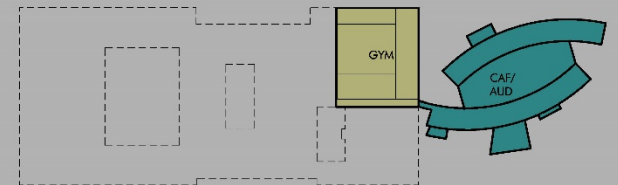
OPTION 0.0 - EXISTING

0.0 'Repair Existing': Minimum required repairs and code upgrades to the existing structure



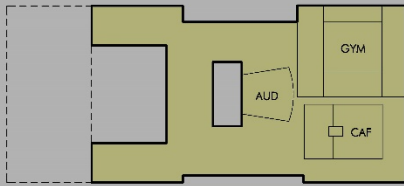
OPTION A - ADD/RENO

A 'Addition/Renovation': Retention and Upgrade of existing auditorium, gymnasium/locker and cafeteria areas. Conversion of existing cafeteria to multi-use dining and learning. Addition of new attached two story classroom and administration wing at front and east of existing cafeteria. Swing space required.



OPTION C.1 - FOLDED HANDS ADD/RENO

C.1 'Folded Hands Addition/Renovation': Retention and renovation of existing gymnasium/locker room only. Remaining scope to be attached new three story split level entry construction with stepped convertible commons/auditorium/cafeteria and balcony-accessed classrooms. Occupied phased construction required.



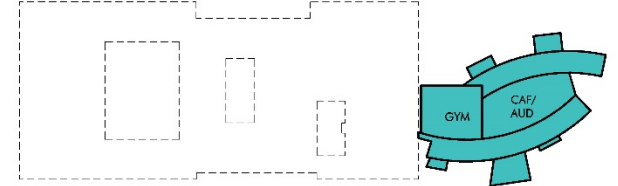
OPTION 0.1 - ADD/RENOVATION

0.1 'Addition/Renovation': Partial demolition of surplus floor areas and complete gut renovation and reconstruction of remaining areas to meet code and to address, as best as possible, the educational program. The later includes conversion of the existing cafeteria into a multi-use dining and learning space. Swing space required.



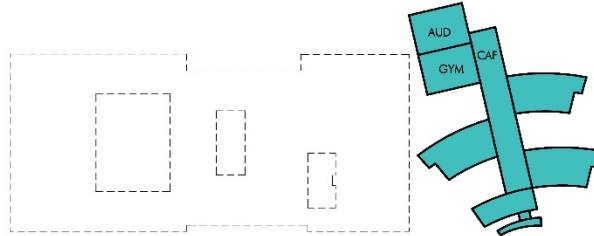
OPTION B.1 - TREE BRANCHES ADD/RENO

B.1 'Tree Branches Addition/Renovation': Retention and renovation of existing auditorium and gymnasium/locker room. Remaining scope to be attached new two story construction with central learning commons/cafeteria spine and branching academic wings and courtyards. Swing space required.



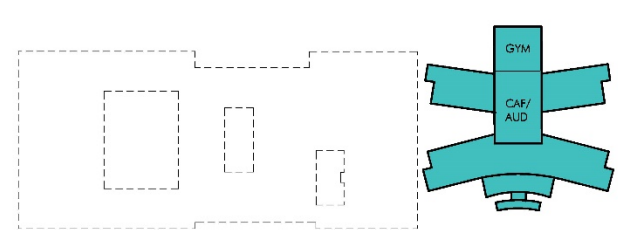
OPTION C.2 - FOLDED HANDS

C.2 'Folded Hands New Construction': New three story split level entry construction with stepped convertible commons/auditorium/cafeteria and balcony-accessed classrooms. New construction located in existing parking. No swing space or occupied construction required.



OPTION B.2 - TREE BRANCHES

B.2 'Tree Branches New Construction': New two story construction with central learning commons/cafeteria spine, new replacement sloped-floor auditorium and branching academic wings and courtyards. New construction located in existing parking. No swing space required.



OPTION D - BUTTERFLY

D 'Butterfly': New two story construction with classroom wings radiating off stepped convertible commons/auditorium/cafeteria/gymnasium. New construction located in existing parking. No swing space or occupied construction required.

Pre-Concept Alternatives Evaluation Matrix

FULLER MIDDLE SCHOOL Pre-Concept Options Evaluation Matrix

RATINGS:

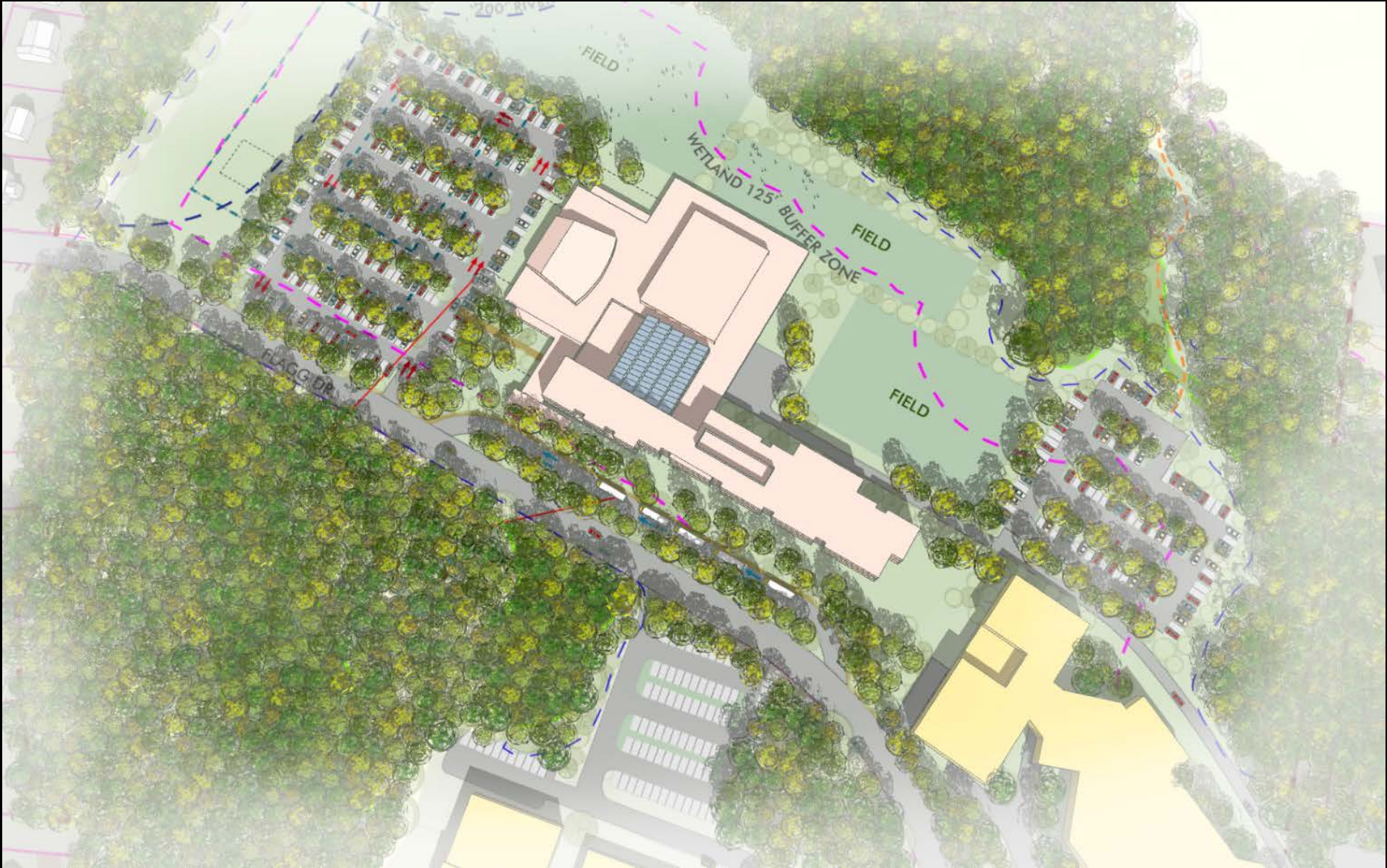
+	Advantageous
-O-	Neutral
-	Disadvantageous
--	Very Disadvantageous

 Voted to be Removed from Consideration by School Building Committee

	Option 0.0 Repair to Code Baseline	Option 0.1 Renovation	Option A Add / Reno With Auditorium	Option B.1 Tree Branch Add / Reno	Option B.2 Tree Branch New Constr. With Auditorium	Option C.1 Folded Hands Add / Reno	Option C.2 Folded Hands New Constr. No Auditorium	Option D Butterfly New Constr. No Auditorium	Comments
Project Criterion									
Total Project Cost	--	--	-	-	-O-	-	+	+	See costs below
Schedule	--	--	-	-	+	+	+	+	Renovation options will require phasing and additional construction time. Swing space requires additional time
Swing Space or Occupied Construction	--	--	-	-	+	+	+	+	New school outside existing footprint requires no swing space
Construction Impact to Education	--	--	-	-	+	-O-	+	+	Swing space will be disruptive and smaller than current Fuller use
Construction Impact to Campus and Neighbors	-O-	-	-O-	-O-	-O-	-O-	-O-	-O-	Swing space / trailers will be disruptive to neighbors. New Construction on east will require temporary parking
Educational Program Accommodation	--	-	-O-	+	+	+	+	+	Options vary on ability to provide 3 appropriate cohort locations and identity
Flexibility	--	-	-	+	+	+	+	+	New construction would be designed for flexible use and improved MEP accessibility
Open Space /Building Massing / Footprint	--	-	-	-O-	+	-O-	+	+	Options built on east parking would open very large and flexible open area on existing Fuller footprint
Academic Campus Coordination	-	-	-	+	+	+	+	+	Locating Fuller closer to Farley and McCarthy improves ability to create identifiable campus
Natural Light and Views	--	--	-O-	-O-	+	+	+	+	"Pancake" massing creates interior rooms with limited access to windows
Risk	--	--	-	-	+	-O-	+	+	Options requiring renovation and/or swing space have more inherent risk due to unforeseen conditions
Community Use	-O-	+	+	+	+	+	+	+	All alternatives allow community use. New Construction options allow increased access to playfields.
Total GSF	195,000	163,000	160,000	164,000	155,000	149,000	145,000	145,000	
Swing Space Cost (\$Million)	\$6	\$6	\$6	\$6	\$0	\$0	\$0	\$0	Option 0 and 0.1 would require swing space at Farley. Options A and B.1 could have swing space in Fuller. Other options require no swing space.
Order of Magnitude Project Cost (\$Million)	\$125	\$123	\$114	\$116	\$95	\$107	\$89	\$89	This existing building is particularly expensive to renovate due to its construction assembly and degree of deterioration
MSBA Share	\$0	\$53	\$49	\$50	\$40	\$45	\$41	\$41	
Framingham Share	\$131	\$76	\$71	\$72	\$55	\$62	\$48	\$48	

Pre-Concept A - 'Add/Reno.': Progress Plan Diagram Model 'Screenshot'

Includes renovated auditorium and gyms – Aerial View



Pre-Concept A - 'Add/Reno.': Progress Plan Diagram Model 'Screenshot'

Includes renovated auditorium and gyms – Level 1



Pre-Concept A - 'Add/Reno.': Progress Plan Diagram Model 'Screenshot'

Includes renovated auditorium and gyms – Level 2



Pre-Concept A - 'Add/Reno.': Progress Plan Diagram Model 'Screenshot'

Includes renovated auditorium and gyms – Level 3



Pre-Concept A - 'Add/Reno.': Progress Plan Diagram Model 'Screenshot'
Includes renovated auditorium and gyms – Massing Perspective View from South



Pre-Concept B - 'Tree Branch': Progress Plan Diagram Model 'Screenshot'

Includes new auditorium and MSBA standard gym – Aerial View



Pre-Concept B - 'Tree Branch': Progress Plan Diagram Model 'Screenshot'

Includes new auditorium and MSBA standard gym - Level 1



Pre-Concept B - 'Tree Branch': Progress Plan Diagram Model 'Screenshot'

Includes new auditorium and MSBA standard gym – Level 2



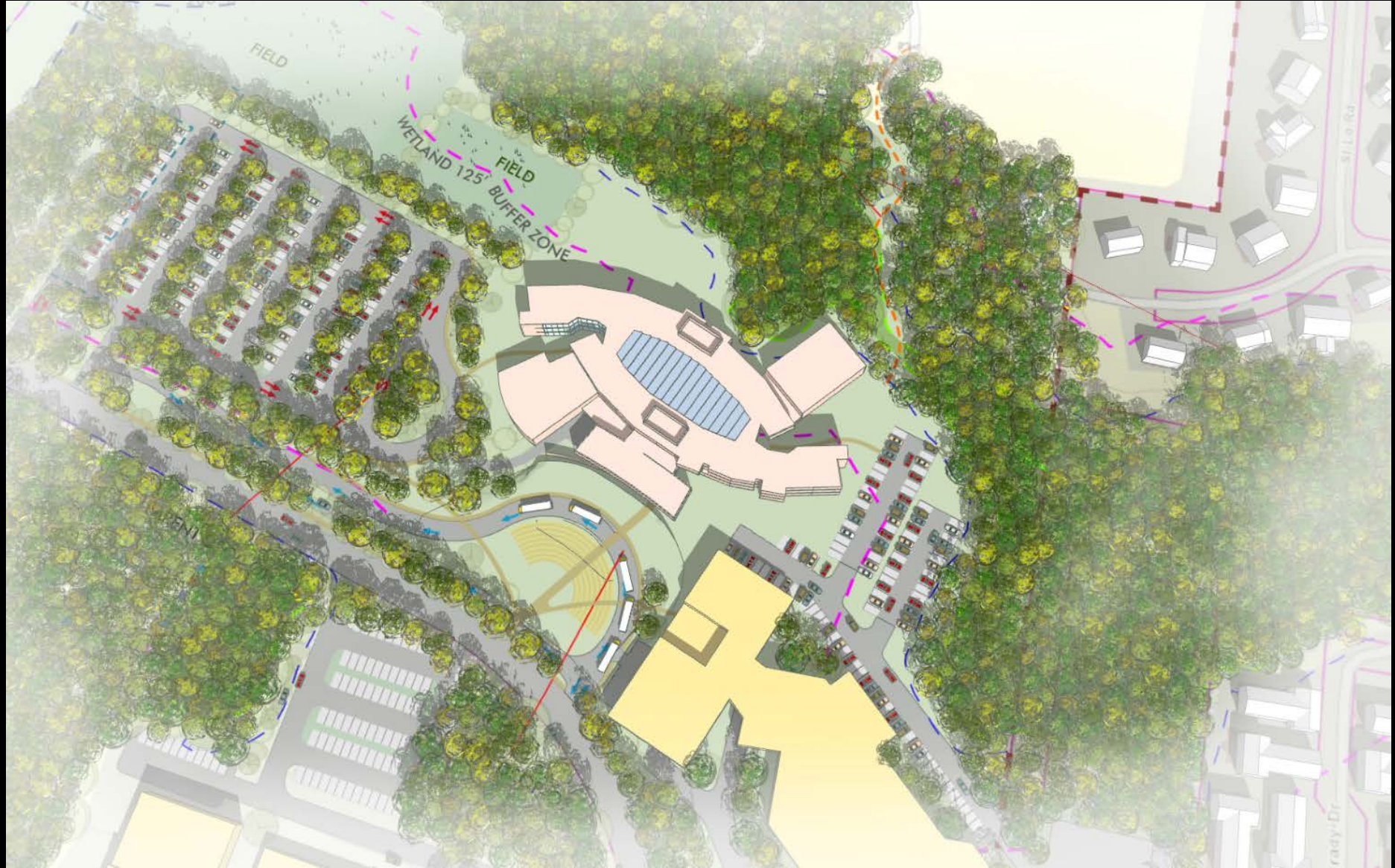
Pre-Concept B - 'Tree Branch': Progress Plan Diagram Model 'Screenshot'

Includes new auditorium and MSBA standard gym – Massing Perspective View from South



Pre-Concept C.3 - 'Folded Hands' : Progress Plan Diagram Model 'Screenshot'

Revised to include new auditorium and MSBA standard gym – Aerial View



Pre-Concept C.2 - 'Folded Hands' : Progress Plan Diagram Model 'Screenshot'

Revised to include new auditorium and MSBA standard gym – Level 2



Pre-Concept C.3 - 'Folded Hands' : Progress Plan Diagram Model 'Screenshot'

Revised to include new auditorium and MSBA standard gym - Level 1



Pre-Concept C.3 - 'Folded Hands' : Progress Plan Diagram Model 'Screenshot'

Revised to include new auditorium and MSBA standard gym – Level 1



Pre-Concept C.3 - 'Folded Hands' : Progress Plan Diagram Model 'Screenshot'

Revised to include new auditorium and MSBA standard gym – Level 3



Pre-Concept C.3 - 'Folded Hands' : Progress Plan Diagram Model 'Screenshot'

Revised to include new auditorium and MSBA standard gym – Massing Perspective View from South



Pre-Concept D - 'Butterfly': Progress Plan Diagram Model 'Screenshot'

Revised to include new auditorium and MSBA standard gym – Aerial View



Pre-Concept D - 'Butterfly': Progress Plan Diagram Model 'Screenshot'

Revised to include new auditorium and MSBA standard gym - Level 1



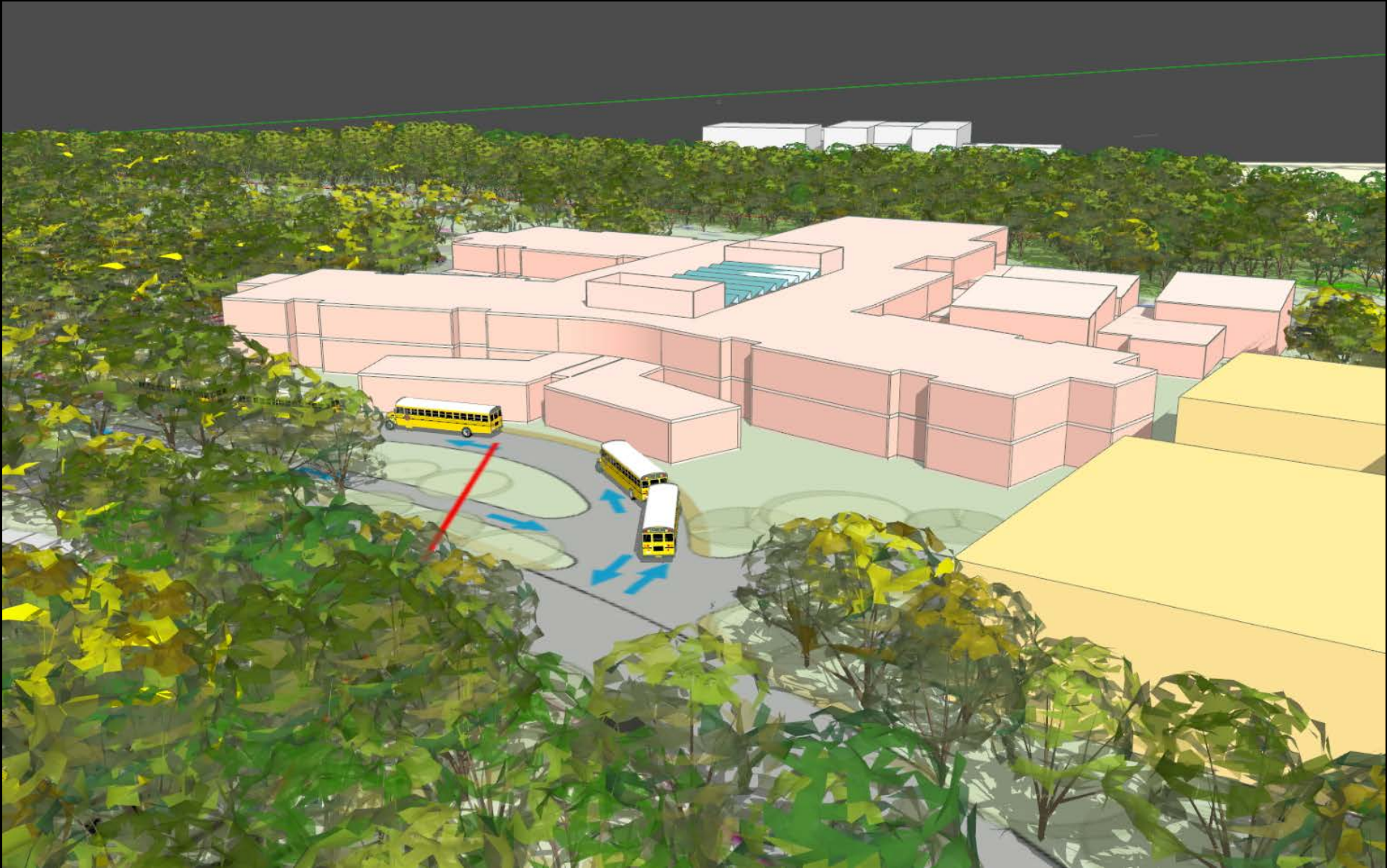
Pre-Concept D - 'Butterfly': Progress Plan Diagram Model 'Screenshot'

Revised to include new auditorium and MSBA standard gym – Level 2



Pre-Concept D - 'Butterfly': Progress Plan Diagram Model 'Screenshot'

Revised to include new auditorium and MSBA standard gym – Massing Perspective View from South



Preliminary Cost Analysis

State Reimbursement

- **MSBA** will reimburse all Eligible Costs, at a Base Rate of **57.05%** plus incentive points for an approved project if accepted by the voters of Framingham
- Example of Ineligible Costs include:
 - Site Costs over 8%
 - Building Costs over \$326/SF
 - Asbestos Flooring abatement
 - FF&E/Technology costs over \$2,400 per student
 - Legal Fees, Moving Expenses, construction contingencies over 1% for new construction or 2% for renovation
 - Temporary Swing space
 - Auditoriums in Middle Schools

State Reimbursement Incentives

The MSBA provides incentives to reimburse up to an estimated additional **4.0% to 5.77%** of eligible costs. The incentives fall under the following categories:

- Energy Efficiency (2%)
- Renovation (1.77%)
- Maintenance Programs (1%)
- CM at Risk project delivery (1%)

Preliminary Cost Analysis

	<u>Option 0.0</u> Repair to Code Baseline	<u>Option A</u> Add / Reno With Auditorium	<u>Option B.2</u> Tree Branch New Constr. With Auditorium	<u>Option C.2</u> Folded Hands New Constr. No Auditorium	<u>Option D</u> Butterfly New Constr. No Auditorium
Swing Space Cost (\$Million)	\$6	\$6	\$0	\$0	\$0
Order of Magnitude Project Cost (\$Million)	\$125	\$114	\$95	\$89	\$89
MSBA Share	\$0	\$49	\$40	\$41	\$41
Framingham Share	\$131	\$71	\$55	\$48	\$48

Questions?



Jonathan Levi Architects

PROJECT MANAGEMENT **SMMA**

Next Steps

NEXT STEPS

School Building Committee to continue to refine the Design Options and Costs. The SBC meetings are every two weeks. Meetings and agendas are posted on the FPS website.

- School Committee Meeting – March 7, 2018
- [April 2, 2018 – Community Forum #4](#)
- April 2018 – Follow-up City Council Meeting
- April 2018 – Follow-up School Committee Meeting
- May 9, 2018 – Submit Preferred Schematic Report (PSR) to MSBA
- September 12, 2018 - Submit Schematic Report (SD) to MSBA
- October 31, 2018 - MSBA board meeting to approve project
- Late Fall 2018 – City appropriation voting

Community Resources

Project Website:

www.framingham.k12.ma.us/FullerSchoolDesign

Questions and Comments