

# CONCEPTUAL DESIGN PRESENTATION

## OPTION 2 – Renovate as New with Additions

### Farmington High School



## Building Committee

Meg Guerrero, Chair  
Michael Smith  
Sharon Mazzochi  
Ellen Siuta  
Chris Fagan  
Garth Meehan  
Johnny Carrier

Kathy Blonski  
Town Manager  
Kathy Greider  
Superintendent  
Alicia Bowman  
Asst. Superintendent – Finance & Operations  
Tim Harris  
Director School Facilities  
Scott Hurwitz  
FHS Principal  
Lisa Karcinski  
FHS Assistant Principal  
Kat Krajewski  
Assistant Town Manager  
Devon Aldave  
FHS Building Committee Intern  
Paul Cianci  
Town Council Liaison  
Beth Kintner  
Town Council Liaison

## Consultants

Construction Solutions Group  
Construction Management

TSKP STUDIO  
Architects

Kohler Ronan Consulting Engineers  
MEP, FP, and IT Systems

Michael Horton Associates, Inc.  
Structural Engineering

Milone & MacBroom  
Civil Engineering, Landscape Design

# FHS Options | What Are The Options?

## Option 1

Maintain Existing FHS

## Option 2

Renovate Existing FHS As New  
With Additions

Max Reimbursement Rate

30¢ per  
eligible dollar

## Option 3

New FHS

Max Reimbursement Rate

20¢ per  
eligible dollar

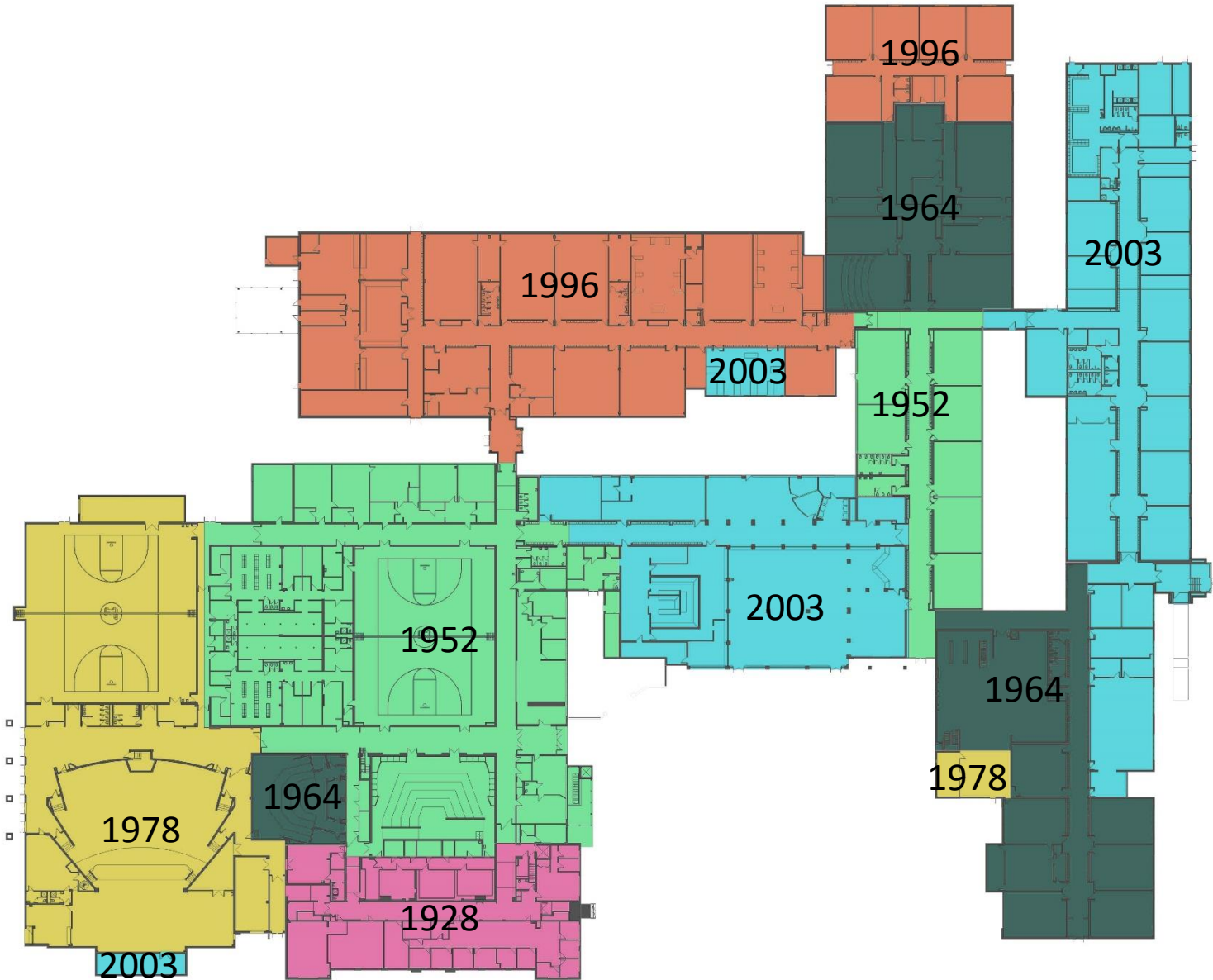


# Option 2 | How Much Should We Renovate?



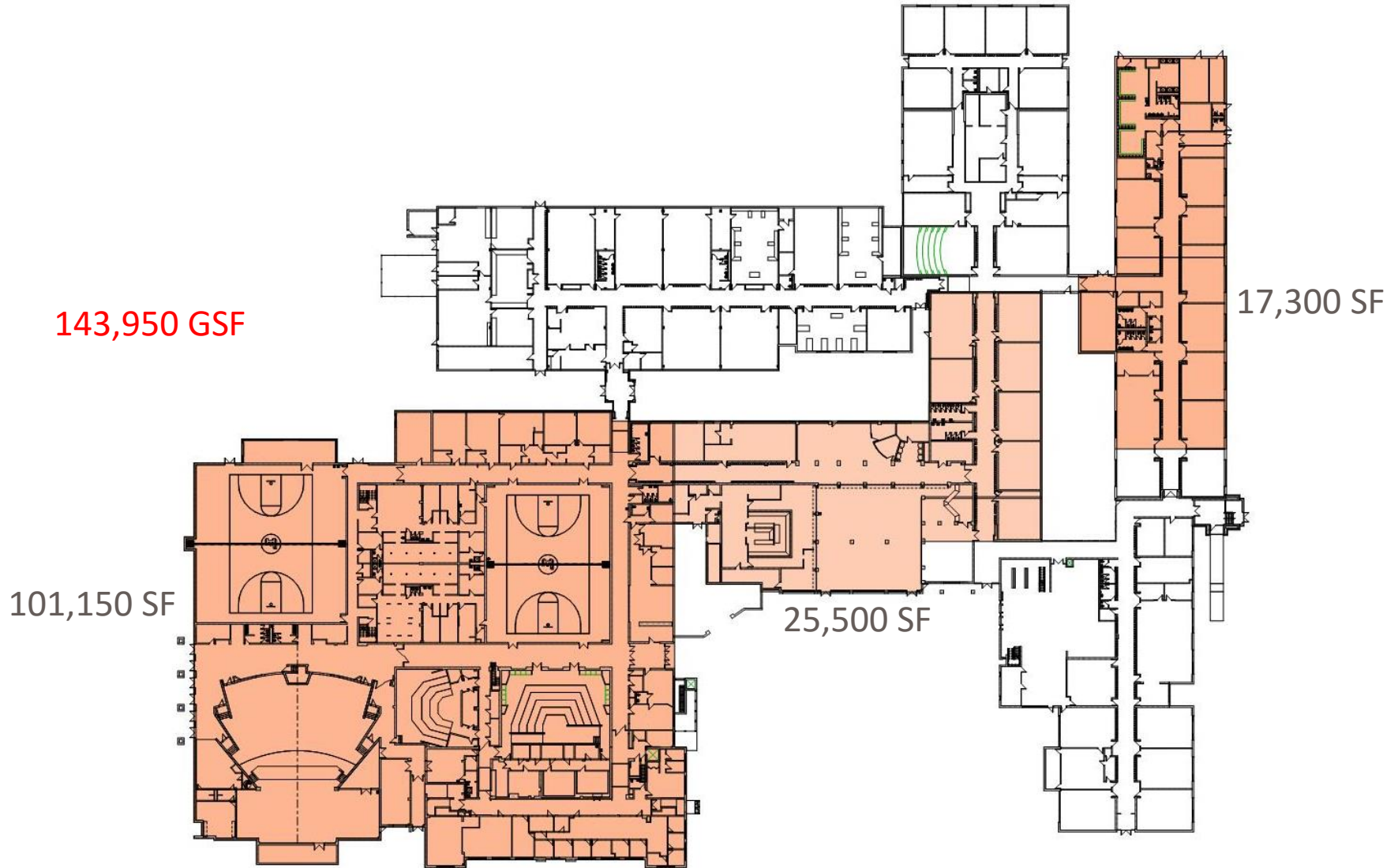


# Option 2 | Strategy for Addition



# Option 2 | Renovate Approximately 66% of Existing GSF

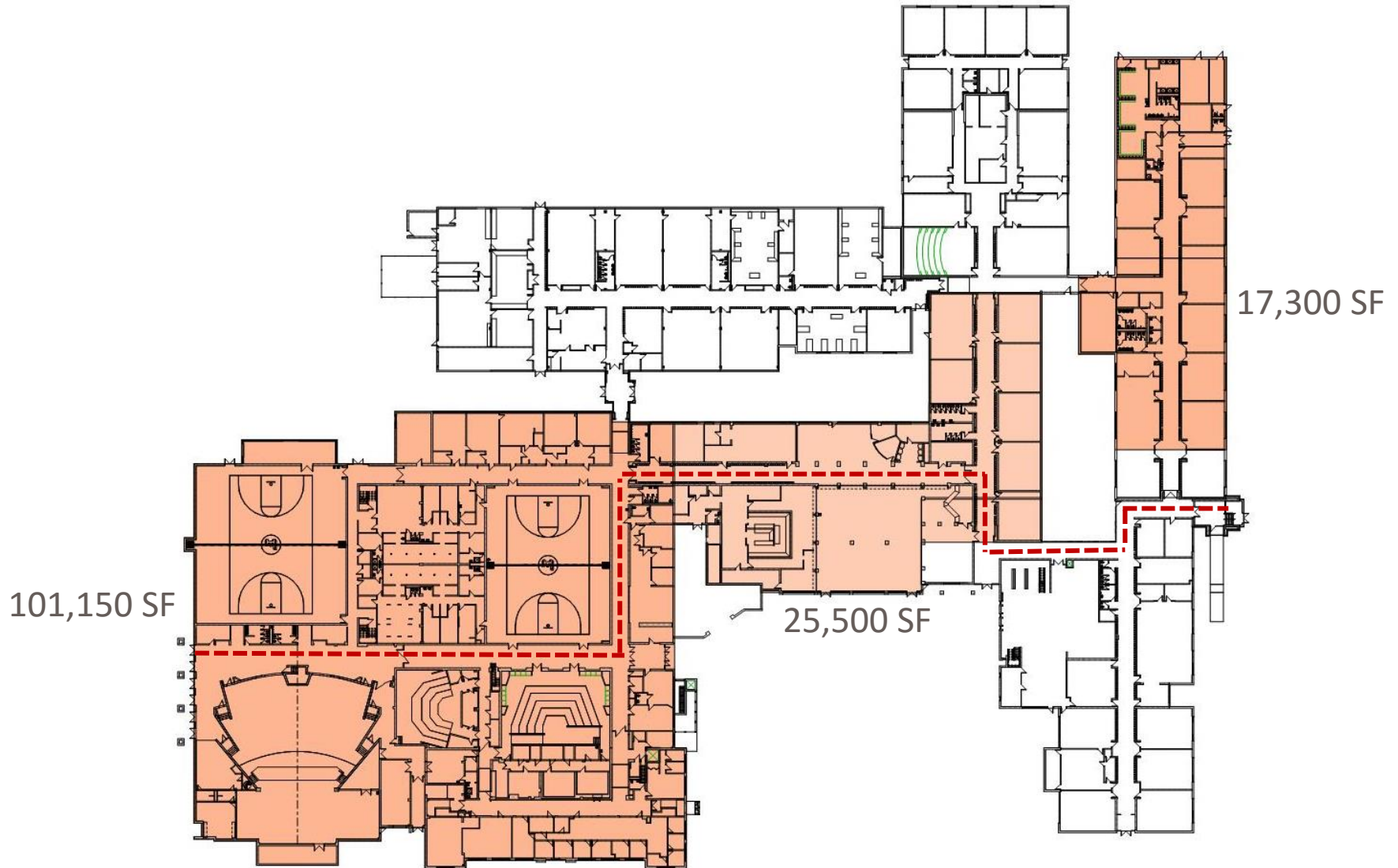
Remember that we need to renovate at least **55%** in order to meet the State's definition of "Renovate-As-New".





# Option 2 | Renovate Approximately 66% of Existing GSF

Remember that we need to renovate at least **55%** in order to meet the State's definition of "Renovate-As-New".



# Option 2 | Strategy for Addition

Renovate As New

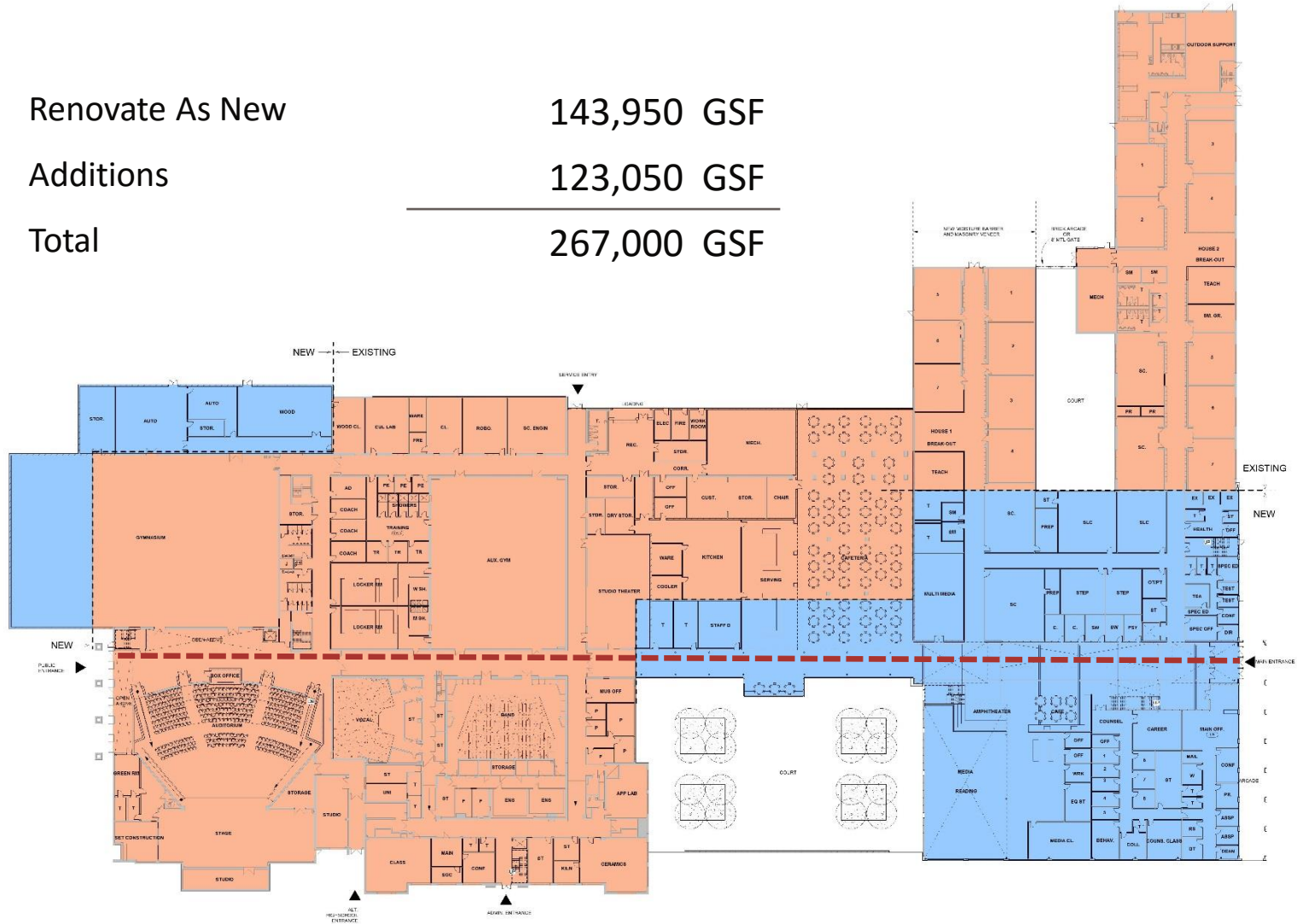
143,950 GSF

Additions

123,050 GSF

Total

267,000 GSF

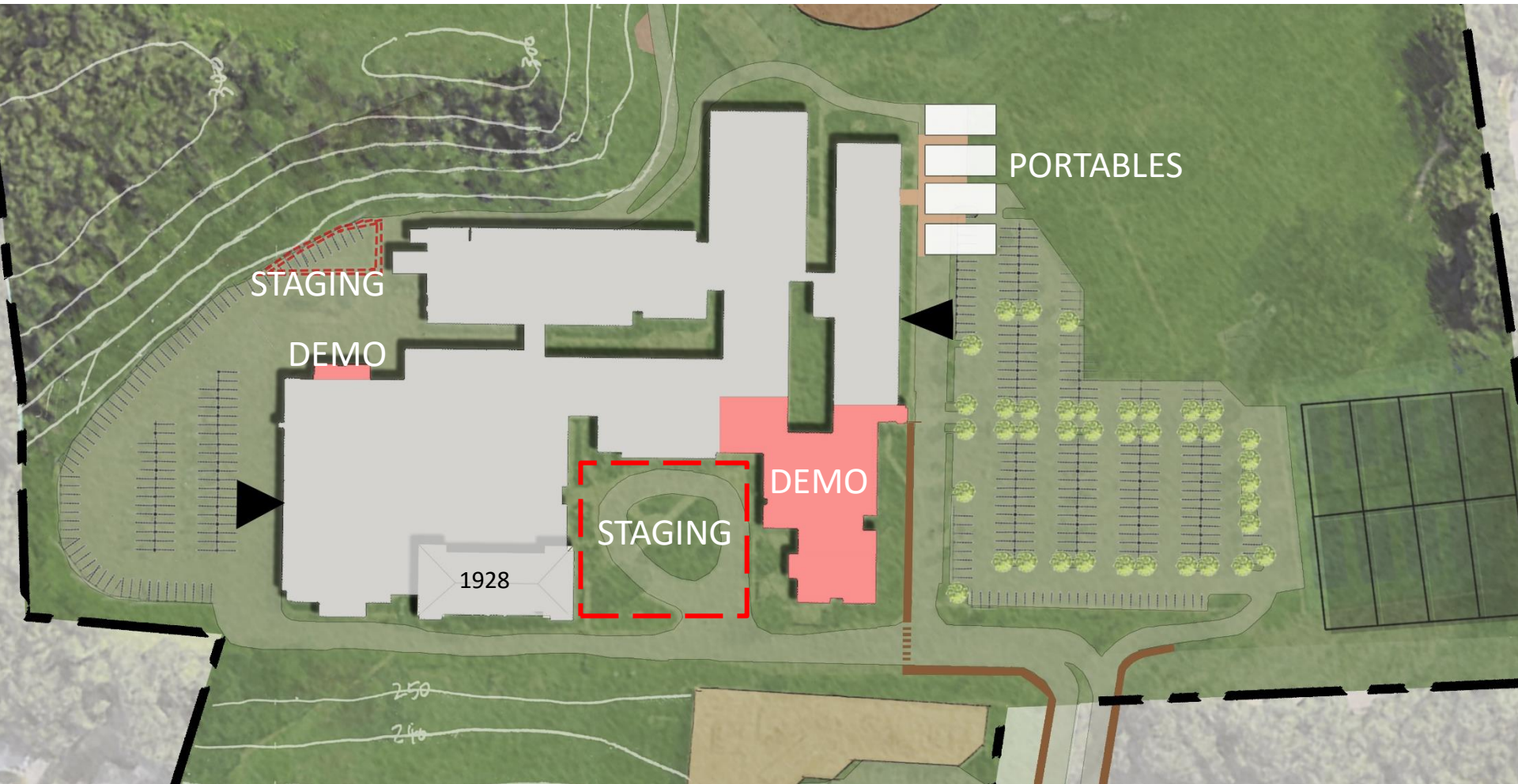




## Option 2 | Important Design Issues

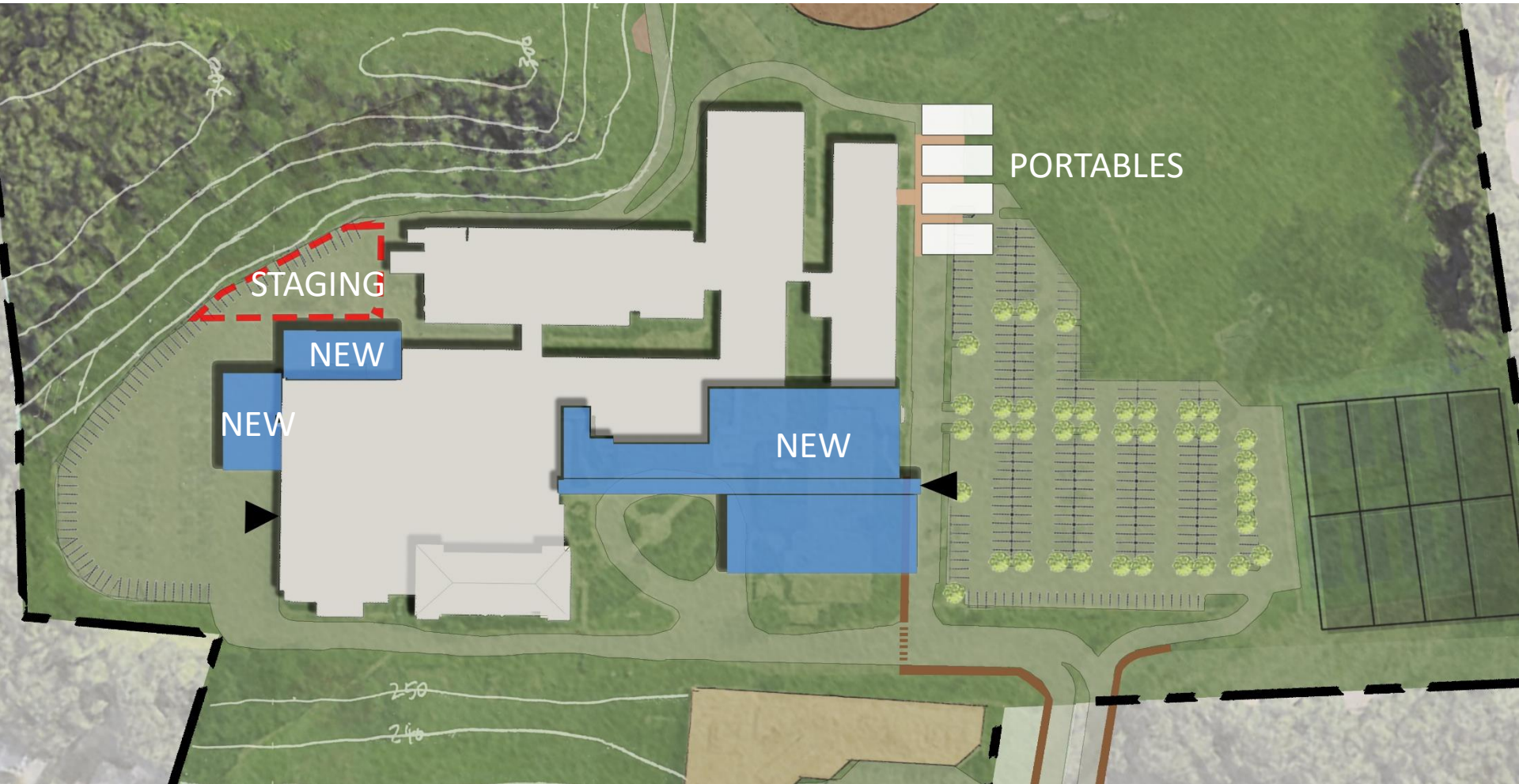
- 1) Sequence of Construction
- 2) Site Improvements
- 3) Plan Organization
- 4) Meeting the Educational Specifications
- 5) Appearance

# Option 2 | Sequence of Construction

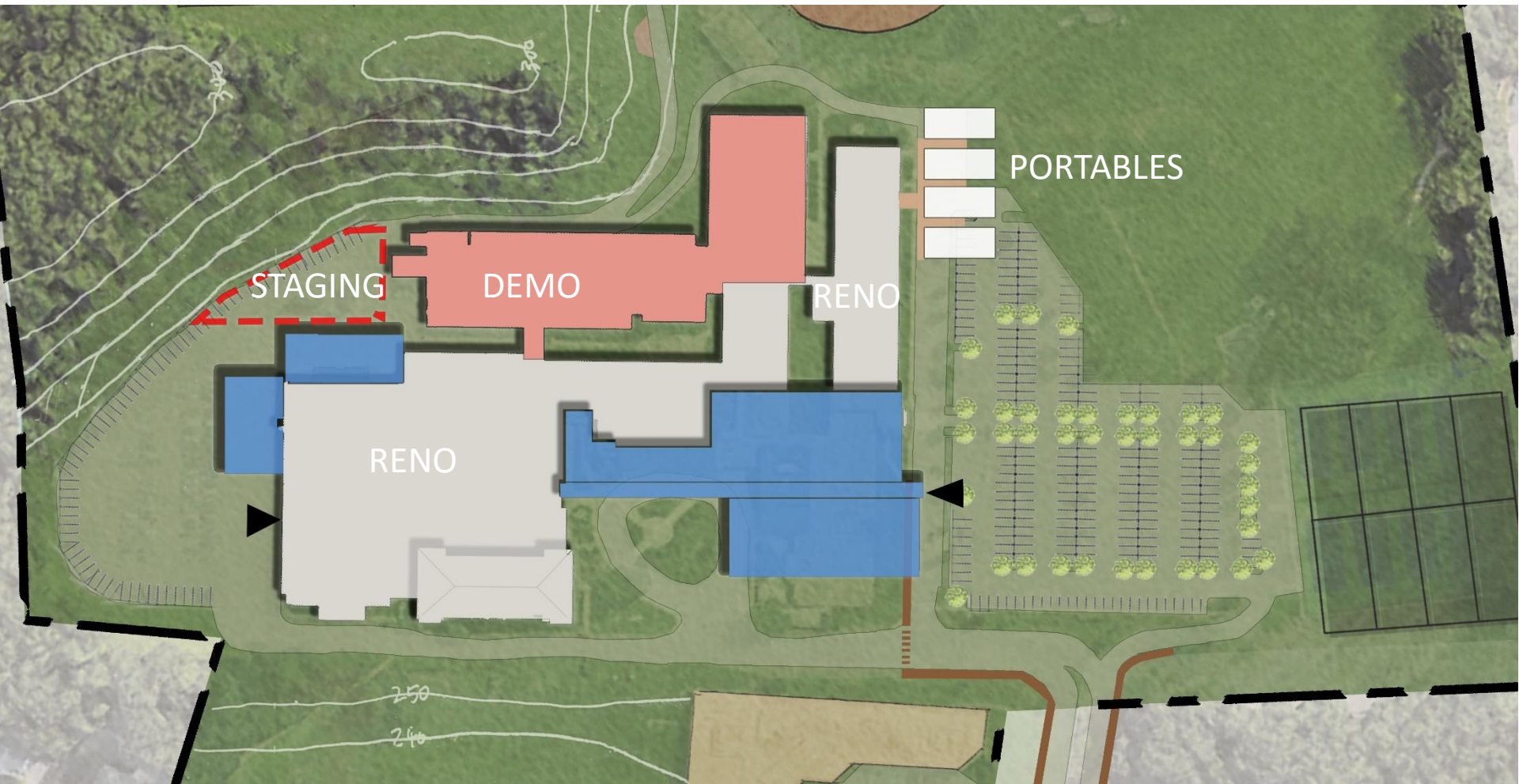




# Option 2 | Sequence of Construction



# Option 2 | Sequence of Construction





# Option 2 | Site Improvements



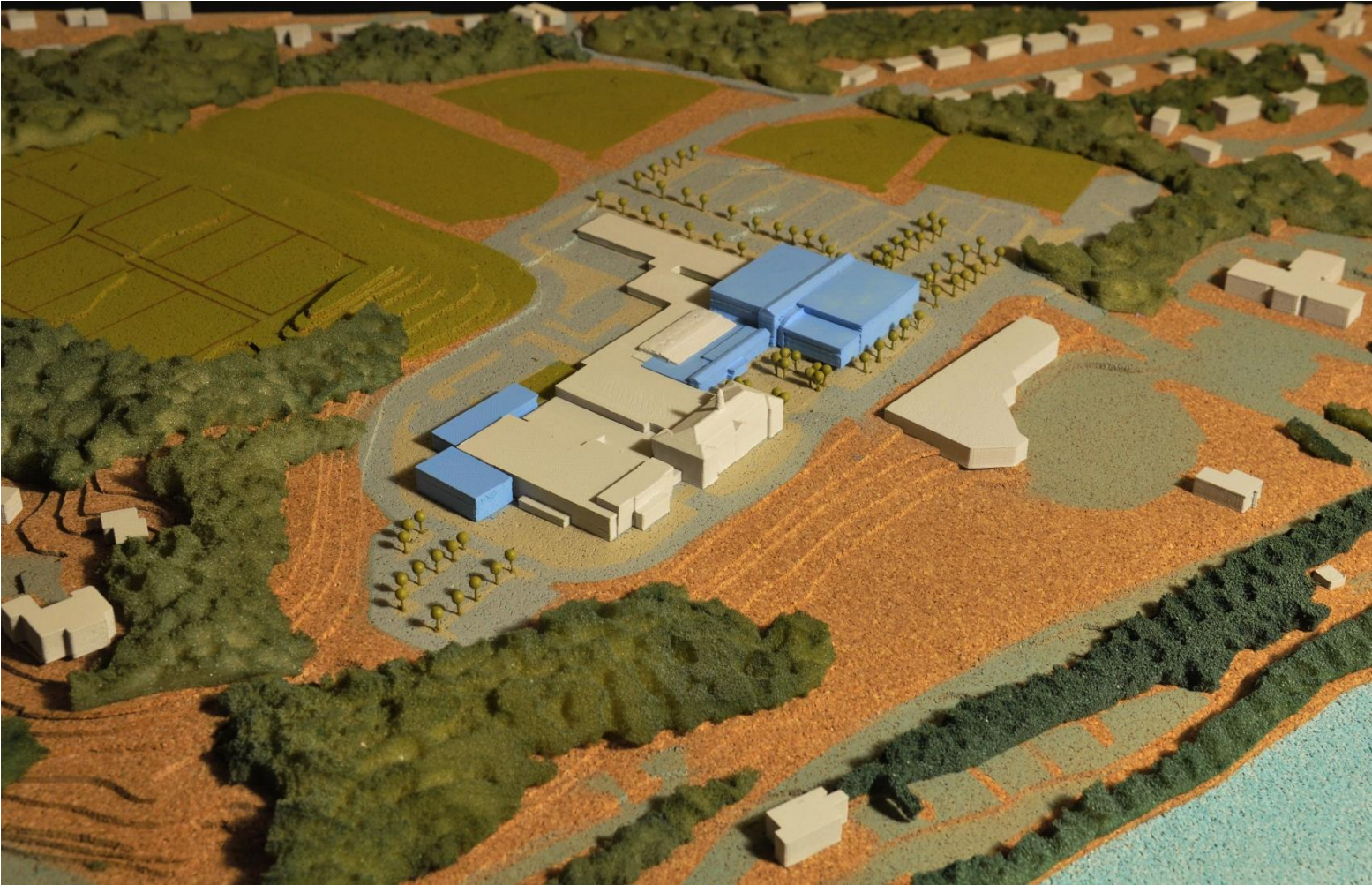


# Option 2 | Study Model





# Option 2 | Study Model







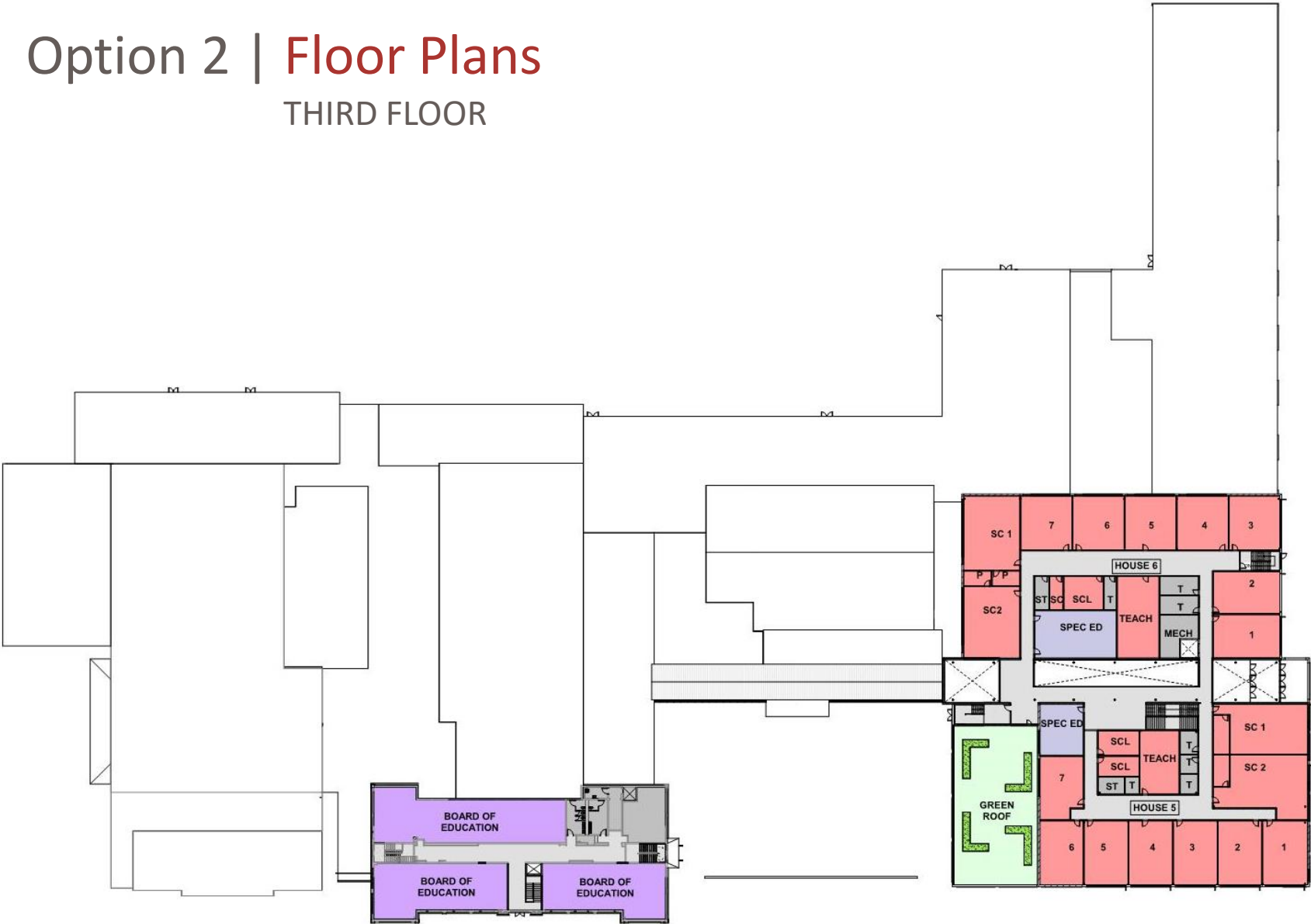
# Option 2 | Floor Plans

## SECOND FLOOR



# Option 2 | Floor Plans

## THIRD FLOOR















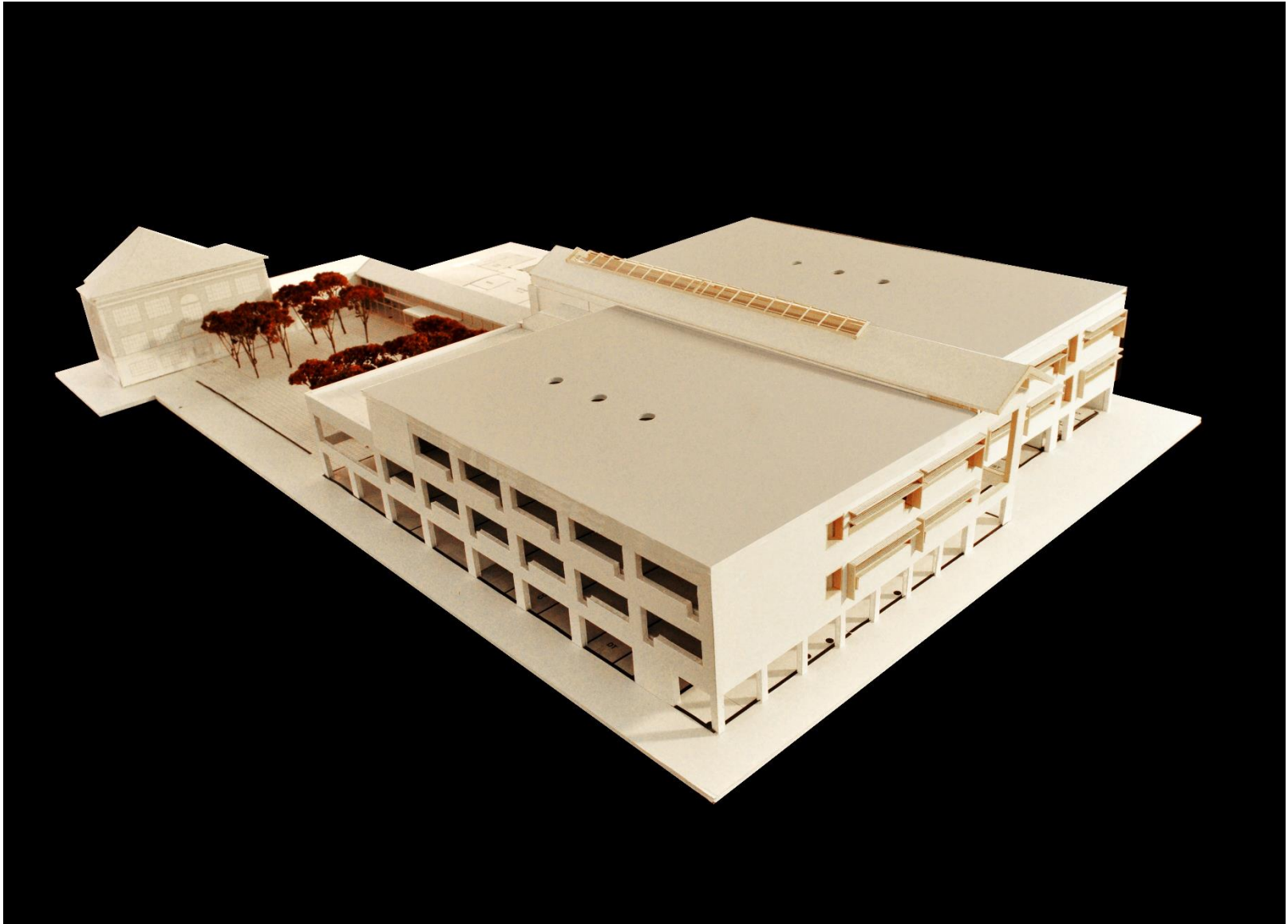




# Option 2 | Exterior

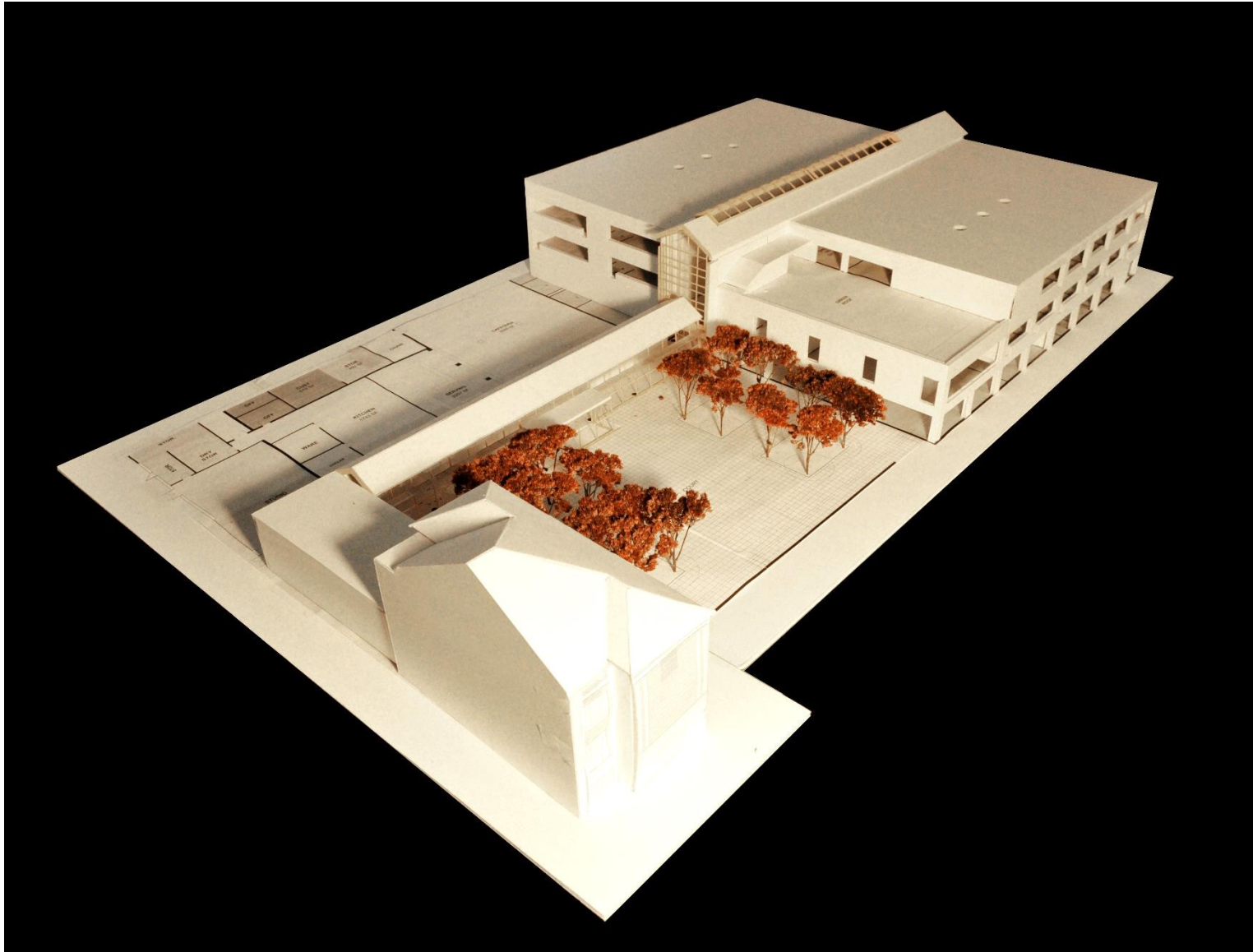


## Option 2 | Large Study Model

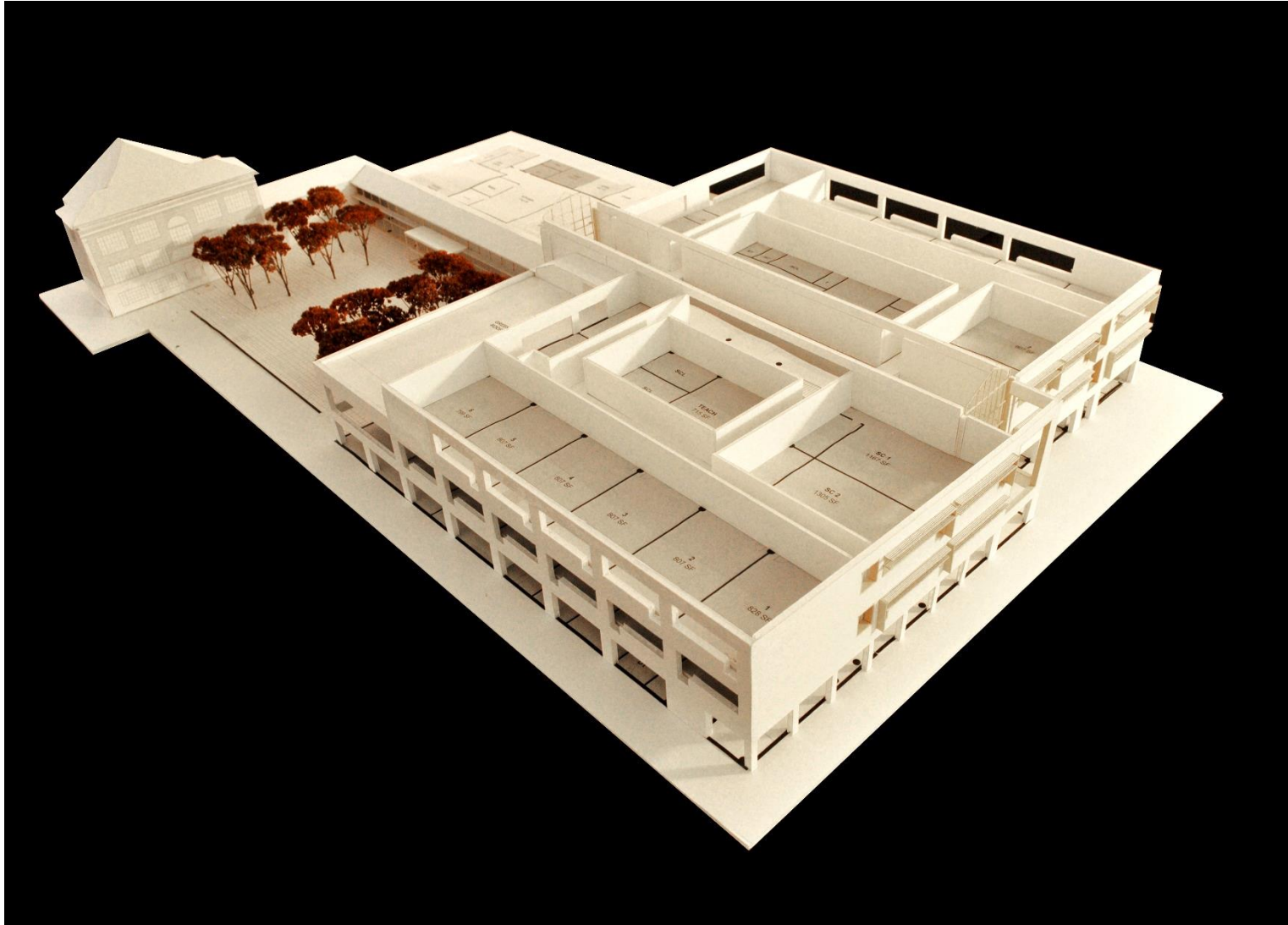




## Option 2 | Large Study Model

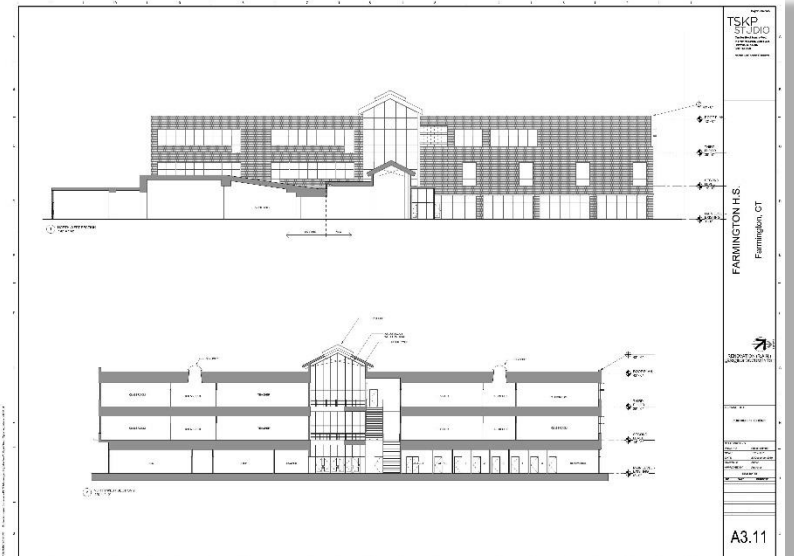
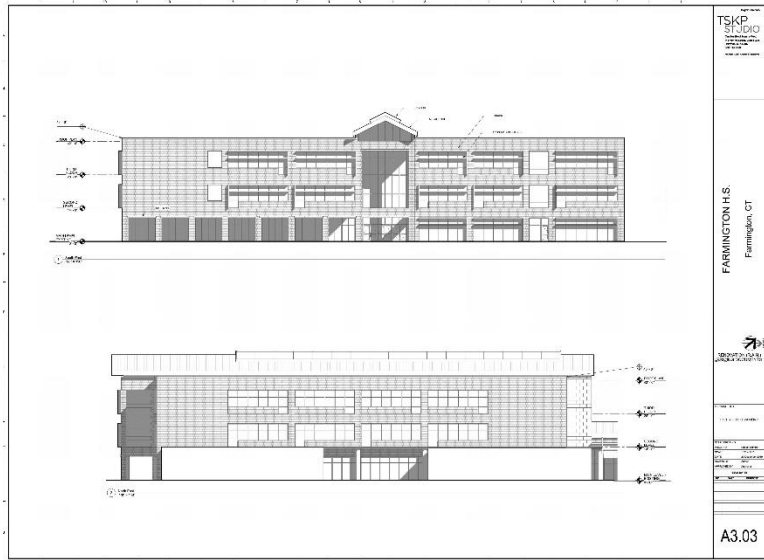
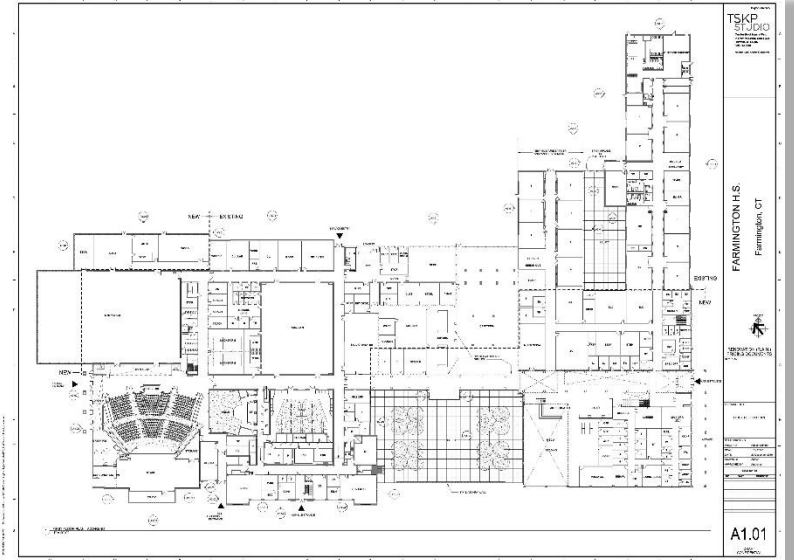
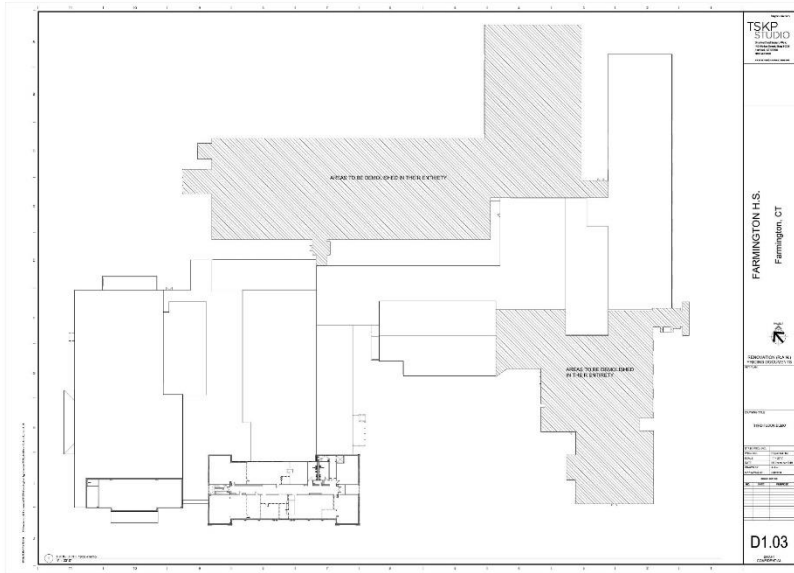


## Option 2 | Large Study Model





# Option 2 | Pricing Documents



# Option 2 | Pricing Documents

Farmington High School  
Renovation Option (Renovate as New) Narrative

FINAL  
01/15/2020

## Division 03 30 00 – Cast-In-Place Concrete:

All cast-in-place concrete shall conform to ACI 301-84 "Specifications for Structural Concrete for Buildings", and ACI 318-89 "Building Code Requirements for Reinforced Concrete".

- A. Reinforcing bars: ASTM A615, Grade 60
- B. Welded wire fabric: ASTM A185
- C. Portland cement: ASTM C150, Type I.
- D. Aggregates: ASTM C33
- E. Water: clean, free from deleterious amounts of acid, alkalis and organic materials.
- F. Admixtures:
  - 1 Air-entraining admixture: ASTM C260
  - 2 Water reducing, accelerating, high range water reducing admixtures: ASTM C494
- G. Concrete:
  - 1 Slabs on grade: 3500 psi (no air entrainment) at 28 days. Water-cement ratio shall not exceed 0.50 by weight. Air content 6 percent by volume. Include moisture vapor reducing admixture in design mix.
  - 2 Elevated slabs: Lightweight 3500 psi (no air entrainment) at 28 days. Include moisture vapor reducing admixture in design mix
  - 3 Other interior concrete: 3000 psi at 28 days.
  - 4 Exterior concrete: 3000 psi at 28 days, with air-entraining admixture. Concrete subject to de-icers shall have water-cement ratio not exceeding 0.40.

## Division 05 12 00 – Structural Steel:

- A. Structural steel: in accordance with the current AISC Specification for the Design, Fabrication, and Erection of Structural Steel for Buildings.
- B. All welding: by welders holding active welding certificates only.
- C. Structural steel: ASTM A36
- D. Welding electrodes: E70XX
- E. High strength bolts: ASTM A325
- F. Shop welding, field welding, and high strength bolting: laboratory controlled.

## Division 05 21 00 – Steel Joists:

- A. Steel joists: designed, fabricated and erected in accordance with Steel Joist Institute Standard Specifications and Recommendations.
- B. Joist manufacturer: Member of SJI, approved for joist types specified.
- C. Field welding: laboratory controlled, performed by welders holding active welding certificates only.
- D. Shop paint: fabricators standard lead-free shop paint. Touch up shop paint after installation.

## Division 05 30 00 – Metal Deck:

- E. Metal roof deck: 1 1/2" deep, 20 gage, galvanized steel roof deck with nesting side seams.
- F. Acoustic Metal Roof Deck: 3" deep, 20 gage, galvanized acoustic metal roof deck

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PART II - 3

Farmington High School  
Renovation Option (Renovate as New) Narrative

FINAL  
01/15/2020

- G. Composite floor deck: 2" deep, 20 gage galvanized steel deck with interlocking type side laps produced with integral locking lugs to provide mechanical lock between concrete and steel.
- H. Manufacture and install in accordance with Steel Deck Institute Design Specifications and Code of Recommended Standard Practice. Manufacturer: Member of SDI.
- I. Form metal from hot dipped galvanizing sheet conforming to ASTM A446-76, Grade A, with zinc coating conforming to ASTM A525-76, Coating Designation G-60.
- J. Installation and fastening: Conform to SDI Tentative Recommendations for Design of Steel Deck Diaphragms.
- K. Shear connectors: stud type conforming to ASTM A 108, Grade 1015 or 1020. Dimensions and tolerances in accordance with figure 4.22.1 of the AWS "Structural Welding Code - Steel".
  - 1 An arc shield (ferrule) of heat resistant ceramic or other suitable material shall be furnished with each shear connector.
  - 2 A suitable deoxidizing and arc stabilizing flux for welding shall be furnished with each shear connector.

## Division 05 51 00 – Cold Formed Metal Framing:

- A. Structural Performance: Provide cold-formed metal framing capable of withstanding design loads within limits and under conditions indicated.
  - 1 Design Loads: Wind Loads: per ASCE-07-10
  - 2 Cold-Formed Steel Framing, General: Design according to AISI's "Standard for Cold-Formed Steel Framing - General Provisions."
- B. Recycled Content of Steel Products: Provide products with an average recycled content of steel products so post-consumer recycled content plus one-half of pre-consumer recycled content is not less than 25 percent.
  - 1 Steel Sheet: ASTM A 1003/A 1003M, Structural Grade, Type H, metallic coated, of grade and coating weight as follows.
    - i Grade: As required by structural performance
    - ii Coating: G60.
- C. Exterior Non-Load-Bearing Wall Framing
  - 1 Steel Studs: Manufacturer's standard C-shaped steel studs, of web depths indicated, punched, with stiffened flanges, and as follows:
    - i Minimum Base-Metal Thickness: 0.0428 inch.
    - ii Flange Width: 1-5/8 inches.

## EXTERIOR ENVELOPE

Masonry exterior walls will be masonry veneer on metal stud backup. The assembly will consist of 6" metal studs with densglass sheathing, fluid applied moisture barrier, polystyrene insulation and either clay masonry or cast stone trim on masonry anchors. New walls over 2 stories high will be relieved at the third floor slab with continuous steel angles.

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PART II - 4



## Option 2 | Cost Analysis

	Detailed Estimate	In Millions
1. Arch./Eng. Design Fee	\$ 4,895,000	\$ 4.9
2. Professional Fees	\$ 3,355,384	3.3
3. Construction Costs	\$ 111,698,063	111.7
4. Alternates	\$ 5,580,677	5.6
5. FF&E and Technology	\$ 5,591,000	5.6
6. Owner Contingency (5%)	\$ 7,000,000	7.0
<b>Grand Total</b>	<b>\$ 138,120,124</b>	<b>\$ 138.1</b>

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<b>Grand Total</b>	<b>\$ 138,120,124</b>	<b>\$ 138.1</b>



# FHS Options | What Are The Options?

## Option 1

Maintain Existing FHS

Estimated  
Net Reimbursement Rate

approx 8¢  
per dollar

## Option 2

Renovate Existing FHS As New  
With Additions

Estimated  
Net Reimbursement Rate

approx 29¢  
per dollar


## Option 3

New FHS


# Option 2 | Where Does the Money Go?

In Millions:


\$ 33.1

External Requirements		
<b>ACCREDITATION</b> 	IA	<b>High School Accreditation:</b> The New England Association of Schools and Colleges has placed FHS on “warning” status for “serious facilities deficiencies, including ADA access, heating and ventilation problems, leaky roof, inadequate science, cafeteria, auditorium, and library and media facilities, and other facilities issues that limit educational opportunities for students.” Although FHS met and exceeded expectations in six (6) NEASC accreditation standards, it was placed on “warning” status for standard seven (7) – “Community Resources for Learning.”
<b>ACCESSIBILITY</b>	IB	<b>ADA Compliance:</b> FHS must adhere to an Office of Civil Rights (OCR) report indicating multiple areas of the school that do not meet Americans with Disabilities (ADA) Act requirements. Examples include music spaces, media center, gymnasium, some classrooms, bathrooms, weight room, auditorium, stage, orchestra pit, 2nd/3rd floors of 1928 building, outdoor athletic facilities, culinary spaces, and various spaces throughout the building.


\$ 12.6

Challenges and Needs		
<b>SECURITY COMPLIANCE</b> 	IIA	<i>There have been seven (7) additions / renovations to FHS when heightened security expectations were not a consideration.</i> <ul style="list-style-type: none"> <li>✓ 23 separate entry points, sightline issues, lack of private/public separation and difficult building orientation even with signage</li> <li>✓ Current parking lot configuration does not provide for clear pedestrian traffic pathways which is a safety concern</li> </ul>


\$ 9.1

<b>SPRAWLING LAYOUT</b> 	IIB	<i>FHS is a large, mostly one floor inefficient facility with too many long and narrow hallways.</i> <ul style="list-style-type: none"> <li>✓ Built in 1928 with renovations/additions in 1952, 1964, 1969, 1974, 1978, 1996, and 2003</li> <li>✓ Hallway overcrowding and lengthy passing time for students to get to classes on time</li> <li>✓ 30% of the square footage is used for hallways instead of instructional space</li> <li>✓ Sprawling building is associated with increased energy costs</li> </ul>
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\$ 30.9

<b>EDUCATIONAL PROGRAMMING</b> 	IIC	<i>FHS is reaching its limits for providing 21<sup>st</sup> Century programming and learning spaces that prepare today's learners for the future.</i> <ul style="list-style-type: none"> <li>✓ Inadequate classroom space to accommodate all programmatic offerings and active vs. passive learning</li> <li>✓ Overcrowded study halls</li> <li>✓ Undersized library at capacity every period of the school day</li> <li>✓ Inadequate space for robotics, special education, science labs and performance spaces</li> <li>✓ Lack of collaborative work spaces that reflect the way students learn in today's educational setting</li> <li>✓ Auditorium and cafeteria are undersized for the population, impacting scheduling, educational programming, and state and federal requirements for food services.</li> </ul> <p><i>Education today requires:</i></p> <ul style="list-style-type: none"> <li>✓ Open, flexible spaces to promote independence, collaborative spaces to mirror real world work environments, public spaces to showcase learning and display work, and quiet places for reflection</li> <li>✓ Technology and imagination rich environments to foster a maker mindset</li> </ul>
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\$ 52.4

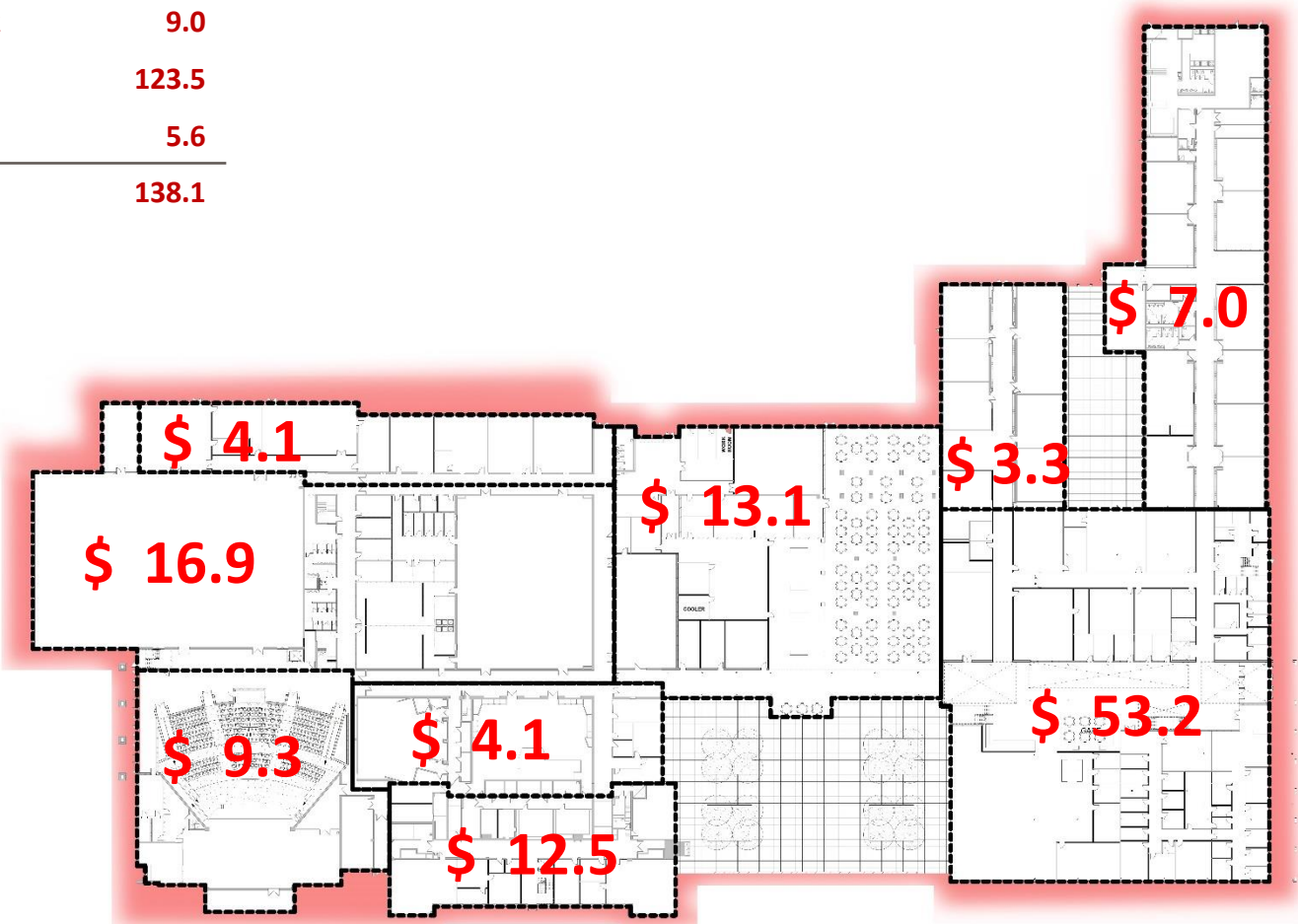
<b>BUILDING ENVELOPE CODE COMPLIANCE (MEP)</b> 	IID	<i>FHS is currently an inefficient building from an energy standpoint and also has code compliance issues.</i> <ul style="list-style-type: none"> <li>✓ An inefficient building envelope impacts energy costs and efficiencies (insulation, façade, windows-except for 900 wing)</li> <li>✓ Mechanical, electrical, plumbing, fire alarm and building-protection systems are out-of-date and not in code compliance</li> <li>✓ A “Green Design” (new or renovated MEP systems) could save 35-45% of annual costs per year depending upon design</li> </ul>
<b>ENERGY EFFICIENCY</b>	IIE	








# Option 2 | Where Does the Money Go?

## In \$ Millions:

Site Work	9.0
Building	123.5
FF&E	5.6
<b>TOTAL</b>	<b>138.1</b>



# FHS Options | Develop Criteria for Evaluation

<p>1. Local, State, &amp; Federal Requirements</p> <p>Security Needs</p>	<p><b>External Requirements</b></p> <p><b>ACCREDITATION AND ACCESSIBILITY</b></p> <p><b>I A</b></p>  <p><b>I B</b></p> <p><b>High School Accreditation:</b> The New England Association of Schools and Colleges has placed FHS on “warning” status for “serious facilities deficiencies, including ADA access, heating and ventilation problems, leaky roof, inadequate science, cafeteria, auditorium, and library and media facilities, and other facilities issues that limit educational opportunities for students.” Although FHS met and exceeded expectations in six (6) NEASC accreditation standards, it was placed on “warning” status for standard seven (7) – “Community Resources for Learning.”</p> <p><b>ADA Compliance:</b> FHS must adhere to an Office of Civil Rights (OCR) report indicating multiple areas of the school that do not meet Americans with Disabilities (ADA) Act requirements. Examples include music spaces, media center, gymnasium, some classrooms, bathrooms, weight room, auditorium, stage, orchestra pit, 2nd/3rd floors of 1928 building, outdoor athletic facilities, culinary spaces, and various spaces throughout the building.</p>
<p>3. Consolidation of Space</p>	<p><b>Challenges and Needs</b></p> <p><b>SECURITY COMPLIANCE</b></p> <p><b>II A</b></p>  <p><i>There have been seven (7) additions / renovations to FHS when heightened security expectations were not a consideration.</i></p> <ul style="list-style-type: none"> <li>✓ 23 separate entry points, sightline issues, lack of private/public separation and difficult building orientation even with signage</li> <li>✓ Current parking lot configuration does not provide for clear pedestrian traffic pathways which is a safety concern</li> </ul>
<p>2. Programmatic Needs</p>	<p><b>SPRAWLING LAYOUT</b></p> <p><b>II B</b></p>  <p><i>FHS is a large, mostly one floor inefficient facility with too many long and narrow hallways.</i></p> <ul style="list-style-type: none"> <li>✓ Built in 1928 with renovations/additions in 1952, 1964, 1969, 1974, 1978, 1996, and 2003</li> <li>✓ Hallway overcrowding and lengthy passing time for students to get to classes on time</li> <li>✓ 30% of the square footage is used for hallways instead of instructional space</li> <li>✓ Sprawling building is associated with increased energy costs</li> </ul> <p><b>EDUCATIONAL PROGRAMMING</b></p> <p><b>II C</b></p>  <p><i>FHS is reaching its limits for providing 21<sup>st</sup> Century programming and learning spaces that prepare today's learners for the future.</i></p> <ul style="list-style-type: none"> <li>✓ Inadequate classroom space to accommodate all programmatic offerings and active vs. passive learning</li> <li>✓ Overcrowded study halls</li> <li>✓ Undersized library at capacity every period of the school day</li> <li>✓ Inadequate space for robotics, special education, science labs and performance spaces</li> <li>✓ Lack of collaborative work spaces that reflect the way students learn in today's educational setting</li> <li>✓ Auditorium and cafeteria are undersized for the population, impacting scheduling, educational programming, and state and federal requirements for food services.</li> </ul> <p><i>Education today requires:</i></p> <ul style="list-style-type: none"> <li>✓ Open, flexible spaces to promote independence, collaborative spaces to mirror real world work environments, public spaces to showcase learning and display work, and quiet places for reflection</li> <li>✓ Technology and imagination rich environments to foster a maker mindset</li> </ul>
<p>4. Building Systems</p>	<p><b>BUILDING ENVELOPE CODE COMPLIANCE (MEP)</b></p> <p><b>II D</b></p> <p><b>ENERGY EFFICIENCY</b></p> <p><b>II E</b></p>  <p><i>FHS is currently an inefficient building from an energy standpoint and also has code compliance issues.</i></p> <ul style="list-style-type: none"> <li>✓ An inefficient building envelope impacts energy costs and efficiencies (insulation, façade, windows-except for 900 wing)</li> <li>✓ Mechanical, electrical, plumbing, fire alarm and building-protection systems are out-of-date and not in code compliance</li> <li>✓ A “Green Design” (new or renovated MEP systems) could save 35-45% of annual costs per year depending upon design</li> </ul>

and add 5. Site Improvements, 6. Benefits to the Community, 7. Fit & Feel for Farmington and 8. Cost

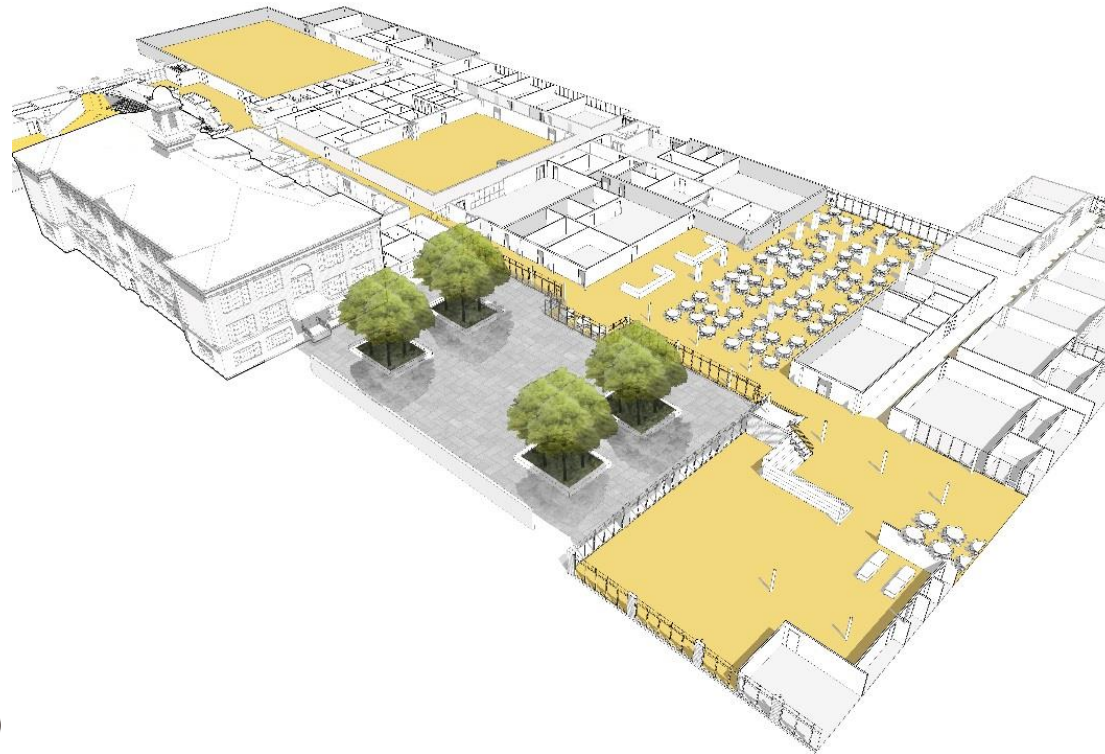


# FHS Options | Evaluation of TSKP Option 2

		PRESENTATION 1 OF 3- JANUARY 8, 2020		PRESENTATION 2 OF 3- JANUARY 15, 2020		PRESENTATION 3 OF 3- JANUARY 22, 2020	
CRITERIA	Total Points Available	OPTION 1		OPTION 2		OPTION 3	
		MAINTAIN EXISTING FHS		RENOVATE EXISTING FHS AS NEW WITH ADDITION		NEW FHS BUILDING	
		TSKP	QA&M	TSKP	QA&M	TSKP	QA&M
<b>1 LOCAL, STATE, AND FEDERAL REQUIREMENTS</b>							
Address ADA Compliance (OCR Requirements)	4						
Address Security Needs (School Safety Infrastructure Council Standards)	4						
Public/Private Separation	4						
Address NEASC Requirements	4						
<b>2 PROGRAMMATIC NEEDS</b>							
Education Disruption (Phasing)	4						
Satisfies Ed Specs	4						
Address Undersized Learning Spaces (Cafeteria, Gym, Media Center, Performing Arts)	4						
Flexible and Collaborative Learning Environments	4						
Space for New or Enhanced Educational Programming	4						
<b>3 CONSOLIDATION OF SPACE</b>							
Reduce Sprawl and Improve Internal Circulation	4						
Utilization of Space	4						
Robotics	4						
Farmington Alternate High School	4						
School District Administration Offices	4						
<b>4 BUILDING SYSTEMS</b>							
Energy Efficiency	4						
Mechanical, Electrical, Plumbing	4						
Building Envelope	4						
Green Design	4						
<b>5 SITE IMPROVEMENTS</b>							
Traffic Flow, Pedestrian Safety, and Parking	4						
Athletic Fields	4						
ADA Compliance	4						
Site Layout Plan	4						
<b>6 BENEFITS TO THE COMMUNITY</b>							
Community Use of the Building	4						
Shelter in Place	4						
<b>7 FIT AND FEEL FOR FARMINGTON</b>							
Internal Design	4						
External Design	4						
Overall fit and feel for Farmington	4						
<b>TOTAL</b>	<b>28</b>						

# Option 2 | 1. Local, State & Federal Requirements

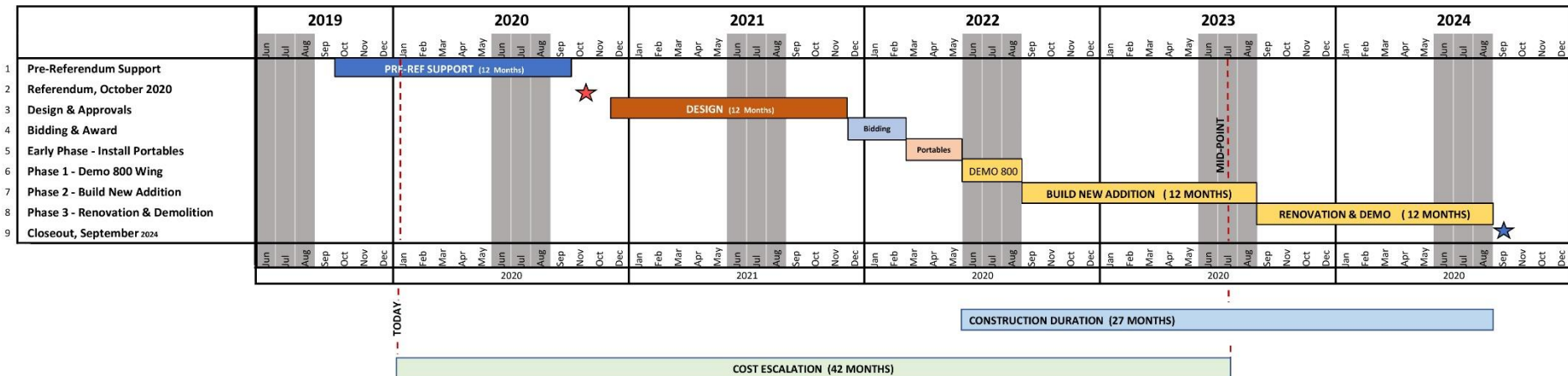
CRITERIA		Total Points Available	OPTION 1	
			MAINTAIN EXISTING FHS	
			TSKP	Comments
			RS OPINION	
<b>1</b>	<b>LOCAL, STATE, AND FEDERAL REQUIREMENTS</b>			
	Address ADA Compliance (OCR Requirements)	4	4.0	Meets all ADA requirements.
	Address Security Needs (School Safety Infrastructure Council Standards)	4	4.0	Addresses Security Needs.
	Public/Private Separation	4	4.0	Achieves Public/Private Separation.
	Address NEASC Requirements	4	4.0	Addresses NEASC Requirements.





# Option 2 | 2. Programmatic Needs

CRITERIA	Total Points Available	OPTION 1	
		TSKP	Comments
		MAINTAIN EXISTING FHS	
		RS OPINION	
<b>2 PROGRAMMATIC NEEDS</b>			
Education Disruption (Phasing)	4	3.0	Requires Swing Space and 27 Months of Additions and Renovation.
Satisfies Ed Specs	4		
Address Undersized Learning Spaces (Cafeteria, Gym, Media Center, Performing Arts)	4		
Flexible and Collaborative Learning Environments	4		
Space for New or Enhanced Educational Programming	4		



# Option 2 | 2. Programmatic Needs

CRITERIA		Total Points Available	OPTION 1	
			MAINTAIN EXISTING FHS	
			TSKP	Comments
			RS OPINION	
<b>2</b>	<b>PROGRAMMATIC NEEDS</b>			
	Education Disruption (Phasing)	4	3.0	Requires Swing Space and 27 Months of Additions and Renovation.
	Satisfies Ed Specs	4	4.0	Satisfies Ed Specs.
	Address Undersized Learning Spaces (Cafeteria, Gym, Media Center, Performing Arts)	4	4.0	Fully Addresses Undersized Learning Spaces, including Cafeteria, Gym, Media Center, Performing Arts.
	Flexible and Collaborative Learning Environments	4		
	Space for New or Enhanced Educational Programming	4		

	Ed Specs	Option 2
	Including Central Office	Renovate As New with Additions
	Estimated Square Feet	Actual Square Feet
<b>A. Program Area</b>	187,884	188,000
<b>B. Building Services / Core Areas</b>	60,194	45,000
<b>C. Total Building Area per State</b>	248,078	260,000
<b>D. Exterior Wall Thickness</b>	26,230	7,000
<b>E. Total Gross Square Footage</b>	274,308	267,000



# Option 2 | 2. Programmatic Needs

CRITERIA		Total Points Available	OPTION 1	
			MAINTAIN EXISTING FHS	
			TSKP	Comments
			RS OPINION	
<b>2</b>	<b>PROGRAMMATIC NEEDS</b>			
	Education Disruption (Phasing)	4	3.0	Requires Swing Space and 27 Months of Renovation.
	Satisfies Ed Specs	4	4.0	Satisfies Ed Specs.
	Address Undersized Learning Spaces (Cafeteria, Gym, Media Center, Performing Arts)	4	4.0	Cafeteria Capacity Increased, Gym, Media Center, Performing Arts Improved.
	Flexible and Collaborative Learning Environments	4	4.0	Creates Flexible and Collaborative Learning Environments.
	Space for New or Enhanced Educational Programming	4	4.0	Adds New Space for Enhanced Educational Programming.



# Option 2 | 3. Consolidation of Space

CRITERIA		Total Points Available	OPTION 1	
			MAINTAIN EXISTING FHS	
			TSKP	Comments
			RS OPINION	
<b>3</b>	<b>CONSOLIDATION OF SPACE</b>			
	Reduce Sprawl and Improve Internal Circulation	4	4.0	Reduces Sprawl and Improves Internal Circulation.
	Utilization of Space	4	4.0	Very Efficient Utilization of Space.
	Robotics	4	4.0	Included.
	Farmington Alternate High School	4	4.0	Included.
	School District Administration Offices	4	4.0	Included.

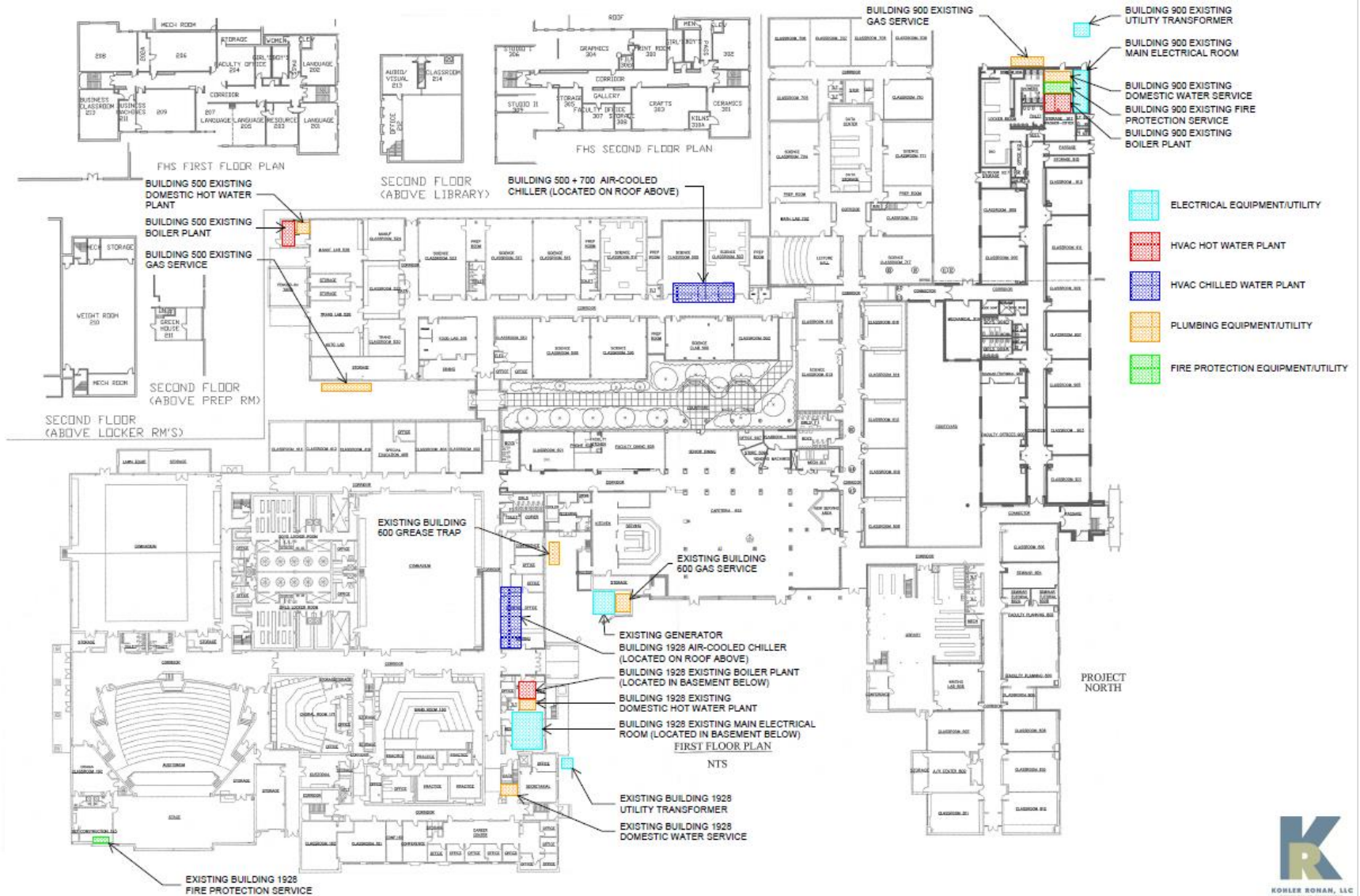




# Option 2 | 4. Building Systems

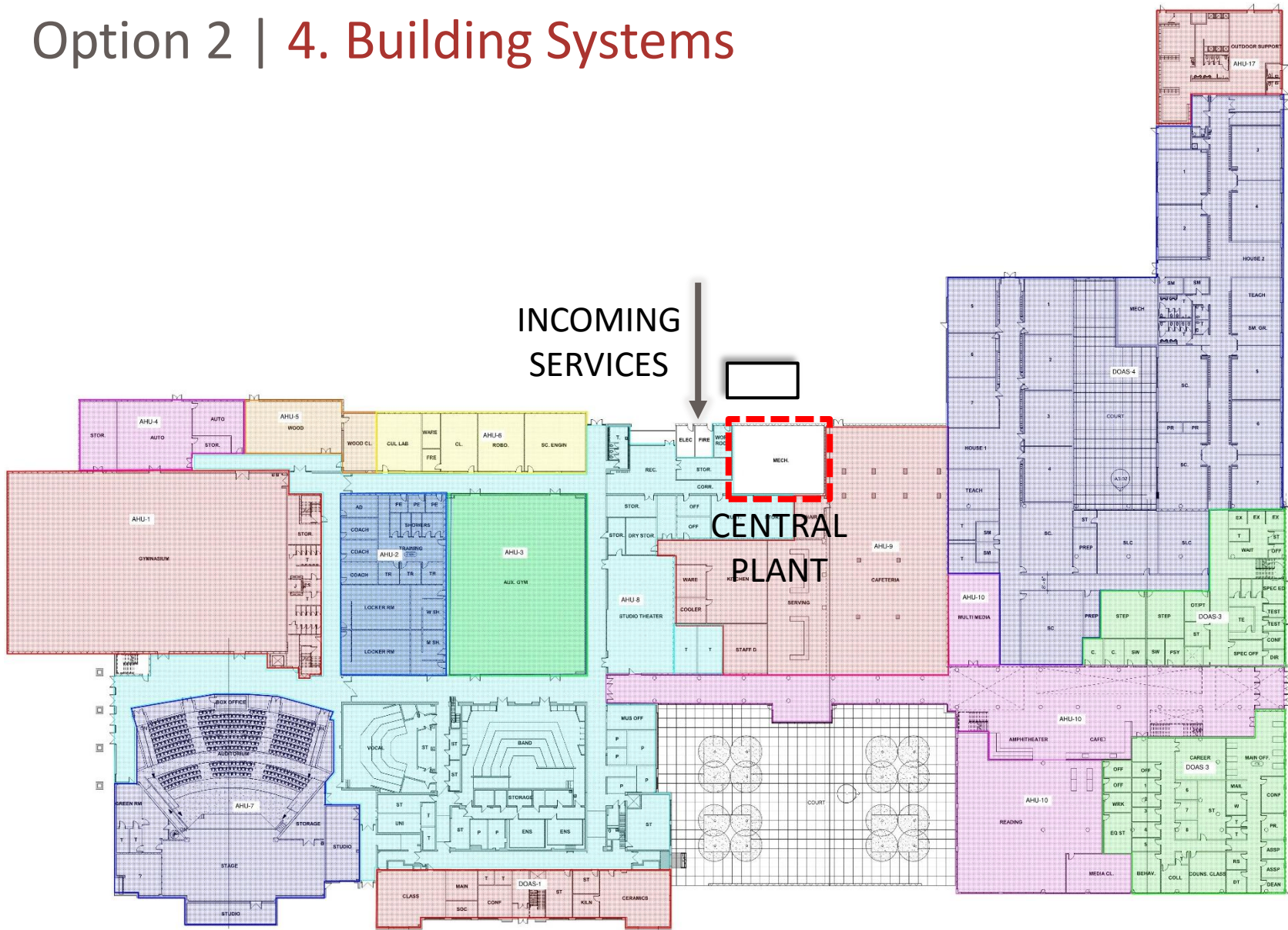
CRITERIA		Total Points Available	OPTION 1	
			MAINTAIN EXISTING FHS	
			TSKP	Comments
			RS OPINION	
<b>4</b>	<b>BUILDING SYSTEMS</b>			
	Energy Efficiency	4	4.0	Change MEP Systems and Configuration Completely.
	Mechanical, Electrical, Plumbing	4	4.0	New Mechanical, Electrical, Plumbing Components.
	Building Envelope	4	3.0	New and Upgraded Envelope.
	Green Design	4	4.0	Included as Add Alternates.

# Option 2 | 4. Building Systems



## Existing MEP/FP Utility Plan

# Option 2 | 4. Building Systems



**Proposed MEP/FP Utility Plan**



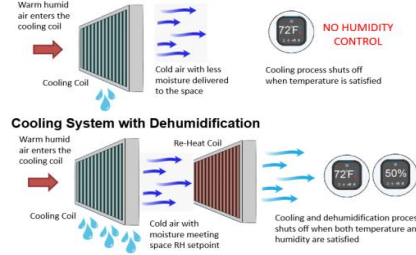
# Option 2 | 4. Building Systems (Green Technologies)



Photovoltaic Panels



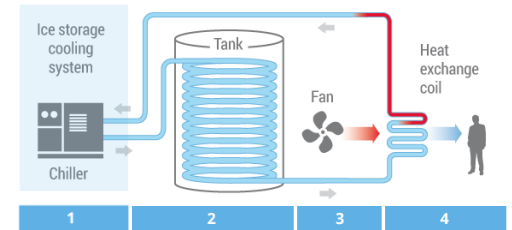
### Traditional Cooling System



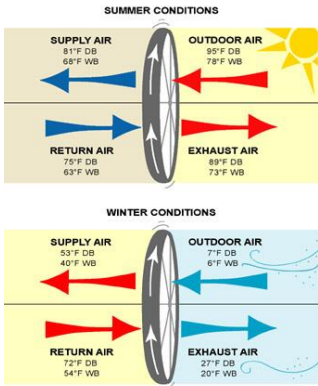
Humidification & Dehumidification



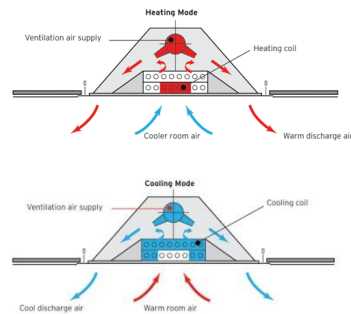
Modular Systems



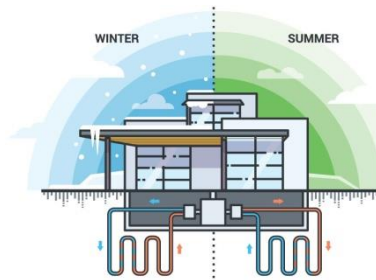
Ice Storage



Energy Recovery



Chilled Beams



Geothermal Wells

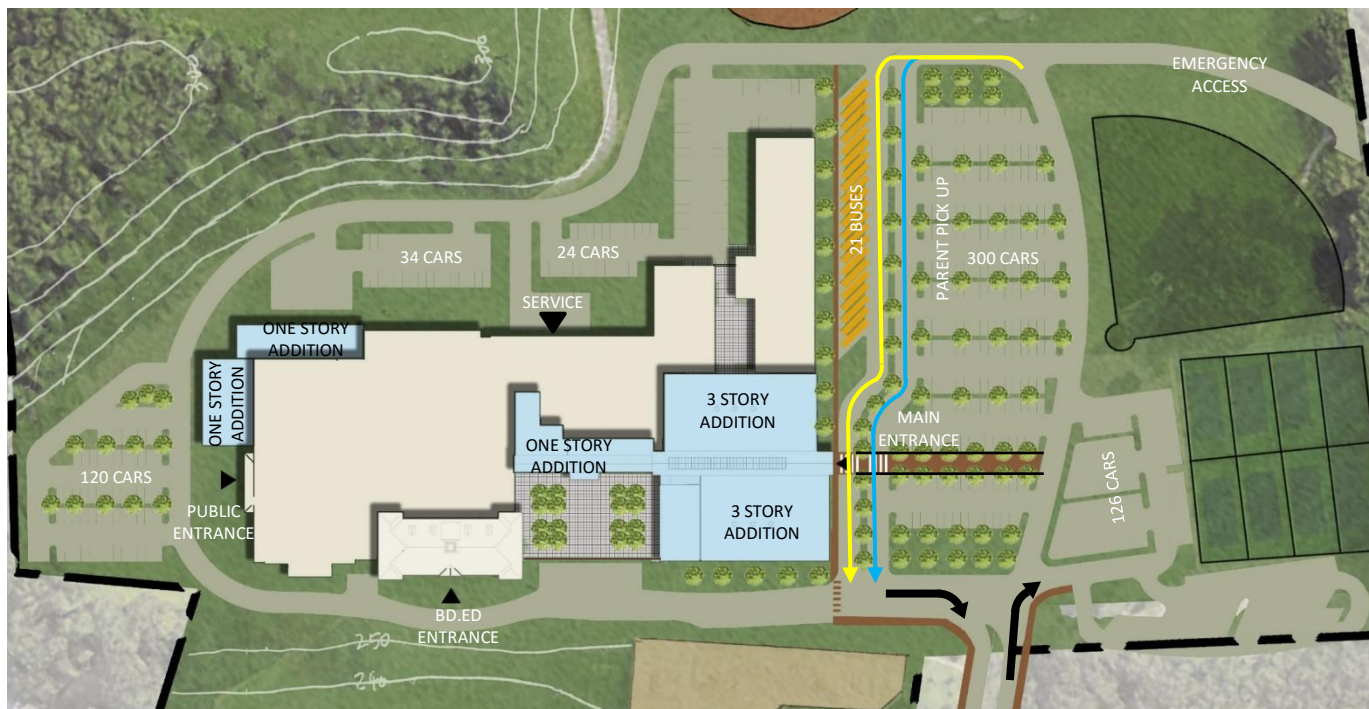


## Option 2 | 4. Building Systems

Case	Utility Cost	Years to payback	Comments
Current Building	\$328K/year		218,000 SF Less than half air conditioned
Renovate as New	\$368K/year		267,000 SF Fully air conditioned, 11 months/year
Renovate as New w/ PV Array	\$239K/year		PV array \$4.7M first cost included in \$138.1M project cost
Renovate as New w/ PV Array and Partial Ice Storage	\$214K/year	6	Ice Storage has a \$150K first cost
Renovate as New w/ PV Array and Partial Ice Storage and Chilled Beams	\$194K/year	30	Chilled Beams have a \$1.7M first cost

# Option 2 | 5. Site Improvements

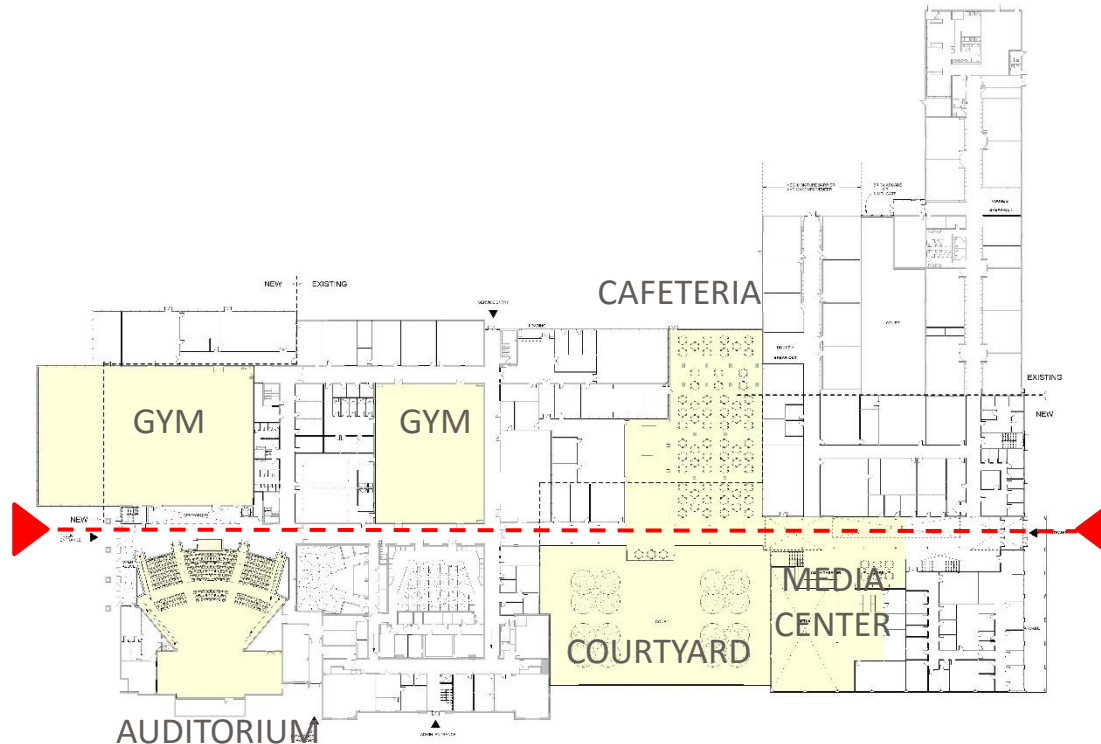
CRITERIA		Total Points Available	OPTION 1	
			MAINTAIN EXISTING FHS	
			TSKP	Comments
			RS OPINION	
<b>5</b>	<b>SITE IMPROVEMENTS</b>			
	Traffic Flow, Pedestrian Safety, and Parking	4	4.0	Improvements in Traffic Flow, Pedestrian Safety, and Parking.
	Athletic Fields	4	4.0	No Reduction in Athletic Fields. No Interruption in Use of Fields.
	ADA Compliance	4	4.0	ADA Compliant
	Site Layout Plan	4	4.0	Improved Site Layout Plan. Better Traffic Configuration.





# Option 2 | 6. Benefits to Community

CRITERIA		Total Points Available	OPTION 1	
			MAINTAIN EXISTING FHS	
			TSKP	Comments
			RS OPINION	
<b>6</b>	<b>BENEFITS TO THE COMMUNITY</b>			
	Community Use of the Building	4	4.0	<b>Building Configuration Allows Community Use of the Building.</b>
	Shelter in Place	4	4.0	<b>Included.</b>



# Option 2 | 7. Fit & Feel for Farmington

CRITERIA		Total Points Available	OPTION 1	
			MAINTAIN EXISTING FHS	
			TSKP	Comments
			RS OPINION	
<b>7</b>	<b>FIT AND FEEL FOR FARMINGTON</b>			
	Internal Design	4	4.0	Completely Transforms Internal Design.
	External Design	4	4.0	Preserves Legacy Building and Adds Compatible New Building.
	Overall fit and feel for Farmington	4	4.0	Conserves Existing Resources and Invests in the Future.



The End