Meeting Minutes
Farmington High School Building Committee Meeting
Wednesday, January 8, 2020
Farmington High School Library
6:30 PM

Present:
Meg Guerrera, Chair
Johnny Carrier
Michael Smith
Sharon Mazzochi
Ellen Siuta
Garth Meehan
Chris Fagan
Kat Krajewski, Assistant Town Manager
Devon Aldave, Committee Clerk
Kathy Greider, Superintendent
Alicia Bowman, Asst. Superintendent of Finance and Operations
Tim Harris, Director of School Facilities
Scott Hurwitz, FHS Principal
Lisa Kapcisnki, FHS Assistant Principal
Russ Crist, FHS Assistant Principal
Mary Lundquist, FHS Dean of Students
Beth Kintner, Town Council Liaison
Chris Cykley, Construction Solutions Group
Mark Garilli, Construction Solutions Group
Roger LaFleur, Construction Solutions Group
QA+M Architecture
TSKP Studio

Absent:
Kathy Blonski, Town Manager

A. Call to Order.
The meeting was called to order at 6:30 P.M.

B. Pledge of Allegiance.
The committee members and audience recited the pledge of allegiance.

C. Chair Report.
Meg Guerrera stated that QA+M and TSKP Studio will present their conceptual designs for the maintain option, and the audience will have opportunities to provide public comments before and after the presentations. Meg explained that the committee will not be making a

recommendation regarding the conceptual designs following the presentations.

D. Public Comment.

Patty Picard, 11 Tanglewood Road, suggested hosting the next few meetings at a different venue due to the high number of audience attendance. She stated that moving to another venue may increase the number of attendees.

Jen Skitromo, 1 Paperchase Drive, stated that it is difficult for parents of elementary aged children to make it to meetings. She suggested the committee reach out to the National Honor Society to see if members would be interested in watching the children for community service hours, so that parents may attend.

Trish Guglielmo, 22 Michael Drive, expressed her concerns with the current FHS facility. She stated that the facility is unsafe for students in its current condition. She shared pictures of facility issues and passed them around to the audience members to highlight the issues.

Jay Tulin, 39 Timberline Drive, submitted an online communication. It is recorded with these minutes as Attachment A.

E. Minutes.

1) To approve the attached December 11, 2019 minutes.

Upon a motion made and seconded (Carrier/Meehan) it was unanimously VOTED: to approve the December 11, 2019 minutes.

F. Correspondence and Reports.

1) Farmington Public Schools Enrollment Projections Report to 2029.

Meg Guerrera reviewed the correspondence received. It is included in the agenda packet.

Kathy Greider explained that a ten-year projection is required for a school construction project. The highest year of student enrollment is used to calculate a basis for square footage.

2) Letter from the New England Association of Schools and Colleges (NEASC) regarding remaining Farmington High School’s warning status for Standard for Accreditation on Community Resources for Learning.

Meg Guerrera reviewed the correspondence received. It is included in the agenda packet.

Scott Hurwitz stated that NEASC is pleased that there is a committee examining the issues outlined in their report. Since the FHS facility does not meet their current standards, the district owes NEASC an update on an annual basis.

3) Meg Guerrera- FHS Building Committee December 2019 Update/Orientation Materials for Town Council

Meg Guerrera stated that this correspondence was shared with the Town Council to summarize the work that the committee has done to this point, and to provide a timeline moving forward.

4) Josh Davidson- Communication Suggestions.

Meg Guerrera reviewed the correspondence received. It is included in the agenda packet.

5) John Vibert- Question and Comments regarding classroom clusters.

Meg Guerrera reviewed the correspondence received. It is included in the agenda packet.

G. New Business.

1) To approve the attached invoice from Construction Solutions Group (CSG) in the amount of $66,374.00

Upon a motion made and seconded (Carrier/Mazzochi) it was unanimously VOTED: to approve the attached invoice from Construction Solutions Group.

2) To approve the attached invoice from QA+M Architecture in the amount of $11,750.00.

Upon a motion made and seconded (Carrier/Mazzochi) it was unanimously VOTED: to approve the attached invoice from QA+M Architecture.

3) To approve the attached invoice from TSKP Studio in the amount of $60,000.00.

Upon a motion made and seconded (Carrier/Mazzochi) it was unanimously VOTED: to approve the attached invoice from TSKP Studio.

H. Presentations.

Each architectural firm was given 35 minutes to present their maintain option, followed by a 10-minute question and answer session from the committee.

1) Presentation of the maintain option and associated cost by QA+M and CSG.

QA+M presented their conceptual design for the maintain option. The presentation is recorded with these minutes as Attachment B.

Mark Garilli, CSG, presented the cost estimate for the maintain option presented by QA+M. The cost estimate is recorded with these minutes as Attachment C. Mark explained that the estimated cost is through construction of the project.

Kat Krajewski, Assistant Town Manager, presented the tax impact for this option. She stated that the estimated tax impact to the average Farmington home assessed at $226,777 is an increase of is $401.31 in year one. Costs will decrease at an estimated rate of $7.60 per year over 20 years.

Following the presentation, QA+M answered questions from the committee on the following topics:

- Square footage
- Phasing/Disruption
- Parking
- Sprawl/Circulation
- Security

2) Presentation of the maintain option and associated cost by TSKP Studio and CSG.

TSKP presented their conceptual design for the maintain option. The presentation is recorded with these minutes as Attachment D.

Mark Garilli, CSG, presented the cost estimate for TSKP Studio’s maintain option. The cost estimate is recorded with these minutes as Attachment E. Mark reiterated that the estimated cost is through construction of the project.

Kat Krajewski, Assistant Town Manager, presented the tax impact for this option. She stated that the tax impact to the average home assessed at $226,777 is an increase of $229.16 in

year one. Costs will decrease at an estimated rate of $4.27 per year over 20 years.

Following the presentation, TSKP Studio answered questions from the committee on the following topics:

- MEP/Boiler Replacement
- Hazmat Issues
- Meeting NEASC Requirements

I. Public Comment.

Mark Hoffman, 22 Greenwood Lane, is a representative for the Farmington Robotics team, which has around 75 members. Mark stated that this team provides around 5000 hours of community service and exposes students to many scholarship opportunities. Currently, the Farmington Robotics team meets off site at the alternative center, and Mark calculated that each student spends about 1,000 hours traveling back and forth from FHS. He believes that the team can give back even more to the community if they could reduce travel time and hopes the future proposals will include a space for robotics within the high school.

Inez St. James, 11 Brightwood Road, is the President of Friends of Music, a Farmington nonprofit organization created to promote and enhance music education in Farmington schools. Currently, about 525 students participate in the music programs. Inez stated that around 80% of students that receive awards at the end of each year participate in a music program. Inez was happy to hear about the auditorium, music rooms, and ADA issues being addressed. She stated that the current facility does not have enough space for instruments, and the air ventilation issues cause expensive instruments to separate at the seams. She hopes that future proposals will provide more space for instrument storage to address this issue.

James Moses, 33 High Street, stated that it is important to provide the community with context regarding other major capital projects. He stated that the committee should research other projects in the state and the region, looking at averages and medians, and communicate the information to the public. James believes this information will provide important context that community members can use to evaluate whether the proposal selected is good.

Jean Baron, 22 Basswood Road, thanked the committee for presenting these options to the Town and thought that both options were well

done. She stated that it is important to discuss the history of Farmington while considering this project. Jean stated that the Town has made additions to the building numerous times that did not address major problems facility in order to keep costs down. She believes that failing to produce a comprehensive solution to the facilities has cost the taxpayers dearly.

Meg Guerrera thanked audience members for attending. She announced that the committee is planning a community meeting on a Saturday morning, where the public can stop by over a 3-hour period for another opportunity to learn more about the options.

J. Executive Session: Review and Discussion of RFP Responses for Architectural Services in accordance with Conn. Gen. Stat. §§1-200(6) and 1-210(b) (24).

Upon a motion made and seconded (Carrier/Smith) it was unanimously VOTED: to move to executive session at 9:15 P.M.

The committee returned to open session at 10:27 P.M.

K. Adjournment.

Upon a motion made and seconded (Carrier/Mazzochi) it was unanimously VOTED: to adjourn at 10:27 P.M.

Respectfully Submitted,

Devon Aldave
FHS Building Committee Intern

From: Squarespace
To: Kathryn Krajewski
Subject: Form Submission - New Form - Accreditation Issues
Date: Tuesday, January 07, 2020 1:11:38 PM

Name: Jay Tulin

Email Address: jayspay55@hotmail.com

Subject: Accreditation Issues

Message: I've read the letter from the NEASC to Dr. Hurwitz from November 25th. Although its very encouraging that they are acknowledging the progress made by FHS ..the Statement of Needs, hiring an owner's rep and the process of hiring an architect and a plan to take corrective action regarding ADA deficiencies, we are still very definitely on notice for potential loss of accreditation.
My thoughts today concern the items from the substantive change policy and in particular diminished upkeep and maintenance of facilities, significantly decreased funding, increases in student enrollment that cannot be accommodated and potentially changes in student population that warrant changes that cannot be accommodated. All these items on this policy list are very important but these specific ones stick out for me. If I understand this policy changes in any of these items could have a negative impact on successfully getting FHS off warning status. Therefore it is incumbent that this process ends successfully . I look forward to this process moving forward with a comprehensive solution to the issues at FHS and a positive outcome at referendum with whatever alternative is presented to the Farmington community.

(Sent via *FHS building project*)

Farmington High School

Creating New Possibilities | Option 1

QA+M architecture

BSC GROUP

VANZELM ENGINEERS

"At a minimum, this conceptual design must address:

+ Code compliance
+ Accessibility
+ HVAC / mechanical systems
+ Address the auditorium
+ Safety + security
+ Issues outlined in the NEASC Report
  - Inadequate science, cafeteria, auditorium, library, and media facilities
+ Issues outlined in the OCR Reports"

Priorities

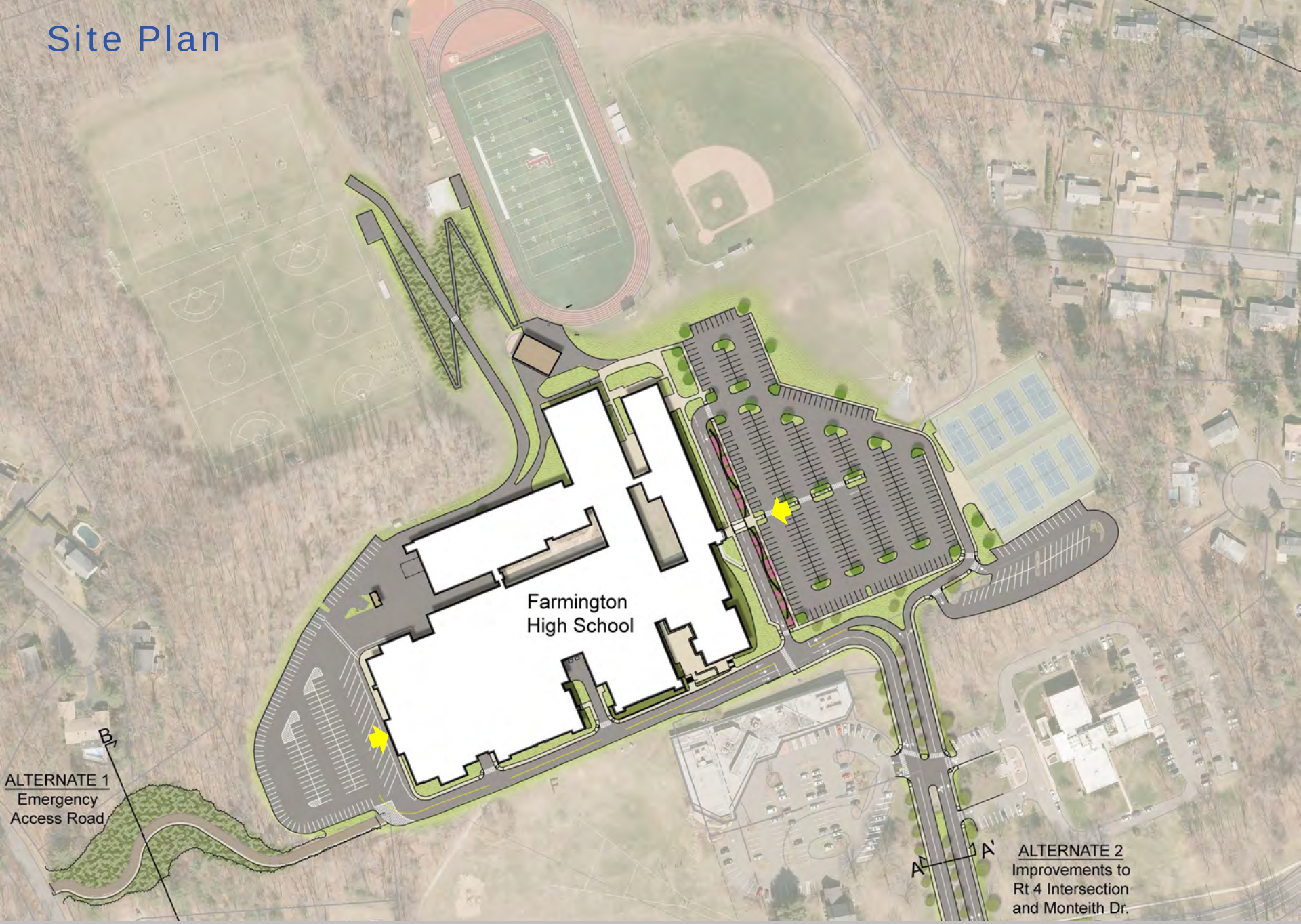
+ Safety + Security

+ Student Experience

+ Circulation Efficiency

+ Improving Insufficient Spaces

Site Plan

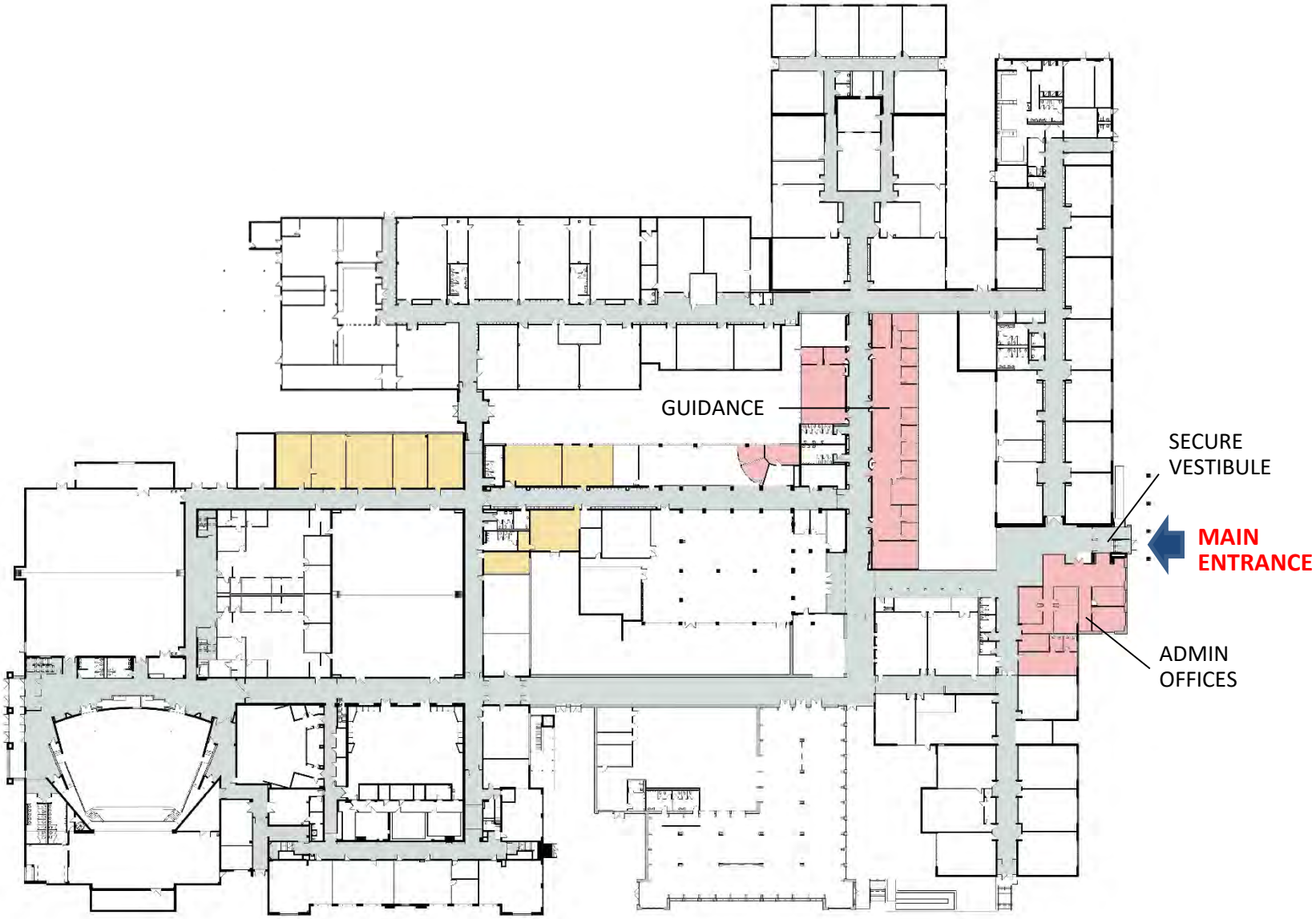


BSC GROUP

QA+M architecture

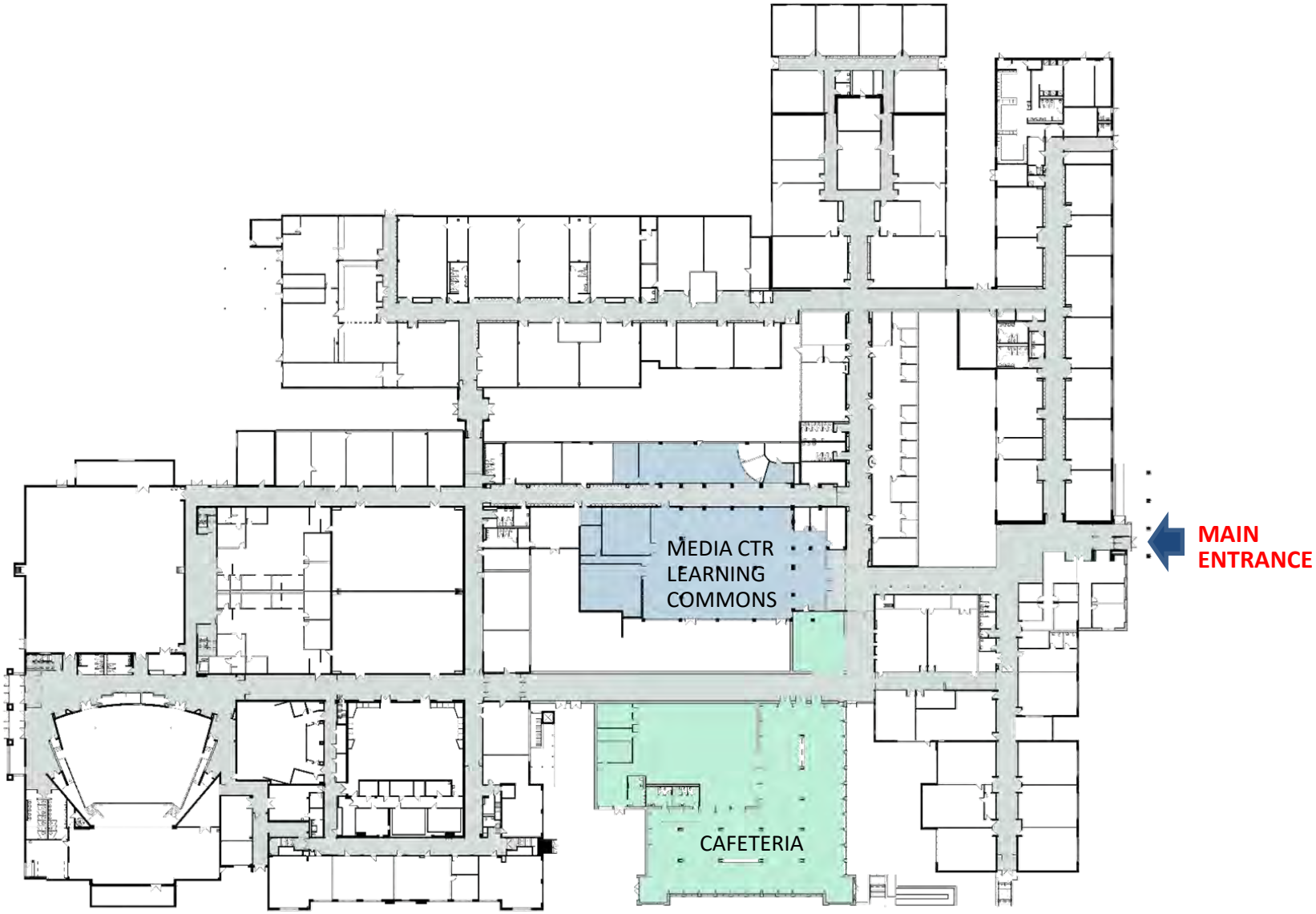
Main Entrance

Main Entrance



Lobby

Media Center + Cafeteria

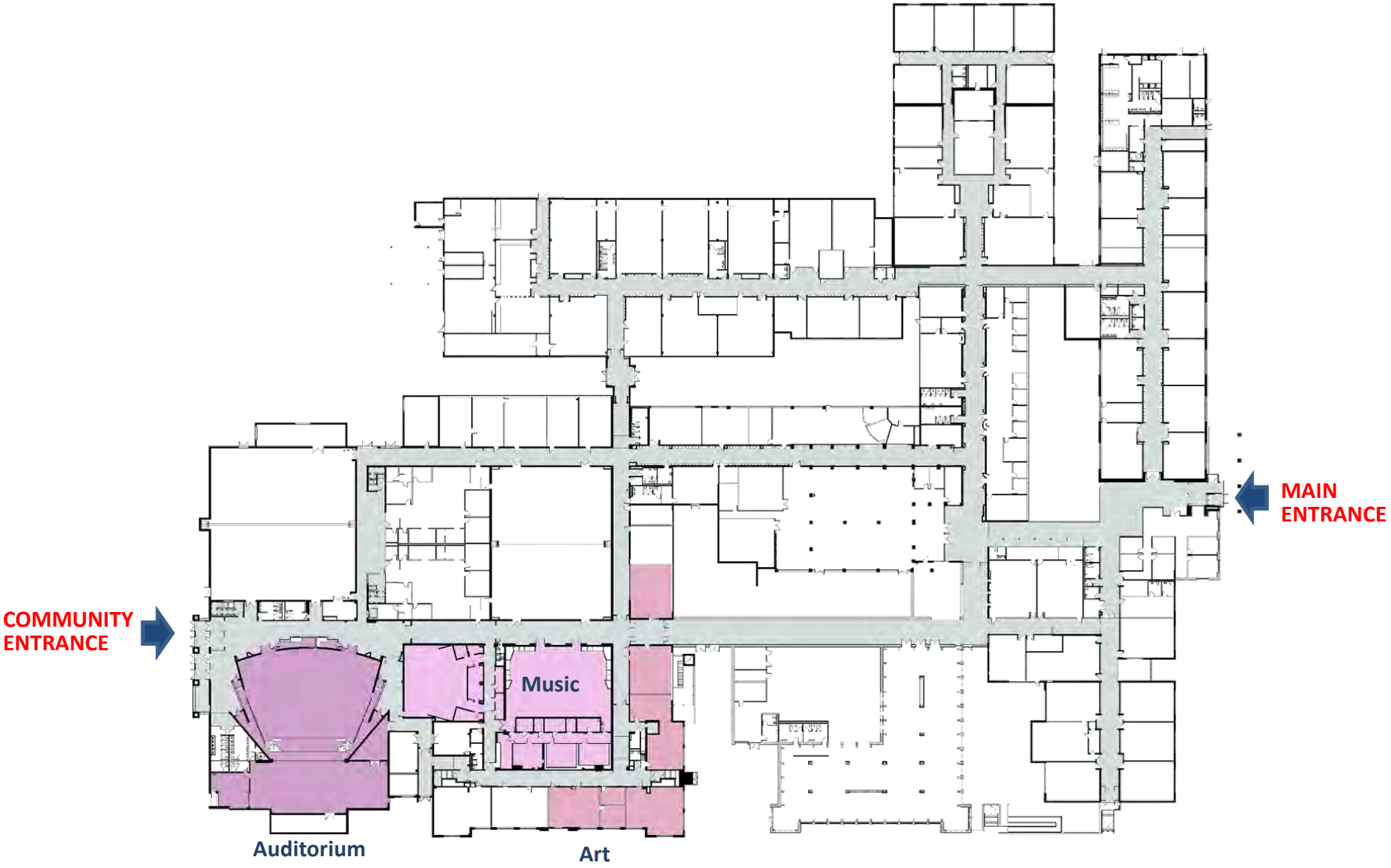


QA+M architecture

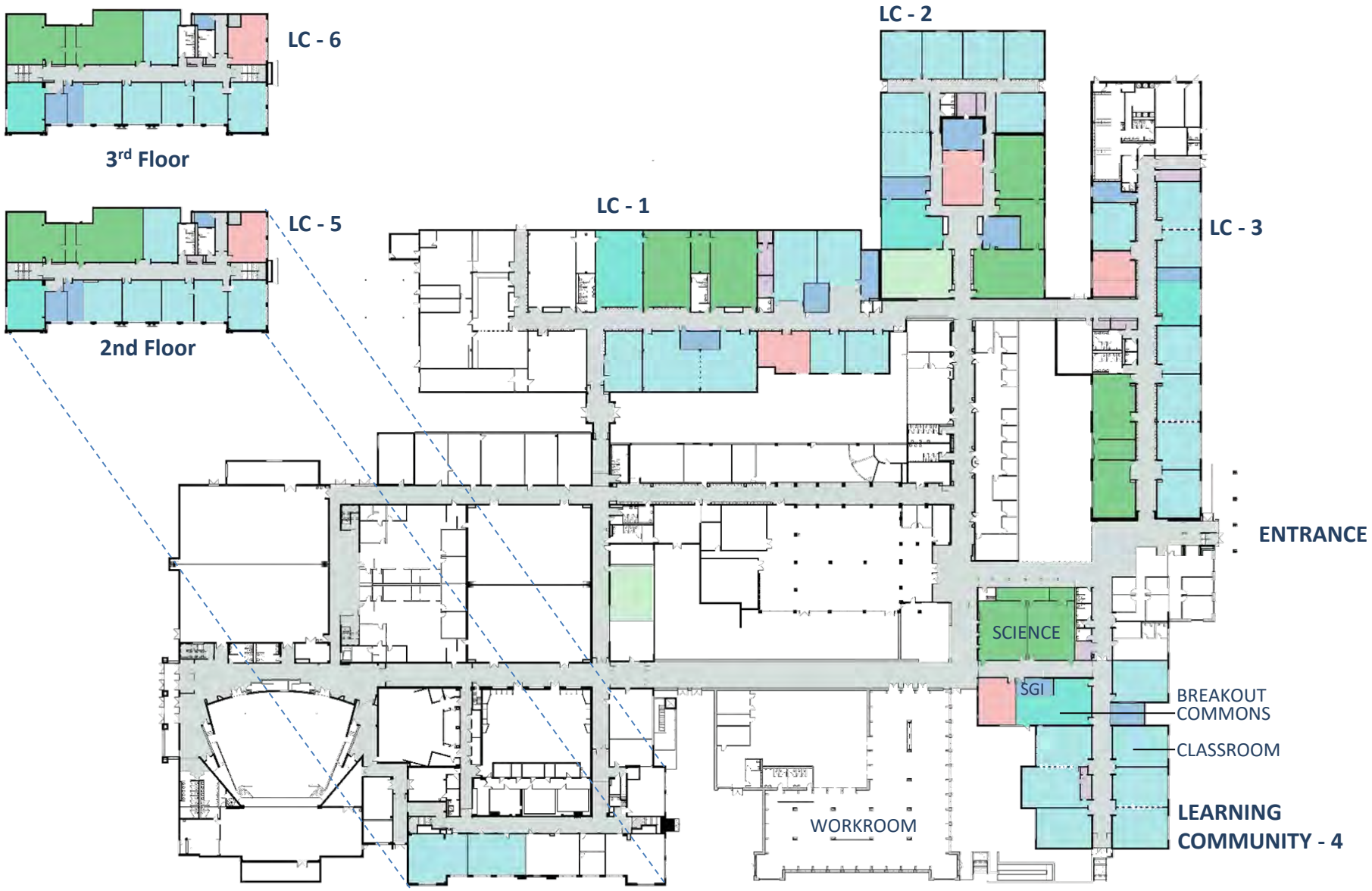
Media Center | Learning Commons

Cafeteria

Performing + Fine Arts



Performing + Fine Arts



Learning Communities

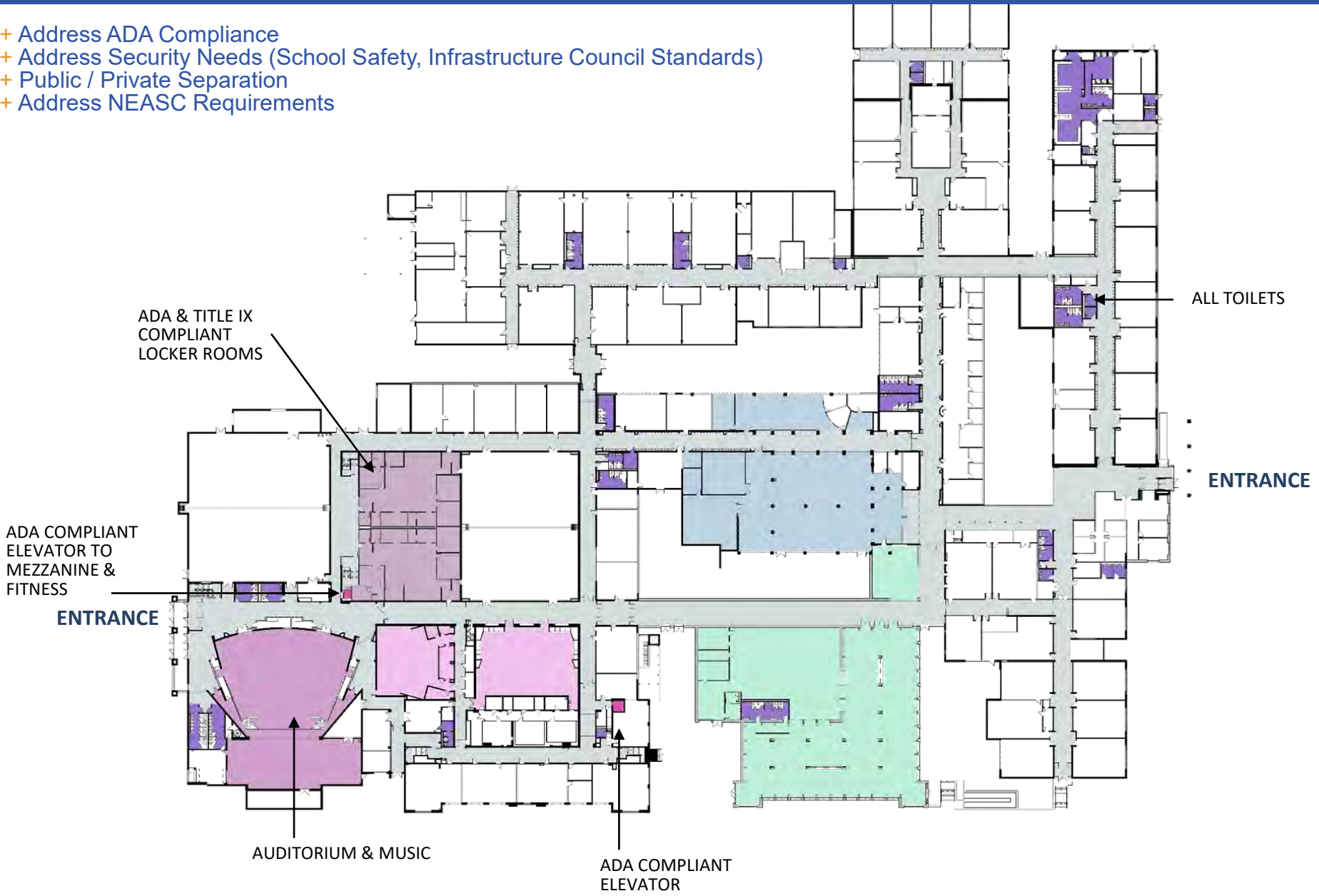
Overall First Floor Plan

QA+M architecture

QA+M architecture

Criteria

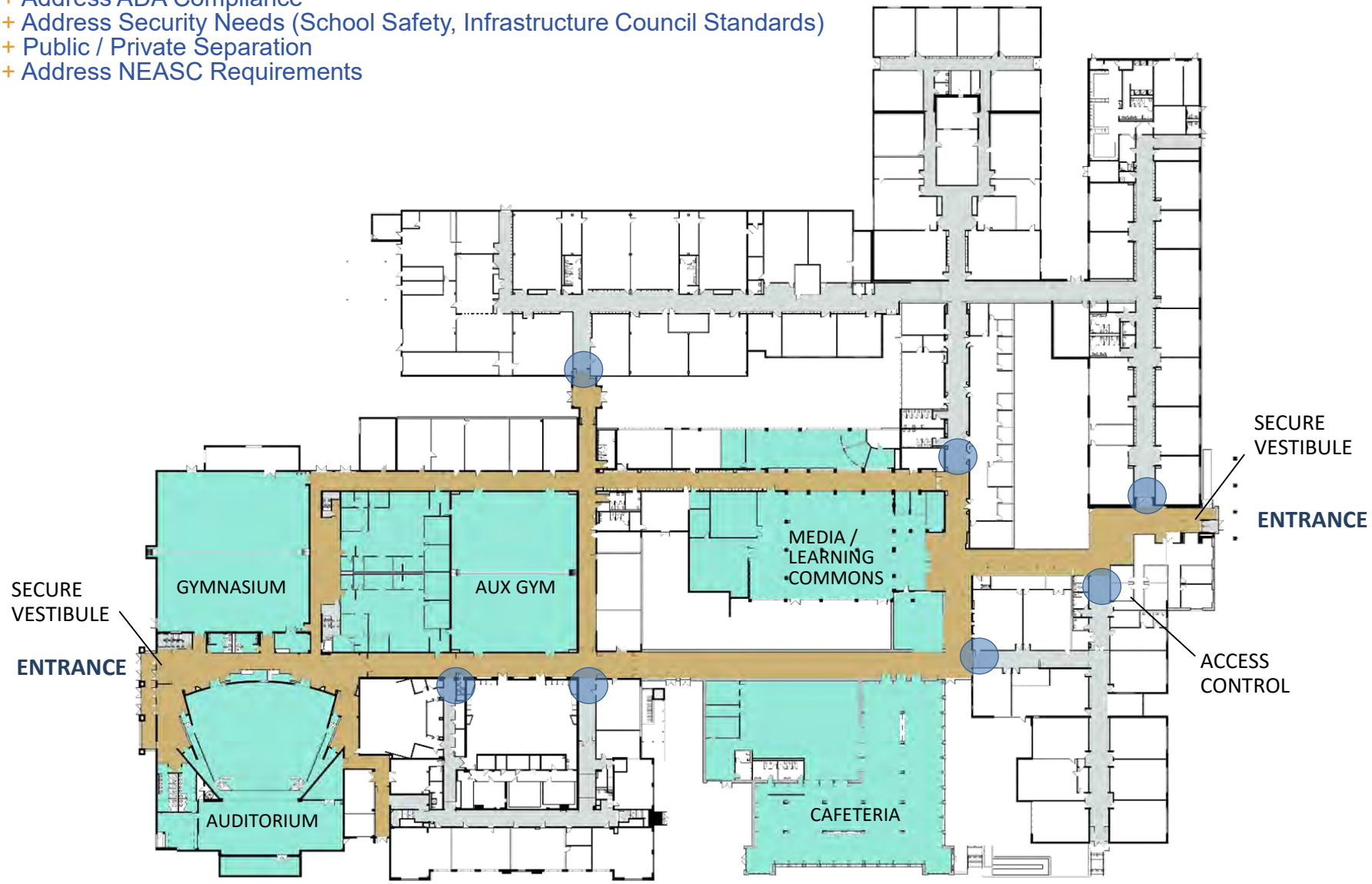
+ Address ADA Compliance
+ Address Security Needs (School Safety, Infrastructure Council Standards)
+ Public / Private Separation
+ Address NEASC Requirements



QA+M architecture

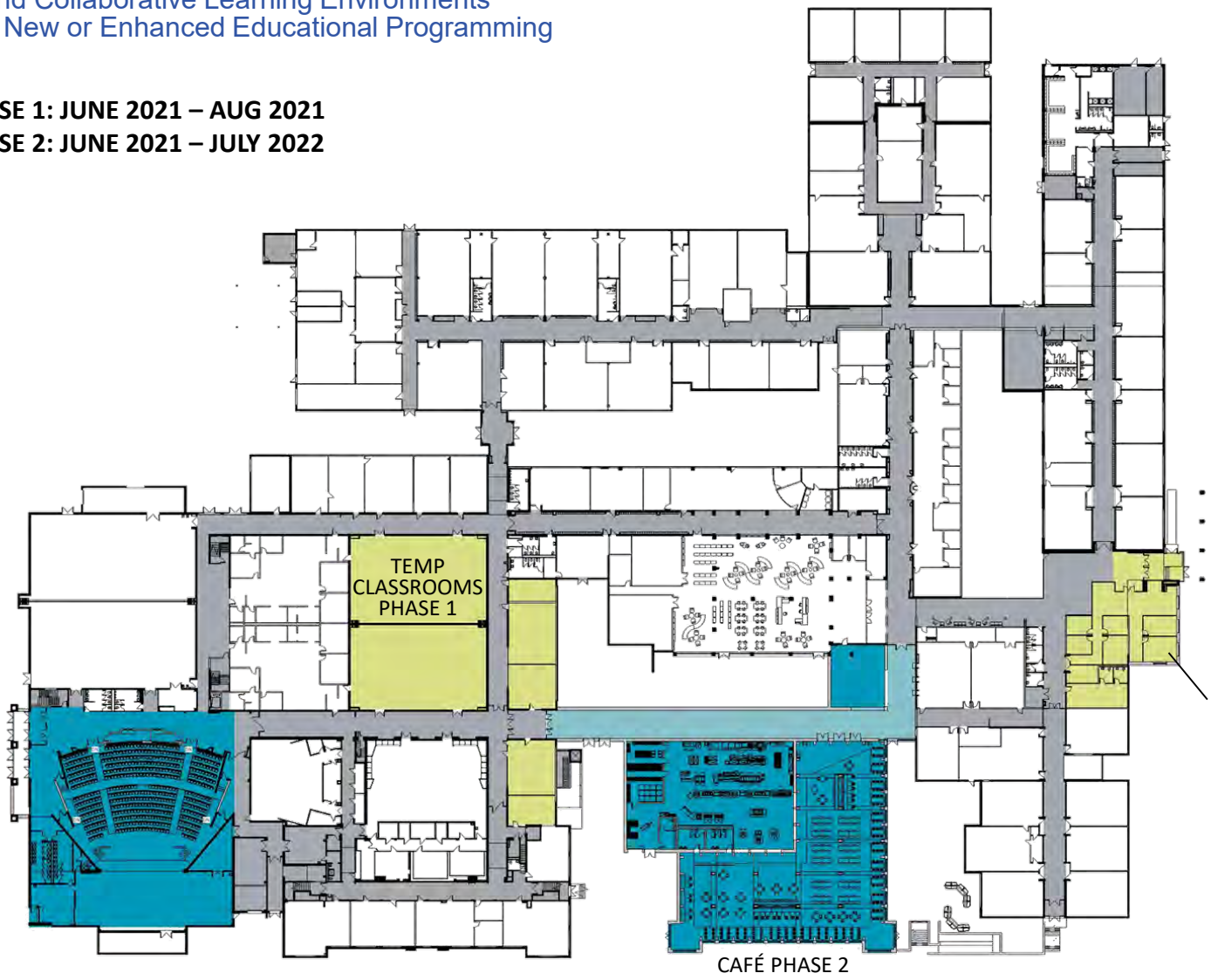
1 Local, State and Federal Requirements

+ Address ADA Compliance
+ Address Security Needs (School Safety, Infrastructure Council Standards)
+ Public / Private Separation
+ Address NEASC Requirements



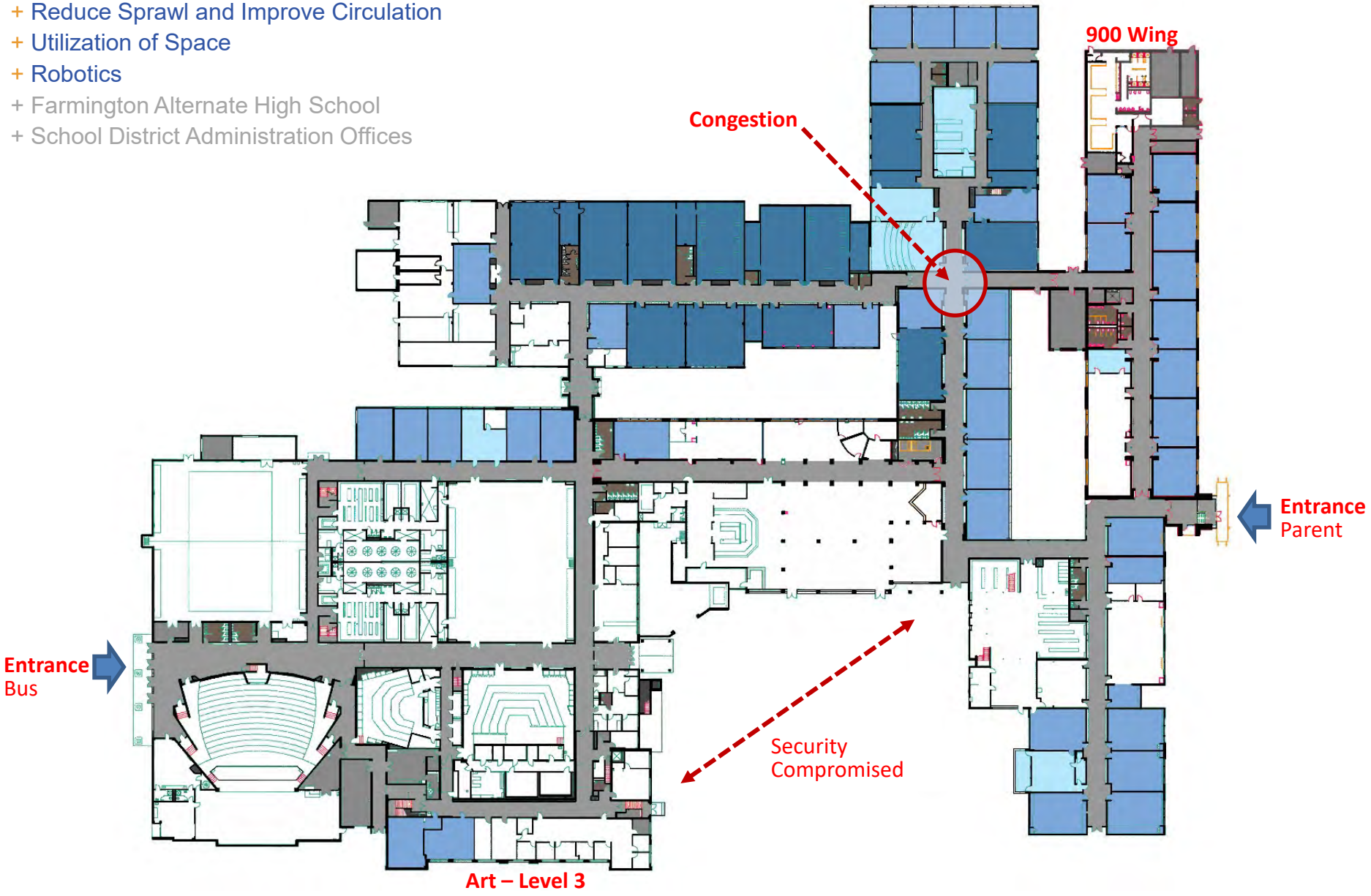
+ Education Disruption
+ Satisfies Ed Specs
+ Address Undersized Learning Spaces (Cafeteria, Gym, Media Center, Performing Arts)
+ Flexible and Collaborative Learning Environments
+ Space for New or Enhanced Educational Programming

PHASE 1: JUNE 2021 – AUG 2021
PHASE 2: JUNE 2021 – JULY 2022

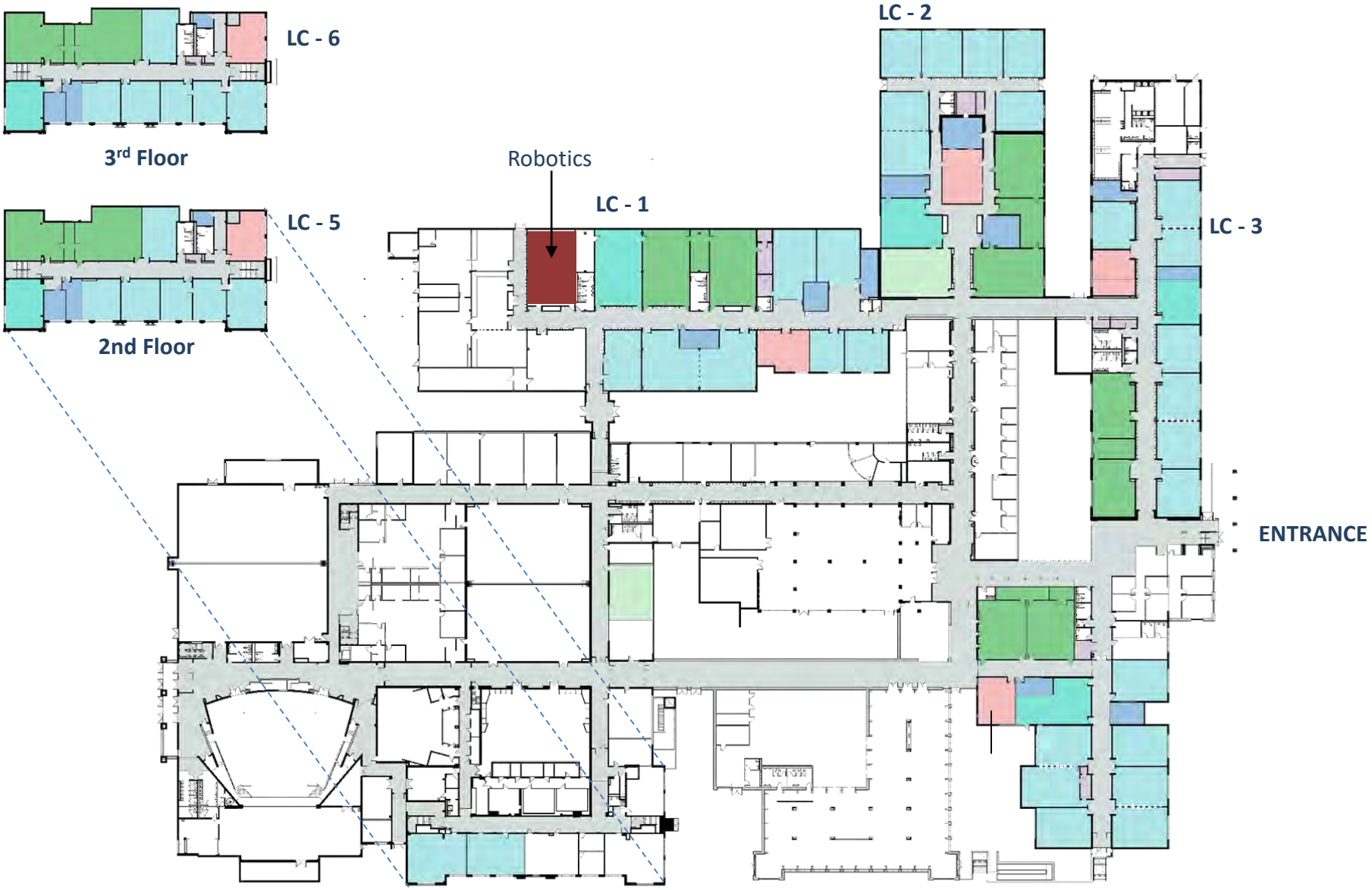


3 Consolidation of Space

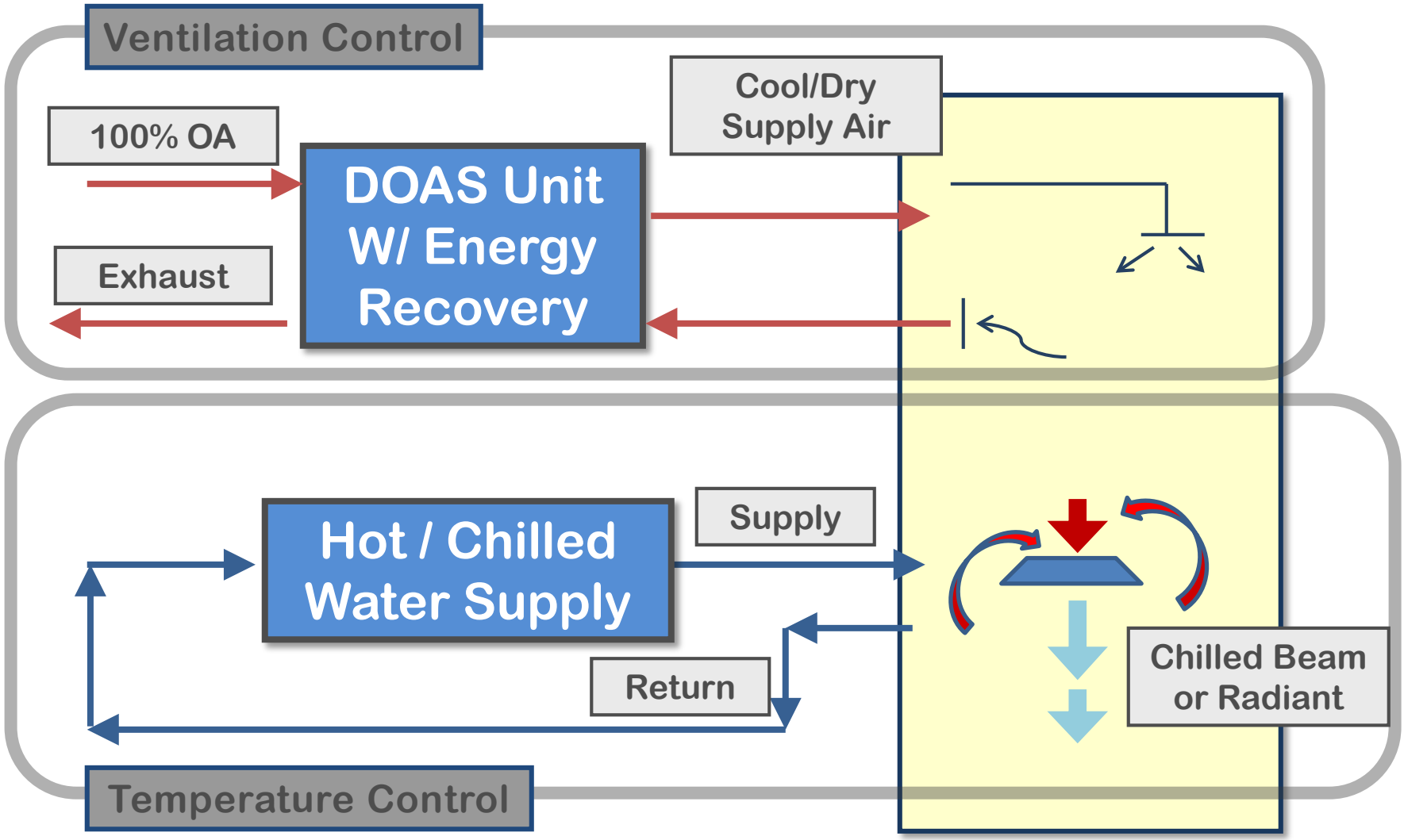
+ Reduce Sprawl and Improve Circulation
+ Utilization of Space
+ Robotics
+ Farmington Alternate High School
+ School District Administration Offices



3 Consolidation of Space



QA+M architecture



+ Energy Efficiency
+ Mechanical, Electrical, Plumbing
+ Building Envelope
+ Green Design

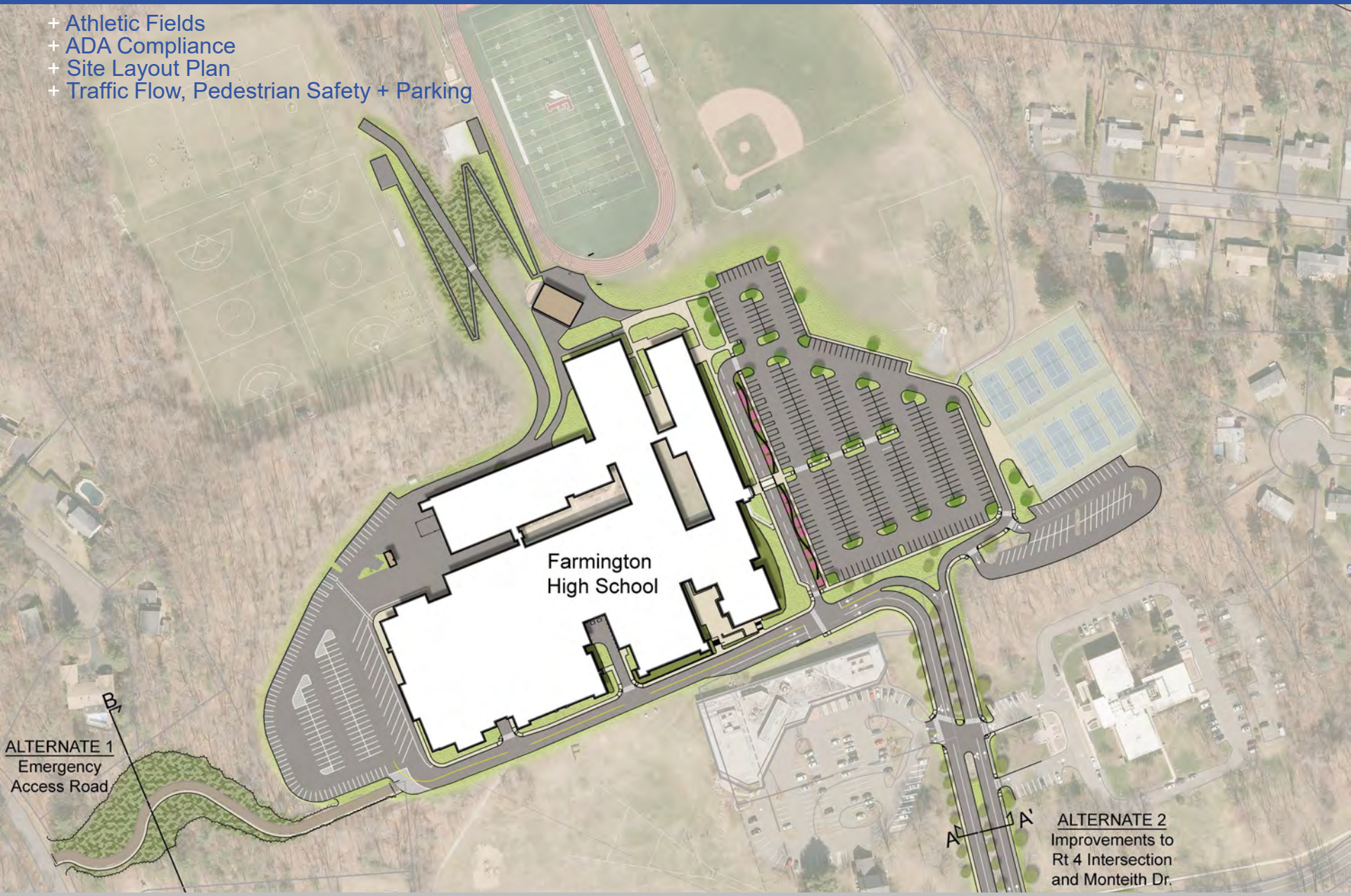
Room / Zone

MEP SYSTEMS

		ENERGY EFFICIENCY (EUI)	GREEN DESIGN	SUSTAINABILITY	CARBON REDUCTION	RESILIENCY	EASE OF MAINTENANCE	THERMAL COMFORT	RESPONSIVENESS TO THERMAL AND HUMIDITY CONDITIONS	INDOOR ENVIRONMENT QUALITY	CONSTRUCTION COST EFFECTIVENESS
MECHANICAL											
GENERATION											
CONDENSING BOILERS		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AIR CONDITIONING		✓	✓				✓	✓	✓	✓	✓
DISTRIBUTION METHODS											
DUCTS							✓	✓	✓	✓	✓
PIPING		✓	✓	✓			✓	✓	✓	✓	✓
TERMINAL DEVICES											
CHILLED BEAMS		✓	✓	✓			✓	✓	✓	✓	✓
RADIANT CEILING PANELS		✓	✓	✓			✓	✓	✓	✓	✓
ELECTRICAL											
GENERATION											
GENERATOR						✓	✓				✓
NEW 480V SERVICE		✓		✓		✓	✓				✓
DISTRIBUTION											
NEW PANELS			✓			✓	✓				✓
TERMINAL DEVICES											
LIGHTING		✓	✓				✓			✓	✓
LED		✓	✓	✓							✓
CONTROLS		✓	✓	✓							
PLUMBING											
GENERATION											
WATER HEATER		✓	✓				✓				✓
DISTRIBUTION											
NEW PIPING IN '28 BLDG.			✓			✓	✓				
TERMINALS											
REPLACE FIXTURES		✓	✓								✓

5 Site Improvements

+ Athletic Fields
+ ADA Compliance
+ Site Layout Plan
+ Traffic Flow, Pedestrian Safety + Parking



BSC GROUP

QA+M architecture

6 Benefits to the Community

+ Community Use of the Building
+ Shelter in Place

7 Fit and Feel For Farmington

+ Internal Design
+ External Design
+ Overall Fit + Feel

7 Fit and Feel For Farmington

+ Internal Design
+ External Design
+ Overall Fit + Feel

7 Fit and Feel For Farmington

+ Internal Design
+ External Design
+ Overall Fit + Feel

Media Center | Learning Commons

7 Fit and Feel For Farmington

+ Internal Design
+ External Design
+ Overall Fit / Feel

7 Fit and Feel For Farmington

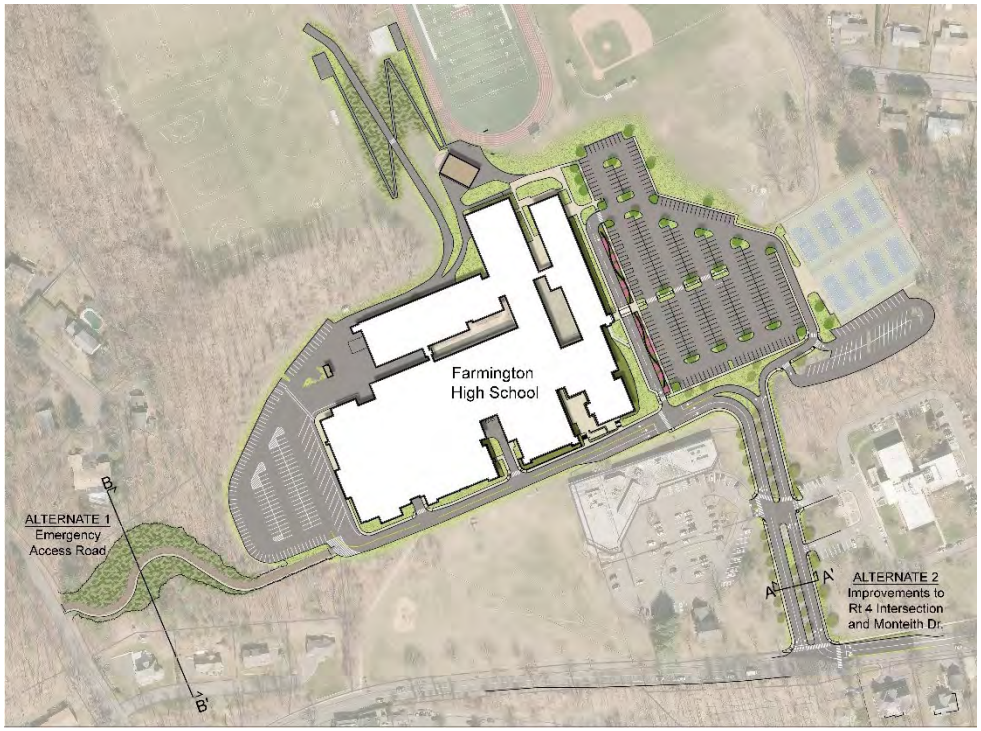
7 Fit and Feel For Farmington

+ Internal Design
+ External Design
+ Overall Fit + Feel

BSC GROUP

QA+M architecture

Alternates



BSC GROUP

QA+M architecture

+ Maintain to reinvigorate

+ Solutions meet and comply with the criteria

+ Efficient

+ Effective

+ Responsible

Farmington High School- CIP Option

Mechanical and Electrical Systems

January 8, 2020

VANZELM ENGINEERS

FHS- CIP MEP SYSTEMS

- **MAJOR COMPONENTS OF MEP SYSTEMS**
  - **GENERATION**
    - Boilers
    - Chillers
    - Cooling System
    - Electric Service
    - Water Heaters
  - **DISTRIBUTION**
    - Air Handling Units
    - Piping
    - Ductwork
    - Electric Wiring and Panels
    - Plumbing Piping: Sanitary, Storm, Hot and Cold Water
  - **Terminal Devices**
    - Chilled Beams
    - Radiant Panels
    - Plumbing Fixtures
    - Light Fixtures

VANZELM ENGINEERS

FHS – CIP - HVAC Systems

Central Heating Systems Upgrades

GENERATION

- Maintain Existing Boiler Plant Locations
- Replace with New High Efficiency Condensing Boilers and variable speed pumping

DISTRIBUTION

- Upgrade Plant Hot Water Piping and Distribution
- Convert Entire Building to Low Temperature Hot Water (140°F) operation

TERMINAL DEVICES

- Chilled Beams
- Radiant Ceiling Panels

FHS – CIP - HVAC Systems

Central Cooling Systems Upgrades

GENERATION

- Air Condition Entire Building
- Replace Existing Air Cooled Chillers With High Efficiency Water Cooled
  Add Third Chiller in Media Center Mezzanine
- Adiabatic Condensers in lieu of Cooling Towers for water savings

DISTRIBUTION

- New Chilled Water Piping, Reuse Existing Piping Where Possible
- Replace All Air Handling Units with DOAS
- Reuse Existing Ductwork To Greatest Degree Possible
- New DOAS Ductwork For Classrooms

TERMINAL DEVICES

- Chilled Beams
- Radiant Ceiling Panels

FHS – CIP - MEP Systems

MEP SYSTEMS		ENERGY EFFICIENCY (EUI)	GREEN DESIGN	SUSTAINABILITY	CARBON REDUCTION	RESILIENCY	EASE OF MAINTENANCE	THERMAL COMFORT	RESPONSIVENESS TO THERMAL AND HUMIDITY CONDITIONS	INDOOR ENVIRONMENT QUALITY	CONSTRUCTION COST EFFECTIVENESS
MECHANICAL											
GENERATION											
CONDENSING BOILERS		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AIR CONDITIONING		✓	✓				✓	✓	✓	✓	✓
DISTRIBUTION METHODS											
DUCTS							✓	✓	✓	✓	✓
PIPING		✓	✓	✓			✓	✓	✓	✓	✓
TERMINAL DEVICES											
CHILLED BEAMS		✓	✓	✓			✓	✓	✓	✓	✓
RADIANT CEILING PANELS		✓	✓	✓			✓	✓	✓	✓	✓
ELECTRICAL											
GENERATION											
GENERATOR						✓	✓				✓
NEW 480V SERVICE		✓		✓		✓	✓				✓
DISTRIBUTION											
NEW PANELS			✓			✓	✓				✓
TERMINAL DEVICES											
LED LIGHTING		✓	✓				✓			✓	✓
CONTROLS		✓	✓	✓							✓
PLUMBING											
GENERATION											
WATER HEATER		✓	✓				✓				✓
DISTRIBUTION											
NEW PIPING IN '28 BLDG.			✓			✓	✓				
TERMINALS											
REPLACE FIXTURES		✓	✓								✓

VANZELM ENGINEERS

FHS – CIP - Electrical Systems

Proposed System Upgrades – Power Distribution

GENERATION

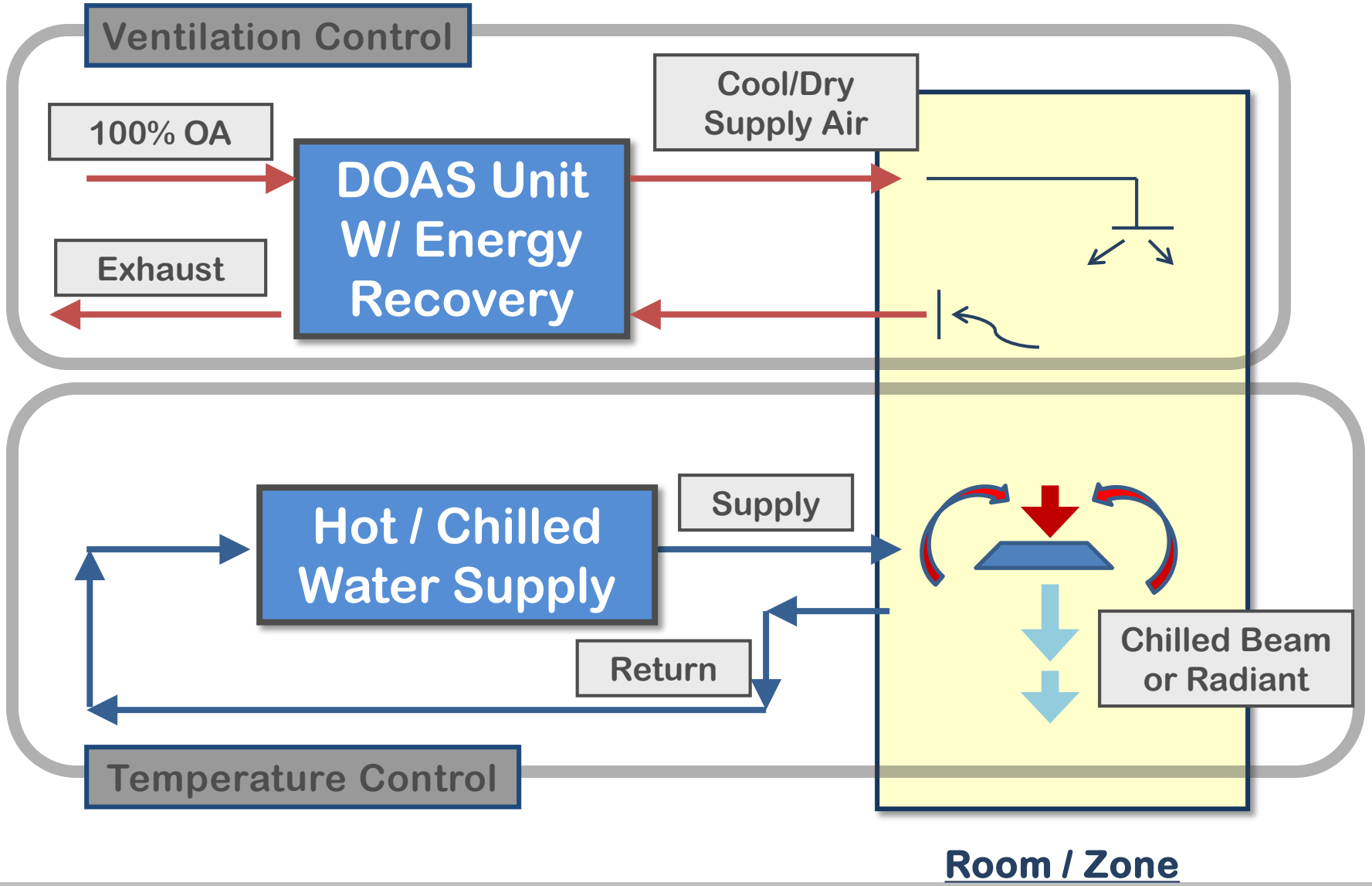
- Main Electrical Service, Switchboards & Distribution
  - Provide New Service From New Utility Substation To Building – 3000A, 480V 3-Phase
  - Provide New Main Switchboard
  - Update Power Distribution
  - New Feeders / Panelboards
- Emergency Power
  - To Serve Emergency Power Loads And Increase Generator / Distribution Capacity
  - Include Cooling Systems
  - Provisions For Solar PV Input

DISTRIBUTION

- Update Power Distribution
- New Feeders / Panelboards

VANZELM ENGINEERS

LOW ENERGY HVAC SYSTEM APPROACH



QA&M Option I Cost Estimate

QA&M Option I Maintain Current Facility	
Item	**Cost Estimate**
Architectual Design Fee	$ 3,567,000.00
Original fee	
Proffessional Fees	$ 2,991,029.00
Construction Costs	$ 83,342,964.00
Alternates	$ 1,493,860.00
Furniture/Equipment/ Technology	$ 2,795,500.00
5% Owner Contingency	$ 4,950,000.00
Total Project Cost	$ 99,140,353.00

CRITERIA	PRESENTATION 1 OF 3- JANUARY 8, 2020 OPTION 1 MAINTAIN EXISTING FHS		PRESENTATION 2 OF 3- JANUARY 15, 2020 OPTION 2 RENOVATE EXISTING FHS AS NEW WITH ADDITIONS		PRESENTATION 3 OF 3- JANUARY 22, 2020 OPTION 3 NEW FHS BUILDING	
	TSKP	QA&M	TSKP	QA&M	TSKP	QA&M
TOTAL PROJECT COST: Total Project Cost includes construction and soft costs. This is the number that would appear on the referendum ballot and interest is not included in the total project cost.		$99,140,353				
LESS STATE REIMBURSEMENT OF ELIGIBLE COSTS(NOT ALL ITEMS ELIGIBLE): Farmington's reimbursement rate depends on the type of building project that is proposed. A renovation is up to 30%, and a new building is up to 20%. However, the exact reimbursement is not known until the very end of a project (after auditors review the final project).		$17,845,264				
NET PROJECT COST:		$81,295,089	0.0	0.0	0.0	0.0
ADDITIONAL CAPITAL EXPENDITURES OVER 20 YEARS		$0				
TOTAL PROJECTED COST OVER 20 YEARS--TOWN SHARE		$81,295,089				
Tax Impact Year 1 *		$401.31				
The Tax Impact is for the Farmington High School Building Project ONLY. The tax impact is calculated based on the Average Residental Assessment of $226,777.		*Costs will decrease by approximately $7.60/year over 20 years				
ANNUAL OPERATIONAL COST: This cost is the best estimate of running the building compared to what it costs to run the building now.						
ENERGY COST						
MAINTENANCE COST						
TAX IMPACT						

Attachment D

CONCEPTUAL DESIGN PRESENTATION
OPTION 1 – Maintain Existing
Farmington High School

TSKP STUDIO ARCHITECTURE | PLANNING | INTERIORS

January 8, 2020

Building Committee

Meg Guerrera, 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 Kapcinski
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

Option 3

New FHS

Option 1

Maintain Existing FHS

Irv Gordon bought a new Volvo P1800S in 1966 and drove it to a Guinness World Record 3.2 million miles.

Option 1

Maintain Existing FHS

Option 1

Maintain Existing FHS

Joseph Vaillancourt drove his 1963 Plymouth Fury until it reached 1.6 million miles, when it was struck and totaled by a truck.

Existing Conditions | Building Configuration

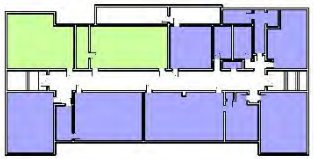
Option 1 | Maintenance Challenges

Option 1

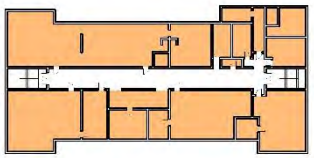
Maintain Existing FHS

Existing Conditions | Building Configuration

Existing Conditions | Building Configuration

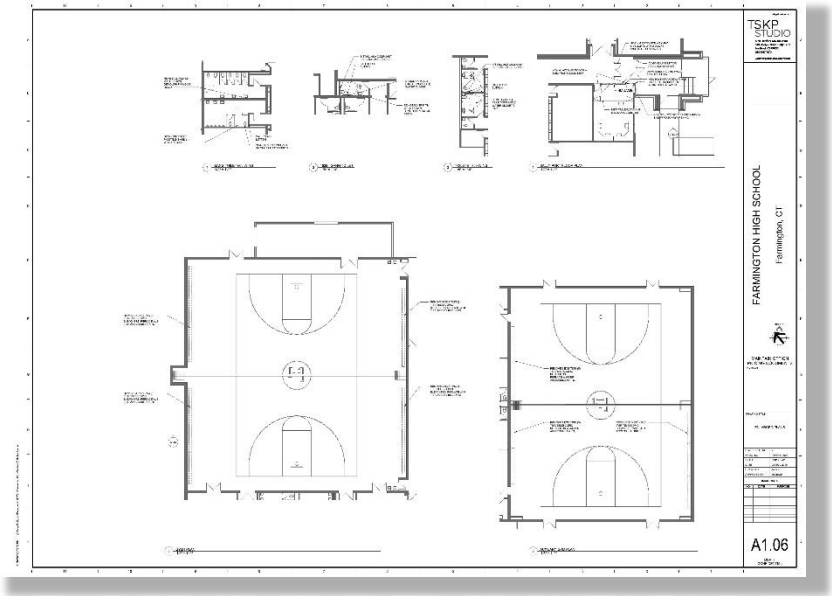


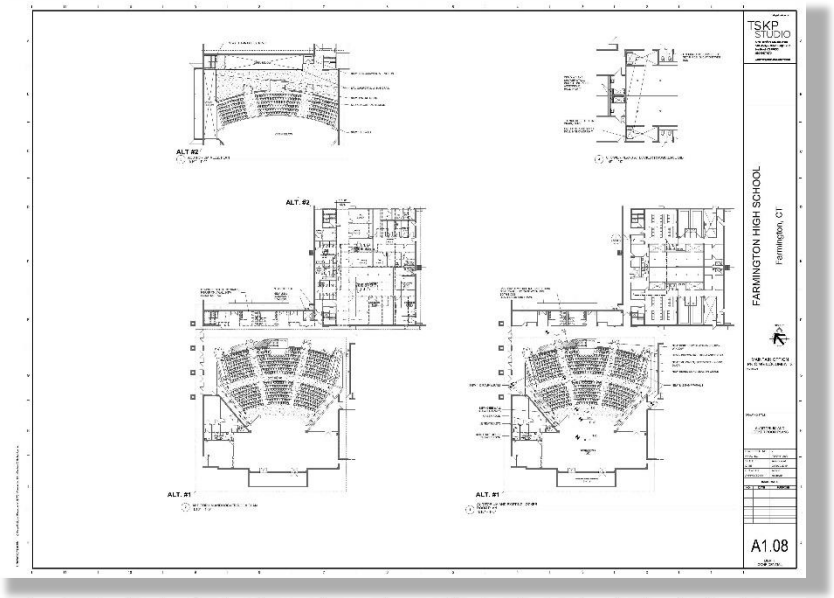
Second Floor

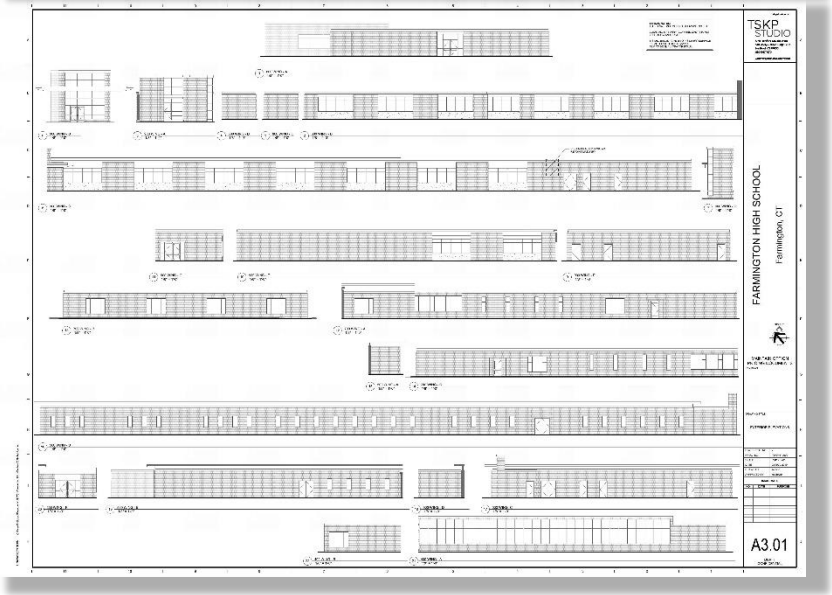


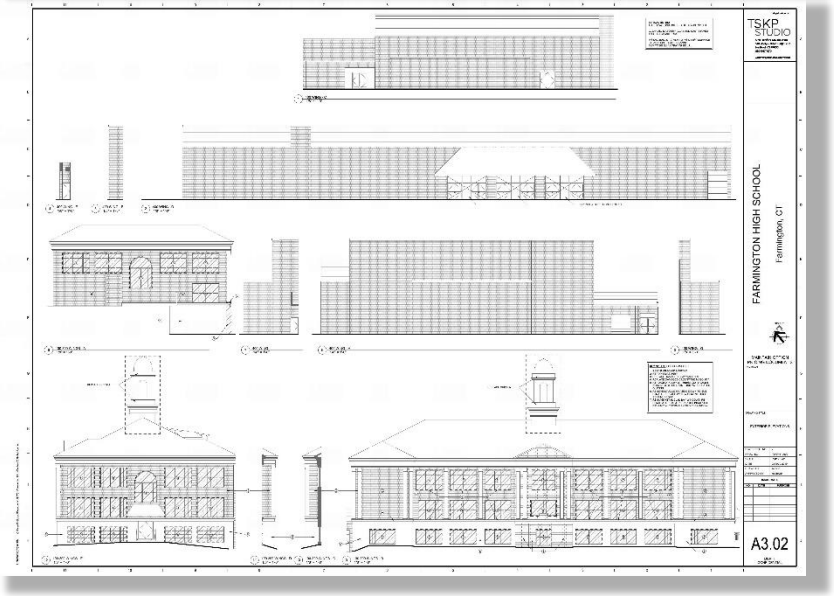
Third Floor

Option 1 | Pricing Documents









Option 1 | Pricing Documents

GENERAL NOTES

Include new room and wayfinding signage throughout.

Basis of design products and finishes where required by outlined scopes

A. QT flooring – AMERICAN OLEAN 6x6
B. VCT flooring – JOHNSONITE "iQ Optima" 24x24
C. PT flooring – STONE SOURCE "Chrometech"
D. CT flooring – AMERICAN OLEAN 6x6
E. Rubber Base – ROPPE 6"
F. Rubber Tile and Tread – ROPPE, circular, low profile
G. CT walls – AMERICAN OLEAN 2x2
H. Toilet Partitions – GLOBAL "9200"
I. ACT ceilings – ARMSTRONG "Ultra" 2x2

Plumbing notes:

A. Provide thermometers on inlet and outlets of the tempering valve.
B. Provide thermal expansion for the domestic hot water heating system.
C. Clear, ream, and flush existing sanitary drainage system.
D. Clear, ream and flush the existing storm drainage piping.
E. Clear, ream, and flush existing kitchen waste drainage.

New Fire Alarm system (headend equipment, initiating and annunciating devices, and wiring) throughout.

100, 200 and 300 WING – "1928 Building"

Originally constructed in 1928, this three story masonry structure has been renovated throughout its history. The current use is administrative and classroom spaces. It includes the main mechanical space in its basement, a full height attic with mechanical equipment, and an elevator serving its 3 public floors.

A. Demolition
    1 Demolish all exterior window units and entryways, include abatement at entry units.
    2 Damaged stone and clay masonry units in areas noted on building elevations.
    3 Remove stucco exterior down to stable substrate.
    4 Remove roof deck and structure as required by attic equipment replacement
    5 Remove roofing down to deck.
    6 Demolish cupola.
    7 Demolish public and toilet partitions as required by 3/A1.06
    8 Demolish flooring (including abatement) where required.
B. Concrete – no scope
C. Masonry – as shown on building elevations
    1 Clean façade, repoint masonry

Farmington High School
Maintain Option Narrative
CONFIDENTIAL
11/26/2019

    2 Replace damages cast stone and clay masonry
    3 New stucco parge coat at rusticated first floor envelop. 2 Coat gypsum system.
D. Framing and Partitions
    1 New framing and decking at roof demolition
    2 Reconstructed cupola structure. Light gage metal frame. Copper roof and KYNAR metal copings, profiles, and cladding.
E. Thermal/Moisture
    1 New sill flashing at all masonry window openings
    2 New spray foam insulation at roof rafters to R30
    3 New asphalt shingle roof, GAF "Timberline UHD" or equal
    4 New rake and eave flashing
F. Doors and Windows – all new exterior windows and doors to be ballistic grade
    1 New thermally-broken, aluminum window units with 1" insulated glazing units. Custom color. WINCO "1450S" or equal.
    2 1 new storefront entry with sidelights with 1" insulated glazing units. Custom color. EFCO 5600 or equal.
G. Finishes – no scope
H. Elevator – no scope
I. Furnishing and Equipment – no scope
J. Mechanical
    1 Replace Hot Water Pumps (2 in total) – Pumps shall be similar to Bell & Gossett Series 1510, capacity to match existing. Provide a VFD for each pump.
    2 Replace Steam to Hot Water Exchanger – Heat exchanger shall be similar to Bell & Gossett Model SU, capacity to match existing.
    3 Replace Steam Condensate Receiver Tanks (2 IN Total) – Tanks shall be similar to Bell & Gossett Series CED with integral pumps.
    4 Replace Steam and Hot Water Piping in tunnels – Provide a cost per linear feet of piping ranging in size from 1", 1 ½", 2", 2 ½", 4", 6" with insulation. Pricing should be provided for copper up to 2" and for EWR Schedule 80 Steel pipe from 1" up to 6".
    5 Provide new 45-ton Chiller, similar to Daikin Model AGZ.
    6 Replace four H&V units and four exhaust fans serving Large Gymnasium. H&V Units shall be similar to McQuay Vison series. Exhaust fans shall be similar to Greenheck Model G. Capacity to match existing.
    7 Replace two H&V units serving the Small gymnasium, H&V Units shall be similar to McQuay Vison series. Capacity to match existing.
    8 Replace air handling unit (hot water and chilled water coil) serving the Auditorium, unit shall be similar to McQuay Vison series. Capacity to match existing.
    9 Replace air handling unit (hot water and chilled water coil) serving the Auditorium Stage, unit shall be similar to McQuay Vison series. Capacity to match existing.
    10 Replace air handling unit (hot water and chilled water coil) serving the Green Room, unit shall be similar to McQuay Vison series. Capacity to match existing.
    11 Replace air handling unit (hot water and chilled water coil) serving the Band room, unit shall be similar to McQuay Vison series. Capacity to match existing.

Option 1 | Cost Analysis

	Detailed Estimate	In Millions
1. Arch./Eng. Design Fees	$ 3,300,000	$ 3.3
2. Professional Fees	2,576,041	2.6
3. Construction Costs	29,946,403	30.0
4. Alternates	8,745,395	8.7
5. FF&E and Technology	2,795,500	2.8
6. Owner Contingency (5%)	2,500,000	2.5
Grand Total	**$ 49,863,339**	**$ 49.9**

Option 1 | Where Does the Money Go?

External Requirements		
ACCREDITATION	IA	**High School Accreditation:** 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."
ACCESSIBILITY	IB	**ADA Compliance**: 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.
Challenges and Needs		
SECURITY COMPLIANCE	IIA	*There have been seven (7) additions / renovations to FHS when heightened security expectations were not a consideration.* ✓ 23 separate entry points, sightline issues, lack of private/public separation and difficult building orientation even with signage ✓ Current parking lot configuration does not provide for clear pedestrian traffic pathways which is a safety concern
SPRAWLING LAYOUT	IIB	*FHS is a large, mostly one floor inefficient facility with too many long and narrow hallways.* ✓ Built in 1928 with renovations/additions in 1952, 1964, 1969, 1974, 1978, 1996, and 2003 ✓ Hallway overcrowding and lengthy passing time for students to get to classes on time ✓ 30% of the square footage is used for hallways instead of instructional space ✓ Sprawling building is associated with increased energy costs
EDUCATIONAL PROGRAMMING	IIC	*FHS is reaching its limits for providing 21st Century programming and learning spaces that prepare today's learners for the future.* ✓ Inadequate classroom space to accommodate all programmatic offerings and active vs. passive learning ✓ Overcrowded study halls ✓ Undersized library at capacity every period of the school day ✓ Inadequate space for robotics, special education, science labs and performance spaces ✓ Lack of collaborative work spaces that reflect the way students learn in today's educational setting ✓ Auditorium and cafeteria are undersized for the population, impacting scheduling, educational programming, and state and federal requirements for food services. *Education today requires:* ✓ 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 ✓ Technology and imagination rich environments to foster a maker mindset
BUILDING ENVELOPE CODE COMPLIANCE (MEP)	IID	*FHS is currently an inefficient building from an energy standpoint and also has code compliance issues.* ✓ An inefficient building envelope impacts energy costs and efficiencies (insulation, façade, windows-except for 900 wing) ✓ Mechanical, electrical, plumbing, fire alarm and building-protection systems are out-of-date and not in code compliance
ENERGY EFFICIENCY	IIE	✓ A "Green Design" (new or renovated MEP systems) could save 35-45% of annual costs per year depending upon design

Option 1 | Where Does the Money Go?

In Millions:

	External Requirements		
$ 4.3	ACCREDITATION NEASC ACCESSIBILITY	IA IB	**High School Accreditation:** 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." **ADA Compliance**: 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.
	Challenges and Needs		
$ 8.1	SECURITY COMPLIANCE	IIA	*There have been seven (7) additions / renovations to FHS when heightened security expectations were not a consideration.* ✓ 23 separate entry points, sightline issues, lack of private/public separation and difficult building orientation even with signage ✓ Current parking lot configuration does not provide for clear pedestrian traffic pathways which is a safety concern
$ 0.0	SPRAWLING LAYOUT	IIB	*FHS is a large, mostly one floor inefficient facility with too many long and narrow hallways.* ✓ Built in 1928 with renovations/additions in 1952, 1964, 1969, 1974, 1978, 1996, and 2003 ✓ Hallway overcrowding and lengthy passing time for students to get to classes on time ✓ 30% of the square footage is used for hallways instead of instructional space ✓ Sprawling building is associated with increased energy costs
$ 11.1	EDUCATIONAL PROGRAMMING	IIC	*FHS is reaching its limits for providing 21st Century programming and learning spaces that prepare today's learners for the future.* ✓ Inadequate classroom space to accommodate all programmatic offerings and active vs. passive learning ✓ Overcrowded study halls ✓ Undersized library at capacity every period of the school day ✓ Inadequate space for robotics, special education, science labs and performance spaces ✓ Lack of collaborative work spaces that reflect the way students learn in today's educational setting ✓ Auditorium and cafeteria are undersized for the population, impacting scheduling, educational programming, and state and federal requirements for food services. *Education today requires:* ✓ 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 ✓ Technology and imagination rich environments to foster a maker mindset
$ 26.4	BUILDING ENVELOPE CODE COMPLIANCE (MEP) ENERGY EFFICIENCY	IID IIE	*FHS is currently an inefficient building from an energy standpoint and also has code compliance issues.* ✓ An inefficient building envelope impacts energy costs and efficiencies (insulation, façade, windows-except for 900 wing) ✓ Mechanical, electrical, plumbing, fire alarm and building-protection systems are out-of-date and not in code compliance ✓ A "Green Design" (new or renovated MEP systems) could save 35-45% of annual costs per year depending upon design

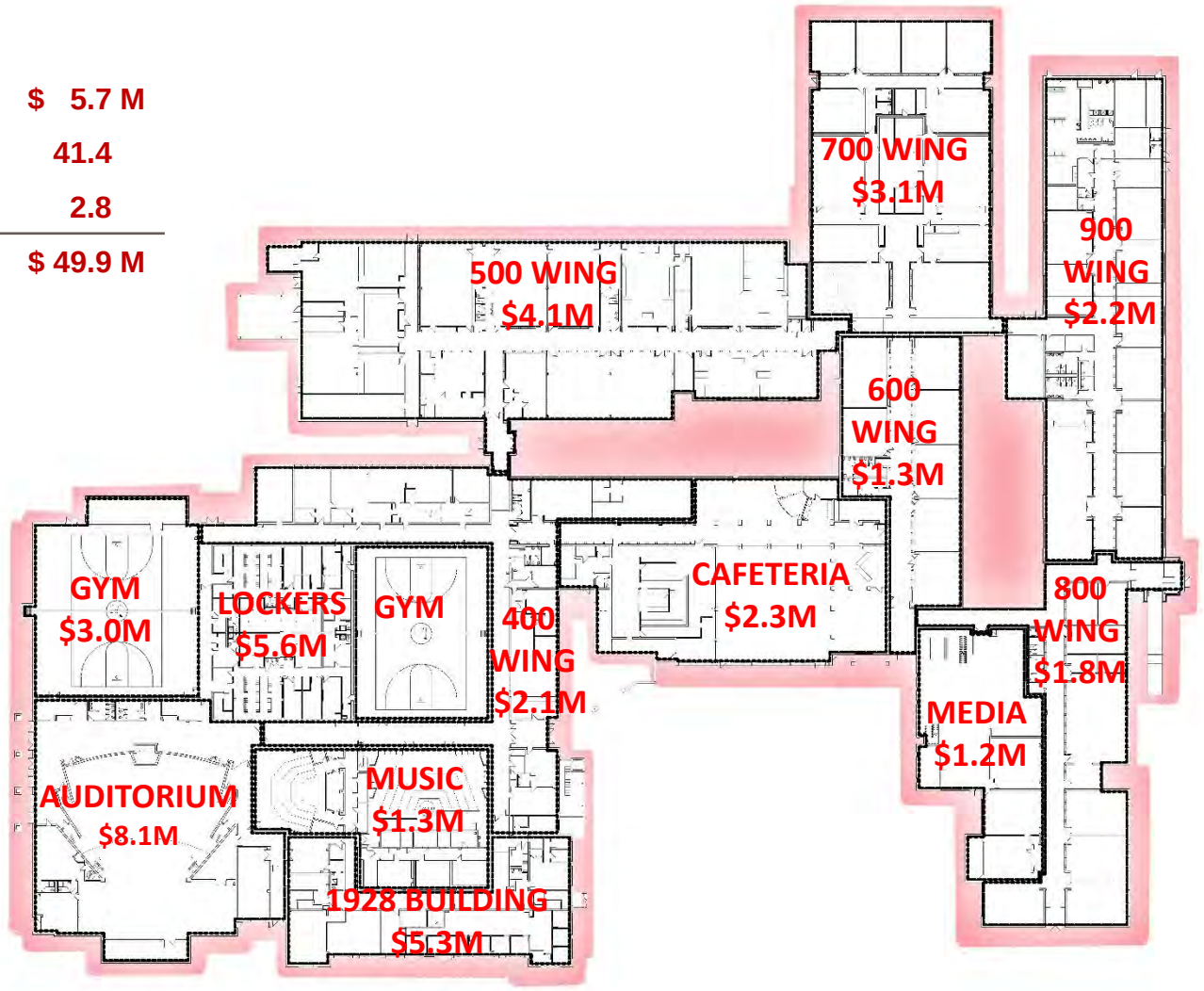
Option 1 | Where Does the Monev Go?

In Millions:

				NOT INCLUDED
	External Requirements			
$ 4.3	ACCREDITATION NEASC ACCESSIBILITY	IA	Roof leaks Improve HVAC Undersized cafeteria	Field house parity (Title IX) Install AC throughout More science areas
		IB	Auditorium Culinary spaces Gymnasium Site amenities - press box, stadium Bathroom and showers Music rooms Media Center mezzanine	
	Challenges and Needs			
$ 8.1	SECURITY COMPLIANCE 	IIA	Window film at grade Additional Site Access Sally port entry Legible signage Site pedestrian and vehiclar circulation 23 separate entries	
$ 0.0	SPRAWLING LAYOUT 	IIB		
$ 11.1	EDUCATIONAL PROGRAMMING 	IIC	Auditorium (acoustics and capacity) Cafeteria (capacity) Performance space	Board of Education space Alt. high school space Collaboration space Robotics Special Education Additional science labs Exhibition space Flexible classroom design- Flexible, unprogrammed
$ 26.4	BUILDING ENVELOPE CODE COMPLIANCE (MEP)	IID	Cupola rehab Repointing, flashing Drafty Windows Roofs (beyond life cycle)	Replace additional roofs Solid masonry exterior walls
	ENERGY EFFICIENCY 	IIE	HVAC upgrades Plumbing upgrades Fire Alarm Continuous power for IT Storm/Sanitary separation	HVAC and BMS throughout Emergency power total

Option 1 | Where Does the Monev Go?

Site Work	$ 5.7 M
Building	41.4
FF&E	2.8
TOTAL	$ 49.9 M



FHS Options | Develop Criteria for Evaluation

1. Local, State, & Federal Requirements

   Security Needs

3. Consolidation of Space

2. Programmatic Needs

4. Building Systems

External Requirements	
ACCREDITATION AND ACCESSIBILITY I A / I B	**High School Accreditation:** 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." **ADA Compliance:** 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.
Challenges and Needs	
SECURITY COMPLIANCE II A	*There have been seven (7) additions / renovations to FHS when heightened security expectations were not a consideration.* ✓ 23 separate entry points, sightline issues, lack of private/public separation and difficult building orientation even with signage ✓ Current parking lot configuration does not provide for clear pedestrian traffic pathways which is a safety concern
SPRAWLING LAYOUT II B	*FHS is a large, mostly one floor inefficient facility with too many long and narrow hallways.* ✓ Built in 1928 with renovations/additions in 1952, 1964, 1969, 1974, 1978, 1996, and 2003 ✓ Hallway overcrowding and lengthy passing time for students to get to classes on time ✓ 30% of the square footage is used for hallways instead of instructional space ✓ Sprawling building is associated with increased energy costs
EDUCATIONAL PROGRAMMING II C	*FHS is reaching its limits for providing 21st Century programming and learning spaces that prepare today's learners for the future.* ✓ Inadequate classroom space to accommodate all programmatic offerings and active vs. passive learning ✓ Overcrowded study halls ✓ Undersized library at capacity every period of the school day ✓ Inadequate space for robotics, special education, science labs and performance spaces ✓ Lack of collaborative work spaces that reflect the way students learn in today's educational setting ✓ Auditorium and cafeteria are undersized for the population, impacting scheduling, educational programming, and state and federal requirements for food services. *Education today requires:* ✓ 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 ✓ Technology and imagination rich environments to foster a maker mindset
BUILDING ENVELOPE CODE COMPLIANCE (MEP) II D ENERGY EFFICIENCY II E	*FHS is currently an inefficient building from an energy standpoint and also has code compliance issues.* ✓ An inefficient building envelope impacts energy costs and efficiencies (insulation, façade, windows-except for 900 wing) ✓ Mechanical, electrical, plumbing, fire alarm and building-protection systems are out-of-date and not in code compliance ✓ A "Green Design" (new or renovated MEP systems) could save 35-45% of annual costs per year depending upon design

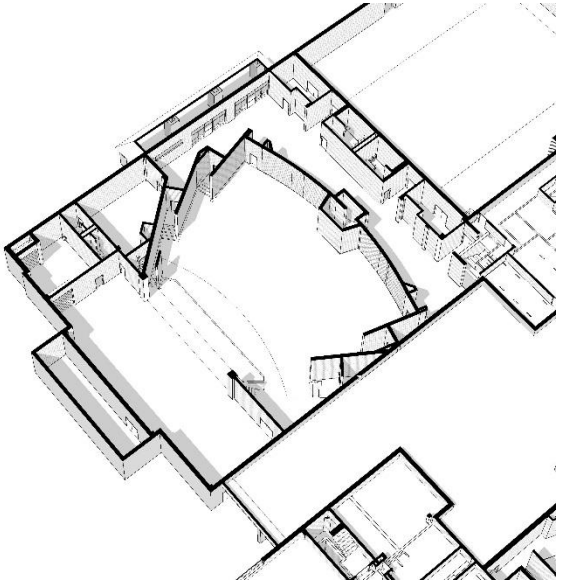
and add 5. Site Improvements, 6. Benefits to the Community, 7. Fit & Feel for Farmington and 8. Cost

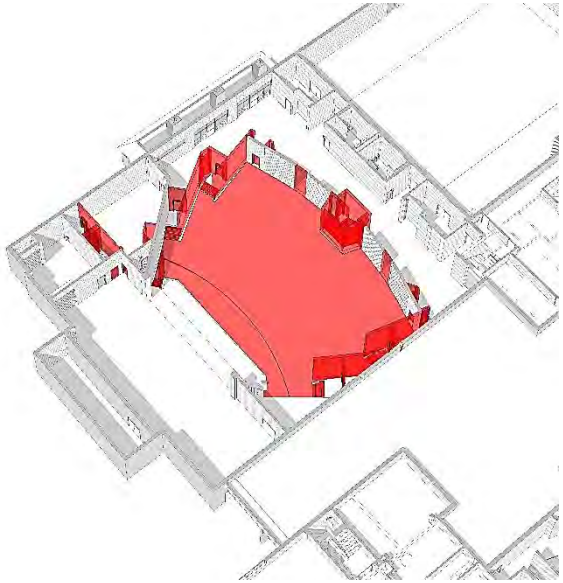
FHS Options | Presentation of TSKP Option 1

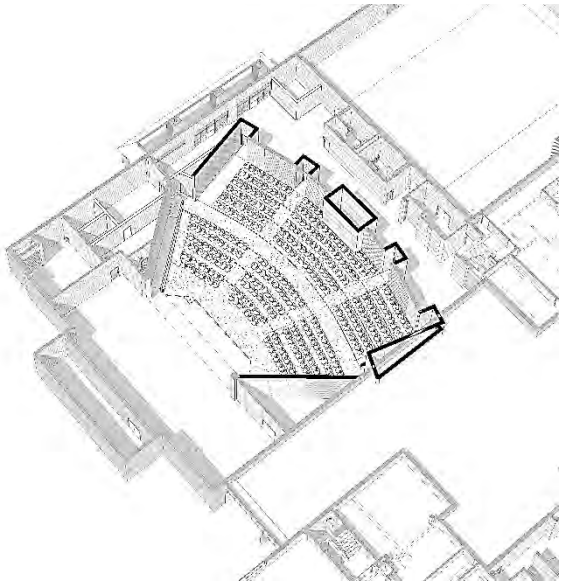
	CRITERIA	Total Points Available	PRESENTATION 1 OF 3- JANUARY 8, 2020 OPTION 1 MAINTAIN EXISTING FHS		PRESENTATION 2 OF 3- JANUARY 15, 2020 OPTION 2 RENOVATE EXISTING FHS AS NEW WITH ADDITIONS		PRESENTATION 3OF 3- JANUARY 22, 2020 OPTION 3 NEW FHS BUILDING	
			TSKP	QA&M	TSKP	QA&M	TSKP	QA&M
1	**LOCAL,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

Option 1 | 1. Local, State & Federal Requirements

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

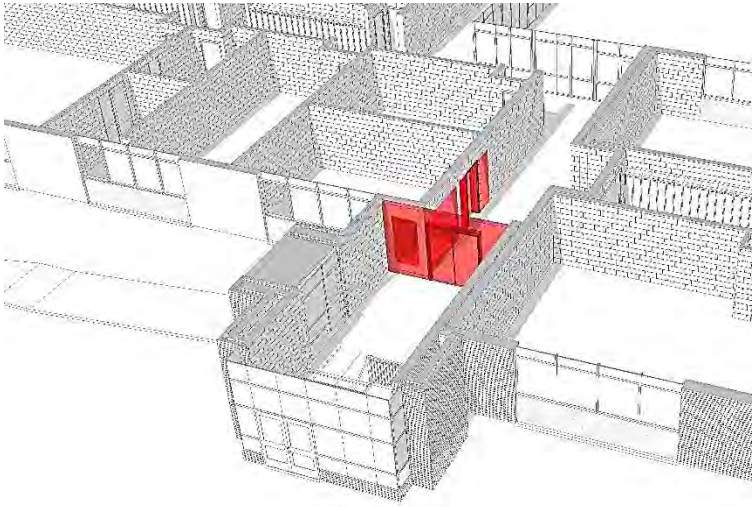


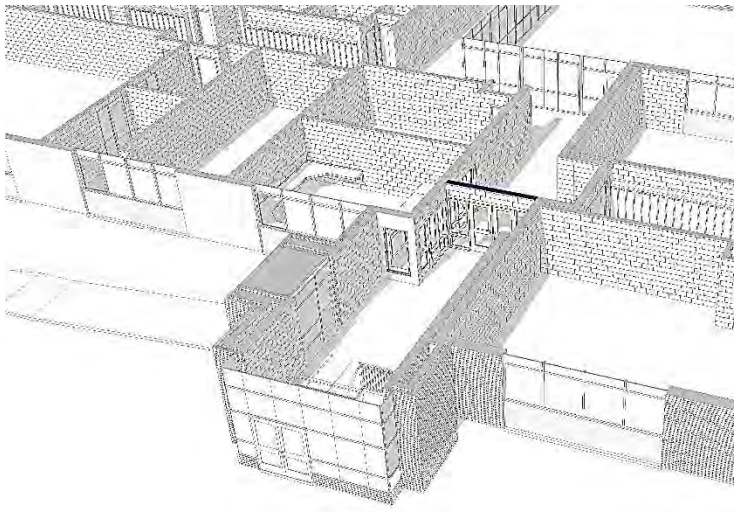




Option 1 | 1. Local, State & Federal Requirements

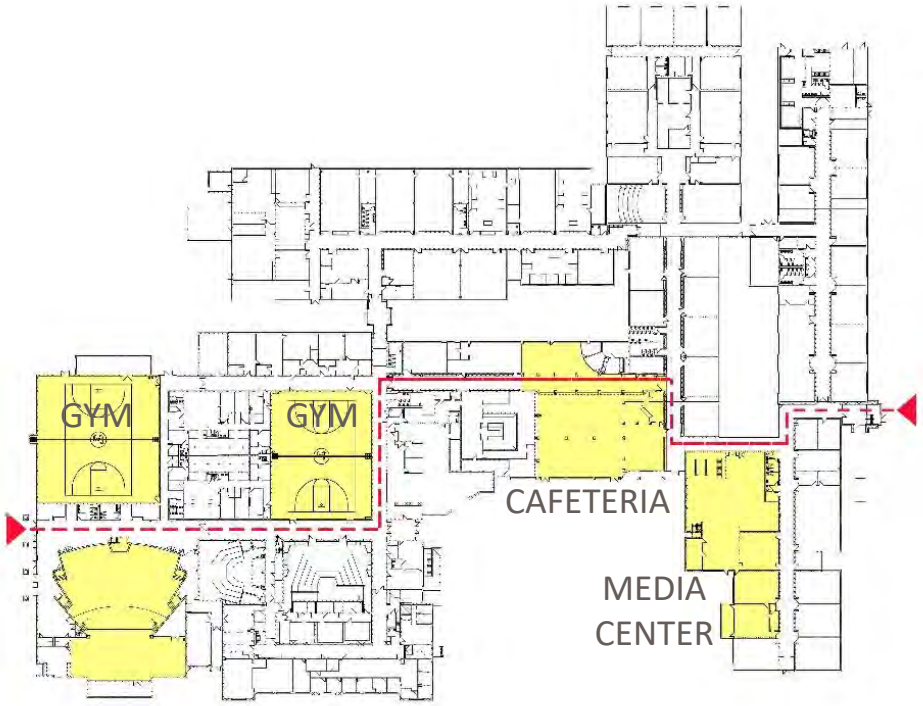
	CRITERIA	Total Points Available	OPTION 1	
			MAINTAIN EXISTING FHS	
			TSKP	Comments
			RS OPINION	
1	**LOCAL, STATE, AND FEDERAL REQUIREMENTS**			
	Address ADA Compliance (OCR Requirements)	4	4.0	**Meets all ADA requirements.**
	Address Security Needs (School Safety Infrastructure Council Standards)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





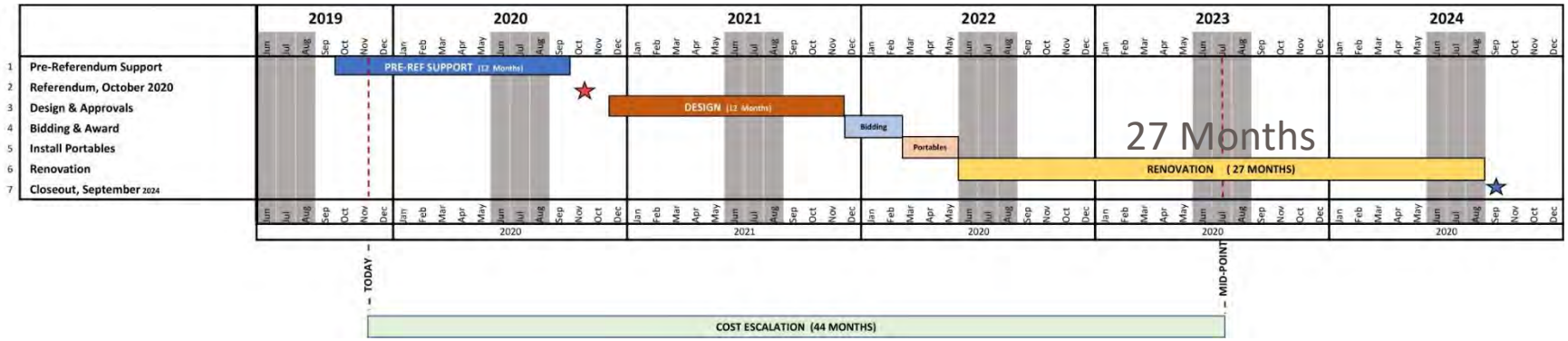
Option 1 | 1. Local, State & Federal Requirements

	CRITERIA	Total Points Available	OPTION 1 MAINTAIN EXISTING FHS TSKP RS OPINION	Comments
1	**LOCAL, STATE, AND FEDERAL REQUIREMENTS**			
	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	2.0	**No Change.**
	Address NEASC Requirements	4	4.0	**Addresses NEASC Requirements.**



Option 1 | 2. Programmatic Needs

	CRITERIA	Total Points Available	OPTION 1 MAINTAIN EXISTING FHS	
			TSKP	Comments
			RS OPINION	
2	**PROGRAMMATIC NEEDS**			
	Education Disruption (Phasing)	4	1.0	**Requires Swing Space and 27 Months of 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 1 | 2. Programmatic Needs

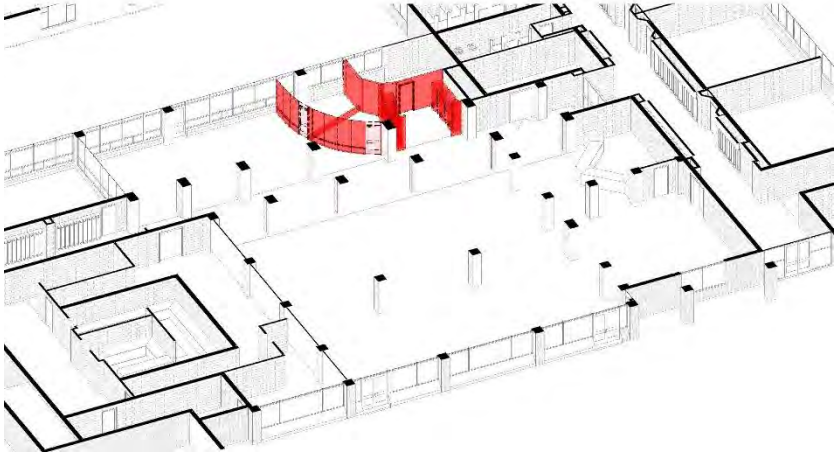
	CRITERIA	Total Points Available	OPTION 1 MAINTAIN EXISTING FHS	
			TSKP	Comments
			RS OPINION	
2	**PROGRAMMATIC NEEDS**			
	Education Disruption (Phasing)	4	1.0	**Requires Swing Space and 27 Months of Renovation**
	Satisfies Ed Specs	4	3.0	**Ed Specs cannot be completely satisfied.**
	Address Undersized Learning Spaces (Cafeteria, Gym, Media Center, Performing Arts)	4		
	Flexible and Collaborative Learning Environments	4		
	Space for New or Enhanced Educational Programming	4		

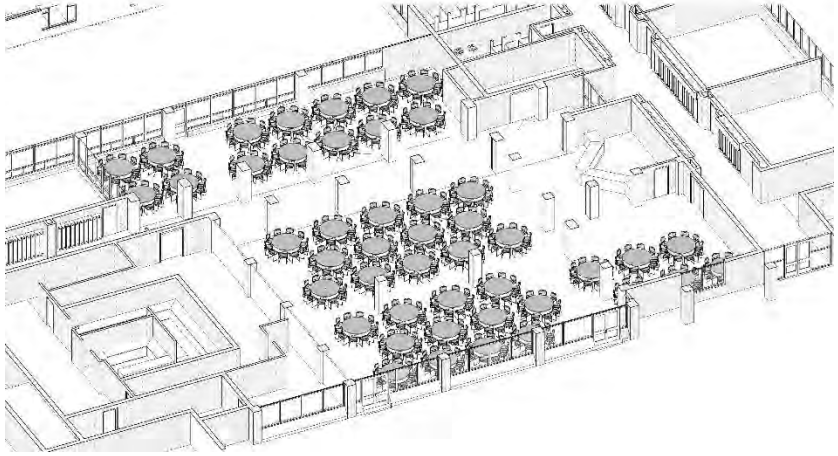
	Ed Specs	Option 1 Maintain Existing
	Estimated Square Feet	Actual Square Feet
A. Program Area	183,186	166,000
B. Building Services / Core Areas	61,414	45,000
C. Total Building Area per State	244,600	211,000
D. Exterior Wall Thickness	26,906	7,000
E. Total Gross Square Footage	271,506	218,000

80% of Ed Specs

Option 1 | 2. Programmatic Needs

	CRITERIA	Total Points Available	OPTION 1	
			MAINTAIN EXISTING FHS	
			TSKP	Comments
			RS OPINION	
2	**PROGRAMMATIC NEEDS**			
	Education Disruption (Phasing)	4	1.0	**Requires Swing Space and 27 Months of Renovation.**
	Satisfies Ed Specs	4	3.0	**Ed Specs cannot be completely satisfied.**
	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		
	Space for New or Enhanced Educational Programming	4		





Option 1 | 2. Programmatic Needs

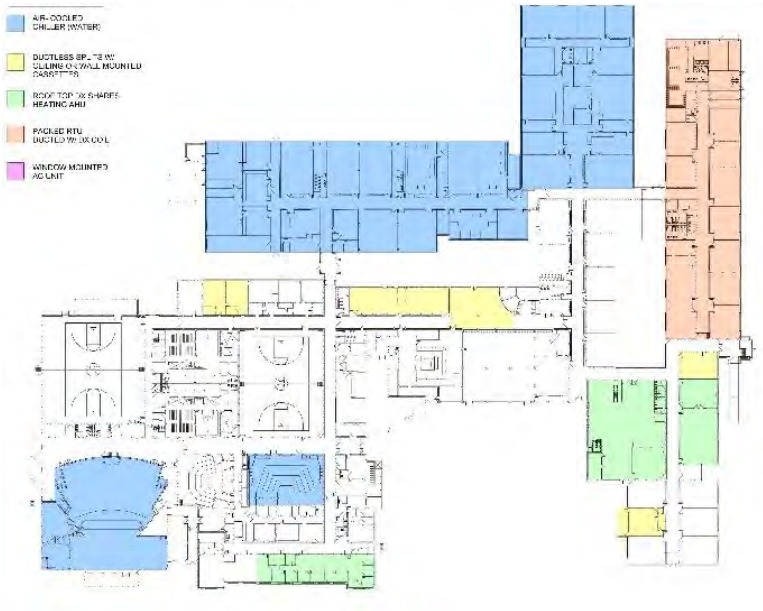
	CRITERIA	Total Points Available	OPTION 1	
			MAINTAIN EXISTING FHS	
			TSKP	Comments
			RS OPINION	
2	**PROGRAMMATIC NEEDS**			
	Education Disruption (Phasing)	4	1.0	**Requires Swing Space and 27 Months of Renovation.**
	Satisfies Ed Specs	4	3.0	**Ed Specs cannot be completely satisfied.**
	Address Undersized 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	1.0	**Included $2.8 Million for FF&E and Technology.**
	Space for New or Enhanced Educational Programming	4	0.0	**No New Space for Enhanced Educational Programming.**

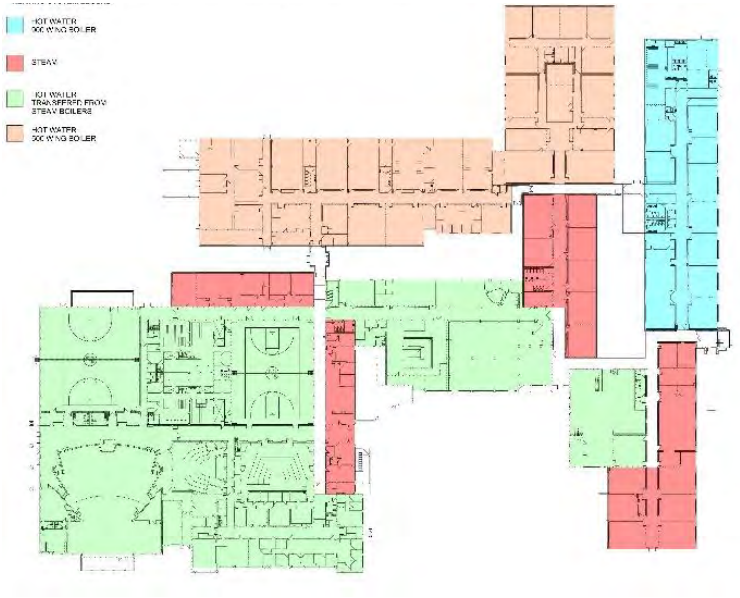
Option 1 | 3. Consolidation of Space

	CRITERIA	Total Points Available	OPTION 1	
			MAINTAIN EXISTING FHS	
			TSKP	Comments
			RS OPINION	
3	**CONSOLIDATION OF SPACE**			
	Reduce Sprawl and Improve Internal Circulation	4	0.0	**Not Reduced**
	Utilization of Space	4	2.0	**Unchanged.**
	Robotics	4	0.0	**Not Provided**
	Farmington Alternate High School	4	0.0	**Not Provided**
	School District Administration Offices	4	0.0	**Not Provided**

Option 1 | 4. Building Systems

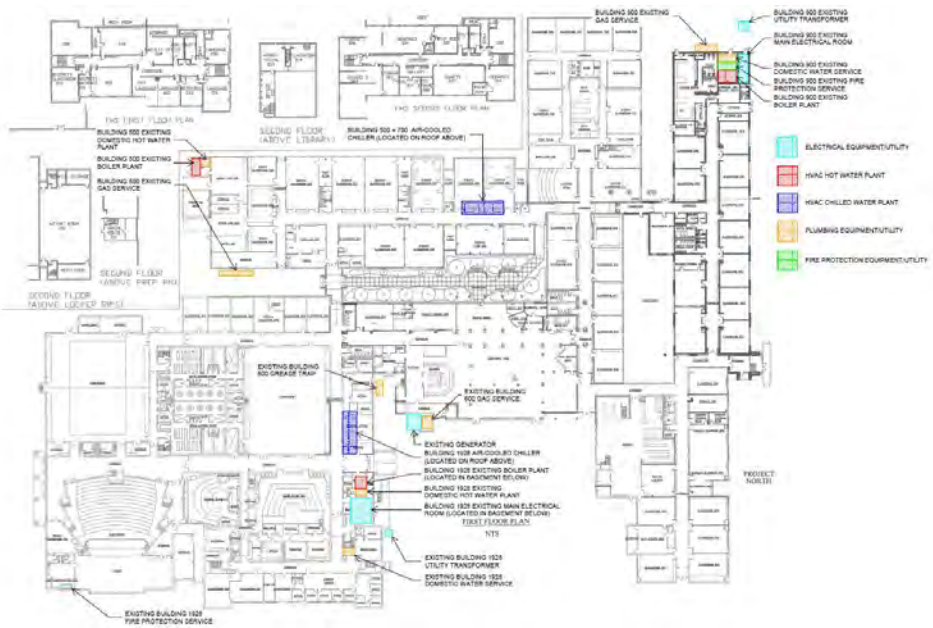
	CRITERIA	Total Points Available		OPTION 1	
				MAINTAIN EXISTING FHS	
				TSKP	Comments
				RS OPINION	
4	**BUILDING SYSTEMS**				
	Energy Efficiency	4		1.0	**No Change in Mechanical Configuration.**
	Mechanical, Electrical, Plumbing	4			
	Building Envelope	4			
	Green Design	4			





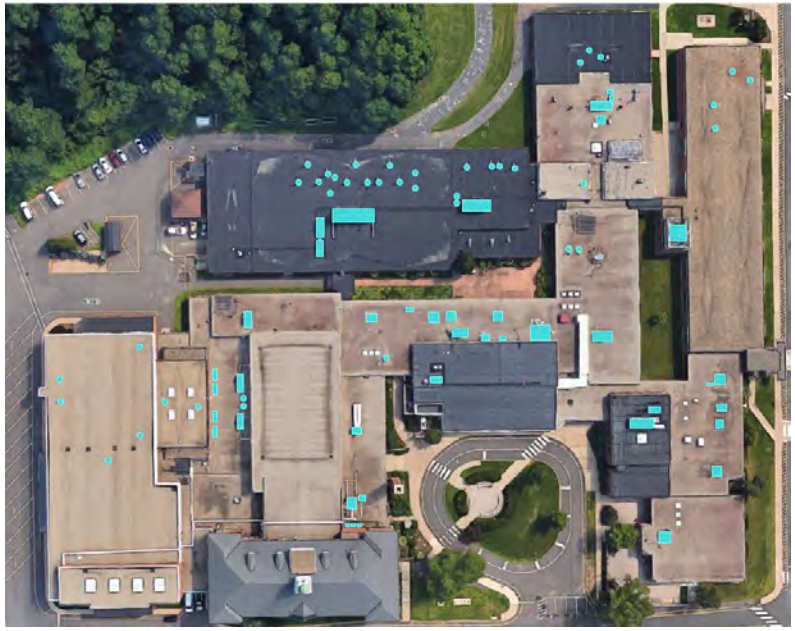
Option 1 | 4. Building Systems

	CRITERIA	Total Points Available		OPTION 1	
				MAINTAIN EXISTING FHS	
				TSKP	Comments
				RS OPINION	
4	**BUILDING SYSTEMS**				
	Energy Efficiency	4		1.0	**No Change in Mechanical Configuration.**
	Mechanical, Electrical, Plumbing	4		4.0	**Most Major Mechanical Components Replaced. Exist'g Distribution Unchanged.**
	Building Envelope	4			
	Green Design	4			



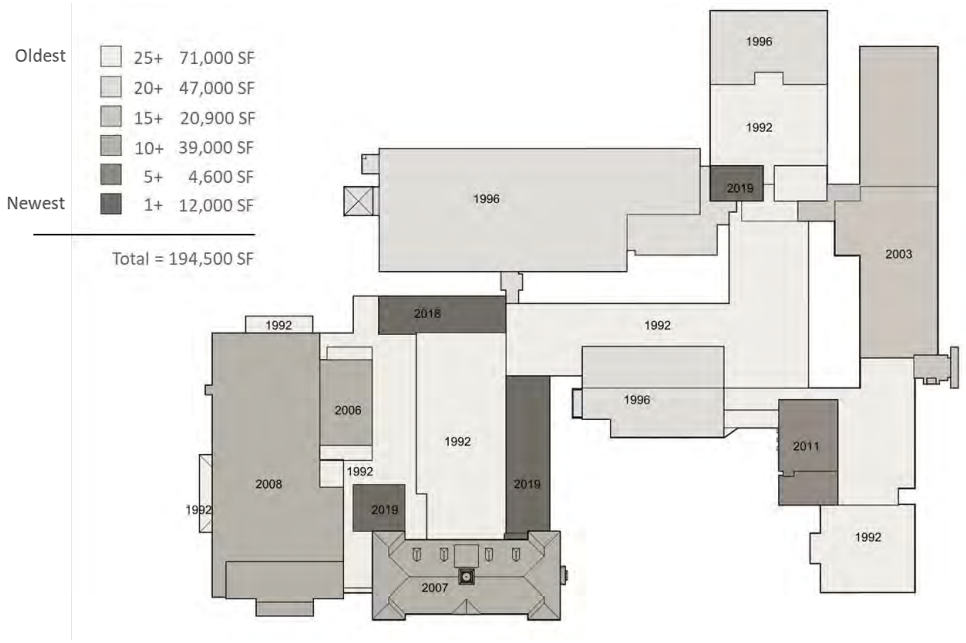
Option 1 | 4. Building Systems

	CRITERIA	Total Points Available	OPTION 1	
			MAINTAIN EXISTING FHS	
			TSKP	Comments
			RS OPINION	
4	**BUILDING SYSTEMS**			
	Energy Efficiency	4	1.0	**No Change in Mechanical Configuration.**
	Mechanical, Electrical, Plumbing	4	4.0	**Most Major Mechanical Components Replaced. Exist'g Distribution Unchanged.**
	Building Envelope	4		
	Green Design	4		



Option 1 | 4. Building Systems

	CRITERIA	Total Points Available		OPTION 1	
				MAINTAIN EXISTING FHS	
				TSKP	Comments
				RS OPINION	
4	**BUILDING SYSTEMS**				
	Energy Efficiency	4		1.0	**No Change in Mechanical Configuration.**
	Mechanical, Electrical, Plumbing	4		4.0	**Selected Major Mechanical Components Changed.**
	Building Envelope	4		3.0	**Roof and Roof Insulation, Plus Window Upgrades**
	Green Design	4			



- Roof membrane replacement
- Additional insulation at roofs
- Clean all exterior masonry
- Masonry and stone restoration for 1928 building
- Selected repointing
- Replacement of al single glazed windows
- Replacement of failing window units

Option 1 | 4. Building Systems

	CRITERIA	Total Points Available		OPTION 1	
				MAINTAIN EXISTING FHS	
				TSKP	Comments
				RS OPINION	
4	**BUILDING SYSTEMS**				
	Energy Efficiency	4		1.0	**No Change in Mechanical Configuration.**
	Mechanical, Electrical, Plumbing	4		4.0	**Selected Major Mechanical Components Changed.**
	Building Envelope	4		3.0	**Roof and Roof Insulation, Plus Window Upgrades**
	Green Design	4		0.0	**No Green Design.**

Potential Geothermal Field

Based on the building area and program, approximately 200 geothermal boreholes at 495 feet depth are required.

Option 1 | 4. Building Systems

	CRITERIA	Total Points Available		OPTION 1	
				MAINTAIN EXISTING FHS	
				TSKP	Comments
				RS OPINION	
4	**BUILDING SYSTEMS**				
	Energy Efficiency	4		1.0	**No Change in Mechanical Configuration.**
	Mechanical, Electrical, Plumbing	4		3.0	**Selected Major Mechanical Components Changed.**
	Building Envelope	4		3.0	**Roof and Roof Insulation, Plus Window Upgrades**
	Green Design	4		0.0	**No Green Design.**

Existing electrical utility bills indicate the consumption of FHS to be 1.6 million kWh

Typical PV panel generates 20 watts/sqft

Total available sunshine in the Northeast is 1200 hours/year

Total available area at FHS – 270,000 sqft

Assuming 25% of available free area for PV array – 67,500 sqft

Based on this, PV array can generate electricity to offset all current electrical usage

20watts x 1200 hours/yr x 67,500 sfqt =

1.6 million kWh of electricity generated

Option 1 | 5. Site Improvements

Option 1 | 5. Site Improvements

CRITERIA		Total Points Available	OPTION 1	
			MAINTAIN EXISTING FHS	
			TSKP	Comments
			RS OPINION	
5	**SITE IMPROVEMENTS**			
	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.**
	ADA Compliance	4	4.0	**ADA Compliant**
	Site Layout Plan	4	4.0	**Adequate Site Layout Plan. Better Traffic Configuration.**

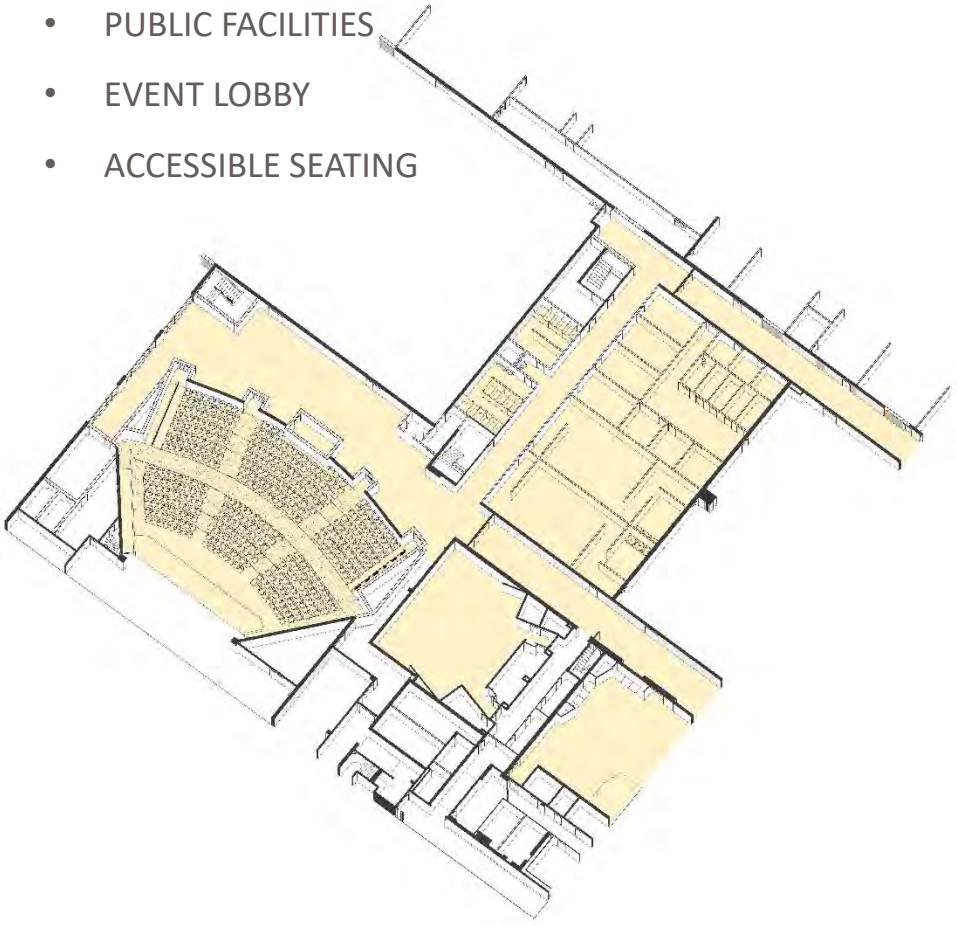
Option 1 | 6. Benefits to Community

EXISTING:

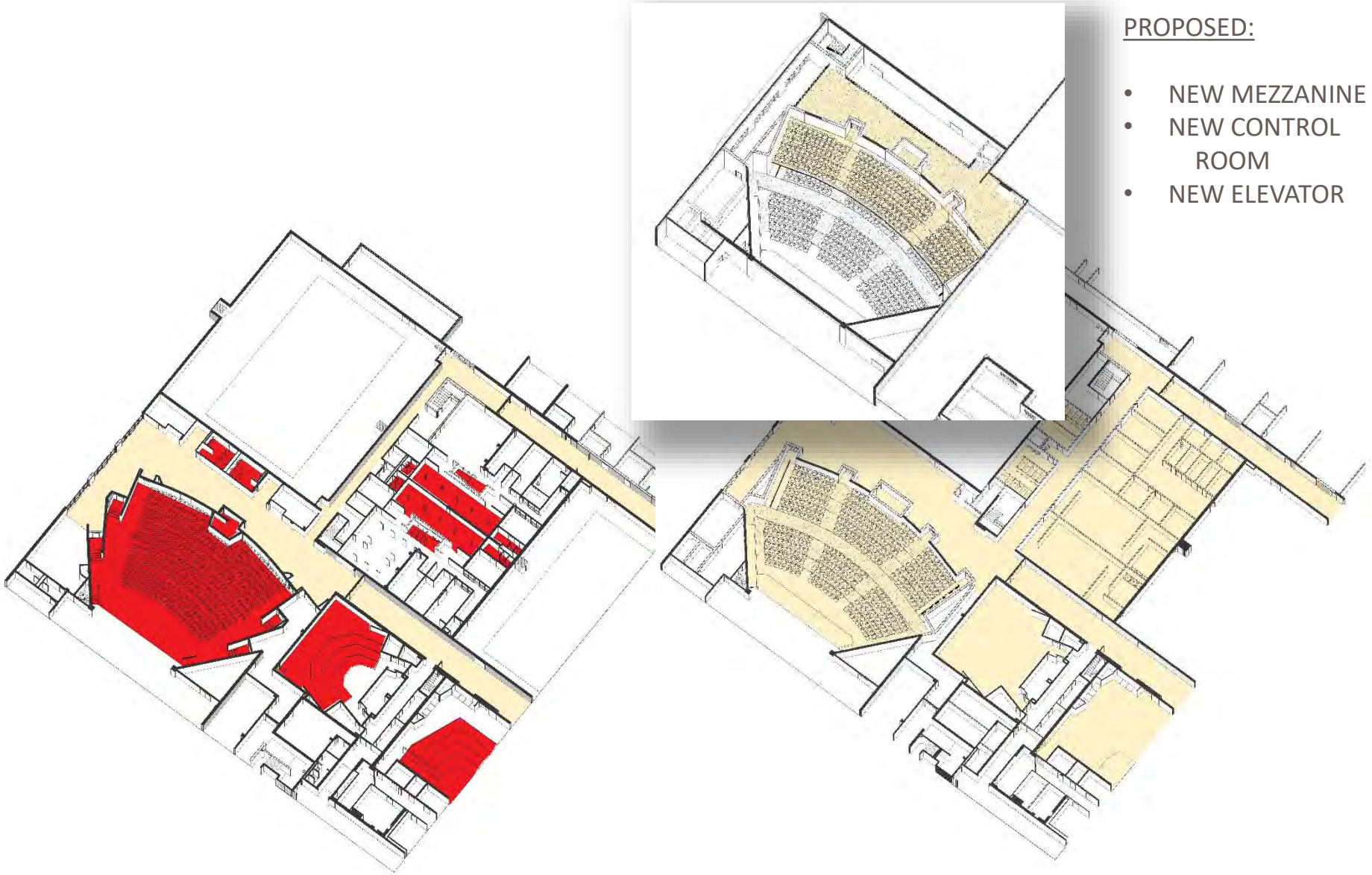
- ADAPTED ATHLETIC SPACES
- NARROW HALLS
- INACCESSIBLE FACILITIES
- TIGHT LOBBY
- INACCESSIBLE SEATING

PROPOSED:

- PURPOSE BUILT ATHLETIC SPACES
- WIDER HALLS
- PUBLIC FACILITIES
- EVENT LOBBY
- ACCESSIBLE SEATING



Option 1 | 6. Benefits to Community

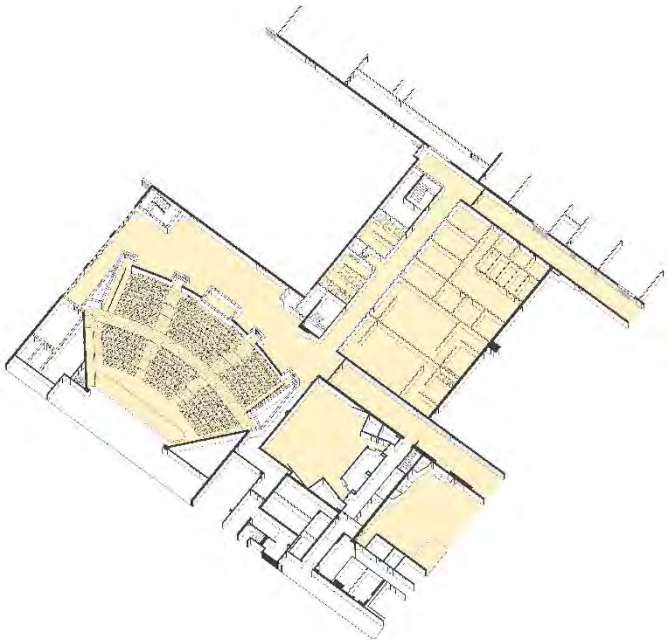


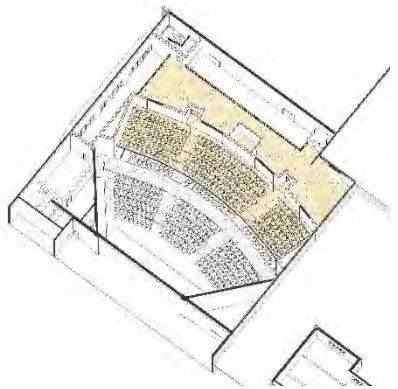
PROPOSED:

- NEW MEZZANINE
- NEW CONTROL ROOM
- NEW ELEVATOR

Option 1 | 6. Benefits to Community

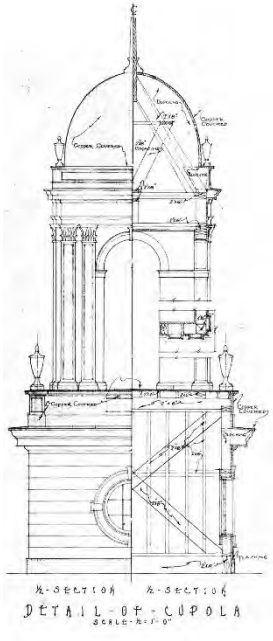
	CRITERIA	Total Points Available	OPTION 1	
			MAINTAIN EXISTING FHS	
			TSKP	Comments
			RS OPINION	
6	**BENEFITS TO THE COMMUNITY**			
	Community Use of the Building	4	2.0	**Provides accessibility to existing public spaces.**
	Shelter in Place	4	0.0	**Not addressed.**





Option 1 | 7. Fit & Feel for Farmington

CRITERIA		Total Points Available	OPTION 1	
			MAINTAIN EXISTING FHS	
			TSKP	Comments
			RS OPINION	
7	**FIT AND FEEL FOR FARMINGTON**			
	Internal Design	4	2.0	**No change in internal design.**
	External Design	4	3.0	**Improves appearance of legacy building. Preserves building for the future.**
	Overall fit and feel for Farmington	4	3.0	**Improves site appearance. Good conservation of resources.**



The End

TSKP Option I Cost Estimate

TSKP Option I Maintain Current Facility	
Item	**Cost Estimate**
Architectual Design Fee	$ 3,300,000.00
reduced to match projected duration	
Proffessional Fees	$ 2,576,041.00
Construction Costs	$ 29,946,403.00
Alternates	$ 8,745,395.00
Furniture/Equipment/ Technology	$ 2,795,500.00
5% Owner Contingency	$ 2,500,000.00
Total Project Cost	$ 49,863,339.00

CRITERIA	PRESENTATION 1 OF 3- JANUARY 8, 2020 OPTION 1 MAINTAIN EXISTING FHS		PRESENTATION 2 OF 3- JANUARY 15, 2020 OPTION 2 RENOVATE EXISTING FHS AS NEW WITH ADDITIONS		PRESENTATION 3 OF 3- JANUARY 22, 2020 OPTION 3 NEW FHS BUILDING	
	TSKP	QA&M	TSKP	QA&M	TSKP	QA&M
TOTAL PROJECT COST: Total Project Cost includes construction and soft costs. This is the number that would appear on the referendum ballot and interest is not included in the total project cost.	$49,863,339					
LESS STATE REIMBURSEMENT OF ELIGIBLE COSTS(NOT ALL ITEMS ELIGIBLE): Farmington's reimbursement rate depends on the type of building project that is proposed. A renovation is up to 30%, and a new building is up to 20%. However, the exact reimbursement is not known until the very end of a project (after auditors review the final project).	$4,188,520					
NET PROJECT COST:	$45,674,819		0.0	0.0	0.0	0.0
ADDITIONAL CAPITAL EXPENDITURES OVER 20 YEARS	$1,170,000					
TOTAL PROJECTED COST OVER 20 YEARS--TOWN SHARE	$46,844,819					
Tax Impact Year 1 *	$229.16					
The Tax Impact is for the Farmington High School Building Project ONLY. The tax impact is calculated based on the Average Residental Assessment of $226,777.	*Costs will decrease by approximately $4.27/year over 20 years					
ANNUAL OPERATIONAL COST: This cost is the best estimate of running the building compared to what it costs to run the building now.						
ENERGY COST						
MAINTENANCE COST						
TAX IMPACT						