New Fairfield Schools Study
High School & Consolidated School

New Fairfield Board of Education | February 7, 2019

QA+M architecture

SPECIALIZED DESIGN TEAM

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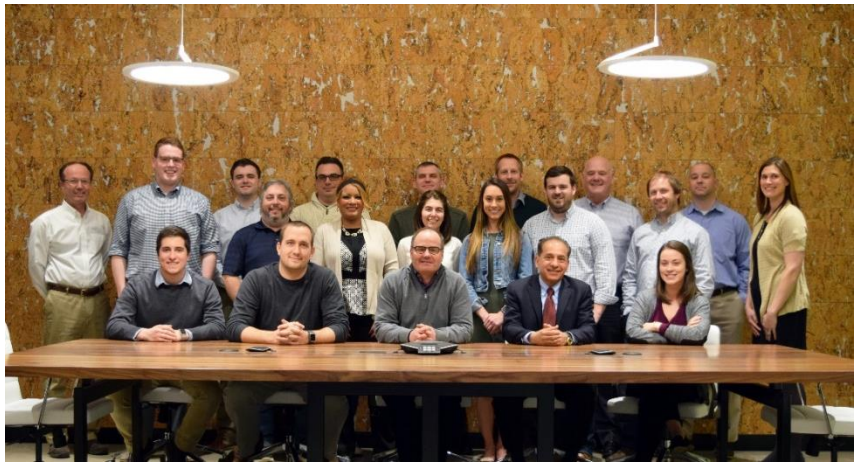
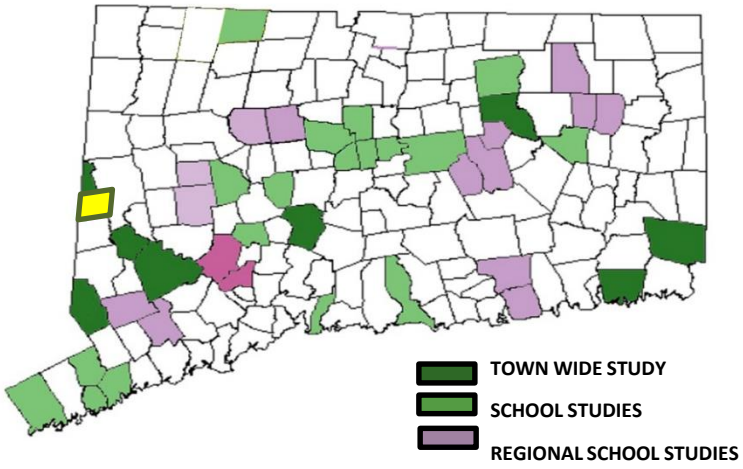
MEP Engineering Design
RZ Engineers

WILL WALTERS, L.A.
Landscape Architecture
Benesch

CONNECTICUT SCHOOL EXPERIENCE





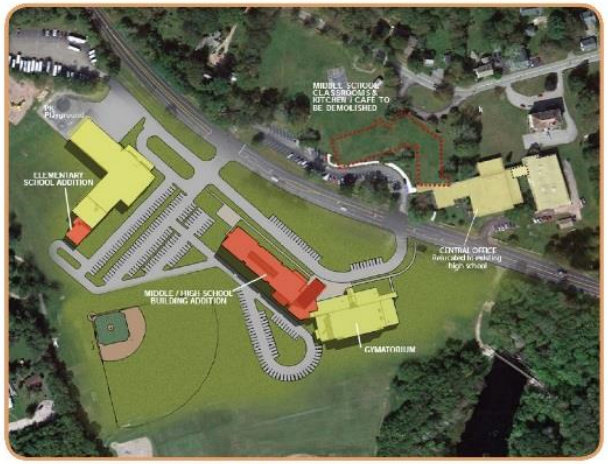
- Farmington CT, Full-Service Architectural Firm
- 34 Full-Time Employees, 15 CT Licensed Architects: (44%) and 3 Interior Designers
- Specialize in Academic Architecture & Educational Facility Planning
- Educators on Staff
- Design for 21st Century Learning
- 3D / Revit Expertise
- Significant experience with CT State OSCG&R

North Stonington Elementary School
North Stonington, CT

North Stonington Elementary School - Relocate the 6th grade to NSES for a PK thru 6th Configuration: There is space available on the second floor of NSES to accommodate the 6th grade students. By relocating the 6th grade students to the elementary school the town is able to get the full reimbursement of 46.07% for the project at this school. The project includes a 2,600 SF addition for a central kitchen. The existing building would be fully renovated to an "As New" status. The project would meet all educational needs.

STONINGTON ELEMENTARY SCHOOL
Floor Plans and Renderings

QUISENBERRY ARCARI ARCHITECTS LLC



The scope for both projects include:

- Address Hazmat and health concerns in all schools.
- Address storage issues in each school
- Consider alternative energy / solar etc.
- Address security at the schools
- Address all NEASC citations
- Title IX at all buildings
- Meet educational specifications
- Maximize state reimbursement
- Address building and fire codes concerns in all schools.

WHEELER HIGH SCHOOL
Concept Renderings

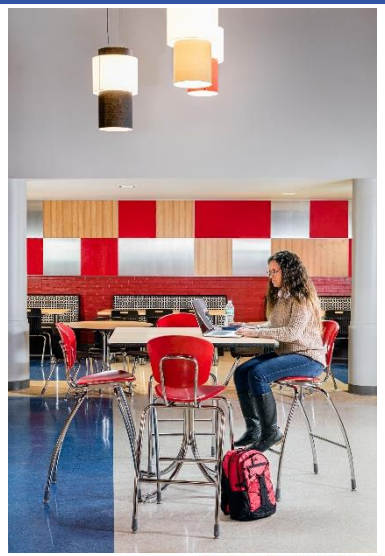
Wheeler Middle & High School - 7th thru 12th Grade Configuration: The scope of the project demolishes a large section of the existing school and relocates the central offices to the 1996 addition at the existing high school. The project will include a 44,500 SF addition at the gymatorium for a consolidated school at the west side of Route 2. The existing gymatorium building would be renovated to meet code and educational program requirements. The project would meet all educational needs. Security will be upgraded and the Route 2 connector will be not be modified.

North Stonington Elementary School

North Stonington, CT

Wethersfield High School Comprehensive Renovation

Wethersfield, CT

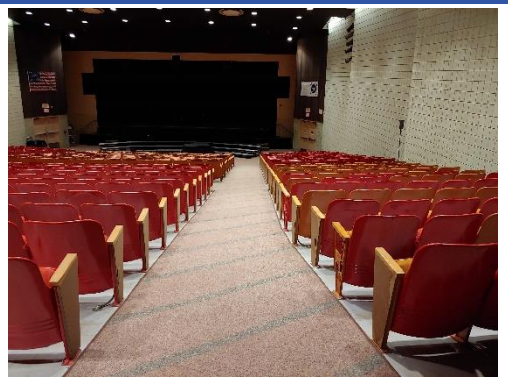


HIGH SCHOOL – Conditions Summary

SITE:
Parking capacity & site circulation
Well system

BUILDING:
Energy efficiency
Interior partitions
Auditorium
Aged pool & locker rooms
Aged materials - interior and exterior
Servery ADA compliance
Groundwater flooding
Elevator & ADA accessibility
Natural light
Meeting, office, and collaboration space

MEP SYSTEMS:
Sprinkler system
Pool ventilation & dehumidification
Heating electric, end of life, limited A/C
Fire Alarm

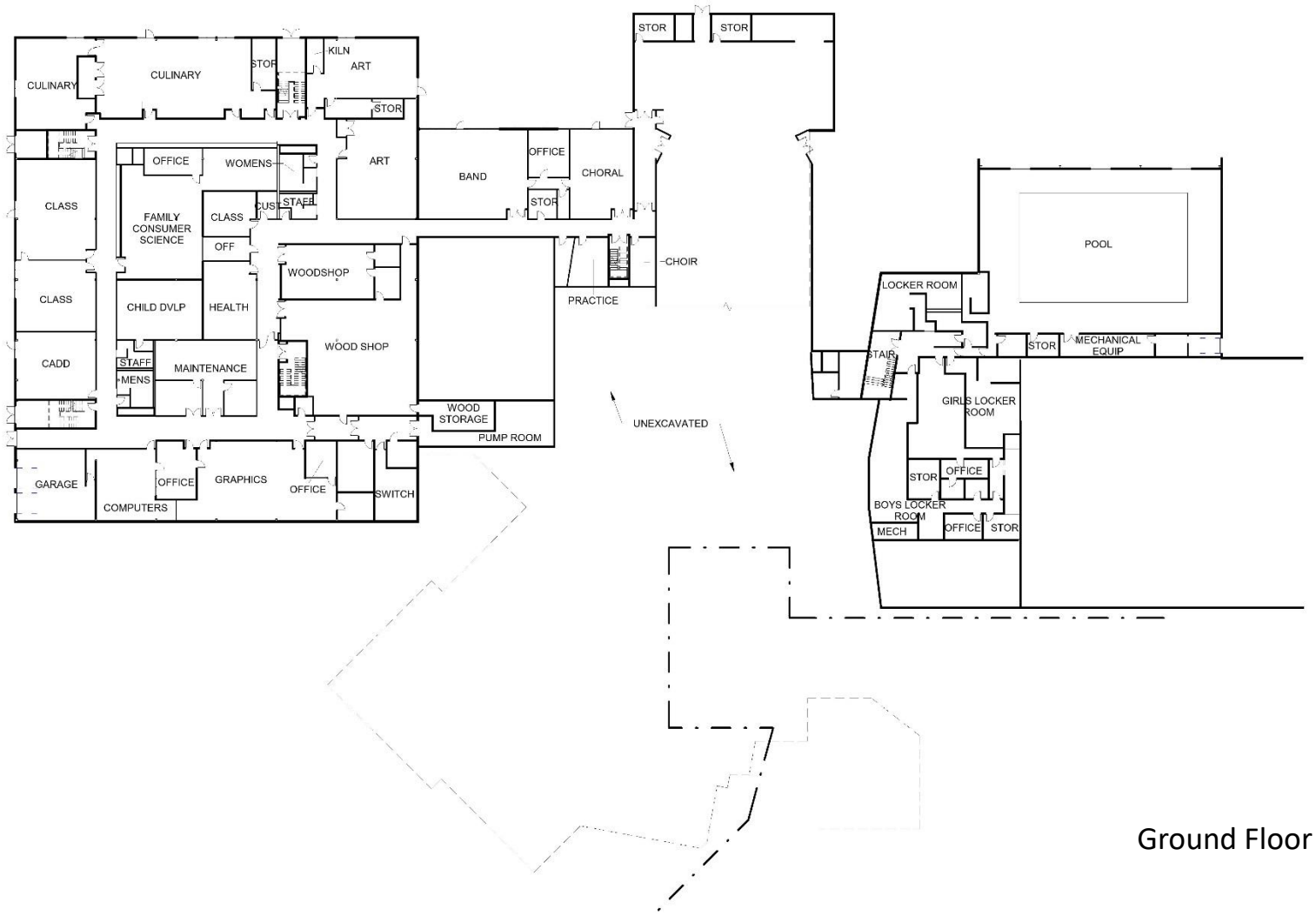


HIGH SCHOOL – Conditions Summary

BUILDING DOCUMENTATION – Site Layout

HIGH SCHOOL – Conditions Summary

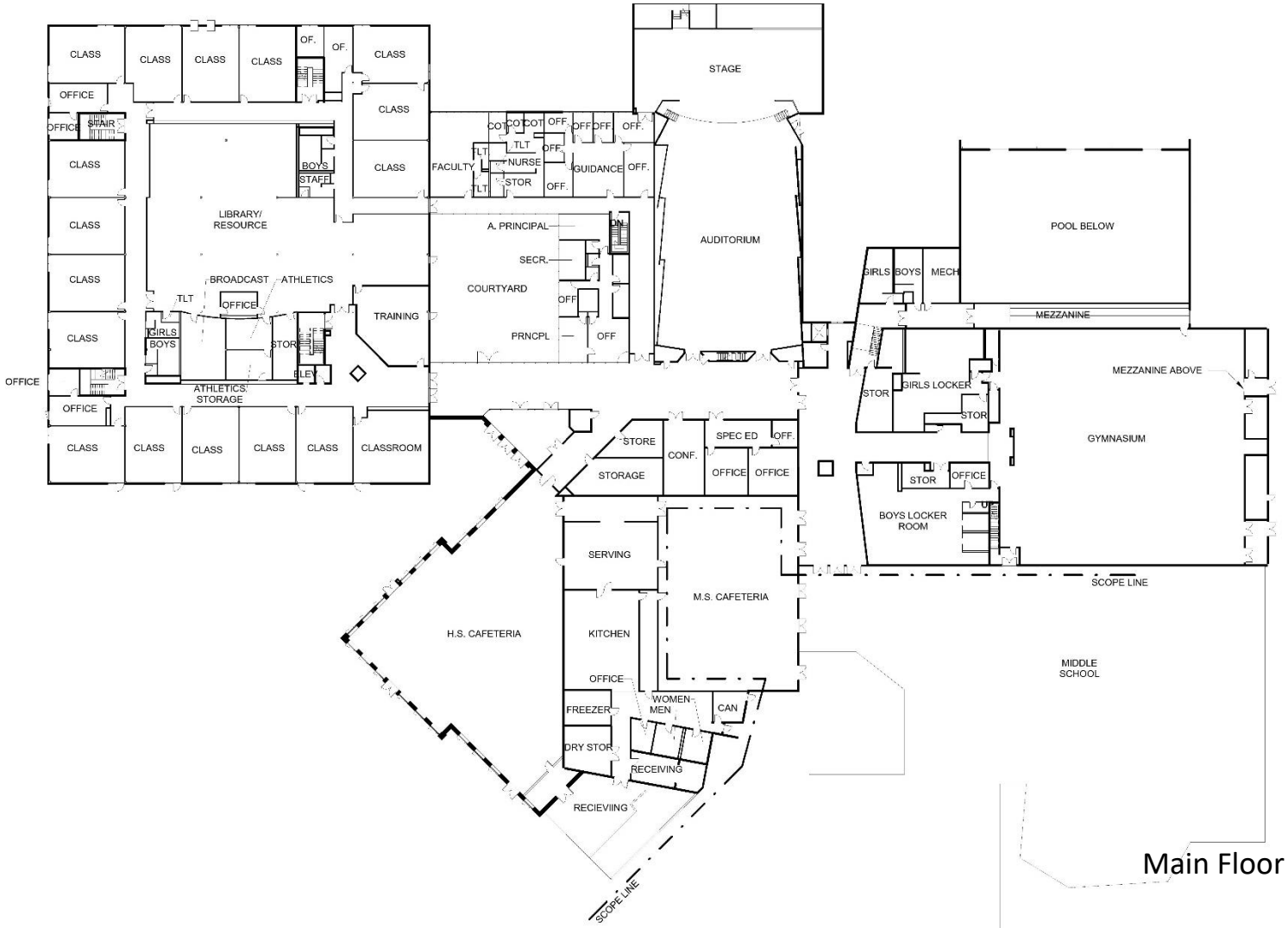
BUILDING DOCUMENTATION



Ground Floor Plan

HIGH SCHOOL – Conditions Summary

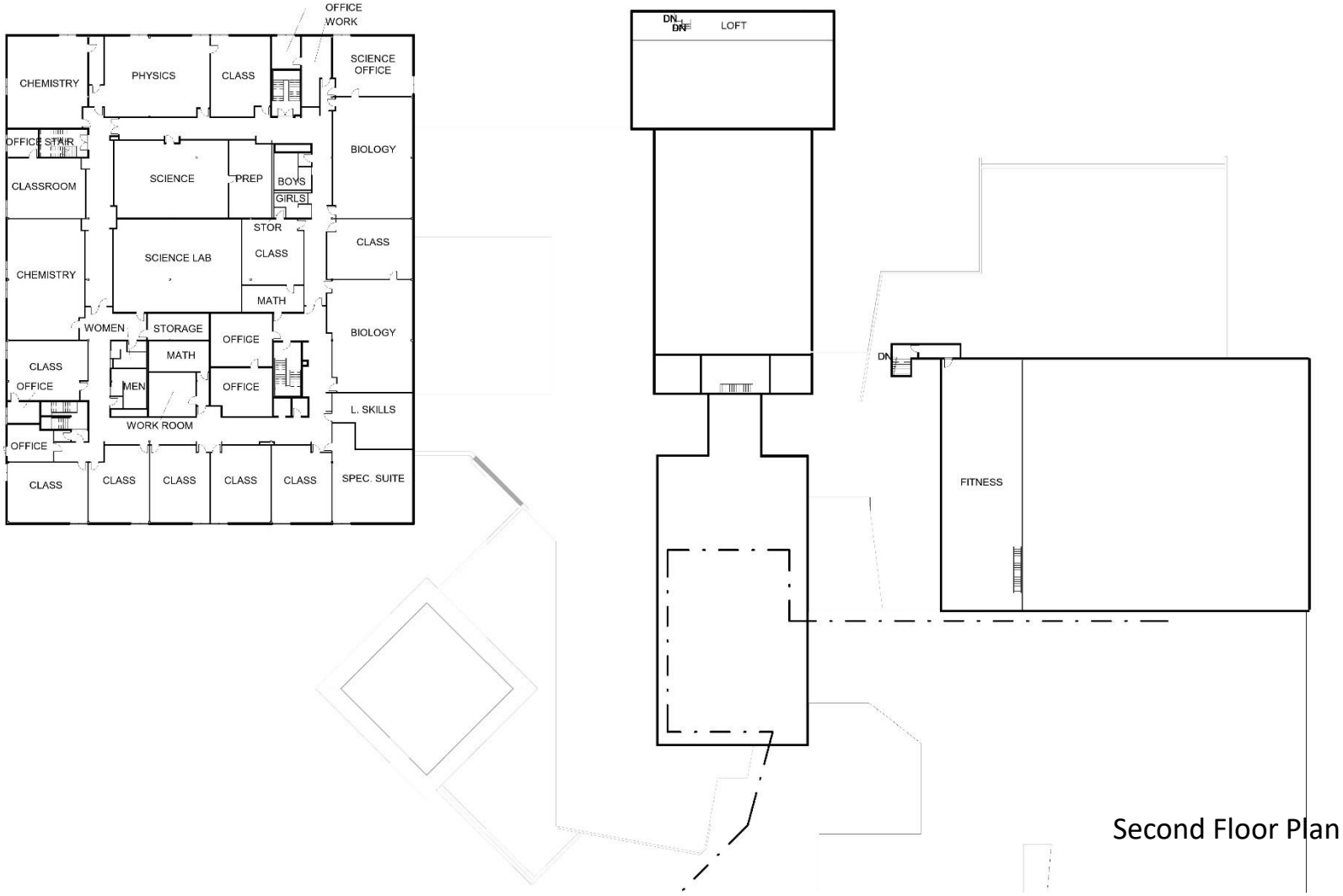
BUILDING DOCUMENTATION



Main Floor Plan

HIGH SCHOOL – Conditions Summary

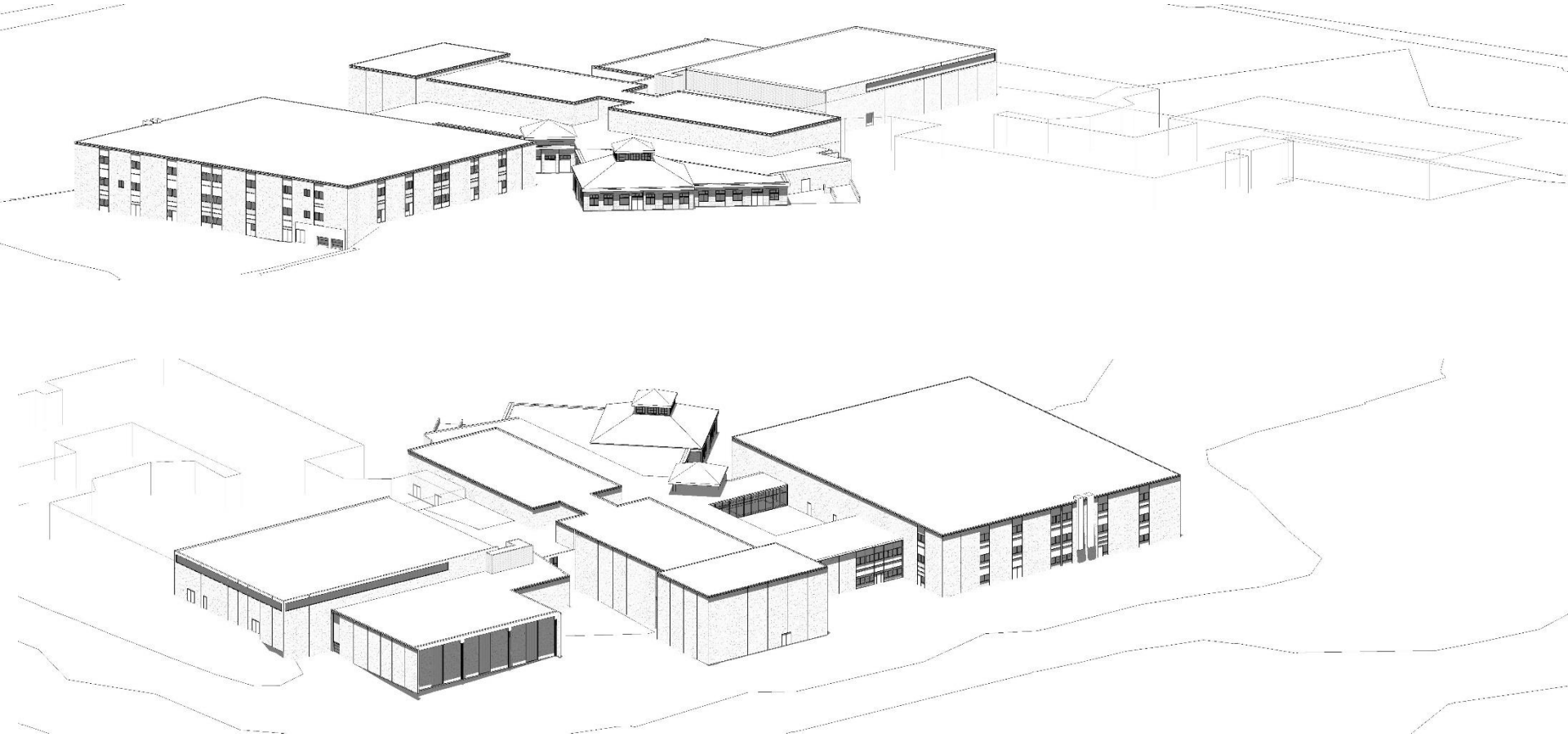
BUILDING DOCUMENTATION



Second Floor Plan

HIGH SCHOOL – Conditions Summary

BUILDING DOCUMENTATION – Building Model



CONSOLIDATED SCHOOL – Conditions Summary

SITE:
Parking capacity & site circulation
Well system

BUILDING:
Energy efficiency, roof, leaks
Aged materials - interior and exterior
Kitchen, servery and cafeteria
Groundwater flooding
Elevator & ADA accessibility
Natural light
Layout
Meeting, office, and collaboration space
Phys Ed and assembly spaces

MEP SYSTEMS:
Sprinkler system
Portions of HVAC systems

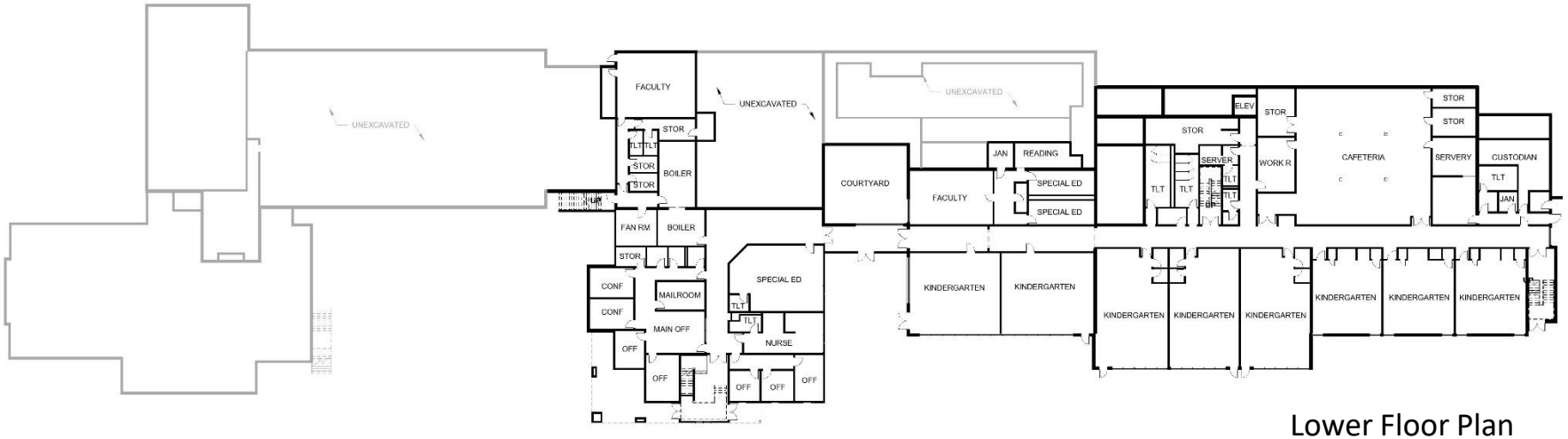
CONSOLIDATED SCHOOL – Conditions Summary

BUILDING DOCUMENTATION – Site Layout

CONSOLIDATED SCHOOL – Conditions Summary

BUILDING DOCUMENTATION – Floor Plans

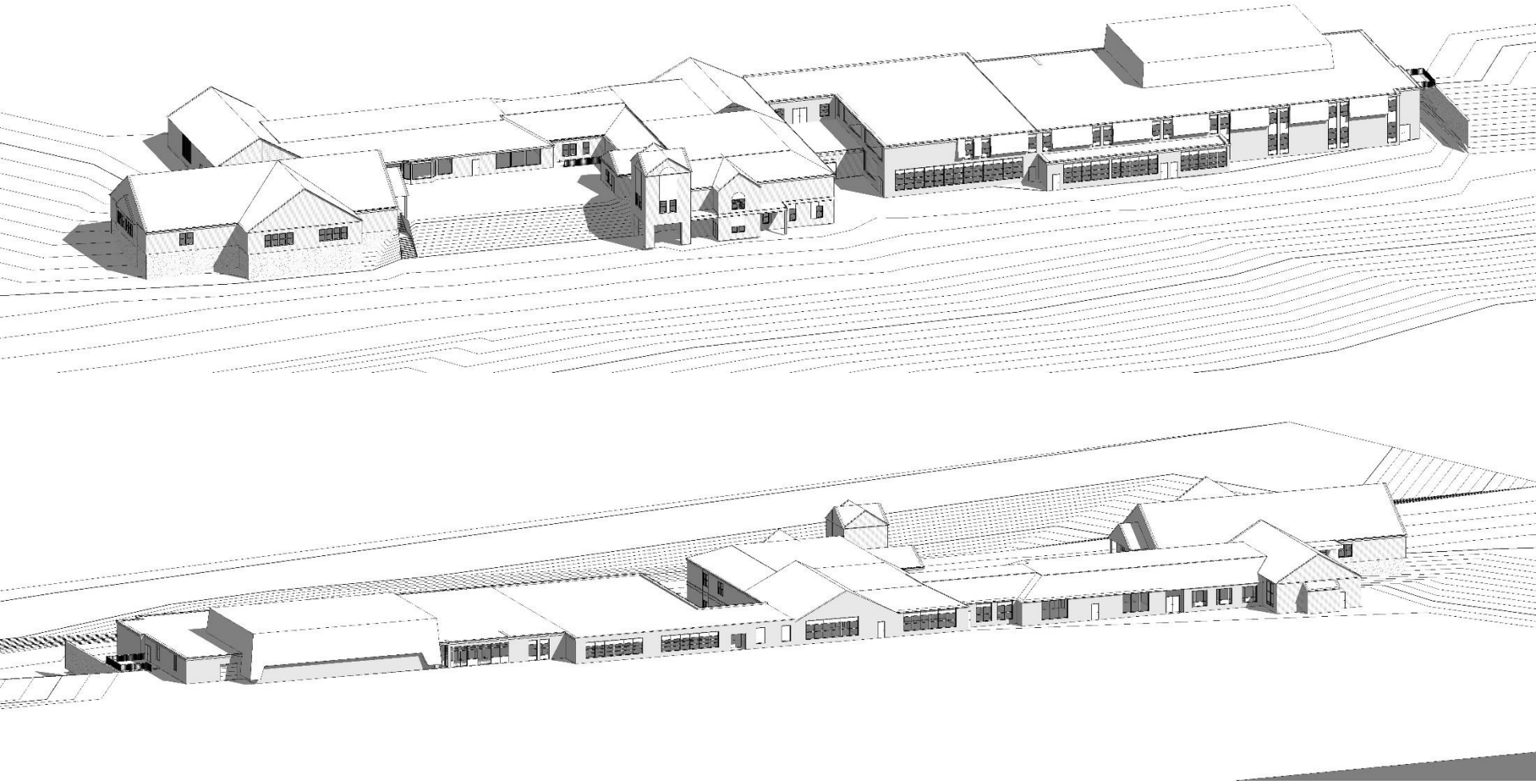
Upper Floor Plan



Lower Floor Plan

CONSOLIDATED SCHOOL – Conditions Summary

BUILDING DOCUMENTATION – Building Model



Recommended Next Steps - Summary

1) Enrollment Projections (in process)

2) Educational Programming

3) Comparative Analysis of Concept Design Options vs. Preventive Maintenance Plan

4) Dialogue and Application to CT State OSCG&R for grant assistance

PROCESS - Educational Programming

PROGRAM ANALYSIS

Enrollment Projections

- Historical Analysis
- State Reimbursement Impact

Educational Program

- Educational Visioning
- 21st Century Learning Environments
- Educational Trends & Design Considerations
- Space Needs
- Grade Configurations
- Special Education Needs
- Facility Parity
- Safety & Security
- Technology
- Educational Specifications

PROCESS– Educational Programming

21st Century Schools - INDIVIDUAL MOST IMPORTANT ISSUES

Places for Learning

Integrating the Curriculum

Most Effective Learning Modalities

School Structure

Project Based Learning

OVERALL ORGANIZATION

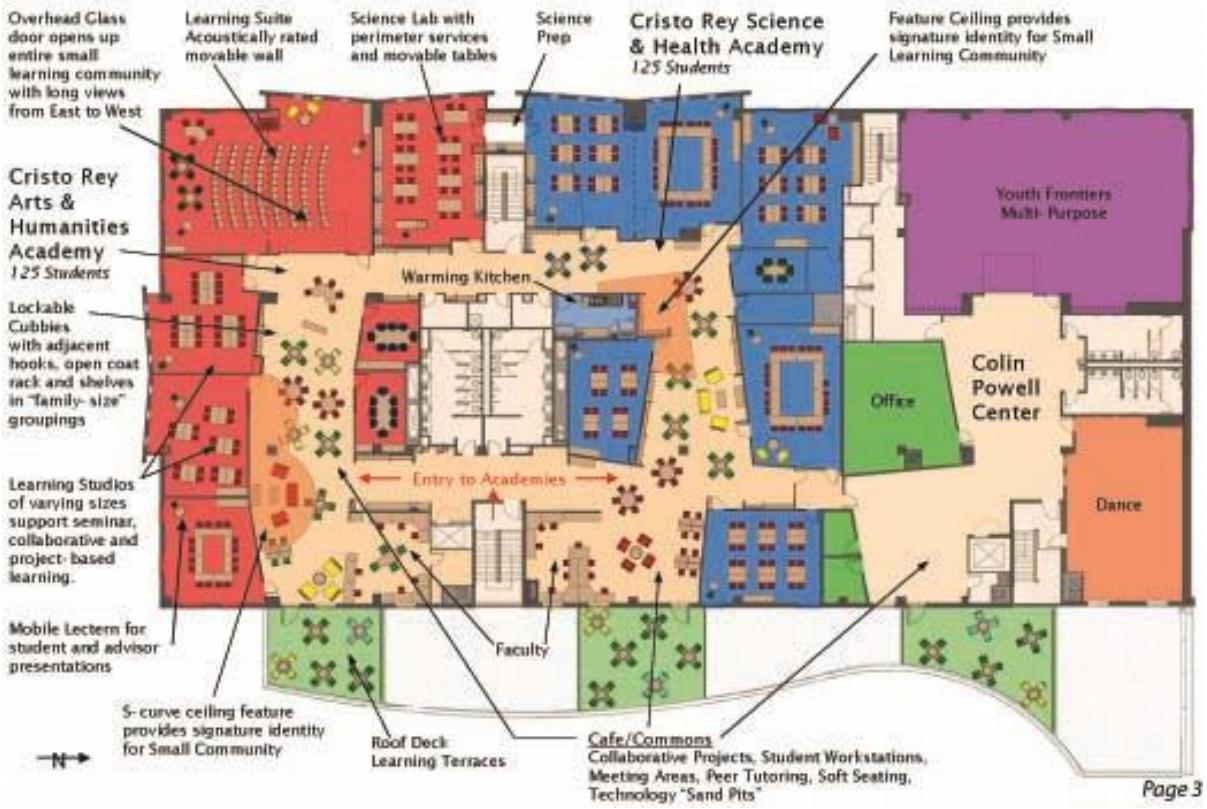
ISSUE	VERY IMPORTANT	IMPORTANT	DON'T KNOW	MAYBE NOT	NOT IMPORTANT	SCARY TO ME
1 Learning Pyramid	19	14	1		1	1
2 Gardner: Multiple Intelligences	24	9		2		1
3 Integrate arts in core learning	20	13	2	1		1
4 Environmental Sciences/Sustainable Living/STEM/STEAM/Engineering	21	9	2			
5 Relationships: Dunbar's Law, "Magic of 150"	11	7	11	4	2	
6 Computers for Learning: Adaptive Learning, Blended Learning, Computer Games Learning	16	14	3			1
7 Revised Bloom's Taxonomy	13	16	5	1		
8 Daggett: Relevance + Rigor Framework	11	20	4	1		
9 21st Century Skills	23	10	1			1
10 Jerald's Research on 21st Cent Education	18	10	2	2		
11 Project Based Learning: Café Paresien	24	12			2	
12 Deeper Learning	15	14	4			
13 Making Things to Learn	18	12	1	2		

ISSUE	VERY IMPORTANT	IMPORTANT	DON'T KNOW	MAYBE NOT	NOT IMPORTANT	SCARY TO ME
14 Small Learning Communities	14	11	3	1	2	
15 Flexible, Varied, Brain Based Furniture	10	12		2	1	
16 New Technology Close by	15	13	2		1	
17 21st Century Learning Spaces	13	9	1	1	1	2
18 Teacher Planning Centers	9	13	5	3	1	1
19 The End of the Library as we Know It Today	12	18	1			
20 The End of the Cafeteria as we Know It Today	16	11	4	2	1	
21 Flexibility for Change	17	8	4		2	
22 Collaboration/Breakout/Commons	11	15+	4	1		
23 Teacher Teaming/Collaboration	11	12	5	1	2	1
24 Integrated Applied Learning/Making Things/Design Thinking	9	14	2	1	1	1
25 End of the Classroom as We Know it Today	13	10	4	1	1	1

PROCESS – Educational Programming

places for learning – most appropriate concepts for core curriculum

PROCESS– Educational Programming

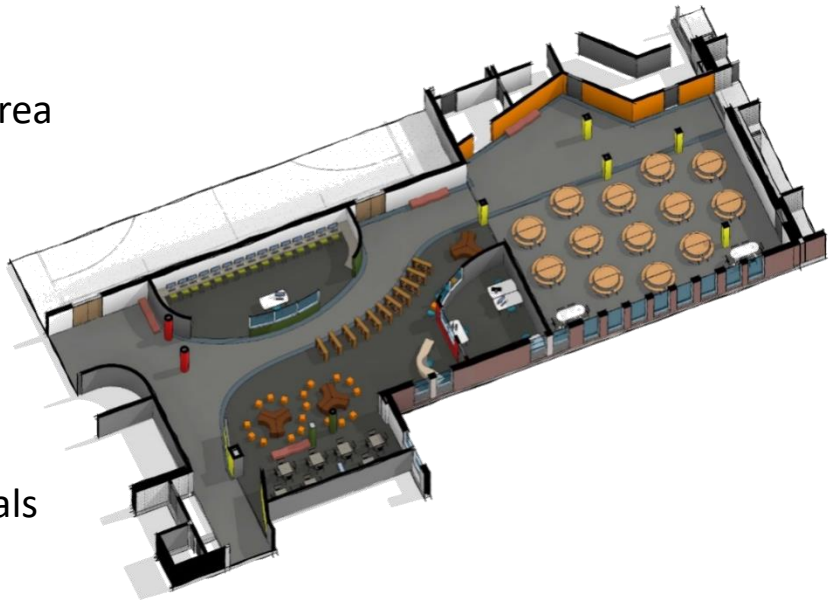


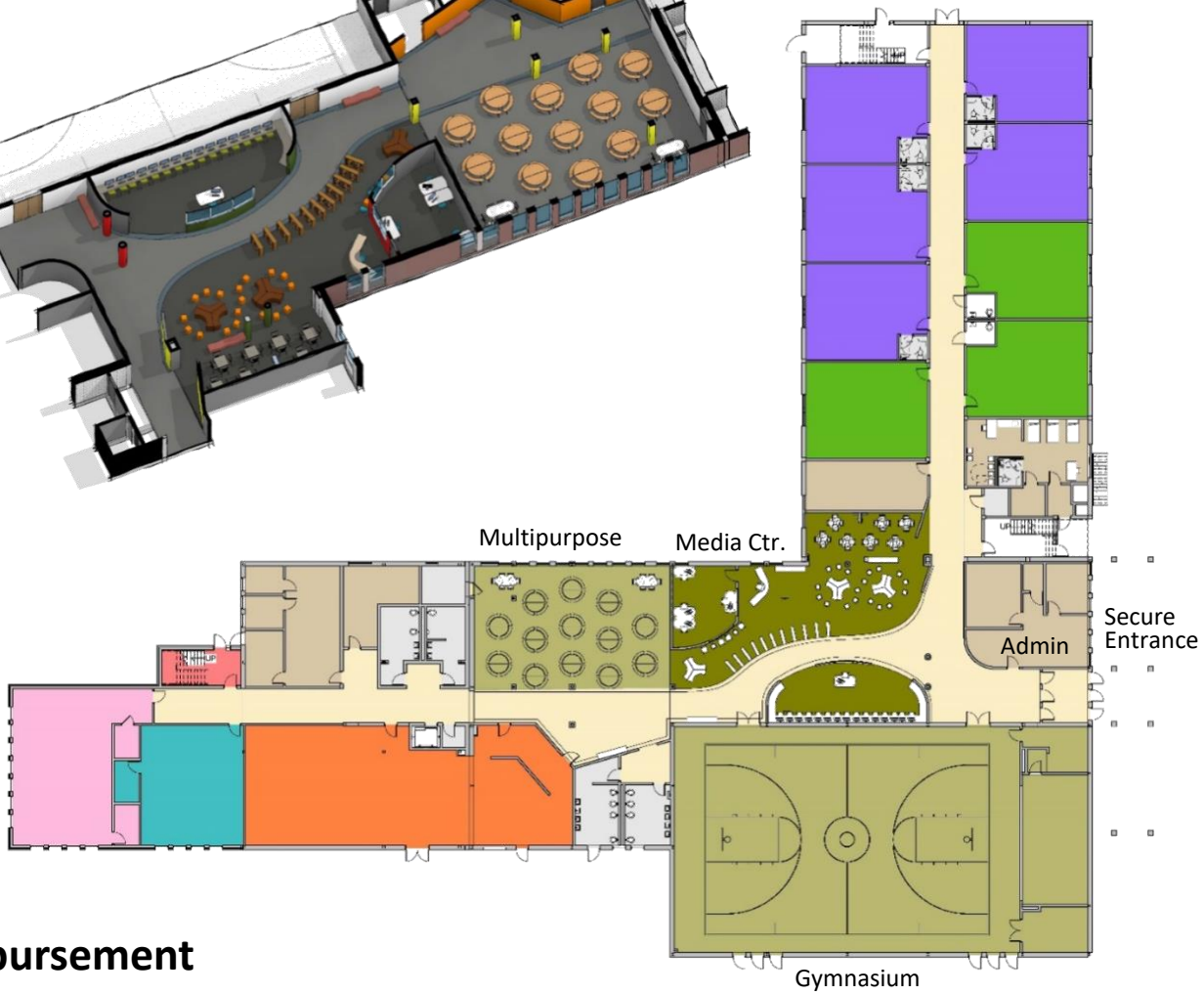
places for learning – most appropriate concepts for core curriculum

PROJECT APPROACH – Concept Designs

Welcoming Entrance
Safety & Security
Playscapes, separate Pre-K play area
Separation of Vehicular Traffic
Natural Light
Acoustical Design
Appropriate Finishes
Environmental Comfort
Review District's Technology Plan
Review District's Security Plan
Meet with town regulatory officials

Identify OSCG Requirements
Acoustical Standards
Indoor Air Quality
ASHRAE Standards
Hazmat Natural Lighting
High Performance





Concept Design Options –
Budget Estimates & State Reimbursement

PROCESS – Design Considerations

Construction Phasing

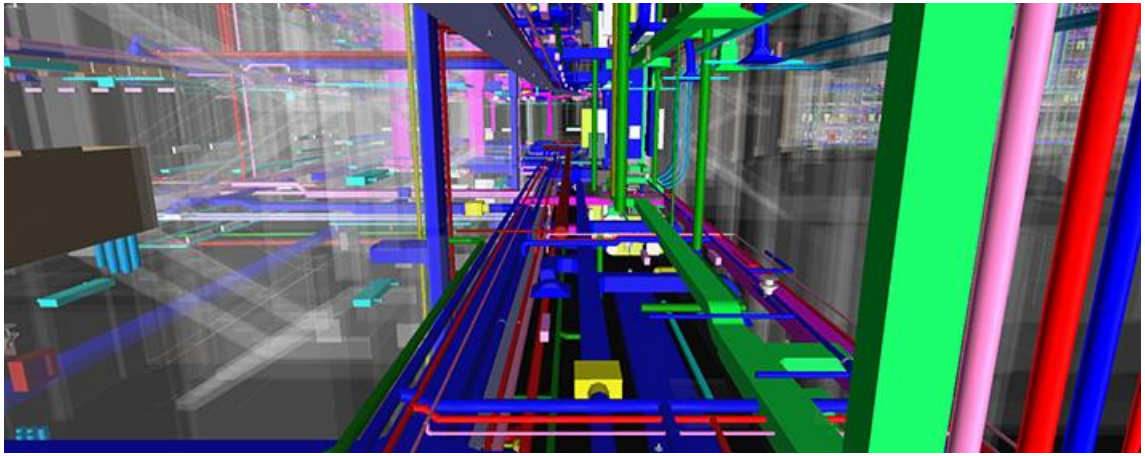
- Separation Construction & School Traffic
- Construction Staging Areas
- Continuity of Utilities & Services

Constructability & Site Logistics

- Construction Access
- Demolition Impact
- HAZMAT Management
- Erosion & Sedimentation Control

Energy Conservation + Sustainability

- Mechanical design options
- Energy Efficiency
- Maintenance & Controls
- First cost / Operating cost
- Full 3D technology coordination



PROCESS – State OSCGR

State Grant Evaluation

New Facility Options
Alterations & Additions
Renovation Status
Space Standards
New Design Guidelines
Maximizing Reimbursement
Concept Design Review
Grant Applications - SGC-1049

TASK SCHEDULE

February – March :
Educational Programming

- Meet with Educational Programming Group
- Workshops and Research
- Compile Ed Specs

April - May:
Concept Designs & Estimates

- Community Engagement
- Explore options and compare priorities

June:
Grant Application

- Present data and concepts to OSCGR
- Explore potential grant funding
- Compile extensive documents required for application


QA+M
architecture

PROCESS – Site Design

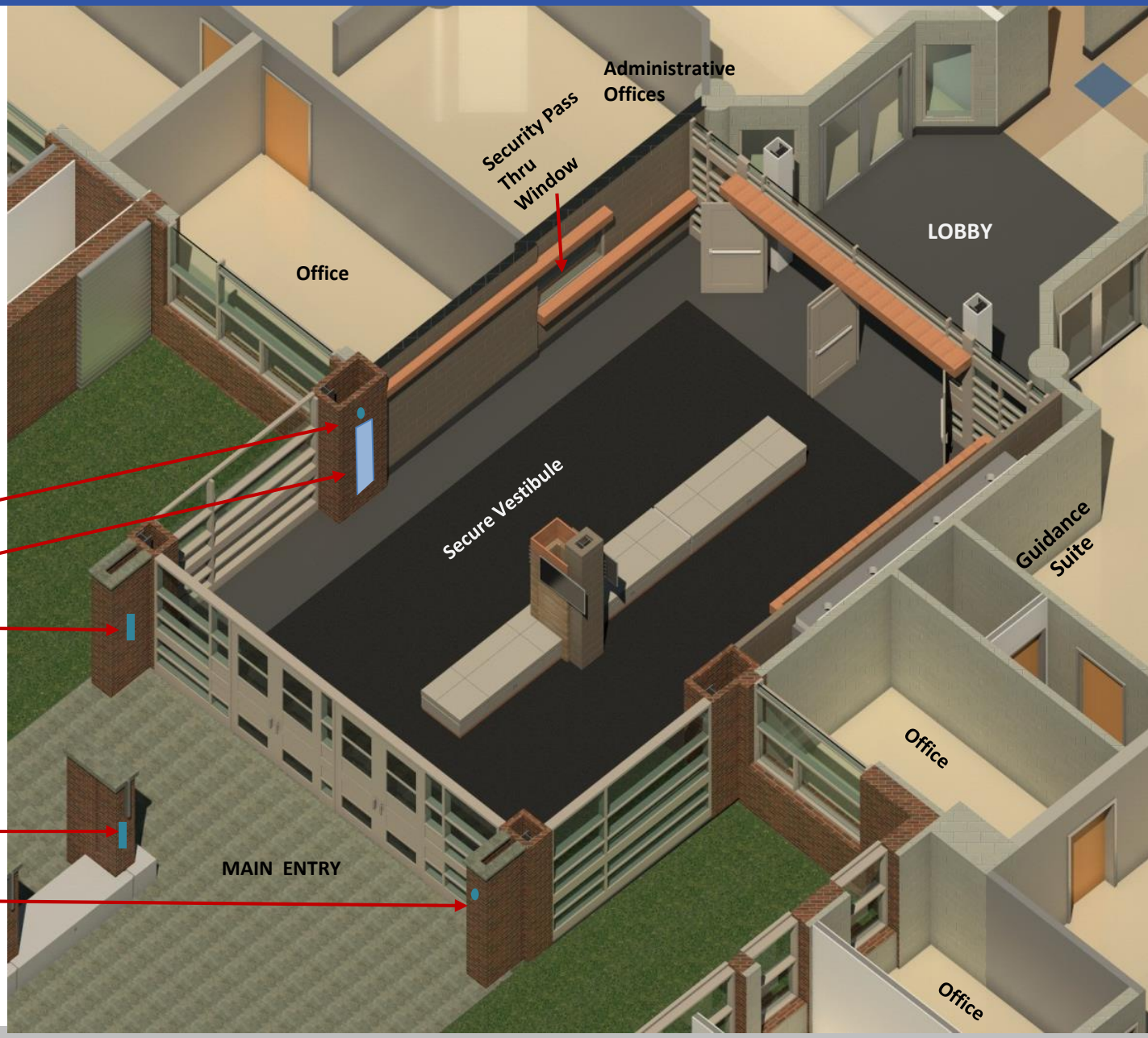
HIGH SCHOOL SITE LAYOUT - Considerations

2015 Concept for Safety and Drop Off

WETHERSFIELD HIGH SCHOOL ENTRANCE SECURITY

SECURITY FEATURES

- Door & Window Sensors
- Secure Hardware
- Glass Break
- Laminate & Bullet Res. Glass
- Motion Sensors
- Perim. Door Auto Lockdown
- Interior & Exterior Cameras
- Security Stations
- Interior Corr. Door Lockdown
- Card Key Access
- Remote Camera Login
- Roof Top Camera



WETHERSFIELD HIGH SCHOOL INTERIOR IMAGES

WETHERSFIELD HIGH SCHOOL INTERIOR IMAGES