

***MAINTAINING EXISTING BUILDINGS AND
PLANNING FOR THE FUTURE OF EDUCATION***

MAMARONECK UNION FREE SCHOOL DISTRICT

SEPTEMBER 25, 2018



**Proposed Bond Referendum:
Recommended Capital Projects**

Project Team

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Agenda

1. Introduction
2. Project Team
3. The Process
4. Needs & Goals
5. Infrastructure Improvements
6. “B” List Projects
7. Interdisciplinary Learning Spaces
8. Estimated Budget
9. Milestone Schedule

The Process:

“Failing to plan is planning to fail”

2015 NYSED Building Condition Survey & Five Year Capital Plan

LAN Associates, Engineering, Planning, Architecture & Surveying, LLP

Building Committee

A Committee made up of District Representatives, Board Members, Community Members,
and Industry Professionals

Educational Design Consulting

Fielding Nair International (FNI)

Pre-Referendum: Identify Capital Projects & Prioritize Needs

LAN Associates, Engineering, Planning, Architecture & Surveying, LLP

Building Committee

Proposed Bond Referendum: February 2019

Why does the Mamaroneck Union Free School District *need* to have a bond referendum?

The proposed bond will address many items in need of replacement that may not otherwise be financed through the annual operating budget.

- Through preparation of the 2015 Building Condition Survey (BCS) & Five Year Capital Plan, the District has identified critical site, infrastructure, and facility deficiencies.
- The District buildings range in age from **50-116 years old**. Deferring the infrastructure and facility needs could yield larger and more expensive problems in the future.
- Over \$50 Million dollars in **Infrastructure Improvements** were identified in 2015 as part of the BCS.
- Approximately \$2 Million of projects have been removed that were completed as maintenance projects or as part of the Summer 2018 projects with excess money from the PE Improvement Bond.
- In the past 3-4 years since the BCS report was developed, an additional \$8.5 Million in Infrastructure Improvements have been identified and added to the plan.

What are the goals of the Mamaroneck Union Free School District and how do they relate to the bond referendum?

Innovative School Design is transforming school design to promote concepts such as:

- Student-Centered Learning
- Intradisciplinary Learning
- Technology Integration
- Connection to Nature

The proposed “**Path Finder Projects**” have been scoped for the Mamaroneck Union Free School District by Fielding Nair International. FNI is an award-winning, global leader in education planning and architectural design. FNI provides Visioning for **21st Century Community Learning Centers** through services such as:

- Discovery workshops with staff and students
- Long-range Facilities Master Planning
- Curriculum Review and Implementation Strategies



Proposed Bond Referendum: Infrastructure Improvements

Work items were selected by the Building Committee, School Facilities Department, and LAN.

Infrastructure Improvements are required at each District owned building to maintain and extend the useful life of the aging buildings.

- Central Elementary School
- Mamaroneck Avenue Elementary School
- Chatsworth Avenue Elementary School
- Murray Avenue Elementary School
- Hommocks Middle School
- Mamaroneck High School
- Transportation Garage

The proposed infrastructure and program improvements will enable the MUFSD to provide a school environment that is up-to-date with the instructional needs of the 21st Century.



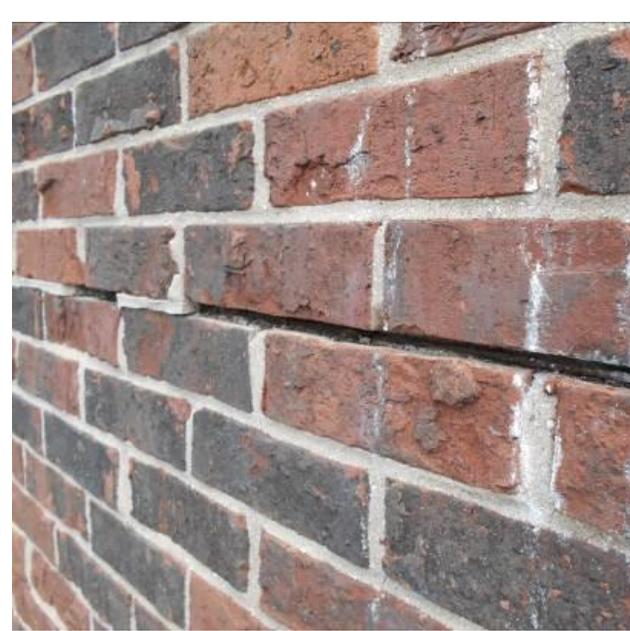
Infrastructure Improvements: Central School



Site Improvements:
Install Backflow Preventer
Repair/Replace Sidewalks
Repair Chain Link Fences
Replace Softball Field Bleachers



Infrastructure Improvements: Central School



Building Envelope:
Repoint/Repair Masonry
Clean and Repair Stucco Panels
Replace Roofs
Waterproof Storage Room Foundation Wall

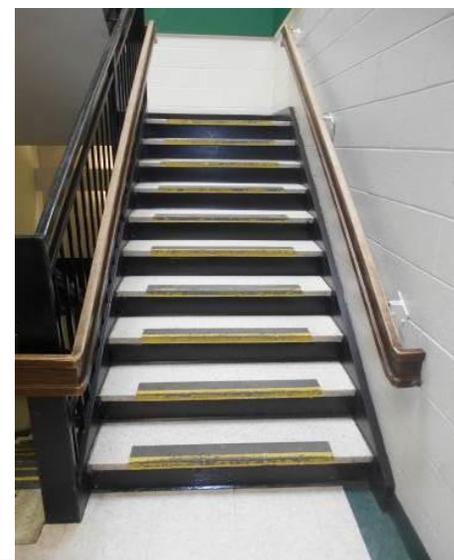


Infrastructure Improvements: Central School



Interior Improvements:

- Remove Corridor Wood Paneling
- Replace LGI Acoustical Wall Panels
- Replace Raised Floors in Classrooms (Add Ramps)
- Replace Stair Railings and Treads
- Replace Elevator Controls
- Install New Interior Signage
- Provide Allowance for Interior Painting
- Provide Allowance to Replace Interior Doors



Infrastructure Improvements: Central School



Mechanical/Electrical/Plumbing:

Install New Exterior Lighting Fixtures

Install New Central Clock System

Insulate Air Handler Piping

Replace 3-Way Valves



Infrastructure Improvements: Central School

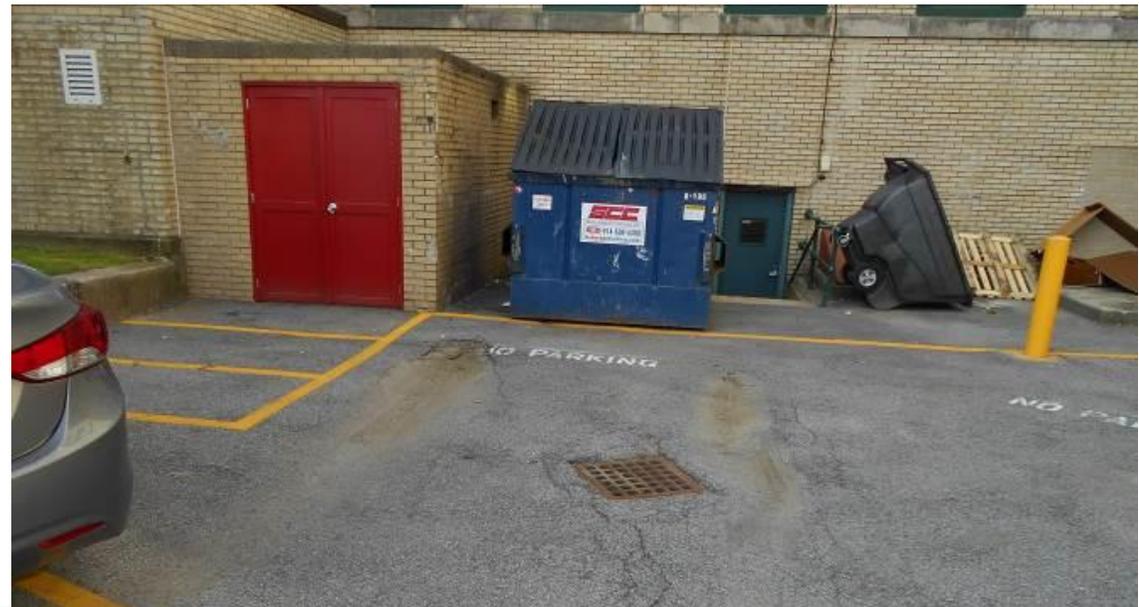


Infrastructure Improvements: Mamaroneck Avenue



Site Improvements:

- Replace Sanitary Line
- Eliminate Low Pressure Gas Service
- Repair/Replace Pavement and Sidewalks
- Repair Fencing



Infrastructure Improvements: Mamaroneck Avenue



Building Envelope:

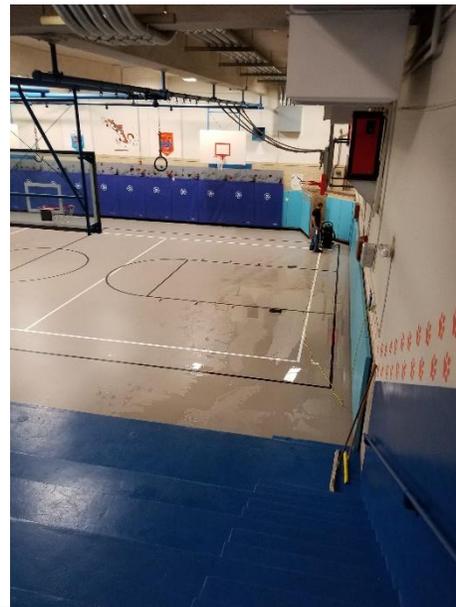
Restore Brick Facade (South Wall)

Repoint Masonry

Replace Exterior Service Door

Repair Existing Foam Roofs

Waterproof Gymnasium Floor Slab and Foundation Walls



Infrastructure Improvements: Mamaroneck Avenue



Interior Improvements:

Remove Wood Classroom Floors (MAS Bldg.)

Replace Multi-Purpose Room Wood Floor

Repair/Replace Multi-Purpose Room Ceiling

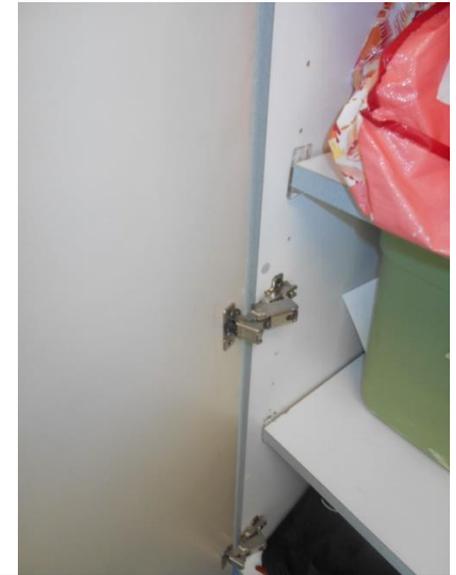
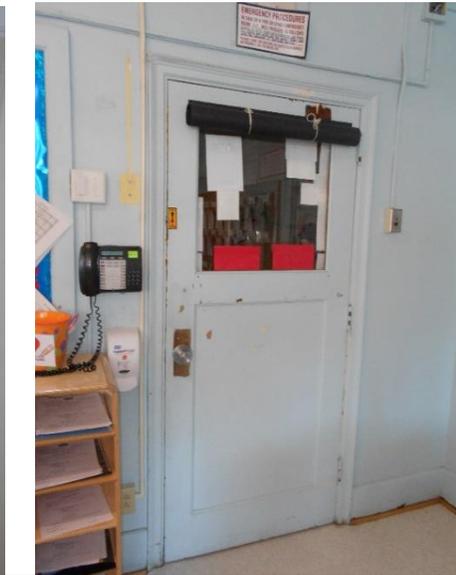
Replace 1st Floor Corridor Ceiling

Install New Classroom Casework

Install (2) Elevators for ADA Accessibility

Provide Allowance for Interior Painting

Provide Allowance to Replace Interior Doors



Infrastructure Improvements: Mamaroneck Avenue

Mechanical/Electrical/Plumbing:

Replace Original Stage Lighting and Controls

Install New Central Clock System

Install New Generator for Gymnasium Sump Pumps

Connect Sewage Pit in Boiler Room to the Generator

Replace Chiller Controls (Middle Building)



Infrastructure Improvements: Mamaroneck Avenue



Infrastructure Improvements: Chatsworth Avenue



Site Improvements:

Repoint/Repair Retaining Walls

Replace Sidewalks

Replace Stairs at Kindergarten Playground

Install Handrails at Exterior Doors



Infrastructure Improvements: Chatsworth Avenue



Building Envelope:
Repoint/Repair Masonry
Install Chimney Cap
Scrape/Paint Window and Door Lintels
Replace (2) Rosette Windows



Infrastructure Improvements: Chatsworth Avenue



Interior Improvements:

Repair Plaster Walls – Sky Gym

Abate Asbestos Floor

Remove Wood Classroom Floors

Install (1) Elevator for ADA Accessibility

Level Old Coal Chute Floor

Provide Allowance for Interior Painting

Provide Allowance to Replace Interior Doors



Infrastructure Improvements: Chatsworth Avenue



Mechanical/Electrical/Plumbing:

Replace/Refurbish Auditorium Light Fixtures

Install New Central Clock System

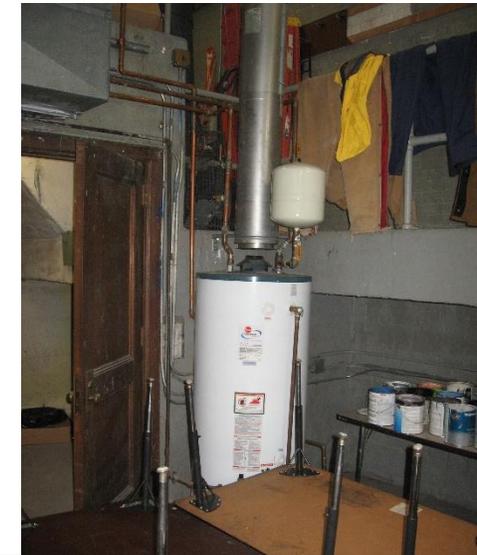
Replace Domestic Water Piping

Replace Existing Trane Controls with New Andover

Replace 3-Way Valves

Replace Cafeteria Air Handler

Provide Air Conditioning for Auditorium



Infrastructure Improvements: Chatsworth Avenue



Infrastructure Improvements: Murray Avenue

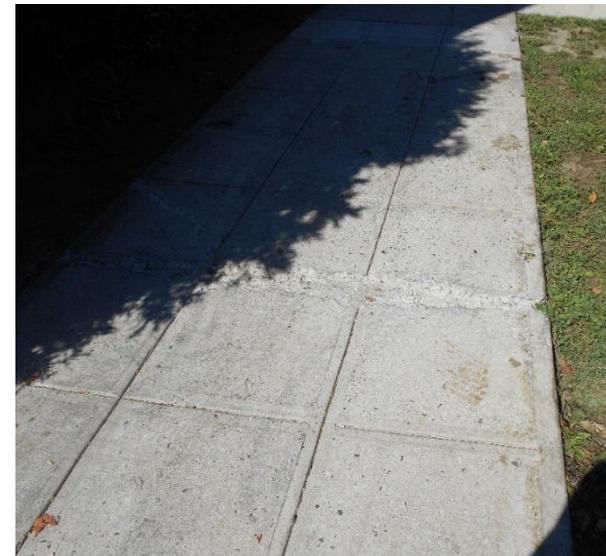


Site Improvements:

Install Backflow Preventer

Repair/Replace Sidewalks

Repair Water Infiltration in Dumpster Alleyway



Infrastructure Improvements: Murray Avenue



Building Envelope:

Repoint Masonry

Repair and Clean Cornice/Pediment

Replace Roof Penthouse Door/Windows

Replace Gas Service Enclosure Door and Frame

Repoint Main Entrance Stair

Repair Library Slate Roof

Replace (3) Bay Window Roofs



Infrastructure Improvements: Murray Avenue

Interior Improvements:

- Replace Wood Classroom Floors
- Repair Corroded North East Stair
- Repair Water Infiltration in Dumpster Alleyway
- Install (2) Elevators for ADA Accessibility
- Provide Allowance for Interior Painting
- Provide Allowance to Replace Interior Doors



Infrastructure Improvements: Murray Avenue



Mechanical/Electrical/Plumbing:

Upgrade Electrical Service

Replace Unit Ventilator Louvers

Install New Ventilation Units in Gymnasium

Provide Air Conditioning in Auditorium

Install New Central Clock System

Install Dehumidification System in Small Gymnasium

Replace Domestic Hot Water Flue



Infrastructure Improvements: Murray Avenue



Infrastructure Improvements: Hommocks



Site Improvements:

Replace Sidewalks

Repair Loading Docks

Raise Generator at Loading Dock

Repair/Replace Catch Basin (South House)



Infrastructure Improvements: Hommocks



Building Envelope:

Repair and Clean Masonry and Concrete Panels

Replace Soffit Access Panels

Replace Penthouse Insulated Metal Panels

Repair West Wing Roof

Replace East Wing Roof



Infrastructure Improvements: Hommocks



Interior Improvements:

- Replace Gymnasium Wood Flooring
- Replace Fitness Center Wood Flooring
- Replace Shop Wood Flooring
- Replace Interior Stair Handrails
- Refurbish Controls and Cabs in (2) Elevators
- Provide Allowance for Interior Painting
- Provide Allowance to Replace Interior Doors



Infrastructure Improvements: Hommocks



Mechanical/Electrical/Plumbing:

Replace Chiller & Cooling Towers w/ Air Cooled Chillers

Replace Library Air Handling Unit

Provide New HVAC System in Copy Room

Install Supplemental Heat in Pool Entrance Corridor

Insulate Piping

Replace Lighting Fixtures in Auditorium



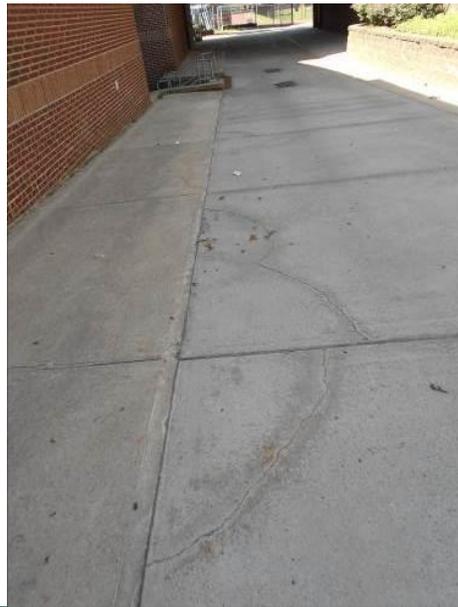
Infrastructure Improvements: Hommocks



Infrastructure Improvements: High School



- Site Improvements:**
- Install Backflow Preventers
 - Replace Timber Guardrail (East Parking Lot)
 - Replace/Repair Sidewalks
 - Replace Fencing
 - Replace Site Railings
 - Replace Concrete Stairs at North side of Track



Infrastructure Improvements: High School



Building Envelope:

Repoint/Clean Masonry

Install Railings at PACE Stairs

Repair Curtain Wall Windows in Concourse

Repair Curtain Wall Windows in Library

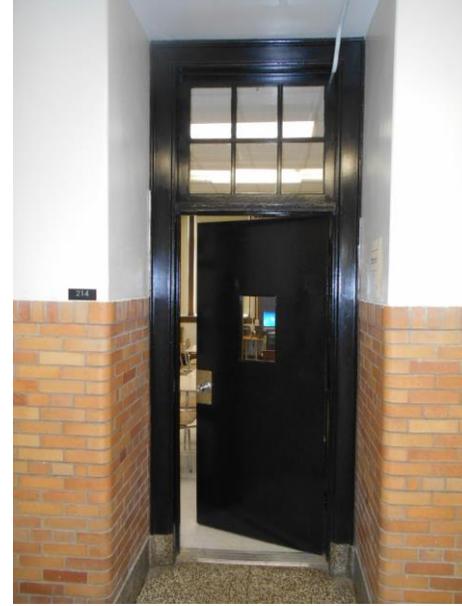
Repair 1st & 2nd Floor Office Windows in Addition

Replace Roof on the North Side of Post Apple Center

Replace Palmer Ave. North Courtyard Roof



Infrastructure Improvements: High School



- Interior Improvements:**
- Replace Post Gymnasium Floor
 - Replace Post Gymnasium Ceiling
 - Renovate Stair Towers in Post and Palmer
 - Replace Post Elevator
 - Replace Palmer Wheelchair Lift
 - Replace Library Carpet
 - Improve Interior Access to Roofs
 - Provide Allowance for Interior Painting
 - Provide Allowance to Replace Interior Doors

Infrastructure Improvements: High School



Mechanical/Electrical/Plumbing:

- Install New Fire Alarm Systems
- Install New Security Systems
- Replace Palmer Boilers
- Replace (2) Post Chillers
- Install Generator at Post Road
- Install New Main Switch Board at Post Road
- Replace Domestic Water Piping (Palmer)
- Refurbish Post Auditorium Lighting
- Install New Central Clock System
- Replace Murray Brand Electrical Panels
- Paint Roof Gas Piping and Steel Dunnage
- Replace Utility Sinks

Infrastructure Improvements: High School



Infrastructure Improvements: Bus Garage

Site Improvements:

- Replace Catch Basin
- Replace West and North Retaining Walls
- Replace West and North Chain Link Fences

Building Envelope:

- Repair Exterior Walls
- Replace Roof
- Install New Bollards at Overhead Doors
- Scrape and Paint Overhead Door Lintels
- Replace Steel Windows



Infrastructure Improvements: Bus Garage



Interior Improvements:

- Firestop Wall Between Garage/Office
- Replace Door Between Garage/Office
- Repair CMU Wall Step Cracks

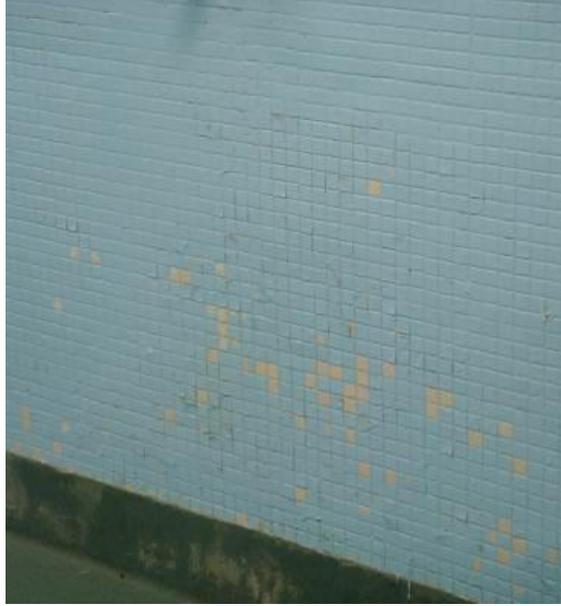


Mechanical/Electrical/Plumbing:

- Replace (2) Heaters in Garage
- Enclose Electrical Panel in Office
- Install New Interior Light Fixtures
- Install Exhaust System in Storage Room
- Install New Fire Alarm System
- Install Emergency Lighting and Exit Signage



Infrastructure Improvements: Bus Garage



Hommocks “B” List Projects:

- Renovate Pool Locker Rooms
- Install Dehumidification System in Pool Locker Room
- Upgrade Heating and Ventilating in Pool Hallway
- Replace Pool Air Handling Unit (Filter Room/Office)



“B” List Projects: Hommocks

Interdisciplinary Learning Spaces

Today's **learning environments** are providing students with opportunities combining basic subject matters with various specialty areas. Starting with small lessons to introduce ideas and skills, schools are providing Interdisciplinary Learning Spaces to **further student exploration and cross-curricular programs**. Providing pathways beyond the typical trajectory, these interdisciplinary spaces introduce other opportunities by **combining educational standards and innovative ideas** to jumpstart college lessons or explore career paths. By utilizing an interdisciplinary approach, **students improve critical thinking, bias recognition, and future readiness**.

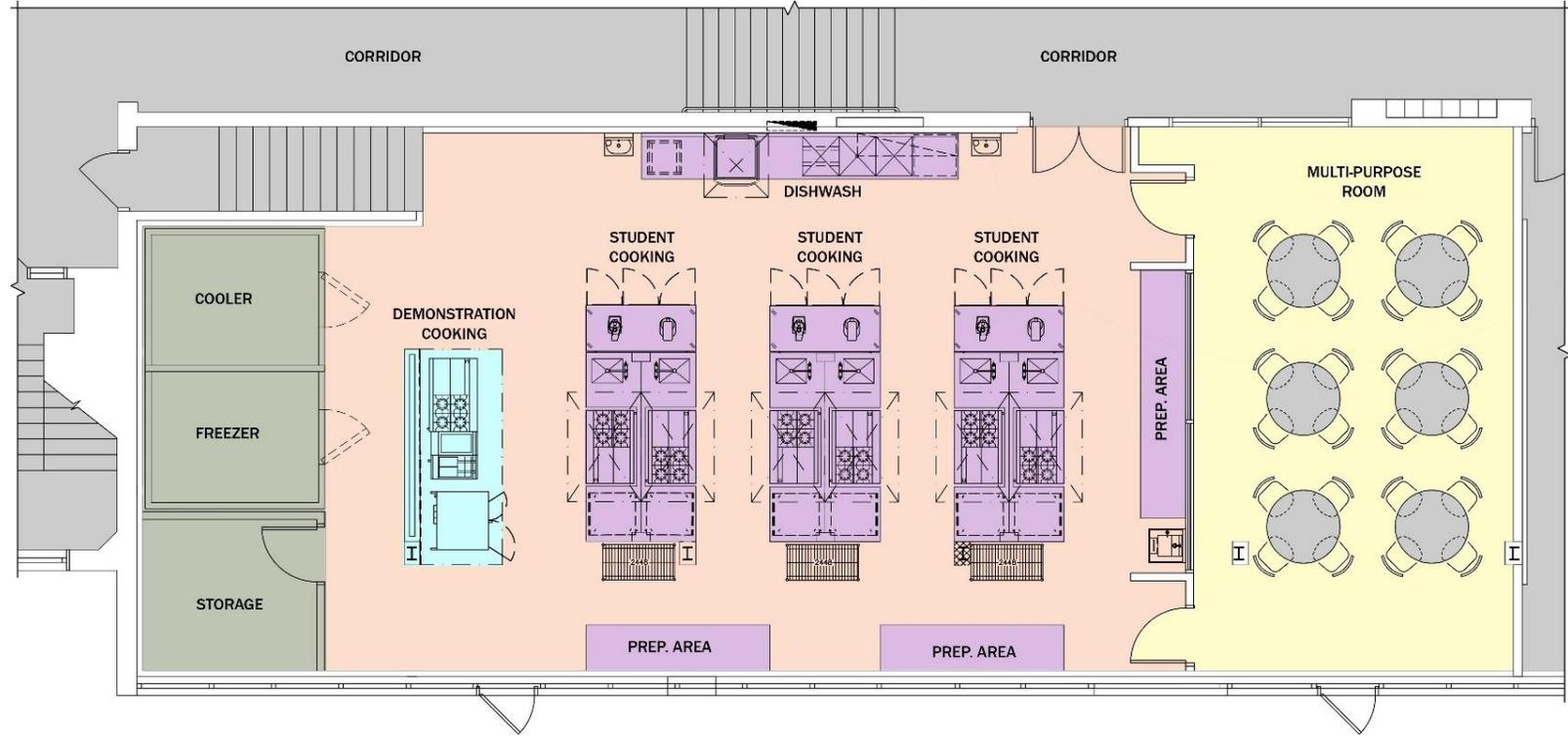
These Interdisciplinary Learning Spaces can include:

- Architecture/Engineering Labs
- Digital/ Physical Fabrication Studios
- Culinary Labs
- Makerspaces
- Audio/Visual & Recording Rooms
- Creative Commons
- Greenhouses/Outdoor Classrooms



“We are not students of some subject matter, but students of problems. And problems may cut right across the boundaries of any discipline.”

Karl Popper
Philosopher & Professor of Science



Proposed High School Culinary Arts Lab

Interdisciplinary Learning Spaces

Estimated Budget



Infrastructure Improvements:

Central Elementary:	\$ 3,182,426.89
Mamaroneck Avenue Elementary:	\$ 6,048,011.81
Chatsworth Avenue Elementary:	\$ 4,207,677.47
Murray Avenue Elementary:	\$ 5,264,878.50
Hommocks Middle School:	\$ 3,108,107.36
Mamaroneck High School:	\$ 11,290,663.91
<u>Transportation Garage:</u>	<u>\$ 471,558.54</u>
Subtotal:	\$ 33,573,324.49

Allowances:

Asbestos Allowance:	\$ 1,000,000.00
Technology Allowance:	\$ 1,000,000.00
Interior Door Allowance:	\$ 1,000,000.00
<u>Painting Allowance:</u>	<u>\$ 1,000,000.00</u>
Subtotal:	\$ 4,000,000.00

Educational Improvements:

Path Finder Projects:	\$ 2,000,000.00
High School Culinary Arts Lab:	\$ 1,400,000.00
Chatsworth Cafeteria/Library/Art Room:	\$ 2,500,000.00
<u>Chatsworth Inheritance Credit:</u>	<u>\$ (489,000.00)</u>
Subtotal:	\$ 5,411,000.00

Construction Contingency:

Construction Contingency (10%) :	\$ 4,298,432.45
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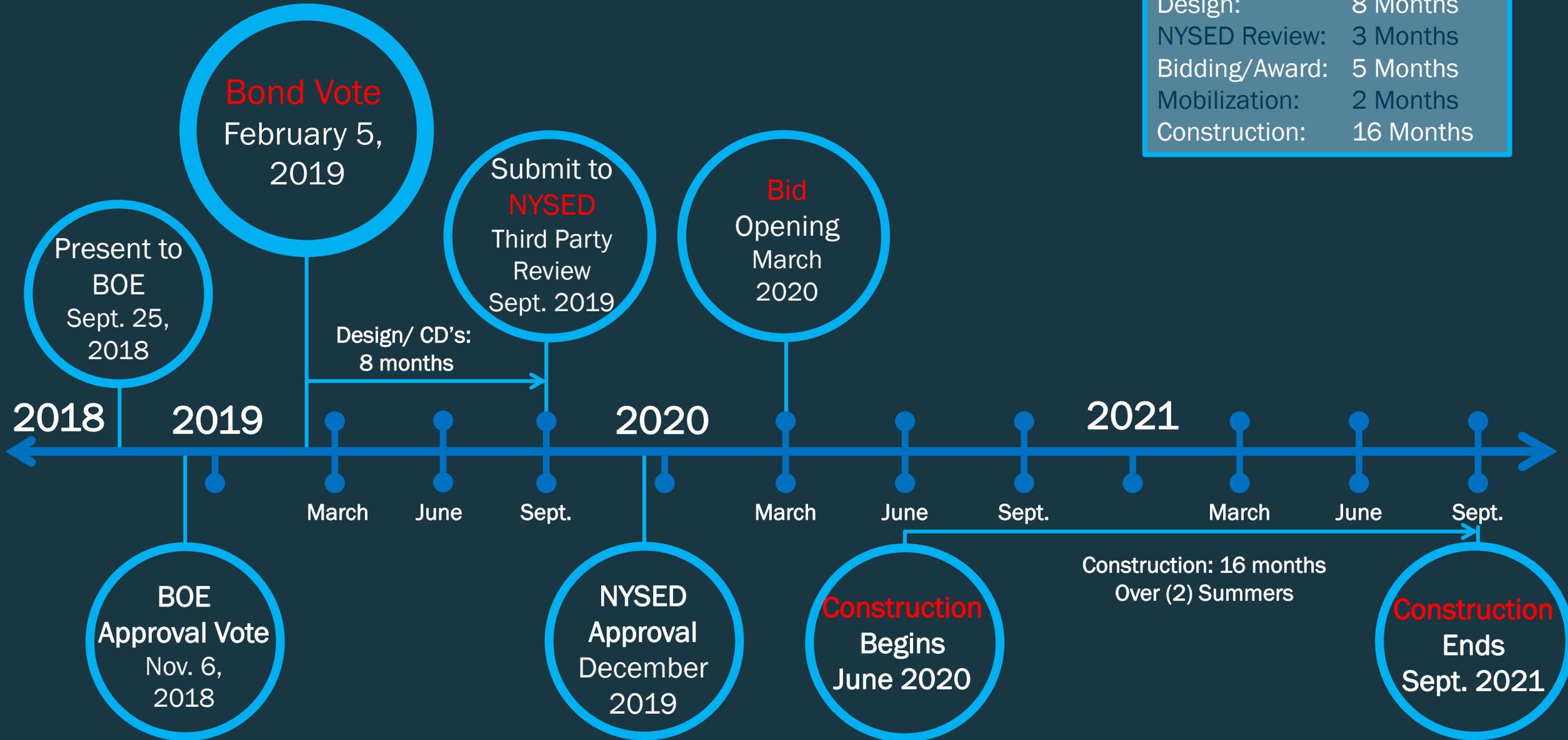
Incidental Costs:

Soft Costs (15%):	\$ 7,092,413.54
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Projected Bond Amount:
\$54,375,170.48

Milestone Schedule

Pre-Bond:	4.5 Months
Design:	8 Months
NYSED Review:	3 Months
Bidding/Award:	5 Months
Mobilization:	2 Months
Construction:	16 Months





Questions?

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