



PK-5 School Modernization – Feasibility Study Progress

PK-5 School Modernization Committee

Representative group including:

- Parents
- Teachers
- Community members
- Board of Education liaisons
- Town Council liaisons
- Department of Public Works
- Enfield Administration

Toured each PK-5 school facility

Consulted with the contracted design team at Russell and Dawson on school design

This presentation includes their recommendation and feedback

Committee Goals/Priorities

Investigate consolidation of K-2 and 3-5 to K-5 schools

- Reduce transition
- Improve engagement in the schools

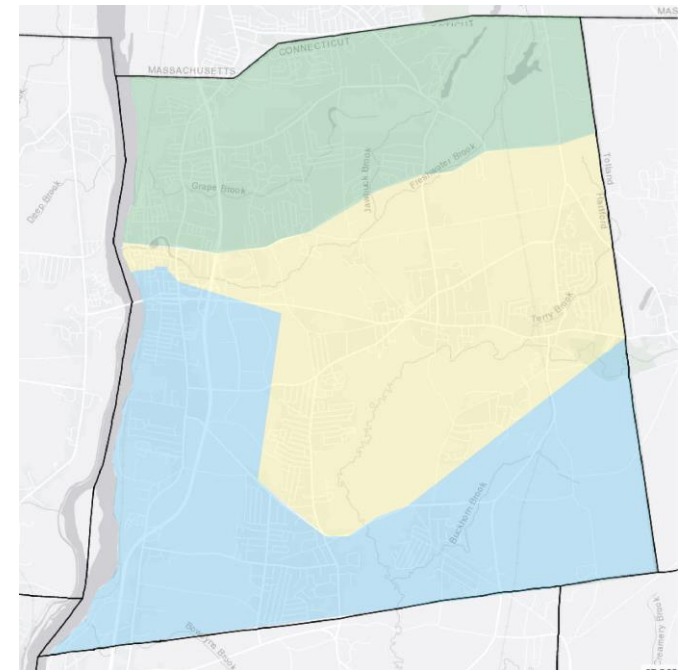
Avoid redistricting

Avoid construction related disruptions to learning

Identify potential sites for consolidated schools

Identify potential reuse of school facilities

Identify economic implications of consolidation



Scope of the Feasibility Study

Evaluate existing site conditions and systems

Estimate capital expenditure for major systems: function, code compliance, and ADA compliance

Suggest sites for reuse as school facilities

Estimate costs for **new** or **renovate to new** for the consolidated schools



Renovate to New (71.79%)

ADVANTAGES

High reimbursement rate

Lower initial cost

Reuses part of the existing building

Additional new spaces

Potentially less time consuming

DISADVANTAGES

Foundations and essential structure still old

Less flexible design

Space restrictions on all sites

Mix of old and new spaces

Higher long-term energy costs

Higher long-term maintenance costs

New Construction (61.79%)

ADVANTAGES

Greater flexibility of design

- Educational systems and building systems

Improved safety

Less unplanned maintenance (20 years)

Improved efficiency (especially if “Net Zero”)

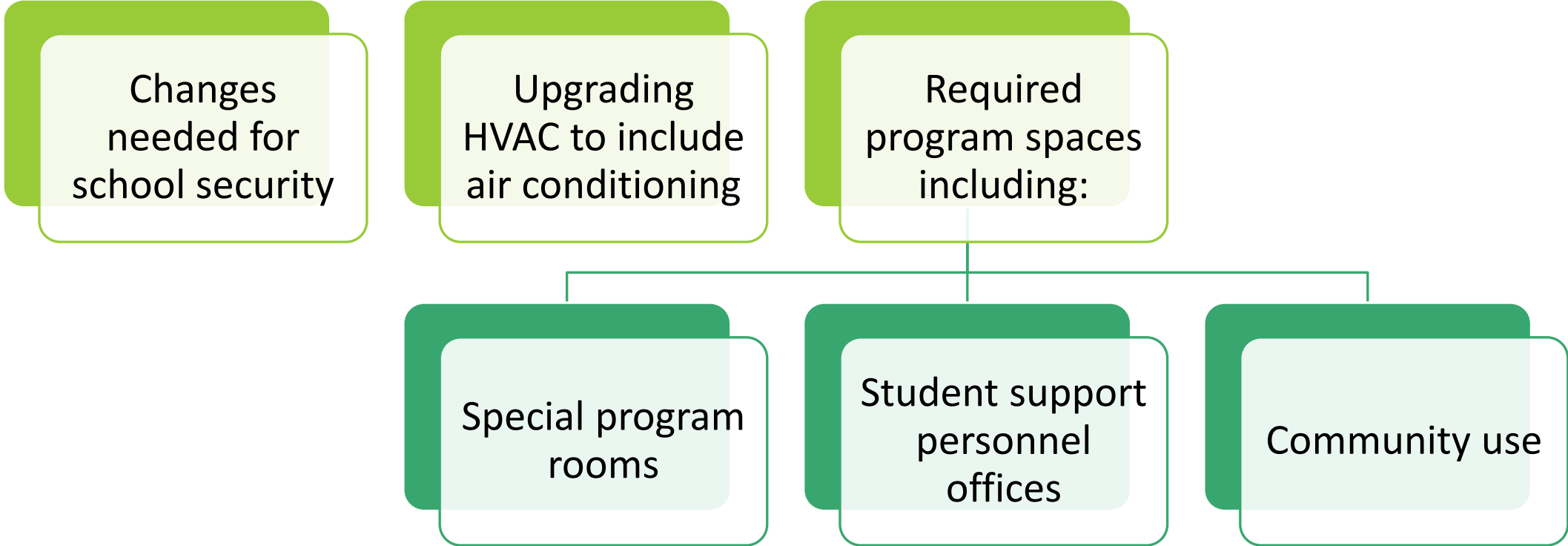
Reduced maintenance and personnel costs

Higher dollar reimbursement

DISADVANTAGES

Greater upfront cost

Items Not Estimated in Assessments



Facilities Assessment for Hazardville Memorial Elementary School



Existing conditions report: August 21, 2023

Prepared for:

TOWN OF ENFIELD
DPW, 40 Moody Road
Enfield, CT-06082

Prepared by:

Chirag Thaker
Utkarsh Patil



RUSSELL AND DAWSON Inc.
Architecture | Engineering | Construction
1111 Main Street
East Hartford, CT 06108

Re: Educational Demographic Study, Facility Assessments
& Feasibility Study for Hazardville Memorial Elementary School
Town of Enfield

File No.: 23095.04

R:\A-YR-2023\23095 School Modernization, Enfield, CT\RD\ Outgoing\Working\23095.04 Hazardville Memorial 071723

Rev.: 19.00 An Affirmative Action/Equal Opportunity Employer

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Key Draft Findings from Russell & Dawson

Mirrored the “Town of Enfield 10-Year Capital Projections”

Additional general recommendations included:

- Replacing unit-ventilators for increased ventilation
- ADA compliance for bathroom access and wall protrusions
- Additional parking-area improvements, marking, and lighting



Memorial

“It is recommended to replace all single pane windows with double pane 1” insulated glass aluminum storefront windows. This particular scope will be significant and expensive to perform, and the cost of renovation needs to be carefully determined for this scope.”

Facility Conditions Analysis Rankings

ELI WHITNEY ELEMENTARY SCHOOL - FACILITY CONDITIONS ANALYSIS						
TAG NO.	ASSESSMENT	SYSTEM/ CODE REFERENCE	RANKING	CORRECTIVE ACTION	ITEMIZED ESTIMATED COST	REMARKS
1	Urgent Priority - Components that include code, health and life safety issues that need to be addressed as soon as possible.					
2	High Priority - These items should be corrected within a reasonable amount of time after the highest priorities referenced above. These may be associated with high priority maintenance issues or accessibility issues for the physically challenged. Maintenance items have a remaining useful life from 1-3 years					
3	Moderate Priority - These items are associated with general maintenance and aesthetic issues and can be addressed within 3-5 years.					
4	Low Priority - These items includes aesthetic or general maintenance issues that should be addressed per affordability within an useful life of 5-10 years or greater.					

Estimates from Facility Conditions Analysis

School	Urgent	High	Moderate	Low	Total
Barnard	\$ 100,000.00	\$ 865,000.00	\$ 1,555,000.00	\$ 2,070,000.00	\$ 4,590,000.00
Crandall		\$ 3,768,800.00	\$ 1,054,000.00	\$ 3,931,400.00	\$ 8,754,200.00
ESS	\$ 1,560,000.00	\$ 2,560,000.00	\$ 868,000.00	\$ 811,600.00	\$ 5,799,600.00
Memorial		\$ 4,614,500.00	\$ 1,098,200.00	\$ 2,407,960.00	\$ 8,120,660.00
Parkman		\$ 3,310,350.00	\$ 1,588,260.00	\$ 983,000.00	\$ 5,881,610.00
Stowe	\$ 1,530,000.00	\$ 988,000.00	\$ 970,000.00	\$ 980,000.00	\$ 4,468,000.00
Whitney		\$ 2,690,000.00	\$ 725,000.00	\$ 1,613,000.00	\$ 5,028,000.00
	\$ 3,190,000.00	\$ 18,796,650.00	\$ 7,858,460.00	\$ 12,796,960.00	\$ <u>42,642,070.00*</u>

Costs Could Reach 100 Million Dollars

HVAC to address indoor air quality (potentially 6 million dollars per school in 2023)

- Ventilation (Energy Recovery Ventilators)
- Air conditioning
 - Upgraded electrical
 - Any repairs for disturbed walls, ceilings, and roofing
 - Plumbing

School security

Special programs rooms

Unplanned remediation

Inflation and finance costs

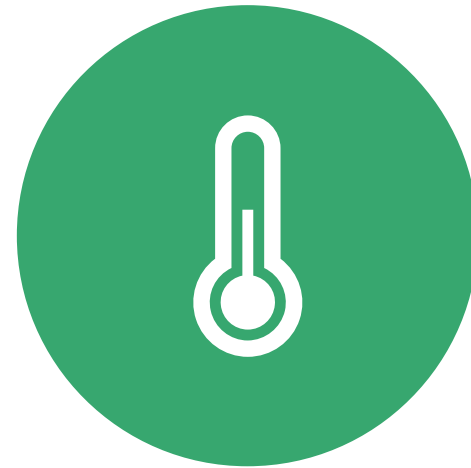
Indoor Air Quality

	Temperature	Rel. Humidity	Carbon Monoxide 50 ppm	Carbon Dioxide	Dust - Respirable	Volatile Organic Compounds	Formaldehyde	Mold in air	Overall Assessment
	Sum. 72-80 °F	20%-60%	50 ppm	ASHRAE < 707ppm OSHA < 5000 ppm	5 mg/m ³	500 ppb	0.75 ppm		
Barnard	72.6 - 78.8	52.2 - 80.6	1.3 - 2.1	500 -1498	0.07	0 - 0.060	0.05	No toxigenic - <u>1</u> elevated	Fit for occupancy
Crandall	69.6 - 80.3	41.2 - 81.6	0.8 - 2.0	524 - 2080	0.039	0	0.11	No amplification	Fit for occupancy
ESS	76.2 - 86.5	59.5 - 75.7	1.1 - 1.6	486 - 833	0.062	0 - 0.016	0	No amplification	Fit for occupancy
Memorial	69.6 - 81	43.4 - 90.5	0.6 - 2.4	402 - 700	0.073	0 - 0.75	0	No amplification (<u>surface found</u>)	Fit for occupancy
Parkman	74.9 - 82.2	52.8 - 76.7	0	375 -642	0.041	0 - 0.5	0	No amplification	Fit for occupancy
Stowe	70.9 - 78.6	49.9 - 72.9	0.1 - 0.7	525 - 1440	0	.006 - .441	0.11	No amplification	Fit for occupancy
Whitney	72-81	46 - 71.1	0.6 - 1.3	468 - 810	0.023	143 - 878	0.05	No amplification	Fit for occupancy

Air Quality General Recommendations



UPGRADE MECHANICAL
VENTILATION



CONTROL HUMIDITY

Demography Report

SCENARIOS (KINDERGARTEN ENROLLMENT)

1. Births 5-year moving average (90%)
2. Births housing market projection (90%)
3. Births 5-year moving average (92%)
4. Births housing market projection (92%)

FINDINGS

Less than 100 student variation

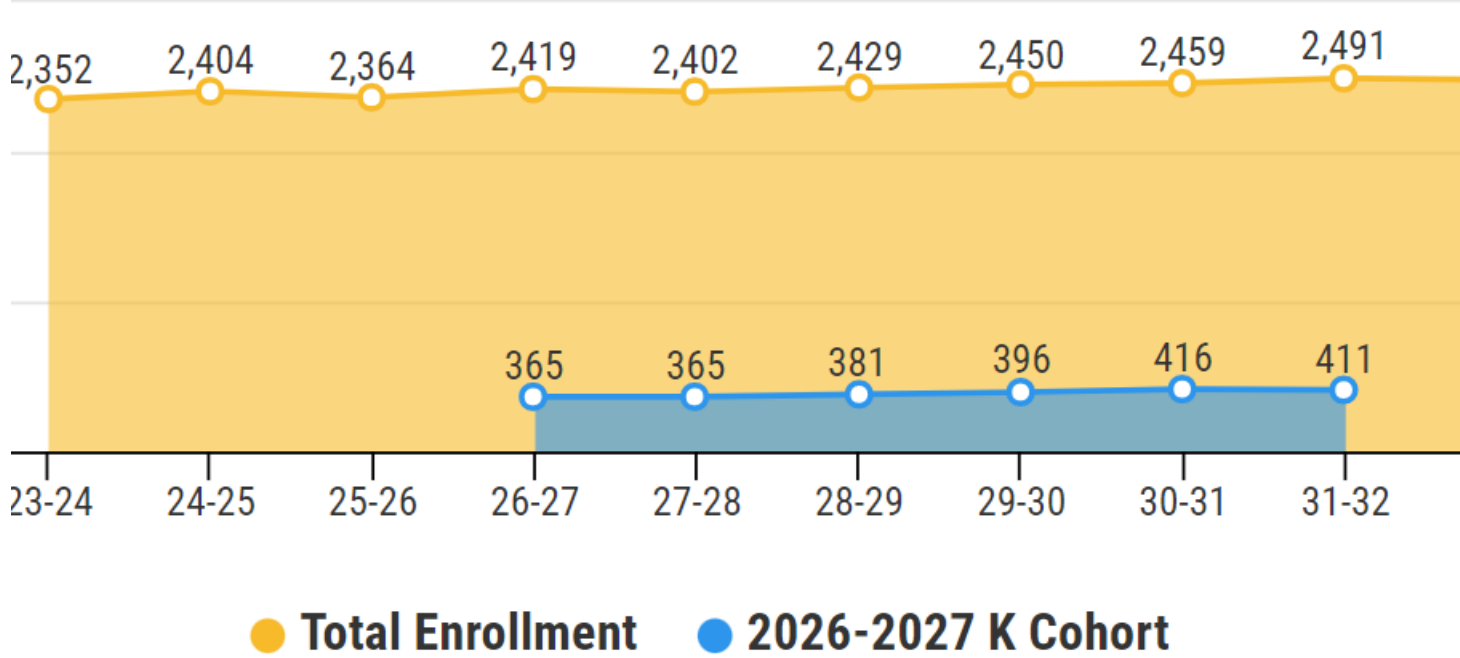
- 2,453- 2,541

2,491 enrollment in 2031-2032

- 2,252 – K-5

Approximately 2017-2018 enrollment

PK-5 Enrollment



Projected Enrollment

- K – 365 = 15 classrooms
- 1 – 365 = 15 classrooms
- 2 – 381 = 16 classrooms
- 3 – 396 = 16 classrooms
- 4 – 416 = 17 classrooms
- 5 – 411 = 17 classrooms
- Total = 96 classrooms

Estimated Classes

Grade Configuration:		K-5							
PROJECTED STUDENT ENROLLMENT		Students	# Inst. Areas	Students	# Inst. Areas				
8-Year Highest Projected Enrollment		8-Year	25	8-Year	25				
Pre-Kindergarten			0.00	Grade 6		0.00			
Kindergarten	122	4.88		Grade 7		0.00			
Grade 1	122	4.88		Grade 8		0.00			
Grade 2	127	5.08		Grade 9		0.00			
Grade 3	132	5.28		Grade 10		0.00			
Grade 4	138	5.52		Grade 11		0.00			
Grade 5	137	5.48		Grade 12		0.00			
Total Student Enrollment					778	31.12	Note 1		
REIMBURSEABLE SQUARE FOOTAGE		Students	SF/student	Total	SF/Student		Note 2		
SF/Student - Elementary School		778	113.45	88,263	Range				
SF/Student - Middle School		0			104-125				
SF/ Student - High School		0			119-151				
Maximum Reimbursable Gross Square Feet				88,263	163-187		Note 3		

K = 5 classrooms

1 = 5 classrooms

2 = 6 classrooms

3 = 6 classrooms

4 = 6 classrooms

5 = 6 classrooms

District total for three schools = 102 (approximately)

Site Recommendations

Preliminary Recommendations

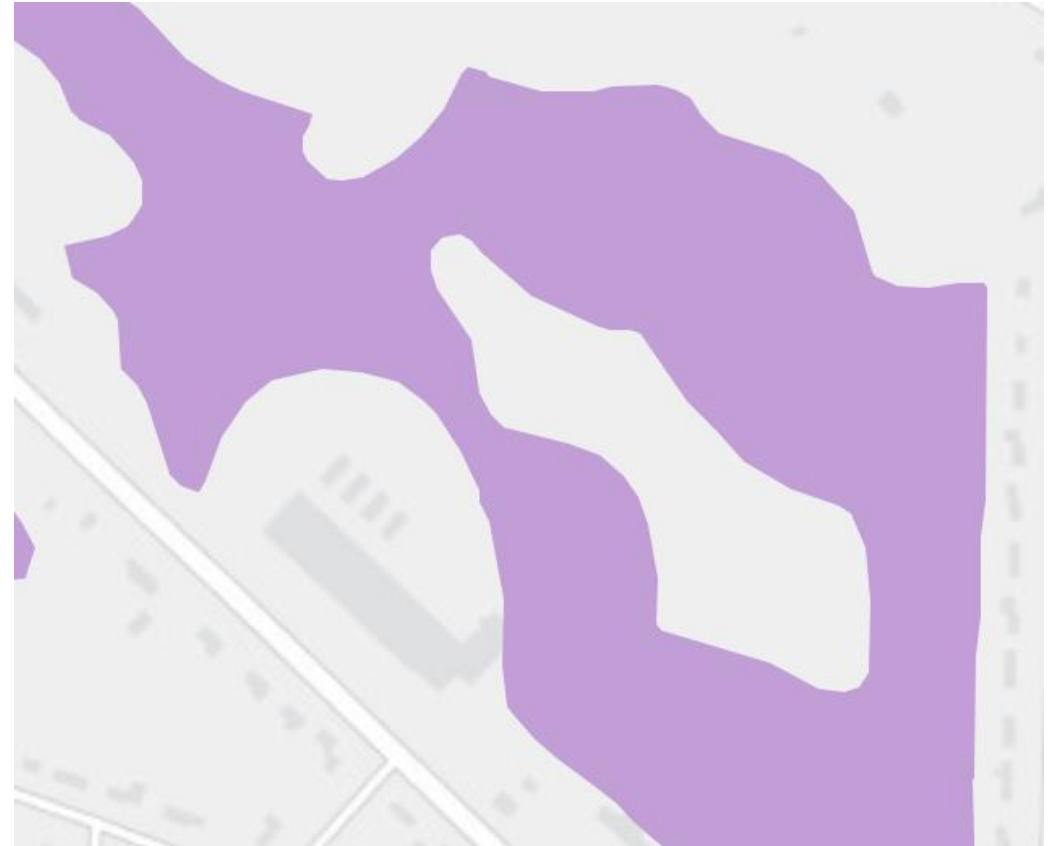
- Stowe (28 acres)
- Whitney/Library (15.91 acres)
- Barnard (19.62 acres)

Options

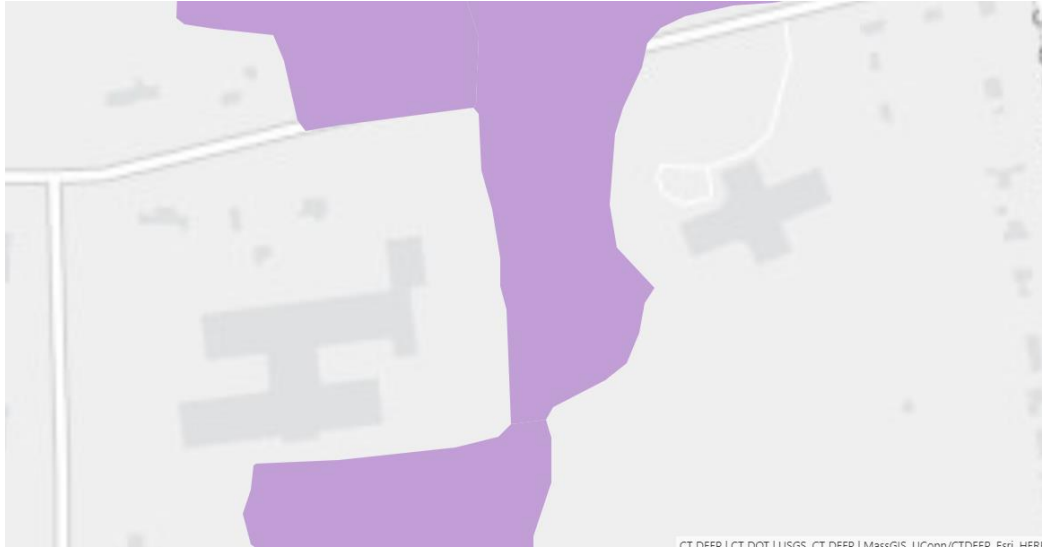
- New
- Renovate to new

Requested program space exceeds reimbursable by more than 11,000 ft² per school

Stowe Early Learning Center



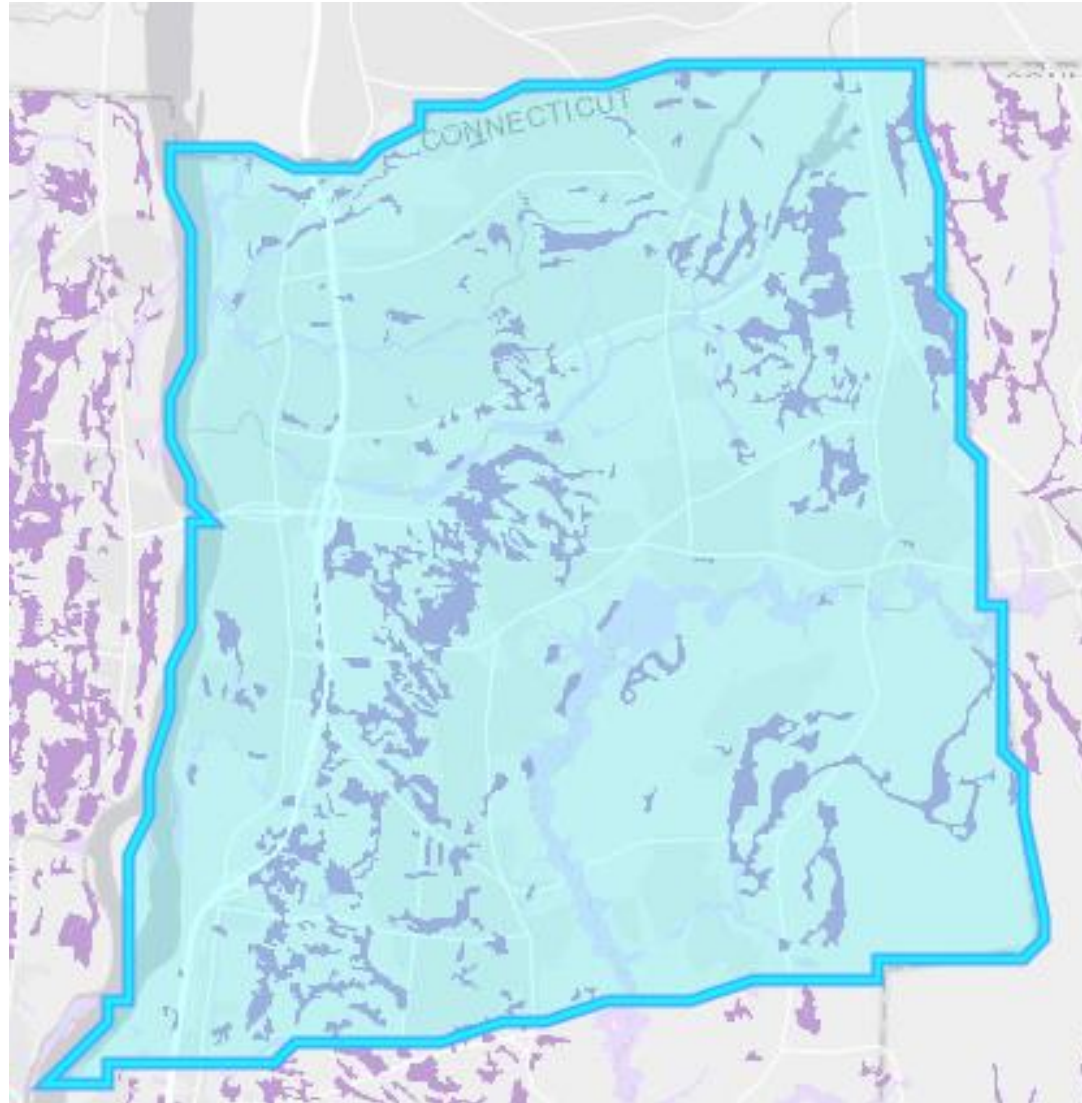
Eli Whitney



CT DEED LIT DOT LUGS CT DEED I MacGIS LUG/CTDEED Peri WER

Henry Barnard





Challenges With Site Recommendations

All sites contain wetland areas

Site access restrictions

Impact on the library and sports fields

No swing space*

- Construction with students on site

Redistricting needed*



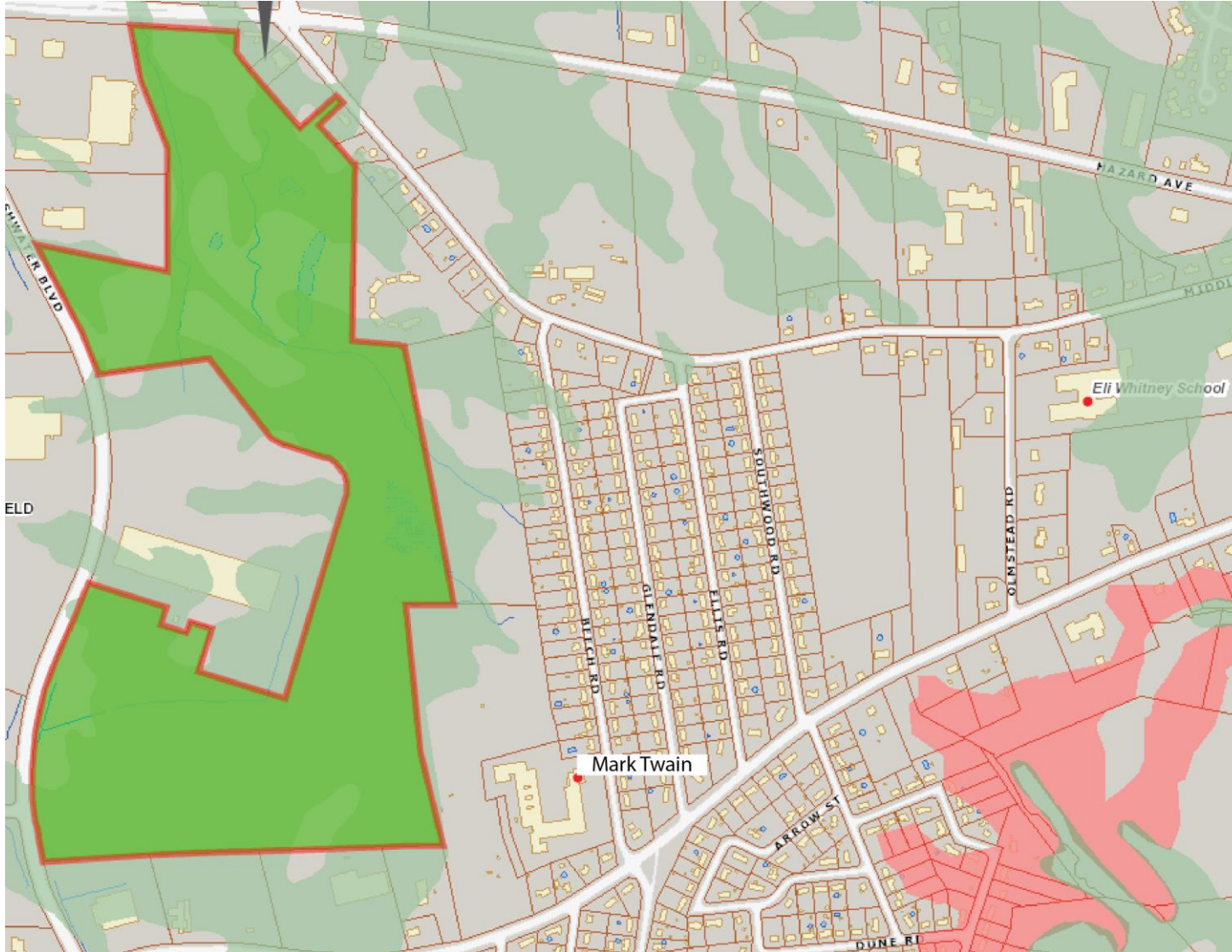
Site for Consideration

Town land near Mark Twain

- Between Veterans Memorial Park and industrial park
- 99-acre site

Rezone and reclaim

- Build on existing sports fields
- Expand fields into new site



Advantages/ Challenges

Advantages

- Town owned
- Location near Whitney
- “Swing” school
- No construction related disruptions

Challenges

- Wetland relocation
- Zoning

PK-5 School Modernization Site and Phasing - Proposal

Phase 1 - Central Zone

New School Near Mark Twain

Build a new 800+ student K-5 school on Town owned land adjacent to Mark Twain. When completed the school will house all students from Eli Whitney and Hazardville Memorial. The property will be expanded to incorporate additional recreation spaces. Hazardville Memorial will be reused as town park/open space. Eli Whitney will be used as the swing space for the remaining phases.

Phase 2 - Southern Zone

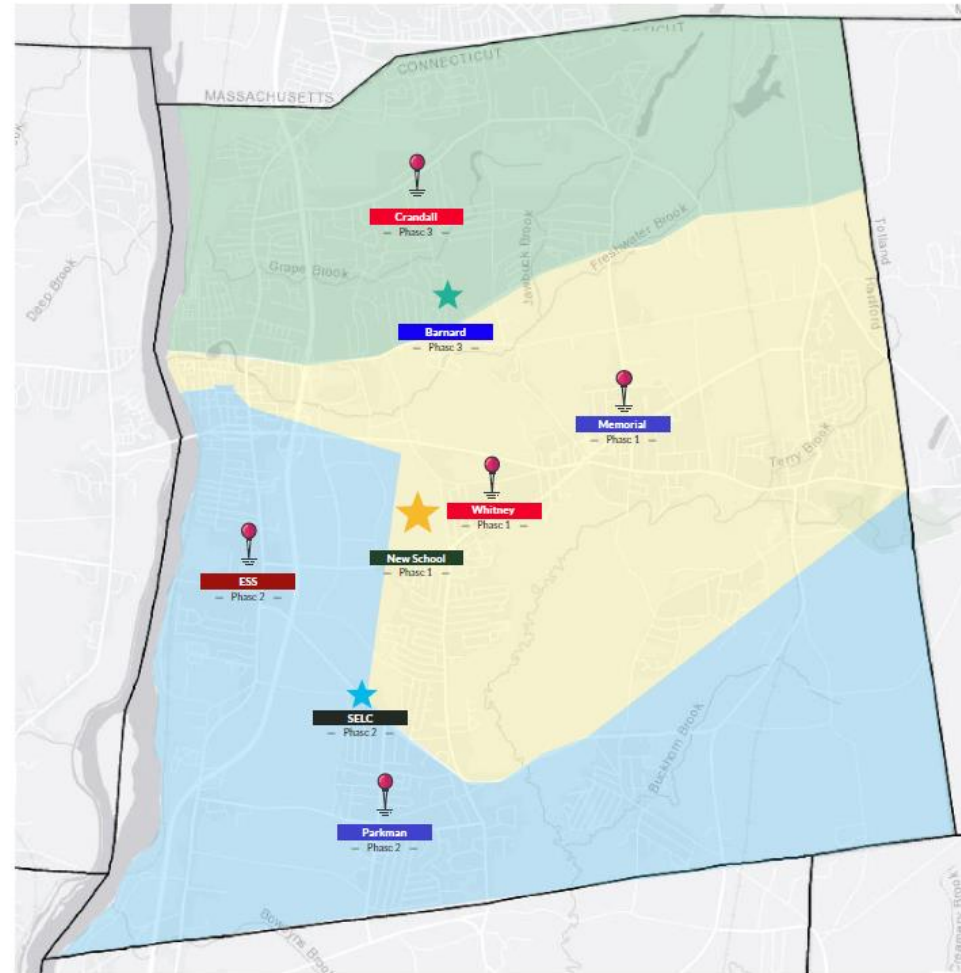
New/Renovate to New at SELC

Build new or renovate to new a 750+ student K-5 school at the Stowe Early Learning Center (SELC) and Enfield Child Development Center (ECDC) site. When completed the school will house all students from Edgar H. Parkman and Enfield Street School.

Phase 3 - Northern Zone

New/Renovate to New at Barnard

Build new or renovate to new an 800+ student K-5 school at the Henry Barnard site. When completed the school will house all students from Henry Barnard and Prudence Crandall.



Phase 1-2 Transitions

Summer Following Phase 1

- Move Eli Whitney and Hazardville Memorial to the new "Central" school
- Close Hazardville Memorial (begin conversion)
- Move Edgar H. Parkman to Eli Whitney
- Renovate Edgar H. Parkman to house SELC and ECDC
- Move SELC and ECDC to Edgar H. Parkman

Phase 2-3 Transitions

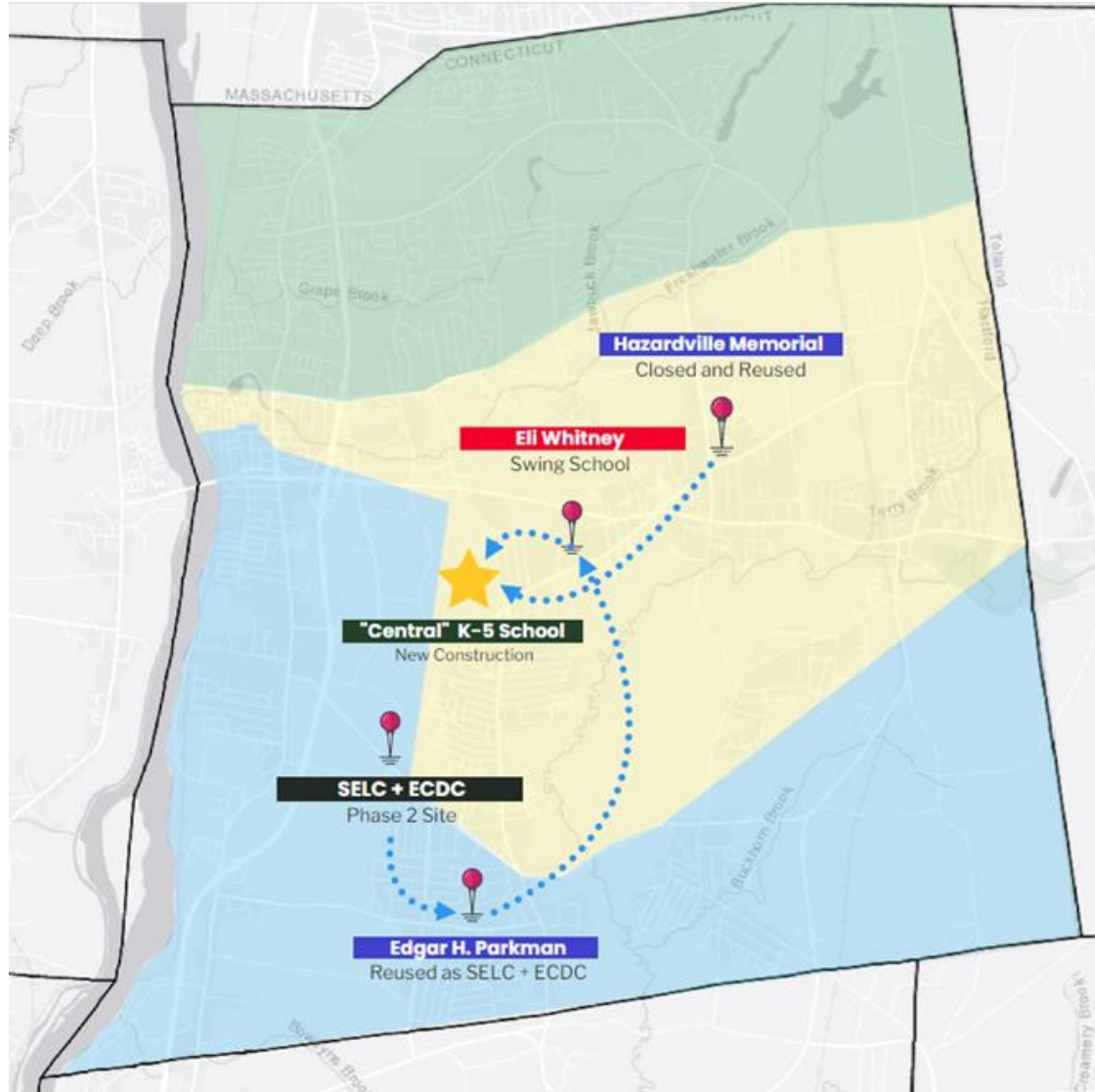
Summer Following Phase 2

- Move Edgar H. Parkman and Enfield Street School to the new "Southern" school.
- Renovate Enfield Street School for Eagle Academy use
- Move Henry Barnard to Eli Whitney
- Move Eagle Academy to Enfield Street School
- Move Alternative Ed. to Eagle Academy

Final Transitions

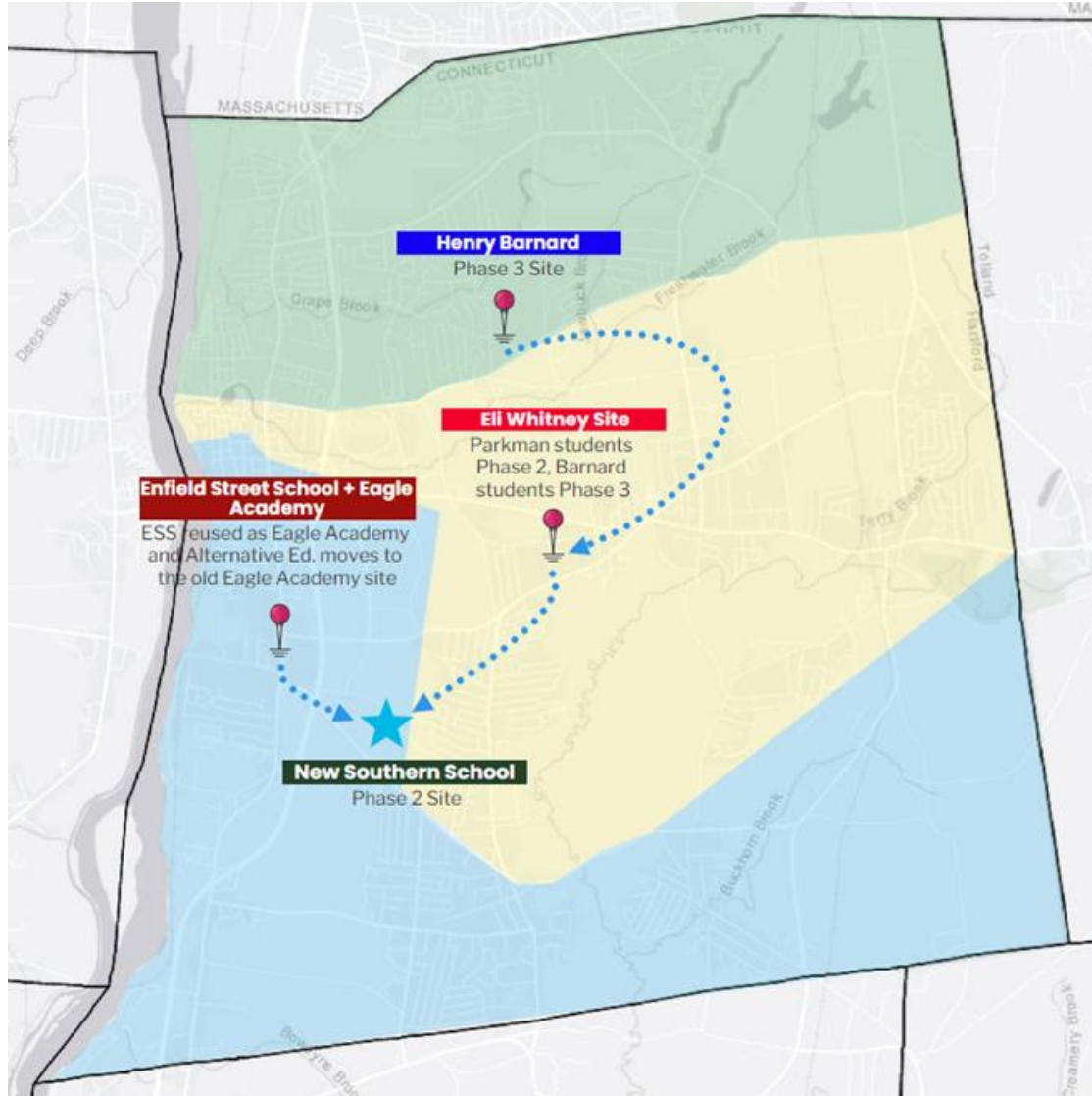
Summer Following Phase 3

- Move Henry Barnard and Prudence Crandall to the new "Northern" school.
- Renovate Eli Whitney
- Move ECDC to Eli Whitney
- Close Prudence Crandall



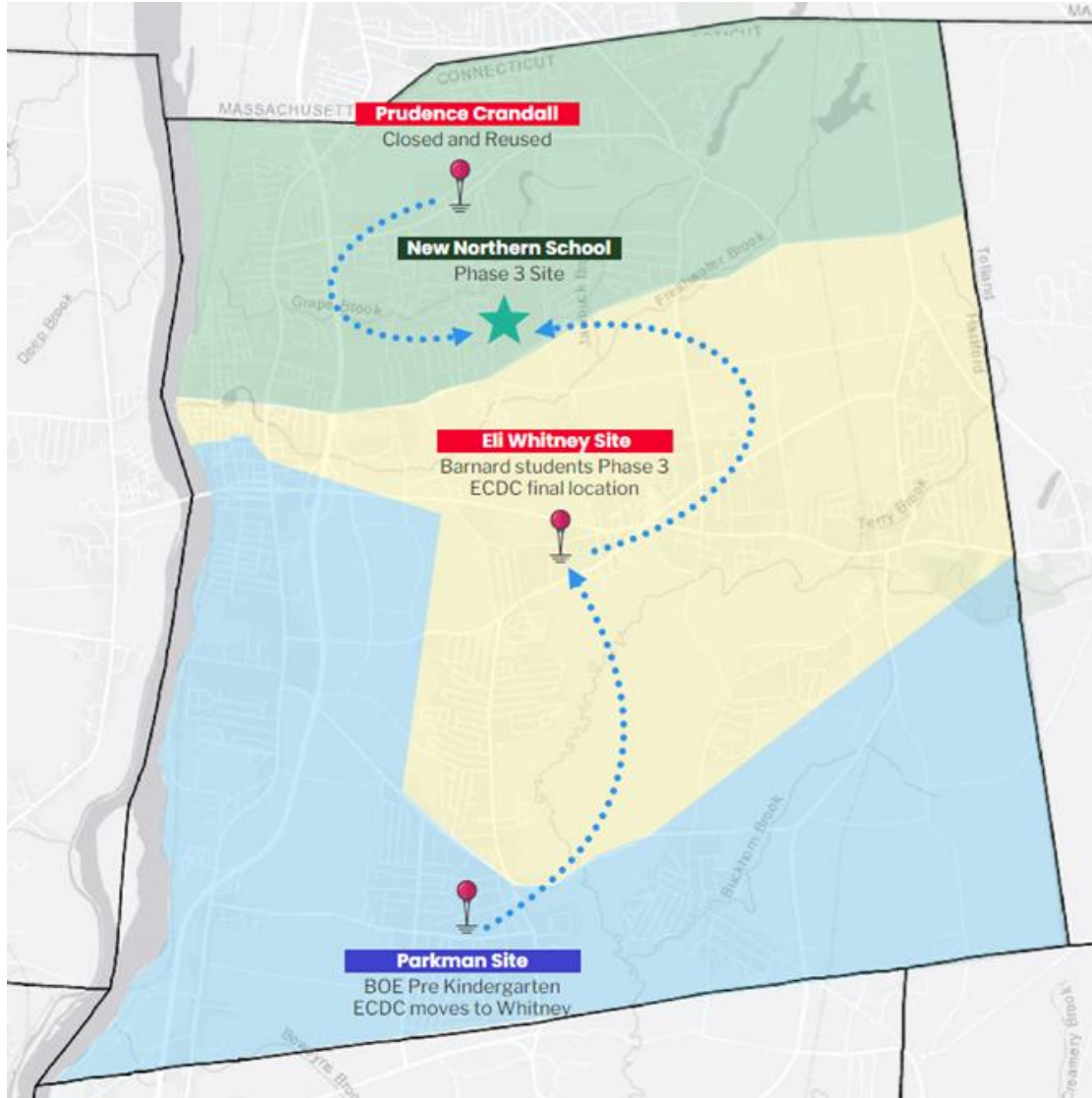
Phase 1 – Central Zone

1. New school near Mark Twain
2. Whitney and Memorial move to the new school
3. Close Memorial
4. Parkman moves to Whitney
5. Renovate Parkman (summer)
6. SELC and ECDC move to Parkman



Phase 2 – Southern Zone

1. New school at SELC+ECDC site
2. ESS and Parkman zone move to the new school
3. Barnard moves to Whitney
4. ESS renovated for Eagle Academy (summer)
5. Eagle Academy renovated for Alternative Ed. (summer)
6. Move Eagle Academy to ESS
7. Move Alternative Ed. to EA



Phase 3 – Northern Zone

1. New school at Barnard
2. Move Barnard zone and Crandall to the new school
3. Close Crandall
4. Renovate Whitney
5. Move ECDC to Whitney

Current vs Final Site Use

Barnard	→	New “Northern” school
Crandall	→	Sold off (possible subdivision)
Eagle Academy	→	Alternative Ed.
Enfield Street	→	Eagle Academy
Memorial	→	Open space
Parkman	→	SELC
Stowe (SELC)	→	New “Southern” school
Whitney	→	ECDC



Anticipated Reuse Outcome Benefits

Program expansion (cost saving and revenue generating)

- Eagle Academy, SELC at Parkman, and Alternative Ed.

ECDC at Whitney (centralized and revenue generating)

Reduced bussing*

Expanded access to recreation and open spaces at former Memorial site and new "Central School"

Opportunity for new housing at Crandall site

Reduce capital investment in two buildings with high needs

Prevent unnecessary capital investment at Stowe

Challenges



Additional time needed to investigate the alternate site



Wetland and zoning issues



Additional study needed



Limited time due to pending projects

Systemic Change

Changing the landscape of education, childcare, recreation, and municipal funding in this community for generations. Allowing Enfield to become a regional hub for all the above.

Recommendations

1. Adoption of the site selection and phasing for future study
2. Authorize the formation of a Pre-Referendum Building Committee
3. Authorize funding of a design team for pre-referendum work
4. Apply for Indoor Air Quality grants for reused sites
 1. Authorize superintendent to apply
 2. Accept a long-term strategic plan
 3. Allocate funding for design
 4. Form a building committee