District: Town of Wellesley

School Name: Ernest F. Upham Elementary School

Recommended Category: Preferred Schematic Date: December 9, 2020

Recommendation

That the Executive Director be authorized to approve the Town of Wellesley (the "District"), as part of its Invitation to Feasibility Study, to proceed into Schematic Design to consolidate and replace the existing Upham Elementary School and the existing Hardy Elementary School with a new facility serving 365 students in grades K-5 on the existing Hardy Elementary School site. MSBA staff has reviewed the Feasibility Study and accepts the District's Preferred Schematic.

District Information				
District Name	Town of Wellesley			
Elementary School(s)	Ernest F. Upham Elementary School (K-5)			
	Hunnewell Elementary School (K-5)			
	John D. Hardy Elementary School (K-5)			
	Joseph E. Fiske Elementary School (PK-5)			
	Katharine Lee Bates Elementary School (K-5)			
	Schofield Elementary School (K-5)			
	Sprague Elementary School (K-5)			
Middle School(s)	Wellesley Middle School (6-8)			
High School(s)	Wellesley Sr. High School (9-12)			
Priority School Name	Ernest F. Upham Elementary School			
Type of School	Elementary School			
Grades Served	K-5			
Year Opened	1957			
Existing Square Footage	36,481			
Additions	1967 addition; modular units in 1993; roof/boilers replaced			
	in 2009			
Acreage of Site	12 acres			
Building Issues	The District identified deficiencies in the following areas:			
	 Structural integrity 			
	 Mechanical systems 			
	 Electrical systems 			
	 Plumbing systems 			
	- Envelope			
	- Windows			
	- Roof			
	 Accessibility 			
	In addition to the physical plant issues, the District reported			
	that the existing facility does not support the delivery of its			
	educational program			
Original Design Capacity	Unknown			
2019-2020 Enrollment	225			
Agreed Upon Enrollment	Study Enrollment includes the following configurations:			
	Enrollment: 240 students (K-5 in seven school facilities)			

District Information						
	Enrollment: 365 students (K-5 in six school facilities with					
	equalized enrollments) (Preferred Schematic)					
Enrollment Specifics	Contingent upon the Board's approval of the Preferred					
	Schematic, the District will sign a Design Enrollment					
	Certification for 365 students in grades K-5.					
Total Project Budget – Debt	Yes					
Exclusion Anticipated						

MSBA Board Votes			
Invitation to Eligibility Period	December 13, 2017		
Invitation to Feasibility Study	October 31, 2018		
Preferred Schematic Authorization	On December 16, 2020 Board agenda		
Project Scope & Budget Authorization	District is targeting Board authorization on		
	August 25, 2021		
Feasibility Study Reimbursement Rate	31.00%		
(Incentive points are not applicable)			

Consultants	
Owner's Project Manager (the "OPM")	Compass Project Management, Inc.
Designer	Symmes Maini & McKee Associates, Inc.

Discussion

The existing Ernest F. Upham Elementary School is a one-story 36,481 square-foot facility located on a 12-acre site. The original school building was constructed in 1957 with an addition completed in 1967, and two modular classes added in 1993. The two modular classrooms went through upgrades in 2014, including: stairs, siding, windows, gutters, carpeting and air conditioning. In addition to the changes listed above, the building roof and boiler were replaced in 2009. The existing facility currently houses 225 students in grades K-5.

The District identified numerous deficiencies in the Statement of Interest for the Upham Elementary School, including accessibility concerns, building envelope issues, windows, and thermal comfort concerns as a result of having inadequate wall insulation. The District has indicated the building lacks adequate space to deliver some of its special education programs and does not provide programmatic space for additional supplementary and support programs for students. Additionally, there is no chairlift or elevator to provide access between a major grade change in the middle of the school. The District has noted because there are also no ramps and bathroom modifications, students with severe physical disabilities are assigned to other schools.

The District requested, and the MSBA agreed to study potential solutions that include the consolidation of the Ernest F. Upham Elementary School students with the John D. Hardy Elementary School student population. The District presented design alternatives as part of the feasibility study, based on the following design enrollment: 240 students for Grades K–5 as one of seven grade K-5 schools in the District, and 365 students as one of six grade K-5 schools with district-wide equalized enrollments. After review and consideration, the District decided to combine the Upham and Hardy Elementary Schools.

The Hardy Elementary School is a two-story 45,900 square-foot facility located on a 9-acre site. The original school building was constructed in 1923, with additions built in 1925 and 1957. An elevator and vestibule were also added to the south east side of the building in 1994, and modular classrooms were added in 1993 and 1997. There have been updates over the years that include the replacement of the main electrical switchboard in 1997, replacement of two boilers in 2007, exterior LED's and minor interior lighting upgrades in 2014, and installation of a new security system that ties to the Fire Department in 2018. The modular classrooms were upgraded in 2014 including: stairs, wood siding, windows, gutters, carpeting, and heating.

The MSBA notes that the District has indicated that at a Special Town Meeting held on December 9, 2019, a local vote was passed to fund construction of a new school to replace the Hunnewell Elementary School concurrently outside of the MSBA grant program.

In conjunction with its consultants, the District performed a comprehensive assessment of the existing conditions and the educational program and received input from educators, administrators, and facilities personnel. Based on the findings of this effort, the District and its consultants initially studied seven preliminary options which include one base repair option, three addition/renovation options, and three new construction options, as presented below.

Option	Description of Preliminary Options
1	Base Repair – Comprehensive renovation of the existing Upham Elementary School
	to address facility maintenance and code compliance (Grades K-5;
	240 students)
2	Addition/Renovation – Comprehensive renovation and addition to the existing Upham
	Elementary School; (Grades K-5; 240 students)
3	Addition/Renovation – Comprehensive renovation and addition to the existing Upham
	Elementary School; (Grades K-5; 365 students)
4	Addition/Renovation – Comprehensive renovation and addition to the existing Hardy
	Elementary School; (Grades K-5; 365 students)
5	New Construction - New elementary school constructed on the existing Upham
	Elementary School site; (Grades K-5; 240 students)
6	New Construction - New elementary school constructed on the existing Upham
	Elementary School site; (Grades K-5; 365 students)
7	New Construction - New elementary school constructed on the upper portion of the
	existing Hardy Elementary School site; (Grades K-5; 365 students)

The District determined that "Option 1", the base repair was not a viable option, however, this option is included in the final evaluation of alternatives for cost comparison purposes. "Option 2 and 5", were eliminated from further consideration because these options did not meet the goals established in the District's educational plan or provide the area required for the District's preferred enrollment option of 365 students in grades K-5.

Although "Option 3", would include major building additions intended to meet the goals of the District's educational plan that would accommodate a 365-student enrollment, it was eliminated from further consideration because of the limitations of the existing Upham Elementary School building and the site's topography.

Upon further review in the preferred schematic phase, the District desired to evaluate additional new construction options on both sites and subsequently introduced additional floor plans and site plans as sub-options to "Options 6 and 7", as presented below:

Option	Description
6a	New Construction on center of site, main entrance oriented to the South
6b	New Construction on center of site, main entrance oriented to the West
6с	New Construction on existing Upham footprint with 4-sided Fire Department access road
7a	New Construction on center of site, with long axis in the North-South direction
7b	New Construction on center of site, with long axis in the East-West direction
7c	New Construction on the southern edge of the site
7d	New Construction on the existing Hardy School footprint

"Option 6b", was eliminated from further consideration because the District and design team determined that the proposed orientation to the neighborhood did not result in the best use of the site. "Options 7a and 7c" were eliminated from further consideration due to unsuitable soils and less than optimal use of the site for circulation and program. "Option 7d" was eliminated from further consideration primarily because this option requires the undesirable use of temporary swing space.

After evaluating the site impact and the associated cost estimates, further sub-options were developed as "Option 6c-R" (with 3-sided Fire Department access) and "7b-R" (with fewer retaining wall requirements) to respond to discussions related to building siting and cost considerations. Seven options were further developed and considered in the final evaluation of options. The associated preliminary design pricing is presented below.

Summary of Preliminary Design Pricing for Final Evaluation of Options

	Total Gross	Square Feet of Renovated	Square Feet of New	Site, Building Takedown,	Estimated Total Construction	
Option (Description)	Square Feet	Space (cost*/sq. ft.)	Construction (cost*/sq. ft.)	Haz Mat. Cost*	** (cost*/sq. ft.)	Estimated Total Project Costs
Option 1: Capital Imp./Code Upgrade at Upham ES (240 students)	36,481	36,481 \$458/sq. ft.	N/A	\$622,030	\$17,340,868 \$475/sq. ft.	\$27,160,000
Option 4: Addition/Renovatio n at Hardy ES (365 students)	84,951	19,583 \$451/sq. ft.	65,368 \$532/sq. ft.	\$13,394,040	\$57,031,954 \$671/sq. ft.	\$81,679,000
Option 6a: New Construction at Upham ES site (365 students)	81,390	N/A	81,390 \$543/sq. ft.	\$17,080,088	\$61,294,279 \$753/sq. ft.	\$79,731,000
Option 6c: Option introduced in PSR, New Construction at Upham ES site (365 students)	81,390	N/A	81,390 \$534/sq. ft.	\$12,796,018	\$56,226,739 \$691/sq. ft.	\$81,860,000

Option (Description)	Total Gross Square Feet	Square Feet of Renovated Space (cost*/sq. ft.)	Square Feet of New Construction (cost*/sq. ft.)	Site, Building Takedown, Haz Mat. Cost*	Estimated Total Construction ** (cost*/sq. ft.)	Estimated Total Project Costs
Option 6c-R: Option introduced in PSR, New Construction at Upham ES site (365 students)	81,390	N/A	81,390 \$534/sq. ft.	\$12,280,114	\$55,739,055 \$685/sq. ft.	\$81,305,000
Option 7b.2: Evolution of Option 7b, New Construction at Hardy ES site (365 students)	81,390	N/A	81,390 \$530/sq. ft.	\$14,223,648	\$57,323,723 \$704/sq. ft.	\$75,811,000
Option 7b-R: New Construction at Hardy ES site (365 students)	81,390	N/A	81,390 \$531/sq. ft.	\$12,804,621	\$55,982,143 \$688/sq. ft.	\$74,282,000

^{*} Marked up construction costs

Based on additional analysis, the District concluded that an Upham and Hardy consolidation of 365 students on the site of the existing Hardy School would be the preferred study enrollment option. The District determined that this consolidation impacts the least number of students/families, results in the least impact to current traffic patterns, provides the greatest potential for student-walkers across the district, maintains existing neighborhoods, and creates favorable utilization across all schools.

The District has selected "Option 7b.2", a two-story new construction building as its Preferred Schematic to proceed into Schematic Design. The District selected this option as its Preferred Schematic because it best meets the educational and sustainability goals identified by the District; satisfies the District's requirements for site access, parking and fields; and meets community access and benefit goals. In addition, this option does not require swing space or temporary modulars based on the location of the proposed building, which offers less disruption to students during construction. Although this option results in a cost estimated higher than the other options considered on this site, the overall project is lower as there is no swing space cost. The District noted that it has chosen to take a conservative approach to the site cost until further soils exploration and testing can be performed in subsequent phases of design.

"Option 1", the base repair option, was eliminated from further consideration because the District determined that this option did not meet the educational program and visioning goals for the entire K-5 and Skills populations. This option did not meet the District's redistricting and educational goals of providing all 18-section elementary schools. Additionally, the District has indicated this option would have left the Hardy School with building systems at the end of their useful life requiring an eventual third project for the District upon the completion of the Hunnewell and Upham projects.

^{**} Does not include construction contingency

^{***}District's Preferred Schematic

"Option 4 and 7b-R", addition/renovation and new construction options at the Hardy School site, met the majority of the District's educational program and visioning goals for the entire K-5 population. However, these options were not selected by the District primarily because these options would require swing space and demolition before the addition and renovation could begin. The District has indicated the construction phasing of these two options would increase the project cost, lengthen the project schedule and would require that students be relocated to a modular building without access to all the typical program spaces.

Although "Option 6a", new construction on the Upham site, meets the District's educational program, visioning, and building-specific sustainability goals, the District did not select this option because it did not meet the Town's site sustainability goals due to the amount of tree and ledge removal that would be required. "Options 6c and 6c-R", also located on the Upham site, were not selected because these options also required significant tree and ledge removal. Additionally, the District indicated these two options would require undesirable swing space or relocating students to a modular building at another elementary school site within the District.

The District presented its proposed Preferred Schematic to the MSBA Facilities Assessment Subcommittee ("FAS") on November 18, 2020. At that meeting, FAS members discussed a number of items including, an appreciation for the Educational Program; high cost of the proposed project; variations to the MSBA space summary guidelines, the size of the gymnasium; review of the distribution of special education spaces; inclusion, location, and access associated with outdoor learning spaces; appreciation of separated parking locations and green space; building circulation; openness of the proposed floor plan and the proposed media center; appreciation of a campus approach; opportunity to further develop the site plan regarding adjacencies of the fire lane and play spaces; and, opportunity to reduce the cost of the project by simplifying the building's form.

MSBA staff reviewed the conclusions of the Feasibility Study and all other subsequent submittals with the District and found:

- 1) The options investigated were sufficiently comprehensive in scope, the approach undertaken in this study was appropriate, and the District's Preferred Schematic is reasonable and cost-effective and meets the needs identified by the District.
- 2) The District has submitted an operational budget for educational objectives and a capital budget statement for MSBA review.
- 3) The District's Special Education submission will be subject to final review and approval by the Department of Elementary and Secondary Education as part of the Schematic Design submittal, which is prior to executing a Project Scope and Budget Agreement.
- 4) Subject to Board approval, the MSBA will participate in a project that includes spaces that meet MSBA guidelines, except for variations previously agreed to by the MSBA. All proposed spaces will be reviewed during the Schematic Design phase.
- 5) As part of the Schematic Design phase, the District will work with the MSBA to determine a mutually agreeable methodology to differentiate eligible costs from ineligible costs.

Based on the review outlined above, staff recommends that the Town of Wellesley be approved to proceed into Schematic Design to consolidate and replace the existing Upham Elementary School and the existing Hardy Elementary School with a new facility serving grades K-5 on the existing Hardy Elementary School site.