District: Town of Stoneham
School Name: Stoneham High School
Recommended Category: Preferred Schematic
Date: February 4, 2021

Recommendation

That the Executive Director be authorized to approve the Town of Stoneham (the "District"), as part of its Invitation to Feasibility Study, to proceed into Schematic Design to replace the existing Stoneham High School with a new grades 9-12 facility on the existing site. MSBA staff has reviewed the Feasibility Study and accepts the District's Preferred Schematic.

District Information						
District Name	Town of Stoneham					
Elementary School(s)	Colonial Park School (PK-4)					
	Robin Hood School (PK-4)					
	South Elementary School (PK-4)					
Middle School(s)	Stoneham Central Middle School (5-8)					
High School(s)	Stoneham High School (9-12)					
Priority School Name	Stoneham High School					
Type of School	High School					
Grades Served	9-12					
Year Opened	1968					
Existing Square Footage	208,113					
Additions	1981: 5 science and business education labs added					
Acreage of Site	35 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 as well as existing and projected overcrowding.					
Original Design Capacity	Unknown					
2020-2021 Enrollment	610					
Agreed Upon Enrollment	695					
Enrollment Specifics	The District and MSBA have mutually agreed upon a design enrollment of 695 students serving grades 9-12.					
Total Project Budget – Debt Exclusion Anticipated	Yes					

MSBA Board Votes			
Invitation to Eligibility Period	December 12, 2018		
Invitation to Feasibility Study	October 30, 2019		
Preferred Schematic Authorization	On February 11, 2021 Board agenda		
Project Scope & Budget Authorization	District is targeting Board authorization on		
	August 25, 2021.		
Feasibility Study Reimbursement Rate	52.06%		
(Incentive points are not applicable)			

Consultants	
Owner's Project Manager (the "OPM")	SMMA
Designer	Perkins + Will

Discussion

The existing Stoneham High School is a 208,113 square foot facility located on a 35-acre site that currently serves students in grades 9-12. The original school building was constructed in 1968, with a small addition of five science and business education labs in 1981.

The District's Statement of Interest ("SOI") identifies numerous deficiencies in the existing facility associated with outdated mechanical, electrical, and plumbing systems; building envelope; accessibility issues; overcrowding; and inappropriate existing spaces for delivering the District's educational 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 (10) preliminary options that include: (1) code upgrade option, (1) renovation option, (3) addition/renovation options, and (5) new construction options as presented below.

Option	Description of Preliminary Options			
1	Code Upgrade with an estimated project costs \$115 million			
2	Renovation with an estimated project cost of \$173.4 million			
3A1	Addition/Renovation with an estimated project cost of \$175.7 million			
3A2	Addition/Renovation with an estimated project cost of \$175.2 million			
3B	Addition/Renovation with an estimated project cost of \$174.6 million			
4A1	New Construction with an estimated project cost of \$177.7 million			
4A2	New Construction with an estimated project cost of \$180.6 million			
4A3	New Construction with an estimated project cost of \$174.8 million			
4B	New Construction with an estimated project cost of \$172.9 million			
4C	New Construction with an estimated project cost of \$173.7 million			

As a result of this analysis, the District determined "Option 3A1" would not be considered for further evaluation because of the upgrades and repairs to the existing field house, the proposed parking distance from the stadium, the loss of fields during construction, and, to a lesser extent, the relocation of utilities required to keep the existing facility in operation during construction.

The District determined "Option 3B" would not be considered for further evaluation because it results in the field being surrounded by a driveway, results in parking that is remote from the stadium, has poor visibility from Franklin Street, and has suboptimal building orientation, thereby not aligning with the zero net energy goals of the District.

The District determined "Options 4A1 and 4A2" would not be considered for further evaluation because of the high cost associated with each of the options, significant grade changes between fields, and, to a lesser degree, this option requires relocation of utilities required to keep the existing facility in operation during construction.

The District determined "Option 4C" would not be considered for further evaluation because of the distance between the parking and the stadium, there is no visibility of the new building from Franklin Street, and the suboptimal building orientation for classroom daylighting.

MSBA staff and the District agreed to explore the following (5) options for further development and consideration in the final evaluation and development of preliminary design pricing as presented below, including: (1) code upgrade option, (1) renovation option, (1) addition/renovation option, and (2) new construction options.

Summary of Preliminary Design Pricing for Final Evaluation of Options

Option (Description)	Total Gross Square Feet	Square Feet of Renovated Space (cost*/sq. ft.)	Square Feet of New Constructio n (cost*/sq. ft.)	Site, Building Takedown, Haz Mat. Cost*	Estimated Total Construction ** (cost*/sq. ft.)	Estimated Total Project Costs
Option 1: (Code Upgrade)	208,113	208,113 \$360/sq. ft.	N/A	\$17,656,044	\$92,664,325 \$445/sq. ft.	\$115,523,799
Option 2: (Renovation)	208,113	208,113 \$456/sq. ft.	N/A	\$40,319,373	\$135,140,192 \$649/sq. ft.	\$168,437,931
Option 3A2: (Addition/ Renovation)	207,827	48,000 \$422/sq. ft.	159,827 \$543/sq. ft.	\$38,372,689	\$145,405,962 \$699/sq. ft.	\$181,956,184
Option 4A3: (New Construction)	207,827	N/A	207,827 \$499/sq. ft.	\$37,805,343	\$141,652,635 \$681/sq. ft.	\$177,433,426
Option 4B: (New Construction)***	207,827	N/A	207,827 \$496/sq. ft.	\$37,579,957	\$140,636,495 \$677/sq. ft.	\$176,208,977

^{*} Marked up construction costs

The District has selected "Option 4B", as its Preferred Schematic to proceed into Schematic Design. The District selected "Option 4B" because it best meets the needs of the District's educational program, its location on the existing Stoneham High School site will minimize disruption to ongoing education during construction, the proposed geo-exchange field wraps the building on three sides, this option separates entrances for all user groups (high school, Pre-

^{**} Does not include construction contingency

^{***}District's Preferred Schematic

Kindergarten, and District Offices), and meets the District's sustainability goals through zero net energy performance. Although this option requires relocation of utilities to keep the existing facility in operation during construction it was viewed as more favorable by the District.

"Option 1" was not selected by the District because it would not meet the needs of the District's educational program, it would not meet any capacity requirements, and creates significant disruption to ongoing education during construction.

"Option 2" was not selected by the District because it requires modular classrooms for swing space and creates significant disruption to ongoing education during construction, it would be difficult to meet the zero net energy goals of the District, and the District's Offices could not be accommodated in the existing facility.

"Option 3A2" was not selected by the District because this option was viewed as less favorable than Option 4B and it requires the relocation of utilities to keep the existing facility in operation during construction.

"Option 4A3" was not selected by the District because this option requires the relocation of utilities to keep the existing facility in operation during construction and there are challenges to accommodate grade change with most of the fields on the south of the site.

The District presented its proposed Preferred Schematic to the MSBA Facilities Assessment Subcommittee ("FAS") on January 20, 2021. At that meeting, members of the FAS discussed the following items: location of the gymnasium and auditorium; appreciation of the Educational Program; review of the distribution of Special Education spaces; staffing related to the Library/Media Center; appreciation of separated parking locations and green space; building organization and circulation; length of corridors and tighter corners; inclusion of the town-wide PK program; focusing on transition from PK to K; and location of the art room in relation to the auditorium.

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 Stoneham be approved to proceed into Schematic Design to replace the existing Stoneham High School with a new grades 9-12 facility on the existing site.