

District: Town of Sharon
 School Name: Sharon High School
 Recommended Category: Preferred Schematic
 Date: June 19, 2019

Recommendation

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

District Information	
District Name	Town of Sharon
Elementary School(s)	Cottage Street Elementary School East Elementary School Heights Elementary School
Middle School(s)	Sharon Middle School
High School(s)	Sharon High School
Priority School Name	Sharon High School
Type of School	High School
Grades Served	9-12
Year Opened	1956
Existing Square Footage	168,422
Additions	33,500 square foot addition in 1963; 25,000 square foot addition in 1997; and 1,200 square foot weight room addition in 2010.
Acreage of Site	13.7
Building Issues	The District identified deficiencies in the following areas: <ul style="list-style-type: none"> – Overcrowding – Building Envelope – Windows – Mechanical systems – Electrical systems – Plumbing systems – Accessibility
Original Design Capacity	950
2018-2019 Enrollment	1,121
Agreed Upon Enrollment	1,250
Enrollment Specifics	The District and MSBA have mutually agreed upon a design enrollment of 1,250 students serving grades 9-12.
Total Project Budget – Debt Exclusion Anticipated	Yes

MSBA Board Votes	
Invitation to Eligibility Period	February 15, 2017
Invitation to Feasibility Study	December 13, 2017
Preferred Schematic Authorization	On June 26, 2019 Board agenda

Project Scope & Budget Authorization	District is targeting Board authorization on October 30, 2019.
Feasibility Study Reimbursement Rate (Incentive points are not applicable)	45.32%

Consultants	
Owner’s Project Manager (the “OPM”)	PMA Consultants, LLC
Designer	Tappé Associates, Inc.

Discussion

The existing Sharon High School is a 168,422 square-foot facility located on a 13.7-acre site in a residential neighborhood and currently serves grades 9-12. The original school building was constructed in 1956, with additions in 1963, 1997, and 2010. Additionally, various upgrades have been completed at the existing facility over the history of the school, including modular classrooms added in 2001 and 2009, and a complete roof replacement in 2011.

The District identified numerous deficiencies in the Statement of Interest including severe overcrowding, building envelope, windows, mechanical, electrical, plumbing systems, and accessibility constraints. The District has also expressed concern regarding its ability to deliver its educational program due to lack of programmatic space.

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 eight preliminary options that included one code upgrade option, two addition/renovation options, and five new construction options as presented below.

Option	Description of Preliminary Options
R-1	Code Upgrade/ Repair – Includes repair of systems and /or scope required for code compliance with no modification to existing spaces or their function.
AR-1	Addition/ Renovation - Demolition of the 1963 and 1965 classroom wings with a two-story classroom addition onto the south side of the existing school.
AR-2	Addition/ Renovation - Demolition of the 1963 classroom wing with a two-story classroom addition onto the north side of the existing school.
N-1	New Construction – Two-story building located on the existing softball and baseball fields. Proposes major public functions on the north side of the school with two south-facing classroom wings resulting in four learning communities.
N-2	New Construction – Two-story building located on the existing softball and baseball fields. Proposes the main entry on the northern side with major public functions on the northwest and southeastern sides of the school, with one northeastern and one southwestern-facing classroom wings, resulting in four learning communities.
N-3	New Construction – Two-story building located on the existing softball and baseball fields. Proposes major public functions on the north and western sides of the school, with one east-facing and two south-facing classroom wings resulting in six learning communities.
N-4	New Construction – Two-story building located on the existing softball and baseball

	fields. Proposes major public functions on the north and western sides of the school with three east-facing classroom wings resulting in six learning communities.
N-5	New Construction – Three-story building located on the existing softball and baseball fields. Proposes major public functions on the western and southern sides of the school with two east-facing classroom wings resulting in six learning communities.

As a result of this analysis the District determined that “Option R-1”, the base repair option, is not a viable option because it could not accommodate the current overcrowding and provide the programmatic space required for the approved student population. The District has indicated the existing school is 70,000 square feet below MSBA space summary guidelines.

“Option AR-2” was also not considered a viable option. The District determined that it did not meet the needs of the educational program because it does not create the smaller learning communities that are needed to fulfill the District’s educational program. Additionally, this option requires temporary swing space classrooms and requires a longer construction duration that would be more disruptive to ongoing education than “Option AR-1”.

“Options N-1 & N2” were not considered viable options because they also do not provide the smaller learning communities needed to fulfill the District’s educational program. These two options proposed four, 300-student classroom wings. The District has indicated that providing six, 200-student classroom wings would also offer greater flexibility for how the school is organized in the future.

Although “Option N-5”, the only three-story option proposed, fulfills the District’s educational program, it was not considered a viable option because of the vertical circulation required. The District determined this option would isolate some classrooms on the top floor away from some of the major spaces on the ground level. Additionally, considerations for accessibility and limiting vertical travel time eliminated this option from further consideration.

Upon further review, MSBA staff and the District agreed to explore four options for further development and consideration: one base repair option, one addition/renovation option, and two new construction options. Although “Option N-3” was listed as an option for further consideration along with R-1, AR-1 and N-4, early in the preferred schematic phase, the District eliminated it from further consideration because the building layout did not provide views from the cafeteria to outdoors, and it proposed classroom wings that were located further apart making travel distances longer than “Option N-4”.

The District has decided to explore the following three options for further development and consideration: one base repair option, one addition/renovation option, and a new construction option. Each of these final three options are included in the preliminary design pricing presented below. Please note that “Option R-1” was not considered a viable option but has been included for cost comparison purposes.

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 Construction (cost*/sq. ft.)	Site, Building Takedown, Haz Mat. Cost*	Estimated Total Construction ** (cost*/sq. ft.)	Estimated Total Project Costs
Option R-1: (Base Repair)	168,422	168,422 \$432/sq. ft.	N/A	\$2,749,873	\$75,539,551 \$449/sq. ft.	\$94,424,438
Option AR-1: (Addition/ Renovation)	249,928	104,442 \$447/sq. ft.	145,486 \$465/sq. ft.	\$11,190,420	\$125,545,456 \$502/sq. ft.	\$156,931,820
Option N-4: (New Construction) ***	240,874	N/A	240,874 \$450/sq. ft.	\$13,135,241	\$121,628,847 \$505/sq. ft.	\$152,036,059

* Marked up construction costs

** Does not include construction contingency

***District's Preferred Schematic

The District has selected “Option N-4”, a new two-story construction option, as the Preferred Schematic to proceed into Schematic Design. This option addresses various aspects of the District’s educational program, including the enhancement of the existing departmental approach by providing academic wings that connect the arts, technology, and health and wellness programs to promote collaboration between departments and disciplines. Moreover, this option locates teacher planning centers on each floor to encourage collaboration.

“Option N-4” eliminates the need for temporary swing space while keeping the existing school fully operational without disrupting academic programs during construction. Additionally, the preferred solution locates the cafeteria and media center to take advantage of the views of an existing lake located to the south of the site and configures the proposed building to avoid an existing wetland.

Although “Option AR-1” satisfies the requirements of the District’s educational program, provides all new core academic classrooms, and addresses most of the District’s stated goals, this option was not considered further because it results in the highest net to gross square footage ratio due to inefficiencies associated with the existing floor plan. This option also requires complex phasing of an occupied building that would result in an undesirable disruption to the academic programs. Additionally, it is estimated as the costliest option of the three options studied in the final evaluation of alternatives.

The District presented its proposed Preferred Schematic to the MSBA Facilities Assessment Subcommittee (“FAS”) on June 5, 2019. At that meeting, members of the FAS discussed a number of topics including: appreciation of the Education Program and the District’s response to the subcommittee’s comments; consideration of the chemical storage square footage requirements and introducing microchemistry into the curriculum; appreciation of the proposed layout; incorporation of the construction process used as a teaching and learning tool; the District’s approach to world languages and the future of language lab and instruction; differences between the Innovation Labs and STEAM rooms; distribution of the toilet rooms; reducing the long-term utility cost by modifying the building’s footprint; appreciation of the façade’s design; the project’s sustainable goals and the preliminary exploration of opportunities to approach Net Zero for energy

usage; the relationship between the cafeteria and media center and its visual connection to the outdoor natural resources; consideration for large items to have access to the stage; and confirmation of conversations with the District's facilities teams to simplify future operation of the building systems.

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 Schematic Design submittal 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 Town of Sharon be approved to proceed into Schematic Design to replace the existing Sharon High School with a new facility serving grades 9-12 on the existing site.