

District: Town of Millbury
 School Name: Raymond E. Shaw Elementary School
 Recommended Category: Preferred Schematic
 Date: April 3, 2019

Recommendation

That the Executive Director be authorized to approve the Town of Millbury (the “District”), as part of its Invitation to Feasibility Study, to proceed into Schematic Design to replace the existing Raymond E. Shaw Elementary School with a new grades 3-6 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 Millbury
Elementary School(s)	Elmwood Street Elementary School (PK-3) Raymond E. Shaw Elementary School (4-6)
Middle School(s)	N/A
High School(s)	Millbury Junior-Senior High School (7-12)
Priority School Name	Raymond E. Shaw Elementary School
Type of School	Elementary School
Grades Served	4-6
Year Opened	1975
Existing Square Footage	73,911
Additions	N/A
Acreage of Site	150 acres
Building Issues	<p>The District identified deficiencies in the following areas:</p> <ul style="list-style-type: none"> – Mechanical systems – Electrical systems – Plumbing systems – Envelope – Windows – Accessibility <p>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.</p>
Original Design Capacity	Unknown
2018-2019 Enrollment	443
Agreed Upon Enrollment	Study Enrollment includes the following configurations: 550 Students (grades 3-6) (Preferred Schematic) 415 Students (grades 4-6)
Enrollment Specifics	Contingent upon the Board’s approval of the Preferred Schematic, the District will sign a Design Enrollment Certification for 550 students in grades 3-6.
Total Project Budget – Debt Exclusion Anticipated	Yes

MSBA Board Votes	
Invitation to Eligibility Period	February 15, 2018
Invitation to Feasibility Study	October 25, 2018
Preferred Schematic Authorization	April 10, 2019
Project Scope & Budget Authorization	August 28, 2019
Feasibility Study Reimbursement Rate (Incentive points are not applicable)	57.74%

Consultants	
Owner's Project Manager (the "OPM")	Hill International
Designer	Turowski2 Architecture, Inc.

Discussion

The existing Raymond E. Shaw Elementary School is a 73,911 square-foot, single-story school located on a 150-acre site that currently houses grades 4-6 and was originally constructed in 1975. The existing building and the Elmwood Elementary School share the same parcel of land; however, the facilities have separate vehicular entrances and the buildings are approximately one half-mile apart.

The original roof was replaced in 2009, with additional accessibility and security upgrades completed in 2011 and 2013 respectively. The District identified numerous deficiencies in the Statement of Interest, including original non-insulated windows, original mechanical, electrical, and plumbing systems, as well as many existing non-compliant accessibility features.

As part of the Feasibility Study, the MSBA agreed with the District's intent to explore multiple alternatives associated with the District's grades 4-6 student population, resulting in the following study enrollment options: 415 students in grades 4-6; and 550 students in grades 3-6.

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 eleven preliminary options that included one base repair option, three addition/renovation configurations, and seven new construction options as listed below.

Option	Description of Preliminary Options
0	Base Repair for 415 students, grades 4-6
A1	Addition/ renovation retaining existing classroom size for 415 students, grades 4-6
A2	Addition/ renovation with increase to classroom size for 415 students, grades 4-6
B	Addition/ renovation for 550 students, grades 3-6
C1	New construction, n. e. site within easement, for 550 students, grades 3-6
C2	New construction, n. e. site variation within easement, for 550 students, grades 3-6
C3A	New construction, n. w. site, for 550 students in grades 3-6
C3B	New construction, n. e. site, outside easement, for 550 students, grades 3-6
C4A	New construction, n. w. site variation, outside easement, for 550 students, grades 3-6
C4B	New construction, central site, within easement for 550 students, grades 3-6
D	New construction for 415 students, with similar 'C' option site variations, grades 4-6

As a result of this analysis, the District determined that the Base Repair, “Option 0”, is not a viable option and it does not allow for the District’s desired relocation of the 3rd grade students, which are currently attending the Elmwood Street School. However, per review of the District’s Preliminary Design Program, the MSBA requested that this Option continue to be developed/evaluated as part of the Preferred Schematic Report. Further evaluation of “Option 0” was performed accordingly.

As a result of the preliminary evaluation, the District determined that the addition/renovation, “Option A1”, could provide the basic needs of the educational program. However, the District determined that this Option does not allow for the adjustment of desired classroom sizes, and it does not address the District’s desired grades 3-6 configuration; thus, it was not considered further.

Although “Options C1 and C2” would accommodate the District’s desired grade configuration and fully address the educational program, the District determined that the proposed building location for these options would not produce optimal building visibility upon approach to the site; thus, these Options were not considered further. The District determined that although “Options C4A and C4B” would produce similar programmatic benefits, these options would not offer ideal building orientation and/or preferred site development. Although “Option D” would accommodate the District’s educational program for grades 4-6, this option was not considered further because it does not alleviate space constraints for early education programs at other facilities and does not support the District’s desired grades 3-6 configuration at the Shaw School.

As a result of further evaluation, the District combined the proposed features associated with “Options C3A and C3B” into a single “Option C3” and produced an additional alternative titled “Option C5”. Five 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

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 0: (Base Repair, grades 4-6)	74,336	73,911 \$420/sq. ft.	425 \$420/sq. ft.	\$2,890,000	\$34,100,000 \$459/sq. ft.	\$47,100,000
Option A2: (Addition/reno, grades 4-6)	77,311	72,560 \$428/sq. ft.	4,751 \$428/sq. ft.	\$4,290,040	\$37,400,000 \$484/sq. ft.	\$51,400,000
Option B: (Addition/reno, grades 3-6)	87,366	75,744 \$448/sq. ft.	11,622 \$448/sq. ft.	\$4,190,000	\$43,300,000 \$496/sq. ft.	\$59,700,000
Option C3: (New Construction, grades 3-6)	88,422	n/a	88,422 \$430/sq. ft.	\$5,900,000	\$43,900,000 \$496/sq. ft.	\$55,600,000
Option C5: (New Construction, grades 3-6)***	88,422	n/a	88,422 \$435/sq. ft.	\$5,800,000	\$44,300,000 \$501/sq. ft.	\$56,000,000

** Marked up construction costs*

*** Does not include construction contingency*

******District's Preferred Schematic***

The District has selected “Option C5”, new construction, as the Preferred Schematic to proceed into Schematic Design. In addition to supporting the District’s desire to incorporate the 3rd grade student population into the proposed school, this option addresses the deficiencies associated with the existing building, fully accommodates the District’s educational program, and results in the preferred building location, orientation, and site development opportunities.

After further evaluation, the District determined that “Option 0” would not accommodate the desired grades 3-6 configuration, fully address the deficiencies of the existing building, or fully support the District’s educational program. “Option A2” also failed to accommodate the District’s desired grade configuration. The District also determined that the educational disruption associated with phased construction in an occupied building was disadvantageous for both of these options; thus, neither of these Options were selected.

“Option B” results in the desired grade configuration, satisfies the space needs, and programmatic requirements. However, it is the most-costly option and has a longer period of disruption; thus, the District did not further consider this Option. Although many advantageous similarities exist between “Option C3” and “Option C5”, the District determined that variations in the proposed floor plan and building orientation aided in the selection of “Option C5” as the District’s Preferred Schematic.

The District presented its proposed Preferred Schematic to the MSBA Facilities Assessment Subcommittee (the “FAS”) on March 13, 2019. At that meeting, members of the FAS discussed the appreciation of the District’s educational program; the site layout, parking, and interest in understanding further development; proposed building massing and associated further development; opportunities to enhance the building entry; refinement of proposed mechanical equipment location in the attic space; opportunities to refine adjacency/access to proposed rooftop space from maker-space; special education spaces and their connection to the proposed “neighborhoods”; consideration for providing one or two larger special education spaces for future use as self-contained classrooms; consideration for including sink-mounted eyewash provisions in classrooms; testing of potable water; avoiding book storage beneath lab tables; accessibility to outdoor learning spaces; science and social science instruction; proposed outdoor rooftop learning activities; and potential for adjacency improvements related to toilet room locations near “performance” areas.

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, 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 the Town of Millbury be approved to proceed into Schematic Design to replace the existing Raymond E. Shaw Elementary School with a new grades 3-6 facility on the existing site.