

District: City of Fall River
 School Name: B.M.C. Durfee High School
 Recommended Category: Preferred Schematic
 Date: August 16, 2017

Recommendation

That the Executive Director be authorized to approve the City of Fall River, as part of its Invitation to Feasibility Study, to proceed into Schematic Design to replace the existing B.M.C. Durfee High School with a new facility on the existing site while maintaining and renovating the existing high school athletic complex. MSBA staff has reviewed the Feasibility Study and accepts the District’s preferred solution.

District Information	
District Name	City of Fall River
Elementary School(s)	Carlton M. Viveiros Elementary School (K-5) Henry Lord Community School (PK-8) James Tansey Elementary School (K-5) John J. Doran School (PK-8) Letourneau Elementary School (PK-5) Mary Fonseca Elementary School (K-5) North End Elementary School (PK-5) Samuel Watson Elementary School (K-5) Spencer Borden Elementary School (K-5) Stone Day School (2-8) William S. Greene Elementary School (PK-5)
Middle School(s)	Matthew J. Kuss Middle School (6-8) Morton Middle School (6-8) Resiliency Middle School (6-9) Talbot Innovation School (6-8)
High School(s)	B.M.C. Durfee High School (9-12) Fall River Gateway to College (11-12) Resiliency Preparatory School (9-12)
Priority School Name	B.M.C. Durfee High School
Type of School	High School
Grades Served	9-12
Year Opened	1978
Existing Square Footage	573,210
Additions	N/A
Acreage of Site	63.68 acres
Building Issues	The District identified deficiencies in the following areas: <ul style="list-style-type: none"> – Structural integrity – Mechanical systems – Electrical systems – Plumbing systems – Building Envelope – Windows and Roofing – Accessibility

District Information	
	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
2016-2017 Enrollment	2,123
Agreed Upon Enrollment	2,570
Enrollment Specifics	The District and MSBA have mutually agreed upon a design enrollment of 2,570 students serving grades 9-12.

MSBA Board Votes	
Invitation to Eligibility Period	January 14, 2015
Invitation to Feasibility Study	November 18, 2015
Preferred Schematic Authorization	On August 23, 2017 Board agenda
Project Scope & Budget Authorization	District is targeting Board authorization on February 14, 2018
Feasibility Study Reimbursement Rate (Incentives points are not applicable)	79.58%

Consultants	
Owner's Project Manager (the "OPM")	Leftfield, LLC
Designer	Ai3 Architects

Discussion

The existing BMC Durfee High School is a 573,210 square foot facility located on an approximately 64 acre site that currently serves students in grades 9-12.

The original school building was constructed in 1978 and received various repairs/upgrades that were completed between 2003 and 2013, including boiler and roof replacement.. The District identified numerous deficiencies in the Statement of Interest that are associated with: structural, mechanical, electrical, and plumbing systems; roofing; building envelope and windows; and, accessibility constraints. The District has also expressed concern regarding the ability to deliver its educational program due to the original open-concept floor plan within the academic portion of the building as well as deliver its science and vocational programs due to the physical deficiencies of the facility.

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 the possibility of new construction at three alternative sites and five preliminary options on the existing site that included one base repair option, two addition/renovation options, one new construction option, and one comprehensive renovation option. The following is a detailed list of the preliminary alternatives considered.

Alternative Sites:

Location	Description of Preliminary Options
1	New Construction at the Duro Mills site.
2	New Construction at the Industrial Park site.
3	New construction at the Anawan Mills site.

Existing B.M.C. Durfee High School Site:

Option	Description of Preliminary Options
0	Base Repair of the existing facility.
1	Addition/Renovation of the existing facility (main building is replaced with new construction and maintains existing athletic complex and performing arts building).
2	New construction on the existing site.
3	Addition/Renovation of the existing facility (main building is replaced with new construction, maintains/renovates existing athletic complex and existing performing arts building is demolished).
4	Comprehensive renovation of the existing facility.

Early in the evaluation of alternatives during the preliminary design program, the District determined that given considerable non-advantageous factors such as limited buildable area, soil contamination, and cost of acquisition, the alternative sites are not viable locations and were not further evaluated.

The District chose to further evaluate the various options identified above at the existing high school site. The base repair “Option 0”, was determined to be a non-viable alternative and dropped from further development because this option does not resolve the facility and educational deficiencies. However, this option has been carried forward for cost comparison purposes in the District’s Preferred Schematic Report and in the Preliminary Design Pricing Table below.

As a result of further evaluation, the District determined that the addition and renovation scope associated with “Option 3” would also result in complex phased construction within an occupied facility and include longer construction duration when compared to “Option 1” and “Option 2”. Although this option retains and proposes to renovate the existing high school athletic complex, it does not provide the District with an opportunity to retain the existing performing arts building that could be repurposed for community use as a separate project, and was therefore eliminated from further consideration.

In addition, the District determined that the comprehensive renovation scope associated with “Option 4” would result in multiple construction phases while occupied, would result in the most educationally disruptive option, and would result in the longest construction duration of any other option. Therefore, “Option 4” was not considered further.

The District determined that in order to complete a full analysis of the remaining viable options, variations to “Option 1” and “Option 2” would be explored during the preferred schematic phase and are presented below:

Option	Description
1A	Renovation of the existing performing arts and athletic complex with newly constructed/connected Academic Core to the northwest.
1B	Renovation of the existing performing arts and athletic complex with newly constructed/disconnected Academic Core to the northwest.
1C	Renovation of the existing performing arts and athletic complex with newly constructed/disconnected Academic Core to the north.
1D	Renovation of the existing performing arts and athletic complex with newly constructed/connected Academic Core to the west.
1E	Renovation of the existing athletic complex with newly constructed/connected Academic Core. Existing performing arts building is re-purposed.
2A	New Construction without pool.
2B	New construction with portions of pre-engineered components.

Upon further review, MSBA staff and the District agreed to two final options, “Option 1” addition/renovation with variations, and “Option 2” new construction with variations, for further development and consideration in the final evaluation and development of preliminary design pricing as 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	573,210	573,210 \$99/sq. ft.	n/a	\$1,710,000	\$58,169,531 \$101/sq. ft.	\$73,072,371
Option 1A: Addition/Renovation	526,044	189,523 \$253/sq. ft.	336,521 \$366/sq. ft.	\$29,761,823	\$201,015,521 \$382/sq. ft.	\$243,831,826
Option 1B: Addition/Renovation	526,044	189,523 \$248/sq. ft.	336,521 \$355/sq. ft.	\$29,199,612	\$195,871,340 \$372/sq. ft.	\$237,591,935
Option 1C: Addition/Renovation	526,044	189,523 \$258sq. ft.	336,521 \$369/sq. ft.	\$24,259,847	\$197,333,168 \$375/sq. ft.	\$239,365,132
Option 1D: Addition/Renovation	526,044	189,523 \$280/sq. ft.	336,521 \$398/sq. ft.	\$16,032,807	\$202,893,942 \$386/sq. ft.	\$246,110,351

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
<i>Option 1E: New construction/renovation of existing athletic complex***</i>	501,330	98,523 \$259/sq. ft.	402,807 \$386/sq. ft.	\$16,032,807	\$197,067,802 \$393/sq. ft.	\$239,043,243
Option 2A: New Construction without pool	476,296	n/a	476,296 \$356/sq. ft.	\$32,923,838	\$202,425,800 \$425/sq. ft.	\$245,542,495
Option 2B: New Construction with pre-engineered components	489,966	n/a	489,966 \$389/sq. ft.	\$21,248,283	\$211,912,657 \$433/sq. ft.	\$257,050,052

* Marked up construction costs

** Does not include construction contingency

***District's preferred solution

The District has selected “Option 1E”, a newly constructed core academic building while maintaining and renovating the existing high school athletic complex, as the preferred solution to proceed into Schematic Design. The District selected “Option 1E” because it resolves the existing deficiencies, meets the goals of the educational program, and simultaneously results in a cost-effective estimated project when compared to the other viable options. This option maximizes the desired street frontage along Elsbree Street and retains recently renovated site amenities (athletic stadium, practice field, etc.). “Option 1E” also minimizes disruption to students in the existing facility during construction.

Although Options 1A, 1B, 1C, and 1D offer similar solutions to address current building deficiencies and resolve the District’s educational goals, these options involve a combination of disadvantageous components and were not considered further. The disadvantageous components include complex and lengthy construction phasing, educational disruption, re-work of the recently renovated athletic fields, and a larger financial impact. Options 1A, 1B, 1C, and 1D also include the proposed cost to renovate the existing performing arts building as part of the High School program, unlike “Option 1E” that proposes to re-purpose this building as a separate City-funded project.

Although “Option 2A” and “Option 2B” provide new buildings that accommodate most of the District’s needs, these options result in the most educationally disruptive and costly options and were not considered further.

The District presented its proposed project to the MSBA Facilities Assessment Subcommittee (“FAS”) on July 27, 2017. At that meeting, members of the FAS and the District discussed building orientation; sheltered drop-off/pick-up area; accessibility; maintenance; utilization of the courtyard; class size policies; Library/Media Center staffing; importance of grade-specific adjacencies; and components of the estimated construction cost.

MSBA staff reviewed the conclusions of the Feasibility Study, all subsequent submittals, and the enrollment data 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 solution 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 prior to 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, with the exception of 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 MSBA will continue to work with the District to establish the limits of eligibility associated with renovation of the existing athletic complex and how the space serves the student population.
- 6) MSBA records show a total MSBA payment of \$6,440,827 for the BMC Durfee High School HVAC Replacement Project #W20034351 completed in 2003. Pursuant to the MSBA's enabling legislation, the MSBA's regulations, and the District's proposed plan for the B.M.C. Durfee High School for which it received a school building grant from the Commonwealth for a prior project, the MSBA may recover a pro-rated portion of the financial assistance that the School District has received for previous grants. Based on preliminary information provided in the District's Preferred Schematic Report, the MSBA estimates the cost recovery to be approximately \$650,000. However, the exact amount to be recovered will be established at the conclusion of the Schematic Design/Total Project Budget Phase.
- 7) 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 City of Fall River be approved to proceed into Schematic Design to replace the existing B.M.C. Durfee High School with a new facility on the existing site while maintaining and renovating the existing high school athletic complex.