District: Town of Weymouth

School Name: Maria Weston Chapman Middle School

Recommended Category: Preferred Schematic October 24, 2018

## Recommendation

That the Executive Director be authorized to approve the Town of Weymouth as part of its Invitation to Feasibility Study, to proceed into Schematic Design with an addition and renovation project to the existing Maria Weston Chapman Middle School for grades 6-8. MSBA staff has reviewed the Feasibility Study and accepts the District's preferred solution.

<b>District Information</b>					
District Name	Town of Weymouth				
Elementary School(s)	Johnson Early Childhood Center (PK)				
	Academy Avenue (K-4)				
	Frederick C. Murphy Elementary School (K-4)				
	Lawrence W. Pingree Elementary School (K-4)				
	Ralph Talbot Elementary School (K-4)				
	Thomas V. Nash Elementary School (K-4)				
	Thomas W. Hamilton Primary School (K-4)				
	William Seach Elementary School (K-4)				
Middle School(s)	Abigail Adams Middle School (5-6)				
	Maria Weston Chapman Middle School (7-8)				
High School(s)	Weymouth High School (9-12)				
Priority School Name	Maria Weston Chapman Middle School				
Type of School	Middle School				
Grades Served	7-8				
Year Opened	1961				
Existing Square Footage	233,230				
Additions	1972 Addition				
Acreage of Site	15.9 acres				
Building Issues	The District identified deficiencies in the following areas:				
	<ul> <li>Mechanical systems</li> </ul>				
	<ul> <li>Electrical systems</li> </ul>				
	<ul> <li>Plumbing systems</li> </ul>				
	- Windows				
	- Roof				
	<ul><li>Accessibility</li></ul>				
	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				
2017-2018 Enrollment	882				
Agreed Upon Enrollment	Study Enrollment includes the following configurations:				
	<ul> <li>District-wide grades 7-8 with an enrollment of 985</li> </ul>				
	students				
	<ul> <li>Grades 6-8 with an enrollment of 745 students</li> </ul>				

<b>District Information</b>				
	<ul> <li>Grades 5-8 with an enrollment of 1,230 students</li> </ul>			
	<ul> <li>District-wide grades 6-8 facility with an enrollment</li> </ul>			
	of 1,470 students (Preferred Solution)			
Enrollment Specifics	Contingent upon the Board's approval of the Preferred			
	Solution, the District will sign a Design Enrollment			
	Certification for 1,470 students in grades 6-8.			
Total Project Budget – Debt	Yes			
Exclusion Anticipated				

MSBA Board Votes				
Invitation to Eligibility Period	May 25, 2016			
Invitation to Feasibility Study	November 9, 2017			
Preferred Schematic Authorization	October 31, 2018 Board agenda			
Project Scope & Budget Authorization	District is targeting Board authorization on			
	April 10, 2019			
Feasibility Study Reimbursement Rate	56.26%			
(Incentive points are not applicable)				

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

## Discussion

The existing Maria Weston Chapman Middle School is a 233,230 square foot facility located on a 15.9-acre site that currently serves students in grades 7-8. The original school building was constructed in 1961, with a roof replacement in 1996.

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; and inappropriate existing spaces for delivering the District's educational program.

As part of its Feasibility Study the District evaluated the following four study enrollment options for the District's grade 5-8 student population:

- Option A: District-wide grades 7-8 with an enrollment of 985 students at the Maria Weston Chapman Middle School. This would result in the Abigail Adams Middle School remaining a District-wide grades 5-6 facility (current configuration).
- Option B: Grades 6-8 with an enrollment of 745 students at the Maria Weston Chapman Middle School. This would result in the Abigail Adams Middle School being reconfigured as a grades 6-8 facility and grade 5 students being distributed among the District's eight existing elementary schools.

- Option C: Grades 5-8 with an enrollment of 1,230 students at the Maria Weston Chapman Middle School. This would result in the Abigail Adams Middle School being reconfigured as a grades 5-8 facility.
- Option D: District-wide grades 6-8 facility with an enrollment of 1,470 students at the Maria Weston Chapman Middle School. This was requested by the District during development of its Feasibility Study and would result in the Abigail Adams Middle School being reconfigured as the District's ninth elementary school all serving students in grades K-5. The MSBA will limit its estimated maximum grant for this district-wide solution based on a project sized for up to 1,230 students (Option C above) and all costs associated with the repurposing of the existing Abigail Adams facility are at the District's sole expense.

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 studied 12 preliminary options which included four base repair options, four addition/renovation options, and four new construction options as listed below.

Option	Description of Preliminary Options
A.0	Base Repair for 985 students in grades 7-8 at the Maria Weston Chapman Middle School.
A.1	Addition/Renovation for 985 students in grades 7-8 at the Maria Weston Chapman Middle School.
A.2	New construction for 985 students in grades 7-8 at the Maria Weston Chapman Middle School site.
B.0	Base Repair for 745 students in grades 6-8 at the Maria Weston Chapman Middle School.
B.1	Addition/Renovation for 745 students in grades 6-8 at the Maria Weston Chapman Middle School.
B.2	New construction for 745 students in grades 6-8 at the Maria Weston Chapman Middle School site.
C.0	Base Repair for 1,230 students in grades 5-8 at the Maria Weston Chapman Middle School.
C.1	Addition/Renovation for 1,230 students in grades 5-8 at the Maria Weston Chapman Middle School.
C.2	New construction for 1,230 students in grades 5-8 at the Maria Weston Chapman Middle School site.
D.0	Base Repair for 1,470 students in grades 6-8 at the Maria Weston Chapman Middle School.
D.1	Addition/Renovation for 1,470 students in grades 6-8 at the Maria Weston Chapman Middle School.
D.2	New construction for 1,470 students in grades 6-8 at the Maria Weston Chapman Middle School site.

As a result of this analysis the District determined that "Option A.0", "Option B.0", "Option C.0", and "Option D.0" were not considered viable options and would not be considered for further evaluation because they do not meet the needs of the District's educational program.

Additionally, the District determined "Option A.1" and "Option A.2" would not be considered for further evaluation because they do not reduce the number of grade transitions, provide educational equity across middle school grades, or relocate the fifth-grade students into the District's elementary schools. These options would not allow the District to provide full-day Kindergarten within the existing elementary schools.

Upon further review, MSBA staff and the District agreed to explore the following seven options for further development and consideration: one base repair, three addition/renovation options, and three new construction options. Please note that "Option D.0" is 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 B.1: Addition/ renovation for 745 students in grades 6-8	180,209	67,107 \$380/sq. ft.	113,102 \$448/sq. ft.	\$19,846,937	\$96,810,359 \$537/sq. ft.	\$127,210,431
Option B.2: New construction for 745 students in grades 6-8	160,076	N/A	160,076 \$466/sq. ft.	\$20,510,132	\$95,857,896 \$599/sq. ft.	\$123,903,905
Option C.1: Addition/ renovation for 1,230 students in grades 5-8	236,505	67,107 \$380/sq. ft.	169,398 \$422/sq. ft.	\$20,290,374	\$118,349,283 \$500/sq. ft.	\$156,871,618
Option C.2: New construction for 1,230 students in grades 5-8	220,422	N/A	220,422 \$434/sq. ft.	\$21,113,602	\$117,838,666 \$535/sq. ft.	\$151,543,559
Option D.0: Base repair for 1,470 students in grades 6-8 (Cost Comparison Only)	249,000	249,000 \$293/sq. ft.	N/A	\$8,898,210	\$83,148,357 \$334/sq. ft.	\$102,603,028
Option D.1: *** Addition/renovation for 1,470 students in grades 6-8	259,193	67,107 \$379/sq. ft.	192,086 \$420/sq. ft.	\$20,496,478	\$127,760,729 \$493/sq. ft.	\$169,123,697
Option D.2: New construction for 1,470 students in grades 6-8	244,452	N/A	244,542 \$427/sq. ft.	\$21,152,371	\$126,689,565 \$518/sq. ft.	\$163,006,165

<sup>\*</sup> Marked up construction costs

<sup>\*\*</sup> Does not include construction contingency

<sup>\*\*\*</sup>District's preferred option

The District has selected "Option D.1", an addition/renovation of the existing Maria Weston Chapman Middle School, as the preferred solution to proceed into schematic design. The District selected "Option D.1" because it is anticipated to meet the needs of the District's educational plan, provides educational equity across middle school grades, and reduces grade transitions. Key features include providing team-based adjacencies, space for project-based learning, and space for teacher collaboration. This option repurposes the existing Abigail Adams Middle School to serve as the District's ninth elementary school allowing the District to relocate the fifth-grade students into its elementary schools and will provide space to support the District's goal of providing full-day Kindergarten.

"Option" B.1" and "Option B.2" adequately meet the needs of the District's educational program, however, were not considered for further evaluation because they each require relocating the fifth grade into the District's existing eight elementary schools. The District indicated that the existing elementary schools have insufficient capacity to accommodate the fifth-grade population, and that these options would necessitate a separate, town-funded project to provide an additional elementary school for the District.

Although "Option C.1" and "Option C.2" adequately meet the needs of the District's educational program, the District did not consider these options for further evaluation because they would not have provided District-wide educational parity. Additionally, although "Option D.2" adequately meets the needs of the District's educational program and provides District-wide educational parity, the District did not consider it for further evaluation because the size of the proposed gymnasium was smaller than the existing gymnasium. The District indicated that the existing gymnasium is viewed as a large benefit given the heavy use of athletics, gatherings, and special events in the middle school and in the community.

The District presented its proposed project to the MSBA Facilities Assessment Subcommittee ("FAS") on September 26, 2018. At that meeting, members of the FAS discussed a number of topics including: appreciation of the educational program and the proposed academic neighborhoods; function and utilization of the proposed project areas and exploratory labs; proposed number of sixth grade science classrooms; impact of noise throughout the building as a result of the open concept cafeteria; location and function of the media center; use of the proposed outdoor learning areas; proposed class schedule for a team-teaching model; potential for creating a more efficient building envelope; location of renovated and new construction areas; long term operating costs of the proposed building; and site topography and draining.

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

- 1) MSBA reviewed the Feasibility Study and subsequent material and finds that 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 previously communicated to the District the MSBA will limit its estimated maximum grant for the potential expanded district-wide solution from the design development through construction to a project sized up to 1,230 students, and an estimated grant will not include the costs associated with the added enrollment for a project for 1,470 students.
- 6) The MSBA understands that the proposed middle school project will result in the reconfiguration and utilization of the existing Abigail Adams Middle School as an elementary school. The MSBA notes that all future studies, design, and construction associated with the existing Abigail Adams facility are at the District's sole expense, responsibility, and must be locally approved and authorized separately from the proposed middle school project.
- 7) As part of the Schematic Design phase, the MSBA will continue to work with the District to better understand the total area associated with health and physical education and how the space serves the student population and the renovation of the existing facility.
- 8) 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 Weymouth be approved to proceed into Schematic Design for an addition and renovation project to the Maria Weston Chapman Middle School for grades 6-8.