

District: Town of Hingham  
 School Name: William L. Foster Elementary School  
 Recommended Category: Preferred Schematic  
 Date: February 18, 2022

**Recommendation**

That the Executive Director be authorized to approve the Town of Hingham (the “District”), as part of its Invitation to Feasibility Study, to proceed into Schematic Design to replace the existing William L. Foster Elementary School with a new facility serving pre-kindergarten through grade 5 on the existing site. MSBA staff has reviewed the Feasibility Study and accepts the District’s Preferred Schematic.

<b>District Information</b>	
District Name	Town of Hingham
Elementary School(s)	East Elementary School (PK-5) Plymouth River School (K-5) William L. Foster Elementary School (K-5) South Elementary School (K-5)
Middle School(s)	Hingham Middle School (6-8)
High School(s)	Hingham High School (9-12)
Priority School Name	William L. Foster Elementary School
Type of School	Elementary School
Grades Served	K-5
Year Opened	1951
Existing Square Footage	71,982
Additions	1957, 1974, 2009
Acreage of Site	39.75 acres
Building Issues	The District identified deficiencies in the following areas: <ul style="list-style-type: none"> <li>– Structural integrity</li> <li>– Mechanical systems</li> <li>– Electrical systems</li> <li>– Plumbing systems</li> <li>– Building Envelope</li> <li>– Windows</li> <li>– Roof</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
2021-2022 Enrollment	419
Agreed Upon Enrollment	605
Enrollment Specifics	The District and MSBA have mutually agreed upon a design enrollment of 605 students serving grades K-5, for a project that will serve grades PK-5.
Total Project Budget – Debt Exclusion Anticipated	Yes

<b>MSBA Board Votes</b>	
Invitation to Eligibility Period	December 11, 2019
Invitation to Feasibility Study	December 16, 2020
Preferred Schematic Authorization	On March 2, 2022 Board agenda
Project Scope & Budget Authorization	District is targeting Board authorization on August 31, 2022
0Feasibility Study Reimbursement Rate (Incentive points are not applicable)	33.95%

<b>Consultants</b>	
Owner’s Project Manager (the “OPM”)	PMA Consultants, LLC
Designer	Raymond Design Associates, Inc.

## Discussion

The existing William L. Foster Elementary School is a 71,982 square foot facility located on a 39.75-acre site that currently services students in grades K-5. The original school building was constructed in 1951, with a 28,000 square foot addition in 1957, an addition and renovation in 1974, and a renovation in 2009 which focused on accessibility, special education space, the creation of dedicated music art and presentation rooms, and asbestos remediation.

The District’s Statement of Interest (“SOI”) identified numerous deficiencies in the existing facility associated with the following: outdated mechanical, electrical, and plumbing systems; building envelope; accessibility issues; and existing spaces not conducive 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 included (1) code upgrade option, (1) addition/renovation option, and (8) new construction options, as presented below.

<b>Option</b>	<b>Description of Preliminary Options</b>
A	New construction at the existing William L. Foster Elementary School site, built partially into the hill on the north side of the site; with an estimated construction cost of \$78 million.
B	New construction at the existing William L. Foster Elementary School site located on the play fields; with an estimated construction cost of \$78 million.
C	New construction at the existing William L. Foster Elementary School site, “V-shaped layout” open to the west and built partially into the hill on the north side of the site; with an estimated construction cost of \$78 million.
D	New construction at the existing William L. Foster Elementary school site, located on the play fields; with an estimated construction cost of \$78 million.
E	New construction at the existing William L. Foster Elementary School site, “V-shaped layout” open to and built partially into the hill on the north side of the site; with an estimated construction cost of \$78 million.

F	New construction at the existing William L. Foster Elementary School site, built partially into the hill on the north side of the site with an alternate layout to “Option E”; with an estimated construction cost of \$78 million.
G	New construction at the existing William L. Foster Elementary School site, “rectangular-shaped layout” facing east-west built partially into the hill on the north side of the site; with an estimated construction cost of \$78 million.
H	New construction at the existing William L. Foster Elementary School site, built on top of the hill to the north site of the site located toward Downer Ave.; with an estimated construction cost of \$78 million.
I	Addition/renovation at the existing William L. Foster Elementary School; with an estimated construction cost of \$80.5 million.
J	Code Upgrade at the existing William L. Foster Elementary School; with an estimated construction cost of \$15.2 million.

As a result of this analysis, the District determined that “Option J” is not considered a viable option because this option does not meet the needs of the District’s educational program and does not address the District’s overcrowding issue. Additionally, this option would result in significant disruption to ongoing education during construction and would remain in the projected flood plains upon project completion.

The District determined that “Option A” would not be considered for further evaluation because the building design was found to be less desirable when compared to “Options E and F”. In addition, the east-west solar orientation would prove challenging for the HVAC system and building efficiency, and it would be challenging to develop as much protected play areas as provided in “Options E and F”. This option also does not take advantage of the views toward the tidal marsh.

The District determined that “Option C” would not be considered for further evaluation because building design was found to be less desirable when compared to “Options E and F”. The proposed main entrance results in a significant distance from the parking lot and would not provide an identifiable main entrance when viewed from Downer Avenue. In addition, this option would be more challenging to develop desired protected play areas around the building and would require a large soil import for site development.

The District determined that “Option D” would not be considered for further evaluation because the proposed building design and solar orientation was found to be less desirable when compared to “Option B”. This option also results in limited views toward the tidal marsh.

Initially, the District determined “Option G” would not be considered for further evaluation because the inclusion of a dedicated pre-k entrance and play area would be challenging to develop, and the proposed building layout would make it difficult to separate the community areas.

It should be noted that, subsequent to the evaluation of preliminary options, the District decided to reconsider and further develop “Option G”, renamed “Option G.1” because the proposed location on the site was advantageous from a site planning perspective. In addition, the District created a variation to “Option H”, named “Option H.1” for further development.

Ultimately, the District determined that “Options B, E, H, and H.1” would not be considered for further evaluation mainly because of the proposed split of the outdoor play areas between the ‘front’ and ‘back’ of the proposed school were considered less desirable and require more staff to supervise recess. In addition, these options result in poor solar orientation, less desirable play area shading, and limited tidal marsh views.

MSBA staff and the District agreed to explore the following (4) 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) addition/renovation option, and (2) new construction options. Please note that “Option J” was not considered for further evaluation by the District; however, this option has been included for cost comparison purposes only.

### 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
<b>Option F: New Construction***</b>	126,434	N/A	126,434 \$649/sq. ft.	\$2,208,071	\$84,272,289 \$667/sq. ft.	\$105,258,403
Option G.1: New Construction	127,481	N/A	127,481 \$670/sq. ft.	\$2,473,136	\$87,938,966 \$690/sq. ft.	\$108,413,853
Option I: Addition/ Renovation	135,500	23,100 \$509/sq. ft.	112,400 \$684/sq. ft.	\$2,665,502	\$91,299,812 \$674/sq. ft.	\$111,942,416
Option J: Code Upgrade	71,982	71,982 \$201/sq. ft.	N/A	\$731,875	\$15,213,625 \$211/sq. ft.	\$18,559,894

\* Marked up construction costs

\*\* Does not include construction contingency

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

The District has selected "Option F" as its Preferred Schematic to proceed into Schematic Design as the District has determined that this option best meets the needs of the District's educational program and minimizes the direct disturbances to ongoing education during construction. The proposed building location and orientation provides optimal daylighting, allows for desired outdoor learning opportunities, results in appropriate play and field space, and offers safe site circulation. In addition, “Option F” results in a lower estimated cost when compared to “Option G.1” and “Option I”.

“Option G.1” was not selected as the preferred schematic by the District because even with plan adjustments that address community segregation issues and a new location that improves solar orientation and marsh views, this option was considered a poor alternative in that it results in split exterior play areas, some to the shady north, which would limit free play at recess and require more staff to supervise recess. In addition, the proposed building location is recessed further into the existing hillside, requiring much more excavation and cost. Also, the monolithic building mass of this option was not deemed appropriate for the District's young learners.

“Option I” was not selected as the preferred schematic by the District because of the inherent difficulties in repurposing portions of the existing structure through renovations and logistical challenges. In addition, this option results in a higher estimated construction cost, when compared to the preferred schematic, mainly due to costs associated with a prolonged and phased construction. This option also results in significant disruption to ongoing education during construction and would result in complete rebuilding of interior walls and exterior envelope components. Also, a disadvantage of this option results in the footprint of the large addition occupying a portion of the site better suited for outdoor learning and play areas. This option does not provide optimal views toward the existing tidal marsh.

As noted above, “Option J” was not considered a viable option and was not considered for further evaluation; however, this option was included for cost comparison purposes only.

The District presented its proposed Preferred Schematic to the MSBA Facilities Assessment Subcommittee (“FAS”) on Wednesday February 2, 2022. At that meeting, members of the FAS discussed the following items: appreciation for the District’s educational program, distribution of special education spaces on the second level, proposed world language program offerings, site constraints and potential challenges as it relates to current and future floodplain projections, site circulation, development of site and landscape design and opportunities to further refine indoor/outdoor connections, community engagement and outreach for the proposed project, and the proposed project schedule which includes proceeding into design development ahead of MSBA approval of the proposed project.

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 Hingham, be approved to proceed into Schematic Design to replace the existing William L. Foster Elementary School with a new facility serving pre-kindergarten through grade 5 on the existing site.