

MEMORANDUM

TO: Board of Directors, Massachusetts School Building Authority
FROM: James A. MacDonald, First Deputy Treasurer, Chief Executive Officer
John K. McCarthy, Executive Director, Deputy Chief Executive Officer
SUBJECT: MSBA Model School Program Recommendations
DATE: October 20, 2021

The purpose of this memorandum is to seek the Board of Directors' approval of six project designs, as indicated on page 3, for the MSBA's Model School Program. The MSBA issued a Request for Qualifications ("RFQ") requesting project designs for consideration to be included in the Model School Program dated July 31, 2019, and re-issued the RFQ on February 24, 2021 to allow for additional responses. In accordance with established practices, staff has completed its review of these Model School Program applications submitted by Designers in response to both aforementioned RFQs. The information and recommendations below were presented at the Facilities Assessment Subcommittee meeting on September 22, 2021.

Background

The MSBA's Model School Program seeks to adapt and re-use the design of successful, recently constructed schools to meet the requirements of a school district that has been invited by the MSBA's Board of Directors to construct a new (versus renovated) school. Under the Model School Program, the MSBA intends to select from existing school designs meeting the appropriate criteria and to pre-qualify the designer of each selected Model School. The District, in collaboration with the MSBA, may then select one of the pre-qualified Model Schools and its designer. The school district will then enter into a contract with the selected designer for design services. It is anticipated that the list of pre-qualified Model Schools will be updated periodically.

The RFQ issued on July 31, 2019, included the following minimum requirements:

1. The proposed Model Schools are entirely new construction of a PK-12 grade configuration, located within a 125-mile radius of Worcester, MA;
2. The proposed Model Schools were permitted using 780 CMR Massachusetts State Building Code 8th edition or, if not permitted in Massachusetts, any building code or design criteria using the International Energy Conservation Code ("IECC") no earlier than 2009 edition, and ASHRAE 90.1 no earlier than the 2007 version;
3. The proposed Model Schools were registered with either U.S. Green Building Council "LEED-S" or Collaborative for High Performance Schools ("CHPS"), and;
4. The proposed Model Schools have been open for **full occupancy** for a minimum of 12 months as of **September 3, 2019** (using the substantial completion date as the starting date of occupancy; for phased occupancies, using the final substantial completion date).

For the re-issuance of the RFQ on February 24, 2021, minimum requirement number 4 was adjusted as follows:

The proposed Model Schools have been open for **occupancy** for a minimum of 12 months as of **September 1, 2021** (using the substantial completion date as the starting date of occupancy; for phased occupancies, using the final substantial completion date).

The recommended Model Schools were also evaluated favorably using the following criteria:

1. Completeness of the requested submission materials;
2. The adaptability of the school design to other sites without substantial re-design or expense;
3. The extent to which the school classroom wing/areas may be adapted to a 20% addition and reduction in design enrollment by adding or reducing the number of classrooms. The Core Academic portion of the design must be adaptable to expansion or contraction to meet a specific design enrollment, with minimal re-design effort;
4. The adaptability of the design to various educational programs. In particular, the design must be adaptable to various teaching methodologies, grade configurations, class offerings, and reconfiguration of core classroom space with minimal re-design effort;
5. The extent to which the spaces in the school allow for maximum flexibility for multiple and/or future uses;
6. The extent to which the design includes differentiated learning spaces and student and teacher collaboration areas;
7. The efficiency of the design; how closely the school conforms to current MSBA space summary guideline standards, including net square footage by category, total net square footage, total gross square footage, overall grossing factor (GSF/NSF), and space utilization of capacity generating spaces;
8. The incorporation of energy efficiency and sustainable design elements based on the current MSBA Sustainable Building Design Guidelines;
9. The school's environmental qualities and natural lighting;
10. The extent to which the school complies with the MSBA Guidelines for Science Labs in High School Facilities (if applicable), the Review and Recommendations of Best Practices for K-12 STEM Learning Spaces and/or MSBA's Staff Recommendation for 2018 Science/Technology/Engineering Area Guidelines;
11. The construction cost per gross square foot exclusive of site development, Furnishings, Fixtures & Equipment ("FF&E"), and soft costs;
12. The extent of change orders as a percentage of the original bid price (exclusive of Owner directed change orders or change orders related to differing or unforeseen site conditions);
13. The ability of the proposed design team to comply with the goals of the Model School Program (design "best practices", accelerated production schedule, reduced fees, reduced change orders, etc.) based on previous project experience; and,
14. Any other criteria that the MSBA may deem relevant to the evaluation of proposed model schools.

The MSBA received 5 responses to the July 31, 2019 RFQ. Staff reviewed the responses in accordance with the above stated criteria and completed their evaluation of 2 of the 5 schools, which were approved by the Board of Directors for inclusion in the Model School Program on February 11, 2021, while site visits for the remaining 3 schools were postponed due to public health concerns.

In response to the February 24, 2021 RFQ, the MSBA received an additional 8 responses on May 26, 2021. Staff reviewed the responses in accordance with the above stated criteria and conducted site visits to all 8 schools in August 2021, in addition to conducting site visits to the 3 schools that remained under consideration as part of the 2019 procurement process.

During the visits, the team sought to receive input from the districts regarding the benefits of the building and to gain an understanding of any challenges associated with the building. The site visits also provided opportunities for the MSBA team to see first-hand how designers can provide educationally appropriate designs in a thoughtful manner. As part of the model school selection process, the focus remains on future adaptability, and so even though many successful schools were visited, not all have been recommended for inclusion in the Model School Program. All of the schools, however, incorporated features that provide good models for breakout areas, storage and natural light that should be considered by designers in future projects.

An update regarding the Model School reviews and visits was provided at the Facilities Assessment Subcommittee meeting on July 21, 2019. A full update and staff recommendations were also presented at the Facilities Assessment Subcommittee meeting on September 22, 2021.

Recommendation

Based on the review and findings described above staff recommends that the following six project designs be included in the Model School Program:

- Hurld-Wyman Elementary School, by DiNisco Design, Inc.
- James L. Mulcahey Elementary School, by Dore & Whittier Architects, Inc.
- Maria Hastings Elementary School, by DiNisco Design, Inc.
- Plains Elementary School, by Jones Whitsett Architects, Inc.
- North Middlesex Regional High School, by SMMA
- Dr. Thomas J. Curran Early Childhood Education Center, by Raymond Design Associates, Inc.

The following five project designs, despite many positive attributes, are not recommended to be included in the Model School Program:

- Barrington Middle School, by Kaestle Boos Associates, Inc.
- Caleb Dustin Hunking School, by JCJ Architecture, PC

- J. Henry Higgins Middle School, by DiNisco Design, Inc.
- Minuteman Regional Vocational Technical High School, by Kaestle Boos Associates, Inc.
- Nelson Place Elementary School, by Lamoureux Pagano Associates| Architects, Inc.

The MSBA will continue to monitor the effectiveness of MSBA policy to support the Model School Program.