

District: City of Newton  
 School Name: Cabot Elementary School  
 Recommended Category: Preferred Schematic  
 Date: July 30, 2015

**Recommendation**

That the Executive Director be authorized to approve the City of Newton, as part of its Invitation to Feasibility Study, to proceed into Schematic Design for an addition and renovation project at the existing Cabot Elementary School. MSBA staff has reviewed the Feasibility Study and accepts the District’s preferred solution.

<b>District Information</b>	
District Name	City of Newton
Early Childhood Center(s)	Newton Early Childhood Center (PK)
Elementary School(s)	15 (K-5)
Middle School(s)	Bigelow Middle School (6-8) Charles E. Brown Middle School (6-8) F.A. Day Middle School (6-8) Oak Hill Middle School (6-8)
High School(s)	Newton Central High School (9-12) Newton North High School (9-12) Newton South High School (9-12)
Priority School Name	Cabot Elementary School
Type of School	Elementary School
Grades Served	K-5
Year Opened	1929
Existing Square Footage	43,940 (including modular classrooms)
Additions	1957: Addition 1991 and 2007: Modular classrooms
Acreage of Site	1.77 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>– Envelope</li> <li>– Windows</li> <li>– Roof</li> <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 as well as existing overcrowding.
Original Design Capacity	Unknown
2014-2015 Enrollment	418
Agreed Upon Enrollment	480
Enrollment Specifics	The District and MSBA have mutually agreed upon a design enrollment of 480 students serving grades K-5.

<b>MSBA Board Votes</b>	
Invitation to Eligibility Period	November 20, 2013
Invitation to Feasibility Study	March 26, 2014
Preferred Schematic Authorization	On August 6, 2015 Board agenda
Project Scope & Budget Authorization	District is targeting Board authorization on November 18, 2015
Feasibility Study Reimbursement Rate ( <i>Incentives points are not applicable</i> )	33.95%

<b>Consultants</b>	
Owner's Project Manager	Joslin, Lesser & Associates, Inc.
Designer	DiNisco Design Partnership, Ltd.

## **Discussion**

The existing Cabot Elementary School is a 37,964 square foot neighborhood school located on a 1.77 acre site in the Newtonville section of Newton. The existing facility currently houses grades K-5. The original school building was constructed in 1929 with an addition completed in 1953, which added four classrooms and a small gymnasium. The kindergarten, art, and music classrooms are located in two modular buildings adjacent to the original building. The District identified numerous deficiencies in the Statement of Interest associated with accessibility and appropriateness of existing spaces to deliver their educational program. In addition, the mechanical and electrical systems in the Cabot Elementary School building are reported to be severely inadequate. There are two boilers, one of which is original to the building and the other installed in 2010. However, despite any recent improvements, there are major heating infrastructure problems reported, which include leaking steam pipes, inoperable pneumatic controls, and unit ventilators that have outlived their useful life and are affecting the delivery of the educational program. The building is not equipped with sprinkler protection and plumbing systems remain original to the building. The current building envelope system is reported to be inefficient and perform poorly.

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 eight potential sites and five preliminary options that include one base repair option, two addition/renovation options, and two new construction options. The following is a detailed list of the preliminary alternatives considered:

<b>Option</b>	<b>Description of Preliminary Options</b>
1	Base repair/code upgrade of existing building
2	Addition/renovation of the existing facility
3	New construction on the existing site
4	Addition/renovation of the existing facility (w/ preservation of the existing façade)
5-8	New construction on alternate site(s)

As a result of further analysis, “Options 5-8” were not considered for further evaluation because of potential legal restrictions associated with the alternative sites, property availability, and the longer distance from the existing Cabot Elementary School district. Based on the aforementioned, it was determined that the existing Cabot Elementary School site was the only viable option for development of a potential project. “Option 4” was dismissed early in the District’s evaluation as the scenario to provide a more comprehensive restoration of the existing building is achieved with “Option 2.” “Option 1” was not considered a viable option as this scenario does not comprehensively address all of the building deficiencies, including provisions for additional square footage required to deliver the District’s educational program.

Upon further review, MSBA staff and the District agreed to two final options for further development and consideration in the final evaluation and development of preliminary design pricing as presented below. Please note “Option 1” is presented below for comparative purposes only.

**Summary of Preliminary Design Pricing for Final Evaluation of Options**

<b>Option (Description)</b>	<b>Total Gross Square Feet</b>	<b>Square Feet of Renovated Space (cost*/sf)</b>	<b>Square Feet of New Construction (cost*/sf)</b>	<b>Site, Building Takedown, Haz Mat. Cost*</b>	<b>Estimated Total Construction ** (cost*/sf)</b>	<b>Estimated Total Project Costs</b>
Option 1: (Repair/ Code Upgrade)	43,936	43,936 \$387.15/sf	0 \$0/sf	\$475,050	\$17,009,748 \$387.15/sf	\$21,262,185
<b><i>Option 2: (Addition / Renovation)***</i></b>	<b><i>84,446</i></b>	<b><i>28,042</i></b> <b><i>\$353.94/sf</i></b>	<b><i>56,404</i></b> <b><i>\$363.09/sf</i></b>	<b><i>\$5,584,268</i></b>	<b><i>\$35,989,306</i></b> <b><i>\$426.18/sf</i></b>	<b><i>\$45,000,000</i></b>
Option 3: (New Construction)	81,450	0 \$0/sf	81,450 \$353.85/sf	\$5,927,677	\$34,749,478 \$426.64/sf	\$44,000,000

\* *Marked up construction costs*

\*\* *Does not include construction contingency*

\*\*\****District’s preferred option***

The District has selected “Option 2,” which proposes an addition/renovation to the existing Cabot Elementary School as the preferred solution to proceed into Schematic Design. The District selected “Option 2” as its preferred alternative because it addresses the previously referenced building deficiencies and will allow the District to deliver its desired educational program while preserving the historic 1929 building as a community resource. Although “Option 3” results in a layout that satisfies delivery of the District’s educational program and addresses all building deficiencies with new construction, it does not provide the desired preservation of the existing 1929 building.

The District presented its proposed project to the MSBA Facilities Assessment Subcommittee (“FAS”) on June 24, 2015. At that meeting, members of the FAS discussed: the required closure of a portion of a public road; the ownership of land associated with Cabot Park; the necessary timeline associated with state and local approvals; potential safety measures associated with elementary level STEM programs; proposed site and building accessibility at the building entry; the District’s position in providing 1:1 technology in the future; and coordination of the proposed “swing space” and transition schedule associated with the utilization of the existing Carr School.

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 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 Newton be approved to proceed into Schematic Design for an addition/renovation project at the existing Cabot Elementary School.