

District: City of Newton
 School Name: A. E. Angier Elementary School
 Recommended Category: Preferred Schematic
 Date: March 27, 2013

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 to replace the existing elementary school facility with a new A.E. Angier Elementary School serving students in grades K-5. MSBA staff has reviewed the Feasibility Study and accepts the District’s preferred solution to replace the existing elementary school facility with the construction of a new A.E. Angier Elementary School on the existing site.

District Information	
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 North High School (9-12) Newton South High School (9-12) Newton Central High School (9-12)
Priority School Name	A. E. Angier Elementary School
Type of School	Elementary School
Grades Served	K-5
Year Opened	1919
Existing Square Footage	52,940
Additions	1936
Acreage of Site	1.98 acres
Building Issues	The District identified deficiencies in the following areas: <ul style="list-style-type: none"> - Mechanical systems - Electrical systems - Plumbing systems - Accessibility 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 and projected overcrowding.
Original Design Capacity	Unknown
2012-2013 Enrollment	408
Agreed Upon Enrollment	465
Enrollment Specifics	The District and MSBA have mutually agreed upon a design enrollment of 465 students serving grades K-5.

MSBA Board Votes	
Invitation to Eligibility Period	January 25, 2012
Invitation to Feasibility Study	March 28, 2012
Preferred Schematic Authorization	On April 3, 2013 Board agenda
Project Scope & Budget Authorization	District is targeting Board authorization on November 20, 2013
Reimbursement Rate Before Incentives	33.95%

Consultants	
Owner's Project Manager	Joslin Lesser + Associates, Inc.
Designer	DiNisco Design Partnership

Discussion

The existing A. E. Angier Elementary School is a 52,940 square foot building on a 1.98 acre site on Beacon Street in Newton. The original building was constructed in 1919, and a six classroom addition was completed in 1936. The structure is three stories supported on conventional shallow foundations and mainly consisting of concrete slabs supported by steel framing and unreinforced masonry-bearing walls. The existing facility currently houses grades K-5.

The District identified numerous deficiencies in the Statement of Interest. In addition to the general lack of accessibility features, the Feasibility Study confirmed that the existing facility requires window, heating, ventilation, plumbing, and electrical systems replacement, abatement of hazardous material, fire protection and seismic code upgrades, as well as non-structural exterior improvements.

In addition to the physical plant issues described above, the District is experiencing enrollment growth at the elementary level. Due to the current and projected enrollment trends, capacity pressures are expected at a number of the District's elementary schools. As such, the MSBA and the District agreed that a design enrollment of 465 students in Grades K-5 would allow for an expansion over current enrollment in order to accommodate a portion of the enrollment growth. The District has implemented buffer zones for its elementary school districts to facilitate the management of the size of its neighborhood elementary schools. The District also demonstrated a willingness to implement redistricting beyond the buffer zones if it is required to realize the expanded capacity that is being proposed as part of this project.

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 assessment, the District and its consultants initially studied four preliminary options that included two addition/renovation configurations and two new construction options. The following is a detailed list of the preliminary alternatives considered.

Option	Description of Preliminary Options
1	Full renovation, no addition
2	Full renovation and addition
3	Full demolition and new construction (existing site)
4	New construction (new site)

The no-build option was quickly eliminated from consideration by the District because it does not meet the educational goals and objectives of the District. Also, the agreed upon design enrollment necessitates an addition in order to meet programmatic needs.

The District explored addition/renovation schemes that address the numerous deficiencies described above as well as increase the capacity of the facility to meet the programmatic needs of the larger enrollment. The Feasibility Study confirmed that the existing classrooms are significantly undersized and that reconfiguring the demising walls with renovation work within the existing facility is infeasible due to the structural nature of the existing building.

Understanding the challenges associated with renovating the existing facility, an exhaustive search was performed for potential sites for new construction located in the same area of the City as the existing facility. Finding none viable, the District directed its consultants to develop options for new construction on the existing site.

Based on the preliminary evaluation of various alternatives associated with Options 2 and 3 above, the District and its consultants advanced six options for further development and consideration in the final evaluation of alternatives. One of these options is the addition/renovation scheme presented as Option 2 in the preliminary evaluation of alternatives. The other five options are variations of Option 3, new construction on the existing site, as presented above. While the independent variations of Option 3 have different layouts and site configurations, the program for each is identical and they were therefore estimated by the District to have the same preliminary costs. The result of the cost estimating exercise performed as part of the final evaluation of alternatives is presented in the preliminary design pricing table below.

Summary of Preliminary Design Pricing for Final Evaluation of Options

Option (Description)	Total Gross Square Feet	Square Feet of Renovated Space (cost*/sf)	Square Feet of New Construction (cost*/sf)	Site, Building Takedown, Haz Mat. Cost*	Estimated Total Construction ** (cost*/sf)	Estimated Total Project Costs
Option 2: (Renovation/ Addition)	84,320	48,575 \$347/sf	35,745 \$347/sf	\$3,838,086	\$33,089,185 \$392/sf	\$41,361,481
Option 3: (New Elementary School)***	75,000	-	75,000 \$333/sf	\$4,262,186	\$29,250,000 \$390/sf	\$36,562,500

* Marked up construction costs

** Does not include construction contingency

***District's preferred option

The District has selected a new construction option, Option 3, as the preferred solution to proceed into schematic design. The District selected Option 3 as its preferred solution because it meets the needs of the educational program, addresses the deficiencies of the current facility, and is expected to be more cost-effective than the addition/renovation scheme.

The District presented its proposed project to the MSBA Facilities Assessment Subcommittee (“FAS”) on March 20, 2013. At that meeting, members of the FAS raised a number of issues including: 1) the relatively high preliminary estimated construction cost; 2) the potential for incorporating outdoor garden space on the proposed plaza as a resource for the science classrooms; 3) adequacy of lighting for use of cubby and circulation spaces outside the classrooms as instructional areas; and 4) the number of restroom facilities shown in the preliminary design. As part of the ongoing dialogue with the design team and throughout the Schematic Design Phase, the MSBA will continue to work with the District to address the concerns identified above.

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 execution of a Project Funding 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 for core academic space 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 site costs from ineligible costs associated with work beyond the boundaries of the site.

Based on the review outlined above, staff recommends that the City of Newton be approved to proceed into schematic design to replace the existing elementary school facility with the construction of a new A.E. Angier Elementary School on the existing site.