

District: Town of Abington
 School Name: Frolio Middle School
 Recommended Category: Preferred Schematic
 Date: March 19, 2014

Recommendation

That the Executive Director be authorized to approve the Town of Abington, as part of its Invitation to Feasibility Study, to proceed into schematic design to replace the existing Frolio Middle School and Abington High School with a new 5-12 facility, which includes PK, on the existing Abington High School site. MSBA staff has reviewed the Feasibility Study and accepts the District’s preferred solution to replace the existing Frolio Middle School and Abington High School with a new 5-12 facility, which includes PK, on the existing Abington High School site.

District Information	
District Name	Town of Abington
Elementary School(s)	Center Elementary School (PK-K) Beaver Brook Elementary School (1-4) Woodsdale Elementary School (5-6)
Middle School(s)	Frolio Middle School (7-8)
High School(s)	Abington High School (9-12)
Priority School Name	Frolio Middle School
Type of School	Middle School
Grades Served	7-8
Year Opened	1937
Existing Square Footage	51,729
Additions	N/A
Acreage of Site	2 Acres
Building Issues	The District identified deficiencies in the following areas: <ul style="list-style-type: none"> - Mechanical systems - Electrical systems - Envelope - Windows 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	350
Agreed Upon Enrollment	Study Enrollment include the following configurations: Grades 5-12: 1,115 students (Preferred Solution) Grades 5-8: 665 students Grades 6-8: 495 students Grades 6-12: 945 students Grades 7-12: 780 students
Enrollment Specifics	Contingent upon the Board’s approval of the preferred solution, the District will sign a Design Enrollment Certification for 1,115 students in grades 5-12, for a project that will serve grades 5-12 and PK.

MSBA Board Votes	
Invitation to Feasibility Study	September 29, 2008
Invitation to Eligibility Period	January 25, 2012
Invitation to Feasibility Study	July 25, 2012
Preferred Schematic Authorization	On March 26, 2014 Board agenda
Project Scope & Budget Authorization	District is targeting Board authorization on September 24, 2014
Feasibility Study Reimbursement Rate (Incentives points are not applicable)	55.63%

Consultants	
Owner's Project Manager	Knight, Bagge & Anderson, Inc.
Designer	Ai3 Architects, LLC

Discussion

Early in the project, the District expressed interest in studying options that consider solutions that extend beyond the Frolio Middle School student population. Due to existing overcrowding in the elementary schools and the identified poor condition of the Abington High School, the MSBA agreed with the District's request to explore three enrollment options including: 495 students for grades 6-8, 665 students for grades 5-8, and 945 students in grades 6-12. The District and its consultants performed a space utilization study of the District's elementary schools to further inform the optimum grade configuration for the proposed project that could meet all of the District's educational goals. This study confirmed that relocating the 5th and 6th grades into the middle school will address district-wide elementary school overcrowding concerns, will provide opportunities for expanded school programs including PK and all-day Kindergarten, and would allow the District to close an inefficient and outdated facility (Center Elementary School, which was built in 1938). For these reasons and to ensure that the Feasibility Study was sufficiently broad in its scope and considered all reasonable options, the District and the MSBA agreed on two additional enrollment options including: 780 students for grades 7-12 and 1,115 students for grades 5-12, for a total of five study design enrollments.

The existing Frolio Middle School is a 51,729 square foot facility on a 2-acre site located on Washington Street and currently houses students in grades 7-8. The school was constructed in 1937 with no additions to date. The District's Statement of Interest ("SOI") identified numerous deficiencies in the existing middle school including undersized classrooms, overcrowding, multiple floor levels, deficient handicap accessibility, aged building systems, insufficient parking, and no area for vehicular drop off and pick up.

The Abington High School is a 111,831 square foot facility on an approximate 10-acre site located on Gliniewicz Way and currently houses grades 9-12. The school was constructed in 1962 with no additions to date. The District’s Statement of Interest (“SOI”) identified numerous deficiencies in the existing High School including undersized classrooms, limited handicapped accessibility with multiple floor elevations, and a deteriorating building envelope.

In conjunction with its consultants, the District performed a comprehensive assessment of the existing conditions and the educational program at both the Frolio Middle School and the Abington High School and received input from educators, administrators and facilities personnel. Based on the findings of this effort, the District and its consultants initially considered 25 sites and studied 14 preliminary options that included 6 renovation/addition options and 8 new construction options. Potential sites were assessed for buildable area, abutting properties, wetlands, existing site use and property acquisition cost. The District’s initial work noted that the site of the Frolio Middle School is too small to accommodate a new middle or new middle/high school facility, and that therefore the playfields behind the existing high school was the most appropriate location.

The District considered the overall impact to all schools and grades in the District for each of the options. For clarity, the component of the proposed option that aligns with the Study Enrollments is presented in normal font while the District projects and reconfigurations are shown in grayscale. The following is a detailed list of the preliminary design alternatives that were considered.

Option	Description of Preliminary Options
0	Base Repair to Frolio Middle School
1	Close Center School Reconfiguration of Beaver Brook for grades K-2 w/full day K Reconfiguration of Woodsdale for grades 3-4 Closure of Frolio New 5-12 co-located Middle /HS w/ PK on the existing High School site
1B	Close Center School Reconfiguration of Beaver Brook for grades K-2 w/full day K Reconfiguration of Woodsdale for grades 3-4 Closure of Frolio Renovation/addition of HS for co-located 5-12 MS/HS w/ PK
2	Continuation of Center School for PK-K (no additional full day K opportunities) Reconfiguration of Beaver Brook for grades 1-3 Reconfiguration of Woodsdale for grades 4-5 Closure of Frolio New 6-12 co-located MS/HS w/ PK on existing High School site
2B	Continuation of Center School for PreK-K (no additional full day K opportunities) Reconfiguration of Beaver Brook for grades 1-3 Reconfiguration of Woodsdale for grades 4-5 Closure of Frolio Renovation/addition of HS for new 6-12 co-located MS/HS w/ PK
3	Closure of Center School Reconfiguration of Beaver Brook Elementary for PK-1 Reconfiguration of Woodsdale for grades 2-3 Renovation of Frolio for grades 4-5

Option	Description of Preliminary Options
	New 6-12 co-located MS/HS w/ PK on existing High School site
3B	Closure of Center School Reconfiguration of Beaver Brook Elementary for PK-1 Reconfigure Woodsdale for grades 2-3 Renovation of Frolio for grades 4-5 Renovation/addition of HS for new grades 6-12 co-located MS/HS
4	Closure of Center School Renovation/addition of Beaver Brook for grades PK-3 Renovation/addition of Woodsdale for grades 4-6 Renovation of Frolio for grades 7-8 New High School on HS site for grades 9-12
4B	Closure of Center School Renovation/addition of Beaver Brook for grades PK-3 Renovation/addition of Woodsdale for grades 4-6 Renovation of Frolio for grades 7-8 Renovation of HS for grades 9-12
5	Closure of Center School Renovation/addition of Beaver Brook grades PK-4 Renovation/addition of Woodsdale for grades 5-8 Closure of the Frolio New HS on HS site for grades 9-12
5B	Closure of Center School Renovation/addition of Beaver Brook grades PK-4 Renovation/addition of Woodsdale for grades 5-8 Closure of the Frolio Renovation HS for 9-12
6	Closure of Center School Reconfiguration of Beaver Brook Elementary for K-2 (w/full day K) Reconfiguration of Woodsdale for grades 3-4 New MS for 5-8 located elsewhere in town (not identified) Closure of the Frolio New HS for 9-12 w/ PK on existing HS site
6B	Closure of Center School Reconfiguration of Beaver Brook Elementary for K-2 (w/full day K) Reconfiguration of Woodsdale for grades 3-4 New MS on HS site Closure of the Frolio Renovation/addition of HS
7	Closure of Center School Renovation/addition of Beaver Brook for K-4 Reconfiguration of Woodsdale for grades 5-6 Closure of the Frolio New co-located MS/HS for 7-12 on HS site
7B	Closure of Center School Renovation/addition of Beaver Brook for K-4 Reconfiguration of Woodsdale for grades 5-6

Option	Description of Preliminary Options
	Closure of the Frolio Renovation HS for MS grades 7-12 w/ PK

Based on the initial analysis of options, the District determined that the Base Repair Option was not viable, as it does not resolve the overcrowding in the elementary grades or educational deficiencies at the high school. Option 2 also did not address overcrowding issues, and a comparative cost analysis indicated high cost for options 2B through 7B. Upon review of the preliminary options, MSBA staff and the District agreed to allow Option 1, a new co-located middle and high school and three variations of Option 1B to retain and renovate portions of the existing high school with additions, to be advanced for further development and consideration in the final evaluation and development of preliminary pricing, as presented below. All of the developed options are for a 5-12 co-located middle and high school with an enrollment of 1,115 that will also serve PK (note the District re-numbered the three requested variations of Option 1B as Option 2A, 2B and 2C for the final evaluation of options).

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 1: New 5-12 co-located MS/HS with Pre-K	243,494	N/A	243,494 \$213.61/sf	\$8,820,846 \$36.23/sf	\$78,580,352 \$322.72/sf	\$96,429,104 \$396.02/sf
Option 2A: Reno/Add 5-12 co-located MS/HS with Pre-K	257,131	53,766 \$191.80/sf	203,365 \$220.68/sf	\$8,041,227 \$31.27/sf	\$82,958,833 \$322.63/sf	\$104,452,717 \$406.22/sf
Option 2B: Reno/Add 5-12 co-located MS/HS with Pre-K	257,131	108,493 \$171.22/sf	148,638 \$245.44/sf	\$7,462,883 \$29.02/sf	\$82,083,375 \$319.23/sf	\$103,415,299 \$402.19/sf
Option 2C: Reno/Add 5-12 co-located MS/HS with Pre-K	257,131	106,035 \$173.92/sf	151,096 \$240.24/sf	\$7,638,579 \$29.71/sf	\$81,908,359 \$318.55/sf	\$103,207,905 \$401.38/sf

*Does not include construction contingency

**Does not include construction contingency

*****District's preferred option**

The District selected Option 1, a new co-located 5-12 middle/high school with PK on the existing high school playfield site as the preferred solution to advance into schematic design. The

renovation/addition options (2A, 2B and 2C) proved to be more costly due to the structural upgrades required to conform to current code, the larger size of the addition renovation options, and the need to address issues associated with multiple floor levels in the existing high school. The District selected Option 1 because it best supports the goals of the educational programming, provides for middle school educational teaming organization and opportunities, provides a shorter construction timeframe with fewer disruptions to students and staff, is the less costly option and offers the most economical long-term operational cost.

The District presented its proposed project to the MSBA Facilities Assessment Subcommittee (“FAS”) on January 15, 2014. At that meeting, members of the FAS discussed: the previous options reviewed and submitted by the District versus the option as presented at FAS; how the proposed solution separates grades by cohorts; continued development of conceptual plans to better reflect the educational program; design considerations for school administration to monitor external and internal circulation and security; academic organization of the high school spaces; organization and layout of the middle school; and the importance of establishing sufficiently detailed conceptual layouts prior to proceeding into schematic design.

Based on the observations and discussion during the FAS meeting, and review of the material presented at the FAS, the MSBA requested that the District provide a Preferred Schematic Solution Supplement to address the remaining outstanding items and questions.

The District and its Designer submitted a Preferred Schematic Solution Supplement to the MSBA on February 7, 2014 that addressed the MSBA concerns regarding the separation of grade cohorts, adherence to the MSBA science classroom guidelines, and refinement of the plan to address organization of academic spaces and key educational adjacencies. MSBA staff will continue to work with the District and its consultants to understand the need for and if applicable, the potential eligibility of spaces where the proposed program exceeds the MSBA guidelines for Art early in the schematic design process. The District’s updated preferred option (Option 1) preliminary pricing is as follows:

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 1: New 5-12 co-located MS/HS with Pre-K	234,560	N/A	234,560	\$8,772,246	\$75,697,203	\$95,857,635
			\$213.61/sf	\$37.39/sf	\$322.72/sf	\$408.67/sf

**Does not include construction contingency*

***Does not include construction contingency*

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

- 1) MSBA previously completed a study enrollment projection and reached a mutual agreement with the District for the following study enrollments: 665 students for a grade 5-8 facility, 495 students for a grade 6-8 facility, 945 students for a 6-12 facility, 780

students for a 7-12 facility, and 1,115 students for a 5-12 facility. A Design Enrollment Certification will be provided by the MSBA for District signature for 1,115 students in grades 5-12, for a project that will serve grades 5-12 and PK.

- 2) 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.
- 3) The District has submitted an operational budget for educational objectives and a capital budget statement for MSBA review.
- 4) 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.
- 5) 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. The MSBA will work with the District and its consultants early in the schematic design phase to understand the need and determine eligibility for the additional spaces associated with the additional Art Room being proposed that is beyond the MSBA guidelines.
- 6) 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 Abington be approved to proceed into schematic design to replace the existing Frolio Middle School with a new 5-12 co-located middle school and high school facility, which includes PK on the existing Abington High School playfields site.