

District: Town of Arlington  
 School Name: Arlington High School  
 Recommended Category: Preferred Schematic  
 Date: August 22, 2018

**Recommendation**

That the Executive Director be authorized to approve the Town of Arlington, as part of its Invitation to Feasibility Study, to proceed into Schematic Design to replace the existing Arlington High School on the existing site. MSBA staff has reviewed the Feasibility Study and accepts the District’s preferred solution.

<b>District Information</b>	
District Name	Town of Arlington
Elementary School(s)	John A. Bishop Elementary School (K-5) Brackett Elementary School (K-5) Cyrus E. Dallin Elementary School (K-5) Hardy Elementary School (K-5) Peirce Elementary School (K-5) M. Norcross Stratton Elementary School (K-5) Thompson Elementary School (K-5)
Middle School(s)	Ottoson Middle School (6-8)
High School(s)	Arlington High School
Priority School Name	Arlington High School
Type of School	High School
Grades Served	9-12
Year Opened	1913
Existing Square Footage	378,620
Additions	1938, Main Office section, Collomb House 1960’s, Lowe Auditorium, Blue Gym, Offices, Cafeteria, Downs House 1981, Renovation of buildings, addition of Red Gym and Links Building
Acreage of Site	23 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 and projected overcrowding.
Original Design Capacity	Unknown

<b>District Information</b>	
2017-2018 Enrollment	1,325
Agreed Upon Enrollment	1,755
Enrollment Specifics	The District and MSBA have mutually agreed upon a design enrollment of 1,755 students serving grades 9-12.
Total Project Budget – Debt Exclusion Anticipated	Yes

<b>MSBA Board Votes</b>	
Invitation to Eligibility Period	May 25, 2016
Invitation to Feasibility Study	February 15, 2017
Preferred Schematic Authorization	August 29, 2018
Project Scope & Budget Authorization	District is targeting Board authorization on April 10, 2019
Feasibility Study Reimbursement Rate (Incentive points are not applicable)	45.11%

<b>Consultants</b>	
Owner’s Project Manager (the “OPM”)	Skanska USA Building, Inc.
Designer	HMFH Architects, Inc.

## **Discussion**

The existing Arlington High School is a 391,875 square foot facility serving grades 9-12, located on a 23-acre site. Its main façade fronts onto Massachusetts Avenue, set back from the road by a green space with mature trees. The site has a significant downward slope that runs from the front of the building to the athletic fields, behind the building. The original six-story “Fusco House” building was built in 1914. Major additions were added in 1938 and in the 1960s. Later renovations were made from the late 1970s to the early 1980s.

The District identified numerous deficiencies in the Statement of Interest including, but not limited to, deteriorated exterior systems, moisture and mildew problems, outdated interior finishes, and accessibility challenges. Most of the building consists of various additions, resulting in a sprawling and inefficient layout that is not conducive to the educational goals of the District. The existing athletic fields are located over areas with contaminated soils. Also, there are significant structural foundation issues in the existing building caused by underground water infiltration.

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 eleven preliminary options that included eight addition/renovation options and three new construction options. In addition to the options listed below, the District and design team analyzed a “code upgrade” and a “renovation only” option and found that these options could not meet the educational goals of the District, or the larger design enrollment for the proposed project. None of the options listed below retain the existing 1960s additions. The following table summarizes the preliminary alternatives considered by the District:

<b>Option</b>	<b>Description of Preliminary Options</b>
1	Addition/Renovation to the 1914 Fusco House and 1938 Collomb building with additions to the north and east
1A	Addition/Renovation to the 1914 Fusco House and 1938 Collomb building with additions to the north, east and south (a modified version of Option 1)
2	Addition/Renovation to the 1914 Fusco House and 1938 Collomb building with three new connected “wing” additions to the north
3	Addition/Renovation that retains the 1914 Fusco House for Town use and renovates the 1938 Collomb building with additions to the north and east
4	Addition/Renovation to the 1938 Collomb building with additions to the north, east and west, and demolishes the 1914 Fusco House
5	Addition/Renovation to the 1938 Collomb building with additions to the east, south and west, and demolishes the 1914 Fusco House.
5A	Addition/Renovation to the 1914 Fusco House with additions to the north, east and south, and demolishes the 1938 Collomb House (a modified version of Option 5).
5B	Addition/Renovation to the 1914 Fusco House and 1938 Collomb building with additions to the north, east and south (a combined version of Options 5 and 5A).
6	All new construction overlapping the existing building location, with the Pre-K wing on the north side of the building
6A	All new construction overlapping the existing building location with the Pre-K wing on the east side of the building (a modified version of Option 6)
7	All new construction located in the existing green space adjacent to Massachusetts Avenue, with no overlap of the existing building and no required phasing

After further development in the Preliminary Design Program, the District and its design team identified the advantages of four of the options noted above. “Option 2” will retain and renovate the iconic portions of the two existing Fusco and Collomb buildings and retain the open, front green along Massachusetts Avenue. New construction, in “Option 2”, will be in the rear portion of the site. “Option 5B” (unlike “Option 5” and “Option 5A”) will retain and renovate both the Fusco and Collomb buildings, while maintaining most of the open, front green space. “Option 6A” is all new construction with a large portion of the building located at the front green, while retaining a significant portion of open space along Massachusetts Avenue. Thus, “Option 6A” will create more open space towards the rear of the building than “Option 6” or “Option 5B”, and the new construction will provide swing space to enable the rest of the construction to proceed. “Option 7” is all new construction located completely on the front green. “Option 7” will eliminate the open space along Massachusetts Avenue but increase the open space towards the rear of the building. The new construction is anticipated to be completed in one phase, thus, shortening the construction duration.

From the eleven options listed above, the Preliminary Evaluation of Alternatives concluded with the selection of the following four options for further evaluation:

<b>Option</b>	<b>Description</b>
2	Addition/Renovation to the 1914 Fusco House and 1938 Collomb building with three new connected “wing” additions to the north
5B	Addition/Renovation to the 1914 Fusco House and 1938 Collomb building with additions to the north, east and south (a combined version of Options 5 and 5A).

6A	All new construction overlapping the existing building location with the Pre-K wing on the east side of the building (a modified version of Option 6)
7	All new construction located in the existing green space adjacent to Massachusetts Avenue, with no overlap of the existing building and no required phasing

Upon further review, MSBA staff and the District agreed to six final options for further development and consideration in the final evaluation and development of preliminary design pricing, as presented below. Please note that the “Base Repair” was carried for comparison purposes only and was not further developed as part of the final evaluation of options because, as stated by the District, this option is insufficient for the student population and does not support the educational needs of the District.

### 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
Base Repair	392,316	392,316 \$216/sq. ft.	NA	\$6,006,177	\$90,665,100 \$231/sq. ft.	\$108,798,120
Full Renovation	392,316	392,316 \$367/sq. ft.	NA	\$9,756,127	\$153,927,576 \$392/sq. ft.	\$184,713,091
Option 2: Addition/Renovation	443,000	115,200 \$252/sq. ft.	327,800 \$650/sq. ft.	\$14,234,475	\$256,404,393 \$579/sq. ft.	\$333,034,936
Option 5B: Addition/Renovation	443,100	115,200 \$252/sq. ft.	327,900 \$613/sq. ft.	\$14,493,745	\$244,582,156 \$552/sq. ft.	\$317,048,118
<b>Option 6A: New Construction, Phased***</b>	<b>415,400</b>	<b>NA</b>	<b>415,400 \$536/sq. ft.</b>	<b>\$15,345,765</b>	<b>\$238,072,994 \$573/sq. ft.</b>	<b>\$308,278,341</b>
Option 7: New Construction, Not Phased	415,400	NA	415,400 \$492/sq. ft.	\$17,173,843	\$221,595,703 \$533/sq. ft.	\$284,107,247

\* Marked up construction costs

\*\* Does not include construction contingency

\*\*\*District's preferred option

The District has selected “Option 6A”, phased new construction, as the preferred solution to proceed into Schematic Design. The Base Repair and Full Renovation options do not provide space for the additional student population. The addition/renovation options are less cost effective than the new building options; have extended construction durations; and encroach into the open space in the rear portion area of the site. The District’s preferred solution, “Option 6A”, will be partially located on the front green while retaining a portion of the open front area that runs along Massachusetts Avenue. Also, “Option 6A” will allow for a phased new construction area, and increased space towards the rear of the building for circulation and improved connections between the school and the existing play fields. “Option 7” is the least popular option within the community since it is a comparatively tall building that eliminates the open green area along Massachusetts Avenue, and provides site and internal space adjacencies that are less optimal than “Option 6A”.

The District presented its proposed project to the MSBA Facilities Assessment Subcommittee (“FAS”) on August 8, 2018. MSBA staff and members of the FAS discussed several topics including: the amount of ineligible area in excess of MSBA guidelines and high square foot construction costs that will result in an increased share of the project cost by the District; practicality of proposed science lab locations after the school transitions to an interdisciplinary educational approach; professional development during construction and transition to an interdisciplinary educational approach; overhead protection for the handicapped at the main entrance during inclement weather; sound quality under the balcony in the auditorium; lack of distributed SPED spaces in the humanities wing; proximity of the maker space to the library; main façade imagery seen from Massachusetts Avenue; community support for demolition of the existing building; and the cost comparisons to other similar recent high school projects.

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, 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 MSBA 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 Town of Arlington be approved to proceed into Schematic Design to replace the existing Arlington High School on the existing site.