District: City of Worcester

School Name: South High Community School

Recommended Category: Preferred Schematic

Date: June 21, 2017

Recommendation

That the Executive Director be authorized to approve the City of Worcester, as part of its Invitation to Feasibility Study, to proceed into Schematic Design to replace the existing South High Community School facility with a new building on the existing South High Community School site. MSBA staff has reviewed the Feasibility Study and accepts the District's preferred solution.

District Information						
District Name	City of Worcester					
Elementary School(s)	1 (PK)					
	20 (PK-6)					
	13 (K-6)					
Middle School(s)	2 (6–8)					
	2 (7–8)					
High School(s)	1 (7–12)					
	5 (9–12)					
	1 (11–12)					
Priority School Name	South High Community School					
Type of School	High School					
Grades Served	9 - 12					
Year Opened	1978					
Existing Square Footage	246,000					
Additions	N/A					
Acreage of Site	41 acres					
Building Issues	The District identified deficiencies in the following areas					
	 Mechanical systems 					
	 Electrical systems 					
	 Plumbing systems 					
	- Envelope					
	– Windows					
	- Roof					
	In addition to the physical plant issues, the District reported that the					
	existing facility does not support the delivery of its educational					
0::15:0	program. The school is also trying to prevent loss of accreditation.					
Original Design Capacity	Unknown					
2016-2017 Enrollment	1,421					
Agreed Upon Enrollment	1,420					
Enrollment Specifics	The District and MSBA have mutually agreed upon a design					
	enrollment of 1,420 students serving grades 9-12.					

MSBA Board Votes				
Invitation to Eligibility Period	January 14, 2015			
Invitation to Feasibility Study	September 30, 2015			
Preferred Schematic Authorization	On June 28, 2017 Board agenda			
Project Scope & Budget Authorization	District is targeting Board authorization on June			
	28, 2017			
Feasibility Study Reimbursement Rate				
(Incentives points are not applicable)	78.95%			

Consultants				
Owner's Project Manager (the "OPM")	HEERY International			
Designer	Lamoureux-Pagano			

Discussion

The existing South High Community School is a 246,000 square foot building located on a 43-acre site (which is shared with the Sullivan Middle School) and currently serves grades 9-12. The South High Community School is a three-level building that was originally constructed in 1976 as an "open-classroom" concept high school with a large field house gymnasium, swimming pool, auditorium and other program/support areas. South High Community School has not undergone additions or major renovations since its original construction; however, there have been a number of repair/alteration projects relative to mechanical/electrical, science labs, toilet rooms, roof systems and partition wall scope. In 1990, the Sullivan Middle School was constructed on the same 43-acre site as South High Community School. This eliminated some of the original high school's athletic fields and introduced shared parking areas between the two buildings.

The District identified numerous deficiencies in the Statement of Interest that are associated with: outdated and failing mechanical and electrical systems, security and communication systems, lack of a full-coverage fire suppression system, structural systems, and building envelope. The District also identified non-compliant accessibility issues and space constraints inhibiting the District's ability to deliver its educational program.

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 seven (7) preliminary options that included one (1) base repair option, two (2) addition/renovation configurations, two (2) addition/renovation hybrid configurations, and two (2) new construction options. The following is a detailed list of the preliminary alternatives considered.

Option	Description of Preliminary Options
B.1	"No Build" renovation solution with a minimal level of repair to meet code.
Base	
Repair	
C.1	Addition/Renovation of the existing facility (185,862 sf. ft. addition)
C.2	Addition/Renovation of the existing facility (149,127 sf. ft. addition)
C.3	Addition/Renovation Hybrid of the existing facility common-use spaces (330,262 sf. ft.
	addition)
C.4	Addition/Renovation Hybrid of the existing facility common-use spaces (286,950 sf. ft.
	addition)
D.1	New Construction at the existing site (on existing track/field, courtyard layout)
D.2	New Construction at the existing site (on existing track/field, three-wing layout)

Upon further review, MSBA staff and the District agreed to seven final options for further development and consideration in the final evaluation and development of preliminary design pricing as presented below.

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
Option B.1: (Base Repair)	246,000	246,000 \$281/sq. ft.	0 \$0/sq. ft.	\$8,159,898	\$77,292,278 \$314/sq. ft.	\$100,500,000
Option C.1: (Addition/ Renovation)	368,727	182,865 \$356/sq. ft.	185,862 \$356/sq. ft.	\$22,313,411	\$153,685,577 \$417/sq. ft.	\$192,566,995
Option C.2: (Addition/ Renovation)	379,982	230,855 \$320/sq. ft.	149,127 \$320/sq. ft.	\$23,447,431	\$145,050,224 \$381/sq. ft.	\$183,183,992
Option C.3: (Addition/ Renovation)	400,882	70,620 \$369/sq. ft.	330,262 \$369/sq. ft.	\$25,749,935	\$173,760,612 \$433/sq. ft.	\$214,047,658
Option C.4: (Addition/ Renovation)	374,198	99,490 \$371/sq. ft.	274,708 \$371/sq. ft.	\$24,097,259	\$163,061,394 \$436/sq. ft.	\$202,546,000
Option D.1: (New Construction)	347,000	0 \$0/sq.ft.	347,000 \$389/sq. ft.	\$24,174,959	\$159,180,725 \$459/sq. ft.	\$191,211,145
Option D.2: (New Construction)***	347,000	0 \$0/sq.ft.	347,000 \$389/sq. ft.	\$24,174,959	\$159,180,725 \$459/sq. ft.	\$191,211,145

^{*} Marked up construction costs

^{**} Does not include construction contingency

^{***}District's preferred option

The District has selected "Option D.2", which replaces the existing South High Community School with a new facility serving students in grades 9-12, as the preferred solution to proceed into Schematic Design. The District selected this option as its preferred solution because it best meets the needs of the District's educational program, allows the school community to create its ideal learning environment, is anticipated to provide the least construction impact of all options, and is estimated below the established targeted total project budget.

"Option B.1" (Base Repair) was eliminated because it did not address the educational goals or correct the educational deficiencies of the District. "Options C.1 and C.2" (Addition/Renovation), were determined to be less viable because these options required a 4-story addition to be built first at the west end of the school. This addition would then be used as swing space, ultimately, requiring a longer construction duration with complex phasing that would be disruptive to the ongoing delivery of the District's educational program.

"Options C.3 and C. 4" (Addition/Renovation Hybrid), were developed as solutions that anticipate less construction impact than options "C.1 and C.2" while maintaining the common-use spaces of the existing facility. Although, both options offered a possible solution, the District chose to eliminate "Options C.3 and C.4" because these options provided limited access to core facilities, extended construction duration with complex phasing, would be disruptive to students within an occupied facility, and exceeded the District's targeted total project budget. Therefore, the addition/renovation hybrid options were not selected.

The District presented its proposed project to the MSBA Facilities Assessment Subcommittee ("FAS") on June 7, 2017. At that meeting, members of the FAS discussed a number of topics regarding: the District's preferred solution and how it aligns with the educational program; organization of Freshman Academy, location and delivery of the common room spaces, science labs and art rooms, location and organization of the life skills, vocational, health and physical education spaces; the vision of the District's 1:1 technology method and computer labs; the logistical challenges with regards to circulation and efficiencies, consideration of relocation of programmatic spaces associated with physically challenged individuals; school schedule and its impact on curriculum delivery; advanced placement program and potential for academically enriching opportunities accessible to all students; location and size of the elevator(s), the rationale behind the massing and organization of the school; and orientation of the building.

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

- 1) MSBA has completed an enrollment projection and has reached a mutual agreement with the District for a design enrollment of 1,420 students for the 9-12 South High Community School.
- 2) The Department of Elementary and Secondary Education ("DESE") have reviewed the District's proposed programming offerings and are satisfied that the District's planning for the Career/Vocational Technical Education Program offerings has been thorough, and that the programs are viable. With the exception that the District work with the designer in schematic design to create a dual-purpose space for the Automotive and Diesel Technology programs.

- 3) 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.
- 4) The District's schematic design submittal and proposed locations and adjacencies associated with life skills spaces will be subject to final review and approval by DESE 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.
- 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 City of Worcester, be approved to proceed into Schematic Design to replace the existing South High Community School on the existing site.