District: City of Boston

School Name: William E. Carter School Recommended Category: Preferred Schematic February 3, 2021

Recommendation

That the Executive Director be authorized to approve the City of Boston (the "District"), as part of its Invitation to Feasibility Study, to proceed into Schematic Design to replace the existing William E. Carter School on the existing site. MSBA staff has reviewed the Feasibility Study and accepts the District's Preferred Schematic.

District Information				
District Name	City of Boston			
Elementary School(s)	7 Schools (Early Learners)			
3	40 Schools (K-5)			
	33 Schools (K-8)			
Middle School(s)	6 Schools (6-8)			
High School(s)	6 Schools (K-12 Special Education)			
	4 Schools (6-12)			
	3 Schools (7-12)			
	20 Schools (9-12)			
	5 Alternative Schools (9-12)			
Priority School Name	William E. Carter School			
Type of School	Middle-High School			
Grades Served	7-12			
Year Opened	1971			
Existing Square Footage	14,040 GSF			
Additions	1979 addition, and replacement of HVAC and electrical			
1 idditions	systems in 2013			
Acreage of Site	1.6 acres			
Building Issues	The District identified deficiencies in the following areas:			
Building Issues	Mechanical 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.			
Original Design Capacity	Unknown			
2019-2020 Enrollment	28 students			
Agreed Upon Enrollment	Study Enrollment includes the following configurations:			
rigicou open Emoniment	30 students (grades 7-12) – Current Configuration			
	60 students (grades PK-12)			
	30-60 students (Enrollment based upon the maximum size			
	facility that could be accommodated at the existing site)			
Enrollment Specifics	Contingent upon the Board's approval of the Preferred			
	Schematic, the District will sign a Design Enrollment			
	Certification for 60 students in grades PK-12.			

District Information			
Total Project Budget – Debt	No		
Exclusion Anticipated			

MSBA Board Votes				
Invitation to Eligibility Period	December 13, 2017			
Invitation to Feasibility Study	April 10, 2019			
Preferred Schematic Authorization	On February 11, 2021 Board agenda			
Project Scope & Budget Authorization	District is targeting Board authorization on			
	August 25, 2021			
Feasibility Study Reimbursement Rate	62.52%			
(Incentive points are not applicable)				

Consultants	
Owner's Project Manager (the "OPM")	Hill International, Inc.
Designer	Perkins + Will Architects, Inc.

Discussion

The existing William E. Carter School is a 14,040 square foot school, located at 396 Northampton Street in Boston, which is near Northeastern University's campus and adjacent to the rail line for the MBTA Orange Line and Amtrack. The existing facility currently houses grades 7-12, serving students with severe cognitive and physical disabilities. All of the students in the Carter School have an Individualized Education Program. The District has proposed that the new facility be expanded from the current 7-12 grade range to include preK-12, with student ages ranging from 3 to 22.

The original school building was constructed in 1971 with upgrades and additions in 1979. Since then, the Carter School has not had any upgrades to the original exterior walls or windows. The roof was replaced 11 years ago. The mechanical, electrical services, and distribution system was replaced in 2013. The District identified numerous deficiencies in its Statement of Interest. The existing facility requires significant upgrades to meet the requirements of the school population. In addition, the building lacks required area to support the educational needs of the students, as described in the educational program. Both the existing building code analysis and accessibility analysis note a general lack of compliance inherent with a building of this vintage. This is especially noteworthy given the specialized requirements of this facility.

In conjunction with its consultants, the District performed a comprehensive assessment of the existing conditions and the educational program. They also received input from educators, administrators, and facilities personnel. Based on the findings of this effort, seven preliminary options were evaluated in the Preliminary Design Program submittal including: a code upgrade for 30 students, renovation for 30 students, renovation/addition for 30 students, and four new construction options for 60 students. All the new construction options were located adjacent to the northwestern portion of the site parallel to the MBTA site and varied only in massing and internal organization. The District did not review alternate sites for this study. The code upgrade and renovation options of the existing 14,040 square foot building that were evaluated do not meet the 30 student capacity requirements, and the addition/renovation option was determined to be

ineffectual due to the limitations and condition of the existing building. The following is a list of the preliminary options considered:

Option	Description of Preliminary Options			
1	Code Upgrade on the existing facility for 30 students			
2	Base Renovation for 30 students			
3	Addition / Renovation of the existing facility for 30 students (63,000 nsf)			
4A	New construction for 60 students on the existing site			
4B	New construction for 60 students on the existing site			
4C	New construction for 60 students on the existing site			
4D	New construction for 60 students on the existing site			

At the MSBA's request, options 4C and 4D were subdivided into the two required design enrollments for 30 and 60 students in the Preferred Schematic Report submittal. Upon further review, MSBA staff and the District agreed to eight 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
Base / Code	14,040	14,040	0	\$1,530,027	\$9,391,146	\$11,645,021
Repair - 30 students		\$560/sq. ft.	\$0/sq. ft.		\$669/sq. ft.	
Add / Reno - 30 students	63,000	14,040	48,960	\$5,899,075	\$54,466,640	\$70,806,632
		\$518/sq. ft.	\$844/sq. ft.		\$865/sq. ft.	
Option 4A-60 students (New	86,227	0	86,227	\$4,729,625	\$69,714,440	\$90,628,772
Construction)		\$0/sq. ft.	\$754/sq. ft.		\$808/sq. ft.	
Option 4B-60 students (New	86,227	0	86,227	\$6,184,452	\$66,970,937	\$87,062,218
Construction)		\$0/sq. ft.	\$705/sq. ft.		\$777/sq. ft.	
Option 4C-60 students (New	86,227	0	86,227	\$5,089,425	\$67,497,804	\$87,747,145
Construction)		\$0/sq. ft.	\$724/sq. ft.		\$783/sq. ft.	
Option 4C-30 students (New	63,000	0	63,000	\$4,720,665	\$52,407,042	\$68,129,155
Construction)		\$0/sq. ft.	\$757/sq. ft.		\$832/sq. ft.	
Option 4D-60 students (New	86,227	0	86,227	\$6,022,395	\$68,895,701	\$89,564,411
Construction)***		\$0/sq. ft.	\$729/sq. ft.		\$799/sq. ft.	
Option 4D-30 students (New	63,000	0	63,000	\$5,856,260	\$50,337,000	\$65,438,100
Construction)		\$0/sq. ft.	\$706/sq. ft.		\$799/sq. ft.	

- * Marked up construction costs
- ** Does not include construction contingency
- ***District's Preferred Schematic

The District reported that new construction options 4B and 4D (both for 60 students) best meet the District's educational selection criteria. Thenew construction option 4D was ultimately selected as the District's preferred option to proceed into Schematic Design. The District selected this option based on the following reasons: how the option meets the educational program needs,;internal site circulation and parking; connection to the surrounding area; design flexibility; sustainability goals; internal space connection to the exterior; interior and exterior maintainability; safety and security needs; internal organization; and the acoustical impact of the adjacent MBTA system.

The Base/Code Repair option fail to address the existing educational and physical constraints of the existing facility. The addition/renovation option was determined to be ineffectual due to the limitations and substandard conditions of the existing building. The new construction options designed for 30 students do not support the District's desire to expand the grades and number of students to increase the reach of this specialized program.

Options 4A and 4C, both for 60 students, include student focused areas adjacent to the train tracks making these options less optimal than the selected option. Option 4B, for 60 students, includes a more complex building envelope and, therefore, was not selected.

The District presented its educational program and preliminary designs for the Carter School to the MSBA Facilities Assessment Subcommittee ("FAS") on November 18, 2020. At that meeting, members of the FAS and District discussed the following topics: appreciation for developing ageappropriate spaces; the size of the proposed therapy pool; layout of toilet rooms; design and spatial considerations for students with visual and hearing impairments; options for outdoor spaces and how each fits with the overall flow of the building; and evacuation plans. The FAS requested additional information which was provided. The District returned to the FAS on January 13, 2021 to present its preferred schematic. At that meeting, members of the FAS and District discussed the following topics: the educational program and appreciation of the additional information provided following the November 18, 2020 FAS meeting; the engaging and collaborative preliminary design process; preliminary evacuation plans; potential use of the therapy pool and differentiated gym space; opportunities to review the proposed project with Boston's Disabilities Commission; building orientation; how the large circular corridor on the second floor will support mobility training; attention during design and construction to mitigate impact to the facility from adjacent train tracks regarding acoustics and vibrations that could affect the therapy pool or the building; and the flexibility of the facility design and availability of resources for adaptation once occupied.

MSBA staff reviewed the conclusions of the Feasibility Study and all other subsequent submittals 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 Schematic 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 Special Education submission will be subject to final review and approval by the Department of Elementary and Secondary Education as part of the Schematic Design submittal, which is prior to executing 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, except for 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 Boston be approved to proceed into Schematic Design to replace the existing William E. Carter School on the existing site.