

District: Town of Walpole
 School Name: Bird Middle School
 Recommended Category: Preferred Schematic
 Date: April 7, 2021

Recommendation

That the Executive Director be authorized to approve the Town of Walpole (the “District”), as part of its Invitation to Feasibility Study, to proceed into Schematic Design to replace the existing Bird Middle School and Eleanor Johnson Middle School with a new facility serving students in grades 6-8 (district-wide) on the existing Bird Middle School site. MSBA staff has reviewed the Feasibility Study and accepts the District’s Preferred Schematic.

District Information	
District Name	Town of Walpole
Elementary School(s)	Boyden Elementary School (K-5) Daniel Feeney Preschool Center (PK) Elm Street School (K-5) Fisher Elementary School (K-5) Old Post Road Elementary School (K-5)
Middle School(s)	Bird Middle School (6-8) Eleanor Johnson Middle School (6-8)
High School(s)	Walpole High School (9-12)
Priority School Name	Bird Middle School
Type of School	Middle School
Grades Served	6-8
Year Opened	1961
Existing Square Footage	88,500
Additions	Roof replacement, elevator installation
Acreage of Site	13.9 acres
Building Issues	The District identified deficiencies in the following areas: <ul style="list-style-type: none"> – Structural integrity – Mechanical systems – Electrical systems – Plumbing systems – Envelope – Windows – Roof – 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
2020-2021 Enrollment	397 students
Agreed Upon Enrollment	Study Enrollment includes the following configurations: <ul style="list-style-type: none"> – 450 students in grades 6-8

District Information	
	– 905 students in grades 6-8 (Preferred Schematic)
Enrollment Specifics	Contingent upon the Board’s approval of the Preferred Schematic, the District will sign a Design Enrollment Certification for 905 students in grades 6-8.
Total Project Budget – Debt Exclusion Anticipated	Yes

MSBA Board Votes	
Invitation to Eligibility Period	December 12, 2018
Invitation to Feasibility Study	October 30, 2019
Preferred Schematic Authorization	On April 14, 2021 Board agenda
Project Scope & Budget Authorization	District is targeting Board authorization on August 25, 2021.
Feasibility Study Reimbursement Rate (Incentive points are not applicable)	48.68%

Consultants	
Owner’s Project Manager (the “OPM”)	Compass Project Management, Inc.
Designer	Tappe Architects, Inc.

Discussion

The existing Bird Middle School is an 88,500 square foot facility located on a 13.9-acre site that currently serves students in grades 6-8. The original school building was constructed in 1961, with two renovations in 1992 and 1994.

The District’s Statement of Interest (“SOI”) identifies numerous deficiencies in the existing facility associated with outdated mechanical, electrical, and plumbing systems; building envelope; accessibility issues; overcrowding; and existing spaces not conducive for delivering the District’s educational program.

As part of the Feasibility Study, the MSBA accepted the District’s request to explore options that include a consolidation of the students from the Bird Middle School and the Eleanor Johnson Middle School resulting in the following study design enrollments: 450 students in grades 6-8; and 905 students in grades 6-8.

The existing Eleanor Johnson Middle School is 93,518 square-foot facility located on a 52.4-acre site. The facility currently serves students in grades 6-8. The original school building was constructed in 1966.

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 (18) preliminary options that include: (1) code upgrade option, (3) addition/renovation options, and (14) new construction options as presented below.

Option	Description of Preliminary Options
CB	Code Upgrade for grades 6-8 with an enrollment of 450 students at the existing Bird Middle School; with an estimated project cost \$61 million.
BR1	Addition/Renovation for grades 6-8 with an enrollment of 450 students at the existing Bird Middle School; with an estimated project cost of \$82 million.
BR2	Addition/Renovation for grades 6-8 with an enrollment of 905 students at the existing Bird Middle School; with an estimated project cost of \$118 million.
JR1	Addition/Renovation for grades 6-8 with an enrollment of 905 students at the existing Johnson Middle School; with an estimated project cost of \$120 million.
B1	New Construction for grades 6-8 with an enrollment of 905 students at the Bird Middle School site; with an estimated project cost of \$120 million.
B1s	New Construction for grades 6-8 with an enrollment of 450 students at the Bird Middle School site; with an estimated project cost of \$87 million.
B2	New Construction for grades 6-8 with an enrollment of 905 students at the Bird Middle School site; with an estimated project cost of \$124 million.
B2s	New Construction for grades 6-8 with an enrollment of 450 students at the Bird Middle School site; with an estimated project cost of \$92 million.
B3	New Construction for grades 6-8 with an enrollment of 905 students at the Bird Middle School site; with an estimated project cost of \$126 million.
B3s	New Construction for grades 6-8 with an enrollment of 450 students at the Bird Middle School site; with an estimated project cost of \$95 million.
B4	New Construction for grades 6-8 with an enrollment of 905 students at the Bird Middle School site; with an estimated project cost of \$122 million.
B4s	New Construction for grades 6-8 with an enrollment of 450 students at the Bird Middle School site; with an estimated project cost of \$94 million.
B5	New Construction for grades 6-8 with an enrollment of 905 students at the Bird Middle School site; with an estimated project cost of \$121 million.
B5s	New Construction for grades 6-8 with an enrollment of 450 students at the Bird Middle School site; with an estimated project cost of \$95 million.
B6	New Construction for grades 6-8 with an enrollment of 905 students at the Bird Middle School site; with an estimated project cost of \$126 million.
B6s	New Construction for grades 6-8 with an enrollment of 450 students at the Bird Middle School site; with an estimated project cost of \$98 million.
J1	New Construction for grades 6-8 with an enrollment of 905 students at the Johnson Middle School site; with an estimated project cost of \$112 million.
J2	New Construction for grades 6-8 with an enrollment of 905 students at the Johnson Middle School site; with an estimated project cost of \$114 million.

As a result of this analysis, the District determined that “Option CB” is not considered a viable option because it does not meet the needs of the District’s educational program, would result in significant disruption to ongoing education during construction, and requires temporary modular classrooms to provide construction swing space. However, this option was included for cost comparison purposes only.

The District determined “Option JR1” would not be considered for further evaluation because the site is constrained due to wetlands and a significant portion of the site is in a Water Resource Protection Overlay District as a result of two existing wellheads that are located behind the

existing building. Additionally, the District determined there is insufficient site around the existing building for proper circulation and parking and insufficient space to provide temporary classrooms during construction. This option would also require the off-site relocation of students during construction.

The District determined “Options B2 and B2s” would not be considered for further evaluation because the location would be challenging to implement due to the existing grade change across the site, and the proposed floor plans would create an undesirable travel distance for students moving through the school. Additionally, the proposed location would require demolition and/or rerouting of the current entry and utility service feeds to the existing building creating added complexity, duration, and cost.

The District determined “Options B3 and B3s” would not be considered for further evaluation because the proposed floor plans would create an undesirable travel distance for students moving through the school and the very long floor plate contributes to increased cost and spreads uphill encountering the same grading/stepping issues as “Options B2 and B2s”.

The District determined “Option J1” would not be considered for further evaluation because, in comparison, the District preferred “Option J2” which has a very similar floorplan.

Subsequent to the evaluation of preliminary options, the District decided to proceed with a single 905-student middle school for grades 6-8. Therefore, “Options B1s, B4s, B5s, and B6s” were not considered for further evaluation because these options are designed for 450-students in grades 6-8.

The District determined “Option BR1” would not be considered for further evaluation because it did not meet the District’s educational program for the 905-student enrollment. The District does not have any available swing space requiring costly modular classrooms and adding duration to a phased and occupied renovation. The District also determined that this option would result in significant disruption to ongoing education during construction.

The District determined “Option B4” would not be considered for further evaluation because the added duration of a phased construction approach, construction cost, combined with more significant disruption to ongoing education during construction, makes this option less desirable than the Preferred Schematic.

The District determined “Option B5” would not be considered for further evaluation because this option has increased costs associated with the site topography changes, which limit the floorplan options for the building. This option requires demolition and/or rerouting of portions of the current entry and utility service feeds to the existing building creating added complexity, duration, and cost. Also, the proximity of the entrance to Washington Street creates potential limitation to vehicular queueing mitigation options.

The District determined “Option B6” would not be considered for further evaluation because it does not locate the building in the ideal permanent location of the middle of the site. It also created unfavorable permanent parking access to the building as the parking would result in a significant distance to the main entrance. The District determined that this option would create a permanent disadvantageous impact to the District’s overall program as several varsity athletic fields would be

displaced. Finally, this option would result in increased site costs to restore fields to remain and proved to be more costly than the Preferred Schematic.

The District determined “Option J2” would not be considered for further evaluation because this option raises significant concerns associated with the ability to mitigate anticipated added traffic to the site due to the enrollment consolidation. The limitations of the site preclude multiple entrances/exits as provided in the Preferred Schematic. This option also raises substantial concern over the potential impact to the Town’s drinking water wells given the proposed site is within existing well heads recharge zones. Also, in order to meet the District’s curriculum and extra-curricular needs, this option would require a synthetic turf field to be added due to the proximity to the existing well heads, which prohibits certain maintenance such as irrigation and fertilization of natural turf fields within the well areas. This would result in additional costs not included in the PSR estimate. This option would also leave the District with two existing empty buildings at the conclusion of the project, as neither building is required to be demolished in this scenario. This option also is more restrictive to future expansion possibilities due to its topography and proximity to the existing well head protection zones. For similar reasons “Option J1” was not considered for further evaluation by the District.

Subsequent to the evaluation of preliminary options, the District also included an additional option for evaluation that provided a cafetorium rather than an auditorium, referred to as “Option B.1.2”.

MSBA staff and the District agreed to explore the following (4) options for further development and consideration in the final evaluation and development of preliminary design pricing as presented below, including: (1) code upgrade option, (1) addition/renovation option, and (2) new construction options. Please note that “Option CB” was not considered for further evaluation by the District; however, it has been included for cost comparison purposes only.

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 CB: Code Upgrade	88,249	88,249 \$456/sq. ft.	N/A	\$3,054,695	\$42,233,837 \$489/sq. ft.	\$56,203,988
Option BR2: Addition/ Renovation	165,609	88,249 \$444/sq. ft.	77,360 \$547/sq. ft.	\$9,147,088	\$90,054,001 \$544/sq. ft.	\$117,070,201
<i>Option B1***: New Construction</i>	<i>170,966</i>	<i>N/A</i>	<i>170,966 \$459/sq. ft.</i>	<i>\$14,059,997</i>	<i>\$92,766,989 \$543/sq. ft.</i>	<i>\$120,597,086</i>
Option B1.2: New Construction with Cafetorium	164,058	N/A	164,058 \$454/sq. ft.	\$14,059,997	\$88,795,349 \$541/sq. ft.	\$115,433,954

* Marked up construction costs

** Does not include construction contingency

***District’s Preferred Schematic

The District has selected "Option B1", as its Preferred Schematic to proceed into Schematic Design. The District selected "Option B1" because it best meets the needs of the District's educational program, while minimizing the direct disturbances to ongoing education during construction. This option situates the new building in a manner, which maximizes circulation options and connections to outdoor learning opportunities, including access to the District's existing athletic fields.

"Option CB" was not considered a viable option by the District because it does not support the desired enrollment and does not meet the educational needs and was only included for cost comparison purposes.

"Option BR2" was not selected by the District because it requires a longer construction duration, results in significant disruption to ongoing education during construction, and requires temporary modular classrooms to provide construction swing space.

"Option B1.2" was not selected by the District because it does not include an auditorium that is desired by the District. While sharing many of the attributes of the Preferred Schematic, the District believes the Cafetorium option does not adequately support the robust performing arts included in the education program nor anticipated needs of the community. The Cafetorium also creates operational and logistical complexities with less flexibility for the District to offer and schedule its full potential of educational and extra-curricular programs.

The District presented its proposed Preferred Schematic to the MSBA Facilities Assessment Subcommittee ("FAS") on March 24, 2021. At that meeting, members of the FAS discussed the following items: appreciation of the District's Educational Program and the building layout and organization; appreciation of the transition from public spaces to the academic neighborhoods; further development of the proposed site plan and connections to the building; further development of outdoor learning areas; location of the art room relative to the auditorium for set design and transport purposes; location and distribution of Special Education classrooms, and requirement of upcoming Special Education review by the Department of Elementary and Secondary Education; insistence of incorporating a central chemical storage area as part of the project to support future flexibility in science offerings; clarification of the world language and exploratory language programs; shelter and access to the building for individuals with limited mobility; and proposed number of parking spaces.

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 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 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 Town of Walpole be approved to proceed into Schematic Design to replace the existing Bird Middle School and Eleanor Johnson Middle School with a new facility serving students in grades 6-8 (district-wide) on the existing Bird Middle School site.