

District: City of Haverhill  
 School Name: Dr. Albert B. Consentino Middle School  
 Recommended Category: Preferred Schematic  
 Date: June 15, 2022

## Recommendation

That the Executive Director be authorized to approve the City of Haverhill (the “District”), as part of its Invitation to Feasibility Study, to proceed into Schematic Design to replace the existing Dr. Albert B. Consentino Middle School with a new facility serving grades 5-8 on the existing school site. MSBA staff has reviewed the Feasibility Study and accepts the District’s Preferred Schematic.

<b>District Information</b>	
District Name	City of Haverhill
Elementary Schools	Moody Pre-School (PK) Walnut Elementary School (K-2) Tilton Lower School (K-3) Bradford Elementary School (K-4) Golden Hill Elementary School (K-4) Pentucket Lake Elementary School (K-4) Silver Hill Elementary School (K-5) Caleb Dustin Hunking School (K-8)
Middle Schools	Tilton Upper School (4-6) Dr. Albert B. Consentino Middle School (5-8) Dr. Paul Nettle Middle School (5-8) J.G. Whittier Middle School (5-8)
High Schools	Greenleaf Academy (6-12) Haverhill High School (9-12)
Priority School Name	Dr. Albert B. Consentino Middle School
Type of School	Middle School
Grades Served	5-8
Year Opened	1969
Existing Square Footage	114,000
Additions	N/A
Acreage of Site	28.1 acres
Building Issues	The District identified deficiencies in the following areas: <ul style="list-style-type: none"> <li>– Mechanical systems</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 overcrowding.
Original Design Capacity	Unknown
2021-2022 Enrollment	730 students
Agreed Upon Enrollment	Study Enrollment includes the following configurations:

<b>District Information</b>	
	715 students (Grades 5-8; current configuration) 985 students (Grades 5-8 and Tilton Upper School remains in service) 1,080 students (Grades 5-8 and without Tilton Upper School in service)
Enrollment Specifics	Contingent upon the Board’s approval of the Preferred Schematic, the District will sign a Design Enrollment Certification for 1,080 students in grades 5-8.
Total Project Budget – Debt Exclusion Anticipated	No

<b>MSBA Board Votes</b>	
Invitation to Eligibility Period	December 12, 2018
Invitation to Feasibility Study	April 15, 2020
Preferred Schematic Authorization	On June 22, 2022 Board agenda
Project Scope & Budget Authorization	District is targeting Board authorization on October 26, 2022
Feasibility Study Reimbursement Rate (Incentive points are not applicable)	76.84%

<b>Consultants</b>	
Owner’s Project Manager (the “OPM”)	Colliers Project Leaders USA NE, LLC
Designer	Dore + Whittier Architects

## **Discussion**

The existing Consentino Middle School is a 114,000 square-foot facility that consists of primarily one-story educational, administrative, and large assembly/ public access spaces with a two-story classroom wing to the south, located on the northern half of a 29-acre site, that is shared with the Silver Hill Elementary School. The facility currently serves 730 students in grades 5-8.

The existing school building was constructed in 1969. The District has maintained the building over the years including the updating of lighting, as part of an energy savings project, and the replacement of boilers, hot water systems, windows and doors in 2013, as part of the MSBA’s Green Repair Program. The library was refinished to repair damage from a burst pipe in 2016.

The District’s Statement of Interest (“SOI”) identified numerous deficiencies in the existing facility associated with the following: the age of the building and its systems; educational/ spatial deficiencies; accessibility issues; inadequate site circulation patterns for bus, car, bicycle, and pedestrian traffic; antiquated HVAC, Electrical, Plumbing systems; interior spaces with no windows or daylighting; non-compliant building code conditions, such as stairway hand and guard rails; significant deterioration of building fixtures and casework; and existing spaces not conducive for delivering the District’s 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. In order to ensure that the feasibility study was sufficiently

broad in scope to address existing issues regarding overcrowding and outdated structures, the MSBA agreed to include three study enrollments. The following enrollment options were considered:

- Enrollment 1: 715 students in grades 5-8;
- Enrollment 2: 985 students in grades 5-8; and
- Enrollment 3: 1,080 students in grades 5-8.

Based on the findings of this effort, the District and its consultants initially studied (19) preliminary options that included: (1) code upgrade option, (9) addition/renovation options, and (9) new construction options, as presented below.

Option	Description of Preliminary Options
RO.715-A	Code Upgrade/Base Repair for grades 5-8 with an enrollment of 715 students at the existing Consentino Middle School; with an estimated project cost of \$66.2-70.3 million.
R.715-A	Renovation for grades 5-8 with an enrollment of 715 students at the existing Consentino Middle School to accommodate as much program as possible; with an estimated project cost of \$90.9-96.5 million.
AR.715-A	Addition/Renovation for grades 5-8 with an enrollment of 715 students at the existing Consentino Middle School to accommodate all the identified program, saving the entirety of the existing building; with an estimated project cost of \$120.5-127.9 million.
AR.715-C	Addition/Renovation for grades 5-8 with an enrollment of 715 students at the existing Consentino Middle School to accommodate all the identified program, saving the “public” portions of the existing building, four story; with an estimated project cost of \$125.8-133.6 million.
N.715-A	New Construction for grades 5-8 with an enrollment of 715 students at the Consentino Middle School site; with an estimated project cost of \$127.4-135.3 million.
N.715-B	New Construction for grades 5-8 with an enrollment of 715 students at the Consentino Middle School site with classroom wings oriented with North/South sun exposure; with an estimated project cost of \$130.2-138.2 million.
N.715-C	New Construction in L-shaped footprint for grades 5-8 with an enrollment of 715 students at the Consentino Middle School site; with an estimated project cost of \$131.5-139.6 million.
AR.985-A	Additions/Renovations to accommodate all the identified program, saving the entirety of the existing building, two-story variation for grades 5-8 with an enrollment of 985 students at the Consentino Middle School site; with an estimated project cost of \$161.0-170.9 million.

AR.985-B	Additions/Renovations to accommodate all the identified program, saving the entirety of the existing building, three-story variation for grades 5-8 with an enrollment of 985 students at the Consentino Middle School site; with an estimated project cost of \$159.5-169.3 million.
AR.985-C	Additions/Renovations to accommodate all the identified program, saving the “public” portions of the existing building, four-story variation for grades 5-8 with an enrollment of 985 students at the Consentino Middle School site; with an estimated project cost of \$165.1-175.3 million.
N.985-A	New Construction for grades 5-8 with an enrollment of 985 students at the Consentino Middle School site; with an estimated project cost of \$163.9-174 million.
N.985-B	New Construction w/ classroom wings oriented with North/South sun exposure for grades 5-8 with an enrollment of 985 students at the Consentino Middle School site; with an estimated project cost of \$168.6-179.1 million.
N.985-C	New Construction in L-shaped footprint for grades 5-8 with an enrollment of 985 students at the Consentino Middle School site; with an estimated project cost of \$166.9-177.3 million.
AR.1080-A	Additions/Renovations to accommodate all the identified program, saving the entirety of the existing building, two-story variation for grades 5-8 with an enrollment of 1,080 students at the Consentino Middle School site; with an estimated project cost of \$172.1-182.8 million.
AR.1080-B	Additions/Renovations to accommodate all the identified program, saving the entirety of the existing building, three-story variation for grades 5-8 with an enrollment of 1,080 students at the Consentino Middle School site; with an estimated project cost of \$169.4-179.9 million.
AR.1080-C	Additions/Renovations to accommodate all the identified program, saving the “public” portions of the existing building, four-story variation for grades 5-8 with an enrollment of 1,080 students at the Consentino Middle School site; with an estimated project cost of \$175.8-186.7 million.
N.1080-A	New Construction for grades 5-8 with an enrollment of 1,080 students at the Consentino Middle School site; with an estimated project cost of \$174.2-185 million.
N.1080-B	New Construction w/ classroom wings oriented with North/South sun exposure for grades 5-8 with an enrollment of 1,080 students at the Consentino Middle School site; with an estimated project cost of \$178.2-189.3 million.
N.1080-C	New Construction in L-shaped footprint for grades 5-8 with an enrollment of 1,080 students at the Consentino Middle School site; with an estimated project cost of \$177.5-188.5 million.

As a result of this analysis, the District determined that the following options would not be considered for further evaluation:

The District determined that “Option AR.715-A” and “Option AR.715-C” are not considered viable options because these options do not meet the needs of the District’s educational program

and do not address the District's overcrowding issue. Additionally, both options would result in significant disruption to ongoing education during construction.

The District determined that "Option N.715-B" would not be considered for further evaluation because the proposed building concept was found to be less desirable when compared to other options. In addition, the solar orientation of this alternative will likely provide lower quality daylight which would prove challenging for building efficiency.

Similar to "Option N.715-B", "Option N.715-C" would not be considered for further evaluation because this option does not address the District's overcrowding issue and the building concept was found to be less desirable when compared to other options.

The District has determined that "Option AR.985-A" would not be considered for further evaluation because this option does not fully address the District's overcrowding issue when compared to upper enrollment alternatives and does not meet the needs of the District's educational program. Additionally, this option would result in significant disruption to ongoing education during construction.

The District determined that "Option N.985-B" would not be considered for further evaluation because each wing contains two grade-level teams. Moreover, this alternative provides limited daylight and views in the office and adult spaces when compared to some of the other alternatives. Additionally, the length of the wings in this alternative will likely impact the hill which is located to the east of the existing fields and it may be necessary to construct lengthy retaining walls.

The District has determined that "Option N.985-C" would not be considered for further evaluation because the solar orientation of this alternative in some classrooms will likely provide lower quality daylight which would prove challenging for building efficiency. Additionally, this alternative provides limited daylight and views in the office and adult spaces when compared to some of the other alternatives.

The District has determined that "Option AR.1080-A" and "Option AR.1080-B" would not be considered for further evaluation because these options do not fully meet the needs of the District's educational program. Moreover, both options isolate grade-level teams from other grade-level teams in a specific grade. Additionally, both options require complex phasing which would likely result in significant disruption to ongoing education during construction.

The District has determined that "Option N.1080-B" would not be considered for further evaluation since each wing contains two grade-level teams. Moreover, this option provides limited daylight and views in the office and adult spaces when compared to some of the other alternatives. Additionally, the length of the wings in this alternative will likely impact the hill which is located to the east of the existing fields and it may be necessary to construct lengthy retaining walls.

The District has determined that "Option N.1080-C" would not be considered for further evaluation because the solar orientation of this alternative in some classrooms will likely provide lower quality daylight which, would prove challenging for building efficiency. Additionally, this alternative provides limited daylight and views in the office and adult spaces when compared to some of the other alternatives.

It should be noted that subsequent to the evaluation of preliminary options, the District revised the program for all options in the PSR phase. As a result, “Option N.715-A” was further developed and a new variation alternative was created as “Option N.715-A.1” that improved daylight and resolved structural complications.

“Option AR.985-C” and “Option AR.1080-C” were replaced by “Option AR.985-C.1” and “Option AR.1080-C.1” respectively as improved variation alternatives that reflect the programmatic changes and modified geometries.

Similarly, “Option N.985-A” and “Option N.1080-A” were replaced by three new improved variation alternatives; “Option N.985-A.1”, “Option N.985-A.2”, and “Option N.985-A.3”, and “Option N.1080-A.1”, “Option N.1080-A.2” and “Option N.1080-A.3” respectively as improved variation alternatives that resolve structural complications and daylighting issues.

MSBA staff and the District agreed to explore the following (11) 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) renovation only option, (2) addition/renovation options, and (7) new construction options.

**Summary of Preliminary Design Pricing for Final Evaluation of Options**

<b>Option (Description)</b>	<b>Total Gross Square Feet</b>	<b>Square Feet of Renovated Space (cost*/sq. ft.)</b>	<b>Square Feet of New Construction (cost*/sq. ft.)</b>	<b>Site, Building Takedown, Haz Mat. Cost*</b>	<b>Estimated Total Construction ** (cost*/sq. ft.)</b>	<b>Estimated Total Project Costs</b>
Option RO.715A Base Repair (715 students)	114,000	114,000 \$399/sq. ft.	N/A	\$4,683,000	\$50,177,432 \$440/sq. ft.	\$65,356,105
Option R.715.A Renovation Only (715 students)	114,000	114,000 \$523/sq. ft.	N/A	\$10,384,760	\$70,012,300 \$614/sq. ft.	\$90,989,378
Option N.715-A.1 New Construction (715 students)	139,599	N/A	139,599 \$633/sq.ft.	\$12,573,319	\$100,981,085 \$723/sq. ft.	\$127,488,620
Option AR.985-C1 Addition/Renovation (985 students)	186,848	45,000 \$580/sq. ft.	141,848 \$700/sq. ft.	\$10,545,101	\$135,937,750 \$727/sq. ft.	\$177,058,919
Option N.985-A1 New Construction (985 students)	186,848	N/A	186,848 \$585/ sq. ft.	\$11,985,111	\$121,272,506 \$649/sq. ft.	\$153,107,154
Option N.985-A2 New Construction (985 students)	186,848	N/A	186,848 \$594/ sq. ft.	\$12,573,319	\$123,549,912 \$661/sq. ft.	\$155,981,764
Option N.985-A3 New Construction (985 students)	186,848	N/A	186,848 \$598/ sq. ft.	\$12,573,319	\$124,283,133 \$665/sq. ft.	\$156,907,574

Option AR.1080-C.1 Addition/Renovation (1,080 students)	188,903	45,000 \$580/sq. ft.	143,903 \$699/sq. ft.	\$10,545,101	\$137,271,266 \$727/sq. ft.	\$178,796,370
Option N.1080-A1 New Construction (1,080 students)	188,903	N/A	\$188,903 \$584/sq. ft.	\$11,985,111	\$122,384,807 \$648/sq. ft.	\$154,510,819
<b>*** Option N.1080-A2 New Construction (1,080 students)</b>	<b>188,903</b>	<b>N/A</b>	<b>\$188,903 \$593/sq. ft.</b>	<b>\$12,573,319</b>	<b>\$124,677,689 \$660/sq. ft.</b>	<b>\$157,405,582</b>
Option N.1080-A3 New Construction (1,080 students)	188,903	N/A	\$188,903 \$597/sq. ft.	\$12,573,319	\$125,419,566 \$664/sq. ft.	\$158,342,202

\* *Marked up construction costs*

\*\* *Does not include construction contingency*

\*\*\* ***District's Preferred Schematic***

The District has selected “Option N.1080-A2”, as the Preferred Schematic to proceed into Schematic Design as its preferred option because this option best meets the needs of the District’s educational program, serves the greatest number of students, provides site amenities such as expanded parking and playfields, and limits the disruption to ongoing education during construction.

“Option RO.715-A” and “Option R.715-A” were not selected by the District because the District determined that these options would not improve the spatial conditions for the programs and services needed. Additionally, both options would require the District to relocate students to other facilities and would not allow the District to vacate a rented facility currently housing Tilton Upper students. Furthermore, both options would cause significant disruption to educational activities during construction.

“Option N.715-A.1” was not selected by the District because the enrollment in this option is lower than the current enrollment. Additionally, this option would require the District to relocate students to other facilities and would not allow the District to vacate a rented facility currently housing Tilton Upper students.

“Option AR.985-C.1” and “Option AR.1080-C.1” were not selected by the District because the District determined these options are not cost-effective. Additionally, the District determined that these alternatives are the most disruptive to educational activities during construction since students must continue to occupy the building during construction and would require the District to continue using a rented facility for Tilton Upper students. Furthermore, while this alternative explored a creative relationship with the existing hill to the east and would likely result in improved solar orientation for classrooms, the potential negative impacts to abutters made this option undesirable.

“Option N.985-A.1” and “Option N.1080-A.1” were not selected by the District because the compactness of these alternatives resulted in several instructional spaces being completely interior to the project with limited or no opportunities to access natural daylight, outdoor air, or views to

the exterior. Cost differences between these alternatives and other alternatives with improved access to daylight were determined to be insufficient to justify having spaces without daylighting. Access to outdoor areas for dining and outdoor learning would be more exposed and limited to the south end of the proposed building.

“Option N.985-A.2” was not selected by the District because another option positively impacted more students across the district than this alternative. Additionally, this alternative would require the district to continue using a rented facility for Tilton Upper students and would continue a lack of parity for fifth-grade students in this part of the District.

“Option N.985-A.3” was not selected by the District because another option positively impacted more students across the district than this alternative. Additionally, this alternative would require the district to continue using a rented facility for Tilton Upper students and would continue a lack of parity for fifth-grade students in this part of the District. Furthermore, this alternative, while only three stories, was not selected because it positions the full three stories of the project on the main elevation facing west, had a less desirable overall experience when compared to other alternatives, and the public portion of this project is at the southern end of the concept. Also, its relationship to Silver Hill results in less outdoor recess area for Consentino students.

“Option N.1080-A.3” was not selected by the District because the public portion of this project is at the southern end of the site and its relationship to Silver Hill results in less outdoor recess area for Consentino students. Additionally, this alternative, while only three stories, was not selected because it positions the full three stories of the project on the main elevation facing west, had a less desirable overall experience when compared to other alternatives, and was estimated to be slightly more expensive than the preferred option.

The District presented its proposed Preferred Schematic to the MSBA Facilities Assessment Subcommittee (“FAS”) on May 18, 2022. At that meeting, members of the FAS discussed the following items: the importance of District involvement in the visioning and development of the educational program; equity of resources and school building facilities across the District; current and planned professional development opportunities for staff; variations from MSBA space guidelines as it relates to the proposed science labs and classroom spaces; staffing related to the science labs and media center; proposed square footage of classrooms and anticipated class sizes; discussion of fifth and sixth grade in a middle school model as it relates to science curriculum and staff certifications; anticipated plans for middle school world language program; appreciation for the distribution for Special Education program spaces; separation of public spaces from the academic wings; proposed utilization, size, and number of extended learning spaces; presentation of extended learning spaces within the floor plans, appreciation of the layout of open spaces, and potential for increased efficiency as the design develops; flexibility of the cafetorium, multipurpose room and gymnasium; site circulation; and appreciation of the consistent floor plans across all four levels.

Additionally, the MSBA requested from the District and the Design Team to provide the following:

1. Floor Plans
  - a. The District provided updated floor plans with sizing adjustments to academic spaces for science and general classrooms on June 1, 2022.



These plans are still in development and may still need to be adjusted to address some of the conversations noted above.

2. Educational Program

- a. The District has been requested to provide an updated Educational Program that provides clarity on the City's redistricting efforts, ongoing professional development, opportunities to train staff in the new facility, and expands on the world language program no later than Wednesday, June 22, 2022.

3. Summary of Redistricting

- a. The District has been requested to provide a narrative of recent redistricting as described at the FAS meeting, along with an updated geographical map of school facilities and boundaries before and after redistricting efforts no later than June 22, 2022.

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. However, the MSBA has requested that the District provide additional information, as described above, to further understand certain components of the District's Preferred Schematic.
- 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 Haverhill be approved to proceed into Schematic Design to replace the existing Dr. Albert B. Consentino Middle School with a new facility serving grades 5-8 on the existing school site.