

District: Town of Plymouth  
 School Name: Plymouth South High School  
 Recommended Category: Preferred Schematic  
 Date: March 19, 2014

**Recommendation**

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

<b>District Information</b>	
District Name	Town of Plymouth
Elementary School(s)	Mount Pleasant School (PK) South Elementary School (PK-4) 7 (K-5)
Middle School(s)	Plymouth Community Intermediate School (6-8) Plymouth South Middle School (5-8)
High School(s)	Plymouth North High School (9-12) Plymouth South High School (9-12)
Priority School Name	Plymouth South High School
Type of School	High School
Grades Served	9-12
Year Opened	1985
Existing Square Footage	221,026
Additions	N/A
Acreage of Site	122 acres
Building Issues	The District identified deficiencies in the following areas: <ul style="list-style-type: none"> <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
2012-2013 Enrollment	1,280
Agreed Upon Enrollment	1,005
Enrollment Specifics	The District and MSBA have mutually agreed upon a design enrollment of 1,005 students serving grades 9-12.

<b>MSBA Board Votes</b>	
Invitation to Eligibility Period	July 25, 2012
Invitation to Feasibility Study	November 14, 2012
Preferred Schematic Authorization	On March 26, 2014 Board agenda
Project Scope & Budget Authorization	District is targeting Board authorization on September 24, 2014
Feasibility Study Reimbursement Rate (Incentive points are not applicable)	49.74%

<b>Consultants</b>	
Owner's Project Manager	Ted Gentry Associates, Inc.
Designer	Ai3 Architects LLC.

## Discussion

The existing Plymouth South High School is a 221,026 square foot two-story facility located on a 122 acre site in the geographic center of Plymouth and adjacent to the South Middle School. The existing facility currently serves students in grades 9-12.

The original school building was constructed in 1985. The existing layout and current systems have virtually remained unchanged since initial building occupation. The District identified numerous deficiencies in the Statement of Interest including roof deterioration and extensive leaking, a geothermal-based mechanical system plagued with problems beginning soon after initial building occupancy, antiquated electrical and plumbing systems, non-compliant accessibility, and interior spaces insufficiently sized to accommodate the delivery of 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. Based on the findings of this effort, the District and its consultants initially studied four preliminary options that included one base repair option, two addition/renovation options and one new construction option. The following is a detailed list of the preliminary alternatives considered.

<b>Option</b>	<b>Description of Preliminary Options</b>
1	New construction (replaces existing facility on existing site)
2	Addition/ comprehensive renovation of existing facility
3	Addition/ moderate renovation of existing facility
4	Base repair 'No-build'

The ‘No-build’ base repair option was not considered a viable option as it does not address issues associated with the existing building and educational program. Therefore, this was not evaluated for further consideration.

Upon further review, MSBA staff and the District agreed to consider three options for further development in the final evaluation of alternatives. A summary of preliminary design pricing of these alternatives is presented below.

**Table 1- Summary of Preliminary Design Pricing**

Option (Description)	Total Gross Square Feet	Square Feet of Renovated Space (cost*/sf)	Square Feet of New Construction (cost*/sf)	Site, Building Takedown, HAZ Mat. Cost*	Estimated Total Construction** (cost*/sf)	Estimated Total Project Costs
<b><i>Option 1-New Construction***</i></b>	<b><i>247,631sf</i></b>	<b><i>NA</i></b>	<b><i>247,631sf \$354/sf</i></b>	<b><i>\$1,182,755</i></b>	<b><i>\$88,844,129 \$359/sf</i></b>	<b><i>\$107,499,000</i></b>
Option 2a-Major Renovation/Addition	270,470sf	122,290sf \$351/sf	148,180sf \$366/sf	\$1,467,064	\$98,624,734 \$365/sf	\$121,189,148
Option 2b-Moderate Renovation/Addition	255,021sf	216,341sf \$352/sf	38,680sf \$353/sf	\$575,000 (Haz Mat)	\$90,381,072 \$354/sf	\$114,006,763

\* *Marked up construction costs*

\*\* *Does not include construction contingency*

\*\*\****District’s preferred option***

The District has selected ‘Option 1- New Construction’ as the preferred solution to proceed into schematic design. The District selected ‘Option 1’ as its preferred alternative because upon evaluation of renovation/addition of the existing facility ‘Option 1’ offers a multitude of advantages over ‘Options 2a and 2b’. ‘Option 1 – New Construction’ has the lowest preliminary cost and minimal disruption to students and existing programs during construction. The renovation/addition options, ‘Options 2a and 2b’, have construction durations of 36 to 40 months while ‘Option 1 – New Construction’ has a shorter construction duration of 22 months. In ‘Option 1’, the existing facility will remain online until construction of the new facility is complete.

‘Option 1 – New Construction’ provides the District with its desired configuration aimed at delivering a comprehensive educational program in conjunction with providing an efficient building footprint and envelope. New construction would also avoid the inherent problems associated with the original building design including costly replacement of the entire existing roof and roof decking system. In addition, and based on evaluation of the existing conditions, renovation of the existing building will require full compliance with the building code for new construction. Furthermore, in addition to cost associated with complete removal and replacement of mechanical systems, preliminary estimates indicate significant cost difference for hazardous material abatement and amounts included for construction contingency to cover the unanticipated issues that arise during a renovation project.

The District presented its proposed project to the MSBA Facilities Assessment Subcommittee (“FAS”) on March 12, 2014. At that meeting, members of the FAS raised a number of concerns regarding the District’s proposed educational plan, the guiding philosophy and how this informs the proposed conceptual layout. Based on these concerns, the MSBA has requested a revised educational plan that clearly demonstrates the District’s goals associated with delivering their proposed comprehensive program. The revised educational program should emphasize clarification to the delivery of the Freshman Academy, utilization of teacher collaboration spaces, utilization of the Media Center, opportunities for vocational and academic collaboration, definition of vocational clusters, description of interdisciplinary opportunities, and opportunities for community use of occupational program resources.

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

- 1) 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.
- 2) MSBA approval of the District’s preferred solution is contingent upon the receipt and acceptance of a revised educational plan and any associated conceptual layout revisions that addresses the concerns raised by the Facilities Assessment Subcommittee including any DESE approvals related to the District’s proposed Chapter 74 program revisions.
- 3) The District has submitted an operational budget for educational objectives and a capital budget for MSBA review.
- 4) 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.
- 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.

Based on the review outlined above, staff recommends that the Town of Plymouth be approved to proceed into schematic design to replace the existing Plymouth South High School on the existing site.