

District: Grafton
School Name: Grafton Memorial Senior High School
Recommended Category: Preferred Schematic
Date: September 30, 2009

Recommendation:

That the Executive Director is authorized to approve the Town of Grafton, as part of its Invitation for Feasibility Study, to proceed into schematic design for the replacement of the existing Grafton Memorial Senior High School. MSBA staff has reviewed the designer's options for the Grafton Memorial Senior High School and accepts the District's preferred solution to replace the existing building with a new facility on the existing high school site as the most cost-effective and educationally sound option.

Background:

Grafton Public Schools had a total 2008-2009 population of 2,880 students. The District has three elementary schools (PK-2, K-2 and 3-5), one middle school (6-8) and one high school (9-12). In 2008, Grafton submitted a Statement of Interest ("SOI") for the Grafton Senior High School and the Grafton Middle School. The District prioritized the SOI for the Senior High School.

The existing Grafton Memorial Senior High School is a 102,924 square foot facility that was constructed in 1962 following a California "Pavilion" style, with three separate buildings connected by an exterior covered walkway. The School was renovated in 1995. The buildings are in good condition with the District citing size as its primary concern, although some systems may require updating.

According to the District's SOI, the High School's capacity is 568 students. In 2008-2009, Grafton Memorial Senior High School had a total enrollment of 681 students, 20% over its stated design capacity. Overcrowding has impacted all curriculum areas, and has begun to limit specialized program offerings. Science laboratories are undersized, and two to three students are often assigned to a station designed for one. Vocational and life skills programs are difficult to provide as part of the SPED program. Guidance offices are small and lack conference space, making confidentiality an issue. Core spaces are also lacking with limited library and computer space, and gym classes are conducted in hallways due to overflow. Throughout the building, hallways and stairwells are not wide enough to accommodate the volume of students during class transitions, making for unsafe and inefficient student passing.

On November 28, 2007, the MSBA Board of Directors voted to invite the Owner to conduct a feasibility study for the Grafton Memorial Senior High School to identify and study possible solutions and, through a collaborative process with the MSBA, reach a mutually-agreed upon solution.

Discussion

MSBA staff has received and reviewed the designer's feasibility study and the options for addressing the problems at Grafton Memorial Senior High School. MSBA staff and the District have discussed and reviewed the educational program, the existing site and building conditions as well as the enrollment growth and capacity issues district-wide to understand the best solution to deliver the District's educational program. Based upon a review of the feasibility study, the District and its Designer have noted that an addition/renovation option to the existing high school building presents the following challenges:

- Given the design capacity of 568 for the existing high school and the enrollment projection of 900, a significant addition to the existing building is warranted;
- The existing building is positioned in the northeast corner of the site along Lake Ripple surrounded on two sides by water and limiting the possible options for building additions (only options are to the west and south);
- The core academic spaces are in the far northeast corner of the site at a lower level than the rest of the building and surrounded by the auditorium and the gymnasium. Additions to the west and south would create a split academic wing with the core areas in the center and create a significant drawback to the delivery of the educational program;
- An addition to the existing building would not resolve the problems created by the narrowness of the corridors and stairwells in the existing academic wing (further exacerbated by the increased student population), a non-accessible existing auditorium and the undersized gymnasium; and
- An addition/renovation to the existing high school would not allow for reuse of the existing high school as an upper middle school, thereby helping to resolve the overcrowding at the District's middle and elementary schools.

The District and its consultant team reviewed multiple options, including two addition/renovation options, three new construction options on the existing site and two new construction options at a different location. As illustrated in the table below, construction of a new facility is comparable to the cost of an addition/renovation option of similar square footage but is better suited to meet the educational program. Although studied in Option 3, due to development costs associated with the new site, construction of a facility at the existing high school site is more cost-effective.

Summary of Preliminary Design Pricing

| | Option | Enrollment (Grade Structure) | Gross SF | Estimated Construction Cost |
|----|---|---|-----------------|--|
| 1A | - Addition/Renovation: Retains the entire existing building with additional classroom wing constructed on the opposite side of the gymnasium and auditorium. | 900 (9-12) | ~185,000 | 60,500,000 |
| 1B | Addition/Renovation: Demolition and replacement of the gymnasium, auditorium, cafeteria, library, boiler plant, academic and support spaces while two story academic building remains. | 900 (9-12) 1,100 (core) | 193,243 | 62,078,937 |
| 2 | New Construction: A. New HS located at the northwest corner of the existing site; B. New HS on the existing site nearest Providence Road C. New HS at the center of the existing site – adaptation of Hudson High School | 900 (9-12) 1,100 (core) | 194,239 | 63,470,718 |
| 3A | New Construction: New HS at northeast corner of Old Westboro road site, with a wetlands crossing on the east side of the site; site development of most of the site while preserving farm field in the southeast portion of the site. | 900 (9-12) 1,100 (core) | 194,239 | 75,000,000 |
| 3B | New Construction: New HS at southwest corner the Old Westboro Road site; site development of most of the site while preserving farm field in the southeast portion of the site. | 900 (9-12) 1,100 (core) | 194,239 | 75,000,000 |

The District's preferred solution is to construct a new high school on the existing site for grades 9-12. By building a new high school, the District would meet its long-term goals to eliminate district-wide overcrowding.

- The existing high school which is in good condition and does not require significant upgrades to mechanical and electrical systems can become an upper middle school for Grades 7 and 8.
- The former middle school can become a lower middle school for Grades 5 and 6. This would eliminate the need for a major project at the middle school which is significantly overcrowded on a site that has limited capacity for an addition/renovation or new construction.

- The fifth grade can be relocated to the lower middle school allowing the District to restructure their elementary program amongst the three elementary schools.
- The District has stated that this restructuring would be at no additional cost to the MSBA.

MSBA has reviewed the conclusions of the Feasibility Study and the enrollment data with the District and found:

- 1) All initial paperwork required has been processed including an executed Initial Certificate of Compliance, the composition of the School Building Committee and the enrollment questionnaire.
- 2) MSBA has completed an enrollment projection utilizing the enrollment questionnaire completed by Grafton. The MSBA and the District have agreed to a design enrollment of 900 students for a replacement of the Grafton Memorial High School. The District has proposed that the new building include core spaces built to accommodate 1,100 students. The MSBA agrees to further discuss this issue with the District as the basis of commencing with the schematic design. An analysis conducted on the District's high school enrollment indicated that the total enrollment in grades 9-12 has increased by 34% during the most recent ten year period. The projected enrollment for grades 9-12 indicates continued growth as a result of identified development, as well from larger class sizes presently in the lower grades that will progress through the system. A design enrollment of 900 students for this facility will accommodate both the recent and anticipated new growth from identified development.
- 3) MSBA reviewed the feasibility study and finds that the alternatives investigated were sufficiently comprehensive in their scope and that the District's preferred option is reasonable
- 4) The construction of a new Senior High School facility is as an opportunity to relieve district-wide overcrowding. By utilizing the existing high school building, the District hopes to implement a grade restructuring plan which will more appropriately match existing facilities and the student populations housed in them.

Based on the review outlined above, staff recommends that Town of Grafton be approved to proceed into schematic design to replace the Grafton Memorial High School with a new facility as the most cost-effective and educationally sound option.