SECTION ONE EXECUTIVE SUMMARY

In 2009, the Town of Grafton engaged *Symmes, Maini & McKee Associates, Inc.* (SMMA) as Architect and Engineer, and *Joslin Lesser and Associates, Inc. (JLA)* as the Owner's Project Manager, to undertake a Feasibility Study and Schematic Design for Grafton Memorial High School.

At the September 30, 2009 MSBA Board meeting, the Board approved the Recommendation for a "Preferred Schematic Design" for Grafton Memorial High School. The preferred schematic is for a new high school building to be located on the Providence Road site. The existing high school on the same site will remain and be repurposed to serve as an upper middle school, grades 7 – 8.

In follow up meetings with the MSBA, it was agreed that if the project could be advance quickly with an improved "time to market", the school will be allowed to be approximately 186,000 gross square feet. It was also agreed that this project will not be invited into the MSBA's Model School Program.

The following report summarizes the Schematic Design phase for the project. This Schematic Design report includes a summary of the existing conditions and educational specifications, a listing of the sustainable design elements included in the project, as well as the project schedule, budget and design. The Schematic Design work has been implemented under the direction and oversight of the Secondary School Building Committee (SSBC)

PROJECT BACKGROUND

CHARGE & GOALS OF THE GRAFTON SECONDARY SCHOOL BUILDING COMMITTEE

COMMITTEE

Develop a high school design to address the long term needs of the schools' curriculum and growing enrollment. Report to the Selectmen and School Committee with recommendations on facility design, and upon these Boards' approval. Present to the Town Meeting for funding.

PROCESS

- Follow a well organized, comprehensive, and iterative process
- Clearly communicate the process, findings, and recommendations
- Engage key stakeholders
- Develop a design solution capable of obtaining the support of the community and the MSBA

EDUCATIONAL

- Propose a high school design which:
  - promotes and enhances educational excellence
  - fosters a positive learning environment
  - accommodates projected student enrollment and educational needs
  - recognizes possible future expansion needs
  - provides flexibility to accommodate future educational requirements
  - accommodates the athletic program needs of the school

BUILDINGS

- Propose a high school in which the building:
  - maximizes community use potential
  - reflects the character of the community
  - minimizes adverse effects on abutters
  - is easy and cost effective to maintain
  - is cost effective design
  - is cost effective to construct
  - addresses long term health, safety and security needs
  - provide a technological infrastructure to accommodate future enhancements
  - creates a sense of community within the facility
  - creates clear and logical building circulation for vehicles and pedestrians
  - use green technology

SITE

- Select a site that:
  - emphasizes efficiency of land use to meet the Town's needs
  - allows for future expansion potential (vertical and or horizontal)
  - creates clear and logical site circulation
  - provides operational efficiency
  - encourages teachers and students to walk or bike to school

CONSTRUCTION

- Develop a high school design that:
  - minimizes disruption to teaching and learning
  - recognizes and address neighborhood disruption

REPORT FORMAT

It is the intent of this Report to document Schematic Design as well as include certain documentation from the Feasibility Study that, to date, has not been formally submitted. This Report will provide the Massachusetts School Building Authority (MSBA) and the Grafton School Building Committee with a complete catalogue and reference of all analyses, investigations, alternatives development and community participation. Further, it will outline the processes, priorities and rationale for decisions made to reach the preferred alternative.

This Executive Summary provides an overview of the information contained in detail in the following sections.

EDUCATIONAL SPECIFICATION

The educational vision was developed through extensive interviews with the Grafton Memorial High School administration, teachers, and staff. The vision was translated into the Final Design Program. The building size will be 186,351 square feet. The listing of program spaces is included in Section Two in the Proposed Space Summary.

EXISTING SITE CONDITIONS

The 46-acre High School site is primarily occupied by the existing school and the accompanying ball fields and parking. The southeast corner of the site is occupied by the new Grafton Police Department, the Municipal Building, the former police department building (currently leased), and the School Administration Building. The site is predominately flat, with steep slopes down to Lake Ripple along the north and west sides of the site. The Municipal and School Department buildings are on a fourteen-foot rise. The east and south sides of the site are bounded by Providence Road and Brigham Hill Road, respectively.

The existing vehicular and pedestrian circulation areas are inadequate for a school of the current and projected populations. The bus and parent pick-up/drop-off locations are small, without sidewalks, and are not formalized,

which causes conflicts between buses, automobiles, and pedestrians. Handicap access at the main entrance is sufficient, but there is no accessible route to either Providence Road or the nearby Municipal complex. In addition, many secondary entrances are not accessible.

Figure 1A: Existing High School Site

SUSTAINABLE DESIGN

The project will strive to meet the threshold 34 points defined by the Massachusetts Collaborative for High Performance Schools (MA-CHPS) and maximize the Energy Efficiency incentive points established by the MSBA.

A "green charrette," open public forum with consensus-based discussion, was held on November 18, 2009 in Grafton. The purpose of the charrette was to: 1) familiarize and educate the Town's constituencies on sustainable design and MA-CHPS; 2) identify sustainable design opportunities; and, 3) develop sustainable design goals.

The project team embraced an integrative design approach with the participation of the facility staff, teachers and students early in the schematic design phase. The design process addressed sustainable design criteria opportunities using the building as a 21st century teaching tool. The project

team will support the Town in obtaining grants from the MRET (formerly known as MTC) as applicable, and energy efficiency incentives from the major utilities.

SCHEMATIC DESIGN

DESCRIPTION

The Secondary School Building Committee's (SSBC) preferred option, is for the construction of a new High School building on the current school site, located at 24 Providence Road. This Option calls for a population for 900 students with core space for 1,100 students.

The design has a similar parti to the Hudson High School but beyond that differs in types and sizes of teaching spaces; specialty classrooms and public spaces.

The design provides flexibility for a larger future population by expanding Pod 2 from a two story building to a three story building. This would allow for a "roof top "addition of approximately 12 classrooms and associated support spaces.

Schematic Design places a new building in the middle of the Providence Road site. This specific high school building design meets the educational program needs and maximizes the use of the site for athletic fields, parking, and vehicular circulation. This option puts the majority of the parking in front of the school with the ball fields behind the school.

Site reconstruction includes a parking lot for approximately 400 parking spaces, and bus and parent drop-off/pick-up areas to accommodate both the new High School and the Upper Middle School. The parking would be located in front of both schools in one large area. A parking lot serving the Middle School staff will be reconfigured behind the Middle School. Ball fields would be reconstructed behind the two schools to include two soccer/lacrosse fields, softball and baseball fields, six tennis courts, and a basketball court. The existing track & field would be reconstructed with a new multipurpose football field; the recently installed field lighting would be relocated and reinstalled.

Figure 1B: Proposed Site Plan

BUILDING DESCRIPTION

The building plan provides for a controlled entry that opens into the Dining Commons with administration to the immediate right. Administration, health services and guidance are grouped together along the front of the building. The gymnasium and related areas are located to the left of the dining commons; the

auditorium to the right and the Library Media Center overlooking the commons.

The majority of the academic spaces are located in (one) three story and (one) two story "pod". These pods include classrooms ringing central areas that serve a variety of teaching activities and disciplines including Large Group Instruction; computer labs, media lab and other spaces.

Special education spaces are integrated across both academic pods taking into account proximity to general classrooms and the unique needs of the programs within the school.

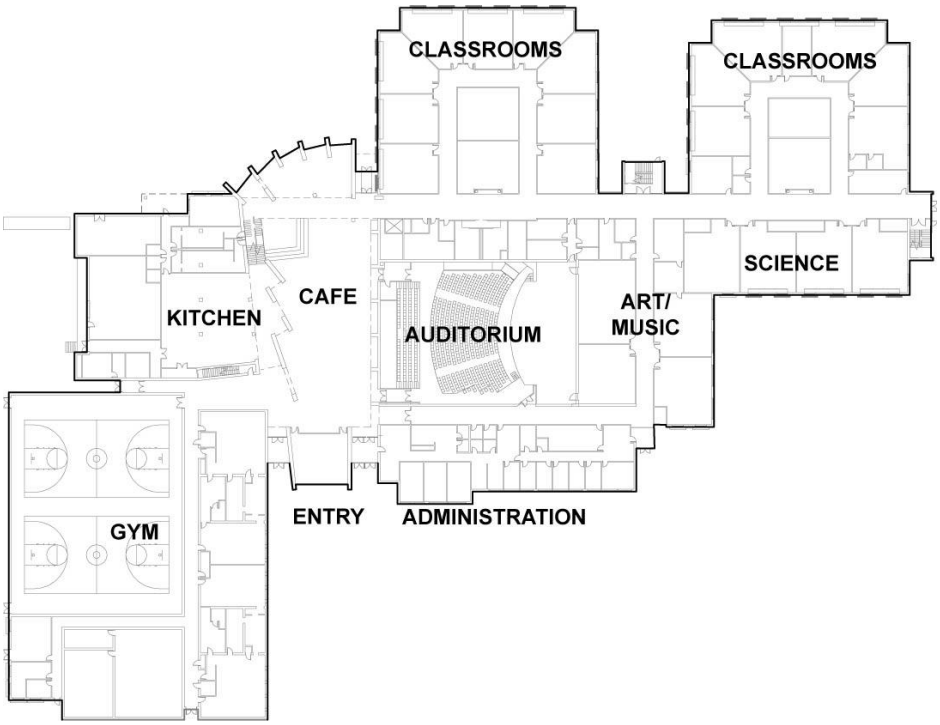

Figure 1C: First Floor Plan

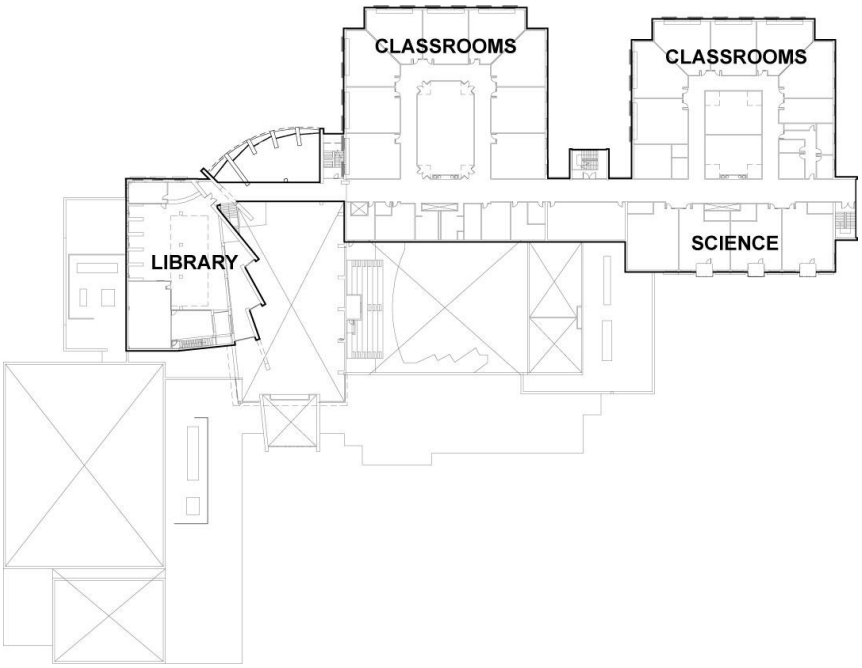

Figure 1D: Second Floor Plan

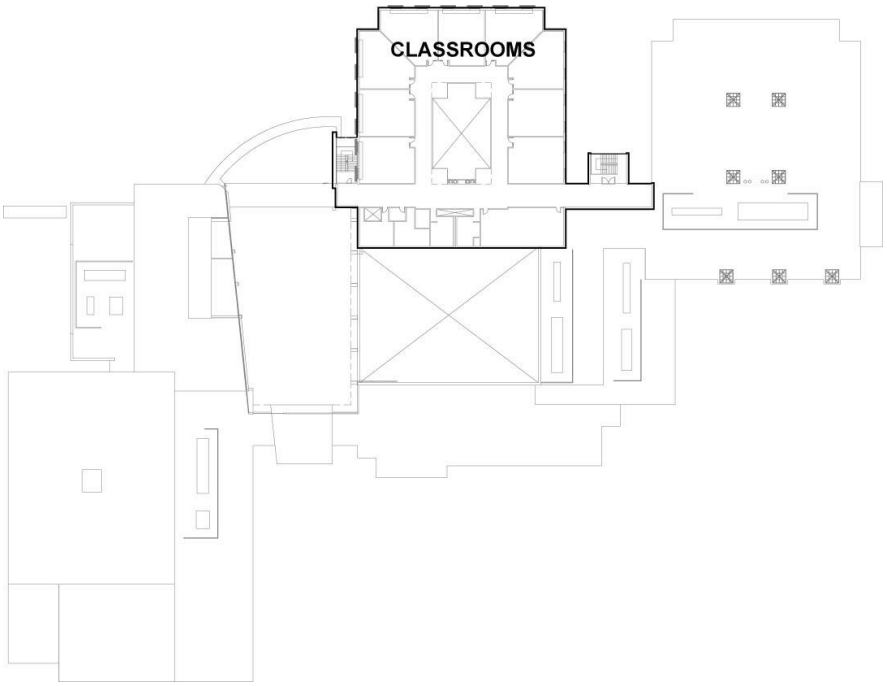

Figure 1E: Third Floor Plan

Figure 1F: Interior Perspective of the Dinning Commons

The exterior design utilizes a composition of brick, metal paneling, and glass, to visibly express the school's civic role in the larger community, while respecting the local neighborhood scale and context. All materials are low maintenance, high durability, and long lived. The classroom wing is oriented to maximize daylighting and minimize solar heat gain. Classroom windows provide views to Lake Ripple and the sports fields.

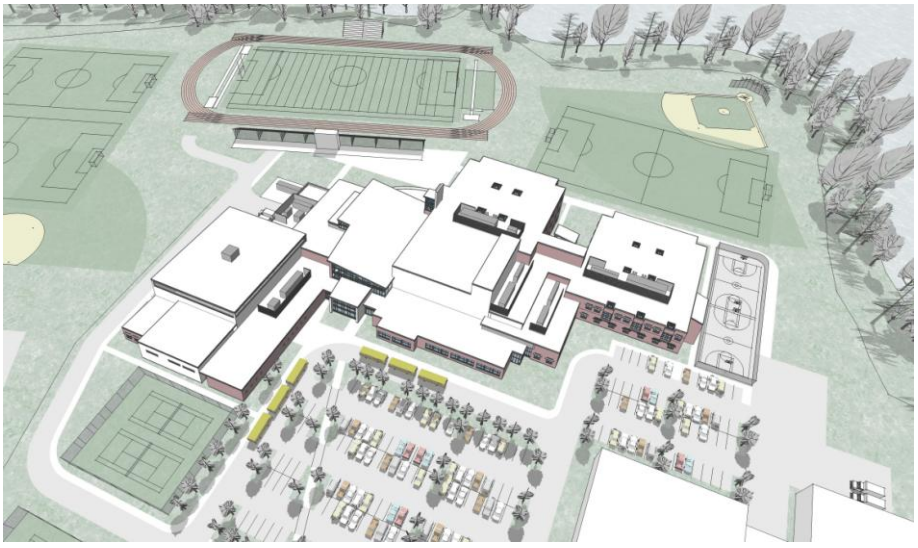

Figure 1G: Exterior Perspective

SCHEDULE OVERVIEW

The proposed timeline identifies construction commencing in the August – September timeframe of 2010. The decision for selecting the project procurement method (Design / Bid / Build or CM at Risk) has not yet been made by the committee. This decision will influence the construction start date. However, the Town of Grafton School Building Committee has voted to begin the application process with the attorney general's office to pursue a Construction Manager at Risk option

This proposed schedule will allow for the completion of permitting; Design Development and Contract Documents following the Town approvals in the winter of 2010. This aggressive schedule is important to the *time to market* strategy.

The schedule anticipates the following major milestones:

- MSBA Board approval to move to Schematic Design — Sept. 30, 2009
- MSBA Board approval of final scope and budget — January 27, 2010
- Town Meeting appropriating total project funding — February 6, 2010
- Construction commencement — August - September, 2010
- School Opening — August 15, 2012

TOTAL PROPOSED PROJECT BUDGET

Two independent Schematic Design Construction Cost estimates were developed by SMMA and JLA. These separate estimates have been reconciled as represented by the budget contained herein. These estimates are based on the systems' description, drawings, and schedule, and have been extrapolated from current and projected construction costs, knowledge of the site conditions, and an understanding of phasing and project management.

The estimated total project budget is $73,097,400 and includes detailed costs for administration, design, construction, technology, furnishings, and contingencies, as detailed in Section 6.1.

The estimated construction cost is $57,445,000. This is based on the A.M. Fogarty and Associates cost estimate, dated December 15, 2009, included in Section 6.2.