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## Executive Summary

### Overview of Building and Site

New Fairfield High School is a four-year comprehensive high school that was built in 1972 on a 145.5 acre site off Gillotti Road in New Fairfield, Connecticut. The building sits on a sloping site and has been designed with three levels of educational program space nestled into the slope. Additionally, there are basement areas that primarily house the building's mechanical, electrical, plumbing and fire protection systems. There have been several additions and renovation projects at the school in the 1993 and 2010's, and the total gross building area of the facility now stands at approximately 165,000 square feet given some shared space with New Fairfield Middle School. The 1993 addition at the high school site was part of a new middle school addition. The past building projects have mainly focused on aesthetic and program related improvements and have not addressed infrastructure needs that are now resulting in building system failures at the physical plant.

New Fairfield High School building includes general classrooms, technology education laboratories, science classroom/laboratories, a media center, an auditorium and an extensive physical education/interscholastic area complete with an indoor swimming/diving facility and a multi-use "field-turf" playing surface at football field. Lights have been installed at this complex for evening events. New Fairfield High School is fully accredited by the Commission on Public Secondary Schools (CPSS) for the New England Association of Schools and Colleges (NEASC). However, its accreditation status is currently under review. The accrediting agency recently sent a visiting team to New Fairfield High School. In preparation for the visiting committee, the staff at New Fairfield High School prepared a self-study document examining the level of adherence to the Standards for Accreditation. Through the self-study process, it has become evident that facilities at New Fairfield High School do not, in all instances, support the curriculum for implementation as it was originally designed. Although the building has been well maintained in its 47 year existence, several components of the buildings infrastructure have begun to fail and/or are at the end of their projected useful life. In the past several years, several infrastructure elements at New Fairfield High School have failed. There have been several wiring malfunctions to the fire alarm system which have been temporarily addressed but which need a complete overhaul. Electrical and plumbing issues are constantly addressed on a short-term basis but need a long-term solution. The State Department of Education Civil Rights Compliance Review team has cited New Fairfield High School for non-compliance in a number of specific areas. Although efforts have been made by the district to address the cited areas, the efforts have fallen short of full compliance. A major building project would be necessary to fully satisfy the ADA issues identified through the recent Civil Rights Compliance Review.

Recognizing the fact that the physical plant at New Fairfield High School has served the community well for the past 47 years, and understanding the safety concerns, infrastructure needs and the impact on educational curriculum, the Board of Education retained the architectural firm of QA+M Architecture to review and update a facility study and develop a range of design concepts based on educational specifications. The design concepts

# New Fairfield High School

## Facilities Study & Educational Specifications

April 9, 2019



would evaluate scenarios that considered program needs, facility conditions, building, fire and life safety codes, accessibility violations, construction phasing and the estimated cost to the Town of New Fairfield. The options studied ranged from simple renovations and code updates, to a fully renovated facility with additions, as well as a new facility.

### Existing Conditions

New Fairfield High School was designed in 1971 and construction started in 1972. The original building was approximately 180,000 SF and included academic classrooms, an auditorium, a gymnasium, cafeteria and kitchen and other support spaces. The project was contracted as a maximum not-to-exceed construction project and included the building, site as well as furniture, furnishings and equipment for \$4,200,000. The construction project was challenged from the very start and there are several reports that document some of the deficiencies of the original construction. In 1993, a middle school was added to the campus and a new cafeteria space was built for the high school. Over the years, there have been several small projects at the high school including a roof replacement in 2000 and culinary center in 2018. The science classrooms were renovated with the 2010 renovation project, however, based on the existing facility constraints, natural light could not be accommodated and the HVAC system was minimally updated. As is evident by the existing conditions reports, many of the infrastructure and structural issues have not been addressed since the original project. Some of the major infrastructure and building concerns are:

#### SITE:

- a. Parking & vehicular circulation
- b. Accessibility
- c. Utilities – Water / Well System
- d. Septic System – Needs update

#### BUILDING:

- e. Energy efficiency – Electric Heat
- f. Interior Partitions – Acoustical separation
- g. Auditorium – Accessibility, Acoustics, MEP Systems
- h. Pool – Aged systems and poor ventilation and dehumidification
- i. Interior & Exterior finishes – Aged and failing
- j. Kitchen & Servery – ADA compliance
- k. Elevator – ADA / Accessibility
- l. Building Security – Need to meet Standards
- m. Natural Light – Very limited
- n. Program Space for collaboration and conferences is limited
- o. Groundwater infiltration / Flooding at lower levels



- p. HAZMAT – PCB and Asbestos abatement needed
- q. Structure – Concerns based on original report. Non-seismic design
- r. Building Envelope – Poor condition (Tilt Wall Construction)
- s. Windows – Need replacement

**MEP (MECHANICAL, ELECTRICAL, PLUMBING) SYSTEMS:**

- t. Limited sprinkler system
- u. HVAC and Electrical Systems – At end of life (1972)
- v. Fire Alarm non-compliant / non-addressable
- w. Technology & Communications – Needs updating

**Priorities**

Based on the priorities established by the Town of New Fairfield and New Fairfield Public Schools leadership, QA+M Architecture approached the New Fairfield High School project by creating three primary focus areas. The first focus area was energy management, the second was accessibility citations identified throughout the building and grounds by the State Department of Education, and the third being that the facilities should support 21<sup>st</sup> century educational programming and curriculum. These priorities became the baseline for the evaluation of all design concepts.

1. The energy management area includes a complete evaluation of all existing mechanical and electrical systems with the goal of meeting the State requirements for high performance buildings. The Engineers spent numerous hours reviewing existing reports and analyzing all existing components to determine the needs of the facility. Based on the analysis and research it was determined that a complete replacement of the existing heating system would be the best solution for the facility. Additionally, a central air conditioning system that would replace all the partial systems would also be included as part of the renovation project. The energy management analysis also included an evaluation of alternative energy systems. The team will explore several options for possible integration into the project. The selection of the systems would be based on available grants and overall feasibility for the facility. At this time, several options still remain open for discussion. This includes, use of a photovoltaic system due to some significant incentives available for the project, geothermal systems based on significant advancement in the technology and co-generation, based on the short payback. A final decision on the systems will be made at the design development phase of the project. Additionally, the design team incorporated reusable energy and sustainable design into the school to allow student access to the technology, with the ability to integrate the systems into the science and technology curriculum. Other elements to be included into the proposed scope of work for energy management would be complete window and roof replacement, with the potential integration solar electric system into the building envelope.
2. The second focus area is specific to the Civil Rights Compliance Review and ADA standards. The scope of this priority includes the entire New Fairfield High School building and site. Concerns to be addressed on the

# New Fairfield High School

## Facilities Study & Educational Specifications

April 9, 2019



site will include handicapped accessible parking, walkways and drop-off areas around the site as well as accessible routes to the various fields, bleachers and site elements/improvements. Within the building, all programs will require compliance with accessibility codes based on ADA, UFAS, ANSI and regulatory building codes. The design team's evaluation and recommendation is that all ADA and code issues must be addressed through any renovation and/or addition project.

3. The third and perhaps the most significant focus area is the evaluation of the educational curriculum and program needs for New Fairfield High School. The QA+M team held meetings with the heads of all departments, school administrators and facilities staff, and worked with the NFHS educational specification committee to develop the educational specification and space needs program. The program information, along with the facility study documents, has been used to generate various design approaches and concepts that address all the educational program requirements at New Fairfield High School. The design process also considered the following planning concepts integral to the design of educational facilities:

- Energy Conservation and Sustainable Design
- Codes – Building, Fire/Life Safety, ADA
- Technology
- Security & Safety
- Furniture Furnishing and Equipment
- Community Use
- Flexibility & Agility
- Student Display
- Site Analysis/Evaluation
- Land Use Requirements
- Site Selection
- Site Circulation
- Concept designs
- Construction Phasing
- Project and Construction Schedule

Based on the educational specifications the key educational program deficiencies that need to be addressed in all project design scenarios are identified below:

### **Educational Specification Committee – Process**

The committee of educators gathered relevant information including current demographic reports and various constituents' input, explored current and future technologies. The committee worked with the Board of Education



in developing the educational specifications and evaluated several scenarios including the potential of building a new facility. During this process, the committee adhered to the following parameters:

- Acknowledgment of the current enrollment projections.
- Maintenance of a department structure with a move to combined departmental offices, where possible.
- Focus on the use of the building for upper secondary education.
- Maintenance of class size under the district guidelines.
- Maintenance of current course offerings with adjustments for curriculum review.
- Gathering of constituents' input.
- Assurance that the building is ready for increased technology.
- Provision for flexibility in room usage.
- Provision for intermediate-sized group spaces.
- Provision for attractive and welcoming aesthetics.
- Provision for energy efficiency and high indoor air quality.
- Addressing all building and life safety codes, ADA and Civil Rights Compliance Review concerns.

## **Overview of Program Format**

The educational programming section for the New Fairfield High School study is organized into six sections. Each section identifies program and support spaces that are programmatically related. All spaces within the facility are identified in one of the following sections:

1. Academic & Support Spaces
2. Fine & Performing Arts
3. Career & Technical Education
4. Assembly and Community Use
5. Administration and Student Services
6. Facilities Management and Support

A space utilization program is developed for each space. The information is provided as a starting point for the architectural design team. Further review with the school for final room layout, furnishings and fixtures will be required prior to the development of the final design.

### **1. ACADEMIC & SUPPORT SPACES**

- English
- Social Studies
- World Language
- Science
- Mathematics
- Special Education

# New Fairfield High School

## Facilities Study & Educational Specifications

April 9, 2019



### 2. FINE & PERFORMING ARTS

- Music (Band, Chorus, Strings)
- Art

### 3. CAREER & TECHNICAL EDUCATION

- Technology Education (Engineering, Construction, & Graphics)
- Business
- Family & Consumer Science

### 4. ASSEMBLY & COMMUNITY USE

- Learning Commons and Makerspace
- Cafeteria, Kitchen, and Serverly
- Auditorium / Assembly
- Physical Education and Health

### 5. ADMINISTRATION & STUDENT SERVICES

- Administrative Offices
- Health/Nurse
- School Counseling

### 6. FACILITY MANAGEMENT & SUPPORT

- Mechanical / Electrical / Plumbing / Security Infrastructure
- Facilities Offices & Building Storage

## Project Goals

New Fairfield High School will be designed with an emphasis on core academic spaces with a concept that focuses around the consolidation and redesign of all the academic, community and support spaces.

Facilitate 21st century learning with facilities that support the curriculum and includes modern technology, infrastructure, and choice.

Improve accessibility throughout the school.

Develop an agile and flexible learning environment with FFE that supports multiple learning styles.

Provide small group instructional and breakout spaces for collaborative work throughout the building.

Showcase student interests and work throughout the building.

Improve energy efficiency and implement sustainable principles throughout the facility.

Increased participation in community service, work experience and extended learning programs.

Support students in attending competitive colleges and post-secondary vocational programs.

Enhance community access to all assembly and athletic spaces.



- a. **The English and Social Studies Departments** must include classrooms that are designed as flexible spaces for large and small group instruction. All classrooms must provide adequate FFE to support the independent reading program as well as reading and writing conferencing. All program spaces must meet current codes and safety regulations, and include technology infrastructure to support voice, video and data systems; equipment and furnishings. Departmental space should be contiguous. A shared office/work room with the world language department will promote collaboration and also must include a bookroom, storage space, and small group instructional rooms for conferencing or tutoring.
- b. **The Mathematics Department** must include classrooms with the design of flexible space for large and small group instructional areas including breakout spaces for intervention. All program spaces must meet current codes and safety regulations, and include technology infrastructure to support voice, video and data systems; equipment and furnishings. The department's space should be contiguous. A shared office/work room with the science department will promote collaboration and also must include a bookroom, storage space, and small group instructional rooms for conferencing or tutoring.
- c. **The Science Department** must include appropriately sized "Clabrooms" combined classroom & laboratory space, adjoining preparatory and storage rooms, imbedded technology, and a greenhouse. Clabrooms must include FFE specific to the unique disciplines within the science department of Biology, Chemistry, and Physics as well as elective programs. All program spaces must meet current codes and safety regulations. The department space should be contiguous and include a shared office/work room with the mathematics department. A shared office/work room with the mathematics department will promote collaboration and also must include a bookroom, storage space, and small group instructional rooms for conferencing or tutoring.
- d. **The World Language Department** must include additional classroom space with flexible for large and small group instructional areas to support all forms of language acquisition (reading, writing, speaking, listening). All program spaces must meet current codes and safety regulations, and include technology infrastructure to support voice, video and data systems; equipment and furnishings. A language laboratory based on digital systems must be provided. The department's space should be contiguous. A shared office/work room with the English and social studies departments will promote collaboration and also must include a bookroom, storage space, and small group instructional rooms for conferencing or tutoring.
- e. **The Special Education Department** must provide a combination of small and large group instructional rooms and resource classrooms that promote inclusion. All program spaces must meet current codes and safety regulations, and include technology infrastructure to support voice, video and data systems; equipment and furnishings. The design of the special education spaces should provide sensory friendly lighting and acoustics that would be beneficial for all students. A classroom should be provided with adequate FFE to



# New Fairfield High School

## Facilities Study & Educational Specifications

April 9, 2019



support instruction in the activities of daily living. The department's space should be contiguous with office and program space for related service providers such as speech, occupational therapy, and physical therapy. A office/work room with conference space will promote collaboration among all departments and also must include storage space for teachers and paraprofessionals.

- f. **The Music Department** must include specialized spaces and FFE that accommodate the unique needs of band, chorus, and orchestra with proper acoustics. Rehearsal rooms must be adequate in size and there is a significant need for practice instrument storage, general storage and other support spaces. A shared classroom space for music theory is also required. All program spaces must meet current codes and safety regulations, and include technology infrastructure to support voice, video and data systems; equipment and furnishings. The department's space should be contiguous with the auditorium. A recording studio that supports audio and video recording could be shared or situated near the learning commons.
- g. **The Art Department** was renovated to address many concern, however there are still some concerns over appropriate space for storage, the kiln and support space for display within the studios and a student gallery. Additional space is needed for the graphics program and lectures. By relocating the department to the Technology Education area, the graphics, lecture and display can be shared to create greater efficiency on the use of program space. All program spaces must meet current codes and safety regulations, and include technology infrastructure to support voice, video and data systems; equipment and furnishings. The department's spaces should be contiguous.
- h. **The Technology Education Department** is currently housed in space that was designed to be the "Shop" in earlier educational models. The organizing and interior finish is inappropriate for today's technology education curriculum. By reorganizing the existing space, the program can be consolidated to provide a technology rich high-tech environment that is geared towards the digital age while providing the hands-on environments in the construction, robotic and engineering labs. By sharing spaces with art and supporting the performing arts/theater programs the technology education program is an integral part of the academic program. All program spaces must meet current codes and safety regulations, and include technology infrastructure to support voice, video and data systems; equipment and furnishings. The department's spaces should be contiguous.
- i. **The Business Department** must be flexible space for large and small group instruction. The business classrooms must provide appropriate FFE to support personal finance, investment management, video conferencing around the globe, and marketing presentations. All program spaces must meet current codes and safety regulations, and include technology infrastructure to support voice, video and data systems; equipment and furnishings. The department's space should be contiguous and include a shared office/work room and storage space.





- j. **The Family and Consumer Science Department** must be provide a culinary kitchen with multiple workstations including the appropriate support equipment and storage. A shared cafe and instructional space must be located adjacent to the culinary kitchen. Child Development must provide planning space for high school students while also serving as a Pre-K. It should have a separate entrance/pick-up point and an environment inclusive of playful colors and FFE appropriate for the age group. Interior and Fashion Design must include specialized classrooms with appropriate FFE for clothing construction, fitting, and modeling. All program spaces must meet current codes and safety regulations, and include technology infrastructure to support voice, video and data systems; equipment and furnishings. The department's space should be contiguous and include storage space.
- k. **The Auditorium** is a crucial component of the high school. The auditorium supports every department of the school and is a true multi-functional space. The auditorium / theater will be a multi-purpose performance space that will accommodate programs that range from public speaking and presentation, to music recitals, dance and theatrical performances. The auditorium is to be designed to accommodate large school gatherings as well as performances for smaller audiences. Musical performances will include the band, the concert choir, strings students and must support district-wide band, choir, and strings concerts. The auditorium can also be the venue for community groups and co-curricular clubs. The auditorium must meet current codes and safety regulations, and include technology infrastructure to support voice, video and data systems; equipment and furnishings. Technology for large format display and recording of events should also incorporated into the design. The auditorium should be located adjacent to parking with a lobby/pre-function space and community access. Concession and box office should be provided.
- l. **The Learning Commons** should be the hub of the high school and contribute to the academic success of students. The space must incorporate technology with multiple charging stations, provide structured and informal seating areas with various furniture options, quiet and small group study rooms, and be an inviting space with abundant natural light that encourages student interaction, research, and learning. Flexible FFE is essential to allow for continual reorganization of the learning environment and allow for multiclass use and access to available resources. The Learning Commons must also include a makerspace and technology for large format display. The Learning Commons should also serve as a community space. The location of the learning commons should be near academic areas and community areas.
- m. **The Cafeteria and Kitchen** must support the flow of students to and from the space and within the seating area. Bathrooms must be included in the cafeteria space. A variety of choice seating should be provided that emulates a university dining hall and can function as a study hall seating when not being used during lunch. The servery must be ADA compliant. A separate loading dock and clearly defined pedestrian and vehicular circulation path is essential in maintaining a safe and user-friendly environment. The location of the cafeteria should be near academic areas and community areas.
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# New Fairfield High School

## Facilities Study & Educational Specifications



April 9, 2019

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- n. **The Physical Education and Health Department and Athletics** are an important part of student life in all high schools. The challenges facing New Fairfield High School emanate from outdated facilities, inequity in the assignment of space resulting in Title IX violations, inadequate teaching locations for health education, and poor locker room conditions. Although the accessibility, infrastructure and physical conditions can be addressed within the existing space, the Title IX and instructional concerns need to be addressed by developing an appropriately sized locker rooms and classroom for physical education, health, athletics, and the natatorium (pool). In addition to a full sized gym, space is needed for the fitness room as well as wrestling and cheerleading programs. All program spaces must meet current codes and safety regulations, and include technology infrastructure to support voice, video and data systems; equipment and furnishings. The department's spaces should be contiguous.
- o. **The Administration** offices must be designed to provide support for the efficient operation of the administrative, secretarial, and security staff. The administrative offices should be located at the main school entrance and provide control for all visitors and students entering and leaving the school. FFE specific to the administrative use must be installed. The school resource offices office should be proximate to the main office. All program spaces must meet current codes and safety regulations, and include technology infrastructure to support voice, video and data systems; equipment and furnishings.
- p. **The School Counseling Department** provides services to all students at NFHS (regular education, special education, alternative education). The model of delivery includes: individual, group, family, and classroom sessions. Small group instructional spaces for multiple counselors is required. The school counseling department should have shared space in a "mental health suite" that includes school counselors, school nurse and clinic, social worker, and school psychologist. This area must include private conference rooms, private office spaces, college and career center area, secretarial area, waiting areas, storage area, and fire safe master and confidential file areas. All program spaces must meet current codes and safety regulations, and include technology infrastructure to support voice, video and data systems; equipment and furnishings. The mental health suite should be adjacent to administration offices.
- q. **The Facility Management including the physical plant** and building systems infrastructure at New Fairfield High School must meet the latest building, fire and life safety codes adopted by the State of Connecticut. In addition the NFHS facility must meet and/or exceed the high performance building standards adopted by the State, and achieve a LEED Silver or equivalent certification. Alternative energy systems will be introduced with the goal of making New Fairfield High School an example of environmental stewardship. All program spaces will be accessible.
- r. **The Site** at New Fairfield High School is quite large however the steep grades and contours do present some



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challenges. Parking and vehicular circulation needs to be addressed in order to allow for the potential of the high and middle school start times being the same. The Civil Rights Compliance Review report cited lack of access at the site and the fields as part of the deficiencies identified at NFHS. The site slopes, resulting in the need for ramps in several locations. Reorganization of the vehicular traffic is necessary to provide separation of bus and car (parent & student) traffic. Additional parking is needed to support the academic program.

## **Enrollment Projections**

Each year the administration updates student enrollment projections for the New Fairfield Public Schools by grade, and by grade combinations from Kindergarten through Grade 12. These enrollment projections are used during the budget development process to anticipate future staffing needs as well as materials, equipment, and/or furniture needs associated with increases or decreases in projected enrollments.

The enrollment in the New Fairfield Public Schools peaked in 2008 and declined to 2,171 students in 2018. During the next eight years, the decline in enrollment will continue. The State Department of Administrative Services requires enrollment projections indicating the highest 8 year projected enrollment starting in October of the year the project application is submitted. Based on the proposed project for New Fairfield High School, enrollment projections would be required for October 2018 thru October 2026.

The following information was obtained from the enrollment project provided by Donald G. Kennedy, Ed.D., Demographic Specialist of NESDEC on October 25, 2018. Based on the enrollment projections by Donald G. Kennedy Ed.D. the enrollment at New Fairfield High School is as follows:

The enrollment at the high school peaked in 2008-2009 and has been declining with a low of 613 students projected in 2026-2027. Based on this projection the student enrollment of 789 (2018-2019) will be utilized for the Department of Administrative Services Grant application and the space standards calculations for New Fairfield High School.

## **Enrollment Projections and Space Standards**

The State of Connecticut Department of Administrative Services provides grants for school construction projects to all public-school systems. The eligibility of a school project for State funding is governed by the Connecticut General Statutes (CGS) and the grant application is administered by the State Department of Administrative Services Office of School Construction Grants and Review Division. Each municipality must apply for the grant by June 30th of each year and the funding is approved the following year. The Town of New Fairfield has applied for and received several school construction grants over the years and specifically was funded for the last construction project that included renovations and code updates.

In considering the renovations and additions or new facility project at New Fairfield High School for state reimbursement, several regulations must be evaluated. These include laws that will determine the project eligibility,

# New Fairfield High School

## Facilities Study & Educational Specifications



April 9, 2019

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priority and estimated percentage of the project cost that is for the state grant. Additionally, the Town of New Fairfield must meet the requirement of the Office of School Construction Grants & Review and ultimately an audit of the project. Regulations concerning school construction grants can be reviewed in the Connecticut General Statutes Section 10-287 c-J to 10-287 c-2J.

The first step in this process will be a meeting with representatives from the State Department of Administrative Services to review a waiver request for a partial or complete waiver of the space standards.

This waiver request will be filed with the Commissioner of Department of Administrative Services. This waiver would be based on the inherent inefficiencies of the existing building design and changes in the program/curricular requirements in education that have impacted the physical plant. If additional eligible area is approved by the State Department of Administrative Services, the Town of New Fairfield will receive greater reimbursement, with the potential of receiving the full percentage assigned to the Town if a full waiver of space standards is approved.

**SPACE STANDARDS** - For grant purposes, a maximum allowable square footage per pupil is determined for a facility. This maximum is based upon the projected enrollment for the project, grades housed at the school and the amount at square footage, if any, constructed prior to 1950. See C.G.S. 10-287c-] S(a)

Space standards do not apply to the following, projects solely for creation of code or health violations, roof replacements, vocational agriculture equipment projects, board of education central administration projects, and projects solely for purchase. In actual construction, districts are not limited to the maximum allowable square footage per pupil. However, grant reimbursement is reduced to reflect the degree by which a school exceeds the maximum allowable square footage.

**SAMPLE SPACE STANDARDS CALCULATIONS** - For grant computation purposes, the grade range and projected enrollment for a project are applied to the allowable square footage table to calculate a maximum allowable square footage per pupil. The maximum allowable square footage per pupil is compared to the actual square footage per pupil if the resulting ratio is less than one, the building is oversized for grant computation purposes. Therefore, the ratio is applied to all protect costs (except site and building purchase costs), and there is a corresponding grant reduction.

Based on the Space Standards Worksheet the allowable area per student is 180.5 SF. With the projected highest enrollment at 789 students based on the 2018-2019 school year the maximum allowable area for New Fairfield High School is 142,415 Net SF. Which is approximately 150,000 Gross SF of building area. The existing building based on shared facilities for the natatorium, kitchen and auditorium programs is 164,800 SF.

### Key Planning & Design Concept

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The reorganization of New Fairfield High School is based on a planning concept that focuses educational goals established by the Board of Education and improving the educational and space utilization of the existing facility. The design approach focuses on the following imperatives:

## SITE

- Separation of the student, parent and bus traffic and points of entry to the building.
- Increased parking and improved vehicular and pedestrian circulation to allow for the middle school and high school to have the same start time.
- Separation of the academic and community use spaces.
- A clearly identified community entrance.
- A facility that is accessible to all individuals with disabilities.

## BUILDING

- Space adjacencies that enhance / improve intra- and interdepartmental communications and teacher collaboration.
- Simplification of internal building circulation
- Given the challenges of a multi-level building, develop design concepts that consolidate academic departments
- Improve the efficiency of the existing space utilization and provide flexibility of instructional spaces.
- Reorganize and develop academic programs around 21<sup>st</sup> Century educational pedagogy.
- Implement safety and security measures throughout the facility.
- Develop a ubiquitous technology environment.
- Develop a plan that optimizes energy savings and infuses sustainable design principles in all aspects of the facility.
- Develop the building as an educational tool that incorporates the building infrastructure, energy management systems and sustainable design principles into the curriculum.

## Key Planning Concept

Although several design concepts were evaluated for program adequacy and cost, each design was based on one of the following options:

- i. Limited Renovations
- ii. Full Renovations under the “Renovate as New” Status with the State Department of Administrative Services.
- iii. Full Renovations and Additions under the “Renovate as New” Status with the State Department of Administrative Services.
- iv. New Facility on the Existing Site

**The Limited Renovations approach** included a design that was developed around additions and renovation that

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resolved program deficiencies in specific program areas. The main emphasis for renovation/additions was placed on improving the program areas with outdated and/or inadequate facilities that needed improvement were Music, Technology Education, Media Center, Art, School Counseling and Physical Education. During the review and programming process which took place with all the NFHS departments, additional program deficiencies came to light. It was soon apparent that a limited renovation and addition approach would not meet the goals of the educational specifications and the priorities established for the project without a more significant construction project. The building infrastructure, especially the Mechanical, Electrical and Plumbing systems are in very poor condition. Although there is greater flexibility on a limited renovation project, when it comes to replacement of building systems, the State Department of Administrative Services reimbursement for a limited scope project is much lower compared to other options, resulting in cost differentials that are minimal.

**The Full Renovations** project under the “Renovate as New” status was evaluated to identify the potential cost of a project that would incorporate all educational program needs and include a complete facility update. Under this scenario, all building systems would be replaced and the facility would be brought into compliance with the latest building, fire, ADA and life safety codes. This approach included the evaluation of several design options with emphasis on all the key educational program areas. The greatest challenge with this approach is the abatement of hazmat and the replacement of the building systems. The construction in this approach would phased and would have significant impact on teaching and learning. Additionally, a recent meeting with the State Office of School Construction Grants and Review concluded that a grant for a full renovation project would not be approved and therefore not qualify for state reimbursement due to the condition of the existing building and site.

**The Full Renovations and Additions** project under the “Renovate as New” Status was evaluated to identify the potential cost of a project that would incorporate all educational program needs and include a complete facility update. Under this scenario all building systems would be replaced and the facility would be brought into compliance with the latest building, fire, ADA and life safety codes. This approach included the evaluation of several design options with emphasis on all the key educational program areas. The following is a partial list of options evaluated:

1. A new auditorium and music spaces as well as redesigned physical education spaces.
2. Relocation of the administrative functions to an addition in the front of the building.
3. Second level expansion for the science and academic programs.

The solution will meet many educational program requirements through the addition. The greatest challenge with this approach is the abatement of hazmat, the replacement of the building systems, and space standards. The construction in this approach would phased and would have significant impact on teaching and learning. Project cost and schedule delays based on the history of the original construction of the high school must be anticipated. This approach should maximize reimbursement from the State Department of Administrative Services. However, a recent meeting with State Office of School Construction Grants and Review concluded that a grant for a full





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renovation with partial replacement would not be approved and therefore not qualify for state reimbursement due to the condition of the existing building and site.

**New Facility** - The QA+M team conducted a preliminary evaluation of a new facility on the existing site and identified the following item that would be considered in making a decision to construct a new facility:

1. Construction of a new facility will be minimally invasive to the educational programs at New Fairfield High School. The programs that would be most significantly impacted will be physical education and athletics, as the new facility will need to be located on the existing practice fields. The new facility would be right sized to accommodate the declining student population and would be completed in under two years. Based on recent legislation, the reimbursement rate for a new facility is approximately 10% lower. However, a reimbursement reduction waiver could be reviewed with the State Department of Administrative Services.
2. There is adequate space on the site to locate the new building.
3. Space standards waivers if necessary would be minimal as the building would be appropriately sized for the projected enrollment.
4. The new facility construction project would have a minimal impact on education.
5. Unforeseen conditions that adversely impact budgets and delay projects will be minimized.

## **Recommendation & Priority Considerations**

Based on the design team's evaluation of the four scenarios, the design options developed for New Fairfield High School in concert with the school administration and town leaders, and feedback from the Office of School Construction Grants and Review, the option to build a new facility on the campus of the current high school is recommended.

New Fairfield High School project is being submitted for consideration as a **Priority Category A**. The proposed project is envisioned to renovate and expand the existing facility or to build a new facility to provide mandatory instructional programs pursuant to Title 10 of the Connecticut General Statutes and Title IX of the U.S. Elementary and Secondary Education Act of 1972. The project will address all the program and code deficiencies cited in the NEASC reports and State Department of Education reports.