

EDUCATIONAL SPECIFICATIONS

Fairfield Ludlowe High School
Fairfield Public Schools
Fairfield, CT 06824

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RATIONALE FOR THE PROJECT

BACKGROUND:

On May 10, 2011, the Fairfield Board of Education adopted the "Fairfield Public Schools Facilities Plan 2011-2015". The primary purpose of this plan was to produce a blueprint for meeting the facilities needs of the school district over the next four years. The extension and alteration project for Fairfield Ludlowe High School is a major recommendation for meeting these identified facilities needs by the installation of an addition(s) to provide additional classrooms and cafeteria space to accommodate increased enrollment; installation of new lockers and renovation of boys' and girls' lavatories.

ENROLLMENT:

Between 2002 and 2012, the number of high school students overall has increased from approximately 2160 students to over 2968. This represents an increase of over 808 students or a 37.4% growth. This growth pattern has been documented in a number of facility reports and student enrollment studies. MGT of America has completed 10 year enrollment projections by school that project an increase in the overall high school population. The most recent enrollment updates show a continued increase. This enrollment increase is projected to continue through at least the 2016-17 school year.

CAPACITY:

The Fairfield Public Schools currently has two high schools each with a design capacity of 1400 students. Presently Fairfield Ludlowe High School's enrollment is 10.8% over its design capacity and projected to be 22.7% over its design capacity by the 2016-17 school year. Presently the overcapacity of this facility has been accommodated by scheduling advantages offered by the school's rotating class schedule.

As the enrollment continues to increase additional classrooms, core spaces, and facility improvements will be needed as specific types of specialized spaces will be unavailable. Specific space shortages are expected in science classrooms/labs, cafeteria space, and certain types of general classroom spaces.

LONG RANGE EDUCATIONAL PLAN:

On August 27, 2004 the Fairfield Board of Education approved the following policies which explain the long range educational plan of the district.

MISSION STATEMENT

Policy Number 0100*

The Fairfield Board of Education, in a cooperative partnership with the parent or guardian, staff, and community, will provide the students in our town's public schools with the high-quality instruction, learning opportunities, and positive environment they require to realize their potential as lifelong learners and responsible citizens.

LONG-TERM GOAL

Policy Number 0110

Sustain the continuing improvement of the Fairfield Public Schools so that they will continue to rank with the best in the nation.

THE PROJECT

In conjunction with the Fairfield Board of Education's Long Range Facility Plan the board proposes a construction project at Fairfield Ludlowe High School to alleviate overcrowding of the facility due to continuing enrollment increases and to address long-term facility needs. The essential elements of this proposed construction project include the following elements:

- Addition of two science classrooms and labs
- Addition of four general purpose classrooms for use with the following curriculum
 - o Business Education
 - English
 - o Mathematics
 - Social Studies
 - o Health
 - o World Language
- Expansion of the cafeteria/kitchen to accommodate increasing enrollment
- Relocation of the Teacher Lounge (to free up an additional classroom space)
- Relocation/enhancement of the Senior Lounge (including the creation of individual & group study areas)
- · Replacement of windows with energy efficient units per recent architectural studies
- Addition of lockers
- Replacement of the roofing installed in 1991

ENROLLMENT DATA AND PROPOSED PROJECT CAPACITY

FAIRFIELD LUDLOWE	YEAR									
HIGH SCHOOL	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
Enrollment	1538	1552	1601	1661	1699	1718	1703	1674	1641	1695
Capacity	1400	1400	1400	1525	1525	1525	1525	1525	1525	1525

SPACE DEFICIENCIES:

This construction project <u>does not</u> address all of the program/capacity deficiencies identified in the "Fairfield Public Schools Facilities Plan 2011-2015" dated May 10, 2011.

Specifically this project does not address the following items found in the "Fairfield Public Schools Facilities Plan 2011-2015":

- Addition of mechanical fresh air systems in the existing building
- Addition of air conditioning in the existing building
- Addition of storage rooms for custodial/maintenance needs
- Addition of storage rooms for staff and school needs
- New and increased security measures
- Increasing the facility capacity to provide an 85% capacity utilization rate
- Renovation of student lavatories

The following specifications apply to the new and renovated spaces only, not to the entire building.

BUILDING SYSTEMS:

Envelope

- Roofing systems shall be multi-ply systems (no single membrane systems) 20 year warranty (no dollar limit/edge to edge)
- Exterior envelope materials shall be consistent and compatible with the existing building façade materials in size, shape, color and texture
- Construction details of exterior elements shall be consistent and compatible with the existing building façade details

Security/Safety

- Reliable internal and external communication should be available between/among all areas of the facility to the degree consistent with safety and security plans
- Electronic security shall be provided which will include color video cameras (interior and exterior) and DVR (Dedicated Micros Sprite model with 16 channels) recording devices with remote viewing capabilities (via secure computer network) and LCD monitors located in Security Office.
- Door hardware District Standards Schlage/Von Duprin/LCN
- Exterior doors to have continuous hinges
- Locks Everest 'D" Keyway (interior), Primus Keyway (exterior) Key into existing building system –
 Master key facility (new and old locks)
- All spaces to be capable of interior lockdown (without re-entry into the corridor)
- Doors Narrow vision lites (for restricted line of sight into classroom during lockdowns)
- Exterior doors used by staff and students for exterior functions shall have CO access control locks by Locknetics
- Tactile signage (new spaces) for room identification (including room numbers) and directions
- Evacuation signage with directional maps
- Exterior signage (for directions and site identification)
- Provide adequate site lighting
- Protective window covering at locations subject to damage

Code

- Abate any hazardous material encapsulation is not acceptable
- ILSM Interim Life Safety Measures for working in an occupied building

(Also see BSF Filing Requirements)

INTERIOR BUILDING ENVIRONMENT:

Mechanical Systems

- Separate <u>independent</u> commissioning of Mechanical/Electrical/Plumbing (MEP) systems to include an air flow balancing contractor hired directly by the building committee (not the construction manager or design team) and reporting directly to the building committee <u>and</u> the Board of Education
- Lighting fixtures standard type(s), ease of maintenance, coordinated with presentation stations (projectors & projection surfaces)
- Low voltage systems to be designed to district standards
- Proper shutoff and backflow valves located to provide easy and quick access
- Upgrade telephone system as appropriate for the new additional space
- Master clock system in all spaces

Interior Spaces - General

• Kitchen update for increased enrollment— Review equipment (size, condition, etc.), storage space, serving lines, etc including but not limited to:

Storage for dry goods

Walk-in Refrigerator

Walk-in Freezer

Washer & Dryer

Serving lines with power and network access

- Ceiling systems standard sizes 2x2 or 2x4, standard tiles, wide grids 9/16", no strange patterns, consistent choices
- Millwork solid surface countertops/plastic laminate cabinets/wire pull handles/euro-hinges
- Flooring –VCT or other easily mopped finish in classrooms, corridors, etc.
- Student lavatories and staff toilet rooms meeting district standards to be located at convenient locations for students and staff
- MDF/IDF room (in new addition) to be:
 - o large enough to allow front and rear access to all racked equipment
 - o located in non-classroom spaces
 - o provided sufficient ventilation, cooling and power to support equipment growth
 - o provided with security alarms
- Built in shelving, cabinets and countertops sufficient for instructional material storage
- Built in shelving, cabinets and countertops sufficient for office material storage (lockable)
- FF&E New Spaces Appropriate furniture and equipment to accommodate the intended use of the room/space inclusive of student desks and/or tables, chairs bookcases, storage, teacher desk & chairs, learning centers for individual and/or group instruction, computer tables & chairs, area carpets, room darkening shades, appropriate projection surface for use with multimedia projector, wall pads, basketball hoops, fire resistant file cabinets, tackboards, tackstrips, whiteboards, flags, clocks, pencil sharpeners, paper towel dispensers, soap dispensers, etc.

<u>Interior Spaces – Specific Program Needs</u>

- SCIENCE each classroom/lab must be equipped with:
 - o lab stations for students working in pairs, each with water/gas/electric hook-ups, as well as an area for traditional student desks
 - o all safety equipment including vented hoods, emergency showers, eye wash stations, fire extinguishers and blankets, goggle storage
 - Preparation rooms accessible to the outside corridor as well as the corresponding classroom; size of a classroom, equipped with dry storage, refrigerators, lab-ware dishwashers, flammable storage and caustic storage.

TECHNOLOGY:

- An essential component of this project is to provide electronic network access to every segment of the new building (addition). <u>All</u> instructional areas and support facilities shall be provided with:
 - o local and wide-area wired and wireless networks
 - o digitally delivered TV connectivity
 - o digitally integrated internal broadcast capability
 - o wiring for interactive whiteboard technology
- Each teaching space shall be provided with connectivity to multimedia projection systems with amplification and speaker systems to support audio as per current district standards.
- All wiring to be CAT 6 or better and certified. Each patch panel shall be labeled with the room number, and jack number and each jack labeled with MDF/IDF closet number, panel and punch down location.
- Charging stations for mobile computer labs
- Technology Network Space server room, wiring closets, dedicated area for head-end equipment including extended demarcation points provided by the suppliers to the server room for <u>all</u> external connections.

(Also see INTERIOR BUILDING ENVIRONMENT – Interior Spaces)

CSDE BSF FILING REQUIREMENTS (for Reimbursement):

This project shall be designed so that it can be filed with the Connecticut State Department of Education - Bureau of School Facilities under at least the following project types:

- Extension of Facility
- Alteration of Existing Facility
- Energy Conservation
- Roof Replacement
- Code Violation (Hazardous Material abatement)

As required by C.G.S. 10-291 a Phase I environmental site assessment in accordance with ASTM Standard #1527 shall be conducted prior to the approval of architectural plans.

COMMUNITY USES:

Fairfield Ludlowe High School does not contain or host space(s) for other town departments or outside firms. The building is used exclusively as a high school. The building facilities are available to the public on a reservation basis when the building is not in use (nights and weekends). Some of these uses include among others:

- Parent Teacher Association (PTA) meetings and events
- Various school clubs
- Civic group meetings
- Sporting clubs and events

Fairfield Ludlowe High School is used as a polling place and as an emergency shelter.