

Educational Specifications for the Heating Repair/ Replacement Project

1. RATIONALE:

These educational specifications are for the repair/replacement of the Eastford Elementary School heating system in Eastford, Connecticut.

The school was constructed in phases, starting in 1949 with an addition in 1963 and another in 1991. The 1949 portion of the building contains 4 classrooms on the first floor with a full basement that contains the library and educational support areas. This portion of the building is heated by a steam system with 2-inch fin-tube exposed radiator elements. Heat is provided by a steam boiler in the basement. The 1963 addition consists of 5 additional classrooms and support areas with a partial basement. This portion of the building uses the same steam boiler.

A 1991 addition of a classroom, office space, and gymnasium is heated with a separate hot water boiler, also located in the boiler room. The two boilers use #2 fuel oil. As part of an emergency repair in the summer of 2019, approximately one half of the 1963 portion of the building was converted to hot water using hot water from the return of the 1991 portion of the building. This included new radiators in one upstairs classroom, two downstairs classrooms, the faculty lounge and the nurse's office.

The building had been upgraded in terms of insulation and window glazing from the original building, including a new flat roof on the gym in the summer of 2018.

The total size of the 1949 and 1963 wings is approximately 20,000 ft².

The steam system in the building has had multiple leaks and is difficult to maintain and control. The radiators are oversized based on the current building.

2. LONG – RANGE PLAN:

The district's school facilities provision calls for a quality and appropriate learning environment for the students & staff and to be more environmentally sustainable. In order to comply with this aspect of the plan, it is required to repair and replace the current heating system at Eastford Elementary School. Since Eastford Elementary School is the only school in Eastford, plans are to continue to utilize Eastford Elementary School in its current capacity, and with appropriate maintenance, as an elementary school for at least the next thirty years and indefinitely after that.

3. THE PROJECT:

We need:

- A new heating system to replace the steam portion of the school with 130°F hot water radiators in the 1949 and 1963 portions of the building, providing an appropriate amount of heating to the space.
- To correct design issues in hot water plumbing to the gym air handling units that is causing excessive pressure drops.

- To establish a boiler configuration, after evaluating the existing boilers and a boiler room suitable for long term maintainability.
- Update of electrical system as it pertains to the project

4. BUILDING SYSTEMS:

- Security: not in project scope
- Public Address: not in project scope
- Technology: not in project scope
- Phone System: not in project scope
- Clocks: not in project scope

5. INTERIOR BUILDING ENVIRONMENT:

- Acoustics: not in project scope
- Lighting: not in project scope
- Windows & Doors: not in project scope

6. SITE DEVELOPMENT:

- Site Acquisitions: not in project scope
- Parking: not in project scope
- Drives: not in project scope
- Walkways: not in project scope
- Outdoor Athletic Fields: not in project scope
- Landscaping: not in project scope
- Site Improvements: not in project scope

7. CONSTRUCTION BONUS REQUESTS:

Eastford Elementary School houses the following special programs eligible for a school construction bonus.

- School Readiness: Yes
- Full Day Kindergarten: Yes
- Lighthouse School: not applicable
- CHOICE: not applicable
- Reduced class size: not applicable
- Regional Vo-Ag Center: not applicable
- Inter-District Magnet School: not applicable
- Inter-District Cooperative School: not applicable
- Regional Special Education Center: not applicable

8. COMMUNITY USES:

Eastford Elementary School is designed for community use during school hours, before and after school hours and on some weekends throughout the school year and summer months. The uses included but are not limited to include:

- PTO
- The Recreation Department
- Summer Enrichment Programs
- Neighborhood and town wide public meetings
- Boy & Girl Scouts
- Community choral and other performing arts programs
- Sports Camp
- Basketball Leagues

Various and sometimes multiple areas are used for these functions.