

Building Dialogue

11/15/2006

Year Open: 1915 Additions: 1924

Square Footage: 43340 Acreage: 362

Moore Elementary School
4510 Linwood**FACILITY MANAGEMENT SYSTEM****Date Dialogue****10/12/2006 Mechanical : Recommendations for HVAC renovation**

Two(2) 3000 MBH hot water recirculation system is proposed to replace the existing steam heating system. Two additional pipe will be added to the existing two-pipe system for steam heating to form a four-pipe recirculation loop. A 350-ton chilled-water system is proposed to provide cooling for the facility. The existing house fan ventilating tempered OA with steam coils in the basement shall be removed. A MAU with cooling and heating coils is proposed to handle the OA ventilation. Unit ventilator with cooling and heating capability are to be used in each classroom, admin. office area, library, computer room, cafeteria, and other areas to provide space cooling and heating. Two packaged rooftop AHUs are proposed to serve the Auditorium and gymnasium respectively. A DDC control system with WEB based Lonworks protocol will provide a efficient and economical operation of the HVAC system.

10/12/2006 Mechanical : Cost estimate for HVAC improvements

The cost estimates are based on rules of thumb for the building size, age, condition and types of usage. Any requirements of asbestos removal are not included in the following estimation:

1. Install two(2) 3000 MBH hot water boilers with recirculation pumps - \$300,000
2. Install 350-ton chilled-water system with chillers, condensers, pumps and a four-pipe setup - \$450,000
3. Install new 4-pipe unit ventilators and piping - \$300,000
4. Install MAU for OA ventilation and ductwork - \$60,000
5. Replacement on make-up air unit for the kitchen - \$25,000
6. Install AHUs to serve auditorium and gymnasium - \$150,000
7. New DDC control system with WEB based Lonworks protocol - \$150,000
8. Demolition and removal allowance - \$50,000
9. Miscellaneous and architectural allowance - \$20,000

10/3/2006 Mechanical : Existing HVAC System

Two(2) Kewanee steam boilers provide low pressure steam for heating throughout the facility. Steam coils are located in the fan room in the basement level where one(1) fans circulate air throughout the entire building. Additional heat are provided through cast-iron radiators located around the perimeter of the building on each floor.

Partial air-conditioning is provided for the office, library and computer room through four(4) packaged rooftop units with DX cooling.

9/8/2006 Doors: Exterior Entrances

Service doors and frames are hollow metal with single glazed plexiglass. Condition good. South side veranda has 6 aluminum doors and frames.

8/30/2006 Asphalt/Concrete : Asphalt

Poor general appearance. North parking lot has weathered and uneven surface with cracking and spalling. Some bio-growth in cracks. 36 cars parking and 2 handicapped stall and signs. Lines are faded and missing. Upper playground exhibits alligatoring, cracking, and uneven surface. Lower playground has rough surface with good markings.

8/30/2006 Asphalt/Concrete : Concrete

Stoops and stairs in good condition.

8/30/2006 Asphalt/Concrete : Playground Equipment

None observed, only marked and unmarked hard surfaces.

8/30/2006 Windows: Windows

Aluminum single hung, single glazed with plexiglass. Interior wood trim and lower level security screens. New south side veranda has aluminum with insulated glazing and metal panels. Some plexiglass clouding was visible.

8/30/2006 Walls : Exterior walls

Stone building in good condition. New veranda on south side- EIFS finish. Stone retaining wall on south side is leaning south slightly. Cut stone cap, sills, lintels and trim with minor staining. Interior side of exterior wall has water staining on north auditorium wall each end. Custodian reports water flowing down the interior stone wall at west end of new south side veranda. Ceiling type is plaster, painted concrete, 2X2 and 2X4 acoustical tile.

8/29/2006 Electrical : General Description

The 50,653 square foot building constructed in 1915 (addition made to it on 1924) is fed by a 1200A Main Entrance Panelboard, and a 225KVA KCP&L transformer (No. JAB941036P) and Metered (Srl. No. 02715058). The Main entrance panelboard seemed to be amply-sized to handle the present load situation. Not much spare capacity is noticed on the panelboard. TVSS is not found as a part of the electrical system. Electrical Room seemed clean by the equipment spacing and clearances did comply with National Electrical Code. It is obvious that the present electrical service needs to be upgraded or a new 480V service might be required if there is any major addition/alteration from the present situation.

In general we are dealing with pendant mounted 34W 4-lamp situations in maximum classrooms. Light fixtures needs to be upgraded with 3-lamp T8 troffers. Gymnasium Lighting needs to be upgraded to either rapid start metal halide fixtures or T5HOs. As a whole lamp replacement and lens clean-up (as necessary) is required to get maximum foot-candle out to the work plane. In general, all the light fixtures are controlled by Toggle Switch. Application of occupancy sensors are required all over the place to comply with the latest codes and standards.

Manual Pull stations found at designated exits. Smoke Detectors found at

7/26/2006 Roofing : Roof Review

Matt Pierce and Glenn Robinson performed a roof review. The roof is in very good condition. Roof can be accessed from multiple doors, area c from window. Monitor base flashing for adhesion. Some mansard tile on roof which is in good condition. Some minor cracking, one ridge cap should be replaced.

