Central Library

The Central Library is a three story building with approximately 46,000 sq. ft. of building space. The Library facility is open Monday through Thursday 9 AM to 9 PM, Friday/Saturday 9 AM to 6 PM, Sunday 1 PM to 5 PM. According to the facility staff, the building temperatures are maintained at 74°F cooling and 68°F heating.

The building mechanical systems were recently renovated in 2000 with new mechanical systems and automation system. The building appears to be in very good shape overall.



Figure 11: Central Library Building

Lighting:

Offices and restrooms were found to contain 4 lamp 2x4 fixtures, hallways contain 3-T8 32 Watt lamp 2X4 fixtures These fixtures were in relatively good condition. Storage areas contained a pendant mounted 250 Watt Metal Halide fixture mounted at 24 feet height.

The outside fixtures consisted of parking lot pole lights, and wall mounted architectural lighting around the perimeter of the building.

Heating and Cooling:

Central Cooling and Heating Equipment:

The Library is cooled by multiple water source heat pump systems that serve single zone areas within the core of the building. Smaller water source heat pump units are used around the perimeter of the building. Both the air handlers and perimeter units provide cooling and heating.

A BAC cooling tower is located on grade behind the Library building, (Model #15146, Serial# U012749901). The cooling tower operates with a constant speed fan to maintain the primary condenser water loop for the building. The primary loop is piped between the cooling tower and a Tranter plate and frame heat exchanger within the main basement mechanical room. The heat exchanger connects the primary and secondary condenser water loops to keep the outside loop separate from the inside loop.

The condenser water is distributed by primary and secondary water pumps. All pumps operate at constant speed with premium efficiency motors.

| PUMP SUMMARY | | | |
|--------------|----------|------------|-------|
| Pump ID | Motor HP | Motor Eff. | Frame |
| 1 & 2 | 25 | 91.7% | 284T |
| 3 & 4 | 15 | 91.0% | 234T |

