

Smith-Boughan, Inc.



Case Study

Lima Library Association

Lima Public Library – HVAC Control System Upgrade

Job# 110118

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Smith-Boughan information

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Solution group	Energy Solutions
Solution offering	Building Automation
Project name / Job#	Lima Public Library / # 110118

Client profile

Client name	Lima Library Association
Division	
Address	650 W. Market St.
City, state, ZIP Code	Lima, OH 45801
Phone number	419.228.5113
Fax number	419.224.2669
Web site address	www.limalibraryassociation.org

Industry	Institutional - Government
Number of employees	
Annual revenue	

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Lima Library Association

Lima Public Library – HVAC Control System Upgrade

Company profile

The Lima Library Association is an independent, non-profit organization dedicated to providing support for the Lima Public Library through mobilization of resources and advocacy. The Association is committed to securing a variety of resources for the Lima Public Library in order to provide excellent facilities, quality, and innovative services to enhance the community's appreciation and utilization of the library as an educational and community resource.

Business situation

It had been nearly 53 years since the original HVAC pneumatic control system installation and The Lima Public Library was faced with escalating costs and unstable environmental conditions that were affecting occupant comfort as well as the preservation of collection/reading materials. Through funding of a House Bill 295 project, the Lima Library Association was presented with the opportunity to address those issues by upgrading the HVAC control system.

Technical situation

Failing components, continual out-of-calibration sensors and controllers, and inefficient operation of the pneumatic control system were all contributing to the unstable environmental conditions within the Library affecting occupant comfort and collection/reading materials.

Solution

Smith-Boughan put their 30 + years of controls expertise to work and replaced the antiquated pneumatic control system with a state-of-the-art Trend Building Automation System. All of the pneumatic components were removed including the air compressor. They were replaced with TCP/IP & BACnet protocol controllers, electronic sensors, control valves, actuators and a fully graphical operator user interface for the client.

The system upgrade regained control of the environmental conditions within the space, eliminating the costly repairs experienced by the old system, and began reducing energy consumption through proper control of the HVAC equipment. With the use of a graphical user interface the client also has the ability to oversee and manage his system operations in addition to being notified if problems should arise....capabilities they did not have previously.

Benefits

- Improved environmental comfort for the occupants of the building.
- Extended life of collection and reading materials within the library.
- Reduction in utility consumption.
- Minimizing energy required to heat or cool the air.
- Reduced maintenance of the building automation system.
- Quicker response - maintenance personnel are notified via mobile devices upon a critical HVAC related alarm.

Products and services your company used

- Trend Controls - Building Automation System products.

- Dell – Workstation PC
- Honeywell – Various components and final control devices.

Services provided by other groups or companies

(None)