

Marion County Correctional Facility

Palmyra, Missouri



Marion County Commission approved a Performance Contract project with CTS for lighting and HVAC improvements to the Marion County Correctional Facility. By redesigning and replacing mechanical and lighting systems with higher efficiency systems, the County will generate a 10% - 15% reduction in energy consumption.

“CTS did everything they said they would do, when they said they would do it, and without interruption of our day to day operation.”

John Waldschlager
Sheriff, Marion County

County Challenges

- The existing lighting used inefficient bulbs and ballasts.
- Condensation was forming on concrete floors due to improper removal of humidity.
- Main temperature controller was obsolete and replacement parts had become unavailable.
- Kitchen heating/cooling system was not on a separate system resulting in wide temperature swings.
- Kitchen make-up air unit had numerous breakdowns.
- Domestic potable hot water heater had frequent failures.
- Prisoner pods had humidity and temperature problems.

Project Overview

CTS developed a cooperative project with the County’s architect and local contractors through the Missouri Performance Contracting legislation to provide program management with a compressed project schedule. The facility’s system modifications consisted of replacing and adding HVAC Systems and Building Automation Systems and upgrading lighting.

- Kitchen area now has a new gas heat/electric cool package rooftop unit. The area is now on its own separate system with its own temperature control and is not tied into other heating and cooling systems.
- Existing aged boilers were replaced with high efficiency condensing hot water boilers along with new circulating pumps.
- Existing aged condensing units were replaced with air cooled condensing units.
- A new fan coil unit was installed for the computer server room.
- The existing temperature control system was replaced with a Web Based Building Automation System (BAS). The non-proprietary BAS is accessible over the Internet from any PC without proprietary software. Marion County is now able to monitor and control temperature from remote locations. This provides the County with the enhanced capability to control temperature and humidity in prisoner pods and offices.
- The existing lighting system has also been upgraded to high efficiency lighting.