



IONIA COMPLEX

MICHIGAN DEPT. OF CORRECTIONS

IONIA, MI



SAFETY RECORD

ZERO Recordable Events



PROJECT SIZE

\$34.5M



PROJECT SCHEDULE

8/1/2014-1/6/2021



CONTRACT METHOD

ESPC



SAVINGS INFORMATION

Energy and operational savings
of over \$2.7M



The Ionia Complex was beginning to face multiple challenges with its' infrastructure. Their central plant was relying on three large steam boilers that were over 40 years old to supply steam to the Michigan Reformatory, Bellamy Creek Dormitory, and the Ionia and Handlon Correctional Facilities. Exiting piping running from the central boiler plant to the facilities was also in poor condition, with numerous leaks. From these issues, Ionia knew they wanted a change. ESG partnered with the Michigan Department of Technology, Management, and Budget to develop an energy savings performance contract that would include building improvements and efficient measures to reduce energy and operating costs.

SOLUTIONS

- Boilers
 - ESG replaced the existing steam heating system with high efficiency hot water boilers and domestic water heaters, thereby eliminating the need for underground steam piping, condensate pumps and steam traps. The boilers allow the facilities to operate more efficiently and independently.
- Lighting Retrofits
 - Lighting retrofits and upgrades –replacing, re-lamping, re-ballasting, and retrofitting existing fixtures –were implemented in all facilities to provide energy efficient lighting.
- Water/Sewer Conservation
 - ESG implemented water/sewer conservation measures to provide standardized water conservation equipment throughout the Ionia Complex. Retrofits included the replacement of 3.5 gallon-per-flush valves with 1.6 gallon-per-flush valves and the replacement of shower buttons with shower sensors. The new systems provide increased efficiency and security, allowing facility staff to control and monitor all plumbing fixtures for lock-down, remote flush, and usage schedules.

RESULTS

From their partnership with ESG the Ionia Complex now has sustainable energy-efficient infrastructure in place and saves over \$2.7M in energy and operational savings.