

# BUREAU OF RECLAMATION

EPHRATA, WA, USA

GOVERNMENT

## FACILITY DESCRIPTION

The Bureau of Reclamation Ephrata Field Office/Warehouse is a four-storey office building housing government employees who are focused on storing and conveying water and providing infrastructure for agricultural development, flood control, municipal and industrial water, and fish and wildlife enhancement.

## PROJECT DETAILS

Reliable Controls Authorized Dealer Skyline Automated Systems Inc., removed the existing control system from this occupied facility and replaced it while working to ensure as little downtime as possible.

The mechanical equipment in the facility includes boilers, cooling towers, circulating glycol pumps, and head pumps. A MACH-ProZone controller with SSL was installed for each of the 29 heat pumps. Another 15 MACH-ProZone controllers were installed to pick up the heat-pump zone return air temperatures, four fresh air fan systems (one per floor), the bathroom exhaust fans, and two humidifiers. Networked hardware includes a MACH-ProWebSys controller with an MS/TP subnet and SSL.

Some of the older heat pumps did not have enough head pressure to actuate their reversing valves, causing compressors to trip on high pressure. Programming through Control-BASIC™ allowed the compressor enough runtime to build up sufficient pressure before switching the reversing valve to cooling. Working closely with the mechanical contractor and management ensured the project was completed in a timely manner.

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### PROJECT TYPE:

**Retrofit**

### INSTALLATION TYPE:

**Boiler, Heatpump, Cooling Tower, Glycol heating loop, Circulating Pumps**

### TOTAL AREA:

**4,875 m<sup>2</sup> (52,474 ft<sup>2</sup>)**

### EQUIPMENT INSTALLED:

**1 MACH-ProWebSys™**  
**1 MACH-ProPoint™**  
**44 MACH-ProZone™**  
**29 SMART-Sensor™**  
**RC-Studio®**  
**RC-Toolkit®**  
**RC-GrafXSet®**

### NETWORK:

**EIA-485, Ethernet**

### INTEGRATION:

**SMTP, BACnet®**

### TOTAL SYSTEM POINTS:

**255 points**

### RELIABLE CONTROLS® DEALER:

**Skyline Automated Systems, Inc.**

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