

Project Overview

The Seaton Paramedics Facility and Training Centre in Pickering is a flagship Durham Region project showcasing climate-forward infrastructure. Built on a provincially provided site, it combines emergency response operations with paramedic training and is designed to the Durham Standard. The facility demonstrates the Region's commitment to sustainable infrastructure, climate leadership, and operational excellence in emergency services.

The Seaton Paramedics Facility is a critical emergency response hub and training centre that advances Durham Region's goals for public safety, climate action, and infrastructure modernization by combining operational readiness with sustainability leadership as a near net zero facility.

Scope

The facility spans 4-acres which includes:

- Fully operational paramedic response station
- Region-wide training centre capable of acting as an Emergency Response Centre
- Integrated Building Automation Systems (BAS) for energy monitoring and performance optimization

Key Features and Innovation

Climate-Forward Design

- Geothermal heating and cooling
- Rooftop solar PV system for heating and cooling
- Zero-carbon design aligned with the Durham Standard for high-performance buildings

Smart Infrastructure

- Advanced BAS for energy monitoring and performance optimization to support operational efficiency and allow for real-time adjustments to energy use
- Designed with robust integrated IT and security infrastructure, backup power systems, and security equipment tailored to paramedic operations

Climate Impact Metrics

- Estimated 70% reduction in GHG emissions compared to Ontario Building Code standards
- Solar PV capacity is equivalent to powering 1,450 LED lights or charging 10 electric vehicles simultaneously
- Geothermal system rated at 58 kW

Design for Future Expansion

- The site layout accommodates future integration of Durham Emergency Management operations. Design work has already been completed to allow seamless expansion when needed

Desired Outcomes & Key Milestones

The Training Centre is a modern, energy-efficient facility that supports high-quality paramedic education while advancing Durham Region's sustainability goals.

The facility is designed to meet the Durham Standard, adopted in 2023, which mandates net-zero carbon construction for all Region-owned buildings.

As a replicable model for sustainable development, the Centre reinforces Durham Region's commitment to resilient, low-carbon communities.

Seaton EMS Facility



Solar at the Facility



EV Charging Station at the Facility



The Facility's Geothermal Glycol Heating



Results & Lessons Learned

The project has already demonstrated significant environmental benefits as noted previously. With three more paramedic stations planned in the next 5-years, the Seaton Paramedic Station will be the prototype for these future builds.