



# Hydro One Leamington Transformer Station

## CLIENT

Hydro One Networks

## LOCATION

Leamington, Ontario

## PROJECT DESCRIPTION

Hydro One is Ontario's largest electricity transmission and distribution service provider. It delivers electricity to nearly 1.4 million predominantly rural customers. This is approximately 26 percent of the total demand for Ontario. In 2015, the company became a publicly traded company on the Toronto Stock Exchange. Though it may seem like a new company, it has a long history. The company dates back more than 110 years to 1906 when the Ontario Legislature established the then Hydro-Electric Power Commission of Ontario (HEPC). Since then, the company has worked to grow and evolve to meet the changing needs of Ontario.

Black & McDonald (B&M) was the general contractor during this project. The station was built because the total load in the area exceeded the loading capacity of the existing stations and transmission lines.



# Hydro One Leamington Transformer Station

## B&M SCOPE OF WORK

Now completed, the station was comprised of two 75/100/125 MVA, 215.5 – 28 kV transformers, eight feeders, one capacitor bank, and switching, protection and metering equipment. Our scope included:

- Site preparation including clearing, grading, drainage, access roads and fences
- Foundation works including yard equipment and bus support structure, PCT building and any other temporary foundation or support required during construction
- Installation of the two transformers (Hydro One procured and supplied the transformers)
- Procurement and installation of all electrical equipment and accessories
- Procurement and installation of substation grounding grid and above grade ground connections
- Procurement and installation of substation materials including cable raceway systems, trenches, conduits, cable raceways, duct banks, and accessories
- Procurement and installation of substation lighting complete with accessories
- Procurement and installation of the PCT building complete with P&C panels, building electrical and mechanical equipment and all materials and cables from a Hydro One approved PCT building vendor
- Procurement and installation of metering equipment, material and cables
- Procurement and installation of telecommunication equipment, material and cables
- Procurement and installation of the equipment and bus support structural steel and platforms for major electrical equipment and PCT building
- Site acceptance testing and checks, documentation including test report and O&M manual

## BENEFITS TO CLIENT OR PROBLEM SOLVED

When Hydro One needed to build a vital transformer station as part of its key infrastructure to keep the lights on in rural Ontario, it called on Black & McDonald to handle the job with ease and professionalism.