

Durham Region Administrative Facility

Acoustical Engineering for a Multi-Department Regional Headquarters in Whitby

VISION

A consolidated regional headquarters where diverse departments—from administrative offices to active courtrooms and police services—each benefit from an acoustic environment suited to their specific function.

PARTNERSHIP

Full-scope acoustical engineering services delivered in collaboration with Brisbin Brook Beynon Architects and EllisDon, addressing the acoustic complexity of a six-storey facility serving 13 Regional departments.

VALUE-ADD

Noise control for generators and cooling towers, sound isolation across office and courtroom environments, and interior acoustics design—ensuring the building performs to the standard required of a major regional civic institution.

CLIENT

Regional Municipality of Durham

ARCHITECT

Brisbin Brook Beynon Architects

GENERAL CONTRACTOR

EllisDon

ACOUSTICAL DESIGN

Trinity Consultants Canada

The Durham Region Administrative Facility at 605 Rossland Road East in Whitby is the \$58-million headquarters of the Regional Municipality of Durham. Designed by Brisbin Brook Beynon Architects and constructed by EllisDon, the six-storey office tower consolidates 13 Regional departments under one roof, including the administrative offices of the Durham Region Police Services. The facility also incorporates five courtrooms and associated support areas serving the Provincial Offences Act courts of Durham Region.

Trinity Consultants Canada provided a full range of acoustical engineering services for the project. The combination of open-plan regional offices, police administration, and active courtrooms within a single facility created a broad and demanding acoustic scope—one that our team addressed through noise control, sound isolation, and interior acoustic design.

VISION

Durham Region's decision to consolidate its administrative functions into a single purpose-built headquarters reflected a commitment to operational efficiency and civic presence. Bringing 13 departments together—including Durham Region Police Services—alongside the Regional POA courts created a facility with a wide range of acoustic requirements. Courtrooms demand strict speech intelligibility and sound isolation. Police administration requires acoustic privacy. Open-plan offices need appropriate background noise levels and speech privacy. Each function had to be addressed within the constraints of a single integrated building.

The facility's mechanical infrastructure added further acoustic complexity. Generators and cooling towers serving a building of this scale require careful noise control, both to protect the acoustic environment within the building and to meet noise limits at the property boundary. The acoustic vision for the project was to deliver a facility where every department could operate effectively, without acoustic interference from adjacent uses or building systems.

PARTNERSHIP

Trinity Consultants Canada was engaged to provide acoustical engineering services across the full scope of the project. Our team worked in collaboration with Brisbin Brook Beynon Architects and EllisDon, contributing acoustic input to the design of spaces ranging from courtrooms and police offices to open-plan administrative floors and mechanical plant areas.

The diversity of the programme—civic, judicial, and law enforcement functions within a single envelope—required a coordinated approach to acoustic zoning and assembly design. Our team developed recommendations that addressed each programme element on its own terms while ensuring that the acoustic performance of the building as a whole met the requirements of a major regional civic facility.

VALUE-ADD

Noise control for major mechanical equipment was a significant element of our scope. Generators and cooling towers serving a six-storey regional headquarters produce substantial noise, and our team developed recommendations for equipment selection, enclosure, and treatment to meet applicable limits both within the building and at the property boundary. Ensuring that mechanical noise did not compromise the acoustic environment in sensitive spaces—particularly the courtrooms and police offices—was a primary design objective.

Sound isolation between spaces was addressed across the building's diverse programme. The adjacency of courtrooms, offices, meeting rooms, and support areas required careful design of separating assemblies to ensure that activities in one area did not intrude on another. Courtrooms, in particular, require a high degree of sound isolation to support the proper conduct of legal proceedings under the Provincial Offences Act.

Interior acoustics design was applied to the courtrooms and key meeting and office spaces to ensure that reverberation conditions and background noise levels supported speech clarity and communication. The completed facility provides the Regional Municipality of Durham with a headquarters that functions effectively for all 13 departments it houses, with an acoustic environment suited to the full range of civic, judicial, and administrative activities it accommodates.

ABOUT TRINITY CONSULTANTS

Trinity Consultants, a leading global environmental consulting firm, provides services and solutions in the EHS Regulatory Compliance, Built Environment, Life Sciences, and Water & Ecology markets. Founded in 1974, Trinity has the technical expertise, industry depth, and capabilities to help clients achieve their goals across the natural and built environments.

