

Connecting People *and Places*

Buildings





Cover / Royal Ontario Museum, Toronto, ON;
Above / Isabel Bader Theatre, Kingston, ON

Are the buildings we design today ready for the complex challenges of tomorrow?

URBANIZATION. CLIMATE CHANGE. SUSTAINABILITY.

Can the buildings we design today address solutions to the problems of air pollution, noise, greenhouse gas emissions, overcrowding? Can we design buildings that minimize risk and are that are resistant to costly damages throughout their lifecycle? Can the materials, technologies and processes we use today across a building's lifecycle impact future generations?

Our building experts understand the challenges we all face and the complexities associated with designing and delivering services for all types of buildings across our unique and ever-changing Canadian landscape. A world-leading consultancy, we have successfully delivered some of the most spectacular and iconic buildings projects in Canada and around the world.

We tackle these challenges with a whole-project approach. More than just experts in buildings, we are complemented by a wide-array of services including civil engineering, urban planning, environmental science and planning, landscape architecture, and transportation and traffic engineering. With this breadth of talent and in-house experience, our team is able to anticipate, quickly identify, and solve the many technical challenges we encounter daily on our projects; our firm's diverse mix of projects and personal experience are drawn upon to provide valuable insights into the design, construction, and delivery processes.

Integrated design team

With strong core services, we also provide a wide range of specialty services across the building life cycle – forming teams that are able to deliver solutions tailored to our client's specific needs.

Local expertise, global depth

With experts in over 150 offices across Canada, we are part of global team that delivers iconic buildings around the world.

Simple to complex

We can do anything. From the tallest buildings to the smallest of projects, we help our clients find value no matter the complexity of their project.

Delivering on all project procurement models

Infrastructure funding has changed and with that, so have the methods projects are procured and delivered. From Design-Bid-Build to Public-Private Partnerships, we understand the intricacies of navigating through this landscape and are the engineering partner-of-choice.

Our commitment to sustainability

Beyond living this commitment, we deliver trend-setting sustainable buildings to benefit future generations.

Future ready thinking

Mindful of the growing awareness related to issues such as diminishing resources, global warming, changing demographics and advancing technologies, our client interactions focus on today's reality as well as future requirements.

01



02



03



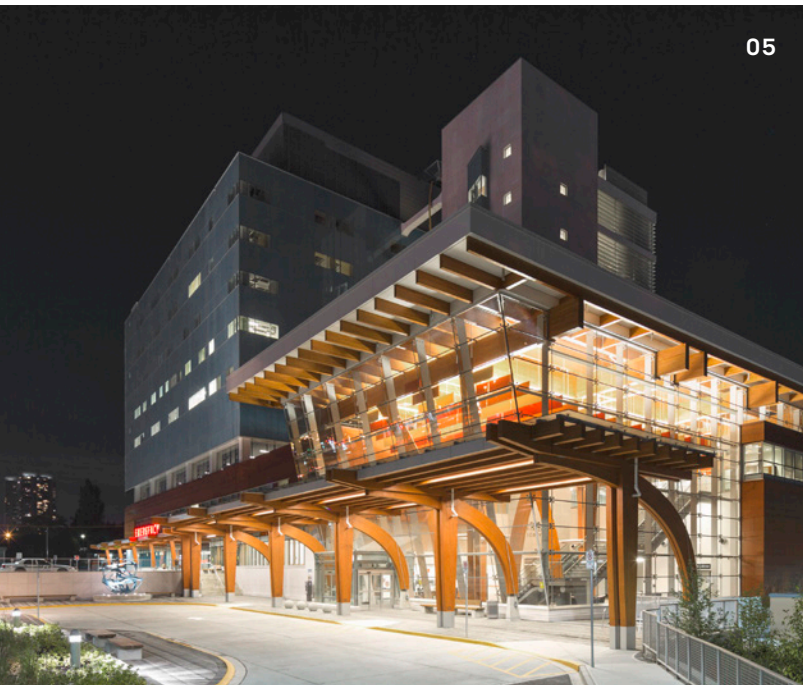
06



04



05



1,700

**Buildings Professionals
across Canada**

#1

**Best Services Engineer
(World Architecture 100)**

46

**of Canada's top 100
Infrastructure projects**

500+

**LEED® Certified
Projects across Canada**

Clockwise from top left:

01 / The Shard, London, UK; **02** / Fairmont Chateau Lake Louise, Lake Louise, AB;
03 / Union Pearson Express Platform and Waiting Lounge, Toronto, ON; **04** / One World Trade Center, New York, USA;
05 / Surrey Memorial Hospital, Surrey, BC; **06** / Videotron Centre, Quebec City, QC



Main Services

BUILDING SCIENCES

Enclosure engineering
façades and roofs

Property condition assessment

Condominium and strata assessment

Repair and renewal

Forensic and dispute resolution

Recommissioning

MECHANICAL & ELECTRICAL ENGINEERING

Heating, ventilation,
air conditioning (HVAC)

Building automation systems (BAS)
and controls

Electrical service and distribution

Renewable energy technologies

Emergency and standby power

Plumbing design and engineering

Lab and medical gas systems

Tenant fit-out

PROJECT MANAGEMENT

Pre-development
and development services

Program and project management

Strategic advisory services

Commercial management

Project readiness

Construction services

Engineering and design management

STRUCTURAL ENGINEERING

New structures

Additions and renovations

Value engineering and peer review

Security and blast design

Structural glass design

Seismic engineering

Wind engineering

Wood and timber engineering

SUSTAINABILITY & ENERGY

Sustainability strategy

Green building benchmarking
– LEED, GRESB

Building performance

Measurement and verification

Commissioning

Net zero

Energy management

Facility management

WELL Building Standard

TELECOM & TECHNOLOGY

Access control systems

Emergency communications systems

Network systems

Physical and electronic security

Surveillance systems

Structured cabling systems

Telecom infrastructure design

Wireless infrastructure implementation



Specialized Services

BIM

Parametric modeling
2D/3D modeling for design support
Simulation, design validation and review
Multi-disciplinary collaborative work processes

FIRE PROTECTION ENGINEERING

Fire and building code consulting
Sprinkler design
Fire alarms and security

FOOD SERVICE DESIGN

Auditing, strategic planning and budget estimates
Food service planning
Refrigeration and exhaust system design
Procurement management
Laundry and waste management

LIGHTING STUDIO

Architectural lighting design
Exterior façade lighting
Landscape and site lighting
3D computer modeling, rendering and analysis
Lighting control design and programming

SECURITY

Threat and risk assessment, security audit and program planning
Design and implementation of architectural, physical and electronic mitigation measures
Organizational integration of security
Project management

Sectors

Commercial
Cultural
Education
Government
Healthcare
High Rise
Hospitality
Industrial Buildings
Master Planning & Urban Development
Mission Critical Facilities
Residential
Retail
Science & Technology
Sports & Stadia
Tenant Interiors
Transport Buildings



Canadian Museum of Nature, Ottawa, ON

WSP is uniquely able to deliver an integrated design package across the building lifecycle – one that both satisfies current needs of our clients and is Future Ready.

Terry Tommason

Senior Vice-President, Buildings, WSP



WSP™ is one of the world's leading professional services consulting firms. We are dedicated to our local communities and propelled by international brainpower. We are technical experts and strategic advisors including engineers, technicians, scientists, project managers, planners, surveyors and environmental specialists, as well as other design and program management professionals. We design and deliver lasting solutions in the Buildings, Transportation, Infrastructure, Environment, Geomatics, Energy, Resources and Industry sectors as well as project delivery and strategic consulting services. With over 8,000 talented people across Canada and 42,000 globally, we engineer projects that will help societies grow for generations to come.

