

A searchable database of CEA member companies and their fields of specialization is available online at

CEA.ca

Reference Guide 2023

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Fields of Specialization

- 1. Aerospace
- 2. Agriculture
- 3. Building Science
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- 6. Computer Science
- 7. Electrical
- 8. Energy
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- 10. Export
- 11. Fisheries
- 12. Forensic 13. Forestry
- 14. Geotechnical
- 15. Industrial
- 16. Marine & Coastal
- 17. Materials
- 18. Mechanical 19. Mediation
- 20. Mining Engineering
- 21. Municipal
- 22. Occupational Health 23. Petroleum Engineering
- 24. Planning
- 25. Pressure Vessels
- 27. Research
- 28. Structural Buildings

26. Project Management

- 29. Structural Other
- 30. Surveying 31. Temporary Works
- 32. Transportation



CEA and its members can assist municipalities in asset management to ensure the right money gets spent on the right projects at the right point in time.

As the matrix shows, while engineering decign is a major

engi com of C prov fron phas	ineering design is a major apponent of the capabilities EEA members, they can vide advice and assistance in the financial pre-feasibility se of projects through to appletion and beyond.	AECOM	Akron Engineering Consultant's Group Ltd. Al-Terra Engineering (Red Deer) Ltd. Al-Terra Engineering Ltd. Almor Testing Services Ltd.	Aplin Martin Arrow Engineering Inc. Associated Engineering	Barr Engineering & Environmental Science Canada Ltd. Binnie Consulting Ltd. RDTEC Engineering 144	CIMA Canada Inc. (CIMA+) Clifton Engineering Group Inc.	COWI North America Ltd. CTM Design Services Ltd. CVL Engineers Inc.	D.E.S. Engineering Limited DIALOG Dillon Consulting Limited	Eagle Engineering Corp. EHAN Engineering Ltd.	Englobe Corp. Entuitive Corporation EXP Services Inc.	Fast + Epp GeoMetrix Group Engineering Ltd.	Great Northern Engineering Consultants Inc.	Hawk's Aerial and Technical Solutions Inc. HDR Corporation	Hedgehog Technologies Howe Gastmeier Chapnik Limited (HGC Engineering)	Invistec Consulting Ltd. ISL Engineering and Land Services Ltd.	J. R. Paine & Associates Ltd. Jacobs Kerr Wood Leidal Associates Ltd.	Klohn Crippen Berger Ltd. LEX3 Engineering Inc.	M2 Engineering Magna IV Engineering, Inc. McElhanney Ltd.	McIntosh Perry MCW Hemisphere Ltd. MNA Quality Consulting Ltd.	Mortison Hershfield Limited Mott MacDonald Canada Limited	MPE Engineering Ltd. Northwest Hydraulic Consultants Ltd.	OGL Engineering Parsons Inc.	Patching Associates Acoustical Engineering Ltd. PBX Engineering Ltd.	ReLumen Engineering Inc. RJC Engineers	Koseke Engineering Ltd. Sameng Inc. Scheffer Andrew Ltd.	SE Design and Consulting Inc. SMA Consulting Ltd. Smith + Andersen	SMP Engineering SNC-Lavalin Inc.	SolidEarth Geotechnical Inc. Stantec Consulting Ltd. Stephenson Engineering Ltd.	T2 Utility Engineers Inc. Tetra Tech Canada Inc.	Inurber Engineering Ltd. TWD Technologies Limited Urban Systems Ltd.	V3 Companies of Canada Ltd. Wave Engineering Consultants Inc. WSP WSP E&I Canada Limited
	Agricultural Engineering/Agrology Agricultural Environment Organic Waste Disposal in Rural Areas Drainage Studies/Surveys			•						•	•			•	•	• •				•	•				• •	•		• •	• (• •	• •
<u>a</u>	Draining and Irrigation Systems/Networks Farm Buildings Farm Machinery and Equipment	•		• •			•									• •	•			•	• •	•			• •			•		•	• •
Agricultu 7	Farmland Resources: Survey and Improvement Works Food Processing and Storage Grains & Feeds: Drying, Cleaning, Handing, Processing and Storage			•																•	•				•			•		•	•
	Irrigation Land Drainage Nutrient Management		•	• • •	•	•	•			•				•	•	• •				•	• •	•			• •	•	•	•		•	• •
	Rural Planning and Development Water and Soil Conservation Engineering Acoustics			• • •		•		• •		•	•	•		•	•	• •	•				•	•	•		• •	•		•	•	• •	• •
	Architecture Building Code QP			•		•	•	• •)	•			•)	•				•	•						•	0 0		•	• •
9	Capital Planning Ergonomics Fire Protection/Prevention	•		• •		•	•	• •)	•						•		•	•	•	•			•		•	• • •	•	•	•	• •
ding Scien	Indoor Air Quality Inspections/Investigations Preliminary/Final Design	•		• •		•	• •	• •		• •	0 0		•			•				•	•			• •				• • •	• (• •	• •
Buik	Registered Code Agency Repair/Restoration Residential	• (•		•	•	• •)	• •	•		•		•	•				•	•			• •			•	•			• •
	Roofing and Waterproofing Technical Audits Walls and Cladding	•	•	• •			•	• •		• •	•		•		•				•	•	•		•	• •		•	•	• • •	• (•	•
gal	Windows Desalination Food Processing	•					•	• •		• •	•				•	•				•	•		•	•				•		•	•
Chemic Chemic	Plastics Process Design Synthetic Fibres				•							•				•												•	•	•	•
comm.	AM/FM Broadcasting Data Transmission Systems Fibre Optics	_		•		•		•				• •		•		•		•		•	•			•			•	•			• •
mm./Telec	Program Production Facilities Terrestrial and Satellite Links			•		•								•)	•			•	•	•			•				•			•
3	TV and CATV Wireless Systems Client/Server			• •		•		•			•	• •		•		•		•	•	•	•			•		•	•	•			• •
Science	Computational Mechanics Controls Database Management			•		•						• •	•	•	•	•		•			•					•		•			• •
Computer	Ergonomics Internet/Intranet Process Automation			•		•		•			•	_	•	•	•			•		•	•		•					•	•		• •
	Robotics Software Development Alarm and Security Systems	• (•		•	•	• •			•	•	•	•	•			•	• •	•	•		•	•		•	•	•	•	•	•
cal	Building Codes QP Building Systems Energy Conservation		•	• •		•	•	• •				•		•		•		•	• •		•		•	•				•	•	•	• •
Electri	Illumination and Lighting Motors and Generators Power Transmission and Distribution	•	•	• •		•	•	• • •				• •	•	•	•	•		•	• •	•	•		•	•		•		•	•	•	• •
	Registered Code Agency Residential Biomass/Wood			•	•	•		•					•	•)	•		•	•	•	•					•	•	•		•	0 0
	Coat Processing/Transportation Cogeneration District Heating and Co-Generation			• •		•		•			•	•	• •	• •)	• •		•	•	•	•						• •	•		• •	• •
	Electric Power Generation - Hydroelectric Electric Power Generation - Nuclear Electric Power Generation - Thermal			•	•	•		•			•	•		•		• •		•			• •						•	•	• •	•	• • •
Energy 8	Electric Power Systems Analysis Energy Conservation Oil & Gas Pipelines	•		• •		•		•)	•		• •	•	• •		• •	_	•	•	•	•		•	•			• •	•	•	•	• • •
	Oil & Gas Production/Storage/Distribution Oil & Gas Refineries/Processing Plants Solar Energy			• •	•	•	• •	•)	•		• •	•	•		•	•	•		• •	•		•	•			•	•	• •	• •	• • •
	Steam Power Generation Wind Energy			•	•	•	•	•		•		•		•		• •		•		• •	•		•				•	•	•	•	• • •
	Air Quality Management Environmental Assessments Environmental Litigation Support	•	•	•		•		•		•)		•		• • •	•	•	•	•	•	•			•		•	• •	•	•	• •
ıtal	Environmental Site Assessments and Audits Groundwater Resources/Hydrogeology Industrial Hygiene and Safety	•	•	•	•	•		•)	•			•	•		•	•	•		•		•			•		•		• •	•	• •
vironmen 6	Industrial Wastewater Treatment Laboratory and Treatability Studies Mould Studies	_	•		•	•		•		•			•		•	• •	•	•		•	•	•						•	•	•	• •
	Noise and Vibration Record of Site Condition Risk Assessment	•		•	•	•		•		• •		•		•		•	•	•		•	•	•	•			•	•	• •	•		• •
	Solid/Hazardous Waste Management Surface Water Resources Underground Storage Tank Management	•	•	• •	•	• •	•	•		•			•		•	• •	•	•		•	•	•			•	•	•	•	•	•	• •
	Africa - East Africa - North Africa - South			•																							•		•	•	• •
	Africa - West Asia - SE Australia	•										•					•	•			•							•	•	•	• •
	Caribbean Central America China	•		•							•			•			•	•		•				•			•	•	•	•	• •
xbort 10	Europe - East Europe - North Europe - West	•														•	•							•					•	•	• •
	Indian Subcontinent Japan Mexico													•			•	•			•			•				•			• •
	Middle East New Zealand Polar Regions	•		•							•					•	•	•						•			•	•	•	•	• •
	Polynesia Russian Federation	•															•												•		• •
	South America United States Fish By-products: Processing	•	•	•		•								•			•	•		•	•		•	•			•	•	•	•	• •
leries	Fish Processing/Storage Fishery Resources: Evaluation, Development, Operations, Aquaculture Fishing Vessels Gear/Equipment			•				•					•			•	•	•									•				• •
Fisher 11	Marine Biology and Oceanography Monitoring, Control and Surveillance (MCS) Naval Architecture and Boat Construction			•				•					•				•												•		• •
	Remote Sensing Accident Reconstruction Cladding Failures	•	•							•										•				•				•			•
orensic 12	Electrical/Mechanical Failures Fires and Explosions Investigation and Settlement of Claims	•	•	• •		•		• •		• •			•			•		•		•				•			•	•			•
	Process Support Facilities Product Failures and Liability Structural Failures	•	•		• •					• •						•				•		•		•			•	•		•	•
	Wind and Water Damage			•			•	•		• •										•				•				•			•





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CEA members, they can provide advice and assistance from the financial pre-feasibility phase of projects through to completion and beyond. Building Materials: Plywood, Lumber Manufacturing, etc.	AECOM	Akron Engineering Consultant's Groi Al-Terra Engineering (Red Deer) Ltd. Al-Terra Engineering Ltd.	Almor Testing Services Ltd. Aplin Martin	Arrow Engineering Inc. Associated Engineering	Barr Engineering & Environmental Sc Binnie Consulting Ltd.	BPTEC Engineering Ltd. CIMA Canada Inc. (CIMA+)	Clifton Engineering Group Inc.	CTM Design Services Ltd. CVL Engineers Inc.	D.E.S. Engineering Limited DIALOG	Dillon Consulting Limited Eagle Engineering Corp.	EHAN Engineering Ltd. Englobe Corp.	Entuitive Corporation EXP Services Inc.	Fast + Epp GeoMetrix Group Engineering Ltd.	GHD Limited Great Northern Engineering Consult	Hatch Hawk's Aerial and Technical Solution	HDR Corporation Hedgehog Technologies	Howe Gastmeier Chapnik Limited (F	Invistec Consulting Ltd. ISL Engineering and Land Services Lt	J. R. Paine & Associates Ltd. Jacobs	Kerr Wood Leidal Associates Ltd. Klohn Crippen Berger Ltd.	LEX3 Engineering Inc. M2 Engineering	Magna IV Engineering, Inc. McElhanney Ltd.	McIntosh Perry MCW Hemisphere Ltd.	MNA Quality Consulting Ltd. Morrison Hershfield Limited	Mott MacDonald Canada Limited MPA Engineering Ltd.	MPE Engineering Ltd. Northwest Hydraulic Consultants Lt	OGL Engineering Parsons Inc.	Pasquini & Associates Consulting Ltc	PBX Engineering Ltd. ReLumen Engineering Inc.	RJC Engineers Roseke Engineering Ltd.	Sameng Inc. Scheffer Andrew Ltd.	SE Design and Consulting Inc.	Smith + Andersen	SNNF Engineering SNC-Lavalin Inc. SolidFarth Geotechnical Inc.	Stantec Consulting Ltd. Stanhenson Engineering 1 td	Stephenson Engineering Ltd. T2 Utility Engineers Inc.	Thurber Engineering Ltd.	Urban Systems Ltd.	Wave Engineering Consultants Inc.	WSP WSP E&I Canada Limited
Forest Harvesting Forestry Forestry Engineering Pulp, Paper and Fiber Board Pulp/Paper Plants, Products Timber Engineering Timber Grading, Wood Species Identification, Wood Damage Assessment				•		•				•												•		•										•	•		•		•	•
Earth Structures Foundations Laboratory Testing Site Investigations Soil and Rock Mechanics Soil Stabilization		•	•		•	•	•	•		•	•	•		•	•				• • • • • • • • • • • • • • • • • • •	•		•				•				•				0 0		•				• • • • • • • • • • • • • • • • • • •
Ergonomics Hydraulic Engineering Machine Design/Analysis Manufacturing Facilities Materials Handling Materials Storage				• •	•	•		• •		•					•	•	•	•	•			•		•		•		•		•		•	•		•	•			•	•
Plant Maintenance Product & Process Design Prototyping and Product Development Time Motion Studies Transportation/Automotive Equipment Erosion Protection				•		•			_	•					•	•	•		•			•		•		•	•	•		•		•			•)	•	•
Marinas Ports and Terminals Underwater Surveys Waterfront Planning Analysis		•		•		•	•			•	•	•		•	•	•	•	•	•			0 0 0			•	•	•	•		•	•			•	•		•	•		
Corrosion Control and Remediation Design and Selection Quality Issues Specifications and Manuals Testing and Certification Welding Building Codes QP		•	•		•	•	•			•		•								•		•						•		•										
Computational Fluid Dynamics Computer Aided Engineering Cranes and Derricks Finite Element Analysis Fire Protection Systems Heating, Ventilation and A/C		•		• •	•	•		•	0					•	•	•	•		•		•	•	•	• •		•							•	•	•					•
Machine Design Plumbing and Piping Refrigeration Registered Code Agency Residential Software Development		•		• •	•	•		•	•						•	•		•	•				•	• •		•							•		•)		•
19 Mediation and Alternative Dispute Resolution Blasting Control Iron and Steel Works - Rolling/Casting/Forging/etc. Metallurgy Extractive - Ferrous Metals Metallurgy Extractive - Non-Ferrous Metals Metals/Minerals/Ore Dressing Non-Ferrous Metals - Fabricating/Rolling/Casting/Extruding/etc.						•									•					•		•												•	•)			•
Open Pit/Underground Mining Infrastructure Rehabilitation Residuals Management Roads and Street Stormwater Management Wastewater Collection, Treatment and Disposal		• • •	• •	• •	• •	•	•	•		• •	• •	•	•		•	•	•	• • • • • • • • • • • • • • • • • • •	•	• •	•	• • • • • • • • • • • • • • • • • • •		•	•	•	•	• •	•	•	• •	• •		• • •	•					• •
Wastewater Management Water Supply, Treatment and Distribution Area Classifications - Electrical Area Classifications - Hazardous Area Classifications - Industrial Pre-Start Health and Safety Reviews			•	•	• •	•		•			•	•		•	•	•		• •	•	• •	•	• •		•		•	•		•	•	• •	•			•	• •	•	•		• •
Acquisitions and Divestitures Evaluations Expert Witness Exploration Feasibility Studies Oil and Gas Production/Storage/Distribution		•			•	•		•		•				•	•	•				•					•										•)		• •
Reservoir Engineering Well Test Analysis Drainage Studies Industrial Parks Land Use Site Plans			•	• •	• •	•	•	•	0	•		•		•	•	•	•	• • • • • • • • • • • • • • • • • • •	•	• •		•	•	•	•	• •	•	•		•	0 0 0 0 0			•	•		•	0 0		
25 Subdivision Plans Urban and Rural Design Design Modification Process Piping Design Buildings Construction Management		•	•	• •	•	•		• •	•		• •	• •	•	•	•	•	•	• • •	•	•	• •	• •	•		•		•		•	•	0 0				•	_				• •
Construction Quality Control Contract Administration Management of Design Other Procurement Management Project Control and Risk Management Related Management Services			•	• •	•	•	•	• •	•		•	•	•	•	•		•	• •	•	• •	• •	•		•	• •	•	•		•	• •				•	•					• • • • • • • • • • • • • • • • • • •
Sewers and Water Telecommunications Transportation Value Engineering Feasibility Studies Technological Assessment		• • •	•		• •		0 0	•	•		• •	• •		•		•	•	• •	• •	•	•	•		•	• •	•	•	•	•	•	• •				•				•	• • •
Commercial Foundations Highrise Industrial Inspections and Investigations Institutional		•		•	•	• • • • • • • • • • • • • • • • • • •	•	• •	0	•		•	• • • • • • • • • • • • • • • • • • •	•	•	•		•	• •	•	•			•	•	•		•		•				•)		• • •
Lowrise Parking Facilities Residential Restoration and Repair Seismic Retrofit		•		•		• •		• •	•	•		• •	0 0 0	•	•			0	•		•		•	•	•	•		•		•				•	0 0					• •
Bridges Bunkers and Silos Dams and Locks Nuclear Tanks and Shells Towers		•		•	•	• •	•	•		•		•	•		•	•		•	•	•	• •	•	•		•	• •	•			• •				•	•)		•
Tunnels Aerial Photography: Photogrammetry/Photo Interpretation/Cartography Construction Layout Surveys Geographic Information Systems Remote Sensing/Satellite Data Interpretation/Imagery Resource Surveys		• • •		•	•	• •		•		•		•		•	•		•	0 0 0	•	•	•	•	•	•	•	•	•	•		•	0 0			•	•	0 0				
Topographic Surveys Excavation Enclosures Formwork Lifting and Moving Scaffolding Structural Shoring		•	•			•		•	•	•		•	•		•		•	•		•		•		•			•	•		•	0 0				•					•
Airports Highway and Road Safety Intelligent Transportation Systems Long Distance Rail Pavement Design Pavement Management Services Ports and Harbours		• • •	•	•		•	•	•	•	•	•		•	•	•	•	•	•	• •	•		•	•	•	•	•	•			•	•	•			•	0 0		•		
Ports and Harbours Roads and Highways Terminals and Service Centres Traffic Engineering and Control Transportation Planning Urban Public Transport		• • •		•	•	• • • • • • • • • • • • • • • • • • •		•	•		•	• • • • • • • • • • • • • • • • • • •		•	•	•	•	• •	• •	•		• • • • • • • • • • • • • • • • • • •	•	•	•	•	•	•	•	•	•		•	•	•	•		• •		• • • • • • • • • • • • • • • • • • •