

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

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Reference Guide 2024

Consulting Engineers of Alberta members offer a wide range of services to assist their clients toward their ultimate goals. The following matrix provides a simple, easy-to-use guide to help clients in the initial selection of an appropriate consulting engineering firm.

Fields of Specialization

- 1. Aerospace
- 2. Agriculture
- 3. Building Science
- 4. Chemical Engineering
- 5. Communications/ **Telecommunications**
- 6. Computer Science
- 7. Electrical
- 8. Energy
- 9. Environmental
- 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.

engi com of C prov from phas	ne matrix shows, while neering design is a major ponent of the capabilities EA members, they can ride advice and assistance in the financial pre-feasibility se of projects through to apletion and beyond.	AECOM Akron Engineering Consultant's Group Ltd.	Al-Terra Almor Testing Services Ltd. Aplin Martin Abtus Engineering Ltd.	Aptus Engineering Ltd. Arcadis Associated Engineering AtkinsRéalis Canada Inc.	Binnie Consulting Ltd. BPTEC Engineering Ltd. CIMA Canada Inc. (CIMA+)	COWI North America Ltd. CTM Design Services Ltd. CVL Engineers Inc.	DE.S. Engineering Limited DIALOG Dillon Consulting Limited Eagle Engineering Corp.	Egis EHAN Engineering Ltd. Englobe Corp. Entuitive Corporation Envirogeotech Consulting Inc. EXP Services Inc.	FVB Energy Inc. GeoMetrix Group Engineering Ltd. GHD Limited Hatch Hawk's Aerial and Technical Solutions Inc. HDR Corporation	Howe Gastmeier Chapnik Limited (HGC Engineering) 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 Engineering Services Inc. Magna IV Engineering, Inc. McElhanney Ltd. MCW Hemisphere Ltd.	Morrison Hershfield Limited Mott MacDonald Canada Limited MPA Engineering Ltd. MPE a division of Englobe Northwest Hydraulic Consultants Ltd.	OGL Engineering Parsons Inc. Pasquini & Associates Consulting Ltd. Patching Associates Acoustical Engineering Ltd.	PBX Engineering Ltd. RJC Engineers Sameng Inc. Scheffer Andrew Ltd.	SE Design and Consulting Inc. SMA Consulting Ltd. Smith + Andersen SMP Engineering	SolidEarth Geotechnical Inc. Stantec Consulting Ltd. Stephenson Engineering Ltd.	T2 Utility Engineers Inc. Tetra Tech Canada Inc. Thurber Engineering Ltd. TWD Tachnologies I imited	I WD recomposes uninted Urban Systems Ltd. V3 Companies of Canada Ltd. Wave Engineering Consultants Inc.
	Agricultural Engineering/Agrology Agricultural Environment Organic Waste Disposal in Rural Areas			•					•			•				•		
	Drainage Studies/Surveys		• • •	• • •				• • •		• • •		• • •	•	• •	•	•	• •	•
	Draining and Irrigation Systems/Networks Farm Buildings	•		•		•		•		• • •	•	• • •	•	• •		•	•	•
ture	Farm Machinery and Equipment Farmland Resources: Survey and Improvement Works											•		•			•	
Agricultu	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	•			•		•		•			•			•	• •		
	Capital Planning Ergonomics	• •			•		• •	• •	•	•		•		•		• •	•	
auce	Fire Protection/Prevention Indoor Air Quality	• •		• •	•	•	• •	• •	• •		• •				• •	• •	• •	•
ing Scie	Inspections/Investigations Preliminary/Final Design	• •	•	• •	•	• •	• •	0 0 0	0 0 0	•	•	• •		•	• •	• • •		
Buildir	Registered Code Agency	•						•								•		
	Repair/Restoration Residential	•	•	•	•	•	• •	0 0 0	•	• •		• •		•		• •		•
	Roofing and Waterproofing Technical Audits	• •		•		•	• •	• • •	•	•	•	• •		•	• •	• •	• •	
	Walls and Cladding Windows	• •				•	• •	0 0	•	•		• •	•	•		• •		
	Desalination								•	•						•		
4	Food Processing Plastics									•						•	•	
5	Process Design Synthetic Fibres								•	•						•	• •	•
Ë	AM/FM Broadcasting Data Transmission Systems	•		• •	•		•			•	• •	•			•	•		•
elecon	Fibre Optics Program Production Facilities	•		• •	•		•		•	• •	• •	•				•		•
nm./T	Terrestrial and Satellite Links				•					•	•	•				•		
Ö	TV and CATV Wireless Systems	•		• •	•			•	•	• •	• •				•			•
	Client/Server Computational Mechanics			•	•		•		• •	•	•	•			•	•		
cience	Controls Database Management			•	•				• • •	• •	•	•			•	•		•
of the Science of the	Ergonomics																	
Сотр	Internet/Intranet Process Automation			• •	•		•		• •	• •	•	•		•		•	•	•
	Robotics Software Development			• •						•	•	•		•	•	•		
	Alarm and Security Systems Building Codes QP	• •		•	•	•	• •	•			• •	• •		•	• •	•	• •	
	Building Systems Energy Conservation	• •		• • •	•	•	• •	•		• •	0 0			•	• •	•	• •	•
ectric 7	Illumination and Lighting	• •		• • •	•		• • •	•	•	• •	• •	• •		•	• •	•	• •	•
	Motors and Generators Power Transmission and Distribution	• •		• • •	•	• •	• • •	•	• •	• •	• •				• •	•	•	
_	Registered Code Agency Residential	•		•			•	•			•	• •			• •	•	•	•
	Biomass/Wood Coat Processing/Transportation	•		•	•		•	•	• • •	•	•	•				•	• •	
	Cogeneration			• •	•			•			•	•			•	•	•	•
	District Heating and Co-Generation Electric Power Generation - Hydroelectric			• •	•		• •	•	• • • •	• •	•	• •			•	•	• •	•
>	Electric Power Generation - Nuclear Electric Power Generation - Thermal	•		• •	•		•		•	• • •	•					•	• •	•
Energ	Electric Power Systems Analysis Energy Conservation			• • •	•		•	•	• • •		•	•		•	•		• •	•
	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	• •	•	• • •			•	• • •	• • •	• • • •	• •	• •	•	•		• •	• •	•
	Environmental Site Assessments and Audits	• •		• • •		•	•	• • •	• • •	• • • •	•	•	•	•		• •	• •	•
tal	Groundwater Resources/Hydrogeology Industrial Hygiene and Safety			• •	•		•	• •	• • •	• •	•	•	•			•	• •	
namer 9	Industrial Wastewater Treatment Laboratory and Treatability Studies	• •		• •	•	•	•	•	• • •	• • •	•	•	•			•	•	•
Enviro	Mould Studies Noise and Vibration	•		• •			•	• •	•	•		•	•			•	• •	
	Record of Site Condition Risk Assessment	• •		• •	•		•	0 0 0	•	• •	•	•	•		•	• •	•	•
	Solid/Hazardous Waste Management	• •		• •	• (•	•	•	• • •	• • •		• •	•		•	• •	• •	
	Surface Water Resources Underground Storage Tank Management	• •	•	• •	•		•	•	• • •	• • •	• •	• •	•	•		•	•	•
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	Africa - South Africa - West						_										• •	
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	China	•		•					·	•	•			•	•	•		
ort 10	Europe - East Europe - North								•	• •				•			•	•
EXP	Europe - West Indian Subcontinent	•							•	• •	•	•		•		•	•	
	Japan Mexico	•							•		•			•				
	Middle East	• •		•					•	• • •	•			•	•	•	•	
	New Zealand Polar Regions									•				•		•	•	
	Polynesia Russian Federation									•							•	
	South America United States	•		•		•			•	• •	• •	•		•		•	•	
	Fish By-products: Processing																	
S	Fish Processing/Storage Fishery Resources: Evaluation, Development, Operations, Aquaculture			• •			•		•	• •	•							
Fisheries	Fishing Vessels Gear/Equipment Marine Biology and Oceanography			•			•		•								•	
	Monitoring, Control and Surveillance (MCS) Naval Architecture and Boat Construction						•			•								
	Remote Sensing Accident Reconstruction	•						•								•	•	
	Cladding Failures	• •					• •	• •				•		•		•		
ısic	Electrical/Mechanical Failures Fires and Explosions	• •		•			• •	•	•	•	•			•	• •	•		•
12 12	Investigation and Settlement of Claims Process Support Facilities	•		•	•			• • •				•		•		•		
	Product Failures and Liability	• •		• •	•	•	• •	• •		•		•	•	•		•	•	
	Structural Failures						•											





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As the matrix shows, while engineering design is a major component of the capabilities of CEA members, they can provide advice and assistance from the financial pre-feasibility phase of

financial pre-feasibility phase of projects through to completion and beyond. Building Materials: Plywood, Lumber Manufacturing, etc. Forest Harvesting	Akron Engineering Con	Almor Testing Services Aplin Martin Aptus Engineering Ltd. Arcadis Associated Engineering AtkinsRéalis Canada Inc Binnie Consulting Ltd.	CIMA Canada Inc. (CIM Clifton Engineering Grc	CTM Design Services L1 CVL Engineers Inc. D.E.S. Engineering Limit	Dillon Consulting Limit Eagle Engineering Corp. Egis	EHAN Engineering Ltd. Englobe Corp. Entuitive Corporation Envirogeotech Consulti	EXP Services Inc. Fast + Epp FVB Energy Inc. GeoMetrix Group Engir	Hatch Hawk's Aerial and Techr HDR Corporation Hedgehog Technologie	Howe Gastmeier Chap Howe Gastmeier Chap ISL Engineering and Lar J. R. Paine & Associates	Kerr Wood Leidal Asso Klohn Crippen Berger L LEX3 Engineering Inc.	M2 Engineering MAGNA Engineering Se Magna IV Engineering, I McElhanney Ltd.	MCW Hemisphere Ltd. Morrison Hershfield Lir Mott MacDonald Cana MPA Engineering 14	MPE a division of Englo Northwest Hydraulic C OGL Engineering	Parsons inc. Pasquini & Associates C Patching Associates Acc PBX Engineering Ltd. RJC Engineers	Sameng Inc. Scheffer Andrew Ltd. SE Design and Consulti	Smith + Andersen SMP Engineering SolidEarth Geotechnics Stantec Consulting Ltd	Stephenson Engineering T2 Utility Engineers Inc. Tetra Tech Canada Inc. Thumber Fnaineering Ltd.	TWD Technologies Lim Urban Systems Ltd. V3 Companies of Canac Wave Engineering Cons
Forestry Forestry Engineering Pulp, Paper and Fiber Board Pulp/Paper Plants, Products Timber Engineering		•	•		•			•			•	•				•	•	
Foundations • Laboratory Testing •	•	• • • • • • • • • • • • • • • • • • •	• • •	•	0 0	0 0	•	•	0 0	•	•		•			0 0	0 0	
Soil Stabilization Ergonomics Hydraulic Engineering Machine Design/Analysis	•	•	•		•	• •	•	•		•	•		•	•	٠	• •	• •	•
Product & Process Design Prototyping and Product Development	•	• •	•	• •	•	•		• •	•))	•	0	•	• •		•	• •	• •
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Finite Element Analysis Fire Protection Systems Heating, Ventilation and A/C Machine Design	•	•	•	• •		•			•		•	• •	•			•	•	
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Wastewater Management Water Supply, Treatment and Distribution Area Classifications - Electrical Area Classifications - Hazardous Area Classifications - Industrial Pre-Start Health and Safety Reviews	0 0	0 0 0 0 0	• •	•			• •		• •		• • • •	0 0	•		0 0 0	0	• • •	
Acquisitions and Divestitures Evaluations Expert Witness Exploration Feasibility Studies	•		• •		•			•		•		•				•	•	•
Industrial Parks •	• • • • • • • • • • • • • • • • • • • •		0 0	•	0 0		• • • • • • • • • • • • • • • • • • •		• •		• •	0 0 0	•		0 0 0 0	•	•	0 0 0
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Project Control and Risk Management Related Management Services Sewers and Water Telecommunications Transportation	• •					0 0 0 0	• • •	• • •			• • •	0 0			0 0 0	•	0 0 0	
Feasibility Studies Technological Assessment Commercial Foundations			• •	• • •	0	•	• • •	• • •		•	• • •	0 0 0					0 0 0 0	
Industrial Inspections and Investigations Institutional Lowrise	0	0 0 0		• • •	•	•	• •	• • •				0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0		•	• • •	
Restoration and Repair Seismic Retrofit Bridges Bunkers and Silos Dams and Locks	•	0 0 0		•	• •		0 0	• •			•	0 0		•		•	0 0	•
Tunnels Aerial Photography: Photogrammetry/Photo Interpretation/Cartography	•	• • •		•	•	•		•	• •	•		•		•		• •		
Geographic Information Systems Remote Sensing/Satellite Data Interpretation/Imagery Resource Surveys Topographic Surveys	0 0	0 0 0 0	•	•	0 0 0		• •		•	•	• •	•	• • •	•	0 0 0	0	0 0	
Lifting and Moving Scaffolding Structural Shoring Airports	•			• •	0 0		• •	•	•		• • •	0 0	• (•	0 0 0	
Intelligent Transportation Systems Long Distance Rail Pavement Design Pavement Management Services Ports and Harbours	0 0 0	• • •		•	•	• •	•	• • •			•	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		•	•	• •	0 0 0	
Terminals and Service Centres			•		• • •		•	• • • • • • • • • • • • • • • • • • •			• •	0 0		•	• • •	• •	0 0 0	0 0 0 0