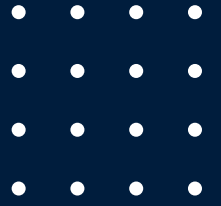




Klohn Crippen Berger



TRANSPORTATION



Down to Earth.
Up to the Challenge.

INTEGRATED TEAMS & TECHNOLOGIES

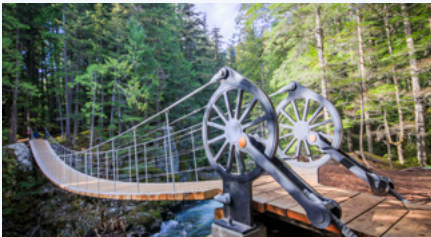
Klohn Crippen Berger (KCB) integrates the application of engineering and geoscience with environment, community and safety-by-design principles. This approach drives our reputation as a leading-edge provider of professional services. Our valued clients, some of whom have worked with us for decades, have trusted us with the design, construction engineering and seismic retrofit of some of the most challenging projects across the world.



..... STRUCTURAL
..... GEOTECHNICAL
..... CIVIL
..... HYDROTECHNICAL
..... ENVIRONMENTAL
..... MECHANICAL
..... ELECTRICAL

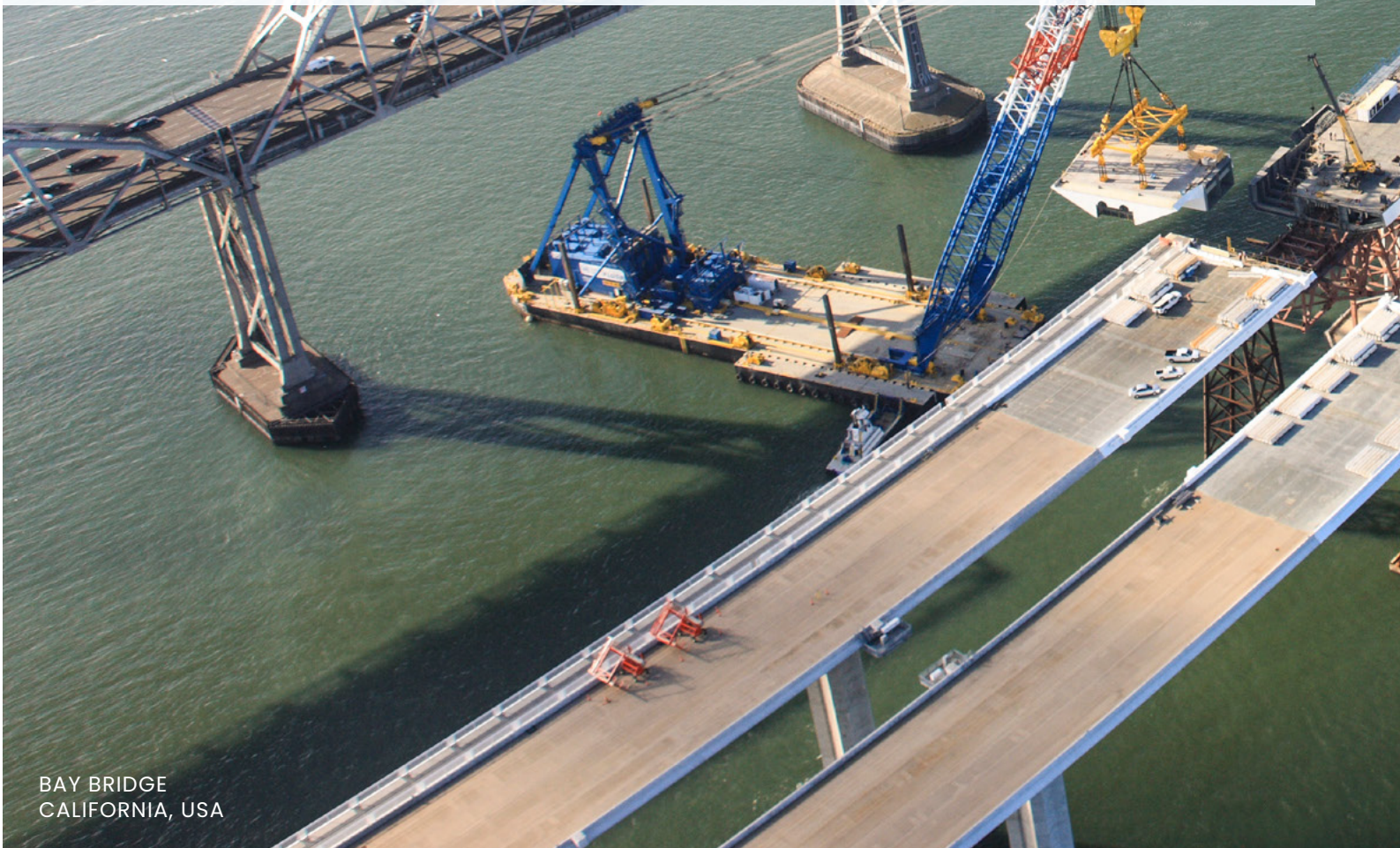


BRIDGES

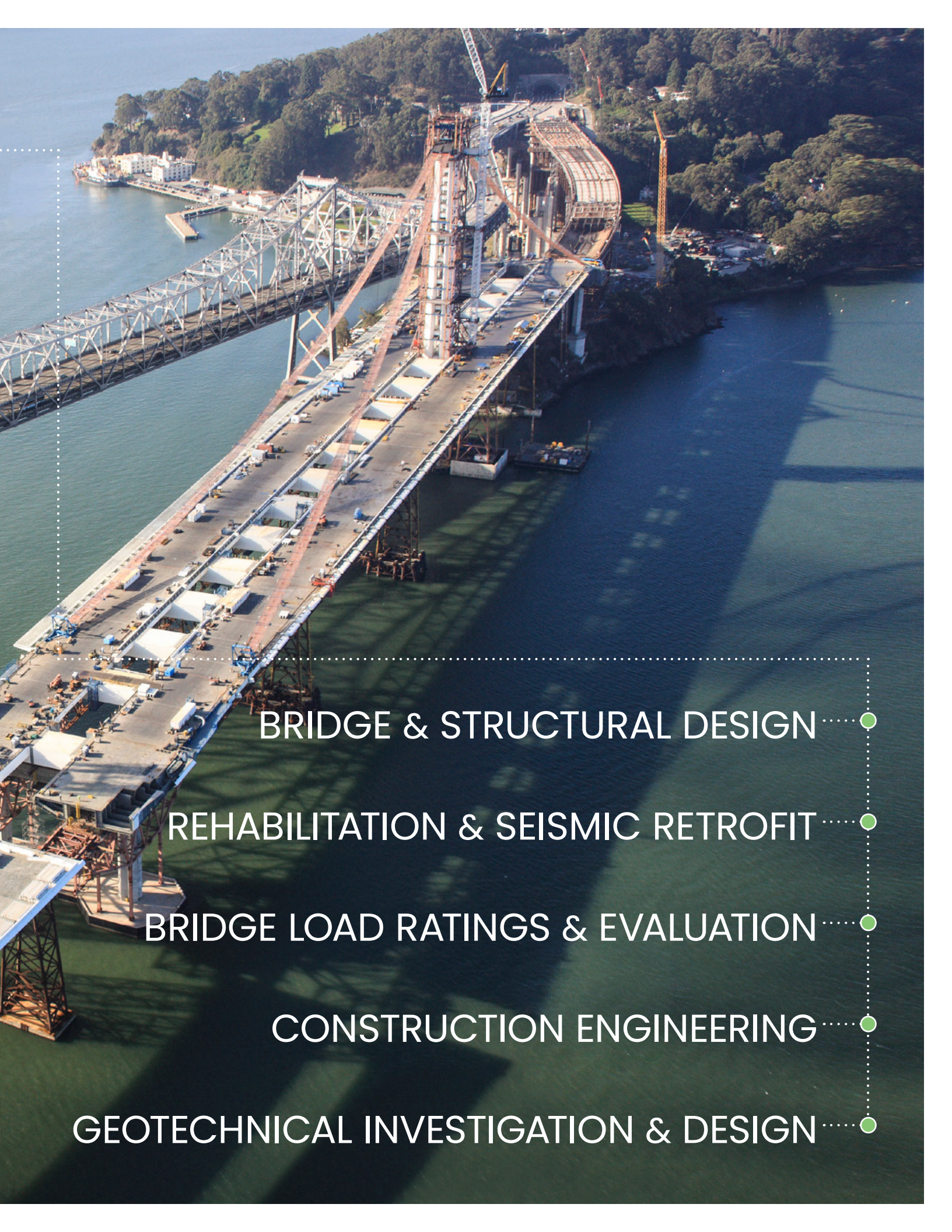


KCB has been a leading bridge design consultant in Canada and internationally for more than 70 years and has received numerous awards for its design innovations.

We provide cost-effective solutions in bridge design, rehabilitation, seismic retrofit, construction engineering for all types of bridges. We have extensive experience in the design of highway bridges, pedestrian bridges, and construction engineering for long span bridges.



BAY BRIDGE
CALIFORNIA, USA



BRIDGE & STRUCTURAL DESIGN

REHABILITATION & SEISMIC RETROFIT

BRIDGE LOAD RATINGS & EVALUATION

CONSTRUCTION ENGINEERING

GEOTECHNICAL INVESTIGATION & DESIGN



KCB has been involved in numerous design assignments ranging from major highway projects to industrial access roads. We provide comprehensive engineering services, including design management, structural design, geotechnical and environmental services.



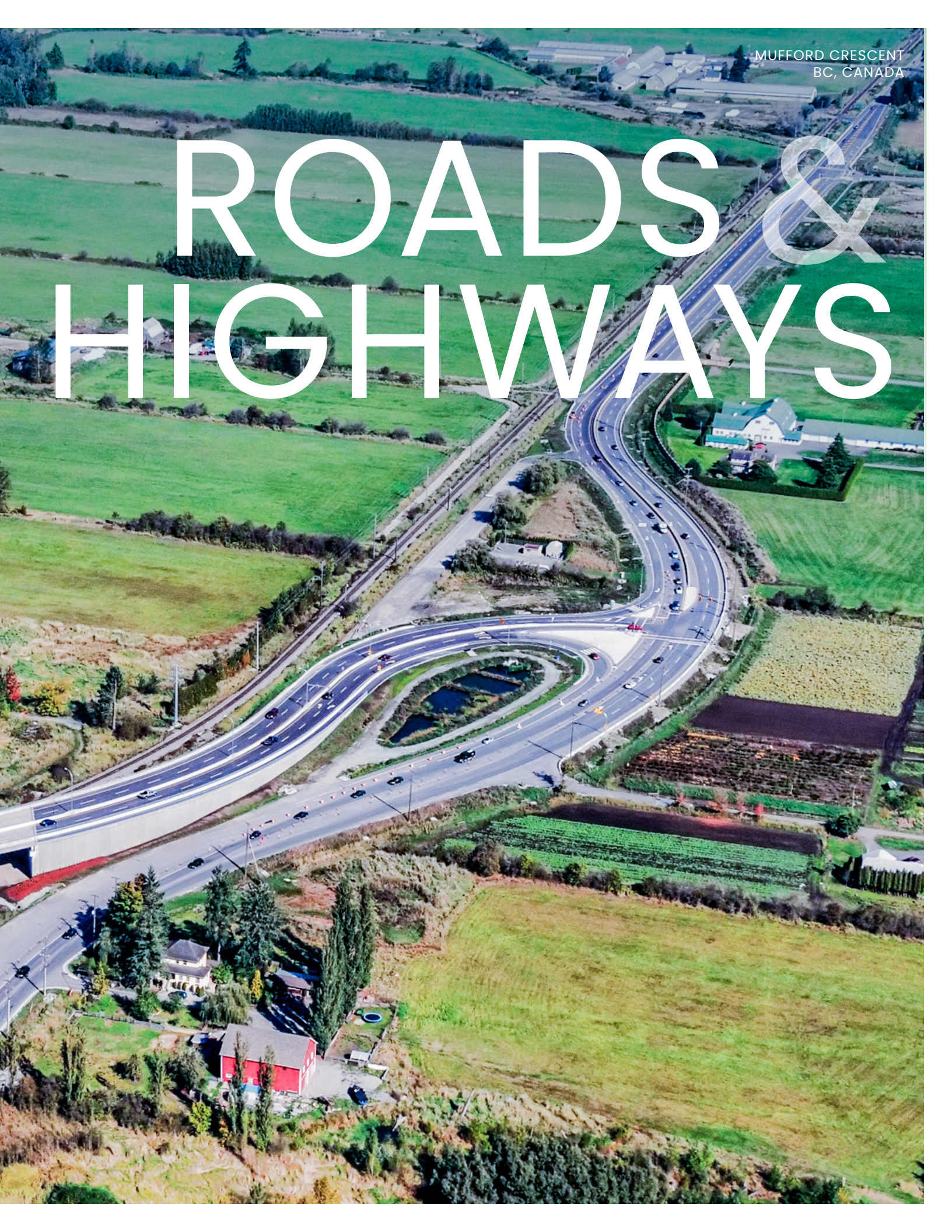
Our skills and experience allow us to offer our clients practical and cost-effective design and construction solutions. KCB has extensive experience in assembling and effectively managing comprehensive engineering teams for Design-Build highway projects.

- STRUCTURAL DESIGN
- GEOTECHNICAL
- HIGHWAY DESIGN
- DESIGN BUILD / PPP PROJECTS



MUFFORD CRESCENT
BC, CANADA

ROADS & HIGHWAYS

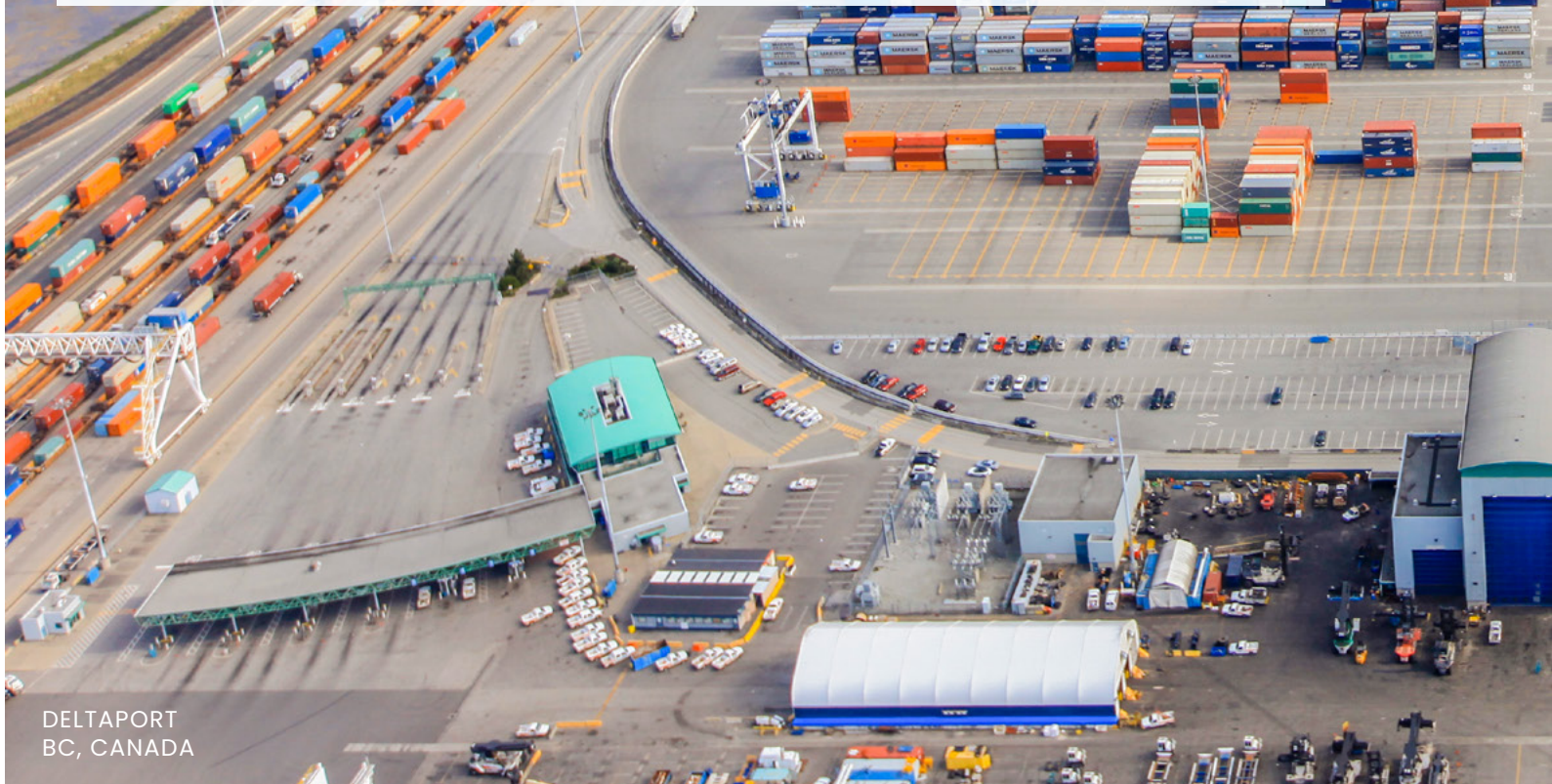


PORTS & HARBOURS

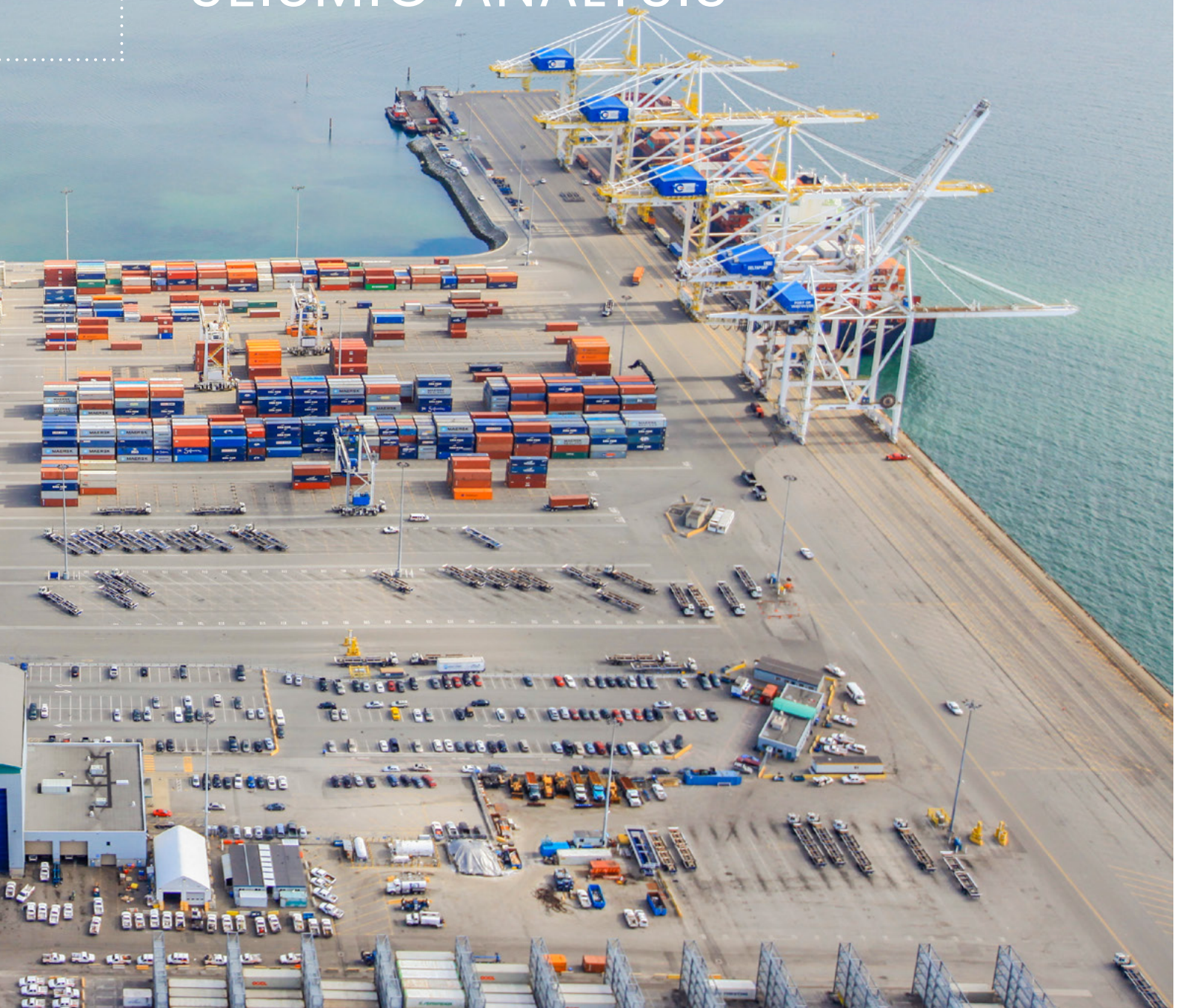


For over 70 years, KCB has been active in the planning, design and construction of a wide variety of ports, harbours and marine terminals.

Our experience ranges from economic evaluations, structural assessments and remedial designs, through to site development, wharf design and site services for major new terminals. Our extensive marine engineering experience will add significant value to your port projects.



○..... BERTHING & MOORING DESIGN
○..... COASTAL & RIVER ENGINEERING
○..... CONSTRUCTION MANAGEMENT
○..... FEASIBILITY & PLANNING
○..... SEISMIC ANALYSIS



TUNNELS

KCB is one of Canada's leading tunneling and underground engineering consultants. We are involved in many challenging tunnel and underground engineering projects, including railway, hydropower, water supply, mining, highway and transit tunnels.

KCB incorporates the latest tunnelling technologies and practices and tunnel ventilation design. We utilize the most advanced design methods including finite element and finite difference programs. We have experience on projects with diverse and challenging geological conditions including gas-bearing strata, extreme in-situ stresses, swelling rock and infiltrating groundwater. Our tunnelling designs have included drill and blast, tunnel boring machine (TBM), roadheader, hydraulic breaker, hand mining and cut-and-cover methods.

- CONCEPTUAL & PRELIMINARY DESIGN
- GEOTECHNICAL INVESTIGATION & DESIGN
- CUT & COVER TUNNEL DESIGN
- CONSTRUCTION SUPERVISION
- TUNNEL VENTILATION DESIGN



BARRIER WALL/ROCKSHED
BC, CANADA



HEAVY RAIL & RAPID TRANSIT

KCB provides a wide range of engineering services in the heavy rail and rapid transit sectors. For the heavy rail sector we provide geohazard assessment and slope stabilization, tunnel, rail and bridge design services.

Our experience in rapid transit projects includes geotechnical design services for cut-and-cover tunnels, elevated guideways, tunnel ventilation and fire protection systems, and electrical/mechanical systems for transit stations.



TRACK DESIGN

TRANSIT STATIONS

BRIDGE & GEOTECHNICAL DESIGN

GRADE & SLOPE STABILIZATION

ENVIRONMENTAL

WHERE WE WORK

PROJECT LOCATIONS

AMERICAS

Argentina
Brazil
Canada
Chile
Colombia
Costa Rica
Ecuador
French
Guiana
Guatemala
Panama
Peru
USA
Venezuela

ASIA

China
Indonesia
Kazakhstan
Mongolia
Pakistan
Philippines
South Korea
Sri Lanka
Thailand
Vietnam

EUROPE

Andorra
Finland
Netherlands
Romania
Spain
Sweden
Turkey
United Kingdom

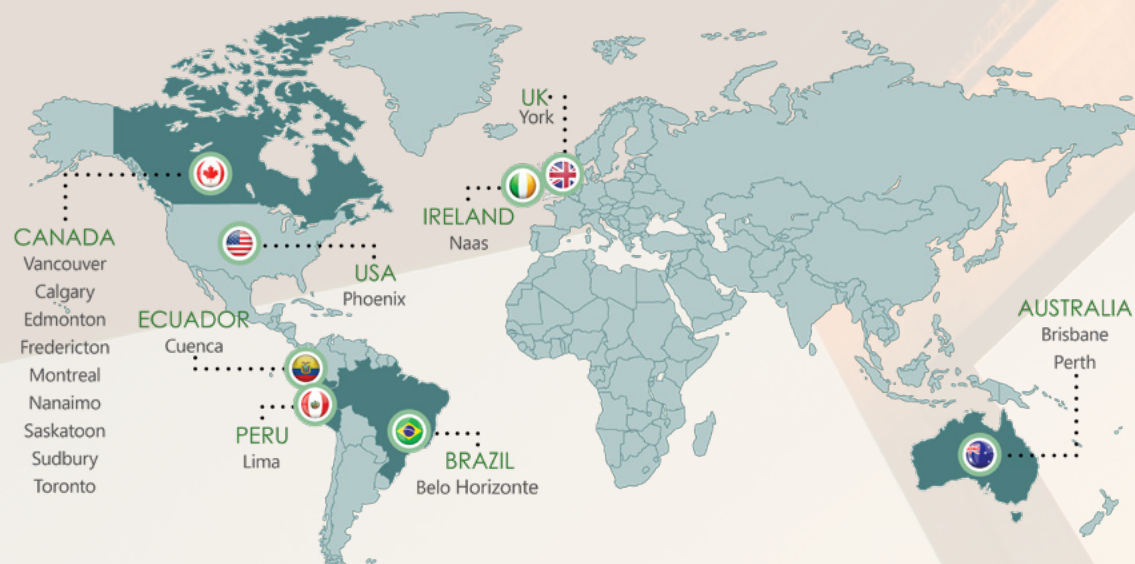
AFRICA

Egypt
Kenya
Madagascar
Mauritania
Saudi Arabia
Uganda

AUSTRALASIA

Australia
Fiji
New
Caledonia
Papua New
Guinea

WE HAVE OFFICES IN STRATEGIC LOCATIONS ACROSS THE GLOBE



HOW WE WORK



Platinum member



ISO 9001
14001
45001

QUALITY
ISO 9001

ENVIRONMENT
ISO 14001

HEALTH & SAFETY
ISO 45001

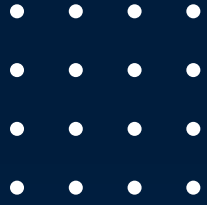
KCB has a strong reputation for quality work and technical experience in a range of services. Our commitment to excellence is the driving force behind everything we do and, as a result, we are the recipient of multiple national and international awards for major projects and corporate governance. We are committed to sustainability in our business operations and professional services, and we publish our progress in an annual Sustainability Report on www.klohn.com. We strive to balance social, environmental and economic considerations to meet the needs of our clients, the community, our employees and other key stakeholders.

Our business is governed using an integrated management system consisting of quality, health and safety, and environment (QHSE) procedures. Our management system, which meets the requirements of the ISO 9001, 14001 and 45001 standards, steers our business conduct and the manner in which we undertake our projects. Our QHSE policy includes our goals of fostering quality services, promoting a safe and healthy culture, reducing our environmental impact and committing to sustainability.

In addition to the ISO standards, we are guided by the frameworks developed by the Global Reporting Initiative, the Institute for Sustainable Infrastructure, the International Council of Mining and Metals, and the Mining Association of Canada's Towards Sustainable Mining, among others.

To meet our clients' requirements for health, safety, and the environment we subscribe to several subcontractor management systems. We are an approved contractor on Avetta, ISNetworld, Contractor Qualification Network, ComplyWorks and BROWZ.

klohn.com



 Klohn Crippen Berger



MAYERTHORPE BRIDGE,
ALBERTA, CANADA