



FUNDAMENTAL
ENGINEERING LTD



ENGINEERED FOR **EFFICIENCY**, BUILD ON **FUNDAMENTALS**

FACILITIES ENGINEERING - INDUSTRIAL ENGINEERING - PROJECT MANAGEMENT -
OPTIMIZATION - MANAGEMENT OF CHANGE - CONSTRUCTION SUPERVISION

fundamentaleng.ca

WHO WE ARE

At Fundamental Engineering, our services are only part of the story. We're a team built on integrity, consistency, and a boots-on-the-ground approach that puts client success first. From our roots in Alberta's Peace Country to projects across Western Canada, we've built a legacy of trust through practical solutions and strong partnerships.

OUR VISION

We envision a future where engineering doesn't just serve projects — it empowers people. From our roots in the Peace Country to projects across Alberta and BC, our goal is to grow a business that reflects the values we were founded on: clarity, consistency, and a commitment to continual improvement.

BUILD ON EXPERIENCE, GROWN THROUGH INTEGRITY

Fundamental Engineering began in 2005 as a one-person consulting business with a vision to do things differently. Over the last 20 years, the company has grown by consistently adding value for our clients. Founded on a simple idea — delivering practical engineering solutions rooted in real-world experience — the company avoids unnecessary complexity. Just good work by good people. That philosophy built our company and continues to guide us today.



OUR MISSION & PURPOSE

At our core, we believe that engineering doesn't just create infrastructure — it builds relationships. That's why our mission is simple: apply the fundamentals of engineering and project management to support the long-term success of our clients and the industries we serve.

CORE VALUES THAT GUIDE US

Our values are the foundation of everything we do — from how we treat our clients to how we show up for each other.

Continuous Improvement: Every project is a chance to get better.



Our People

The strength of our work begins with the strength of our team.



Our Integrity

We act with honesty, transparency, and respect — always.



Our Consistency

Reliable, repeatable, results-driven solutions.



Our Approach

Practical, field-tested, and built for collaboration.



Field-Focused Pipeline Design

Start Smart. Finish Strong.

At Fundamental Engineering, pipeline design starts with boots-on-the-ground. With early engagement we optimize from survey through to final handover with operations, ensuring our designs respond to the opportunities and challenges in the field.

The results are compliant, efficient, and environmentally responsible pipelines built for long-term performance.

Our pipeline expertise supports everything from gathering systems to large scale infrastructure – always aligned with your schedule, scope, and safety expectations.

- Pipeline Project Management
- Desktop Assessments
- Pipeline Route Scouting
- Survey Coordination
- Coordination of Crossings
- Timber Salvage Coordination
- Environmental Impact
- Procurement Support
- Stress Analysis
- Field/Infrastructure Modelling
- Regulatory Approvals
- Pipeline Hydraulics



Practical, Repeatable Wellsite Design

Engineered for Efficiency, Built on Fundamentals

We take a hands-on, **Back-to-the-Basics** approach to wellsite design. Every layout, every detail is reviewed with operational performance, process safety, and repeatability in mind. From modular builds to expansion-ready designs, our multi-disciplinary teams deliver practical solutions that work in the field – not just on paper.

We standardize our designs for repeatability to reduce cost, improve operability and reduce maintenance for reliable future designs.

Whether you are building new infrastructure, upgrading existing layouts, or preparing long term field development, Fundamental brings field proven insight to every phase.

- Pad Standardization Approach
- Cost Reduction
- Erosion Mitigation
- Sand Management
- Operational Minded
- Emission Reduction
- Multi-disciplinary approach
- Equipment layout
- Electrical Engineering
- Instrumentation Engineering
- Process Safety
- Process Piping Design





Facility Engineering That Delivers Practical Solutions

Safe, Scalable, and Built for the Real World

At Fundamental Engineering, we design oil and gas facilities that do more than meet specs — they meet reality. Whether we're leading a greenfield build or upgrading a brownfield site, we approach every project with multi-disciplinary knowledge, a practical mindset, and a strong focus on safety and efficiency.

Our team designs and supports facilities of all sizes - from oil batteries to gas processing, custody transfer, and waste disposal. We work closely with your team to ensure designs align with your goals, meet regulatory requirements, while optimizing both safety and operational performance.

- Project Management
- Process Equipment
- Equipment Sourcing
- Structural Analysis
- Skid Design
- Mechanical and Electrical Routing
- Compression review/Sizing
- Pump Sizing
- Regulatory Application
- Building Permits
- Metering Schematics
- Facility debottlenecking



Focused Solutions for Industrial Facilities and Fabrication Partners

Industrial Support Success: Engineered for Efficiency, Built on Fundamentals

Our philosophy starts with the operation, budget, and schedule requirements of our client's. Every design is reviewed with owner and contractor stakeholders to ensure solutions that are constructible, economic, and timely. From safety access upgrades to entire equipment retrofits, our multi-disciplinary team delivers practical solutions that work in the field - not just on paper.

- Fall arrest, safety barriers, and rescue platforms
- Working platform extensions and modifications
- Monorails, Cranes, Jibs
- Equipment and process upgrades
- Electrical and mechanical routing
- Temporary staging
- Corrosion damage repair
- Lift lugs and custom lift points
- Post-fire structural inspection and repairs.
- Foundation and equipment base repairs.
- Structural Assessments
- Vibration Mitigation





Operational Support Where and When It Counts - In the Field

Field-Tested Support for Operational Success

At Fundamental Engineering, we don't disappear after design. Our team brings significant experience staying involved — walking your sites, managing documentation, and ensuring every system is ready for safe, compliant operation. From commissioning support to regulatory audits, we help you maintain performance, safety, and control across your entire asset lifecycle.

Handing off a new facility or optimizing an existing one? Operations support is more than a checklist - it's a commitment. We bring consistency, technical depth, and a team-first mindset to every engagement.

- Wellsite Inspections
- Commissioning/Start-up
- Troubleshooting
- Field Assessments
- Due diligence reporting
- As-building
- Metering Schematics
- Pipeline Risk Assessments
- Car Seal and Maintenance Lock
- Operations Secondment
- ABSA Audit Support
- Cost Estimating



Managing Change with Clarity and Confidence

Structured Support for Smooth Transitions

Change is inevitable — and when it happens in a high-stakes environment, structure is everything. At Fundamental Engineering, we help clients navigate operational change through clear, compliant, and field-tested engineering support. Whether improving an existing MOC program or developing one from the ground up, we bring the technical insight and project rigor to manage change without disruption.

Our strength lies in our ability to integrate fully into your operational culture. Working side by side with your teams, tailoring our support to your systems, needs, and goals. With a hands-on, problem-solving mindset, we help you manage change in ways that move your operation forward.

- MOC Program Development
- Troubleshooting support
- Project Management
- Program Assistance
- Cost Evaluations
- Lessons Learned
- Facility Layouts
- Virtual Design/3D Point Cloud
- Process Safety Review/Hazop
- Commissioning & Start-up
- Project Closures
- QA/QC review



ENGINEERING CAPABILITIES



Project Management
Drafting & Design Services
Operational Support



Wellsite Design
Virtual Design / 3D Point Cloud
Modular Design



Process Engineering
Process Safety
Facility Debottlenecking



Mechanical Engineering
Vibration Analysis & Mitigation
Process Piping Design



Pipeline Engineering
Pipeline Scouting
Thermal Stress Analysis



Construction Management
Construction Supervision
Project Planning/Field Support



Management of Change
Operations Support
As-Building



Electrical Engineering
Instrumentation & Controls
Engineering Control Philosophy



Procurement and Contracts
Document Control
Regulatory Compliance



Civil / Structural Engineering
Industrial Engineering
Inspection, Assessment,
& Upgrades





Integrated Construction Supervision That Starts Early and Stays Engaged

First-On-Site, From Survey to Completion with Fundamental Engineering

Fundamental Engineering, in partnership with F.O.S. Consulting Services, delivers integrated construction supervision and management solutions that add value from the very beginning. Our teams prioritize early involvement to gain a thorough understanding of construction challenges, enabling proactive input and effective solutions right from survey kickoff.

By combining engineering expertise with on-site construction supervision, we enhance scoping details, clarify procurement bids, and manage contractors effectively throughout the construction phase. Our integrated team ensures that every aspect of the project is aligned, from initial planning to final execution.

Our Capabilities

Construction Supervision

- Qualified professionals with knowledge of codes and safety requirements.
- Detailed daily reporting and proficient construction practices.
- Acting as liaison with clients, facility engineers, operations, and third-party project management companies.

Construction Management

- Cost management and preparation of cost reports.
- Site management, including logistics and scheduling.
- Material handling and UAV aerial photography for construction timelines.

Project Planning

- Pipeline selection and routing.
- Wellsite placements (MSL/LOCs).
- Cost estimating.

Facility Handover

- Commissioning and startup support.
- Addressing deficiencies and QA/QC signoff.
- Project closure activities.



Serving Western Canada, Proudly Local

Our roots run deep in Alberta and reach across British Columbia. Our team prioritizes showing up, listening closely, and delivering real solutions that make sense for your operation.



A PROUD MEMBER OF



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